General Features

ROYSE
rodamientos y servicios
Desde 1979

High efficiency motors

The Techtop motors are designed with the new European standard for high efficiency.
MS line, is designed and manufactured in according to the parameters of the new international standard 60034–30–1 for efficiency IE1, IE2
TA and TC lines, are designed and manufactured in accordance with the parameters of the int. standard 60034–30–1 for efficiency IE1, IE2, IE3, IE4
The motors are totally enclosed, fan cooled, with squirrel cage rotor.
MS and TA lines, from frame 56 to frame 200, are with aluminium frame.
TC line, from frame 80 to frame 355, is with cast iron frame.
IEC 60034–30–1 standard defines IE (International Efficiency) efficiency classes of single speed three–phase cage induction motors; 50Hz and 60Hz; 2,4,6,8, pole; rated voltage up to 1000V; S1 duty in the new standard.

- IE1 standard efficiency
- IE2 high efficiency from 0.12 to 375 kW
- IE3 premium efficiency from 0.12 to 375 kW
- IE4 super premium efficiency form 0.12 to 375kW

Rated Power kW	(IE1) Standard Efficiency				(IE2) High Efficiency				(IE3) Premium Efficiency				(IE4) Super Premium Efficiency			
	Poli–Poles				Poli–Poles				Poli–Poles				Poli–Poles			
	2	4	6	8	2	4	6	8	2	4	6	8	2	4	6	8
0.12	45.0	50.0	38.3	31.0	53.6	59.1	50.6	39.8	60.8	64.8	57.7	50.7	66.5	69.8	64.9	62.3
0.18	52.8	57.0	45.5	38.0	60.4	64.7	56.6	45.9	65.9	69.9	63.9	58.7	70.8	74.7	70.1	67.2
0.25	58.2	61.5	52.1	43.4	64.8	68.5	61.6	50.6	69.7	73.5	68.6	64.1	74.3	77.9	74.1	70.8
0.37	63.9	66.0	59.7	49.7	69.5	72.7	67.6	56.1	73.8	77.3	73.5	69.3	78.1	81.1	78.0	74.3
0.55	69.0	70.0	65.8	56.1	74.1	77.1	73.1	61.7	77.8	80.8	77.2	73.0	81.5	83.9	80.9	77.0
0.75	72.1	72.1	70.0	61.2	77.4	79.6	75.9	66.2	80.7	82.5	78.9	75.0	83.5	85.7	82.7	78.4
1.1	75.0	75.0	72.9	66.5	79.6	81.4	78.1	70.8	82.7	84.1	81.0	77.7	85.2	87.2	84.5	80.8
1.5	77.2	77.2	75.2	70.2	81.3	82.8	79.8	74.1	84.2	85.3	82.5	79.7	86.5	88.2	85.9	82.6
2.2	79.7	79.7	77.7	74.2	83.2	84.3	81.8	77.6	85.9	86.7	84.3	81.9	88.0	89.5	87.4	84.5
3	81.5	81.5	79.7	77.0	84.6	85.5	83.3	80.0	87.1	87.7	85.6	83.5	89.1	90.4	88.6	85.9
4	83.1	83.1	81.4	79.2	85.8	86.6	84.6	81.9	88.1	88.6	86.8	84.8	90.0	91.1	89.5	87.1
5.5	84.7	84.7	83.1	81.4	87.0	87.7	86.0	83.8	89.2	89.6	88.0	86.2	90.9	91.9	90.5	88.3
7.5	86.0	86.0	84.7	83.1	88.1	88.7	87.2	85.3	90.1	90.4	89.1	87.3	91.7	92.6	91.3	89.3
11	87.6	87.6	86.4	85.0	89.4	89.8	88.7	86.9	91.2	91.4	90.3	88.6	92.6	93.3	92.3	90.4
15	88.7	88.7	87.7	86.2	90.3	90.6	89.7	88.0	91.9	92.1	91.2	89.6	93.3	93.9	92.9	91.2
18.5	89.3	89.3	88.6	86.9	90.9	91.2	90.4	88.6	92.4	92.6	91.7	90.1	93.7	94.2	93.4	91.7
22	89.9	89.9	89.2	87.4	91.3	91.6	90.9	89.1	92.7	93.0	92.2	90.6	94.0	94.5	93.7	92.1
30	90.7	90.7	90.2	88.3	92.0	92.3	91.7	89.8	93.3	93.6	92.9	91.3	94.5	94.9	94.2	92.7
37	91.2	91.2	90.8	88.8	92.5	92.7	92.2	90.3	93.7	93.9	93.3	91.8	94.8	95.2	94.5	93.1
45	91.7	91.7	91.4	89.2	92.9	93.1	92.7	90.7	94.0	94.2	93.7	92.2	95.0	95.4	94.8	93.4
55	92.1	92.1	91.9	89.7	93.2	93.5	93.1	91.0	94.3	94.6	94.1	92.5	95.3	95.7	95.1	93.7
75	92.7	92.7	92.6	90.3	93.8	94.0	93.7	91.6	94.7	95.0	94.6	93.1	95.6	96.0	95.4	94.2
90	93.0	93.0	92.9	90.7	94.1	94.2	94.0	91.9	95.0	95.2	94.9	93.4	95.8	96.1	95.6	94.4
110	93.3	93.3	93.3	91.1	94.3	94.5	94.3	92.3	95.2	95.4	95.1	93.7	96.0	96.3	95.8	94.7
132	93.5	93.5	93.5	91.5	94.6	94.7	94.6	92.6	95.4	95.6	95.4	94.0	96.2	96.4	96.0	94.9
160	93.8	93.8	93.8	91.9	94.8	94.9	94.8	93.0	95.6	95.8	95.6	94.3	96.3	96.6	96.2	95.1
200	94.0	94.0	94.0	92.5	95.0	95.1	95.0	93.5	95.8	96.0	95.8	94.6	96.5	96.7	96.3	95.4
250	94.0	94.0	94.0	92.5	95.0	95.1	95.0	93.5	95.8	96.0	95.8	94.6	96.5	96.7	96.5	95.4
315	94.0	94.0	94.0	92.5	95.0	95.1	95.0	93.5	95.8	96.0	95.8	94.6	96.5	96.7	96.6	95.4
355–375	94.0	94.0	94.0	92.5	95.0	95.1	95.0	93.5	95.8	96.0	95.8	94.6	96.5	96.7	96.6	95.4

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Standards

Motors MS, TA, TC series are complied with the following Standards

Ratings and performances
IEC 60034–1 CEI EN 60034–1

Methods for determining losses and efficiency
IEC 60034–2–1 CEI EN 60034–2

Rotating electrical machines,part 30, efficiency classes of single speed, three–phase induction motors (ie code)
IEC 60034–30–1 EDITION 1

Classification of degrees of protection (ip code)
IEC 60034–5 CEI EN 60034–5

Methods of cooling (ic code)
IEC 60034 – 6 CEI EN 60034–6

Classification of type of construction mounting arrangements (im code)
IEC 60034–7 CEI EN 60034–7

Terminal markings and direction of rotation
IEC 60034–8 CEI 2–8

Noise limits
IEC 60034–9 CEI EN 60034– 9

Built–in thermal protections
IEC 60034–11

Starting performance of rotating electrical machines
IEC 60034– 12 CEI EN 60034 – 12

Mechanical vibrations
IEC 60034–14 CEI EN 60034–14

Dimensions and outputs for electrical machines
CEI EN50347 IEC 60072–1 IEC 60072–2

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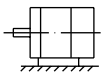
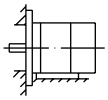
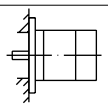
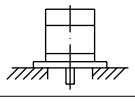
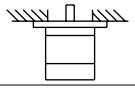
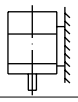
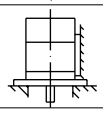
Mounting and Positions

Frame according to IEC 60034-7, are defined in the following table:

FIGURE	STANDARDS			FRAME SIZES		
	CEI 2-14	Code I	Code II	56−160	180−280	315−355
	B3	IM B3	IM 1001	standard		
	B3/B5	IM B35	IM 2001	standard		
	B5	IM B5	IM 3001	standard	standard	upon request
	B6	IM B6	IM 1051	standard	upon request	upon request
	B7	IM B7	IM 1061	standard	upon request	upon request
	B8	IM B8	IM 1071	standard	upon request	upon request
	B14	IM B14	IM 3601	standard		
	V1	IM V1	IM 3011	standard		
	V3	IM V3	IM 3031	standard	standard	upon request
	V5	IM V5	IM 1011	upon request	upon request	upon request
	V6	IM V6	IM 1031	upon request	upon request	upon request
	V1/V5	IM V15	IM 2011	standard	standard	upon request
	V18	IM V18	IM 3611	standard		
	V19	IM V19	IM 3631	standard		

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Protection

The motors protection degrees according to IEC 60034-5 standards, are:

IP 55 (standard) totally enclosed motors, fan cooled, protected against penetration of dust and water splashes coming from any direction

IP 56 (upon request) totally enclosed motors, protected against dust penetration and against sea waves, for use on deck.

Normally IP56 also IP55 motors are supplied with external fan (IC 411 - IC 416 or IC 418).
Upon request they can be supplied without fan. (IC410). In this case the features, outputs and technical data will be supplied upon request.

The external fan is covered, in line with safety standards.
Motors for vertical mounting V1, V5, V1/V5, are supplied with rain cowl.(optional)
The terminal box, in aluminium or cast iron, has IP 55 or IP56 protection degree.

ROYSE

General Construction Features

The motors have been designed and manufactured in compliance with international standards.

TA and MS series are avilable from frame size 56 to frame size 200
Frame and terminal box are in aluminum, fan cover is in sheet steel, flanges and shields are in aluminum.

TC series is avilable from frame size 80 to frame size 355.
Frame and terminal box are in cast iron, fan cover is in sheet steel, flanges and shields are in cast iron.

The terminal box, standard is on the top of the motor, which can be rotated in step of 90°, but can only rotate the position of the gland not the position of the T/BOX.

Fans are in nylon, upon request can be supplied with aluminium or steel sheet.
Feet are removable, on all series, from frame size 56 to frame size 280.

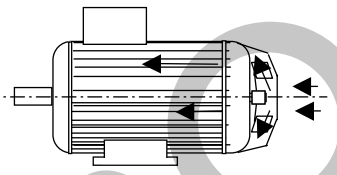
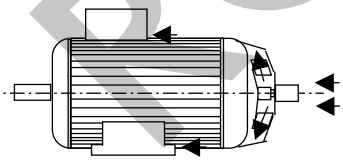
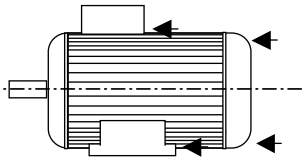
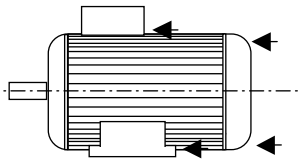
Cooling

The designation of cooling method is given by the IC (International Cooling) code, according to IEC 60034-6

IC _ _ _

- Code I (Simplified)
- Circuit Arrangement I
- Method of fluid circulation for the secondary cooling fluid.
- Method of fluid circulation for the primary cooling fluid.

Motors in standard execution of frame sizes from 56 to 355 are supplied with IC 411 cooling systems, incorporating a bidirectional fan.
All frame sizes can be supplied with cooling system IC 416 on request.
In this case a proper fan is fitted inside the fan cover, suitably reinforced, in order to make the ventilation independent of the rotation speed.

IC CODE	FIGURE	DESCRIPTION	NOTE
IC 411		Self ventilating motor. Enclosed machine. Fan mounted on motor shaft end	Standard
IC 416		Motor with forced ventilation. Enclosed machine. Independent external fan mounted inside the fan cover.	Upon request
IC 418		Motor with external ventilation. Enclosed machine. Provided by air flowing from the driven system.	Upon request
IC 410		Non ventilated motor Enclosed machine.	Upon request

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Bearings and Oil Seals

Motors TA and MS series from frame size 56 to frame size 200 have sealed pre-lubricated ball bearings, DE and NDE side, C3. Motors TC series frame size 132 have sealed pre-lubricated ball bearings, DE and NDE side,C3. Motors TC series from frame size 160 to frame size 280 (including 315 2 pole) have ball bearings, DE and NDE, C3. Motors TC series from frame size 315 (4,6,8 pole) to frame size 355, have roller bearings DE side and ball bearings NDE side.
All non pre-lubricated bearings need to periodically re-lubricated according to the data give in the motors maintenance manuals.
Motor with bearing axial constrains have an arrangement with a spring in order to absorb vibrations.
The lifetime of bearings (in accordance with supplier data) is in excess of 40.000 hours, for motors with direct coupling.

In table are mentioned all specifications concerning bearings installed on motors frame size 56-355

MOTOR TYPE	Bearing		Oil seals
	Drive end	Non–drive end	dxDxB
MS 56	6201	6201	12x22x5
MS 63	6201	6201	12x24x5
MS 71	6202	6202	15x25x7
MS 80	6204	6204	20x34x7
MS 90	6205	6205	25x37x7
MS 100	6206	6206	30x44x7
MS 112	6306	6206	30x44x7
MS 132	6308	6208	40x58x7
MS 160	6309	6309	45x65x8
MS 180	6311	6211	55x72x8
MS 200	6312	6212	60x80x8
TA 56	6201	6201	12x22x5
TA 63	6201	6201	12x22x5
TA 71	6202	6202	15x25x7
TA 80	6204	6204	20x34x7
TA 90	6205	6205	25x37x7
TA 100	6206	6206	30x44x7
TA 112	6306	6206	30x44x7
TA 132	6308	6208	40x58x7
TA 160	6309	6209	45x65x8
TA 180	6311	6211	55x72x8
TA 200	6312	6212	60x80x8

MOTOR TYPE	Bearing		Oil seals
	Drive end	Non–drive end	dxDxB
TC 80	6204	6204	20x34x7
TC 90	6205	6205	25x37x7
TC 100	6206	6206	30x44x7
TC 112	6306	6306	30x44x7
TC 132	6308	6308	40x58x7
TC 160	6309	6309	45x65x8
TC 180	6311	6311	55x75x8
TC 200	6312	6312	60x80x8
TC 225	6313	6313	65x90x10
TC 250	6314	6314	70x95x10
TC 280	6316	6316	80x100x10
TC 315–2	6317	6317	85x110x12
TC 315–4/6/8	NU319	6319	95x120x12
TC 355–2	6319	6319	95x120x12
TC 355–4/6/8	NU322	6322	110x130x12

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Upon request can be mounted, roller bearings at DE side, where non-standard, insulated bearings at NDE side, and reinforced bearings at NDE side.

Terminal Box

The terminal board is normally equipped with 6 terminal and is made with non hygroscopic and middle resistance material.
Terminal box for TA and MS series is made in aluminum, in cast iron for TC series.
Terminal box has IP 55 standard protection degree or IP56.

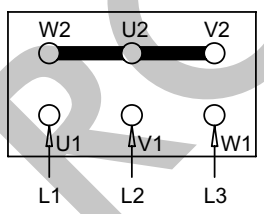
Generally. Cable gland with the following dimensions is provided for:

FRAME	Cable gland	FRAME	Cable gland
TA/MS 56	1-M16x1,5	TC 80	1-M20x1.5
TA/MS 63	1-M16x1,5	TC 90	1-M20x1.5
TA/MS 71	1-M20x1,5	TC 100	2-M20x1.5
TA/MS 80	1-M20x1,5	TC 112	2-M20x1.5
TA/MS 90	1-M20x1,5	TC 132	2-M25x1,5
TA/MS 100	2-M20x1,5	TC 160	2-M32x1,5
TA/MS 112	2-M25x1,5	TC 180	2-M32x1,5
TA/MS 132	2-M25x1,5	TC 200	2-M40x1,5
TA/MS 160	2-M32x1,5	TC 225	2-M50x1,5
TA/MS 180	2-M40x1,5	TC 250	2-M50x1,5
TA/MS 200	2-M40x1,5	TC 280	2-M50x1,5
		TC 315	2-M63x1,5
		TC 355	2-M63x1,5

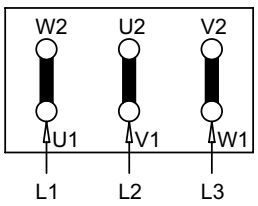
Connection

Single speed motors

Connection star Y
highest voltage on plate

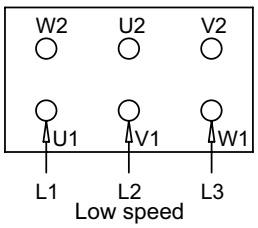


Connection delta Δ
lower voltage on plate

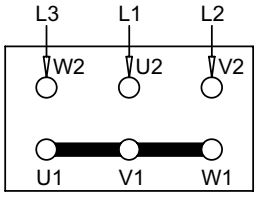


Double speed motors

single winding
6 terminals

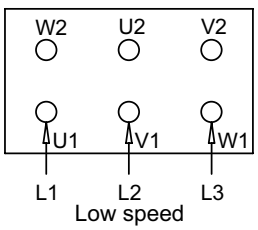


Low speed

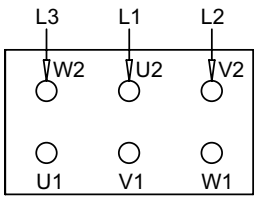


High speed

Two separate windings
6 terminals



Low speed



High speed

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Insulation, Winding

The motors of the series MS,TA,TC are made in F insulation class.
The soft copper electrolytic wire is insulated by using a special enamel (double enamel). Such enamel is classified as insulation class.
All insulating materials used to produce motors are in F or H insulation class.
The winding undergoes a treatment as follows: it is impregnated by soaking it in oven-curing F class resins, it is tropicalized following a process including a spraying of anti-salty enamel and, finally, it is coated using a spray with heatproof, humidity-proof, chemical agent and sea-ambient corrosive action resistant characteristics.
The impregnation cycle is carried out under vacuum.

Ratings and Technical Data

Power and data reported in the Technical Data Tables are for continuous duty (S1) at an ambient temperature of 40 C, max. altitude 1000 a.s.l., with supply at 400 V - 50Hz.
In such conditions, the temperature rise reached by the motors lower than the one provided for by the B insulation class.
The operating characteristics are guaranteed with the tolerances defined by the CEI EN 60034-1 Standards and the IEC 60034-1 Recommendations, reported in the table

CHARACTERISTICS	TOLERANCES
Efficiency	Motor power < 50 kW -15% of (1-η) Motor power > 50 kW -10% of (1-η)
Power factor	+1/6 (1- cosφ) Min 0.02 Max 0.07
Locked rotor current	+20% of guaranteed value
Locked rotor torque	-15% + 25% of guaranteed value
Pull out torque	-10% of guaranteed value
Slip	± 20% of guaranteed value

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Supply Voltage

The motors, series MS,TA,TC from frame size 56 to frame size 250 are designed to be used for supply at rated voltages from 220V to 690V at 50Hz and at 60Hz, motors from frame size 280 to frame size 355 are designed to be used for supply at rated voltages from 400V to 690V at 50Hz and at 60 Hz.
Standard rated voltages of the motors usually in stock are:
from frame size 56 to frame size 100, 230/400V 50Hz
from frame size 112 to frame size 355, 400/690V 50Hz
Lower voltage is made with delta connection while the higher voltage is made with star connection.
In these supply conditions efficiencies are in compliance with hte IEC 60034-30-1.

Voltage and Frequency Variations

Motors can work without failures if the supply voltage variations are limited as stated in the Classification Society Standards.
In particular, motors can run with voltage variations of 10% and frequency variations of 5% with a maximum combined variation of 10% with temperature rise in compliance with the provisions of the Classification Society Standards.

Operation at 60Hz Frequency

The motors can run with a frequency of 60 Hz with differences in performances and electrical ratings by applying the multiplier value as described in the table below. For motors made at 50Hz and supply at 60Hz, efficiency class of the motor at 50Hz is no longer valid.

PLATE VOLTAGE	PLATE VOLTAGE	NOMINAL POWER	NOMINAL CURRENT	NOMINAL TORQUE	RPM	STARTING CURRENT	STARTING TORQUE	MAX TORQUE
50 HZ	60 HZ							
230 +/- 10%	220 +/- 5%	1	1	0.83	1.2	0.83	0.83	0.83
230 +/- 10%	230 +/- 10%	1	0.95	0.83	1.2	0.83	0.83	0.83
230 +/- 10%	254 +/- 5%	1.15	1.02	0.96	1.2	0.93	0.93	0.93
230 +/- 10%	277 +/- 5%	1.2	1	1	1.2	1	1	1
400 +/- 10%	380 +/- 5%	1	1	0.83	1.2	0.83	0.83	0.83
400 +/- 10%	400 +/- 10%	1	0.95	0.83	1.2	0.83	0.83	0.83
400 +/- 10%	440 +/- 5%	1.15	1.02	0.96	1.2	0.93	0.93	0.93
400 +/- 10%	460 +/- 10%	1.15	1	0.96	1.2	0.96	0.96	0.96
400 +/- 10%	480 +/- 5%	1.2	1	1	1.2	1	1	1

ROYSE

Deratings

The tables of technical data are referred to an ambient temperature of 40°C and an altitude up to 1000 a.s.l.
In different environmental conditions output ratings vary, and are obtainable by applying the factors as mentioned in the following table, maintaining the temperature rise provided for by the B insulation class.

ALTITUDE M A.S.L	AMBIENT TEMPERATURE (°C)					
	30	30-40	45	50	55	60
<= 1000	1.06	1	0.97	0.94	0.90	0.87
1500	1.04	0.97	0.94	0.91	0.87	0.84
2000	1	0.95	0.92	0.88	0.84	0.81
3000	0.96	0.89	0.86	0.82	0.78	0.74
4000	0.91	0.84	0.80	0.76	0.72	0.67

In case the temperature rise permitted for the F insulation class is used, the corrective factors are the same mentioned in the following table:

ALTITUDE M A.S.L	AMBIENT TEMPERATURE (°C)					
	30	30-40	45	50	55	60
<= 1000	1.17	1.12	1.09	1.06	1.03	1
1500	1.15	1.10	1.07	1.04	1.01	0.97
2000	1.13	1.07	1.04	1.01	0.98	0.95
3000	1.08	1.02	0.99	0.96	0.93	0.89
4000	1.04	0.97	0.94	0.91	0.87	0.84

All technical data reported in the tables are referred to continuous duty (S1). Upon request, motors for limited Duty S2 (30 or 60 minutes) can be supplied.

ROYSE

Overloads

Continuous duty motors can withstand the following overloads

OVERLOAD %	DURATION MINUTES	TIME INTERVAL MINUTES
10	10	15
20	6	15
30	4	15
40	3	15
50	2	15

In these operating overloads conditions, over temperature are than the limits of the insulation class F.

Starting

Motors are suitable for the following types of starting:

- Direct
- Star - delta
- By autotransformer
- Soft-start (*)
- by inverter (**)

(*)when the starting is finished soft-start should be by-passed, or precaution must be used the same when the motor powered with inverter

(**) see as recommended in the paragraph n.23 “Inverter Supply”

Vibration

Motors are dynamically balanced with a half key applied to the shaft extension in accordance with standard IEC 60034-14:2007 to vibration severity grade normal (N) in standard execution.
The following table indicates the maximum vibration grades with respect to the diferent shaft heights.

Vibraion degree	Frame size (mm)	56≤H≤132	132<H≤280	H>280
	Mounting type	Speed/ (mm/s)	Speed/ (mm/s)	Speed/ (mm/s)
A	Suspension	1.5	2.2	2.8
	Rigid mounting	1.3	1.8	2.3

ROYSE

Noise

The technical features table contains the values of A-sound pressure level (LpA) and A sound power level (LwA), measured at a one meter distance.
Sound levels are measured in no-load conditions and have tolerances of 3 dB(A).

FRAME SIZE	A-sound pressure level (LpA) · A-sound power level (LwA) dB(A)							
	2POLES		4POLES		6POLES		8POLES	
	LpA	LwA	LpA	LwA	LpA	LwA	LpA	LwA
56	69	78	63	72	58	67	54	63
63	75	84	67	76	61	70	58	67
71	75	84	67	76	61	70	58	67
80	75	84	70	79	63	72	61	70
90	75	85	70	80	66	76	66	76
100	77	87	70	80	66	76	66	76
112	78	88	73	83	66	76	66	76
132	69	78	63	72	58	67	54	63
160	75	84	67	76	61	70	58	67
180	75	84	67	76	61	70	58	67
200	75	84	70	79	63	72	61	70
225	75	85	70	80	66	76	66	76
250	77	87	70	80	66	76	66	76
280	78	88	73	83	66	76	66	76
315	80	90	77	87	73	83	69	79
355	86	97	84	96	82	94	79	91

The values of the noise (LpA) and of the sound power (LwA) in the table are related to the operation at 50Hz, when the frequency changes these values change how indicated in the following tabel:

SUPPLY FREQUENCY HZ	% VALUE OF THE NOISE LEVEL COMPARED TO THE 50HZ VALUE
10	60%
20	60%
30	70%
40	100%
50	100%
60	100%
80	120%

ROYSE

Thermal Protections

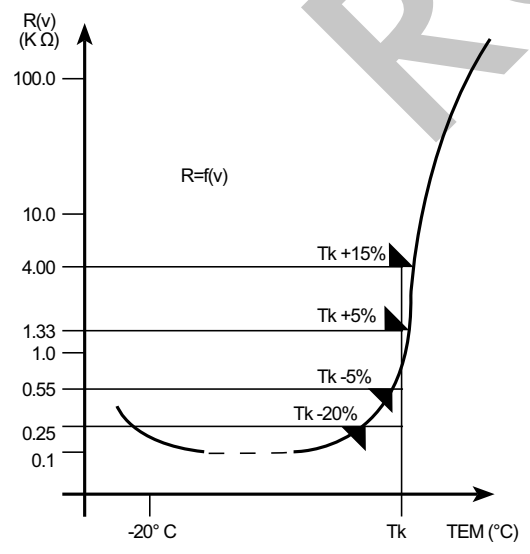
All the Techtop motors from frame size 160 to frame size 355 have installed the positive temperature coefficient thermistors PTC. These protections change its standard resistance value, Upon request, these protection, will be installed from frame size 56 to frame size 132.

Resistance of PTC, for nominal operating temperature (T), will be satisfy the following value:
- < 250 Ohm at a temperature from -20°C toTK-20°C
- < 550 Ohm at a temperature of TK-5°C
- > 1330 Ohm at a temperature of TK+5°C
- > 4000 Ohm at a temperature of TK+15°C

Values of TK related with the class of insulation are the following:

CLASS OF INSULATION	OPERATING TEMPERATURE LIMIT OF THE INSULATION °C	TK °C
A	105	95-100
E	120	110-115
B	130	120-125
F	155	145-150
H	180	170-175

The nominal operating temperature of the thermistors PTC, mounted on the Techtop motors is 150' C, maximum supply voltage of the PTC theristors is 2,5V.
Below the characteristic resistance/ temperature of the PTC thermistors:



Upon request, the following thermal protections can be installed on the motors:

Bimetallic devices

Motor protectors with contact normally closed. The contact opens when the winding temperature reaches limits dangerous to the insulation system of the motor.

Platinum resistance thermometers PT100

Variable linear resistance with the winding temperature. Device particularly suitable for a continuous winding temperature monitoring.
The protection is normally made by 3 sensitive elements, one for each phase, and with two terminals in a specially provided terminal board located in the main terminal box or in a specially provided auxiliary terminal box.

ROYSE

Anticondensation heaters

Motors subject to atmospheric condensation, either through standing idle in damp environments or because of wide ambient temperature variations, may be fitted with anticondensation heaters.
They are of tape form and are normally mounted on the stator winding head.
Anticondensation heaters are normally switched on automatically when the supply to the motor is interrupted, heating the motor to avoid water condensation.
Normal supply voltage is 115 V or 220/240V.

Anticondensation heater terminals are led to a specially provided terminal board located in the main terminal box. Upon request they can be led to a terminal board located in an auxilary terminal box.

The power values normally used are shown in the table :

FRAME SIZE	POWER (W)
132-160	26
180-200	26
225-250	50
280-315	100
355	200

ROYSE

Drainage hole

Motors of series MS, TA, TC are provided with holes for the discharge of condensate closed with a plug to guarantee the degree of protection IP reported on plate.
As a function of the operating conditions such plugs can be removed to allow the discharge of condensate that may form inside the motor.

Converter Fed Application

TECHTOP low voltage motors are suitable for pumps, fans, compressors, texitle machine and mechanical machine applications where variable or constant speed is required.

In application where the motor is driven by a converter, the degree of electrical interference depends on the type of converter used (type, number of IGBTs, interference suppression measures, and manufacturer), cabling, distance and application requirements.

The installation guidelines of the converter manufacturer with regards to electromagnetic compatibility must be considered at all times during the design and implementation phases.

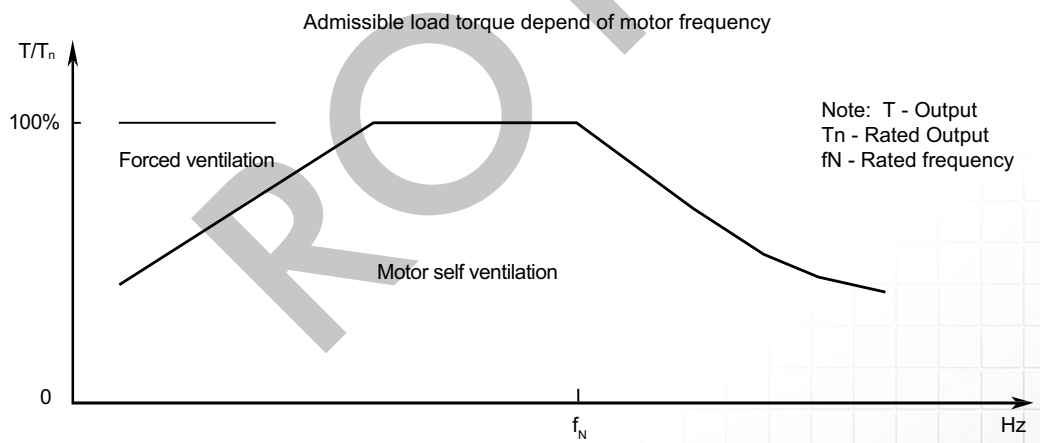
At rated output with converter fed operation, the motors will be used in temperature class 155 (F). To prevent damage as a result of bearing currents, insulated bearings are recommended to be assembled for FS250 ~ 315. Please inquire Techtop about the detailed information of insulated bearing.

ROYSE

Converter-fed Operation

The standard insulation of TECHTOP low voltage motors is designed such that operation is possible on the converter at mains voltage up to 480 V.

The load torque characteristics of this series motor is referred in the following diagram:



By usage with admissible torque and below, the motor can be operated with self cooling; by usage over the admissible torque line, the motor with forced ventilation is needed.

At operating speeds above rated speed the noise and vibration levels increase and the bearing life time reduce. Attention should be paid to the re-greasing intervals and the grease service life.

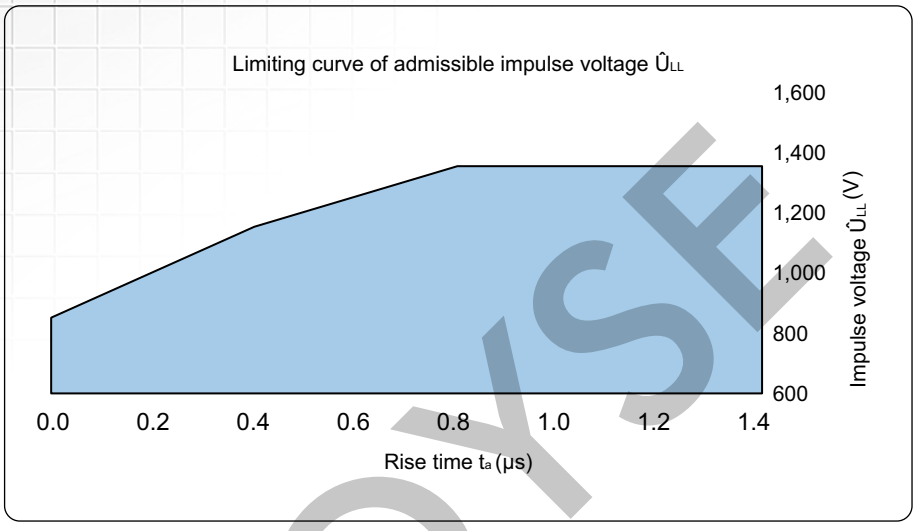
For converter-fed operation with frequencies greater than 60 Hz special balancing is required for compliance with the specified limit values.

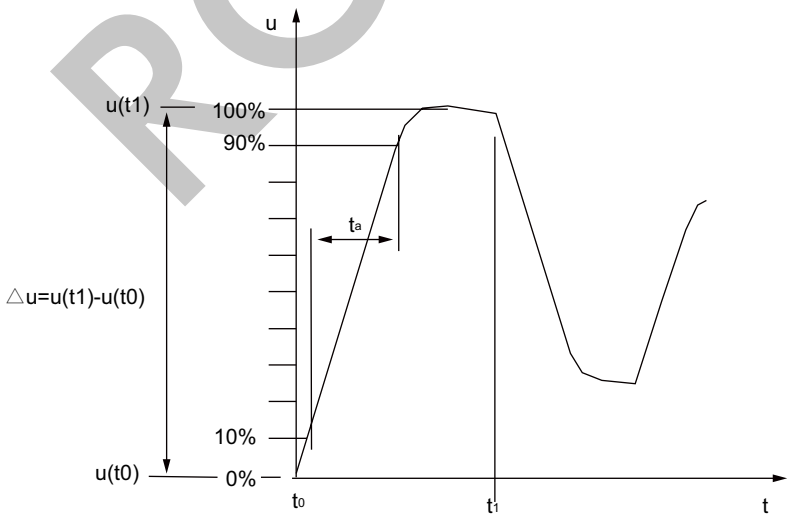
Voltage Withstand Levels

The dielectric stress of the winding insulation is determined by:

- the peak voltage, rise time and frequency of the impulses produced by the converter.
- the characteristics and the length of the connection leads between the converter and motor.
- the winding construction and other system parameters, especially the voltages between the different parts of the winding and the ground represent dielectric stress at the insulation system.

The standard insulation of the 1LE0003 motors is designed to withstand voltage peak and rise time which is showed in the diagram:





The values refer to standard IEC 60034-17 and GB/T 20161-2008.

ROYSE

Auxiliary Fans

All frame sizes can be supplied with cooling system IC 416 (forced ventilation) on request.
Consequently the ventilation is independent of the rotation speed of the motor itself.
This solution is particularly suitable for inverter supplied motors.

Auxiliary fans three phase

TYPE	SPEED (r/min)	MAXIMUN AIR FLOW (m^3/h)	MAXIMUM PRESSURE (pa)	NOISE dB(A)
63	2800	45	40	62
71	2800	52	50	62
80	2800	58	60	62
90	2800	91	80	65
100	2750	142	80	67
112	2600	229	80	67
132	1400	337	35	69
160	1390	609	40	72
180	1330	686	55	72
200	1230	1679	65	72
225	1430	1786	70	74
250	1420	1813	80	75
280	1360	2415	85	78
315	1320	2820	110	81
355	900	3500	800	85

3PHASE (v)	INPUT CURRENT (A)	Hz	INPUT POWER (w)
230	0,12	50	20
230	0,14	50	25
230	0,14	50	29
230	0,16	50	32
230	0,29	50	58
230	0,31	50	69
230	0,33	50	52
230	0,43	50	70
230	0,43	50	85
230	0,46	50	105
230	0,62	50	75
230	0,66	50	115
230	0,94	50	180
230	1,3	50	480
230	1,65	50	400

TYPE	SPEED (r/min)	MAXIMUN AIR FLOW (m^3/h)	MAXIMUM PRESSURE (pa)	NOISE dB(A)
63	2800	45	40	62
71	2800	52	50	62
80	2800	58	60	62
90	2800	91	80	65
100	2750	142	80	67
112	2600	229	80	67
132	1400	337	35	69
160	1390	609	40	72
180	1330	686	55	72
200	1230	1679	65	72
225	1430	1786	70	74
250	1420	1813	80	75
280	1360	2415	85	78
315	1320	2820	110	81
355	900	3500	800	85

3PHASE (v)	INPUT CURRENT (A)	Hz	INPUT POWER (w)
400	0,07	50	20
400	0,08	50	25
400	0,08	50	29
400	0,09	50	32
400	0,17	50	58
400	0,18	50	69
400	0,19	50	52
400	0,25	50	70
400	0,25	50	85
400	0,26	50	105
400	0,36	50	75
400	0,38	50	115
400	0,54	50	180
400	0,75	50	480
400	0,95	50	400

ROYSE

Auxiliary Fans

Auxiliary fans three phase

TYPE	SPEED (r/min)	MAXIMUN AIR FLOW (m^3/h)	MAXIMUM PRESSURE (pa)	NOISE dB(A)
63	2800	45	40	62
71	2800	52	50	62
80	2800	58	60	62
90	2800	91	80	65
100	2750	142	80	67
112	2600	229	80	67
132	1400	337	35	69
160	1390	609	40	72
180	1330	686	55	72
200	1230	1679	65	72
225	1430	1786	70	74
250	1420	1813	80	75
280	1360	2415	85	78
315	1320	2820	110	81
355	900	3500	800	85

3PHASE (v)	INPUT CURRENT (A)	Hz	INPUT POWER (w)
690	0,04	50	20
690	0,05	50	25
690	0,05	50	29
690	0,05	50	32
690	0,1	50	58
690	0,1	50	69
690	0,11	50	52
690	0,14	50	70
690	0,14	50	85
690	0,15	50	105
690	0,21	50	75
690	0,22	50	115
690	0,31	50	180
690	0,43	50	480
690	0,55	50	400

Auxiliary fans single phase

TYPE	SPEED (r/min)	MAXIMUN AIR FLOW (m^3/h)	MAXIMUM PRESSURE (pa)	NOISE dB(A)
63	2800	45	40	62
71	2800	52	50	62
80	2700	58	60	62
90	2300	91	80	65
100	2700	142	80	67
112	2400	229	80	67
132	1400	337	35	69
160	1400	609	40	72
180	1200	686	55	72
200	1200	1679	65	72
225	1400	1786	70	74
250	1400	1813	80	75
280	1400	2415	85	78

1PHASE (v)	INPUT CURRENT (A)	Hz	INPUT POWER (w)	μF
230	0,12	50	17	1
230	0,17	50	33	2
230	0,18	50	35	2
230	0,2	50	45	3
230	0,3	50	55	2
230	0,37	50	65	2
230	0,35	50	55	3
230	0,28	50	55	4
230	0,4	50	80	4
230	0,4	50	85	4
230	0,5	50	85	6
230	0,9	50	120	6
230	0,95	50	170	10

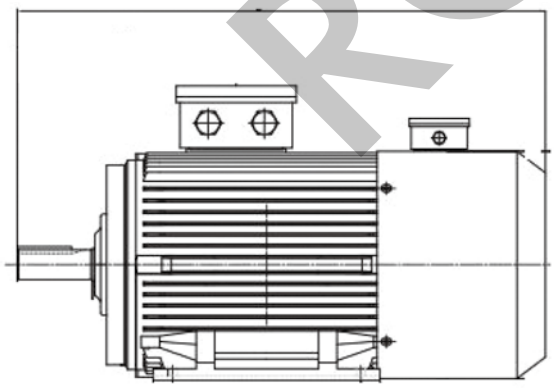
ROYSE

Auxiliary Fans

All frame sizes can be supplied with cooling system IC 416 (forced ventilation) on request.
In the following table shown the increases of the dimension L when a forced ventilation is mounted.

TYPE	MS SERIES (mm)	TA SERIES (mm)	TC SERIES (mm)
63	92	92	–
71	92	105	–
80	98	110	–
90	97	110	–
100	103	120	–
112	93	125	–
132	109	120	120
160	–	145	130
180	–	–	130
200	–	–	140
225	–	–	160
250	–	–	167
280	–	–	175
315	–	–	205
355	–	–	205

L standard motor+measure indicated in the table



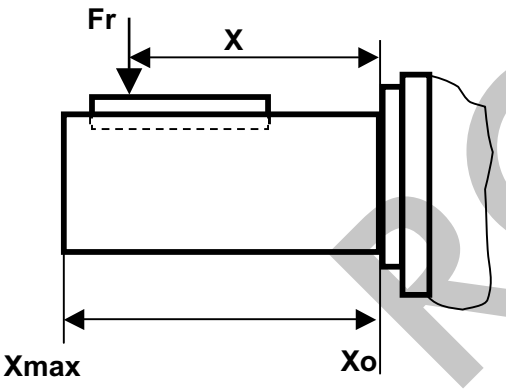
ROYSEL

Permissible Load On The Bearings

The theoretical basic fatigue life for bearings is calculated according to the provisions of the ISO R 281-1 Standard. Life is calculated assuming that motors are running under normal ambient conditions, without abnormal vibrations, without axial or radial loads beyond the ones mentioned in the following tables and with operating temperatures of the bearings ranging between - 30 and +85 C'.
Life calculated this way is called basic life (L_{10h}) expressed in hours of operation.
50% of bearings reaches a life equal to five times the basic life resulting from the calculation.
In table 13 are mentioned the maximum permitted axial and radial loads for a basic life (L_{10h}) , calculated according to the provisions of the ISO Standards, equal to 20000 and 40000 hours of operation.
Values of the radial loads are given both for loads applied to the shaft extension (X_{max}) and in correspondence of the face on the shaft hub (X_0).
Radial loads that can be applied linearly, change with the change of the application point, therefore for loads placed at a distance X from the shaft face (X_0), the maximum load that can be applied is given by the followig expression:

$$Fra_X = \frac{C_{xo} - C_{xmax}}{X_{max}} \times X + C_{xmax}$$

Where:
Fra_x = permitted radial load at point X
C_{xo} = permitted radial load at point X_0
C_{Xmax} = permitted' radial load at point X_{max}
X_{max} = shaft extension
X = distance from the application point of the radial load to the shaft face



To verify that the belt pull does not exceed the maximum value allowed the following formula can be used:

$$F = \frac{19100 \times P \times K}{n \times D}$$

F= radial force in Nm
P= power trasmitted in KW
n= numbers of revs. per minute
D= pulley diameter in meters
K= constant

Constant values K:

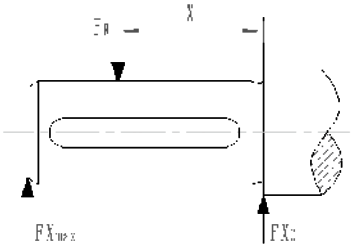
2	for flat pulley with tension roller
2,25	for sheaves with V belt
2,5-3	for flat belts without tension roller, or for heavy duty with any t ype of pulley

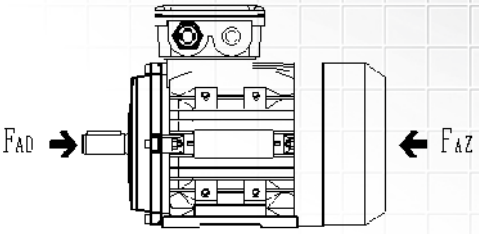
ROYSE

The maximum allowable radial forces, at the shaft X_{max} and at the shaft collar X_0,reported in the following pages are for motors having the following characteristic: standard construction, horizontal mounting IMB3 or IMB35 only, operating frequency 50Hz, bearing life of 20000 or 40000 hours according to ISO 281:1990, bearing operating temperature between -20°C to+70°C, NO external axial forces, motor installed on a rigid foundation with negligible structural vibrations.

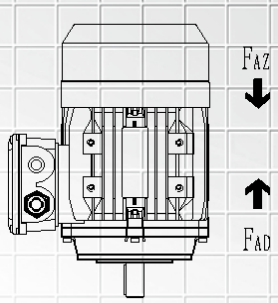
The maximum allowable axial forces, reported in the following pages are, for motors having the following characteristic:
standard construction, horizontal mounting IMB3 or IMB35 only, operating frequency 50Hz, bearing life of 20.000 or 40.000 hours according to ISO281:1990, bearing operating temperature between -20°C to+70°C, NO external radial forces, motor installed on a rigid foundation with negligible structural vibrations.

MS series permissible radial forces (N) & permissible axial forces(deep groove ball bearings)





IM B3



IM V1

Motor size	Poles	Shaft length (mm)	Ball bearings				Mounting IM B3				Mounting IM V1			
			Max.radial forces		Max.radial forces		Max.axial forces		Max.axial forces		Max.axial forces		Max.axial forces	
			L10=20000 hours		L10=40000 hours		L10h=20000 hours		L10h=40000 hours		L10h=20000 hours		L10h=40000 hours	
			FX_0	FX_{max}	FX_0	FX_{max}	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)
MS56	2	20	353.8	305.7	280.2	242.1	261.0	261.0	192.6	192.6	269.3	255.9	200.8	187.5
	4	20	445.5	384.8	352.7	304.7	354.7	354.7	260.4	260.4	366.3	347.9	271.8	253.4
MS63	2	23	352.0	302.9	278.5	239.7	260.3	260.3	192.0	192.0	272.1	253.1	203.6	184.6
	4	23	442.5	380.8	349.9	301.1	353.4	353.4	259.2	259.2	371.3	343.0	276.7	248.5
	6	23	506.7	436.1	400.7	344.9	423.5	423.5	310.0	310.0	443.5	411.9	329.7	298.2
MS71	2	30	397.6	334.0	314.4	264.1	283.3	283.3	208.7	208.7	299.2	273.4	224.5	198.6
	4	30	500.2	420.2	395.3	332.1	384.6	384.6	282.0	282.0	407.3	371.1	304.4	268.2
	6	30	571.8	480.3	451.8	379.5	460.8	460.8	337.8	337.8	489.1	444.4	365.7	320.9
	8	30	631.7	530.6	499.6	419.6	520.1	520.1	384.3	384.3	544.3	505.3	408.7	369.7
MS71 (L.H.)*	2	30	400.3	340.7	316.2	269.1	282.5	282.5	208.0	208.0	302.4	270.2	227.6	195.4
	4	30	502.9	428.0	397.0	337.9	383.3	383.3	280.8	280.8	412.6	365.8	309.7	262.9
	6	30	575.1	489.4	453.8	386.2	459.2	459.2	336.3	336.3	494.9	438.6	371.5	315.1
	8	30	636.2	541.4	502.7	427.9	518.6	518.6	383.2	383.2	548.6	501.0	413.1	365.4
MS80	2	40	663.9	545.9	524.2	431.0	464.7	464.7	339.6	339.6	498.5	438.7	375.9	316.1
	4	40	836.1	687.5	660.1	542.7	629.0	629.0	462.9	462.9	677.0	600.2	507.0	430.2
	6	40	957.4	787.2	755.9	621.5	752.0	752.0	551.1	551.1	806.7	720.1	604.8	518.1
	8	40	1052.8	865.6	831.0	683.3	854.8	854.8	626.2	626.2	918.1	818.4	688.5	588.7
MS90S	2	50	726.9	574.8	574.2	454.0	495.4	495.4	362.4	362.4	532.6	472.0	398.9	338.3
	4	50	919.1	726.8	726.6	574.6	671.9	671.9	495.3	495.3	710.3	648.4	533.2	471.4
	6	50	1048.8	829.4	828.5	655.2	801.5	801.5	587.5	587.5	855.0	769.7	640.2	554.9
	8	50	1156.3	914.4	913.8	722.7	912.8	912.8	669.1	669.1	966.7	881.4	722.0	636.7
MS90L	2	50	732.6	593.9	577.7	468.3	493.1	493.1	360.3	360.3	542.7	461.8	409.0	328.1
	4	50	925.9	750.5	730.7	592.3	668.6	668.6	492.1	492.1	724.2	634.6	547.1	457.5
	6	50	1057.4	857.1	834.0	676.0	798.0	798.0	584.3	584.3	869.0	755.6	654.2	540.9
	8	50	1166.4	945.5	920.5	746.1	909.1	909.1	665.8	665.8	980.7	867.3	736.0	622.7
MS90L(L.H.)*	2	50	737.5	612.1	580.6	481.9	490.8	490.8	358.2	358.2	552.9	451.7	419.2	318.0
	4	50	935.5	776.4	737.8	612.3	667.4	667.4	490.9	490.9	729.4	629.3	552.3	452.3
	6	50	1064.3	883.3	837.9	695.4	794.2	794.2	580.7	580.7	884.0	740.6	669.3	525.8
	8	50	1181.6	980.6	932.5	773.9	909.1	909.1	665.8	665.8	980.7	867.3	736.0	622.7
MS100L	2	60	1012.5	805.5	797.4	634.4	673.3	673.3	492.5	492.5	755.6	621.2	573.1	438.7
	4	60	1276.1	1015.2	1005.0	799.6	912.3	912.3	669.6	669.6	1015.9	848.3	772.2	604.6
	6	60	1458.0	1159.9	1147.7	913.1	1091.3	1091.3	801.1	801.1	1216.7	1012.5	921.6	717.3
	8	60	1621.6	1290.1	1280.1	1018.4	1247.1	1247.1	914.4	914.4	1341.3	1191.6	1007.0	857.2

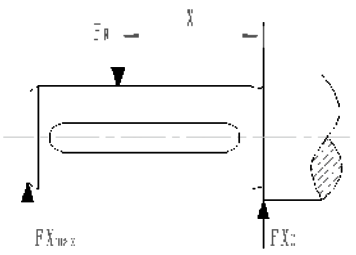
ROYCE

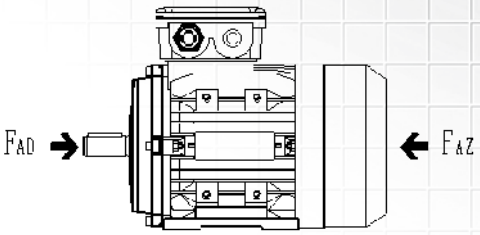
Motor size	Poles	Shaft length (mm)	Ball bearings				Mounting IM B3				Mounting IM V1			
			Max.radial forces		Max.radial forces		Max.axial forces		Max.axial forces		Max.axial forces		Max.axial forces	
			L10=20000 hours		L10=40000 hours		L10h=20000 hours		L10h=40000 hours		L10h=20000 hours		L10h=40000 hours	
			FX_0	FX_{max}	FX_0	FX_{max}	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)
MS100(L.H.)*	2	60	1020.4	823.9	803.6	648.8	673.3	673.3	492.5	492.5	755.6	621.2	573.1	438.7
	4	60	1276.1	1030.3	1002.9	809.7	907.1	907.1	664.8	664.8	1037.8	826.3	794.1	582.6
	6	60	1469.4	1186.3	1156.7	933.9	1091.3	1091.3	801.1	801.1	1216.7	1012.5	921.6	717.3
	8	60	1634.3	1319.5	1290.1	1041.6	1247.1	1247.1	914.4	914.4	1341.3	1191.6	1007.0	857.2
MS112M	2	60	1401.5	1131.5	1104.6	891.8	669.6	949.5	489.1	693.5	772.5	884.6	590.0	626.8
	4	60	1767.0	1426.7	1392.9	1124.6	907.8	1285.4	665.3	945.2	1035.2	1207.0	791.5	865.5
	6	60	2018.7	1629.8	1590.4	1284.1	1085.1	1534.4	795.6	1122.6	1241.7	1439.5	946.5	1025.3
	8	60	2241.4	1809.7	1770.1	1429.1	1241.5	1756.6	909.4	1287.0	1362.7	1685.7	1028.4	1213.9
MS112(L.E.S)*	2	60	1407.5	1144.8	1109.3	902.3	669.6	949.5	489.1	693.5	772.5	884.6	590.0	626.8
	4	60	1764.4	1435.1	1388.7	1129.5	901.5	1279.9	660.3	940.1	1058.0	1184.3	814.3	842.8
	6	60	2027.4	1649.0	1597.3	1299.2	1085.1	1534.4	795.6	1122.6	1241.7	1439.5	946.5	1025.3
	8	60	2251.1	1831.0	1777.7	1446.0	1241.5	1756.6	909.4	1287.0	1362.7	1685.7	1028.4	1213.9
MS132S	2	80	2092.6	1597.3	1650.4	1259.8	1003.8	1415.8	756.4	1036.3	1144.1	1326.7	872.5	944.5
	4	80	2635.5	2011.7	2078.3	1586.4	1358.2	1917.0	996.7	1408.6	1540.2	1804.6	1176.4	1294.4
	6	80	3025.7	2309.6	2388.0	1822.8	1633.5	2301.5	1199.9	1681.9	1818.7	2184.5	1382.5	1567.5
	8	80	3340.3	2549.7	2638.3	2013.9	1857.8	2615.6	1359.7	1918.5	2034.5	2511.3	1533.8	1811.0
MS132M	2	80	2110.4	1661.4	1660.8	1307.5	995.5	1407.4	749.0	1028.8	1181.7	1289.0	910.1	906.9
	4	80	2658.4	2092.8	2092.1	1646.9	1347.4	1906.2	986.6	1398.3	1586.2	1758.6	1222.4	1248.3
	6	80	3036.1	2390.1	2387.8	1879.7	1610.0	2279.5	1179.8	1672.2	1907.1	2096.1	1470.9	1479.1
	8	80	3377.4	2658.8	2663.8	2097.0	1847.5	2605.1	1350.2	1909.0	2075.0	2470.8	1574.3	1770.5
MS132L	2	80	2108.4	1688.8	1654.8	1325.5	985.4	1397.2	739.8	1019.6	1227.7	1243.1	956.1	860.9
	4	80	2650.8	2123.3	2079.4	1665.6	1331.3	1888.0	971.5	1383.0	1655.3	1689.6	1291.4	1179.3
	6	80	3038.6	2433.9	2384.4	1909.9	1596.8	2266.0	1167.4	1660.2	1961.5	2041.7	1525.3	1424.8
	8	80	3407.6	2729.5	2687.6	2152.8	1847.5	2605.1	1350.2	1909.0	2075.0	2470.8	1574.3	1770.5
MS160M	2	110	2737.7	2156.9	2150.9	1694.6	1798.2	1798.2	1314.3	1314.3	2085.7	1615.1	1596.5	1125.9
	4	110	3458.5	2724.8	2719.1	2142.3	2438.7	2438.7	1789.1	1789.1	2783.1	2230.5	2126.7	1574.1
	6	110	3970.1	3127.8	3123.7	2461.0	2930.2	2930.2	2151.2	2151.2	3294.4	2710.9	2509.3	1925.8
	8	110	4383.0	3453.2	3451.5	2719.2	3329.7	3329.7	2435.1	2435.1	3696.2	3112.8	2798.5	2215.1
MS160L	2	110	2715.9	2139.7	2129.1	1677.4	1787.6	1787.6	1304.6	1304.6	2133.8	1567.0	1644.6	1077.8
	4	110	3382.3	2664.8	2643.0	2082.3	2399.2	2399.2	1752.2	1752.2	2950.8	2062.9	2294.3	1406.4
	6	110	3871.2	3049.9	3024.8	2383.1	2876.2	2876.2	2101.4	2101.4	3512.3	2493.0	2727.2	1707.9
	8	110	4338.0	3417.7	3406.5	2683.8	3304.4	3304.4	2411.7	2411.7	3795.2	3013.8	2897.6	2116.1
MS180M	2	110	3745.1	3052.2	2939.7	2395.7	1383.0	2396.2	1035.7	1805.5	1801.5	2125.8	1451.9	1529.8
	4	110	4720.0	3846.7	3705.2	3019.6	1885.8	3245.3	1365.1	2377.4	2417.5	2913.3	1888.3	2039.0
	6	110	5372.4	4378.3	4210.7	3431.6	2227.6	3871.9	1620.1	2836.4	2924.8	3445.7	2307.0	2402.7
	8	110	5932.4	4834.7	4653.8	3792.7	2542.5	4403.8	1853.0	3212.0	3262.8	3972.2	2561.3	2769.5
MS200L	2	110	4212.9	3448.1	3295.6	2697.4	1496.9	2706.9	1114.8	2035.2	2112.3	2307.8	1727.2	1629.6
	4	110	5323.9	4357.5	4168.2	3411.6	2046.6	3674.0	1477.0	2686.0	2792.1	3207.3	2209.8	2210.3
	6	110	6061.6	4961.3	4738.6	3878.5	2418.4	4384.8	1751.9	3205.1	3368.4	3802.7	2687.3	2612.9
	8	110	6653.3	5445.6	5197.1	4253.8	2740.7	4977.3	1984.1	3632.2	3840.8	4301.7	3068.8	2930.7

ROYSE

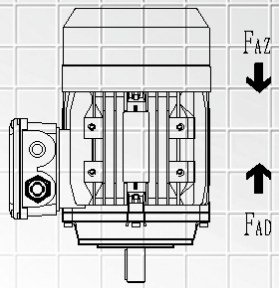
Note:
FR=FX0–X/E(FX0–FXmax)
When the motor is running at 60Hz, the permissible force will reduse 10%.
(L.H.)* = Long housing
(L.E.S.)* = Long End Shield

TA series permissible radial forces (N) & permissible axial forces(deep groove ball bearings)





IM B3



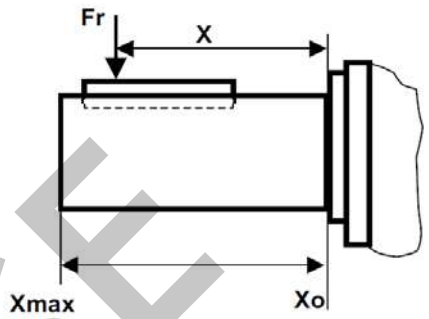
IM V1

Motor size	Poles	Shaft length (mm)	Ball bearings				Mounting IM B3				Mounting IM V1			
			Max.radial forces		Max.radial forces		Max.axial forces		Max.axial forces		Max.axial forces		Max.axial forces	
			L10=20000 hours		L10=40000 hours		L10h=20000 hours		L10h=40000 hours		L10h=20000 hours		(L10h=40000 hours	
			FX_0	FX_{max}	FX_0	FX_{max}	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)
TA56	2	20	351.1	303.6	278.0	240.5	261.0	261.0	192.6	192.6	269.3	255.9	200.8	187.5
	4	20	442.0	382.2	350.0	302.7	354.7	354.7	260.4	260.4	366.3	347.9	271.8	253.4
TA63	2	23	352.6	304.1	279.0	240.6	260.3	260.3	192.0	192.0	272.1	253.1	203.6	184.6
	4	23	443.3	382.3	350.6	302.3	353.4	353.4	259.2	259.2	371.3	343.0	276.7	248.5
	6	23	507.6	437.7	401.5	346.2	423.5	423.5	310.0	310.0	443.5	411.9	329.7	298.2
TA71	2	30	391.9	330.5	309.6	261.1	282.5	282.5	208.0	208.0	302.4	270.2	227.6	195.4
	4	30	492.4	415.3	388.7	327.8	383.3	383.3	280.8	280.8	412.6	365.8	309.7	262.9
	6	30	563.1	474.9	444.4	374.7	459.2	459.2	336.3	336.3	494.9	438.6	371.5	315.1
	8	30	622.9	525.3	492.2	415.1	518.6	518.6	383.2	383.2	548.6	501.0	413.1	365.4
TA80	2	40	657.9	538.3	519.6	425.1	464.9	464.9	339.8	339.8	497.6	439.6	375.0	317.0
	4	40	828.8	678.1	654.5	535.5	629.5	629.5	463.1	463.1	675.3	601.9	505.3	431.9
	6	40	949.3	776.7	749.7	613.4	752.7	752.7	551.7	551.7	804.2	722.6	602.3	520.6
	8	40	1048.8	858.1	829.2	678.4	858.6	858.6	629.6	629.6	904.1	832.3	674.5	602.7
TA90S	2	50	720.1	571.0	568.4	450.7	494.6	494.6	361.6	361.6	536.2	468.3	402.5	334.6
	4	50	910.2	721.8	719.1	570.3	670.7	670.7	494.1	494.1	715.3	643.4	538.3	466.3
	6	50	1041.0	825.5	822.3	652.0	801.3	801.3	587.4	587.4	855.6	769.0	640.8	554.3
	8	50	1147.7	910.1	907.0	719.2	912.6	912.6	669.0	669.0	967.3	880.7	722.7	636.1
TA90L	2	50	721.7	586.3	567.8	461.3	490.0	490.0	357.5	357.5	556.5	448.1	422.8	314.4
	4	50	911.0	740.1	717.1	582.6	663.9	663.9	487.6	487.6	743.9	614.8	566.8	437.7
	6	50	1042.8	847.2	820.8	666.8	793.6	793.6	580.2	580.2	886.3	738.4	671.5	523.6
	8	50	1154.9	938.2	910.5	739.7	906.7	906.7	663.6	663.6	989.6	858.4	745.0	613.8
TA100L	2	60	1007.5	808.7	791.9	635.6	669.7	669.7	489.2	489.2	772.1	604.7	589.6	422.3
	4	60	1266.7	1016.7	995.0	798.6	904.9	904.9	663.5	663.5	1043.5	820.7	799.8	577.0
	6	60	1464.8	1175.7	1153.8	926.0	1093.1	1093.1	802.8	802.8	1209.5	1019.8	914.3	724.6
	8	60	1613.1	1294.7	1270.8	1020.0	1239.9	1239.9	907.9	907.9	1368.9	1164.0	1034.5	829.7
TA112M	2	60	1396.9	1130.8	1098.8	889.5	664.7	944.6	484.8	689.1	794.3	862.7	611.8	604.9
	4	60	1760.2	1425.0	1384.8	1121.0	899.8	1278.3	658.8	938.5	1064.8	1177.4	821.1	835.9
	6	60	2030.7	1643.9	1600.9	1296.0	1087.6	1536.9	797.9	1124.9	1231.6	1449.5	936.4	1035.4
	8	60	2251.7	1822.8	1778.6	1439.8	1242.6	1757.7	910.4	1288.0	1358.5	1689.9	1024.2	1218.1
TA132S	2	80	2129.9	1668.2	1679.9	1315.7	1003.9	1415.9	756.5	1036.4	1143.8	1327.0	872.2	944.8
	4	80	2684.1	2102.2	2117.0	1658.1	1359.2	1918.0	997.6	1409.5	1536.2	1808.6	1172.4	1298.4
	6	80	3085.2	2416.3	2436.1	1907.9	1636.6	2304.7	1202.8	1684.8	1806.1	2197.1	1369.9	1580.2
	8	80	3398.6	2661.7	2684.1	2102.2	1857.2	2615.0	1359.2	1918.0	2036.8	2509.1	1536.1	1808.8
TA132M	2	80	2112.4	1697.2	1656.6	1331.0	982.4	1394.1	737.0	1016.9	1241.5	1229.2	969.9	847.1
	4	80	2665.1	2141.3	2090.9	1679.9	1331.9	1888.7	972.1	1383.6	1652.5	1692.3	1288.7	1182.1
	6	80	3061.3	2459.6	2404.0	1931.4	1601.0	2270.3	1171.3	1664.2	1944.3	2058.9	1508.1	1442.0
	8	80	3425.1	2751.9	2701.6	2170.6	1847.9	2605.6	1350.6	1909.4	2073.2	2472.6	1572.5	1772.3
TA160M	2	110	2687.3	2088.3	2111.1	1640.6	1024.2	1797.7	768.2	1313.9	1312.2	1613.1	1054.0	1123.9
	4	110	3403.7	2645.0	2677.7	2080.8	1405.7	2442.8	1019.6	1792.9	1714.6	2247.9	1333.9	1591.4
	6	110	3914.5	3042.0	3083.5	2396.2	1683.1	2939.2	1231.5	2159.5	1999.6	2747.2	1544.7	1962.1
	8	110	4320.0	3357.1	3405.3	2646.2	1920.2	3338.9	1406.5	2443.6	2239.3	3149.0	1711.1	2251.4
TA160L	2	110	2682.8	2133.7	2099.3	1669.7	1006.3	1779.1	751.0	1335.9	1396.8	1528.5	1138.5	1039.4
	4	110	3349.3	2663.9	2614.3	2079.2	1356.6	2392.2	974.6	1745.8	1929.2	2033.3	1548.5	1376.8
	6	110	3925.0	3121.7	3083.5	2452.5	1662.9	2918.1	1212.4	2140.0	2084.7	2662.0	1629.8	1877.0
	8	110	4340.3	3452.0	3414.1	2715.4	1901.7	3319.9	1389.4	2426.0	2313.8	3074.5	1785.7	2176.8
TA180M	2	110	3745.1	3052.2	2939.7	2395.7	1383.0	2396.2	1035.7	1805.5	1801.5	2125.8	1451.9	1529.8
	4	110	4720.0	3846.7	3705.2	3019.6	1885.8	3245.3	1365.1	2377.4	2417.5	2913.3	1888.3	2039.0
	6	110	5372.4	4378.3	4210.7	3431.6	2227.6	3871.9	1620.1	2836.4	2924.8	3445.7	2307.0	2402.7
	8	110	5932.4	4834.7	4653.8	3792.7	2542.5	4403.8	1853.0	3212.0	3262.8	3972.2	2561.3	2769.5
TA200L	2	110	4212.9	3448.1	3295.6	2697.4	1496.9	2706.9	1114.8	2035.2	2112.3	2307.8	1727.2	1629.6
	4	110	5323.9	4357.5	4168.2	3411.6	2046.6	3674.0	1477.0	2686.0	2792.1	3207.3	2209.8	2210.3
	6	110	6061.6	4961.3	4738.6	3878.5	2418.4	4384.8	1751.9	3205.1	3368.4	3802.7	2687.3	2612.9
	8	110	6653.3	5445.6	5197.1	4253.8	2740.7	4977.3	1984.1	3632.2	3840.8	4301.7	3068.8	2930.7

ROYAL

TC series permissible radial forces (N)

Motor size	Poles	Shaft length mm	Ball bearings				Roller bearings			
			L10=20000 hours		L10=40000 hours		L10=20000 hours		L10=40000 hours	
			X_0	X_{max}	X_0	X_{max}	X_0	X_{max}	X_0	X_{max}
80	2	40	660	540	520	420				
	4		830	680	650	630				
	6		950	760	750	610				
	8		1050	860	830	680				
90	2	50	720	570	570	450				
	4		910	720	720	570				
	6		1040	820	820	650				
	8		1050	910	900	710				
100	2	60	100	800	790	630				
	4		1200	1000	990	800				
	6		1460	1180	1150	930				
	8		1600	1300	1270	1020				
112	2	60	1400	1130	1100	890				
	4		1760	1420	1380	1120				
	6		2030	1640	1600	1300				
	8		2250	1820	1800	1440				
132	2	80	2130	1660	1600	1300				
	4		2600	2100	2100	1660				
	6		3080	2400	2400	1900				
	8		3400	2600	2680	2100				
160	2	110	2680	2130	2100	1670	5900	4200	4800	4200
	4		3350	2660	2610	2080	6800	4200	5800	4200
	6		3900	3100	3050	2450	8200	4200	6800	4200
	8		4300	3360	3400	2650	8600	4200	7500	4200
180	2	110	3800	3050	3100	2400	7700	5300	6700	5300
	4		4100	3380	3450	2820	8500	5300	7200	5300
	6		4300	3450	3500	2880	8800	5300	7400	5300
	8		4500	3600	3650	2950	9200	5300	8200	5300
200	2	110	5000	4180	4200	3500	10200	8600	8900	7300
	4		5400	4500	4430	3680	11600	9500	9800	8200
	6		5800	4880	4750	4000	12500	9500	10600	8800
	8		6300	5200	5240	4370	13000	9500	11000	9300
225S	2	110	6410	5400	5400	4500	13300	10700	11500	9700
	4	140	7300	5900	6100	4900	15300	10200	13200	10200
	6		7600	6200	6300	5100	16400	10200	14000	10200
	8		8500	6800	7100	5700	17800	10200	15200	10200



ROYSE

TC series permissible radial forces (N)

Motor size	Poles	Shaft length mm	Ball bearings				Roller bearings			
			L10=20000 hours		L10=40000 hours		L10=20000 hours		L10=40000 hours	
			X_0	X_{max}	X_0	X_{max}	X_0	X_{max}	X_0	X_{max}
225M	2	110	6100	5100	5100	4300	13000	10600	11200	9500
	4	140	7000	5700	5800	4700	15100	10200	12800	10200
	6		7100	5750	5850	4700	16000	10200	13400	10200
	8		8000	6400	6600	5300	17300	10200	14600	10200
250M	2	140	6800	5500	5600	4600	16300	10800	14000	10800
	4		7400	6000	6000	4900	18000	13800	15300	12000
	6		8200	6600	6600	5400	20200	13800	17200	13800
	8		9500	7700	7800	6300	22600	13800	19200	13800
280S	2	140	7200	5800	5800	4700	16000	10200	13400	10200
	4		8000	6500	6600	5400	22000	14000	15400	13200
	6		10000	8500	8600	7300	27000	14400	23000	14000
	8		10500	8800	8800	7600	29000	14400	23000	14000
280M	2	140	7000	5600	5600	4500	15800	10000	13200	10000
	4		7800	6300	6400	5300	21500	14000	15200	13200
	6		9800	8300	8400	7200	26500	14400	22800	14000
	8		10300	8600	8600	7300	28600	14400	23000	14000
315S	2	140	7500	6100	6000	5000	20500	13600	15000	13000
	4	170	9000	7000	7100	5700	29000	15000	23000	15000
	6		11000	9200	9300	8000	34000	15000	25000	15000
	8		13000	10500	10600	9200	37000	15000	26000	15000
315M/L	2	140	7400	6000	6000	4900	20300	13600	14800	13000
	4	170	8900	6900	7000	5600	28600	15000	22800	15000
	6		10500	9100	9200	7900	33800	15000	24700	15000
	8		12800	10200	10300	9000	36800	15000	25800	15000
355M	2	140	7600	6100	6200	5100	23000	13600	18000	13600
	4	210	12300	9300	9400	8300	46000	23000	36000	23000
	6		14600	11000	11100	10000	52000	23000	42000	23000
	8		16400	12000	12200	11000	56000	23000	46000	23000
355L	2	140	7300	6100	6200	5100	23000	13600	18000	13600
	4	210	12000	9100	9200	8200	45500	23000	35500	23000
	6		14100	10800	10900	9900	51300	23000	41200	23000
	8		16000	11600	11800	10800	56000	23000	46000	23000

ROYSE

TC series permissible axial forces(deep groove ball bearings)

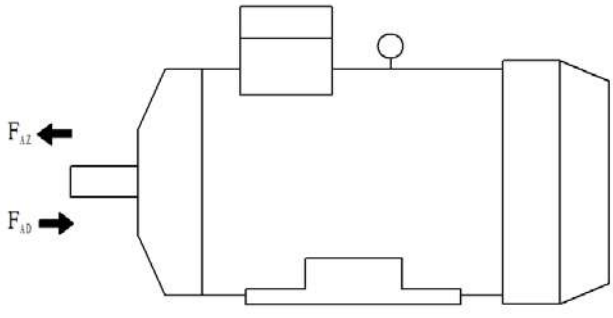
Motor size	Poles	Shaft length (mm)	Mounting IM B3				Mounting IM V1			
			L10h=20000 hours		L10h=40000 hours		L10h=20000 hours		L10h=40000 hours	
			F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)
80	2	40	260	420	190	305	270	400	200	288
	4		350	560	250	400	360	530	270	380
	6		450	700	330	500	460	670	345	480
	8		550	830	400	600	560	800	420	570
90	2	50	370	430	270	310	380	400	285	280
	4		510	590	370	430	530	550	400	395
	6		630	710	460	510	640	670	460	480
	8		760	860	555	620	780	820	580	590
100	2	60	370	590	270	430	380	550	280	400
	4		500	810	365	590	520	750	390	540
	6		650	1020	475	450	680	950	510	680
	8		780	1190	570	860	810	1120	600	800
112	2	60	540	1140	395	830	560	1080	420	770
	4		730	1550	530	1130	760	1470	570	1000
	6		960	1940	700	1400	990	1860	740	1300
	8		1070	2150	780	1500	1100	2050	820	1400
132	2	80	720	1320	520	960	760	1210	570	870
	4		990	1810	720	1300	1030	1660	770	1200
	6		1220	2200	890	1600	1270	2050	950	1500
	8		1370	2450	1000	1780	1440	2250	1000	1600
160	2	110	2600	2600	2100	2100	2900	2392	2300	1900
	4		3200	3200	2600	2600	3500	2900	2800	2300
	6		3500	3500	2800	2800	3800	3200	3000	2500
	8		4000	4000	3200	3200	4400	3700	3500	3000
180	2	110	3200	3200	2560	2560	3500	3000	2800	2400
	4		3600	3600	2880	2880	4000	3300	3200	2600
	6		4100	4100	3280	3280	4500	3700	3600	3000
	8		4200	4200	3360	3360	4600	3800	3650	3000
200	2	110	3600	3600	2880	2880	4000	3300	3200	2600
	4		4400	4400	3520	3520	4800	4000	3800	3200
	6		5000	5000	4000	4000	5500	4600	4400	3600
	8		6000	6000	4800	4800	6600	5500	5300	4400
225S	2	110	4000	4000	3200	3200	4400	3700	3500	3000
	4	140	5000	5000	4000	4000	5500	4600	4400	3700
	6		5500	5500	4400	4400	6000	5000	4800	4000
	8		6200	6200	4960	4960	6800	5700	5400	4500
225M	2	110	3900	3900	3120	3120	4300	3600	3400	2900
	4	140	4900	4900	3920	3920	5400	4500	4300	3600
	6		5300	5300	4240	4240	5800	4900	4600	3900
	8		6000	6000	4800	4800	6600	5500	5300	4400
250M	2	140	4300	4300	3400	3400	4800	4000	3800	3200
	4		5500	5500	4400	4400	6000	5000	4800	4000
	6		6000	6000	4800	4800	6600	5500	5200	4400
	8		6900	6900	5500	5500	8600	6300	6800	5000

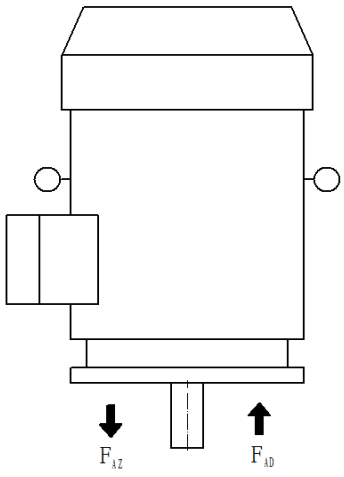
ROYSE

TC series permissible axial forces(deep groove ball bearings)

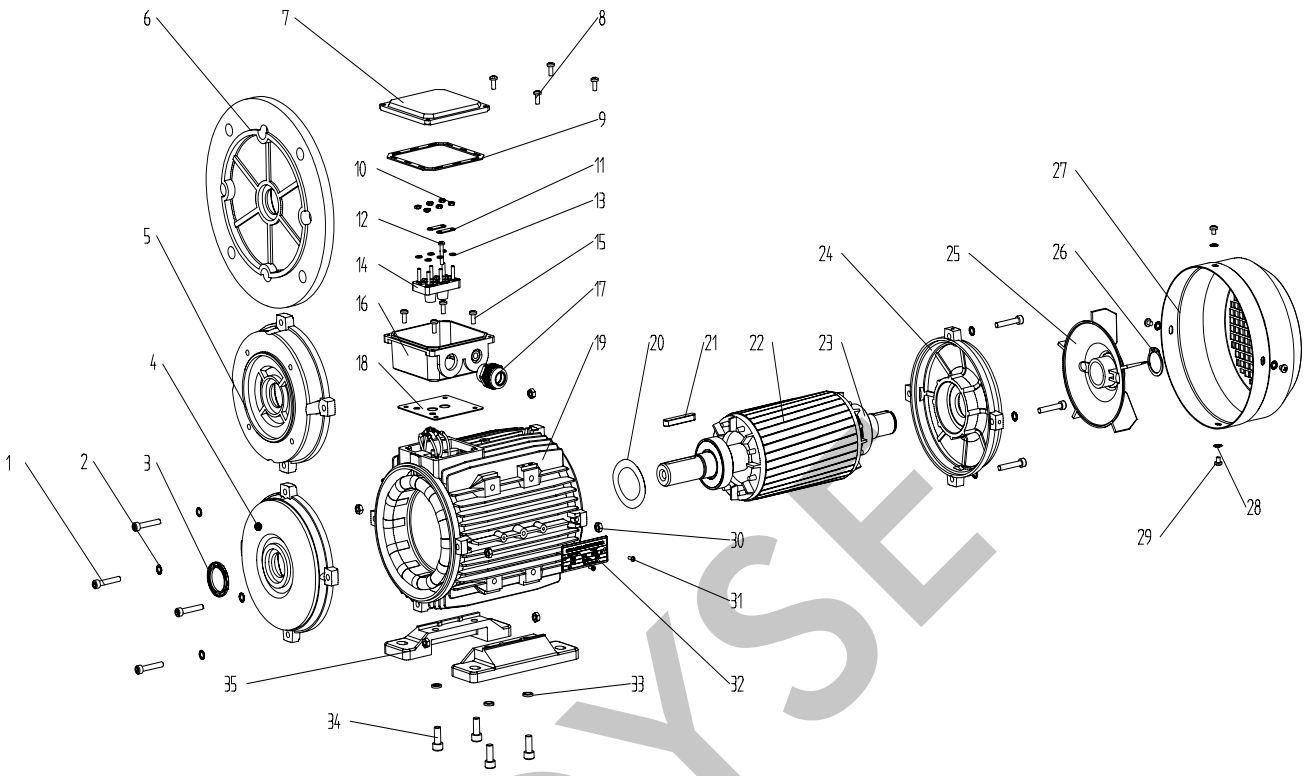
Motor size	Poles	Shaft length (mm)	Mounting IM B3				Mounting IM V1			
			L10h=20000 hours		L10h=40000 hours		L10h=20000 hours		L10h=40000 hours	
			F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)	F_{AD}(N)	F_{AZ}(N)
280S	2	140	4200	4200	3350	3350	4600	3800	3700	3000
	4		6000	6000	4800	4800	6600	5500	5300	4400
	6		7200	7200	5700	5700	7900	6600	6300	5300
	8		8000	8000	6400	6400	8800	7300	7000	5800
280M	2	140	4100	4100	3200	3200	4500	3700	3600	3000
	4		5900	5900	4700	4700	6500	5400	5200	4300
	6		7050	7050	5600	5600	7700	6400	6200	5100
	8		7800	7800	6200	6200	8500	7200	6800	5700
315S	2	140	6100	4200	4800	2850	7900	2600	6600	1300
	4	170	8400	6400	6400	4500	10400	4800	8400	2900
	6		9800	7800	7500	5500	12200	5650	9800	3300
	8		11000	9000	8400	6300	14000	7200	11300	4500
315M/L	2	140	6000	4100	4700	2800	7800	2500	6400	1200
	4	170	8200	6200	6200	4400	10200	4700	8200	2800
	6		9400	7400	7100	5100	12200	5500	9600	3200
	8		10400	8500	7900	5600	13600	7000	11000	4400
355M	2	140	4100	3200	2200	2500	9600	5000	7700	3100
	4	210	7700	6800	6000	4800	10200	6600	8100	4500
	6		9400	7800	6300	5500	11600	6700	9000	4400
	8		11000	8600	6600	6000	11900	7700	9600	5500
355L	2	140	3900	3000	2100	2400	9500	4900	7600	3000
	4	210	7500	6600	5900	4700	10100	6500	8000	4400
	6		9200	7700	6200	5400	11500	6600	8900	4300
	8		10800	8500	6500	5900	11800	7600	9500	5400

ROYSE





Motor Spare Part List "Exploded Drawing"

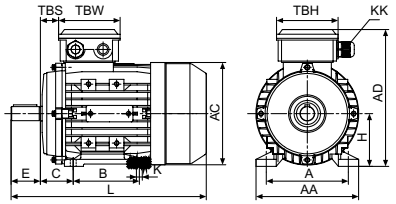


ROYSE

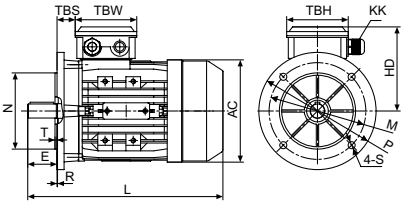
This catalogue is only a reference for users.
The concrete data be changed please contact with us before ordering.

1. Screw
2. Gasket
3. Oil seal
4. Front endshield
5. B14 flange
6. B5 flange
7. TB cover
8. TB fixing screws
9. TB upper gasket
10. Terminal board fixing nut
11. Terminal bridge
12. Terminal pin
13. Terminal shim
14. Terminal board
15. TB fixing screws
16. TB base
17. Cable gland
18. TB bottomgasket
19. Frame
20. Preload washer
21. Key
22. Rotor
23. Bearing
24. NDE endshield
25. Cooling fan
26. Fan circlip
27. Fan cover
28. Fan cover fixing shim
29. Fan cover fixing screws
30. Endshield fixing nut
31. Rivet
32. Nameplate
33. Foot fixing nut
34. Foot fixing screws
35. Foot

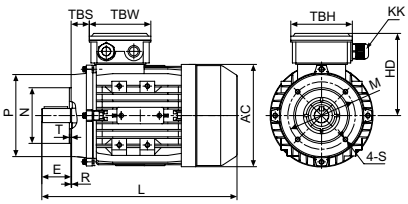
MS/MSD Series Dimensional Drawings



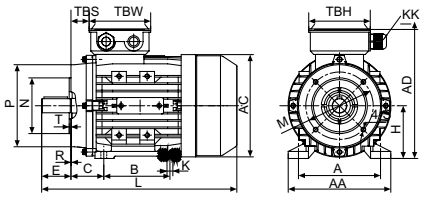
56-160 IM B3



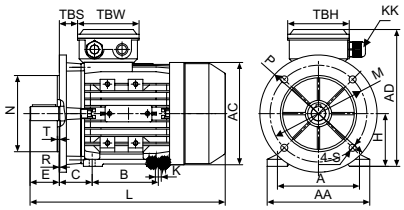
56-160 IM B5



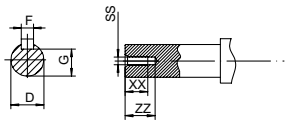
56-160 IM B14

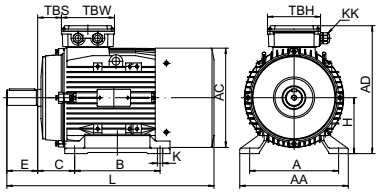


56-160 IM B34

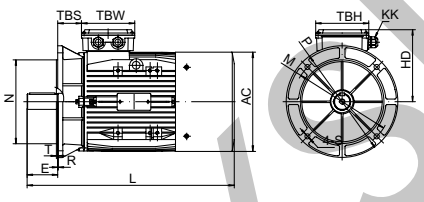


56-160 IM B35

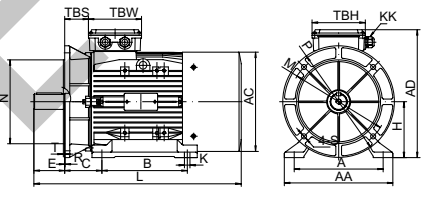




180-200 IM B3



180-200 IM B5



180-200 IM B35

Overall & Installation Dimensions

FRAME	Foot Mounting				Shaft								General							
	H	A	B	C	D	E	F	G	K	SS	XX	ZZ	AA	AD	HD	AC	L	TBS	TBW	TBH
56	56	90	71	36	Φ9	20	3	7.2	5.8*8.8	M4	10	14	110	152	96	Φ110	196	14	88	88
63	63	100	80	40	Φ11	23	4	8.5	7*10	M4	10	14	120	169	106	Φ121	220	14	94	94
71☆☆	71	112	90	45	Φ14	30	5	11	7*10	M5	12	17	132	184	113	Φ139	241(255)	20	94	94
80	80	125	100	50	Φ19	40	6	15.5	10*13	M6	16	21	160	211	131	Φ156	290	27	105	105
90S	90	140	100	56	Φ24	50	8	20	10*13	M8	19	25	175	228	138	Φ175	312	30	105	105
90L1/L2	90	140	125	56	Φ24	50	8	20	10*13	M8	19	25	175	228	138	Φ175	337/367	30	105	105
100☆☆	100	160	140	63	Φ28	60	8	24	12*15	M10	22	30	198	248	148	Φ196	368(386)	26	105	105
112	112	190	140	70	Φ28	60	8	24	12*15	M10	22	30	220	278	166	Φ221	397	32	112	112
132S	132	216	140	89	Φ38	80	10	33	12*15	M12	28	37	252	316	184	Φ256	437	38	112	112
132M/L	132	216	178	89	Φ38	80	10	33	12*15	M12	28	37	252	316	184	Φ256	475/501	38	112	112
160M/L	160	254	210/254	108	Φ42	110	12	37	15*19	M16	36	45	290	382	222	Φ313	641	64	143	143
180M/L	180	279	241/279	121	Φ48	110	14	42.5	15*25	M16	36	45	340	440	260	Φ355	730	73	190	190
200L	200	318	305	133	Φ55	110	16	49	19*29	M20	42	53	390	460	260	Φ355	745	85	190	190

FRAME	KK	B5						B14						B5R						B14B					
		N	M	P	S	T	R	N	M	P	S	T	R	N	M	P	T	S	R	N	M	P	T	S	R
56	1–M16*1.5	Φ80	Φ100	Φ120	Φ7	3	0	Φ50	Φ65	Φ80	M5	2.5	0												
63	1–M16*1.5	Φ95	Φ115	Φ140	Φ10	3	0	Φ60	Φ75	Φ90	M5	2.5	0												
71	1–M20*1.5	Φ110	Φ130	Φ160	Φ10	3.5	0	Φ70	Φ85	Φ105	M6	2.5	0	Φ95	Φ115	Φ140	3	Φ10	0	Φ95	Φ115	Φ140	3	M8	0
80	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ80	Φ100	Φ120	M6	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
90	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ95	Φ115	Φ140	M8	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
100	2–M20*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0
112	2–M25*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0
132	2–M25*1.5	Φ230	Φ265	Φ300	Φ15	4	0	Φ130	Φ165	Φ200	M10	3.5	0	Φ180	Φ215	Φ250	4	Φ15	0	Φ180	Φ215	Φ250	4	M12	0
160	2–M32*1.5	Φ250	Φ300	Φ350	Φ19	5	0	Φ180	Φ215	Φ250	M12	4	0												
180	2–M32*1.5	Φ250	Φ300	Φ350	Φ19	5	0																		
200	2–M40*1.5	Φ300	Φ350	Φ400	Φ19	5	0																		

☆☆ This frame size has two housing sizes, the rated output is for normal "L" size,and increased output is for thd bigger "L" size (refer to the figures in the bracket "( )")

ROYSL

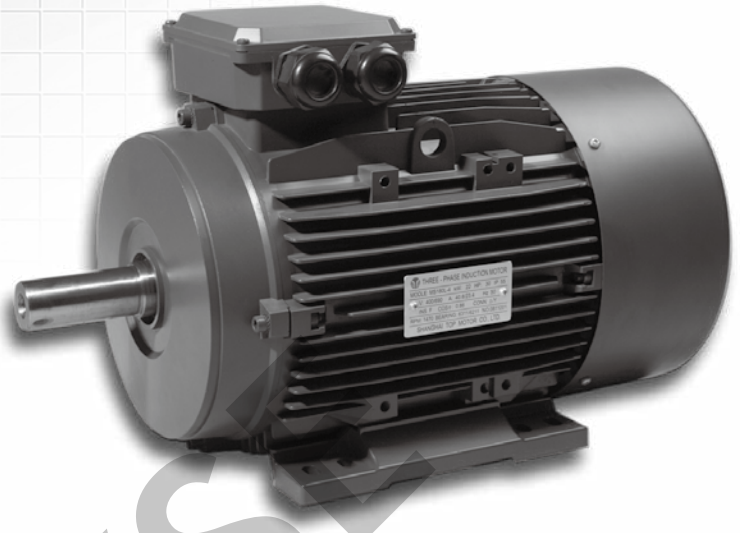
MS Series

Three-Phase Asynchronous Motors

Aluminum Housing

MS series aluminum housing three-phase asynchronous motors with latest design in entirety are made of selected quality materials and conform to the IEC standard.

MS motors have good performance, safety and reliable operation, nice appearance, and can be maintained very conveniently, while with low noises, little vibration and at the same time light weight and simple construction. These series motors can be used for general drive.



ROYSE

MS Series IE1 Efficiency Motors Technical Data (at 50Hz)

Model	Power (kW)	Current (A)			Current (A)			Current (A)			Speed (r/min)	Eff			Power factor	T_{st}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_{st}/I_n (Times)	Noise dB(A)	W.T (kg)	Moment of inertia ($kg*m^2$)
		220V	380V	660V	230V	400V	690V	240V	415V	720V		100%	75%	50%								
MS561–2	0.09	0.63	0.37	0.21	0.61	0.35	0.20	0.58	0.34	0.19	2800	55.6	49.6	39.2	0.67	2.4	2.6	2.2	3.5	58	2.80	0.000102
MS562–2	0.12	0.68	0.39	0.23	0.65	0.37	0.22	0.62	0.36	0.21	2840	65.6	61.8	53.2	0.71	2.3	2.6	2.1	4.3	58	2.90	0.000128
MS563–2	0.18	0.92	0.53	0.31	0.88	0.51	0.29	0.85	0.49	0.28	2780	66.5	64.2	56.8	0.77	2.3	2.5	2.4	4.1	61	4.00	0.000142
MS631–2	0.18	0.92	0.53	0.31	0.88	0.51	0.29	0.85	0.49	0.28	2780	66.5	64.2	56.8	0.77	2.3	2.5	2.4	4.1	61	4.00	0.000150
MS632–2	0.25	1.19	0.69	0.40	1.14	0.65	0.38	1.09	0.63	0.36	2780	69.8	68.8	62.8	0.79	2.6	2.5	2.4	4.3	61	4.20	0.000171
MS633–2	0.37	1.72	1.00	0.57	1.65	0.95	0.55	1.58	0.91	0.53	2750	71.4	71.2	65.9	0.79	2.8	2.6	2.6	4.7	62	4.70	0.000203
MS711–2	0.37	1.70	0.99	0.57	1.63	0.94	0.54	1.56	0.90	0.52	2830	71.3	70.4	65.2	0.8	2.8	2.9	2	5.9	64	5.20	0.000314
MS712–2	0.55	2.52	1.46	0.84	2.41	1.39	0.80	2.31	1.34	0.77	2815	71.6	71	66.1	0.8	2.7	2.7	1.8	6	64	6.20	0.000384
MS713–2	0.75	3.25	1.88	1.08	3.11	1.79	1.04	2.98	1.72	0.99	2820	73.8	73.9	70.3	0.82	3.0	3.0	2.0	6.6	65	7.20	0.000476
MS800–2	0.55	2.38	1.38	0.79	2.28	1.31	0.76	2.18	1.26	0.73	2810	73.1	73.4	69.7	0.83	2.7	2.5	1.9	5.3	64	7.30	0.000752
MS801–2	0.75	3.15	1.83	1.05	3.02	1.73	1.01	2.89	1.67	0.96	2830	75.2	75.6	72.2	0.83	3	2.8	2	6.2	67	8.70	0.000880
MS802–2	1.1	4.40	2.55	1.47	4.21	2.42	1.40	4.04	2.33	1.35	2840	79	79.8	77.7	0.83	2.6	3.1	2.6	6.1	67	10.50	0.001072
MS803–2	1.5	5.70	3.30	1.90	5.46	3.14	1.82	5.23	3.02	1.74	2820	81.2	82.5	81.3	0.85	3.2	3	2.5	7.2	70	11.20	0.001329
MS90S–2	1.5	5.73	3.32	1.91	5.48	3.15	1.83	5.25	3.04	1.75	2850	80.8	81.2	78.9	0.85	2.8	3.3	2.6	7.7	72	12.00	0.001579
MS90M–2	1.85	7.04	4.08	2.35	6.73	3.87	2.24	6.45	3.73	2.15	2850	82.1	82.6	80.7	0.84	4.2	3.6	2.9	7.8	72	13.30	0.001846
MS90L1–2	2.2	8.19	4.74	2.73	7.84	4.51	2.61	7.51	4.34	2.50	2860	82.9	83.4	81.4	0.85	3.7	3.9	3.3	8.8	72	14.50	0.002123
MS90L2–2	3	11.1	6.43	3.70	10.6	6.11	3.54	10.2	5.89	3.39	2830	82.4	83.5	82.3	0.86	4.4	4.2	3.5	8	74	15.00	0.002491
MS100L1–2	3	10.9	6.32	3.64	10.4	6.00	3.48	10.0	5.78	3.33	2875	83.9	84.5	83	0.86	2.8	3.2	2	8.1	76	20.00	0.003475
MS100L2–2	4	13.8	7.99	4.60	13.2	7.59	4.40	12.6	7.31	4.22	2870	85.5	86.5	85.8	0.89	3.2	3.4	2.2	8.8	77	24.00	0.004247
MS112M–2	4	13.2	7.63	4.40	12.6	7.25	4.20	12.1	6.99	4.03	2870	85.6	87.0	86.8	0.93	2.6	2.85	1.75	8.1	77	26.00	0.005845
MS112L–2	5.5	18.0	10.4	6.00	17.2	9.9	5.74	16.5	9.5	5.50	2890	87.1	88	87.6	0.92	3.1	3.3	2	9.4	78	29.30	0.007429
MS132S1–2	5.5	18.5	10.7	6.17	17.7	10.2	5.90	17.0	9.8	5.65	2900	86.6	87.4	86.5	0.90	2.25	3.1	1.5	7.9	80	38.40	0.011224
MS132S2–2	7.5	24.6	14.2	8.19	23.5	13.5	7.84	22.5	13.0	7.51	2900	88.0	88.8	88.3	0.91	2.4	3.25	1.5	8.5	80	41.30	0.013838
MS132M1–2	9.2	30.8	17.8	10.3	29.5	17.0	9.83	28.3	16.3	9.42	2930	88	88	86.4	0.89	2	2.2	1.2	7.5	81	48.20	0.016551
MS132M2–2	11	36.3	21.0	12.1	34.7	20.0	11.6	33.3	19.2	11.1	2930	88.4	88.6	87.5	0.9	2	2.2	1.2	7.5	83	52.50	0.018641
MS160M1–2	11	36.4	21.1	12.1	34.8	20.0	11.6	33.4	19.3	11.1	2920	88.8	89.4	88.6	0.89	2.6	2.95	1.85	7.1	86	76.00	0.041164
MS160M2–2	15	49.3	28.5	16.4	47.2	27.1	15.7	45.2	26.1	15.1	2910	89.1	90.0	89.6	0.90	2.2	2.8	1.8	6.4	86	83.00	0.048985
MS160L–2	18.5	59.3	34.4	19.8	56.8	32.6	18.9	54.4	31.5	18.1	2930	90.3	90.9	90.3	0.91	2.9	3.05	1.65	8.4	86	92.30	0.059935
MS180M–2	22	71.3	41.3	23.8	68.2	39.2	22.7	65.3	37.8	21.8	2950	90	90.2	89.7	0.9	2	2.2	1.2	7.5	88	121.0	0.090185
MS200L1–2	30	95.9	55.5	32.0	91.8	52.8	30.6	87.9	50.8	29.3	2950	91.2	90.6	88.5	0.9	2	2.2	1.2	7.5	90	144.0	0.114999
MS200L2–2	37	117.3	67.9	39.1	112.2	64.5	37.4	107.5	62.2	35.8	2940	92	92.1	91.4	0.9	2	2.2	1.2	7.5	90	170.0	0.136738

MS Series IE1 Efficiency Motors Technical Data (at 50Hz)

Model	Power (kW)	Current (A)			Current (A)			Current (A)			Speed (r/min)	Eff			Power factor	T_{st}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_{st}/I_n (Times)	Noise dB(A)	W.T (kg)	Moment of inertia ($kg*m^2$)
		220V	380V	660V	230V	400V	690V	240V	415V	720V		100%	75%	50%								
MS561–4	0.06	0.54	0.31	0.18	0.52	0.30	0.17	0.50	0.29	0.17	1400	52.8	47.7	38.7	0.55	3.1	3.2	3	3.2	50	2.90	0.000190
MS562–4	0.09	0.71	0.41	0.24	0.68	0.39	0.23	0.65	0.38	0.22	1400	56.2	51.7	43.1	0.59	2.3	2.5	2.8	3.1	50	3.20	0.000240
MS563–4	0.12	0.89	0.51	0.30	0.85	0.49	0.28	0.81	0.47	0.27	1390	58.5	54.3	45.6	0.61	2.65	2.8	2.7	3.2	52	3.70	0.000265
MS631–4	0.12	0.89	0.51	0.30	0.85	0.49	0.28	0.81	0.47	0.27	1390	58.5	54.3	45.6	0.61	2.65	2.8	2.7	3.2	52	3.70	0.000273
MS632–4	0.18	1.15	0.67	0.38	1.10	0.63	0.37	1.06	0.61	0.35	1365	64.2	62.5	55.9	0.64	2.8	2.55	2.4	3.6	52	4.40	0.000338
MS633–4	0.25	1.45	0.84	0.48	1.39	0.80	0.46	1.33	0.77	0.44	1370	68.3	67.5	62.1	0.66	2.7	2.7	2.4	3.9	54	5.00	0.000408
MS711–4	0.25	1.38	0.80	0.46	1.32	0.76	0.44	1.27	0.73	0.42	1395	65.1	63.1	55.8	0.73	2	2.15	1.6	4.2	55	5.10	0.000561
MS712–4	0.37	1.90	1.10	0.63	1.82	1.05	0.61	1.74	1.01	0.58	1390	68.6	68.2	62.9	0.74	2.25	2.35	1.95	4.6	55	6.10	0.000714
MS713–4	0.55	2.81	1.63	0.94	2.69	1.54	0.90	2.57	1.49	0.86	1390	71.9	71.6	66.8	0.72	2.8	2.8	2.4	4.8	57	7.20	0.000920
MS801–4	0.55	2.74	1.59	0.91	2.62	1.51	0.87	2.51	1.45	0.84	1400	70.9	70.5	65.5	0.74	2.25	2.55	1.95	4.9	58	8.30	0.001350
MS802–4	0.75	3.36	1.94	1.12	3.21	1.85	1.07	3.08	1.78	1.03	1390	74.4	76.0	73.9	0.79	2.5	2.55	2.05	5.4	58	9.70	0.001793
MS803–4	1.1	4.90	2.84	1.63	4.69	2.69	1.56	4.49	2.60	1.50	1390	74.6	75.7	73.3	0.79	2.9	2.9	2.4	5.9	60	11.70	0.002236
MS90S–4	1.1	4.90	2.83	1.63	4.68	2.69	1.56	4.49	2.60	1.50	1400	75.5	76.7	74.4	0.78	2.9	2.7	2.15	6	61	11.70	0.002443
MS90L1–4	1.5	6.48	3.75	2.16	6.20	3.56	2.07	5.94	3.44	1.98	1410	79.6	80.2	78.0	0.76	3.4	3.3	2.7	6.9	61	15.00	0.003152
MS90L2–4	2.2	9.76	5.65	3.25	9.33	5.37	3.11	8.94	5.17	2.98	1410	78.9	79.4	77	0.75	3.8	2.6	3.2	7.2	63	17.60	0.004002
MS100L1–4	2.2	8.71	5.05	2.90	8.34	4.79	2.78	7.99	4.62	2.66	1420	82.0	83.3	82.3	0.81	2.4	2.7	2.15	6.3	64	19.20	0.005977
MS100L2–4	3	11.5	6.64	3.82	11.0	6.31	3.66	10.5	6.08	3.51	1430	83.7	84.8	83.8	0.82	2.6	3	2.15	6.8	64	22.50	0.007591
MS100L3–4	4	15.2	8.80	5.07	14.5	8.36	4.85	13.9	8.06	4.65	1430	84.2	85.5	85.3	0.82	2.2	2.3	1.5	7	65	27.30	0.009626
MS112M–4	4	14.9	8.60	4.95	14.2	8.17	4.74	13.6	7.88	4.54	1440	84.7	86.0	85.4	0.83	2.5	2.9	2.05	7.1	65	29.00	0.012079
MS112L–4	5.5	20.4	11.8	6.81	19.5	11.2	6.51	18.7	10.8	6.24	1435	85.9	87.1	86.6	0.82	2.5	2.95	2.2	7.2	68	35.70	0.014229
MS132S–4	5.5	19.6	11.4	6.54	18.76	10.8	6.25	18.0	10.4	5.99	1445	86.4	87.8	87.7	0.85	2.15	2.85	1.75	7.5	71	39.00	0.024846
MS132M–4	7.5	25.9	15.0	8.62	24.7	14.2	8.24	23.7	13.7	7.90	1450	87.6	88.8	88.5	0.87	2.1	2.9	1.65	8.6	71	48.60	0.033131
MS132L1–4	9.2	31.3	18.1	10.4	30.0	17.2	10.0	28.7	16.6	9.6	1450	88.6	89.5	89.1	0.87	2.8	2.4	2	8.4	74	56.50	0.039339
MS132L2–4	11	37.3	21.6	12.4	35.6	20.5	11.9	34.2	19.8	11.4	1450	90.1	91.1	91	0.86	3	2.5	2	8.9	74	64.00	0.045478
MS160M–4	11	39.7	23.0	13.2	37.9	21.8	12.6	36.4	21.0	12.1	1450	87.7	89.6	90.3	0.83	2.05	2.25	1.55	6.1	75	73.00	0.077369
MS160L1–4	15	51.9	30.1	17.3	49.7	28.5	16.6	47.6	27.5	15.9	1455	88.7	90.0	90.2	0.86	2.2	2.45	1.4	7.3	75	88.50	0.101156
MS160L2–4	18.5	63.1	36.5	21.0	60.4	34.7	20.1	57.9	33.5	19.3	1460	90.5	91	90.6	0.85	2.2	2.2	1.4	7.5	78	97.50	0.127587
MS180M–4	18.5	62.4	36.1	20.8	59.7	34.3	19.9	57.2	33.1	19.1	1460	90.5	90.7	89.9	0.86	2.2	2.2	1.4	7.5	80	118.0	0.155064
MS180L–4	22	73.8	42.7	24.6	70.6	40.6	23.5	67.6	39.1	22.5	1460	91	91.3	90.6	0.86	2.2	2.2	1.4	7.5	80	128.0	0.173293
MS200L–4	30	99.5	57.6	33.2	95.2	54.7	31.7	91.2	52.8	30.4	1470	92	92.2	91.6	0.86	2.2	2.2	1.4	7.5	83	153.0	0.224084
MS631–6	0.09	0.75	0.44	0.25	0.72	0.41	0.24	0.69	0.40	0.23	890	50.7	47.6	39.8	0.62	2	2.2	1.9	2.9	50	4.20	0.000418
MS632–6	0.12	0.97	0.56	0.32	0.93	0.54	0.31	0.89	0.52	0.30	895	53.7	50.9	43.2	0.60	2.3	2.2	2.1	2.8	50	4.50	0.000517
MS711–6	0.18	1.11	0.64	0.37	1.06	0.61	0.35	1.02	0.59	0.34	905	63.0	61.6	55.4	0.67	2.15	2.4	2	3.5	52	5.60	0.000841
MS712–6	0.25	1.56	0.90	0.52	1.49	0.86	0.50	1.43	0.83	0.48	885	62.6	62.0	55.8	0.67	2.05	2.3	2.05	3.2	52	6.10	0.000965
MS713–6	0.37	2.32	1.34	0.77	2.22	1.28	0.74	2.13	1.23	0.71	890	65.4	64.4	58.2	0.64	2.3	2.5	2.3	3.4	54	6.80	0.001151
MS801–6	0.37	2.06	1.19	0.69	1.97	1.13	0.66	1.89	1.09	0.63	920	68.1	67.7	62.2	0.69	1.95	2.25	1.8	3.7	56	8.10	0.001560
MS802–6	0.55	2.74	1.59	0.91	2.62	1.51	0.87	2.51	1.45	0.84	920	72.5	73.0	69.3	0.73	2.25	2.45	2.05	4.3	56	9.60	0.002098
MS803–6	0.75	3.65	2.11	1.22	3.49	2.01	1.16	3.34	1.93	1.11	910	72.9	74.2	71.3	0.74	2.2	2.4	2.1	4.1	58	10.00	0.002635
MS90S–6	0.75	3.83	2.22	1.28	3.67	2.11	1.22	3.52	2.03	1.17	920	72.5	73.3	70.0	0.71	1.8	2.2	1.7	4.1	59	11.30	0.003061
MS90L1–6	1.1	5.47	3.17	1.82	5.23	3.01	1.74	5.01	2.90	1.67	910	73.5	75.2	72.9	0.72	1.95	2.25	1.85	4.2	59	14.40	0.004067
MS90L2–6	1.5	7.12	4.12	2.37	6.81	3.92	2.27	6.53	3.78	2.18	900	74.7	77	75.5	0.74	2.1	2.3	1.9	4.2	60	15.50	0.005147
MS100L1–6	1.5	6.77	3.92	2.26	6.47	3.72	2.16	6.20	3.59	2.07	935	78.5	79.9	78.2	0.74	2.05	2.35	1.8	5	61	18.80	0.007913
MS100L2–6	2.2	9.87	5.71	3.29	9.44	5.43	3.15	9.04	5.23	3.01	950	77	78.4	77.8	0.76	2.2	2.2	1.3	6	63	22.80	0.011194
MS112M–6	2.2	9.3	5.38	3.10	8.89	5.11	2.96	8.52	4.93	2.84	925	79.2	81.8	81.7	0.78	1.9	2.25	1.75	4.7	64	25.00	0.013777
MS112L–6	3	12.9	7.49	4.31	12.4	7.12	4.13	11.9	6.86	3.95	950	79	80.9	80.9	0.77	2.2	2.2	1.3	6	64	30.00	0.018246
MS132S–6	3	12.5	7.22	4.16	11.9	6.86	3.98	11.4	6.61	3.81	955	82.5	84.5	84.3	0.77	1.7	2.15	1.45	5.3	64	35.00	0.029932
MS132M1–6	4	16.2	9.39	5.40	15.5	8.92	5.17	14.9	8.59	4.95	965	85.2	85.8	84.4	0.76	2.3	2.9	1.6	6.6	68	47.60	0.037337
MS132M2–6	5.5	21.5	12.4	7.16	20.6	11.8	6.9	19.7	11.4	6.6	960	85.9	87.2	86.8	0.78	2.5	2.7	1.7	6.7	68	50.70	0.049025
MS132L–6	7.5	30.1	17.4	10.0	28.8	16.5	9.6	27.6	15.9	9.2	960	85	86.4	86.4	0.77	2	2	1.3	6.5	68	57.20	0.060782
MS160M–6	7.5	30.3	17.6	10.1	29.0	16.7	9.7	27.8	16.1	9.3	970	86.8	87.6	86.7	0.75	2.1	2.7	1.65	6.1	68	69.0	0.084476
MS160L–6	11	42.5	24.6	14.2	40.7	23.4	13.6	39.0	22.5	13.0	965	87.2	88.6	88.6	0.78	2.25	2.35	1.5	6.9	73	86.0	0.118152
MS180L–6	15	54.6	31.6	18.2	52.2	30.0	17.4	50.1	28.9	16.7	970	89	89	88.6	0.81	2	2.2	1.3	6.5	77	124.0	0.254063
MS200L1–6	18.5	66.6	38.6	22.2	63.7	36.6	21.2	61.0	35.3	20.3	975	90	90.2	89.5	0.81	2	2.2	1.3	6.5	80	141.0	0.303941
MS200L2–6	22	77.3	44.7	25.8	73.9	42.5	24.6	70.9	41.0	23.6	975	90	90.2	89.4	0.83	2	2.2	1.3	6.5	80	152.0	0.353160
MS711–8	0.09	0.97	0.56	0.32	0.93	0.54	0.31	0.89	0.52	0.30	680	44.9	39.6	31.1	0.54	2.3	2.6	2.2	2.4	50	5.60	0.000717
MS712–8	0.12	1.15	0.67	0.38	1.10	0.63	0.37	1.06	0.61	0.35	680	51.7	47.1	38.4	0.53	2.5	2.75	2.5	2.7	50	6.00	0.000841
MS713–8	0.18	1.51	0.88	0.50	1.45	0.83	0.48	1.39	0.80	0.46	670	55.8	52.5	44.4	0.56	2.3	2.5	2.4	2.8	52	6.90	0.001026
MS801–8	0.18	1.24	0.72	0.41	1.18	0.68	0.39	1.13	0.66	0.38	705	64.4	61.3	53.9	0.59	2.2	2.65	2	3.6	52	9.40	0.002098
MS802–8	0.25	1.64	0.95	0.55	1.57	0.90	0.52	1.51	0.87	0.50	700	66.3	64.3	57.8	0.60	2.1	2.5	2.05	3.5	52	10.10	0.002500
MS90S–8	0.37	2.37	1.37	0.79	2.26	1.30	0.75	2.17	1.25	0.72	690	66.3	65.4	59.6	0.62	1.55	2	1.5	3.2	56	12.50	0.003061
MS90L–8	0.55	3.26	1.89	1.09	3.12	1.79	1.04	2.99	1.73	1.00	680	69.0	69.9	65.8	0.64	1.6	1.95	1.6	3.3	56	15.30	0.004067
MS100L1–8	0.75	3.88	2.24	1.29	3.71	2.13	1.24	3.55	2.06	1.18	700	75.2	74.8	70.8	0.68	2.1	2.55	1.95	4.4	59	17.20	0.006043
MS100L2–8	1.1	5.16	2.99	1.72	4.94	2.84	1.65	4.73	2.74	1.58	685	74.6	76.7	75.1	0.75	1.8	2.15	1.65	4.1	59	19.50	0.007503
MS112M–8	1.5	7.24	4.19	2.41	6.93	3.98	2.31	6.64	3.84	2.21	700	78.3	78.9	76.4	0.69	2.2	2.5	2.1	4.5	61	25.50	0.013491
MS132S–8	2.2	10.0	5.81	3.35	9.6	5.52	3.20	9.20	5.32	3.07	705	78.8	80.7	79.6	0.73	1.8	2.25	1.65	4.5	64	34.20	0.028992
MS132M–8	3	13.0	7.51	4.33	12.4	7.14	4.14	11.9	6.88	3.96	705	80.9	82.6	81.9	0.75	2.1	2.5	1.8	5.1	64	40.00	0.038042
MS160M1–8	4	18.0	10.4	5.99	17.2	9.88	5.73	16.5	9.53	5.49	710	81.7	83.0	82.0	0.72	1.8	2.25	1.5	4.7	68	59.00	0.067231
MS160M2–8	5.5	23.4	13.5	7.79	22.4	12.9	7.45	21.4	12.4	7.14	715	84.6	85.7	84.9	0.73	2.15	2.55	1.6	5.2	68	69.00	0.090636
MS160L–8	7.5	30.3	17.5	10.1	29.0	16.67	9.66	27.8	16.1	9.26	715	85.8	87.1	86.7	0.76	2.15	2.45	1.4	5.4	68	87.00	0.124073
MS180L–8	11	45.2	26.2	15.1	43.3	24.9	14.4	41.5	24.0	13.8	715	87.4	87.2	85.7	0.73	1.9	2.2	1.2	6	76	124.0	0.261094
MS200L–8	15	58.9	34.1	19.6	56.3	32.4	18.8	54.0	31.2	18.0	725	88.0	88.0	86.9	0.76	1.9	2.2	1.2	6	79	154.3	0.339098
MS200L2–8	18.5	71.0	41.1	23.7	67.9	39.0	22.6	65.1	37.6	21.7	730	90.0	90.0	88.8	0.76	1.9	2.2	1.2	6	79	175.0	0.409410

DOSIN

MS2 Series IE2 Efficiency Motors Technical Data (at 50Hz)

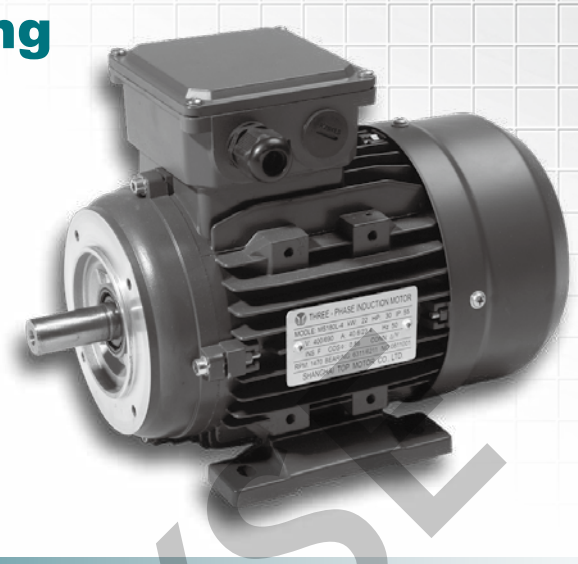
Model	Power	Current(A)			Current(A)			Current(A)			Speed	Eff.			Power Factor	T_{start}/T_n	T_{max}/T_n	T_{min}/T_n	I_s/I_n	Noise	W.T	Inertia
		220V	380V	660V	230V	400V	690V	240V	415V	720V	(r/min)	100%	75%	50%		(Times)	(Times)	(Times)	(Times)	dB(A)	(kg)	($kg*m^2$)
MS2 712–2	0.55	2.47	1.43	0.82	2.35	1.36	0.78	2.26	1.31	0.75	2810	74.1	72.3	69.3	0.79	2.8	2.9	2.5	5.3	64	6.2	0.000366947
MS2 713–2	0.75	3.19	1.84	1.06	3.03	1.75	1.01	2.92	1.69	0.97	2830	77.4	76.4	74.3	0.8	3.2	3.3	3.1	6.6	65	7.5	0.000454621
MS2 801–2	0.75	3.27	1.89	1.09	3.11	1.79	1.04	2.99	1.73	1.00	2860	77.4	76.8	72.7	0.78	3.4	3.2	2.4	7.1	67	8.9	0.000852421
MS2 802–2	1.1	4.49	2.59	1.50	4.27	2.46	1.42	4.11	2.37	1.37	2860	79.6	79.7	77	0.81	4.4	3.3	2.6	7.8	67	10.6	0.001044831
MS2 803–2	1.5	5.92	3.42	1.97	5.63	3.25	1.88	5.42	3.13	1.81	2860	81.3	81.2	79.7	0.82	3.5	3.7	3.2	8.4	70	13	0.001301378
MS2 90S–2	1.5	5.92	3.42	1.97	5.63	3.25	1.88	5.42	3.13	1.81	2870	81.3	80.9	79.3	0.82	3.9	3.6	3	8.2	72	13.2	0.001637187
MS2 90L1–2	2.2	8.28	4.78	2.76	7.87	4.54	2.62	7.59	4.38	2.53	2880	83.2	82.9	81.5	0.84	3.8	3.7	2.9	9.2	72	16.1	0.002180747
MS2 90L2–2	3	11.2	6.49	3.75	10.7	6.17	3.56	10.3	5.94	3.43	2890	84.6	83.9	82.4	0.83	5.1	4.4	3.4	10.2	74	20	0.002815241
MS2 100L1–2	3	10.7	6.19	3.58	10.2	5.88	3.40	9.82	5.67	3.27	2880	84.6	85	84	0.87	3	3.5	2.2	8.6	76	22.7	0.003470520
MS2 100L2–2	4	13.8	7.96	4.60	13.1	7.56	4.37	12.6	7.29	4.21	2860	85.8	87.1	86.6	0.89	3.2	3.5	2.3	9.3	77	26	0.004242158
MS2 112M–2	4	13.5	7.78	4.49	12.8	7.39	4.27	12.3	7.13	4.12	2890	85.8	87.1	87	0.91	2.6	3.2	2	8.4	77	26.4	0.006006696
MS2 112L–2	5.5	18.9	10.9	6.30	18.0	10.4	5.99	17.3	9.99	5.77	2920	87	87.4	86.4	0.88	4	4.3	3	11	78	32.1	0.007818571
MS2 132S1–2	5.5	18.7	10.8	6.23	17.8	10.3	5.92	17.1	9.88	5.71	2900	87	87.5	86.7	0.89	2.2	3.2	1.6	8.7	80	42.3	0.011499620
MS2 132S2–2	7.5	24.9	14.4	8.30	23.6	13.7	7.88	22.8	13.2	7.60	2910	88.1	89.3	89	0.9	2.5	3.1	1.8	8.6	80	46.2	0.014112840
MS2 132M1–2	9.2	31.0	17.9	10.3	29.5	17.0	9.82	28.4	16.4	9.47	2900	88.7	89	88	0.88	3.5	3.9	2.4	9.8	81	51.6	0.016303290
MS2 132M2–2	11	37.7	21.7	12.6	35.8	20.7	11.9	34.5	19.9	11.5	2930	89.4	89.4	88	0.86	3.5	3.9	2.4	11.5	83	54.5	0.019439160
MS2 160M1–2	11	36.4	21.0	12.1	34.6	20.0	11.5	33.3	19.2	11.1	2940	89.4	89.6	89	0.89	2.4	3	1.6	7.9	86	79.2	0.048470990
MS2 160M2–2	15	49.1	28.4	16.4	46.7	26.9	15.6	45.0	26.0	15.0	2930	90.3	90.5	89.9	0.89	2.9	2.9	1.7	8.4	86	96.6	0.059420980
MS2 160L–2	18.5	59.5	34.4	19.8	56.5	32.6	18.8	54.5	31.5	18.2	2940	90.9	91.3	90.6	0.9	3.1	3.1	1.5	9.2	86	102.5	0.065678100
MS2 160L2–2	22	70.5	40.7	23.5	66.9	38.6	22.3	64.5	37.2	21.5	2940	91.3	90.8	88.9	0.9	3.6	3.4	1.9	10.4	88	115	0.079756640
MS2 180M–2	22	69.7	40.2	23.2	66.2	38.2	22.1	63.8	36.8	21.3	2950	91.3	90.9	88.8	0.91	2.5	2	1.4	8.1	88	128	0.095015620
MS2 200L1–2	30	95.3	55.1	31.8	90.6	52.3	30.2	87.3	50.4	29.1	2960	92	92.1	91.1	0.9	3.1	3.2	1.4	9.5	90	158	0.122245500
MS2 200L2–2	37	115.7	66.8	38.6	109.9	63.4	36.6	105.9	61.2	35.3	2960	92.5	92.3	91.3	0.91	2.8	3.5	1.4	9.6	90	181.3	0.148815500
MS2 801–4	0.55	2.47	1.43	0.82	2.35	1.35	0.78	2.26	1.31	0.75	1400	77.1	77.5	76.3	0.76	2.2	2.4	2	4.9	58	9.95	0.001411044
MS2 802–4	0.75	3.26	1.88	1.09	3.10	1.79	1.03	2.99	1.72	1.00	1410	79.6	80.8	79.6	0.76	2.2	2.5	2	5.8	58	11.1	0.001952112
MS2 90S–4	1.1	4.87	2.81	1.62	4.63	2.67	1.54	4.46	2.58	1.49	1420	81.4	82.2	81	0.73	2.5	2.5	2	6	61	13.9	0.002734978
MS2 90L–4	1.5	6.44	3.72	2.15	6.12	3.53	2.04	5.90	3.41	1.97	1420	82.8	83.7	82.6	0.74	2.7	3.2	2.7	6.4	61	16.9	0.003571579
MS2 100L1–4	2.2	8.92	5.15	2.97	8.47	4.89	2.82	8.17	4.72	2.72	1440	84.3	83.9	82.5	0.77	2.9	3.5	2	7.2	64	22.4	0.006728579
MS2 100L2–4	3	12.0	6.92	4.00	11.4	6.58	3.80	11.0	6.34	3.66	1440	85.5	85.3	84	0.77	3.2	3.4	2.5	7.9	64	26.4	0.008764313
MS2 112M–4	4	15.0	8.66	5.00	14.3	8.23	4.75	13.7	7.93	4.58	1450	86.6	87	86.1	0.81	3	3.1	2.3	8.4	65	32.3	0.013305300
MS2 132S–4	5.5	19.9	11.5	6.63	18.9	10.9	6.30	18.2	10.5	6.07	1460	87.7	88.4	87.8	0.83	2.7	2.9	1.8	8.5	71	43	0.026732150
MS2 132M–4	7.5	26.8	15.5	8.94	25.5	14.7	8.49	24.5	14.2	8.18	1460	88.7	89.2	88.5	0.83	2.9	3.3	1.8	9.6	71	52.6	0.034860380
MS2 132L–4	9.2	31.9	18.4	10.6	30.3	17.5	10.1	29.2	16.9	9.75	1450	89.2	90	89.5	0.85	2.9	3.2	2	8.8	74	59	0.041953520
MS2 160M–4	11	38.4	22.2	12.8	36.5	21.0	12.2	35.1	20.3	11.7	1460	89.8	90.3	89.6	0.84	2.5	2.9	1.6	7.3	75	83	0.089629630
MS2 160L1–4	15	51.9	29.9	17.3	49.3	28.4	16.4	47.5	27.4	15.8	1460	90.6	90.8	89.8	0.84	2.9	3	1.7	8.2	75	103.5	0.118353700
MS2 160L2–4	18.5	62.8	36.3	20.9	59.7	34.4	19.9	57.5	33.2	19.2	1460	91.2	91.5	91	0.85	2.9	3	1.7	8.1	78	114.5	0.136632600
MS2 180M–4	18.5	61.4	35.4	20.5	58.3	33.7	19.4	56.2	32.4	18.7	1460	91.2	91.6	91.1	0.87	2.4	3	1.8	7.8	80	119	0.155063600
MS2 180L–4	22	71.8	41.5	23.9	68.2	39.4	22.7	65.8	38.0	21.9	1460	91.6	92.2	91.9	0.88	2.4	2.8	1.7	7.7	80	129	0.173293100
MS2 200L–4	30	99.5	57.4	33.2	94.5	54.6	31.5	91.1	52.6	30.4	1470	92.3	92.6	92	0.86	3.2	3.7	2.3	9.5	83	169.2	0.242313300
MS2 90S–6	0.75	3.56	2.06	1.19	3.38	1.95	1.13	3.26	1.88	1.09	930	75.9	75.9	74	0.73	2.3	2.5	2	5	59	13	0.003186311
MS2 90L–6	1.1	5.15	2.97	1.72	4.89	2.82	1.63	4.71	2.72	1.57	930	78.1	78.6	77	0.72	2.6	2.3	1.9	5.7	59	16.4	0.004447236
MS2 100L–6	1.5	6.97	4.02	2.32	6.62	3.82	2.21	6.38	3.68	2.13	950	79.8	79.4	77.6	0.71	2.4	2.8	2	5.6	61	21.6	0.008733458
MS2 100L2–6	2.2	9.83	5.68	3.28	9.34	5.39	3.11	9.00	5.20	3.00	950	81.8	81.8	80.3	0.72	2.5	2.7	1.9	6.1	64	26.7	0.012441140
MS2 112M–6	2.2	9.44	5.45	3.15	8.96	5.18	2.99	8.64	4.99	2.88	940	81.8	82.7	81.7	0.75	2.2	2.5	1.9	5.2	64	27	0.015691900
MS2 132S–6	3	12.5	7.20	4.16	11.8	6.84	3.95	11.4	6.59	3.81	960	83.3	84.4	83.4	0.76	2.2	2.6	1.7	6.1	64	35.2	0.029932380
MS2 132M1–6	4	16.6	9.58	5.53	15.8	9.10	5.25	15.2	8.77	5.06	965	84.6	84.9	83.9	0.75	2.5	2.9	1.8	7	68	45	0.038798280
MS2 132M2–6	5.5	22.4	13.0	7.48	21.3	12.3	7.11	20.5	11.9	6.85	965	86	86.7	85.9	0.75	2.7	2.8	1.6	7.1	68	53.5	0.050486330
MS2 132L–6	7.5	30.2	17.4	10.1	28.7	16.6	9.56	27.6	16.0	9.21	970	87.2	87.5	86.2	0.75	3.7	3.1	2.2	8.2	68	66.2	0.068086740
MS2 160M–6	7.5	30.6	17.7	10.2	29.1	16.8	9.69	28.0	16.2	9.34	970	87.2	87.8	86.7	0.74	2.8	2.9	1.6	7.1	68	72.6	0.089688320
MS2 160L–6	11	43.5	25.1	14.5	41.3	23.9	13.8	39.8	23.0	13.3	970	88.7	89	88.1	0.75	3	2.8	1.6	7.1	73	89.5	0.122729800
MS2 180L–6	15	53.0	30.6	17.7	50.4	29.1	16.8	48.5	28.0	16.2	975	89.7	89.5	88.7	0.83	2.2	2.7	1.2	8	77	130	0.254062800
MS2 200L1–6	18.5	66.5	38.4	22.2	63.2	36.5	21.1	60.9	35.1	20.3	980	90.4	90.7	89.8	0.81	2.5	2.9	1.7	7.6	80	149	0.303941400
MS2 200L2–6	22	76.7	44.3	25.6	72.9	42.1	24.3	70.3	40.6	23.4	980	90.9	91.2	90.5	0.83	2.3	2.6	2.3	7.6	80	167	0.353160100

ROYSE

MSD Series

Three-Phase Asynchronous Double-Polarity Motors

Aluminum Housing



Technical Data (at 400V/50Hz)

Model	Power (kW)		Speed (r/min)		Eff. (%)		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		T_{st}/T_n (Times)		I_{st}/I_n (Times)		T_{max}/T_n (Times)	
	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P
MSD711-2/4	0.3	0.22	2750	1350	60	55	0.8	0.73	0.90	0.79	1.04	1.56	1.7	1.7	3.5	3.5	1.9	1.9
MSD712-2/4	0.45	0.3	2790	1380	63	58	0.8	0.73	1.29	1.02	1.54	2.08	2	2	4	4	2	2
MSD801-2/4	0.55	0.45	2800	1380	65	64	0.84	0.75	1.45	1.35	1.88	3.11	2	2	4.5	4.5	2.1	2.1
MSD802-2/4	0.75	0.6	2800	1400	67	68	0.86	0.77	1.88	1.65	2.56	4.09	1.8	1.8	4.5	4.5	2	2
MSD90S-2/4	1.25	0.95	2820	1400	72	68	0.86	0.82	2.91	2.46	4.23	6.48	2	2	5	5	2	2
MSD90L-2/4	1.7	1.32	2830	1400	73	70	0.86	0.83	3.91	3.28	5.74	9.00	2	2	5	5	2	2
MSD100L1-2/4	2.4	1.84	2830	1410	73	76	0.86	0.83	5.52	4.21	8.10	12.46	2	2	5.5	5	2	2
MSD100L2-2/4	3.3	2.6	2840	1420	74	78	0.86	0.85	7.48	5.66	11.10	17.19	2	1.9	5.5	5	2	1.9
MSD112M-2/4	4.5	4	2860	1430	77	79	0.85	0.86	9.92	8.50	15.03	26.71	2	1.8	5.5	5	2.2	2
MSD132S-2/4	6	5	2860	1440	79	82	0.84	0.86	13.05	10.23	20.03	33.16	2	1.5	5.5	5.5	2.2	1.9
MSD132M-2/4	8	6.6	2870	1440	82	84	0.84	0.86	16.76	13.09	26.62	43.77	2	2	6	6	2.2	2.2
MSD160M-2/4	11	9	2920	1450	84	84	0.85	0.82	22.23	18.86	35.98	59.28	1.8	1.8	7	6	2	2
MSD160L-2/4	15	12	2920	1450	86	84	0.87	0.83	28.94	24.84	49.06	79.03	2	2	7	7	2.2	2.2

Technical Data (at 400V/50Hz)

Model	Power (kW)		Speed (r/min)		Eff. (%)		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		T_{st}/T_n (Times)		I_{st}/I_n (Times)		T_{max}/T_n (Times)	
	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P
MSD801-4/8	0.25	0.15	1380	680	58	40	0.77	0.60	0.81	0.90	1.73	2.11	2	2	4.5	3	2	2
MSD802-4/8	0.45	0.25	1390	685	68	48	0.80	0.60	1.19	1.25	3.09	3.49	1.8	2	4.5	3	2	2
MSD90S-4/8	0.55	0.3	1400	690	68	50	0.83	0.61	1.41	1.42	3.75	4.15	1.8	2	4.5	3.5	2	2
MSD90L-4/8	0.8	0.45	1400	690	68	53	0.83	0.63	2.05	1.95	5.46	6.23	1.8	1.6	4	3	1.9	1.8
MSD100L1-4/8	1.25	0.6	1400	700	69	54	0.82	0.56	3.19	2.86	8.53	8.16	1.8	2	5	3.5	2	2
MSD100L2-4/8	1.76	0.88	1400	700	71	58	0.84	0.56	4.26	3.91	12.00	12.00	1.8	2	5.5	4	2	2
MSD112M-4/8	2.2	1.5	1420	700	75	64	0.82	0.61	5.16	5.54	14.80	20.46	2	2	6	4	2	2
MSD132S-4/8	3.3	2.2	1430	705	78	70	0.84	0.64	7.27	7.09	22.04	29.8	2	2	6	5	2	2
MSD132M-4/8	4.5	3	1430	705	82	77	0.85	0.65	9.32	8.65	30.05	40.64	2	2	6	5	2	2
MSD160M1-4/8	5.5	4	1440	710	82	77	0.81	0.69	11.95	10.87	36.48	53.80	2.1	1.7	7.6	4.6	2.3	2.2
MSD160M2-4/8	7.5	5	1440	710	82	79	0.89	0.78	14.83	11.71	49.74	67.25	1.7	1.6	6.6	4.5	2.3	2.1
MSD160L-4/8	10	7	1450	715	84	82	0.90	0.78	19.09	15.80	65.86	93.50	1.8	1.9	5.5	5	2.3	2.1

ROYSL

Technical Data (at 400V/50Hz)

Model	Power (kW)		Speed (r/min)		Eff. (%)		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		T_{st}/T_n (Times)		I_{st}/I_n (Times)		T_{max}/T_n (Times)	
	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P
MSD801-4/6	0.3	0.22	1400	910	60	55	0.74	0.69	0.98	0.84	2.05	2.31	2	1.8	4.5	4	2	2
MSD802-4/6	0.45	0.3	1410	920	63	58	0.75	0.7	1.37	1.07	3.05	3.11	2	1.8	4.5	4	2	2
MSD90S-4/6	0.66	0.45	1410	920	66	61	0.76	0.65	1.9	1.64	4.47	4.67	1.7	1.7	5	4.5	2	2
MSD90L-4/6	0.88	0.6	1420	930	70	64	0.77	0.67	2.36	2.02	5.92	6.16	1.7	1.7	5	4.5	2	2
MSD100L1-4/6	1.32	0.88	1420	940	72	67	0.85	0.75	3.11	2.3	8.88	8.94	1.8	1.8	6	5	2	2
MSD100L2-4/6	1.76	1.2	1430	950	74	70	0.85	0.75	4.04	3.3	11.75	12.06	1.8	1.8	6	5	2	2
MSD112M-4/6	2.2	1.5	1430	950	76	70	0.8	0.70	5.22	4.42	14.69	15	2	1.8	6	5	2.2	2.2
MSD132S-4/6	3.3	2.2	1440	960	82	78	0.81	0.72	7.17	5.65	21.9	21.9	2	2	7	6	2.2	2.2
MSD132M-4/6	4.5	3	1450	970	83	80	0.82	0.74	9.54	7.31	29.6	29.5	2	2	7	6	2.3	2.3
MSD160M-4/6	6.6	4.5	1460	970	84	81	0.84	0.78	13.5	10.3	43.2	44.3	1.8	1.8	7	6	2.3	2.3
MSD160L-4/6	8.8	6	1460	970	84	81	0.85	0.79	17.8	13.5	57.6	59.1	1.8	1.8	7	6	2.3	2.3

Technical Data (at 400V/50Hz)

Model	Power (kW)		Speed (r/min)		Eff. (%)		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		T_{st}/T_n (Times)		I_{st}/I_n (Times)		T_{max}/T_n (Times)	
	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P
MSD801-6/8	0.18	0.11	900	680	50	42	0.69	0.65	0.75	0.58	1.91	1.54	1.5	1.5	3.5	3	1.5	1.5
MSD802-6/8	0.25	0.18	920	700	54	46	0.7	0.66	0.95	0.86	2.60	2.46	1.7	1.5	3.5	3	1.5	1.7
MSD90S-6/8	0.37	0.25	930	680	58	50	0.72	0.68	1.28	1.06	3.80	3.51	1.5	1.4	4	3	1.8	1.7
MSD90L-6/8	0.55	0.37	940	685	63	54	0.73	0.69	1.73	1.43	5.59	5.16	1.5	1.4	4	3	1.8	1.7
MSD100L1-6/8	0.75	0.55	950	700	69	63	0.74	0.74	2.12	1.70	7.54	7.50	1.5	1.4	5	4	2	1.8
MSD100L2-6/8	1.03	0.75	955	705	71	65	0.76	0.76	2.76	2.19	10.30	10.16	1.5	1.4	5	4	2	1.8
MSD112M-6/8	1.25	0.95	960	710	72	64	0.71	0.71	3.53	3.02	12.43	12.78	1.5	1.5	5	4	2	1.8
MSD132S-6/8	2.2	1.5	970	720	76	70	0.71	0.7	5.88	4.42	21.66	19.90	1.6	1.4	6	5.5	2.3	2
MSD132M-6/8	3	1.85	970	720	78	74	0.71	0.7	7.82	5.01	29.54	24.37	1.6	1.4	6	5.5	2.3	2
MSD160M1-6/8	3.7	2.6	970	720	78	75	0.74	0.71	9.25	7.05	36.43	34.49	1.8	1.5	6	5.5	2.5	1.9
MSD160M2-6/8	4.5	3.3	970	720	79	76	0.78	0.72	10.54	8.70	44.30	43.77	1.8	1.7	6	5.5	2.5	2
MSD160L-4/6	6	4.5	973	720	80	77	0.79	0.73	13.70	11.55	59.89	59.69	1.8	1.7	6	5.5	2.5	2

ROYSL

Technical Data (at 400V/50Hz)

Model	Power (kW)		Speed (r/min)		Eff. (%)		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		T_{st}/T_n (Times)		I_{st}/I_n (Times)		T_{max}/T_n (Times)	
	2P	8P	2P	8P	2P	8P	2P	8P	2P	8P	2P	8P	2P	8P	2P	8P	2P	8P
MSD801-2/8	0.37	0.08	2760	660	65	33	0.76	0.48	1.08	0.73	1.28	1.16	1.7	2	3.5	2.5	1.9	2.1
MSD802-2/8	0.55	0.11	2780	670	67	35	0.78	0.50	1.52	0.91	1.89	1.57	1.7	2	4	3	1.9	2.2
MSD90S-2/8	0.75	0.18	2800	670	67	43	0.79	0.52	2.05	1.16	2.56	2.57	1.8	2	4	3	2	2.3
MSD90L-2/8	1.1	0.3	2810	680	67	45	0.8	0.54	2.96	1.78	3.74	4.21	1.8	2	4	3.5	2	2.3
MSD100L1-2/8	1.5	0.37	2820	700	67	50	0.84	0.56	3.85	1.91	5.08	5.05	1.7	2.1	5	3.5	2	2.6
MSD100L2-2/8	2.2	0.55	2820	710	68	51	0.85	0.58	5.49	2.68	7.45	7.40	1.8	2.2	5	3.5	2	2.6
MSD112M1-2/8	2.6	0.75	2840	710	71	58	0.86	0.6	6.15	3.11	8.74	10.09	1.8	1.8	5.5	4	1.9	1.9
MSD112M2-2/8	3	0.9	2850	710	75	63	0.86	0.58	6.71	3.56	10.05	12.1	1.7	2	6.5	4.5	1.9	2.2
MSD132S-2/8	3.7	1.1	2890	710	81	65	0.83	0.57	7.94	4.29	12.22	14.80	1.7	1.7	7	5	1.9	1.9
MSD132M-2/8	5.5	1.5	2900	720	82	66	0.85	0.57	11.39	5.75	18.11	19.90	1.8	1.8	7	5	1.9	1.9
MSD160M-2/8	7.5	2.2	2900	720	80	73	0.87	0.58	15.55	7.50	24.70	29.18	2.3	2.5	7	5	2.3	2.5
MSD160L-2/8	9.5	3	2920	720	82	73	0.87	0.58	19.22	10.23	31.07	39.79	2.3	2.5	7	5	2.3	2.5

Technical Data (at 400V/50Hz)

Model	Power (kW)		Speed (r/min)		Eff. (%)		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		T_{st}/T_n (Times)		I_{st}/I_n (Times)		T_{max}/T_n (Times)	
	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P
MSD712-2/4	0.55	0.12	2850	1410	75	57	0.78	0.55	1.5	0.7	1.8	0.8	2.7	3.3	6	4	2.7	3.2
MSD802-2/4	0.75	0.19	2860	1430	75	59	0.82	0.6	2	1	2.4	1.2	3.3	2.8	7	4	2.6	2.8
MSD802-2/4	1.1	0.28	2870	1430	79	64	0.82	0.59	2.8	1.5	3.6	1.8	3.4	2.5	7.5	4.6	2.8	2.8
MSD90S-2/4	1.5	0.38	2880	1440	82	71	0.84	0.6	3.5	1.5	4.9	2.5	2.6	3.2	7.5	5.5	3.3	3.5
MSD90L-2/4	2.2	0.55	2880	1440	83	73	0.86	0.62	4.5	2	7.2	3.5	3.6	3.6	8	5.8	3.3	3.2
MSD100L1-2/4	3	0.8	2850	1430	81	77	0.9	0.72	6	2.2	10	5.2	2.1	1.9	8	5.5	2.8	2.5
MSD112M-2/4	4	1	2910	1450	85	80	0.86	0.67	8	3	13	6	3.2	3.2	10.5	8	3.4	3.7
MSD112M-2/4	4.5	1.3	2900	1440	84	81	0.93	0.81	8.5	3	14	8	2.3	1.9	9.5	6.5	2.9	2.6
MSD132S-2/4	5.5	1.4	2900	1450	85	82	0.9	0.73	10.5	3.5	18	9	2.7	2.1	9.5	6.5	3	3
MSD132S-2/4	6	1.6	2890	1440	83	80	0.92	0.79	11.5	3.9	19	10	2.5	1.8	9	6	2.9	2.7
MSD132M-2/4	9	2.5	2920	1450	86	82	0.91	0.79	17	6	29	16	2.5	1.8	10.3	6.8	2.5	2.7
MSD160M-2/4	15	3.7	3930	1460	86	86	0.91	0.76	28	8.5	48	24	2.5	2.3	8	6.4	2.9	2.6
MSD160L-2/4	18.5	4.4	2940	1470	88	87	0.91	0.74	34	10.5	59	58	3	2.7	9.5	7	3.2	3

Technical Data (at 400V/50Hz)

Model	Power (kW)		Speed (r/min)		Eff. (%)		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		T_{st}/T_n (Times)		I_{st}/I_n (Times)		T_{max}/T_n (Times)	
	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P
MSD711-4/8	0.25	0.03	1370	710	53	30	0.67	0.44	1.2	0.5	1.7	0.4	2.4	2.5	3.5	2.8	2.5	4.8
MSD712-4/8	0.33	0.04	1360	710	58	34	0.71	0.45	1.5	0.5	2.3	0.5	2.2	4.1	4	3	2.5	4.6
MSD712-4/8	0.37	0.09	1360	650	58	45	0.69	0.61	1.5	0.5	2.5	1.3	2.4	2	3.5	2.5	2.5	2
MSD801-4/8	0.55	0.09	1410	710	64	43	0.7	0.49	2	1	3.7	1.1	2	2.6	4.5	3.5	2.5	3.6
MSD802-4/8	0.75	0.19	1430	710	76	59	0.82	0.6	1.8	0.8	2.4	1.2	3.3	2.8	7	4	2.6	2.8
MSD90S-4/8	1.1	0.18	1400	710	75	53	0.79	0.47	3	1.5	7.4	2.4	2.3	3	5.8	3.6	2.5	3.5
MSD90L-4/8	1.5	0.25	1380	700	75	57	0.83	0.49	4	1.5	10	3	2.2	2.8	5.8	3.6	2.4	3.3
MSD100L1-4/8	2.2	0.37	1430	720	79	62	0.8	0.46	4	2	14	4.5	2.1	2.5	7	4.5	2.7	3.5
MSD100L2-4/8	3	0.55	1420	710	80	67	0.82	0.5	6.6	2.5	20	7.3	2	2.3	6.9	4	2.5	3
MSD112M-4/8	4	0.75	1440	720	82	72	0.84	0.53	8.5	3	26.5	9.9	1.9	1.9	7.5	4.5	2.5	2.8
MSD132S-4/8	5.5	1.1	1450	720	84	74	0.85	0.54	11	4	36	14	2.1	1.5	8.5	5	2.5	2.8
MSD132M-4/8	7.5	1.5	1450	720	85	75	0.83	0.51	15	5.8	49	19	2.2	2	9.2	5	3	3
MSD160M-4/8	8.9	2	1460	730	87	79	0.83	0.53	18	7	58	26	2.4	1.7	8.7	4.5	3	2.6
MSD160L-4/8	11	2.8	1460	720	88	81	0.83	0.58	22	8.5	71	36	2.3	1.4	8	4	2.7	1.8
MSD160L-4/8	15	3.5	1460	720	89	82	0.83	0.56	12.5	11.5	97	45	2.2	1.6	7.5	4	2.9	2
MSD180M-4/8	18.5	4.6	1470	730	90	84	0.84	0.55	35	14	119	59	2.5	2.3	9	5.5	3	2.8
MSD180L-4/8	22	5.5	1470	730	90	83	0.85	0.6	40	16	142	71	2.4	2.1	9.5	5.5	3	2.8

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Technical Data (at 400V/50Hz)

Model	Power (kW)		Speed (r/min)		Eff. (%)		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		T_{st}/T_n (Times)		I_{st}/I_n (Times)		T_{max}/T_n (Times)	
	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P
MSD71S-4/6	0.25	0.09	1380	950	48	41	0.68	0.64	1.3	0.5	1.7	0.9	2.4	2	3	2.5	2.2	2.1
MSD801-4/6	0.37	0.12	1420	960	59	47	0.68	0.58	1.5	0.7	2.4	1.1	2	2.2	4.5	4	2.3	2.9
MSD802-4/6	0.55	0.16	1420	960	64	53	0.72	0.56	1.8	0.8	3.6	1.5	1.7	2.4	4.5	4.2	2.2	3.2
MSD90S-4/6	0.75	0.25	1410	950	65	59	0.74	0.65	2.5	0.9	5	2.4	1.8	1.6	4.5	4.2	2.1	2.3
MSD90L1-4/6	1.1	0.37	1410	950	68	64	0.74	0.68	3.2	1.5	7.4	3.7	1.9	2	4.5	4.2	2.1	2.2
MSD90L2-4/6	1.5	0.5	1420	950	73	68	0.77	0.7	4	1.6	10	4.8	1.9	1.9	5.5	5	2.1	2.3
MSD100L1-4/6	1.7	0.6	1430	960	75	68	0.77	0.73	4.5	2	11	5.5	1.9	1.6	5.5	5	2.2	2.1
MSD100L2-4/6	2.2	0.75	1430	950	80	69	0.83	0.69	5	2.4	14.5	7.5	2.4	1.7	6.5	4.3	2.5	2.2
MSD100L2-4/6	3	0.9	1430	950	77	68	0.77	0.7	7.5	3	19	8	2.7	1.7	6	4.6	2.5	2.2
MSD112M-4/6	3	1	1440	950	82	72	0.84	0.72	6.5	3	19.5	9.5	2.2	1.3	7.5	4.5	2.5	2.1
MSD132S-4/6	4	1.3	1440	960	80	73	0.81	0.73	9	4	26	12.5	2.3	1.3	3.8	5.5	2.4	2.1
MSD132M1-4/6	5.5	1.6	1450	970	83	75	0.81	0.71	12	4.5	36	15	2.4	1.4	7.8	6	2.4	2.2
MSD132M1-4/6	6	2	1450	970	84	77	0.8	0.74	13	5.5	39	19	2.5	1.5	7.8	6	2.8	2.2
MSD132M1-4/6	7.5	2.2	1450	970	85	72	0.86	0.74	15	6.2	49	21	2.2	1.4	8	5.5	2.7	2.2
MSD160M-4/6	11	3.3	1460	970	86	77	0.85	0.75	22	8.5	71	32	2.5	1.3	8	4.8	3	1.9
MSD160L-4/6	15	5	1450	970	88	80	0.86	0.73	29	12.5	98	48	2.2	1.9	9	6	2.3	2.3

Technical Data (at 400V/50Hz)

Model	Power (kW)		Speed (r/min)		Eff. (%)		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		T_{st}/T_n (Times)		I_{st}/I_n (Times)		T_{max}/T_n (Times)	
	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P
MSD802-6/8	0.37	0.18	940	710	64	53	0.67	0.57	1.3	0.9	3.7	2.4	2.3	2.4	4.5	3.5	2.5	2.7
MSD90S-6/8	0.75	0.32	940	710	70	57	0.73	0.61	2.1	1.4	7.5	4.2	1.9	1.6	4.6	3.3	2.5	2.2
MSD90L-6/8	1.1	0.46	940	710	67	52	0.67	0.63	4	2.4	11	6	1.8	1.6	4	3.5	2.2	1.9
MSD100L-6/8	1.5	0.63	950	710	75	62	0.72	0.66	4.3	2.5	14.5	8	2.1	1.7	5.2	4	2.3	2
MSD112M-6/8	2.2	0.93	950	720	79	68	0.75	0.62	5.5	3.5	21	12	2.6	1.7	6	4.2	2.5	2.3
MSD132S-6/8	3	1.3	970	730	83	72	0.76	0.6	7	4.5	29	16	2.4	1.8	7	4.6	2.6	2.4
MSD132M-6/8	4	1.7	970	730	83	74	0.77	0.6	9.3	5.8	39	22	2.4	1.9	7	5	2.5	2.5

Technical Data (at 400V/50Hz)

Model	Power (kW)		Speed (r/min)		Eff. (%)		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		T_{st}/T_n (Times)		I_{st}/I_n (Times)		T_{max}/T_n (Times)	
	6P	12P	6P	12P	6P	12P	6P	12P	6P	12P	6P	12P	6P	12P	6P	12P	6P	12P
MSD802-6/12	0.37	0.06	930	450	59	30	0.71	0.57	1.3	0.5	3.7	1.2	1.6	1.9	3.5	2	1.9	2
MSD802-6/12	0.55	0.08	930	450	64	38	0.74	0.57	1.7	0.53	5.6	1.7	1.6	1.8	4	2	2	2
MSD90S-6/12	0.75	0.1	930	460	66	41	0.75	0.47	2.2	0.8	7	2	1.4	1.8	3.6	2	1.9	2.2
MSD90L-6/12	1.1	0.15	930	460	67	42	0.73	0.46	3.2	1.2	11	3	1.7	2.1	3.8	2	2	2.3
MSD100L-6/12	1.5	0.2	940	470	73	48	0.75	0.44	4	1.5	15	4	2.1	3.2	4.8	1.5	2.4	3.1
MSD112M-6/12	2.2	0.3	950	470	77	54	0.74	0.41	5.5	2	22	6	2.2	3	5.3	2.7	2.5	3.2
MSD132S-6/12	3	0.4	960	480	77	51	0.7	0.39	8	2.9	29	7	2.6	3.4	6	3.5	3	3.9
MSD132M1-6/12	4	0.55	970	480	80	57	0.72	0.39	10	3.6	39	10	2.7	3.4	6.5	3.6	3.2	4.2
MSD132M2-6/12	5.5	0.75	970	480	81	59	0.73	0.39	13.5	4.7	54	14	2.9	3.5	7	3.5	2.7	3.9

ROYSE

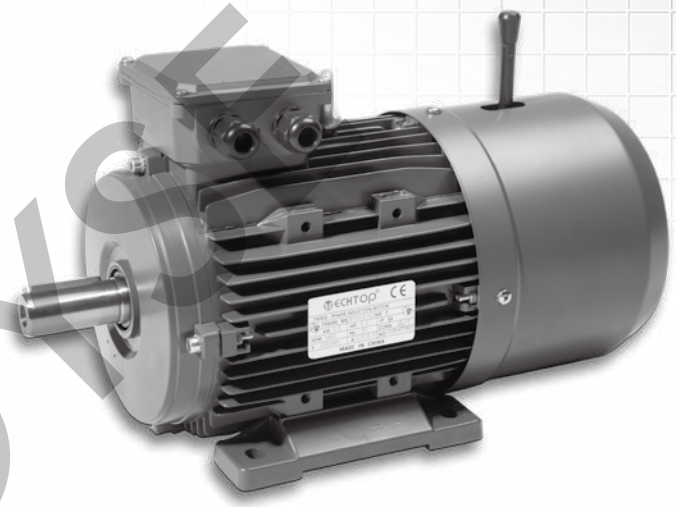
MSBCCL Series

Asynchronous Three-Phase Brake Motors With Squirrel Cage Rotor · Direct Current Brake

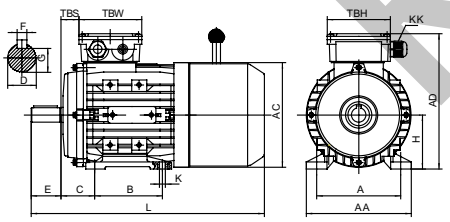
· MSBCCL series-enclosed construction externally ventilated-sizes 63~160

The brake–motors of the MSBCCL series result from coupling an asynchronous three–phase motor and an electromagnetic D.C. brake unit. Due to their reliability and operating safety, as well as their quick braking time (connection & disconnection time = 5~80 milliseconds) they are suitable for a great variety of applications, such as:

- Braking of loads or torques on the driving shaft.
- Braking of rotating masses to reduce any lost–time.
- Braking operations to increase the set–up precision.
- Braking of machine parts,according to safely rules.



PROVISIONAL



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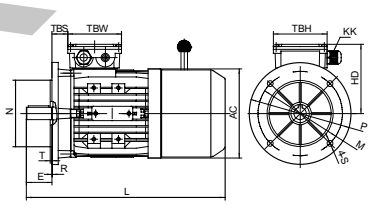

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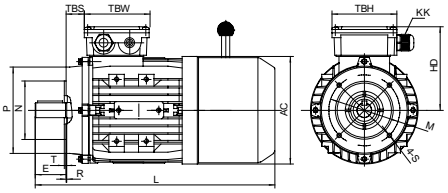

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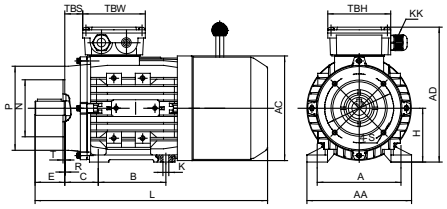

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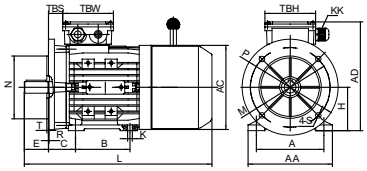

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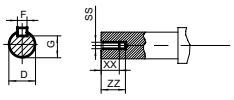


Overall & Installation Dimensions

FRAME	Foot Mounting				Shaft								General							
	H	A	B	C	D	E	F	G	K	SS	XX	ZZ	AA	AD	HD	AC	L	TBS	TBW	TBH
56	56	90	71	36	Φ9	20	3	7.2	5.8*8.8	M4	10	14	110	152	96	Φ110	233	14	88	88
63	63	100	80	40	Φ11	23	4	8.5	7*10	M4	10	14	120	169	106	Φ121	265	14	94	94
71☆☆	71	112	90	45	Φ14	30	5	11	7*10	M5	12	17	132	184	113	Φ139	287/301	20	94	94
80	80	125	100	50	Φ19	40	6	15.5	10*13	M6	16	21	160	211	131	Φ156	340	27	105	105
90S	90	140	100	56	Φ24	50	8	20	10*13	M8	19	25	175	228	138	Φ175	356	30	105	105
90L1/L2	90	140	125	56	Φ24	50	8	20	10*13	M8	19	25	175	228	138	Φ175	381/411	30	105	105
100☆☆	100	160	140	63	Φ28	60	8	24	12*15	M10	22	30	198	248	148	Φ196	434/452	26	105	105
112	112	190	140	70	Φ28	60	8	24	12*15	M10	22	30	220	278	166	Φ221	465	32	112	112
132S	132	216	140	89	Φ38	80	10	33	12*15	M12	28	37	252	316	184	Φ256	518	38	112	112
132M/L	132	216	178	89	Φ38	80	10	33	12*15	M12	28	37	252	316	184	Φ256	556/582	38	112	112
160M/L	160	254	210/254	108	Φ42	110	12	37	15*19	M16	36	45	290	382	222	Φ313	701	64	143	143

FRAME	KK	B5						B14						B5R						B14B					
		N	M	P	S	T	R	N	M	P	S	T	R	N	M	P	T	S	R	N	M	P	T	S	R
56	1–M16*1.5	Φ80	Φ100	Φ120	Φ7	3	0	Φ50	Φ65	Φ80	M5	2.5	0												
63	1–M16*1.5	Φ95	Φ115	Φ140	Φ10	3	0	Φ60	Φ75	Φ90	M5	2.5	0												
71	1–M20*1.5	Φ110	Φ130	Φ160	Φ10	3.5	0	Φ70	Φ85	Φ105	M6	2.5	0	Φ95	Φ115	Φ140	3	Φ10	0	Φ95	Φ115	Φ140	3	M8	0
80	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ80	Φ100	Φ120	M6	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
90	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ95	Φ115	Φ140	M8	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
100	2–M20*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0
112	2–M25*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0
132	2–M25*1.5	Φ230	Φ265	Φ300	Φ15	4	0	Φ130	Φ165	Φ200	M10	3.5	0	Φ180	Φ215	Φ250	4	Φ15	0	Φ180	Φ215	Φ250	4	M12	0
160	2–M32*1.5	Φ250	Φ300	Φ350	Φ19	5	0	Φ180	Φ215	Φ250	M12	4	0												

ROYSE

REACH brake data

Frame size	Brake type	Brake torque (Speed 100r/min) (Nm)	Brake rated power(20℃) (W)	Delay time when power on (ms)	Brake time (ms)	Pick in time when power off (ms)
56–71	06	4	20	15	30	40
80	08	8	25	15	32	50
90	10	16	30	25	45	69
100	12	32	40	26	56	108
112	14	60	50	27	57	190
132	16	80	55	30	60	200
160	18	150	85	35	78	260

INTORQ brake data

Frame size	Brake type	Brake torque (Speed100r/min) (Nm)	Brake rated power(20℃) (W)	Delay time when power on (ms)	Brake time (ms)	Pick in time when power off (ms)
56–71	06	4	20	10	23	52
80	08	8	25	15	31	60
90	10	16	30	31	50	65
100	12	32	40	39	64	145
112	14	60	50	26	51	205
132	16	80	55	40	70	258

SB Series Motors Technical Data (at 50Hz)

Model	Power (kW)	Current (A)			Current (A)			Current (A)			Speed (r/min)	Eff			Power factor	T_{st}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_{st}/I_n (Times)	Noise dB(A)
		220V	380V	660V	230V	400V	690V	240V	415V	720V		100%	75%	50%						
MSB 631-2	0.18	0.92	0.53	0.31	0.88	0.51	0.29	0.85	0.49	0.28	2780	66.5	64.2	56.8	0.77	2.3	2.5	2.4	4.1	61
MSB 632-2	0.25	1.19	0.69	0.40	1.14	0.65	0.38	1.09	0.63	0.36	2780	69.8	68.8	62.8	0.79	2.6	2.5	2.4	4.3	61
MSB 633-2	0.37	1.72	1.00	0.57	1.65	0.95	0.55	1.58	0.91	0.53	2750	71.4	71.2	65.9	0.79	2.8	2.6	2.6	4.7	62
MSB 711-2	0.37	1.70	0.99	0.57	1.63	0.94	0.54	1.56	0.90	0.52	2830	71.3	70.4	65.2	0.8	2.8	2.9	2	5.9	64
MSB 712-2	0.55	2.52	1.46	0.84	2.41	1.39	0.80	2.31	1.34	0.77	2815	71.6	71	66.1	0.8	2.7	2.7	1.8	6	64
MSB 713-2	0.75	3.25	1.88	1.08	3.11	1.79	1.04	2.98	1.72	0.99	2820	73.8	73.9	70.3	0.82	3.0	3.0	2.0	6.6	65
MSB 801-2	0.75	3.15	1.83	1.05	3.02	1.73	1.01	2.89	1.67	0.96	2830	75.2	75.6	72.2	0.83	3	2.8	2	6.2	67
MSB 802-2	1.1	4.40	2.55	1.47	4.21	2.42	1.40	4.04	2.33	1.35	2840	79	79.8	77.7	0.83	2.6	3.1	2.6	6.1	67
MSB 803-2	1.5	5.70	3.30	1.90	5.46	3.14	1.82	5.23	3.02	1.74	2820	81.2	82.5	81.3	0.85	3.2	3	2.5	7.2	70
MSB 90S-2	1.5	5.73	3.32	1.91	5.48	3.15	1.83	5.25	3.04	1.75	2850	80.8	81.2	78.9	0.85	2.8	3.3	2.6	7.7	72
MSB 90L1-2	2.2	8.19	4.74	2.73	7.84	4.51	2.61	7.51	4.34	2.50	2860	82.9	83.4	81.4	0.85	3.7	3.9	3.3	8.8	72
MSB 90L2-2	3	11.1	6.43	3.70	10.6	6.11	3.54	10.2	5.89	3.39	2830	82.4	83.5	82.3	0.86	4.4	4.2	3.5	8	74
MSB 100L1-2	3	10.9	6.32	3.64	10.4	6.00	3.48	10.0	5.78	3.33	2875	83.9	84.5	83	0.86	2.8	3.2	2	8.1	76
MSB 100L2-2	4	13.8	7.99	4.60	13.2	7.59	4.40	12.6	7.31	4.22	2870	85.5	86.5	85.8	0.89	3.2	3.4	2.2	8.8	77
MSB 112M-2	4	13.2	7.63	4.40	12.6	7.25	4.20	12.1	6.99	4.03	2870	85.6	87.0	86.8	0.93	2.6	2.85	1.75	8.1	77
MSB 112L-2	5.5	18.0	10.4	6.00	17.2	9.9	5.74	16.5	9.5	5.50	2890	87.1	88	87.6	0.92	3.1	3.3	2	9.4	78
MSB 132S1-2	5.5	18.5	10.7	6.17	17.7	10.2	5.90	17.0	9.8	5.65	2900	86.6	87.4	86.5	0.90	2.25	3.1	1.5	7.9	80
MSB 132S2-2	7.5	24.6	14.2	8.19	23.5	13.5	7.84	22.5	13.0	7.51	2900	88.0	88.8	88.3	0.91	2.4	3.25	1.5	8.5	80
MSB 132M1-2	9.2	30.8	17.8	10.3	29.5	17.0	9.83	28.3	16.3	9.42	2930	88	88	86.4	0.89	2	2.2	1.2	7.5	81
MSB 132M2-2	11	36.3	21.0	12.1	34.7	20.0	11.6	33.3	19.2	11.1	2930	88.4	88.6	87.5	0.9	2	2.2	1.2	7.5	83
MSB 160M1-2	11	36.4	21.1	12.1	34.8	20.0	11.6	33.4	19.3	11.1	2920	88.8	89.4	88.6	0.89	2.6	2.95	1.85	7.1	86
MSB 160M2-2	15	49.3	28.5	16.4	47.2	27.1	15.7	45.2	26.1	15.1	2910	89.1	90.0	89.6	0.90	2.2	2.8	1.8	6.4	86
MSB 160L-2	18.5	59.3	34.4	19.8	56.8	32.6	18.9	54.4	31.5	18.1	2930	90.3	90.9	90.3	0.91	2.9	3.05	1.65	8.4	86
MSB 631-4	0.12	0.89	0.51	0.30	0.85	0.49	0.28	0.81	0.47	0.27	1390	58.5	54.3	45.6	0.61	2.65	2.8	2.7	3.2	52
MSB 632-4	0.18	1.15	0.67	0.38	1.10	0.63	0.37	1.06	0.61	0.35	1365	64.2	62.5	55.9	0.64	2.8	2.55	2.4	3.6	52
MSB 633-4	0.25	1.45	0.84	0.48	1.39	0.80	0.46	1.33	0.77	0.44	1370	68.3	67.5	62.1	0.66	2.7	2.7	2.4	3.9	54
MSB 711-4	0.25	1.38	0.80	0.46	1.32	0.76	0.44	1.27	0.73	0.42	1395	65.1	63.1	55.8	0.73	2	2.15	1.6	4.2	55
MSB 712-4	0.37	1.90	1.10	0.63	1.82	1.05	0.61	1.74	1.01	0.58	1390	68.6	68.2	62.9	0.74	2.25	2.35	1.95	4.6	55
MSB 713-4	0.55	2.81	1.63	0.94	2.69	1.54	0.90	2.57	1.49	0.86	1390	71.9	71.6	66.8	0.72	2.8	2.8	2.4	4.8	57
MSB 801-4	0.55	2.74	1.59	0.91	2.62	1.51	0.87	2.51	1.45	0.84	1400	70.9	70.5	65.5	0.74	2.25	2.55	1.95	4.9	58
MSB 802-4	0.75	3.36	1.94	1.12	3.21	1.85	1.07	3.08	1.78	1.03	1390	74.4	76.0	73.9	0.79	2.5	2.55	2.05	5.4	58
MSB 803-4	1.1	4.90	2.84	1.63	4.69	2.69	1.56	4.49	2.60	1.50	1390	74.6	75.7	73.3	0.79	2.9	2.9	2.4	5.9	60
MSB 90S-4	1.1	4.90	2.83	1.63	4.68	2.69	1.56	4.49	2.60	1.50	1400	75.5	76.7	74.4	0.78	2.9	2.7	2.15	6	61
MSB 90L1-4	1.5	6.48	3.75	2.16	6.20	3.56	2.07	5.94	3.44	1.98	1410	79.6	80.2	78.0	0.76	3.4	3.3	2.7	6.9	61
MSB 90L2-4	2.2	9.76	5.65	3.25	9.33	5.37	3.11	8.94	5.17	2.98	1410	78.9	79.4	77	0.75	3.8	2.6	3.2	7.2	63
MSB 100L1-4	2.2	8.71	5.05	2.90	8.34	4.79	2.78	7.99	4.62	2.66	1420	82.0	83.3	82.3	0.81	2.4	2.7	2.15	6.3	64
MSB 100L2-4	3	11.5	6.64	3.82	11.0	6.31	3.66	10.5	6.08	3.51	1430	83.7	84.8	83.8	0.82	2.6	3	2.15	6.8	64
MSB 100L3-4	4	15.2	8.80	5.07	14.5	8.36	4.85	13.9	8.06	4.65	1430	84.2	85.5	85.3	0.82	2.2	2.3	1.5	7	65
MSB 112M-4	4	14.9	8.60	4.95	14.2	8.17	4.74	13.6	7.88	4.54	1440	84.7	86.0	85.4	0.83	2.5	2.9	2.05	7.1	65
MSB 112L-4	5.5	20.4	11.8	6.81	19.5	11.2	6.51	18.7	10.8	6.24	1435	85.9	87.1	86.6	0.82	2.5	2.95	2.2	7.2	68
MSB 132S-4	5.5	19.6	11.4	6.54	18.76	10.8	6.25	18.0	10.4	5.99	1445	86.4	87.8	87.7	0.85	2.15	2.85	1.75	7.5	71
MSB 132M-4	7.5	25.9	15.0	8.62	24.7	14.2	8.24	23.7	13.7	7.90	1450	87.6	88.8	88.5	0.87	2.1	2.9	1.65	8.6	71
MSB 132L1-4	9.2	31.3	18.1	10.4	30.0	17.2	10.0	28.7	16.6	9.6	1450	88.6	89.5	89.1	0.87	2.8	2.4	2	8.4	74
MSB 132L2-4	11	37.3	21.6	12.4	35.6	20.5	11.9	34.2	19.8	11.4	1450	90.1	91.1	91	0.86	3	2.5	2	8.9	74
MSB 160M-4	11	39.7	23.0	13.2	37.9	21.8	12.6	36.4	21.0	12.1	1450	87.7	89.6	90.3	0.83	2.05	2.25	1.55	6.1	75
MSB 160L1-4	15	51.9	30.1	17.3	49.7	28.5	16.6	47.6	27.5	15.9	1455	88.7	90.0	90.2	0.86	2.2	2.45	1.4	7.3	75
MSB 160L2-4	18.5	63.1	36.5	21.0	60.4	34.7	20.1	57.9	33.5	19.3	1460	90.5	91	90.6	0.85	2.2	2.2	1.4	7.5	78

ROYSF

SB Series Motors Technical Data (at 50Hz)

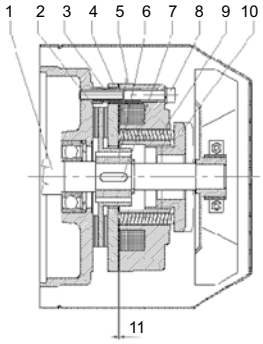
Model	Power (kW)	Current (A)			Current (A)			Current (A)			Speed (r/min)	Eff			Power factor	T_{st}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_{st}/I_n (Times)	Noise dB(A)
		220V	380V	660V	230V	400V	690V	240V	415V	720V		100%	75%	50%						
MSB 631-6	0.09	0.75	0.44	0.25	0.72	0.41	0.24	0.69	0.40	0.23	890	50.7	47.6	39.8	0.62	2	2.2	1.9	2.9	50
MSB 632-6	0.12	0.97	0.56	0.32	0.93	0.54	0.31	0.89	0.52	0.30	895	53.7	50.9	43.2	0.60	2.3	2.2	2.1	2.8	50
MSB 711-6	0.18	1.11	0.64	0.37	1.06	0.61	0.35	1.02	0.59	0.34	905	63.0	61.6	55.4	0.67	2.15	2.4	2	3.5	52
MSB 712-6	0.25	1.56	0.90	0.52	1.49	0.86	0.50	1.43	0.83	0.48	885	62.6	62.0	55.8	0.67	2.05	2.3	2.05	3.2	52
MSB 713-6	0.37	2.32	1.34	0.77	2.22	1.28	0.74	2.13	1.23	0.71	890	65.4	64.4	58.2	0.64	2.3	2.5	2.3	3.4	54
MSB 801-6	0.37	2.06	1.19	0.69	1.97	1.13	0.66	1.89	1.09	0.63	920	68.1	67.7	62.2	0.69	1.95	2.25	1.8	3.7	56
MSB 802-6	0.55	2.74	1.59	0.91	2.62	1.51	0.87	2.51	1.45	0.84	920	72.5	73.0	69.3	0.73	2.25	2.45	2.05	4.3	56
MSB 803-6	0.75	3.65	2.11	1.22	3.49	2.01	1.16	3.34	1.93	1.11	910	72.9	74.2	71.3	0.74	2.2	2.4	2.1	4.1	58
MSB 90S-6	0.75	3.83	2.22	1.28	3.67	2.11	1.22	3.52	2.03	1.17	920	72.5	73.3	70.0	0.71	1.8	2.2	1.7	4.1	59
MSB 90L1-6	1.1	5.47	3.17	1.82	5.23	3.01	1.74	5.01	2.90	1.67	910	73.5	75.2	72.9	0.72	1.95	2.25	1.85	4.2	59
MSB 90L2-6	1.5	7.12	4.12	2.37	6.81	3.92	2.27	6.53	3.78	2.18	900	74.7	77	75.5	0.74	2.1	2.3	1.9	4.2	60
MSB 100L1-6	1.5	6.77	3.92	2.26	6.47	3.72	2.16	6.20	3.59	2.07	935	78.5	79.9	78.2	0.74	2.05	2.35	1.8	5	61
MSB 100L2-6	2.2	9.87	5.71	3.29	9.44	5.43	3.15	9.04	5.23	3.01	950	77	78.4	77.8	0.76	2.2	2.2	1.3	6	63
MSB 112M-6	2.2	9.3	5.38	3.10	8.89	5.11	2.96	8.52	4.93	2.84	925	79.2	81.8	81.7	0.78	1.9	2.25	1.75	4.7	64
MSB 112L-6	3	12.9	7.49	4.31	12.4	7.12	4.13	11.9	6.86	3.95	950	79	80.9	80.9	0.77	2.2	2.2	1.3	6	64
MSB 132S-6	3	12.5	7.22	4.16	11.9	6.86	3.98	11.4	6.61	3.81	955	82.5	84.5	84.3	0.77	1.7	2.15	1.45	5.3	64
MSB 132M1-6	4	16.2	9.39	5.40	15.5	8.92	5.17	14.9	8.59	4.95	965	85.2	85.8	84.4	0.76	2.3	2.9	1.6	6.6	68
MSB 132M2-6	5.5	21.5	12.4	7.16	20.6	11.8	6.9	19.7	11.4	6.6	960	85.9	87.2	86.8	0.78	2.5	2.7	1.7	6.7	68
MSB 132L-6	7.5	30.1	17.4	10.0	28.8	16.5	9.6	27.6	15.9	9.2	960	85	86.4	86.4	0.77	2	2	1.3	6.5	68
MSB 160M-6	7.5	30.3	17.6	10.1	29.0	16.7	9.7	27.8	16.1	9.3	970	86.8	87.6	86.7	0.75	2.1	2.7	1.65	6.1	68
MSB 160L-6	11	42.5	24.6	14.2	40.7	23.4	13.6	39.0	22.5	13.0	965	87.2	88.6	88.6	0.78	2.25	2.35	1.5	6.9	73
MSB 711-8	0.09	0.97	0.56	0.32	0.93	0.54	0.31	0.89	0.52	0.30	680	44.9	39.6	31.1	0.54	2.3	2.6	2.2	2.4	50
MSB 712-8	0.12	1.15	0.67	0.38	1.10	0.63	0.37	1.06	0.61	0.35	680	51.7	47.1	38.4	0.53	2.5	2.75	2.5	2.7	50
MSB 713-8	0.18	1.51	0.88	0.50	1.45	0.83	0.48	1.39	0.80	0.46	670	55.8	52.5	44.4	0.56	2.3	2.5	2.4	2.8	52
MSB 801-8	0.18	1.24	0.72	0.41	1.18	0.68	0.39	1.13	0.66	0.38	705	64.4	61.3	53.9	0.59	2.2	2.65	2	3.6	52
MSB 802-8	0.25	1.64	0.95	0.55	1.57	0.90	0.52	1.51	0.87	0.50	700	66.3	64.3	57.8	0.60	2.1	2.5	2.05	3.5	52
MSB 90S-8	0.37	2.37	1.37	0.79	2.26	1.30	0.75	2.17	1.25	0.72	690	66.3	65.4	59.6	0.62	1.55	2	1.5	3.2	56
MSB 90L-8	0.55	3.26	1.89	1.09	3.12	1.79	1.04	2.99	1.73	1.00	680	69.0	69.9	65.8	0.64	1.6	1.95	1.6	3.3	56
MSB 100L1-8	0.75	3.88	2.24	1.29	3.71	2.13	1.24	3.55	2.06	1.18	700	75.2	74.8	70.8	0.68	2.1	2.55	1.95	4.4	59
MSB 100L2-8	1.1	5.16	2.99	1.72	4.94	2.84	1.65	4.73	2.74	1.58	685	74.6	76.7	75.1	0.75	1.8	2.15	1.65	4.1	59
MSB 112M-8	1.5	7.24	4.19	2.41	6.93	3.98	2.31	6.64	3.84	2.21	700	78.3	78.9	76.4	0.69	2.2	2.5	2.1	4.5	61
MSB 132S-8	2.2	10.0	5.81	3.35	9.6	5.52	3.20	9.20	5.32	3.07	705	78.8	80.7	79.6	0.73	1.8	2.25	1.65	4.5	64
MSB 132M-8	3	13.0	7.51	4.33	12.4	7.14	4.14	11.9	6.88	3.96	705	80.9	82.6	81.9	0.75	2.1	2.5	1.8	5.1	64
MSB 160M1-8	4	18.0	10.4	5.99	17.2	9.88	5.73	16.5	9.53	5.49	710	81.7	83.0	82.0	0.72	1.8	2.25	1.5	4.7	68
MSB 160M2-8	5.5	23.4	13.5	7.79	22.4	12.9	7.45	21.4	12.4	7.14	715	84.6	85.7	84.9	0.73	2.15	2.55	1.6	5.2	68
MSB 160L-8	7.5	30.3	17.5	10.1	29.0	16.67	9.66	27.8	16.1	9.26	715	85.8	87.1	86.7	0.76	2.15	2.45	1.4	5.4	68

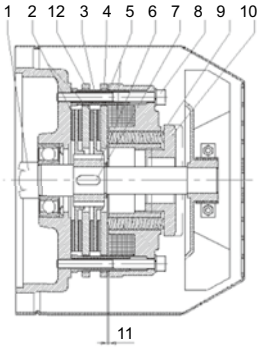
ROYSF

MSBCCL Series Brake Motors

Operating Principle

The direct current brake is fed by means of an electronic circuit with diode bridge (rectifier) situated inside the terminal-box. When feeding the electromagnet (5), the movable anchor (4) is attracted towards the same, thus loading the braking torque springs (9) and allowing the disk (2), equipped with friction packing and fitted on the groove hub (6) to turn solitary the motor shaft (1) by means of a key (7). By interrupting the feeding, the movable anchor (4), pushed by the braking torque springs (9), exerts a pressure upon the friction surface of the disk (2), thus causing its stopping.





Adjustment Of The Air Gap

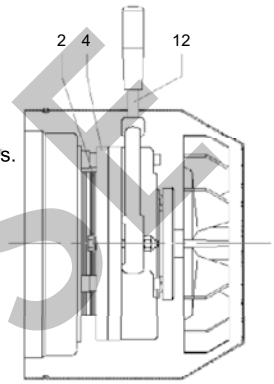
The air gap (11) is the distance between the electromagnet (5) and the movable anchor (9).

The air gap has to be regularly checked, since due to the wear of the friction packing (2) it tends to increase.

Act no the brake adjusters (3) after having unloosen the screws (8) to bring the air gap to the required value.

Act on the ring nut (10) which acts on the braking torque springs (9) to adjust the braking torque.

Pls. contact our technical department for information on the air gap adjustment values.



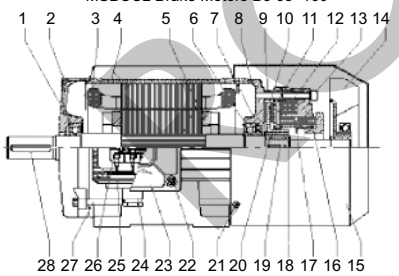
Hand Release With Lever

Upon request a hand release with lever can be supplied.

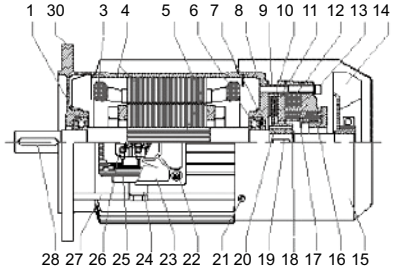
In case of a current cutoff, acting on the lever (12), the release, connected to the movable anchor (4) overcomes the springs pressure, thus detaching the movable anchor from the disc friction packing (2) allowing the shaft to turn.

NOYSF

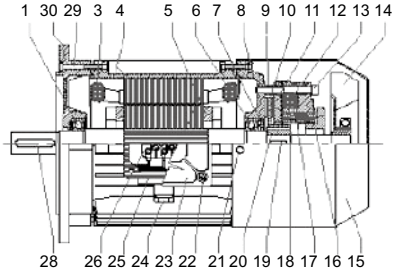
MSBCCL Brake Motors B3 63~160



MSBCCL Brake Motors B5 63~112



MSBCCL Brake Motors B5 132~160



Spare Parts

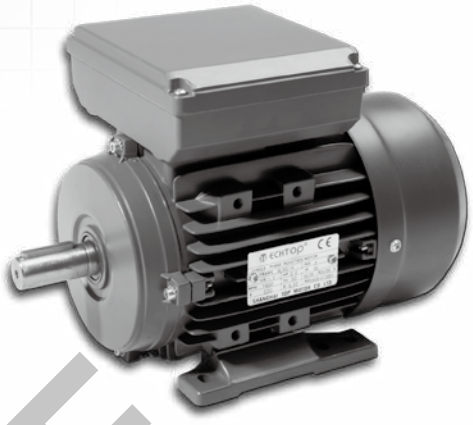
1. Front bearing
2. Front shield
3. Winding
4. Frame with stator package
5. Shaft with rotor
6. Rear bearing
7. Spring
8. Rear shield
9. Adjusting bush
10. Brake disc
11. Moving anchor
12. Electromagnet coil with diode
13. Fixing screws for brake
14. Cooling fan
15. Fan hood
16. Ring nut
17. Spring
18. See gearing
19. Key brake side
20. Toothed pinion
21. Fixing screw for fan hood
22. Fixing crew for terminal-box
23. Terminal-box
24. Able-holder
25. Packing
26. Terminal-block
27. Tie-bolt
28. Coupling side key
29. Fixing screw for shield
30. Flange shield

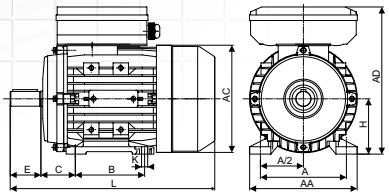
ML Series

Single-Phase Capacitor Start and Capacitor Run Asynchronous Motors

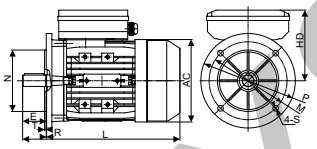
Aluminum Housing

ML series aluminum housing single-phase dual-capacitor asynchronous motors,with latest design in entirety, are made of selected quality materials and conform to the IEC standard.
ML motors have good performance,safety and reliable operation, the multiple of starting torque is up to 2.5.
These series motors are suitable for the occasion where the requirements of big starting torque and high over load, such as air-compressors, pumps, and many other small machines.

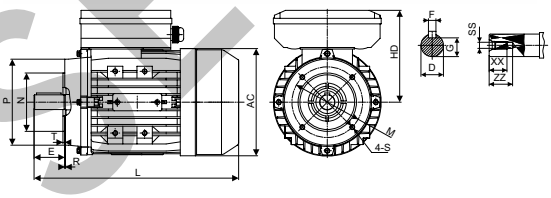




IM B3



IM B5



IM B14

ROYSE

Overall & Installation Dimensions

FRAME	Mounting Dimensions									Overall Dimensions					Shaft End Screw Dimensions		
	H	A	B	C	D	E	F	G	K	AA	AD	HD	AC	L	SS	XX	ZZ
ML 63	63	100	80	40	Φ11	23	4	8.5	7×10	120	179	116	Φ121	220	M4	10	14
ML 71	71	112	90	45	Φ14	30	5	11	7×10	132	194	123	Φ139	255	M5	12	17
ML 80	80	125	100	50	Φ19	40	6	15.5	10×13	160	223	143	Φ156	290	M6	16	21
ML 90S	90	140	100	56	Φ24	50	8	20	10×13	175	240	150	Φ175	337	M8	19	25
ML 90L	90	140	125	56	Φ24	50	8	20	10×13	175	240	150	Φ175	367	M8	19	25
ML 100L	100	160	140	63	Φ28	60	8	24	12×15	198	271	171	Φ196	403(421)	M10	22	30
ML 112M	112	190	140	70	Φ28	60	8	24	12×15	220	297	185	Φ221	431	M10	22	30

FRAME	KK	B5						B14						B5R						B14B					
		N	M	P	S	T	R	N	M	P	S	T	R	N	M	P	T	S	R	N	M	P	T	S	R
ML 63	1–M20*1.5	Φ95	Φ115	Φ140	Φ10	3	0	Φ60	Φ75	Φ90	M5	2.5	0												
ML 71	1–M20*1.5	Φ110	Φ130	Φ160	Φ10	3.5	0	Φ70	Φ85	Φ105	M6	2.5	0	Φ95	Φ115	Φ140	3	Φ10	0	Φ95	Φ115	Φ140	3	M8	0
ML 80	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ80	Φ100	Φ120	M6	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
ML 90	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ95	Φ115	Φ140	M8	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
ML 100	1–M20*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0
ML 112	1–M25*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0

Technical Data (at 230V/50Hz)

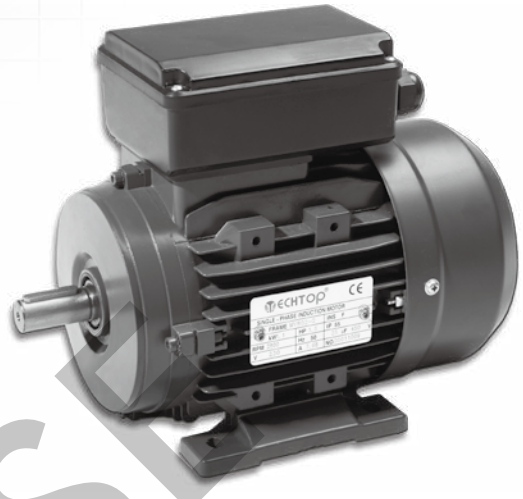
Model	Power (kW)	Current (A)	Speed (r/min)	Eff (%)	Power factor (cos ϕ)	T_{st}/T_n (Times)	T_{max}/T_n (Times)	Starting Current(A)	Run Capacitor (μf/V)	Start Capacitor (μf/V)	Noise dB(A)	W.T (kg)	Inertia (kg*m²)
ML631-2	0.18	1.36	2820	62	0.93	1.9	1.8	7	8μf/450V	30μf/250V	70	3.9	0.000141
ML632-2	0.25	1.71	2800	67.5	0.94	2.3	1.8	8	10μf/450V	30μf/250V	70	4.4	0.000168
ML711-2	0.37	2.40	2780	70.5	0.95	2.5	1.6	12	12μf/450V	40μf/250V	75	6.2	0.000330
ML712-2	0.55	3.31	2790	74.5	0.97	2.5	1.8	20	16μf/450V	50μf/250V	75	7	0.000437
ML801-2	0.75	4.25	2840	77.5	0.99	2.5	1.8	30	20μf/450V	75μf/250V	75	9	0.000781
ML802-2	1.1	6.08	2850	79.5	0.99	2.3	1.8	40	30μf/450V	120μf/250V	78	10.3	0.000938
ML90S-2	1.5	8.23	2860	80	0.99	2.5	1.8	56	40μf/450V	200μf/300V	80	13.8	0.001512
ML90M-2	1.8	9.76	2860	81	0.99	2.5	1.8	65	40μf/450V	200μf/300V	80	15.1	0.001752
ML90L-2	2.2	11.9	2850	81	0.99	2.5	1.75	15	50μf/450V	250μf/300V	80	16.8	0.001995
ML100L-2	3	17.7	2830	75	0.98	2.5	1.63	110	60μf/450V	300μf/300V	83	25	0.004803
ML112M1-2	3.7	19.9	2900	82.5	0.98	2.5	1.8	155	60μf/450V	400μf/300V	84	31	0.007170
ML112M2-2	4	21.3	2900	83.5	0.98	2.5	1.8	165	60μf/450V	400μf/300V	84	33	0.007453
ML631-4	0.12	1.01	1380	54.5	0.95	2.5	1.65	6	8μf/450V	30μf/250V	65	4.1	0.000291
ML632-4	0.18	1.36	1340	60	0.96	2.3	1.43	6	10μf/450V	30μf/250V	65	4.5	0.000340
ML711-4	0.25	1.78	1415	63	0.97	2.5	1.7	10	12μf/450V	40μf/250V	65	5.9	0.000598
ML712-4	0.37	2.53	1410	65.5	0.97	2.3	1.6	15	16μf/450V	50μf/250V	68	6.9	0.000760
ML800-4	0.37	2.52	1420	66.5	0.96	2.5	1.8	15	16μf/450V	50μf/250V	68	8.5	0.001105
ML801-4	0.55	3.52	1420	71.5	0.95	2.5	1.8	20	20μf/450V	75μf/250V	70	9.6	0.001380
ML802-4	0.75	4.56	1420	73	0.98	2.5	1.75	27	25μf/450V	100μf/250V	70	10.9	0.001656
ML90S-4	1.1	6.62	1420	76	0.95	2.5	1.7	40	35μf/450V	150μf/250V	73	13.8	0.002510
ML90L-4	1.5	8.56	1420	78.5	0.97	2.5	1.75	55	40μf/450V	200μf/300V	75	16.7	0.003252
ML100L0-4	1.84	10.3	1440	79.5	0.98	2.3	1.62	60	50μf/450V	200μf/300V	77	21	0.006804
ML100L1-4	2.2	12.1	1440	80.5	0.98	2.5	1.65	80	50μf/450V	250μf/300V	78	22.8	0.008045
ML100L2-4	3	16.4	1445	83	0.96	2.4	1.75	110	60μf/450V	300μf/300V	78	28.7	0.010543
ML112M1-4	3.7	19.7	1430	83.5	0.98	2.4	1.75	130	60μf/450V	400μf/300V	79	31	0.013608
ML112M2-4	4	21.3	1435	83.5	0.98	2.5	1.75	140	60μf/450V	400μf/300V	79	32.8	0.014485
ML711-6	0.18	1.3	930	60	0.97	2.3	1.72	7	10μf/450V	40μf/250V	68	6.7	0.000965
ML801-6	0.37	2.5	935	67	0.97	2.2	1.55	13	16μf/450V	50μf/250V	68	10.1	0.001829
ML802-6	0.55	3.5	935	71	0.97	2.2	1.45	20	20μf/450V	75μf/250V	70	10.8	0.002366
ML90S-6	0.75	4.7	945	71	0.97	2.1	1.45	35	30μf/450V	150μf/250V	70	14.2	0.003534
ML90L-6	1.1	6.7	945	74	0.96	2.5	1.45	45	45μf/450V	200μf/300V	70	17.3	0.004792
ML100L-6	1.5	8.73	960	77	0.97	2.3	1.55	60	45μf/450V	200μf/300V	72	23.8	0.010784
ML112M-6	2.2	12.0	965	82	0.97	2.5	1.7	100	60μf/450V	400μf/300V	75	31.2	0.019523

ROYSE

MY/MYT Series

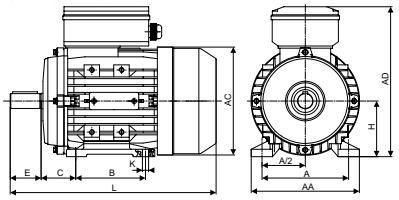
Single-Phase Capacitor Run Asynchronous Motors

Aluminum Housing

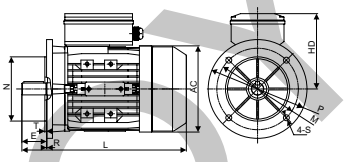


MY/MYT series aluminum housing single-phase capacitor-run asynchronous motors,with latest design in entirety, are made of selected quality materials and conform to the IEC standard.
MY motors have good performance, safety and reliable operation, nice appearance, and can be maintained very conveniently, while with low noises, little vibration and at the same time of light weight and simple construction. The multiple of starting torque is 0.3~0.7(MY), 0.45~0.75(MYT).
These series motors are suitable for the occasion where there requirements of starting torque is low and long-term continuous woking, such as home electric appliances, pumps, fans, and recording meters,etc.

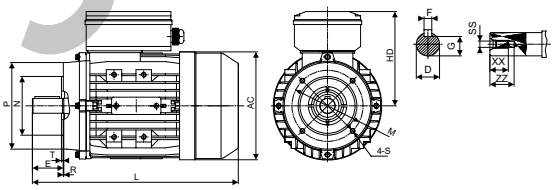
ROYSE



IM B3



IM B5



IM B14

Overall & Installation Dimensions

FRAME	Mounting Dimensions									Overall Dimensions					Shaft End Screw Dimensions		
	H	A	B	C	D	E	F	G	K	AA	AD	HD	AC	L	SS	XX	ZZ
MY 56	56	90	71	36	Φ9	20	3	7.2	5.8×8.8	110	144	88	Φ110	196	M4	9	12
MY 63	63	100	80	40	Φ11	23	4	8.5	7×10	120	181	118	Φ121	220	M4	10	14
MY 71	71	112	90	45	Φ14	30	5	11	7×10	132	196	125	Φ139	241/255	M5	12	17
MY 80	80	125	100	50	Φ19	40	6	15.5	10×13	160	226	146	Φ156	290	M6	16	21
MY 90S	90	140	100	56	Φ24	50	8	20	10×13	175	243	153	Φ175	312	M8	19	25
MY 90L	90	140	125	56	Φ24	50	8	20	10×13	175	243	153	Φ175	337/367	M8	19	25
MY 100L	100	160	140	63	Φ28	60	8	24	12×15	198	265	165	Φ196	368/386	M10	22	30

FRAME	KK	B5						B14						B5R						B14B					
		N	M	P	S	T	R	N	M	P	S	T	R	N	M	P	T	S	R	N	M	P	T	S	R
MY 56	1–M16*1.5	Φ80	Φ100	Φ120	Φ7	3	0	Φ50	Φ65	Φ80	M5	2.5	0												
MY 63	1–M20*1.5	Φ95	Φ115	Φ140	Φ10	3	0	Φ60	Φ75	Φ90	M5	2.5	0							Φ80	Φ100	Φ120	3	M6	0
MY 71	1–M20*1.5	Φ110	Φ130	Φ160	Φ10	3.5	0	Φ70	Φ85	Φ105	M6	2.5	0	Φ95	Φ115	Φ140	3	Φ10	0	Φ95	Φ115	Φ140	3	M8	0
MY 80	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ80	Φ100	Φ120	M6	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
MY 90	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ95	Φ115	Φ140	M8	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
MY 100	1–M20*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0

Technical Data (at 230V/50Hz)

Model	Power (kW)	Current (A)	Speed (r/min)	Eff (%)	Power factor (cos ϕ)	T_{st}/T_n (Times)	T_{max}/T_n (Times)	Starting Current(A)	Run Capacitor (μf/V)	Noise dB(A)	W.t. (Kg)	Inertia (kg*m²)
MY561-2	0.09	0.81	2750	51	0.95	0.7	1.7	2	5μf/450V	67	3	0.000093
MY562-2	0.12	0.89	2800	61	0.96	0.7	1.8	3.1	6μf/450V	67	3.2	0.000120
MY631-2	0.18	1.31	2770	62	0.96	0.55	1.8	4.5	8μf/450V	70	3.8	0.000141
MY632-2	0.25	1.65	2780	68	0.97	0.55	1.8	6	10μf/450V	70	4.5	0.000168
MY633-2	0.37	2.51	2780	67.5	0.95	0.46	1.65	8	12μf/450V	75	5	0.000216
MY634-2	0.55	3.52	2740	70	0.97	0.46	1.55	12	16μf/450V	75	5.5	0.000249
MY711-2	0.37	2.54	2780	68	0.93	0.5	1.64	9.5	12μf/450V	75	5.5	0.000330
MY712-2	0.55	3.45	2800	73	0.95	0.5	1.8	14.5	16μf/450V	75	6.7	0.000356
MY713-2	0.75	4.45	2840	75.5	0.97	0.48	1.8	20	25μf/450V	75	7	0.000436
MY801-2	0.75	4.51	2810	73	0.99	0.45	1.75	19	25μf/450V	75	8.9	0.000789
MY802-2	1.1	6.30	2810	77.5	0.98	0.45	1.8	30	35μf/450V	78	11	0.001174
MY803-2	1.5	8.48	2820	78.5	0.98	0.34	1.68	40	40μf/450V	80	12.7	0.001430
MY90S-2	1.5	8.45	2820	78	0.99	0.33	1.72	35	45μf/450V	80	12.2	0.001512
MY90L-2	2.2	12.08	2850	80	0.99	0.29	1.8	61	60μf/450V	80	15.5	0.001983
MY100L-2	3	16.7	2860	79	0.99	0.35	1.8	73	80μf/450V	83	23.1	0.004803
MY561-4	0.06	0.55	1410	49	0.97	0.7	1.8	1.5	4μf/450V	63	2.9	0.000215
MY562-4	0.09	0.78	1390	51	0.99	0.7	1.65	8	6μf/450V	63	3.4	0.000240
MY631-4	0.12	0.97	1400	55	0.98	0.7	1.75	2.5	8μf/450V	65	3.4	0.000298
MY632-4	0.18	1.35	1380	59	0.98	0.6	1.65	3.5	10μf/450V	65	4.4	0.000373
MY633-4	0.25	1.77	1380	62.5	0.98	0.55	1.6	5	12μf/450V	65	5	0.000448
MY710-4	0.18	1.33	1420	60.5	0.97	0.48	1.65	4	10μf/450V	65	5.2	0.000538
MY711-4	0.25	1.70	1410	64.5	0.99	0.5	1.6	5	12μf/450V	65	5.8	0.000641
MY712-4	0.37	2.43	1410	67.5	0.98	0.44	1.65	7.5	16μf/450V	68	6.9	0.000846
MY713-4	0.55	3.45	1385	70	0.99	0.45	1.47	10.5	20μf/450V	70	8.3	0.001052
MY800-4	0.37	2.38	1420	69	0.98	0.45	1.8	9	16μf/450V	68	8	0.001285
MY801-4	0.55	3.34	1420	73	0.98	0.45	1.78	13	20μf/450V	70	9.5	0.001618
MY802-4	0.75	4.42	1420	74.5	0.99	0.44	1.71	16.5	30μf/450V	70	10.5	0.002061
MY90S-4	1.1	6.30	1420	77.5	0.98	0.35	1.75	24	40μf/450V	73	13.1	0.002500
MY90L-4	1.5	8.55	1420	79.5	0.96	0.33	1.8	36	45μf/450V	75	16.5	0.003240
MY100L1-4	2.2	13.0	1450	79	0.93	0.31	1.8	65	70μf/450V	78	23.4	0.008045
MY100L2-4	3	16.8	1450	81	0.96	0.31	1.8	91	90μf/450V	78	28.7	0.010853
MY631-6	0.09	0.9	900	44.5	0.97	0.38	1.53	2	8μf/450V	63	4.4	0.000550
MY632-6	0.12	1.1	875	47.5	0.98	0.25	1.23	2	11μf/450V	63	5.5	0.000649
MY711-6	0.18	1.5	920	55.5	0.97	0.5	1.5	3.5	11μf/450V	68	6.2	0.000585
MY712-6	0.25	2.0	930	56	0.98	0.45	1.5	5	16μf/450V	68	7.3	0.001151
MY801-6	0.37	2.5	960	66	0.96	0.35	1.6	8.5	20μf/450V	68	9	0.002232
MY802-6	0.55	3.5	955	70.5	0.97	0.35	1.6	12	25μf/450V	70	11.6	0.002903
MY90S-6	0.75	5.0	905	67	0.98	0.35	1.6	13	35μf/450V	70	13.5	0.003523
MY90L-6	1.1	6.6	940	74	0.98	0.35	1.5	25	50μf/450V	70	16.2	0.004957

ROYSE

Technical Data (at 230V/50Hz)

Model	Power (kW)	Current (A)	Speed (r/min)	Eff (%)	Power Factor (cos ϕ)	T_{st}/T_n (Times)	T_{max}/T_n (Times)	Starting Current(A)	Run Capacitor (μ f/V)	Noise dB(A)	W.t. (Kg)	Inertia (kg*m²)
MYT631–2	0.18	1.29	2750	62	0.98	0.7	1.8	4	10 μ f/450V	70	3.8	0.000141
MYT632–2	0.25	1.71	2750	65	0.98	0.65	1.75	5.5	12 μ f/450V	70	4.5	0.000168
MYT633–2	0.37	2.39	2740	68	0.99	0.7	1.8	8	16 μ f/450V	75	5	0.000216
MYT711–2	0.37	2.59	2640	66	0.94	0.7	1.65	8	14 μ f/450V	75	6	0.000356
MYT712–2	0.55	3.52	2760	71.5	0.95	0.7	1.8	14	20 μ f/450V	75	7.4	0.000489
MYT801–2	0.75	4.87	2760	69	0.97	0.7	1.8	17.5	25 μ f/450V	75	9	0.001007
MYT802–2	1.1	6.53	2780	74	0.99	0.7	1.8	25	40 μ f/450V	78	11.6	0.001238
MYT90S–2	1.5	8.56	2755	77	0.99	0.65	1.8	31	50 μ f/450V	80	13	0.001665
MYT90L–2	2.2	12.39	2765	78	0.99	0.65	1.8	51	70 μ f/450V	80	17.8	0.002136
MYT90L2–2	3	16.68	2800	79	0.99	0.48	1.8	85	90 μ f/450V	83	22.3	0.002686
MYT100L0–2	2.2	12.68	2825	77	0.98	0.55	1.8	13	70 μ f/450V	80	21	0.004803
MYT100L–2	3	17.11	2765	77	0.99	0.55	1.75	64	90 μ f/450V	83	23.7	0.005383
MYT561–4	0.06	0.55	1410	49	0.97	0.7	1.8	1.5	4 μ f/450V	63	3.3	0.000215
MYT562–4	0.09	0.78	1390	51	0.99	0.7	1.65	8	6 μ f/450V	63	3.6	0.000240
MYT631–4	0.12	0.97	1400	55	0.98	0.7	1.75	2.5	8 μ f/450V	65	4.4	0.000298
MYT632–4	0.18	1.35	1380	59	0.98	0.6	1.65	3.5	10 μ f/450V	65	5.1	0.000373
MYT633–4	0.25	1.76	1380	62.5	0.99	0.63	1.57	5	14 μ f/450V	65	5.4	0.000448
MYT711–4	0.25	1.81	1310	60.5	0.99	0.7	1.55	4.5	14 μ f/450V	65	6	0.000692
MYT712–4	0.37	2.48	1325	65.5	0.99	0.7	1.52	6.5	20 μ f/450V	68	7.1	0.000898
MYT800–4	0.37	2.63	1350	63	0.97	0.7	1.7	7.5	16 μ f/450V	68	8.5	0.001396
MYT801–4	0.55	3.70	1330	66	0.98	0.7	1.57	10.5	25 μ f/450V	73	10	0.001728
MYT802–4	0.75	4.82	1355	69	0.98	0.67	1.65	16	35 μ f/450V	73	11.4	0.002393
MYT90S–4	1.1	6.94	1355	72.5	0.95	0.68	1.8	22	40 μ f/450V	75	14.3	0.002743
MYT90L–4	1.5	9.28	1360	74	0.95	0.68	1.8	32	50 μ f/450V	78	17.3	0.003483
MYT100L1–4	2.2	12.64	1390	78	0.97	0.48	1.75	49	70 μ f/450V	80	24.5	0.008665
MYT100L2–4	3	16.57	1380	79.5	0.99	0.45	1.6	61	90 μ f/450V	80	32	0.010853
MYT711–6	0.18	1.52	930	52	0.99	0.65	1.7	3.5	14 μ f/450V	68	6.2	0.000585
MYT712–6	0.25	2.12	925	54	0.95	0.58	1.7	5	16 μ f/450V	68	7.3	0.001151
MYT801–6	0.37	2.63	925	63	0.97	0.67	1.7	7.5	20 μ f/450V	68	9	0.002232
MYT802–6	0.55	3.71	915	66.5	0.97	0.63	1.7	11	30 μ f/450V	70	11.6	0.002903
MYT90S–6	0.75	4.93	890	67.5	0.98	0.65	1.5	12	40 μ f/450V	70	13.5	0.003523
MYT90L–6	1.1	7.15	905	69	0.97	0.55	1.7	21	50 μ f/450V	70	16.2	0.004957

* Note: MYT is high starting torque series single phase capacitor–run motors

ROYSE

MC Series

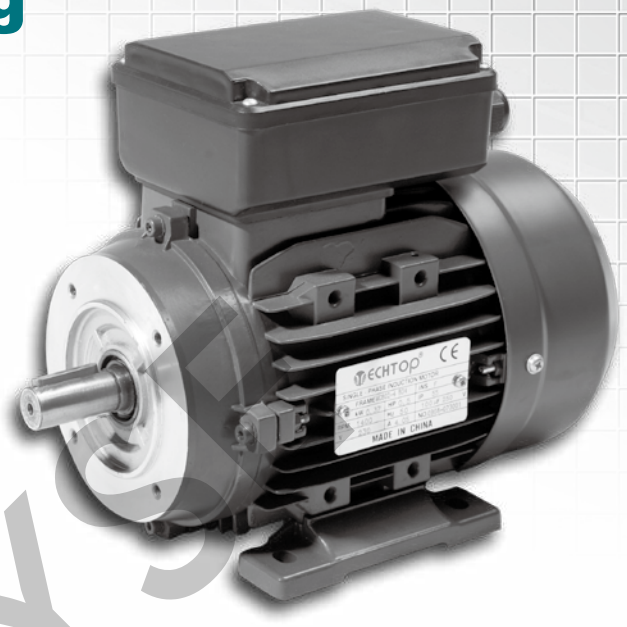
Single-Phase Capacitor Start Asynchronous Motors

Aluminum Housing

MC Series aluminum housing single-phase capacitor-start asynchronous motors, with latest design in entirety, are made of selected quality materials and conform to the IEC standard.

MC motors have good performance, safely and reliable operation, nice appearance, and can be maintained very conveniently, while with low noises, little vibration and at the same time of light weight and simple construction. High starting torque, perfect starting performance, generally the multiple of the starting torque can up to 3.0 times.

These series motors are suitable for the occasion where big starting torque and small starting current, such as air-compressors, pumps, refrigerators, medical apparatus, and many other machines needing full-load start.



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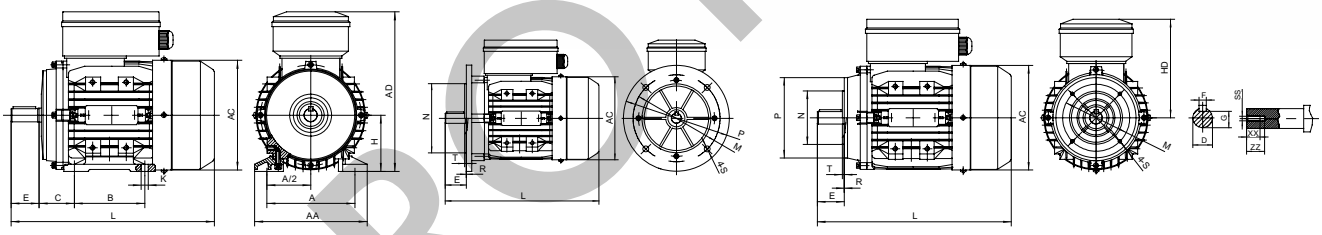


Overall & Installation Dimensions

FRAME	Mounting Dimensions									Overall Dimensions					Shaft End Screw Dimensions		
	H	A	B	C	D	E	F	G	K	AA	AD	HD	AC	L	SS	XX	ZZ
MC 63	63	100	80	40	Φ11	23	4	8.5	7×10	120	181	118	Φ121	217	M4	10	14
MC 71	71	112	90	45	Φ14	30	5	11	7×10	132	196	125	Φ139	255	M5	12	17
MC 80	80	125	100	50	Φ19	40	6	15.5	10×13	160	226	146	Φ156	290	M6	16	21
MC 90S	90	140	100	56	Φ24	50	8	20	10×13	175	243	153	Φ174	337	M8	19	25
MC 90L	90	140	125	56	Φ24	50	8	20	10×13	175	243	153	Φ174	367	M8	19	25
MC 100L	100	160	140	63	Φ28	60	8	24	12×15	198	265	165	Φ196	403(421)	M10	22	30
MC 112M	112	190	140	70	Φ28	60	8	24	12×15	220	297	185	Φ221	431	M10	22	30

FRAME	KK	B5						B14						B5R						B14B					
		N	M	P	S	T	R	N	M	P	S	T	R	N	M	P	T	S	R	N	M	P	T	S	R
MC 63	1–M20*1.5	Φ95	Φ115	Φ140	Φ10	3	0	Φ60	Φ75	Φ90	M5	2.5	0												
MC 71	1–M20*1.5	Φ110	Φ130	Φ160	Φ10	3.5	0	Φ70	Φ85	Φ105	M6	2.5	0	Φ95	Φ115	Φ140	3	Φ10	0	Φ95	Φ115	Φ140	3	M8	0
MC 80	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ80	Φ100	Φ120	M6	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
MC 90	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ95	Φ115	Φ140	M8	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
MC 100	1–M20*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0
MC 112	1–M25*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0

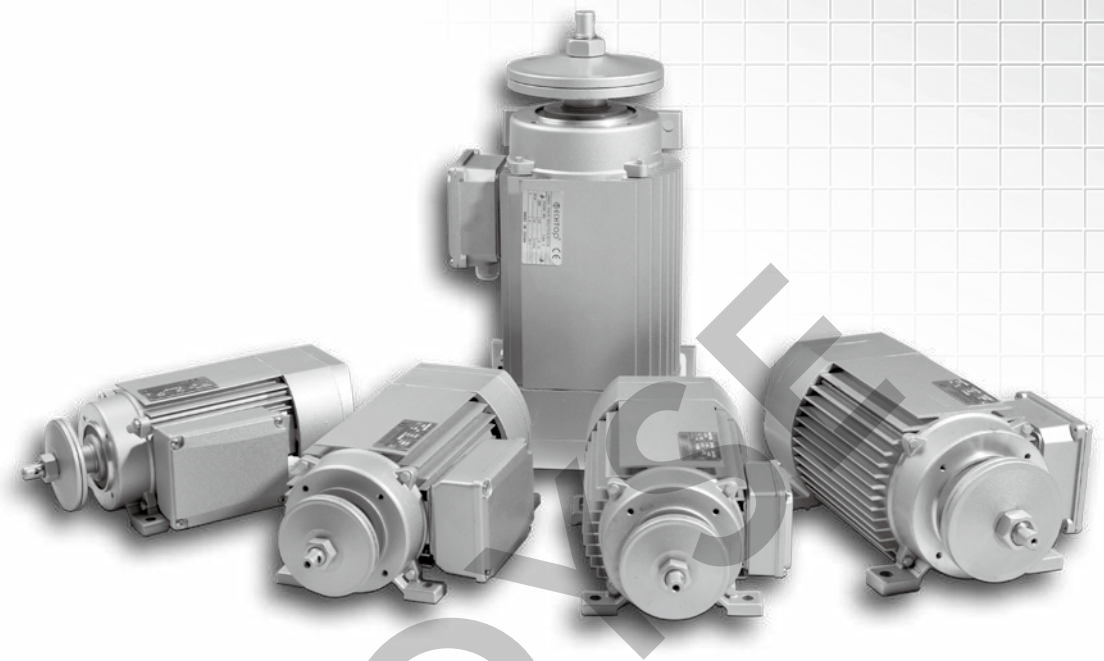
Technical Data (at 230V/50Hz)

Model	Power (kW)	Current (A)	Speed (r/min)	Eff (%)	Power factor (cos ϕ)	T_{start}/T_n (Times)	T_{max}/T_n (Times)	Starting Current (A)	Start Capacitor (μ f/V)	Noise dB(A)	W.T (kg)	Inertia (kg*m²)
MC631–2	0.09	1.22	2650	44	0.73	3	1.6	5	30uf/250V	67	3.66	0.000131
MC632–2	0.12	1.36	2730	52	0.74	3	1.8	6	40uf/250V	67	4.18	0.000157
MC711–2	0.18	1.86	2750	60	0.70	3.0	2.2	12	75 μ F/250V	70	5.8	0.000330
MC712–2	0.25	2.43	2780	62	0.72	3.0	2.2	15	75 μ F/250V	70	6.75	0.000410
MC801–2	0.37	3.46	2800	62	0.75	2.8	2.2	21	100 μ F/250V	75	9	0.000779
MC802–2	0.55	4.78	2800	65	0.77	2.8	2.2	29	150 μ F/250V	75	10.3	0.000936
MC90S–2	0.75	6.15	2810	68	0.78	2.5	2.2	37	200 μ F/300V	75	13	0.001366
MC90L–2	1.1	8.76	2820	70	0.78	2.5	2.2	60	250 μ F/300V	78	16	0.001838
MC100L1–2	1.5	11.5	2830	72	0.79	2.5	2.0	80	300 μ F/300V	83	22	0.004126
MC100L2–2	2.2	16.6	2840	73	0.79	2.2	2.0	120	400 μ F/300V	83	26	0.005672
MC112M–2	3.0	22.0	2850	74	0.8	2.2	1.9	150	600 μ F/300V	87	35.3	0.007972
MC631–4	0.06	1.22	1400	39	0.55	3	2	5	30 μ F/250V	63	4.1	0.000292
MC632–4	0.09	1.80	1390	39.5	0.55	3	2	6	30uf/250V	63	4.5	0.000340
MC711–4	0.12	1.86	1360	50	0.56	3.0	2.2	9	50 μ F/250V	65	5.6	0.000558
MC712–4	0.18	2.46	1380	53	0.6	2.8	2.2	12	75 μ F/250V	65	6.7	0.000729
MC801–4	0.25	3.07	1390	58	0.61	2.8	2.2	15	100 μ F/250V	65	9.6	0.001379
MC802–4	0.37	4.18	1400	62	0.62	2.5	2.2	21	100 μ F/250V	70	10.4	0.001563
MC90S–4	0.55	5.49	1400	66	0.66	2.5	2.0	29	150 μ F/250V	70	13	0.002266
MC90L–4	0.75	6.85	1410	68	0.7	2.5	2.0	37	150 μ F/250V	70	15	0.003009
MC100L1–4	1.1	9.49	1420	71	0.71	2.5	2.0	60	250 μ F/300V	73	20.7	0.006727
MC100L2–4	1.5	12.4	1430	73	0.72	2.5	2.0	80	400 μ F/300V	78	24.5	0.009225
MC112M–4	2.2	17.7	1440	74	0.73	2.2	1.9	120	600 μ F/300V	78	33.8	0.013404

ROYSE

MSC/MYC Series

Three/Single-Phase Aluminum Housing Saw Motors

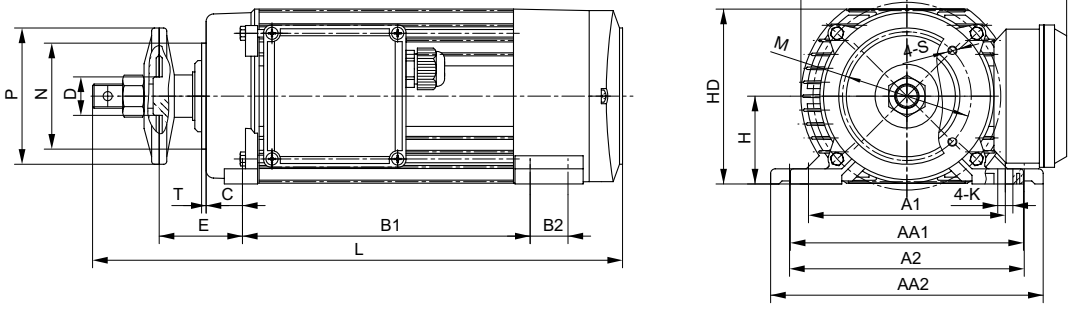


ROYAL

MSC/MYC Series Motors Technical Data

TYPE	Power (kW)	Phase	V	HZ	Amp.	Eff.	Cos ϕ	Rpm	T_s/T_n	T_m/T_n	I_s/I_n	Duty	Capacitor	Inertia (kg*m²)
MYC58A2	1.1	1	230	50	7.18	68	0.98	2770	0.35	1.7	5	S6–40%	25uF/450V	0.000697
MYC58B2	1.5	1	230	50	9.51	70	0.98	2790	0.35	1.7	5	S6–40%	30uF/450V	0.000900
MYC58C2	1.8	1	230	50	11.1	72	0.98	2790	0.32	1.7	5	S6–40%	30uF/450V	0.001031
MYC63B2	2.2	1	230	50	13.2	74	0.98	2800	0.32	1.7	5	S6–40%	40uF/450V	0.001220
MSC58A2	1.5	3	400	50	3.41	77.5	0.82	2750	3	3	6	S6–40%		0.000762
MSC58B2	2.2	3	400	50	4.76	78.5	0.85	2750	3	3	6	S6–40%		0.001031
MSC63A2	2.2	3	400	50	4.73	79	0.85	2800	2.4	2.2	6	S6–40%		0.001276
MSC63B2	3	3	400	50	6.37	80	0.85	2820	2.8	2.4	6.5	S6–40%		0.001679
MSC74A2	4	3	400	50	8.19	82	0.86	2850	3	3	7	S6–40%		0.003118
MSC81A2	5.5	3	400	50	10.5	85	0.89	2880	3	3	9	S1		0.005452
MSC81B2	7.5	3	400	50	14.1	86	0.89	2880	3	3	9	S1		0.007185
MSC93A2	5.5	3	400	50	10.1	87	0.9	2890	3	3	9	S1		0.004694
MSC93B2	7.5	3	400	50	13.6	87.5	0.91	2890	3	3	9	S1		0.005935

MSC/MYC Series Three/Single-Phase Aluminum Housing Saw Motors



MSC/MYC Series Motors Overall & Installation Dimensions

Modle	H	D	P	N	M	S	A1	A2	B1	B2	C	E	T	K	AA1	AA2	HD	AD1	AD2	L
MYC58A2	58	25.4	90	70	85	M6	130	155	165	25	24	55	3	10	154	180	116	70	113	325
MYC58B2	58	25.4	90	70	85	M6	130	155	190	25	24	55	3	10	154	180	116	70	113	350
MYC58C2	58	25.4	90	70	85	M6	130	155	190	25	24	55	3	10	154	180	116	70	113	350
MYC63B2	63	25.4	90	80	100	M6	130	155	190	28	24	55	3	10	154	180	126	77	118	355
MSC58A2	58	25.4	90	70	85	M6	130	155	165	25	24	55	3	10	154	180	116	70	103	325
MSC58B2	58	25.4	90	70	85	M6	130	155	190	25	24	55	3	10	154	180	116	70	103	350
MSC63A2	63	25.4	90	80	100	M6	130	155	165	28	24	55	3	10	154	180	126	77	108	330
MSC63B2	63	25.4	90	80	100	M6	130	155	190	28	24	55	3	10	154	180	126	77	108	355
MSC74A2	74	30	110	95	115	M6	155	155	190	25	24	55	3	12	180	180	147	87	125	370
MSC81A2	81	40	158	110	130	M8	160	190	254	20	25	64	3.5	12	190	225	162	99	133	462
MSC81B2	81	40	158	110	130	M8	160	190	318	20	25	64	3.5	12	190	225	162	99	133	526
MSC93A2	93	40	158	110	130	M8	190	190	229	25	25	64	3.5	14	225	225	184	108	143	440
MSC93B2	93	40	158	110	130	M8	190	190	254	25	25	64	3.5	14	225	225	184	108	143	465

ROYSE

* Note:The size “L” With brake type is 30mm more

MSV/MYV Series

Three/Single-Phase Aluminum Housing Pad Mount Motors

ROYAL

MYV Series Technical Data (at 230V/50Hz)

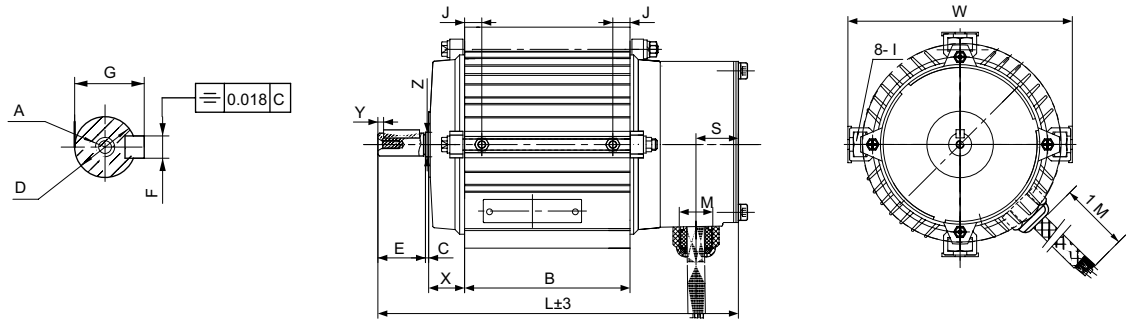
Model	Power (kW)	Current (A)	Speed (r/min)	Eff (%)	Power factor (cos ϕ)	T_{start}/T_n (Times)	T_{max}/T_n (Times)	Starting Current (A)	Run Capacitor (μ f/V)	Noise dB(A)	W.t. (Kg)	Inertia (kg*m²)
MYV711–2	0.37	2.54	2780	68	0.93	0.5	1.64	9.5	12 μ f/450V	75	5.6	0.000330
MYV712–2	0.55	3.45	2800	73	0.95	0.5	1.8	14.5	16 μ f/450V	75	6.95	0.000356
MYV713–2	0.75	4.45	2840	75.5	0.97	0.48	1.8	20	25 μ f/450V	75	8.15	0.000436
MYV801–2	0.75	4.51	2810	73	0.99	0.45	1.75	19	25 μ f/450V	75	8.5	0.000789
MYV802–2	1.1	6.30	2810	77.5	0.98	0.45	1.8	30	35 μ f/450V	78	11	0.001174
MYV803–2	1.5	8.48	2820	78.5	0.98	0.34	1.68	40	40 μ f/450V	80	12.75	0.001430
MYV90S–2	1.5	8.45	2820	78	0.99	0.33	1.72	35	45 μ f/450V	80	13.7	0.001512
MYV90L–2	2.2	12.08	2850	80	0.99	0.29	1.8	61	60 μ f/450V	80	16.7	0.001983
MYV100L–2	3	16.7	2860	79	0.99	0.35	1.8	73	80 μ f/450V	83	23.1	0.004803
MYV710–4	0.18	1.33	1420	60.5	0.97	0.48	1.65	4	10 μ f/450V	65	5.2	0.000538
MYV711–4	0.25	1.70	1410	64.5	0.99	0.5	1.6	5	12 μ f/450V	65	5.8	0.000641
MYV712–4	0.37	2.43	1410	67.5	0.98	0.44	1.65	7.5	16 μ f/450V	68	6.9	0.000846
MYV713–4	0.55	3.45	1385	70	0.99	0.45	1.47	10.5	20 μ f/450V	70	8.25	0.001052
MYV800–4	0.37	2.38	1420	69	0.98	0.45	1.8	9	16 μ f/450V	68	8	0.001285
MYV801–4	0.55	3.34	1420	73	0.98	0.45	1.78	13	20 μ f/450V	70	9.55	0.001618
MYV802–4	0.75	4.42	1420	74.5	0.99	0.44	1.71	16.5	30 μ f/450V	70	10.45	0.002061
MYV90S–4	1.1	6.30	1420	77.5	0.98	0.35	1.75	24	40 μ f/450V	73	13.1	0.002500
MYV90L–4	1.5	8.55	1420	79.5	0.96	0.33	1.8	36	45 μ f/450V	75	16.45	0.003240
MYV100L1–4	2.2	13.0	1450	79	0.93	0.31	1.8	65	70 μ f/450V	78	22.8	0.008045
MYV100L2–4	3	16.8	1450	81	0.96	0.31	1.8	91	90 μ f/450V	78	29.2	0.010853
MYV711–6	0.18	1.5	920	55.5	0.97	0.5	1.5	3.5	11 μ f/450V	68	6.3	0.000585
MYV712–6	0.25	2.0	930	56	0.98	0.45	1.5	5	16 μ f/450V	68	7.6	0.001151
MYV801–6	0.37	2.5	960	66	0.96	0.35	1.6	8.5	20 μ f/450V	68	9	0.002232
MYV802–6	0.55	3.5	955	70.5	0.97	0.35	1.6	12	25 μ f/450V	70	11.6	0.002903
MYV90S–6	0.75	5.0	905	67	0.98	0.35	1.6	13	35 μ f/450V	70	13.5	0.003523
MYV90L–6	1.1	6.6	940	74	0.98	0.35	1.5	25	50 μ f/450V	70	16.2	0.004957

MSV Series Technical Data (at 50Hz)

Model	Power (kW)	Current (A)			Current (A)			Current (A)			Speed (r/min)	Eff (%)	Power factor (cos φ)	T_{st}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_{st}/I_n (Times)	Noise dB(A)	W.T (kg)	Inertia (kg*m²)
		220V	380V	660V	230V	400V	690V	240V	415V	720V										
MSV711-2	0.37	1.70	0.99	0.57	1.63	0.94	0.54	1.56	0.90	0.52	2830	71.3	0.8	2.8	2.9	2	5.9	64	5.20	0.000314
MSV712-2	0.55	2.52	1.46	0.84	2.41	1.39	0.80	2.31	1.34	0.77	2815	71.6	0.8	2.7	2.7	1.8	6	64	6.00	0.000384
MSV713-2	0.75	3.25	1.88	1.08	3.11	1.79	1.04	2.98	1.72	0.99	2820	73.8	0.82	3.0	3.0	2.0	6.6	65	7.00	0.000476
MSV800-2	0.55	2.38	1.38	0.79	2.28	1.31	0.76	2.18	1.26	0.73	2810	73.1	0.83	2.7	2.5	1.9	5.3	64	7.30	0.000752
MSV801-2	0.75	3.15	1.83	1.05	3.02	1.73	1.01	2.89	1.67	0.96	2830	75.2	0.83	3	2.8	2	6.2	67	8.70	0.000880
MSV802-2	1.1	4.40	2.55	1.47	4.21	2.42	1.40	4.04	2.33	1.35	2840	79	0.83	2.6	3.1	2.6	6.1	67	10.00	0.001072
MSV803-2	1.5	5.70	3.30	1.90	5.46	3.14	1.82	5.23	3.02	1.74	2820	81.2	0.85	3.2	3	2.5	7.2	70	11.20	0.001329
MSV90S-2	1.5	5.73	3.32	1.91	5.48	3.15	1.83	5.25	3.04	1.75	2850	80.8	0.85	2.8	3.3	2.6	7.7	72	12.00	0.001579
MSV90M-2	1.85	7.04	4.08	2.35	6.73	3.87	2.24	6.45	3.73	2.15	2850	82.1	0.84	4.2	3.6	2.9	7.8	72	13.30	0.001846
MSV90L1-2	2.2	8.19	4.74	2.73	7.84	4.51	2.61	7.51	4.34	2.50	2860	82.9	0.85	3.7	3.9	3.3	8.8	72	14.50	0.002123
MSV90L2-2	3	11.1	6.43	3.70	10.6	6.11	3.54	10.2	5.89	3.39	2830	82.4	0.86	4.4	4.2	3.5	8	74	15.00	0.002491
MSV100L1-2	3	10.9	6.32	3.64	10.4	6.00	3.48	10.0	5.78	3.33	2875	83.9	0.86	2.8	3.2	2	8.1	76	20.00	0.003475
MSV100L2-2	4	13.8	7.99	4.60	13.2	7.59	4.40	12.6	7.31	4.22	2870	85.5	0.89	3.2	3.4	2.2	8.8	77	24.00	0.004247
MSV112M-2	4	13.2	7.63	4.40	12.6	7.25	4.20	12.1	6.99	4.03	2870	85.6	0.93	2.6	2.85	1.75	8.1	77	26.00	0.005845
MSV112L-2	5.5	18.0	10.4	6.00	17.2	9.9	5.74	16.5	9.5	5.50	2890	87.1	0.92	3.1	3.3	2	9.4	78	29.30	0.007429
MSV711-4	0.25	1.38	0.80	0.46	1.32	0.76	0.44	1.27	0.73	0.42	1395	65.1	0.73	2	2.15	1.6	4.2	55	5.06	0.000561
MSV712-4	0.37	1.90	1.10	0.63	1.82	1.05	0.61	1.74	1.01	0.58	1390	68.6	0.74	2.25	2.35	1.95	4.6	55	5.96	0.000714
MSV713-4	0.55	2.81	1.63	0.94	2.69	1.54	0.90	2.57	1.49	0.86	1390	71.9	0.72	2.8	2.8	2.4	4.8	57	6.50	0.000920
MSV801-4	0.55	2.74	1.59	0.91	2.62	1.51	0.87	2.51	1.45	0.84	1400	70.9	0.74	2.25	2.55	1.95	4.9	58	8.10	0.001350
MSV802-4	0.75	3.36	1.94	1.12	3.21	1.85	1.07	3.08	1.78	1.03	1390	74.4	0.79	2.5	2.55	2.05	5.4	58	9.10	0.001793
MSV803-4	1.1	4.90	2.84	1.63	4.69	2.69	1.56	4.49	2.60	1.50	1390	74.6	0.79	2.9	2.9	2.4	5.9	60	11.00	0.002236
MSV90S-4	1.1	4.90	2.83	1.63	4.68	2.69	1.56	4.49	2.60	1.50	1400	75.5	0.78	2.9	2.7	2.15	6	61	12.00	0.002443
MSV90L1-4	1.5	6.48	3.75	2.16	6.20	3.56	2.07	5.94	3.44	1.98	1410	79.6	0.76	3.4	3.3	2.7	6.9	61	14.80	0.003152
MSV90L2-4	2.2	9.76	5.65	3.25	9.33	5.37	3.11	8.94	5.17	2.98	1410	78.9	0.75	3.8	2.6	3.2	7.2	63	17.60	0.004002
MSV100L1-4	2.2	8.71	5.05	2.90	8.34	4.79	2.78	7.99	4.62	2.66	1420	82.0	0.81	2.4	2.7	2.15	6.3	64	19.20	0.005977
MSV100L2-4	3	11.5	6.64	3.82	11.0	6.31	3.66	10.5	6.08	3.51	1430	83.7	0.82	2.6	3	2.15	6.8	64	22.50	0.007591
MSV100L3-4	4	15.2	8.80	5.07	14.5	8.36	4.85	13.9	8.06	4.65	1430	84.2	0.82	2.2	2.3	1.5	7	65	27.30	0.009626
MSV112M-4	4	14.9	8.60	4.95	14.2	8.17	4.74	13.6	7.88	4.54	1440	84.7	0.83	2.5	2.9	2.05	7.1	65	29.00	0.012079
MSV112L-4	5.5	20.4	11.8	6.81	19.5	11.2	6.51	18.7	10.8	6.24	1435	85.9	0.82	2.5	2.95	2.2	7.2	68	35.70	0.014229
MSV711-6	0.18	1.11	0.64	0.37	1.06	0.61	0.35	1.02	0.59	0.34	905	63.0	0.67	2.15	2.4	2	3.5	52	5.60	0.000841
MSV712-6	0.25	1.56	0.90	0.52	1.49	0.86	0.50	1.43	0.83	0.48	885	62.6	0.67	2.05	2.3	2.05	3.2	52	6.00	0.000965
MSV713-6	0.37	2.32	1.34	0.77	2.22	1.28	0.74	2.13	1.23	0.71	890	65.4	0.64	2.3	2.5	2.3	3.4	54	6.80	0.001151
MSV801-6	0.37	2.06	1.19	0.69	1.97	1.13	0.66	1.89	1.09	0.63	920	68.1	0.69	1.95	2.25	1.8	3.7	56	8.10	0.001560
MSV802-6	0.55	2.74	1.59	0.91	2.62	1.51	0.87	2.51	1.45	0.84	920	72.5	0.73	2.25	2.45	2.05	4.3	56	9.60	0.002098
MSV803-6	0.75	3.65	2.11	1.22	3.49	2.01	1.16	3.34	1.93	1.11	910	72.9	0.74	2.2	2.4	2.1	4.1	58	10.00	0.002635
MSV90S-6	0.75	3.83	2.22	1.28	3.67	2.11	1.22	3.52	2.03	1.17	920	72.5	0.71	1.8	2.2	1.7	4.1	59	11.30	0.003061
MSV90L1-6	1.1	5.47	3.17	1.82	5.23	3.01	1.74	5.01	2.90	1.67	910	73.5	0.72	1.95	2.25	1.85	4.2	59	14.40	0.004067
MSV90L2-6	1.5	7.12	4.12	2.37	6.81	3.92	2.27	6.53	3.78	2.18	900	74.7	0.74	2.1	2.3	1.9	4.2	60	15.50	0.005147
MSV100L1-6	1.5	6.77	3.92	2.26	6.47	3.72	2.16	6.20	3.59	2.07	935	78.5	0.74	2.05	2.35	1.8	5	61	18.80	0.007913
MSV100L2-6	2.2	9.87	5.71	3.29	9.44	5.43	3.15	9.04	5.23	3.01	950	77	0.76	2.2	2.2	1.3	6	63	19.80	0.011194
MSV112M-6	2.2	9.3	5.38	3.10	8.89	5.11	2.96	8.52	4.93	2.84	925	79.2	0.78	1.9	2.25	1.75	4.7	64	25.00	0.013777
MSV112L-6	3	12.9	7.49	4.31	12.4	7.12	4.13	11.9	6.86	3.95	950	79	0.77	2.2	2.2	1.3	6	64	30.00	0.018246
MSV711-8	0.09	0.97	0.56	0.32	0.93	0.54	0.31	0.89	0.52	0.30	680	44.9	0.54	2.3	2.6	2.2	2.4	50	5.00	0.000717
MSV712-8	0.12	1.15	0.67	0.38	1.10	0.63	0.37	1.06	0.61	0.35	680	51.7	0.53	2.5	2.75	2.5	2.7	50	5.60	0.000841
MSV713-8	0.18	1.51	0.88	0.50	1.45	0.83	0.48	1.39	0.80	0.46	670	55.8	0.56	2.3	2.5	2.4	2.8	52	7.50	0.001026
MSV801-8	0.18	1.24	0.72	0.41	1.18	0.68	0.39	1.13	0.66	0.38	705	64.4	0.59	2.2	2.65	2	3.6	52	9.40	0.002098
MSV802-8	0.25	1.64	0.95	0.55	1.57	0.90	0.52	1.51	0.87	0.50	700	66.3	0.60	2.1	2.5	2.05	3.5	52	10.10	0.002500
MSV90S-8	0.37	2.37	1.37	0.79	2.26	1.30	0.75	2.17	1.25	0.72	690	66.3	0.62	1.55	2	1.5	3.2	56	12.50	0.003061
MSV90L-8	0.55	3.26	1.89	1.09	3.12	1.79	1.04	2.99	1.73	1.00	680	69.0	0.64	1.6	1.95	1.6	3.3	56	15.30	0.004067
MSV100L1-8	0.75	3.88	2.24	1.29	3.71	2.13	1.24	3.55	2.06	1.18	700	75.2	0.68	2.1	2.55	1.95	4.4	59	17.20	0.006043
MSV100L2-8	1.1	5.16	2.99	1.72	4.94	2.84	1.65	4.73	2.74	1.58	685	74.6	0.75	1.8	2.15	1.65	4.1	59	19.50	0.007503
MSV112M-8	1.5	7.24	4.19	2.41	6.93	3.98	2.31	6.64	3.84	2.21	700	78.3	0.69	2.2	2.5	2.1	4.5	61	25.50	0.013491

ROYAL

MSV/MYV Series Motors Overall & Installation Dimensions



MYV Series Motors Overall & Installation Dimensions

Model	Power (kW)	A	B	C	D	E	F	G	Y	Z	W	I	L	X	KK
MYV711–2	0.37	M5 × 10	120	2	φ14	30	5	16	4.5	20	147	M10	240	22	M16
MYV712–2	0.55		140										260		
MYV713–2	0.75		155										275		
MYV710–4	0.18		120										240		
MYV711–4	0.25		120										240		
MYV712–4	0.37		140										260		
MYV713–4	0.55		155										275		
MYV711–6	0.18		140										260		
MYV712–6	0.25		155										275		
MYV801–2	0.75	M6 × 12	120	2	φ19	40	6	21.5	7	25	173	M12	260	30	M16
MYV802–2	1.1		140										280		
MYV803–2	1.5		160										300		
MYV800–4	0.37		120										260		
MYV801–4	0.55		140										280		
MYV802–4	0.75		140										280		
MYV801–6	0.37		140										280		
MYV802–6	0.55		160										300		
MYV90S–2	1.5	M6 × 12	150	8	φ24	50	8	27	4	40	191	M12	320	35	M16
MYV90L1–2	2.2		180										350		
MYV90S0–4	0.75		135										305		
MYV90S–4	1.1		150										320		
MYV90L1–4	1.5		180										350		
MYV90L2–4	2.2		230										400		
MYV90S–6	0.75		150										320		
MYV90L1–6	1.1		195										365		
MYV100L–2	3	M8 × 16	175	8	φ28	60	8	31	4	50	208	M12	360	27	M20
MYV100L1–4	2.2		175										360		

ROYSE

MSV Series Motors Overall & Installation Dimensions

Model	Power (kW)	A	B	C	D	E	F	G	Y	Z	W	I	L	X	KK
MSV711–2	0.37		120										240		
MSV712–2	0.55		120										240		
MSV713–2	0.75		140										260		
MSV711–4	0.25		120										240		
MSV712–4	0.37	M5 × 10	120	2	φ14	30	5	16	4.5	20	150	M10	240	22	M16
MSV713–4	0.55		140										260		
MSV711–6	0.18		120										240		
MSV712–6	0.25		140										260		
MSV713–6	0.37		155										275		
MSV801–2	0.75		120										260		
MSV802–2	1.1		140										280		
MSV803–2	1.5		160										300		
MSV801–4	0.55		120										260		
MSV802–4	0.75	M6 × 12	140	2	φ19	40	6	21.5	7	25	177	M12	280	30	M16
MSV803–4	1.1		160										300		
MSV801–6	0.37		120										260		
MSV802–6	0.55		140										280		
MSV803–6	0.75		160										300		
MSV90S–2	1.5		135										305		
MSV90L1–2	2.2		180										350		
MSV90L2–2	3		195										365		
MSV90S–4	1.1		135										305		
MSV90L1–4	1.5	M6 × 12	150	8	φ24	50	8	27	4	40	191	M12	320	35	M16
MSV90L2–4	2.2		195										365		
MSV90S–6	0.75		135										305		
MSV90L1–6	1.1		180										350		
MSV90L2–6	1.5		195										365		
MSV100L1–2	3		150										335		
MSV100L2–2	4		175										360		
MSV100L1–4	2.2		150										335		
MSV100L2–4	3		175										360		
MSV100L3–4	4	M8 × 16	210	8	φ28	60	8	31	4	50	215	M12	395	27	M20
MSV100L1–6	1.5		150										335		
MSV100L2–6	2.2		175										360		
MSV100L1–8	0.75		130										315		
MSV100L2–8	1.1		150										335		
MSV112M–2	4		165										337		
MSV112L–2	5.5		190										362		
MSV112M–4	4		190										362		
MSV112L–4	5.5	M8 × 16	220	4	φ28	60	8	31	4	50	228	M12	392	28	M25
MSV112M–6	2.2		165										337		
MSV112L–6	3		190										362		
MSV112M–8	1.5		165										337		
MSV112L–8	2.2		190										362		

ROYSE

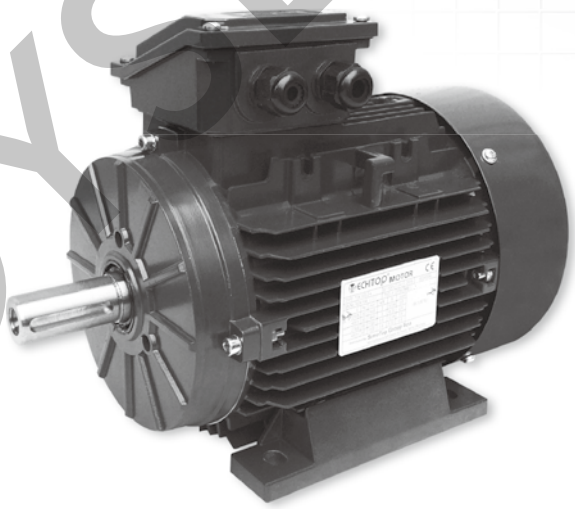
"ECOL" Motors
In Aluminum Housing

FEATURES

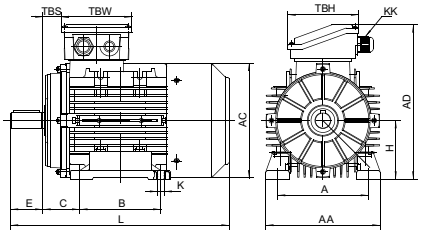
- Energy savings, high efficiency
- High starting torque, lower starting current
- Versatile and easy to modify design adapts to a variety of applications
- Removable feet
- Option of terminal box location (top, left or right)
- Option of IE2, IE3, MEPS High and Premium Efficiency for IEC standards + NEMA EPACT and Premium Efficiency
- Contained total length is the same as or shorter than the current market standard
- Full use of the magnetization properties of cold rolled silicone steel in which the stator laminations are magnetized evenly to reduce temperature rise of the winding

APPLICATIONS

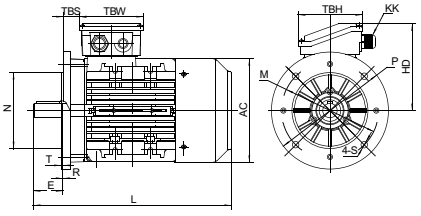
- Pumps
- Waste water treatment plants
- Air compressors, fans
- Gear reducers and power transmission
- Pulp and paper mills
- Steel mill
- Conveyors, elevators
- Should be "Material handling equipment"
- Agricultural application
- Mining equipment
- Hydraulic equipment



ROYCE



56-160 IM B3



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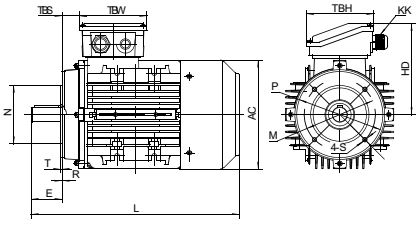
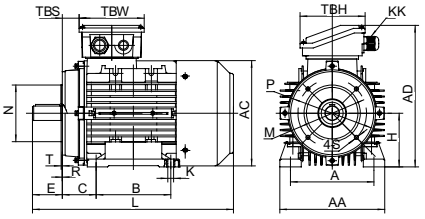


56-160 IM B14



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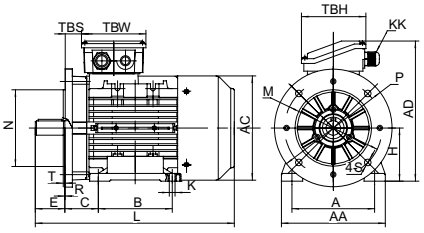
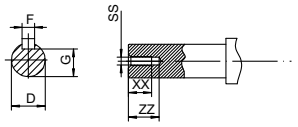
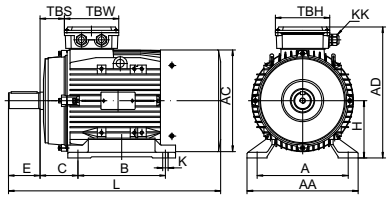
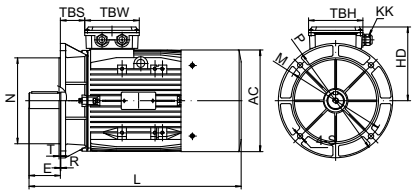


56-160 IM B35

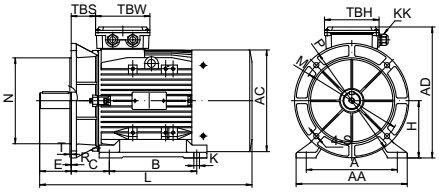




180-200 IM B3



180-200 IM B5



180-200 IM B35

Overall & Installation Dimensions

FRAME	Foot Mounting				Shaft								General							
	H	A	B	C	D	E	F	G	K	SS	XX	ZZ	AA	AD	HD	AC	L	TBS	TBW	TBH
TA 56	56	90	71	36	Φ9	20	3	7.2	6×9	M4	10	14	112	151	95	Φ110	195	16.5	83	83
TA 63	63	100	80	40	Φ11	23	4	8.5	7×10	M4	10	14	124	172	109	Φ122	217	10	98	98
TA 71	71	112	90	45	Φ14	30	5	11	7×10	M5	12	17	140	189	118	Φ138	245	16	98	98
TA 80	80	125	100	50	Φ19	40	6	15.5	10×15	M6	16	21	160	214	134	Φ157	227/304*	26.5	109	109
TA 90S	90	140	100	56	Φ24	50	8	20	10×15	M8	19	25	176	235	145	Φ177	315/340*	28.5	109	109
TA 90L	90	140	125	56	Φ24	50	8	20	10×15	M8	19	25	176	235	145	Φ177	340/365*	28.5	109	109
TA 100	100	160	140	63	Φ28	60	8	24	12×16	M10	22	30	200	260	160	Φ199	376/411*	32	118	118
TA 112	112	190	140	70	Φ28	60	8	24	12×16	M10	22	30	224	283	171	Φ220	398	33	118	118
TA 132S/M	132	216	140/178	89	Φ38	80	10	33	12×16	M12	28	37	260	323	191	Φ261	460/498	36.5	118	118
TA 160M/L	160	254	210/254	108	Φ42	110	12	37	15×21	M16	36	45	314	391	231	Φ314	616/660	64	148	148
TA 180	180	279	241/279	121	Φ48	110	14	42.5	15×25	M16	36	45	340	440	260	Φ355	730	73	190	190
TA200	200	318	305	133	Φ55	110	16	49	19×29	M20	42	53	390	460	260	Φ355	745	85	190	190

FRAME	KK	B5						B14						B5R						B14B					
		N	M	P	S	T	R	N	M	P	S	T	R	N	M	P	T	S	R	N	M	P	T	S	R
TA 56	1–M16*1.5	Φ80	Φ100	Φ120	Φ7	3	0	Φ50	Φ65	Φ80	M5	2.5	0												
TA 63	1–M16*1.5	Φ95	Φ115	Φ140	Φ10	3	0	Φ60	Φ75	Φ90	M5	2.5	0												
TA 71	1–M20*1.5	Φ110	Φ130	Φ160	Φ10	3.5	0	Φ70	Φ85	Φ105	M6	2.5	0	Φ95	Φ115	Φ140	3	Φ10	0	Φ95	Φ115	Φ140	3	M8	0
TA 80	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ80	Φ100	Φ120	M6	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
TA 90S/L	1–M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ95	Φ115	Φ140	M8	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
TA 100	2–M20*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0
TA 112	2–M25*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0
TA 132S/M	2–M25*1.5	Φ230	Φ265	Φ300	Φ15	4	0	Φ130	Φ165	Φ200	M10	3.5	0	Φ180	Φ215	Φ250	4	Φ15	0	Φ180	Φ215	Φ250	4	M12	0
TA 160M/L	2–M32*1.5	Φ250	Φ300	Φ350	Φ19	5	0	Φ180	Φ215	Φ250	M12	4	0												
TA 180	2–M32*1.5	Φ250	Φ300	Φ350	Φ19	5	0																		
TA200	2–M40*1.5	Φ300	Φ350	Φ400	Φ19	5	0																		

ROYSEL

T1A Series IE1 Efficiency Motors Technical Data (at 50Hz)

Model	Power	Current(A)			Current(A)			Current(A)			Speed	Eff.			Power Factor	T_{st}/T_n	T_{max}/T_n	T_{min}/T_n	I_{st}/I_n	Noise	W.T	Inertia
		220V	380V	660V	230V	400V	690V	240V	415V	720V	(r/min)	100%	75%	50%		(Times)	(Times)	(Times)	(Times)	dB(A)	(kg)	($kg*m^2$)
T1A 561–2	0.09	0.64	0.37	0.21	0.60	0.35	0.20	0.58	0.34	0.19	2800	55.6	49.6	39.2	0.67	2.4	2.6	2.2	3.5	58	2.80	0.00010173
T1A 562–2	0.12	0.68	0.39	0.23	0.64	0.37	0.21	0.62	0.36	0.21	2840	65.6	61.8	53.2	0.71	2.3	2.6	2.1	4.3	58	3.00	0.00012837
T1A 563–2	0.18	0.93	0.53	0.31	0.88	0.51	0.29	0.85	0.49	0.28	2780	66.5	64.2	56.8	0.77	2.3	2.5	2.4	4.1	61	3.50	0.00014170
T1A 631–2	0.18	0.95	0.55	0.32	0.90	0.52	0.30	0.87	0.50	0.29	2840	66.5	64.3	56.5	0.75	2	2.5	1.7	4.7	61	3.70	0.00014970
T1A 632–2	0.25	1.21	0.70	0.40	1.15	0.66	0.38	1.11	0.64	0.37	2840	69.8	66.2	56.8	0.78	2.5	2.7	2	5.2	61	4.10	0.00017102
T1A 633–2	0.37	1.79	1.03	0.60	1.70	0.98	0.57	1.64	0.95	0.55	2840	69.8	65.6	61.2	0.78	2	2.4	1.8	5.1	62	4.60	0.00020300
T1A 711–2	0.37	1.66	0.96	0.55	1.58	0.91	0.53	1.52	0.88	0.51	2840	71.5	70.9	65.8	0.82	2	2.2	1.4	5.1	64	5.34	0.00031368
T1A 712–2	0.55	2.41	1.39	0.80	2.29	1.32	0.76	2.21	1.27	0.74	2850	73.2	73.4	69.1	0.82	1.8	2.3	1.4	5.1	64	6.14	0.00038379
T1A 713–2	0.75	3.05	1.76	1.02	2.90	1.67	0.97	2.79	1.61	0.93	2840	77.1	77.5	74.8	0.84	2.6	2.6	1.7	6	65	7.10	0.00047547
T1A 801–2	0.75	3.35	1.93	1.12	3.18	1.84	1.06	3.07	1.77	1.02	2870	73.7	71.7	65.4	0.8	2.1	2.5	1.5	5.7	67	8.15	0.00089634
T1A 802–2	1.1	4.41	2.55	1.47	4.19	2.42	1.40	4.04	2.33	1.35	2870	79	78.8	75.4	0.83	2.6	2.8	1.8	6.5	67	9.70	0.00112377
T1A 803–2	1.5	5.87	3.39	1.96	5.58	3.22	1.86	5.38	3.10	1.79	2870	81	81.1	78.5	0.83	2.7	3	2.1	6.8	70	11.00	0.00135120
T1A 90S–2	1.5	5.94	3.43	1.98	5.65	3.26	1.88	5.44	3.14	1.81	2880	80	79.8	76.7	0.83	2.3	2.8	1.4	6.6	72	12.30	0.00185573
T1A 90L1–2	2.2	8.25	4.77	2.75	7.84	4.53	2.61	7.56	4.36	2.52	2880	83.5	84	82.2	0.84	2.6	2.7	1.8	7.1	72	14.90	0.00230595
T1A 90L2–2	3	10.8	6.24	3.60	10.3	5.92	3.42	9.89	5.71	3.30	2900	86	86.5	85.2	0.85	2.9	3	1.9	8.1	74	17.10	0.00296596
T1A 100L1–2	3	11.3	6.54	3.77	10.8	6.21	3.59	10.4	5.99	3.46	2900	83	82.7	80	0.84	2.7	3.2	2.1	7.7	76	20.10	0.00377615
T1A 100L2–2	4	15.0	8.67	5.00	14.3	8.23	4.75	13.7	7.93	4.58	2890	84.5	84.4	82.1	0.83	3.1	3.6	2.8	8.1	77	23.00	0.00466405
T1A 100L3–2	5.5	18.7	10.8	6.23	17.8	10.25	5.92	17.1	9.88	5.70	2900	88	88.6	87.7	0.88	3.3	3.6	2.5	10.1	78	26.00	0.00590710
T1A 112M1–2	4	14.2	8.2	4.75	13.5	7.81	4.51	13.0	7.53	4.34	2910	85	85	83.6	0.87	2.8	3.6	1.7	9.2	77	26.15	0.00631057
T1A 112M2–2	5.5	19.0	11.0	6.34	18.1	10.4	6.02	17.4	10.1	5.80	2900	86.5	87	86	0.88	3	3.8	2.2	9.8	78	31.20	0.00779613
T1A 112M3–2	7.5	25.8	14.9	8.59	24.5	14.1	8.16	23.6	13.6	7.87	2910	88	88	86.4	0.87	3.8	4.2	2.7	10.3	80	37.00	0.00983332
T1A 132S1–2	5.5	18.8	10.9	6.27	17.9	10.3	5.95	17.2	9.9	5.74	2900	86.5	87.2	86.1	0.89	2.1	2.9	1.7	7.8	80	37.60	0.01205798
T1A 132S2–2	7.5	25.7	14.8	8.55	24.4	14.1	8.13	23.5	13.6	7.83	2890	88.4	89.1	88.4	0.87	2.7	3.2	2.5	8.2	80	45.00	0.01521165
T1A 132M1–2	9.2	30.6	17.6	10.2	29.0	16.8	9.68	28.0	16.2	9.33	2910	88	88.1	86.5	0.9	3.1	3.8	1.7	9.7	81	51.00	0.01783446
T1A 132M2–2	11	36.5	21.1	12.2	34.7	20.0	11.6	33.5	19.3	11.2	2920	89	89	87.3	0.89	3.3	4	1.8	10.7	83	56.50	0.02035740
T1A 132M3–2	15	50.4	29.1	16.8	47.9	27.7	16.0	46.2	26.7	15.4	2940	91	90.7	89.1	0.86	4	4.5	2.5	14	86	73.00	0.02855696
T1A 160M1–2	11	38.3	22.1	12.8	36.4	21.0	12.1	35.1	20.2	11.7	2940	90	90	88.6	0.84	2.6	3.1	1.5	7.9	86	72.00	0.04437972
T1A 160M2–2	15	49.3	28.5	16.4	46.9	27.1	15.6	45.2	26.1	15.1	2940	89.9	90.4	89.6	0.89	2.6	2.9	1.4	8.5	86	82.00	0.05580496
T1A 160L1–2	18.5	62.9	36.3	21.0	59.8	34.5	19.9	57.6	33.3	19.2	2950	91	91.2	89.7	0.85	2.8	3.5	1.7	9.4	86	94.10	0.06559287
T1A 160L2–2	22	72.3	41.8	24.1	68.7	39.7	22.9	66.2	38.2	22.1	2950	92	92	90.9	0.87	3.4	3.2	1.9	9.4	91	104.50	0.07701810
T1A 180M–2	22	71.5	41.3	23.8	67.9	39.2	22.6	65.4	37.8	21.8	2950	90	90.2	89.7	0.9	2	2.2	1.2	7.5	88	121.00	0.09018470
T1A 200L1–2	30	96.2	55.5	32.1	91.4	52.8	30.5	88.1	50.8	29.4	2950	91.2	90.6	88.5	0.9	2	2.2	1.2	7.5	90	144.00	0.11499920
T1A 200L2–2	37	117.6	67.9	39.2	111.7	64.5	37.2	107.7	62.2	35.9	2940	92	92.1	91.4	0.9	2	2.2	1.2	7.5	90	170.00	0.13673820
T1A 561–4	0.06	0.54	0.31	0.18	0.52	0.30	0.17	0.50	0.29	0.17	1400	52.8	47.7	38.7	0.55	3.1	3.2	3	3.2	50	2.90	0.00018990
T1A 562–4	0.09	0.71	0.41	0.24	0.68	0.39	0.23	0.65	0.38	0.22	1400	56.2	51.7	43.1	0.59	2.3	2.5	2.8	3.1	50	3.20	0.00023991
T1A 563–4	0.12	0.89	0.51	0.30	0.84	0.49	0.28	0.81	0.47	0.27	1390	58.5	54.3	45.6	0.61	2.65	2.8	2.7	3.2	52	3.70	0.00026491
T1A 631–4	0.12	0.81	0.47	0.27	0.77	0.44	0.26	0.74	0.43	0.25	1395	60.1	56.7	48.4	0.65	2.1	2.3	1.7	3.5	52	3.70	0.00027304
T1A 632–4	0.18	1.06	0.61	0.35	1.01	0.58	0.34	0.97	0.56	0.32	1370	64.7	60.4	55.8	0.69	2.2	2.3	2.1	3.5	52	4.40	0.00033806
T1A 633–4	0.25	1.30	0.75	0.43	1.23	0.71	0.41	1.19	0.69	0.40	1360	68.5	68.8	65.1	0.74	2.1	2.3	2	3.9	54	5.00	0.00040807
T1A 711–4	0.25	1.40	0.81	0.47	1.33	0.77	0.44	1.28	0.74	0.43	1390	69	67.9	62.4	0.68	2.2	2.3	1.8	4.1	55	5.06	0.00056066
T1A 712–4	0.37	1.85	1.07	0.62	1.76	1.02	0.59	1.70	0.98	0.57	1385	70	70.5	66.2	0.75	2	2.2	1.7	4.3	55	5.96	0.00071439
T1A 713–4	0.55	2.92	1.69	0.97	2.78	1.60	0.93	2.68	1.55	0.89	1380	66	66.5	63	0.75	2.2	2.3	1.8	4.7	57	7.06	0.00091936
T1A 801–4	0.55	2.64	1.53	0.88	2.51	1.45	0.84	2.42	1.40	0.81	1420	73	72.2	67.1	0.75	2	2.3	1.6	4.8	57	8.25	0.00145276
T1A 802–4	0.75	3.39	1.96	1.13	3.22	1.86	1.08	3.11	1.79	1.04	1410	76.5	77.8	75.4	0.76	2.1	2.3	1.7	4.8	58	9.75	0.00169042
T1A 803–4	1.1	4.91	2.84	1.64	4.67	2.70	1.56	4.50	2.60	1.50	1390	77.5	79	77.4	0.76	2.3	2.4	2	5	61	11.20	0.00216574
T1A 90S–4	1.1	4.76	2.75	1.59	4.52	2.61	1.51	4.36	2.52	1.45	1410	79	79.4	76.5	0.77	2.5	2.7	2.2	5.5	61	12.30	0.00267500
T1A 90L1–4	1.5	6.26	3.62	2.09	5.95	3.44	1.98	5.74	3.31	1.91	1410	80.8	81.7	79.7	0.78	2.9	3	2.5	6.2	61	15.10	0.00351865
T1A 90L1–4B	1.85	7.57	4.37	2.52	7.19	4.15	2.40	6.93	4.00	2.31	1415	81.4	82.3	80.6	0.79	3.1	3	2.5	6.5	62	16.60	0.00418540
T1A 90L2–4	2.2	8.84	5.10	2.95	8.39	4.85	2.80	8.09	4.67	2.70	1410	81.9	83.2	82	0.8	3.2	3.1	2.6	6.7	64	17.78	0.00468546
T1A 100L1–4	2.2	8.88	5.13	2.96	8.44	4.87	2.81	8.13	4.70	2.71	1430	82.5	83.5	82.1	0.79	2.2	2.7	1.9	6.3	64	19.75	0.00677509
T1A 100L2–4	3	11.4	6.58	3.80	10.8	6.25	3.61	10.4	6.02	3.48	1430	84.5	85.4	84.4	0.82	2.5	2.8	2.1	6.7	64	23.10	0.00842419
T1A 100L3–4	4	16.6	9.61	5.55	15.8	9.13	5.27	15.2	8.80	5.08	1440	84.3	84.3	81.9	0.75	3	3.5	2.6	7.1	65	28.20	0.01073293
T1A 112M1–4	4	15.8	9.11	5.26	15.0	8.66	5.00	14.5	8.34	4.82	1440	85.5	85.6	83.7	0.78	2.3	3.3	2.1	7.8	65	29.80	0.01322838
T1A 112M2–4	5.5	20.4	11.8	6.81	19.4	11.2	6.47	18.7	10.8	6.23	1440	87.5	88.4	87.8	0.81	2.6	3.5	2.4	7.9	71	36.00	0.01683909
T1A 132S–4	5.5	20.5	11.9	6.84	19.5	11.3	6.50	18.8	10.9	6.26	1450	86	86.4	84.8	0.82	1.8	2.9	1.7	7.1	71	42.20	0.02801223
T1A 132M1–4	7.5	26.6	15.4	8.87	25.3	14.6	8.43	24.4	14.1	8.12	1460	88.3	89.3	89.1	0.84	2.4	2.7	1.4	8.4	71	52.60	0.03714484
T1A 132M2–4	9.2	33.8	19.5	11.3	32.1	18.5	10.7	30.9	17.9	10.3	1450	88.5	88.7	87.3	0.81	3.1	3.4	1.7	8.9	74	55.00	0.04359680
T1A 132M3–4	11	38.2	22.1	12.7	36.3	21.0	12.1	35.0	20.2	11.7	1460	90.2	91	90.7	0.84	3.1	2.8	1.3	9.5	75	64.00	0.05133916

PROOF

T1A Series IE1 Efficiency Motors Technical Data (at 50Hz)

Model	Power	Current(A)			Current(A)			Current(A)			Speed	Eff.			Power	T_{st}/T_n	T_{max}/T_n	T_{min}/T_n	I_{st}/I_n	Noise	W.T	Inertia
		220V	380V	660V	230V	400V	690V	240V	415V	720V	(r/min)	100%	75%	50%	Factor	(Times)	(Times)	(Times)	(Times)	dB(A)	(kg)	($kg*m^2$)
T1A 160M–4	11	40.7	23.5	13.6	38.6	22.3	12.9	37.2	21.5	12.4	1460	89	89.2	87.8	0.8	2.3	2.8	1.4	6.8	75	77.50	0.08025397
T1A 160L1–4	15	51.6	29.8	17.2	49.0	28.3	16.4	47.3	27.3	15.8	1450	88.9	90.5	90.9	0.86	2.1	2.1	1.1	6.8	75	96.00	0.10563970
T1A 160L2–4	18.5	64.5	37.3	21.5	61.3	35.4	20.4	59.1	34.1	19.7	1460	90.9	91.4	91.1	0.83	2.4	2.5	1.4	7.6	78	104.00	0.12761860
T1A 160L3–4	22	74.0	42.7	24.7	70.3	40.6	23.4	67.8	39.1	22.6	1470	92	92.3	91.5	0.85	2.6	2.9	1.4	9	80	118.50	0.14959750
T1A 180M–4	18.5	62.6	36.1	20.9	59.4	34.3	19.8	57.3	33.1	19.1	1460	90.5	90.7	89.9	0.86	2.2	2.2	1.4	7.5	80	118.00	0.15506360
T1A 180L–4	22	74.0	42.7	24.7	70.3	40.6	23.4	67.7	39.1	22.6	1460	91	91.3	90.6	0.86	2.2	2.2	1.4	7.5	80	128.00	0.17329310
T1A 200L–4	30	99.8	57.6	33.3	94.8	54.7	31.6	91.4	52.8	30.5	1470	92	92.2	91.6	0.86	2.2	2.2	1.4	7.5	83	153.00	0.22408390
T1A 631–6	0.09	0.74	0.42	0.25	0.70	0.40	0.23	0.67	0.39	0.22	870	51.1	49.2	42.5	0.63	1.8	2	1.9	2.6	50	4.20	0.00041778
T1A 632–6	0.12	0.91	0.53	0.30	0.87	0.50	0.29	0.84	0.48	0.28	850	51.6	51.2	43.1	0.67	1.8	2	1.8	2.7	50	4.50	0.00051688
T1A 633–6	0.18	1.33	0.77	0.44	1.26	0.73	0.42	1.22	0.70	0.41	850	54	52	47.6	0.66	2	2.1	1.9	3	52	4.80	0.00059864
T1A 711–6	0.18	1.25	0.72	0.42	1.19	0.69	0.40	1.14	0.66	0.38	890	56.6	54.4	46.3	0.67	1.9	2.2	1.8	3.1	52	5.60	0.00084095
T1A 712–6	0.25	1.62	0.93	0.54	1.54	0.89	0.51	1.48	0.86	0.49	910	61.6	59.7	52.2	0.66	2.1	2.3	1.9	3.4	52	6.00	0.00096467
T1A 713–6	0.37	2.23	1.28	0.74	2.11	1.22	0.70	2.04	1.18	0.68	900	66.3	65.5	59.7	0.66	2.4	2.5	2.3	3.7	54	6.80	0.00115024
T1A 801–6	0.37	2.42	1.40	0.81	2.30	1.33	0.77	2.21	1.28	0.74	910	61	58.6	50.7	0.66	1.9	2.2	1.8	3.2	56	8.00	0.00159634
T1A 802–6	0.55	2.99	1.73	1.00	2.84	1.64	0.95	2.74	1.58	0.91	920	71.2	71.1	66	0.68	1.9	2.3	1.8	3.8	56	9.25	0.00204109
T1A 803–6	0.75	3.86	2.23	1.29	3.67	2.12	1.22	3.54	2.04	1.18	910	72	73.1	69.6	0.71	1.9	2.2	1.8	3.9	58	10.60	0.00263409
T1A 90S–6	0.75	4.06	2.34	1.35	3.86	2.23	1.29	3.72	2.15	1.24	940	71.5	70.9	65.8	0.68	1.8	2.2	1.5	4.1	59	11.80	0.00326564
T1A 90L1–6	1.1	5.97	3.45	1.99	5.67	3.27	1.89	5.46	3.15	1.82	930	73.5	73.4	69	0.66	1.9	2.3	1.8	4.1	59	14.20	0.00428110
T1A 90L2–6	1.5	6.98	4.03	2.33	6.63	3.83	2.21	6.39	3.69	2.13	925	77.5	78.7	76.6	0.73	2.2	2.5	1.9	4.8	61	15.50	0.00548739
T1A 100L1–6	1.5	7.22	4.17	2.41	6.86	3.96	2.29	6.61	3.82	2.20	940	77	77.9	75.3	0.71	1.7	2.2	1.6	4.5	61	18.70	0.00754254
T1A 100L2–6	2.2	9.71	5.61	3.24	9.22	5.33	3.07	8.89	5.13	2.96	940	79.5	81	79.8	0.75	1.9	2.3	1.7	5	64	22.80	0.00993467
T1A 112M1–6	2.2	10.6	6.11	3.53	10.1	5.80	3.35	9.69	5.59	3.23	945	79.3	79.5	76.5	0.69	1.9	2.3	1.8	4.8	64	24.50	0.01395044
T1A 112M2–6	3	12.5	7.21	4.17	11.9	6.85	3.96	11.4	6.61	3.81	940	81	84	84.6	0.78	1.6	2.1	1.5	4.8	64	28.50	0.01767543
T1A 132S–6	3	12.5	7.20	4.16	11.8	6.84	3.95	11.4	6.59	3.81	965	84.4	85.7	85.1	0.75	1.7	2.2	1.3	5.6	64	36.40	0.03045714
T1A 132M1–6	4	17.1	9.85	5.69	16.2	9.36	5.40	15.6	9.02	5.21	965	84.5	85.1	83.6	0.73	2	2.6	1.5	5.9	68	42.20	0.03725132
T1A 132M2–6	5.5	23.4	13.5	7.79	22.2	12.8	7.40	21.4	12.4	7.13	965	86	87.6	87.7	0.72	2.1	2.4	1.6	5.8	68	51.40	0.04896639
T1A 132M3–6	7.5	30.2	17.5	10.1	28.7	16.6	9.58	27.7	16.0	9.23	965	87	87.3	85.8	0.75	2.7	2.9	2	7.3	68	62.60	0.06235504
T1A 160M–6	7.5	30.2	17.5	10.1	28.7	16.6	9.58	27.7	16.0	9.23	965	87	87.8	87.1	0.75	2.4	2.9	1.7	6.7	68	71.40	0.08622631
T1A 160L1–6	11	44.5	25.7	14.8	42.2	24.4	14.1	40.7	23.5	13.6	965	86.8	88.1	87.9	0.75	2.4	2.1	1.2	6.2	73	89.40	0.11687380
T1A 160L2–6	15	56.9	32.8	19.0	54.0	31.2	18.0	52.1	30.1	17.4	970	89	88.2	87.9	0.78	2.6	2.6	1.1	7.7	79	105.00	0.15484950
T1A 180L–6	15	54.8	31.6	18.3	52.0	30.0	17.3	50.1	28.9	16.7	970	89	89	88.6	0.81	2	2.2	1.3	6.5	77	124.00	0.25406280
T1A 200L1–6	18.5	66.8	38.6	22.3	63.4	36.6	21.1	61.1	35.3	20.4	975	90	90.2	89.5	0.81	2	2.2	1.3	6.5	80	141.00	0.30394140
T1A 200L2–6	22	77.5	44.7	25.8	73.6	42.5	24.5	71.0	41.0	23.7	975	90	90.2	89.4	0.83	2	2.2	1.3	6.5	80	152.00	0.35316010
T1A 711–8	0.09	1.05	0.61	0.35	1.00	0.58	0.33	0.96	0.56	0.32	680	38.2	28.8	24.1	0.59	1.8	2.2	1.7	2.3	50	5.60	0.00071723
T1A 712–8	0.12	1.20	0.70	0.40	1.14	0.66	0.38	1.10	0.64	0.37	690	42.3	36.6	27.7	0.62	1.8	2.2	1.7	2.5	50	6.00	0.00084095
T1A 801–8	0.18	1.48	0.86	0.49	1.41	0.81	0.47	1.36	0.79	0.45	690	55	51.5	43.4	0.58	2.2	2.4	2	3	52	8.30	0.00202145
T1A 802–8	0.25	1.94	1.12	0.65	1.84	1.06	0.61	1.78	1.03	0.59	690	58.5	55.5	47.9	0.58	2.3	2.4	2	3.1	52	9.30	0.00232255
T1A 803–8	0.37	2.46	1.42	0.82	2.34	1.35	0.78	2.26	1.30	0.75	700	67	62.5	58.3	0.59	2	2.5	2	3.5	56	9.96	0.00262366
T1A 90S–8	0.37	2.58	1.49	0.86	2.45	1.42	0.82	2.36	1.37	0.79	710	65	62.2	54.8	0.58	1.7	2.2	1.6	3.2	56	11.38	0.00326564
T1A 90L1–8	0.55	3.84	2.22	1.28	3.65	2.11	1.22	3.52	2.03	1.17	705	65	62.6	55.6	0.58	1.9	2.3	1.7	3.4	56	13.94	0.00428110
T1A 90L2–8	0.75	4.69	2.71	1.56	4.45	2.57	1.49	4.29	2.48	1.43	700	69	67.5	61.8	0.61	1.8	2.1	1.8	3.5	59	15.50	0.00488424
T1A 100L1–8	0.75	4.43	2.56	1.48	4.21	2.43	1.40	4.06	2.34	1.35	685	68.5	68	62.7	0.65	1.9	2.2	1.8	3.6	59	17.60	0.00634648
T1A 100L2–8	1.1	5.85	3.38	1.95	5.56	3.21	1.85	5.35	3.09	1.79	700	75	75	71.3	0.66	1.8	2.4	1.8	4.2	59	20.00	0.00833992
T1A 112M–8	1.5	7.87	4.54	2.62	7.48	4.32	2.49	7.21	4.16	2.40	700	76	76.5	73.4	0.66	1.8	2.3	1.8	4	61	25.30	0.01395044
T1A 132S–8	2.2	10.6	6.13	3.54	10.1	5.83	3.36	9.73	5.62	3.24	715	79	79	76	0.69	1.9	2.4	1.7	4.9	64	39.60	0.03213071
T1A 132M–8	3	13.7	7.89	4.55	13.0	7.49	4.33	12.5	7.22	4.17	715	81.4	82	80	0.71	2	2.5	1.8	5.1	64	47.40	0.04059848
T1A 160M1–8	4	18.3	10.6	6.11	17.4	10.1	5.81	16.8	9.70	5.60	715	82	82.6	80.7	0.7	1.8	2.3	1.6	4.6	68	59.80	0.07103601
T1A 160M2–8	5.5	24.8	14.3	8.25	23.5	13.6	7.84	22.7	13.1	7.56	710	83.5	84.4	83.1	0.7	1.9	2.4	1.8	4.8	68	69.00	0.08622631
T1A 160L–8	7.5	33.0	19.0	11.0	31.3	18.1	10.4	30.2	17.4	10.1	715	85.5	86	84.5	0.7	2.5	2.8	2	5.7	68	84.80	0.11307620
T1A 180L–8	11	45.4	26.2	15.1	43.1	24.9	14.4	41.5	24.0	13.8	715	87.4	87.2	85.7	0.73	1.9	2.2	1.2	6	76	124.00	0.26109400
T1A 200L1–8	15	59.0	34.1	19.7	56.1	32.4	18.7	54.0	31.2	18.0	725	88	88	86.9	0.76	1.9	2.2	1.2	6	79	154.00	0.33909760
T1A 200L2–8	18.5	71.2	41.1	23.7	67.6	39.0	22.5	65.2	37.6	21.7	730	90.0	90.0	88.8	0.76	1.9	2.2	1.2	6	79	175.00	0.40941010

ROYSE

T2A Series IE2 Efficiency Motors Technical Data (at 50Hz)

Model	Power	Current(A)			Current(A)			Current(A)			Speed (r/min)	Eff.			Power Factor	T_{start}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_s/I_n (Times)	Noise dB(A)	W.T (kg)	Inertia ($kg*m^2$)
		220V	380V	660V	230V	400V	690V	240V	415V	720V		100%	75%	50%								
T2A 631–2	0.18	0.95	0.55	0.32	0.90	0.52	0.30	0.87	0.50	0.29	2840	66.5	64.3	56.5	0.75	2	2.5	1.7	4.7	61	3.6	0.00023100
T2A 632–2	0.25	1.21	0.70	0.40	1.15	0.66	0.38	1.11	0.64	0.37	2840	69.8	68.5	62.6	0.78	2.5	2.7	2	5.2	61	3.9	0.00025500
T2A 633–2	0.37	1.79	1.03	0.60	1.70	0.98	0.57	1.64	0.95	0.55	2840	69.8	68.5	62.6	0.78	2	2.4	1.8	5.1	62	4.6	0.00030304
T2A 711–2	0.37	1.64	0.95	0.55	1.56	0.90	0.52	1.50	0.87	0.50	2840	71.5	70.9	65.8	0.83	2	2.2	1.4	5.1	64	4.9	0.00034600
T2A 712–2	0.55	2.32	1.34	0.77	2.21	1.27	0.74	2.13	1.23	0.71	2860	75.1	75.2	71.4	0.83	2.3	2.4	1.5	5.9	64	5.8	0.00045800
T2A 713–2	0.75	3.04	1.75	1.01	2.88	1.67	0.96	2.78	1.60	0.93	2840	77.4	78	75.1	0.84	2.6	2.6	1.7	6	65	7.1	0.00056896
T2A 801–2	0.75	3.15	1.82	1.05	2.99	1.73	1.00	2.88	1.66	0.96	2840	77.4	78	75.2	0.81	2.6	2.8	2.2	6.1	67	8.4	0.00089634
T2A 802–2	1.1	4.43	2.56	1.48	4.21	2.43	1.40	4.06	2.34	1.35	2860	79.6	79.9	77.5	0.82	2.6	2.6	1.8	7	67	9.8	0.00112377
T2A 803–2	1.5	5.78	3.34	1.93	5.49	3.17	1.83	5.29	3.06	1.76	2880	81.3	82	80.4	0.84	2.9	3.1	2	7.4	70	11.3	0.00142701
T2A 90S–2	1.5	5.92	3.42	1.97	5.63	3.25	1.88	5.42	3.13	1.81	2880	81.3	81.6	79.5	0.82	2.8	3	2	7.2	72	12.4	0.00185573
T2A 90L1–2	2.2	8.38	4.84	2.79	7.96	4.60	2.66	7.68	4.43	2.56	2890	83.2	83.8	82.1	0.83	2.8	3.1	1.4	7.6	72	14.95	0.00230595
T2A 90L2–2	3	11.0	6.34	3.66	10.4	6.02	3.48	10.1	5.80	3.35	2880	84.6	85.8	85.2	0.85	3.4	3.3	2.3	7.9	74	17.2	0.00296596
T2A 100L1–2	3	11.1	6.41	3.70	10.6	6.09	3.52	10.2	5.87	3.39	2890	84.6	84.9	83.2	0.84	3	3.6	2.7	7.6	76	21.7	0.00413131
T2A 100L2–2	4	14.1	8.14	4.70	13.4	7.73	4.47	12.9	7.46	4.30	2910	85.8	86	84.7	0.87	3.7	4.2	3.8	9.9	77	25.8	0.00519679
T2A 112M1–2	4	13.8	7.96	4.60	13.1	7.56	4.37	12.6	7.29	4.21	2920	85.8	86.2	85	0.89	3.3	3.6	2	9.6	77	26.7	0.00631057
T2A 112M2–2	5.5	19.1	11.0	6.37	18.2	10.5	6.06	17.5	10.1	5.84	2920	87	87.3	86.1	0.87	3.4	4.1	2.8	10.2	78	32.5	0.00805674
T2A 112M3–2	7.5	24.9	14.4	8.30	23.6	13.7	7.88	22.8	13.2	7.60	2920	88.1	88.6	87.5	0.9	3.7	4	2.6	11.3	80	37	0.00983332
T2A 132S1–2	5.5	18.7	10.8	6.23	17.8	10.3	5.92	17.1	9.88	5.71	2920	87	87.6	86.6	0.89	2.4	3.4	1.9	8.3	80	39.7	0.01331945
T2A 132S2–2	7.5	24.6	14.2	8.21	23.4	13.5	7.80	22.5	13.0	7.51	2930	88.1	88.6	87.9	0.91	2.5	3.5	1.4	9.8	80	47.3	0.01647312
T2A 132M1–2	9.2	30.0	17.3	10.0	28.5	16.5	9.50	27.5	15.9	9.16	2920	88.7	89.7	89.6	0.91	2.5	3.3	1.9	9.5	81	52	0.01783446
T2A 132M2–2	11	36.0	20.8	12.0	34.2	19.7	11.4	32.9	19.0	11.0	2930	89.4	89.6	88.7	0.9	4	3.9	1.7	12.7	83	58.5	0.02161887
T2A 132M3–2	15	48.6	28.0	16.2	46.1	26.6	15.4	44.5	25.7	14.8	2940	90.3	90.5	89.6	0.9	3.7	4.3	1.7	13.6	86	74	0.02855696
T2A 160M1–2	11	36.4	21.0	12.1	34.6	20.0	11.5	33.3	19.2	11.1	2950	89.4	89.5	88.2	0.89	2.6	3.4	1.5	8.4	86	77	0.05009234
T2A 160M2–2	15	48.6	28.0	16.2	46.1	26.6	15.4	44.5	25.7	14.8	2950	90.3	90.5	89.7	0.9	2.6	3.4	1.8	9.4	86	91	0.06532599
T2A 160L1–2	18.5	58.2	33.6	19.4	55.3	31.9	18.4	53.3	30.8	17.8	2940	90.9	91.8	91.9	0.92	2.5	2.9	1.2	8.7	86	101	0.07701810
T2A 160L2–2	22	69.7	40.2	23.2	66.2	38.2	22.1	63.8	36.8	21.3	2950	91.3	91.5	90.8	0.91	3.1	3.6	1.8	10.6	91	112.5	0.09034755
T2A 180M–2	22	69.7	40.2	23.2	66.2	38.2	22.1	63.8	36.8	21.3	2950	91.3	90.9	88.8	0.91	2.5	2	1.4	8.1	88	128	0.09501562
T2A 200L1–2	30	95.3	55.1	31.8	90.6	52.3	30.2	87.3	50.4	29.1	2960	92	92.1	91.1	0.9	3.1	3.2	1.4	9.5	90	158	0.12224550
T2A 200L2–2	37	115.7	66.8	38.6	109.9	63.4	36.6	105.9	61.2	35.3	2960	92.5	92.3	91.3	0.91	2.8	3.5	1.4	9.6	90	181	0.14881550
T2A 631–4	0.12	0.81	0.47	0.27	0.77	0.44	0.26	0.74	0.43	0.25	1395	60.1	56.7	48.2	0.65	2.2	2.3	1.7	3.5	52	3.5	0.00027400
T2A 632–4	0.18	1.00	0.58	0.33	0.95	0.55	0.32	0.92	0.53	0.31	1350	64.7	64.9	60.3	0.73	2	2.1	1.9	3.6	52	4	0.00033600
T2A 633–4	0.25	1.30	0.75	0.43	1.23	0.71	0.41	1.19	0.69	0.40	1360	68.5	67.7	62.7	0.74	2.1	2.3	2	4	54	5	0.00039876
T2A 711–4	0.25	1.41	0.81	0.47	1.34	0.77	0.45	1.29	0.75	0.43	1400	69.6	68.5	62.9	0.67	2.2	2.3	1.8	4.1	55	5.2	0.00059300
T2A 712–4	0.37	1.83	1.06	0.61	1.74	1.01	0.58	1.68	0.97	0.56	1400	72.7	73	69.2	0.73	2.4	2.5	2	4.7	55	6.3	0.00081600
T2A 801–4	0.55	2.68	1.55	0.89	2.55	1.47	0.85	2.46	1.42	0.82	1420	77.1	77.1	73.9	0.7	2.4	2.8	2.1	5.4	57	8.95	0.00145276
T2A 802–4	0.75	3.49	2.02	1.16	3.32	1.92	1.11	3.20	1.85	1.07	1420	79.6	79.8	77.1	0.71	2.7	2.9	2.4	5.7	58	10.4	0.00192808
T2A 803–4	1.1	4.94	2.85	1.65	4.69	2.71	1.56	4.52	2.61	1.51	1420	81.4	81.9	79.7	0.72	3.1	3.1	2.5	5.9	61	12.3	0.00252222
T2A 90S–4	1.1	4.74	2.74	1.58	4.50	2.60	1.50	4.34	2.51	1.45	1430	81.4	81.9	79.7	0.75	2.9	3.1	2.2	6.8	61	13.85	0.00334175
T2A 90L1–4	1.5	6.27	3.62	2.09	5.96	3.44	1.99	5.74	3.32	1.91	1430	82.8	83.4	81.6	0.76	3.1	3.2	2.2	6.5	61	16.45	0.00418540
T2A 90L2–4	2.2	9.04	5.22	3.01	8.58	4.96	2.86	8.27	4.78	2.76	1430	84.3	84.5	82.3	0.76	4.2	4	3.4	7.7	64	18.8	0.00535221

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T2A Series IE2 Efficiency Motors Technical Data (at 50Hz)

Model	Power	Current(A)			Current(A)			Current(A)			Speed (r/min)	Eff.			Power Factor	T_{start}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_s/I_n (Times)	Noise dB(A)	W.T (kg)	Inertia ($kg*m^2$)
		220V	380V	660V	230V	400V	690V	240V	415V	720V		100%	75%	50%								
T2A 100L1–4	2.2	8.38	4.84	2.79	7.96	4.59	2.65	7.67	4.43	2.56	1440	84.3	85.2	84.3	0.82	2.4	2.9	2	6.6	64	22.2	0.00776455
T2A 100L2–4	3	11.5	6.66	3.85	11.0	6.33	3.66	10.6	6.10	3.52	1450	85.5	86.1	84.9	0.8	2.3	3.2	2.4	7.6	64	25.9	0.00974347
T2A 100L3–4	4	15.2	8.77	5.06	14.4	8.33	4.81	13.9	8.03	4.64	1440	86.6	87.4	86.5	0.8	2.8	3.2	2.3	7.2	65	28.6	0.01106275
T2A 112M1–4	4	14.8	8.56	4.94	14.1	8.13	4.69	13.6	7.84	4.52	1440	86.6	87.7	87.2	0.82	2.5	3.3	2.3	7.9	65	31.4	0.01374420
T2A 112M2–4	5.5	20.6	11.9	6.88	19.6	11.3	6.53	18.9	10.9	6.30	1440	87.7	88.6	88.1	0.8	3.7	3.6	3.1	8.3	71	36.7	0.01735491
T2A 132S–4	5.5	19.9	11.5	6.63	18.9	10.9	6.30	18.2	10.5	6.07	1460	87.7	88.1	87	0.83	2.1	3.5	1.9	8.6	71	44.3	0.03059302
T2A 132M1–4	7.5	26.8	15.5	8.94	25.5	14.7	8.49	24.5	14.2	8.18	1460	88.7	89.4	88.6	0.83	2.7	3.2	1.7	8.9	71	54.5	0.03972562
T2A 132M2–4	9.2	31.9	18.4	10.6	30.3	17.5	10.1	29.2	16.9	9.75	1460	89.2	90.1	89.9	0.85	2.9	3.2	1.7	8.7	74	56.6	0.04617758
T2A 132M3–4	11	37.9	21.9	12.6	36.0	20.8	12.0	34.7	20.0	11.6	1460	89.8	90.5	90.1	0.85	3.3	3.6	1.4	9.3	75	66.2	0.05391993
T2A 160M–4	11	38.8	22.4	12.9	36.9	21.3	12.3	35.6	20.5	11.9	1460	89.8	90.4	90	0.83	2.5	2.7	1.7	7	75	82	0.08967352
T2A 160L1–4	15	51.9	29.9	17.3	49.3	28.4	16.4	47.5	27.4	15.8	1470	90.6	91.2	90.6	0.84	2.5	2.8	1.6	8.3	75	103.2	0.11819900
T2A 160L2–4	18.5	63.5	36.7	21.2	60.4	34.9	20.1	58.2	33.6	19.4	1470	91.2	91.4	90.7	0.84	2.7	3	1.7	8.8	78	115	0.13703810
T2A 180M–4	18.5	61.4	35.4	20.5	58.3	33.7	19.4	56.2	32.4	18.7	1460	91.2	91.6	91.1	0.87	2.4	3	1.8	7.8	80	119	0.15506360
T2A 180L–4	22	71.8	41.5	23.9	68.2	39.4	22.7	65.8	38.0	21.9	1460	91.6	92.2	91.9	0.88	2.4	2.8	1.7	7.7	80	129	0.17329310
T2A 200L–4	30	99.5	57.4	33.2	94.5	54.6	31.5	91.1	52.6	30.4	1470	92.3	92.6	92	0.86	3.2	3.7	2.3	9.5	83	169	0.24231330
T2A 632–6	0.12	0.93	0.54	0.31	0.88	0.51	0.29	0.85	0.49	0.28	850	50.6	50.2	42.4	0.67	1.8	2	1.8	2.7	50	4.5	0.00052145
T2A 711–6	0.18	1.25	0.72	0.42	1.19	0.69	0.40	1.14	0.66	0.38	850	56.6	54.4	46.3	0.67	1.9	2.2	1.8	3.1	52	5.05	0.00071300
T2A 712–6	0.25	1.62	0.93	0.54	1.54	0.89	0.51	1.48	0.86	0.49	910	61.6	59.7	52.2	0.66	2.1	2.3	1.9	3.3	52	6	0.00094300
T2A 801–6	0.37	2.18	1.26	0.73	2.07	1.20	0.69	2.00	1.15	0.67	935	67.6	63.8	59.6	0.66	1.9	2.2	1.7	3.8	56	8.9	0.00174459
T2A 802–6	0.55	2.91	1.68	0.97	2.77	1.60	0.92	2.67	1.54	0.89	935	73.1	71.6	69.7	0.68	2	2.4	2	4	56	10.2	0.00233759
T2A 803–6	0.75	3.88	2.24	1.29	3.69	2.13	1.23	3.55	2.05	1.18	920	75.9	75.4	71.3	0.67	2.7	2.6	2.5	4.2	58	11.7	0.00307884
T2A 90S–6	0.75	4.00	2.31	1.33	3.80	2.19	1.27	3.66	2.11	1.22	940	75.9	75.3	71.1	0.65	2.2	2.5	1.9	4.5	59	12.55	0.00346669
T2A 90L1–6	1.1	5.37	3.10	1.79	5.10	2.95	1.70	4.92	2.84	1.64	950	78.1	78.4	75.6	0.69	2	2.4	1.8	4.9	59	15.2	0.00488424
T2A 90L2–6	1.5	7.27	4.20	2.42	6.91	3.99	2.30	6.66	3.85	2.22	945	79.8	80.1	77.5	0.68	2.7	3	2.5	5.1	61	18.2	0.00629158
T2A 100L1–6	1.5	6.68	3.86	2.23	6.35	3.67	2.12	6.12	3.53	2.04	950	79.8	81.7	81.2	0.74	1.7	2.2	1.6	4.8	61	20.65	0.00833992
T2A 100L2–6	2.2	9.83	5.68	3.28	9.34	5.39	3.11	9.00	5.20	3.00	950	81.8	82.6	81.1	0.72	2.5	2.7	2.1	5.5	64	25	0.01152942
T2A 112M–6	2.2	9.70	5.60	3.23	9.21	5.32	3.07	8.88	5.13	2.96	955	81.8	82.9	81.8	0.73	2.1	2.7	1.8	5.5	64	26	0.01544044
T2A 112M2–6	3	13.2	7.60	4.39	12.5	7.22	4.17	12.1	6.96	4.02	955	83.3	84.4	83.3	0.72	2.3	2.8	2.1	5.7	64	31	0.01916542
T2A 132S–6	3	12.5	7.20	4.16	11.8	6.84	3.95	11.4	6.59	3.81	960	83.3	84.8	84.4	0.76	1.6	2.4	1.5	5.6	64	37.8	0.03213071
T2A 132M1–6	4	16.8	9.71	5.61	16.0	9.22	5.32	15.4	8.89	5.13	965	84.6	85.6	84.8	0.74	2	2.6	1.6	5.9	68	43.8	0.03892490
T2A 132M2–6	5.5	22.4	13.0	7.48	21.3	12.3	7.11	20.5	11.9	6.85	965	86	87.2	86.8	0.75	2.4	2.6	1.8	6.6	68	51.8	0.04896639
T2A 132M3–6	7.5	29.8	17.2	9.93	28.3	16.3	9.43	27.3	15.7	9.09	970	87.2	87.8	87	0.76	3.1	3.2	1.9	7.9	68	66	0.06570220
T2A 160M–6	7.5	29.4	17.0	9.80	27.9	16.1	9.31	26.9	15.5	8.97	965	87.2	88.1	87.7	0.77	2.5	2.9	1.8	6.9	68	74	0.09382144
T2A 160L1–6	11	42.9	24.8	14.3	40.8	23.6	13.6	39.3	22.7	13.1	970	88.7	89.4	88.7	0.76	2.2	2.3	1.3	6.5	73	93	0.12826650
T2A 160L2–6	15	57.2	33.0	19.1	54.3	31.3	18.1	52.3	30.2	17.4	965	89.7	90	90.4	0.77	3.1	3	2.2	8.3	79	116	0.17003980
T2A 180L–6	15	53.0	30.6	17.7	50.4	29.1	16.8	48.5	28.0	16.2	975	89.7	89.5	88.7	0.83	2.2	2.7	1.2	8	77	130	0.25406280
T2A 200L1–6	18.5	66.5	38.4	22.2	63.2	36.5	21.1	60.9	35.1	20.3	980	90.4	90.7	89.8	0.81	2.5	2.9	1.7	7.6	80	149	0.30394140
T2A 200L2–6	22	76.7	44.3	25.6	72.9	42.1	24.3	70.3	40.6	23.4	980	90.9	91.2	90.5	0.83	2.3	2.6	2.3	7.6	80	167	0.35316010

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T3A Series IE3 Efficiency Motors Technical Data (at 50Hz)

Model	Power	Current(A)			Current(A)			Current(A)			Speed (r/min)	Eff.			Power Factor	T_{start}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_s/I_n (Times)	Noise dB(A)	W.T (kg)	Inertia ($kg*m^2$)
		220V	380V	660V	230V	400V	690V	240V	415V	720V		100%	75%	50%								
T3A 631–2	0.18	0.96	0.55	0.32	0.91	0.53	0.30	0.88	0.51	0.29	2850	65.9	63.5	56.2	0.75	2	2.5	1.6	4.7	61	3.6	0.00023100
T3A 632–2	0.25	1.21	0.70	0.40	1.15	0.66	0.38	1.11	0.64	0.37	2840	69.7	68.4	62.5	0.78	2.5	2.7	2	5.2	61	3.9	0.00025500
T3A 711–2	0.37	1.74	1.00	0.58	1.65	0.95	0.55	1.59	0.92	0.53	2860	73.8	72.4	66.5	0.76	2.5	2.8	1.8	5.6	64	5.2	0.00036900
T3A 712–2	0.55	2.33	1.34	0.78	2.21	1.28	0.74	2.13	1.23	0.71	2860	77.8	63.5	56.2	0.8	3.1	3.1	2	6.5	64	6.2	0.00049500
T3A 713–2	0.75	2.98	1.72	0.99	2.83	1.64	0.94	2.73	1.58	0.91	2870	80.7	80.8	78.2	0.82	3	3.2	2.2	7.1	65	7.1	0.00060600
T3A 801–2	0.75	3.02	1.74	1.01	2.87	1.66	0.96	2.76	1.60	0.92	2890	80.7	80.3	77.2	0.81	3.1	3.2	2.3	7.4	67	8.9	0.00097215
T3A 802–2	1.1	4.27	2.46	1.42	4.06	2.34	1.35	3.91	2.26	1.30	2900	82.7	82.5	79.9	0.82	3.2	3.2	2.2	7.8	67	10.6	0.00127539
T3A 803–2	1.5	5.79	3.34	1.93	5.50	3.17	1.83	5.30	3.06	1.77	2910	84.2	83.9	81.5	0.81	4	4	2.2	9.6	70	12.5	0.00165443
T3A 90S–2	1.5	5.72	3.30	1.91	5.43	3.14	1.81	5.24	3.02	1.75	2900	84.2	83.8	81.4	0.82	3.5	3.7	2.1	8.3	72	14	0.00218574
T3A 90L1–2	2.2	8.02	4.63	2.67	7.62	4.40	2.54	7.35	4.24	2.45	2910	85.9	86.1	84.7	0.84	3.3	3.7	1.5	9	72	16.3	0.00263595
T3A 90L2–2	3	11.3	6.54	3.78	10.8	6.21	3.59	10.4	5.99	3.46	2910	87.1	87.1	84.2	0.8	4	4.1	2.6	9.6	74	18.5	0.00340596
T3A 100L1–2	3	10.2	5.88	3.39	9.68	5.59	3.23	9.33	5.38	3.11	2910	87.1	87.5	86.3	0.89	3.2	3.6	2.6	9.4	76	23.7	0.00484163
T3A 100L2–2	4	13.0	7.50	4.33	12.3	7.12	4.11	11.9	6.87	3.96	2910	88.1	88.8	88.1	0.92	2.8	3.3	2.1	9.1	77	27.6	0.00590710
T3A 112M1–2	4	13.1	7.58	4.38	12.5	7.20	4.16	12.0	6.94	4.01	2920	88.1	88.2	87	0.91	3.4	3.9	2.4	10.5	77	30.1	0.00750510
T3A 112M2–2	5.5	17.8	10.3	5.94	16.9	9.78	5.65	16.3	9.43	5.44	2920	89.2	89.6	89.1	0.91	3.3	4.2	2.9	11.9	78	35.7	0.00925127
T3A 112M3–2	7.5	23.8	13.7	7.94	22.6	13.1	7.54	21.8	12.6	7.27	2920	90.1	91.0	90.0	0.92	3.5	3.8	2.1	11.4	80	40	0.01128847
T3A 132S1–2	5.5	18.2	10.5	6.08	17.3	10.0	5.77	16.7	9.64	5.56	2930	89.2	89.4	88.2	0.89	3.2	4	2.5	10	80	43.4	0.01521165
T3A 132S2–2	7.5	23.8	13.7	7.94	22.6	13.1	7.54	21.8	12.6	7.27	2930	90.1	90.9	90.7	0.92	2.6	3.6	1.9	10.1	80	51.7	0.01899607
T3A 132M1–2	9.2	29.4	17.0	9.79	27.9	16.1	9.30	26.9	15.5	8.96	2930	90.6	91.2	90.5	0.91	3.2	4.2	2.6	11.6	81	58.3	0.02161887
T3A 132M2–2	11	34.5	19.9	11.5	32.8	18.9	10.9	31.6	18.2	10.5	2930	91.2	91.5	91.2	0.92	3.6	4.1	2.4	12.2	83	63.5	0.02414181
T3A 132M3–2	15	47.7	27.6	15.9	45.3	26.2	15.1	43.7	25.2	14.6	2940	91.9	92.1	91.2	0.9	4.9	4.9	2	14.4	86	75	0.02855696
T3A 160M1–2	11	36.1	20.8	12.0	34.3	19.8	11.4	33.0	19.1	11.0	2960	91.2	91	89.6	0.88	3.2	4	1.4	10.3	86	85.5	0.05961337
T3A 160M2–2	15	48.3	27.9	16.1	45.8	26.5	15.3	44.2	25.5	14.7	2960	91.9	91.5	89.9	0.89	3.9	4.2	1.4	11.4	86	104	0.07675122
T3A 160L1–2	18.5	57.9	33.4	19.3	55.0	31.8	18.3	53.0	30.6	17.7	2950	92.4	92.8	91.8	0.91	3	3	1.5	9.1	86	121	0.09225175
T3A 160L2–2	22	68.6	39.6	22.9	65.2	37.6	21.7	62.8	36.3	20.9	2960	92.7	92.8	92.5	0.91	3.8	4	1.6	12.7	88	132	0.10748540
T3A 180M–2	22	68.6	39.6	22.9	65.2	37.6	21.7	62.8	36.3	20.9	2960	92.7	93	92.4	0.91	2.7	3.3	1.7	9	88	130.6	0.10467740
T3A 200L1–2	30	94.0	54.3	31.3	89.3	51.6	29.8	86.1	49.7	28.7	2960	93.3	93.2	92.2	0.9	3.5	3.8	1.8	10.2	90	158	0.13673820
T3A 200L2–2	37	115.5	66.7	38.5	109.7	63.3	36.6	105.7	61.0	35.2	2960	93.7	93.6	92.6	0.9	3.6	3.7	1.7	9.8	90	173.1	0.16330820
T3A 631–4	0.12	0.70	0.40	0.23	0.66	0.38	0.22	0.64	0.37	0.21	1360	64.8	63.7	57.6	0.7	2.2	2.3	2	3.5	52	3.8	0.00030500
T3A 632–4	0.18	0.97	0.56	0.32	0.92	0.53	0.31	0.89	0.51	0.30	1400	69.9	69.6	65.4	0.7	2.2	2.5	2.1	4.1	52	4.5	0.00039900
T3A 633–4	0.25	1.27	0.73	0.42	1.21	0.70	0.40	1.16	0.67	0.39	1395	75	75.1	71.5	0.69	2.9	3	2.7	4.7	55	5.3	0.00052391
T3A 711–4	0.25	1.30	0.75	0.43	1.23	0.71	0.41	1.19	0.69	0.40	1410	73.5	73.2	69	0.69	2.3	2.5	2.1	4.5	55	5.8	0.00071700
T3A 712–4	0.37	1.85	1.07	0.62	1.76	1.02	0.59	1.70	0.98	0.57	1420	77.3	77.1	73.6	0.68	2.8	3	2.5	5.2	55	7	0.00096500
T3A 801–4	0.55	2.80	1.62	0.93	2.66	1.54	0.89	2.56	1.48	0.85	1440	80.8	79.9	76	0.64	3.1	3.3	2.4	6.2	57	9.5	0.00169042
T3A 802–4	0.75	3.47	2.00	1.16	3.29	1.90	1.10	3.17	1.83	1.06	1440	82.5	82.5	80.1	0.69	3.1	3.1	2.5	6.3	58	11.7	0.00228457
T3A 803–4	1.1	4.65	2.69	1.55	4.42	2.55	1.47	4.26	2.46	1.42	1430	84.1	84.9	83.7	0.74	3	3.1	2.6	6.6	61	13.8	0.00299754
T3A 90S–4	1.1	4.65	2.69	1.55	4.42	2.55	1.47	4.26	2.46	1.42	1440	84.1	84.1	81.8	0.74	3.7	3.8	3.1	7.7	61	15.1	0.00384181

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T3A Series IE3 Efficiency Motors Technical Data (at 50Hz)

Model	Power	Current(A)			Current(A)			Current(A)			Speed (r/min)	Eff.			Power Factor	T_{start}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_s/I_n (Times)	Noise dB(A)	W.T (kg)	Inertia ($kg*m^2$)
		220V	380V	660V	230V	400V	690V	240V	415V	720V		100%	75%	50%								
T3A 90L1–4	1.5	6.34	3.66	2.11	6.02	3.48	2.01	5.80	3.35	1.93	1440	85.3	85.3	83.1	0.73	4.1	4.1	3.4	8.1	61	18	0.00468546
T3A 100L1–4	2.2	8.14	4.70	2.71	7.74	4.47	2.58	7.46	4.31	2.49	1450	86.7	87.2	86.2	0.82	2.9	3.5	2.4	8	64	23.9	0.00875401
T3A 100L2–4	3	11.5	6.66	3.85	11.0	6.33	3.65	10.6	6.10	3.52	1450	87.7	88	86.9	0.78	3.3	3.4	2.7	8.1	64	28.3	0.01106275
T3A 112M1–4	4	14.5	8.37	4.83	13.8	7.95	4.59	13.3	7.66	4.42	1450	88.6	88.8	88.2	0.82	3.1	3.7	2.6	8.6	65	33.9	0.01529165
T3A 112M2–4	5.5	20.2	11.7	6.73	19.2	11.1	6.39	18.5	10.7	6.16	1450	89.6	89.9	89.1	0.8	3.8	3.7	2.5	9.1	71	39.1	0.04875837
T3A 132S–4	5.5	19.2	11.1	6.41	18.3	10.5	6.09	17.6	10.2	5.87	1460	89.6	89.8	89.4	0.84	2.3	3.5	1.9	9	71	47.4	0.03446419
T3A 132M1–4	7.5	26.0	15.0	8.66	24.7	14.3	8.23	23.8	13.7	7.93	1460	90.4	90.9	90.3	0.84	2.6	3.4	2.2	8.9	71	57.4	0.04359680
T3A 132M2–4	9.2	32.5	18.8	10.8	30.9	17.8	10.3	29.8	17.2	9.93	1460	90.8	91.3	90.7	0.82	3.2	3.6	2	10	74	60	0.05133916
T3A 132M3–4	11	37.7	21.8	12.6	35.8	20.7	11.9	34.5	19.9	11.5	1460	91.4	92	91.6	0.84	3.5	3.7	2.1	10.5	75	67	0.06037189
T3A 160M–4	11	38.2	22.0	12.7	36.3	20.9	12.1	34.9	20.2	11.6	1470	91.4	91.7	89.8	0.83	2.6	2.8	1.8	7.6	75	89	0.10537280
T3A 160L1–4	15	50.4	29.1	16.8	47.9	27.7	16.0	46.2	26.7	15.4	1470	92.1	92.3	91.3	0.85	3	3	2	9.2	75	110.5	0.13703810
T3A 180M–4	18.5	61.1	35.3	20.4	58.1	33.5	19.4	56.0	32.3	18.7	1470	92.6	92.8	92.1	0.86	2.8	3.3	1.9	8.8	80	130	0.17329310
T3A 180L–4	22	72.4	41.8	24.1	68.8	39.7	22.9	66.3	38.3	22.1	1470	93	93.1	92.3	0.86	3	3.5	2.1	9.3	80	145.4	0.20063720
T3A 200L–4	30	95.8	55.3	32.0	91.1	52.6	30.4	87.8	50.7	29.3	1470	93.6	93.7	92.9	0.88	3.2	3.7	2.1	9.7	83	180	0.26510010
T3A 711–6	0.18	1.20	0.69	0.40	1.14	0.66	0.38	1.09	0.63	0.36	930	63.9	61	53.4	0.62	2.4	2.6	2.3	3.5	52	5.4	0.00079000
T3A 712–6	0.25	1.48	0.85	0.49	1.40	0.81	0.47	1.35	0.78	0.45	920	68.6	67.2	61.2	0.65	2.2	2.5	2.2	3.7	52	6.3	0.00102000
T3A 801–6	0.37	1.95	1.12	0.65	1.85	1.07	0.62	1.78	1.03	0.59	930	73.5	73.8	70.5	0.68	2.2	2.5	2.1	4.1	56	9.3	0.00218934
T3A 802–6	0.55	2.64	1.52	0.88	2.51	1.45	0.84	2.42	1.40	0.81	930	77.2	78.1	75.7	0.71	2.3	2.4	2.1	4.3	56	10.9	0.00293059
T3A 803–6	0.75	3.97	2.29	1.32	3.77	2.18	1.26	3.64	2.10	1.21	935	78.9	78.2	74.4	0.63	2.8	3.1	2.6	4.9	59	12.5	0.00322709
T3A 90S–6	0.75	3.73	2.16	1.24	3.55	2.05	1.18	3.42	1.97	1.14	950	78.9	80.1	78.1	0.67	2.3	2.6	2.1	4.7	59	13.8	0.00406984
T3A 90L–6	1.1	5.33	3.08	1.78	5.07	2.93	1.69	4.88	2.82	1.63	950	81	81.1	78.4	0.67	2.7	2.9	2.5	5.2	59	16.2	0.00548739
T3A 90L2–6	1.5	7.14	4.12	2.38	6.78	3.92	2.26	6.54	3.78	2.18	950	82.5	82.7	80.5	0.67	2.9	3	2.5	5.6	61	21.3	0.00689472
T3A 100L1–6	1.5	6.84	3.95	2.28	6.49	3.75	2.16	6.26	3.61	2.09	955	82.5	83	81.8	0.7	2.4	2.9	2.2	5.5	61	22.1	0.00913729
T3A 100L2–6	2.2	9.54	5.51	3.18	9.06	5.23	3.02	8.73	5.04	2.91	955	84.3	85.1	83.9	0.72	2.5	3	2.2	6.2	64	27.7	0.01272548
T3A 112M1–6	2.2	10.1	5.83	3.37	9.59	5.54	3.20	9.25	5.34	3.08	965	84.3	84.5	83.2	0.68	2	2.5	1.9	5.5	64	27.1	0.01767543
T3A 112M2–6	3	13.4	7.72	4.46	12.7	7.33	4.23	12.2	7.07	4.08	965	85.6	86.2	84.8	0.69	2.5	2.9	1.9	6.3	64	33.1	0.02140041
T3A 132S–6	3	12.5	7.20	4.15	11.8	6.84	3.95	11.4	6.59	3.80	965	85.6	86	85.1	0.74	2	2.7	1.7	6	64	38.6	0.03380429
T3A 132M1–6	4	16.4	9.46	5.46	15.6	8.99	5.19	15.0	8.66	5.00	970	86.8	87.1	86.2	0.74	2.3	3	1.8	6.8	68	47.6	0.04394565
T3A 132M2–6	5.5	23.2	13.4	7.72	22.0	12.7	7.34	21.2	12.2	7.07	975	88	88.3	87.1	0.71	2.9	3.5	2.2	7.4	68	55.7	0.05398713
T3A 132M3–6	7.5	30.8	17.8	10.3	29.2	16.9	9.74	28.2	16.3	9.39	970	89.1	89.6	88.6	0.72	3.3	3.2	2	8.3	68	67.6	0.07072295
T3A 160M–6	7.5	29.1	16.8	9.72	27.7	16.0	9.23	26.7	15.4	8.90	975	89.1	89.5	88.5	0.76	2.2	2.9	1.8	7.3	68	79.6	0.10901170
T3A 160L–6	11	41.1	23.7	13.7	39.0	22.5	13.0	37.6	21.7	12.5	975	90.3	90.8	89.9	0.78	2.7	2.9	1.2	8.4	73	105	0.15484950
T3A 180L–6	15	52.1	30.1	17.4	49.5	28.6	16.5	47.7	27.6	15.9	980	91.2	91	89.8	0.83	2.5	3.3	2.1	8.2	77	125.2	0.27515650
T3A 200L1–6	18.5	67.2	38.8	22.4	63.8	36.9	21.3	61.5	35.5	20.5	980	91.7	91.3	90	0.79	2.5	3.3	2	8.5	80	143	0.33206640
T3A 200L2–6	22	79.5	45.9	26.5	75.5	43.6	25.2	72.8	42.0	24.3	980	92.2	92	90.9	0.79	2.8	3.5	2.2	8.8	80	162	0.38831630

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T4A Series IE4 Effciency Motors Technical Date (at 50Hz)

Model	Power	Eff.(%)			Power factor (cos Φ)	Current(A)			Speed (r/min)	T_n (Nm)	T_{start}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_s/I_n (Times)	Noise dB(A)	W.T (kg)	Inertia ($kg*m^2$)
		100%	75%	50%		230V	400V	690V									
T4A631–2	0.18	70.8	68.8	63.6	0.75	0.85	0.49	0.28	2870	0.624	2.6	2.9	2	5.5	61	3.8	0.000245
T4A631–2	0.25	74.3	73.1	68.7	0.77	1.1	0.63	0.37	2880	0.8637	2.7	3.2	2.4	6.3	61	4.5	0.000303
T4A711–2	0.37	78.1	77.3	73.4	0.78	1.52	0.88	0.51	2890	1.2739	2.8	3.3	2.3	6.7	64	5.7	0.000421
T4A712–2	0.55	81.5	81.1	77.9	0.79	2.14	1.23	0.71	2890	1.8936	2.9	3.5	2.5	6.8	64	6.7	0.000569
T4A801–2	0.75	83.5	83.6	81.5	0.8	2.82	1.62	0.94	2900	2.5733	3.7	3.9	2.5	8.8	67	9.5	0.001124
T4A802–2	1.1	85.2	85.2	83.3	0.82	3.95	2.27	1.32	2910	3.7612	4	4.2	2.6	10	67	12	0.001508
T4A90S–2	1.5	86.5	86.5	84.6	0.81	5.37	3.09	1.79	2910	5.1289	3.6	2.8	4	9.6	72	14.5	0.002296
T4A90L–2	2.2	88	88.2	86.9	0.83	7.56	4.35	2.52	2900	7.5483	4	4.2	3	10.5	72	18.5	0.003086
T4A100L–2	3	89.1	89.4	88.4	0.9	9.39	5.4	3.13	2910	10.258	3.7	2.9	3.9	11	76	28	0.005939
T4A112M–2	4	90	90.4	89.7	0.91	12.3	7.05	4.09	2920	13.63	3.5	2.6	3.9	10.5	77	35	0.00927
T4A132S1–2	5.5	90.9	90.9	89.5	0.9	17.3	9.93	5.63	2940	18.614	3.4	2.3	4	10.5	80	49	0.017735
T4A132S2–2	7.5	91.7	91.7	90.7	0.91	23.1	13.3	7.52	2940	25.383	3.8	2.3	4.1	10	80	59	0.02288
T4A160M1–2	11	92.6	93.2	92.1	0.91	32.6	18.8	10.9	2950	37.102	3.5	2.5	3.8	10	86	95	0.069134
T4A160M2–2	15	93.3	93.8	92.8	0.92	43.9	25.2	14.6	2960	50.422	3.6	2.5	3.8	10	86	116	0.090348
T4A160L–2	18.5	93.7	94.2	93.1	0.93	53.3	30.6	17.8	2960	62.188	3.8	2.5	4	10.3	86	136	0.107485
T4A631–4	0.12	69.8	68.2	66.5	0.66	0.65	0.38	0.22	1400	0.8529	2.3	2.7	2.3	4	52	4	0.000336
T4A632–4	0.18	74.7	74.1	69.7	0.67	0.9	0.53	0.3	1400	1.2793	2.6	2.8	2.4	4.3	52	4.8	0.00043
T4A711–4	0.25	77.9	77	72.9	0.65	1.24	0.71	0.41	1430	1.7395	3	3.4	2.8	5.6	55	6.5	0.000841
T4A712–4	0.37	81.1	80.5	77.2	0.66	1.74	1	0.58	1430	2.5745	3.4	3.6	3	6.2	55	8	0.001188
T4A801–4	0.55	83.9	83.3	80.6	0.67	2.46	1.41	0.82	1440	3.8003	3.4	3.7	3	6.8	57	11	0.002047
T4A802–4	0.75	85.7	85.3	82.8	0.67	3.28	1.97	1.09	1450	5.1466	3.7	4	3.1	7.3	58	13	0.002646
T4A90S–4*	1.1	87.2	87.1	84.4	0.69	4.59	2.64	1.53	1435	7.6272	4.8	3.8	4.1	8.2	61	18	0.004685
T4A90L–4*	1.5	88.2	88.1	86.1	0.71	6.01	3.46	2	1455	10.258	4.8	3.8	4.2	9.2	61	21.5	0.005696
T4A100L–4	2.2	89.5	89.6	88.2	0.76	8.12	4.67	2.71	1460	14.993	3.5	3	4.3	9.5	64	26	0.010435
T4A100L2–4*	3	90.4	89.7	88.1	0.75	11.1	6.41	3.7	1460	20.445	3.8	3.4	4.5	9.5	64	33	0.013074
T4A112M–4*	4	91.1	91	90	0.8	14	8.08	4.59	1460	27.26	4	3	4.5	9.8	65	41	0.019436
T4A132S–4	5.5	91.9	92.2	91.5	0.8	18.8	10.9	6.26	1470	37.228	3.4	2.1	4.1	10	71	56	0.043597
T4A132M–4	7.5	92.6	92.8	92.2	0.81	25.1	13.9	8.37	1470	50.765	4.4	2.2	4	10.2	71	74	0.05521
T4A160M–4	11	93.3	93.5	92.8	0.82	36.1	20.7	12	1475	74.203	2.8	2.2	3.2	9.1	75	100	0.127619
T4A160L–4	15	93.9	94.1	93.7	0.83	48.3	27.9	16.1	1475	101.19	3.2	2.2	3.5	9.2	75	126	0.165297
T4A711–6	0.18	70.1	66.8	60.2	0.6	1.07	0.62	0.36	940	1.9053	2.7	2.3	2.9	4.1	52	6.3	0.00102
T4A712–6	0.25	74.1	71.5	65.3	0.6	1.41	0.81	0.47	940	2.6463	2.8	2.4	2.9	4.5	52	7.4	0.00125
T4A801–6	0.37	78	76.7	72.2	0.61	1.95	1.12	0.65	950	3.8753	2.7	3.1	2.5	4.8	56	11	0.002634
T4A802–6*	0.55	80.9	80	76.3	0.61	2.8	1.61	0.93	950	5.7605	3.2	3.5	2.8	5.3	56	14	0.003677
T4A90S–6*	0.75	82.7	81.6	77.7	0.63	3.61	2.08	1.2	960	7.7734	2.8	2.4	3.2	5.7	59	15.5	0.004683
T4A90L–6*	1.1	84.5	83.5	80.5	0.65	5.03	2.89	1.68	960	11.401	3.1	2.5	3.3	5.9	59	20	0.006503
T4A100L–6	1.5	85.9	86.2	84.5	0.72	6.09	3.5	2.03	965	15.466	2.7	1.9	3	6.5	61	28	0.012757
T4A112M–6	2.2	87.4	87.2	85.4	0.69	9.16	4.98	3.05	970	22.567	3	2.6	3.8	7.5	64	35	0.02289
T4A132S–6	3	88.6	88.7	87.4	0.71	12	6.88	3.99	975	30.615	2.5	1.9	3.2	7.1	64	47	0.043846
T4A132M1–6	4	89.5	89.8	88.8	0.74	15.2	8.72	5.05	975	40.821	2.8	1.8	3.4	8	68	55	0.053987
T4A132M2–6	5.5	90.5	90.7	89.7	0.75	20.3	11.7	6.78	975	56.128	3.3	1.8	3.3	8.2	68	68	0.070723
T4A160M–6	7.5	91.3	91.5	90.3	0.77	26.7	15.4	8.89	980	76.148	3.3	1.8	3.3	8.5	68	92	0.128267
T4A160L–6	11	92.3	92.6	91.2	0.77	38.9	22.3	12.9	980	111.68	3.4	1.8	3.4	8.5	73	120	0.18523
T4A712–8	0.12	62.3	59.8	52.6	0.6	0.81	0.47	0.27	690	1.7304	2.2	2.3	2	2.9	50	7.5	0.001327
T4A801–8	0.18	67.2	64.1	56.8	0.52	1.29	0.74	0.43	710	2.5225	2.3	2.7	2	3.4	52	10	0.002323
T4A802–8	0.25	70.8	67.9	61	0.52	1.7	0.98	0.57	710	3.5035	2.7	3.1	2.4	3.7	52	12	0.00308
T4A90S–8	0.37	74.3	71.9	65.7	0.52	2.4	1.38	0.8	715	5.149	2.5	2.2	2.9	3.9	56	14	0.00407
T4A90L–8	0.55	77	75.4	70.1	0.52	3.45	1.98	1.15	710	7.7077	2.5	2.2	2.9	4	56	17.5	0.005498
T4A100L1–8	0.75	78.4	77.9	74.4	0.64	3.75	2.16	1.25	710	10.511	2.1	2.1	2.8	4.3	59	20.5	0.00834
T4A100L2–8	1.1	80.8	80.7	78.1	0.64	5.34	3.07	1.78	710	15.415	2.3	1.8	2.6	4.5	59	26	0.011561
T4A112M–8	1.5	82.6	82.3	79.5	0.63	7.24	4.16	2.41	715	20.874	2.5	2.3	3	5.1	61	33	0.0214
T4A132S–8	2.2	84.5	85.5	82.5	0.64	10.2	5.87	3.4	725	30.193	2.3	2	3	5.6	64	50	0.048867
T4A132M–8	3	85.9	86	84.2	0.67	13.1	7.52	4.36	725	41.172	2.5	2.1	3.1	6.3	64	61	0.062355
T4A160M1–8	4	87.1	87.5	86.3	0.69	16.7	9.61	5.57	725	54.9	2.2	1.7	2.8	5.6	68	76	0.101417
T4A160M2–8	5.5	88.3	88.7	87.8	0.7	22.3	12.8	7.45	725	75.483	2.5	1.8	3	6.1	68	94	0.135595
T4A160L–8	7.5	89.3	89.7	89	0.71	29.7	17.1	9.9	725	102.93	2.6	1.6	3	6.6	68	116	0.177635

Note:Model with*Will be Longer Non–drive Endshield & Fan Cover.

ROYSE

TAI Series MEPS2(Aus) High Effciency Technical Data (at 50Hz)

Model	Power (kW)	Current(A)			Current(A)			Speed (r/min)	Eff. (%)			Power factor (cos φ)	T_{st}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_{st}/I_n (Times)	Inertia (kg*m²)
		230V	400V	690V	240V	415V	720V		100%	75%	50%						
TAI 801–2	0.75	3.04	1.75	1.01	2.91	1.68	0.97	2880	79.4	78.6	74.5	0.78	2.9	3.3	1.9	7	0.00097215
TAI 802–2	1.1	4.15	2.38	1.38	3.97	2.30	1.32	2880	81.2	81.3	78.8	0.82	2.8	2.8	1.8	7.6	0.00119958
TAI 90S–2	1.5	5.45	3.14	1.82	5.23	3.02	1.74	2880	83.2	83.4	81.3	0.83	2.7	3	1.9	7	0.00185573
TAI 90L–2	2.2	7.92	4.55	2.64	7.59	4.39	2.53	2890	84	84.6	82.9	0.83	3	3.1	2.2	8.2	0.00241595
TAI 100L1–2	3	10.5	6.04	3.50	10.07	5.83	3.36	2900	85.3	84.9	83.2	0.84	3	3.6	2.7	7.6	0.00413131
TAI 112M1–2	4	13.1	7.51	4.35	12.5	7.24	4.17	2910	87.4	87.8	86.6	0.88	3.3	3.6	2	9.6	0.00631057
TAI 112M2–2	5.5	18.0	10.3	6.00	17.2	9.97	5.75	2915	88.2	88.5	87.3	0.87	3.4	4.1	2.8	10.2	0.00808716
TAI 132S1–2	5.5	17.8	10.3	5.95	17.1	9.89	5.70	2910	87.9	88.5	87.5	0.88	2.4	3.4	1.9	8.3	0.01331945
TAI 132S2–2	7.5	23.7	13.6	7.90	22.7	13.1	7.57	2920	89.3	89.8	89.1	0.89	3.1	3.7	2	10.3	0.01647312
TAI 160M1–2	11	34.3	19.7	11.4	32.9	19.0	11.0	2940	90.5	90.6	89.2	0.89	2.6	3.4	1.5	8.4	0.05009234
TAI 160M2–2	15	45.2	26.0	15.1	43.3	25.1	14.4	2950	92.5	92.7	91.9	0.9	2.6	3.4	1.8	9.4	0.06532599
TAI 160L–2	18.5	56.2	32.3	18.7	53.9	31.1	18.0	2950	90.8	91.7	91.8	0.91	3.2	3.7	1.8	9.8	0.07701810
TAI 180M–2	22	66.3	38.1	22.1	63.6	36.8	21.2	2950	91.5	91.1	89	0.91	2.5	2.9	1.4	8.1	0.09501562
TAI 200L1–2	30	91.0	52.3	30.3	87.2	50.4	29.1	2955	92	92.1	91.1	0.9	3.1	3.2	1.4	9.5	0.12224550
TAI 200L2–2	37	110.3	63.4	36.8	105.7	61.2	35.2	2955	92.5	92.3	91.3	0.91	2.8	3.5	1.3	9.6	0.14881550
TAI 801–4	0.55	2.51	1.45	0.84	2.41	1.39	0.80	1420	73.2	72.6	67.6	0.75	2	2.3	1.6	4.8	0.00145276
TAI 802–4	0.75	3.36	1.93	1.12	3.22	1.86	1.07	1420	81.1	81.3	78.6	0.69	3	3.1	2.5	5.5	0.00204691
TAI 803–4	1.1	4.87	2.80	1.62	4.67	2.70	1.56	1420	82.2	83.1	81.4	0.69	2.8	2.9	2.5	5.9	0.00252222
TAI 90S–4	1.1	4.45	2.56	1.48	4.26	2.46	1.42	1420	82.8	83.3	81.1	0.75	2.9	2.8	2.2	6.2	0.00350844
TAI 90L1–4	1.5	5.95	3.42	1.98	5.70	3.30	1.90	1440	84.4	85.3	84.1	0.75	3	3.2	2.4	7.3	0.00435209
TAI 100L1–4	2.2	7.85	4.51	2.62	7.52	4.35	2.51	1440	85.8	86.7	85.8	0.82	2.6	3.1	2.1	7.3	0.00776455
TAI 100L2–4	3	10.9	6.29	3.65	10.5	6.07	3.50	1445	86	86.6	85.4	0.8	2.9	3.4	2.4	8.1	0.00974347
TAI 112M1–4	4	14.0	8.06	4.67	13.4	7.76	4.48	1440	87.4	88.5	88	0.82	2.5	3.3	2.3	7.9	0.01374420
TAI 112M2–4	5.5	19.6	11.3	6.54	18.8	10.9	6.27	1425	87.9	88.8	88.3	0.8	3.7	3.6	3.1	8.3	0.01735491
TAI 132S–4	5.5	18.9	10.9	6.29	18.1	10.5	6.03	1460	88.1	88.5	87.4	0.83	2.1	3.5	1.9	8.6	0.03059302
TAI 132M1–4	7.5	25.5	14.7	8.51	24.5	14.1	8.15	1460	88.9	89.4	88.6	0.83	2.7	3.2	1.8	8.9	0.03972562
TAI 132M2–4	9.2	30.4	17.5	10.1	29.1	16.8	9.70	1455	89.5	90.4	90.2	0.85	2.9	3.2	1.7	8.7	
TAI 132M3–4	11	35.9	20.7	12.0	34.4	19.9	11.5	1450	90.4	91.1	90.7	0.85	3.3	3.6	1.5	9.3	0.05391993
TAI 160M–4	11	37.0	21.3	12.3	35.5	20.5	11.8	1460	89.9	90.5	90.1	0.83	2.5	2.7	1.7	7	0.08967352
TAI 160L1–4	15	49.1	28.2	16.4	47.1	27.2	15.7	1465	91.3	91.9	91.3	0.84	2.5	2.8	1.6	8.3	0.11819900
TAI 180M–4	18.5	57.7	33.2	19.2	55.3	32.0	18.4	1460	91.5	91.9	91.4	0.88	2.4	3	1.8	7.8	0.15506360
TAI 180L–4	22	68.4	39.4	22.8	65.6	37.9	21.9	1460	91.7	92.3	92	0.88	2.4	2.8	1.7	7.7	0.17329310
TAI 200L–4	30	94.3	54.2	31.4	90.3	52.2	30.1	1470	92.9	93.2	92.6	0.86	3.2	3.7	2.3	9.5	0.24231330
TAI 801–6	0.37	2.31	1.33	0.77	2.21	1.28	0.74	910	61	58.6	50.7	0.66	1.9	2.2	1.8	3.2	0.00159634
TAI 802–6	0.55	3.15	1.81	1.05	3.02	1.74	1.01	910	65.5	65.4	60.7	0.67	2.1	2.3	2	3.5	0.00204109
TAI 90S–6	0.75	3.86	2.22	1.29	3.70	2.14	1.23	940	76.2	75.6	71.4	0.64	2.2	2.5	1.9	4.5	0.00346669
TAI 90L–6	1.1	5.11	2.94	1.70	4.90	2.83	1.63	945	78.3	78.4	75.5	0.69	2.5	2.7	2.2	5.1	0.00488424
TAI 100L1–6	1.5	6.35	3.65	2.12	6.09	3.52	2.03	945	80.1	82	81.5	0.74	1.7	2.2	1.6	4.8	0.00833992
TAI 112M–6	2.2	9.26	5.33	3.09	8.88	5.13	2.96	950	82.8	83.9	82.8	0.72	2.1	2.7	1.8	5.5	0.01544044
TAI 132S–6	3	11.6	6.66	3.86	11.1	6.42	3.70	960	85.5	87	86.6	0.76	1.8	2.5	1.6	6.1	0.03213071
TAI 132M1–6	4	16.0	9.21	5.34	15.4	8.88	5.12	960	84.7	85.7	84.9	0.74	2	2.6	1.7	5.9	0.03892490
TAI 132M2–6	5.5	21.3	12.3	7.11	20.4	11.8	6.81	960	86.3	87.5	87.1	0.75	2.4	2.6	1.8	6.6	0.04896639
TAI 160M–6	7.5	27.8	16.0	9.28	26.7	15.4	8.90	965	87.8	88.8	88.3	0.77	2.5	2.9	1.9	6.9	0.09382144
TAI 160L–6	11	40.6	23.4	13.5	38.9	22.5	13.0	970	89.4	90.1	89.5	0.76	2.2	2.3	1.3	6.5	0.12826650
TAI 180L–6	15	50.6	29.1	16.9	48.5	28.1	16.2	975	89.6	89.4	88.6	0.83	2.2	2.7	1.2	8	0.25406280
TAI 200L1–6	18.5	64.1	36.9	21.4	61.5	35.5	20.5	980	90.5	90.8	89.8	0.8	2.5	2.9	1.7	7.6	0.30394140
TAI 200L2–6	22	73.3	42.1	24.4	70.2	40.6	23.4	980	90.8	91.2	90.5	0.83	2.3	2.6	2.3	7.6	0.35316010

ROYSE

IEC Frame-NEMA EPACT Efficiency Motors Technical Data (at 60Hz)

Model	Power		Current(A)		Current(A)	Speed (r/min)	Eff. (%)	Power factor (cos ϕ)	T_{st}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_{st}/I_n (Times)	Inertia (kg*m²)
IEC	(HP)	(kW)	230V	460V	575V								
TAF 801–2	1	0.75	3.24	1.62	1.30	3480	75.5	0.77	2.2	3.2	2.2	5.9	0.000896
TAF 802–2	1.5	1.1	4.13	2.07	1.65	3480	82.5	0.81	3.5	3.6	2.6	8.4	0.001124
TAF 90S–2	2	1.5	5.47	2.73	2.19	3510	84	0.82	3.3	3.7	1.7	9.2	0.001856
TAF 90L–2	3	2.2	7.78	3.89	3.11	3510	85.5	0.83	3.3	3.8	2.3	9.6	0.002306
TAF 100L1–2	4	3	9.78	4.89	3.91	3510	87.5	0.88	4.1	4.7	3.1	10.8	0.004842
TAF 112M1–2	5.5	4	12.8	6.38	5.10	3500	87.5	0.9	2.9	3.9	2.2	9.5	0.006311
TAF 132S1–2	7.5	5.5	17.1	8.57	6.86	3520	88.5	0.91	2.2	3.6	1.4	9	0.013950
TAF 132S2–2	10	7.5	22.9	11.4	9.15	3530	89.5	0.92	3.1	4.1	1.7	10.8	0.017735
TAF 160M1–2	15	11	34.4	17.2	13.8	3550	90.2	0.89	3	3.4	1.7	9.4	0.050092
TAF 160M2–2	20	15	46.4	23.2	18.6	3550	90.2	0.9	2.9	3.1	1.6	8.9	0.059613
TAF 160L–2	25	18.5	56.1	28.0	22.4	3550	91	0.91	3	3.3	1.8	9.6	0.069401
TAF 802–4	1	0.75	3.36	1.68	1.34	1740	82.5	0.68	3.4	3.7	2.9	7.1	0.001928
TAF 90S–4	1.5	1.1	4.63	2.31	1.85	1740	84	0.71	3.2	3.6	2.7	7.2	0.003342
TAF 90L1–4	2	1.5	5.98	2.99	2.39	1730	84	0.75	3	3.1	2.3	7.2	0.003852
TAF 100L1–4	3	2.2	7.79	3.90	3.12	1750	87.5	0.81	2.3	3.7	2.3	9.1	0.009084
TAF 100L2–4	4	3	10.37	5.18	4.15	1750	87.5	0.83	2.7	3.7	2.2	9	0.010403
TAF 112M1–4	5.5	4	13.8	6.91	5.53	1740	87.5	0.83	2.3	3.3	2.2	8.3	0.012197
TAF 132S–4	7.5	5.5	18.4	9.18	7.35	1760	89.5	0.84	2	3.5	1.9	9.1	0.030593
TAF 132M1–4	10	7.5	24.5	12.2	9.78	1760	89.5	0.86	2.7	3.4	1.6	9.3	0.037145
TAF 160M–4	15	11	36.1	18.1	14.4	1760	91	0.84	2.6	2.8	1.6	7.8	0.089674
TAF 160L1–4	20	15	48.7	24.3	19.5	1760	91	0.85	2.7	2.7	1.6	7.8	0.105640
TAF 90S–6	1	0.75	3.51	1.76	1.41	1145	80	0.67	2.2	2.6	2.1	5	0.003668
TAF 100L0–6	1.5	1.1	5.47	2.74	2.19	1170	85.5	0.59	3.3	4	2.6	7	0.009137
TAF 100L1–6	2	1.5	6.50	3.25	2.60	1160	86.5	0.67	3.3	3.8	3	6.9	0.011529
TAF 112M–6	3	2.2	9.02	4.51	3.61	1170	87.5	0.7	2.6	3.2	2	6.9	0.019910
TAF 132S–6	4	3	12.0	5.98	4.78	1170	87.5	0.72	2	2.8	1.7	6.3	0.035478
TAF 132M1–6	5.5	4	15.7	7.86	6.29	1170	87.5	0.73	2.2	2.8	1.7	6.6	0.038925
TAF 132M2–6	7.5	5.5	20.8	10.4	8.34	1170	89.5	0.74	2.4	3	1.9	7.3	0.059008
TAF 160M–6	10	7.5	27.0	13.5	10.8	1160	89.5	0.78	2.2	2.8	1.8	7	0.101417
TAF 160L–6	15	11	39.2	19.6	15.7	1170	90.2	0.78	2.3	2.9	1.8	7.2	0.128267

ROYSL

IEC Frame-NEMA Premium Efficiency Motors Technical Data (at 60Hz)

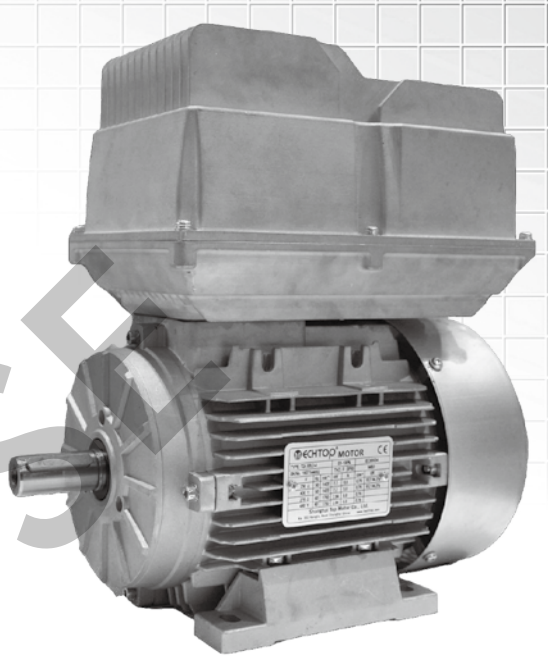
Model	Power		Current(A)		Current(A)	Speed (r/min)	Eff. (%)	Power factor (cos ϕ)	T_{st}/T_n (Times)	T_{max}/T_n (Times)	T_{min}/T_n (Times)	I_{st}/I_n (Times)	Inertia (kg*m²)
IEC	(HP)	(kW)	230V	460V	575V								
T 801–2	1	0.75	3.13	1.57	1.25	3490	77	0.78	2.7	3.1	1.5	7.3	0.000896
T 802–2	1.5	1.1	4.11	2.05	1.64	3510	84	0.8	3.8	4.1	2.6	9.7	0.001275
T 90S–2	2	1.5	5.18	2.59	2.07	3500	85.5	0.85	2.9	3.3	2	9.1	0.001966
T 90L–2	3	2.2	7.34	3.67	2.94	3490	86.5	0.87	2.7	3.3	1.6	8.4	0.002416
T 100L1–2	4	3	9.56	4.78	3.82	3520	88.5	0.89	4.9	4.7	2.4	11.9	0.005197
T 112M1–2	5.5	4	12.6	6.30	5.04	3520	88.5	0.9	3.2	4	2.4	10.9	0.006893
T 132S1–2	7.5	5.5	17.0	8.48	6.78	3520	89.5	0.91	2.6	3.6	1.7	9.6	0.015212
T 132S2–2	10	7.5	22.7	11.3	9.08	3520	90.2	0.92	2.5	3.5	1.4	8.7	0.018996
T 132M–2	15	11	33.0	16.5	13.2	3530	91	0.92	3.5	4.7	0.8	11.5	0.023511
T 160M1–2	15	11	33.7	16.9	13.5	3550	91	0.9	2.7	3.3	0.9	8.8	0.053901
T 160M2–2	20	15	45.5	22.7	18.2	3550	91	0.91	3	3.3	1.4	9.6	0.065326
T 160L–2	25	18.5	55.7	27.8	22.3	3550	91.7	0.91	3.3	3.4	1.5	10.2	0.077018
T 802–4	1	0.75	3.06	1.53	1.22	1740	85.5	0.72	2.7	3	2.3	6.7	0.002285
T 90S–4	1.5	1.1	4.37	2.19	1.75	1740	86.5	0.73	3.6	3.7	2.6	7.7	0.003842
T 90L–4	2	1.5	5.65	2.83	2.26	1740	86.5	0.77	3	3.2	2.1	7.8	0.004685
T 100L1–4	3	2.2	7.71	3.86	3.09	1760	89.5	0.8	3	4	2.4	9.5	0.009743
T 100L2–4	4	3	10.65	5.33	4.26	1750	89.5	0.79	3.4	4.1	2.9	9.3	0.011063
T 112M1–4	5.4	4	13.2	6.60	5.28	1750	89.5	0.85	2.8	3.5	2.2	8.9	0.015292
T 132S–4	7.5	5.5	17.9	8.96	7.17	1770	91.7	0.84	2.6	4	1.9	10.1	0.038335
T 132M1–4	10	7.5	23.9	11.9	9.55	1760	91.7	0.86	3.1	3.8	1.7	10.3	0.046178
T 160M–4	15	11	36.0	18.0	14.4	1770	92.4	0.83	3.1	3.1	2	9	0.105373
T 160L1–4	20	15	47.6	23.8	19.1	1770	93	0.85	3.2	3	2	8.9	0.137038
T 90S–6	1	0.75	3.26	1.63	1.30	1145	82.5	0.7	2.3	2.7	2.1	5.2	0.004472
T 100L0–6	1.5	1.1	4.93	2.47	1.97	1175	87.5	0.64	3	3.6	2.4	7.1	0.011529
T 100L1–6	2	1.5	6.65	3.32	2.66	1170	88.5	0.64	2.9	3.9	2.8	7.2	0.013124
T 112M–6	3	2.2	8.94	4.47	3.58	1175	89.5	0.69	3.2	3.7	2.2	7.9	0.025870
T 132S–6	4	3	12.0	6.01	4.81	1175	89.5	0.7	2.6	3.2	1.9	7.1	0.048867
T 132M1–6	5.5	4	14.8	7.38	5.90	1170	89.5	0.76	2.3	2.9	1.6	7.3	0.053987
T 132M2–6	7.5	5.5	20.2	10.1	8.09	1170	91	0.75	3.4	3.5	1.9	8.8	0.079091
T 160M–6	10	7.5	27.6	13.8	11.0	1180	91	0.75	3.1	3.7	1.7	8.4	0.128267
T 160L–6	15	11	40.7	20.3	16.3	1180	91.7	0.74	3.1	3.7	1.7	8.5	0.177635

ROYSL

TFC Series
Frequency Converters

TFC series low-voltage frequency converters is one of the newest products of TECHTOP, using which you can easily control the motor operation and save energy.

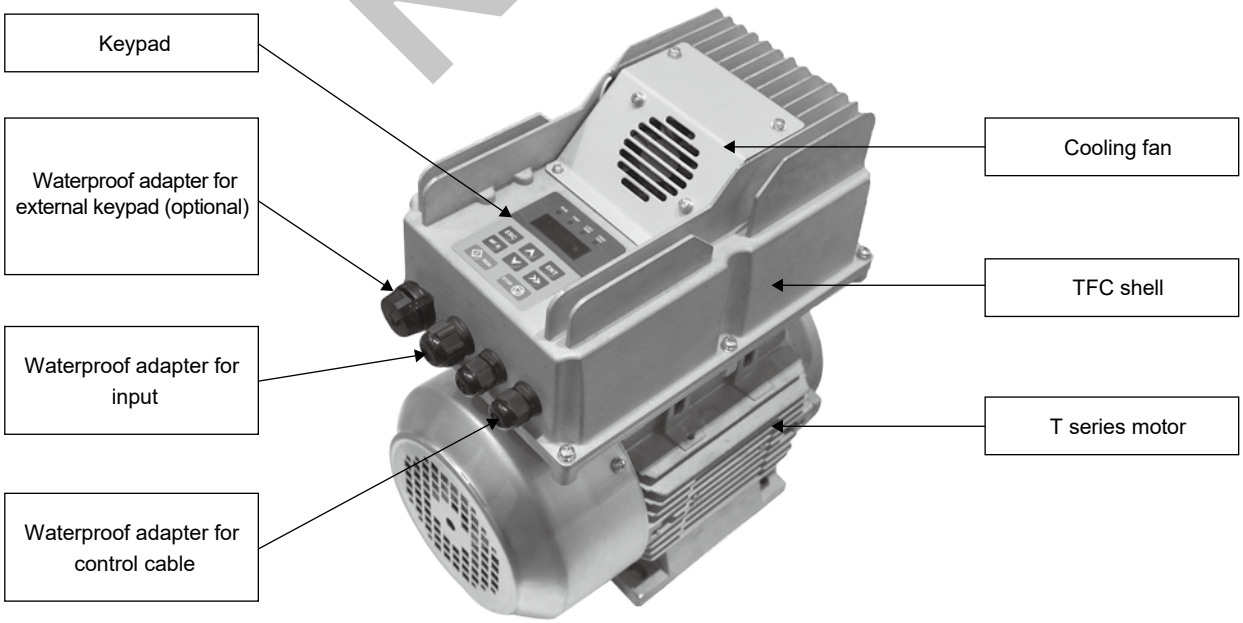
This new series is based on the developer's latest technology and perfectly matches with TECHTOP's T series motors. It provides a power range of 0.25kW ~ 11kW, as well a compact and integrated structure design which is available for both of motor mounting and wall mounting.



Characteristics and advantages:

- Perfectly matching with TECHTOP's T series three phase motor in both of electrical design and mechanical design.
- Integrated structure design, compact and light.
- Multiple installation models, motor mounting and wall mounting.
- Protection degree IP55, shake-proof level 4g.
- Integrated cooling fan, better cooling performance.
- User-friendly wiring connection.
- Optional external keypad.

Product appearance



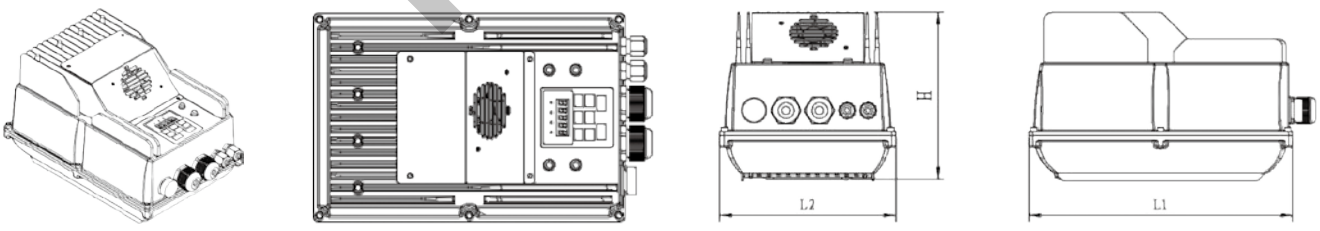
ROYSE

Technical parameters

Main power	Input voltage	Three phase 220VAC, -15% ~ +30%.
		Three phase 380VAC, -15% ~ +30%.
	Input frequency	50/60Hz, ±5%.
Power output	Output voltage	0VAC ~ Uin
	Output frequency	0 ~ 600Hz
	Frequency resolution	0.01Hz
	Overload capacity	150%-1min; 180%-10s; 200%-1s.
Control characteristics	Control mode	V/F control; No PG vector control1; No PG vector control 2.
	Carrier frequency	0.7 ~ 16kHz
	Acceleration time	0.1 ~ 6000.0s
	Deceleration time	0.1 ~ 6000.0s
	Torque boost	Auto torque boost Manually torque boost 0.1 ~ 30.0%.
	DC brake	DC brake frequency: 0 ~ max. frequency; Brake time: 0.0 ~ 10.0s; Brake action current value: 0.0 ~ 150.0%.
Environment conditions	Ambient temperature	-10°C (Non-condensation) ~ +40℃: no derating.
	Storage temperature	-40°C ~ +70°C
	Altitude	≤1000m: no derating. Derating use 1% per 100m rise when the altitude is above 1000 meters, max. 3000m
	Protection degree	IP55
EMC characteristics	Anti-interference	Conform to IEC 61800-3 1st and 2nd environmental standard.
	Radiation level	C3 level EMC filter standard.
Certificate		CE

ROYSE

Outline dimensions



Size	Adaptive motor frame size	L1	L2	H
A	63#, 71#	221	154	140
B	80#, 90#	260	166	162
C	100#, 112#	315	210	198
D	132#	380	260	214

Model name description

TFC - A - 4T - 0.2G/0.4P

- TFC: Techtop Frequency Converter
- A: Adaptive motor frame size:
  A = 63#, 71#
  B = 80#, 90#
  C = 100#, 112#
  D = 132#
- 4: Input voltage:
  2 = 220V (-15% ~ +30%)
  4 = 380V (-15% ~ +30%)
- T: Input voltage phase:
  S: single phase
  T: three phase
- 0.2G/0.4P: Adaptive motor power (kW) and type of application:
  0.2: 0.25kW
  0.4: 0.37kW
  G: general application
  P: fan and pump application

Technical data

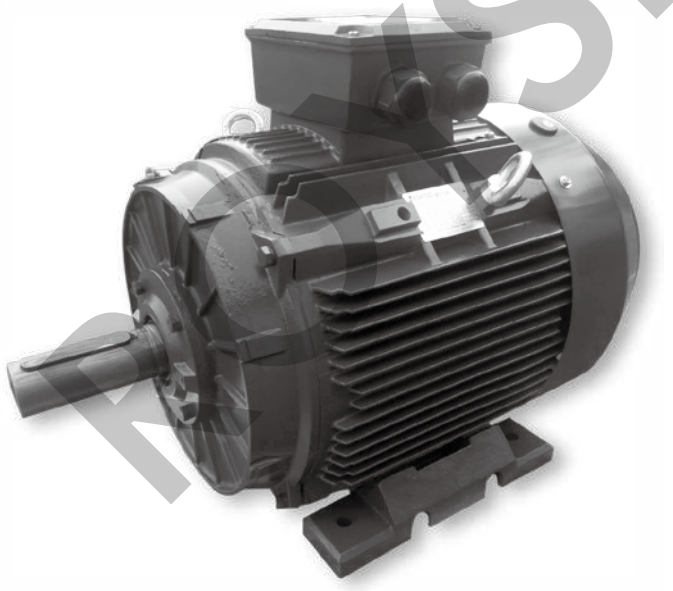
Model	Power capacity (KVA)	Rated input current (A)	Rated output current (A)	Adaptive motor power	
				(kW)	(HP)
Three phase, 220V (-15% ~ +30%), 50/60Hz.					
TFC-A-2T-0.2	1.2	2.3	2.0	0.25	0.35
TFC-A-2T-0.4	1.5	3.4	2.5	0.37	0.5
TFC-A-2T-0.5	2.2	4.0	3.5	0.55	0.75
TFC-B-2T-0.7	3	5.0	4.2	0.75	1
TFC-B-2T-1.1	4	5.8	5.5	1.1	1.5
TFC-C-2T-1.5	4.5	8	7.0	1.5	2
TFC-C-2T-2.2	6	11	9.5	2.2	3
TFC-C-2T-3.0	8.9	14.6	13	3.0	4
TFC-D-2T-4.0	11	20.5	17	4.0	5
TFC-D-2T-5.5	14	24	21	5.5	7.5
Three phase, 380V (-15% ~ +30%), 50/60Hz.					
TFC-A-4T-0.2G/0.4P	0.7	1.2	1.0	0.25	0.35
TFC-A-4T-0.4G/0.5P	1	1.7	1.5	0.37	0.5
TFC-A-4T-0.5G/0.7P	1.2	2.3	2.0	0.55	0.75
TFC-A-4T-0.7G/1.1P	1.5	3.4	2.5	0.75	1
TFC-A-4T-1.1G/1.5P	2.2	4.0	3.5	1.1	1.5
TFC-B-4T-1.5G/2.2P	3	5.0	4.2	1.5	2
TFC-B-4T-2.2G/3.0P	4	5.8	5.5	2.2	3
TFC-C-4T-3.0G/4.0P	4.5	8	7.0	3.0	4
TFC-C-4T-4.0G/5.5P	6	11	9.5	3.7 (4.0)	5
TFC-C-4T-5.5G/7.5P	8.9	14.6	13	5.5	7.5
TFC-D-4T-7.5G/9.0P	11	20.5	17	7.5	10
TFC-D-4T-9.0G/11P	14	24	21	9.0	12
TFC-D-4T-11G	17	26	25	11	15

ROYSE

"ECOL" Motors
in Cast Iron Housing

FEATURES

- Energy savings, high efficiency
- High starting torque, lower starting current
- Versatile and easy to modify design adapts to a variety of applications
- Option of integrated or removable feet
- Option of terminal box location (top, left or right)
- Option of IE2, IE3, MEPS High and Premium Efficiency for IEC standards + NEMA EPACT and Premium Efficiency
- Contained total length is the same as or shorter than the current market standard
- Full use of the magnetization properties of cold rolled silicone steel in which the stator laminations are magnetized evenly to reduce temperature rise of the winding

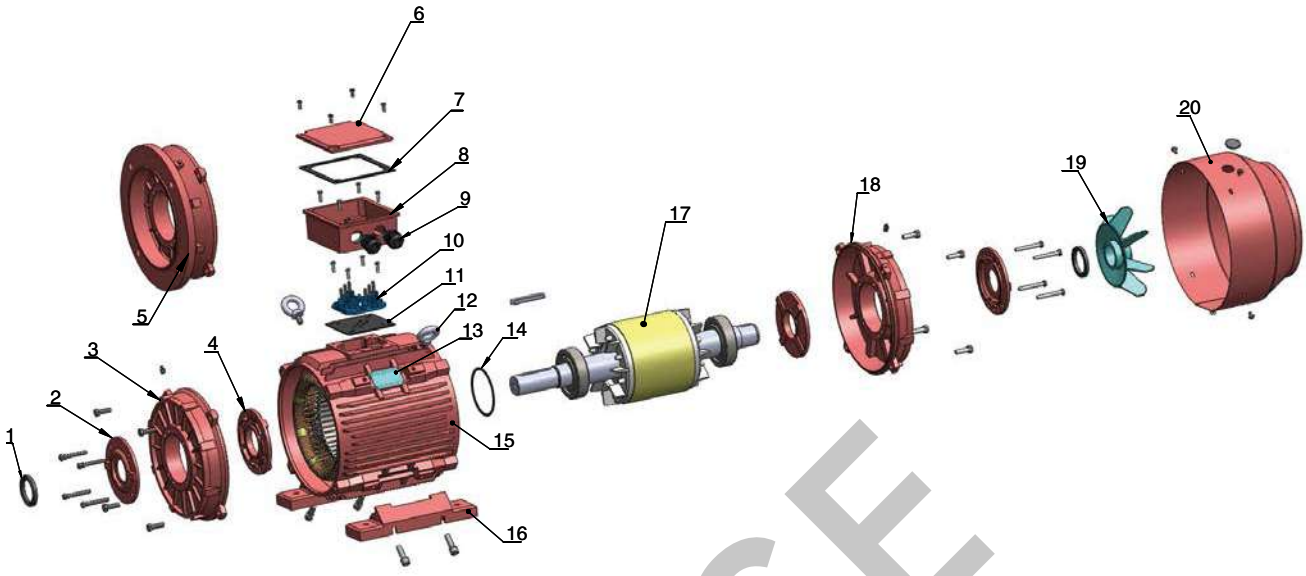


RISE

APPLICATIONS

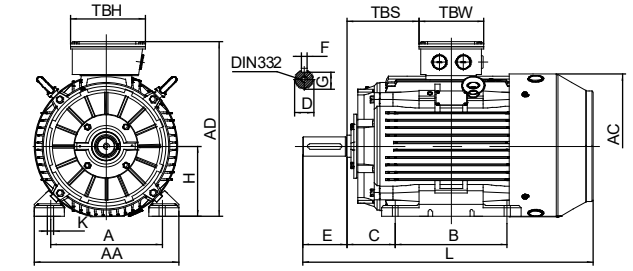
- Pumps
- Waste water treatment plants
- Air compressors, fans
- Gear reducers and power transmission
- Pulp and paper mills
- Steel mill
- Conveyors, elevators
- Should be "Material handling equipment"
- Agricultural application
- Mining equipment
- Hydraulic equipment

Motor Spare Part List "Exploded Drawing"

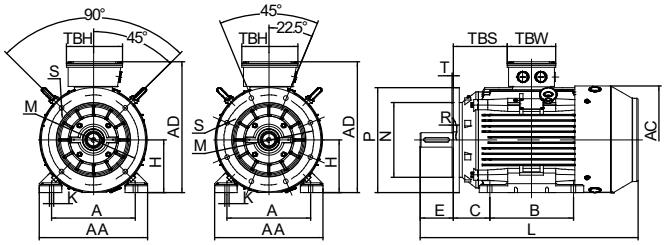


1. Oil seal
2. Outer bearing cap D.E
3. DE endshield
4. Inner bearing cap D.E
5. B5 flange
6. TB cover
7. TB upper gasket
8. TB base
9. Cable gland
10. Terminal board
11. TB bottom gasket
12. Eye bolt
13. Nameplate
14. Wave washer
15. Frame
16. Foot
17. Rotor
18. NDE endshield
19. Cooling fan
20. Fan cover

ROYSE



IM B3



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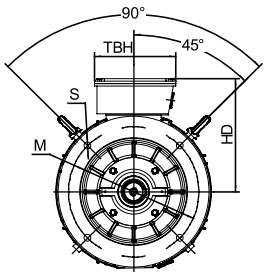
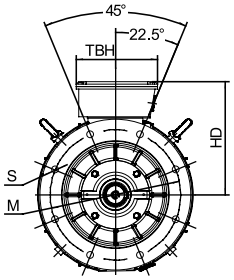


H80-H200



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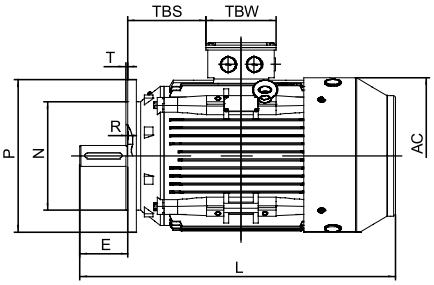
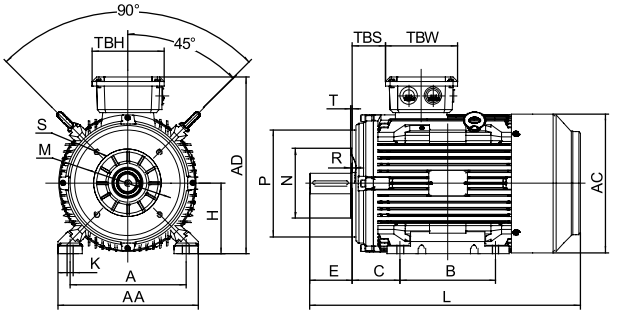


IM B5



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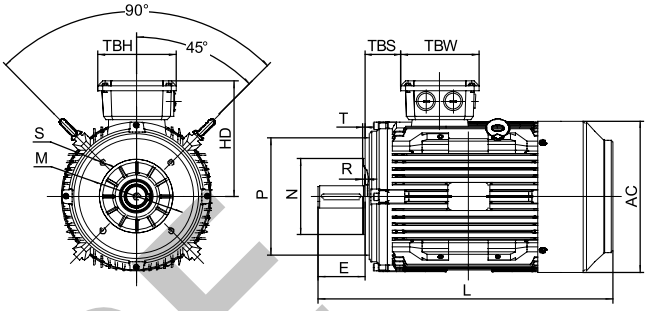

IM B14

Overall & Installation Dimensions

Frame		Foot Mounting				Shaft					General							
		H	A	B	C	D	E	F	G	K	AA	AD	HD	AC	L	TBS	TBW	TBH
80		80	125	100	50	Φ19	40	6	15.5	Φ9	154	214	134	Φ158	290	43	114	114
90S/L		90	140	100/125	56	Φ24	50	8	20	Φ10	178	231	141	Φ176	320/345	49/61.5	114	114
100L		100	160	140	63	Φ28	60	8	24	Φ12	203	251	151	Φ199	385	76	114	114
112M		112	190	140	70	Φ28	60	8	24	Φ12	231	292	180	Φ220	405	73	134	134
132S/M		132	216	140/178	89	Φ38	80	10	33	Φ12	263	332	200	Φ259	467/505	61.5	134	134
160M/L		160	254	210/254	108	Φ42	110	12	37	Φ15	316	404	244	Φ313	605/650	91	162	187
180M/L		180	279	241/279	121	Φ48	110	14	42.5	Φ15	354	445	265	Φ360	687/725	160/180	162	187
200L		200	318	305	133	Φ55	110	16	49	Φ19	393	500	300	Φ399	768.5	192	186	233
225S	4,6,8	225	356	286	149	Φ60	140	18	53	Φ19	440	558	333	Φ459	810	199	186	233
225M	2	225	356	311	149	Φ55	110	16	49	Φ19	440	558	333	Φ459	805	211.5	186	233
	4,6,8	225	356	311	149	Φ60	140	18	53	Φ19	440	558	333	Φ459	835	211.5	186	233
250M	2	250	406	349	168	Φ60	140	18	53	Φ24	484	616	366	Φ506	915	233	218	260
	4,6,8	250	406	349	168	Φ65	140	18	58	Φ24	484	616	366	Φ506	915	233	218	260
280S/M	2	280	457	368/419	190	Φ65	140	18	58	Φ24	560	675	395	Φ559	984/1035	265/277	218/245	260/280
	4,6,8	280	457	368/419	190	Φ75	140	20	67.5	Φ24	560	675	395	Φ559	984/1035	265/277	218/245	260/280
315S	2	315	508	406	216	Φ65	140	18	58	Φ28	628	825	510	Φ680	1205	200	290	350
	4,6,8	315	508	406	216	Φ80	170	22	71	Φ28	628	825	510	Φ680	1235	200	290	350
315M/L	2	315	508	457/508	216	Φ65	140	18	58	Φ28	628	825	510	Φ680	1355	200	290	350
	4,6,8	315	508	457/508	216	Φ80	170	22	71	Φ28	628	825	510	Φ680	1385	200	290	350
355M/L	2	355	610	560/630	254	Φ75	140	20	67.5	Φ28	740	1010	655	Φ820	1495	140	330	380
	4,6,8	355	610	560/630	254	Φ95	170	25	86	Φ28	740	1010	655	Φ820	1525	140	330	380
	4,6,8	355	610	560/630	254	Φ100	210	28	90	Φ28	740	1010	655	Φ820	1565	140	330	380

Frame		Bearings		Cable Gland	B5						B14					
		DE	NDE		N	M	P	S	T	R	N	M	P	S	T	R
80		6204		1-M20×1.5	Φ130	Φ165	Φ200	4×Φ12	3.5	0	Φ80	Φ100	Φ120	M6	3	0
90S/L		6205		1-M20×1.5	Φ130	Φ165	Φ200	4×Φ12	3.5	0	95	115	140	M8	3	0
100L		6206		1-M20×1.5	Φ180	Φ215	Φ250	4×Φ15	4	0	110	130	160	M8	3.5	0
112M		6306		2-M25×1.5	Φ180	Φ215	Φ250	4×Φ15	4	0	110	130	160	M8	3.5	0
132S/M		6308		2-M25×1.5	Φ230	Φ265	Φ300	4×Φ15	4	0	130	165	200	M10	3.5	0
160M/L		6309		2-M32×1.5	Φ250	Φ300	Φ350	4×Φ19	5	0	180	215	250	M12	5	0
180M/L		6311		2-M32×1.5	Φ250	Φ300	Φ350	4×Φ19	5	0						
200L		6312		2-M40×1.5	Φ300	Φ350	Φ400	4×Φ19	5	0						
225S/M		6313		2-M50×1.5	Φ350	Φ400	Φ450	8×Φ19	5	0						
250M		6314		2-M50×1.5	Φ450	Φ500	Φ550	8×Φ19	5	0						
280S/M		6316		2-M50×1.5	Φ450	Φ500	Φ550	8×Φ19	5	0						
315S/M/L	2	6317		2-M63×1.5	Φ550	Φ600	Φ660	8×Φ24	6	0						
	4,6,8	NU319	6319													
355M/L	2	6319		2-M63×1.5	Φ680	Φ740	Φ800	8×Φ24	6	0						
	4,6,8	NU322	6322													

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T1C Series IE1 Efficiency Motors Technical Data (400V/50Hz)

Model	Output (kW)	Rated current (A)	Rotation speed (r/min)	Efficiency 100% load (%)	Efficiency 75% load (%)	Efficiency 50% load (%)	Power factor (Φ)	Rated torque (N.m)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	I_{st}/I_n (Times)	Nosie (dB)	Net weight (kg)	Moment of inertia(kg*m^2)
T1C 801–2	0.75	2.06	2840	72.1	73.3	69.0	0.73	2.52	2.2	1.8	2.3	6	67	14.3	0.00093
T1C 802–2	1.1	2.90	2840	75	77.7	74.8	0.73	3.70	2.2	1.8	2.3	7	67	16.0	0.00110
T1C 90S–2	1.5	3.79	2840	77.2	78.5	75.1	0.74	5.04	2.2	1.8	2.3	7	72	18.5	0.00184
T1C 90L–2	2.2	5.04	2840	79.7	80.9	78.8	0.79	7.40	2.2	1.8	2.3	7.5	72	22.0	0.00239
T1C 100L–2	3	6.56	2840	81.5	82.8	80.1	0.81	10.09	2.2	1.8	2.3	7.5	76	32.0	0.00368
T1C 112M–2	4	8.58	2900	83.1	84.9	82.6	0.81	13.17	2.2	1.8	2.3	7.5	77	41.0	0.01613
T1C 132S1–2	5.5	11.16	2900	84.7	85.5	82.8	0.84	18.11	2.2	1.8	2.3	7.5	80	57.5	0.01106
T1C 132S2–2	7.5	14.81	2900	86	87.1	84.7	0.85	24.70	2.2	1.8	2.3	7.5	80	62.0	0.01468
T1C 132M1–2	9.2	17.75	2900	87	88.2	86.1	0.86	30.30	2.2	1.4	2.3	7.5	80	68.5	0.01767
T1C 160M1–2	11	20.14	2945	87.6	88.9	86.6	0.90	35.67	2.2	1.4	2.3	8.5	86	111.0	0.04150
T1C 160M2–2	15	27.74	2945	88.7	90.0	88.1	0.88	48.64	2.2	1.4	2.3	9	86	122.0	0.05384
T1C 160L–2	18.5	35.18	2945	89.3	91.0	89.5	0.85	59.99	2.2	1.4	2.3	10	86	140.0	0.06436
T1C 180M–2	22	39.25	2945	89.9	89.9	87.6	0.90	71.34	2.2	1.3	2.3	8	89	153.0	0.08110
T1C 200L1–2	30	53.0	2950	90.7	91.4	89.7	0.90	97.12	2.0	1.3	2.3	7.5	92	218.0	0.15138
T1C 200L2–2	37	65.1	2950	91.2	92.7	91.5	0.90	119.8	2.0	1.3	2.3	7.5	92	230.0	0.17351
T1C 225M–2	45	78.7	2955	91.7	91.4	89.7	0.90	145.4	2.0	1.3	2.3	7.5	92	303.0	0.24178
T1C 250M–2	55	95.8	2970	92.1	92.5	90.7	0.90	176.9	2.0	1.3	2.3	9	93	391.0	0.38903
T1C 280S–2	75	129.7	2970	92.7	92.9	91.1	0.90	241.2	2.0	1.3	2.3	9	94	530.0	0.69871
T1C 280M–2	90	155.2	2970	93	92.8	90.9	0.90	289.4	2.0	1.3	2.3	9	94	572.0	0.79539
T1C 315S–2	110	189.1	2970	93.3	94.0	92.5	0.90	353.7	2.0	1.5	2.2	7	96	900.0	1.41216
T1C 315M–2	132	223.9	2970	93.5	94.1	92.8	0.91	424.4	2.0	1.5	2.2	7	96	970.0	1.55013
T1C 315L1–2	160	273.6	2970	93.8	94.2	93.0	0.90	514.5	2.0	1.5	2.2	7	99	1010.0	1.71199
T1C 315L2–2	200	341.2	2970	94	94.3	93.1	0.90	643.1	2.0	1.5	2.2	7	99	1070.0	1.90623
T1C 355M1–2	220	375.3	2980	94	94.3	93.1	0.90	705.0	2.0	1.2	2.2	7	103	1590.0	2.95585
T1C 355M2–2	250	426.5	2980	94	94.4	93.2	0.90	801.2	2.0	1.2	2.2	7	103	1650.0	3.14272
T1C 355L1–2	280	477.7	2980	94	94.5	93.2	0.90	897.3	2.0	1.2	2.2	7	103	1715.0	3.47911
T1C 355L2–2	315	537.4	2980	94	94.5	93.2	0.90	1009.5	2.0	1.2	2.2	7	103	1780.0	3.85287
T1C 801–4	0.55	1.51	1420	70	72.5	70.2	0.75	3.70	2.3	2.0	2.6	6	58	13.5	0.00141
T1C 802–4	0.75	2.00	1420	72.1	79.2	76.8	0.75	5.04	2.3	2.0	2.6	6	58	14.6	0.00168
T1C 90S–4	1.1	2.82	1430	75	77.8	74.5	0.75	7.35	2.3	2.0	2.6	6.5	61	18.0	0.00238
T1C 90L–4	1.5	3.69	1430	77.2	80.0	77.3	0.76	10.02	2.3	2.0	2.6	6.5	61	23.0	0.00335
T1C 100L1–4	2.2	4.98	1430	79.7	79.3	75.6	0.80	14.69	2.2	2.0	2.6	6.5	64	32.0	0.00688
T1C 100L2–4	3	6.64	1435	81.5	82.6	79.9	0.80	19.97	2.2	2.0	2.6	7.5	64	35.0	0.00883
T1C 112M–4	4	8.47	1435	83.1	86.2	84.7	0.82	26.62	2.2	2.0	2.6	7.5	65	44.0	0.01311
T1C 132S–4	5.5	11.29	1440	84.7	87.5	85.6	0.83	36.48	2.2	1.6	2.6	7.5	71	61.0	0.02679
T1C 132M–4	7.5	14.81	1440	86	88.6	86.9	0.85	49.74	2.2	1.6	2.6	7.5	71	76.0	0.03694
T1C 132M2–4	9.2	18.17	1440	86	88.6	85.8	0.85	61.01	2.2	1.6	2.6	7.5	71	79.0	0.04412
T1C 160M–4	11	21.58	1465	87.6	89.7	88.8	0.84	71.71	2.2	1.6	2.6	8.5	75	115.0	0.07659
T1C 160L–4	15	28.06	1465	88.7	90.8	90.2	0.87	97.78	2.2	1.6	2.6	8	75	137.0	0.10379
T1C 180M–4	18.5	33.98	1465	89.3	90.6	89.3	0.88	120.6	2.2	1.6	2.6	8	76	149.5	0.14084
T1C 180L–4	22	40.14	1465	89.9	90.7	89.3	0.88	143.4	2.2	1.6	2.6	8	76	165.0	0.16541
T1C 200L–4	30	56.16	1475	90.7	92.3	91.6	0.85	194.2	2.2	1.6	2.6	8	79	216.5	0.26594
T1C 225S–4	37	68.9	1480	91.2	90.9	88.8	0.85	238.8	2.2	1.3	2.6	7	81	293.0	0.50439
T1C 225M–4	45	83.3	1480	91.7	92.6	91.0	0.85	290.4	2.2	1.3	2.6	7	81	335.0	0.57909
T1C 250M–4	55	100.2	1480	92.1	92.4	90.7	0.86	354.9	2.2	1.3	2.6	8	83	397.0	0.69098
T1C 280S–4	75	131.2	1480	92.7	93.1	93.2	0.89	484.0	2.2	1.3	2.6	9	86	540.0	1.41285
T1C 280M–4	90	155.2	1480	93	93.4	93.5	0.90	580.7	2.2	1.3	2.6	9	86	620.0	1.74607
T1C 315S–4	110	189.1	1480	93.3	93.8	93.2	0.90	709.8	2.0	1.3	2.3	7	93	915.0	2.90486
T1C 315M–4	132	226.4	1480	93.5	94.0	93.6	0.90	851.8	2.0	1.3	2.3	7	93	1005.0	3.29579
T1C 315L1–4	160	273.6	1480	93.8	94.0	93.5	0.90	1032.4	2.0	1.3	2.3	7	97	1068.0	3.73367
T1C 315L2–4	200	341.2	1480	94	94.3	93.9	0.90	1290.5	2.0	1.3	2.3	7	97	1210.0	4.67201
T1C 355M1–4	220	379.6	1480	94	94.5	94.0	0.89	1419.6	2.0	1.2	2.3	7	101	1560.0	6.87200
T1C 355M2–4	250	431.3	1480	94	94.5	94.0	0.89	1613.2	2.0	1.2	2.3	7	101	1600.0	7.63820
T1C 355L1–4	280	483.1	1480	94	94.5	94.0	0.89	1806.8	2.0	1.2	2.3	7	101	1650.0	8.31927
T1C 355L2–4	315	537.4	1485	94	94.6	94.1	0.90	2025.8	2.0	1.2	2.3	7	101	1700.0	9.08547
T1C 355L3–4	355	605.7	1485	94	94.6	94.1	0.90	2283.0	2.0	1.2	2.3	7	101	1780.0	10.10708

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T1C Series IE1 Efficiency Motors Technical Data (400V/50Hz)

Model	Output (kW)	Rated current (A)	Rotation speed (r/min)	Efficiency 100% load (%)	Efficiency 75% load (%)	Efficiency 50% load (%)	Power factor (Φ)	Rated torque (N.m)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	I_{st}/I_n (Times)	Nosie (dB)	Net weight (kg)	Moment of inertia($kg*m^2$)
T1C 801–6	0.37	1.49	900	59.7	60.5	55.7	0.60	3.93	2.0	1.8	2.2	5.5	54	14.0	0.00231
T1C 802–6	0.55	1.95	900	65.8	66.1	62.3	0.62	5.84	2.0	1.8	2.2	5.5	54	15.0	0.00284
T1C 90S–6	0.75	2.34	935	70	70.4	65.8	0.66	7.66	2.0	1.8	2.2	5.5	57	19.0	0.00335
T1C 90L–6	1.1	3.20	935	72.9	74.2	70.8	0.68	11.24	2.0	1.8	2.2	5.5	57	21.6	0.00461
T1C 100L–6	1.5	3.94	940	75.2	75.7	72.4	0.73	15.24	2.0	1.8	2.2	5.5	61	29.5	0.00783
T1C 112M–6	2.2	5.68	940	77.7	79.3	76.2	0.72	22.35	2.0	1.8	2.2	6	65	38.0	0.01383
T1C 132S–6	3	7.24	940	79.7	80.2	76.8	0.75	30.48	2.0	1.8	2.2	6	69	49.6	0.02855
T1C 132M1–6	4	9.58	950	81.4	82.8	80.1	0.74	40.21	2.0	1.8	2.5	6	69	59.4	0.03601
T1C 132M2–6	5.5	12.91	950	83.1	83.0	80.6	0.74	55.29	2.0	1.8	2.5	7.5	69	65.0	0.04890
T1C 160M–6	7.5	16.82	965	84.7	87.0	85.2	0.76	74.22	2.0	1.3	2.5	7.5	73	112.0	0.08726
T1C 160L–6	11	24.18	970	86.4	86.7	84.4	0.76	108.3	2.0	1.3	2.5	7.5	73	122.4	0.10963
T1C 180L–6	15	29.74	970	87.7	89.1	87.8	0.83	147.7	1.8	1.2	2.2	8	73	161.5	0.24936
T1C 200L1–6	18.5	34.25	970	88.6	90.9	90.3	0.88	182.1	1.8	1.2	2.2	8	76	208.3	0.36147
T1C 200L2–6	22	40.45	970	89.2	91.0	90.5	0.88	216.6	1.8	1.2	2.2	8	76	218.2	0.39445
T1C 225M–6	30	55.2	975	90.2	91.2	89.9	0.87	293.8	1.8	1.2	2.2	7	76	289.0	0.55616
T1C 250M–6	37	70.0	980	90.8	90.7	88.6	0.84	360.6	2.0	1.3	2.2	7.5	78	380.0	0.96477
T1C 280S–6	45	83.6	980	91.4	92.6	91.6	0.85	438.5	2.0	1.3	2.2	7.5	80	489.5	1.68116
T1C 280M1–6	55	100.4	980	91.9	93.3	92.5	0.86	536.0	2.0	1.3	2.2	7.5	80	560.0	1.99928
T1C 315S–6	75	135.9	985	92.6	93.4	92.2	0.86	727.2	2.0	1.3	2.3	7	85	806.0	3.25976
T1C 315M–6	90	162.6	985	92.9	93.5	92.5	0.86	872.6	2.0	1.3	2.3	7	85	912.0	3.90933
T1C 315L1–6	110	197.9	985	93.3	93.5	92.3	0.86	1066.5	2.0	1.3	2.3	7	85	965.0	4.54331
T1C 315L2–6	132	236.9	985	93.5	93.6	92.5	0.86	1279.8	2.0	1.3	2.3	7	85	1070.0	5.44899
T1C 355M1–6	160	276.6	990	93.8	93.5	92.7	0.89	1543.4	2.0	1.2	2.2	8	92	1537.0	8.97637
T1C 355M2–6	200	341.2	990	94	93.5	92.8	0.90	1929.3	2.0	1.2	2.2	8	92	1720.0	11.00175
T1C 355L–6	250	426.5	990	94	93.6	92.8	0.90	2411.6	2.0	1.2	2.2	8	92	1880.0	13.56011
T1C 801–8	0.18	0.8	680	51	52.5	48.5	0.61	3.5	1.5	1.3	1.7	2.8	52	15	0.00214
T1C 802–8	0.25	1.1	680	56	58.2	52.5	0.61	3.5	1.6	1.3	2	2.7	52	16.1	0.00249
T1C 90S–8	0.37	1.3	680	63	63.8	58.5	0.63	5.2	1.6	1.3	1.8	2.8	56	19.2	0.00335
T1C 90L–8	0.55	1.9	680	66	67.2	62.3	0.65	7.7	1.6	1.3	1.8	3	56	21.8	0.00461
T1C 100L1–8	0.75	2.4	710	66	67.5	62.5	0.67	10.1	1.7	1.3	2.1	3.5	59	27.9	0.00688
T1C 100L2–8	1.1	3.2	710	72	72.8	67.7	0.69	14.8	1.7	1.3	2.1	3.5	59	32	0.00925
T1C 112M–8	1.5	4.3	710	74	73.2	68.6	0.68	20.2	1.8	1.2	2.1	4.2	61	39.1	0.01552
T1C 132S–8	2.2	6.0	720	75	75.5	71.1	0.71	29.2	2	1.2	2	5.5	64	58	0.03408
T1C 132M–8	3	7.7	720	77	77.2	72.6	0.73	39.8	2	1.2	2	5.5	64	64	0.04522
T1C 160M1–8	4	11.1	730	80	79.5	75.6	0.65	52.33	1.6	1.2	2.2	6	68	108	0.07620
T1C 160M2–8	5.5	14.63	730	83.5	81.6	77.7	0.65	71.95	1.6	1.2	2.2	6	68	124	0.09095
T1C 160L–8	7.5	19.6	730	85	82.8	79.5	0.65	98.12	1.6	1.2	2.2	6	68	136	0.10594
T1C 180L–8	11	24.1	730	88	87.3	84.9	0.75	143.9	2	1.4	2	6	70	174	0.25695
T1C 200L–8	15	29.7	730	89	89.3	88	0.82	196.2	1.6	1.3	2.2	7	73	220	0.36147
T1C 225S–8	18.5	37.1	735	90	88.8	87.2	0.80	240.4	1.6	1.3	2	6	73	285	0.49078
T1C 225M–8	22	43.9	735	90.5	90.4	89.1	0.80	285.9	1.6	1.3	2	6	73	310	0.58885
T1C 250M–8	30	59.5	735	91	91.9	90.8	0.80	389.8	1.6	1.0	1.8	6	75	395	1.02008
T1C 280S–8	37	74.8	740	91.5	91.2	90.5	0.78	477.5	1.9	1.2	2	6.5	76	523	1.88979
T1C 280M–8	45	90.5	740	92	92.3	90.8	0.78	580.7	1.9	1.2	2	6.5	76	575	2.26008
T1C 315S–8	55	106.9	740	92.8	92.5	91.2	0.80	709.8	2	1.3	2	6.5	82	842	3.89374
T1C 315M–8	75	145.5	740	93	92.6	91.1	0.80	967.9	2	1.3	2	6.5	82	998.8	5.26785
T1C 315L1–8	90	173.1	740	93.8	93.9	92.3	0.80	1161.5	2	1.3	2	6.5	82	1096.8	6.26411
T1C 315L2–8	110	211.1	740	94	93.2	92.2	0.80	1419.6	2	1.3	2	6.5	82	1191.2	7.44150
T1C 355M1–8	132	254.2	740	93.7	93.6	92.5	0.80	1703.5	1.8	1.3	2	6.5	90	1496.8	8.86978
T1C 355M2–8	160	306.4	740	94.2	93.6	92.3	0.80	2064.9	1.8	1.3	2	6.5	90	1592	10.04236
T1C 355L–8	200	381.8	740	94.5	93.1	92.5	0.80	2581.1	1.8	1.3	2	6.5	90	1752	12.28093

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T2C Series IE2 Efficiency Motors Technical Data (400V/50Hz)

Model	Output (kW)	Rated current (A)	Rotation speed (r/min)	Efficiency 100% load (%)	Efficiency 75% load (%)	Efficiency 50% load (%)	Power factor (Φ)	Rated torque (N.m)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	I_{st}/I_n (Times)	Nosie (dB)	Net weight (kg)	Moment of inertia(kg*m^2)
T2C 801-2	0.75	1.73	2840	77.4	77.5	73.8	0.81	2.52	2.5	2.1	2.6	6	67	14.5	0.00084
T2C 802-2	1.1	2.43	2880	79.6	80.5	78.6	0.82	3.65	2.5	1.8	2.6	7.5	67	16.5	0.00119
T2C 90S-2	1.5	3.25	2880	81.3	81.9	81.0	0.82	4.97	2.5	1.8	2.6	7	72	18.5	0.00184
T2C 90L-2	2.2	4.60	2880	83.2	83.6	82.5	0.83	7.30	2.5	1.4	2.6	7.5	72	22.0	0.00239
T2C 100L-2	3	6.17	2890	84.6	85.5	84.0	0.83	9.91	2.5	2.0	2.8	7.5	76	33.0	0.00410
T2C 112M-2	4	7.65	2910	85.8	85.3	82.7	0.88	13.13	2.5	1.8	2.8	9.5	77	41.0	0.00607
T2C 132S1-2	5.5	10.37	2910	87	88.1	86.0	0.88	18.05	2.4	1.8	2.8	8.5	80	59.5	0.01251
T2C 132S2-2	7.5	13.96	2920	88.1	89.0	87.3	0.88	24.53	2.5	1.8	2.8	10	80	64.0	0.01613
T2C 132M1-2	9.2	17.13	2920	88.1	88.9	87.0	0.88	30.09	2.5	1.4	3.0	10	80	71.0	0.01758
T2C 160M1-2	11	19.73	2930	89.4	89.5	89.0	0.90	35.85	2.5	1.4	2.8	8.5	86	113.0	0.04561
T2C 160M2-2	15	26.64	2940	90.3	90.0	88.8	0.90	48.72	2.5	1.3	2.8	9	86	124.0	0.06206
T2C 160L-2	18.5	32.64	2940	90.9	91.3	90.0	0.90	60.09	2.5	1.4	2.8	9.5	86	140.0	0.07528
T2C 180M-2	22	38.6	2945	91.3	91.2	89.8	0.90	71.34	2.5	1.4	2.8	9	89	168.0	0.08110
T2C 200L1-2	30	52.3	2945	92	92.1	90.9	0.90	97.3	2.0	1.3	2.5	7	92	235.0	0.14253
T2C 200L2-2	37	64.2	2945	92.5	91.5	92.3	0.90	120.0	2.5	1.5	2.5	7.5	92	246.0	0.16466
T2C 225M-2	45	77.7	2950	92.9	92.4	91.6	0.90	145.7	2.5	1.3	2.4	7.5	92	321.0	0.24906
T2C 250M-2	55	94.6	2960	93.2	93.5	92.0	0.90	177.4	2.3	1.4	2.6	8.5	93	419.0	0.43328
T2C 280S-2	75	128.2	2960	93.8	93.7	92.4	0.90	242.0	2.5	1.8	2.6	9	94	571.0	0.79186
T2C 280M-2	90	153.4	2960	94.1	94.3	93.2	0.90	290.4	2.5	1.8	2.6	9.5	94	638.0	0.90716
T2C 315S-2	110	187.1	2960	94.3	94.5	93.2	0.90	354.9	2.0	1.4	2.3	6	96	927.0	1.50928
T2C 315M-2	132	223.8	2960	94.6	94.8	93.4	0.90	425.9	2.0	1.4	2.3	6	96	1006.0	1.67962
T2C 315L1-2	160	270.7	2960	94.8	95.0	93.7	0.90	516.2	2.0	1.4	2.3	6	99	1060.0	1.87385
T2C 315L2-2	200	337.6	2960	95	95.3	93.9	0.90	645.3	1.8	1.3	2.3	5.5	99	1130.0	2.13283
T2C 355M1-2	220	371.4	2960	95	95.5	93.8	0.90	709.8	1.8	1.3	2.3	5.5	103	1590.0	2.95585
T2C 355M2-2	250	422.0	2960	95	95.5	93.9	0.90	806.6	1.8	1.3	2.3	5.5	103	1650.0	3.14272
T2C 355L1-2	280	472.7	2960	95	95.6	93.9	0.90	903.4	1.8	1.3	2.3	5.5	103	1715.0	3.47911
T2C 355L2-2	315	531.8	2960	95	95.6	93.9	0.90	1016.3	1.8	1.3	2.3	5.5	103	1780.0	3.85287
T2C 802-4	0.75	1.92	1420	79.6	79.8	77.5	0.71	5.04	2.5	2.1	2.6	5.7	58	16.0	0.00128
T2C 90S-4	1.1	2.75	1430	81.4	81.9	79.1	0.71	7.35	2.5	2.1	2.6	6.1	61	20.0	0.00315
T2C 90L-4	1.5	3.53	1430	82.8	83.4	80.4	0.74	10.02	2.5	2.0	2.6	6.5	61	24.0	0.00411
T2C 100L1-4	2.2	4.71	1430	84.3	85.5	83.6	0.80	14.69	2.2	2.0	2.6	6.6	64	34.0	0.00883
T2C 100L2-4	3	6.33	1435	85.5	85.7	83.9	0.80	19.97	2.2	2.0	3.0	7.6	64	35.0	0.01039
T2C 112M-4	4	8.23	1435	86.6	87.2	85.5	0.81	26.62	2.2	2.0	3.0	7.9	65	45.0	0.01369
T2C 132S-4	5.5	10.91	1440	87.7	89.2	87.1	0.83	36.48	2.2	1.8	3.0	8.8	71	63.0	0.02966
T2C 132M-4	7.5	14.70	1440	88.7	89.8	87.5	0.83	49.74	2.2	1.6	3.0	9	71	77.5	0.03981
T2C 132M2-4	9.2	17.82	1440	88.7	89.9	87.5	0.84	61.01	2.2	1.6	3.0	8.8	71	85.0	0.04700
T2C 160M-4	11	21.30	1440	89.8	91.7	91.0	0.83	72.95	2.5	1.6	2.5	7.1	75	119.0	0.08670
T2C 160L-4	15	27.47	1450	90.6	91.3	90.5	0.87	98.79	2.5	1.6	2.5	8.9	75	146.0	0.11272
T2C 180M-4	18.5	34.05	1450	91.2	91.8	90.8	0.86	121.8	2.5	1.6	2.8	8.6	76	161.0	0.14084
T2C 180L-4	22	39.4	1460	91.6	92.2	91.6	0.88	143.9	2.5	1.6	2.8	8.1	76	176.0	0.16541

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T2C Series IE2 Efficiency Motors Technical Data (400V/50Hz)

Model	Output (kW)	Rated current (A)	Rotation speed (r/min)	Efficiency 100% load (%)	Efficiency 75% load (%)	Efficiency 50% load (%)	Power factor (Φ)	Rated torque (N.m)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	I_{st}/I_n (Times)	Nosie (dB)	Net weight (kg)	Moment of inertia($kg*m^2$)
T2C 200L-4	30	53.3	1460	92.3	92.8	91.9	0.88	196.2	2.5	2.1	3.0	8.5	79	242.0	0.27306
T2C 225S-4	37	65.5	1470	92.7	93.9	92.6	0.88	240.4	2.2	1.3	2.3	7.6	81	315.0	0.50439
T2C 225M-4	45	78.4	1480	93.1	94.2	92.8	0.89	290.4	2.2	1.3	2.3	7.7	81	340.0	0.59389
T2C 250M-4	55	98.7	1480	93.5	94.4	93.6	0.86	354.9	2.5	1.5	2.5	8.6	83	420.0	0.70950
T2C 280S-4	75	128.0	1480	94	94.9	93.7	0.90	484.0	2.5	2.0	2.5	9	86	580.0	1.59510
T2C 280M-4	90	153.2	1480	94.2	94.9	93.7	0.90	580.7	2.5	2.0	2.5	8.7	86	650.0	1.89187
T2C 315S-4	110	190.9	1480	94.5	94.8	93.2	0.88	709.8	2.0	1.3	2.8	7.4	93	938.0	3.09253
T2C 315M-4	132	226.1	1480	94.7	95.0	93.6	0.89	851.8	2.0	1.3	2.6	7	93	1030.0	3.48345
T2C 315L1-4	160	273.4	1480	94.9	95.0	93.5	0.89	1032.4	2.0	1.3	2.6	6	97	1106.0	3.98390
T2C 315L2-4	200	341.1	1480	95.1	95.3	93.9	0.89	1290.5	2.0	1.3	2.3	6	97	1220.0	4.67201
T2C 355M1-4	220	375.2	1480	95.1	95.9	94.1	0.89	1419.6	1.8	1.3	2.3	5.5	101	1560.0	6.87200
T2C 355M2-4	250	426.3	1480	95.1	95.8	94.0	0.89	1613.2	1.8	1.3	2.3	5.5	101	1600.0	7.63820
T2C 355L1-4	280	477.5	1480	95.1	95.9	94.3	0.89	1806.8	1.8	1.3	2.3	5.5	101	1650.0	8.31927
T2C 355L2-4	315	531.2	1480	95.1	96.0	94.2	0.90	2032.6	1.8	1.3	2.3	5.5	101	1700.0	9.08547
T2C 355L3-4	355	598.7	1480	95.1	96.0	94.2	0.90	2290.7	1.8	1.3	2.3	5.5	101	1780.0	10.10708
T2C 90S-6	0.75	2.23	935	75.9	76.4	73.8	0.64	7.66	2.0	1.8	2.2	5	57	19.6	0.00360
T2C 90L-6	1.1	2.99	935	78.1	78.6	77.6	0.68	11.24	2.0	1.8	2.2	5	57	23.5	0.00536
T2C 100L-6	1.5	3.72	940	79.8	80.2	78.3	0.73	15.24	1.6	1.6	2.2	5	61	32.0	0.00877
T2C 112M-6	2.2	5.39	940	81.8	82.5	79.0	0.72	22.35	2.0	1.8	2.5	6	65	39.0	0.01468
T2C 132S-6	3	6.93	940	83.3	84.0	82.2	0.75	30.48	1.6	1.5	2.2	6	69	54.0	0.03039
T2C 132M1-6	4	9.22	950	84.6	85.1	83.5	0.74	40.21	2.0	1.6	2.5	6	69	65.0	0.03785
T2C 132M2-6	5.5	12.47	950	86	86.8	85.4	0.74	55.29	2.0	1.8	2.5	7	69	66.0	0.04890
T2C 160M-6	7.5	17.5	960	87.2	88.3	86.7	0.71	74.6	2.5	1.8	2.8	9	73	112.0	0.08726
T2C 160L-6	11	23.9	960	88.7	88.6	87.5	0.75	109.4	2.5	1.4	2.8	9	73	132.6	0.12069
T2C 180L-6	15	30.9	960	89.7	90.8	89.3	0.78	149.2	2.5	1.5	2.8	9	73	179.0	0.25695
T2C 200L1-6	18.5	36.9	970	90.4	91.0	89.8	0.80	182.1	2.0	1.4	2.8	9	76	221.4	0.36147
T2C 200L2-6	22	42.6	970	90.9	91.5	90.1	0.82	216.6	2.5	1.8	2.8	10	76	240.6	0.42742
T2C 225M-6	30	55.6	975	91.7	92.3	91.2	0.85	293.8	2.5	1.5	2.2	9	76	335.0	0.67058
T2C 250M-6	37	69.0	975	92.2	93.0	91.8	0.84	362.4	1.8	1.3	2.2	7	78	391.4	0.99243
T2C 280S-6	45	82.4	980	92.7	92.7	91.9	0.85	438.5	2.3	1.4	2.3	8.5	80	514.0	1.78548
T2C 280M1-6	55	99.2	980	93.1	93.2	92.2	0.86	536.0	2.5	1.7	2.8	9	80	584.0	2.20792
T2C 315S-6	75	135.9	980	93.7	94	92.3	0.85	730.9	2.0	1.3	2.3	7	85	807.0	3.25976
T2C 315M-6	90	162.6	980	94	94.6	92.3	0.85	877.0	2.0	1.3	2.3	7	85	913.0	3.90933
T2C 315L1-6	110	198.1	980	94.3	94.8	92.4	0.85	1071.9	2.0	1.3	2.3	7	85	966.0	4.54331
T2C 315L2-6	132	236.9	980	94.6	94.9	92.4	0.85	1286.3	2.0	1.3	2.3	6.5	85	1080.0	5.53956
T2C 355M1-6	160	286.6	980	94.8	94.9	92.5	0.85	1559.2	2.0	1.3	2.3	6.5	92	1537.0	8.97637
T2C 355M2-6	200	357.5	980	95	95	92.6	0.85	1949.0	2.0	1.3	2.3	6.5	92	1720.0	11.00175
T2C 355L-6	250	446.9	980	95	95.2	92.6	0.85	2436.2	2.0	1.3	2.3	6.5	92	1880.0	13.56011

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T3C Series IE3 Efficiency Motors Technical Data (400V/50Hz)

Model	Output (kW)	Rated current (A)	Rotation speed (r/min)	Efficiency 100% load (%)	Efficiency 75% load (%)	Efficiency 50% load (%)	Power factor (Φ)	Rated torque (N.m)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	I_{st}/I_n (Times)	Nosie (dB)	Net weight (kg)	Moment of inertia ($kg*m^2$)
T3C 801–2	0.75	1.68	2880	80.7	81.0	76.2	0.80	2.49	2.5	2.1	2.8	7.5	67	15.20	0.00093
T3C 802–2	1.1	2.40	2880	82.7	83.5	81.6	0.80	3.65	2.5	1.8	2.8	8	67	17.10	0.00128
T3C 90S–2	1.5	3.06	2880	84.2	84.9	84.0	0.84	4.97	2.5	1.8	2.8	8.5	72	21.5	0.00224
T3C 90L–2	2.2	4.45	2880	85.9	86.4	84.7	0.83	7.30	2.5	1.8	2.8	8.6	72	24.6	0.00279
T3C 100L–2	3	5.65	2900	87.1	88.5	86.8	0.88	9.88	2.5	2.0	2.8	9.5	76	35.5	0.00496
T3C 112M–2	4	7.28	2910	88.1	88.5	87.1	0.90	13.13	2.5	2.0	2.8	10.5	77	44.5	0.00744
T3C 132S1–2	5.5	10.11	2910	89.2	90.2	88.6	0.88	18.05	2.5	2.0	3.0	10	80	63.2	0.01468
T3C 132S2–2	7.5	13.50	2920	90.1	90.8	89.3	0.89	24.53	2.5	1.5	3.0	10	80	70.2	0.01903
T3C 132M1–2	9.2	16.47	2920	90.6	91.2	89.5	0.89	30.09	2.5	1.5	3.0	10	80	76.8	0.02048
T3C 160M1–2	11	19.34	2930	91.2	93.8	93.0	0.90	35.85	2.5	1.4	3.0	9.5	86	118.0	0.05178
T3C 160M2–2	15	26.18	2940	91.9	93.1	92.9	0.90	48.72	2.5	1.4	3.0	10	86	128.0	0.06206
T3C 160L–2	18.5	31.76	2940	92.4	93.5	93.3	0.91	60.09	2.5	1.4	3.0	9.5	86	144.00	0.07669
T3C 180M–2	22	38.5	2945	92.7	94.1	93.6	0.89	71.34	2.5	1.4	3.0	9	89	183.40	0.09665
T3C 200L1–2	30	52.1	2945	93.3	93.8	93.2	0.89	97.3	2.5	1.5	2.5	8.5	92	247.00	0.17351
T3C 200L2–2	37	64.0	2945	93.7	94.4	94.2	0.89	120.0	2.5	1.5	2.5	8.5	92	268.00	0.20008
T3C 225M–2	45	75.9	2950	94	94.6	94.1	0.91	145.7	2.5	1.4	2.5	8.5	92	369.00	0.34366
T3C 250M–2	55	93.5	2960	94.3	94.5	93.1	0.90	177.4	2.5	1.4	2.6	10	93	428.00	0.44434
T3C 280S–2	75	125.6	2960	94.7	94.9	93.7	0.91	242.0	2.5	1.8	2.6	10	94	587.30	0.82911
T3C 280M–2	90	150.3	2960	95	95.2	94.3	0.91	290.4	2.5	1.8	2.6	10	94	655.00	0.98168
T3C 315S–2	110	185.3	2960	95.2	95.5	94.6	0.90	354.9	2.0	1.4	2.3	7	96	980.00	1.70352
T3C 315M–2	132	221.9	2960	95.4	95.5	94.7	0.90	425.9	2.0	1.4	2.3	7	96	1100.00	1.93860
T3C 315L1–2	160	267.8	2960	95.8	95.8	94.5	0.90	516.2	2.0	1.4	2.3	7	99	1155.00	2.19758
T3C 315L2–2	200	334.8	2960	95.8	96.0	94.7	0.90	645.3	2.0	1.4	2.3	7	99	1260.00	2.55368
T3C 355M1–2	220	394.6	2960	95.8	96.2	94.8	0.84	709.8	2.0	1.5	2.3	6.5	103	1590.00	2.95585
T3C 355M2–2	250	448.4	2960	95.8	96.2	94.8	0.84	806.6	2.0	1.5	2.3	6.5	103	1650.00	3.14272
T3C 355L1–2	280	502.2	2960	95.8	96.2	94.8	0.84	903.4	2.0	1.5	2.3	6.5	103	1715.00	3.47911
T3C 355L2–2	315	558.3	2960	95.8	96.2	94.8	0.85	1016.3	2.0	1.5	2.3	6.5	103	1780.00	3.85287
T3C 802–4	0.75	1.90	1420	82.5	82.8	80.6	0.69	5.04	2.8	2.2	2.8	6.3	58	18.20	0.00155
T3C 90S–4	1.1	2.62	1430	84.1	84.6	83.2	0.72	7.35	2.8	2.2	2.8	6.8	61	23.00	0.00372
T3C 90L–4	1.5	3.63	1430	85.3	86.1	85.2	0.70	10.02	2.8	2.2	3.0	7.3	61	26.30	0.00469
T3C 100L1–4	2.2	4.52	1430	86.7	87.8	85.2	0.81	14.69	2.8	2.2	3.0	8	64	35.50	0.00922
T3C 100L2–4	3	6.33	1435	87.7	88.0	85.9	0.78	19.97	2.5	2.2	3.0	8.2	64	38.50	0.01195
T3C 112M–4	4	7.95	1440	88.6	88.9	87.5	0.82	26.53	2.5	2.2	3.0	8.6	65	47.00	0.01545
T3C 132S–4	5.5	10.67	1440	89.6	90.9	88.9	0.83	36.48	2.5	1.8	3.0	9	71	68.30	0.03397
T3C 132M–4	7.5	14.09	1440	90.4	91.3	91.2	0.85	49.74	2.5	1.6	3.0	9	71	79.00	0.04412
T3C 132M2–4	9.2	17.19	1440	90.9	91.8	90.5	0.85	61.01	2.5	1.6	3.0	9	71	87.50	0.04700
T3C 160M–4	11	20.68	1450	91.4	92.2	91.7	0.84	72.45	2.5	1.3	3.0	10	75	127.00	0.10355
T3C 160L–4	15	27.33	1450	92.1	92.9	92.2	0.86	98.8	2.5	1.3	2.8	8.5	75	160.00	0.13750
T3C 180M–4	18.5	33.5	1460	92.6	93.6	93.0	0.86	121.0	2.5	1.8	3.0	9	76	169.40	0.15530
T3C 180L–4	22	39.2	1460	93	93.7	92.9	0.87	143.9	2.5	1.8	3.0	10	76	196.00	0.19433

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T3C Series IE3 Efficiency Motors Technical Data (400V/50Hz)

Model	Output (kW)	Rated current (A)	Rotation speed (r/min)	Efficiency 100% load (%)	Efficiency 75% load (%)	Efficiency 50% load (%)	Power factor (Φ)	Rated torque (N.m)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	I_{st}/I_n (Times)	Nosie (dB)	Net weight (kg)	Moment of inertia ($kg*m^2$)
T3C 200L–4	30	57.1	1470	93.6	93.7	93.2	0.81	194.9	2.5	1.8	2.8	9	79	252.00	0.29441
T3C 225S–4	37	65.4	1470	93.9	95.2	94.3	0.87	240.4	2.5	1.4	2.5	9.2	81	324.50	0.57838
T3C 225M–4	45	79.3	1470	94.2	95.2	94.5	0.87	292.3	2.5	1.5	2.5	9	81	352.90	0.65309
T3C 250M–4	55	95.4	1470	94.6	95.2	94.5	0.88	357.3	2.5	1.8	2.5	8.5	83	427.40	0.76504
T3C 280S–4	75	131.0	1480	95	95.1	94.8	0.87	484.0	2.5	1.8	2.8	10	86	673.30	1.99603
T3C 280M–4	90	160.5	1480	95.2	95.1	95.0	0.85	580.7	2.5	1.8	2.8	10	86	692.00	2.18345
T3C 315S–4	110	189.1	1480	95.4	95.7	94.6	0.88	709.8	2.2	1.5	2.6	9	93	1027.00	3.71808
T3C 315M–4	132	226.5	1480	95.6	95.8	95.0	0.88	851.8	2.2	1.5	2.6	9	93	1155.00	4.29667
T3C 315L1–4	160	273.9	1480	95.8	96.0	95.1	0.88	1032.4	2.2	1.5	2.6	9	97	1240.00	5.10990
T3C 315L2–4	200	337.9	1480	96	96.2	95.3	0.89	1290.5	2.2	1.5	2.6	9	97	1400.00	6.17334
T3C 355M1–4	220	371.7	1480	96	96.2	95.3	0.89	1419.6	2.0	1.3	2.3	8	101	1560.00	7.04227
T3C 355M2–4	250	422.3	1480	96	96.3	95.4	0.89	1613.2	2.0	1.3	2.3	8	101	1600.00	7.63820
T3C 355L1–4	280	473.0	1480	96	96.4	95.4	0.89	1806.8	2.0	1.3	2.3	8	101	1650.00	8.31927
T3C 355L2–4	315	532.1	1480	96	96.3	95.5	0.89	2032.6	2.0	1.3	2.3	8	101	1700.00	9.34080
T3C 90S–6	0.75	2.05	935	78.9	79.6	77.2	0.67	7.66	2.0	1.8	2.2	5	57	21.50	0.00435
T3C 90L–6	1.1	2.97	940	81	81.5	80.2	0.66	11.18	2.3	1.8	2.2	5.2	57	25.50	0.00611
T3C 100L–6	1.5	3.55	940	82.5	83.0	81.6	0.74	15.24	2.0	1.7	2.2	5.2	61	33.50	0.00972
T3C 112M–6	2.2	5.38	940	84.3	85.0	83.2	0.70	22.35	2.0	1.8	2.2	6.2	65	40.00	0.01637
T3C 132S–6	3	6.84	940	85.6	86.1	84.5	0.74	30.48	2.0	1.7	2.2	6	69	59.00	0.03223
T3C 132M1–6	4	8.99	950	86.8	87.6	85.2	0.74	40.21	2.0	1.6	2.5	7	69	75.50	0.04338
T3C 132M2–6	5.5	12.71	950	88	88.8	86.9	0.71	55.29	2.3	1.8	2.5	7.5	69	76.30	0.05443
T3C 160M–6	7.5	16.2	960	89.1	90.3	88.0	0.75	74.6	2.3	1.4	2.8	7.5	73	112.00	0.08726
T3C 160L–6	11	23.1	960	90.3	91.2	88.5	0.76	109.4	2.5	1.4	2.8	8.5	73	134.00	0.13544
T3C 180L–6	15	30.1	960	91.2	92.0	90.3	0.79	149.2	2.5	1.4	2.8	8	73	184.50	0.27973
T3C 200L1–6	18.5	36.4	970	91.7	92.3	90.6	0.80	182.1	2.5	1.4	2.8	9.5	76	231.00	0.38345
T3C 200L2–6	22	42.5	970	92.2	93.0	91.3	0.81	216.6	2.5	1.5	2.8	10	76	249.00	0.44941
T3C 225M–6	30	53.0	975	92.9	93.8	90.9	0.88	293.8	1.8	1.5	2.2	7	76	339.00	0.67058
T3C 250M–6	37	67.3	975	93.3	94.0	91.8	0.85	362.4	1.8	1.3	2.0	7	78	399.40	0.99243
T3C 280S–6	45	83.5	980	93.7	94.6	92.7	0.83	438.5	2.5	1.8	2.8	10	80	551.00	2.20274
T3C 280M1–6	55	99.3	980	94.1	95.0	93.4	0.85	536.0	2.5	1.8	2.8	10	80	624.30	2.57302
T3C 315S–6	75	139.6	980	94.6	94.8	93.2	0.82	730.9	2.0	1.3	2.3	7.5	85	860.00	3.80317
T3C 315M–6	90	166.9	980	94.9	95	93.4	0.82	877.0	2.0	1.3	2.3	7.5	85	970.00	4.45274
T3C 315L1–6	110	203.6	980	95.1	95.4	94	0.82	1071.9	2.0	1.3	2.3	7.5	85	1070.00	5.53956
T3C 315L2–6	132	243.6	980	95.4	95.7	94.2	0.82	1286.3	2.0	1.3	2.3	7.5	85	1196.00	6.62638
T3C 355M1–6	160	294.6	980	95.6	95.8	94.3	0.82	1559.2	2.0	1.3	2.3	7.5	92	1537.00	8.97637
T3C 355M2–6	200	367.5	980	95.8	95.8	94.3	0.82	1949.0	2.0	1.3	2.3	7.5	92	1720.00	11.00175
T3C 355L1–6	220	404.2	980	95.8	96	94.2	0.82	2143.9	2.0	1.3	2.3	7.5	92	1800.00	11.64134
T3C 355L–6	250	459.3	980	95.8	96	94.3	0.82	2436.2	2.0	1.3	2.3	7.5	92	1880.00	13.56011

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T4C Series IE4 Efficiency Motors Technical Data (400V/50Hz)

Model	Output (kW)	Rated current (A)	Rotation speed (r/min)	Efficiency 100% load (%)	Efficiency 75% load (%)	Efficiency 50% load (%)	Power factor (Φ)	Rated torque (N.m)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	I_{st}/I_n (Times)	Nosie (dB)	Net weight (kg)	Moment of inertia ($kg*m^2$)
T4C 801–2	0.75	1.56	2920	83.5	83.7	82	0.83	2.45	2.2	1.5	2.3	8.5	62	16	0.00138
T4C 802–2	1.1	2.25	2920	85.2	85.4	84.5	0.83	3.6	2.2	1.5	2.3	8.5	62	17	0.00179
T4C 90S–2	1.5	2.94	2940	86.5	86.7	86.4	0.85	4.87	2.2	1.5	2.3	9	67	23	0.00264
T4C 90L–2	2.2	4.20	2940	88	88.3	87.8	0.86	7.15	2.2	1.4	2.3	9	67	26	0.00358
T4C 100L–2	3	5.59	2945	89.1	89.3	88.9	0.87	9.73	2.2	1.4	2.3	9.5	74	36	0.00576
T4C 112M–2	4	7.29	2945	90	90.2	89.8	0.88	13	2.2	1.4	2.3	9.5	77	50	0.00973
T4C 132S1–2	5.5	9.92	2950	90.9	91.2	90.7	0.88	17.8	2	1.2	2.3	9.5	79	67	0.0284
T4C 132S2–2	7.5	13.26	2950	91.7	92	91.5	0.89	24.3	2	1.2	2.3	9.5	79	72	0.0349
T4C 160M1–2	11	19.27	2960	92.6	92.8	92.5	0.89	35.5	2	1.2	2.3	9.5	81	129	0.0695
T4C 160M2–2	15	26.07	2960	93.3	93.5	93.1	0.89	48.42	2	1.2	2.3	9.5	81	155	0.0848
T4C 160L–2	18.5	32.02	2965	93.7	93.9	93.6	0.89	59.6	2	1.1	2.3	9.5	81	176	0.102
T4C 180M–2	22	37.96	2965	94	94.2	93.8	0.89	70.9	2	1.1	2.3	9.5	83	220	0.163
T4C 200L1–2	30	51.48	2970	94.5	94.7	94.3	0.89	96.5	2	1.1	2.3	9	84	278	0.267
T4C 200L2–2	37	63.30	2970	94.8	95	94.7	0.89	119	2	1.1	2.3	9	84	292	0.303
T4C 225M–2	45	76.82	2975	95	95.2	94	0.89	144.5	2	1	2.3	9	86	387	0.393
T4C 250M–2	55	93.60	2980	95.3	95.5	94.3	0.89	176.3	2	1	2.3	9	89	531	1.044
T4C 280S–2	75	127.23	2980	95.6	95.8	95	0.89	240.46	1.8	0.9	2.3	8.5	91	625	1.267
T4C 280M–2	90	152.36	2980	95.8	95.9	95.2	0.89	288.55	1.8	0.9	2.3	8.5	91	700	1.495
T4C 315S–2	110	185.83	2980	96	96.1	95.6	0.89	352.67	1.8	0.9	2.3	8.5	92	1110	2.036
T4C 315M–2	132	222.53	2980	96.2	96.2	95.7	0.89	423.2	1.8	0.9	2.3	8.5	92	1228	2.352
T4C 315L1–2	160	269.45	2980	96.3	96.3	95.8	0.89	513	1.8	0.9	2.2	8.5	92	1321	2.720
T4C 315L2–2	200	336.12	2980	96.5	96.5	96	0.89	641.2	1.8	0.8	2.2	8.5	92	1450	3.273
T4C 355M–2	250	420.15	2980	96.5	96.5	96	0.89	801.5	1.6	0.8	2.2	8.5	97	1700	4.481
T4C 355L–2	315	529.39	2980	96.5	96.5	96	0.89	1009.9	1.6	0.8	2.2	8.5	97	2030	5.604
T4C 802–4	0.75	1.71	1435	85.7	85.9	83.9	0.74	4.99	2.3	1.6	2.3	8.5	56	19	0.00301
T4C 90S–4	1.1	2.43	1445	87.2	87.4	85.7	0.75	7.27	2.3	1.6	2.3	8.5	59	25	0.00487
T4C 90L–4	1.5	3.23	1445	88.2	88.4	87.1	0.76	9.92	2.3	1.6	2.3	9	59	31	0.00646
T4C 100L1–4	2.2	4.49	1450	89.5	89.7	88.4	0.79	14.5	2.3	1.5	2.3	9	64	39	0.0132
T4C 100L2–4	3	5.99	1450	90.4	90.6	90	0.8	19.77	2.3	1.5	2.3	9.5	64	45	0.0183
T4C 112M–4	4	7.92	1465	91.1	91.3	90.9	0.8	26.1	2.3	1.5	2.3	9.5	65	61	0.0236
T4C 132S–4	5.5	10.80	1470	91.9	92.1	91.5	0.8	35.75	2	1.4	2.3	9.5	71	75	0.0627
T4C 132M–4	7.5	14.43	1470	92.6	92.8	92	0.81	48.75	2	1.4	2.3	9.5	71	83	0.0716
T4C 160M–4	11	20.50	1475	93.3	93.5	92.8	0.83	71.25	2	1.4	2.3	9.5	73	160	0.144
T4C 160L–4	15	27.45	1475	93.9	94.1	92.8	0.84	97.16	2	1.4	2.3	9.5	73	179	0.184
T4C 180M–4	18.5	33.35	1475	94.2	94.4	93.6	0.85	119.83	2	1.2	2.3	9.5	76	218	0.266
T4C 180L–4	22	39.53	1475	94.5	94.7	93.8	0.85	142.5	2	1.2	2.3	9.5	76	249	0.303
T4C 200L–4	30	53.68	1480	94.9	95.2	94	0.85	193.67	2	1.2	2.3	9	76	295	0.566
T4C 225S–4	37	66.00	1480	95.2	95.4	94.6	0.85	238.85	2	1.2	2.3	9	78	403	0.794
T4C 225M–4	45	80.10	1480	95.4	95.6	95	0.85	290.5	2	1.1	2.3	9	78	425	0.869
T4C 250M–4	55	96.46	1480	95.7	95.9	95.3	0.86	355	2	1.1	2.3	9	79	550	1.435
T4C 280S–4	75	129.61	1485	96	96.1	95.4	0.87	482.5	2	1	2.3	8.5	80	644	2.149
T4C 280M–4	90	153.61	1485	96.1	96.1	95.8	0.88	579	2	1	2.3	8.5	80	714	2.377
T4C 315S–4	110	185.25	1485	96.3	96.3	95.9	0.89	707.7	1.8	1	2.2	8.5	88	1130	3.943
T4C 315M–4	132	222.07	1485	96.4	96.4	96.2	0.89	849.3	1.8	1	2.2	8.5	88	1260	4.471
T4C 315L1–4	160	265.63	1485	96.6	96.6	96.3	0.9	1029.4	1.8	1	2.2	8.5	88	1377	5.267
T4C 315L2–4	200	331.70	1485	96.7	96.7	96.3	0.9	1286.8	1.8	0.9	2.2	8.5	88	1558	6.291
T4C 355M–4	250	414.62	1485	96.7	96.7	96.3	0.9	1608.4	1.8	0.9	2.2	8.5	92	1740	10.212
T4C 355L–4	315	522.42	1485	96.7	96.7	96.4	0.9	2026.6	1.8	0.8	2.2	8.5	92	1933	11.374

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T4C Series IE4 Efficiency Motors Technical Data (400V/50Hz)

Model	Output (kW)	Rated current (A)	Rotation speed (r/min)	Efficiency 100% load (%)	Efficiency 75% load (%)	Efficiency 50% load (%)	Power factor (Φ)	Rated torque (N.m)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	I_{st}/I_n (Times)	Nosie (dB)	Net weight (kg)	Moment of inertia ($kg*m^2$)
T4C 90S–6	0.75	1.87	940	82.7	82.9	83	0.7	7.62	2.1	1.5	2.1	7.5	57	30	0.00611
T4C 90L–6	1.1	2.68	940	84.5	84.8	84.4	0.7	11.18	2.1	1.3	2.1	7.5	57	34	0.00884
T4C 100L–6	1.5	3.55	950	85.9	86.3	85.8	0.71	15.1	2.1	1.3	2.1	7.5	61	39	0.0170
T4C 112M–6	2.2	5.12	950	87.4	87.8	87.2	0.71	22.1	2	1.3	2.1	7.5	65	45	0.0304
T4C 132S–6	3	6.88	970	88.6	88.9	88.6	0.71	29.6	2	1.3	2.1	7.5	69	65	0.0492
T4C 132M1–6	4	8.96	970	89.5	89.8	89.4	0.72	39.4	2	1.3	2.1	8	69	67	0.0606
T4C 132M2–6	5.5	12.18	970	90.5	90.7	90.4	0.72	54.2	2	1.3	2.1	8	69	72	0.0860
T4C 160M–6	7.5	15.60	970	91.3	91.5	91.2	0.76	73.9	2	1.3	2.1	8	73	145	0.149
T4C 160L–6	11	22.34	975	92.3	92.5	92.2	0.77	107.8	2	1.2	2.1	8.5	73	185	0.220
T4C 180L–6	15	29.13	975	92.9	93.2	92.8	0.8	147	2	1.2	2.1	8.5	73	226	0.363
T4C 200L1–6	18.5	35.74	975	93.4	93.6	93.3	0.8	181.3	2	1.2	2.1	8.5	73	246	0.467
T4C 200L2–6	22	41.84	975	93.7	93.9	93.6	0.81	215.6	2	1.2	2.1	8.5	73	271	0.568
T4C 225M–6	30	56.06	980	94.2	94.4	94	0.82	292.5	2	1.2	2.1	8.3	74	351	0.938
T4C 250M–6	37	68.09	980	94.5	94.7	94.3	0.83	360.7	2	1.2	2.1	8.3	76	430	1.633
T4C 280S–6	45	82.55	985	94.8	95	94.7	0.83	436.5	2	1.1	2	8.5	78	533	2.336
T4C 280M1–6	55	99.38	985	95.1	95.3	95	0.84	533.5	2	1.1	2	8.5	78	610	2.703
T4C 315S–6	75	135.09	990	95.4	95.6	95.3	0.84	723.8	1.6	1	2	8	83	1020	4.414
T4C 315M–6	90	159.86	990	95.6	95.8	95.4	0.85	868.6	1.6	1	2	8	83	1212	5.257
T4C 315L1–6	110	194.98	990	95.8	96	95.6	0.85	1061.6	1.6	1	2	8	83	1277	6.309
T4C 315L2–6	132	230.77	990	96	96.2	95.9	0.86	1273.9	1.6	1	2	8	83	1400	7.511
T4C 355M1–6	160	279.14	990	96.2	96.3	96	0.86	1544.1	1.6	1	2	8	85	1740	12.140
T4C 355M2–6	200	348.57	990	96.3	96.3	96.1	0.86	1930.1	1.6	0.9	2	8	85	1893	15.037
T4C 355L–6	250	434.80	990	96.5	96.5	96.4	0.86	2412.7	1.6	0.9	2	8	85	2008	16.968
T4C 100L1–8	0.75	2.09	700	78.4	78.6	79	0.66	10.24	2	1.3	2	7	59	29	0.00996
T4C 100L2–8	1.1	2.93	700	80.8	81	80.6	0.67	15	2	1.2	2	7	59	34	0.0151
T4C 112M1–8	1.5	3.80	710	82.6	82.8	82.4	0.69	20.2	2	1.2	2	7	61	39	0.0223
T4C 132S–8	2.2	5.37	715	84.5	84.7	84.3	0.7	29.4	1.8	1.2	2	7.5	64	56	0.0492
T4C 132M–8	3	7.20	715	85.9	86.2	85.6	0.7	40.1	1.8	1.2	2	7.8	64	64	0.0634
T4C 160M1–8	4	9.34	725	87.1	87.3	86.9	0.71	52.7	1.8	1.2	2	7.9	68	117	0.0910
T4C 160M2–8	5.5	12.49	730	88.3	88.5	88.2	0.72	72	1.8	1.2	2	8.1	68	138	0.118
T4C 160L–8	7.5	16.38	730	89.3	89.5	89	0.74	98.2	1.8	1.2	2	7.8	68	161	0.171
T4C 180L–8	11	23.73	735	90.4	90.6	90	0.74	143	1.8	1.1	2	7.9	70	188	0.289
T4C 200L–8	15	31.65	735	91.2	91.4	91	0.75	195	1.8	1.1	2	8	73	220	0.417
T4C 225S–8	18.5	38.83	735	91.7	91.9	91.4	0.75	240.5	1.8	1.1	2	8.1	73	294	0.698
T4C 225M–8	22	45.37	740	92.1	92.3	92	0.76	284	1.8	1.1	2	8.3	73	319	0.829
T4C 250M–8	30	60.66	740	92.7	92.9	92.6	0.77	387.3	1.8	1.1	2	7.9	75	383	1.393
T4C 280S–8	37	73.54	740	93.1	93.3	93	0.78	477.7	1.8	1.1	2	7.9	76	516	2.155
T4C 280M1–8	45	89.16	740	93.4	93.6	93.3	0.78	581	1.8	1	2	7.9	76	575	2.643
T4C 315S–8	55	105.90	740	93.7	93.9	93.4	0.8	710	1.6	1	2	8.2	82	900	4.179
T4C 315M–8	75	143.65	740	94.2	94.5	94	0.8	968.3	1.6	0.9	2	7.6	82	1068	5.604
T4C 315L1–8	90	169.89	740	94.4	94.6	94.2	0.81	1162	1.6	0.9	2	7.7	82	1158	6.659
T4C 315L2–8	110	206.98	745	94.7	94.9	94.5	0.81	1410.7	1.6	0.9	2	7.7	82	1316	8.331
T4C 355M1–8	132	247.86	745	94.9	95.2	94.8	0.81	1693	1.6	0.9	2	7.7	89	1616	13.896
T4C 355M2–8	160	296.15	745	95.1	95.3	95	0.82	2052	1.6	0.9	2	7.7	89	1794	16.860
T4C 355L–8	200	369.02	745	95.4	95.5	95.2	0.82	2565	1.6	0.9	2	7.8	89	1944	19.825

ROYSF

TCI Series MEPS2 (Aus) High Efficiency Technical Data (400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Net weight (kg)	Moment of inertia ($kg*m^2$)
2 POLE – 3000 RPM SYNCHRONOUS SPEED 50 Hz												
TCI 801–2	0.75	2848	1.70	78.8	0.81	2.51	5	2.4	2.1	2.8	14.5	0.00084
TCI 802–2	1.1	2846	2.40	80.6	0.82	3.69	5	2.4	2.1	2.9	16.5	0.00119
TCI 90S–2	1.5	2852	3.20	82.6	0.82	5.02	5	2.4	2	2.7	18.5	0.00184
TCI 90L–2	2.2	2845	4.55	84	0.83	7.38	5.5	2.4	2.1	2.7	22.0	0.00239
TCI 100L–2	3	2851	6.12	85.3	0.83	10.05	5.5	2.3	2	2.8	33.0	0.00410
TCI 112M–2	4	2910	7.60	86.3	0.88	13.13	6	2.4	2	2.7	41.0	0.00607
TCI 132S1–2	5.5	2905	10.35	87.2	0.88	18.08	6	2.3	2	2.9	59.5	0.01251
TCI 132S2–2	7.5	2910	13.93	88.3	0.88	24.61	6.4	2.3	2	2.8	64.0	0.01613
TCI 160M1–2	11	2920	19.71	89.5	0.90	35.97	6.3	2.4	2.1	3	113.0	0.04561
TCI 160M2–2	15	2918	26.64	90.3	0.90	49.09	6.8	2.4	2.1	3	124.0	0.06206
TCI 160L–2	18.5	2922	32.68	90.8	0.90	60.46	7	2.4	2.1	2.9	140.0	0.07528
TCI 180M–2	22	2930	38.69	91.2	0.90	71.70	7.2	2.3	2	2.8	168.0	0.08110
TCI 200L1–2	30	2925	52.30	92	0.90	97.94	7	2.4	2	2.7	235.0	0.14253
TCI 200L2–2	37	2930	64.15	92.5	0.90	120.59	7.2	2.3	2	2.7	246.0	0.16466
TCI 225M–2	45	2930	77.68	92.9	0.90	146.66	7	2.3	2	2.8	321.0	0.24906
TCI 250M–2	55	2940	94.64	93.2	0.90	178.64	7.8	2.3	1.9	2.7	419.0	0.43328
TCI 280S–2	75	2940	128.10	93.9	0.90	243.60	7.8	2.2	1.9	2.7	571.0	0.79186
TCI 280M–2	90	2940	153.22	94.2	0.90	292.33	7.7	2.2	1.9	2.6	638.0	0.90716
TCI 315S–2	110	2940	186.68	94.5	0.90	357.29	7.7	2	1.8	2.3	927.0	1.50928
TCI 315M–2	132	2940	223.31	94.8	0.90	428.74	7.6	2	1.8	2.3	1006.0	1.67962
TCI 315L1–2	160	2945	270.11	95	0.90	518.81	7.8	2	1.8	2.3	1060.0	1.87385
TCI 315L2–2	200	2945	337.63	95	0.90	648.51	7.9	2	1.8	2.3	1130.0	2.13283
TCI 355M–2	250	2945	422.04	95	0.90	810.64	7.8	2	1.8	2.3	1650.0	3.14272
TCI 355L–2	315	2945	531.77	95	0.90	1021.40	7.8	2	1.8	2.3	1780.0	3.85287
4 POLE – 1500 RPM SYNCHRONOUS SPEED 50 Hz												
TCI 802–4	0.75	1420	1.89	80.5	0.71	5.04	5.4	2.3	2.1	2.9	16.0	0.00128
TCI 90S–4	1.1	1425	2.72	82.2	0.71	7.37	5.3	2.3	2.1	2.7	20.0	0.00315
TCI 90L–4	1.5	1420	3.50	83.5	0.74	10.09	5.5	2.4	2	2.7	24.0	0.00411
TCI 100L1–4	2.2	1430	4.68	84.9	0.80	14.69	6	2.4	2.1	2.9	34.0	0.00883
TCI 100L2–4	3	1430	6.29	86	0.80	20.03	6	2.4	2	2.8	35.0	0.01039
TCI 112M–4	4	1435	8.19	87	0.81	26.62	6.3	2.5	2	3	45.0	0.01369
TCI 132S–4	5.5	1430	10.88	87.9	0.83	36.73	6.5	2.3	2	2.8	63.0	0.02966
TCI 132M–4	7.5	1430	14.67	88.9	0.83	50.08	6.4	2.3	2	2.7	77.5	0.03981
TCI 160M–4	11	1440	21.28	89.9	0.83	72.95	6.8	2.5	2.1	2.8	119.0	0.08670
TCI 160L–4	15	1445	27.41	90.8	0.87	99.13	6.7	2.4	2.1	2.9	146.0	0.11272
TCI 180M–4	18.5	1445	34.05	91.2	0.86	122.26	7.2	2.4	2.1	3	161.0	0.14084
TCI 180L–4	22	1460	39.39	91.6	0.88	143.89	7.3	2.3	2	3	176.0	0.16541
TCI 200L–4	30	1460	53.31	92.3	0.88	196.22	7.6	2.4	2	2.7	242.0	0.27306
TCI 225S–4	37	1470	65.40	92.8	0.88	240.36	7.5	2.4	2	2.7	315.0	0.50439
TCI 225M–4	45	1480	78.39	93.1	0.89	290.35	7.3	2.3	2	2.8	340.0	0.59389
TCI 250M–4	55	1480	98.73	93.5	0.86	354.87	7.4	2.4	1.9	2.7	420.0	0.70950
TCI 280S–4	75	1480	127.96	94	0.90	483.92	7.5	2.2	1.9	2.6	580.0	1.59510
TCI 280M–4	90	1480	152.90	94.4	0.90	580.70	7.7	2.2	1.9	2.6	650.0	1.89187
TCI 315S–4	110	1480	190.52	94.7	0.88	709.75	7.8	2	1.8	2.3	938.0	3.09253
TCI 315M–4	132	1480	225.58	94.9	0.89	851.69	7.8	2	1.8	2.3	1030.0	3.48345
TCI 315L1–4	160	1480	272.57	95.2	0.89	1032.36	7.9	2	1.8	2.3	1106.0	3.98390
TCI 315L2–4	200	1480	340.71	95.2	0.89	1290.45	7.7	2	1.8	2.3	1220.0	4.67201
TCI 355M–4	250	1480	425.89	95.2	0.89	1613.06	7.9	2	1.8	2.3	1600.0	7.63820
TCI 355L–4	315	1480	530.65	95.2	0.9	2032.45	7.8	2	1.8	2.3	1700.0	9.08547

ROYSE

TCI Series MEPS2 (Aus) High Efficiency Technical Data (400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Net weight (kg)	Moment of inertia ($kg*m^2$)
6 POLE – 1000 RPM SYNCHRONOUS SPEED 50 Hz												
TCI 90S–6	0.75	935	2.23	76	0.64	7.66	5.3	2.2	2	2.7	19.6	0.00360
TCI 90L–6	1.1	935	2.98	78.3	0.68	11.23	5	2.3	2.1	2.6	23.5	0.00536
TCI 100L–6	1.5	940	3.71	79.9	0.73	15.24	4.9	2.3	2.1	2.7	32.0	0.00877
TCI 112M–6	2.2	940	5.38	81.9	0.72	22.35	5.7	2.3	2.1	2.9	39.0	0.01468
TCI 132S–6	3	940	6.91	83.5	0.75	30.48	6.3	2.4	2.2	2.8	54.0	0.03039
TCI 132M1–6	4	945	9.21	84.7	0.74	40.42	6.2	2.5	2	2.8	65.0	0.03785
TCI 132M2–6	5.5	945	12.46	86.1	0.74	55.58	6.8	2.3	1.9	2.8	66.0	0.04890
TCI 160M–6	7.5	955	17.46	87.3	0.71	74.99	7	2.4	1.9	2.7	112.0	0.08726
TCI 160L–6	11	960	23.87	88.7	0.75	109.42	7.3	2.5	2	2.8	132.6	0.12069
TCI 180L–6	15	960	30.98	89.6	0.78	149.21	7.2	2.3	2.1	2.9	179.0	0.25695
TCI 200L1–6	18.5	965	36.96	90.3	0.80	183.07	6.9	2.4	2.1	3.2	221.4	0.36147
TCI 200L2–6	22	965	42.65	90.8	0.82	217.70	7.3	2.3	1.9	3.1	240.6	0.42742
TCI 225M–6	30	975	55.61	91.6	0.85	293.82	7.4	2.2	1.9	2.7	335.0	0.67058
TCI 250M–6	37	975	68.96	92.2	0.84	362.38	7.5	2.3	2.1	2.7	391.4	0.99243
TCI 280S–6	45	980	82.43	92.7	0.85	438.49	7.7	2.3	2	2.8	514.0	1.78548
TCI 280M–6	55	980	99.15	93.1	0.86	535.93	7.7	2.2	1.9	2.7	584.0	2.20792
TCI 315S–6	75	980	135.92	93.7	0.85	730.81	7.9	2.1	1.9	2.5	807.0	3.25976
TCI 315M–6	90	980	162.24	94.2	0.85	876.98	8	2	1.8	2.3	913.0	3.90933
TCI 315L1–6	110	980	197.66	94.5	0.85	1071.86	7.7	2	1.8	2.3	966.0	4.54331
TCI 315L2–6	132	980	236.44	94.8	0.85	1286.23	.8	2	1.8	2.3	1080.0	5.53956
TCI 355M1–6	160	980	285.69	95.1	0.85	1559.07	7.6	2	1.8	2.3	1537.0	8.97637
TCI 355M2–6	200	980	357.12	95.1	0.85	1948.84	7.8	2	1.8	2.3	1720.0	11.00175
TCI 355L–6	250	980	446.40	95.1	0.85	2436.05	7.8	2	1.8	2.3	1880.0	13.56011
8 POLE – 750 RPM SYNCHRONOUS SPEED 50 Hz												
TCI 100L1–8	0.75	690	2.79	71.8	0.54	10.38	4.5	2.2	2	2.5	28.5	0.00896
TCI 100L2–8	1.1	690	3.94	74.7	0.54	15.22	4.5	2.3	2.1	2.6	33.0	0.01012
TCI 112M1–8	1.5	695	4.70	76.8	0.60	20.61	4.8	2.3	2.1	2.6	40.0	0.01652
TCI 132S–8	2.2	700	6.35	79.4	0.63	30.01	5	2.3	2.1	2.7	60.0	0.04315
TCI 132M–8	3	700	8.45	81.3	0.63	40.93	5.1	2.4	2.2	2.7	65.0	0.05021
TCI 160M1–8	4	710	10.73	82.8	0.65	53.80	5.3	2.5	2	2.8	110.0	0.08835
TCI 160M2–8	5.5	710	14.45	84.5	0.65	73.97	5.5	2.3	1.9	2.6	126.0	0.09968
TCI 160L–8	7.5	715	19.37	86	0.65	100.17	6	2.4	1.9	2.7	139.0	0.12875
TCI 180L–8	11	720	24.14	87.7	0.75	145.89	6	2.3	2	2.8	180.0	0.25382
TCI 200L–8	15	720	29.70	88.9	0.82	198.94	6.4	2.2	2	2.9	225.0	0.40028
TCI 2225S–8	18.5	725	37.21	89.7	0.80	243.67	6.4	2.2	2	3.2	300.0	0.61248
TCI 2225M–8	22	725	44.01	90.2	0.80	289.77	7	2.1	1.9	3.1	325.0	0.70635
TCI 250M–8	30	730	59.35	91.2	0.80	392.44	7	2.1	1.9	2.7	410.0	1.19568
TCI 280S–8	37	730	74.58	91.8	0.78	484.01	7.5	2.1	1.8	2.5	535.0	2.21547
TCI 280M1–8	45	735	90.12	92.4	0.78	584.65	7.5	2	1.8	2.5	600.0	2.63980
TCI 315S–8	55	740	106.82	92.9	0.80	709.75	7.5	2	1.8	2.4	870.0	3.78520
TCI 315M–8	75	740	144.41	93.7	0.80	967.83	7.7	2	1.8	2.3	1065.0	5.22221
TCI 315L1–8	90	740	172.56	94.1	0.80	1161.40	7.8	2	1.8	2.2	1128.0	6.25320
TCI 315L2–8	110	745	210.01	94.5	0.80	1409.96	7.8	2	1.8	2.3	1215.0	7.41020
TCI 355M1–8	132	745	251.22	94.8	0.80	1691.96	7.9	2	1.8	2.3	1500.0	10.76850
TCI 355M2–8	160	745	303.23	95.2	0.80	2050.86	7.8	2	1.8	2.3	1605.0	12.22650
TCI 355L–8	200	745	379.04	95.2	0.80	2563.57	7.7	2	1.8	2.3	1790.0	14.98620

ROYSE

TCP Series MEPS2 (Aus) Premium Efficiency Technical Data (400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Net weight (kg)	Moment of inertia ($kg*m^2$)
2 POLE – 3000 RPM SYNCHRONOUS SPEED 50 Hz												
TCP 801–2	0.75	2848	1.66	81.4	0.80	2.51	5	2.4	2.1	2.8	15.2	0.00093
TCP 802–2	1.1	2846	2.39	83	0.80	3.69	5	2.4	2.1	2.9	17.1	0.00128
TCP 90S–2	1.5	2852	3.04	84.8	0.84	5.02	5	2.4	2	2.7	21.5	0.00224
TCP 90L–2	2.2	2845	4.44	86.2	0.83	7.38	5.5	2.4	2.1	2.7	24.6	0.00279
TCP 100L–2	3	2851	5.64	87.2	0.88	10.05	5.5	2.3	2	2.8	35.5	0.00496
TCP 112M–2	4	2910	7.28	88.1	0.90	13.13	6	2.4	2	2.7	44.5	0.00744
TCP 132S1–2	5.5	2905	10.15	88.9	0.88	18.08	6	2.3	2	2.9	63.2	0.01468
TCP 132S2–2	7.5	2910	13.53	89.9	0.89	24.61	6.4	2.3	2	2.8	70.2	0.01903
TCP 160M1–2	11	2920	19.41	90.9	0.90	35.97	6.3	2.4	2.1	3	118.0	0.05178
TCP 160M2–2	15	2918	26.26	91.6	0.90	49.09	6.8	2.4	2.1	3	128.0	0.06206
TCP 160L–2	18.5	2922	31.86	92.1	0.91	60.46	7	2.4	2.1	2.9	144.0	0.07669
TCP 180M–2	22	2930	38.61	92.4	0.89	71.70	7.2	2.3	2	2.8	183.4	0.09665
TCP 200L1–2	30	2925	52.26	93.1	0.89	97.94	7	2.4	2	2.7	247.0	0.17351
TCP 200L2–2	37	2930	64.11	93.6	0.89	120.59	7.2	2.3	2	2.7	268.0	0.20008
TCP 225M–2	45	2930	76.26	93.6	0.91	146.66	7	2.3	2	2.8	369.0	0.34366
TCP 250M–2	55	2940	93.64	94.2	0.90	178.64	7.8	2.3	1.9	2.7	428.0	0.44434
TCP 280S–2	75	2940	125.48	94.8	0.91	243.60	7.8	2.2	1.9	2.7	587.3	0.82911
TCP 280M–2	90	2940	150.26	95	0.91	292.33	7.7	2.2	1.9	2.6	655.0	0.98168
TCP 315S–2	110	2940	185.11	95.3	0.90	357.29	7.7	2	1.8	2.3	980.0	1.70352
TCP 315M–2	132	2040	221.67	95.5	0.90	617.90	7.6	2	1.8	2.3	1100.0	1.93860
TCP 315L1–2	160	2945	268.13	95.7	0.90	518.81	7.8	2	1.8	2.3	1155.0	2.19758
TCP 315L2–2	200	2945	335.16	95.7	0.90	648.51	7.9	2	1.8	2.3	1260.0	2.55368
TCP 355M–2	250	2945	418.95	95.7	0.90	810.64	7.8	2	1.8	2.3	1650.0	3.14272
TCP 355L–2	315	2945	527.88	95.7	0.90	1021.40	7.8	2	1.8	2.3	1780.0	3.85287
4 POLE – 1500 RPM SYNCHRONOUS SPEED 50 Hz												
TCP 802–4	0.75	1420	1.89	82.9	0.69	5.04	5.4	2.3	2.1	2.9	18.2	0.00155
TCP 90S–4	1.1	1425	2.61	84.5	0.72	7.37	5.3	2.3	2.1	2.7	23.0	0.00372
TCP 90L–4	1.5	1420	3.61	85.6	0.70	10.09	5.5	2.4	2	2.7	26.3	0.00469
TCP 100L1–4	2.2	1430	4.51	86.9	0.81	14.69	6	2.4	2.1	2.9	35.5	0.00922
TCP 100L2–4	3	1430	6.32	87.8	0.78	20.03	6	2.4	2	2.8	38.5	0.01195
TCP 112M–4	4	1435	7.94	88.7	0.82	26.62	6.3	2.5	2	3	47.0	0.01545
TCP 132S–4	5.5	1430	10.69	89.5	0.83	36.73	6.5	2.3	2	2.8	68.3	0.03397
TCP 132M–4	7.5	1430	14.09	90.4	0.85	50.08	6.4	2.3	2	2.7	79.0	0.04412
TCP 160M–4	11	1440	20.70	91.3	0.84	72.95	6.8	2.5	2.1	2.8	127.0	0.10355
TCP 160L–4	15	1445	27.33	92.1	0.86	99.13	6.7	2.4	2.1	2.9	160.0	0.13750
TCP 180M–4	18.5	1445	33.60	92.4	0.86	122.26	7.2	2.4	2.1	3	169.4	0.15530
TCP 180L–4	22	1460	39.33	92.8	0.87	143.89	7.3	2.3	2	3	196.0	0.19433
TCP 200L–4	30	1460	57.24	93.4	0.81	196.22	7.6	2.4	2	2.7	252.0	0.29441
TCP 225S–4	37	1470	65.44	93.8	0.87	240.36	7.5	2.4	2	2.7	324.5	0.57838
TCP 225M–4	45	1480	79.34	94.1	0.87	290.35	7.3	2.3	2	2.8	352.9	0.65309
TCP 250M–4	55	1480	95.56	94.4	0.88	354.87	7.4	2.4	1.9	2.7	427.4	0.76504
TCP 280S–4	75	1480	131.12	94.9	0.87	483.92	7.5	2.2	1.9	2.6	673.3	1.99603
TCP 280M–4	90	1480	160.53	95.2	0.85	580.70	7.7	2.2	1.9	2.6	692.0	2.18345
TCP 315S–4	110	1480	188.92	95.5	0.88	709.75	7.8	2	1.8	2.3	1027.0	3.71808
TCP 315M–4	132	1480	226.47	95.6	0.88	851.69	7.8	2	1.8	2.3	1155.0	4.29667
TCP 315L1–4	160	1480	273.65	95.9	0.88	1032.36	7.9	2	1.8	2.3	1240.0	5.10990
TCP 315L2–4	200	1480	338.22	95.9	0.89	1290.45	7.7	2	1.8	2.3	1400.0	6.17334
TCP 355M–4	250	1480	422.78	95.9	0.89	1613.06	7.9	2	1.8	2.3	1600.0	7.63820
TCP 355L–4	315	1480	526.78	95.9	0.9	2032.45	7.8	2	1.8	2.3	1700.0	9.34080

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TCP Series MEPS2 (Aus) Premium Efficiency Technical Data (400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Net weight (kg)	Moment of inertia ($kg*m^2$)
6 POLE – 1000 RPM SYNCHRONOUS SPEED 50 Hz												
TCP 90S–6	0.75	935	2.05	78.8	0.67	7.66	5.3	2.2	2	2.7	21.5	0.00435
TCP 90L–6	1.1	935	2.97	80.9	0.66	11.23	5	2.3	2.1	2.6	25.5	0.00611
TCP 100L–6	1.5	940	3.55	82.4	0.74	15.24	4.9	2.3	2.1	2.7	33.5	0.00972
TCP 112M–6	2.2	940	5.39	84.2	0.70	22.35	5.7	2.3	2.1	2.9	40.0	0.01637
TCP 132S–6	3	940	6.84	85.6	0.74	30.48	6.3	2.4	2.2	2.8	59.0	0.03223
TCP 132M1–6	4	945	9.00	86.7	0.74	40.42	6.2	2.5	2	2.8	75.5	0.04338
TCP 132M2–6	5.5	945	12.72	87.9	0.71	55.58	6.8	2.3	1.9	2.8	76.3	0.05443
TCP 160M–6	7.5	955	16.22	89	0.75	74.99	7	2.4	1.9	2.7	112.0	0.08726
TCP 160L–6	11	960	23.16	90.2	0.76	109.42	7.3	2.5	2	2.8	134.0	0.13544
TCP 180L–6	15	960	30.12	91	0.79	149.21	7.2	2.3	2.1	2.9	184.5	0.27973
TCP 200L1–6	18.5	965	36.44	91.6	0.80	183.07	6.9	2.4	2.1	3.2	231.0	0.38345
TCP 200L2–6	22	965	42.57	92.1	0.81	217.70	7.3	2.3	1.9	3.1	249.0	0.44941
TCP 225M–6	30	975	53.02	92.8	0.88	293.82	7.4	2.2	1.9	2.7	339.0	0.67058
TCP 250M–6	37	975	67.34	93.3	0.85	362.38	7.5	2.3	2.1	2.7	399.4	0.99243
TCP 280S–6	45	980	83.52	93.7	0.83	438.49	7.7	2.3	2	2.8	551.0	2.20274
TCP 280M1–6	55	980	99.25	94.1	0.85	535.93	7.7	2.2	1.9	2.7	624.3	2.57302
TCP 315S–6	75	980	139.55	94.6	0.82	730.81	7.9	2.1	1.9	2.5	860.0	3.80317
TCP 315M–6	90	980	166.76	95	0.82	876.98	8	2	1.8	2.3	970.0	4.45274
TCP 315L1–6	110	980	203.17	95.3	0.82	1071.86	7.7	2	1.8	2.3	1070.0	5.53956
TCP 315L2–6	132	980	243.30	95.5	0.82	1286.23	.8	2	1.8	2.3	1196.0	6.62638
TCP 355M1–6	160	980	290.44	95.8	0.83	1559.07	7.6	2	1.8	2.3	1537.0	8.97637
TCP 355M2–6	200	980	363.05	95.8	0.83	1948.84	7.8	2	1.8	2.3	1720.0	11.00175
TCP 355L–6	250	980	453.81	95.8	0.83	2436.05	7.8	2	1.8	2.3	1880.0	13.56011
8 POLE – 750 RPM SYNCHRONOUS SPEED 50 Hz												
TCP 100L1–8	0.75	690	2.67	75	0.54	10.38	4.5	2.2	2	2.5	29.0	0.00925
TCP 100L2–8	1.1	690	3.79	77.6	0.54	15.22	4.5	2.3	2.1	2.6	35.2	0.01114
TCP 112M1–8	1.5	695	4.53	79.6	0.60	20.61	4.8	2.3	2.1	2.6	41.6	0.01722
TCP 132S–8	2.2	700	6.15	81.9	0.63	30.01	5	2.3	2.1	2.7	62.0	0.04513
TCP 132M–8	3	700	8.22	83.6	0.63	40.93	5.1	2.4	2.2	2.7	67.5	0.05259
TCP 160M1–8	4	710	10.45	85	0.65	53.80	5.3	2.5	2	2.8	118.6	0.09832
TCP 160M2–8	5.5	710	14.12	86.5	0.65	73.97	5.5	2.3	1.9	2.6	130.0	0.10938
TCP 160L–8	7.5	715	18.97	87.8	0.65	100.17	6	2.4	1.9	2.7	146.5	0.13913
TCP 180L–8	11	720	23.71	89.3	0.75	145.89	6	2.3	2	2.8	193.0	0.27973
TCP 200L–8	15	720	29.21	90.4	0.82	198.94	6.4	2.2	2	2.9	232.0	0.40544
TCP 2225S–8	18.5	725	36.64	91.1	0.80	243.67	6.4	2.2	2	3.2	315.6	0.63789
TCP 2225M–8	22	725	43.38	91.5	0.80	289.77	7	2.1	1.9	3.1	338.0	0.73596
TCP 250M–8	30	730	58.58	92.4	0.80	392.44	7	2.1	1.9	2.7	428.0	1.24135
TCP 280S–8	37	730	71.86	92.9	0.80	484.01	7.5	2.1	1.8	2.5	550.0	2.30705
TCP 280M1–8	45	735	86.83	93.5	0.80	584.65	7.5	2	1.8	2.5	628.0	2.72950
TCP 315S–8	55	740	105.68	93.9	0.80	709.75	7.5	2	1.8	2.4	890.0	3.89374
TCP 315M–8	75	740	143.04	94.6	0.80	967.83	7.7	2	1.8	2.3	1102.0	5.26785
TCP 315L1–8	90	740	171.11	94.9	0.80	1161.40	7.8	2	1.8	2.2	1165.7	6.26411
TCP 315L2–8	110	745	208.25	95.3	0.80	1409.96	7.8	2	1.8	2.3	1243.0	7.44150
TCP 355M1–8	132	745	249.38	95.5	0.80	1691.96	7.9	2	1.8	2.3	1564.0	10.82687
TCP 355M2–8	160	745	301.02	95.9	0.80	2050.86	7.8	2	1.8	2.3	1650.0	12.26856
TCP 355L–8	200	745	376.27	95.9	0.80	2563.57	7.7	2	1.8	2.3	1800.0	15.02087

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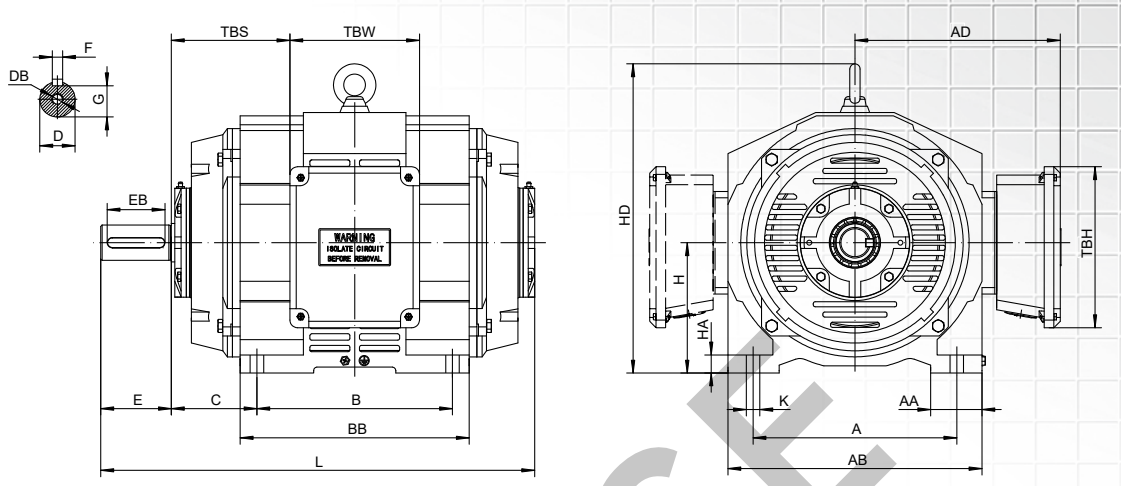
TDC series IEC ODP(IP23) Three Phase Motor



Overall & Installation Dimensions

Frame		Foot Mounting				Shaft					General						
		H	A	B	C	D	E	F	G	K	AA	AB	AD	HD	BB	L	HA
160M/L		160	254	210/254	108	ϕ42	110	12	37	ϕ15	60	316	178+	381	305	579	21
180M/L		180	279	241/279	121	ϕ48	110	14	42.5	ϕ15	80	360	200+	436	331	625	25
200L		200	318	305	133	ϕ55	110	16	49	ϕ19	80	396	218+	479	357	676	28
225S/M	2	225	356	311	149	ϕ55	110	16	49	ϕ19	90	458	249+	545	379	708	28.5
	4,6,8					ϕ60	140	18	53	ϕ19						738	
250M	2	250	406	349	168	ϕ60	140	18	53	ϕ24	95	506	273+	594	431	819	30
	4,6,8					ϕ65	140	18	58	ϕ24							
280S/M	2	280	457	368/419	190	ϕ65	140	18	58	ϕ24	110	560	290+	692	510	927	37
	4,6,8					ϕ75	140	20	67.5	ϕ24							

Frame	TBS	TBW	TBH	DB	Bearings		Cable Gland
					DE	NDE	
160M/L	147	176	210	M16	6309C3		2–M32×1.5
180M/L	172	176	210	M16	6311C3		2–M32×1.5
200L	185	202	251	M20	6312C3		2–M40×1.5
225S/M	204	202	251	M20	6313C3		2–M50×1.5
250M	228	234	278	M20	6314C3		2–M50×1.5
280S/M	267	265	300	M20	6316C3		2–M50×1.5

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TDC1 Series IE1 Efficiency Motors Technical Data (IP23) (400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Moment of inertia ($kg*m^2$)
2 Pole 3000 rpm Synchronous Speed 50Hz											
TDC1 160M1–2	11	2910	20.83	87.6	0.87	36.10	8.5	2.0	1.2	2.3	0.033200
TDC1 160M2–2	15	2910	28.06	88.7	0.87	49.23	8.5	2.0	1.2	2.3	0.043072
TDC1 160L–2	18.5	2910	33.60	89.3	0.89	60.71	8.5	2.0	1.1	2.3	0.051488
TDC1 180M–2	22	2920	39.7	89.9	0.89	71.95	8.5	2.0	1.1	2.3	0.064880
TDC1 200L1–2	30	2920	53.6	90.7	0.89	98.1	8	2.0	1.1	2.3	0.121104
TDC1 200L2–2	37	2920	65.8	91.2	0.89	121.0	8	2.0	1.1	2.3	0.138808
TDC1 225M–2	45	2930	78.7	91.7	0.90	146.7	8	2.0	1.0	2.3	0.193424
TDC1 250M–2	55	2930	97.9	92.1	0.88	179.3	8	2.0	1.0	2.3	0.311224
TDC1 280S–2	75	2930	131.2	92.7	0.89	244.5	7.5	2.0	0.9	2.3	0.558968
TDC1 280M–2	90	2930	155.2	93	0.90	293.3	7.5	2.0	0.9	2.3	0.636312
4 Pole 1500 rpm Synchronous Speed 50Hz											
TDC1 160M–4	11	1440	21.32	87.6	0.85	72.95	8	2.2	1.4	2.3	0.061272
TDC1 160L–4	15	1450	28.06	88.7	0.87	98.79	8	2.2	1.4	2.3	0.083032
TDC1 180M–4	18.5	1450	33.98	89.3	0.88	121.8	8	2.2	1.2	2.3	0.112672
TDC1 180L–4	22	1460	40.6	89.9	0.87	143.9	8	2.2	1.2	2.3	0.132328
TDC1 200L–4	30	1460	53.6	90.7	0.89	196.2	8	2.2	1.2	2.3	0.212752
TDC1 225S–4	37	1470	65.8	91.2	0.89	240.4	8	2.0	1.2	2.3	0.403512
TDC1 225M–4	45	1480	80.5	91.7	0.88	290.4	8	2.0	1.1	2.3	0.463272
TDC1 250M–4	55	1480	96.8	92.1	0.89	354.9	8	2.0	1.1	2.3	0.552784
TDC1 280S–4	75	1480	132.7	92.7	0.88	484.0	7.5	2.0	1.0	2.2	1.130280
TDC1 280M–4	90	1480	155.2	93	0.90	580.7	7.5	2.0	1.0	2.2	1.396856
6 Pole 1000 rpm Synchronous Speed 50Hz											
TDC1 160M–6	7.5	960	18.0	84.7	0.71	74.6	8	2.0	1.3	2.1	0.069808
TDC1 160L–6	11	960	24.5	86.4	0.75	109.4	8	2.0	1.2	2.1	0.087704
TDC1 180L–6	15	960	31.7	87.7	0.78	149.2	8	2.0	1.2	2.1	0.199488
TDC1 200L1–6	18.5	970	37.7	88.6	0.80	182.1	8	2.0	1.2	2.1	0.289176
TDC1 200L2–6	22	970	43.4	89.2	0.82	216.6	8	2.0	12.0	2.1	0.315560
TDC1 225M–6	30	975	56.5	90.2	0.85	293.8	7.5	2.0	1.2	2.1	0.444928
TDC1 250M–6	37	975	70.0	90.8	0.84	362.4	7.5	2.0	1.2	2.1	0.771816
TDC1 280S–6	45	980	83.6	91.4	0.85	438.5	7	2.0	1.1	2.0	1.344928
TDC1 280M1–6	55	980	100.4	91.9	0.86	536.0	7	2.0	1.1	2.0	1.599424
8 Pole 750 rpm Synchronous Speed 50Hz											
TDC1 160M1–8	4	730	9.9	80	0.73	52.3	7	1.8	1.2	2.1	0.060960
TDC1 160M2–8	5.5	720	12.8	83.5	0.74	73.0	7	1.8	1.2	2.1	0.072760
TDC1 160L–8	7.5	720	17.0	85	0.75	99.5	7	1.8	1.2	2.1	0.084750
TDC1 180L–8	11	730	23.7	88	0.76	143.9	7	1.8	1.1	2.1	0.205561
TDC1 200L–8	15	730	31.6	89	0.77	196.2	7	1.8	1.1	2.1	0.289175
TDC1 225S–8	18.5	730	39.0	90	0.76	242.0	7	1.8	1.1	2.1	0.392622
TDC1 225M–8	22	740	45.0	90.5	0.78	283.9	7	1.8	1.1	2.1	0.471080
TDC1 250M–8	30	740	60.2	91	0.79	387.2	7	1.8	1.1	2.1	0.816068
TDC1 280S–8	37	740	73.9	91.5	0.79	477.5	7	1.8	1.1	2.1	1.511832
TDC1 280M–8	45	740	89.4	92	0.79	580.7	7	1.8	0.9	2.1	1.808060

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TDC2 Series IE2 Efficiency Motors Technical Data (IP23) (400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Moment of inertia ($kg*m^2$)
2 Pole 3000 rpm Synchronous Speed 50Hz											
TDC2 160M1–2	11	2930	19.73	89.4	0.90	35.85	8.5	2.0	1.2	2.3	0.036488
TDC2 160M2–2	15	2940	26.64	90.3	0.90	48.72	8.5	2.0	1.2	2.3	0.049648
TDC2 160L–2	18.5	2940	32.64	90.9	0.90	60.09	8.5	2.0	1.1	2.3	0.060224
TDC2 180M–2	22	2945	38.6	91.3	0.90	71.34	8.5	2.0	1.1	2.3	0.064880
TDC2 200L1–2	30	2945	52.3	92	0.90	97.3	8	2.0	1.1	2.3	0.114024
TDC2 200L2–2	37	2945	64.2	92.5	0.90	120.0	8	2.0	1.1	2.3	0.131728
TDC2 225M–2	45	2950	77.7	92.9	0.90	145.7	8	2.0	1.0	2.3	0.199248
TDC2 250M–2	55	2960	94.6	93.2	0.90	177.4	8	2.0	1.0	2.3	0.346624
TDC2 280S–2	75	2960	128.2	93.8	0.90	242.0	7.5	2.0	0.9	2.3	0.633488
TDC2 280M–2	90	2960	153.4	94.1	0.90	290.4	7.5	2.0	0.9	2.3	0.725728
4 Pole 1500 rpm Synchronous Speed 50Hz											
TDC2 160M–4	11	1440	21.30	89.8	0.83	72.95	8	2.2	1.4	2.3	0.069360
TDC2 160L–4	15	1450	27.47	90.6	0.87	98.79	8	2.2	1.4	2.3	0.090176
TDC2 180M–4	18.5	1450	34.05	91.2	0.86	121.8	8	2.2	1.2	2.3	0.112672
TDC2 180L–4	22	1460	39.4	91.6	0.88	143.9	8	2.2	1.2	2.3	0.132328
TDC2 200L–4	30	1460	53.3	92.3	0.88	196.2	8	2.2	1.2	2.3	0.218448
TDC2 225S–4	37	1470	65.5	92.7	0.88	240.4	8	2.0	1.2	2.3	0.403512
TDC2 225M–4	45	1480	78.4	93.1	0.89	290.4	8	2.0	1.1	2.3	0.475112
TDC2 250M–4	55	1480	98.7	93.5	0.86	354.9	8	2.0	1.1	2.3	0.567600
TDC2 280S–4	75	1480	128.0	94	0.90	484.0	7.5	2.0	1.0	2.2	1.276080
TDC2 280M–4	90	1480	153.2	94.2	0.90	580.7	7.5	2.0	1.0	2.2	1.513496
6 Pole 1000 rpm Synchronous Speed 50Hz											
TDC2 160M–6	7.5	960	17.5	87.2	0.71	74.6	8	2.0	1.3	2.1	0.069808
TDC2 160L–6	11	960	23.9	88.7	0.75	109.4	8	2.0	1.2	2.1	0.096552
TDC2 180L–6	15	960	30.9	89.7	0.78	149.2	8	2.0	1.2	2.1	0.205560
TDC2 200L1–6	18.5	970	36.9	90.4	0.80	182.1	8	2.0	1.2	2.1	0.289176
TDC2 200L2–6	22	970	42.6	90.9	0.82	216.6	8	2.0	12.0	2.1	0.341936
TDC2 225M–6	30	975	55.6	91.7	0.85	293.8	7.5	2.0	1.2	2.1	0.536464
TDC2 250M–6	37	975	69.0	92.2	0.84	362.4	7.5	2.0	1.2	2.1	0.793944
TDC2 280S–6	45	980	82.4	92.7	0.85	438.5	7	2.0	1.1	2.0	1.428384
TDC2 280M1–6	55	980	99.2	93.1	0.86	536.0	7	2.0	1.1	2.0	1.766336

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TDC3 Series IE3 Efficiency Motors Technical Data (IP23) (400V/50Hz)

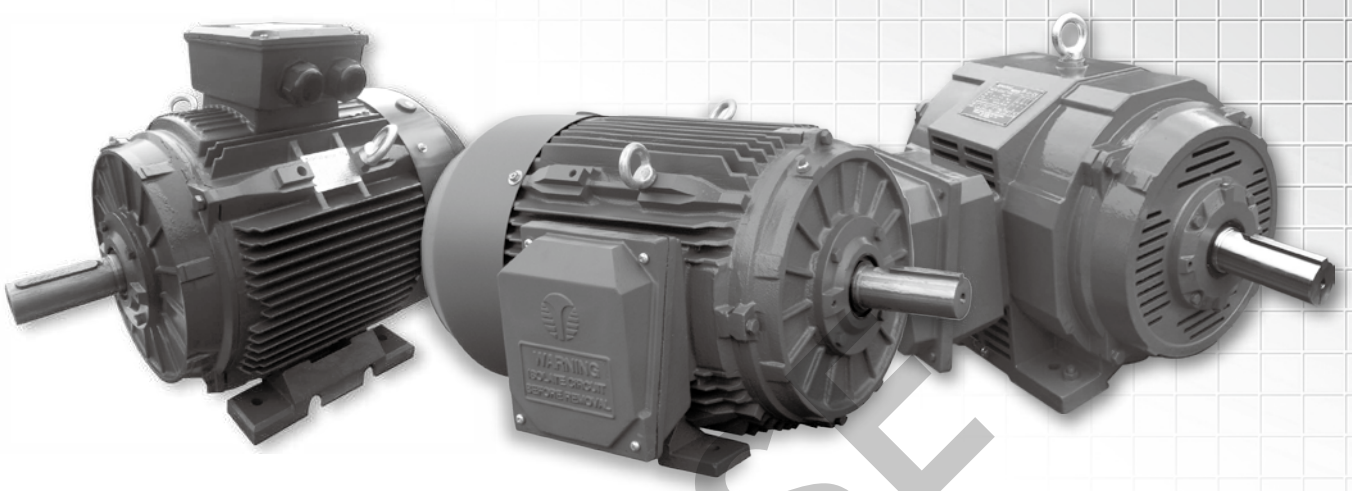
Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Moment of inertia ($kg*m^2$)
2 Pole 3000 rpm Synchronous Speed 50Hz											
TDC3 160M1–2	11	2930	19.34	91.2	0.90	35.85	8.5	2.0	1.2	2.3	0.041424
TDC3 160M2–2	15	2940	26.18	91.9	0.90	48.72	8.5	2.0	1.2	2.3	0.049648
TDC3 160L–2	18.5	2940	31.76	92.4	0.91	60.09	8.5	2.0	1.1	2.3	0.061352
TDC3 180M–2	22	2945	38.5	92.7	0.89	71.34	8.5	2.0	1.1	2.3	0.077320
TDC3 200L1–2	30	2945	52.1	93.3	0.89	97.3	8	2.0	1.1	2.3	0.138808
TDC3 200L2–2	37	2945	64.0	93.7	0.89	120.0	8	2.0	1.1	2.3	0.160064
TDC3 225M–2	45	2950	75.9	94	0.91	145.7	8	2.0	1.0	2.3	0.274928
TDC3 250M–2	55	2960	93.5	94.3	0.90	177.4	8	2.0	1.0	2.3	0.355472
TDC3 280S–2	75	2960	125.6	94.7	0.91	242.0	7.5	2.0	0.9	2.3	0.663288
TDC3 280M–2	90	2960	150.3	95	0.91	290.4	7.5	2.0	0.9	2.3	0.785344
4 Pole 1500 rpm Synchronous Speed 50Hz											
TDC3 160M–4	11	1450	20.68	91.4	0.84	72.45	8	2.2	1.4	2.3	0.082840
TDC3 160L–4	15	1450	27.33	92.1	0.86	98.8	8	2.2	1.4	2.3	0.110000
TDC3 180M–4	18.5	1460	33.5	92.6	0.86	121.0	8	2.2	1.2	2.3	0.124240
TDC3 180L–4	22	1460	39.2	93	0.87	143.9	8	2.2	1.2	2.3	0.155464
TDC3 200L–4	30	1470	57.1	93.6	0.81	194.9	8	2.2	1.2	2.3	0.235528
TDC3 225S–4	37	1470	65.4	93.9	0.87	240.4	8	2.0	1.2	2.3	0.462704
TDC3 225M–4	45	1470	79.3	94.2	0.87	292.3	8	2.0	1.1	2.3	0.522472
TDC3 250M–4	55	1470	95.4	94.6	0.88	357.3	8	2.0	1.1	2.3	0.612032
TDC3 280S–4	75	1480	131.0	95	0.87	484.0	7.5	2.0	1.0	2.2	1.596824
TDC3 280M–4	90	1480	160.5	95.2	0.85	580.7	7.5	2.0	1.0	2.2	1.746760
6 Pole 1000 rpm Synchronous Speed 50Hz											
TDC3 160M–6	7.5	960	16.2	89.1	0.75	74.6	8	2.0	1.3	2.1	0.069808
TDC3 160L–6	11	960	23.1	90.3	0.76	109.4	8	2.0	1.2	2.1	0.108352
TDC3 180L–6	15	960	30.1	91.2	0.79	149.2	8	2.0	1.2	2.1	0.223784
TDC3 200L1–6	18.5	970	36.4	91.7	0.80	182.1	8	2.0	1.2	2.1	0.306760
TDC3 200L2–6	22	970	42.5	92.2	0.81	216.6	8	2.0	12.0	2.1	0.359528
TDC3 225M–6	30	975	53.0	92.9	0.88	293.8	7.5	2.0	1.2	2.1	0.536464
TDC3 250M–6	37	975	67.3	93.3	0.85	362.4	7.5	2.0	1.2	2.1	0.793944
TDC3 280S–6	45	980	83.5	93.7	0.83	438.5	7	2.0	1.1	2.0	1.762192
TDC3 280M–6	55	980	99.3	94.1	0.85	536.0	7	2.0	1.1	2.0	2.058416

ROYSE

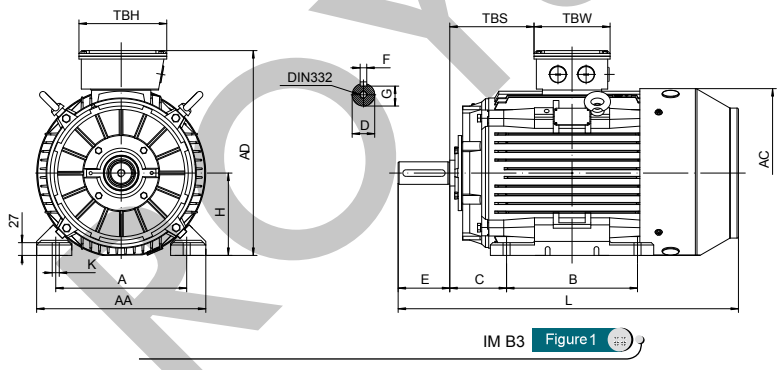
Fire Pump Motors

STANDARD FEATURES

- ODP TYPE or TEFC TYPE
- Service Factor: 1.15
- Class ‘F’ insulation for all frames, Class B rise
- Continuous Duty (S1)
- 50℃ ambient temperature



T Series Motors Dimensional Drawings



IM B3 Figure 1

O verall & Installation Dimensions

Frame		Foot Mounting				Shaft					General							
		H	A	B	C	D	E	F	G	K	AA	AD	HD	AC	L	TBS	TBW	TBH
80		80	125	100	50	φ19	40	6	15.5	φ9	154	214	134	φ158	290	43	114	114
90S/L		90	140	100/125	56	φ24	50	8	20	φ10	178	231	141	φ176	320/345	49/61.5	114	114
100L		100	160	140	63	φ28	60	8	24	φ12	203	251	151	φ199	385	76	114	114
112M		112	190	140	70	φ28	60	8	24	φ12	231	292	180	φ220	405	73	134	134
132S/M		132	216	140/178	89	φ38	80	10	33	φ12	263	332	200	φ259	467/505	61.5	134	134
160M/L		160	254	210/254	108	φ42	110	12	37	φ15	316	404	244	φ313	605/650	91	162	187
180M/L		180	279	241/279	121	φ48	110	14	42.5	φ15	354	445	265	φ360	687/725	160/180	162	187
200L		200	318	305	133	φ55	110	16	49	φ19	393	500	300	φ399	768.5	192	186	233
225S	4,6,8	225	356	286	149	φ60	140	18	53	φ19	440	558	333	φ459	810	199	186	233
225M	2	225	356	311	149	φ55	110	16	49	φ19	440	558	333	φ459	805	211.5	186	233
	4,6,8	225	356	311	149	φ60	140	18	53	φ19	440	558	333	φ459	835	211.5	186	233
250M	2	250	406	349	168	φ60	140	18	53	φ24	484	616	366	φ506	915	233	218	260
	4,6,8	250	406	349	168	φ65	140	18	58	φ24	484	616	366	φ506	915	233	218	260
280S/M	2	280	457	368/419	190	φ65	140	18	58	φ24	560	675	395	φ559	984/1035	265/277	218/245	260/280
	4,6,8	280	457	368/419	190	φ75	140	20	67.5	φ24	560	675	395	φ559	984/1035	265/277	218/245	260/280
315S	2	315	508	406	216	φ65	140	18	58	φ28	628	825	510	φ680	1205	200	290	350
	4,6,8	315	508	406	216	φ80	170	22	71	φ28	628	825	510	φ680	1235	200	290	350
315M/L	2	315	508	457/508	216	φ65	140	18	58	φ28	628	825	510	φ680	1355	200	290	350
	4,6,8	315	508	457/508	216	φ80	170	22	71	φ28	628	825	510	φ680	1385	200	290	350
355M/L	2	355	610	560/630	254	φ75	140	20	67.5	φ28	740	1010	655	φ820	1495	140	330	380
	4,6,8	355	610	560/630	254	φ95	170	25	86	φ28	740	1010	655	φ820	1525	140	330	380
	4,6,8	355	610	560/630	254	φ100	210	28	90	φ28	740	1010	655	φ820	1565	140	330	380

ROYSE

T Serie Fire Pump Motors' Main Performance Parameters (IEC)

Serial NO.	Model NO.	Volts	Output (kW)	Output (HP)	Hz	Locked current A(standard) 400V	Locked torque multiple (standard)	Maximum torque multiple (standard)	Minimum torque multiple (standard)	INS class	RPM	The test environment temperature
1	T 801-2	380-415V	0.75	1.0	50	19.0	175	250	120	F	2848	50℃
2	T 802-2	380-415V	1.1	1.5	50	25.7	175	250	120	F	2846	50℃
3	T 803-2	380-415V	1.5	2.0	50	32.3	170	240	120	F	2852	50℃
4	T 90S-2	380-415V	1.5	2.0	50	32.3	170	240	120	F	2852	50℃
5	T 90L1-2	380-415V	2.2	3.0	50	40.9	160	230	110	F	2845	50℃
6	T 90L2-2	380-415V	3	4.0	50	49.4	155	220	105	F	2851	50℃
7	T 100L-2	380-415V	3	4.0	50	49.4	155	220	105	F	2851	50℃
8	T 100L2-2	380-415V	4	5.5	50	61.8	145	215	105	F	2910	50℃
9	T 112M-2	380-415V	4	5.5	50	61.8	145	215	105	F	2910	50℃
10	T 112L-2	380-415V	5.5	7.5	50	79.8	140	200	100	F	2905	50℃
11	T 132S1-2	380-415V	5.5	7.5	50	79.8	140	200	100	F	2905	50℃
12	T 132S2-2	380-415V	7.5	10.0	50	101.7	135	200	100	F	2910	50℃
13	T 132M1-2	380-415V	9.2	12.0	50	118.8	130	200	100	F	2910	50℃
14	T 132M2-2	380-415V	11	15.0	50	146.3	130	200	100	F	2920	50℃
15	T 160M1-2	380-415V	11	15.0	50	146.3	130	200	100	F	2920	50℃
16	T 160M2-2	380-415V	15	20.0	50	184.3	130	200	100	F	2918	50℃
17	T 160L-2	380-415V	18.5	25.0	50	230.9	130	200	100	F	2922	50℃
18	T 180M-2	380-415V	22	30.0	50	274.6	130	200	100	F	2930	50℃
19	T 200L1-2	380-415V	30	40.0	50	367.7	125	200	100	F	2925	50℃
20	T 200L2-2	380-415V	37	50.0	50	457.9	120	200	100	F	2930	50℃
21	T 225M-2	380-415V	45	60.0	50	549.1	120	200	100	F	2930	50℃
22	T 250M-2	380-415V	55	75.0	50	685.9	105	200	95	F	2940	50℃
23	T 280S-2	380-415V	75	100.0	50	916.8	105	200	95	F	2940	50℃
24	T 280M-2	380-415V	90	125.0	50	1146.7	100	200	90	F	2940	50℃
25	T 315S-2	380-415V	110	150.0	50	1369.0	100	200	90	F	2940	50℃
26	T 315M-2	380-415V	132	175.0	50	1599.8	100	200	90	F	2940	50℃
27	T 315L1 -2	380-415V	160	215.0	50	1900.0	90	175	65	F	2945	50℃
28	T 315L2 -2	380-415V	200	270.0	50	2636.3	70	175	65	F	2945	50℃
29	T 355M-2	380-415V	250	330.0	50	3125.5	70	175	65	F	2945	50℃
30	T 355L-2	380-415V	315	420.0	50	4075.5	70	175	65	F	2945	50℃
31	T 802-4	380-415V	0.75	1.0	50	19.0	275	300	190	F	1420	50℃
32	T 803-4	380-415V	1.1	1.5	50	25.7	250	280	175	F	1425	50℃
33	T 90S-4	380-415V	1.1	1.5	50	25.7	250	280	175	F	1425	50℃
34	T 90L-4	380-415V	1.5	2.0	50	32.3	235	270	165	F	1420	50℃
35	T 90L2-4	380-415V	2.2	3.0	50	40.9	215	250	150	F	1430	50℃
36	T 100L1-4	380-415V	2.2	3.0	50	40.9	215	250	150	F	1430	50℃
37	T 100L2-4	380-415V	3	4.0	50	49.4	200	230	140	F	1430	50℃
38	T 100L3-4	380-415V	4	5.5	50	61.8	180	225	130	F	1435	50℃
39	T 112M-4	380-415V	4	5.5	50	61.8	180	225	130	F	1435	50℃
40	T 112L-4	380-415V	5.5	7.5	50	79.8	175	215	120	F	1430	50℃
41	T 132S-4	380-415V	5.5	7.5	50	79.8	175	215	120	F	1430	50℃
42	T 132M-4	380-415V	7.5	10.0	50	101.7	165	200	115	F	1430	50℃
43	T 132L1-4	380-415V	9.2	12.0	50	118.8	160	200	115	F	1430	50℃
44	T 132L2-4	380-415V	11	15.0	50	146.3	160	200	110	F	1440	50℃
45	T 160M-4	380-415V	11	15.0	50	146.3	160	200	110	F	1440	50℃
46	T 160L-4	380-415V	15	20.0	50	184.3	150	200	105	F	1445	50℃
47	T 180M-4	380-415V	18.5	25.0	50	230.9	150	200	105	F	1445	50℃
48	T 180L-4	380-415V	22	30.0	50	274.6	150	200	105	F	1460	50℃
49	T 200L-4	380-415V	30	40.0	50	367.7	140	200	100	F	1460	50℃
50	T 225S-4	380-415V	37	50.0	50	457.9	140	200	100	F	1470	50℃

ROYSE

T Serie Fire Pump Motors' Main Performance Parameters (IEC)

Serial NO.	Model NO.	Volts	Output (kW)	Output (HP)	Hz	Locked current A(standard) 400V	Locked torque multiple (standard)	Maximum torque multiple (standard)	Minimum torque multiple (standard)	INS class	RPM	The test environment temperature
51	T 225M-4	380-415V	45	60.0	50	549.1	140	200	100	F	1480	50℃
52	T 250M-4	380-415V	55	75.0	50	685.9	140	200	100	F	1480	50℃
53	T 280S-4	380-415V	75	100.0	50	916.8	125	200	100	F	1480	50℃
54	T 280M-4	380-415V	90	125.0	50	1146.7	110	200	100	F	1480	50℃
55	T 315S-4	380-415V	110	150.0	50	1369.0	110	200	100	F	1480	50℃
56	T 315M-4	380-415V	132	175.0	50	1599.8	100	200	90	F	1480	50℃
57	T 315L1-4	380-415V	160	215.0	50	1900.0	90	175	75	F	1480	50℃
58	T 315L2-4	380-415V	200	270.0	50	2636.3	80	175	75	F	1480	50℃
59	T 355M1-4	380-415V	220	300.0	50	2874.7	80	175	75	F	1480	50℃
60	T 355M2-4	380-415V	250	330.0	50	3125.5	80	175	75	F	1480	50℃
61	T 355L1-4	380-415V	280	375.0	50	3604.3	80	175	75	F	1480	50℃
62	T 355L2-4	380-415V	315	420.0	50	4075.5	80	175	75	F	1480	50℃
63	T 355L3-4	380-415V	355	475.0	50	4563.8	80	175	75	F	1480	50℃
64	T 803-6	380-415V	0.75	1.0	50	19.0	170	265	120	F	935	50℃
65	T 90S-6	380-415V	0.75	1.0	50	19.0	170	265	120	F	935	50℃
66	T 90L-6	380-415V	1.1	1.5	50	25.7	165	250	115	F	935	50℃
67	T 100L-6	380-415V	1.5	2.0	50	32.3	160	240	110	F	940	50℃
68	T 112M-6	380-415V	2.2	3.0	50	40.9	155	230	110	F	940	50℃
69	T 112M1-6	380-415V	3	4.0	50	49.4	150	220	105	F	940	50℃
70	T 112M2-6	380-415V	4	5.5	50	61.8	150	215	105	F	940	50℃
71	T 132S-6	380-415V	3	4.0	50	49.4	150	220	105	F	940	50℃
72	T 132M1-6	380-415V	4	5.5	50	61.8	150	215	105	F	945	50℃
73	T 132M2-6	380-415V	5.5	7.5	50	79.8	150	205	105	F	945	50℃
74	T 132M3-6	380-415V	7.5	10.0	50	101.7	150	200	105	F	945	50℃
75	T 160M-6	380-415V	7.5	10.0	50	101.7	150	200	105	F	955	50℃
76	T 160L-6	380-415V	11	15.0	50	146.3	140	200	100	F	960	50℃
77	T 180L-6	380-415V	15	20.0	50	184.3	135	200	100	F	960	50℃
78	T 200L1-6	380-415V	18.5	25.0	50	230.9	135	200	100	F	965	50℃
79	T 200L2-6	380-415V	22	30.0	50	274.6	135	200	100	F	965	50℃
80	T 225M-6	380-415V	30	40.0	50	367.7	135	200	100	F	975	50℃
81	T 250M-6	380-415V	37	50.0	50	457.9	135	200	100	F	975	50℃
82	T 280S-6	380-415V	45	60.0	50	549.1	135	200	100	F	980	50℃
83	T 280M-6	380-415V	55	75.0	50	685.9	135	200	100	F	980	50℃
84	T 315S-6	380-415V	75	100.0	50	916.8	125	200	100	F	980	50℃
85	T 315M-6	380-415V	90	125.0	50	1146.7	125	200	100	F	980	50℃
86	T 315L1-6	380-415V	110	150.0	50	1369.0	120	200	100	F	980	50℃
87	T 315L2-6	380-415V	132	175.0	50	1599.8	120	200	100	F	980	50℃
88	T 355M1-6	380-415V	160	215.0	50	1900.0	100	175	90	F	980	50℃
89	T 355M2-6	380-415V	200	270.0	50	2636.3	100	175	90	F	980	50℃
90	T 355L1-6	380-415V	220	300.0	50	2874.7	100	175	90	F	980	50℃
91	T 355L2-6	380-415V	250	330.0	50	3125.5	100	175	90	F	980	50℃

ROYSL

DC Series NEMA Motor

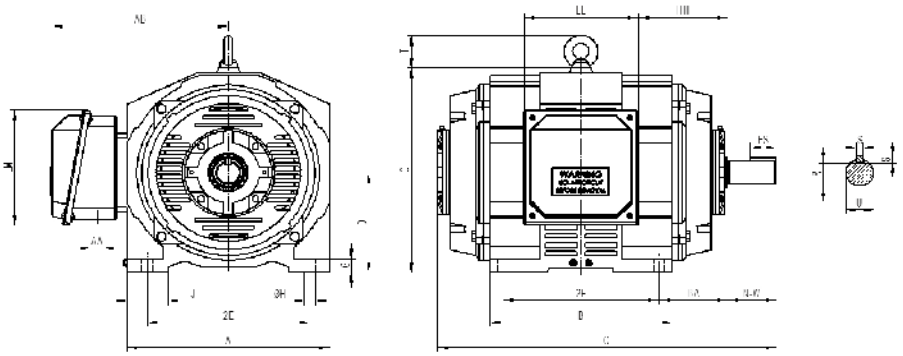


Figure 1 Foot Mounted

Installation Dimensions

NEMA Frames	MOUNTING				A	B	C	D	G	J	O	T
	2E	2F	H	BA								
254T	10.00	8.25	0.53	4.25	12.44	12.00	22.46	6.25	0.78	2.36	13.06	2.047
256T		10.00										
284T	11.00	9.50	0.53	4.75	14.17	13.03	24.85	7.00	0.90	3.15	14.87	2.441
286T		11.00										
284TS		9.50					23.48					
286TS		11.00										
324T	12.50	10.50	0.66	5.25	15.59	14.06	27.55	8.00	1.11	3.15	16.39	2.441
326T		12.00										
324TS		10.50					26.05					
326TS		12.00										
364T	14.00	11.25	0.66	5.88	18.03	14.92	29.42	9.00	1.26	3.54	19.00	2.835
365T		12.25										
364TS		11.25					27.29					
365TS		12.25										
404T	16.00	12.25	0.81	6.62	19.92	16.97	33.86	10.00	1.34	3.74	20.95	3.465
405T		13.75										
404TS		12.25					30.86					
405TS		13.75										
444T	18.00	14.50	0.81	7.50	22.05	20.08	39.47	11.00	1.43	4.33	23.09	3.465
445T		16.50										
444TS		14.50					35.72					
445TS		16.50										
447T	18.00	20.00	0.81	7.50	22.05	28.58	47.97	11.00	1.43	4.33	23.09	4.134
449T		25.00										
447TS		20.00					44.22					
449TS		25.00										

NEMA Frames	KEYWAY			SHAFT		TERAINAL BOX					BEARINGS	
	S	R	ES	N–W	U	AB	HH	LL	LM	AA	D.E	N.D.E
254T	0.375	1.416	2.91	4.0	1.625	10.83	5.77	6.97	7.31	1–1/4	6309 C3	
256T												
284T	0.5	1.591	3.28	4.62	1.875	11.62	6.77	6.97	7.31	1–1/2	6311 C3	
286T												
284TS	0.375	1.416	1.91	3.25	1.625							
286TS												
324T	0.5	1.845	3.91	5.25	2.125	13.62	6.86	8.78	9.23	2	6312 C3	
326T												
324TS	0.5	1.591	2.03	3.75	1.875							
326TS												
364T	0.625	2.021	4.28	5.88	2.375	15.23	6.83	10.36	9.23	3	6313 C3	
365T												
364TS	0.5	1.591	2.03	3.75	1.875							
365TS												
404T	0.75	2.45	5.65	7.25	2.875	16.72	8.28	10.44	11.56	3	6316C3	6314C3
405T												
404TS	0.5	1.845	2.78	4.25	2.125						6314C3	
405TS												
444T	0.875	2.88	6.91	8.5	3.375	18.31	9.39	12.72	14.58	3	6319C3	6316C3
445T												
444TS	0.625	2.021	3.03	4.75	2.375						6316C3	
445TS												
447T	0.875	2.88	6.91	8.5	3.375	18.31	3.9	12.72	14.58	3	6319C3	6316C3
449T												
447TS	0.625	2.021	3.03	4.75	2.375						6316C3	
449TS												

*Dimensions in inches.

ROYSE

DC Serie Fire Pump Motor Main Performance Parameters(NEMA 50Hz)

Serial NO.	Model NO.	Current (A) 380V	Current (A) 415V	Output (HP)	Hz	Locked current A(standard) 380V	Locked current A(standard) 415V	Locked torque multiple(standard) %	Maximum torque multiple(standard) %	Minimum torque multiple(standard) %	Service factor	INS class	RPM	EFF %	Power factor	Weight (lbs)
1	TDC254T15U2B	22.4	20.5	15	50	154	141	130	200	100	1.15	F	2925	87.6	0.87	221
2	TDC256T20U2B	29.5	27.0	20	50	194	177	130	200	100	1.15	F	2925	88.7	0.87	243
3	TDC284TS25U2B	36.7	33.6	25	50	243	222	130	200	100	1.15	F	2935	89.3	0.87	315
4	TDC286TS30U2B	43.2	39.6	30	50	289	264	130	200	100	1.15	F	2935	89.9	0.88	344
5	TDC286TS40U2B	57.1	52.3	40	50	387	354	125	200	100	1.15	F	2935	90.7	0.88	386
6	TDC324TS40U2B	56.5	51.7	40	50	387	354	125	200	100	1.15	F	2937	90.7	0.89	441
7	TDC324TS50U2B	70.2	64.3	50	50	482	441	120	200	100	1.15	F	2935	91.2	0.89	474
8	TDC326TS50U2B	70.2	64.3	50	50	482	441	120	200	100	1.15	F	2935	91.2	0.89	474
9	TDC326TS60U2B	84.7	77.6	60	50	578	529	120	200	100	1.15	F	2940	91.7	0.88	509
10	TDC364TS60U2B	83.8	76.7	60	50	578	529	120	200	100	1.15	F	2942	91.7	0.89	606
11	TDC364TS75U2B	104.3	95.5	75	50	722	661	105	200	95	1.15	F	2940	92.1	0.89	653
12	TDC365TS75U2B	104.3	95.5	75	50	722	661	105	200	95	1.15	F	2940	92.1	0.89	662
13	TDC365TS100U2B	139.7	127.9	100	50	965	883	105	200	95	1.15	F	2940	92.7	0.88	750
14	TDC405TS100U2B	138.1	126.5	100	50	965	883	105	200	95	1.15	F	2942	92.7	0.89	809
15	TDC404TS125U2B	176.1	161.2	125	50	1207	1105	100	200	90	1.15	F	2943	93	0.87	931
16	TDC405TS150U2B	205.8	188.5	150	50	1441	1319	100	200	90	1.15	F	2944	93.3	0.89	994
17	TDC444TS125U2B	174.1	159.4	125	50	1207	1105	100	200	90	1.15	F	2945	93	0.88	1125
18	TDC445TS150U2B	203.6	186.4	150	50	1441	1319	100	200	90	1.15	F	2950	93.3	0.9	1230
19	TDC444TS200U2B	289.3	264.9	200	50	1927	1764	70	175	65	1.15	F	2955	93.8	0.84	1383
20	TDC447TS200U2B	289.3	264.9	200	50	1927	1764	70	175	65	1.15	F	2955	93.8	0.84	1566
21	TDC447TS300U2B	399.7	365.9	300	50	3026	2770	70	175	65	1.15	F	2960	94	0.91	1985
22	TDC447TS350U2B	466.3	426.9	350	50	3542	3243	70	175	65	1.15	F	2965	94	0.91	2117
23	TDC449TS250U2B	336.7	308.3	250	50	2534	2320	70	175	65	1.15	F	2960	94	0.9	1742
24	TDC449TS300U2B	399.7	365.9	300	50	3026	2770	70	175	65	1.15	F	2970	94	0.91	1962
25	TDC449TS350U2B	466.3	426.9	350	50	3542	3243	70	175	65	1.15	F	2970	94	0.91	2139
26	TDC449TS400U2B	532.9	487.9	400	50	4046	3704	70	175	65	1.15	F	2970	94	0.91	2293
27	TDC 254T15U4B	22.4	20.5	15	50	154	141	160	200	110	1.15	F	1440	87.6	0.87	225
28	TDC 256T20U4B	29.5	27.0	20	50	194	177	150	200	105	1.15	F	1445	88.7	0.87	256
29	TDC 284T25U4B	36.7	33.6	25	50	243	222	150	200	105	1.15	F	1450	89.3	0.87	322
30	TDC 286T30U4B	43.7	40.0	30	50	289	264	150	200	105	1.15	F	1460	89.9	0.87	348
31	TDC 324T40U4B	57.8	52.9	40	50	387	354	140	200	100	1.15	F	1460	90.7	0.87	454
32	TDC 326T50U4B	71.8	65.8	50	50	482	441	140	200	100	1.15	F	1470	91.2	0.87	507
33	TDC364T60U4B	85.7	78.5	60	50	578	529	140	200	100	1.15	F	1480	91.7	0.87	628
34	TDC365T75U4B	105.5	96.6	75	50	722	661	140	200	100	1.15	F	1480	92.1	0.88	606
35	TDC405T100U4B	139.7	127.9	100	50	965	883	125	200	100	1.15	F	1480	92.7	0.88	889
36	TDC405T125U4B	174.1	159.4	125	50	1207	1105	110	200	100	1.15	F	1478	93	0.88	1014
37	TDC444T125U4B	172.1	157.6	125	50	1207	1105	110	200	100	1.15	F	1480	93	0.89	1125
38	TDC444T150U4B	208.2	190.6	150	50	1441	1319	110	200	100	1.15	F	1480	93.3	0.88	1213
39	TDC445T150U4B	208.2	190.6	150	50	1441	1319	110	200	100	1.15	F	1480	93.3	0.88	1213
40	TDC445T200U4B	273.0	250.0	200	50	1927	1764	100	200	90	1.15	F	1480	93.8	0.89	1411
41	TDC447T200U4B	273.0	250.0	200	50	1927	1764	100	200	90	1.15	F	1480	93.8	0.89	1610
42	TDC447T250U4B	340.5	311.8	250	50	2534	2320	80	175	75	1.15	F	1480	94	0.89	1830
43	TDC449T250U4B	340.5	311.8	250	50	2534	2320	80	175	75	1.15	F	1480	94	0.89	1830
44	TDC449T300U4B	408.6	374.2	300	50	3026	2770	80	175	75	1.15	F	1480	94	0.89	2073
45	TDC449T350U4B	476.7	436.5	350	50	3542	3243	80	175	75	1.15	F	1480	94	0.89	2227
46	TDC 254T7.5U6B	13.5	12.4	7.5	50	84	77	150	200	105	1.15	F	955	83.1	0.76	207
47	TDC 256T10U6B	17.7	16.2	10	50	107	98	150	200	105	1.15	F	960	84.7	0.76	227
48	TDC 284T15U6B	25.7	23.5	15	50	154	141	140	200	100	1.15	F	960	86.4	0.77	309
49	TDC 286T20U6B	33.7	30.9	20	50	194	177	135	200	100	1.15	F	965	87.7	0.77	335
50	TDC 324T25U6B	41.8	38.2	25	50	243	222	135	200	100	1.15	F	965	88.6	0.77	415
51	TDC 326T30U6B	49.8	45.6	30	50	289	264	135	200	100	1.15	F	975	89.2	0.77	445
52	TDC364T40U6B	64.8	59.3	40	50	387	354	135	200	100	1.15	F	975	90.2	0.78	595
53	TDC365T50U6B	80.4	73.7	50	50	482	441	135	200	100	1.15	F	980	90.8	0.78	662
54	TDC404T60U6B	95.9	87.8	60	50	578	529	135	200	100	1.15	F	980	91.4	0.78	798
55	TDC405T75U6B	117.7	107.8	75	50	722	661	135	200	100	1.15	F	980	91.9	0.79	871
56	TDC444T100U6B	155.8	142.6	100	50	965	883	125	200	100	1.15	F	980	92.6	0.79	1186
57	TDC445T125U6B	194.1	177.7	125	50	1207	1105	125	200	100	1.15	F	980	92.9	0.79	1308
58	TDC447T150U6B	231.9	212.3	150	50	1441	1319	120	200	100	1.15	F	980	93.3	0.79	1614
59	TDC449T200U6B	307.6	281.6	200	50	1927	1764	120	175	100	1.15	F	980	93.8	0.79	1887
60	TDC449T250U6B	383.6	351.3	250	50	2534	2320	100	175	90	1.15	F	980	94	0.79	2161

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DC Serie Fire Pump Motor Main Performance Parameters(NEMA 60Hz)

Serial NO.	Model NO.	Current (A) 230V	Current (A) 460V	Current (A) 380V	Current (A) 400V	Current (A) 575V	Output (HP)	Hz	Locked current A(standard) 380V	Locked current A(standard) 400V	Locked current A(standard) 575V	Locked current A(standard) 460V	Locked torque multiple (standard)%	Maximum torque multiple (standard)%	Minimum torque multiple (standard)%	Service factor	INS class	RPM	EFF %	Power factor
1	TDC254T15U2B	35.1	17.5	21.2	20.2	14.0	15	60	140.4	133.4	92.8	116.0	130	200	100	1.15	F	3504	89.5	0.9
2	TDC256T20U2B	46.4	23.2	28.1	26.7	18.6	20	60	175.5	166.7	116.0	145.0	130	200	100	1.15	F	3504	90.2	0.9
3	TDC284TS25U2B	57.5	28.7	34.8	33.0	23.0	25	60	220.9	209.9	146.0	182.5	130	200	100	1.15	F	3516	91	0.9
4	TDC286TS30U2B	69.0	34.5	41.7	39.7	27.6	30	60	263.3	250.1	174.0	217.5	130	200	100	1.15	F	3516	91	0.9
5	TDC286TS40U2B	91.3	45.6	55.2	52.5	36.5	40	60	351.1	333.5	232.0	290.0	125	200	100	1.15	F	3516	91.7	0.9
6	TDC324TS40U2B	91.3	45.6	55.2	52.5	36.5	40	60	351.1	333.5	232.0	290.0	125	200	100	1.15	F	3516	91.7	0.9
7	TDC324TS50U2B	113.2	56.6	68.5	65.1	45.3	50	60	438.8	416.9	290.0	362.5	120	200	100	1.15	F	3516	92.4	0.9
8	TDC326TS50U2B	113.2	56.6	68.5	65.1	45.3	50	60	438.8	416.9	290.0	362.5	120	200	100	1.15	F	3516	92.4	0.9
9	TDC326TS60U2B	135.0	67.5	81.7	77.6	54.0	60	60	526.6	500.3	348.0	435.0	120	200	100	1.15	F	3516	93	0.9
10	TDC364TS60U2B	135.0	67.5	81.7	77.6	54.0	60	60	526.6	500.3	348.0	435.0	120	200	100	1.15	F	3516	93	0.9
11	TDC364TS75U2B	168.7	84.4	102.1	97.0	67.5	75	60	656.7	623.9	434.0	542.5	105	200	95	1.15	F	3516	93	0.9
12	TDC365TS75U2B	168.7	84.4	102.1	97.0	67.5	75	60	656.7	623.9	434.0	542.5	105	200	95	1.15	F	3528	93	0.9
13	TDC365TS100U2B	224.9	112.5	136.1	129.3	90.0	100	60	877.6	833.8	580.0	725.0	105	200	95	1.15	F	3528	93	0.9
14	TDC405TS100U2B	224.9	112.5	136.1	129.3	90.0	100	60	877.6	833.8	580.0	725.0	105	200	95	1.15	F	3528	93	0.9
15	TDC404TS125U2B		139.7	169.1	160.6	111.7	125	60	1098.6	1043.6	726.0	907.5	100	200	90	1.15	F	3528	93.6	0.9
16	TDC405TS150U2B		165.8	200.7	190.6	132.6	150	60	1313.4	1247.8	868.0	1085.0	100	200	90	1.15	F	3528	93.6	0.91
17	TDC444TS125U2B		138.1	167.2	158.9	110.5	125	60	1098.6	1043.6	726.0	907.5	100	200	90	1.15	F	3528	93.6	0.91
18	TDC444TS200U2B		218.9	265.0	251.8	175.1	200	60	1755.3	1667.5	1160.0	1450.0	100	200	90	1.15	F	3570	94.5	0.91
19	TDC445TS150U2B		165.8	200.7	190.6	132.6	150	60	1313.4	1247.8	868.0	1085.0	100	200	90	1.15	F	3528	93.6	0.91
20	TDC447TS200U2B		218.9	265.0	251.8	175.1	200	60	1755.3	1667.5	1160.0	1450.0	100	200	90	1.15	F	3570	94.5	0.91
21	TDC447TS300U2B		326.7	395.4	375.7	261.3	300	60	2663.2	2530.0	1760.0	2200.0	70	175	65	1.15	F	3570	95	0.91
22	TDC447TS350U2B		381.1	461.4	438.3	304.9	350	60	3086.8	2932.5	2040.0	2550.0	70	175	65	1.15	F	3570	95	0.91
23	TDC449TS250U2B		273.7	331.3	314.7	218.9	250	60	2209.2	2098.8	1460.0	1825.0	70	175	65	1.15	F	3570	94.5	0.91
24	TDC449TS300U2B		326.7	395.4	375.7	261.3	300	60	2663.2	2530.0	1760.0	2200.0	70	175	65	1.15	F	3570	95	0.91
25	TDC449TS350U2B		381.1	461.4	438.3	304.9	350	60	3086.8	2932.5	2040.0	2550.0	70	175	65	1.15	F	3570	95	0.91
26	TDC449TS400U2B		433.7	525.0	498.8	347.0	400	60	3510.5	3335.0	2320.0	2900.0	70	175	65	1.15	F	3570	95.4	0.91
27	TDC 254T15U4B	34.9	17.4	21.1	20.0	13.9	15	60	140.4	133.4	92.8	116.0	160	200	110	1.15	F	1728	91	0.89
28	TDC 256T20U4B	46.5	23.2	28.1	26.7	18.6	20	60	175.5	166.7	116.0	145.0	150	200	105	1.15	F	1734	91	0.89
29	TDC 284T25U4B	57.7	28.8	34.9	33.2	23.1	25	60	220.9	209.9	146.0	182.5	150	200	105	1.15	F	1740	91.7	0.89
30	TDC 286T30U4B	68.7	34.3	41.6	39.5	27.5	30	60	263.3	250.1	174.0	217.5	150	200	105	1.15	F	1752	92.4	0.89
31	TDC 324T40U4B	91.0	45.5	55.1	52.3	36.4	40	60	351.1	333.5	232.0	290.0	140	200	100	1.15	F	1752	93	0.89
32	TDC 326T50U4B	113.7	56.9	68.8	65.4	45.5	50	60	438.8	416.9	290.0	362.5	140	200	100	1.15	F	1764	93	0.89
33	TDC364T60U4B	135.6	67.8	82.1	78.0	54.2	60	60	526.6	500.3	348.0	435.0	140	200	100	1.15	F	1776	93.6	0.89
34	TDC365T75U4B	168.6	84.3	102.0	96.9	67.4	75	60	656.7	623.9	434.0	542.5	140	200	100	1.15	F	1776	94.1	0.89
35	TDC405T100U4B	224.8	112.4	136.1	129.3	89.9	100	60	877.6	833.8	580.0	725.0	125	200	100	1.15	F	1776	94.1	0.89
36	TDC405T125U4B		138.4	167.5	159.1	110.7	125	60	1098.6	1043.6	726.0	907.5	110	200	100	1.15	F	1776	94.5	0.9
37	TDC444T125U4B		138.4	167.5	159.1	110.7	125	60	1098.6	1043.6	726.0	907.5	110	200	100	1.15	F	1776	94.5	0.9
38	TDC444T150U4B		165.2	199.9	189.9	132.1	150	60	1313.4	1247.8	868.0	1085.0	110	200	100	1.15	F	1776	95	0.9
39	TDC445T150U4B		165.2	199.9	189.9	132.1	150	60	1313.4	1247.8	868.0	1085.0	110	200	100	1.15	F	1776	95	0.9
40	TDC445T200U4B		217.8	263.6	250.4	174.2	200	60	1755.3	1667.5	1160.0	1450.0	100	200	90	1.15	F	1780	95	0.91
41	TDC447T200U4B		217.8	263.6	250.4	174.2	200	60	1755.3	1667.5	1160.0	1450.0	100	200	90	1.15	F	1780	95	0.91
42	TDC447T250U4B		271.1	328.2	311.7	216.9	250	60	2209.2	2098.8	1460.0	1825.0	80	175	75	1.15	F	1780	95.4	0.91
43	TDC449T250U4B		271.1	328.2	311.7	216.9	250	60	2209.2	2098.8	1460.0	1825.0	80	175	75	1.15	F	1780	95.4	0.91
44	TDC449T300U4B		325.3	393.8	374.1	260.2	300	60	2663.2	2530.0	1760.0	2200.0	80	175	75	1.15	F	1780	95.4	0.91
45	TDC449T350U4B		379.5	459.4	436.4	303.6	350	60	3086.8	2932.5	2040.0	2550.0	80	175	75	1.15	F	1780	95.4	0.91
46	TDC 254T7.5U6B	20.5	10.2	12.4	11.8	8.2	7.5	60	76.9	73.0	50.8	63.5	150	200	105	1.15	F	1146	88.5	0.78
47	TDC 256T10U6B	26.8	13.4	16.2	15.4	10.7	10	60	98.1	93.2	64.8	81.0	150	200	105	1.15	F	1152	90.2	0.78
48	TDC 284T15U6B	39.6	19.8	24.0	22.8	15.9	15	60	140.4	133.4	92.8	116.0	140	200	100	1.15	F	1152	90.2	0.79
49	TDC 286T20U6B	52.4	26.2	31.7	30.1	21.0	20	60	175.5	166.7	116.0	145.0	135	200	100	1.15	F	1158	91	0.79
50	TDC 324T25U6B	65.0	32.5	39.3	37.4	26.0	25	60	220.9	209.9	146.0	182.5	135	200	100	1.15	F	1158	91.7	0.79
51	TDC 326T30U6B	77.4	38.7	46.8	44.5	31.0	30	60	263.3	250.1	174.0	217.5	135	200	100	1.15	F	1170	92.4	0.79
52	TDC364T40U6B	101.2	50.6	61.3	58.2	40.5	40	60	351.1	333.5	232.0	290.0	135	200	100	1.15	F	1170	93	0.8
53	TDC365T50U6B	126.5	63.3	76.6	72.8	50.6	50	60	438.8	416.9	290.0	362.5	135	200	100	1.15	F	1176	93	0.8
54	TDC404T60U6B	150.9	75.4	91.3	86.7	60.3	60	60	526.6	500.3	348.0	435.0	135	200	100	1.15	F	1176	93.6	0.8
55	TDC405T75U6B	186.2	93.1	112.7	107.1	74.5	75	60	656.7	623.9	434.0	542.5	135	200	100	1.15	F	1176	93.6	0.81
56	TDC444T100U6B	247.0	123.5	149.5	142.0	98.8	100	60	877.6	833.8	580.0	725.0	125	200	100	1.15	F	1176	94.1	0.81
57	TDC445T125U6B		154.4	186.9	177.5	123.5	125	60	1098.6	1043.6	726.0	907.5	125	200	100	1.15	F	1176	94.1	0.81
58	TDC447T150U6B		184.5	223.3	212.1	147.6	150	60	1313.4	1247.8	868.0	1085.0	120	200	100	1.15	F	1180	94.5	0.81
59	TDC449T200U6B		246.0	297.7	282.9	196.8	200	60	1755.3	1667.5	1160.0	1450.0	120	200	100	1.15	F	1180	94.5	0.81
60	TDC449T250U6B		304.6	368.7	350.2	243.6	250	60	2209.2	2098.8	1460.0	1825.0	100	175	90	1.15	F	1180	95.4	0.81

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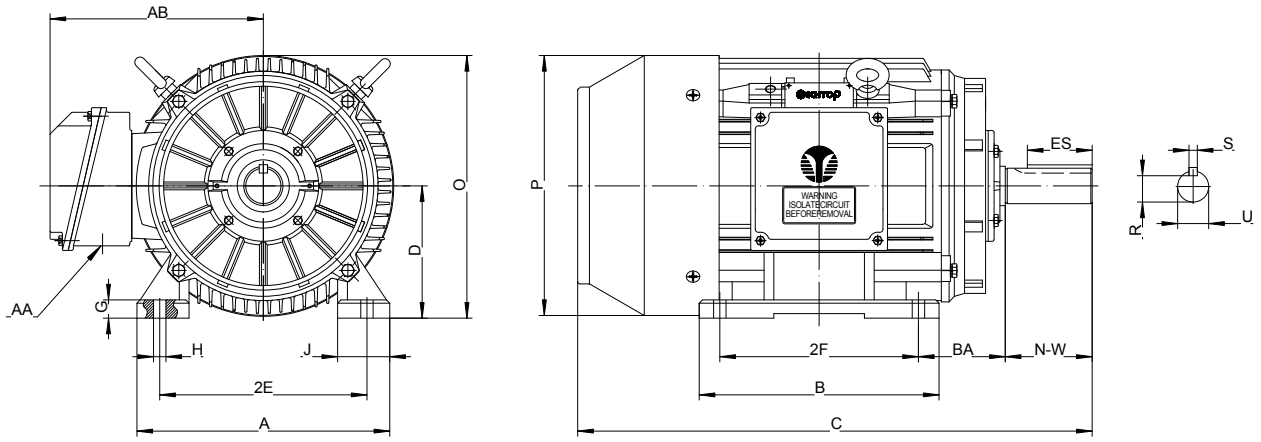
XC Series Motors Dimensional Drawings



Foot Mounted Figure 1

Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					General					
	A	B	G	J	2E	2F	H	BA	N-W	U	S	R	ES	C	D	O	AA	AB	P
143T	7	5.12	0.55	1.46	5.5	4	0.34	2.25	2.25	0.875	0.188	0.771	1.41	13	3.5	7.01	3/4	5.9	6.93
145T		6.1				5								14					
182T	9	6.1	0.675	1.77	7.5	4.5	0.41	2.75	2.75	1.125	0.25	0.986	1.78	15.5	4.5	8.83	3/4	7.17	8.66
184T		7.09				5.5								16.5					
213T	10.27	7.48	0.71	1.81	8.5	5.5	0.41	3.5	3.38	1.375	0.312	1.201	2.42	18.78	5.25	10.35	1	7.95	10.2
215T		8.98				7								20.28					
254T	12.36	10.35	0.63	2.36	10	8.25	0.53	4.25	4	1.625	0.375	1.416	2.91	24	6.25	12.44	1-1/4	10.1	12.36
256T		12.05				10								25.73					
284T	13.8	12.2	0.985	2.95	11	9.5	0.53	4.75	4.62	1.875	0.5	1.591	3.28	27.37	7	13.9	1-1/2	10.83	13.78
286T		13.7				11								28.87					
284TS	13.8	12.2	0.985	2.95	11	9.5	0.53	4.75	3.25	1.625	0.375	1.416	1.91	26	7	13.9	1-1/2	10.83	13.78
286TS		13.7				11								27.5					
324T	15.4	13	1.12	3.15	12.5	10.5	0.66	5.25	5.25	2.125	0.5	1.845	3.91	29.8	8	15.9	2	13	15.71
326T		14.5				12								31.3					
324TS	15.4	13	1.12	3.15	12.5	10.5	0.66	5.25	3.75	1.875	0.5	1.591	2.03	28.3	8	15.9	2	13	15.71
326TS		14.5				12								29.8					
364T	17.17	14.2	1.24	3.15	14	11.25	0.66	5.88	5.88	2.375	0.625	2.021	4.28	33.47	9	18	3	14.2	18.07
365T		15.2				12.25								34.47					
364TS	17.17	14.2	1.24	3.15	14	11.25	0.66	5.88	3.75	1.875	0.5	1.591	2.03	31.34	9	18	3	14.2	18.07
365TS		15.2				12.25								32.34					
404T	19.06	17.44	1.33	3.15	16	12.25	0.81	6.62	7.25	2.875	0.75	2.45	5.65	37.76	10	20	3	15.3	19.96
405T						13.75													
405TS									4.25	2.125	0.5	1.845	2.78	34.77					
444T	21.93	20.08	1.315	3.94	18	14.5	0.81	7.5	8.5	3.375	0.875	2.88	6.91	44.05	11	22	3	18	22.01
445T						16.5													
444TS	21.93	20.08	1.315	3.94	18	14.5	0.81	7.5	4.75	2.375	0.625	2.021	3.03	40.3					
445TS						16.5													
447T	21.93	28.6	1.315	3.94	18	20	0.81	7.5	8.5	3.375	0.875	2.88	6.91	52.55	11	22	3	18	22.01
449T						25													
447TS	21.93	28.6	1.315	3.94	18	20	0.81	7.5	4.75	2.375	0.625	2.021	3.03	48.8					
449TS						25													

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TXC Serie Fire Pump Motors' Main Performance Parameters(NEMA 50Hz)

Serial NO.	Model NO.	Current (A)380V	Current (A)415V	Output (HP)	Hz	Locked current A (standard) 380V	Locked current A(standard) 415V	Locked torque multiple (standard) %	Maximum torque multiple (standard) %	Minimum torque multiple (standard) %	Service factor	INS class	RPM	EFF %	Power factor
1	TXC 143T1U2B	1.8	1.6	1	50	20	18.3	175	250	120	1.15	F	2875	72.1	0.88
2	TXC 143T1.5U2B	2.6	2.4	1.5	50	27	24.7	175	250	120	1.15	F	2875	75	0.88
3	TXC 145T2U2B	3.3	3.0	2	50	34	31.1	170	240	120	1.15	F	2875	77.2	0.89
4	TXC 182T3U2B	4.8	4.4	3	50	43	39.4	160	230	110	1.15	F	2925	79.7	0.89
5	TXC 184T5U2B	7.9	7.2	5	50	61	55.9	150	215	105	1.15	F	2925	81.5	0.89
6	TXC 213T7.5U2B	11.3	10.4	7.5	50	84	76.9	140	200	100	1.15	F	2933	84.7	0.89
7	TXC 215T10U2B	14.9	13.6	10	50	107	98.0	135	200	100	1.15	F	2933	86	0.89
8	TXC 254T15U2B	21.7	19.9	15	50	154	141.0	130	200	100	1.15	F	2950	87.6	0.9
9	TXC 256T20U2B	28.5	26.1	20	50	194	177.6	130	200	100	1.15	F	2950	88.7	0.9
10	TXC 284TS25U2B	35.4	32.5	25	50	243	222.5	130	200	100	1.15	F	2958	89.3	0.9
11	TXC 286TS30U2B	42.3	38.7	30	50	289	264.6	130	200	100	1.15	F	2958	89.9	0.9
12	TXC 324TS40U2B	55.2	50.6	40	50	387	354.4	125	200	100	1.15	F	2967	90.7	0.91
13	TXC 326TS50U2B	68.7	62.9	50	50	482	441.3	120	200	100	1.15	F	2967	91.2	0.91
14	TXC364TS60U2B	81.9	75.0	60	50	578	529.3	120	200	100	1.15	F	2967	91.7	0.91
15	TXC365TS75U2B	100.9	92.4	75	50	722	661.1	105	200	95	1.15	F	2967	92.1	0.92
16	TXC405TS100U2B	133.6	122.3	100	50	965	883.6	105	200	95	1.15	F	2975	92.7	0.92
17	TXC444TS125U2B	166.5	152.4	125	50	1207	1105.2	100	200	90	1.15	F	2979	93	0.92
18	TXC445TS150U2B	197.0	180.4	150	50	1441	1319.5	100	200	90	1.15	F	2979	93.3	0.93
19	TXC447TS200U2B	262.1	240.0	200	50	1927	1764.5	100	200	90	1.15	F	2979	93.5	0.93
20	TXC449TS250U2B	326.6	299.0	250	50	2534	2320.3	70	175	65	1.15	F	2979	93.8	0.93
21	TXC449TS300U2B	391.1	358.1	300	50	3026	2770.8	70	175	65	1.15	F	2979	94	0.93
22	TXC586/7TS350U2B	456.2	417.8	350	50	3542	3243.3	70	175	65	1.15	F	2980	94	0.93
23	TXC586/7TS400U2B	521.4	477.4	400	50	4046	3704.8	70	175	65	1.15	F	2981	94	0.93
24	TXC586/7TS450U2B	586.6	537.1	450	50	4539	4156.2	70	175	65	1.15	F	2982	94	0.93
25	TXC 143T1U4B	1.8	1.6	1	50	20	18.3	275	300	190	1.15	F	1442	72.1	0.88
26	TXC 145T1.5U4B	2.6	2.4	1.5	50	27	24.7	250	280	175	1.15	F	1442	75	0.88
27	TXC 145T2U4B	3.4	3.1	2	50	34	31.1	235	270	165	1.15	F	1442	77.2	0.88
28	TXC 182T3U4B	4.9	4.5	3	50	43	39.4	215	250	150	1.15	F	1446	79.7	0.88
29	TXC 184T5U4B	7.9	7.3	5	50	61	55.9	185	225	130	1.15	F	1446	81.5	0.88
30	TXC 213T7.5U4B	11.5	10.5	7.5	50	84	76.9	175	215	120	1.15	F	1450	84.7	0.88
31	TXC 215T10U4B	15.1	13.8	10	50	107	98.0	165	200	115	1.15	F	1450	86	0.88
32	TXC 254T15U4B	21.9	20.1	15	50	154	141.0	160	200	110	1.15	F	1458	87.6	0.89
33	TXC 256T20U4B	28.9	26.4	20	50	194	177.6	150	200	105	1.15	F	1458	88.7	0.89
34	TXC 284T25U4B	35.8	32.8	25	50	243	222.5	150	200	105	1.15	F	1467	89.3	0.89
35	TXC 286T30U4B	42.7	39.1	30	50	289	264.6	150	200	105	1.15	F	1467	89.9	0.89

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XC Serie Fire Pump Motors' Main Performance Parameters(NEMA 50Hz)

Serial NO.	Model NO.	Current (A) 380V	Current (A) 415V	Output (HP)	Hz	Locked current A (standard) 380V	Locked current A(standard) 415V	Locked torque multiple (standard) %	Maximum torque multiple (standard) %	Minimum torque multiple (standard) %	Service factor	INS class	RPM	EFF %	Power factor
36	TXC 324T40U4B	56.5	51.7	40	50	387	354.4	140	200	100	1.15	F	1475	90.7	0.89
37	TXC 326T50U4B	70.2	64.3	50	50	482	441.3	140	200	100	1.15	F	1475	91.2	0.89
38	TXC364T60U4B	83.8	76.7	60	50	578	529.3	140	200	100	1.15	F	1479	91.7	0.89
39	TXC365T75U4B	103.1	94.4	75	50	722	661.1	140	200	100	1.15	F	1479	92.1	0.9
40	TXC405T100U4B	136.6	125.1	100	50	965	883.6	125	200	100	1.15	F	1483	92.7	0.9
41	TXC444T125U4B	168.3	154.1	125	50	1207	1105.2	110	200	100	1.15	F	1483	93	0.91
42	TXC445T150U4B	201.3	184.3	150	50	1441	1319.5	110	200	100	1.15	F	1483	93.3	0.91
43	TXC447T200U4B	267.9	245.3	200	50	1927	1764.5	100	200	90	1.15	F	1483	93.5	0.91
44	TXC449T250U4B	333.8	305.6	250	50	2534	2320.3	80	175	75	1.15	F	1483	93.8	0.91
45	TXC449T300U4B	399.7	365.9	300	50	3026	2770.8	80	175	75	1.15	F	1484	94	0.91
46	TXC586/7T350U4B	466.3	426.9	350	50	3542	3243.3	80	175	75	1.15	F	1485	94	0.91
47	TXC586/7T400U4B	532.9	487.9	400	50	4046	3704.8	80	175	75	1.15	F	1486	94	0.91
48	TXC586/7T450U4B	599.5	548.9	450	50	4539	4156.2	80	175	75	1.15	F	1487	94	0.91
49	TXC 145T1U6B	2.1	2.0	1	50	20	18.3	170	265	120	1.15	F	958	70	0.76
50	TXC 182T1.5U6B	3.0	2.8	1.5	50	27	24.7	165	250	115	1.15	F	958	72.9	0.77
51	TXC 184T2U6B	3.9	3.6	2	50	34	31.1	160	240	110	1.15	F	958	75.2	0.77
52	TXC 213T3U6B	5.7	5.2	3	50	43	39.4	155	230	110	1.15	F	958	77.7	0.77
53	TXC 215T5U6B	9.3	8.5	5	50	61	55.9	150	215	105	1.15	F	967	79.7	0.77
54	TXC 254T7.5U6B	13.4	12.2	7.5	50	84	76.9	150	200	105	1.15	F	967	83.1	0.77
55	TXC 256T10U6B	17.5	16.0	10	50	107	98.0	150	200	105	1.15	F	971	84.7	0.77
56	TXC 284T15U6B	25.4	23.2	15	50	154	141.0	140	200	100	1.15	F	971	86.4	0.78
57	TXC 286T20U6B	33.3	30.5	20	50	194	177.6	135	200	100	1.15	F	975	87.7	0.78
58	TXC 324T25U6B	40.7	37.3	25	50	243	222.5	135	200	100	1.15	F	975	88.6	0.79
59	TXC 326T30U6B	48.5	44.4	30	50	289	264.6	135	200	100	1.15	F	979	89.2	0.79
60	TXC364T40U6B	63.2	57.8	40	50	387	354.4	135	200	100	1.15	F	979	90.2	0.8
61	TXC365T50U6B	78.4	71.8	50	50	482	441.3	135	200	100	1.15	F	983	90.8	0.8
62	TXC404T60U6B	93.5	85.6	60	50	578	529.3	135	200	100	1.15	F	983	91.4	0.8
63	TXC405T75U6B	114.8	105.1	75	50	722	661.1	135	200	100	1.15	F	983	91.9	0.81
64	TXC444T100U6B	151.9	139.1	100	50	965	883.6	125	200	100	1.15	F	983	92.6	0.81
65	TXC445T125U6B	189.3	173.3	125	50	1207	1105.2	125	200	100	1.15	F	983	92.9	0.81
66	TXC447T150U6B	226.2	207.1	150	50	1441	1319.5	120	200	100	1.15	F	983	93.3	0.81
67	TXC449T200U6B	300.9	275.5	200	50	1927	1764.5	120	200	100	1.15	F	983	93.5	0.81
68	TXC586/7T250U6B	375.0	343.3	250	50	2534	2320.3	100	175	90	1.15	F	983	93.8	0.81
69	TXC586/7T300U6B	449.0	411.1	300	50	3026	2770.8	100	175	90	1.15	F	983	94	0.81
70	TXC586/7T350U6B	523.8	479.6	350	50	3542	3243.3	100	175	90	1.15	F	983	94	0.81
71	TXC586/7T400U6B	598.7	548.2	400	50	4046	3704.8	100	175	90	1.15	F	983	94	0.81

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XC Serie Fire Pump Motors' Main Performance Parameters(NEMA 60HZ)

Serial NO.	Model NO.	Current (A) 230V	Current (A) 460V	Current (A) 380V	Current (A) 400V	Current (A) 575V	Output (HP)	Hz	Locked current A(standard) 380V	Locked current A(standard) 400V	Locked current A(standard) 575V	Locked current A(st andard) 460V	Locked torque multiple (standard)%	Maximum torque multiple (standard)%	Minimum torque multiple (standard)%	Service factor	INS class	RPM	EFF %	Power factor
1	TXC 143T1U2B	2.8	1.4	1.7	1.6	1.1	1	60	18.2	17.3	12.0	15	175	250	120	1.15	F	3450	75.5	0.88
2	TXC 143T1.5U2B	3.9	1.9	2.4	2.2	1.6	1.5	60	24.2	23.0	16.0	20	175	250	120	1.15	F	3450	82.5	0.88
3	TXC 145T2U2B	5.0	2.5	3.0	2.9	2.0	2	60	30.3	28.8	20.0	25	170	240	120	1.15	F	3450	84	0.89
4	TXC 182T3U2B	7.4	3.7	4.5	4.3	3.0	3	60	38.7	36.8	25.6	32	160	230	110	1.15	F	3510	85.5	0.89
5	TXC 184T5U2B	12.1	6.0	7.3	7.0	4.8	5	60	55.7	52.9	36.8	46	150	215	105	1.15	F	3510	87.5	0.89
6	TXC 213T7.5U2B	17.9	9.0	10.9	10.3	7.2	7.5	60	76.9	73.0	50.8	63.5	140	200	100	1.15	F	3520	88.5	0.89
7	TXC 215T10U2B	23.6	11.8	14.3	13.6	9.5	10	60	98.1	93.2	64.8	81	135	200	100	1.15	F	3520	89.5	0.89
8	TXC 254T15U2B	34.8	17.4	21.1	20.0	13.9	15	60	140.4	133.4	92.8	116	130	200	100	1.15	F	3540	90.2	0.9
9	TXC 256T20U2B	46.4	23.2	28.1	26.7	18.6	20	60	175.5	166.8	116.0	145	130	200	100	1.15	F	3540	90.2	0.9
10	TXC 284TS25U2B	57.5	28.7	34.8	33.0	23.0	25	60	220.9	209.9	146.0	182.5	130	200	100	1.15	F	3550	91	0.9
11	TXC 286TS30U2B	69.0	34.5	41.7	39.7	27.6	30	60	263.3	250.1	174.0	217.5	130	200	100	1.15	F	3550	91	0.9
12	TXC 324TS40U2B	90.2	45.1	54.6	51.9	36.1	40	60	351.1	333.5	232.0	290	125	200	100	1.15	F	3560	91.7	0.91
13	TXC 326TS50U2B	112.0	56.0	67.8	64.4	44.8	50	60	438.8	416.9	290.0	362.5	120	200	100	1.15	F	3560	92.4	0.91
14	TXC364TS60U2B	133.5	66.7	80.8	76.8	53.4	60	60	526.6	500.3	348.0	435	120	200	100	1.15	F	3560	93	0.91
15	TXC365TS75U2B	165.0	82.5	99.9	94.9	66.0	75	60	656.7	623.9	434.0	542.5	105	200	95	1.15	F	3560	93	0.92
16	TXC405TS100U2B	218.6	109.3	132.3	125.7	87.5	100	60	877.6	833.8	580.0	725	105	200	95	1.15	F	3570	93.6	0.92
17	TXC444TS125U2B	-	134.1	162.3	154.2	107.3	125	60	1098.6	1043.6	726.0	907.5	100	200	90	1.15	F	3575	95.4	0.92
18	TXC445TS150U2B	-	159.0	192.5	182.8	127.2	150	60	1313.4	1247.8	868.0	1085	100	200	90	1.15	F	3575	95.5	0.93
19	TXC447TS200U2B	-	213.1	258.0	245.1	170.5	200	60	1755.3	1667.5	1160.0	1450	100	200	90	1.15	F	3575	95	0.93
20	TXC449TS250U2B	-	265.3	321.1	305.0	212.2	250	60	2209.2	2098.8	1460.0	1825	70	175	65	1.15	F	3575	95.4	0.93
21	TXC449TS300U2B	-	318.3	385.3	366.1	254.6	300	60	2663.2	2530.0	1760.0	2200	70	175	65	1.15	F	3575	95.4	0.93
22	TXC586/7TS350U2B	-	371.4	449.5	427.1	297.1	350	60	3086.8	2932.5	2040.0	2550	70	175	65	1.15	F	3576	95.4	0.93
23	TXC586/7TS400U2B	-	422.6	511.6	486.0	338.1	400	60	3510.5	3335.0	2320.0	2900	70	175	65	1.15	F	3577	95.8	0.93
24	TXC586/7TS450U2B	-	475.5	575.6	546.8	380.4	450	60	3934.2	3737.5	2600.0	3250	70	175	65	1.15	F	3578	95.8	0.93
25	TXC 143T1U4B	2.6	1.3	1.6	1.5	1.0	1	60	18.2	17.3	12.0	15	275	300	190	1.15	F	1730	82.5	0.88
26	TXC 145T1.5U4B	3.8	1.9	2.3	2.2	1.5	1.5	60	24.2	23.0	16.0	20	250	280	175	1.15	F	1730	84	0.88
27	TXC 145T2U4B	5.1	2.5	3.1	2.9	2.0	2	60	30.3	28.8	20.0	25	235	270	165	1.15	F	1730	84	0.88
28	TXC 182T3U4B	7.3	3.7	4.4	4.2	2.9	3	60	38.7	36.8	25.6	32	215	250	150	1.15	F	1735	87.5	0.88
29	TXC 184T5U4B	12.2	6.1	7.4	7.0	4.9	5	60	55.7	52.9	36.8	46	185	225	130	1.15	F	1735	87.5	0.88
30	TXC 213T7.5U4B	17.9	9.0	10.9	10.3	7.2	7.5	60	76.9	73.0	50.8	63.5	175	215	120	1.15	F	1740	89.5	0.88
31	TXC 215T10U4B	23.9	12.0	14.5	13.7	9.6	10	60	98.1	93.2	64.8	81	165	200	115	1.15	F	1740	89.5	0.88
32	TXC 254T15U4B	34.9	17.4	21.1	20.0	13.9	15	60	140.4	133.4	92.8	116	160	200	110	1.15	F	1750	91	0.89
33	TXC 256T20U4B	46.5	23.2	28.1	26.7	18.6	20	60	175.5	166.8	116.0	145	150	200	105	1.15	F	1750	91	0.89
34	TXC 284T25U4B	57.2	28.6	34.6	32.9	22.9	25	60	220.9	209.9	146.0	182.5	150	200	105	1.15	F	1760	92.4	0.89
35	TXC 286T30U4B	68.7	34.3	41.6	39.5	27.5	30	60	263.3	250.1	174.0	217.5	150	200	105	1.15	F	1760	92.4	0.89

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XC Serie Fire Pump Motors' Main Performance Parameters(NEMA 60HZ)

Serial NO.	Model NO.	Current (A) 230V	Current (A) 460V	Current (A) 380V	Current (A) 400V	Current (A) 575V	Output (HP)	Hz	Locked current A(standard) 380V	Locked current A(standard) 400V	Locked current A(standard) 575V	Locked current A(st andard) 460V	Locked torque multiple (standard)%	Maximum torque multiple (standard)%	Minimum torque multiple (standard)%	Service factor	INS class	RPM	EFF %	Power factor
36	TXC 324T40U4B	91.0	45.5	55.1	52.3	36.4	40	60	351.1	333.5	232.0	290	140	200	100	1.15	F	1770	93	0.89
37	TXC 326T50U4B	113.7	56.9	68.8	65.4	45.5	50	60	438.8	416.9	290.0	362.5	140	200	100	1.15	F	1770	93	0.89
38	TXC364T60U4B	135.6	67.8	82.1	78.0	54.2	60	60	526.6	500.3	348.0	435	140	200	100	1.15	F	1775	93.6	0.89
39	TXC365T75U4B	166.7	83.4	100.9	95.9	66.7	75	60	656.7	623.9	434.0	542.5	140	200	100	1.15	F	1775	94.1	0.9
40	TXC405T100U4B	221.4	110.7	134.0	127.3	88.5	100	60	877.6	833.8	580.0	725	125	200	100	1.15	F	1780	94.5	0.9
41	TXC444T125U4B	-	136.8	165.6	157.4	109.5	125	60	1098.6	1043.6	726.0	907.5	110	200	100	1.15	F	1780	94.5	0.91
42	TXC445T150U4B	-	163.3	197.7	187.8	130.7	150	60	1313.4	1247.8	868.0	1085	110	200	100	1.15	F	1780	95	0.91
43	TXC447T200U4B	-	217.8	263.6	250.4	174.2	200	60	1755.3	1667.5	1160.0	1450	100	200	90	1.15	F	1780	95	0.91
44	TXC449T250U4B	-	272.2	329.5	313.1	217.8	250	60	2209.2	2098.8	1460.0	1825	80	175	75	1.15	F	1780	95	0.91
45	TXC449T300U4B	-	325.3	393.8	374.1	260.2	300	60	2663.2	2530.0	1760.0	2200	80	175	75	1.15	F	1781	95.4	0.91
46	TXC586/7T350U4B	-	379.5	459.4	436.4	303.6	350	60	3086.8	2932.5	2040.0	2550	80	175	75	1.15	F	1782	95.4	0.91
47	TXC586/7T400U4B	-	433.7	525.0	498.8	347.0	400	60	3510.5	3335.0	2320.0	2900	80	175	75	1.15	F	1783	95.4	0.91
48	TXC586/7T450U4B	-	488.0	590.7	561.1	390.4	450	60	3934.2	3737.5	2600.0	3250	80	175	75	1.15	F	1784	95.4	0.91
49	TXC 145T1U6B	3.1	1.5	1.9	1.8	1.2	1	60	18.2	17.3	12.0	15	170	265	120	1.15	F	1150	80	0.76
50	TXC 182T1.5U6B	4.3	2.1	2.6	2.5	1.7	1.5	60	24.2	23.0	16.0	20	165	250	115	1.15	F	1150	85.5	0.77
51	TXC 184T2U6B	5.7	2.8	3.4	3.3	2.3	2	60	30.3	28.8	20.0	25	160	240	110	1.15	F	1150	86.5	0.77
52	TXC 213T3U6B	8.4	4.2	5.1	4.8	3.4	3	60	38.7	36.8	25.6	32	155	230	110	1.15	F	1150	87.5	0.77
53	TXC 215T5U6B	14.0	7.0	8.5	8.0	5.6	5	60	55.7	52.9	36.8	46	150	215	105	1.15	F	1160	87.5	0.77
54	TXC 254T7.5U6B	20.5	10.2	12.4	11.8	8.2	7.5	60	76.9	73.0	50.8	63.5	150	200	105	1.15	F	1160	89.5	0.77
55	TXC 256T10U6B	27.3	13.7	16.5	15.7	10.9	10	60	98.1	93.2	64.8	81	150	200	105	1.15	F	1165	89.5	0.77
56	TXC 284T15U6B	40.1	20.1	24.3	23.1	16.1	15	60	140.4	133.4	92.8	116	140	200	100	1.15	F	1165	90.2	0.78
57	TXC 286T20U6B	53.5	26.8	32.4	30.8	21.4	20	60	175.5	166.8	116.0	145	135	200	100	1.15	F	1170	90.2	0.78
58	TXC 324T25U6B	65.0	32.5	39.3	37.4	26.0	25	60	220.9	209.9	146.0	182.5	135	200	100	1.15	F	1170	91.7	0.79
59	TXC 326T30U6B	78.0	39.0	47.2	44.8	31.2	30	60	263.3	250.1	174.0	217.5	135	200	100	1.15	F	1175	91.7	0.79
60	TXC364T40U6B	101.2	50.6	61.3	58.2	40.5	40	60	351.1	333.5	232.0	290	135	200	100	1.15	F	1175	93	0.8
61	TXC365T50U6B	126.5	63.3	76.6	72.8	50.6	50	60	438.8	416.9	290.0	362.5	135	200	100	1.15	F	1180	93	0.8
62	TXC404T60U6B	150.9	75.4	91.3	86.7	60.3	60	60	526.6	500.3	348.0	435	135	200	100	1.15	F	1180	93.6	0.8
63	TXC405T75U6B	186.2	93.1	112.7	107.1	74.5	75	60	656.7	623.9	434.0	542.5	135	200	100	1.15	F	1180	93.6	0.81
64	TXC444T100U6B	247.0	123.5	149.5	142.0	98.8	100	60	877.6	833.8	580.0	725	125	200	100	1.15	F	1180	94.1	0.81
65	TXC445T125U6B	-	154.4	186.9	177.5	123.5	125	60	1098.6	1043.6	726.0	907.5	125	200	100	1.15	F	1180	94.1	0.81
66	TXC447T150U6B	-	183.5	222.1	211.0	146.8	150	60	1313.4	1247.8	868.0	1085	120	200	100	1.15	F	1180	95	0.81
67	TXC449T200U6B	-	244.7	296.2	281.4	195.7	200	60	1755.3	1667.5	1160.0	1450	120	200	100	1.15	F	1180	95	0.81
68	TXC586/7T250U6B	-	305.8	370.2	351.7	244.7	250	60	2209.2	2098.8	1460.0	1825	100	175	90	1.15	F	1180	95	0.81
69	TXC586/7T300U6B	-	367.0	444.3	422.1	293.6	300	60	2663.2	2530.0	1760.0	2200	100	175	90	1.15	F	1180	95	0.81
70	TXC586/7T350U6B	-	428.2	518.3	492.4	342.5	350	60	3086.8	2932.5	2040.0	2550	100	175	90	1.15	F	1180	95	0.81
71	TXC586/7T400U6B	-	489.3	592.4	562.7	391.5	400	60	3510.5	3335.0	2320.0	2900	100	175	90	1.15	F	1180	95	0.81

ROYSE

Трехфазные Асинхронные двигатели Серии TG

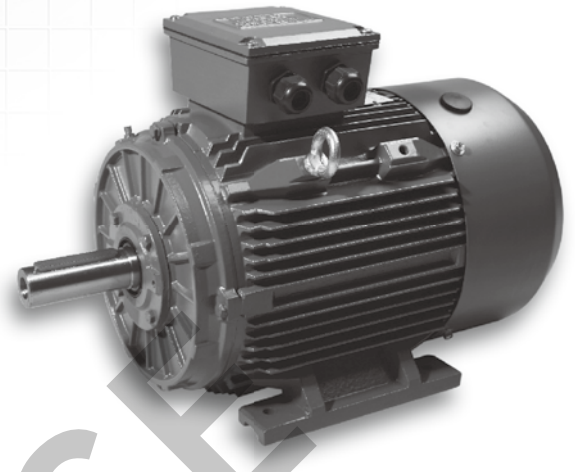
TG Series Three-Phase Motors

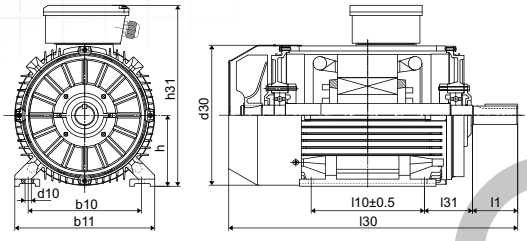
ОСОБЕННОСТИ

- Режим работы: продолжительный при температуре окружающей среды ±40℃
- Материал корпуса:чугун;
- Тип подшипников : шариковый;
- Степень защиты: IP55.

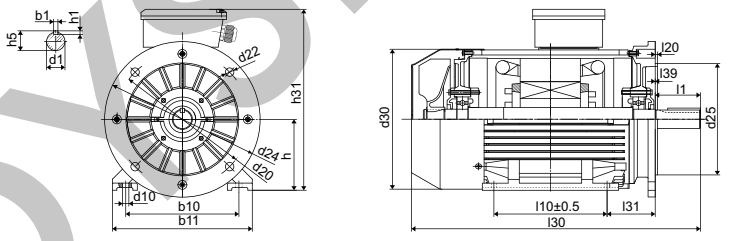
FEATURES

- Continuous Duty ±40℃ Ambient Temperature
- Cast Iron Frames
- Ball Bearings
- IP55 Protection





IM B3 Figure1



IM B35 Figure2

ROYSE

Габаритные, установочные и присоединительные размеры.
Overall & Instalation Dimension

Тип двигателя (Frame)	Число полюсов (Poles)	Монтаж лап(Foot Mounting)					Ось(Shaft)					B5						Общее(General)			
		h	b10	l10	l31	d10	d1	l1	b1	h1	h5	d25	d20	d24	l20	l39	d22	b11	h31	d30	l30
80	2,4,6,8	80	125	100	50	Ø10	Ø22	50	6	6	24.5	Ø130	Ø165	Ø198	3.5	0	4-Ø12	160	205	Ø158	290
90L	2,4,6,8	90	140	125	56	Ø10	Ø24	50	8	7	27	Ø180	Ø215	Ø250	4.0	0	4-Ø15	175	220	Ø176	350
100S/L	2,4,6,8	100	160	112/140	63	Ø12	Ø28	60	8	7	31	Ø180	Ø215	Ø250	4.0	0	4-Ø15	200	245	Ø199	388
112M	2,4,6,8	112	190	140	70	Ø12	Ø32	80	10	8	35	Ø230	Ø265	Ø300	4.0	0	4-Ø15	230	290	Ø220	430
132S/M	2,4,6,8	132	216	140/178	89	Ø12	Ø38	80	10	8	41	Ø250	Ø300	Ø350	4.0	0	4-Ø19	255	330	Ø259	467/505
160S/M	2	160	254	178/210	108	Ø15	Ø42	110	12	8	45	Ø250	Ø300	Ø350	5.0	0	4-Ø19	314	402	Ø313	605
	4,6,8	160	254	178/210	108	Ø15	Ø48	110	14	9	51.5	Ø250	Ø300	Ø350	5.0	0	4-Ø19	314	402	Ø313	605
180S/M	2	180	279	203/241	121	Ø15	Ø48	110	14	9	52	Ø300	Ø350	Ø400	5.0	0	4-Ø19	348	439	Ø360	687
	4,6,8	180	279	203/241	121	Ø15	Ø55	110	16	10	59	Ø300	Ø350	Ø400	5.0	0	4-Ø19	348	439	Ø360	687
200M/L	2	200	318	267/305	133	Ø19	Ø55	110	16	10	59	Ø350	Ø400	Ø450	5.0	0	4-Ø19	388	497	Ø399	768
	4,6,8	200	318	267/305	133	Ø19	Ø60	140	18	11	64	Ø350	Ø400	Ø450	5.0	0	4-Ø19	388	497	Ø399	798
225M	2	225	356	311	149	Ø19	Ø55	110	16	10	59	Ø450	Ø500	Ø550	5.0	0	8-Ø19	436	553	Ø465	809
	4,6,8	225	356	311	149	Ø19	Ø65	140	18	11	69	Ø450	Ø500	Ø550	5.0	0	8-Ø19	436	553	Ø465	839
250S/M	2	250	406	311/349	168	Ø24	Ø65	140	18	11	69	Ø450	Ø500	Ø550	5.0	0	8-Ø19	484	616	Ø506	918
	4,6,8	250	406	311/349	168	Ø24	Ø75	140	20	12	80	Ø450	Ø500	Ø550	5.0	0	8-Ø19	484	616	Ø506	918
280S/M	2	280	457	368/419	190	Ø24	Ø70	140	20	12	74.5	Ø550	Ø600	Ø660	5.0	0	8-Ø24	557	668	Ø559	984/1035
	4,6,8,10	280	457	368/419	190	Ø24	Ø80	170	22	14	85.5	Ø550	Ø600	Ø660	5.0	0	8-Ø24	557	668	Ø559	1014/1065
315S/M	2	315	508	406/457	216	Ø28	Ø75	140	20	12	79.5	Ø550	Ø600	Ø660	5.0	0	8-Ø24	635	845	Ø645	1185/1295
	4,6,8,10,12	315	508	406/457	216	Ø28	Ø90	170	25	14	95	Ø550	Ø600	Ø660	5.0	0	8-Ø24	635	845	Ø645	1215/1325
355S/M	2	355	610	500/560	254	Ø28	Ø85	170	22	14	90.5	Ø680	Ø740	Ø800	5.0	0	8-Ø24	730	1010	Ø710	1530
	4,6,8,10,12	355	610	500/560	254	Ø28	Ø100	210	28	16	106	Ø680	Ø740	Ø800	5.0	0	8-Ø24	730	1010	Ø710	1570

ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ Technical Data

Тип двигателя	Мощ-ность кВт	Частота вращ об/мин	Номинальный ток при 380 В,А	КПД, %	cos ф	$M_п/M_н$	$M_{макс}/M_н$	$I_п/I_н$	Масса, кг
Model	Power (kW)	Speed (r/min)	Current At 380V (A)	Eff. (%)	Power Factor (Cos Φ)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	I_{st}/I_n (Times)	W.T (Kg)
TG 80A-2	1.50	3000	3.5	80	0.85	2.5	2.7	6.4	15.70
TG 80B-2	2.20	3000	5.4	83	0.87	3.1	3	7	18.00
TG 90L-2	3.00	3000	6.8	83.5	0.9	2.7	2.9	7	26.50
TG 100S-2	4.00	3000	8.15	85.5	0.9	2.4	2.9	7	31.50
TG 100L-2	5.50	3000	11.2	87	0.9	2.9	3.3	7.5	35.50
TG 112M-2	7.50	3000	15.1	88	0.91	3.1	3.3	7.5	46.80
TG 132M-2	11	3000	21.9	89	0.9	3.2	3.6	7.5	73.50
TG 160S-2	15	3000	29	89.5	0.9	2.3	3.2	7.5	118.50
TG 160M-2	18.5	3000	35.8	90	0.91	2.3	3.2	7.5	135.00
TG 180S-2	22	3000	42.9	90.5	0.89	2.3	3	7.5	153.00
TG 180M-2	30	3000	57	91.5	0.9	2.3	3.1	7.5	177.00
TG 200M-2	37	3000	70	91.5	0.88	2.4	2.9	7	235.00
TG 200L-2	45	3000	85	92	0.9	2.3	2.9	6.5	255.00
TG 225M-2	55	3000	104.9	92.5	0.9	2.5	2.9	7	345.00
TG 250S-2	75	3000	143	92.7	0.91	2.5	3	7.5	422.00
TG 250M-2	90	3000	171.8	93	0.91	2.7	3.2	7.5	438.00
TG 280S-2	110	3000	195.8	93.5	0.93	2.5	3.1	7.5	670.00
TG 280M-2	132	3000	234.9	94	0.93	2.4	2.9	7.5	700.00
TG 315S-2	160	3000	279	94.5	0.92	2.2	1.8	7.5	1120.00
TG 315M-2	200	3000	348	94.8	0.92	2.2	1.8	7.2	1190.00
TG 355S-2	250	3000	470	95	0.89	1.9	2.3	7.2	1690.00
TG 355M-2	315	3000	582	95.2	0.89	1.9	2.3	7	1850.00
TG 80A-4	1.10	1500	2.75	77	0.75	2.6	2.3	5.5	15.70
TG 80B-4	1.50	1500	3.52	78	0.8	2.8	2.4	5.5	19.00
TG 90L-4	2.20	1500	5.3	80.5	0.8	2.8	2.4	6	24.50
TG 100S-4	3.00	1500	6.7	81.5	0.82	2.4	2.8	6.5	33.40
TG 100L-4	4.00	1500	8	83	0.83	2.5	2.6	6.5	35.30
TG 112M-4	5.50	1500	11.3	85	0.86	2.6	2.6	7	46.80
TG 132S-4	7.5	1500	14.8	87	0.83	2.4	2.9	7.5	72.00
TG 132M-4	11	1500	21.7	88.5	0.84	3	2.9	7.5	85.00
TG 160S-4	15	1500	29	89	0.91	2.3	2.6	7.5	125.00
TG 160M-4	18.5	1500	35	90	0.9	2.8	3	7.5	150.00
TG 180S-4	22	1500	42	90.5	0.87	2.8	3	7.5	162.00
TG 180M-4	30	1500	58.2	91	0.89	2.7	3	7.5	230.00
TG 200M-4	37	1500	70.1	92	0.89	2.8	3.1	7.5	241.00
TG 200L-4	45	1500	85.3	92.2	0.88	2.8	3.2	7.5	276.00
TG 225M-4	55	1500	103.5	92.7	0.86	2.3	2.6	7	360.00
TG 250S-4	75	1500	142.4	93.3	0.88	2.5	2.6	7.5	420.00
TG 250M-4	90	1500	170	93.8	0.89	2.4	2.5	7	450.00
TG 280S-4	110	1500	203	94.2	0.9	2.5	2.6	7	630.00
TG 280M-4	132	1500	244	95	0.9	2.7	2.5	7.5	740.00
TG 315S-4	160	1500	296	95	0.88	2.3	2.1	6.5	1120.00
TG 315M-4	200	1500	360	95.5	0.89	2.3	2.4	5.5	1270.00
TG 355S-4	250	1500	444	95	0.9	2.2	2.1	6.5	1640.00
TG 355M-4	315	1500	551	95	0.91	2.2	2.1	7	1850.00

ROYSE

ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ Technical Data

Тип двигателя	Мощ-ность кВт	Частота вращ об/мин	Номинальный ток при 380 В,А	КПД, %	cos ф	$M_п/M_н$	$M_{max}/M_н$	$I_п/I_н$	Масса, кг
Model	Power (kW)	Speed (r/min)	Current At 380V (A)	Eff. (%)	Power Factor (Cos Φ)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	I_{st}/I_n (Times)	W.T (Kg)
TG 80A-6	1.10	1500	2.75	77	0.75	2.6	2.3	5.5	15.70
TG 80B-6	1.10	1000	3.9	73	0.73	2.4	2.6	4	18.00
TG 90L-6	1.50	1000	5.7	75	0.74	2.3	2.6	5	25.60
TG 100L-6	2.20	1000	8.7	78	0.79	2.3	2.4	5	33.50
TG 112MA-6	3.00	1000	10.9	81	0.74	2.6	3	6.5	42.50
TG 112MB-6	4	1000	9.1	82	0.79	2.6	2.7	6	47.50
TG 132S-6	5.5	1000	11.7	84	0.81	2.5	2.7	7	68.50
TG 132M-6	7.5	1000	16	85.5	0.82	2.8	2.7	7	73.50
TG 160S-6	11	1000	22.2	87	0.83	2.6	2.4	7	125.00
TG 160M-6	15	1000	30.3	89	0.82	2.7	2.7	7	157.00
TG 180M-6	18	1000	35.4	89.5	0.86	2.7	2.9	7	188.00
TG 200M-6	22	1000	42.1	90	0.87	2.4	2.7	7	218.00
TG 200L-6	30	1000	57.4	90	0.85	3	3.2	7.5	245.00
TG 225M-6	37	1000	69.8	91	0.87	2.7	2.8	7.5	323.00
TG 250S-6	45	1000	87	91.7	0.85	2.6	2.8	7.5	326.00
TG 250M-6	55	1000	106	92.2	0.85	2.7	2.6	7.5	370.00
TG 280S-6	75	1000	143.2	93	0.88	2.5	2.6	7	685.00
TG 280M-6	90	1000	171	93.5	0.88	2.8	2.6	6.5	725.00
TG 315S-6	110	1000	209	93.9	0.88	2.2	2.7	6	1110.00
TG 315M-6	132	1000	244	94	0.9	2.2	2.5	6.5	1210.00
TG 355S-6	160	1000	291	94.5	0.89	2	1.9	6.5	1540.00
TG 355M-6	200	1000	360	94.5	0.89	2	1.9	6.5	1700.00
TG 80A-8	0.37	750	1.3	62	0.61	2.3	2.2	3	15.50
TG 80B-8	0.55	750	2	64	0.6	2.1	2.6	3	17.70
TG 90LA-8	0.75	750	2.4	69	0.68	2	2.4	3	23.00
TG 90LB-8	1.10	750	3.3	71	0.68	2.2	2.4	3.5	26.00
TG 100L-8	1.50	750	4.3	74	0.68	2.5	2.7	4	34.00
TG 112MA-8	2.2	750	6.1	76.5	0.71	2.4	2.7	5	46.50
TG 112MB-8	3	750	7.6	78	0.7	2.4	2.6	5	50.00
TG 132S-8	4	750	9.9	82	0.7	2.7	2.7	6	73.00
TG 132M-8	5.5	750	13.3	83	0.74	2.3	2.4	5.5	86.00
TG 160S-8	7.5	750	17.5	85.5	0.71	2.6	2.6	6	125.00
TG 160M-8	11	750	22.2	86.7	0.73	2.4	2.5	6	174.50
TG 180M-8	15	750	28.7	88	0.78	2.7	2.9	7	195.00
TG 200M-8	18.5	750	35.4	88.4	0.79	2.5	2.8	7	240.00
TG 200L-8	22	750	42.2	89	0.78	2.5	2.9	7	255.00
TG 225M-8	30	750	56.6	90	0.8	2.4	2.5	6	335.00
TG 250S-8	37	750	71.4	90.7	0.79	2.2	2.5	6	350.00
TG 250M-8	45	750	86.9	91.3	0.8	2.4	2.5	6	413.00
TG 280S-8	55	750	106	92	0.8	2.7	2.9	7	670.00
TG 280M-8	75	750	132	92.8	0.8	2.8	2.9	7	760.00
TG 315S-8	90	750	178	93.5	0.85	2	1.8	6	1120.00
TG 315M-8	110	750	217	93.5	0.85	2	1.8	6	1230.00
TG 355S-8	132	750	255	93.5	0.85	2	1.8	6	1540.00
TG 355M-8	160	750	308	93.5	0.85	2	1.8	6	1700.00
TG 315S-10	55	600	115	92.5	0.79	2.2	1.6	6.5	925.00
TG 315M-10	75	600	155	92.5	0.8	2.2	1.9	6	1040.00
TG 355S-10	90	600	178	92.5	0.83	2.2	1.9	6	1530.00
TG 355M-10	110	600	217	93	0.83	2.2	1.9	6	1620.00

ROYSE

Description of VHS Motor

APPLICATION:

VHS Series Vertical hollow shaft three-phase asynchronous induction motor is suitable to be used with deep-well pumps. The motor complies to NEMA standard, capable of high axial load and with Non-Reverse Ratchet to prevent reversely running when stopped.

WORKING CONDITIONS:

Ambient temperature: -4°F (-20°C) to 122°F (50°C)
Altitude: Less than 1000m

FEATURES:

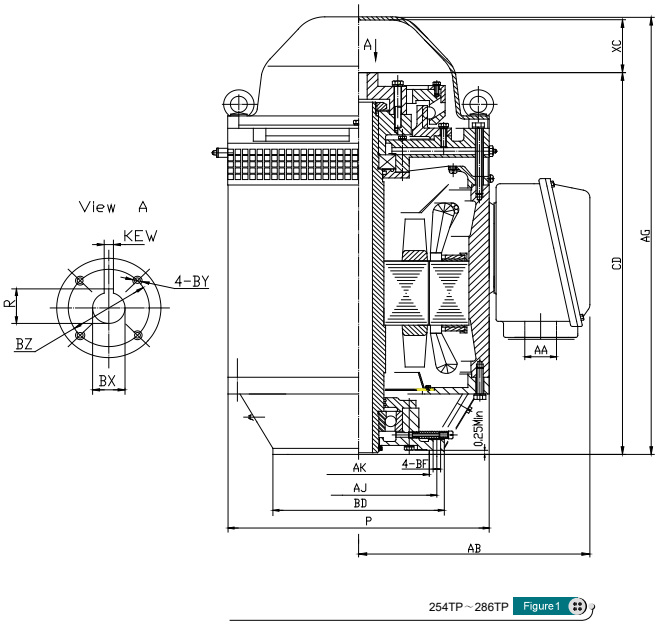
- Three–phase asynchronous motors
- Power：20HP~400HP
- Speed：3000/3600RPM, 1500/1800RPM
- Voltage & Frequency: 380–415V, 50/60Hz
- S.F.：1.15
- Insulation：Class F
- High locked rotor torque
- Efficiency：Standard Efficiency
  High Efficiency
  Premium Efficiency

STRUCTURE:

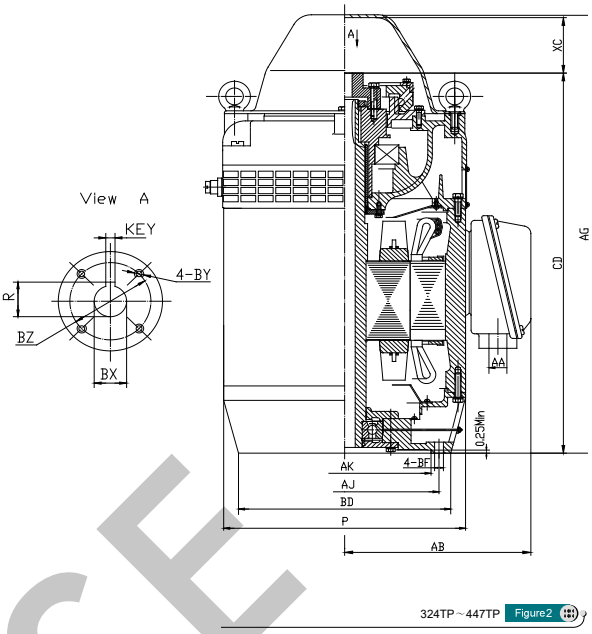
- IP：WP Ⅰ
- FRAME：254TP~447TP
- Non–Reverse Ratchet
- High axial load design
- (If higher load required, please contact with us)
- Bigger lubrication oil chamber
- Standard PTC
- Standard Heat
- Low noise, low vibration
- lubricating for bearing
  254TP-286TP frame：Grease
  324TP and above frame：Oil

ROYSE

Vertical Hollow Shaft Motors (WPI)



254TP~286TP Figure1

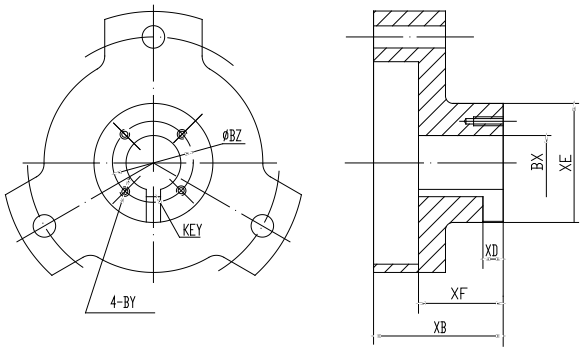


324TP~447TP Figure2

ROYSE

Model	Frame Size	Power (HP)	Mounting Dimension (Inch)											Outline Dimension (Inch)		
			BD	AJ	AK	BF	BX	BZ	KEY	R	BY	CD	XC>	AA	P	AB	AG
VHS254TP20U2B	254TP	20	10	9.125	8.25	0.44	1	1.38	0.25	1.11	10–32	23.38	3.25	1–1/4"	16.2	14.25	27.4
VHS256TP25U2B	256TP	25															
VHS284TP30U2B	284TP	30										24.75		1–1/2"			28.7
VHS286TP40U2B	286TP	40															
VHS254TP15U4B	254TP	15										23.38		1–1/4"			27.4
VHS256TP20U4B	256TP	20															
VHS284TP25U4B	284TP	25										24.75		1–1/2"			28.7
VHS286TP30U4B	286TP	30															
VHS324TP50U2B	324TP	50	16.5	14.75	13.5	0.69	1. 5	2.125	0.375	1.668	1/4–20	28.22	4.69	NPT 3"	18.8	15.75	33.5
VHS326TP60U2B	326TP	60															
VHS324TP40U4B	324TP	40															
VHS326TP50U4B	326TP	50															
VHS364TP75U2B	364TP	75							0.375	1.668		31.16	4.69	NPT 3"	20.4	16.73	36.5
VHS365TP100U2B	365TP	100															
VHS364TP60U4B	364TP	60															
VHS365TP75U4B	365TP	75															
VHS404TP100U4B	404TP	100										36.94	5.5		22.5	19	43
VHS405TP125U4B	405TP	125															
VHS444TP150U4B	444TP	150					1. 5	2.125	0.375	1.668	1/4–20	44.78	5.13	NPT 3–1/2"	24.4	21.85	50.4
VHS445TP200U4B	445TP	200															
VHS447TP250U4B	447TP	250										49.78	5.13		28	24	55.5
VHS447TP300U4B	447TP	300	16.5	14.75	13.5	0.69											
VHS447TP350U4B	447TP	350															
VHS447TP400U4B	447TP	400															

Coupling For Vertical Hollow Shaft Motors



Frame	Part no.	BX	BY	BZ	XB	XD	XE	XF	KEY
254TP–256TP	CY250–0.75	0.75	10–32	1–3/8	2–9/16	11/32	2–1/4	1–5/8	3/16
254TP–256TP	CY250–0.875	0.875	10–32	1–3/8	2–9/16	11/32	2–1/4	1–5/8	3/16
254TP–256TP	CY250–1.0	1.0	10–32	1–3/8	2–9/16	13/32	2–1/4	1–5/8	1/4
254TP–256TP	CY250–1.188	1.188	1/4–20	1–3/4	2–9/16	13/32	2–1/4	1–5/8	1/4
254TP–256TP	CY250–1.25–1	1.25	1/4–20	1–3/4	2–9/16	13/32	2–1/4	1–5/8	1/4
254TP–256TP	CY250–1.25–2	1.25	1/4–20	1–3/4	2–9/16	17/32	2–1/4	1–5/8	3/8
254TP–256TP	CY250	0.751 BLANK	---	---	2–9/16	---	2–1/4	1–5/8	---
284TP–286TP	CY280–0.75	0.75	10–32	1–3/8	2–9/16	11/32	2–1/4	1–5/8	3/16
284TP–286TP	CY280–0.875	0.875	10–32	1–3/8	2–9/16	11/32	2–1/4	1–5/8	3/16
284TP–286TP	CY280–1.0	1.0	10–32	1–3/8	2–9/16	13/32	2–1/4	1–5/8	1/4
284TP–286TP	CY280–1.188	1.188	1/4–20	1–3/4	2–9/16	13/32	2–1/4	1–5/8	1/4
284TP–286TP	CY280–1.25–1	1.25	1/4–20	1–3/4	2–9/16	13/32	2–1/4	1–5/8	1/4
284TP–286TP	CY280–1.25–2	1.25	1/4–20	1–3/4	2–9/16	17/32	2–1/4	1–5/8	3/8
284TP–286TP	CY280	0.751 BLANK	---	---	2–9/16	---	2–1/4	1–5/8	---
324TP–326TP	CY320–1.0	1.0	10–32	1–3/8	2–15/16	13/32	2–7/8	1–15/16	1/4
324TP–326TP	CY320–1.188	1.188	1/4–20	1–3/4	2–15/16	13/32	2–7/8	1–15/16	1/4
324TP–326TP	CY320–1.25–1	1.25	1/4–20	1–3/4	2–15/16	17/32	2–7/8	1–15/16	3/8
324TP–326TP	CY320–1.25–2	1.25	1/4–20	1–3/4	2–15/16	13/32	2–7/8	1–15/16	1/4
324TP–326TP	CY320–1.438	1.438	1/4–20	2–1/8	2–15/16	17/32	2–7/8	1–15/16	3/8
324TP–326TP	CY320–1.5	1.5	1/4–20	2–1/8	2–15/16	17/32	2–7/8	1–15/16	3/8
324TP–326TP	CY320	0.751 BLANK	---	---	2–15/16	---	2–7/8	1–15/16	---
364TP–365TP	CY360–1.0	1.0	10–32	1–3/8	2–15/16	13/32	2–7/8	1–15/16	1/4
364TP–365TP	CY360–1.188	1.188	1/4–20	1–3/4	2–15/16	13/32	2–7/8	1–15/16	1/4
364TP–365TP	CY360–1.25–1	1.25	1/4–20	1–3/4	2–15/16	17/32	2–7/8	1–15/16	3/8
364TP–365TP	CY360–1.25–2	1.25	1/4–20	1–3/4	2–15/16	13/32	2–7/8	1–15/16	1/4
364TP–365TP	CY360–1.438	1.438	1/4–20	2–1/8	2–15/16	17/32	2–7/8	1–15/16	3/8
364TP–365TP	CY360–1.5	1.5	1/4–20	2–1/8	2–15/16	17/32	2–7/8	1–15/16	3/8
364TP–365TP	CY360	0.751 BLANK	---	---	2–15/16	---	2–7/8	1–15/16	---
404TP–405TP	CY400–1.188	1.188	1/4–20	1–3/4	3–15/32	13/32	3–1/8	2–13/32	1/4
404TP–405TP	CY400–1.25–1	1.25	1/4–20	1–3/4	3–15/32	13/32	3–1/8	2–13/32	1/4
404TP–405TP	CY400–1.25–2	1.25	1/4–20	1–3/4	3–15/32	17/32	3–1/8	2–13/32	3/8
404TP–405TP	CY400–1.438	1.438	1/4–20	2–1/8	3–15/32	17/32	3–1/8	2–13/32	3/8
404TP–405TP	CY400–1.5	1.5	1/4–20	2–1/8	3–15/32	17/32	3–1/8	2–13/32	3/8
404TP–405TP	CY400–1.563	1.563	1/4–20	2–1/2	3–15/32	17/32	3–1/8	2–13/32	3/8
404TP–405TP	CY400–1.688	1.688	1/4–20	2–1/2	3–15/32	17/32	3–1/8	2–13/32	3/8
404TP–405TP	CY400–1.813	1.813	1/4–20	2–1/2	3–15/32	17/32	3–1/8	2–13/32	3/8
404TP–405TP	CY400	0.751 BLANK	---	---	3–15/32	---	3–1/8	2–13/32	---
444TP–447TP	CY440–1.438	1.438	1/4–20	2–1/8	4–1/7	11/16	3–11/16	2–7/8	3/8
444TP–447TP	CY440–1.5	1.5	1/4–20	2–1/8	4–1/7	17/32	3–11/16	2–7/8	3/8
444TP–447TP	CY440–1.688	1.688	1/4–20	2–1/2	4–1/7	17/32	3–11/16	2–7/8	3/8
444TP–447TP	CY440–1.75	1.75	1/4–20	2–1/2	4–1/7	17/32	3–11/16	2–7/8	3/8
444TP–447TP	CY440–1.938	1.938	1/4–20	2–1/2	4–1/7	11/16	3–11/16	2–7/8	1/2
444TP–447TP	CY440–2.188	2.188	3/8–16	3–1/4	4–1/7	11/16	4	2–7/8	1/2
444TP–447TP	CY440–2.25	2.25	3/8–16	3–1/4	4–1/7	11/16	4	2–7/8	1/2
444TP–447TP	CY440	0.751 BLANK	---	---	4–1/7	---	3–11/16	2–7/8	---

ROYCE

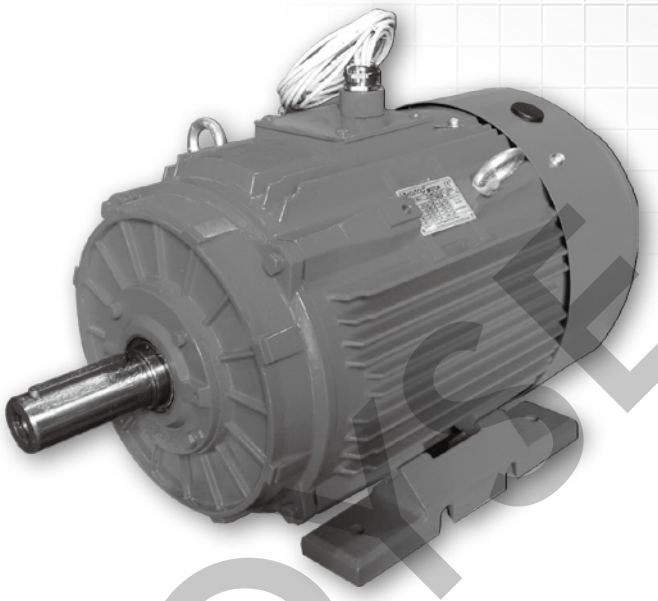
Vertical Hollow Shaft Motors' Main Performance Parameter

Model	Volts (V)	Output (HP)	Speed (r/min) (50Hz)	Speed (r/min) (60Hz)	Frame Size	EFF (%)	Power Factor (%)	Torque				Rated Current (A)	Locked Current (A)	Axial Force (Lbs)
								Rated Torque (lb–ft) (50Hz)	Rated Torque (lb–ft) (60Hz)	Locked Torque/ Rated Torquer (%)	Breakdown Torque/Rated Torque (%)			
VHS254TP20U2B	380	20	2950	3540	254TP	87.5	86	35.6	29.7	180	230	30.6	213.5	2700
VHS256TP25U2B		25	2950	3540	256TP	88.5	86	44.5	37.1	180	230	36.9	258.3	
VHS284TP30U2B		30	2950	3540	284TP	87.5	86.5	53.4	44.5	170	230	44.2	309.4	
VHS286TP40U2B		40	2943	3532	286TP	88.5	86.5	71.4	59.5	170	230	59.5	416.5	
VHS324TP50U2B		50	2958	3550	324TP	89.5	87	88.7	73.9	170	220	72.2	505.4	4600
VHS326TP60U2B		60	2958	3550	326TP	90.2	87	106.5	88.7	170	220	87.1	609.7	
VHS364TP75U2B		75	2952	3542	364TP	89.5	88	133.4	111.2	170	210	106.1	743.4	4800
VHS365TP100U2B		100	2948	3538	365TP	90.2	88	178.1	148.4	170	210	143.6	1004.5	
VHS254TP15U4B		15	1466	1759	254TP	89.5	85	53.7	44.8	180	230	22	154	3400
VHS256TP20U4B		20	1466	1759	256TP	89.5	85	71.6	59.7	180	230	30	212.1	
VHS284TP25U4B		25	1466	1759	284TP	89.5	86	89.5	74.6	170	230	36.5	255.5	
VHS286TP30U4B		30	1471	1765	286TP	90.2	86	107.1	89.2	170	230	43.1	301.7	
VHS324TP40U4B		40	1480	1775	324TP	91	87	141.9	118.3	170	230	57.6	403.2	5700
VHS326TP50U4B		50	1480	1775	326TP	91	87	177.4	147.9	170	230	71	497	
VHS364TP60U4B		60	1480	1775	364TP	91	87	212.8	177.5	180	220	86.4	604.8	6100
VHS365TP75U4B		75	1480	1775	365TP	93	87	266	221.8	180	220	103.3	723.1	
VHS404TP100U4B		100	1486	1783	404TP	93	88	353.3	294.4	180	210	139.2	974.4	7000
VHS405TP125U4B		125	1486	1783	405TP	93.6	88	441.6	368.1	180	210	166	1162	
VHS444TP150U4B		150	1486	1783	444TP	94.1	88	529.9	441.7	170	210	201.8	1412.6	9800
VHS445TP200U4B		200	1486	1783	445TP	94.1	88	706.6	588.9	170	200	275.2	1926.4	
VHS447TP250U4B		250	1486	1783	447TP	94.5	88	883.2	736.1	170	200	338	2366	
VHS447TP300U4B		300	1486	1783	447TP	94.5	89	1059.9	883.3	170	200	397.4	2781.8	17150
VHS447TP350U4B		350	1486	1783	447TP	94.5	89	1236.5	1030.6	170	200	469.7	3287.9	
VHS447TP400U4B		400	1486	1783	447TP	95	89	1413.2	1177.8	170	200	539.1	3773.7	
VHS254TP20U2B	415	20	2937	3524	254TP	87.5	86	35.8	29.8	180	230	27.9	195.4	2700
VHS256TP25U2B		25	2937	3524	256TP	88.5	86	44.7	37.2	180	230	34.1	238.7	
VHS284TP30U2B		30	2935	3522	284TP	87.5	86.5	53.7	44.7	170	230	41.2	288.4	
VHS286TP40U2B		40	2929	3514	286TP	88.5	86.5	71.7	59.8	170	230	54.3	380.1	
VHS324TP50U2B		50	2941	3529	324TP	89.5	87	89.3	74.4	170	220	66.7	466.9	4600
VHS326TP60U2B		60	2940	3528	326TP	90.2	87	107.1	89.3	170	220	79.4	555.8	
VHS364TP75U2B		75	2941	3529	364TP	89.5	88	133.9	111.6	170	210	98.9	692.3	4800
VHS365TP100U2B		100	2932	3518	365TP	90.2	88	179.1	149.2	170	210	131.1	917.7	
VHS254TP15U4B		15	1466	1759	254TP	89.5	85	53.7	44.8	180	230	20.1	140.7	3400
VHS256TP20U4B		20	1466	1759	256TP	89.5	85	71.6	59.7	180	230	27.4	191.8	
VHS284TP25U4B		25	1466	1759	284TP	89.5	86	89.5	74.6	170	230	33.4	233.8	
VHS286TP30U4B		30	1466	1759	286TP	90.2	86	107.4	89.5	170	230	39	273	
VHS324TP40U4B		40	1475	1770	324TP	91	87	142.4	118.6	170	230	52.7	368.9	5700
VHS326TP50U4B		50	1475	1770	326TP	91	87	178	148.3	170	230	65	455	
VHS364TP60U4B		60	1473	1768	364TP	91	87	213.8	178.2	180	220	78.7	550.9	6100
VHS365TP75U4B		75	1472	1766	365TP	93	87	267.5	223	180	220	96.3	674.1	
VHS404TP100U4B		100	1482	1778	404TP	93	88	354.3	295.3	180	210	127	889	7000
VHS405TP125U4B		125	1484	1781	405TP	93.6	88	442.2	368.5	180	210	157.7	1103.9	
VHS444TP150U4B		150	1484	1781	444TP	94.1	88	530.7	442.2	170	210	188.2	1317.4	9800
VHS445TP200U4B		200	1484	1781	445TP	94.1	88	707.5	589.6	170	200	251	1757	
VHS447TP250U4B		250	1484	1781	447TP	94.5	88	884.4	736.9	170	200	312.4	2186.8	
VHS447TP300U4B		300	1488	1786	447TP	94.5	89	1058.5	881.9	170	200	370.6	2594.2	17150
VHS447TP350U4B		350	1488	1786	447TP	94.5	89	1234.9	1028.8	170	200	432.4	3026.8	
VHS447TP400U4B		400	1488	1786	447TP	95	89	1411.3	1175.8	170	200	491.6	3441.2	

ROYSL

S-TC Series

High-temperature Smoke-extraction Motors



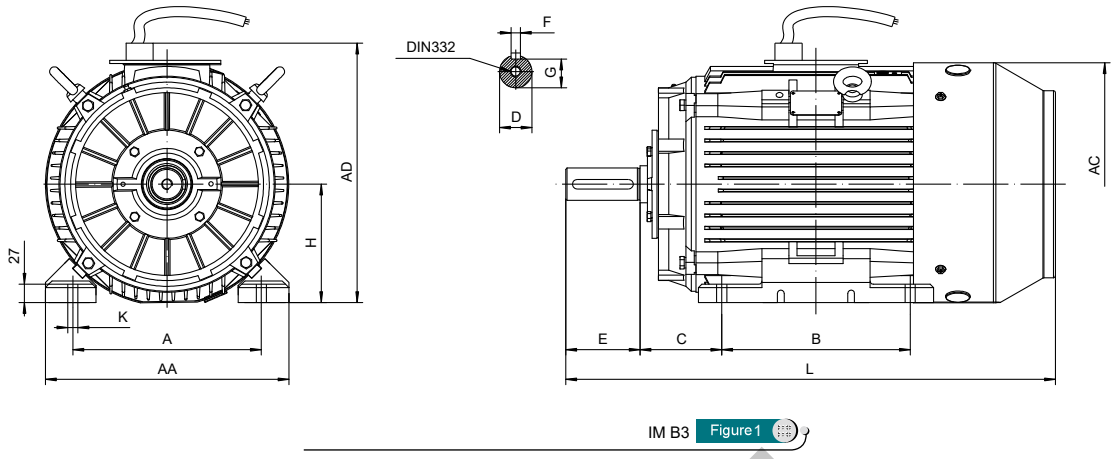
The motors are suitable to be used in the area where people get-together, such as shopping mall, factory, warehouse, parking-area, railway station and the likes. They are high-temperature resistant, able to extract smoke and abstract heat quickly, delay the spread of fire, to assure free access to emergency entrance.

Specifications:

Three phase, multi-voltage, IP55, TEFC
Output: From 0.75 to 355kW
Frame size: From 80 to 355
Voltage: 220-240/380-415V (100L and below),
380-415/660V-720V(112 and up)
Insulation class: F(△ T=80K)
Working duty: S1
Squirrel-cage rotor / Aluminum casting
Cooling type: TEFC or TEAO
2 meter leading wire (Without terminal box)
Stainless steel name-plate
Working with ventilator in normal condition.
In special condition, they can run for 2 hours in Max.300°C of ambient temperature according to the standard.
Products: S-T1C、S-T2C、S-T3C、S-TCI（S for smoke)

ROPSL

S-TC Series High-temperature Smoke-extraction Motors



IM B3 Figure 1

Overall & Installation Dimensions

Frame		Foot Mounting				Shaft					General				
		H	A	B	C	D	E	F	G	K	AA	AD	HD	AC	L
80M		80	125	100	50	ϕ19	40	6	15.5	ϕ9	154	195	134	ϕ158	290
90S/L		90	140	100/125	56	ϕ24	50	8	20	ϕ10	178	215	141	ϕ176	320/345
100L		100	160	140	63	ϕ28	60	8	24	ϕ12	203	235	151	ϕ199	385
112M		112	190	140	70	ϕ28	60	8	24	ϕ12	231	260	180	ϕ220	405
132S/M		132	216	140/178	89	ϕ38	80	10	33	ϕ12	263	300	200	ϕ259	467/505
160M/L		160	254	210/254	108	ϕ42	110	12	37	ϕ15	316	355	244	ϕ313	605/650
180M/L		180	279	241/279	121	ϕ48	110	14	42.5	ϕ15	354	390	265	ϕ360	687/725
200L		200	318	305	133	ϕ55	110	16	49	ϕ19	393	415	300	ϕ399	768.5
225S	4,6,8	225	356	286	149	ϕ60	140	18	53	ϕ19	440	465	333	ϕ459	810
225M	2	225	356	311	149	ϕ55	110	16	49	ϕ19	440	465	333	ϕ459	805
	4,6,8	225	356	311	149	ϕ60	140	18	53	ϕ19	440	465	333	ϕ459	835
250M	2	250	406	349	168	ϕ60	140	18	53	ϕ24	484	515	366	ϕ506	915
	4,6,8	250	406	349	168	ϕ65	140	18	58	ϕ24	484	515	366	ϕ506	915
280S/M	2	280	457	368/419	190	ϕ65	140	18	58	ϕ24	560	575	395	ϕ559	984/1035
	4,6,8	280	457	368/419	190	ϕ75	140	20	67.5	ϕ24	560	575	395	ϕ559	984/1035
315S	2	315	508	406	216	ϕ65	140	18	58	ϕ28	628	620	510	ϕ680	1205
	4,6,8	315	508	406	216	ϕ80	170	22	71	ϕ28	628	620	510	ϕ680	1235
315M/L	2	315	508	457/508	216	ϕ65	140	18	58	ϕ28	628	620	510	ϕ680	1355
	4,6,8	315	508	457/508	216	ϕ80	170	22	71	ϕ28	628	620	510	ϕ680	1385
355M/L	2	355	610	560/630	254	ϕ75	140	20	67.5	ϕ28	740	820	655	ϕ820	1495
	4,6,8	355	610	560/630	254	ϕ95	170	25	86	ϕ28	740	820	655	ϕ820	1525
	4,6,8	355	610	560/630	254	ϕ100	210	28	90	ϕ28	740	820	655	ϕ820	1565

ROYSE

S-T1C Series IE1 Efficiency High-temperature Smoke-extraction Motors Technical Data(400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Net weight (kg)	Moment of inertia ($kg*m^2$)
2 Pole 3000 rpm Synchronous Speed 50Hz												
S-T1C 801-2	0.75	2840	2.06	72.1	0.73	2.52	6	2.2	1.8	2.3	14.3	0.00093
S-T1C 802-2	1.1	2840	2.90	75	0.73	3.70	7	2.2	1.8	2.3	16.0	0.00110
S-T1C 90S-2	1.5	2840	3.79	77.2	0.74	5.04	7	2.2	1.8	2.3	18.5	0.00184
S-T1C 90L-2	2.2	2840	5.04	79.7	0.79	7.40	7.5	2.2	1.8	2.3	22.0	0.00239
S-T1C 100L-2	3	2840	6.56	81.5	0.81	10.09	7.5	2.2	1.8	2.3	32.0	0.00368
S-T1C 112M-2	4	2900	8.58	83.1	0.81	13.17	7.5	2.2	1.8	2.3	41.0	0.01613
S-T1C 132S1-2	5.5	2900	11.16	84.7	0.84	18.11	7.5	2.2	1.8	2.3	57.5	0.01106
S-T1C 132S2-2	7.5	2900	14.81	86	0.85	24.70	7.5	2.2	1.8	2.3	62.0	0.01468
S-T1C 132M1-2	9.2	2900	17.75	87	0.86	30.30	7.5	2.2	1.4	2.3	68.5	0.01767
S-T1C 160M1-2	11	2910	20.83	87.6	0.87	36.10	7.5	2.2	1.4	2.3	111.0	0.04150
S-T1C 160M2-2	15	2910	28.06	88.7	0.87	49.23	7.5	2.2	1.4	2.3	122.0	0.05384
S-T1C 160L-2	18.5	2910	33.60	89.3	0.89	60.71	7.5	2.2	1.4	2.3	140.0	0.06436
S-T1C 180M-2	22	2920	39.7	89.9	0.89	71.95	7.5	2.2	1.4	2.3	153.0	0.08110
S-T1C 200L1-2	30	2920	53.6	90.7	0.89	98.1	7.5	2.0	1.4	2.3	218.0	0.15138
S-T1C 200L2-2	37	2920	65.8	91.2	0.89	121.0	7.5	2.0	1.4	2.3	230.0	0.17351
S-T1C 225M-2	45	2930	78.7	91.7	0.90	146.7	7.5	2.0	1.4	2.3	303.0	0.24178
S-T1C 250M-2	55	2930	97.9	92.1	0.88	179.3	7.5	2.0	1.4	2.3	391.0	0.38903
S-T1C 280S-2	75	2930	131.2	92.7	0.89	244.5	7.5	2.0	1.4	2.3	530.0	0.69871
S-T1C 280M-2	90	2930	155.2	93	0.90	293.3	7.5	2.0	1.4	2.3	572.0	0.79539
S-T1C 315S-2	110	2940	189.1	93.3	0.90	357.3	7.1	1.8	1.3	2.2	900.0	1.41216
S-T1C 315M-2	132	2940	223.9	93.5	0.91	428.8	7.1	1.8	1.3	2.2	970.0	1.55013
S-T1C 315L1-2	160	2945	273.6	93.8	0.90	518.8	7.1	1.8	1.3	2.2	1010.0	1.71199
S-T1C 315L2-2	200	2945	345.1	94	0.89	648.6	7.1	1.8	1.3	2.2	1070.0	1.90623
S-T1C 355M1-2	220	2945	379.6	94	0.89	713.4	7.1	1.8	1.3	2.2	1590.0	2.95585
S-T1C 355M2-2	250	2945	426.5	94	0.90	810.7	7.1	1.6	1.3	2.2	1650.0	3.14272
S-T1C 355L1-2	280	2945	477.7	94	0.90	908.0	7.1	1.6	1.3	2.2	1715.0	3.47911
S-T1C 355L2-2	315	2945	543.5	94	0.89	1021.5	7.1	1.6	1.3	2.2	1780.0	3.85287
4 Pole 1500 rpm Synchronous Speed 50Hz												
S-T1C 801-4	0.55	1420	1.51	70	0.75	3.70	6	2.3	2.0	2.6	13.5	0.00141
S-T1C 802-4	0.75	1420	2.00	72.1	0.75	5.04	6	2.3	2.0	2.6	14.6	0.00168
S-T1C 90S-4	1.1	1430	2.82	75	0.75	7.35	6.5	2.3	2.0	2.6	18.0	0.00238
S-T1C 90L-4	1.5	1430	3.69	77.2	0.76	10.02	6.5	2.3	2.0	2.6	23.0	0.00335
S-T1C 100L1-4	2.2	1430	4.98	79.7	0.80	14.69	6.5	2.2	2.0	2.6	32.0	0.00688
S-T1C 100L2-4	3	1435	6.64	81.5	0.80	19.97	7.5	2.2	2.0	2.6	35.0	0.00883
S-T1C 112M-4	4	1435	8.47	83.1	0.82	26.62	7.5	2.2	2.0	2.6	44.0	0.01311
S-T1C 132S-4	5.5	1440	11.29	84.7	0.83	36.48	7.5	2.2	1.6	2.6	61.0	0.02679
S-T1C 132M-4	7.5	1440	14.81	86	0.85	49.74	7.5	2.2	1.6	2.6	76.0	0.03694
S-T1C 132M2-4	9.2	1440	18.17	86	0.85	61.01	7.5	2.2	1.6	2.6	79.0	0.04412
S-T1C 160M-4	11	1440	21.32	87.6	0.85	72.95	7.5	2.2	1.6	2.6	115.0	0.07659
S-T1C 160L-4	15	1450	28.06	88.7	0.87	98.79	8	2.2	1.6	2.6	137.0	0.10379
S-T1C 180M-4	18.5	1450	33.98	89.3	0.88	121.8	8	2.2	1.6	2.6	149.5	0.14084
S-T1C 180L-4	22	1460	40.6	89.9	0.87	143.9	8	2.2	1.6	2.6	165.0	0.16541
S-T1C 200L-4	30	1460	53.6	90.7	0.89	196.2	8	2.2	1.6	2.6	216.5	0.26594
S-T1C 225S-4	37	1470	65.8	91.2	0.89	240.4	8	2.2	1.3	2.6	293.0	0.50439
S-T1C 225M-4	45	1480	80.5	91.7	0.88	290.4	8	2.2	1.3	2.6	335.0	0.57909
S-T1C 250M-4	55	1480	96.8	92.1	0.89	354.9	8	2.2	1.3	2.6	397.0	0.69098
S-T1C 280S-4	75	1480	132.7	92.7	0.88	484.0	8	2.2	1.3	2.6	540.0	1.41285
S-T1C 280M-4	90	1480	155.2	93	0.90	580.7	8	2.2	1.3	2.6	620.0	1.74607
S-T1C 315S-4	110	1480	189.1	93.3	0.90	709.8	7	2.0	1.3	2.3	915.0	2.90486
S-T1C 315M-4	132	1480	226.4	93.5	0.90	851.8	7	2.0	1.3	2.3	1005.0	3.29579
S-T1C 315L1-4	160	1480	307.8	93.8	0.80	1032.4	7	2.0	1.3	2.3	1068.0	3.73367
S-T1C 315L2-4	200	1480	341.2	94	0.90	1290.5	7	2.0	1.3	2.3	1210.0	4.67201
S-T1C 355M1-4	220	1480	379.6	94	0.89	1419.6	7	2.0	1.3	2.3	1560.0	6.87200
S-T1C 355M-4	250	1480	431.3	94	0.89	1613.2	7	2.0	1.3	2.3	1600.0	7.63820
S-T1C 355L-4	315	1480	537.4	94	0.90	2032.6	7	2.0	1.3	2.3	1700.0	9.08547
S-T1C 355L2-4	355	1480	605.7	94	0.90	2290.7	7	2.0	1.3	2.3	1780.0	10.10708
6 Pole 1000 rpm Synchronous Speed 50Hz												
S-T1C 801-6	0.37	900	1.49	59.7	0.60	3.93	5.5	2.0	1.8	2.2	14.0	0.00231
S-T1C 802-6	0.55	900	1.95	65.8	0.62	5.84	5.5	2.0	1.8	2.2	15.0	0.00284
S-T1C 90S-6	0.75	935	2.34	70	0.66	7.66	5.5	2.0	1.8	2.2	19.0	0.00335
S-T1C 90L-6	1.1	935	3.20	72.9	0.68	11.24	5.5	2.0	1.8	2.2	21.6	0.00461
S-T1C 100L-6	1.5	940	3.94	75.2	0.73	15.24	5.5	2.0	1.8	2.2	29.5	0.00783
S-T1C 112M-6	2.2	940	5.68	77.7	0.72	22.35	6	2.0	1.8	2.2	38.0	0.01383
S-T1C 132S-6	3	940	7.24	79.7	0.75	30.48	6	2.0	1.8	2.2	49.6	0.02855
S-T1C 132M1-6	4	950	9.58	81.4	0.74	40.21	6	2.0	1.8	2.5	59.4	0.03601
S-T1C 132M2-6	5.5	950	12.91	83.1	0.74	55.29	7.5	2.0	1.8	2.5	65.0	0.04890
S-T1C 160M-6	7.5	960	18.0	84.7	0.71	74.6	7.5	2.3	1.8	2.5	112.0	0.08726
S-T1C 160L-6	11	960	24.5	86.4	0.75	109.4	7.5	2.3	1.5	2.5	122.4	0.10963
S-T1C 180L-6	15	960	31.7	87.7	0.78	149.2	7.5	2.3	1.5	2.5	161.5	0.24936
S-T1C 200L1-6	18.5	970	37.7	88.6	0.80	182.1	7.5	2.3	1.5	2.5	208.3	0.36147
S-T1C 200L2-6	22	970	43.4	89.2	0.82	216.6	7.5	2.3	1.5	2.5	218.2	0.39445
S-T1C 225M-6	30	975	56.5	90.2	0.85	293.8	7.5	2.3	1.5	2.5	289.0	0.55616
S-T1C 250M-6	37	975	70.0	90.8	0.84	362.4	7.5	2.3	1.5	2.5	380.0	0.96477
S-T1C 280S-6	45	980	83.6	91.4	0.85	438.5	7.5	2.3	1.5	2.5	489.5	1.68116
S-T1C 280M1-6	55	980	100.4	91.9	0.86	536.0	7.5	2.3	1.5	2.5	560.0	1.99928
S-T1C 315S-6	75	980	137.5	92.6	0.85	730.9	7	2.0	1.3	2.3	806.0	3.25976
S-T1C 315M-6	90	980	164.5	92.9	0.85	877.0	7	2.0	1.3	2.3	912.0	3.90933
S-T1C 315L1-6	110	980	200.2	93.3	0.85	1071.9	7	2.0	1.3	2.3	965.0	4.54331
S-T1C 315L2-6	132	980	239.7	93.5	0.85	1286.3	7	2.0	1.3	2.3	1070.0	5.44899
S-T1C 355M1-6	160	980	289.7	93.8	0.85	1559.2	7	2.0	1.3	2.3	1537.0	8.97637
S-T1C 355M2-6	200	980	361.3	94	0.85	1949.0	7	2.0	1.3	2.3	1720.0	11.00175
S-T1C 355L-6	250	980	451.6	94	0.85	2436.2	7	2.0	1.3	2.3	1880.0	13.56011

ROYAL

S-T2C Series IE2 Efficiency High-temperature Smoke-extraction Motors Technical Data(400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Net weight (kg)	Moment of inertia ($kg*m^2$)
2 Pole 3000 rpm Synchronous Speed 50Hz												
S–T2C 801–2	0.75	2840	1.73	77.4	0.81	2.52	6	2.5	2.1	2.6	14.5	0.00084
S–T2C 802–2	1.1	2880	2.43	79.6	0.82	3.65	7.5	2.5	1.8	2.6	16.5	0.00119
S–T2C 90S–2	1.5	2880	3.25	81.3	0.82	4.97	7	2.5	1.8	2.6	18.5	0.00184
S–T2C 90L–2	2.2	2880	4.60	83.2	0.83	7.30	7.5	2.5	1.4	2.6	22.0	0.00239
S–T2C 100L–2	3	2890	6.17	84.6	0.83	9.91	7.5	2.5	2.0	2.8	33.0	0.00410
S–T2C 112M–2	4	2910	7.65	85.8	0.88	13.13	9.5	2.5	1.8	2.8	41.0	0.00607
S–T2C 132S1–2	5.5	2910	10.37	87	0.88	18.05	8.5	2.4	1.8	2.8	59.5	0.01251
S–T2C 132S2–2	7.5	2920	13.96	88.1	0.88	24.53	10	2.5	1.8	2.8	64.0	0.01613
S–T2C 132M1–2	9.2	2920	17.13	88.1	0.88	30.09	10	2.5	1.4	3.0	71.0	0.01758
S–T2C 160M1–2	11	2930	19.73	89.4	0.90	35.85	8.5	2.5	1.4	2.8	113.0	0.04561
S–T2C 160M2–2	15	2940	26.64	90.3	0.90	48.72	9	2.5	1.3	2.8	124.0	0.06206
S–T2C 160L–2	18.5	2940	32.64	90.9	0.90	60.09	9.5	2.5	1.4	2.8	140.0	0.07528
S–T2C 180M–2	22	2945	38.6	91.3	0.90	71.34	9	2.5	1.4	2.8	168.0	0.08110
S–T2C 200L1–2	30	2945	52.3	92	0.90	97.3	7	2.0	1.3	2.5	235.0	0.14253
S–T2C 200L2–2	37	2945	64.2	92.5	0.90	120.0	7.5	2.5	1.5	2.5	246.0	0.16466
S–T2C 225M–2	45	2950	77.7	92.9	0.90	145.7	7.5	2.5	1.3	2.4	321.0	0.24906
S–T2C 250M–2	55	2960	94.6	93.2	0.90	177.4	8.5	2.3	1.4	2.6	419.0	0.43328
S–T2C 280S–2	75	2960	128.2	93.8	0.90	242.0	9	2.5	1.8	2.6	571.0	0.79186
S–T2C 280M–2	90	2960	153.4	94.1	0.90	290.4	9.5	2.5	1.8	2.6	638.0	0.90716
S–T2C 315S–2	110	2960	187.1	94.3	0.90	354.9	6	2.0	1.4	2.3	927.0	1.50928
S–T2C 315M–2	132	2960	223.8	94.6	0.90	425.9	6	2.0	1.4	2.3	1006.0	1.67962
S–T2C 315L1–2	160	2960	270.7	94.8	0.90	516.2	6	2.0	1.4	2.3	1060.0	1.87385
S–T2C 315L2–2	200	2960	337.6	95	0.90	645.3	5.5	1.8	1.3	2.3	1130.0	2.13283
S–T2C 355M1–2	220	2960	371.4	95	0.90	709.8	5.5	1.8	1.3	2.3	1590.0	2.95585
S–T2C 355M2–2	250	2960	422.0	95	0.90	806.6	5.5	1.8	1.3	2.3	1650.0	3.14272
S–T2C 355L1–2	280	2960	472.7	95	0.90	903.4	5.5	1.8	1.3	2.3	1715.0	3.47911
S–T2C 355L2–2	315	2960	531.8	95	0.90	1016.3	5.5	1.8	1.3	2.3	1780.0	3.85287
4 Pole 1500 rpm Synchronous Speed 50Hz												
S–T2C 802–4	0.75	1420	1.92	79.6	0.71	5.04	5.7	2.5	2.1	2.6	16.0	0.00128
S–T2C 90S–4	1.1	1430	2.75	81.4	0.71	7.35	6.1	2.5	2.1	2.6	20.0	0.00315
S–T2C 90L–4	1.5	1430	3.53	82.8	0.74	10.02	6.5	2.5	2.0	2.6	24.0	0.00411
S–T2C 100L1–4	2.2	1430	4.71	84.3	0.80	14.69	6.6	2.2	2.0	2.6	34.0	0.00883
S–T2C 100L2–4	3	1435	6.33	85.5	0.80	19.97	7.6	2.2	2.0	3.0	35.0	0.01039
S–T2C 112M–4	4	1435	8.23	86.6	0.81	26.62	7.9	2.2	2.0	3.0	45.0	0.01369
S–T2C 132S–4	5.5	1440	10.91	87.7	0.83	36.48	8.8	2.2	1.8	3.0	63.0	0.02966
S–T2C 132M–4	7.5	1440	14.70	88.7	0.83	49.74	9	2.2	1.6	3.0	77.5	0.03981
S–T2C 132M2–4	9.2	1440	17.82	88.7	0.84	61.01	8.8	2.2	1.6	3.0	85.0	0.04700
S–T2C 160M–4	11	1440	21.30	89.8	0.83	72.95	7.1	2.5	1.6	2.5	119.0	0.08670
S–T2C 160L–4	15	1450	27.47	90.6	0.87	98.79	8.9	2.5	1.6	2.5	146.0	0.11272
S–T2C 180M–4	18.5	1450	34.05	91.2	0.86	121.8	8.6	2.5	1.6	2.8	161.0	0.14084
S–T2C 180L–4	22	1460	39.4	91.6	0.88	143.9	8.1	2.5	1.6	2.8	176.0	0.16541
S–T2C 200L–4	30	1460	53.3	92.3	0.88	196.2	8.5	2.5	2.1	3.0	242.0	0.27306
S–T2C 225S–4	37	1470	65.5	92.7	0.88	240.4	7.6	2.2	1.3	2.3	315.0	0.50439
S–T2C 225M–4	45	1480	78.4	93.1	0.89	290.4	7.7	2.2	1.3	2.3	340.0	0.59389
S–T2C 250M–4	55	1480	98.7	93.5	0.86	354.9	8.6	2.5	1.5	2.5	420.0	0.70950
S–T2C 280S–4	75	1480	128.0	94	0.90	484.0	9	2.5	2.0	2.5	580.0	1.59510
S–T2C 280M–4	90	1480	153.2	94.2	0.90	580.7	8.7	2.5	2.0	2.5	650.0	1.89187
S–T2C 315S–4	110	1480	190.9	94.5	0.88	709.8	7.4	2.0	1.3	2.8	938.0	3.09253
S–T2C 315M–4	132	1480	226.1	94.7	0.89	851.8	7	2.0	1.3	2.6	1030.0	3.48345
S–T2C 315L1–4	160	1480	273.4	94.9	0.89	1032.4	6	2.0	1.3	2.6	1106.0	3.98390
S–T2C 315L2–4	200	1480	341.1	95.1	0.89	1290.5	6	2.0	1.3	2.3	1220.0	4.67201
S–T2C 355M1–4	220	1480	375.2	95.1	0.89	1419.6	5.5	1.8	1.3	2.3	1560.0	6.87200
S–T2C 355M–4	250	1480	426.3	95.1	0.89	1613.2	5.5	1.8	1.3	2.3	1600.0	7.63820
S–T2C 355L1–4	280	1480	477.5	95.1	0.89	1806.8	5.5	1.8	1.3	2.3	1650.0	8.31927
S–T2C 355L–4	315	1480	531.2	95.1	0.90	2032.6	5.5	1.8	1.3	2.3	1700.0	9.08547
S–T2C 355L2–4	355	1480	598.7	95.1	0.90	2290.7	5.5	1.8	1.3	2.3	1780.0	10.10708
6 Pole 1000 rpm Synchronous Speed 50Hz												
S–T2C 90S–6	0.75	935	2.23	75.9	0.64	7.66	5	2.0	1.8	2.2	19.6	0.00360
S–T2C 90L–6	1.1	935	2.99	78.1	0.68	11.24	5	2.0	1.8	2.2	23.5	0.00536
S–T2C 100L–6	1.5	940	3.72	79.8	0.73	15.24	5	1.6	1.6	2.2	32.0	0.00877
S–T2C 112M–6	2.2	940	5.39	81.8	0.72	22.35	6	2.0	1.8	2.5	39.0	0.01468
S–T2C 132S–6	3	940	6.93	83.3	0.75	30.48	6	1.6	1.5	2.2	54.0	0.03039
S–T2C 132M1–6	4	950	9.22	84.6	0.74	40.21	6	2.0	1.6	2.5	65.0	0.03785
S–T2C 132M2–6	5.5	950	12.47	86	0.74	55.29	7	2.0	1.8	2.5	66.0	0.04890
S–T2C 160M–6	7.5	960	17.5	87.2	0.71	74.6	9	2.5	1.8	2.8	112.0	0.08726
S–T2C 160L–6	11	960	23.9	88.7	0.75	109.4	9	2.5	1.4	2.8	132.6	0.12069
S–T2C 180L–6	15	960	30.9	89.7	0.78	149.2	9	2.5	1.5	2.8	179.0	0.25695
S–T2C 200L1–6	18.5	970	36.9	90.4	0.80	182.1	9	2.0	1.4	2.8	221.4	0.36147
S–T2C 200L2–6	22	970	42.6	90.9	0.82	216.6	10	2.5	1.8	2.8	240.6	0.42742
S–T2C 225M–6	30	975	55.6	91.7	0.85	293.8	9	2.5	1.5	2.2	335.0	0.67058
S–T2C 250M–6	37	975	69.0	92.2	0.84	362.4	7	1.8	1.3	2.2	391.4	0.99243
S–T2C 280S–6	45	980	82.4	92.7	0.85	438.5	8.5	2.3	1.4	2.3	514.0	1.78548
S–T2C 280M1–6	55	980	99.2	93.1	0.86	536.0	9	2.5	1.7	2.8	584.0	2.20792
S–T2C 315S–6	75	980	135.9	93.7	0.85	730.9	7	2.0	1.3	2.3	807.0	3.25976
S–T2C 315M–6	90	980	162.6	94	0.85	877.0	7	2.0	1.3	2.3	913.0	3.90933
S–T2C 315L1–6	110	980	198.1	94.3	0.85	1071.9	7	2.0	1.3	2.3	966.0	4.54331
S–T2C 315L2–6	132	980	236.9	94.6	0.85	1286.3	6.5	2.0	1.3	2.3	1080.0	5.53956
S–T2C 355M1–6	160	980	286.6	94.8	0.85	1559.2	6.5	2.0	1.3	2.3	1537.0	8.97637
S–T2C 355M2–6	200	980	357.5	95	0.85	1949.0	6.5	2.0	1.3	2.3	1720.0	11.00175
S–T2C 355L–6	250	980	446.9	95	0.85	2436.2	6.5	2.0	1.3	2.3	1880.0	13.56011

ROYAL

S-T3C Series IE3 Efficiency High-temperature Smoke-extraction Motors Technical Data(400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Net weight (kg)	Moment of inertia ($kg*m^2$)
2 Pole 3000 rpm Synchronous Speed 50Hz												
S-T3C 801-2	0.75	2880	1.68	80.7	0.80	2.49	7.5	2.5	2.1	2.8	15.2	0.00093
S-T3C 802-2	1.1	2880	2.40	82.7	0.80	3.65	8	2.5	1.8	2.8	17.1	0.00128
S-T3C 90S-2	1.5	2880	3.06	84.2	0.84	4.97	8.5	2.5	1.8	2.8	21.5	0.00224
S-T3C 90L-2	2.2	2880	4.45	85.9	0.83	7.30	8.6	2.5	1.8	2.8	24.6	0.00279
S-T3C 100L-2	3	2900	5.65	87.1	0.88	9.88	9.5	2.5	2.0	2.8	35.5	0.00496
S-T3C 112M-2	4	2910	7.28	88.1	0.90	13.13	10.5	2.5	2.0	2.8	44.5	0.00744
S-T3C 132S1-2	5.5	2910	10.11	89.2	0.88	18.05	10	2.5	2.0	3.0	63.2	0.01468
S-T3C 132S2-2	7.5	2920	13.50	90.1	0.89	24.53	10	2.5	1.5	3.0	70.2	0.01903
S-T3C 132M1-2	9.2	2920	16.47	90.6	0.89	30.09	10	2.5	1.5	3.0	76.8	0.02048
S-T3C 160M1-2	11	2930	19.34	91.2	0.90	35.85	9.5	2.5	1.4	3.0	118.0	0.05178
S-T3C 160M2-2	15	2940	26.18	91.9	0.90	48.72	10	2.5	1.4	3.0	128.0	0.06206
S-T3C 160L-2	18.5	2940	31.76	92.4	0.91	60.09	9.5	2.5	1.4	3.0	144.0	0.07669
S-T3C 180M-2	22	2945	38.5	92.7	0.89	71.34	9	2.5	1.4	3.0	183.4	0.09665
S-T3C 200L1-2	30	2945	52.1	93.3	0.89	97.3	8.5	2.5	1.5	2.5	247.0	0.17351
S-T3C 200L2-2	37	2945	64.0	93.7	0.89	120.0	8.5	2.5	1.5	2.5	268.0	0.20008
S-T3C 225M-2	45	2950	75.9	94	0.91	145.7	8.5	2.5	1.4	2.5	369.0	0.34366
S-T3C 250M-2	55	2960	93.5	94.3	0.90	177.4	10	2.5	1.4	2.6	428.0	0.44434
S-T3C 280S-2	75	2960	125.6	94.7	0.91	242.0	10	2.5	1.8	2.6	587.3	0.82911
S-T3C 280M-2	90	2960	150.3	95	0.91	290.4	10	2.5	1.8	2.6	655.0	0.98168
S-T3C 315S-2	110	2960	185.3	95.2	0.90	354.9	7	2.0	1.4	2.3	980.0	1.70352
S-T3C 315M-2	132	2960	221.9	95.4	0.90	425.9	7	2.0	1.4	2.3	1100.0	1.93860
S-T3C 315L1-2	160	2960	267.8	95.8	0.90	516.2	7	2.0	1.4	2.3	1155.0	2.19758
S-T3C 315L2-2	200	2960	334.8	95.8	0.90	645.3	7	2.0	1.4	2.3	1260.0	2.55368
S-T3C 355M1-2	220	2960	394.6	95.8	0.84	709.8	6.5	2.0	1.4	2.3	1590.0	2.95585
S-T3C 355M2-2	250	2960	448.4	95.8	0.84	806.6	6.5	2.0	1.5	2.3	1650.0	3.14272
S-T3C 355L1-2	280	2960	502.2	95.8	0.84	903.4	6.5	2.0	1.5	2.3	1715.0	3.47911
S-T3C 355L2-2	315	2960	558.3	95.8	0.85	1016.3	6.5	2.0	1.5	2.3	1780.0	3.85287
4 Pole 1500 rpm Synchronous Speed 50Hz												
S-T3C 802-4	0.75	1420	1.90	82.5	0.69	5.04	6.3	2.8	2.2	2.8	18.2	0.00155
S-T3C 90S-4	1.1	1430	2.62	84.1	0.72	7.35	6.8	2.8	2.2	2.8	23.0	0.00372
S-T3C 90L-4	1.5	1430	3.63	85.3	0.70	10.02	7.3	2.8	2.2	3.0	26.3	0.00469
S-T3C 100L1-4	2.2	1430	4.52	86.7	0.81	14.69	8	2.8	2.2	3.0	35.5	0.00922
S-T3C 100L2-4	3	1435	6.33	87.7	0.78	19.97	8.2	2.5	2.2	3.0	38.5	0.01195
S-T3C 112M-4	4	1440	7.95	88.6	0.82	26.53	8.6	2.5	2.2	3.0	47.0	0.01545
S-T3C 132S-4	5.5	1440	10.67	89.6	0.83	36.48	9	2.5	1.8	3.0	68.3	0.03397
S-T3C 132M-4	7.5	1440	14.09	90.4	0.85	49.74	9	2.5	1.6	3.0	79.0	0.04412
S-T3C 132M2-4	9.2	1440	17.19	90.9	0.85	61.01	9	2.5	1.6	3.0	87.5	0.04700
S-T3C 160M-4	11	1450	20.68	91.4	0.84	72.45	10	2.5	1.3	3.0	127.0	0.10355
S-T3C 160L-4	15	1450	27.33	92.1	0.86	98.8	8.5	2.5	1.3	2.8	160.0	0.13750
S-T3C 180M-4	18.5	1460	33.5	92.6	0.86	121.0	9	2.5	1.8	3.0	169.4	0.15530
S-T3C 180L-4	22	1460	39.2	93	0.87	143.9	10	2.5	1.8	3.0	196.0	0.19433
S-T3C 200L-4	30	1470	57.1	93.6	0.81	194.9	9	2.5	1.8	2.8	252.0	0.29441
S-T3C 225S-4	37	1470	65.4	93.9	0.87	240.4	9.2	2.5	1.4	2.5	324.5	0.57838
S-T3C 225M-4	45	1470	79.3	94.2	0.87	292.3	9	2.5	1.5	2.5	352.9	0.65309
S-T3C 250M-4	55	1470	95.4	94.6	0.88	357.3	8.5	2.5	1.8	2.5	427.4	0.76504
S-T3C 280S-4	75	1480	131.0	95	0.87	484.0	10	2.5	1.8	2.8	673.3	1.99603
S-T3C 280M-4	90	1480	160.5	95.2	0.85	580.7	10	2.5	1.8	2.8	692.0	2.18345
S-T3C 315S-4	110	1480	189.1	95.4	0.88	709.8	9	2.2	1.5	2.6	1027.0	3.71808
S-T3C 315M-4	132	1480	226.5	95.6	0.88	851.8	9	2.2	1.5	2.6	1155.0	4.29667
S-T3C 315L1-4	160	1480	273.9	95.8	0.88	1032.4	9	2.2	1.5	2.6	1240.0	5.10990
S-T3C 315L2-4	200	1480	337.9	96	0.89	1290.5	9	2.2	1.5	2.6	1400.0	6.17334
S-T3C 355M1-4	220	1480	371.7	96	0.89	1419.6	8	2.0	1.3	2.3	1560.0	7.04227
S-T3C 355M-4	250	1480	422.3	96	0.89	1613.2	8	2.0	1.3	2.3	1600.0	7.63820
S-T3C 355L1-4	280	1480	473.0	96	0.89	1806.8	8	2.0	1.3	2.3	1650.0	8.31927
S-T3C 355L-4	315	1480	532.1	96	0.89	2032.6	8	2.0	1.3	2.3	1700.0	9.34080
6 Pole 1000 rpm Synchronous Speed 50Hz												
S-T3C 90S-6	0.75	935	2.05	78.9	0.67	7.66	5	2.0	1.8	2.2	21.5	0.00435
S-T3C 90L-6	1.1	940	2.97	81	0.66	11.18	5.2	2.3	1.8	2.2	25.5	0.00611
S-T3C 100L-6	1.5	940	3.55	82.5	0.74	15.24	5.2	2.0	1.7	2.2	33.5	0.00972
S-T3C 112M-6	2.2	940	5.38	84.3	0.70	22.35	6.2	2.0	1.8	2.2	40.0	0.01637
S-T3C 132S-6	3	940	6.84	85.6	0.74	30.48	6	2.0	1.7	2.2	59.0	0.03223
S-T3C 132M1-6	4	950	8.99	86.8	0.74	40.21	7	2.0	1.6	2.5	75.5	0.04338
S-T3C 132M2-6	5.5	950	12.71	88	0.71	55.29	7.5	2.3	1.8	2.5	76.3	0.05443
S-T3C 160M-6	7.5	960	16.2	89.1	0.75	74.6	7.5	2.3	1.4	2.8	112.0	0.08726
S-T3C 160L-6	11	960	23.1	90.3	0.76	109.4	8.5	2.5	1.4	2.8	134.0	0.13544
S-T3C 180L-6	15	960	30.1	91.2	0.79	149.2	8	2.5	1.4	2.8	184.5	0.27973
S-T3C 200L1-6	18.5	970	36.4	91.7	0.80	182.1	9.5	2.5	1.4	2.8	231.0	0.38345
S-T3C 200L2-6	22	970	42.5	92.2	0.81	216.6	10	2.5	1.5	2.8	249.0	0.44941
S-T3C 225M-6	30	975	53.0	92.9	0.88	293.8	7	1.8	1.5	2.2	339.0	0.67058
S-T3C 250M-6	37	975	67.3	93.3	0.85	362.4	7	1.8	1.3	2.0	399.4	0.99243
S-T3C 280S-6	45	980	83.5	93.7	0.83	438.5	10	2.5	1.8	2.8	551.0	2.20274
S-T3C 280M1-6	55	980	99.3	94.1	0.85	536.0	10	2.5	1.8	2.8	624.3	2.57302
S-T3C 315S-6	75	980	139.6	94.6	0.82	730.9	7.5	2.0	1.3	2.3	860.0	3.80317
S-T3C 315M-6	90	980	166.9	94.9	0.82	877.0	7.5	2.0	1.3	2.3	970.0	4.45274
S-T3C 315L1-6	110	980	203.6	95.1	0.82	1071.9	7.5	2.0	1.3	2.3	1070.0	5.53956
S-T3C 315L2-6	132	980	243.6	95.4	0.82	1286.3	7.5	2.0	1.3	2.3	1196.0	6.62638
S-T3C 355M1-6	160	980	294.6	95.6	0.82	1559.2	7.5	2.0	1.3	2.3	1537.0	8.97637
S-T3C 355M2-6	200	980	367.5	95.8	0.82	1949.0	7.5	2.0	1.3	2.3	1720.0	11.00175
S-T3C 355L1-6	220	980	404.2	95.8	0.82	2143.9	7.5	2.0	1.3	2.3	1800.0	11.64134
S-T3C 355L-6	250	980	459.3	95.8	0.82	2436.2	7.5	2.0	1.3	2.3	1880.0	13.56011

ROYSE

S-TCI Series MEPS2(Aus) Efficiency High-temperature Smoke-extraction Motors Technical Data(400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I_{st}/I_n (Times)	T_{st}/T_n (Times)	T_{min}/T_n (Times)	T_{max}/T_n (Times)	Net weight (kg)	Moment of inertia ($kg*m^2$)
2 POLE – 3000 RPM SYNCHRONOUS SPEED 50 Hz												
S–TCI 801–2	0.75	2848	1.70	78.8	0.81	2.51	5	2.4	2.1	2.8	14.5	0.00084
S–TCI 802–2	1.1	2846	2.40	80.6	0.82	3.69	5	2.4	2.1	2.9	16.5	0.00119
S–TCI 90S–2	1.5	2852	3.20	82.6	0.82	5.02	5	2.4	2	2.7	18.5	0.00184
S–TCI 90L–2	2.2	2845	4.55	84	0.83	7.38	5.5	2.4	2.1	2.7	22.0	0.00239
S–TCI 100L–2	3	2851	6.12	85.3	0.83	10.05	5.5	2.3	2	2.8	33.0	0.00410
S–TCI 112M–2	4	2910	7.60	86.3	0.88	13.13	6	2.4	2	2.7	41.0	0.00607
S–TCI 132S1–2	5.5	2905	10.35	87.2	0.88	18.08	6	2.3	2	2.9	59.5	0.01251
S–TCI 132S2–2	7.5	2910	13.93	88.3	0.88	24.61	6.4	2.3	2	2.8	64.0	0.01613
S–TCI 160M1–2	11	2920	19.71	89.5	0.90	35.97	6.3	2.4	2.1	3	113.0	0.04561
S–TCI 160M2–2	15	2918	26.64	90.3	0.90	49.09	6.8	2.4	2.1	3	124.0	0.06206
S–TCI 160L–2	18.5	2922	32.68	90.8	0.90	60.46	7	2.4	2.1	2.9	140.0	0.07528
S–TCI 180M–2	22	2930	38.69	91.2	0.90	71.70	7.2	2.3	2	2.8	168.0	0.08110
S–TCI 200L1–2	30	2925	52.30	92	0.90	97.94	7	2.4	2	2.7	235.0	0.14253
S–TCI 200L2–2	37	2930	64.15	92.5	0.90	120.59	7.2	2.3	2	2.7	246.0	0.16466
S–TCI 225M–2	45	2930	77.68	92.9	0.90	146.66	7	2.3	2	2.8	321.0	0.24906
S–TCI 250M–2	55	2940	94.64	93.2	0.90	178.64	7.8	2.3	1.9	2.7	419.0	0.43328
S–TCI 280S–2	75	2940	128.10	93.9	0.90	243.60	7.8	2.2	1.9	2.7	571.0	0.79186
S–TCI 280M–2	90	2940	153.22	94.2	0.90	292.33	7.7	2.2	1.9	2.6	638.0	0.90716
S–TCI 315S–2	110	2940	186.68	94.5	0.90	357.29	7.7	2	1.8	2.3	927.0	1.50928
S–TCI 315M–2	132	2940	223.31	94.8	0.90	428.74	7.6	2	1.8	2.3	1006.0	1.67962
S–TCI 315L1–2	160	2945	270.11	95	0.90	518.81	7.8	2	1.8	2.3	1060.0	1.87385
S–TCI 315L2–2	200	2945	337.63	95	0.90	648.51	7.9	2	1.8	2.3	1130.0	2.13283
S–TCI 355M–2	250	2945	422.04	95	0.90	810.64	7.8	2	1.8	2.3	1650.0	3.14272
S–TCI 355L–2	315	2945	531.77	95	0.90	1021.40	7.8	2	1.8	2.3	1780.0	3.85287
4 POLE – 1500 RPM SYNCHRONOUS SPEED 50 Hz												
S–TCI 802–4	0.75	1420	1.89	80.5	0.71	5.04	5.4	2.3	2.1	2.9	16.0	0.00128
S–TCI 90S–4	1.1	1425	2.72	82.2	0.71	7.37	5.3	2.3	2.1	2.7	20.0	0.00315
S–TCI 90L–4	1.5	1420	3.50	83.5	0.74	10.09	5.5	2.4	2	2.7	24.0	0.00411
S–TCI 100L1–4	2.2	1430	4.68	84.9	0.80	14.69	6	2.4	2.1	2.9	34.0	0.00883
S–TCI 100L2–4	3	1430	6.29	86	0.80	20.03	6	2.4	2	2.8	35.0	0.01039
S–TCI 112M–4	4	1435	8.19	87	0.81	26.62	6.3	2.5	2	3	45.0	0.01369
S–TCI 132S–4	5.5	1430	10.88	87.9	0.83	36.73	6.5	2.3	2	2.8	63.0	0.02966
S–TCI 132M–4	7.5	1430	14.67	88.9	0.83	50.08	6.4	2.3	2	2.7	77.5	0.03981
S–TCI 160M–4	11	1440	21.28	89.9	0.83	72.95	6.8	2.5	2.1	2.8	119.0	0.08670
S–TCI 160L–4	15	1445	27.41	90.8	0.87	99.13	6.7	2.4	2.1	2.9	146.0	0.11272
S–TCI 180M–4	18.5	1445	34.05	91.2	0.86	122.26	7.2	2.4	2.1	3	161.0	0.14084
S–TCI 180L–4	22	1460	39.39	91.6	0.88	143.89	7.3	2.3	2	3	176.0	0.16541
S–TCI 200L–4	30	1460	53.31	92.3	0.88	196.22	7.6	2.4	2	2.7	242.0	0.27306
S–TCI 225S–4	37	1470	65.40	92.8	0.88	240.36	7.5	2.4	2	2.7	315.0	0.50439
S–TCI 225M–4	45	1480	78.39	93.1	0.89	290.35	7.3	2.3	2	2.8	340.0	0.59389
S–TCI 250M–4	55	1480	98.73	93.5	0.86	354.87	7.4	2.4	1.9	2.7	420.0	0.70950
S–TCI 280S–4	75	1480	127.96	94	0.90	483.92	7.5	2.2	1.9	2.6	580.0	1.59510
S–TCI 280M–4	90	1480	152.90	94.4	0.90	580.70	7.7	2.2	1.9	2.6	650.0	1.89187
S–TCI 315S–4	110	1480	190.52	94.7	0.88	709.75	7.8	2	1.8	2.3	938.0	3.09253
S–TCI 315M–4	132	1480	225.58	94.9	0.89	851.69	7.8	2	1.8	2.3	1030.0	3.48345
S–TCI 315L1–4	160	1480	272.57	95.2	0.89	1032.36	7.9	2	1.8	2.3	1106.0	3.98390
S–TCI 315L2–4	200	1480	340.71	95.2	0.89	1290.45	7.7	2	1.8	2.3	1220.0	4.67201
S–TCI 355M–4	250	1480	425.89	95.2	0.89	1613.06	7.9	2	1.8	2.3	1600.0	7.63820
S–TCI 355L–4	315	1480	530.65	95.2	0.9	2032.45	7.8	2	1.8	2.3	1700.0	9.08547
6 POLE – 1000 RPM SYNCHRONOUS SPEED 50 Hz												
S–TCI 90S–6	0.75	935	2.23	76	0.64	7.66	5.3	2.2	2	2.7	19.6	0.00360
S–TCI 90L–6	1.1	935	2.98	78.3	0.68	11.23	5	2.3	2.1	2.6	23.5	0.00536
S–TCI 100L–6	1.5	940	3.71	79.9	0.73	15.24	4.9	2.3	2.1	2.7	32.0	0.00877
S–TCI 112M–6	2.2	940	5.38	81.9	0.72	22.35	5.7	2.3	2.1	2.9	39.0	0.01468
S–TCI 132S–6	3	940	6.91	83.5	0.75	30.48	6.3	2.4	2.2	2.8	54.0	0.03039
S–TCI 132M1–6	4	945	9.21	84.7	0.74	40.42	6.2	2.5	2	2.8	65.0	0.03785
S–TCI 132M2–6	5.5	945	12.46	86.1	0.74	55.58	6.8	2.3	1.9	2.8	66.0	0.04890
S–TCI 160M–6	7.5	955	17.46	87.3	0.71	74.99	7	2.4	1.9	2.7	112.0	0.08726
S–TCI 160L–6	11	960	23.87	88.7	0.75	109.42	7.3	2.5	2	2.8	132.6	0.12069
S–TCI 180L–6	15	960	30.98	89.6	0.78	149.21	7.2	2.3	2.1	2.9	179.0	0.25695
S–TCI 200L1–6	18.5	965	36.96	90.3	0.80	183.07	6.9	2.4	2.1	3.2	221.4	0.36147
S–TCI 200L2–6	22	965	42.65	90.8	0.82	217.70	7.3	2.3	1.9	3.1	240.6	0.42742
S–TCI 225M–6	30	975	55.61	91.6	0.85	293.82	7.4	2.2	1.9	2.7	335.0	0.67058
S–TCI 250M–6	37	975	68.96	92.2	0.84	362.38	7.5	2.3	2.1	2.7	391.4	0.99243
S–TCI 280S–6	45	980	82.43	92.7	0.85	438.49	7.7	2.3	2	2.8	514.0	1.78548
S–TCI 280M–6	55	980	99.15	93.1	0.86	535.93	7.7	2.2	1.9	2.7	584.0	2.20792
S–TCI 315S–6	75	980	135.92	93.7	0.85	730.81	7.9	2.1	1.9	2.5	807.0	3.25976
S–TCI 315M–6	90	980	162.24	94.2	0.85	876.98	8	2	1.8	2.3	913.0	3.90933
S–TCI 315L1–6	110	980	197.66	94.5	0.85	1071.86	7.7	2	1.8	2.3	966.0	4.54331
S–TCI 315L2–6	132	980	236.44	94.8	0.85	1286.23	.8	2	1.8	2.3	1080.0	5.53956
S–TCI 355M1–6	160	980	285.69	95.1	0.85	1559.07	7.6	2	1.8	2.3	1537.0	8.97637
S–TCI 355M2–6	200	980	357.12	95.1	0.85	1948.84	7.8	2	1.8	2.3	1720.0	11.00175
S–TCI 355L–6	250	980	446.40	95.1	0.85	2436.05	7.8	2	1.8	2.3	1880.0	13.56011

ROYSE

TECHTOP®

NEMA STANDARD MOTORS

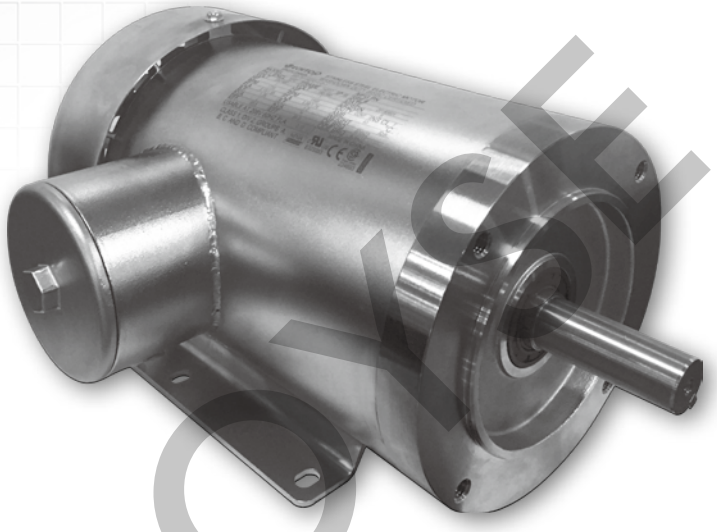
ROYSE

C US 224693 E323353 CC096A

TSS Series

Stainless-steel Housing NEMA Motors

- 1/4HP thru 15HP
- 56 thru 215T



ROYAL

FEATURES:

Service factor: 1.25
Protecion class: IP69K
Ball bearings with food grade grease
Stainless-steel Housing
Continuous Duty 40: Ambient
TEFC & TENV

Application:

The shaft, housing, end-shield and bolts & nuts of the motor are using staineless-steel.It has features of nice appearance, anti-corrosion, and stainless, and can be widely use in the industry of food processing and chemical.

TSS Series TEFC Motors Dimensional Drawings

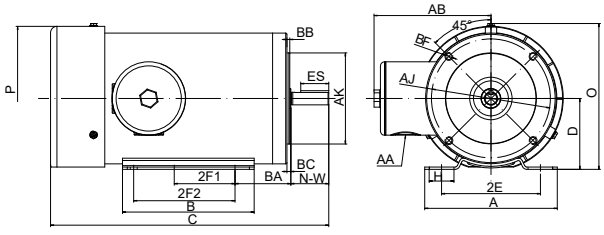


Figure 1 56 thru 140T

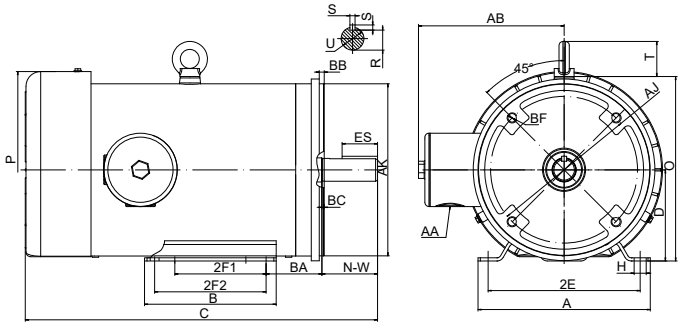


Figure 2 180T、210T

Overall & Installation Dimensions

Frame	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	AB	O	T	P	Bearing DE	Bearing ODE	AJ	AK	BB	BC	BF
56	6.54	4.13	3.5	4.88	3		2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	5.77	7.2		7.19	6205	6204	5.875	4.5	0.16	-0.19	4×3/8-16UNC
56H	6.54	6.5	3.5	4.88	3	5	2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	5.77	7.2		7.19	6205	6204	5.875	4.5	0.16	-0.19	4×3/8-16UNC
140T	6.55	5.9	3.5	5.5	4	5	2.25	0.5×0.34	0.875	2.25	0.771	1.375	0.1875	3/4-14NPT	5.77	7.2		7.19	6205	6204	5.875	4.5	0.16	0.12	4×3/8-16UNC
180T	8.5	6.5	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	3/4-14NPT	7.19	9.1	1.75	9.7	6206	6205	7.25	8.5	0.25	0.12	4×1/2-13UNC
210T	10.5	8.5	5.25	8.5	5.5	7	3.5	0.56×0.433	1.375	3.375	1.201	2.41	0.312	1-111/2NPT	7.95	10.65	1.75	11.36	6208	6206	7.25	8.5	0.25	0.25	4×1/2-13UNC

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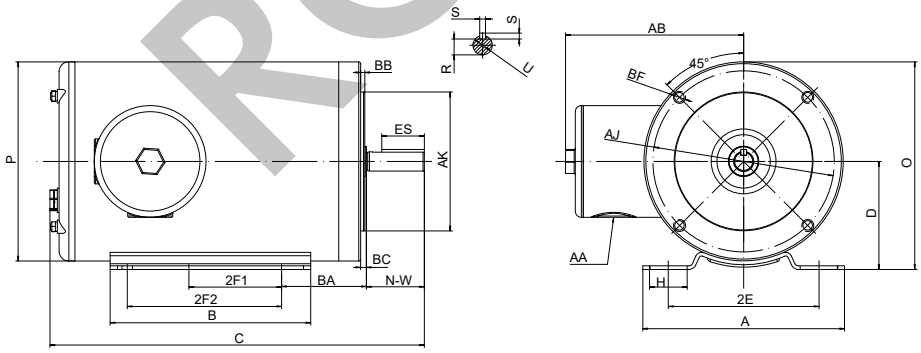
TSS Series TENV Motors Dimensional Drawings



Overall & Installation Dimensions

Frame	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	AB	O	T	P	Bearing DE	Bearing ODE	AJ	AK	BB	BC	BF
56	6.54	4.13	3.5	4.88	3		2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	5.77	6.73		6.46	6205	6204	5.875	4.5	0.16	-0.19	4×3/8-16UNC
56H	6.54	6.5	3.5	4.88	3	5	2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	5.77	6.73		6.46	6205	6204	5.875	4.5	0.16	-0.19	4×3/8-16UNC
140T	6.55	5.9	3.5	5.5	4	5	2.25	0.5×0.34	0.875	2.25	0.771	1.375	0.1875	3/4-14NPT	5.77	6.73		6.46	6205	6204	5.875	4.5	0.16	0.12	4×3/8-16UNC

TSS Series Stainless-steel Housing NEMA Motors Technical Data(60Hz)

HP	FULL LOAD SPEED rpm	FRAME	ENCLOSURE	EFF. 100%	POWER FACTOR (cosΦ)	IFL 460V A	FULL LOAD TORQUE lb-ft	MOMENT OF INERTLA lb-ft squared	LOCKED ROTOR		TST TFL	TPU TFL	TM TFL	SERVICE FACTOR	C
									KVA CODE	II/In					
1/4	3520	56	TENV	74.0	0.78	0.39	0.36	0.0375	N	9.30	3.1	2.6	4.5	1.25	10.4
	3500	56	TEFC	66.0	0.76	0.45	0.36	0.0332	N	8.70	2.8	2.2	4	1.25	11.6
	1760	56	TENV	77.0	0.62	0.47	0.72	0.0764	P	9.10	3.3	2.9	4.6	1.25	10.4
	1760	56	TEFC	70.0	0.55	0.59	0.72	0.0603	P	7.00	3.1	2.9	4.8	1.25	11.6
	1150	56	TENV	75.0	0.56	0.54	1.10	0.0783	L	5.70	2.6	2.3	4	1.25	10.4
	1150	56	TEFC	72.0	0.57	0.55	1.10	0.0702	L	5.30	2.3	2	3.5	1.25	11.6
	830	56	TENV	70.0	0.47	0.69	1.53	0.0944	K	3.90	2	1.7	3.8	1.25	10.4
	830	56	TEFC	64.0	0.47	0.75	1.53	0.0783	K	3.60	1.9	1.6	3.4	1.25	12
1/3	3520	56	TENV	77.0	0.80	0.51	0.50	0.0418	N	9.30	2.9	2.4	4.1	1.25	10.4
	3500	56	TEFC	72.0	0.78	0.56	0.50	0.0375	N	8.70	2.7	2	3.8	1.25	12
	1760	56	TENV	80.0	0.65	0.60	1.00	0.0845	P	9.10	3.3	2.9	4.5	1.25	10.4
	1760	56	TEFC	74.0	0.58	0.73	1.00	0.0764	P	7.40	3.1	2.9	4.8	1.25	12
	1150	56	TENV	77.0	0.58	0.70	1.53	0.0944	L	5.70	2.5	2.3	3.8	1.25	10.4
	1150	56	TEFC	73.0	0.59	0.73	1.53	0.0783	L	5.30	2.3	2	3.5	1.25	12
	830	56	TENV	72.0	0.48	0.91	2.12	0.1106	K	3.90	2	1.7	3.5	1.25	10.9
	830	56	TEFC	66.0	0.48	0.99	2.12	0.0944	K	3.60	1.9	1.6	3.4	1.25	12
1/2	3510	56	TENV	82.5	0.83	0.68	0.74	0.0460	M	9.30	2.8	2.3	3.8	1.25	10.4
	3490	56	TEFC	74.0	0.80	0.78	0.75	0.0418	M	8.70	2.7	2	3.6	1.25	12
	1760	56	TENV	84.0	0.68	0.81	1.48	0.1084	N	9.10	3.3	2.9	4.5	1.25	10.9
	1760	56	TEFC	79.5	0.59	0.99	1.48	0.0845	N	7.40	3.1	2.9	4.7	1.25	12
	1150	56	TENV	79.0	0.60	0.98	2.27	0.1106	K	5.70	2.5	2.2	3.5	1.25	10.9
	1150	56	TEFC	75.5	0.62	0.99	2.27	0.0944	K	5.30	2.2	2	3.2	1.25	12
	830	56H、140T	TENV	74.0	0.50	1.26	3.14	0.1384	J	3.90	2	1.7	3.3	1.25	11.5、11.9
	830	56H、140T	TEFC	68.0	0.50	1.37	3.14	0.1106	J	3.60	1.9	1.6	3.1	1.25	12.5、12.9
3/4	3510	56	TENV	84.5	0.85	0.96	1.10	0.0546	L	9.70	2.8	2.3	3.8	1.25	10.9
	3490	56	TEFC	77.0	0.82	1.09	1.11	0.0460	M	8.70	2.7	1.8	3.4	1.25	12
	1760	56	TENV	86.5	0.68	1.17	2.20	0.1324	M	8.60	3.4	3.1	4.3	1.25	11.5
	1760	56	TEFC	82.5	0.65	1.29	2.20	0.1084	M	7.80	3.2	2.9	4.5	1.25	12.5
	1150	56	TENV	82.5	0.64	1.31	2.37	0.1348	J	5.50	2.3	2	3.3	1.25	11.5
	1150	56	TEFC	81.5	0.64	1.32	2.37	0.1106	J	5.30	2.2	2	3	1.25	12.5
	830	56H、140T	TENV	77.0	0.53	1.69	4.67	0.1668	H	3.90	1.9	1.6	3.1	1.25	12.1、12.5
	830	56H、140T	TEFC	70.0	0.53	1.86	4.67	0.1348	J	3.60	1.8	1.5	2.8	1.25	12.5、12.9
1	3510	56H、140T	TENV	86.5	0.85	1.28	1.51	0.0631	M	10.7	3.2	2.6	4.2	1.25	11.5、11.9
	3490	56H、140T	TEFC	81.0	0.84	1.38	1.51	0.0546	L	8.7	2.7	1.8	3.3	1.25	12.5、12.9
	1750	56H、140T	TENV	86.5	0.68	1.60	3.02	0.1566	N	9.3	4.1	3.9	5	1.25	12.1、12.5
	1750	56H、140T	TEFC	85.5	0.71	1.55	3.02	0.1324	L	7.7	2.9	2.6	3.8	1.25	13.1、13.5
	1150	56H、140T	TENV	84.0	0.66	1.70	4.59	0.1668	J	5.5	2.3	2	3.2	1.25	12.1、12.5
	1150	56H、140T	TEFC	82.5	0.66	1.73	4.59	0.1348	J	5.3	2.2	2	2.95	1.25	13.1、13.5
	850	180T	TEFC	75.5	0.54	2.31	6.22	0.5206	L	5.0	1.8	1.5	3	1.25	14.8
1.5	3510	56H、140T	TENV	87.5	0.86	1.83	2.21	0.0802	M	10.7	3.2	2.6	4.2	1.25	12.1、12.5
	3490	56H、140T	TEFC	84.0	0.87	1.89	2.22	0.0631	K	8.7	2.7	1.8	3.2	1.25	13.1、13.5
	1740	56H、140T	TENV	87.5	0.69	2.29	4.45	0.1887	N	9.3	3.9	3.6	4.6	1.25	12.9、13.3
	1740	56H、140T	TEFC	86.5	0.73	2.19	4.45	0.1566	K	7.7	3.1	2.9	3.9	1.25	13.7、14.1
	1170	180T	TEFC	87.5	0.69	2.29	6.62	0.5206	K	7.2	2.2	1.7	3.2	1.25	14.8
	850	180T	TEFC	78.5	0.55	3.20	9.12	0.6101	K	5.0	1.8	1.5	2.8	1.25	15.4
2	3510	56H、140T	TENV	88.5	0.87	2.45	3.01	0.0973	N	10.7	3.2	2.6	4.2	1.25	12.9、13.3
	3490	56H、140T	TEFC	86.5	0.89	2.45	3.03	0.0802	K	9.1	2.9	2.3	3.3	1.25	13.7、14.1
	1740	56H、140T	TENV	88.5	0.70	3.04	6.07	0.2207	N	9.3	3.9	3.6	4.3	1.25	13.7、14.1
	1740	56H、140T	TEFC	86.5	0.75	2.90	6.07	0.1887	K	7.7	3.1	2.7	3.7	1.25	14.5、14.9
	1170	180T	TEFC	88.5	0.71	3.00	9.03	0.6103	K	7.2	2.2	1.7	3	1.25	15.4
	860	210T	TEFC	84.0	0.58	3.86	12.29	1.0175	J	5.0	1.8	1.5	2.8	1.25	17
3	3500	56H、140T	TENV	88.5	0.88	3.55	4.43	0.1144	M	10.7	3.2	2.3	3.8	1.25	13.7、14.1
	3490	56H、140T	TEFC	87.5	0.89	3.55	4.44	0.0973	K	9.5	3.2	2.1	3.6	1.25	14.5、14.9
	3510	180T	TEFC	87.5	0.90	3.51	4.41	0.2299	K	9.0	2.1	1.6	3.3	1.25	15.4
	1755	180T	TEFC	89.5	0.82	3.76	8.83	0.4129	K	8.3	2.35	1.7	3.35	1.25	15.4
	1170	210T	TEFC	89.5	0.72	4.29	13.24	1.0175	K	7.5	2.1	1.6	3	1.25	17
	860	210T	TEFC	85.5	0.59	5.47	18.02	1.4001	J	5.0	1.8	1.5	2.8	1.25	18.8
5	3510	180T	TEFC	88.5	0.91	5.77	7.43	0.2769	K	9.0	2	1.5	3.1	1.25	16.2
	1755	180T	TEFC	89.5	0.84	6.18	14.85	0.4952	J	7.7	2.2	1.8	3.1	1.25	16.2
	1170	210T	TEFC	89.5	0.74	7.01	22.28	1.4001	K	7.5	2.1	1.6	2.8	1.25	18.8
7.5	3510	210T	TEFC	89.5	0.92	8.38	11.04	0.6345	K	9.0	2.2	1.5	3	1.25	18.8
	1755	210T	TEFC	91.7	0.85	8.86	22.07	1.0102	J	8.4	2.3	1.6	3.15	1.25	18.8
10	3520	210T	TEFC	90.2	0.93	11.22	15.01	0.7330	K	9.0	2.2	1.5	2.8	1.25	19.6
	1755	210T	TEFC	91.7	0.85	12.08	30.10	1.1519	K	8.7	2.3	1.5	3.2	1.25	19.6
15	3520	210T	TEFC	91.0	0.93	16.31	22.01	0.8315	J	9.0	2.2	1.5	2.8	1.25	20.4

ROYSE

HVAC Resilient Cradle Motors

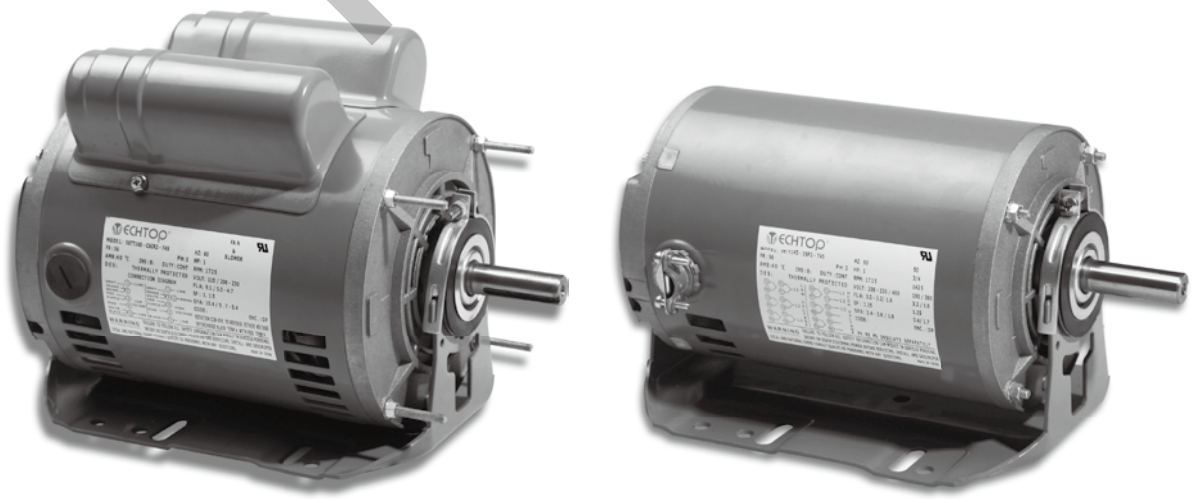
- **Capacitor Start Capacitor Run**
- **Three Phase Induction Run**

Standard Motor Specifications

- Open Drip Proof
- 3.3" Resilient Cradle / Thru Bolt Mount (Ridgid Base available)
- Dual VOLTAGE 115/208–230V Single Phase
- Dual VOLTAGE 230/460V Three Phase
- Class F Insulation – 40℃ Ambient
- Single Phase Automatic Reset Thermal Protection – UL2111
- Three Phase Automatic Reset Thermal Protection – UL1004
- Inverter Duty Available

TYPICAL APPLICATIONS

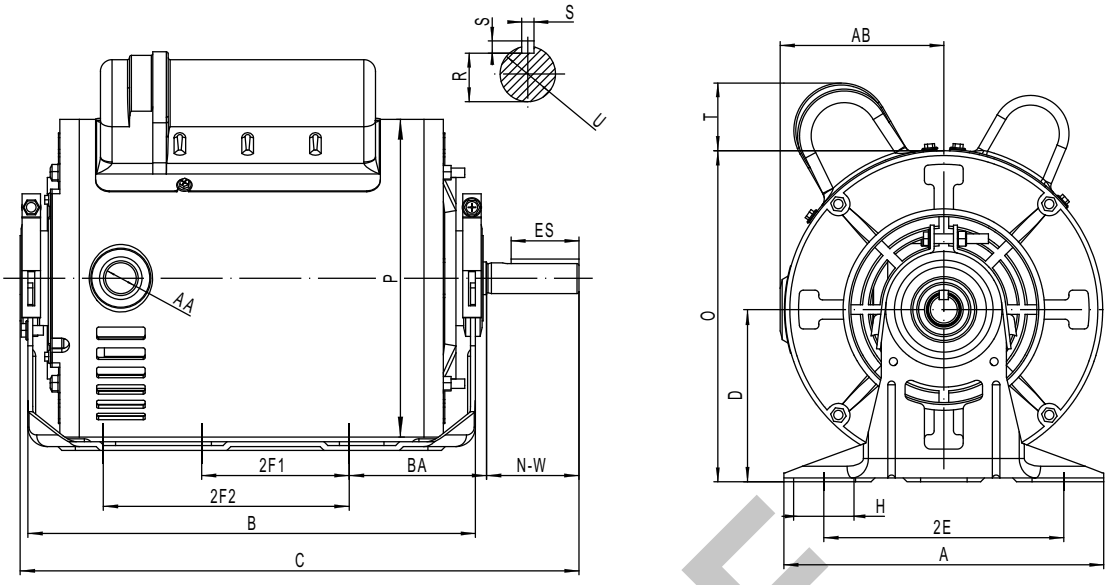
- Centrifugal Blowers
- Ventilators
- Roof vents
- Tubeaxial Fans
- Sidewall Ventilators
- Tubeaxial Blowers Evaporative Coolers



※ All dimensions are as standard and can be customized to meet your requirements

ROYSE

HVAC Resilient Cradle Single-Phase Motors Dimensional Drawings



Overall & Installation Dimensions

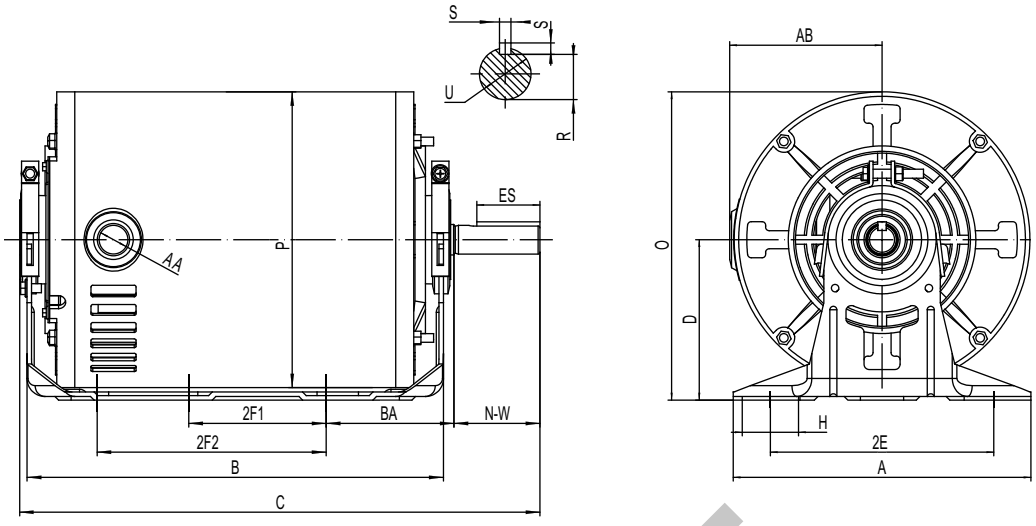
Frame	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	AB	O	T	P	Bearing DE	Bearing NDE
48	5.63	7.6/8.1/8.5	3.0	4.24	2.75		2.50	1.09×0.34	0.50	1.50	0.453			1/2-14NPT	2.92	5.83	1.47	5.67	6203	6203
56	6.40	7.6/8.1/8.5/9.1	3.5	4.88	3		2.75	1.09×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	2.92	6.33	1.47	5.67	6203	6203
56H	6.54	9.6/11.1	3.5	4.88	3	5	2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	3.33	6.75	1.47	6.46	6203	6203
140T	6.55	9.1/9.6/11.1	3.5	5.5	4	5	2.25	0.34	0.875	2.25	0.771	1.375	0.1875	1/2-14NPT	3.33	6.75	1.47	6.46	6205	6203

HVAC Resilient Cradle Single-Phase Motors Technical Data

HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 230V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In				
1/4	3500	48	66.6	90	1.31	0.36	0.0069	L	8.00	3.1	2.2	1.15	9.6
		56											10
	1740	48	68.5	81	1.41	0.72	0.0261	K	6.20	3	2.4	1.15	10.1
		56											10.5
1/3	3500	48	70.5	90	1.71	0.5	0.0073	L	8.00	3.1	2.3	1.15	10.1
		56											10.5
	1740	48	72.4	81	1.85	1.01	0.0355	K	6.70	3.3	2.5	1.15	10.5
		56											10.9
1/2	3510	48	72.4	90	2.47	0.74	0.0085	L	8.20	3.3	2.6	1.15	10.5
		56											10.9
	1740	48	76.2	83	2.54	1.49	0.0451	H	5.80	2.8	2.4	1.15	11.1
		56											11.5
3/4	3510	48	76.2	92	3.41	1.10	0.0104	K	8.20	3.3	2.5	1.15	11.1
		56											11.5
	1750	56H	81.8	90	3.25	2.21	0.0854	H	6.50	2.7	2.3	1.15	12
		140T											12.3
1	3500	56H	80.4	92	4.41	1.50	0.0356	H	7.0	3.3	2.5	1.15	11.5
		140T											11.8
	1750	56H	82.6	90	4.39	3.01	0.1079	H	7.0	2.8	2.5	1.15	13.5
		140T											13.8
1.5	3500	56H	81.5	96	6.11	2.21	0.045	H	7.5	3.2	2.7	1.15	12
		140T											12.3
2	3500	56H	82.9	96	8.19	3.01	0.0522	H	6.8	3.1	2.6	1.15	13.5
		140T											13.8

ROYSE

HVAC Resilient Cradle Three-Phase Motors Dimensional Drawings



Overall & Installation Dimensions

Frame	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	AB	O	T	P	Bearing DE	Bearing NDE
48	5.6 3	7.6/8.1/8.5	3.0	4.24	2.75		2.50	1.09×0.34	0.50	1.50	0.453			1/2-14NPT	2.92	5.83		5.67	6203	6203
56	6.40	7.6/8.1/8.5/9.1	3.5	4.88	3		2.75	1.09×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	2.92	6.33		5.67	6203	6203
56H	6.54	9.6/11 .1	3.5	4.88	3	5	2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	3.33	6.75		6.46	6203	6203
140T	6.55	9.1/9.6/11.1	3.5	5.5	4	5	2.25	0.34	0.875	2.25	0.771	1.375	0.1875	1/2-14NPT	3.33	6.75		6.46	6205	6203

HVAC Resilient Cradle Three-Phase Motors Technical Data

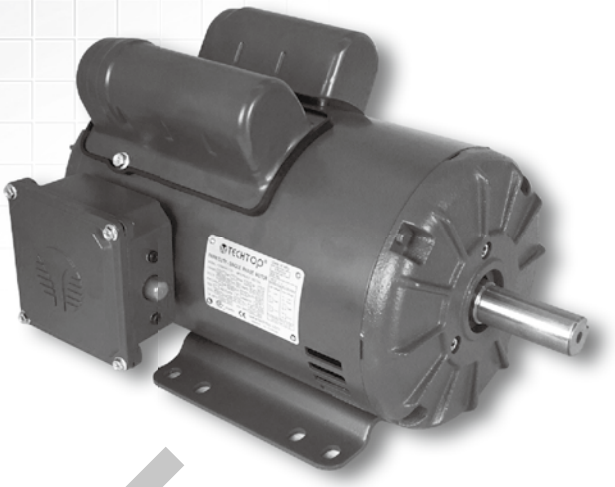
HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 460V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TPU TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In					
1/4	3450	48	65.6	70.0	0.51	0.38	0.0064	M	6.60	2.8	2.2	3.4	1.25	9.6
		56												10
	1740	48	69.5	62.0	0.54	0.76	0.0216	L	5.70	2.9	2.4	3.7	1.25	9.6
		56												10
	1150	56	67.5	59.0	0.59	1.14	0.0484	L	5.00	2.1	1.8	3.3	1.25	11.5
1/3	3450	48	69.5	70.0	0.64	0.51	0.0069	M	6.70	2.7	2	3.3	1.25	10.1
		56												10.5
	1740	48	73.4	64.0	0.66	1.00	0.0261	L	6.20	3.2	2.7	3.7	1.25	10.1
		56												10.5
	1150	56	71.4	60.0	0.73	1.51	0.0586	L	5.20	2.1	1.8	3.3	1.25	11.5
1/2	3450	48	73.4	72.0	0.88	0.76	0.0079	L	6.90	2.6	2	3.3	1.25	10.5
		56												10.9
	1740	48	78.2	66.0	0.91	1.51	0.0327	L	6.40	3.1	2.6	3.5	1.25	10.5
		56												10.9
	1150	56	75.3	63.0	0.99	2.28	0.0785	K	5.20	2.1	1.9	3.3	1.25	11.5
3/4	3450	48	76.8	75.0	1.22	1.14	0.0092	L	7.00	2.6	2	3	1.25	10.4
		56												10.9
	1740	48	81.1	68.0	1.28	2.27	0.0451	L	7.00	3.2	2.5	3.4	1.25	11.1
		56												11.5
	1150	56	81.7	65.0	1.33	3.43	0.0785	J	5.30	2.1	2	3	1.25	11.5
1	3450	56H	81.0	78.0	1.48	1.52	0.0304	K	7.3	3.5	3.1	4.25	1.25	11.5
		140T												11.8
	1740	56H	85.5	70.0	1.56	3.02	0.1023	N	9.6	4.2	3.3	5.2	1.25	13.5
		140T												13.8
	1150	56H	82.5	66.0	1.72	4.57	0.0885	J	5.3	2.2	2	2.95	1.25	12
		140T												12.3
1.5	3500	56H	84.0	82.0	2.04	2.25	0.0356	L	8.5	2.75	2.4	3.75	1.25	11.5
		140T												11.8
	1740	56H	86.5	75.0	2.17	4.53	0.1210	M	9.0	3.4	2.9	4.35	1.25	13.5
		140T												13.8
2	3500	56H	85.5	83.0	2.64	3.00	0.0420	K	8.5	2.8	2.4	3.75	1.25	12
		140T												12.3
3	3500	56H	86.5	86.0	3.78	4.50	0.0558	K	8.9	2.85	2.15	3.7	1.25	13.5
		140T												13.8

ROYAL

NEMA Single Phase Rolled Steel ODP Motors

Castiron endshield 1/4HP thru 10HP

· 48 thru 215T



FEATURES

- Service Factor 1.15
- Continuous Duty 40℃ Ambient
- ODP Class F Insulation With Class B Temp Rise
- NEMA Design L
- High Starting Torque and Low Starting Current
- Rolled Steel construction
- Ball Bearings
- Capacitor Start/Capacitor Run (1/4 thru 10HP)

APPLICATIONS

- Commercial Pumps
- Swimming Pool Pumps
- Fans
- Conveyors
- Air Conditioning Equipment A.K.A HVAC
- Small Machine Tools
- Blowers
- Augers
- Household Electric Appliances
- Equipment Requiring Direct Drive and High Starting Torque

ROYSE

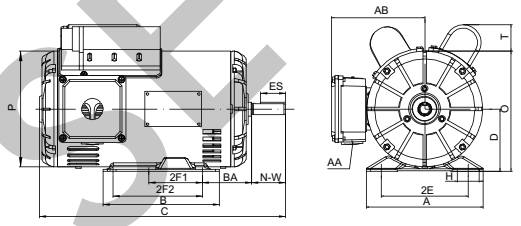


Figure1 48 thru 140T (Foot Mounting)

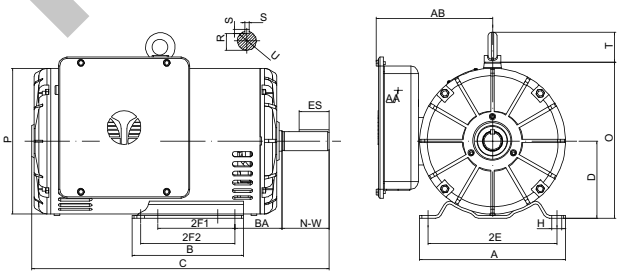


Figure2 180T、210T (Foot Mounting)

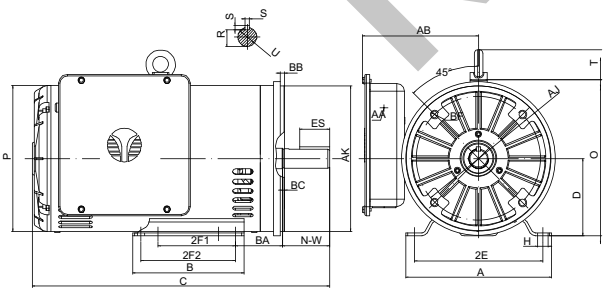


Figure3 180T、210T (C- Face)

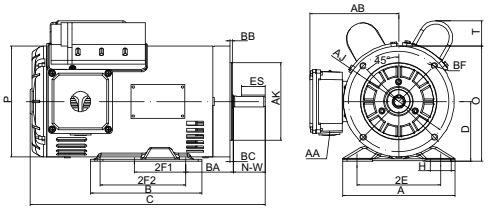


Figure4 48 thru 140T (C- Face)

Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					Ge neral					Bea rings		C- Face				
	A	B	D	2E	2F1	2F2	BA	H	U	N- W	R	ES	S	AA	AB	O	T	P	DE	NDE	AJ	AK	BB	BC	BF
48	5.69	3.94	3.0	4.24	2.75		2.50	1.05×0.34	0.50	1.50	0.453			0.866	4.77	5.83	1.47	5.67	6203	6202	3.750	3.0	0.16	-0.19	4×1/4-20UNC
56	6.54	4.02	3.5	4.88	3		2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	0.866	4.77	6.33	1.47	5.67	6204	6203	5.875	4.5	0.16	-0.19	4×3/8-16UNC
56H	6.54	6.5	3.5	4.88	3	5	2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	0.866	5.2	6.75	1.47	6.46	6205	6203	5.875	4.5	0.16	-0.19	4×3/8-16UNC
140T	6.55	5.9	3.5	5.5	4	5	2.25	0.5×0.35	0.875	2.25	0.771	1.375	0.1875	0.866	5.2	6.75	1.47	6.46	6205	6203	5.875	4.5	0.16	0.12	4×3/8-16UNC
180T	8.5	6.5	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	1.1/1.33	6.4	9.1	1.75	8.51	6206	6205	7.25	8.5	0.25	0.12	4×1/2-13UNC
210T	10.5	8.5	5.25	8.5	5.5	7	3.5	0.56×0.433	1.375	3.375	1.201	2.41	0.312	1.1/1.33	7.15	10.65	1.75	10.04	6208	6206	7.25	8.5	0.25	0.25	4×1/2-13UNC

Single-Phase Rolled Steel Frame ODP Motors Technical Data

HP	Full Load Speed, RPM	Frame Size	EFF.100% FL	Power Factor 100% FL	IFL 230V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In				
1/4	3500	48	66.6	90	1.31	0.36	0.0069	L	8.00	3.1	2.2	1.15	10.8
		56											11.1
	1740	48	68.5	81	1.41	0.72	0.0261	K	6.20	3	2.4	1.15	10.8
		56											11.1
1/3	3500	48	70.5	90	1.71	0.5	0.0073	L	8.00	3.1	2.3	1.15	10.8
		56											11.1
	1740	48	72.4	81	1.85	1.01	0.0355	K	6.70	3.3	2.5	1.15	11.4
		56											11.7
1/2	3510	48	72.4	90	2.47	0.74	0.0085	L	8.20	3.3	2.6	1.15	11.4
		56											11.7
	1740	48	76.2	83	2.54	1.49	0.0451	H	5.80	2.8	2.4	1.15	12
		56											12
3/4	3510	48	76.2	92	3.41	1.10	0.0104	K	8.20	3.3	2.5	1.15	12
		56											12.3
	1750	56H	81.8	90	3.25	2.21	0.0854	H	6.50	2.7	2.3	1.15	12.9
		140T											13.3
1	3500	56H	80.4	92	4.41	1.50	0.0356	H	7.0	3.3	2.5	1.15	12.9
		140T											13.3
	1750	56H	82.6	90	4.39	3.01	0.1079	H	7.0	2.8	2.5	1.15	13.7
		140T											14.1
1.5	3500	56H	81.5	96	6.11	2.21	0.045	H	7.5	3.2	2.7	1.15	13.7
		140T											14.1
	1740	56H	83.8	96	5.94	4.45	0.1423	H	6.9	2.5	2.3	1.15	14.9
		140T											15.3
2	3500	56H	82.9	96	8.19	3.01	0.0522	H	6.8	3.1	2.6	1.15	13.7
		140T											14.1
	1740	56H	84.5	96	8.04	6.07	0.1637	G	6.5	2.6	2.0	1.15	15.7
		140T											16.1
3	3510	56H	84.1	98	11.6	4.41	0.0688	J	8.4	3.1	2.7	1.15	14.5
		140T											14.9
	3480	180T	80.0	96	12.5	4.45	0.1636	H	7.2	4.1	2.2	1.15	16
	1740	180T	82.5	92	12.6	8.90	0.3559	H	7.0	3.5	2.4	1.15	16
5	3490	180T	82.0	98	20.0	7.46	0.2017	H	7.0	3.5	2.0	1.15	17.4
	1740	180T	84.0	94	20.4	14.97	0.4746	G	6.4	3.2	2.2	1.15	17.4
7.5	3510	210T	84.5	98	28.9	11.03	0.4508	H	7.6	4.2	2.2	1.15	19.5
	1750	210T	82.0	94	31.1	22.13	0.9017	H	7.0	4	2.4	1.15	19.5
10	3520	210T	86.0	98	38.7	15.00	0.6169	H	8.0	3.9	2.4	1.15	20.9
	1750	210T	83.5	94	41.6	30.18	1.0916	H	7.3	3.5	2.2	1.15	20.9

ROYSE

NEMA Single Phase Rolled Steel ODP Motors

Alu die casting endshield

1/4HP thru 3HP

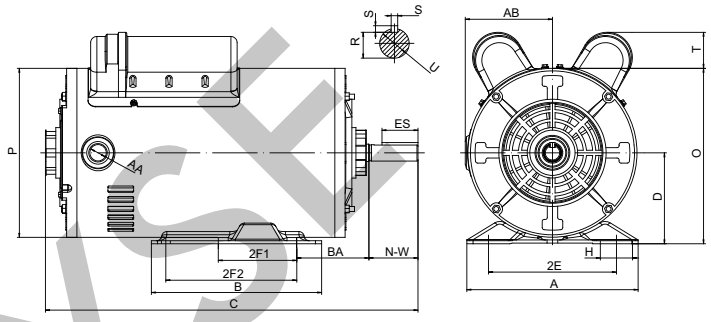
- **48 thru 140T**

FEATURES

- Service Factor 1.15
- Continuous Duty 40℃ Ambient
- ODP Class F Insulation With Class B Temp Rise
- NEMA Design L
- High Starting Torque and Low Starting Current
- Rolled Steel construction
- Ball Bearings
- Capacitor Start/Capacitor Run (1/4 thru 3HP)

APPLICATIONS

- Commercial Pumps
- Swimming Pool Pumps
- Fans
- Conveyors
- Air Conditioning Equipment A.K.A HVAC
- Small Machine Tools
- Blowers
- Augers
- Household Electric Appliances
- Equipment Requiring Direct Drive and High Starting Torque



Overall & Installation Dimensions

Frame	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	AB	O	T	P	Bearing DE	Bearing NDE
48	5.69	3.94	3.0	4.24	2.75		2.50	1.05×0.34	0.50	1.50	0.453			1/2-14NPT	2.92	5.83	1.47	5.67	6203	6 20 3
56	6.54	4.02	3.5	4.88	3		2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	2.92	6.33	1.47	5.67	6203	6 20 3
56H	6.54	6.5	3.5	4.88	3	5	2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	3.33	6.75	1.47	6.46	6203	6 20 3
140T	6.55	5.9	3.5	5.5	4	5	2.25	0.5×0.35	0.875	2.25	0.771	1.375	0.1875	1/2-14NPT	3.33	6.75	1.47	6.46	6205	6 20 3

ROYSE

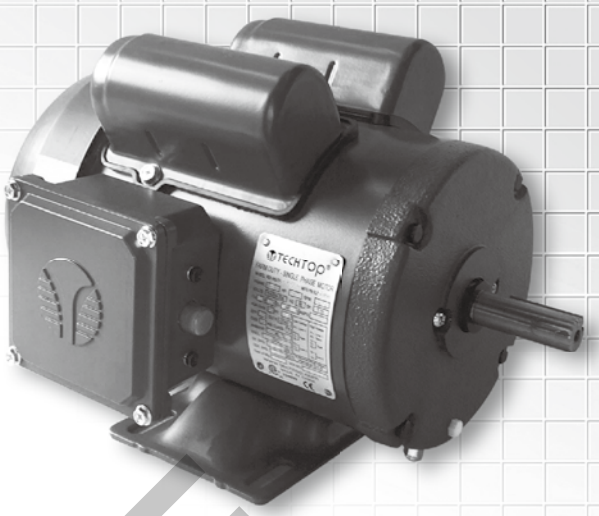
Single-Phase Rolled Steel Frame ODP Motors Technical Data

HP	Full Load Speed, RPM	Frame Size	EFF.100% FL	Power Factor 100% FL	IFL 230V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In				
1/4	3500	48	66.6	90	1.31	0.36	0.0069	L	8.00	3.1	2.2	1.15	10.1
		56											10.5
	1740	48	68.5	81	1.41	0.72	0.0261	K	6.20	3	2.4	1.15	10.1
		56											10.5
1/3	3500	48	70.5	90	1.71	0.5	0.0073	L	8.00	3.1	2.3	1.15	10.1
		56											10.5
	1740	48	72.4	81	1.85	1.01	0.0355	K	6.70	3.3	2.5	1.15	10.7
		56											11.1
1/2	3510	48	72.4	90	2.47	0.74	0.0085	L	8.20	3.3	2.6	1.15	10.7
		56											11.1
	1740	48	76.2	83	2.54	1.49	0.0451	H	5.80	2.8	2.4	1.15	11.3
		56											11.7
3/4	3510	48	76.2	92	3.41	1.10	0.0104	K	8.20	3.3	2.5	1.15	11.3
		56											11.7
	1750	56H	81.8	90	3.25	2.21	0.0854	H	6.50	2.7	2.3	1.15	12.3
		140T											12.7
1	3500	56H	80.4	92	4.41	1.50	0.0356	H	7.0	3.3	2.5	1.15	12.3
		140T											12.7
	1750	56H	82.6	90	4.39	3.01	0.1079	H	7.0	2.8	2.5	1.15	13.1
		140T											13.5
1.5	3500	56H	81.5	96	6.11	2.21	0.045	H	7.5	3.2	2.7	1.15	13.1
		140T											13.5
	1740	56H	83.8	96	5.94	4.45	0.1423	H	6.9	2.5	2.3	1.15	14.3
		140T											14.7
2	3500	56H	82.9	96	8.19	3.01	0.0522	H	6.8	3.1	2.6	1.15	13.1
		140T											13.5
	1740	56H	84.5	96	8.04	6.07	0.1637	G	6.5	2.6	2.0	1.15	15.1
		140T											15.5
3	3510	56H	84.1	98	11.6	4.41	0.0688	J	8.4	3.1	2.7	1.15	13.9
		140T											14.3

NEMA Single Phase Rolled Steel TEFC Motors

1/4HP thru 10HP

- **48 thru 215T**



FEATURES

- Continuous Duty 40℃ Ambient
- TEFC (Totally Enclosed Fan Cooled)
- Class F Insulation With Class B Temp Rise
- NEMA Design L
- High Starting Torque and Low Starting Current
- Rolled Steel Construction
- Ball Bearings
- Capacitor Start/Capacitor Run (1/4 thru 10HP)

APPLICATIONS

- Commercial Pumps
- Swimming Pool Pumps
- Fans
- Conveyors
- Air Conditioning Equipment A.K.A HVAC
- Small Machine Tools
- Blowers
- Augers
- Household Electric Appliances
- Equipment Requiring Direct Drive and High Starting Torque

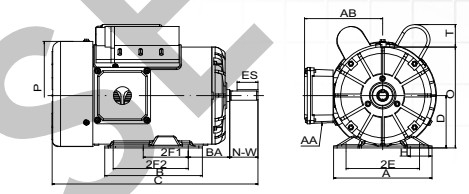


Figure 1 48 thru 140T (Foot Mounting)

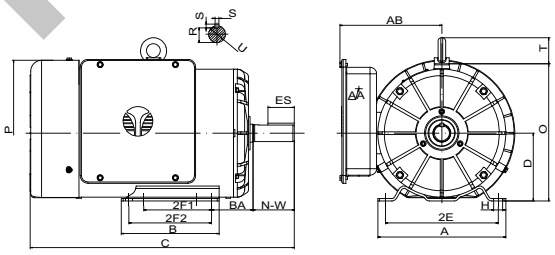


Figure 2 180T、210T (Foot Mounting)

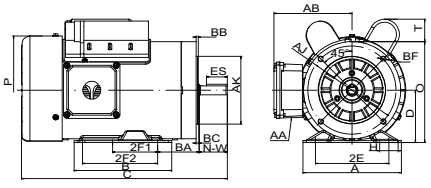


Figure 3 48 thru 140T (C- Face)

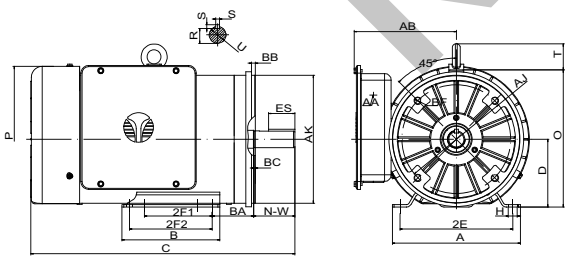


Figure 4 180T、210T (C- Face)

Overall & Installation Dimensions

Frame	Foot Mountin g									Shaft				General					Bearings		C-Face				
	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	AB	O	T	P	DE	NDE	AJ	AK	BB	BC	BF
48	5.69	3.94	3.0	4.24	2.75		2.50	1.05×0.34	0.50	1.50	0.453			0.866	4.77	5.83	1.47	6.42	6203	6202	3.750	3.0	0.16	-0.19	4×1/4-20UNC
56	6.54	4.02	3.5	4.88	3		2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	0.866	4.77	6.33	1.47	6.42	6204	6203	5.875	4.5	0.16	-0.19	4×3/8-16UNC
56H	6.54	6.5	3.5	4.88	3	5	2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	0.866	5.2	6.75	1.47	7.21	6205	6203	5.875	4.5	0.16	-0.19	4×3/8-16UNC
140T	6.55	5.9	3.5	5.5	4	5	2.25	0.5×0.35	0.875	2.25	0.771	1.375	0.1875	0 .866	5.2	6.75	1.75	7.24	6205	6203	5.875	4.5	0.16	0.12	4×3/8-16UNC
180T	8.5	6.5	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	1.1/1.33	6.4	9.1	1.75	9.7	6206	6205	7.25	8.5	0.25	0.12	4×1/2-13UNC
210T	10.5	8.5	5.25	8.5	5.5	7	3.5	0.56×0.433	1.375	3.375	1.201	2.41	0.312	1.1/1.33	7.15	10.65	1.75	11.36	6208	6206	7.25	8.5	0.25	0.25	4×1/2-13UNC

ROYSE

Single-Phase Rolled Steel Frame TEFC Motors Technical Data

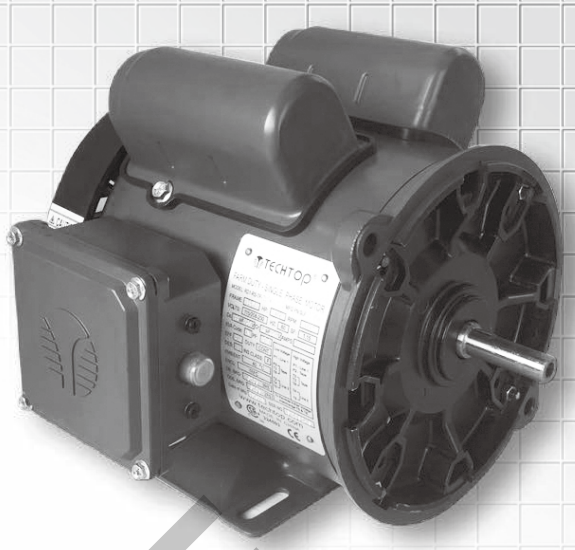
HP	Full Load Speed, RPM	Frame Size	EFF.100% FL	Power Factor 100% FL	IFL 230V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In				
1/4	3500	48	68	90	1.28	0.36	0.0069	L	8.4	3.1	2.2	1.15	11
		56											11.3
	1735	48	70.0	83	1.35	0.72	0.0237	K	6.5	2.6	2.3	1.15	11
		56											11.3
1/3	3500	48	72.0	90	1.7	0.5	0.0073	L	8.4	3.1	2.3	1.2	11
		56											11.3
	1735	48	74.0	83	1.77	1.01	0.0261	K	6.6	3.1	2.6	1.15	11
		56											11.3
1/2	3510	48	74.0	90	2.4	0.7	0.0085	L	8.6	3.3	2.6	1.15	11.6
		56											11.9
	1730	48	77.0	85	2.46	1.49	0.0355	J	6.6	3.3	2.4	1.15	11.6
		56											11.9
3/4	3510	48	77.0	92	3.38	1.10	0.0104	K	8.2	3.3	2.6	1.15	12.2
		56											12.5
	1730	48	78.5	87	3.5	2.24	0.0451	H	6.2	2.7	2.3	1.15	12.2
		56											12.5
1	3500	56H	78.5	92	4.51	1.50	0.0356	H	6.7	3.3	2.4	1.15	12.9
		140T											13.3
	1740	56H	80.0	90	4.53	3.01	0.0854	H	6.1	2.8	2.4	1.15	12.9
		140T											13.3
1.5	3500	56H	81.5	96	6.11	2.21	0.045	H	7.5	3.2	2.6	1.15	13.7
		140T											14.1
	1740	56H	81.5	92	6.38	4.45	0.1079	H	6.3	2.5	2.3	1.15	13.7
		140T											14.1
2	3500	56H	82.5	96	8.23	3.01	0.0522	G	6.5	3.1	2.5	1.15	13.7
		140T											14.1
	1735	56H	82.5	92	8.59	6.07	0.1305	G	6.1	2.4	2.2	1.15	14.5
		140T											14.9
3	3510	56H	84.0	98	11.7	4.41	0.0688	J	8.4	3.1	2.7	1.15	14.5
		140T											14.9
	3480	180T	80.0	96	12.5	4.45	0.1636	H	7.2	4.1	2.2	1.15	16.2
	1740	180T	82.5	92	12.6	8.90	0.3559	H	7.0	3.5	2.4	1.15	16.2
5	3490	180T	82.0	98	20.0	7.46	0.2017	H	7.0	3.5	2.0	1.15	17.6
	1740	180T	84.0	94	20.4	14.97	0.4746	G	6.4	3.2	2.2	1.15	17.6
7.5	3510	210T	84.5	98	28.9	11.03	0.4508	H	7.6	4.2	2.2	1.15	19.9
	1750	210T	82.0	94	31.1	22.13	0.9017	H	7.0	4	2.4	1.15	19.9
10	3520	210T	86.0	98	38.7	15.00	0.6169	H	8.0	3.9	2.4	1.15	21.3
	1750	210T	83.5	94	41.6	30.18	1.0916	H	7.3	3.5	2.2	1.15	21.3

ROYSE

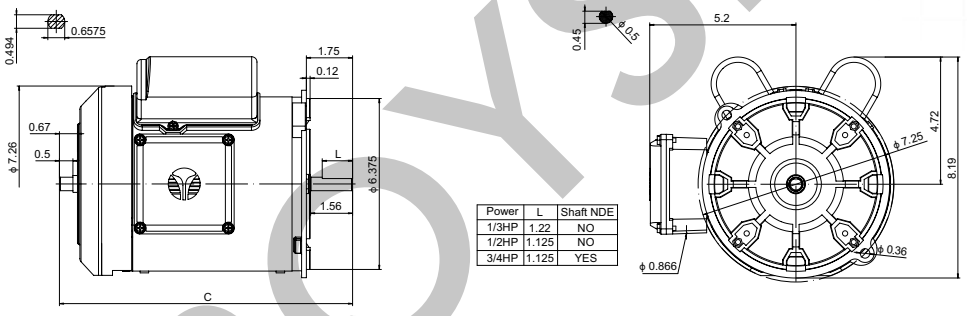
AUGER Motors

FEATURES

- Manual Reset Protectors
- High Efficiency Dual Cap Design
- High Quality Molded Gaskets
- High Starting Torque



Single-Phase Rolled Steel Frame TEFC AUGER Motors Dimensional Drawings



Power	L	Shaft NDE
1/3HP	1.22	NO
1/2HP	1.125	NO
3/4HP	1.125	YES

Figure 1 1/3HP、1/2HP、3/4HP

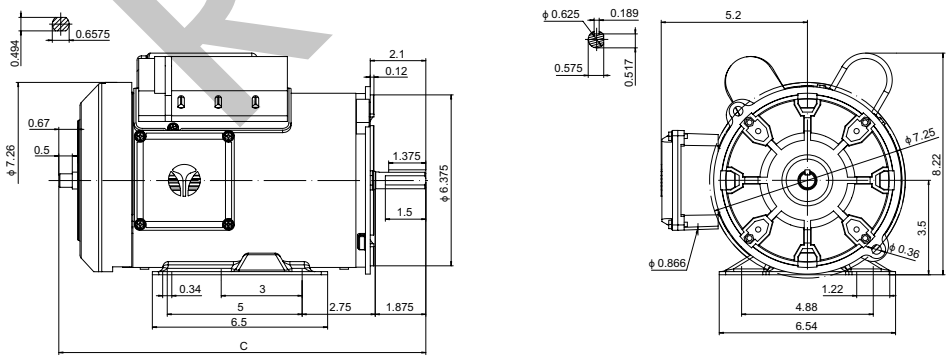


Figure 2 1HP、$1\frac{1}{2}$HP、2HP

Single-Phase Rolled Steel Frame TEFC AUGER Motors Technical Data

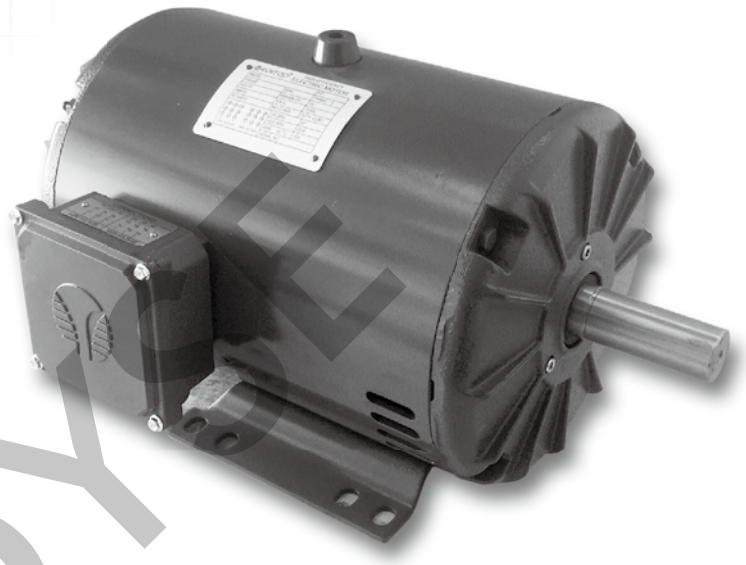
HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 230V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In				
1/3	1735	56	74.0	83	1.77	1.01	0.0261	K	6.6	3.1	2.6	1.15	10.26
1/2	1730	56	77.0	85	2.46	1.49	0.0355	J	6.6	3.3	2.4	1.15	10.26
3/4	1730	56	78.5	87	3.5	2.24	0.0451	H	6.2	2.7	2.3	1.15	12.53
1	1740	140T	80.0	90	4.53	3.01	0.0854	H	6.1	2.8	2.4	1.15	12.88
1.5	1740	140T	81.5	92	6.38	4.45	0.1079	H	6.3	2.5	2.3	1.15	13.62
2	1735	140T	82.5	92	8.59	6.07	0.1305	G	6.1	2.4	2.2	1.15	14.39

ROYSE

NEMA Premium Efficiency Rolled Steel 3-Phase ODP Motors

1/4HP thru 15HP

· 48 thru 215T



FEATURES

- 208–230/460V/60Hz
- NEMA Service Factor 1.15
- Continuous Duty 40℃ Ambient
- Class F Insulation With Class B Temp Rise
- High Efficiency
- NEMA Design B
- Ball Bearings
- Rolled Steel Construction
- Stainless Steel Nameplate

APPLICATIONS

- Pumps
- Compressors
- Fans
- Conveyors
- Machine Tools
- Three Phase or Other General Purpose Applications

ROYAL

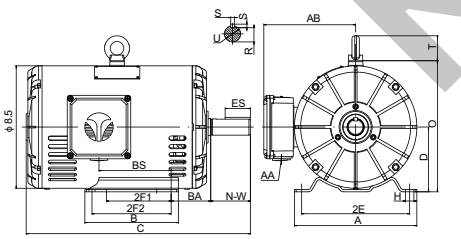


Figure 1 48 thru 210T (Foot Mounting)

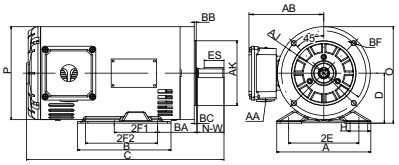


Figure 2 48 thru 140T(C- Face)

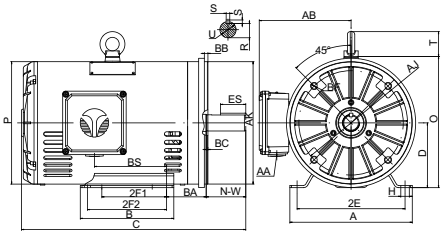


Figure 3 180T、210T(C- Face)

Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					General					Bearings		C-Face				
	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	AB	O	T	P	DE	NDE	AJ	AK	BB	BC	BF
48	5.69	3.94	3.0	4.24	2.75		2.50	1.05×0.34	0.50	1.50	0.453			1/2-14NPT	4.77	5.83		6.42	6203	6202	3.750	3.0	0.16	-0.19	4×1/4-20UNC
56	6.54	4.02	3.5	4.88	3		2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	4.77	6.33		5.67	6204	6203	5.875	4.5	0.16	-0.19	4×3/8-16UNC
56H	6.54	6.5	3.5	4.88	3	5	2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	5.2	6.75		6.46	6205	6203	5.875	4.5	0.16	-0.19	4×3/8-16UNC
140T	6.55	5.9	3.5	5.5	4	5	2.25	0.5×0.35	0.875	2.25	0.771	1.375	0.1875	3/4-14NPT	5.2	6.75		6.46	6205	6203	5.875	4.5	0.16	0.12	4×3/8-16UNC
180T	8.5	6.5	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	3/4-14NPT	6.4	9.1	1.75	8.5	6206	6205	7.25	8.5	0.25	0.12	4×1/2-13UNC
210T	10.5	8.5	5.25	8.5	5.5	7	3.5	0.56×0.433	1.375	3.375	1.201	2.41	0.312	1-11 1/2NPT	7.15	10.65	1.75	10.05	6208	6206	7.25	8.5	0.25	0.25	4×1/2-13UNC

Three-Phase Rolled Steel Frame ODP Motors Technical Data

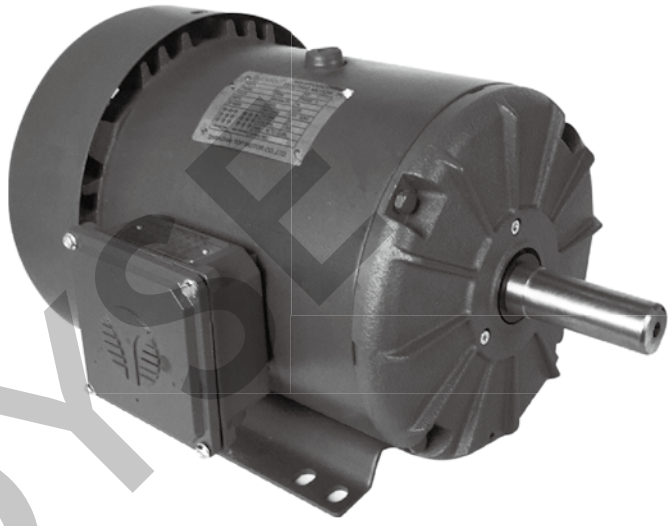
HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 460V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TPU TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	Il/In					
1/4	3450	48	65.6	70.0	0.51	0.38	0.0064	M	6.60	2.8	2.2	3.4	1.25	10.2
		56												10.6
	1740	48	69.5	62.0	0.54	0.76	0.0216	L	5.70	2.9	2.4	3.7	1.25	10.2
		56												10.6
	1150	56	67.5	59.0	0.59	1.14	0.0484	L	5.00	2.1	1.8	3.3	1.25	12.2
1/3	3450	48	69.5	70.0	0.64	0.51	0.0069	M	6.70	2.7	2	3.3	1.25	11.0
		56												11.4
	1740	48	73.4	64.0	0.66	1.00	0.0261	L	6.20	3.2	2.7	3.7	1.25	11.0
		56												11.4
	1150	56	71.4	60.0	0.73	1.51	0.0586	L	5.20	2.1	1.8	3.3	1.25	12.2
1/2	3450	48	73.4	72.0	0.88	0.76	0.0079	L	6.90	2.6	2	3.3	1.25	11.0
		56												11.4
	1740	48	78.2	66.0	0.91	1.51	0.0327	L	6.40	3.1	2.6	3.5	1.25	11.0
		56												11.4
	1150	56	75.3	63.0	0.99	2.28	0.0785	K	5.20	2.1	1.9	3.3	1.25	13.0
3/4	3450	48	76.8	75.0	1.22	1.14	0.0092	L	7.00	2.6	2	3	1.25	11.8
		56												12.2
	1740	48	81.1	68.0	1.28	2.27	0.0451	L	7.00	3.2	2.5	3.4	1.25	11.8
		56												12.2
	1150	56	81.7	65.0	1.33	3.43	0.0785	J	5.30	2.1	2	3	1.25	13.0
1	3450	56H	81.0	78.0	1.48	1.52	0.0304	K	7.3	3.5	3.1	4.25	1.25	12.9
		140T												13.3
	1740	56H	85.5	70.0	1.56	3.02	0.1023	N	9.6	4.2	3.3	5.2	1.25	13.7
		140T												14.1
	1150	56H	82.5	66.0	1.72	4.57	0.0885	J	5.3	2.2	2	2.95	1.25	13.7
		140T												14.1
1.5	3500	56H	84.0	82.0	2.04	2.25	0.0356	L	8.5	2.75	2.4	3.75	1.25	12.9
		140T												13.3
	1740	56H	86.5	75.0	2.17	4.53	0.1210	M	9.0	3.4	2.9	4.35	1.25	14.3
		140T												14.7
	1165	180T	86.5	71.0	2.28	6.77	0.3583	J	6.5	1.85	1.25	2.9	1.25	14.8
2	3500	56H	85.5	83.0	2.64	3.00	0.0420	K	8.5	2.8	2.4	3.75	1.25	12.9
		140T												13.3
	1740	56H	86.5	79.0	2.74	6.04	0.1424	L	8.5	3.25	2.9	4.0	1.25	15.1
		140T												15.5
	1165	180T	87.5	72.0	2.97	9.02	0.4176	J	6.2	1.8	1.2	2.8	1.25	14.8
3	3500	56H	86.5	86.0	3.78	4.50	0.0558	K	8.9	2.85	2.15	3.7	1.25	13.7
		140T												14.1
	1755	180T	89.5	82.0	3.83	8.98	0.3370	K	8.3	2.35	1.7	3.35	1.25	14.8
	1170	210T	88.5	74.0	4.29	13.47	0.7689	J	6.6	1.9	1.5	2.8	1.25	17.2
5	3510	180T	87.5	90.0	5.95	7.49	0.1637	J	7.7	1.9	1.4	3.0	1.25	14.8
	1755	180T	89.5	84.0	6.25	14.97	0.4034	J	7.7	2.2	1.8	3.1	1.25	15.6
	1170	210T	89.5	75.0	7.00	22.46	1.0417	H	6.5	2	1.3	2.6	1.25	18.0
7.5	3510	180T	88.5	91.0	8.70	11.23	0.2017	J	8.1	2.2	1.5	3.0	1.25	15.6
	1755	210T	91.0	85.0	9.10	22.46	0.7665	K	8.4	2.3	1.6	3.15	1.25	18.0
10	3520	210T	89.5	91.5	11.5	14.93	0.4509	J	8.3	2.15	1.35	2.85	1.25	18.0
	1755	210T	91.7	85.0	12.0	29.94	0.8756	K	8.7	2.3	1.5	3.2	1.25	18.8
15	3530	210T	90.2	91.5	17.1	22.33	0.5695	J	8.1	1.9	1.2	2.8	1.25	18.8

ROYSE

NEMA Premium Efficiency Rolled Steel 3-Phase TEFC Motors

1/4HP thru 10HP

▪ 48 thru 215T



FEATURES

- 208–230/460V/60Hz
- NEMA Service Factor 1.15
- Continuous Duty 40℃ Ambient
- Class F Insulation With Class B Temp Rise
- High Efficiency
- NEMA Design B
- Ball Bearings
- Rolled Steel Construction
- IP55 Protection
- Stainless Steel Nameplate

APPLICATIONS

- Pumps
- Compressors
- Fans
- Conveyors
- Machine Tools
- Three Phase or Other General Purpose Applications

ROYSE

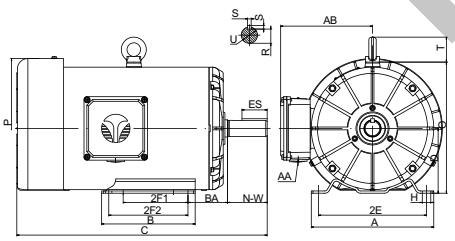


Figure 1 48 thru 210T(Foot Mounting)

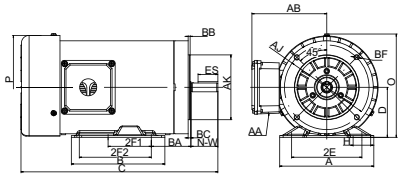


Figure 2 48 thru 140T(C- Face)

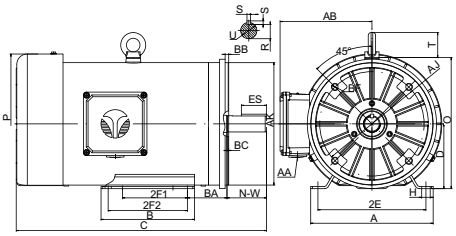


Figure 3 180T、210T(C- Face)

Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					General					Bearings		C-Face				
	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	AB	O	T	P	DE	NDE	AJ	AK	BB	BC	BF
48	5.69	3.94	3.0	4.24	2.75		2.50	1.05×0.34	0.50	1.50	0.453			1/2-14NPT	4.77	5.83		6.42	6203	6202	3.750	3.0	0.16	- 0.19	4×1/4-20UNC
56	6.54	4.02	3.5	4.88	3		2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	4.77	6.33		6.42	6204	6203	5.875	4.5	0.16	- 0.19	4×3/8-16UNC
56H	6.54	6.5	3.5	4.88	3	5	2.75	1.22×0.34	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	5.2	6.75		7.21	6205	6203	5.875	4.5	0.16	- 0.19	4×3/8-16UNC
140T	6.55	5.9	3.5	5.5	4	5	2.25	0.5×0.35	0.875	2.25	0.771	1.375	0.1875	3/4-14NPT	5.2	6.75		7.24	6205	6203	5.875	4.5	0.16	0.12	4×3/8-16UNC
180T	8.5	6.5	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	3/4-14NPT	6.4	9.1	1.75	9.7	6206	6205	7.25	8.5	0.25	0.12	4×1/2-13UNC
210T	10.5	8.5	5.25	8.5	5.5	7	3.5	0.56×0.433	1.375	3.375	1.201	2.41	0.312	1-11 1/2NPT	7.15	10.65	1.75	11.36	6208	6206	7.25	8.5	0.25	0.25	4×1/2-13UNC

Three-Phase Rolled Steel Frame TEFC Motors Technical Data

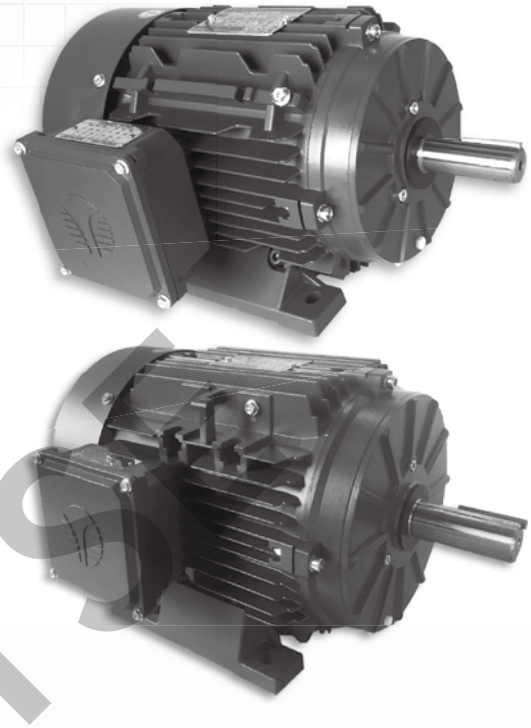
HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 460V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TPU TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In					
1/4	3450	48	66.0	70.0	0.51	0.38	0.0064	M	6.60	2.8	2.2	3.4	1.25	10.4
		56												10.8
	1740	48	70.0	62.0	0.54	0.76	0.0216	L	5.70	2.9	2.4	3.7	1.25	10.4
		56												10.8
	1150	56	72.0	59.0	0.55	1.14	0.0484	L	5.00	2.1	1.8	3.3	1.25	12.2
1/3	3450	48	72.0	70.0	0.61	0.51	0.0069	M	6.70	2.7	2	3.3	1.25	11.2
		56												11.6
	1740	48	74.0	64.0	0.65	1.00	0.0261	L	6.20	3.2	2.7	3.7	1.25	11.2
		56												11.6
	1150	56	72.0	60.0	0.72	1.51	0.0586	L	5.20	2.1	1.8	3.3	1.25	12.2
1/2	3450	48	74.0	72.0	0.88	0.76	0.0079	L	6.90	2.6	2	3.3	1.25	11.2
		56												11.6
	1740	48	78.5	66.0	0.90	1.51	0.0327	L	6.40	3.1	2.6	3.5	1.25	11.2
		56												11.6
	1150	56	75.5	63.0	0.98	2.28	0.0785	K	5.20	2.1	1.9	3.3	1.25	13
3/4	3450	48	77.0	75.0	1.22	1.14	0.0092	L	7.00	2.6	2	3	1.25	12
		56												12.4
	1740	48	81.5	68.0	1.27	2.27	0.0451	L	7.00	3.2	2.5	3.4	1.25	12
		56												12.4
	1150	56	81.5	65.0	1.33	3.43	0.0785	J	5.30	2.1	2	3	1.25	13
1	3450	56H	77.0	78.0	1.56	1.52	0.0304	K	7.3	3.5	3.1	4.25	1.25	12.9
		140T												13.3
	1740	56H	85.5	70.0	1.56	3.02	0.1023	N	9.6	4.2	3.3	5.2	1.25	13.7
		140T												14.1
	1150	56H	82.5	66.0	1.72	4.57	0.0885	J	5.3	2.2	2	2.95	1.25	13.7
		140T												14.1
1.5	3500	56H	84.0	82.0	2.04	2.25	0.0356	L	8.5	2.75	2.4	3.75	1.25	12.9
		140T												13.3
	1740	56H	86.5	75.0	2.16	4.53	0.1210	M	9.0	3.4	2.9	4.35	1.25	14.3
		140T												14.7
	1165	180T	87.5	71.0	2.26	6.77	0.3583	J	6.5	1.85	1.25	2.9	1.25	15
2	3500	56H	85.5	83.0	2.64	3.00	0.0420	K	8.5	2.8	2.4	3.75	1.25	12.9
		140T												13.3
	1740	56H	86.5	79.0	2.74	6.04	0.1424	L	8.5	3.25	2.9	4.0	1.25	15.1
		140T												15.5
	1165	180T	88.5	72.0	2.94	9.02	0.4176	J	6.2	1.8	1.2	2.8	1.25	15
3	3500	180T	86.5	88.0	3.69	4.50	0.1637	J	7.7	1.9	1.4	3.0	1.25	15
	1755	180T	89.5	82.0	3.83	8.98	0.3370	K	8.3	2.35	1.7	3.35	1.25	15
	1170	210T	89.5	74.0	4.24	13.47	0.7689	J	6.6	1.9	1.5	2.8	1.25	17.6
5	3510	180T	88.5	90.0	5.88	11.23	0.2017	J	8.1	2.2	1.5	3.0	1.25	15.8
	1755	180T	89.5	84.0	6.23	14.97	0.4034	J	7.7	2.2	1.8	3.1	1.25	15.8
	1170	210T	89.5	75.0	6.97	22.46	1.0417	H	6.5	2	1.3	2.6	1.25	18.4
7.5	3510	210T	89.5	91.0	8.62	14.93	0.4509	J	8.3	2.15	1.35	2.85	1.25	18.4
	1755	210T	91.7	85.0	9.01	22.46	0.7665	K	8.4	2.3	1.6	3.15	1.25	18.4
10	3520	210T	90.2	91.5	11.4	22.33	0.5695	J	8.1	1.9	1.2	2.8	1.25	19.2
	1755	210T	91.7	85.0	12.0	29.94	0.8756	K	8.7	2.3	1.5	3.2	1.25	19.2

ROYSE

TXA Series NEMA Premium Efficiency 3-Phase Motors

1/4 thru 50HP Aluminum TEFC

· 56 thru 326T



FEATURES

- 208–230/460V/60Hz
- NEMA Service Factor 1.15/1.25
- Continuous Duty 40℃ Ambient
- Class F Insulation With Class B Temp Rise
- NEMA Design B
- Ball Bearings
- Aluminum Housing
- IP55 Protection

APPLICATIONS

- Pumps
- Compressors
- Fans
- Conveyors
- Machine Tools
- Petro–Chemical Plants
- Three Phase or Other General Purpose Applications

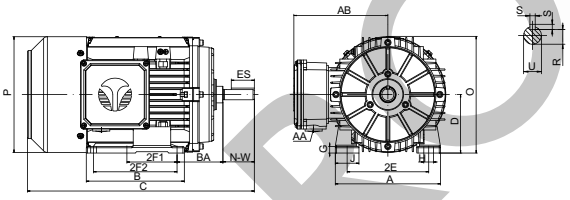


Figure 1 56 thru 320T (Foot Mounting)

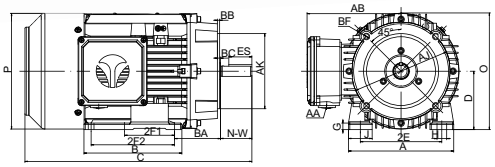


Figure 2 56 thru 140T (C- Face)

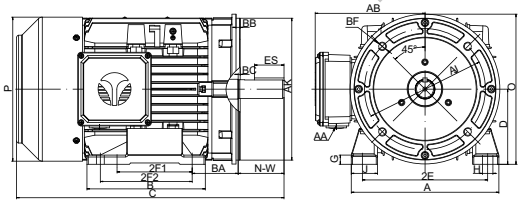


Figure 3 180T thru 320T (C- Face)

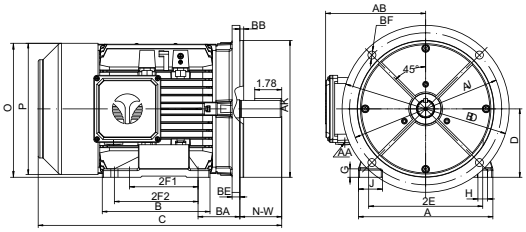


Figure 4 140T thru 320T (D- Face)

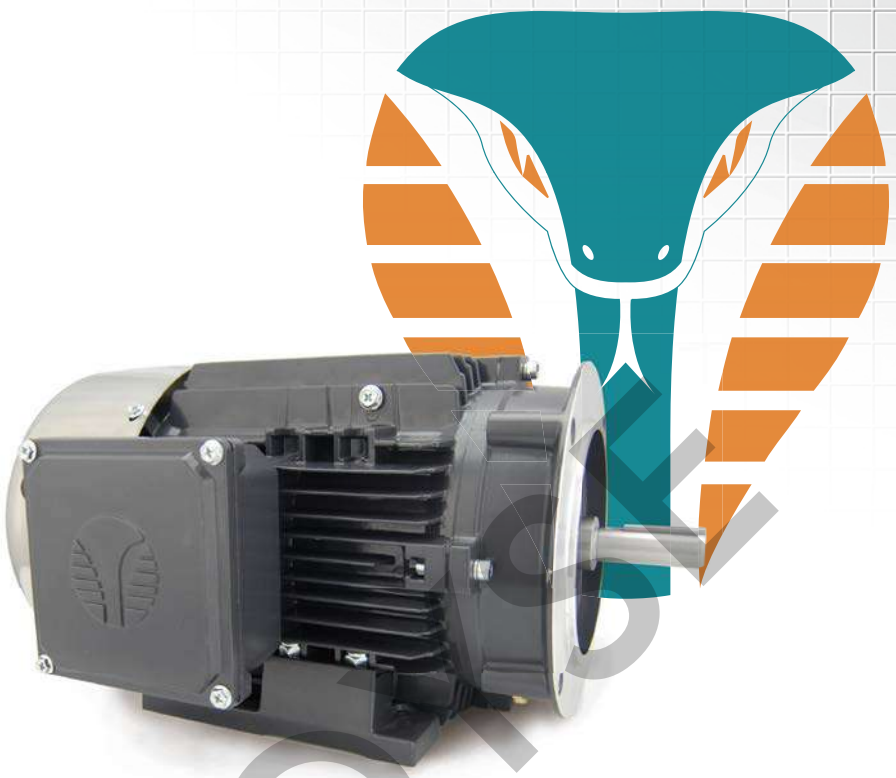
Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					General						Bearings		C-Face						D-Face					
	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	G	J	AB	O	P	DE	NDE	AJ	AK	BB	BC	BF	AJ	AK	BB	BD	BE	BF
56	6.3	3.95	3.5	4.88	3		2.75	0.73×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	0.43	1.37	5.2	6.6	6.2	6204	6204	5.875	4.5	0.16	-0.19	4×3/8-16UNC						
56H	6.3	5.9	3.5	4.88	3	5	2.75	0.58×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	0.39	1.41	5.65	7.0	6.95	6205	6205	5.875	4.5	0.16	-0.19	4×3/8-16UNC						
140T	6.9	5.86	3.5	5.5	4	5	2.25	0.50×0.35	0.875	2.25	0.771	1.375	0.1875	3/4-14NPT	0.47	1.41	5.65	7.0	6.95	6205	6205	5.875	4.5	0.16	0.12	4×3/8-16UNC	10.0	9.0	0.25	11.0	0.5	4×0.53
180T	8.85	7.1	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	3/4-14NPT	0.55	1.57	6.6	8.85	8.65	6306	6206	7.25	8.5	0.25	0.12	4×1/2-13UNC	10.0	9.0	0.25	11.0	0.5	4×0.53
210T	10.3	8.85	5.25	8.5	5.5	7	3.5	0.59×0.433	1.375	3.375	1.201	2.41	0.312	1-11 1/2NPT	0.63	1.73	7.4	10.4	10.3	6308	6208	7.25	8.5	0.25	0.25	4×1/2-13UNC	10.0	9.0	0.25	11.0	0.5	4×0.53
254T	12.4	10.25	6.25	10.0	8.25		4.25	0.83×0.59	1.625	4.0	1.416	2.91	0.375	1 1/4-11 1/2NPT	0.74	2.36	8.5	12.5	12.4	6309	6209	7.25	8.5	0.25	0.25	4×1/2-13UNC	12.5	11.0	0.25	14.0	0.75	4×0.81
256T	12.4	10.25	6.25	10.0	10.0		4.25	0.83×0.59	1.625	4.0	1.416	2.91	0.375	1 1/4-11 1/2NPT	0.74	2.36	8.5	12.5	12.4	6309	6209	7.25	8.5	0.25	0.25	4×1/2-13UNC	12.5	11.0	0.25	14.0	0.75	4×0.81
280T	13.4	13.0	7.0	11.0	9.5	11.0	4.75	0.985×0.59	1.875	4.62	1.591	3.28	0.5	1 1/2-11 1/2NPT	0.71	2.36	11.2	14.1	14.0	6311	6211	9.0	10.5	0.25	0.25	4×1/2-13UNC	12.5	11.0	0.25	14.0	0.75	4×0.81
320T	15.3	14.8	8.0	12.5	10.5	12.0	5.25	1.496×0.74	2.125	5.25	1.845	3.91	0.5	2-11 1/2NPT	0.79	3.82	11.2	14.9	14.0	6312	6212	11.0	12.5	0.25	0.25	4×5/8-11UNC	16.0	14.0	0.25	18.0	0.75	4×0.81

ROYS

The Premier NEMA Aluminum Motor

COBRA LINE



ROHS

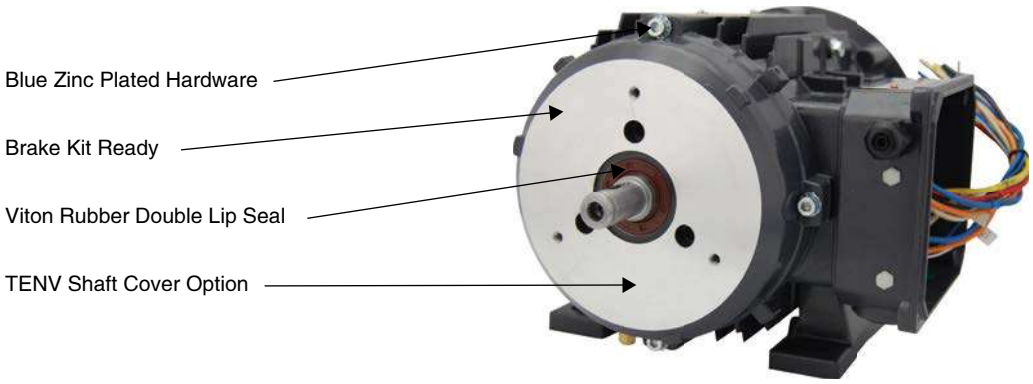
NEW EXTERIOR FEATURES 1

- COBRA LOGO Laser Engrave
- Stainless Steel Fan Cover
- Powder Coat Paint Finish
- New C–Flange Design
- New C–Flange Weep Hole

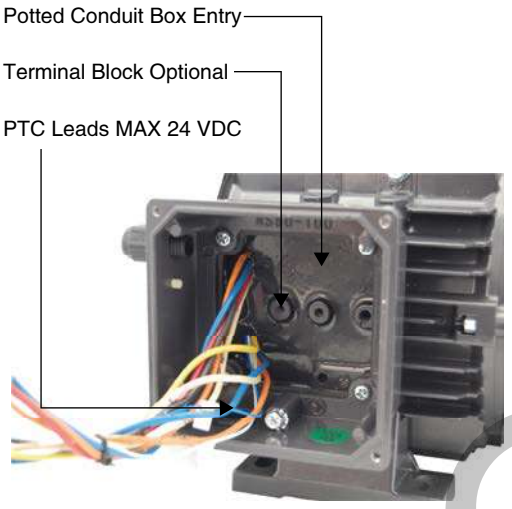
NEW EXTERIOR FEATURES 2

- New Fan Design
- Brake Leads Entry Port
- Shaft extension for Encoder
- Encoder mount threaded inserts
- Threaded Holes for Brake Rectifier

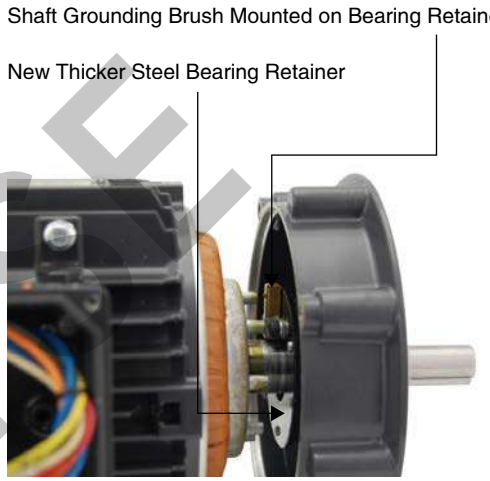
NEW EXTERIOR FEATURES 3



NEW INTERIOR FEATURES 1



NEW INTERIOR FEATURES 2



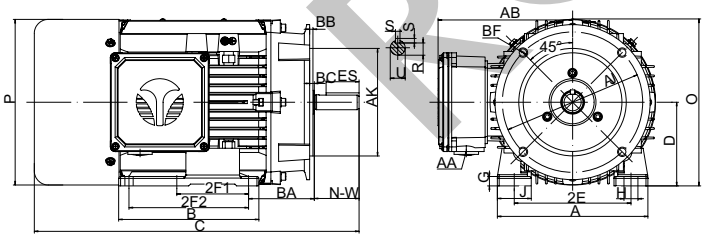


Figure 1 56、56H、140T

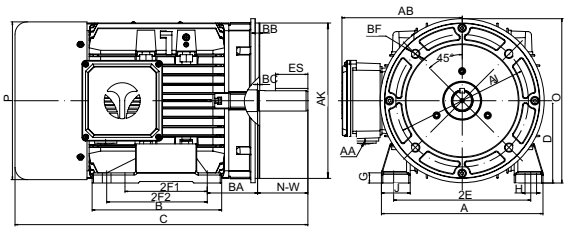


Figure 2 180T thru 250T

PROOF

Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					General							Bearings		C-Face				
	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	G	J	AB	O	P	C	DE	NDE	AJ	AK	BB	BC	BF
56	6.3	3.95	3.5	4.88	3		2.75	0.73×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	0.43	1.37	5.2	6.6	6.2	11.5	6204	6204	5.875	4.5	0.16	-0.19	4×3/8-16UNC
56H	6.3	5.9	3.5	4.88	3	5	2.75	0.58×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	0.39	1.41	5.65	7.0	6.95	13.6	6205	6205	5.875	4.5	0.16	-0.19	4×3/8-16UNC
140T	6.9	5.86	3.5	5.5	4	5	2.25	0.50×0.35	0.875	2.25	0.771	1.375	0.1875	3/ 4- 14N PT	0.47	1.41	5.65	7.0	6.95	13.7	6205	6205	5.875	4.5	0.16	0.12	4×3/8-16UNC
180T	8.85	7.1	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	3/ 4- 14N PT	0.55	1.57	6.6	8.85	8.65	16.1	6306	6206	7.25	8.5	0.25	0.12	4×1/2-13UNC
210T	10.3	8.85	5.25	8.5	5.5	7	3.5	0.59×0.433	1.375	3.375	1.201	2.41	0.312	1-11 1/2NPT	0.63	1.73	7.4	10.4	10.3	19.0	6308	6208	7.25	8.5	0.25	0.25	4×1/2-13UNC
254T	12.4	10.25	6.25	10.0	8.25		4.25	0.83×0.59	1.625	4.0	1.416	2.91	0.375	1 1/4-11 1/2NPT	0.74	2.36	8.5	12.5	12.4	24.0	6309	6209	7.25	8.5	0.25	0.25	4×1/2-13UNC
256T	12.4	10.25	6.25	10.0	10.0		4.25	0.83×0.59	1.625	4.0	1.416	2.91	0.375	1 1/4-11 1/2NPT	0.74	2.36	8.5	12.5	12.4	25.8	6309	6209	7.25	8.5	0.25	0.25	4×1/2-13UNC

Three-Phase TEFC Motors Technical Data

HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 460V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TPU TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In					
1/4	3520	56	66.0	69.0	0.49	0.36	0.0107	L	6.3	3	2.2	3.4	1.25	11.5
	1750	56	70.0	58.0	0.55	0.72	0.0169	K	5	2.9	2.4	3.7	1.25	11.5
	1150	56	72.0	61.0	0.51	1.10	0.0242	J	4.4	2.3	2	2.8	1.25	11.5
1/3	3520	56	72.0	70.0	0.62	0.50	0.0121	M	7.4	3.3	2.7	4.1	1.25	11.5
	1750	56	74.0	63.0	0.67	1.00	0.0188	K	5.6	3.4	2.7	3.7	1.25	11.5
	1150	56	72.0	62.0	0.69	1.53	0.0299	J	4.4	2.1	1.8	2.7	1.25	11.5
1/2	3490	56	74.0	72.0	0.87	0.75	0.0121	L	6.7	3.1	3	3.8	1.25	11.5
	1750	56	78.5	66.0	0.90	1.49	0.0228	L	6.4	3.2	2.7	3.7	1.25	11.5
	1140	56	75.5	66.0	0.93	2.29	0.0382	H	4.5	2.5	2.3	2.8	1.25	11.5
3/4	3500	56	77.0	75.0	1.20	1.11	0.0142	L	7.3	3.1	2.4	3.4	1.25	11.5
	1750	56	81.5	68.0	1.25	2.21	0.0268	L	7	3.4	2.9	3.9	1.25	11.5
	1160	56H	81.5	66.0	1.28	3.34	0.0726	J	5.8	2.5	2.3	3.3	1.25	13.6
1	3490	56	79.0	77.0	1.55	1.51	0.0161	K	7.2	3.1	2.1	3.1	1.25	11.5
	3490	56H	79.0	76.0	1.56	1.51	0.0228	K	6.9	2.8	2.2	3.3	1.25	13.6
		140T												13.7
	1745	56	85.5	69.0	1.59	3.03	0.0387	L	7.7	3.7	3.6	4.4	1.25	11.5
	1745	56H	85.5	71.0	1.55	3.03	0.0553	L	7.8	3.4	3.4	4.2	1.25	13.6
		140T												13.7
	1145	56H	82.5	70.0	1.63	4.61	0.0802	H	5.3	2.2	2.1	3	1.25	13.6
		140T												13.7
1.5	3500	56	84.0	84.0	1.95	2.21	0.0229	M	9.8	3.1	2.6	3.7	1.25	11.5
	3500	56H	84.0	80.0	2.06	2.21	0.0285	L	8.9	3.1	3.2	3.7	1.25	13.6
		140T												13.7
	1735	56	86.5	72.0	2.22	4.47	0.0427	K	7.3	3.4	3.1	3.7	1.25	11.5
	1745	56H	86.5	75.0	2.13	4.44	0.0717	L	8.2	3.5	3.2	4.1	1.25	13.6
		140T												13.7
	1175	180T	87.5	68.0	2.32	6.59	0.3465	L	7.4	2.6	1.9	3.6	1.25	16.1
2	3500	56	85.5	84.0	2.62	3.02	0.0271	L	9.3	3.5	2.9	4.2	1.25	11.5
	3500	56H	85.5	85.0	2.59	3.02	0.0339	L	9.0	2.8	2	3.3	1.25	13.6
		140T												13.7
	1740	56H	86.5	76.0	2.86	6.07	0.0880	L	8.4	3.7	3.3	4.1	1.25	13.6
		140T												13.7
	1175	180T	88.5	68.0	3.13	8.99	0.4509	L	7.5	2.6	1.8	3.6	1.25	16.1
3	3490	56H	86.5	88.0	3.63	4.44	0.0413	K	8.4	2.6	1.6	3.3	1.25	13.6
		140T												13.7
	3515	180T	86.5	89.0	3.59	4.41	0.0975	K	9.3	2.4	1.5	3.5	1.25	16.1
	1730	56H	89.5	75.0	4.11	8.96	0.1013	K	8.1	3.3	3.1	3.6	1.25	14
	1760	180T	89.5	81.0	3.81	8.81	0.2397	L	9.8	2.5	2.4	4.2	1.25	16.1
	1175	210T	89.5	71.0	4.34	13.19	0.8804	K	7.8	2.3	1.6	3.1	1.25	19
5	3500	56H	88.5	87.0	6.05	7.45	0.0560	L	10.0	3.5	2.8	3.8	1.25	14
	3510	180T	88.5	91.0	5.77	7.43	0.1305	L	10.6	3	2.3	4.1	1.25	16.1
	1750	180T	89.5	84.0	6.18	14.89	0.3037	L	9.5	2.8	2.4	3.8	1.25	16.1
	1170	210T	89.5	73.0	7.11	22.28	1.0868	J	6.9	2.4	1.8	2.9	1.25	19
7.5	3510	180T	89.5	90.0	8.55	11.04	0.1633	L	9.9	3.2	2.5	3.8	1.25	16.1
	3520	210T	89.5	91.0	8.48	11.01	0.3061	K	9.6	2.6	1.7	3.6	1.25	19
	1765	210T	91.7	85.0	8.86	21.95	0.7926	L	10.1	2.6	1.9	4	1.25	19
	1180	254T	91.0	72.0	10.5	32.83	2.5344	M	10.1	3.5	2	4.4	1.25	24
10	3520	210T	90.2	92.0	11.3	15.01	0.3797	L	10.1	2.7	1.5	3.9	1.25	19
	1760	210T	91.7	86.0	12.0	30.02	0.9729	L	10.3	3.1	1.7	3.8	1.25	19
	1175	256T	91.0	75.0	13.8	44.96	2.7812	L	8.4	3.1	1.7	3.7	1.25	25.8
15	3530	210T	91.0	92.0	16.5	21.95	0.4675	L	11.3	3.4	2.1	4.1	1.25	19
	3550	254T	91.0	90.0	16.8	21.83	1.1675	J	8.8	3.3	1.5	3.5	1.25	24
	1770	254T	92.4	83.0	18.0	43.78	2.2164	L	9.7	2.7	1.5	3.5	1.25	24
	1175	256T	91.7	77.0	19.6	65.94	3.8490	L	8.7	3	1.7	3.5	1.25	25.8
	1180	280T	91.7	78.0	19.3	65.67	4.6060	K	8.0	2.7	1.9	3.2	1.25	29
20	3550	256T	91.0	91.0	22.7	29.76	1.4001	K	9.5	3	1.4	3.3	1.25	25.8
	1770	256T	93.0	85.0	23.8	59.70	2.8808	K	9.2	2.6	1.3	3.1	1.25	25.8
	1180	280T	91.7	80.0	25.7	89.54	5.8257	J	7.6	2.5	1.8	2.8	1.25	29
25	3550	256T	91.7	91.0	27.8	36.71	1.6326	K	9.9	2.9	1.4	3.3	1.25	25.8
	3550	280T	91.7	91.0	27.8	36.71	1.5780	J	8.5	2.4	1.4	3	1.25	29
	1770	280T	93.6	88.0	28.2	73.62	3.6876	K	9.1	2.9	1.8	3.5	1.25	29
	1180	320T	93.0	82.0	30.4	110.40	7.5034	K	8.9	2.8	1.6	3.2	1.25	30.1
30	3550	280T	91.7	91.0	33.1	43.70	1.8059	J	8.9	2.5	1.4	3.2	1.25	29
	1770	280T	93.6	88.0	33.5	87.55	4.0578	K	9.3	2.9	2.1	3.6	1.25	29
	1180	320T	93.0	83.0	35.8	131.33	8.7231	K	8.9	2.6	1.4	2.9	1.25	30.1
40	3550	320T	92.4	92.0	44.3	59.53	2.3066	J	9.0	2.6	1.4	3.3	1.25	30.1
	1770	320T	94.1	89.0	45.0	119.39	5.3559	K	9.5	3	2.1	3.8	1.25	30.1
50	3550	320T	93.0	92.0	54.3	73.42	2.8049	K	9.9	2.9	1.5	3.5	1.25	30.1
	1770	320T	94.5	89.0	55.2	147.25	6.0037	L	10.5	3.5	1.9	3.5	1.25	30.1

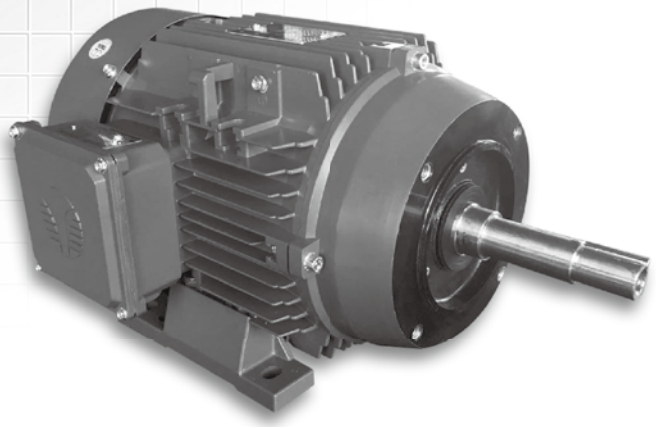
ROYSF

NEMA 56J JM JP Pump Motors

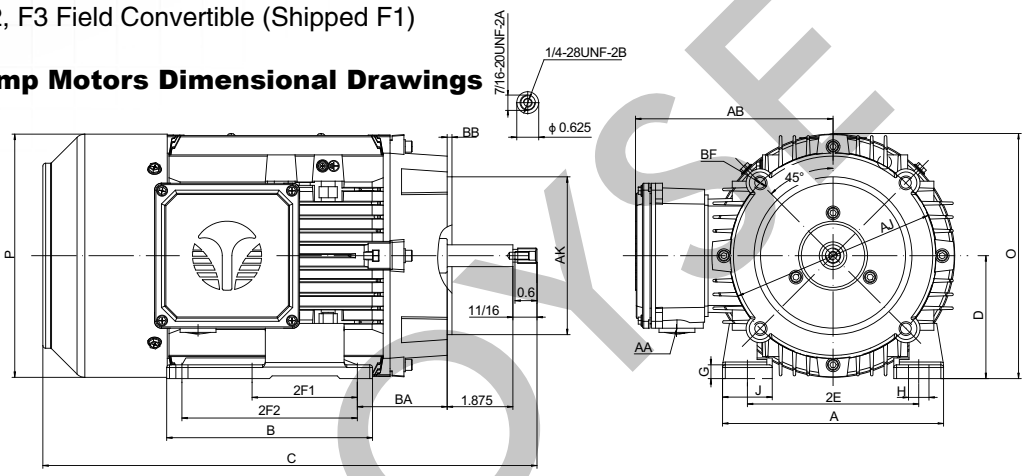
• 1/4HP thru 50HP

STANDARD FEATURES

- Aluminum housing
- IP 55 Rated
- MG1 Part 31 for VFD use
- Continuous Duty
- Dual Voltage
- 40℃ Ambient Temperature Rating
- Double Lip Oil Seals
- Dual Oversized Bearings
- Multi mount Removable Feet
- Conduit Box is 90° Rotatable
- Stainless Steel Nameplate
- One–Way Brass Condensation Drains
- F1, F2, F3 Field Convertible (Shipped F1)



56J Pump Motors Dimensional Drawings



Overall & Installation Dimensions

Frame	A	B	D	2E	2F1	2F2	BA	H	AA	G	J	AB	O	P	Bearing DE	Bearing NDE	AJ	AK	BB	BF
56	6.3	3.95	3.5	4.88	3		2.56	0.73×0.335	1/2-14NPT	0.43	1.37	5.2	6.6	6.2	6204	6204	5.875	4.5	0.125	4×3/8-16UNC
56H	6.3	5.9	3.5	4.88	3	5	2.56	0.58×0.335	1/2-14NPT	0.39	1.41	5.65	7.0	6.95	6205	6205	5.875	4.5	0.125	4×3/8-16UNC

56J Pump Motors Technical Data

HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 460V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor KVA Code	Locked Rotor II/In	TST TFL	TPU TFL	TM TFL	Service Factor	Dim "C"
1/4	3520	56	66.0	69.0	0.49	0.36	0.0107	L	6.3	3	2.2	3.4	1.25	12
	1750	56	70.0	58.0	0.55	0.72	0.0169	K	5	2.9	2.4	3.7	1.25	12
	1150	56	72.0	61.0	0.51	1.10	0.0242	J	4.4	2.3	2	2.8	1.25	12
1/3	3520	56	72.0	70.0	0.62	0.50	0.0121	M	7.4	3.3	2.7	4.1	1.25	12
	1750	56	74.0	63.0	0.67	1.00	0.0188	K	5.6	3.4	2.7	3.7	1.25	12
	1150	56	72.0	62.0	0.69	1.53	0.0299	J	4.4	2.1	1.8	2.7	1.25	12
1/2	3490	56	74.0	72.0	0.87	0.75	0.0121	L	6.7	3.1	3	3.8	1.25	12
	1750	56	78.5	66.0	0.90	1.49	0.0228	L	6.4	3.2	2.7	3.7	1.25	12
	1140	56	75.5	66.0	0.93	2.29	0.0382	H	4.5	2.5	2.3	2.8	1.25	12
3/4	3500	56	77.0	75.0	1.20	1.11	0.0142	L	7.3	3.1	2.4	3.4	1.25	12
	1750	56	81.5	68.0	1.25	2.21	0.0268	L	7	3.4	2.9	3.9	1.25	12
	1160	56H	81.5	66.0	1.28	3.34	0.0726	J	5.8	2.5	2.3	3.3	1.25	14.1
1	3490	56	79.0	77.0	1.55	1.51	0.0161	K	7.2	3.1	2.1	3.1	1.25	12
	3490	56H	79.0	76.0	1.56	1.51	0.0228	K	6.9	2.8	2.2	3.3	1.25	14.1
	1745	56	85.5	69.0	1.59	3.03	0.0387	L	7.7	3.7	3.6	4.4	1.25	12
	1745	56H	85.5	71.0	1.55	3.03	0.0553	L	7.8	3.4	3.4	4.2	1.25	14.1
	1145	56H	82.5	70.0	1.63	4.61	0.0802	H	5.3	2.2	2.1	3	1.25	14.1
1.5	3500	56	84.0	84.0	1.95	2.21	0.0229	M	9.8	3.1	2.6	3.7	1.25	12
	3500	56H	84.0	80.0	2.06	2.21	0.0285	L	8.9	3.1	3.2	3.7	1.25	14.1
	1735	56	86.5	72.0	2.22	4.47	0.0427	K	7.3	3.4	3.1	3.7	1.25	12
	1745	56H	86.5	75.0	2.13	4.44	0.0717	L	8.2	3.5	3.2	4.1	1.25	14.1
2	3500	56	85.5	84.0	2.62	3.02	0.0271	L	9.3	3.5	2.9	4.2	1.25	12
	3500	56H	85.5	85.0	2.59	3.02	0.0339	L	9.0	2.8	2	3.3	1.25	14.1
	1740	56H	86.5	76.0	2.86	6.07	0.0880	L	8.4	3.7	3.3	4.1	1.25	14.1
3	3490	56H	86.5	88.0	3.63	4.44	0.0413	K	8.4	2.6	1.6	3.3	1.25	14.1
	1730	56H	89.5	75.0	4.11	8.96	0.1013	K	8.1	3.3	3.1	3.6	1.25	15.3
5	3500	56H	88.5	87.0	6.05	7.45	0.0560	L	10.0	3.5	2.8	3.8	1.25	15.3

ROYSE

JM Pump Motors Dimensional Drawings

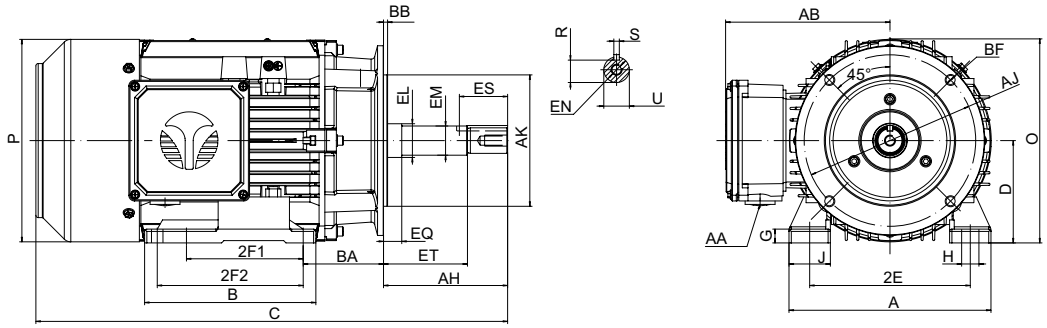


Figure 1 140T、180T

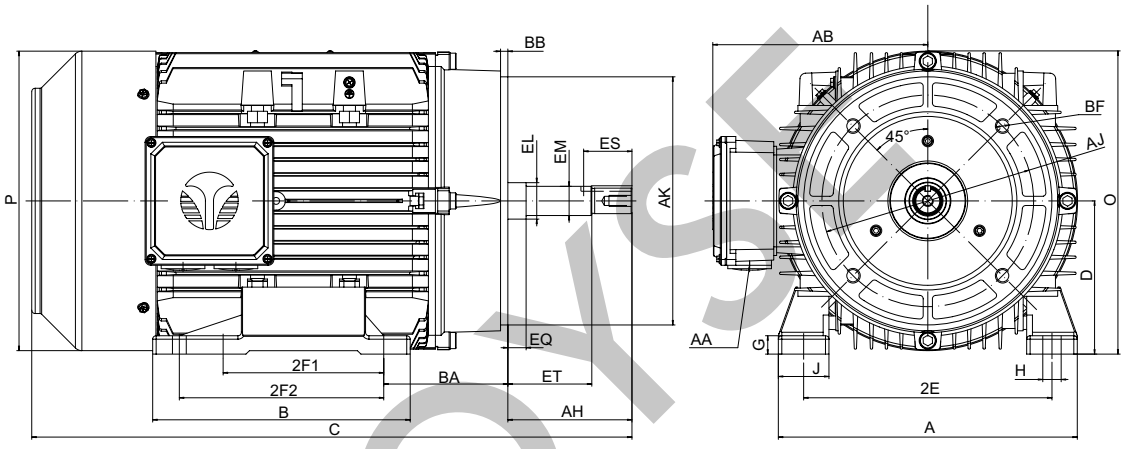


Figure 2 210T thru 320T

ROYSE

Overall & Installation Dimensions

Frame	A	B	D	2E	2F1	2F2	BA	H	AA	G	J	AB	O	P	Bearing DE	Bearing NDE	U	AH	AJ	AK	BB	BF	EL	EM	EN	EQ	R	ES	S	ET
140T	6.9	5.86	3.5	5.5	4	5	2.75	0.50×0.35	3/4-14NPT	0.47	1.41	5.65	7.0	6.95	6206	6205	0.8745	4.25	5.875	4.5	0.125	4×3/8-16UNC	1.156	1.0	3/8-16UNC	0.625	0.771	1.65	0.1875×0.1875×1.375	2.875
180T	8.85	7.1	4.5	7.5	4.5	5.5	3.5	0.59×0.433	3/4-14NPT	0.55	1.57	6.6	8.85	8.65	6207	6206	0.8745	4.25	5.875	4.5	0.125	4×3/8-16UNC	1.25	1.0	3/8-16UNC	0.625	0.771	1.65	0.1875×0.1875×1.375	2.875
210T	10.3	8.85	5.25	8.5	5.5	7	4.25	0.59×0.433	1-11 1/2NPT	0.63	1.73	7.4	10.4	10.3	6308	6208	0.8745	4.25	7.25	8.5	0.25	4×1/2-13UNC	1.25	1.0	3/8-16UNC	0.625	0.771	1.65	0.1875×0.1875×1.375	2.875
254T	12.4	10.25	6.25	10.0	8.25		4.75	0.83×0.59	1 1/4-11 1/2NPT	0.74	2.36	8.5	12.5	12.4	6309	6209	1.2495	5.25	7.25	8.5	0.25	4×1/2-13UNC	1.75	1.375	1/2-13UNC	0.625	1.112	2.53	0.25×0.25×2.41	3.0
256T	12.4	10.25	6.25	10.0	10.0		4.75	0.83×0.59	1 1/4-11 1/2NPT	0.74	2.36	8.5	12.5	12.4	6309	6209	1.2495	5.25	7.25	8.5	0.25	4×1/2-13UNC	1.75	1.375	1/2-13UNC	0.625	1.112	2.53	0.25×0.25×2.41	3.0
280T	13.4	13.0	7.0	11.0	9.5	11.0	4.75	0.985×0.59	1 1/2-11 1/2NPT	0.71	2.36	11.2	14.1	14.0	6311	6211	1.2495	5.25	11.0	12.5	0.25	4×5/8-11UNC	1.75	1.375	1/2-13UNC	0.625	1.112	2.53	0.25×0.25×2.41	3.0
320T	15.3	14.8	8.0	12.5	10.5	12.0	5.25	1.496×0.74	2-11 1/2NPT	0.79	3.82	11.2	14.9	14.0	6312	6212	1.2495	5.25	11.0	12.5	0.25	4×5/8-11UNC	1.75	1.375	1/2-13UNC	0.625	1.112	2.53	0.25×0.25×2.41	3.0

JP Pump Motors Dimensional Drawings

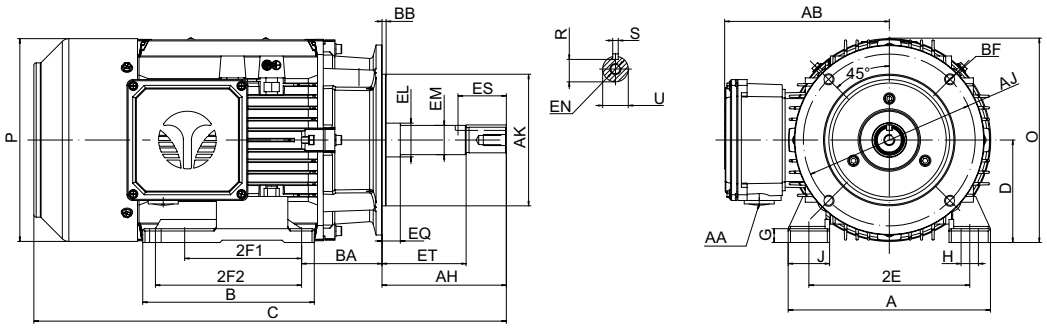


Figure 1 140T、180T

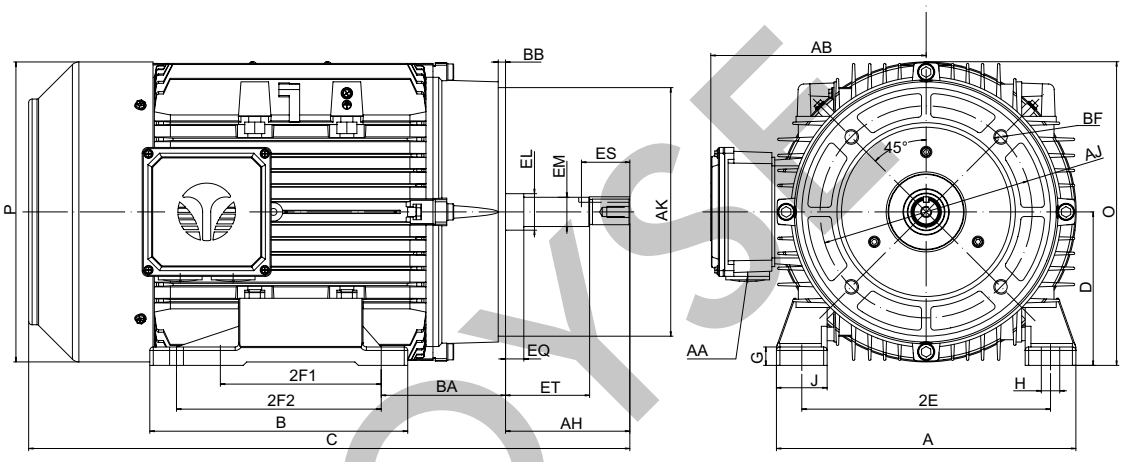


Figure 2 210T thru 320T

ROYSF

Overall & Installation Dimensions

Frame	A	B	D	2E	2F1	2F2	BA	H	AA	G	J	AB	O	P	Bearing DE	Bearing NDE	U	AH	AJ	AK	BB	BF	EL	EM	EN	EQ	R	ES	S	ET
140T	6.9	5.86	3.5	5.5	4	5	2.75	0.50×0.35	3/4-14NPT	0.47	1.41	5.65	7.0	6.95	6206	6205	0.8745	7.312	5.875	4.5	0.125	4×3/8-16UNC	1.156	1.0	3/8-16UNC	1.563	0.771	1.65	0.1875×0.1875×1.375	5.937
180T	8.85	7.1	4.5	7.5	4.5	5.5	3.5	0.59×0.433	3/4-14NPT	0.55	1.57	6.6	8.85	8.65	6207	6206	0.8745	7.312	5.875	4.5	0.125	4×3/8-16UNC	1.25	1.0	3/8-16UNC	1.563	0.771	1.65	0.1875×0.1875×1.375	5.937
210T	10.3	8.85	5.25	8.5	5.5	7	4.25	0.59×0.433	1-11 1/2NPT	0.63	1.73	7.4	10.4	10.3	6210	6208	1.2495	8.125	7.25	8.5	0.25	4×1/2-13UNC	1.75	1.375	1/2-16UNC	2.375	1.112	2.53	0.25×0.25×2.41	5.875
254T	12.4	10.25	6.25	10.0	8.25		4.75	0.83×0.59	1 1/4-11 1/2NPT	0.74	2.36	8.5	12.5	12.4	6309	6209	1.2495	8.125	7.25	8.5	0.25	4×1/2-13UNC	1.75	1.375	1/2-13UNC	2.375	1.112	2.53	0.25×0.25×2.41	5.875
256T	12.4	10.25	6.25	10.0	10.0		4.75	0.83×0.59	1 1/4-11 1/2NPT	0.74	2.36	8.5	12.5	12.4	6309	6209	1.2495	8.125	7.25	8.5	0.25	4×1/2-13UNC	1.75	1.375	1/2-13UNC	2.375	1.112	2.53	0.25×0.25×2.41	5.875
280T	13.4	13.0	7.0	11.0	9.5	11.0	4.75	0.985×0.59	1 1/2-11 1/2NPT	0.71	2.36	11.2	14.1	14.0	6311	6211	1.2495	8.125	11.0	12.5	0.25	4×5/8-11UNC	1.75	1.375	1/2-13UNC	2.375	1.112	2.53	0.25×0.25×2.41	5.875
320T	15.3	14.8	8.0	12.5	10.5	12.0	5.25	1.496×0.74	2-11 1/2NPT	0.79	3.82	11.2	14.9	14.0	6312	6212	1.2495	8.125	11.0	12.5	0.25	4×5/8-11UNC	1.75	1.375	1/2-13UNC	2.375	1.112	2.53	0.25×0.25×2.41	5.875

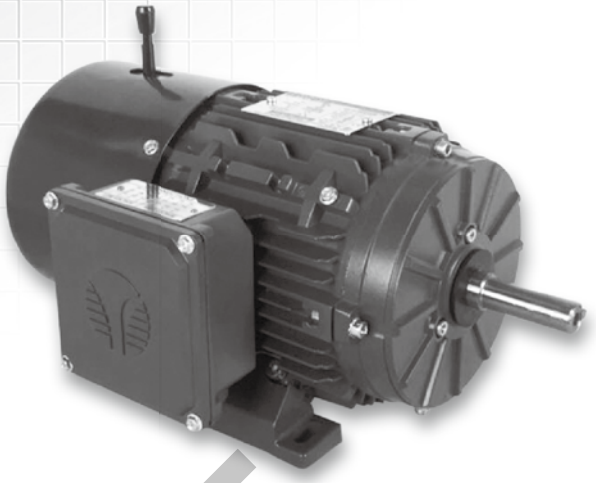
JM JP Pump Motors Technical Data

HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 460V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TPU TFL	TM TFL	Service Factor	Dim "C" For JM	Dim "C" For JP
								KVA Code	II/In						
1	3490	140T	79.0	76.0	1.56	1.51	0.0228	K	6.9	2.8	2.2	3.3	1.25	16.2	19.3
	1745	140T	85.5	71.0	1.55	3.03	0.0553	L	7.8	3.4	3.4	4.2	1.25	16.2	19.3
	1145	140T	82.5	70.0	1.63	4.61	0.0802	H	5.3	2.2	2.1	3	1.25	16.2	19.3
1.5	3500	140T	84.0	80.0	2.06	2.21	0.0285	L	8.9	3.1	3.2	3.7	1.25	16.2	19.3
	1745	140T	86.5	75.0	2.13	4.44	0.0717	L	8.2	3.5	3.2	4.1	1.25	16.2	19.3
	1175	180T	87.5	68.0	2.32	6.59	0.3465	L	7.4	2.6	1.9	3.6	1.25	18.3	21.4
2	3500	140T	85.5	85.0	2.59	3.02	0.0339	L	9.0	2.8	2	3.3	1.25	16.2	19.3
	1740	140T	86.5	76.0	2.86	6.07	0.0880	L	8.4	3.7	3.3	4.1	1.25	16.2	19.3
	1175	180T	88.5	68.0	3.13	8.99	0.4509	L	7.5	2.6	1.8	3.6	1.25	18.3	21.4
3	3490	140T	86.5	88.0	3.63	4.44	0.0413	K	8.4	2.6	1.6	3.3	1.25	16.2	19.3
	3515	180T	86.5	89.0	3.59	4.41	0.0975	K	9.3	2.4	1.5	3.5	1.25	18.3	21.4
	1760	180T	89.5	81.0	3.81	8.81	0.2397	L	9.8	2.5	2.4	4.2	1.25	18.3	21.4
	1175	210T	89.5	71.0	4.34	13.19	0.8804	K	7.8	2.3	1.6	3.1	1.25	20.6	24.5
5	3510	180T	88.5	91.0	5.77	7.43	0.1305	L	10.6	3	2.3	4.1	1.25	18.3	21.4
	1750	180T	89.5	84.0	6.18	14.89	0.3037	L	9.5	2.8	2.4	3.8	1.25	18.3	21.4
	1170	210T	89.5	73.0	7.11	22.28	1.0868	J	6.9	2.4	1.8	2.9	1.25	20.6	24.5
7.5	3510	180T	89.5	90.0	8.55	11.04	0.1633	L	9.9	3.2	2.5	3.8	1.25	18.3	21.4
	3520	210T	89.5	91.0	8.48	11.01	0.3061	K	9.6	2.6	1.7	3.6	1.25	20.6	24.5
	1765	210T	91.7	85.0	8.86	21.95	0.7926	L	10.1	2.6	1.9	4	1.25	20.6	24.5
	1180	254T	91.0	72.0	10.5	32.83	2.5344	M	10.1	3.5	2	4.4	1.25	25.8	28.7
10	3520	210T	90.2	92.0	11.3	15.01	0.3797	L	10.1	2.7	1.5	3.9	1.25	20.6	24.5
	1760	210T	91.7	86.0	12.0	30.02	0.9729	L	10.3	3.1	1.7	3.8	1.25	20.6	24.5
	1175	256T	91.0	75.0	13.8	44.96	2.7812	L	8.4	3.1	1.7	3.7	1.25	27.6	30.5
15	3530	210T	91.0	92.0	16.5	21.95	0.4675	L	11.3	3.4	2.1	4.1	1.25	20.6	24.5
	3550	254T	91.0	90.0	16.8	21.83	1.1675	J	8.8	3.3	1.5	3.5	1.25	25.8	28.7
	1770	254T	92.4	83.0	18.0	43.78	2.2164	L	9.7	2.7	1.5	3.5	1.25	25.8	28.7
	1175	256T	91.7	77.0	19.6	65.94	3.8490	L	8.7	3	1.7	3.5	1.25	27.6	30.5
	1180	280T	91.7	78.0	19.3	65.67	4.6060	K	8.0	2.7	1.9	3.2	1.25	29.7	32.6
20	3550	256T	91.0	91.0	22.7	29.76	1.4001	K	9.5	3	1.4	3.3	1.25	27.6	30.5
	1770	256T	93.0	85.0	23.8	59.70	2.8808	K	9.2	2.6	1.3	3.1	1.25	27.6	30.5
	1180	280T	91.7	80.0	25.7	89.54	5.8257	J	7.6	2.5	1.8	2.8	1.25	29.7	32.6
25	3550	256T	91.7	91.0	27.8	36.71	1.6326	K	9.9	2.9	1.4	3.3	1.25	27.6	30.5
	3550	280T	91.7	91.0	27.8	36.71	1.5780	J	8.5	2.4	1.4	3	1.25	29.7	32.6
	1770	280T	93.6	88.0	28.2	73.62	3.6876	K	9.1	2.9	1.8	3.5	1.25	29.7	32.6
	1180	320T	93.0	82.0	30.4	110.40	7.5034	K	8.9	2.8	1.6	3.2	1.25	30.1	33
30	3550	280T	91.7	91.0	33.1	43.70	1.8059	J	8.9	2.5	1.4	3.2	1.25	29.7	32.6
	1770	280T	93.6	88.0	33.5	87.55	4.0578	K	9.3	2.9	2.1	3.6	1.25	29.7	32.6
	1180	320T	93.0	83.0	35.8	131.33	8.7231	K	8.9	2.6	1.4	2.9	1.25	30.1	33
40	3550	320T	92.4	92.0	44.3	59.53	2.3066	J	9.0	2.6	1.4	3.3	1.25	30.1	33
	1770	320T	94.1	89.0	45.0	119.39	5.3559	K	9.5	3	2.1	3.8	1.25	30.1	33
50	3550	320T	93.0	92.0	54.3	73.42	2.8049	K	9.9	2.9	1.5	3.5	1.25	30.1	33
	1770	320T	94.5	89.0	55.2	147.25	6.0037	L	10.5	3.5	1.9	3.5	1.25	30.1	33

ROYSL

NEMA Three-Phase Brake Motors Aluminum TEFC

- **1/4HP thru 25HP**
- **56 thru 256T**



STANDARD FEATURES

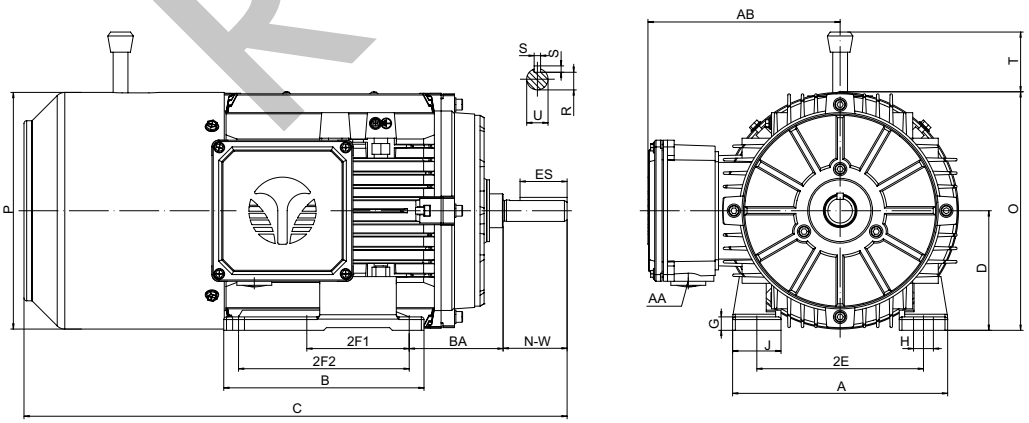
- 40℃ Ambient Rating
- Aluminum Housing
- Ball bearings
- IP 55 Rated
- Removable Feet
- Corrosion Resistant Hardware
- Double Lip Oil Seals

REACH brake data

Frame size	Brake type	Brake torque (Speed 100r/min) (Nm)	Brake rated power(20℃) (W)	Delay time when power on (ms)	Brake time (ms)	Pick in time when power off (ms)
56	08	8	25	15	32	50
56H、140	10	16	30	25	45	69
180	14	60	50	27	57	190
210	16	80	55	30	60	200
250	18	150	85	35	78	260

INTORQ brake data

Frame size	Brake type	Brake torque (Speed100r/min) (Nm)	Brake rated power(20℃) (W)	Delay time when power on (ms)	Brake time (ms)	Pick in time when power off (ms)
56	08	8	25	15	31	60
56H、140	10	16	30	31	50	65
180	14	60	50	26	51	205
210	16	80	55	40	70	258



Overall & Installation Dimensions

Frame	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	G	J	AB	O	T	P	Bearing DE	Bearing NDE
56	6.3	3.95	3.5	4.88	3		2.75	0.73×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	0.43	1.37	5.2	6.6	1.5	6.2	6204	6204
56H	6.3	5.9	3.5	4.88	3	5	2.75	0.58×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	0.39	1.41	5.65	7.0	1.75	6.95	6205	6205
140T	6.9	5.86	3.5	5.5	4	5	2.25	0.50×0.35	0.875	2.25	0.771	1.375	0.1875	3/4-14NPT	0.47	1.41	5.65	7.0	1.75	6.95	6205	6205
180T	8.85	7.1	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	3/4-14NPT	0.55	1.57	6.6	8.85	3.45	8.65	6306	6206
210T	10.3	8.85	5.25	8.5	5.5	7	3.5	0.59×0.433	1.375	3.375	1.201	2.41	0.312	1-11 1/2NPT	0.63	1.73	7.4	10.4	4.4	10.3	6308	6208
254T	12.4	10.25	6.25	10.0	8.25		4.25	0.83×0.59	1.625	4.0	1.416	2.91	0.375	1 1/4-11 1/2NPT	0.74	2.36	8.5	12.5	4.85	12.4	6309	6209
256T	12.4	10.25	6.25	10.0	10.0		4.25	0.83×0.59	1.625	4.0	1.416	2.91	0.375	1 1/4-11 1/2NPT	0.74	2.36	8.5	12.5	4.85	12.4	6309	6209

ROYSE

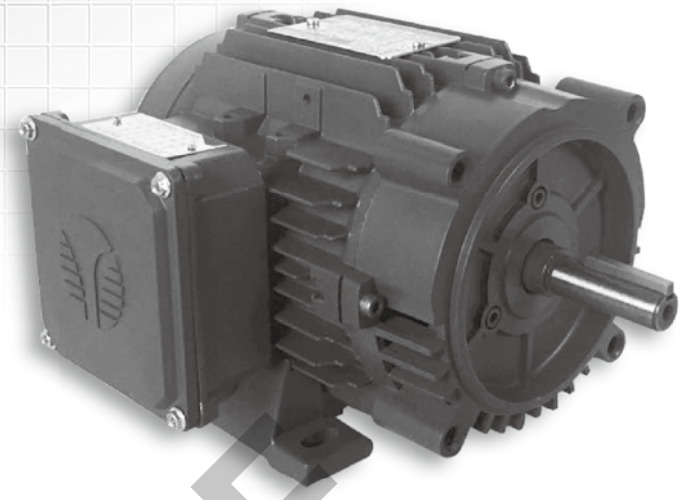
Three-Phase TEFC Brake Motors Technical Data

HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 460V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TPU TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In					
1/4	3520	56	66.0	69.0	0.49	0.36	0.0107	L	6.3	3	2.2	3.4	1.25	14.15
	1750	56	70.0	58.0	0.55	0.72	0.0169	K	5	2.9	2.4	3.7	1.25	14.15
	1150	56	72.0	61.0	0.51	1.10	0.0242	J	4.4	2.3	2	2.8	1.25	14.15
1/3	3520	56	72.0	70.0	0.62	0.50	0.0121	M	7.4	3.3	2.7	4.1	1.25	14.15
	1750	56	74.0	63.0	0.67	1.00	0.0188	K	5.6	3.4	2.7	3.7	1.25	14.15
	1150	56	72.0	62.0	0.69	1.53	0.0299	J	4.4	2.1	1.8	2.7	1.25	14.15
1/2	3490	56	74.0	72.0	0.87	0.75	0.0121	L	6.7	3.1	3	3.8	1.25	14.15
	1750	56	78.5	66.0	0.90	1.49	0.0228	L	6.4	3.2	2.7	3.7	1.25	14.15
	1140	56	75.5	66.0	0.93	2.29	0.0382	H	4.5	2.5	2.3	2.8	1.25	14.15
3/4	3500	56	77.0	75.0	1.20	1.11	0.0142	L	7.3	3.1	2.4	3.4	1.25	14.15
	1750	56	81.5	68.0	1.25	2.21	0.0268	L	7	3.4	2.9	3.9	1.25	14.15
	1160	56H	81.5	66.0	1.28	3.34	0.0726	J	5.8	2.5	2.3	3.3	1.25	15.95
1	3490	56	79.0	77.0	1.55	1.51	0.0161	K	7.2	3.1	2.1	3.1	1.25	14.15
	3490	56H	79.0	76.0	1.56	1.51	0.0228	K	6.9	2.8	2.2	3.3	1.25	15.95
		140T												16.00
	1745	56	85.5	69.0	1.59	3.03	0.0387	L	7.7	3.7	3.6	4.4	1.25	14.15
	1745	56H	85.5	71.0	1.55	3.03	0.0553	L	7.8	3.4	3.4	4.2	1.25	15.95
		140T												16.00
	1145	56H	82.5	70.0	1.63	4.61	0.0802	H	5.3	2.2	2.1	3	1.25	15.95
		140T												16.00
1.5	3500	56	84.0	84.0	1.95	2.21	0.0229	M	9.8	3.1	2.6	3.7	1.25	14.15
	3500	56H	84.0	80.0	2.06	2.21	0.0285	L	8.9	3.1	3.2	3.7	1.25	15.95
		140T												16.00
	1735	56	86.5	72.0	2.22	4.47	0.0427	K	7.3	3.4	3.1	3.7	1.25	14.15
	1745	56H	86.5	75.0	2.13	4.44	0.0717	L	8.2	3.5	3.2	4.1	1.25	15.95
		140T												16.00
	1175	180T	87.5	68.0	2.32	6.59	0.3465	L	7.4	2.6	1.9	3.6	1.25	18.90
2	3500	56	85.5	84.0	2.62	3.02	0.0271	L	9.3	3.5	2.9	4.2	1.25	14.15
	3500	56H	85.5	85.0	2.59	3.02	0.0339	L	9.0	2.8	2	3.3	1.25	15.95
		140T												16.00
	1740	56H	86.5	76.0	2.86	6.07	0.0880	L	8.4	3.7	3.3	4.1	1.25	15.95
		140T												16.00
	1175	180T	88.5	68.0	3.13	8.99	0.4509	L	7.5	2.6	1.8	3.6	1.25	18.90
3	3490	56H	86.5	88.0	3.63	4.44	0.0413	K	8.4	2.6	1.6	3.3	1.25	15.95
		140T												16.00
	3515	180T	86.5	89.0	3.59	4.41	0.0975	K	9.3	2.4	1.5	3.5	1.25	18.90
	1730	56H	89.5	75.0	4.11	8.96	0.1013	K	8.1	3.3	3.1	3.6	1.25	17.15
	1760	180T	89.5	81.0	3.81	8.81	0.2397	L	9.8	2.5	2.4	4.2	1.25	18.90
	1175	210T	89.5	71.0	4.34	13.19	0.8804	K	7.8	2.3	1.6	3.1	1.25	22.90
5	3500	56H	88.5	87.0	6.05	7.45	0.0560	L	10.0	3.5	2.8	3.8	1.25	17.15
	3510	180T	88.5	91.0	5.77	7.43	0.1305	L	10.6	3	2.3	4.1	1.25	18.90
	1750	180T	89.5	84.0	6.18	14.89	0.3037	L	9.5	2.8	2.4	3.8	1.25	18.90
	1170	210T	89.5	73.0	7.11	22.28	1.0868	J	6.9	2.4	1.8	2.9	1.25	22.90
7.5	3510	180T	89.5	90.0	8.55	11.04	0.1633	L	9.9	3.2	2.5	3.8	1.25	18.90
	3520	210T	89.5	91.0	8.48	11.01	0.3061	K	9.6	2.6	1.7	3.6	1.25	22.90
	1765	210T	91.7	85.0	8.86	21.95	0.7926	L	10.1	2.6	1.9	4	1.25	22.90
	1180	254T	91.0	72.0	10.5	32.83	2.5344	M	10.1	3.5	2	4.4	1.25	26.70
10	3520	210T	90.2	92.0	11.3	15.01	0.3797	L	10.1	2.7	1.5	3.9	1.25	22.90
	1760	210T	91.7	86.0	12.0	30.02	0.9729	L	10.3	3.1	1.7	3.8	1.25	22.90
	1175	256T	91.0	75.0	13.8	44.96	2.7812	L	8.4	3.1	1.7	3.7	1.25	28.40
15	3530	210T	91.0	92.0	16.5	21.95	0.4675	L	11.3	3.4	2.1	4.1	1.25	22.90
	3550	254T	91.0	90.0	16.8	21.83	1.1675	J	8.8	3.3	1.5	3.5	1.25	26.70
	1770	254T	92.4	83.0	18.0	43.78	2.2164	L	9.7	2.7	1.5	3.5	1.25	26.70
	1175	256T	91.7	77.0	19.6	65.94	3.8490	L	8.7	3	1.7	3.5	1.25	28.40
20	3550	256T	91.0	91.0	22.7	29.76	1.4001	K	9.5	3	1.4	3.3	1.25	28.40
	1770	256T	93.0	85.0	23.8	59.70	2.8808	K	9.2	2.6	1.3	3.1	1.25	28.40
25	3550	256T	91.7	91.0	27.8	36.71	1.6326	K	9.9	2.9	1.4	3.3	1.25	28.40

ROYSE

NEMA Premium Efficiency Three-Phase Motors Aluminum ODP

- **1/4HP thru 15HP**
- **56 thru 215T**



STANDARD FEATURES

- Continuous Duty 40℃ Ambient
- Aluminum Housing
- Ball bearings
- IP23 Protection

APPLICATIONS

- Pumps
- Compressors
- Fans
- Machine Tools
- Other General Purpose Three Phase Applications

ROYSE

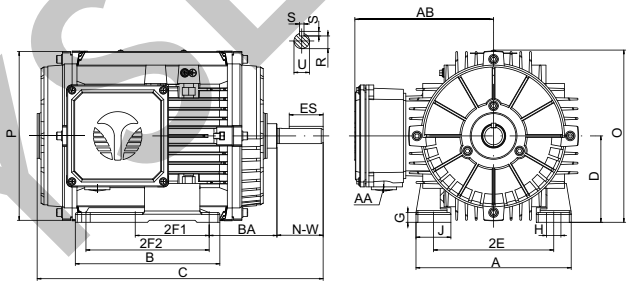


Figure 1 56 thru 210T (Foot Mounting)

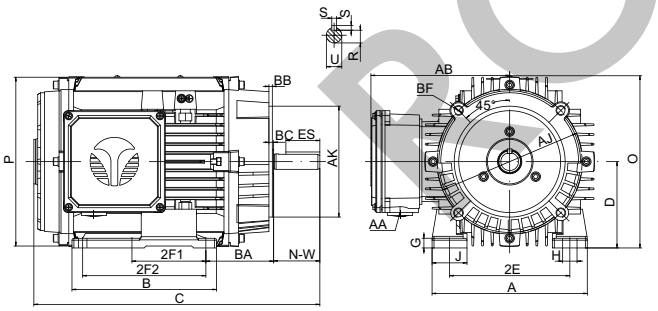


Figure 2 56 thru 140T (C- Face)

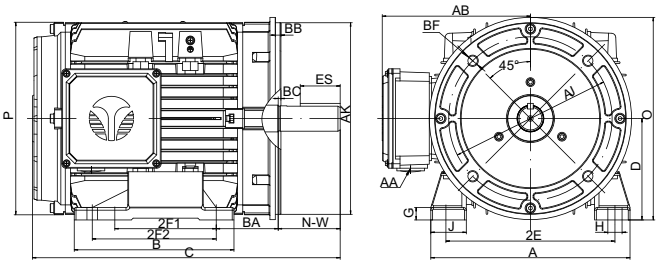


Figure 3 180T、210T (C- Face)

Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					General						Bearings		C-Face				
	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	G	J	AB	O	P	DE	NDE	AJ	AK	BB	BC	BF
56	6.3	3.95	3.5	4.88	3		2.75	0.73×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	0.43	1.37	5.2	6.6	6.2	6204	6203	5.875	4.5	0.16	-0.19	4×3/8-16UNC
56H	6.3	5.9	3.5	4.88	3	5	2.75	0.58×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT	0.39	1.41	5.65	7.0	6.95	6205	6204	5.875	4.5	0.16	-0.19	4×3/8-16UNC
140T	6.9	5.86	3.5	5.5	4	5	2.25	0.50×0.35	0.875	2.25	0.771	1.375	0.1875	3/4-14NPT	0.47	1.41	5.65	7.0	6.95	6205	6204	5.875	4.5	0.16	0.12	4×3/8-16UNC
180T	8.85	7.1	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	3/4-14NPT	0.55	1.57	6.6	8.85	8.65	6306	6206	7.25	8.5	0.25	0.12	4×1/2-13UNC
210T	10.3	8.85	5.25	8.5	5.5	7	3.5	0.59×0.433	1.375	3.375	1.201	2.41	0.312	1-11 1/2NPT	0.63	1.73	7.4	10.4	10.3	6308	6208	7.25	8.5	0.25	0.25	4×1/2-13UNC

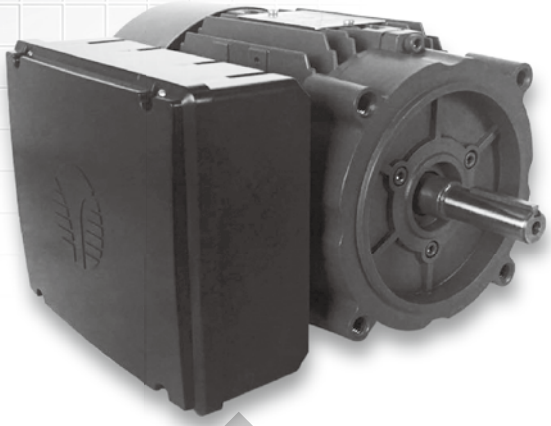
ODP Three-Phase Motors Technical Data

HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 460V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TPU TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In					
1/4	3520	56	65.6	69.0	0.50	0.36	0.0107	L	6.3	3	2.2	3.4	1.25	10
	1750	56	69.5	58.0	0.56	0.72	0.0169	K	5.0	2.9	2.4	3.7	1.25	10
	1150	56	67.5	61.0	0.55	1.10	0.0242	J	4.4	2.3	2	2.8	1.25	10
1/3	3520	56	69.5	70.0	0.64	0.50	0.0121	M	7.4	3.3	2.7	4.1	1.25	10
	1750	56	73.4	63.0	0.68	1.00	0.0188	K	5.6	3.4	2.7	3.7	1.25	10
	1150	56	71.4	62.0	0.71	1.53	0.0299	J	4.4	2.1	1.8	2.7	1.25	10
1/2	3490	56	73.4	72.0	0.88	0.75	0.0121	L	6.7	3.1	3	3.8	1.25	10
	1750	56	78.2	66.0	0.90	1.49	0.0228	L	6.4	3.2	2.7	3.7	1.25	10
	1140	56	75.3	66.0	0.93	2.29	0.0382	H	4.5	2.5	2.3	2.8	1.25	10
3/4	3500	56	76.8	75.0	1.20	1.11	0.0142	L	7.3	3.1	2.4	3.4	1.25	10
	1750	56	81.1	68.0	1.25	2.21	0.0268	L	7.0	3.4	2.9	3.9	1.25	10
	1160	56H	81.7	66.0	1.28	3.34	0.0726	J	5.8	2.5	2.3	3.3	1.25	11.6
1	3490	56	77.0	77.0	1.59	1.51	0.0161	K	7.2	3.1	2.1	3.1	1.25	10
	3490	56H	77.0	76.0	1.61	1.51	0.0228	K	6.9	2.8	2.2	3.3	1.25	11.6
		140T												11.7
	1745	56	83.5	69.0	1.63	3.03	0.0387	L	7.7	3.7	3.6	4.4	1.25	11.5
	1745	56H	85.5	71.0	1.55	3.03	0.0553	L	7.8	3.4	3.4	4.2	1.25	11.6
		140T												11.7
	1145	56H	82.5	70.0	1.63	4.61	0.0802	H	5.3	2.2	2.1	3	1.25	11.6
		140T												11.7
1.5	3500	56	84.0	84.0	1.96	2.21	0.0229	M	9.8	3.1	2.6	3.7	1.25	11.5
	3500	56H	84.0	80.0	2.06	2.21	0.0285	L	8.9	3.1	3.2	3.7	1.25	11.6
		140T												11.7
	1735	56	86.5	72.0	2.22	4.47	0.0427	K	7.3	3.4	3.1	3.7	1.25	11.5
	1745	56H	86.5	75.0	2.13	4.44	0.0717	L	8.2	3.5	3.2	4.1	1.25	11.6
		140T												11.7
	1175	180T	86.5	68.0	2.35	6.59	0.3465	L	7.4	2.6	1.9	3.6	1.25	13.8
2	3500	56	85.5	84.0	2.62	3.02	0.0271	L	9.3	3.5	2.9	4.2	1.25	11.5
	3500	56H	85.5	85.0	2.59	3.02	0.0339	L	9.0	2.8	2	3.3	1.25	11.6
		140T												11.7
	1740	56H	86.5	76.0	2.86	6.07	0.0880	L	8.4	3.7	3.3	4.1	1.25	12.8
		140T												12.9
	1175	180T	87.5	68.0	3.16	8.99	0.4509	L	7.5	2.6	1.8	3.6	1.25	16.1
3	3490	56H	85.5	88.0	3.67	4.44	0.0413	K	8.4	2.6	1.6	3.3	1.25	12.8
		140T												12.9
	3515	180T	85.5	89.0	3.63	4.41	0.0975	K	9.3	2.4	1.5	3.5	1.25	13.8
	1730	56H	86.9	75.0	4.24	8.96	0.1013	K	8.1	3.3	3.1	3.6	1.25	14.8
	1760	180T	89.5	81.0	3.81	8.81	0.2397	L	9.8	2.5	2.4	4.2	1.25	13.8
	1175	210T	88.5	71.0	4.39	13.19	0.8804	K	7.8	2.3	1.6	3.1	1.25	16.6
5	3500	56H	86.5	87.0	6.17	7.45	0.0560	L	10.0	3.5	2.8	3.8	1.25	14.8
	3510	180T	86.5	91.0	5.90	7.43	0.1305	L	10.6	3	2.3	4.1	1.25	13.8
	1750	180T	89.5	84.0	6.18	14.89	0.3037	L	9.5	2.8	2.4	3.8	1.25	16.1
	1170	210T	89.5	73.0	7.11	22.28	1.0868	J	6.9	2.4	1.8	2.9	1.25	16.6
7.5	3510	180T	88.5	90.0	8.67	11.04	0.1633	L	9.9	3.2	2.5	3.8	1.25	16.1
	3520	210T	88.5	91.0	8.57	11.01	0.3061	K	9.6	2.6	1.7	3.6	1.25	16.6
	1765	210T	91.0	85.0	8.92	21.95	0.7926	L	10.1	2.6	1.9	4	1.25	16.6
10	3520	210T	89.5	92.0	11.4	15.01	0.3797	L	10.1	2.7	1.5	3.9	1.25	16.6
	1760	210T	91.7	86.0	12.0	30.02	0.9729	L	10.3	3.1	1.7	3.8	1.25	19
15	3530	210T	90.2	92.0	16.6	21.95	0.4675	L	11.3	3.4	2.1	4.1	1.25	19

ROYSE

NEMA Single-Phase Motors Aluminum TEFC

▪ 1/4HP thru 10HP



STANDARD FEATURES

- 40°C Ambient Rating
- Aluminum Housing
- Ball bearings
- IP 55 Rated
- Removable Feet
- Corrosion Resistant Hardware
- Double Lip Oil Seals

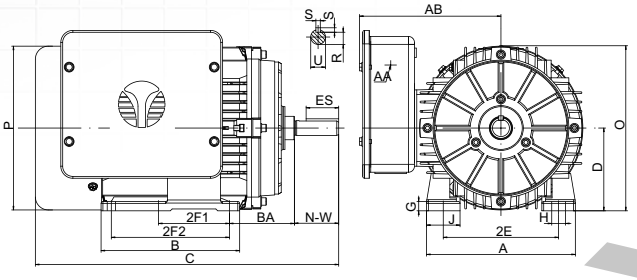


Figure 1 56 thru 210T (Foot Mounting)

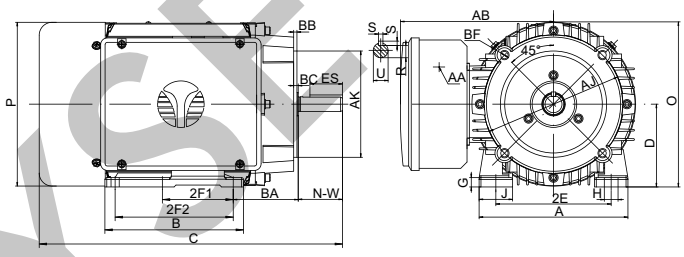


Figure 2 56 thru 140T (C- Face)

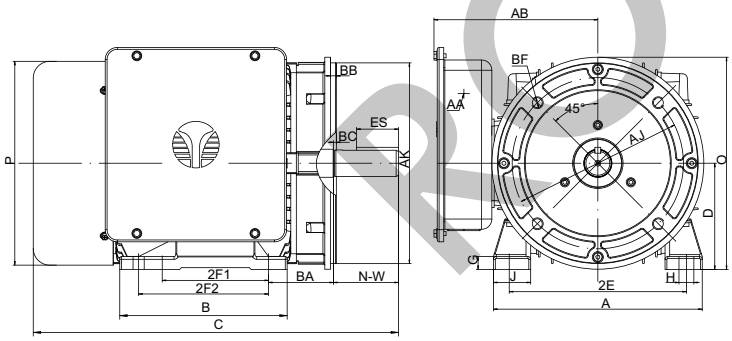


Figure 3 180T、210T (C- Face)

Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					General						Bearings		C-Face				
	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	G	J	AB	O	P	DE	NDE	AJ	AK	BB	BC	BF
56	6.3	3.95	3.5	4.88	3		2.75	0.73×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT3/4-14NPT	0.43	1.37	6.05	6.6	6.2	6204	6204	5.875	4.5	0.16	-0.19	4×3/8-16UNC
56H	6.3	5.9	3.5	4.88	3	5	2.75	0.58×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT3/4-14NPT	0.39	1.41	6.5	7.0	6.95	6205	6205	5.875	4.5	0.16	-0.19	4×3/8-16UNC
140T	6.9	5.86	3.5	5.5	4	5	2.25	0.50×0.35	0.875	2.25	0.771	1.375	0.1875	1/2-14NPT3/4-14NPT	0.47	1.41	6.5	7.0	6.95	6205	6205	5.875	4.5	0.16	0.12	4×3/8-16UNC
180T	8.85	7.1	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	φ1.11、φ1.33	0.55	1.57	6.95	8.85	8.65	6306	6206	7.25	8.5	0.25	0.12	4×1/2-13UNC
210T	10.3	8.85	5.25	8.5	5.5	7	3.5	0.59×0.433	1.375	3.375	1.201	2.41	0.312	φ1.11、φ1.33	0.63	1.73	8.13	10.4	10.3	6308	6208	7.25	8.5	0.25	0.25	4×1/2-13UNC

ROYSE

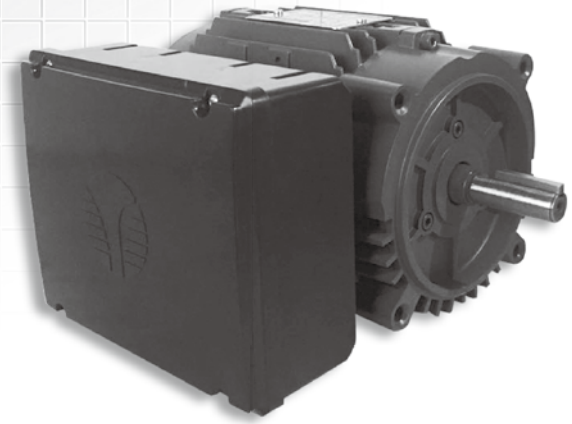
NEMA TEFC Single-Phase Motors Technical Data

HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 230V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	II/In				
1/4	3530	56	68.0	92	1.25	0.36	0.0121	N	9.60	3	2.6	1.15	11.3
	1735	56	70.0	86	1.30	0.73	0.0208	M	8.50	3.1	2.7	1.15	11.3
1/3	3530	56	72.0	92	1.64	0.5	0.0134	M	9.50	3	2.6	1.15	11.3
	1735	56	74.0	86	1.71	1.01	0.0268	L	7.90	3.1	2.7	1.15	11.3
1/2	3530	56	74.0	93	2.34	0.74	0.0161	M	9.40	3	2.6	1.15	11.3
	1730	56	77.0	88	2.37	1.51	0.0327	K	8.10	3.1	2.7	1.15	11.3
3/4	3530	56	77.0	93	3.37	1.10	0.0202	L	8.90	3	2.6	1.15	11.3
	1730	56	78.5	88	3.34	2.24	0.0387	K	8.10	3	2.5	1.15	11.3
1	3530	56H	78.5	95	4.37	1.50	0.0320	L	8.9	3.3	2.6	1.15	13.1
		140T											13.2
	1740	56H	80.0	90	4.53	3.04	0.0619	K	7.8	3	2.4	1.15	13.1
		140T											13.2
1.5	3530	56H	81.5	95	6.18	2.20	0.0377	K	8.5	3.3	2.6	1.15	13.1
		140T											13.2
	1740	56H	81.5	92	6.38	4.45	0.0750	H	6.9	2.8	2.3	1.15	13.1
		140T											13.2
2	3530	56H	82.5	95	8.32	2.99	0.0413	K	8.4	3.1	2.5	1.15	13.1
		140T											13.2
	1735	56H	82.5	92	8.59	6.09	0.0880	H	6.4	2.6	2.2	1.15	13.1
		140T											13.2
3	3530	56H	84.0	96	11.9	4.39	0.0484	J	8.4	3.1	2.5	1.15	13.1
		140T											13.2
	3530	180T	84.0	96	11.9	4.39	0.1139	H	7.5	3.5	2.2	1.15	15.6
	1740	180T	83.5	94	12.2	8.91	0.2397	H	7.0	3.5	2.4	1.15	15.6
5	3530	180T	84.0	96	20.0	7.38	0.1360	H	7.0	3.5	2.2	1.15	15.6
	1740	180T	84.0	94	20.4	14.98	0.3037	G	6.4	3.2	2.2	1.15	15.6
7.5	3530	210T	84.5	98	28.9	10.98	0.3417	H	7.6	3.5	2.2	1.15	18.6
	1750	210T	84.5	96	29.5	22.14	0.9255	H	7.0	3	2.4	1.15	18.6
10	3530	210T	86.0	98	38.7	14.97	0.4438	H	8.0	3.5	2.2	1.15	18.6
	1750	210T	85.5	96	39.7	30.19	1.1106	H	7.6	2.8	2.2	1.15	18.6

ROYSL

NEMA Single-Phase Motors Aluminum ODP

▪ 1/4HP thru 10HP



STANDARD FEATURES

- 40℃ Ambient Rating
- Aluminum Housing
- Ball bearings
- IP23 Protection
- Removable Feet
- Corrosion Resistant Hardware
- Double Lip Oil Seals

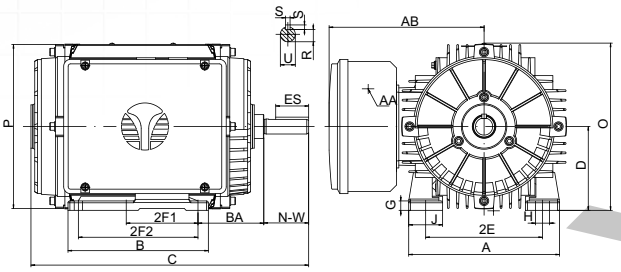


Figure1 56 thru 210T (Foot Mounting)

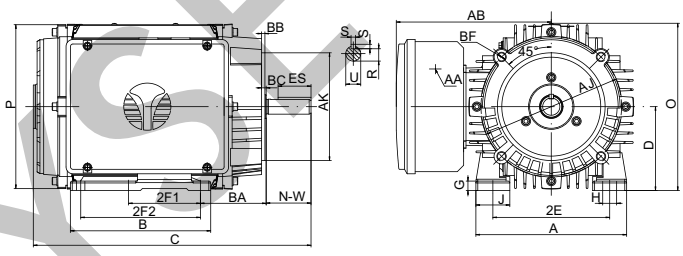


Figure2 56 thru 140T (C- Face)

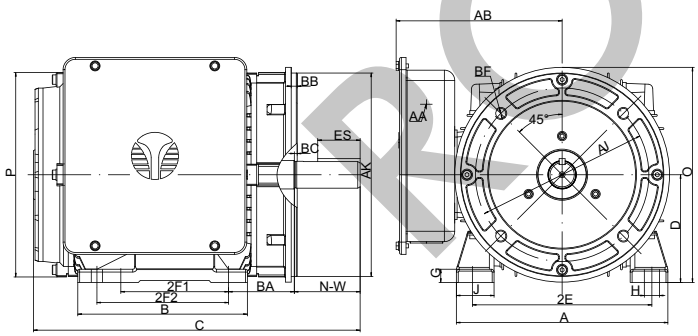


Figure3 180T、210T (C- Face)

Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					General						Bearings		C-Face				
	A	B	D	2E	2F1	2F2	BA	H	U	N-W	R	ES	S	AA	G	J	AB	O	P	DE	NDE	AJ	AK	BB	BC	BF
56	6.3	3.95	3.5	4.88	3		2.75	0.73×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT、3/4-14NPT	0.43	1.37	6.05	6.6	6.2	6204	6203	5.875	4.5	0.16	-0.19	4×3/8-16UNC
56H	6.3	5.9	3.5	4.88	3	5	2.75	0.58×0.335	0.625	1.875	0.517	1.375	0.1875	1/2-14NPT、3/4-14NPT	0.39	1.41	6.5	7.0	6.95	6205	6204	5.875	4.5	0.16	-0.19	4×3/8-16UNC
140T	6.9	5.86	3.5	5.5	4	5	2.25	0.50×0.35	0.875	2.25	0.771	1.375	0.1875	1/2-14NPT、3/4-14NPT	0.47	1.41	6.5	7.0	6.95	6205	6204	5.875	4.5	0.16	0.12	4×3/8-16UNC
180T	8.85	7.1	4.5	7.5	4.5	5.5	2.75	0.59×0.433	1.125	2.75	0.986	1.75	0.25	ϕ1.11、ϕ1.33	0.55	1.57	6.95	8.85	8.65	6306	6206	7.25	8.5	0.25	0.12	4×1/2-13UNC
210T	10.3	8.85	5.25	8.5	5.5	7	3.5	0.59×0.433	1.375	3.375	1.201	2.41	0.312	ϕ1.11、ϕ1.33	0.63	1.73	8.13	10.4	10.3	6308	6208	7.25	8.5	0.25	0.25	4×1/2-13UNC

ROYSE

NEMA ODP Single-Phase Motors Technical Data

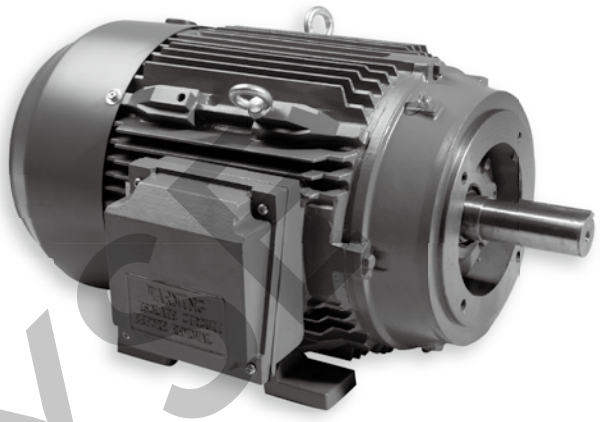
HP	Full Load Speed, RPM	Frame Size	EFF. 100% FL	Power Factor 100% FL	IFL 230V A	Full Load Torque Lb-Ft	Moment Of Inertia Lb-Ft Squared	Locked Rotor		TST TFL	TM TFL	Service Factor	Dim "C"
								KVA Code	Il/In				
1/4	3530	48、56	66.6	92	1.28	0.36	0.0121	N	9.60	3	2.6	1.15	10.0
	1735	48、56	68.5	86	1.33	0.73	0.0208	M	8.50	3.1	2.7	1.15	10.0
1/3	3530	48、56	70.5	92	1.68	0.5	0.0134	M	9.50	3	2.6	1.15	10.0
	1735	48、56	72.4	86	1.75	1.01	0.0268	L	7.90	3.1	2.7	1.15	10.0
1/2	3530	48、56	72.4	93	2.39	0.74	0.0161	M	9.40	3	2.6	1.15	10.0
	1730	48、56	76.2	88	2.40	1.51	0.0327	K	8.10	3.1	2.7	1.15	11.5
3/4	3530	48、56	76.2	93	3.37	1.10	0.0202	L	8.90	3	2.6	1.15	11.5
	1730	56H	81.8	90	3.25	2.24	0.0619	K	8.10	3	2.5	1.15	11.6
		140T											11.7
1	3530	56H	80.4	95	4.27	1.50	0.0320	L	8.9	3.3	2.6	1.15	11.6
		140T											11.7
	1740	56H	82.6	90	4.39	3.04	0.0750	K	7.8	3	2.4	1.15	12.8
		140T											12.9
1.5	3530	56H	81.5	95	6.18	2.20	0.0377	K	8.5	3.3	2.6	1.15	12.8
		140T											12.9
	1740	56H	83.8	92	6.20	4.45	0.0949	H	6.9	2.8	2.3	1.15	14.8
		140T											14.9
2	3530	56H	82.9	95	8.28	2.99	0.0413	K	8.4	3.1	2.5	1.15	12.8
		140T											12.9
	1735	56H	84.5	92	8.39	6.09	0.1080	H	6.4	2.6	2.2	1.15	14.8
		140T											14.9
3	3530	56H	84.1	96	11.8	4.39	0.0484	J	8.4	3.1	2.5	1.15	14.8
		140T											14.9
	3530	180T	80.0	96	12.5	4.39	0.1139	H	7.5	3.5	2.2	1.15	13.8
	1740	180T	82.5	94	12.3	8.91	0.2397	H	7.0	3.5	2.4	1.15	13.8
5	3530	180T	82.0	96	20.4	7.38	0.1360	H	7.0	3.5	2.2	1.15	13.8
	1740	180T	84.0	94	20.4	14.98	0.3037	G	6.4	3.2	2.2	1.15	16.1
7.5	3530	210T	84.5	98	28.9	10.98	0.3417	H	7.6	3.5	2.2	1.15	16.6
	1750	210T	82.0	96	30.4	22.14	0.9255	H	7.0	3	2.4	1.15	16.6
10	3530	210T	86.0	98	38.7	14.97	0.4438	H	8.0	3.5	2.2	1.15	16.6
	1750	210T	83.5	96	40.7	30.19	1.1106	H	7.6	2.8	2.2	1.15	19.0

ROYSL

TXC Series NEMA Premium Efficiency 3-Phase Motors

1HP thru 500 HP Cast Iron TEFC

- **143T thru 449T**

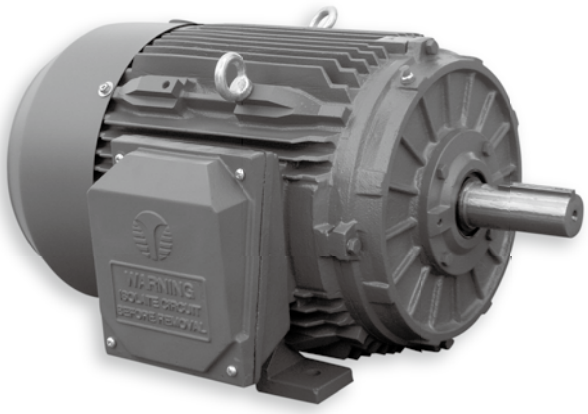


FEATURES

- 208–230/460V/60Hz or 575V/60Hz
- NEMA Service Factor 1.15/1.25
- Continuous Duty 40℃ Ambient
- TEFC (Totally Enclosed Fan Cooled)
- Class F Insulation With Class B Temp Rise
- Cast Iron frames
- NEMA Design B or C
- Ball Bearings
- IP55 Protection
- Up to 445T Available with Integral or Removable Feet

APPLICATIONS

- Pumps
- Compressors
- Fans
- Machine Tools
- Energy saving applications
- Other General Purpose Three Phase Applications



APPLICATIONS(Design C)

- Conveyors
- Gear Reducers
- Applications Requiring Design C Torque

ROYAL

NEMA EPACT & Premium Efficiency 3-Phase Cast Iron TEFC Motors

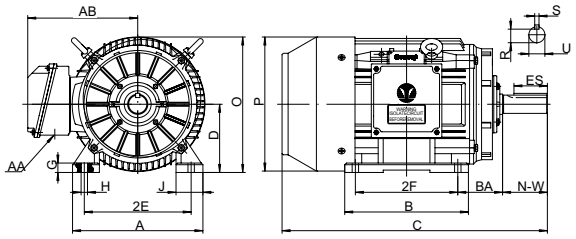


Figure 1 Foot Mounted

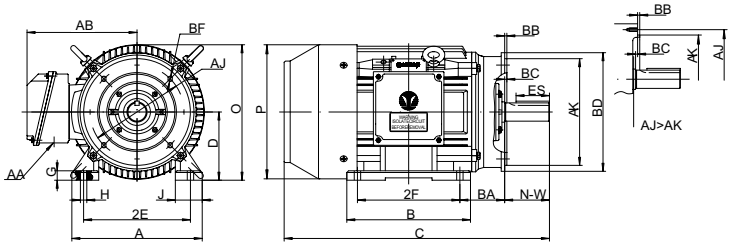


Figure 2 C-Face,Foot Mounted

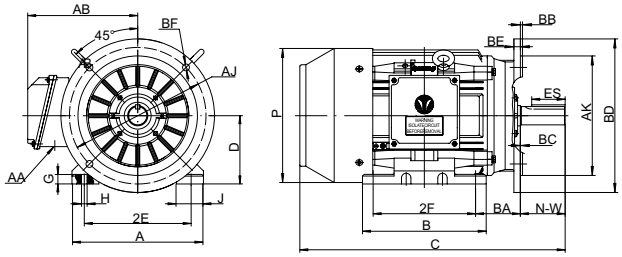


Figure 3 D-Face,Foot Mounted

Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					General					
	A	B	G	J	2E	2F	H	BA	N-W	U	S	R	ES	C	D	O	AA	AB	P
143T	7	5.12	0.55	1.46	5.5	4	0.34	2.25	2.25	0.875	0.188	0.771	1.41	13	3.5	7.01	3/4	5.9	6.93
145T		6.1				5								14					
182T	9	6.1	0.675	1.77	7.5	4.5	0.41	2.75	2.75	1.125	0.25	0.986	1.78	15.5	4.5	8.83	3/4	7.17	8.66
184T		7.09				5.5								16.5					
213T	10.27	7.48	0.71	1.81	8.5	5.5	0.41	3.5	3.38	1.375	0.312	1.201	2.42	18.78	5.25	10.35	1	7.95	10.2
215T		8.98				7								20.28					
254T	12.36	10.35	0.63	2.36	10	8.25	0.53	4.25	4	1.625	0.375	1.416	2.91	24	6.25	12.44	1-1/4	10.1	12.36
256T		12.05				10								25.73					
284T	13.8	12.2	0.985	2.95	11	9.5	0.53	4.75	4.62	1.875	0.5	1.591	3.28	27.37	7	13.9	1-1/2	10.83	13.78
286T		13.7				11								28.87					
284TS	13.8	12.2	0.985	2.95	11	9.5	0.53	4.75	3.25	1.625	0.375	1.416	1.91	26	7	13.9	1-1/2	10.83	13.78
286TS		13.7				11								27.5					
324T	15.4	13	1.12	3.15	12.5	10.5	0.66	5.25	5.25	2.125	0.5	1.845	3.91	29.8	8	15.9	2	13	15.71
326T		14.5				12								31.3					
324TS	15.4	13	1.12	3.15	12.5	10.5	0.66	5.25	3.75	1.875	0.5	1.591	2.03	28.3	8	15.9	2	13	15.71
326TS		14.5				12								29.8					
364T	17.17	14.2	1.24	3.15	14	11.25	0.66	5.88	5.88	2.375	0.625	2.021	4.28	33.47	9	18	3	14.2	18.07
365T		15.2				12.25								34.47					
364TS	17.17	14.2	1.24	3.15	14	11.25	0.66	5.88	3.75	1.875	0.5	1.591	2.03	31.34	9	18	3	14.2	18.07
365TS		15.2				12.25								32.34					
404T	19.06	17.44	1.33	3.15	16	12.25	0.81	6.62	7.25	2.875	0.75	2.45	5.65	37.76	10	20	3	15.3	19.96
405T						13.75													
405TS									4.25	2.125	0.5	1.845	2.78	34.77					
444T	21.93	20.08	1.315	3.94	18	14.5	0.81	7.5	8.5	3.375	0.875	2.88	6.91	44.05	11	22	3	18	22.01
445T						16.5													
444TS	21.93	20.08	1.315	3.94	18	14.5	0.81	7.5	4.75	2.375	0.625	2.021	3.03	40.3					
445TS						16.5													
447T	21.93	28.6	1.315	3.94	18	20	0.81	7.5	8.5	3.375	0.875	2.88	6.91	52.55	11	22	3	18	22.01
449T						25													
447TS	21.93	28.6	1.315	3.94	18	20	0.81	7.5	4.75	2.375	0.625	2.021	3.03	48.8					
449TS						25													
447T*	21.93	33.46	1.46	4.1	18	20	0.81	7.5	8.5	3.375	0.875	2.88	6.91	58.65	11	25.37	3	19.7	24.8
449T*						25													
447TS*	21.93	33.46	1.46	4.1	18	20	0.81	7.5	4.75	2.375	0.625	2.021	3.03	54.91					
449TS*						25													

Note: The frame size with an asterisk *, which external dimensions are slightly different from the conventional frame sizes 447/449.

Frame	C-Face						D-Face						
	AJ	AK	BB	BC	BD	BF	AJ	AK	BB	BC	BD	BE	BF
143-145T	5.875	4.5	0.16	0.12	6.5	4*3/8-16	10.0	9.0	0.25	0	11	0.5	4*0.53
182-184T	7.25	8.5	0.25	0.12	9	4*1/2-13	10.0	9.0	0.25	0	11	0.5	4*0.53
213-215T	7.25	8.5	0.25	0.25	8.95	4*1/2-13	10.0	9.0	0.25	0	11	0.5	4*0.53
254-256T	7.25	8.5	0.25	0.25	10	4*1/2-13	12.5	11.0	0.25	0	14	0.75	4*0.81
284-286T/TS	9	10.5	0.25	0.25	11.25	4*1/2-13	12.5	11.0	0.25	0	14	0.75	4*0.81
324-326T/TS	11	12.5	0.25	0.25	14	4*5/8-11	16.0	14.0	0.25	0	18	0.75	4*0.81
364-365T/TS	11	12.5	0.25	0.25	14	8*5/8-11	16.0	14.0	0.25	0	18	0.75	4*0.81
404-405T/TS	11	12.5	0.25	0.25	15.5	8*5/8-11	20.0	18.0	0.25	0	22	1	8*0.81
444-449T/TS	14	16	0.25	0.25	18	8*5/8-11	20.0	18.0	0.25	0	22	1	8*0.81

ROYSEL

XC Series NEMA Premium Efficiency TEFC Motor Design A Technical Data(60Hz)

HP	Full Load Speed (r/min)	NEMA Frame	Full Load Current			Eff. 100%FL	Power Factor (cosΦ)	Full Load Torque lbf–ft	KVA Code	Locked Rotor		BDT (%FL)	Service Factor	Moment of inertia ($lb*ft^2$)	Net weight (lbs)
			I_n230V (A)	I_n460V (A)	I_n575V (A)					LRA 230V (A)	LRT (%FL)				
1	3500	143T	3.0	1.5	1.2	77	0.83	1.50	K	22	220	300	1.25	0.0278	41.2
	1740	143T	3.0	1.5	1.2	85.5	0.75	3.02	J	19	280	300	1.25	0.0657	46.3
	1150	145T	3.4	1.7	1.3	82.5	0.68	4.57	H	17	200	270	1.25	0.1153	52.9
1.5	3500	143T	4.0	2.0	1.6	84	0.84	2.25	K	32	220	300	1.25	0.0373	41.9
	1740	145T	4.4	2.2	1.7	86.5	0.75	4.53	L	34	280	300	1.25	0.0885	54.0
	1175	182T	4.8	2.4	1.9	87.5	0.66	6.71	L	35	220	300	1.25	0.4286	93.7
2	3500	145T	5.2	2.6	2.1	85.5	0.85	3.00	L	47	220	300	1.25	0.0470	48.5
	1740	145T	5.6	2.8	2.2	86.5	0.78	6.04	K	42	280	300	1.25	0.1113	59.5
	1175	184T	6.2	3.1	2.5	88.5	0.68	8.94	L	46	220	300	1.25	0.5700	112.5
3	3510	182T	7.2	3.6	2.9	86.5	0.9	4.49	K	61	200	280	1.25	0.1115	82.7
	1750	182T	8.0	4.0	3.2	89.5	0.79	9.01	L	71	220	300	1.25	0.2831	94.8
	1175	213T	8.8	4.4	3.5	89.5	0.72	13.41	K	67	200	300	1.25	1.0268	147.7
5	3510	184T	11.4	5.7	4.6	88.5	0.92	7.48	K	107	200	280	1.25	0.1607	97.0
	1750	184T	12.6	6.3	5.0	89.5	0.83	15.01	K	108	220	300	1.25	0.3669	110.3
	1175	215T	13.8	6.9	5.5	89.5	0.76	22.36	K	105	200	300	1.25	1.2912	172
7.5	3520	213T	17.4	8.7	7.0	89.5	0.9	11.19	J	150	200	280	1.25	0.3479	140
	1750	213T	17.8	8.9	7.1	91.7	0.86	22.52	J	142	200	250	1.25	0.9082	159
	1170	254T	20.8	10.4	8.3	91	0.74	33.68	K	167	200	250	1.25	2.0700	247
10	3520	215T	22.6	11.3	9.0	90.2	0.92	14.93	K	214	200	280	1.25	0.4533	165
	1750	215T	23.8	11.9	9.5	91.7	0.86	30.02	J	189	200	250	1.25	1.1149	182
	1175	256T	27.8	13.9	11.1	91	0.74	44.72	K	222	200	250	1.25	2.6008	278
15	3550	254T	33.6	16.8	13.4	91	0.92	22.20	K	303	200	280	1.25	1.2283	255
	1770	254T	35.4	17.7	14.1	92.4	0.86	44.53	J	285	220	300	1.25	2.2164	279
	1180	284T	37.8	18.9	15.1	91.7	0.81	66.79	L	340	200	280	1.25	5.7264	364
20	3550	256T	45.2	22.6	18.1	91	0.91	29.60	J	379	200	280	1.25	1.3261	276
	1770	256T	46.8	23.4	18.7	93	0.88	59.37	K	424	200	300	1.25	2.7824	331
	1180	286T	49.8	24.9	19.9	91.7	0.82	89.05	K	442	200	280	1.25	6.6386	404
25	3545	284TS	56.8	28.4	22.7	91.7	0.9	37.05	H	415	200	250	1.25	1.8016	354
	1775	284T	58.2	29.1	23.3	93.6	0.86	74.00	K	545	220	300	1.25	3.5714	366
	1180	324T	62.2	31.1	24.9	93	0.81	111.32	K	559	200	280	1.25	9.3474	501
30	3550	286TS	68.0	34.0	27.2	91.7	0.9	44.40	J	598	200	250	1.25	1.9359	375
	1775	286T	69.8	34.9	27.9	93.6	0.86	88.80	K	662	220	300	1.25	4.0399	397
	1180	326T	74.6	37.3	29.8	93	0.81	133.58	K	671	200	280	1.25	10.6666	648
40	3555	324TS	91.0	45.5	36.4	92.4	0.89	59.12	H	689	200	280	1.25	3.3692	485
	1780	324T	93.6	46.8	37.5	94.1	0.85	118.07	H	680	200	220	1.25	7.1424	539
	1185	364T	92.6	46.3	37.0	94.1	0.86	177.36	K	818	220	280	1.15	15.8991	725
50	3560	326TS	111.8	55.9	44.7	93	0.9	73.79	J	939	200	280	1.25	4.0145	529
	1780	326T	115.2	57.6	46.1	94.5	0.86	147.59	J	998	200	220	1.25	8.3396	601
	1185	365T	116.0	58.0	46.3	94.1	0.86	221.69	K	1099	220	280	1.15	18.2263	792
60	3560	364TS	134	67	53	93.6	0.9	88.55	K	1252	200	280	1.15	7.2912	762
	1780	364T	136	68	54	95	0.87	177.11	K	1338	220	280	1.15	16.1862	783
	1185	404T	140	70	56	94.5	0.85	266.03	J	1104	200	230	1.15	28.8796	976
75	3560	365TS	165	82	66	93.6	0.91	110.69	G	1184	200	280	1.15	8.5000	785
	1780	365T	167.2	83.6	67	95.4	0.88	221.38	K	1675	220	280	1.15	18.9957	873
	1185	405T	173	87	69	94.5	0.86	332.54	H	1303	200	230	1.15	34.1302	1045
100	3565	405TS	222	111	88	94.1	0.9	147.38	K	2080	220	280	1.15	11.8424	1021
	1780	405T	228	114	91	95.4	0.86	295.18	L	2266	220	280	1.15	20.8694	1025
	1190	444T	230	115	92	95	0.86	441.53	H	1721	200	250	1.15	76.1733	1590
125	3570	444TS	–	134	107	95	0.92	183.97	K	2512	200	250	1.15	22.3970	1438
	1785	444T	–	138	110	95.4	0.89	367.94	K	2536	250	320	1.15	45.1563	1480
	1190	445	–	147	117	95	0.84	551.91	J	2317	200	250	1.15	84.8372	1731
150	3570	445TS	–	159	127	95	0.93	220.76	H	2652	200	250	1.15	25.9333	1544
	1785	445T	–	165	132	95.8	0.89	441.53	K	3258	250	320	1.15	55.5355	1632
	1190	447T	–	175	140	95.8	0.84	662.29	K	3072	200	250	1.15	102.6656	2042
200	3570	447TS	–	218	171	95.4	0.9	294.35	K	3840	200	250	1.15	30.7095	1859
	1785	447T	–	217	174	96.2	0.9	588.70	H	3411	250	250	1.15	71.6045	2055
	1190	449T	–	233	186	95.8	0.84	883.05	K	4091	200	250	1.15	123.7071	2245
250	3570	449TS	–	271	212	95.8	0.9	367.94	K	4781	200	250	1.15	36.8791	2024
	1785	449T	–	270	216	96.2	0.9	735.88	H	4374	250	250	1.15	85.4436	2289
	1190	449T*	–	291	233	95.8	0.84	1103.82	J	4654	200	250	1.15	150.937	2597
300	3570	449TS	–	326	261	95.8	0.9	441.53	H	5212	200	250	1.15	63.641	2271
	1785	449T	–	324	260	96.2	0.9	883.05	H	5191	250	250	1.15	97.532	2443
	1190	449T*	–	349	279	95.8	0.84	1324.58	J	5585	200	250	1.15	171.998	3025
350	3570	449TS*	–	384	307	95.8	0.89	515.11	H	6150	200	250	1.15	53.676	2602
	1785	449T*	–	387	310	96.2	0.88	1030.23	H	6194	250	250	1.15	118.256	2849
	1190	449T*	–	407	326	95.8	0.84	1545.34	J	6516	200	250	1.15	190.792	3237
400	3570	449TS*	–	439	351	95.8	0.89	588.70	H	7028	200	250	1.15	63.597	2884
	1785	449T*	–	442	354	96.2	0.88	1177.41	H	7078	250	250	1.15	130.047	3025
	1190	449T*	–	465	372	95.8	0.84	1766.11	J	7446	200	250	1.15	219.023	3554
450	3570	449TS*	–	494	395	95.8	0.89	662.29	H	7907	200	250	1.15	68.581	3025
	1785	449T*	–	498	398	96.2	0.88	1324.58	H	7963	250	250	1.15	146.554	3272
500	3570	449TS*	–	549	439	95.8	0.89	735.88	H	8785	200	250	1.15	78.500	3308
	1785	449T*	–	553	442	96.2	0.88	1471.76	H	8848	250	250	1.15	163.051	3519

Note: The frame size and external dimensions with an asterisk *, should be one–to–one correspondence relationship.

ROYAL

XC Series NEMA Premium Efficiency TEFC Motor Design B Technical Data(60Hz)

HP	Full Load Speed (r/min)	NEMA Frame	Full Load Current			Eff. 100%FL	Power Factor (cosΦ)	Full Load Torque lbf–ft	KVA Code	Locked Rotor		BDT (%FL)	Service Factor	Moment of inertia ($lb*ft^2$)	Net weight (lbs)
			I_n230V (A)	I_n460V (A)	I_n575V (A)					LRA 230V (A)	LRT (%FL)				
1	3500	143T	3.0	1.5	1.2	77	0.83	1.50	K	22	220	300	1.25	0.027765	41.23
	1740	143T	3.0	1.5	1.2	85.5	0.75	3.02	J	19	280	300	1.25	0.065733	46.31
	1150	145T	3.4	1.7	1.3	82.5	0.68	4.57	H	17	200	270	1.25	0.115330	52.92
1.5	3500	143T	4.0	2.0	1.6	84	0.84	2.25	K	32	220	300	1.25	0.037257	41.90
	1740	145T	4.4	2.2	1.7	86.5	0.75	4.53	L	34	280	300	1.25	0.088514	54.02
	1175	182T	4.8	2.4	1.9	87.5	0.66	6.71	L	35	220	300	1.25	0.428570	93.71
2	3500	145T	5.2	2.6	2.1	85.5	0.85	3.00	L	47	220	300	1.25	0.046986	48.51
	1740	145T	5.6	2.8	2.2	86.5	0.78	6.04	K	42	280	300	1.25	0.111295	59.54
	1175	184T	6.2	3.1	2.5	88.5	0.68	8.94	L	46	220	300	1.25	0.570003	112.46
3	3510	182T	7.2	3.6	2.9	86.5	0.9	4.49	K	61	200	280	1.25	0.111533	82.69
	1750	182T	7.6	3.8	3.1	89.5	0.82	9.01	K	64	220	300	1.25	0.283103	97.46
	1175	213T	8.8	4.4	3.5	89.5	0.72	13.41	K	64	200	250	1.25	1.070477	151.70
5	3510	184T	11.4	5.7	4.6	88.5	0.92	7.48	J	92	180	250	1.25	0.160655	97.02
	1750	184T	12.4	6.2	4.9	89.5	0.85	15.01	J	92	185	250	1.25	0.380635	112.90
	1175	215T	13.8	6.9	5.5	89.5	0.76	22.36	J	92	190	240	1.25	1.291169	171.99
7.5	3510	213T	17.0	8.5	6.8	89.5	0.92	11.23	H	127	180	250	1.25	0.365210	143.99
	1750	213T	19.0	9.5	7.6	91.7	0.81	22.52	H	127	180	220	1.25	1.010439	162.73
	1175	254T	20.6	10.3	8.2	91	0.75	33.54	H	127	180	220	1.25	2.507588	246.96
10	3510	215T	22.4	11.2	8.9	90.2	0.93	14.97	H	162	180	250	1.25	0.487659	173.31
	1750	215T	25.2	12.6	10.1	91.7	0.81	30.02	H	162	180	220	1.25	1.251302	193.82
	1175	256T	27.0	13.5	10.8	91	0.76	44.72	H	162	180	220	1.25	2.775741	277.83
15	3530	254T	33.6	16.8	13.4	91	0.92	22.33	G	232	180	220	1.25	1.228284	254.68
	1770	254T	34.6	17.3	13.8	92.4	0.88	44.53	G	232	180	220	1.25	2.373037	278.93
	1180	284T	40.4	20.2	16.1	91.7	0.76	66.79	G	232	180	210	1.25	6.627417	396.90
20	3530	256T	45.2	22.6	18.1	91	0.91	29.77	G	290	180	220	1.25	1.326053	275.63
	1770	256T	45.8	22.9	18.3	93	0.88	59.37	G	290	180	220	1.25	2.942328	330.75
	1180	286T	53.8	26.9	21.5	91.7	0.86	89.05	G	290	180	210	1.25	7.719726	443.21
25	3530	284TS	56.2	28.1	22.4	91.7	0.91	37.21	G	365	170	200	1.25	1.801609	353.90
	1770	284T	61.0	30.5	24.4	93.6	0.82	74.21	G	365	180	220	1.25	3.571420	366.03
	1175	324T	63.8	31.9	25.5	93	0.79	111.79	G	365	150	200	1.25	9.608188	500.54
30	3530	286TS	67.4	33.7	26.9	91.7	0.91	44.65	G	435	170	200	1.25	1.997385	381.47
	1770	286T	70.6	35.3	28.2	93.6	0.85	89.05	G	435	180	220	1.25	4.270991	416.75
	1175	326T	76.4	38.2	30.6	93	0.79	134.15	G	435	150	200	1.25	11.709987	680.24
40	3550	324TS	90.0	45.0	36.0	92.4	0.9	59.20	G	580	180	210	1.25	3.684377	509.36
	1770	324T	91.4	45.7	36.6	94.1	0.87	118.74	G	580	180	210	1.25	7.142366	539.12
	1180	364T	96.0	48.0	38.4	94.1	0.83	178.11	G	580	180	200	1.15	19.002091	809.24
50	3550	326TS	110.6	55.3	44.3	93	0.91	74.00	G	725	180	210	1.25	4.854996	593.15
	1770	326T	112.6	56.3	45.0	94.5	0.88	148.42	G	725	180	210	1.25	8.376820	617.18
	1180	365T	120.0	60.0	48.0	94.1	0.83	222.63	G	725	180	200	1.15	22.105074	895.23
60	3560	364TS	132	66	53	93.6	0.91	88.55	G	870	140	210	1.15	7.636432	782.78
	1775	364T	137.6	68.8	55	95	0.86	177.61	G	870	160	210	1.15	16.186246	782.78
	1185	404T	144	72	57	94.5	0.83	266.03	G	870	180	210	1.15	32.817436	1041.86
75	3560	365TS	165	82.5	66	93.6	0.91	110.69	G	1085	160	210	1.15	9.017539	815.85
	1775	365T	169.2	84.6	68	95.4	0.87	222.01	G	1085	160	210	1.15	18.984294	873.18
	1185	405T	180	90	72	94.5	0.83	332.54	G	1085	180	210	1.15	38.680498	1122.35
100	3560	405TS	224	112	89	94.1	0.89	147.59	G	1450	150	210	1.15	13.680082	1098.09
	1780	405T	234	117	93	95.4	0.84	295.18	G	1450	200	210	1.15	27.020820	1179.68
	1190	444T	238	119	94	95	0.83	441.53	G	1450	200	210	1.15	83.599710	1678.01
125	3560	444TS	276	137	110	95	0.9	184.49	G	1815	160	210	1.15	22.396958	1437.66
	1785	444T	276	138	110	95.4	0.89	367.94	G	1815	190	200	1.15	45.156278	1479.56
	1190	445	294	147	117	95	0.84	551.91	G	1815	200	210	1.15	93.497646	1775.03
150	3565	445TS	324	162	130	95	0.91	221.07	G	2170	160	210	1.15	30.353987	1691.24
	1785	445T	330	165	132	95.8	0.89	441.53	G	2170	200	200	1.15	57.265410	1661.47
	1190	447T	344	172	138	95.8	0.85	662.29	G	2170	200	210	1.15	111.329830	2130.03
200	3570	447TS	432	216	173	95.4	0.91	294.35	G	2900	200	210	1.15	35.120943	2006.55
	1785	447T	438	219	175	96.2	0.89	588.70	G	2900	200	200	1.15	71.604484	2055.06
	1190	449T	460	230	184	95.8	0.85	883.05	G	2900	200	210	1.15	136.084400	2376.99
250	3570	449TS	538	269	215	95.8	0.91	367.94	G	3650	200	210	1.15	45.739570	2262.33
	1785	449T	546	273	219	96.2	0.89	735.88	G	3650	200	200	1.15	88.903210	2288.79

ROYSE

NEMA EPACT Efficiency TEFC Motors Technical Data—Design C

HP	Full Load Speed (r/min)	NEMA Frame	Conn	Code	Current at 460V		Torque			Efficiency Full Load (%)
					Full Load (A)	Locked Rotor (A)	Full Load LB-FT	Locked Rotor (%)	Break Down (%)	
1	3450	143T	2Y/Y	N	1.4	15	1.5	245	225	74.0
	1720	143T	2Y/Y	N	1.7	15	3.1	285	200	73.0
	1150	145T	2Y/Y	N	2.0	15	4.6	255	225	72.0
1.5	3450	143T	2Y/Y	M	2.1	20	2.2	240	225	78.0
	1720	145T	2Y/Y	M	2.4	20	4.5	285	200	77.0
	1150	182T	2Y/Y	M	2.6	20	6.8	250	225	72.0
2	3450	145T	2Y/Y	L	2.8	25	3.0	240	225	79.0
	1720	145T	2Y/Y	L	3.1	25	6.1	285	200	78.5
	1150	184T	2Y/Y	L	3.3	25	9.2	250	225	78.5
3	3450	182T	2Y/Y	K	4.0	32	4.5	240	225	80.0
	1720	182T	2Y/Y	K	4.3	32	9.0	270	200	82.5
	1150	213T	2Y/Y	K	4.7	32	13.5	250	225	81.5
5	3450	184T	2Y/Y	J	6.4	46	7.5	240	200	82.0
	1720	184T	2Y/Y	J	6.9	46	15.2	255	200	82.5
	1150	215T	2Y/Y	J	8.3	46	22.6	250	200	82.5
7.5	3450	213T	2Y/Y	H	9.4	64	11.2	215	200	83.0
	1720	213T	2Y/Y	H	9.9	64	22.5	250	200	84.0
	1150	254T	2Y/Y	H	11.2	64	33.8	225	190	86.5
10	3450	215T	2Y/Y	H	12.2	81	15.0	215	190	84.0
	1720	215T	2Y/Y	H	13.0	81	30.5	250	200	84.0
	1150	256T	2Y/Y	H	15.0	81	45.0	225	190	86.5
15	3450	254T	2△/△	G	18.4	116	22.5	200	180	87.0
	1720	254T	2△/△	G	19.7	116	45.4	225	200	87.5
	1150	284T	2△/△	G	20.3	116	66.8	210	190	88.5
20	3450	256T	2△/△	G	23.1	145	29.8	180	180	86.5
	1720	256T	2△/△	G	24.7	145	60.0	200	200	87.5
	1150	286T	2△/△	G	25.8	145	89.4	200	190	88.5
25	3450	284TS	2△/△	G	28.9	183	37.2	200	190	89.5
	1720	284T	2△/△	G	29.6	183	74.2	200	190	89.5
	1150	324T	2△/△	G	31.9	183	111.3	200	190	89.5
30	3450	286TS	2△/△	G	34.5	218	44.4	200	190	91.0
	1720	286T	2△/△	G	35.5	218	89.1	200	190	91.0
	1150	326T	2△/△	G	38.0	218	133.6	200	190	91.0
40	3450	324TS	2△/△	G	46.5	290	59.1	200	190	90.2
	1720	324T	2△/△	G	47.1	290	118.7	200	190	91.0
	1150	364T	2△/△	G	48.4	290	178.1	200	190	91.0
50	3450	326TS	2△/△	G	58.4	363	73.8	200	190	91.0
	1720	326T	2△/△	G	59.2	363	148.4	200	190	91.7
	1150	365T	2△/△	G	60.5	363	222.6	200	190	91.0
60	3450	364TS	2△/△	G	64.5	435	88.6	200	190	91.7
	1720	364T	2△/△	G	69.4	435	177.6	200	190	91.7
	1150	404T	2△/△	G	70.2	435	266.0	200	190	91.7
75	3450	365TS	2△/△	G	84.3	543	110.0	200	190	91.7
	1720	365T	2△/△	G	86.2	543	222.0	200	190	92.4
	1150	405T	2△/△	G	87.7	543	333.0	200	190	91.7
100	3450	405TS	2△/△	G	100.2	725	147.2	200	190	91.8
	1720	405T	2△/△	G	114.0	725	295.2	200	190	92.4
	1150	444T	2△/△	G	116.0	725	445.2	200	190	91.7
125	3450	444TS	2△/△	G	137.0	908	183.7	200	190	92.4
	1720	444T	2△/△	G	141.0	908	368.3	200	190	92.4
	1150	445T	2△/△	G	145.0	908	556.5	200	190	92.4
150	3450	445TS	2△/△	G	164.0	1085	220.4	200	190	93.0
	1720	445T	2△/△	G	169.0	1085	442.0	200	190	93.0
	1150	447T	2△/△	G	170.0	1085	668.0	200	190	92.4
200	3450	447TS	△	G	215.0	1450	294.0	200	190	93.6
	1720	447T	△	G	223.0	1450	589.3	200	190	93.0

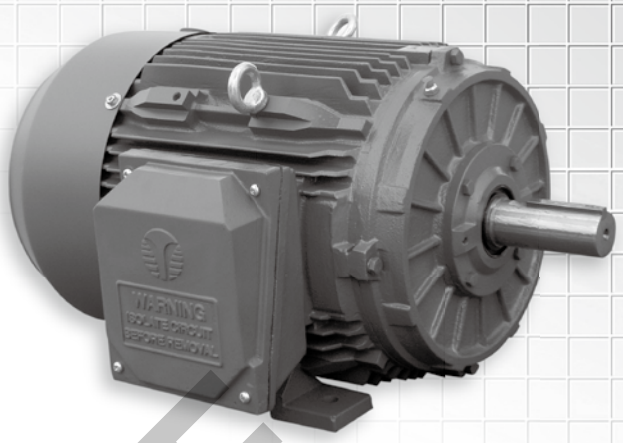
ROYSE

Crusher Duty Motors

75HP thru 200HP Cast Iron TEFC

STANDARD FEATURES

- NEMA Design "C"
- 6 Lead – 460V
- Drive–end Roller Bearings
- Oversized Bearings on DE & ODE
- 4140 Carbon Steel Shaft
- Split Conduit Box is 90° Rotatable
- F1 to F2 Field Convertible (Shipped F1)



Crusher Duty Motors Technical Data

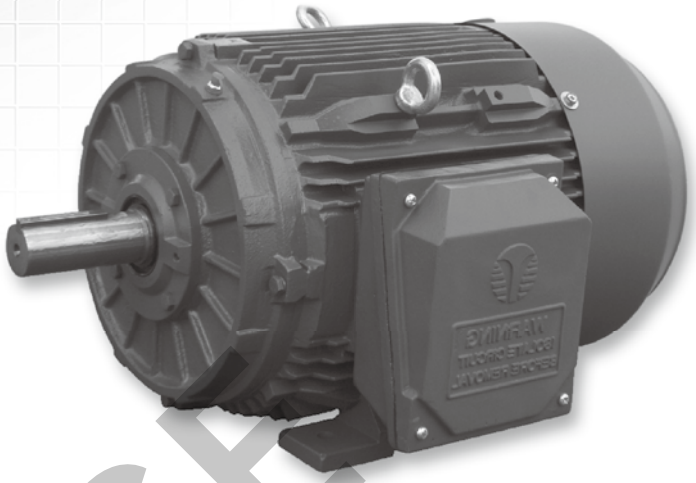
Model	Frame	HP	RPM	SF	Volt-age	Hz	FLA	KVA Code	PF	Eff		DES	Ins Class	AMB	Enc	IP	LRA	LRT	BDT	Duty	Bearings	
										FL	3/4						460V	(%FL)	(%FL)		DE	NDE
TFC365T75U4B	365T	75	1775	1.15	460	60	85.8	K	87.0	94.1	93.5	C	F	40	TEFC	55	755	330	285	Cont.	NU313	6313 C3
TFC405T100U4B	405T	100	1780	1.15	460	60	115.2	H	86.0	94.5	94.3	C	F	40	TEFC	55	864	225	300	Cont.	NU316	6314 C3
TFC405T75U6B	405T	75	1185	1.15	460	60	88.3	J	85.0	93.6	93.8	C	F	40	TEFC	55	741	275	290	Cont.	NU316	6314 C3
TFC444T125U4B	444T	125	1780	1.15	460	60	142.4	K	87.0	94.5	94.4	C	F	40	TEFC	55	1281	265	380	Cont.	NU319	6319 C3
TFC445T150U4B	445T	150	1780	1.15	460	60	168.0	J	88.0	95.0	94.6	C	F	40	TEFC	55	1378	240	290	Cont.	NU319	6319 C3
TFC444T100U6B	444T	100	1180	1.15	460	60	115.7	J	86.0	94.1	94.0	C	F	40	TEFC	55	902	230	245	Cont.	NU319	6319 C3
TFC445T125U6B	445T	125	1180	1.15	460	60	144.6	J	86.0	94.1	94.1	C	F	40	TEFC	55	1128	275	240	Cont.	NU319	6319 C3
TFC447T200U4B	447T	200	1780	1.15	460	60	221.5	J	89.0	95.0	94.7	C	F	40	TEFC	55	1883	275	295	Cont.	NU319	6319 C3
TFC447T250U4B	449T	250	1780	1.15	460	60	273.8	H	90.0	95.0	94.7	C	F	40	TEFC	55	2163	256	265	Cont.	NU319	6319 C3
TFC447T150U6B	447T	150	1180	1.15	460	60	171.9	J	86.0	95.0	94.5	C	F	40	TEFC	55	1410	260	245	Cont.	NU319	6319 C3
TFC449T200U6B	449T	200	1180	1.15	460	60	226.6	J	87.0	95.0	94.5	C	F	40	TEFC	55	1813	240	245	Cont.	NU319	6319 C3

ROYSE

TOC Series Oil Pumper Motors

3HP thru 125HP Design D foot mounted

- **213T thru 445T**
- **Cast Iron TEFC**



FEATURES

- Two–part epoxy paint,
- Moisture–resistant insulation,
- Shaft slinger, F2 position conduit box.

APPLICATIONS

- Oil field pumps and applications requiring high torque & high slip

TOC Oil Pumper Motors Technical Data

Model	Frame	HP	RPM	SF	Voltage	Hz	FLA	FLA	KVA Code	PF	Eff		DES	Ins Class	AMB	IP	FLA	FLA	LRA	LRT	BDT	Duty	Bearing	
							230V	460V			FL	3/4					208V	796V	230V	(%FL)	(%FL)		DE	NDE
TOC213T3U6B	213T	3	1123	1.15	230/460	60	8.8	4.4	J	77.0	82.7	83.2	D	F	40	55	9.7	2.53	54.6	325	345	Cont.	6308ZZ	
TOC215T5U6B	215T	5	1115	1.15	230/460	60	13.6	6.8	J	81.0	84.3	85.5	D	F	40	55	15.1	3.95	90.7	345	320	Cont.	6308ZZ	
TOC254T7.5U6B	254T	7.5	1110	1.15	230/460	60	20.4	10.2	G	83.0	84.0	85.4	D	F	40	55	22.6	5.91	117.3	280	230	Cont.	6309 C3	
TOC256T10U6B	256T	10	1138	1.15	230/460	60	26	13	H	83.0	87.0	87.3	D	F	40	55	28.8	7.53	160.2	278	250	Cont.	6309 C3	
TOC284T15U6B	284T	15	1139	1.15	230/460	60	38.2	19.1	G	84.0	87.7	87.9	D	F	40	55	42.3	11.05	229.6	285	250	Cont.	6311 C3	
TOC286T20U6B	286T	20	1115	1.15	230/460	60	49.6	24.8	G	88.0	86.4	87.9	D	F	40	55	54.8	14.32	286.7	300	270	Cont.	6311 C3	
TOC324T25U6B	324T	25	1135	1.15	230/460	60	60	30	F	86.0	90.7	91.4	D	F	40	55	66.5	17.38	334.2	345	320	Cont.	6312 C3	
TOC326T30U6B	326T	30	1136	1.15	230/460	60	71	35.5	F	86.0	91.1	91.9	D	F	40	55	78.5	20.51	390.5	290	360	Cont.	6312 C3	
TOC364T40U6B	364T	40	1135	1.15	230/460	60	92	46	F	89.0	91.5	92.5	D	F	40	55	101.8	26.60	562.1	278	280	Cont.	6313 C3	
TOC365T50U6B	365T	50	1138	1.15	230/460	60	111	55.5	F	91.0	91.9	92.8	D	F	40	55	122.8	32.09	691.5	285	250	Cont.	6313 C3	
TOC404T60U6B	404T	60	1135	1.15	230/460	60	135.2	67.6	F	90.0	92.0	93.0	D	F	40	55	149.5	39.07	830.1	280	280	Cont.	6316 C3	6314 C3
TOC405T75U6B	405T	75	1135	1.15	230/460	60	164	82	G	91.0	92.2	93.0	D	F	40	55	181.5	47.43	1067.6	278	285	Cont.	6316 C3	6314 C3
TOC444T100U6B	444T	100	1138	1.15	230/460	60	223.6	111.8	G	91.0	92.5	93.2	D	F	40	55	247.5	64.67	1442.2	280	300	Cont.	6319 C3	
TOC445T125U6B	445T	125	1139	1.15	230/460	60	279.2	139.6	G	91.0	92.6	93.2	D	F	40	55	308.7	80.67	1803.6	280	300	Cont.	6319 C3	

ROYSE

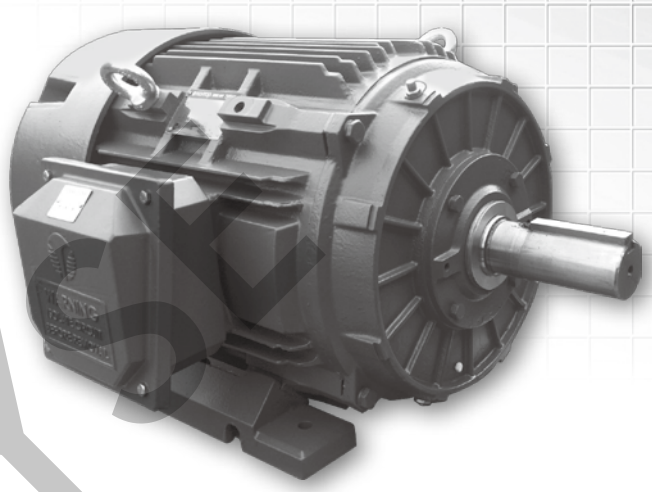
TXC IEEE-841 Three-Phase Motor Petrochem motor-NEMA premium efficiency

Description

TXC NEMA Premium motors meet or exceed all NEMA Premium requirements for energy efficiency. These TXC IEEE 841 NEMA Premium efficiency mill and chemical duty motors are specially suited for pulp and paper mills, Steel mills and applications requiring severe duty long life motors.

Applications

- Pumping applications
- Pulp and paper mills
- Petrochemical



Standard Features

- Three-phase, 2, 4, 6pole, 60Hz
- Voltage: 460 or 575V(3 wire)
- Totally enclosed fan cooled (TEFC)
- Degree of protection: IP55
- Class: “F” insulation (“B” Temperature rise at full load)
- 104°F (40℃) ambient temperature

Service Factor:

- -1.25-up to 100 HP, -1.15-from 125HP and up
- Squirrel cage rotor/ Aluminum die cast
- 143T up to 449T cast iron frame
- All cast iron reinforced construction: frame, endshields, terminal box and fan cover
- F1 mounting
- Stainless steel nameplate
- Labyrinth type oil seal on drive end and opposite drive end
- External paint: Epoxy polyamide enamel, meets 240h salt spray as per ASTM B117-03
- Internal corrosion resistant epoxy finish
- Regreasable ball bearings D.E. and O.D.E
- Grease outlet through the fan cover
- High tensile steel shaft (for frame 404T and up -4 poles and up)
- Fan: Conductive plastic or Bronze
- “T” type stainless steel condensate drain
- Balance quality grade G1
- Solid milled feet
- Foot flatness 0.005 in (0.127 mm)
- Hex-head bolts or socket-head cap screws and organometallic surface lining
- Stainless steel grease inlet extension
- Minimum Bearing life L10h:50,000 hours for directed-connected loads and 26,280 hours belted

Optional Features

- Special voltages
- Specialty designed shaft
- Space heaters
- Additional terminal box
- Drip cover(canopy) for shaft down applications
- Cable glands
- Terminal block
- Flange mounting
- Roller bearings

Notes

All motors supplied with IEEE 841 Test ReportALL TECHTOP motors are energy efficiency verified by UL addition to the DOE

PROYA

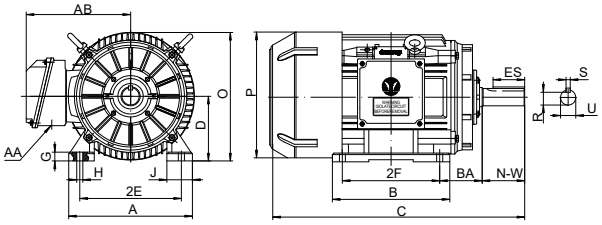


Figure1 NEMA Foot Mounted

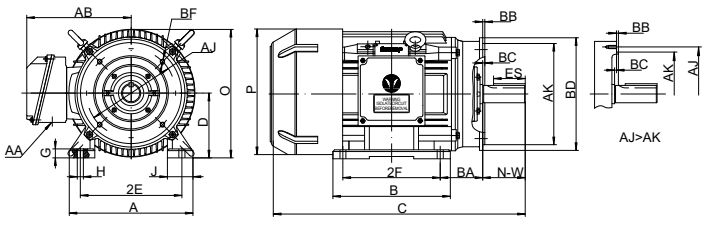


Figure2 NEMA C-Face Foot Mounted

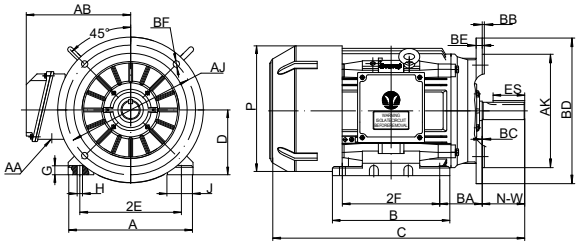


Figure2 NEMA D-Face Foot Mounted

Overall & Installation Dimensions

Frame	Foot Mounting								Shaft					General					
	A	B	G	J	2E	2F	H	BA	N–W	U	S	R	ES	C	D	O	AA	AB	P
143T	7	5.12	0.55	1.46	5.5	4	0.34	2.25	2.25	0.875	0.188	0.771	1.41	13.38	3.5	7.01	3/4	5.69	7.25
145T		6.1				5								14.38					
182T	9	6.1	0.675	1.77	7.5	4.5	0.41	2.75	2.75	1.125	0.25	0.986	1.78	15.9	4.5	8.83	3/4	7.37	9.06
184T		7.09				5.5								16.9					
213T	10.27	7.48	0.71	1.81	8.5	5.5	0.41	3.5	3.38	1.375	0.312	1.201	2.42	19.1	5.25	10.35	1	8.13	10.63
215T		8.98				7								20.6					
254T	12.36	10.35	0.63	2.36	10	8.25	0.53	4.25	4	1.625	0.375	1.416	2.91	24.28	6.25	12.44	1–1/4	10.24	12.68
256T		12.05				10								25.98					
284T	13.8	12.2	0.985	2.95	11	9.5	0.53	4.75	4.62	1.875	0.5	1.591	3.28	27.73	7	13.9	1–1/2	10.91	14.53
286T		13.7				11								29.23					
284TS	13.8	12.2	0.985	2.95	11	9.5	0.53	4.75	3.25	1.625	0.375	1.416	1.91	26.36	7	13.9	1–1/2	10.91	14.53
286TS		13.7				11								27.86					
324T	15.4	13	1.12	3.15	12.5	10.5	0.66	5.25	5.25	2.125	0.5	1.845	3.91	30.2	8	15.9	2	13	16.06
326T		14.5				12								31.7					
324TS	15.4	13	1.12	3.15	12.5	10.5	0.66	5.25	3.75	1.875	0.5	1.591	2.03	28.7	8	15.9	2	13	16.06
326TS		14.5				12								30.2					
364T	17.17	14.2	1.24	3.15	14	11.25	0.66	5.88	5.88	2.375	0.625	2.021	4.28	33.83	9	18	3	15.3	18.425
365T		15.2				12.25								34.83					
364TS	17.17	14.2	1.24	3.15	14	11.25	0.66	5.88	3.75	1.875	0.5	1.591	2.03	31.7	9	18	3	15.3	18.425
365TS		15.2				12.25								32.7					
404T	19.06	17.44	1.33	3.15	16	12.25	0.81	6.62	7.25	2.875	0.75	2.45	5.65	38.75	10	20	3	16.1	20.32
405T						13.75													
405TS									4.25	2.125	0.5	1.845	2.78	35.75					
444T	21.93	20.08	1.315	3.94	18	14.5	0.81	7.5	8.5	3.375	0.875	2.88	6.91	44.52	11	22	3	17.72	22.36
445T						16.5													
444TS	21.93	20.08	1.315	3.94	18	14.5	0.81	7.5	4.75	2.375	0.625	2.021	3.03	40.77					
445TS						16.5													
447T	21.93	28.6	1.315	3.94	18	20	0.81	7.5	8.5	3.375	0.875	2.88	6.91	53.02	11	22	3	17.72	22.36
449T						25													
447TS	21.93	28.6	1.315	3.94	18	20	0.81	7.5	4.75	2.375	0.625	2.021	3.03	49.27					
449TS						25													

Frame	C–Face						D–Face						
	AJ	AK	BB	BC	BD	BF	AJ	AK	BB	BC	BD	BE	BF
143–145T	5.875	4.5	0.16	0.12	6.5	4*3/8–16	10.0	9.0	0.25	0	11	0.5	4*0.53
182–184T	7.25	8.5	0.25	0.12	9	4*1/2–13	10.0	9.0	0.25	0	11	0.5	4*0.53
213–215T	7.25	8.5	0.25	0.25	8.95	4*1/2–13	10.0	9.0	0.25	0	11	0.5	4*0.53
254–256T	7.25	8.5	0.25	0.25	10	4*1/2–13	12.5	11.0	0.25	0	14	0.75	4*0.81
284–286T/TS	9	10.5	0.25	0.25	11.25	4*1/2–13	12.5	11.0	0.25	0	14	0.75	4*0.81
324–326T/TS	11	12.5	0.25	0.25	14	4*5/8–11	16.0	14.0	0.25	0	18	0.75	4*0.81
364–365T/TS	11	12.5	0.25	0.25	14	8*5/8–11	16.0	14.0	0.25	0	18	0.75	4*0.81
404–405T/TS	11	12.5	0.25	0.25	15.5	8*5/8–11	20.0	18.0	0.25	0	22	1	8*0.81
444–449T/TS	14	16	0.25	0.25	18	8*5/8–11	20.0	18.0	0.25	0	22	1	8*0.81

ROYSEL

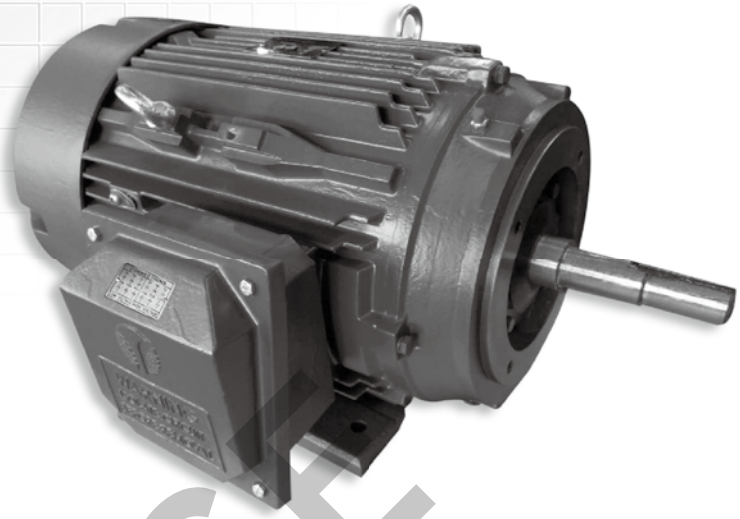
IEEE-841 NEMA Premium Efficiency TEFC Motor Design B Technical Data(60Hz)

HP	Full Load Speed (r/min)	NEMA Frame	Full Load Current		Eff. 100%FL	Power Factor (cosΦ)	Full Load Torque lbf–ft	KVA Code	Locked Rotor		BDT (%FL)	Service Factor	Moment of inertia ($lb*ft^2$)	Net weight (lbs)
			I_n460V (A)	I_n575V (A)					LRA 230V (A)	LRT (%FL)				
1	3500	143T	1.5	1.2	77	0.83	1.50	K	22	220	300	1.25	0.027765	41.2
	1740	143T	1.5	1.2	85.5	0.75	3.02	J	19	280	300	1.25	0.065733	46.3
	1150	145T	1.7	1.3	82.5	0.68	4.57	H	17	200	270	1.25	0.115330	52.9
1.5	3500	143T	2.0	1.6	84	0.84	2.25	K	32	220	300	1.25	0.037257	41.9
	1740	145T	2.2	1.7	86.5	0.75	4.53	L	34	280	300	1.25	0.088514	54.0
	1175	182T	2.4	1.9	87.5	0.66	6.71	L	35	220	300	1.25	0.428570	93.7
2	3500	145T	2.6	2.1	85.5	0.85	3.00	L	47	220	300	1.25	0.046986	48.5
	1740	145T	2.8	2.2	86.5	0.78	6.04	K	42	280	300	1.25	0.111295	59.5
	1175	184T	3.1	2.5	88.5	0.68	8.94	L	46	220	300	1.25	0.570003	112.5
3	3510	182T	3.6	2.9	86.5	0.9	4.49	K	61	200	280	1.25	0.111533	82.7
	1750	182T	3.8	3.1	89.5	0.82	9.01	K	64	220	300	1.25	0.283103	97.5
	1175	213T	4.4	3.5	89.5	0.72	13.41	K	64	200	250	1.25	1.070477	152
5	3510	184T	5.7	4.6	88.5	0.92	7.48	J	92	180	250	1.25	0.160655	97.0
	1750	184T	6.2	4.9	89.5	0.85	15.01	J	92	185	250	1.25	0.380635	112.9
	1175	215T	6.9	5.5	89.5	0.76	22.36	J	92	190	240	1.25	1.291169	172
7.5	3510	213T	8.5	6.8	89.5	0.92	11.23	H	127	180	250	1.25	0.365210	144
	1750	213T	9.5	7.6	91.7	0.81	22.52	H	127	180	220	1.25	1.010439	163
	1175	254T	10.3	8.2	91	0.75	33.54	H	127	180	220	1.25	2.507588	247
10	3510	215T	11.2	8.9	90.2	0.93	14.97	H	162	180	250	1.25	0.487659	173
	1750	215T	12.6	10.1	91.7	0.81	30.02	H	162	180	220	1.25	1.251302	194
	1175	256T	13.5	10.8	91	0.76	44.72	H	162	180	220	1.25	2.775741	278
15	3530	254T	16.8	13.4	91	0.92	22.33	G	232	180	220	1.25	1.228284	255
	1770	254T	17.3	13.8	92.4	0.88	44.53	G	232	180	220	1.25	2.373037	279
	1180	284T	20.2	16.1	91.7	0.76	66.79	G	232	180	210	1.25	6.627417	397
20	3530	256T	22.6	18.1	91	0.91	29.77	G	290	180	220	1.25	1.326053	276
	1770	256T	22.9	18.3	93	0.88	59.37	G	290	180	220	1.25	2.942328	331
	1180	286T	26.9	21.5	91.7	0.86	89.05	G	290	180	210	1.25	7.719726	443
25	3530	284TS	28.1	22.4	91.7	0.91	37.21	G	365	170	200	1.25	1.801609	354
	1770	284T	30.5	24.4	93.6	0.82	74.21	G	365	180	220	1.25	3.571420	366
	1175	324T	31.9	25.5	93	0.79	111.79	G	365	150	200	1.25	9.608188	501
30	3530	286TS	33.7	26.9	91.7	0.91	44.65	G	435	170	200	1.25	1.997385	381
	1770	286T	35.3	28.2	93.6	0.85	89.05	G	435	180	220	1.25	4.270991	417
	1175	326T	38.2	30.6	93	0.79	134.15	G	435	150	200	1.25	11.709987	680
40	3550	324TS	45.0	36.0	92.4	0.9	59.20	G	580	180	210	1.25	3.684377	509
	1770	324T	45.7	36.6	94.1	0.87	118.74	G	580	180	210	1.25	7.142366	539
	1180	364T	48.0	38.4	94.1	0.83	178.11	G	580	180	200	1.15	19.002091	809
50	3550	326TS	55.3	44.3	93	0.91	74.00	G	725	180	210	1.25	4.854996	593
	1770	326T	56.3	45.0	94.5	0.88	148.42	G	725	180	210	1.25	8.376820	617
	1180	365T	60.0	48.0	94.1	0.83	222.63	G	725	180	200	1.15	22.105074	895
60	3560	364TS	66	53	93.6	0.91	88.55	G	870	140	210	1.15	7.636432	783
	1775	364T	68.8	55	95	0.86	177.61	G	870	160	210	1.15	16.186246	783
	1185	404T	72	57	94.5	0.83	266.03	G	870	180	210	1.15	32.817436	1042
75	3560	365TS	82.5	66	93.6	0.91	110.69	G	1085	160	210	1.15	9.017539	816
	1775	365T	84.6	68	95.4	0.87	222.01	G	1085	160	210	1.15	18.984294	873
	1185	405T	90	72	94.5	0.83	332.54	G	1085	180	210	1.15	38.680498	1122
100	3560	405TS	112	89	94.1	0.89	147.59	G	1450	150	210	1.15	13.680082	1098
	1780	405T	117	93	95.4	0.84	295.18	G	1450	200	210	1.15	27.020820	1180
	1190	444T	119	94	95	0.83	441.53	G	1450	200	210	1.15	83.599710	1678
125	3560	444TS	137	110	95	0.9	184.49	G	1815	160	210	1.15	22.396958	1438
	1785	444T	138	110	95.4	0.89	367.94	G	1815	190	200	1.15	45.156278	1480
	1190	445	147	117	95	0.84	551.91	G	1815	200	210	1.15	93.497646	1775
150	3565	445TS	162	130	95	0.91	221.07	G	2170	160	210	1.15	30.353987	1691
	1785	445T	165	132	95.8	0.89	441.53	G	2170	200	200	1.15	57.265410	1661
	1190	447T	172	138	95.8	0.85	662.29	G	2170	200	210	1.15	111.329830	2130
200	3570	447TS	216	173	95.4	0.91	294.35	G	2900	200	210	1.15	35.120943	2007
	1785	447T	219	175	96.2	0.89	588.70	G	2900	200	200	1.15	71.604484	2055
	1190	449T	230	184	95.8	0.85	883.05	G	2900	200	210	1.15	136.084400	2377
250	3570	449TS	269	215	95.8	0.91	367.94	G	3650	200	210	1.15	45.739570	2262
	1785	449T	273	219	96.2	0.89	735.88	G	3650	200	200	1.15	88.903210	2289

ROYSE

TFC Series NEMA JM JP Pump Motors

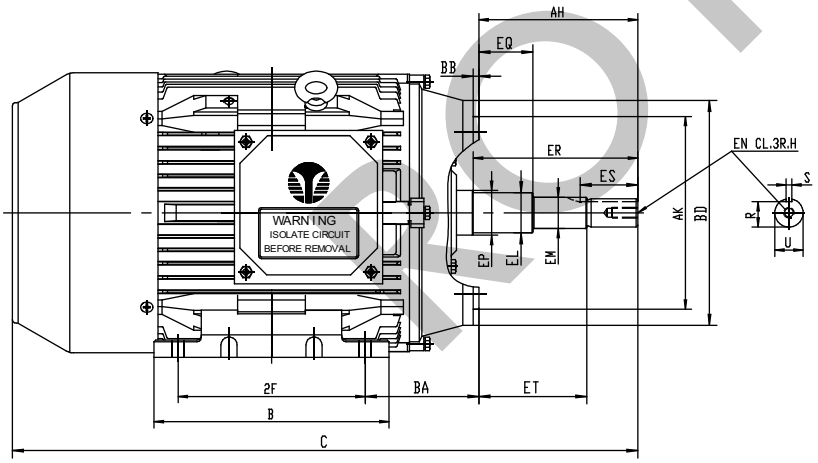
· 1HP thru 100HP

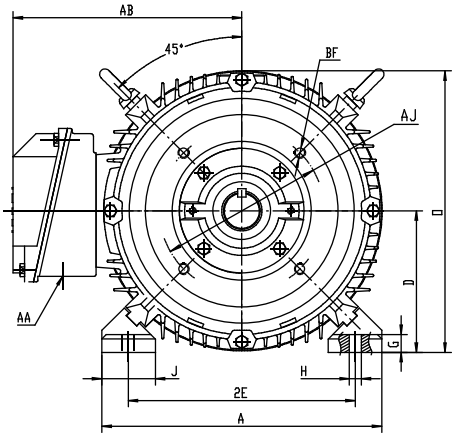


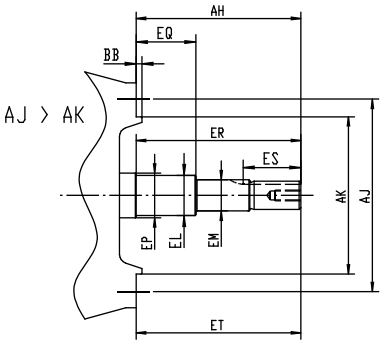
STANDARD FEATURES

- Cast Iron franes
- IP 55 Rated
- MG1 Part 31 for VFD use
- Continuous Duty
- Dual Voltage
- 40℃ Ambient Temperature Rating
- Double Lip Oil Seals
- Dual Oversized Bearings
- Multi mount Removable Feet
- Conduit Box is 90° Rotatable
- Stainless Steel Nameplate
- One–Way Brass Condensation Drains
- F1, F2, F3 Field Convertible (Shipped F1)

PROYSE







JM Pump Motors Overall & Installation Dimensions

Frame	U	AJ	AK	BB	BD max	R	S	EL	EM	EP min	AH	EQ	ER min	ES min	ET	BF			EN		
																No.	Screw SZ	Depth	Screw SZ	Depth	Thread L
143JM-	0.8745	5.875	4.500	0.156	6.62	0.771	0.190	1.156	1.0000	1.156	4.281	0.640	4.25	1.65	2.890	4	3/8-16	0.56	3/8-16	1.12	0.75
145JM	0.8740		4.497	0.125		0.756	0.188	1.154	0.9995		4.219	0.610			2.860						
182JM-	0.8745	5.875	4.500	0.156	6.62	0.771	0.190	1.250	1.0000	1.25	4.281	0.640	4.25	1.65	2.890	4	3/8-16	0.56	3/8-16	1.12	0.75
184JM	0.8740		4.497	0.125		0.756	0.188	1.248	0.9995		4.219	0.610			2.860						
213JM-	0.8745	7.25	8.500	0.312	9.0	0.771	0.190	1.250	1.0000	1.75	4.281	0.640	4.25	1.65	2.890	4	1/2-13	0.75	3/8-16	1.12	0.75
215JM	0.8740		8.497	0.250		0.756	0.188	1.248	0.9995		4.219	0.610			2.860						
254JM-	1.2495	7.25	8.500	0.312	10.0	1.112	0.190	1.750	1.3750	1.75	5.281	0.640	5.25	2.53	3.015	4	1/2-13	0.75	1/2-13	1.5	1.0
256JM	1.2490		8.497	0.250		1.097	0.188	1.748	1.3745		5.219	0.610			2.985						
284JM-	1.2495	11.0	12.500	0.312	14.0	1.112	0.252	1.750	1.3750	2.125	5.281	0.645	5.25	2.53	3.015	4	5/8-11	0.94	1/2-13	1.5	1.0
286JM	1.2490		12.495	0.250		1.097	0.250	1.748	1.3745		5.219	0.605			2.985						
324JM-	1.2495	11.0	12.500	0.312	14.0	1.112	0.252	1.750	1.3750	2.125	5.281	0.645	5.25	2.53	3.015	4	5/8-11	0.94	1/2-13	1.5	1.0
326JM	1.2490		12.495	0.250		1.097	0.250	1.748	1.3745		5.219	0.605			2.985						
364JM-	1.2495	11.0	12.500	0.312	14.0	1.112	0.252	1.750	1.3750	2.125	5.281	0.645	5.25	2.53	3.015	8	5/8-11	0.94	1/2-13	1.5	1.0
365JM	1.2490		12.495	0.250		1.097	0.250	1.748	1.3745		5.219	0.605			2.985						
404JM-	1.2495	11.0	12.500	0.312	14.0	1.112	0.252	1.750	1.3750	2.125	5.281	0.645	5.25	2.53	3.015	8	5/8-11	0.94	1/2-13	1.5	1.0
405JM	1.2490		12.495	0.250		1.097	0.250	1.748	1.3745		5.219	0.605			2.985						

Frame	Foot Mounting								General				
	A	B	G	J	2E	2F	H	BA	C	D	O	AA	AB
143JM	7	5.12	0.55	1.46	5.5	4	0.34	2.25	15.13	3.5	7.01	3/4	5.9
145JM		6.1				5			16.13				
182JM	9	6.1	0.675	1.77	7.5	4.5	0.41	3.5	17.43	4.5	8.83	3/4	7.17
184JM		7.09				5.5			18.43				
213JM	10.27	7.48	0.71	1.81	8.5	5.5	0.41	4.25	20.5	5.25	10.35	1/2	7.95
215JM		8.98				7			22				
254JM	12.36	10.35	0.63	2.36	10	8.25	0.53	4.25	25.3	6.25	12.44	1/4	10.1
256JM		12.05				10			27.05				
284JM	13.8	12.2	0.985	2.95	11	9.5	0.53	4.75	28.13	7	13.9	1/2	10.83
286JM		13.7				11			29.53				
324JM	15.4	13	1.12	3.15	12.5	10.5	0.66	5.25	29.84	8	15.9	1/2	13
326JM		14.5				12			31.34				
364JM	17.17	14.2	1.24	3.15	14	11.25	0.66	5.88	33.47	9	18	1/2	14.2
365JM		15.2				12.25			34.47				
404JM	19.06	17.44	1.33	3.15	16	12.25	0.81	6.62	35.91	10	20	3	15.3
405JM						13.75							

JP Pump Motors Overall & Installation Dimensions

Frame	U	AJ	AK	BB	BD max	R	S	EL	EM	EP min	AH	EQ	ER min	ES min	ET	BF			EN		
																No.	Screw SZ	Depth	Screw SZ	Depth	Thread L
143JP-	0.8745	5.875	4.500	0.156	6.62	0.771	0.190	1.156	1.0000	1.156	7.343	1.578	7.312	1.65	5.952	4	3/8-16	0.56	3/8-16	1.12	0.75
145JP	0.8740		4.497	0.125		0.756	0.188	1.154	0.9995		7.281	1.548			5.922						
182JP-	0.8745	5.875	4.500	0.156	6.62	0.771	0.190	1.250	1.0000	1.25	7.343	1.578	7.312	1.65	5.952	4	3/8-16	0.56	3/8-16	1.12	0.75
184JP	0.8740		4.497	0.125		0.756	0.188	1.248	0.9995		7.281	1.548			5.922						
213JP-	1.2495	7.25	8.500	0.312	9.0	1.112	0.252	1.750	1.3750	1.75	8.156	2.39	8.125	1.65	5.89	4	1/2-13	0.75	3/8-16	1.12	0.75
215JP	1.2490		8.497	0.250		1.097	0.250	1.748	1.3745		8.094	2.36			5.86						
254JP-	1.2495	7.25	8.500	0.312	10.0	1.112	0.252	1.750	1.3750	1.75	8.156	2.39	8.125	2.53	5.89	4	1/2-13	0.75	1/2-13	1.5	1.0
256JP	1.2490		8.497	0.250		1.097	0.250	1.748	1.3745		8.094	2.36			5.86						
284JP-	1.2495	11.0	12.500	0.312	14.0	1.112	0.252	1.750	1.3750	2.125	8.156	2.395	8.125	2.53	5.895	4	5/8-11	0.94	1/2-13	1.5	1.0
286JP	1.2490		12.495	0.250		1.097	0.250	1.748	1.3745		8.094	2.360			5.855						
324JP-	1.2495	11.0	12.500	0.312	14.0	1.112	0.252	1.750	1.3750	2.125	8.156	2.395	8.125	2.53	5.895	4	5/8-11	0.94	1/2-13	1.5	1.0
326JP	1.2490		12.495	0.250		1.097	0.250	1.748	1.3745		8.094	2.355			5.855						
364JP-	1.6245	11.0	12.500	0.312	14.0	1.416	0.377	2.125	1.7500	2.5	8.156	2.395	8.125	2.53	5.895	4	5/8-11	0.94	1/2-13	1.5	1.0
365JP	1.6240		12.495	0.250		1.401	0.375	2.123	1.7495		8.094	2.356			5.855						

Frame	Foot Mounting								General				
	A	B	G	J	2E	2F	H	BA	C	D	O	AA	AB
143JP	7	5.12	0.55	1.46	5.5	4	0.34	2.25	18.19	3.5	7.01	3/4	5.9
145JP		6.1				5			19.19				
182JP	9	6.1	0.675	1.77	7.5	4.5	0.41	3.5	20.49	4.5	8.83	3/4	7.17
184JP		7.09				5.5			21.49				
213JP	10.27	7.48	0.71	1.81	8.5	5.5	0.41	4.25	24.38	5.25	10.35	1/2	7.95
215JP		8.98				7			25.88				
254JP	12.36	10.35	0.63	2.36	10	8.25	0.53	4.25	28.18	6.25	12.44	1/4	10.1
256JP		12.05				10			29.93				
284JP	13.8	12.2	0.985	2.95	11	9.5	0.53	4.75	31.01	7	13.9	1/2	10.83
286JP		13.7				11			32.51				
324JP	15.4	13	1.12	3.15	12.5	10.5	0.66	5.25	32.72	8	15.9	1/2	13
326JP		14.5				12			34.22				
364JP	17.17	14.2	1.24	3.15	14	11.25	0.66	5.88	36.35	9	18	1/2	14.2
365JP		15.2				12.25			37.35				

ROYSE

JM-JP Pump Motors Technical Data

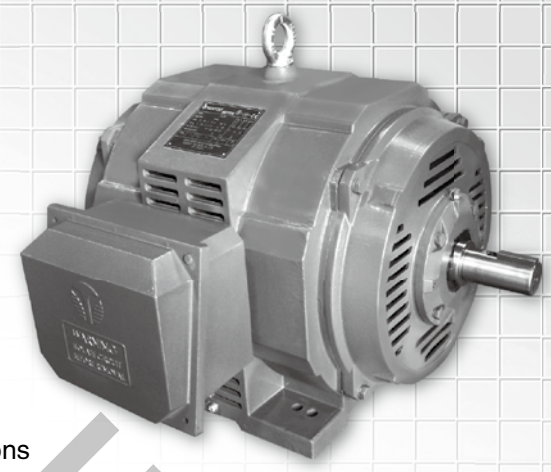
HP	Full Load Speed (r/min)	NEMA Frame	Full Load Current			Eff. 100%FL	Power Factor (cosΦ)	Full Load Torque lbf-ft	KVA Code	Locked Rotor		BDT (%FL)	Service Factor	Moment of inertia ($lb*ft^2$)
			I_n230V (A)	I_n460V (A)	I_n575V (A)					LRA 230V (A)	LRT (%FL)			
1	3450	143T	3.04	1.52	1.22	77	0.8	1.52	L	23	241	326	1.25	0.0278
	1735	143T	3.00	1.50	1.20	85.5	0.73	3.03	J	19	224	270	1.25	0.0657
	1150	145T	3.39	1.69	1.36	82.5	0.67	4.57	H	17	213	248	1.25	0.1153
1.5	3450	143T	4.00	2.00	1.61	84	0.83	2.28	K	32	312	346	1.25	0.0373
	1715	145T	4.33	2.16	1.73	86.5	0.75	4.60	L	34	311	351	1.25	0.0885
	1150	182T	4.79	2.40	1.92	87.5	0.67	6.85	L	35	256	362	1.25	0.4286
2	3450	145T	5.15	2.58	2.06	85.5	0.85	3.05	L	47	283	362	1.25	0.0470
	1730	145T	5.55	2.78	2.22	86.5	0.78	6.07	K	42	282	304	1.25	0.1113
	1150	184T	6.22	3.11	2.49	88.5	0.68	9.14	L	46	270	346	1.25	0.5700
3	3510	182T	7.30	3.65	2.92	86.5	0.89	4.49	K	62	462	328	1.25	0.1115
	1755	182T	7.95	3.97	3.18	89.5	0.79	8.98	L	71	288	384	1.25	0.2831
	1170	213T	8.84	4.42	3.54	89.5	0.71	13.47	L	68	253	336	1.25	1.0268
5	3510	184T	11.76	5.88	4.70	88.5	0.9	7.48	L	121	275	382	1.25	0.1607
	1745	184T	12.60	6.30	5.04	89.5	0.83	15.05	K	108	253	362	1.25	0.3669
	1165	215T	13.77	6.88	5.51	89.5	0.76	22.55	K	105	241	318	1.25	1.2912
7.5	3520	213T	17.24	8.62	6.90	89.5	0.91	11.19	J	149	213	319	1.25	0.3479
	1750	213T	18.23	9.12	7.29	91.7	0.84	22.52	L	181	264	383	1.25	0.9082
	1170	254T	20.31	10.15	8.12	91	0.76	33.68	J	143	214	253	1.25	2.0700
10	3520	215T	22.57	11.28	9.03	90.2	0.92	14.93	K	214	245	346	1.25	0.4533
	1750	215T	24.00	12.00	9.61	91.7	0.85	30.02	L	248	274	383	1.25	1.1149
	1170	256T	26.73	13.36	10.69	91	0.77	44.91	J	188	204	249	1.25	2.6008
15	3540	254T	35.1	17.54	14.0	91	0.88	22.26	L	345	238	363	1.25	1.2283
	1760	254T	36.2	18.10	14.5	92.4	0.84	44.78	K	329	269	344	1.25	2.2164
	1175	284T	40.3	20.15	16.1	91.7	0.76	67.07	M	410	281	268	1.25	5.7264
20	3530	256T	45.2	22.61	18.1	91	0.91	29.77	K	425	289	321	1.25	1.3261
	1760	256T	45.8	22.88	18.3	93	0.88	59.71	K	406	255	315	1.25	2.7824
	1175	286T	51.1	25.53	20.4	91.7	0.8	89.43	L	481	280	338	1.25	6.6386
25	3550	284TS	60.1	30.03	24.0	91.7	0.85	37.00	M	664	322	445	1.25	1.8016
	1770	284T	58.8	29.42	23.5	93.6	0.85	74.21	K	551	275	356	1.25	3.5714
	1180	324T	61.4	30.69	24.6	93	0.82	111.32	M	670	313	356	1.25	9.3474
30	3550	286TS	70.4	35.21	28.2	91.7	0.87	44.40	L	725	286	363	1.25	1.9359
	1770	286T	69.0	34.49	27.6	93.6	0.87	89.05	K	618	276	327	1.25	4.0399
	1180	326T	72.8	36.39	29.1	93	0.83	133.58	M	833	309	408	1.25	10.6666
40	3560	324TS	90.1	45.04	36.0	92.4	0.9	59.04	H	669	220	240	1.25	3.3692
	2770	324T	97.1	48.54	38.8	94.1	0.82	75.87	L	1004	373	343	1.25	7.1424
	1180	364T	93.6	46.82	37.5	94.1	0.85	178.11	J	778	264	287	1.15	15.8991
50	3560	326TS	113.1	56.56	45.2	93	0.89	73.79	H	853	276	291	1.25	4.0145
	1770	326T	118.0	58.98	47.2	94.5	0.84	148.42	K	1125	335	331	1.25	8.3396
	1180	365T	119.9	59.94	48.0	94.1	0.83	222.63	H	849	224	245	1.15	18.2263
60	3560	364TS	136.4	68.20	54.6	93.6	0.88	88.55	L	1451	431	359	1.15	7.2912
	1775	364T	135.9	67.97	54.4	95	0.87	177.61	L	1478	353	320	1.15	16.1862
	1185	404T	141.5	70.77	56.6	94.5	0.84	266.03	J	1113	238	242	1.15	28.8796
75	3560	365TS	166.7	83.36	66.7	93.6	0.9	110.69	K	1651	362	328	1.15	8.5000
	1775	365T	167.3	83.65	66.9	95.4	0.88	222.01	L	1727	325	378	1.15	18.9957
	1185	405T	172.8	86.41	69.1	94.5	0.86	332.54	H	1279	215	247	1.15	34.1302
100	3570	405TS	218.7	109.34	87.5	94.1	0.91	147.18	K	2110	288	306	1.15	11.8424
	1780	405T	230.9	115.47	92.4	95.4	0.85	295.18	K	2240	336	291	1.15	20.8694

ROYSF

TDC Series NEMA Premium Efficiency 3-Phase Motors

7.5HP thru 250HP

- **254T thru 449T**
- **Cast Iron ODP**



FEATURES

- Continuous Duty 40℃ Ambient
- Cast Iron frames
- Ball Bearings
- IP23 Protection

APPLICATIONS

- Pumps
- Compressors
- Fans
- Machine Tools
- Other General Purpose Three Phase Applications

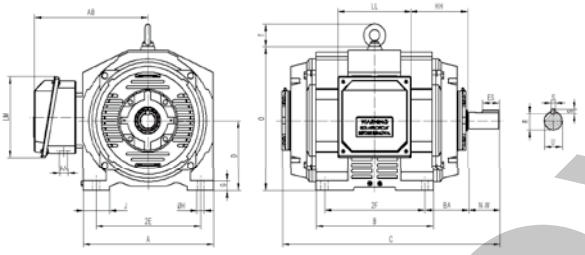


Figure 1 Foot Mounted

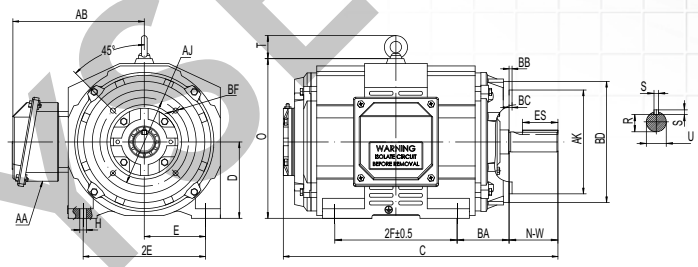


Figure 2 C-Face, Foot Mounted

Frame	FootMounting				Shaft					General						C-Face					
	2E	2F	H	BA	N-W	U	S	R	ES	C	D	O	T	AA	AB	AJ	AK	BB	BC	BD	BF
254TC	10	8.25	0.53	4.25	4	1.625	0.375	1.416	2.91	22.46	6.25	13.06	2.047	1-1/4	10.83	7.25	8.5	0.25	0.25	10	4x1/2-13
256TC		10		4.75																	
284TSC	11	9.5	0.53	4.75	3.25	1.625	0.375	1.416	1.91	23.48	7	14.87	2.441	1-1/2	11.62	9	10.5	0.25	0.25	11.25	4x1/2-13
286TSC		11																			
284TC		9.5			4.62	1.875	0.5	1.591	3.28	24.85											
286TC		11																			
324TSC	12.5	10.5	0.66	5.25	3.75	1.875	0.5	1.591	2.03	26.05	8	16.39	2.441	2	13.62	11	12.5	0.25	0.25	14	4x5/8-11
326TSC		12																			
324TC		10.5			5.25	2.125		1.845	3.91	27.55											
326TC		12																			
364TSC	14	11.25	0.66	5.88	3.75	1.875	0.5	1.591	2.03	27.29	9	19	2.835	3	15.23	11	12.5	0.25	0.25	14	8x5/8-11
365TSC		12.25																			
364TC		11.25			5.88	2.375	0.625	2.021	4.28	29.42											
365TC		12.25																			
404TSC	16	12.25	0.81	0.62	4.25	2.215	0.5	1.845	2.78	30.86	10	20.95	3.465	3	16.72	11	12.5	0.25	0.25	15.5	8x5/8-11
405TSC		13.75																			
404TC		12.25			7.25	2.875	0.75	2.45	5.65	33.86											
405TC		13.75																			
444TSC	18	14.5	0.81	7.5	4.75	2.375	0.625	2.021	3.03	35.72	11	23.09	3.465	3	18.31	14	16	0.25	0.25	18	8x5/8-11
445TSC		16.5																			
444TC		14.5			8.5	3.375	0.875	2.88	6.91	39.47											
445TC		16.5																			
447TSC		20			4.75	2.375	0.625	2.021	3.03	44.22			4.134								
449TSC		25																			
447TC		20			8.5	3.375	0.875	2.88	6.91	47.97											
449TC		25																			

ROYCE

T DC Series NEMA Motor Installation Dimensions

NEMA Frames	MOUNTING				A	B	C	D	G	J	O	T
	2E	2F	H	BA								
254T	10.00	8.25	0.53	4.25	12.44	12.00	22.46	6.25	0.78	2.36	13.06	2.047
256T		10.00										
284T	11.00	9.50	0.53	4.75	14.17	13.03	24.85	7.00	0.90	3.15	14.87	2.441
286T		11.00										
284TS		9.50					23.48					
286TS		11.00										
324T	12.50	10.50	0.66	5.25	15.59	14.06	27.55	8.00	1.11	3.15	16.39	2.441
326T		12.00										
324TS		10.50					26.05					
326TS		12.00										
364T	14.00	11.25	0.66	5.88	18.03	14.92	29.42	9.00	1.26	3.54	19.00	2.835
365T		12.25										
364TS		11.25					27.29					
365TS		12.25										
404T	16.00	12.25	0.81	6.62	19.92	16.97	33.86	10.00	1.34	3.74	20.95	3.465
405T		13.75										
404TS		12.25					30.86					
405TS		13.75										
444T	18.00	14.50	0.81	7.50	22.05	20.08	39.47	11.00	1.43	4.33	23.09	3.465
445T		16.50										
444TS		14.50					35.72					
445TS		16.50										
447T	18.00	20.00	0.81	7.50	22.05	28.58	47.97	11.00	1.43	4.33	23.09	4.134
449T		25.00										
447TS		20.00					44.22					
449TS		25.00										

NEMA Frames	KEYWAY			SHAFT		TERAINAL BOX					BEARINGS	
	S	R	ES	N–W	U	AB	HH	LL	LM	AA	D.E	N.D.E
254T	0.375	1.416	2.91	4.0	1.625	10.83	5.77	6.97	7.31	1–1/4	6309 C3	
256T												
284T	0.5	1.591	3.28	4.62	1.875	11.62	6.77	6.97	7.31	1–1/2	6311 C3	
286T												
284TS	0.375	1.416	1.91	3.25	1.625							
286TS												
324T	0.5	1.845	3.91	5.25	2.125	13.62	6.86	8.78	9.23	2	6312 C3	
326T												
324TS	0.5	1.591	2.03	3.75	1.875							
326TS												
364T	0.625	2.021	4.28	5.88	2.375	15.23	6.83	10.36	9.23	3	6313 C3	
365T												
364TS	0.5	1.591	2.03	3.75	1.875							
365TS												
404T	0.75	2.45	5.65	7.25	2.875	16.72	8.28	10.44	11.56	3	6316C3	6314C3
405T												
404TS	0.5	1.845	2.78	4.25	2.125						6314C3	
405TS												
444T	0.875	2.88	6.91	8.5	3.375	18.31	9.39	12.72	14.58	3	6319C3	6316C3
445T												
444TS	0.625	2.021	3.03	4.75	2.375						6316C3	
445TS												
447T	0.875	2.88	6.91	8.5	3.375	18.31	3.9	12.72	14.58	3	6319C3	6316C3
449T												
447TS	0.625	2.021	3.03	4.75	2.375						6316C3	
449TS												

*Dimensions in inches.

ROYSE

DC Series NEMA Premium Efficiency ODP Motor Technical Data-Design B (60Hz)

HP	Full Load Speed (r/min)	NEMA Frame	Full Load Current			Eff. 100%FL	Power Factor (cosΦ)	Full Load Torque lbf-ft	KVA Code	Locked Rotor		BDT (%FL)	Service Factor	W.T (lbs)
			I_n230V (A)	I_n460V (A)	I_n575V (A)					LRA 230V (A)	LRT (%FL)			
7.5	1170	254T	20.49	10.24	8.20	90.2	0.76	33.68	J	137	200	250	1.15	242.00
10	1170	256T	26.52	13.26	10.61	91.7	0.77	44.91	J	185	220	320	1.15	313.00
15	3540	254T	35.39	17.69	14.16	90.2	0.88	22.26	K	310	240	300	1.15	249.00
	1760	254T	35.96	17.98	14.38	93.0	0.84	44.78	J	300	260	330	1.15	273.00
	1175	284T	40.30	20.15	16.12	91.7	0.76	67.07	L	360	280	330	1.15	404.00
20	3530	256T	45.23	22.61	18.09	91.0	0.91	29.77	H	350	240	240	1.15	315.00
	1760	256T	45.76	22.88	18.31	93.0	0.88	59.71	J	400	280	310	1.15	370.00
	1175	286T	50.67	25.33	20.27	92.4	0.8	89.43	J	400	240	330	1.15	438.00
25	3550	284TS	60.06	30.03	24.02	91.7	0.85	37.00	H	415	280	330	1.15	394.00
	1770	284T	58.84	29.42	23.54	93.6	0.85	74.21	H	425	250	350	1.15	406.00
	1180	324T	61.39	30.69	24.56	93	0.82	111.32	J	460	300	380	1.15	546.00
30	3550	286TS	70.42	35.21	28.17	91.7	0.87	44.40	H	525	260	360	1.15	409.00
	1770	286T	68.62	34.31	27.45	94.1	0.87	89.05	H	520	260	360	1.15	431.00
	1180	326T	72.31	36.16	28.93	93.6	0.83	133.58	H	500	280	370	1.15	556.00
40	3560	324TS	90.07	45.04	36.03	92.4	0.9	59.04	H	650	270	320	1.15	530.00
	1770	324T	97.07	48.54	38.83	94.1	0.82	118.74	J	720	300	340	1.15	584.00
	1180	364T	93.65	46.82	37.46	94.1	0.85	178.11	H	700	250	270	1.15	736.50
50	3560	326TS	113.12	56.56	45.25	93.0	0.89	73.79	H	850	280	300	1.15	541.00
	1770	326T	117.95	58.98	47.18	94.5	0.84	148.42	J	960	300	340	1.15	606.00
	1180	365T	119.88	59.94	47.95	94.1	0.83	222.63	H	800	280	340	1.15	792.00
60	3560	364TS	136.41	68.20	54.56	93.6	0.88	88.55	H	1000	300	330	1.15	772.00
	1775	364T	135.94	67.97	54.38	95	0.87	177.61	H	1052	280	300	1.15	793.80
	1185	404T	141.54	70.77	56.62	94.5	0.84	266.03	H	1000	200	240	1.15	1019.00
75	3560	365TS	166.72	83.36	66.69	93.6	0.9	110.69	H	1150	300	330	1.15	842.00
	1775	365T	168.00	84.00	67.20	95	0.88	222.01	H	1183	280	370	1.15	863.00
	1185	405T	172.81	86.41	69.13	94.5	0.86	332.54	H	1200	200	240	1.15	1089.00
100	3570	405TS	219.85	109.93	87.94	93.6	0.91	147.18	H	1675	300	300	1.15	1025.00
	1780	405T	230.93	115.47	92.37	95.4	0.85	295.18	H	1700	280	320	1.15	1030.00
	1180	444T	229.21	114.60	91.68	95	0.86	445.27	H	1620	180	200	1.15	1656.00
125	3575	444TS	276.39	138.20	110.56	94.1	0.9	183.71	J	2200	300	400	1.15	1504.00
	1780	444T	278.82	139.41	111.53	95.4	0.88	368.97	J	2260	300	350	1.15	1546.00
	1180	445T	286.51	143.25	114.60	95	0.86	556.59	J	2230	175	200	1.15	1797.00
150	3575	445TS	331.67	165.84	132.67	94.1	0.9	220.45	H	2400	250	230	1.15	1610.00
	1780	445T	333.19	166.60	133.28	95.8	0.88	442.77	H	2430	270	290	1.15	1698.00
	1180	447T	340.94	170.47	136.38	95.8	0.86	667.90	H	2480	160	200	1.15	1921.00
200	3575	447TS	438.04	219.02	175.22	95	0.9	293.94	H	3350	200	230	1.15	1738.00
	1780	447T	439.26	219.63	175.71	95.8	0.89	590.36	H	3420	275	200	1.15	1934.00
	1180	449T	451.25	225.62	180.50	95.4	0.87	890.54	H	3360	160	200	1.15	2123.00
250	3575	449TS	547.55	273.78	219.02	95	0.9	367.42	H	4100	200	200	1.15	1954.00
	1780	449T	549.08	274.54	219.63	95.8	0.89	737.95	H	4150	200	210	1.15	2220.00

ROYSE

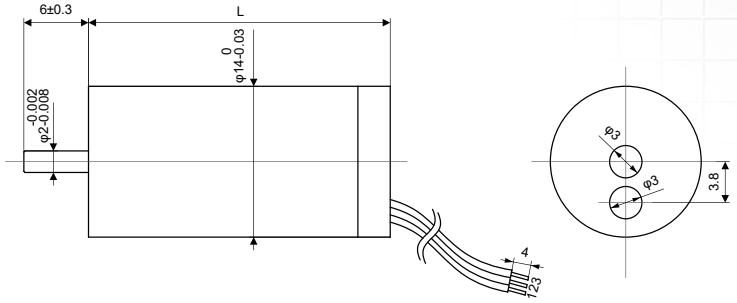
ECHTOP®

DC MOTOR

ROYSE

SL-14 Series

Brushless & Slotless DC Motors



Dimension SL-1428 SL-1435

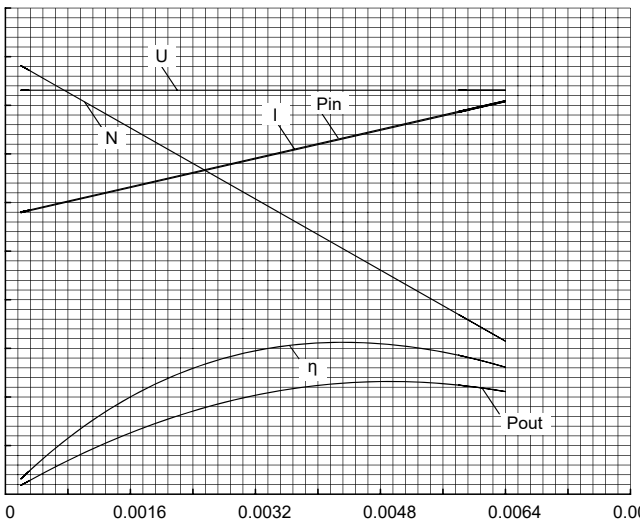
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
SL-1428	10	0.13	20000	31%	0.0064	3.24	28	0.015
SL-1435	24	0.15	20000	30%	0.0063	3.07	35	0.020

※ Controller is requested for motor running

Curve (SL-1428-10V)

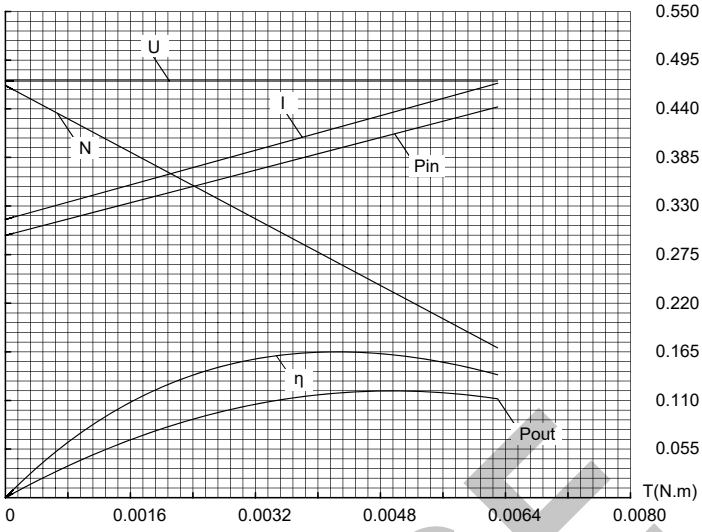
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
14000	14.0	12.0	1.40	14.0	100
12600	12.6	10.8	1.26	12.6	90
11200	11.2	9.6	1.12	11.2	80
9800	9.8	8.4	0.98	9.8	70
8400	8.4	7.2	0.84	8.4	60
7000	7.0	6.0	0.70	7.0	50
5600	5.6	4.8	0.56	5.6	40
4200	4.2	3.6	0.42	4.2	30
2800	2.8	2.4	0.28	2.8	20
1400	1.4	1.2	0.14	1.4	10



ROYSE

Curve (SL-1435-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
14000	14.0	28.0	0.550	14.0	100
12600	12.6	25.2	0.495	12.6	90
11200	11.2	22.4	0.440	11.2	80
9800	9.8	19.6	0.385	9.8	70
8400	8.4	16.8	0.330	8.4	60
7000	7.0	14.0	0.275	7.0	50
5600	5.6	11.2	0.220	5.6	40
4200	4.2	8.4	0.165	4.2	30
2800	2.8	5.6	0.110	2.8	20
1400	1.4	2.8	0.055	1.4	10



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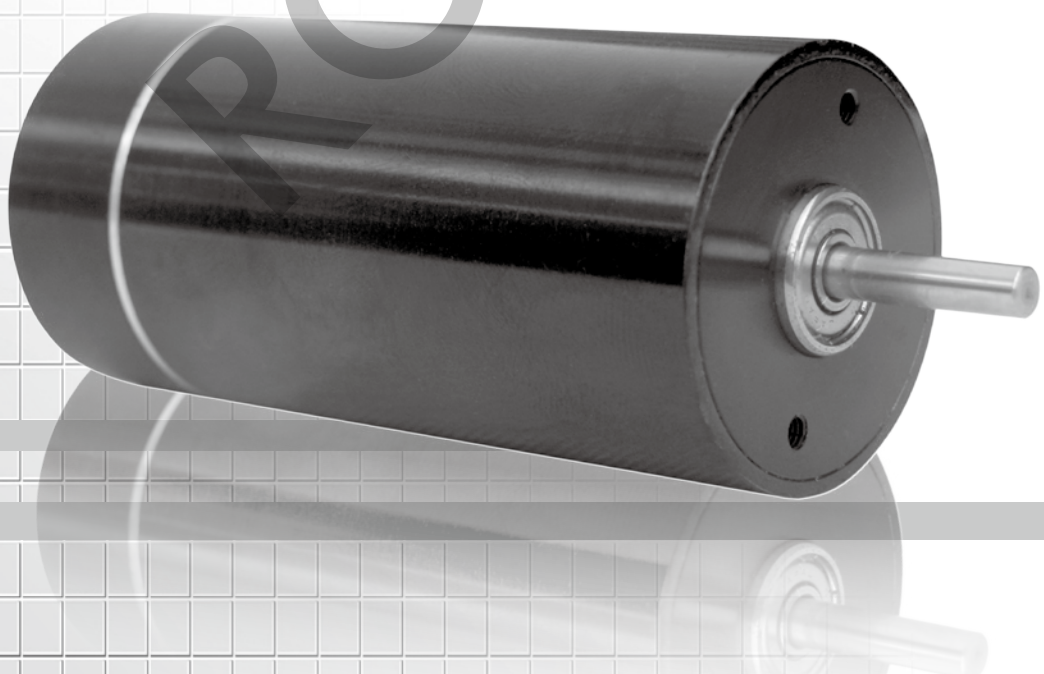
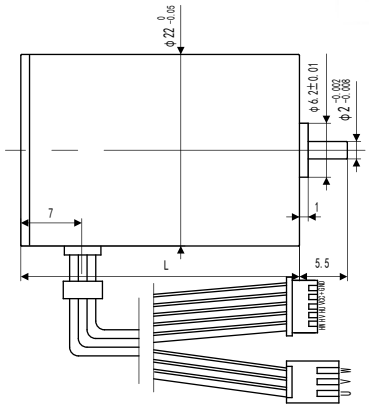
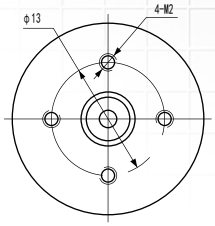


SL-22 Series

Brushless & Slotless DC Motors





Dimension SL-2232 SL-2238 SL-2243 SL-2286

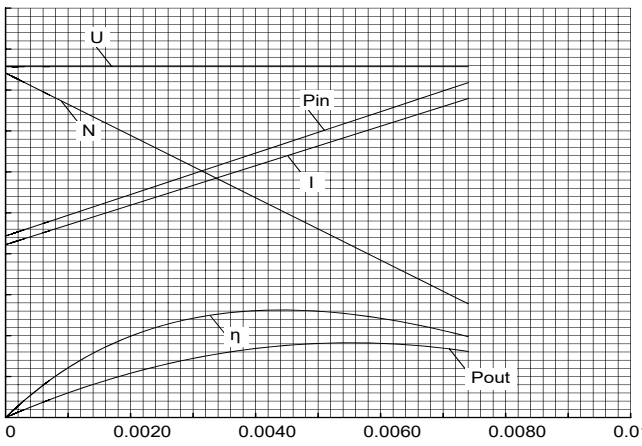
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
SL-2232	24	0.15	10000	26%	0.0074	2.92	32	0.045
	12	0.13	6500	39%	0.0075	1.54	32	0.050
SL-2238	12	0.2	7500	38%	0.0078	2.19	38	0.060
SL-2243	24	0.22	40000	54%	0.0189	11.08	43	0.065
controller built-in ↙								
SL-2286	12	0.13	5500	28%	0.0049	0.91	86	0.065
	24	0.17	11000	32%	0.0083	3.44	86	0.065

※ Controller is requested for motor running

Curve (SL-2232-24V)

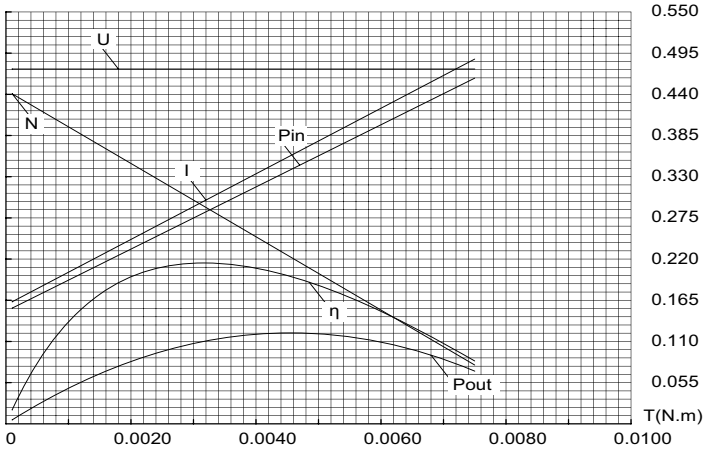
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
12000	16.0	28.0	0.70	16.0	100
10800	14.4	25.2	0.63	14.4	90
9600	12.8	22.4	0.56	12.8	80
8400	11.2	19.6	0.49	11.2	70
7200	9.6	16.8	0.42	9.6	60
6000	8.0	14.0	0.35	8.0	50
4800	6.4	11.2	0.28	6.4	40
3600	4.8	8.4	0.21	4.8	30
2400	3.2	5.6	0.14	3.2	20
1200	1.6	2.8	0.07	1.6	10



ROYSE

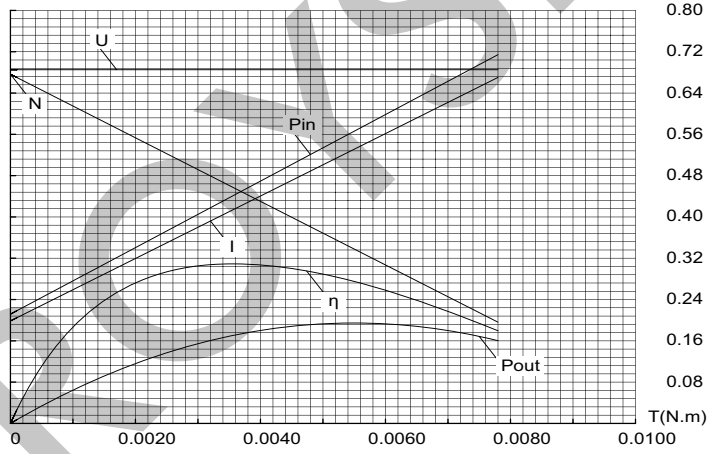
Curve (SL-2232-12V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
8000	7.0	14.0	0.550	7.0	100
7200	6.3	12.6	0.495	6.3	90
6400	5.6	11.2	0.440	5.6	80
5600	4.9	9.8	0.385	4.9	70
4800	4.2	8.4	0.330	4.2	60
4000	3.5	7.0	0.275	3.5	50
3200	2.8	5.6	0.220	2.8	40
2400	2.1	4.2	0.165	2.1	30
1600	1.4	2.8	0.110	1.4	20
800	0.7	1.4	0.055	0.7	10



Curve (SL-2238-12V)

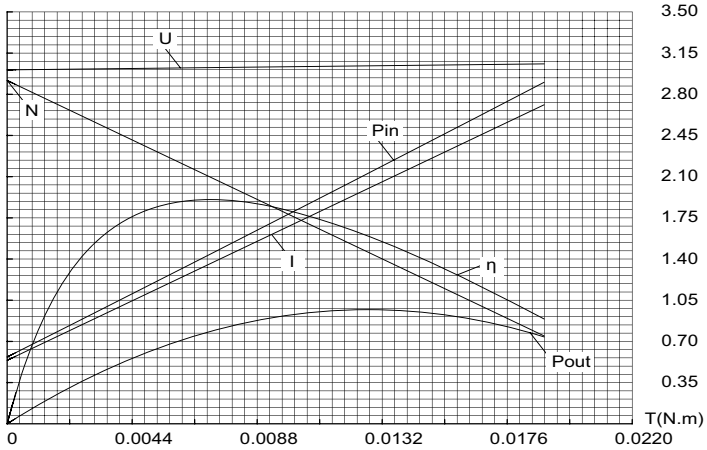
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
9000	9.0	14.0	0.80	9.0	100
8100	8.1	12.6	0.72	8.1	90
7200	7.2	11.2	0.64	7.2	80
6300	6.3	9.8	0.56	6.3	70
5400	5.4	8.4	0.48	5.4	60
4500	4.5	7.0	0.40	4.5	50
3600	3.6	5.6	0.32	3.6	40
2700	2.7	4.2	0.24	2.7	30
1800	1.8	2.8	0.16	1.8	20
900	0.9	1.4	0.08	0.9	10



ROYSE

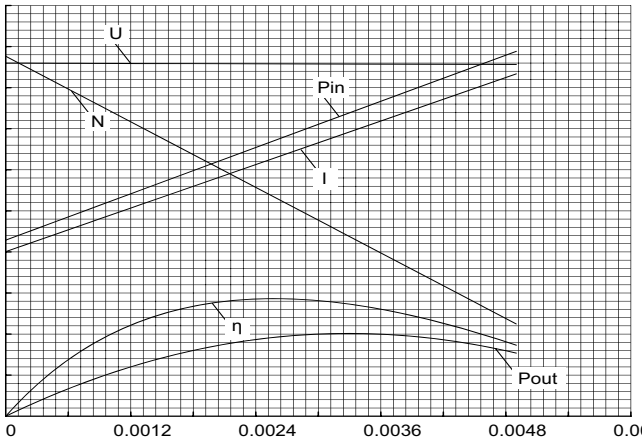
Curve (SL-2243-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
20000	40.0	14.0	3.50	40.0	100
18000	36.0	12.6	3.15	36.0	90
16000	32.0	11.2	2.80	32.0	80
14000	28.0	9.8	2.45	28.0	70
12000	24.0	8.4	2.10	24.0	60
10000	20.0	7.0	1.75	20.0	50
8000	16.0	5.6	1.40	16.0	40
6000	12.0	4.2	1.05	12.0	30
4000	8.0	2.8	0.70	8.0	20
2000	4.0	1.4	0.35	4.0	10



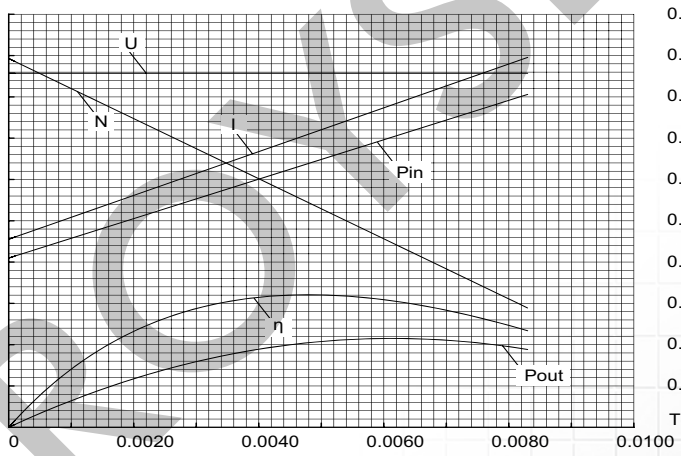
Curve (SL-2286-12V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
6000	4.50	14.0	0.400	4.50	100
5400	4.05	12.6	0.360	4.05	90
4800	3.60	11.2	0.320	3.60	80
4200	3.15	9.8	0.280	3.15	70
3600	2.70	8.4	0.240	2.70	60
3000	2.25	7.0	0.200	2.25	50
2400	1.80	5.6	0.160	1.80	40
1800	1.35	4.2	0.120	1.35	30
1200	0.90	2.8	0.080	0.90	20
600	0.45	1.4	0.040	0.45	10



Curve (SL-2286-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
12000	16.0	28.0	0.60	16.0	100
10800	14.4	25.2	0.54	14.4	90
9600	12.8	22.4	0.48	12.8	80
8400	11.2	19.6	0.42	11.2	70
7200	9.6	16.8	0.36	9.6	60
6000	8.0	14.0	0.30	8.0	50
4800	6.4	11.2	0.24	6.4	40
3600	4.8	8.4	0.18	4.8	30
2400	3.2	5.6	0.12	3.2	20
1200	1.6	2.8	0.06	1.6	10



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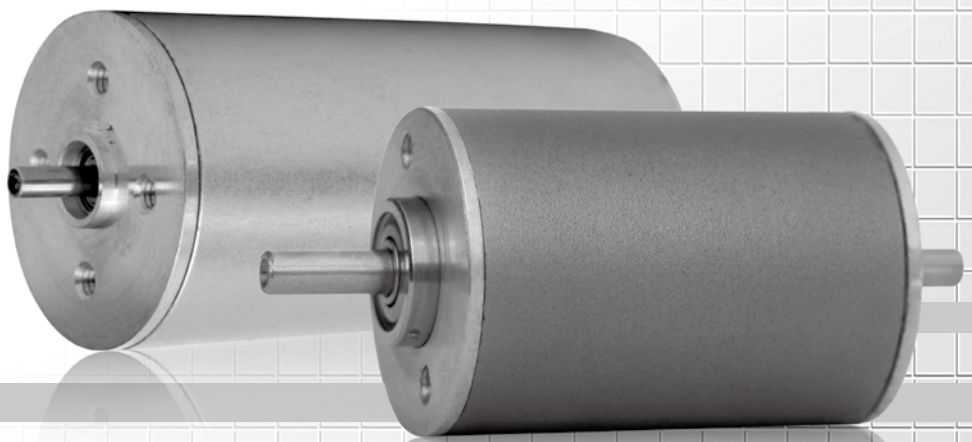
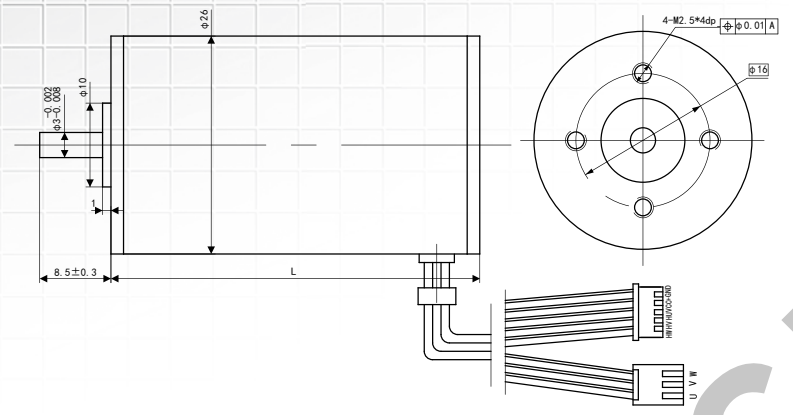


SL-26 Series

Brushless & Slotless DC Motors



Dimension SL-2644

ROYSE

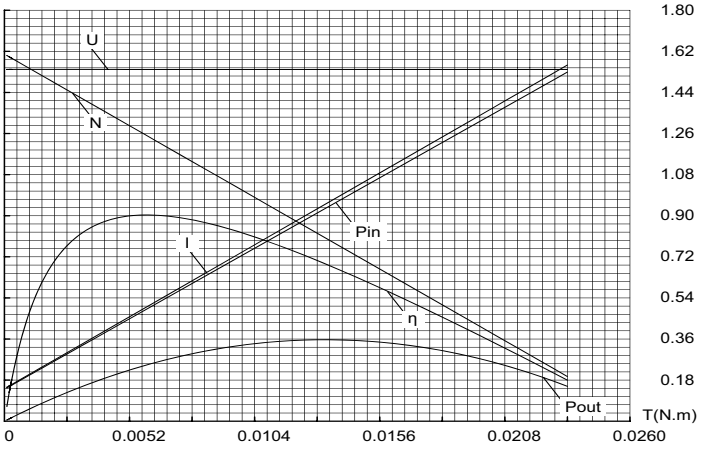
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
SL-2644	12	0.15	6500	50%	0.0234	4.36	44	0.105
	24	0.19	15000	55%	0.0453	25.53	44	0.105

※ Controller is requested for motor running

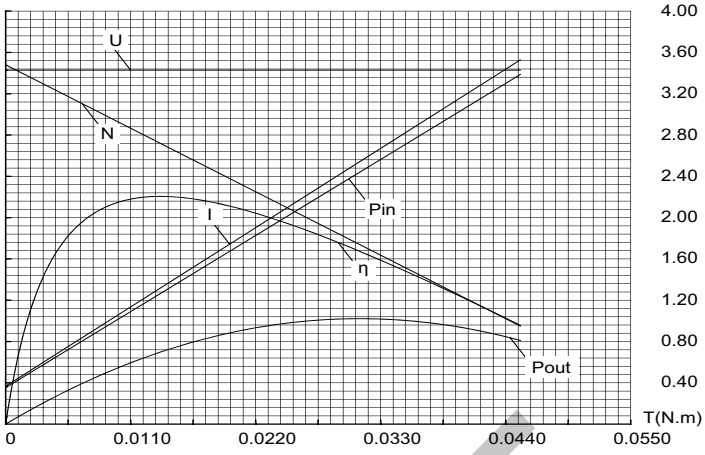
Curve (SL-2644-12V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
7000	22.0	14.0	1.80	22.0	100
6300	19.8	12.6	1.62	19.8	90
5600	17.6	11.2	1.44	17.6	80
4900	15.4	9.8	1.26	15.4	70
4200	13.2	8.4	1.08	13.2	60
3500	11.0	7.0	0.90	11.0	50
2800	8.8	5.6	0.72	8.8	40
2100	6.6	4.2	0.54	6.6	30
1400	4.4	2.8	0.36	4.4	20
700	2.2	1.4	0.18	2.2	10



Curve (SL-2644-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
18000	100	28.0	4.00	100	100
16200	90	25.2	3.60	90	90
14400	80	22.4	3.20	80	80
12600	70	19.6	2.80	70	70
10800	60	16.8	2.40	60	60
9000	50	14.0	2.00	50	50
7200	40	11.2	1.60	40	40
5400	30	8.4	1.20	30	30
3600	20	5.6	0.80	20	20
1800	10	2.8	0.40	10	10



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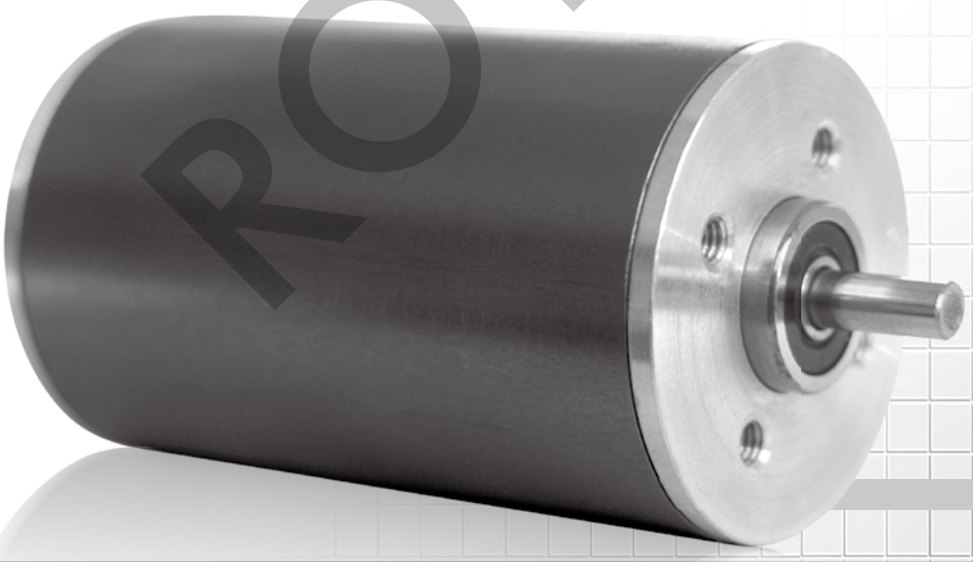
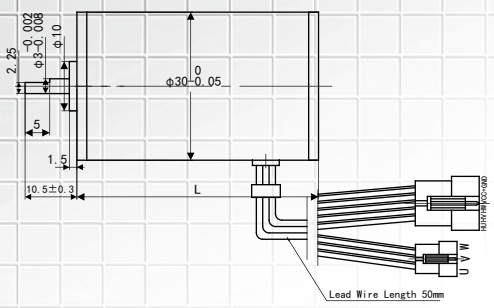
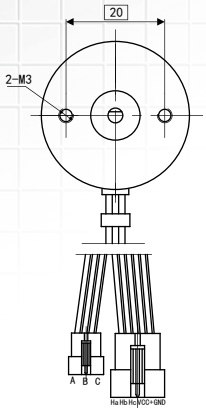


SL-30 Series

Brushless & Slotless DC Motors





Dimension SL-3049 SL-3056 SL-3096

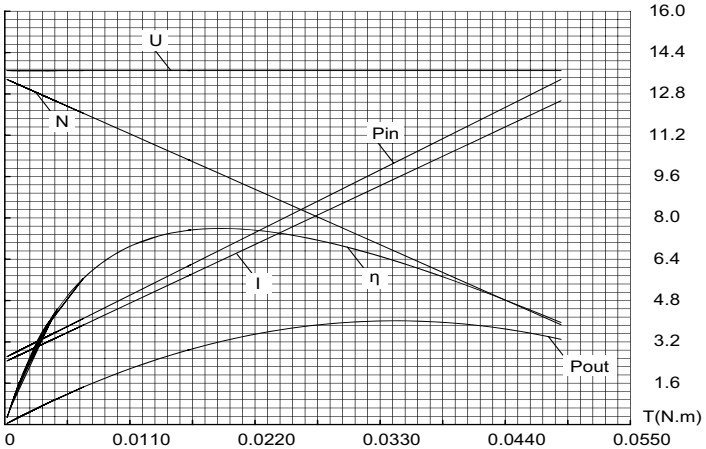
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
SL-3049	12	0.34	25000	48%	0.0489	45.19	49	0.150
	24	0.18	9000	59%	0.0664	19.64	49	0.150
SL-3056	12	0.14	5500	59%	0.0642	12.79	56	0.170
	24	0.19	12000	69%	0.1140	58.04	56	0.170
controller built-in								
SL-3096	12	0.18	5500	61%	0.0642	14.46	96	0.185
	24	0.17	6500	63%	0.1086	26.09	96	0.185

※ Controller is requested for motor running

Curve (SL-3049-12V)

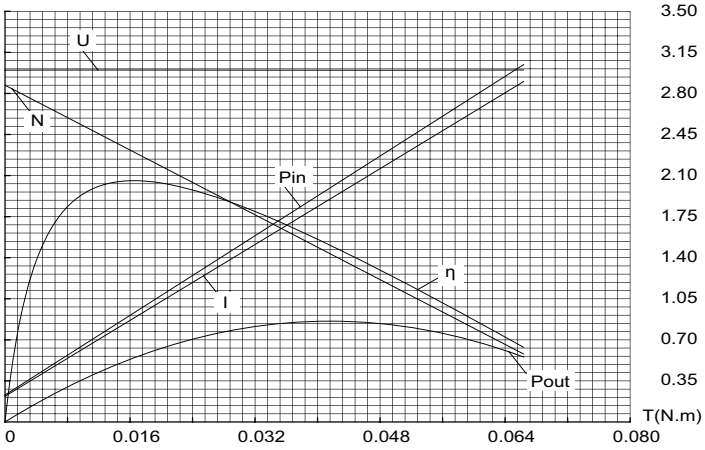
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
30000	180	14.0	16.0	180	100
27000	162	12.6	14.4	162	90
24000	144	11.2	12.8	144	80
21000	126	9.8	11.2	126	70
18000	108	8.4	9.6	108	60
15000	90	7.0	8.0	90	50
12000	72	5.6	6.4	72	40
9000	54	4.2	4.8	54	30
6000	36	2.8	3.2	36	20
3000	18	1.4	1.6	18	10



ROYSE

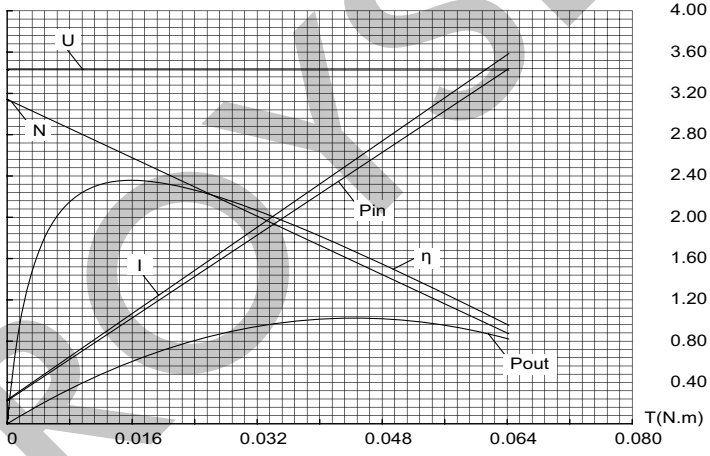
Curve (SL-3049-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
11000	80	28.0	3.50	80	100
9900	72	25.2	3.15	72	90
8800	64	22.4	2.80	64	80
7700	56	19.6	2.45	56	70
6600	48	16.8	2.10	48	60
5500	40	14.0	1.75	40	50
4400	32	11.2	1.40	32	40
3300	24	8.4	1.05	24	30
2200	16	5.6	0.70	16	20
1100	8	2.8	0.35	8	10



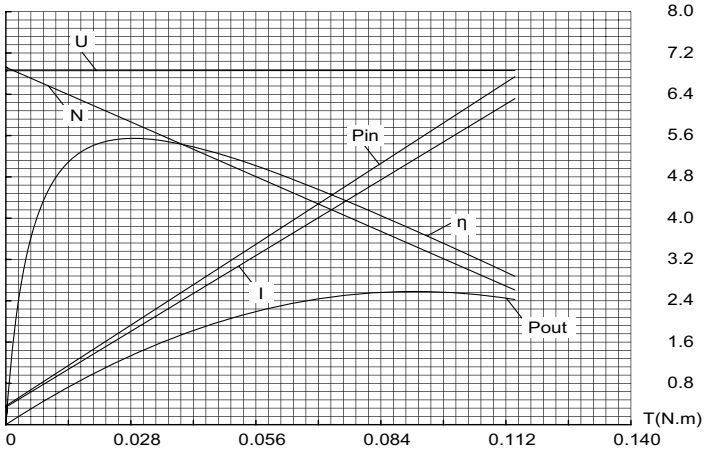
Curve (SL-3056-12V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
7000	50.0	14.0	4.00	50.0	100
6300	45.0	12.6	3.60	45.0	90
5600	40.0	11.2	3.20	40.0	80
4900	35.0	9.8	2.80	35.0	70
4200	30.0	8.4	2.40	30.0	60
3500	25.0	7.0	2.00	25.0	50
2800	20.0	5.6	1.60	20.0	40
2100	15.0	4.2	1.20	15.0	30
1400	10.0	2.8	0.80	10.0	20
700	5.0	1.4	0.40	5.0	10



Curve (SL-3056-24V)

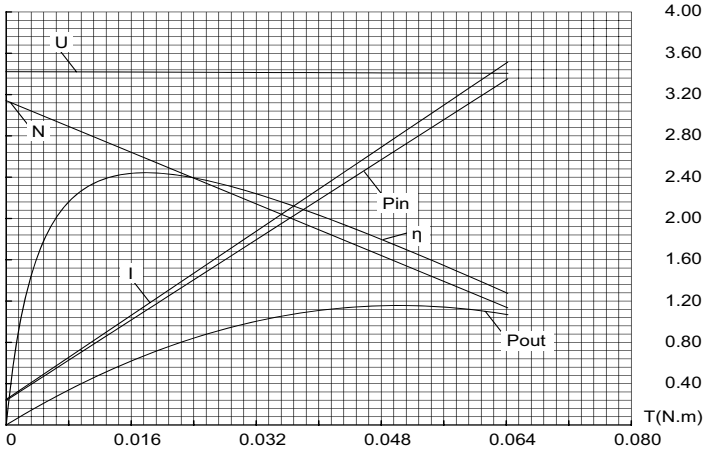
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
14000	180	28.0	8.0	180	100
12600	162	25.2	7.2	162	90
11200	144	22.4	6.4	144	80
9800	126	19.6	5.6	126	70
8400	108	16.8	4.8	108	60
7000	90	14.0	4.0	90	50
5600	72	11.2	3.2	72	40
4200	54	8.4	2.4	54	30
2800	36	5.6	1.6	36	20
1400	18	2.8	0.8	18	10



ROYAL

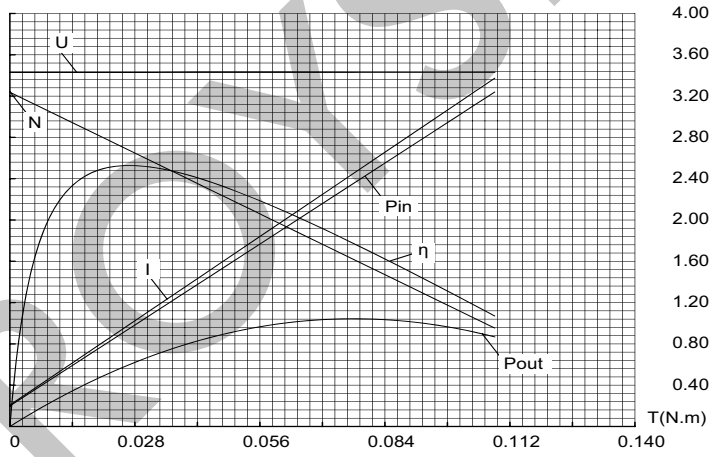
Curve (SL-3096-12V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
7000	50.0	14.0	4.00	50.0	100
6300	45.0	12.6	3.60	45.0	90
5600	40.0	11.2	3.20	40.0	80
4900	35.0	9.8	2.80	35.0	70
4200	30.0	8.4	2.40	30.0	60
3500	25.0	7.0	2.00	25.0	50
2800	20.0	5.6	1.60	20.0	40
2100	15.0	4.2	1.20	15.0	30
1400	10.0	2.8	0.80	10.0	20
700	5.0	1.4	0.40	5.0	10

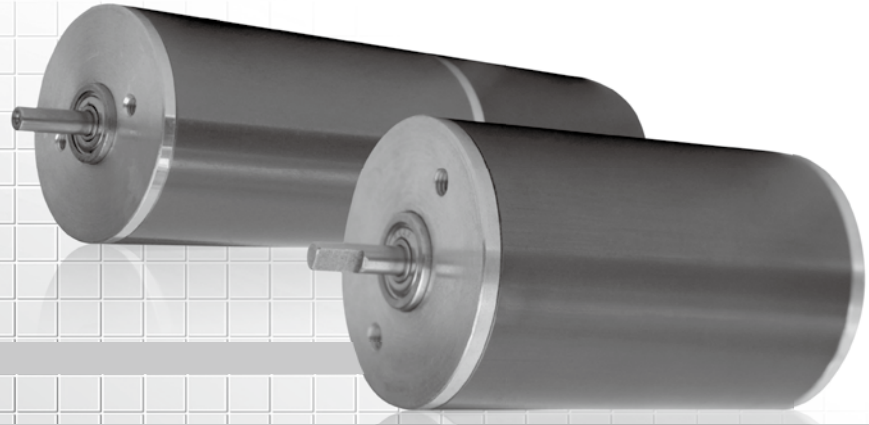


Curve (SL-3096-24V)

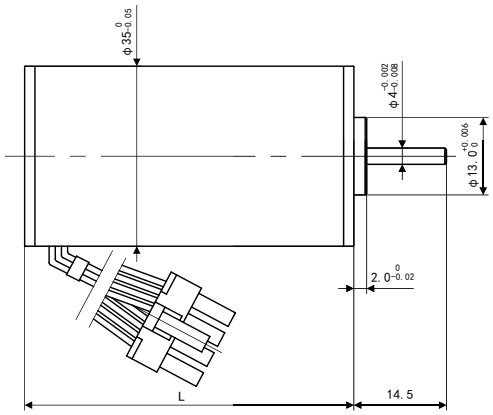
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
8000	100	28.0	4.00	100	100
7200	90	25.2	3.60	90	90
6400	80	22.4	3.20	80	80
5600	70	19.6	2.80	70	70
4800	60	16.8	2.40	60	60
4000	50	14.0	2.00	50	50
3200	40	11.2	1.60	40	40
2400	30	8.4	1.20	30	30
1600	20	5.6	0.80	20	20
800	10	2.8	0.40	10	10



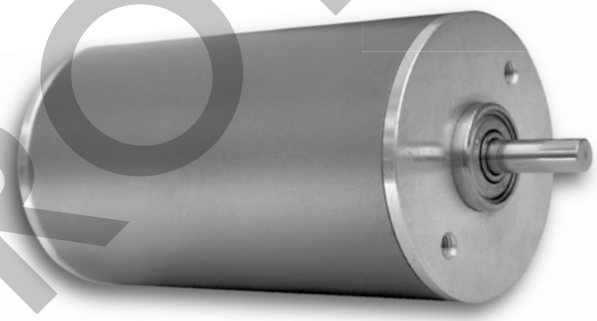
POSE



SL-35 Series
Brushless & Slotless DC Motors



Dimension SL-3564 SL-3575



ROYSE

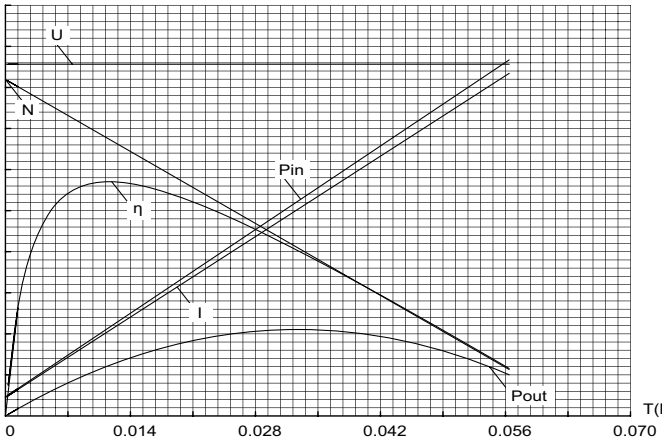
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
SL-3564	12	0.12	3700	57%	0.0564	6.32	64	0.275
	13	0.13	4500	64%	0.1563	20.84	64	0.275
	18	0.18	5000	67%	0.1546	24.70	64	0.275
	24	0.12	3000	66%	0.1699	16.39	64	0.275
	48	0.59	17500	69%	0.1735	208.7	64	0.275
Controller built-in ↙								
SL-3575	12	0.15	4500	58%	0.0468	7.01	75	0.280
	18	0.17	4200	64%	0.1567	29.31	75	0.280
	24	0.13	4000	68%	0.0586	7.10	75	0.280

※ Controller is requested for motor running

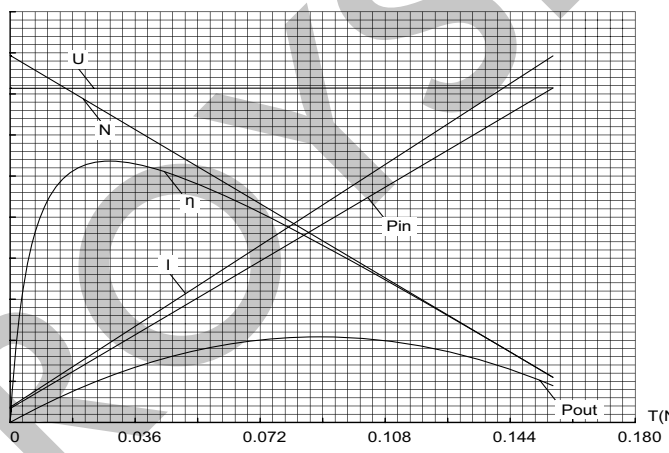
Curve (SL-3564-12V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
4500	30.0	14.0	2.60	30.0	100
4050	27.0	12.6	2.34	27.0	90
3600	24.0	11.2	2.08	24.0	80
3150	21.0	9.8	1.82	21.0	70
2700	18.0	8.4	1.56	18.0	60
2250	15.0	7.0	1.30	15.0	50
1800	12.0	5.6	1.04	12.0	40
1350	9.0	4.2	0.78	9.0	30
900	6.0	2.8	0.52	6.0	20
450	3.0	1.4	0.26	3.0	10



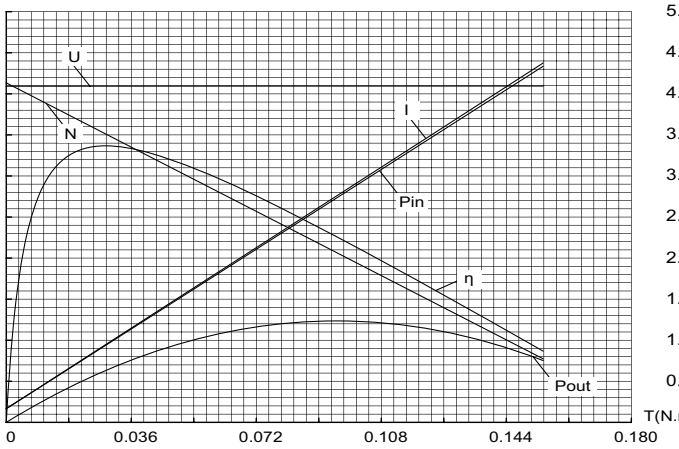
Curve (SL-3564-13V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
5000	100	16.0	7.0	100	100
4500	90	14.4	6.3	90	90
4000	80	12.8	5.6	80	80
3500	70	11.2	4.9	70	70
3000	60	9.6	4.2	60	60
2500	50	8.0	3.5	50	50
2000	40	6.4	2.8	40	40
1500	30	4.8	2.1	30	30
1000	20	3.2	1.4	20	20
500	10	1.6	0.7	10	10



Curve (SL-3564-18V)

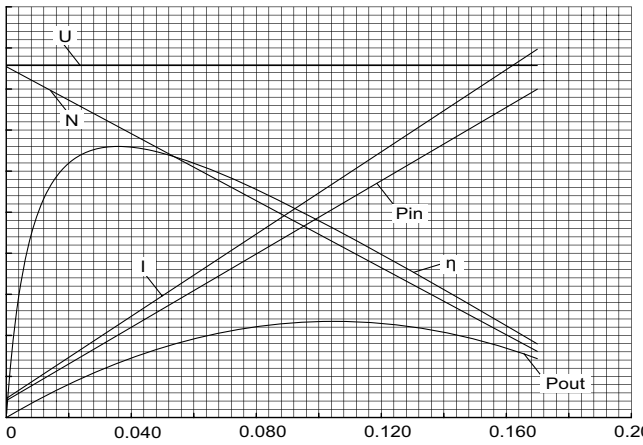
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
6000	100	22.0	5.50	100	100
5400	90	19.8	4.95	90	90
4800	80	17.6	4.40	80	80
4200	70	15.4	3.85	70	70
3600	60	13.2	3.30	60	60
3000	50	11.0	2.75	50	50
2400	40	8.8	2.20	40	40
1800	30	6.6	1.65	30	30
1200	20	4.4	1.10	20	20
600	10	2.2	0.55	10	10



ROYAL

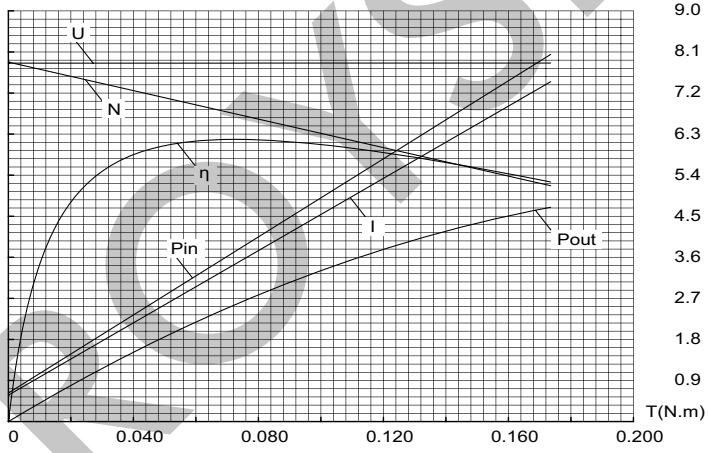
Curve (SL-3564-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
3500	70	28.0	2.60	70	100
3150	63	25.2	2.34	63	90
2800	56	22.4	2.08	56	80
2450	49	19.6	1.82	49	70
2100	42	16.8	1.56	42	60
1750	35	14.0	1.30	35	50
1400	28	11.2	1.04	28	40
1050	21	8.4	0.78	21	30
700	14	5.6	0.52	14	20
350	7	2.8	0.26	7	10



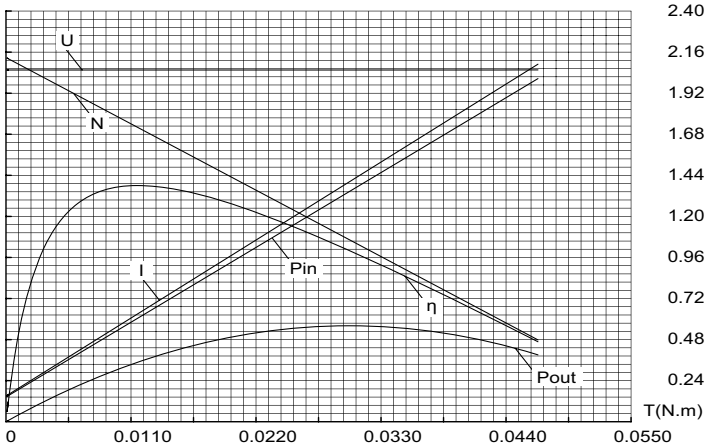
Curve (SL-3564-48V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
20000	400	55.0	9.0	400	100
18000	360	49.5	8.1	360	90
16000	320	44.0	7.2	320	80
14000	280	38.5	6.3	280	70
12000	240	33.0	5.4	240	60
10000	200	27.5	4.5	200	50
8000	160	22.0	3.6	160	40
6000	120	16.5	2.7	120	30
4000	80	11.0	1.8	80	20
2000	40	5.5	0.9	40	10



Curve (SL-3575-12V)

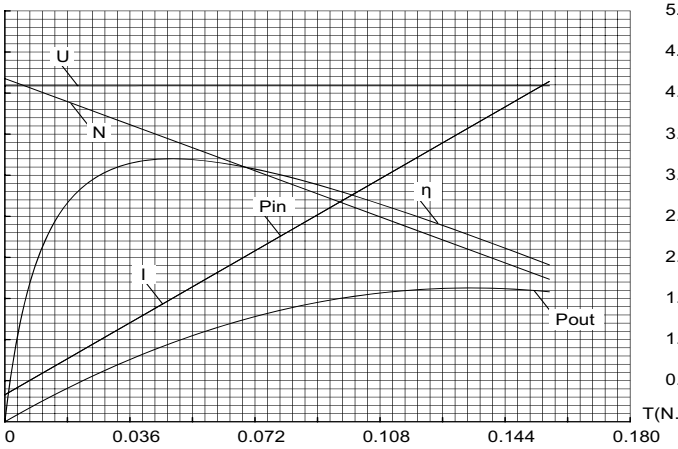
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
5000	30.0	14.0	2.40	30.0	100
4500	27.0	12.6	2.16	27.0	90
4000	24.0	11.2	1.92	24.0	80
3500	21.0	9.8	1.68	21.0	70
3000	18.0	8.4	1.44	18.0	60
2500	15.0	7.0	1.20	15.0	50
2000	12.0	5.6	0.96	12.0	40
1500	9.0	4.2	0.72	9.0	30
1000	6.0	2.8	0.48	6.0	20
500	3.0	1.4	0.24	3.0	10



ROYAL

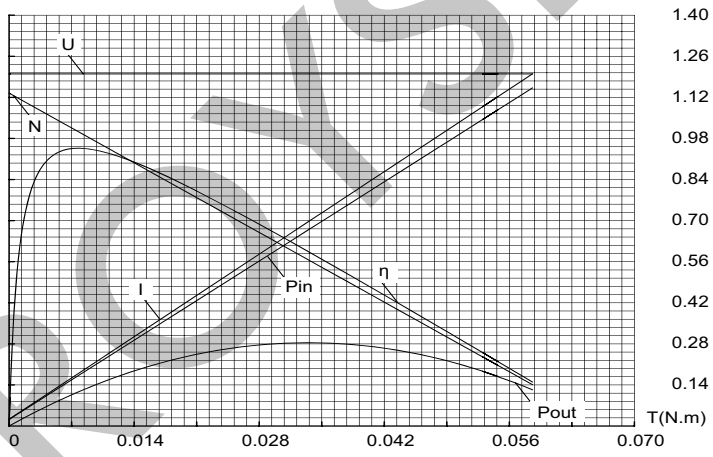
Curve (SL-3575-18V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
5000	90	22.0	5.00	90	100
4500	81	19.8	4.50	81	90
4000	72	17.6	4.00	72	80
3500	63	15.4	3.50	63	70
3000	54	13.2	3.00	54	60
2500	45	11.0	2.50	45	50
2000	36	8.8	2.00	36	40
1500	27	6.6	1.50	27	30
1000	18	4.4	1.00	18	20
500	9	2.2	0.50	9	10

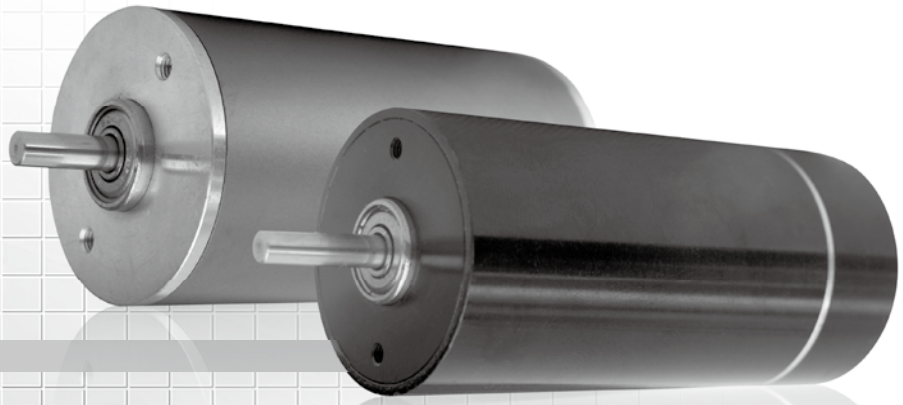


Curve (SL-3575-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
5000	35.0	28.0	1.40	35.0	100
4500	31.5	25.2	1.26	31.5	90
4000	28.0	22.4	1.12	28.0	80
3500	24.5	19.6	0.98	24.5	70
3000	21.0	16.8	0.84	21.0	60
2500	17.5	14.0	0.70	17.5	50
2000	14.0	11.2	0.56	14.0	40
1500	10.5	8.4	0.42	10.5	30
1000	7.0	5.6	0.28	7.0	20
500	3.5	2.8	0.14	3.5	10

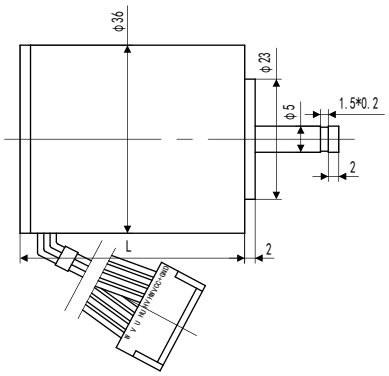


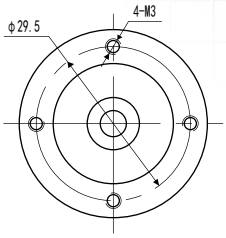
ROYSE



SL-36 Series

Brushless & Slotless DC Motors





Dimension SL-3643

ROYSE

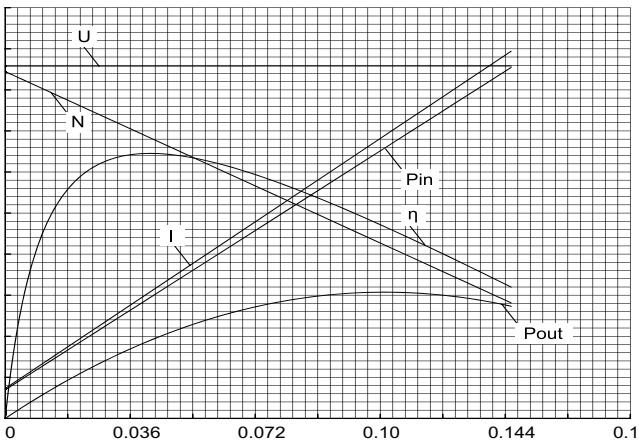
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
SL-3643	30	0.51	12000	65%	0.1457	67.62	43	0.20

※ Controller is requested for motor running

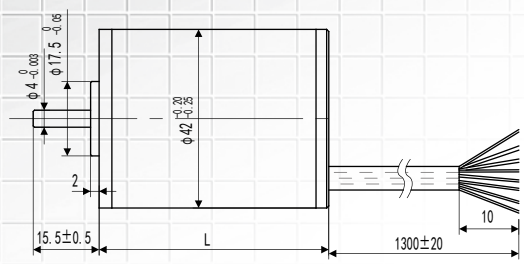
Curve (SL-3643-30V)

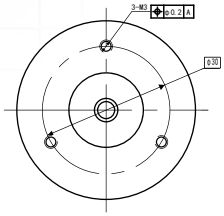
N(rpm)	out(W)	(V)	(A)	in(W)	(%)
14000	220	35.0	7.0	220	100
12600	1	31.5	6.3	1	0
11200	176	2 .0	5.6	176	0
00	154	24.5	4.	154	70
400	132	21.0	4.2	132	60
7000	110	17.5	3.5	110	50
5600		14.0	2.		40
4200	66	10.5	2.1	66	30
2 00	44	7.0	1.4	44	20
1400	22	3.5	0.7	22	10



SL-42 Series

Brushless & Slotless DC Motors





Dimension SL-4254

ROYSE

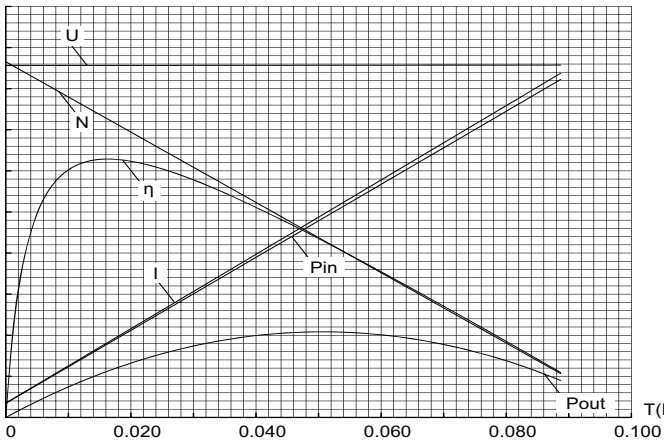
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
SL-4254	12	0.15	4500	63%	0.0887	11.46	54	0.30
	24	0.14	4200	70%	0.2265	28.84	54	0.30

※ Controller is requested for motor running

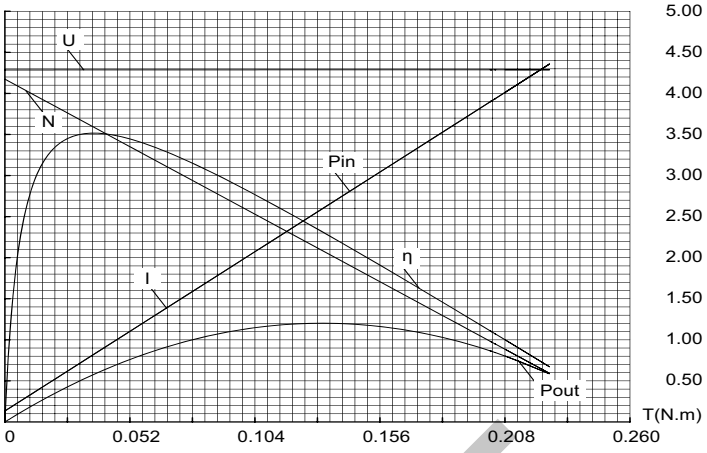
Curve (SL-4254-12V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
5000	55.0	14.0	4.50	55.0	100
4500	49.5	12.6	4.05	49.5	90
4000	44.0	11.2	3.60	44.0	80
3500	38.5	9.8	3.15	38.5	70
3000	33.0	8.4	2.70	33.0	60
2500	27.5	7.0	2.25	27.5	50
2000	22.0	5.6	1.80	22.0	40
1500	16.5	4.2	1.35	16.5	30
1000	11.0	2.8	0.90	11.0	20
500	5.5	1.4	0.45	5.5	10



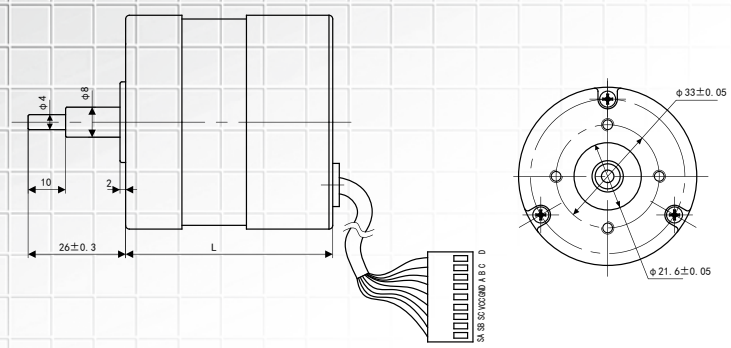
Curve (SL-4235-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
5000	120	28.0	5.00	120	100
4500	108	25.2	4.50	108	90
4000	96	22.4	4.00	96	80
3500	84	19.6	3.50	84	70
3000	72	16.8	3.00	72	60
2500	60	14.0	2.50	60	50
2000	48	11.2	2.00	48	40
1500	36	8.4	1.50	36	30
1000	24	5.6	1.00	24	20
500	12	2.8	0.50	12	10

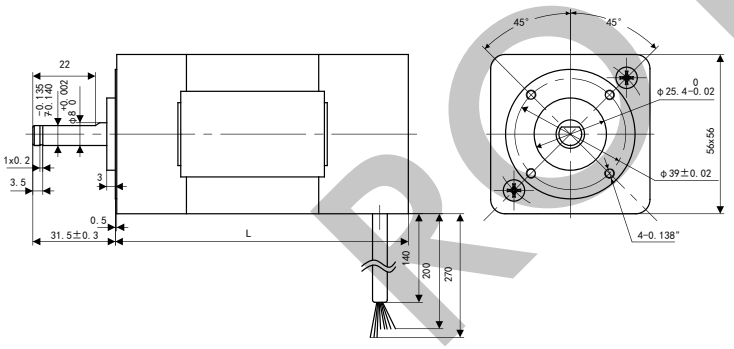


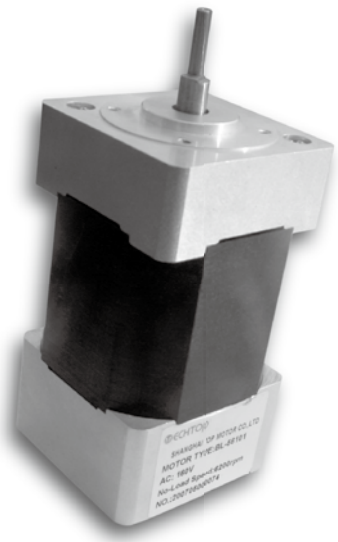
ROYSE

BL-56 Series
Brushless DC Motors



Dimension BL-5656 BL-5660 BL-5667





Dimension BL-5676 BL-56101

Specification

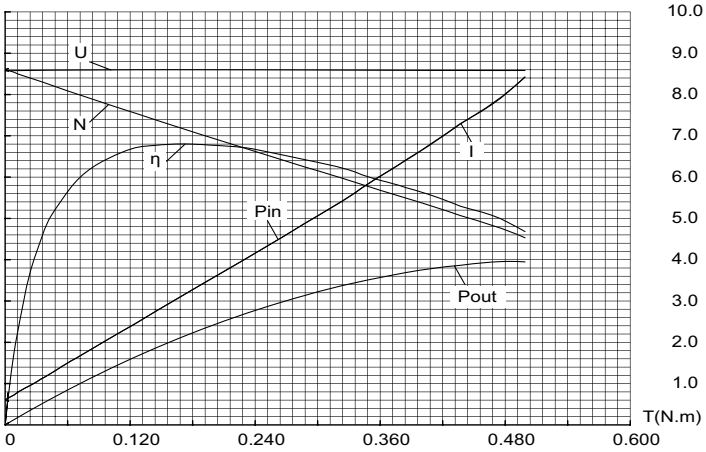
Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
BL-5656	24	0.58	3500	68%	0.499	94.99	56	0.48
	48	1.5	11500	73%	0.336	179.81	56	0.48
BL-5660	24	0.77	3700	72%	0.367	104.50	60	0.54
BL-5667	24	0.84	3300	67%	0.300	84.95	67	0.62
BL-5676	24	0.58	8000	58%	0.0429	35.62	76	0.9
	160	0.55	9500	72%	0.803	408.86	76	0.9
BL-56101	160	0.52	6200	64%	0.217	139.19	101	1.2
	220	0.33	6200	77%	0.692	272.19	101	1.2

※ Controller is requested for motor running

ROYSE

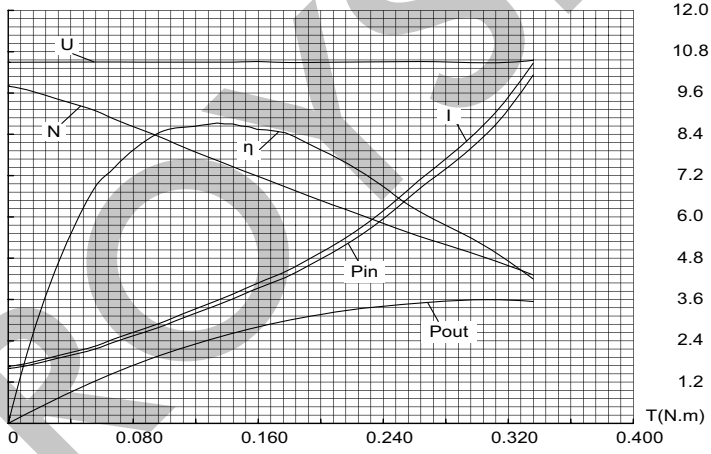
Curve (BL-5656-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
4000	240	28.0	10.0	240	100
3600	216	25.2	9.0	216	90
3200	192	22.4	8.0	192	80
2800	168	19.6	7.0	168	70
2400	144	16.8	6.0	144	60
2000	120	14.0	5.0	120	50
1600	96	11.2	4.0	96	40
1200	72	8.4	3.0	72	30
800	48	5.6	2.0	48	20
400	24	2.8	1.0	24	10



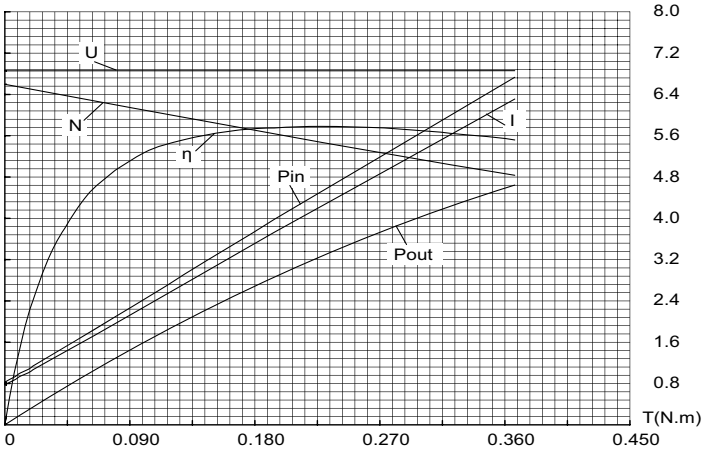
Curve (BL-5656-48V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
14000	600	55.0	12.0	600	100
12600	540	49.5	10.8	540	90
11200	480	44.0	9.6	480	80
9800	420	38.5	8.4	420	70
8400	360	33.0	7.2	360	60
7000	300	27.5	6.0	300	50
5600	240	22.0	4.8	240	40
4200	180	16.5	3.6	180	30
2800	120	11.0	2.4	120	20
1400	60	5.5	1.2	60	10



Curve (BL-5660-24V)

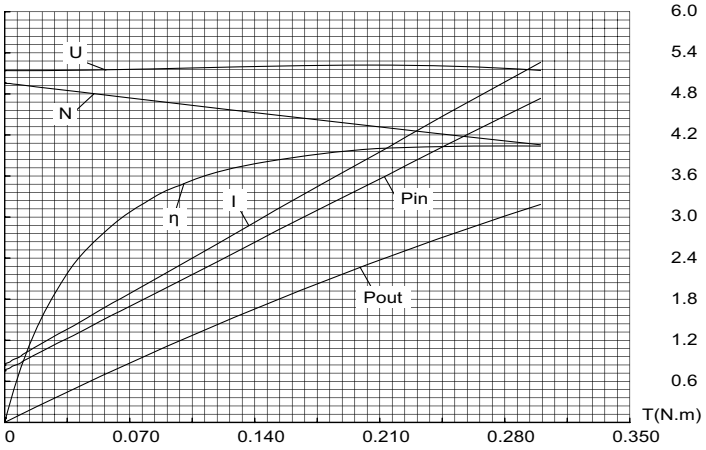
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
4500	180	28.0	8.0	180	100
4050	162	25.2	7.2	162	90
3600	144	22.4	6.4	144	80
3150	126	19.6	5.6	126	70
2700	108	16.8	4.8	108	60
2250	90	14.0	4.0	90	50
1800	72	11.2	3.2	72	40
1350	54	8.4	2.4	54	30
900	36	5.6	1.6	36	20
450	18	2.8	0.8	18	10



ROHS

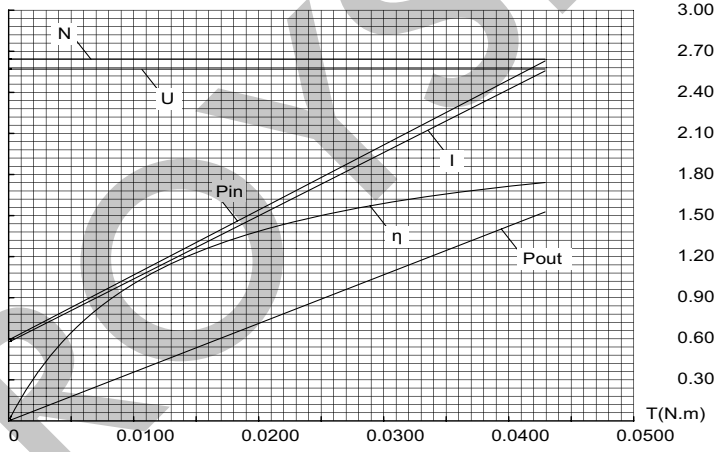
Curve (BL-5667-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
4000	160	28.0	6.0	160	100
3600	144	25.2	5.4	144	90
3200	128	22.4	4.8	128	80
2800	112	19.6	4.2	112	70
2400	96	16.8	3.6	96	60
2000	80	14.0	3.0	80	50
1600	64	11.2	2.4	64	40
1200	48	8.4	1.8	48	30
800	32	5.6	1.2	32	20
400	16	2.8	0.6	16	10



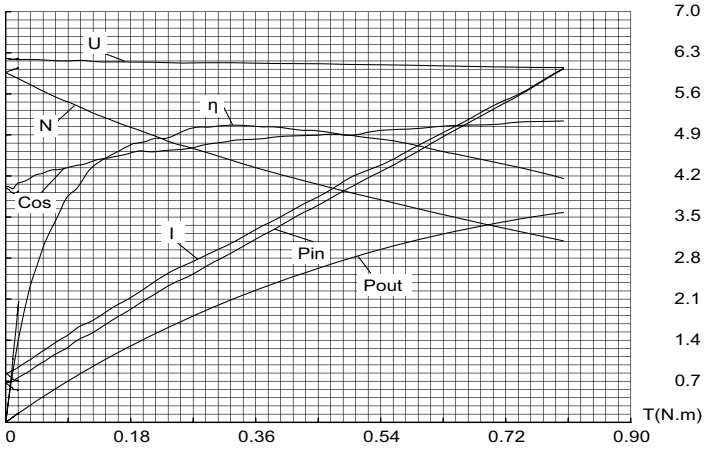
Curve (BL-5676-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
9000	70	28.0	3.00	70	100
8100	63	25.2	2.70	63	90
7200	56	22.4	2.40	56	80
6300	49	19.6	2.10	49	70
5400	42	16.8	1.80	42	60
4500	35	14.0	1.50	35	50
3600	28	11.2	1.20	28	40
2700	21	8.4	0.90	21	30
1800	14	5.6	0.60	14	20
900	7	2.8	0.30	7	10



Curve (BL-5676-160V)

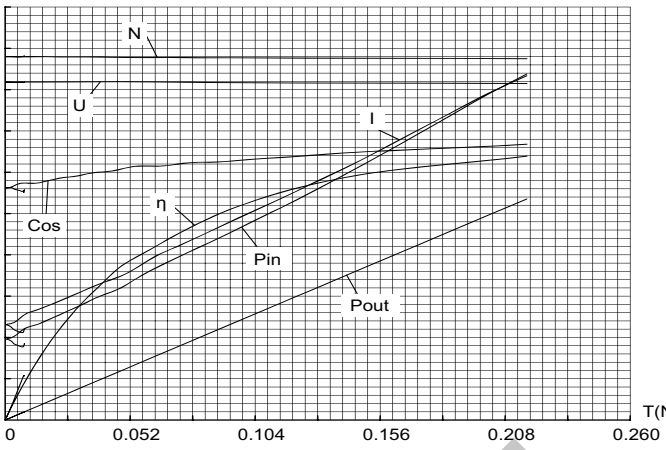
N(rpm)	Pout(W)	U(V)	Cosφ:1	I(A)	Pin(W)	η(%)
11000	800	180		7.0	800	100
9900	720	162		6.3	720	90
8800	640	144		5.6	640	80
7700	560	126		4.9	560	70
6600	480	108		4.2	480	60
5500	400	90		3.5	400	50
4400	320	72		2.8	320	40
3300	240	54		2.1	240	30
2200	160	36		1.4	160	20
1100	80	18		0.7	80	10



ROYSE

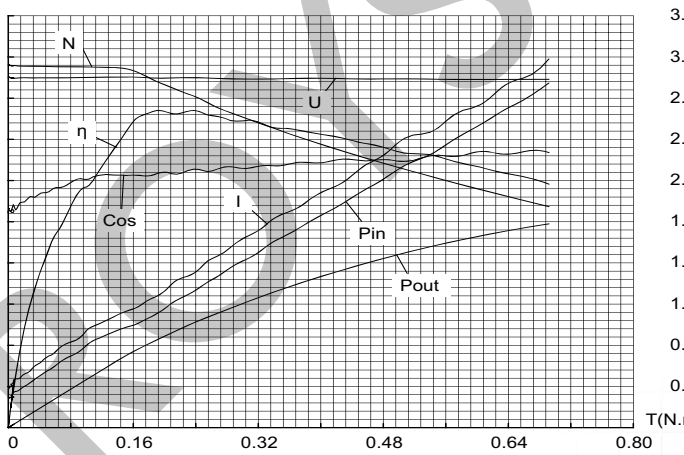
Curve (BL-56101-160V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
7000	260	200	2.40	260	100
6300	234	180	2.16	234	90
5600	208	160	1.92	208	80
4900	182	140	1.68	182	70
4200	156	120	1.44	156	60
3500	130	100	1.20	130	50
2800	104	80	0.96	104	40
2100	78	60	0.72	78	30
1400	52	40	0.48	52	20
700	26	20	0.24	26	10



Curve (BL-56101-220V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
7000	550	260	3.50	550	100
6300	495	234	3.15	495	90
5600	440	208	2.80	440	80
4900	385	182	2.45	385	70
4200	330	156	2.10	330	60
3500	275	130	1.75	275	50
2800	220	104	1.40	220	40
2100	165	78	1.05	165	30
1400	110	52	0.70	110	20
700	55	26	0.35	55	10



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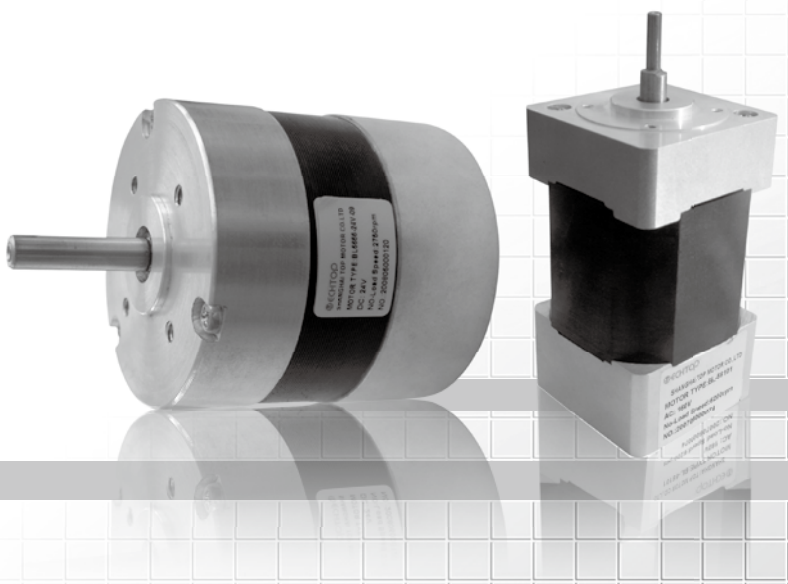
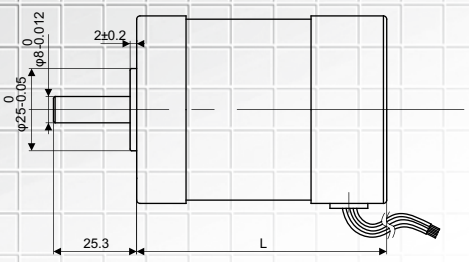
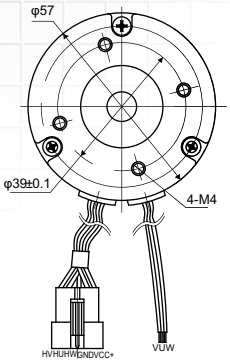
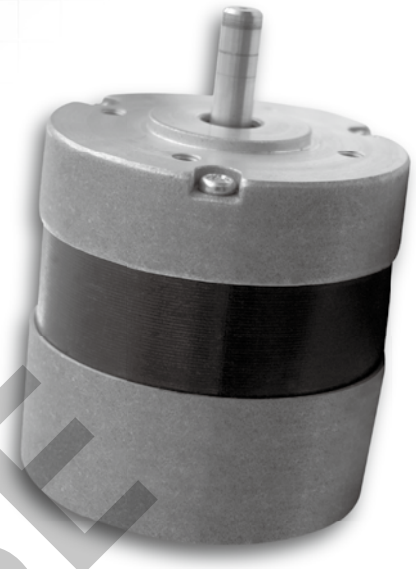


BL-57 Series
Brushless DC Motors







Dimension BL-5756 BL-5776 BL-5796

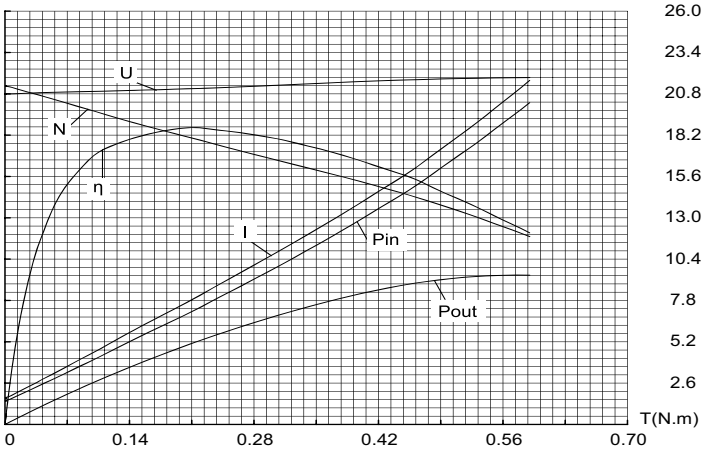
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
BL-5756	24	0.4	7500	72%	0.59	253	56	0.48
BL-5776	24	0.45	5800	80%	0.783	166.74	76	0.75
BL-5796	24	0.5	5300	76%	0.603	107.88	96	1.09

※ Controller i reque ted for motor running

Curve (BL-5756-24V)

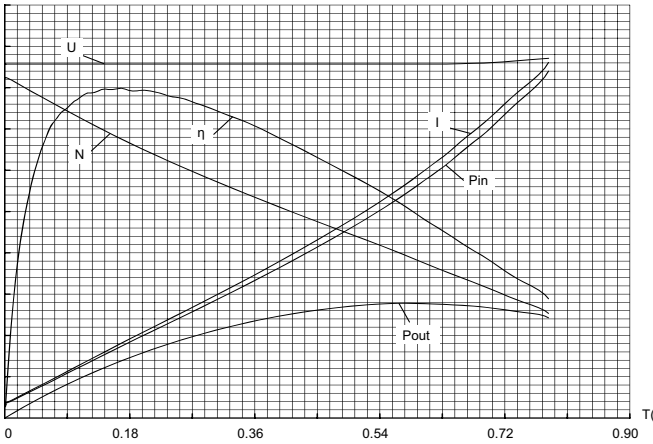
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
9000	700	30.0	26.0	700	100
8100	630	27.0	23.4	630	90
7200	560	24.0	20.8	560	80
6300	490	21.0	18.2	490	70
5400	420	18.0	15.6	420	60
4500	350	15.0	13.0	350	50
3600	280	12.0	10.4	280	40
2700	210	9.0	7.8	210	30
1800	140	6.0	5.2	140	20
900	70	3.0	2.6	70	10



ROYSE

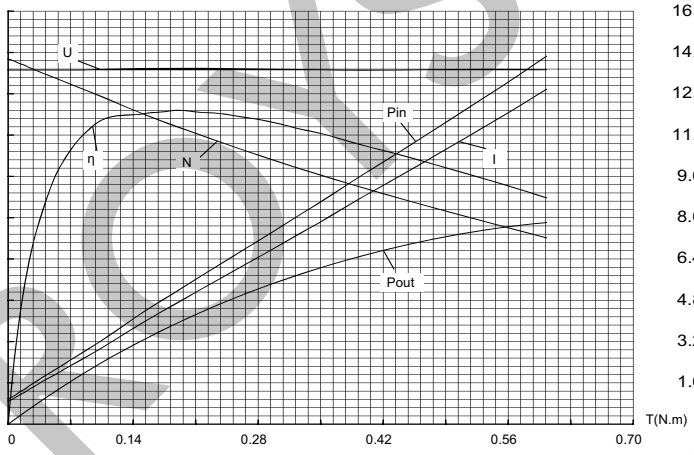
Curve (BL-5776-24V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
7000	600	28.0	24.0	600	100
6300	540	25.2	21.6	540	90
5600	480	22.4	19.2	480	80
4900	420	19.6	16.8	420	70
4200	360	16.8	14.4	360	60
3500	300	14.0	12.0	300	50
2800	240	11.2	9.6	240	40
2100	180	8.4	7.2	180	30
1400	120	5.6	4.8	120	20
700	60	2.8	2.4	60	10

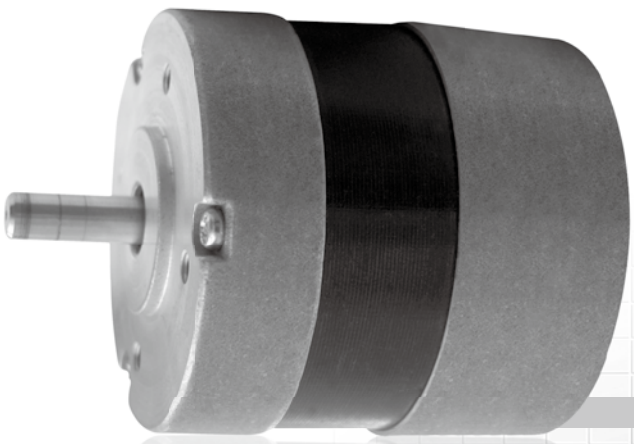


Curve (BL-5796-24V)

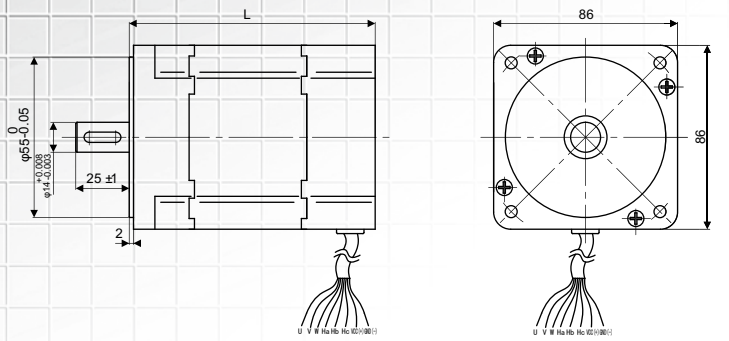
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
6000	350	28.0	16.0	350	100
5400	315	25.2	14.4	315	90
4800	280	22.4	12.8	280	80
4200	245	19.6	11.2	245	70
3600	210	16.8	9.6	210	60
3000	175	14.0	8.0	175	50
2400	140	11.2	6.4	140	40
1800	105	8.4	4.8	105	30
1200	70	5.6	3.2	70	20
600	35	2.8	1.6	35	10

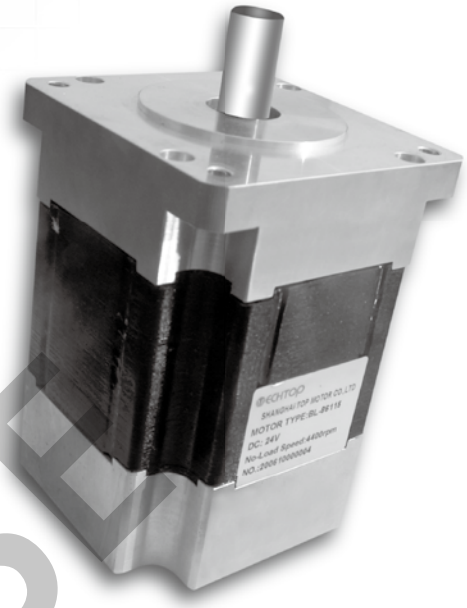


ROYSE



BL-86 Series
Brushless DC Motors





Dimension BL 86115

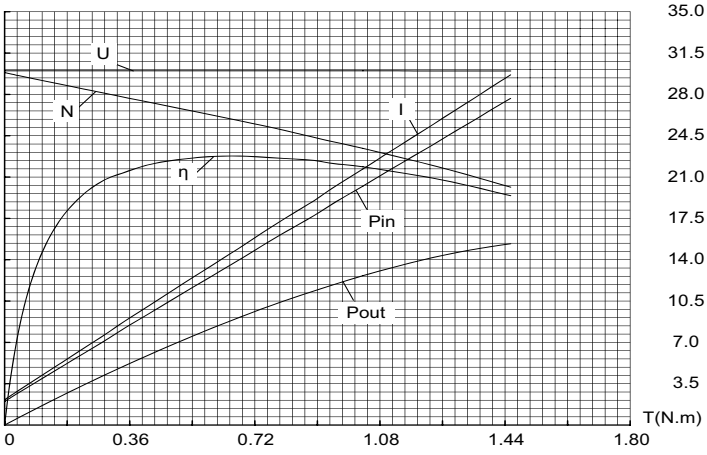
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
BL-86115	24	0.9	3800	65%	1.456	394.91	115	3.36
	36	0.8	3600	67%	0.345	95.45	115	3.36
	48	0.7	3600	69%	0.486	141.30	115	3.36

※ Controller i reque ted for motor running

Curve (BL-86115-24V)

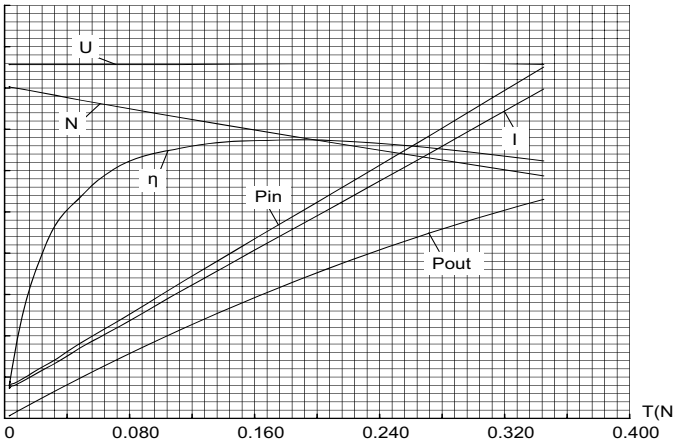
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
4500	900	28.0	35.0	900	100
4050	810	25.2	31.5	810	90
3600	720	22.4	28.0	720	80
3150	630	19.6	24.5	630	70
2700	540	16.8	21.0	540	60
2250	450	14.0	17.5	450	50
1800	360	11.2	14.0	360	40
1350	270	8.4	10.5	270	30
900	180	5.6	7.0	180	20
450	90	2.8	3.5	90	10



ROYSE

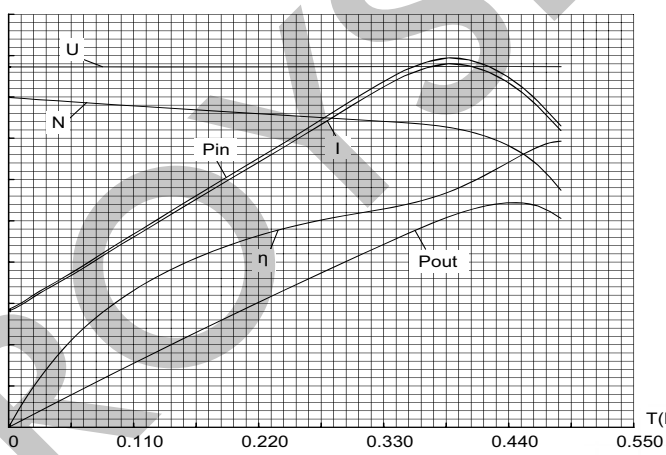
Curve (BL-86115-36V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
4500	180	28.0	8.0	180	100
4050	162	25.2	7.2	162	90
3600	144	22.4	6.4	144	80
3150	126	19.6	5.6	126	70
2700	108	16.8	4.8	108	60
2250	90	14.0	4.0	90	50
1800	72	11.2	3.2	72	40
1350	54	8.4	2.4	54	30
900	36	5.6	1.6	36	20
450	18	2.8	0.8	18	10



Curve (BL-86115-48V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
4500	260	55.0	5.50	260	100
4050	234	49.5	4.95	234	90
3600	208	44.0	4.40	208	80
3150	182	38.5	3.85	182	70
2700	156	33.0	3.30	156	60
2250	130	27.5	2.75	130	50
1800	104	22.0	2.20	104	40
1350	78	16.5	1.65	78	30
900	52	11.0	1.10	52	20
450	26	5.5	0.55	26	10



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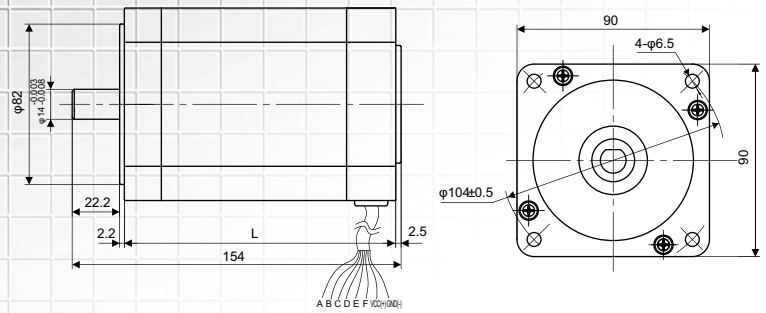
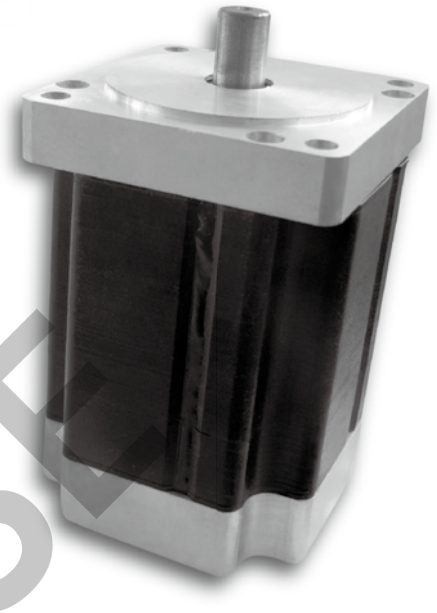
BL-90 Series
Brushless DC Motors





Dimension BL-9077 BL-90107

ROYSE

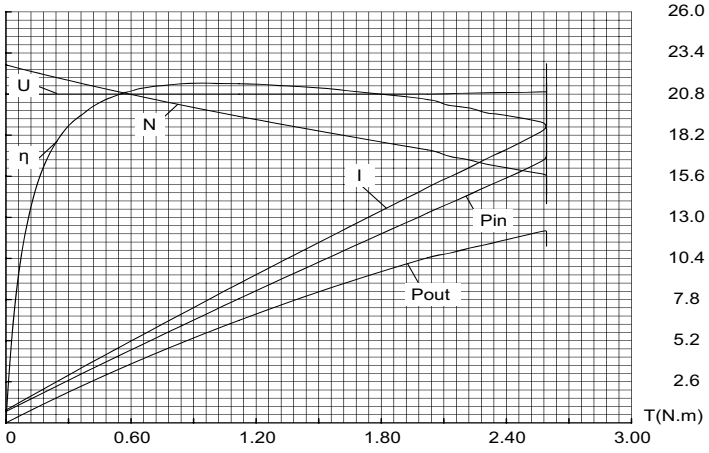
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
BL-9077	48	0.82	3500	83%	2.592	654.13	77	2.80
BL-90107	48	0.54	1900	56%	0.319	53.52	107	3.9

※ Controller i reque ted for motor running

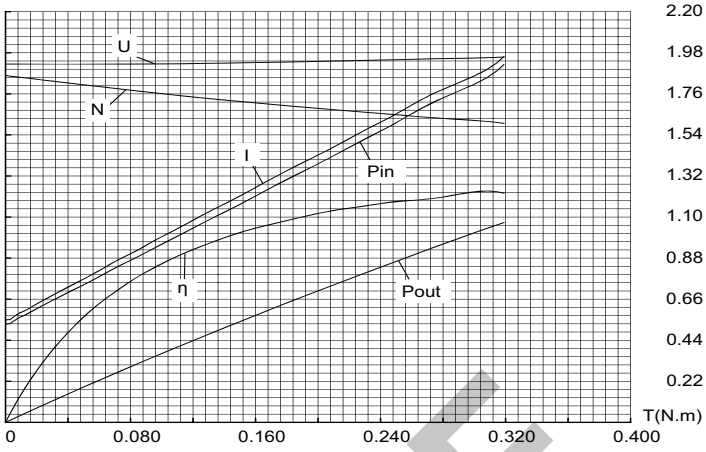
Curve (BL-9077-48V)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
4000	1400	60.0	26.0	1400	100
3600	1260	54.0	23.4	1260	90
3200	1120	48.0	20.8	1120	80
2800	980	42.0	18.2	980	70
2400	840	36.0	15.6	840	60
2000	700	30.0	13.0	700	50
1600	560	24.0	10.4	560	40
1200	420	18.0	7.8	420	30
800	280	12.0	5.2	280	20
400	140	6.0	2.6	140	10



Curve (BL-90107-48V)

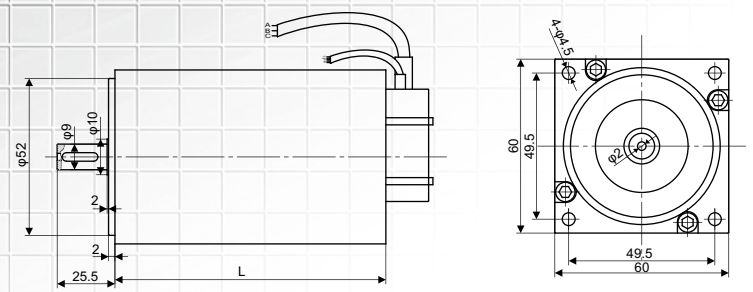
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
2200	110	55.0	2.20	110	100
1980	99	49.5	1.98	99	90
1760	88	44.0	1.76	88	80
1540	77	38.5	1.54	77	70
1320	66	33.0	1.32	66	60
1100	55	27.5	1.10	55	50
880	44	22.0	0.88	44	40
660	33	16.5	0.66	33	30
440	22	11.0	0.44	22	20
220	11	5.5	0.22	11	10

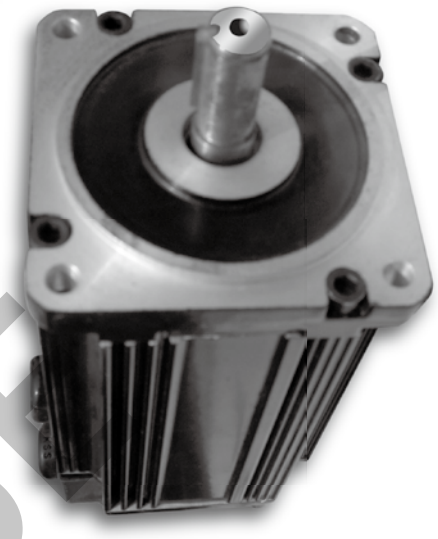


POYSE

ZM Series

Brushless DC Motors





Dimension ZM-80 ZM-92 ZM-120

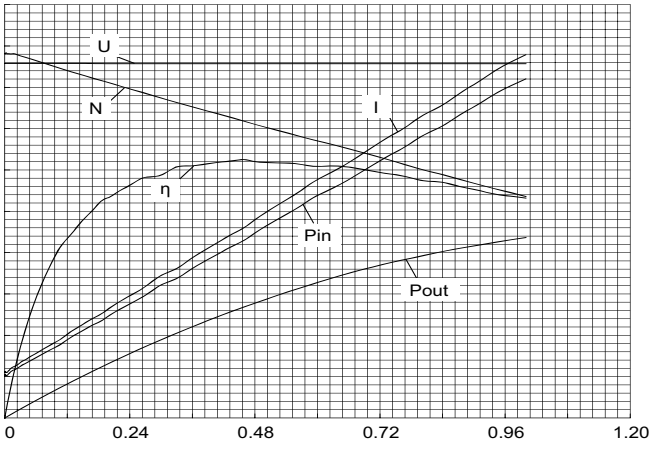
Specification

Model	Voltage (V_{DC})	No Load Current (A)	No Load Speed (rpm)	Max Efficiency (%)	Max Torque (N.M)	Max Output (W)	Length(L) (mm)	N.W. (Kg)
ZM-80	12	3.92	3300	63%	1.000	196.36	120	1.29
ZM-92	24	4.1	3300	59%	1.411	469.89	170	4.0
ZM-120	48	4.32	3400	68%	3.591	1134.57	220	4.9

※ Controller is requested for motor running

Curve (ZM-80)

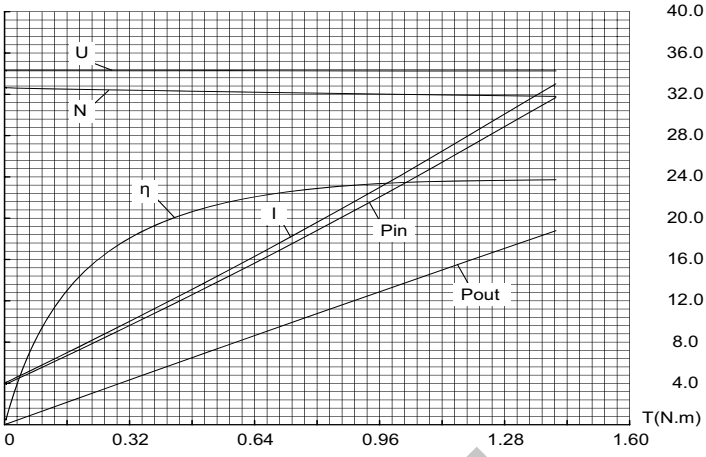
N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
3500	450	14.0	35.0	450	100
3150	405	12.6	31.5	405	90
2800	360	11.2	28.0	360	80
2450	315	9.8	24.5	315	70
2100	270	8.4	21.0	270	60
1750	225	7.0	17.5	225	50
1400	180	5.6	14.0	180	40
1050	135	4.2	10.5	135	30
700	90	2.8	7.0	90	20
350	45	1.4	3.5	45	10



ROYSE

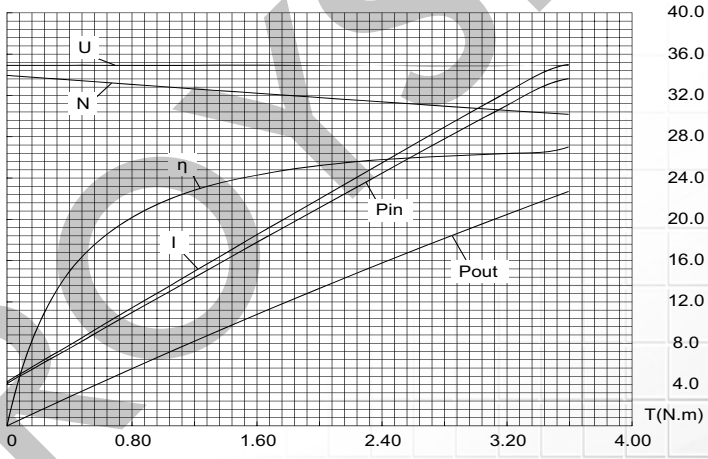
Curve (ZM-92)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
4000	1000	28.0	40.0	1000	100
3600	900	25.2	36.0	900	90
3200	800	22.4	32.0	800	80
2800	700	19.6	28.0	700	70
2400	600	16.8	24.0	600	60
2000	500	14.0	20.0	500	50
1600	400	11.2	16.0	400	40
1200	300	8.4	12.0	300	30
800	200	5.6	8.0	200	20
400	100	2.8	4.0	100	10



Curve (ZM-120)

N(rpm)	Pout(W)	U(V)	I(A)	Pin(W)	η(%)
4000	2000	55.0	40.0	2000	100
3600	1800	49.5	36.0	1800	90
3200	1600	44.0	32.0	1600	80
2800	1400	38.5	28.0	1400	70
2400	1200	33.0	24.0	1200	60
2000	1000	27.5	20.0	1000	50
1600	800	22.0	16.0	800	40
1200	600	16.5	12.0	600	30
800	400	11.0	8.0	400	20
400	200	5.5	4.0	200	10



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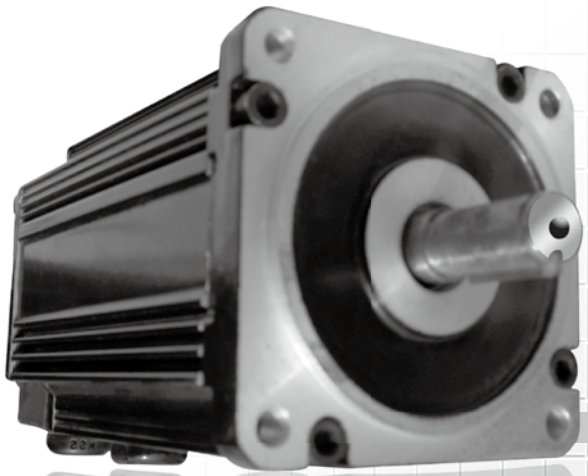
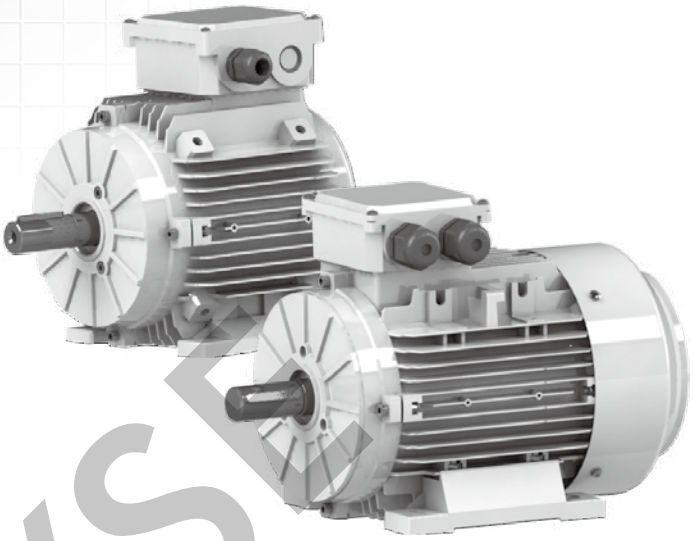


Electronically Commutated Motors

As a professional electric motors manufacturer who cares about environment and energy saving, one of our most important goals is to help our partners to reduce total life operation costs, increase profitability and make production more environmentally friendly.



TECHTOP EC (Electronically Commutated) motors is the special designed PMS (permanent magnet synchronous) motors which constructed on the base of the IEC norm, it is now available in four frame sizes: IEC–71#, IEC–90#, IEC–100#, IEC–132#, the maximum output is 22kW and the maximum torque is 70Nm.

ROYSE

To be qualified for the next generation which requires for higher energy saving products, TECHTOP EC motors has the following advantages:

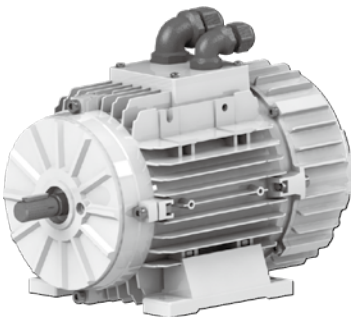
- Extremely high efficiency, average value is over IE4 norms.
- Very high efficiency in wide speed up to 3600rpm and power range.
- Compact and light design with high uniformity in appearance design with other TECHTOP products.
- Mounting dimensions according to the IEC norm, easy to replace from standard AC motors to TECHTOP EC motors.
- Various and flexible mounting types suitable for different applications.

E–Max motors is the first generation of TECHTOP EC motors which has led to develop the next generation of technology in motor efficiency and performance.

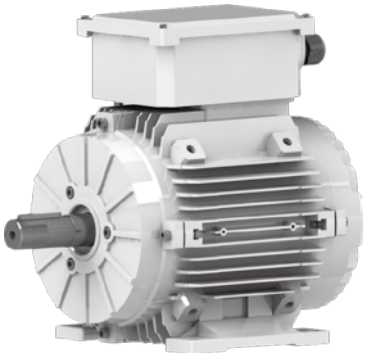
E-Max motors contains two series:

- **E-max commercial**
  IEC frame size 71# to 90# permanent magnet synchronous motors with integrated drive.

- **E-max industrial**
  IEC frame size 71# to 132# permanent magnet synchronous motors



E–Max 71# motor with integrated drive:



E–Max 90# motor with integrated drive:

E-Max Commercial series (ECI series)

Model	Frame size	Rated torque (Nm)**	Output@1500rpm (kW)	Output@3000rpm (kW)	Maximum speed (rpm)
T71ECI01X36	71	1.2	0.2	0.41	3600
T71ECI02X36		2.4	0.41	0.82	3000
T71ECI03X18		3.2	0.55	–	1800
T90ECI03X36	90	3.2	0.55	1.1	3600
T90ECI05X30		4.8	0.75	1.5	3000
T90ECI07X18		7	1.1	–	1800

** The rated torque is based on the motor cooling method. The detail torque please see data sheet.

E–Max Commercial Motor Drive Function

- CW/CCW choose
- Start–stop terminal
- 0–10VDC speed control
- RS485 Modbus
- Speed hand control by adjustable resistance
- Speed feedback

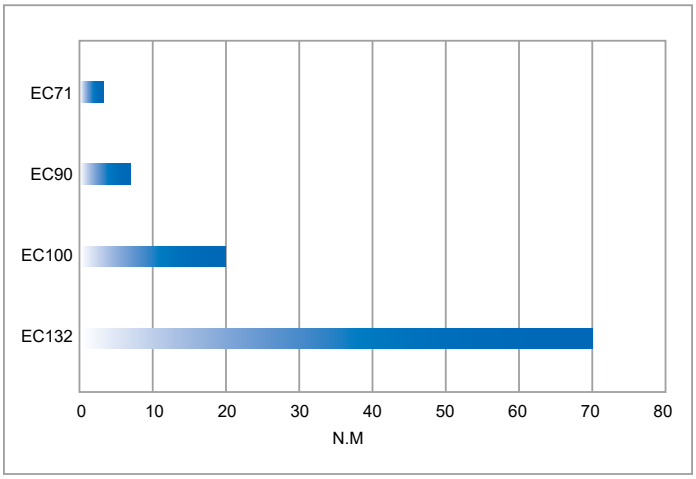
E-Max Industrial series (EC series)

Model	Frame size	Rated torque (Nm)**	Output@1500rpm (kW)	Output@3000rpm (kW)	Maximum speed (rpm)
T71EC01X36	71	1.2	0.2	0.41	3600
T71EC02X36		2.4	0.41	0.82	3600
T71EC03X36		3.2	0.55	1.1	3000
T90EC03X36	90	3.2	0.55	1.1	3600
T90EC05X36		4.8	0.75	1.5	3600
T90EC07X36		7	1.1	2.2	3600
T100EC10X36	100	9.5	1.5	3	3600
T100EC14X36		14	2.2	4	3600
T100EC19X30		19.1	3	5.5	3000
T132EC26X30	132	25.5	4	7.5	3000
T132EC35X30		35	5.5	11	3000
T132EC48X30		47.7	7.5	15	3000
T132EC59X30		58.9	9.2	18.5	3000
T132EC70X30		70	11	22	3000

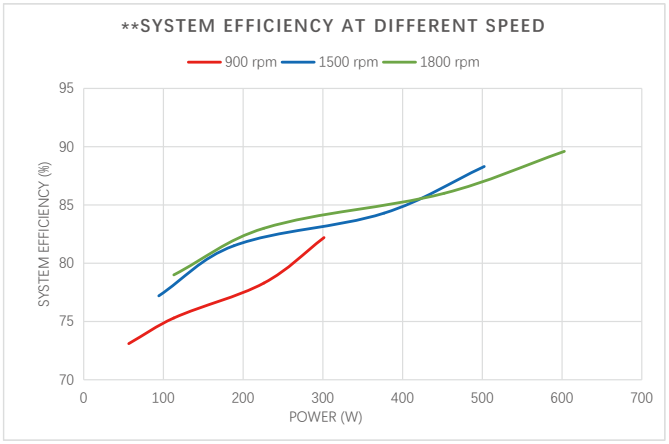
** The rated torque is based on the motor cooling method. The detail torque please see data sheet.

ROYSL

Product Range

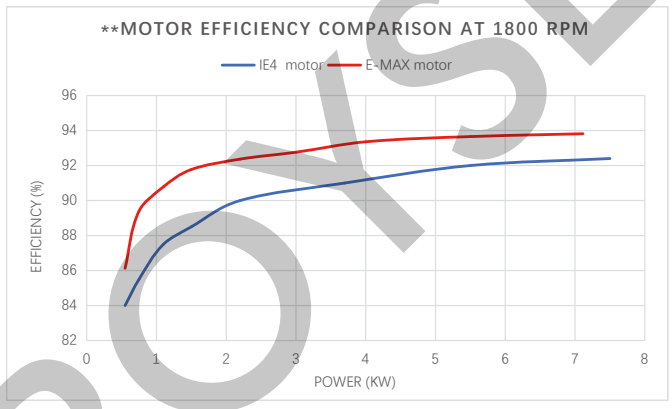


E-Max Commercial series



** System efficiency include the motor and drive efficiency.

E-Max Industrial series



** Efficiency is only motor efficiency.

ROYSL

Model Number Nomenclature

T	90	EC	03	V	36	C2	B14	P	T1
1	2	3	4	5	6	7	8	9	10

Position	Character	Description
1	“T”	Product platform
2	“90”	Frame size: IEC 90#
3	“EC”	EC: permanent magnet motor ECI: permanent magnet motor with integrated drvie
4	“03”	Rated torque
5	“V”	Cooling method: G = General purposes, with fan and fan hood. IC411 V = Ventilation applications, without fan and fan hood.
6	“36”	Maximum speed: 3600 rpm
7	C2	Power line connection method: T1 = Terminal box on top T2 = Terminal box on NDE C1 = No terminal box, power line from housing C2 = No terminal box, power line from NDE
8	B14	Mounting method: B3, B14, B5, B34, B35
9	P	P = Slid rail
10	T1	Voltage code: T1: 3 phase 360–440 V, T2: 3 phase 200–240 V S1: 1 phase 200–240 V, S2: 1 phase 115 V

VFD consideration

PMS motors must be drove by VSD, the motor cannot connect to the normal AC power directly. The VSD can be the commercial drive with vector control or PM motor control mode. VSD need to be set up the correct motor parameter (see below table). The detailed parameters can be find in the model data sheet.

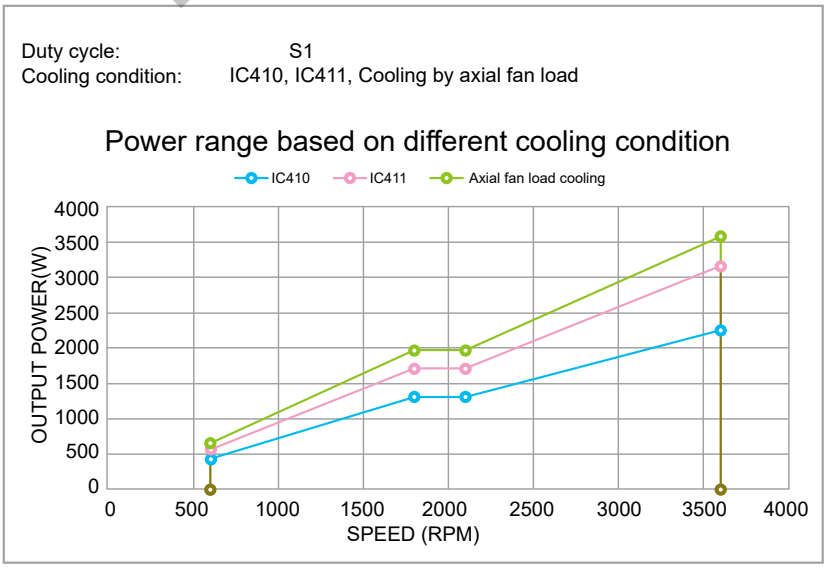
Motor Parameters for VSD

Items	Y	△	Unit	Note
VSD input voltage:	360-440	360-440	V	
Max speed:	1800	3600	rpm	
Max frequency:	150	300	Hz	
VSD output voltage:	360	360	V	
Rated current:	2.65	4.8	A	
Resistance:	1.45	0.49	Ohm	Phase
Ld:	9.5	3.1	mH	Phase
Lq:	9.5	3.1	mH	Phase
Back EMF value:	167	90	Vrms per 100 rpm	

Power choose consideration

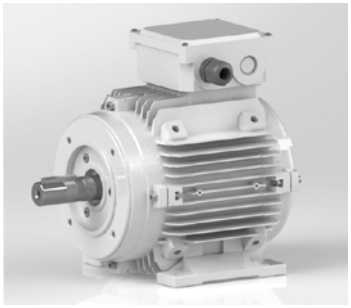
The power and torque in above model list is the rated power or torque when the motor has not any cooling method (IC410). If the motor cooled by the wheel or the load the motor power can be higher. The detail running range please see detail model data sheet. Below chart is a sample to decide the power at different cooling condition.

Duty cycle: S1
Cooling condition: IC410, IC411, Cooling by axial fan load

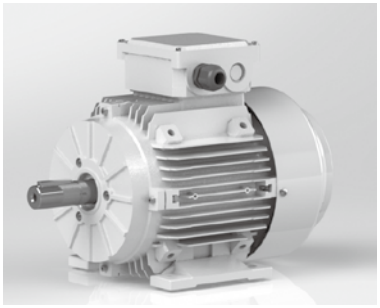


ROYSE

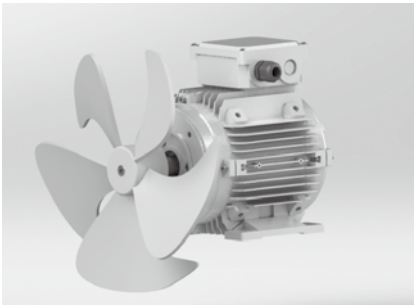
Outline Drawings and Dimensions



IC 410

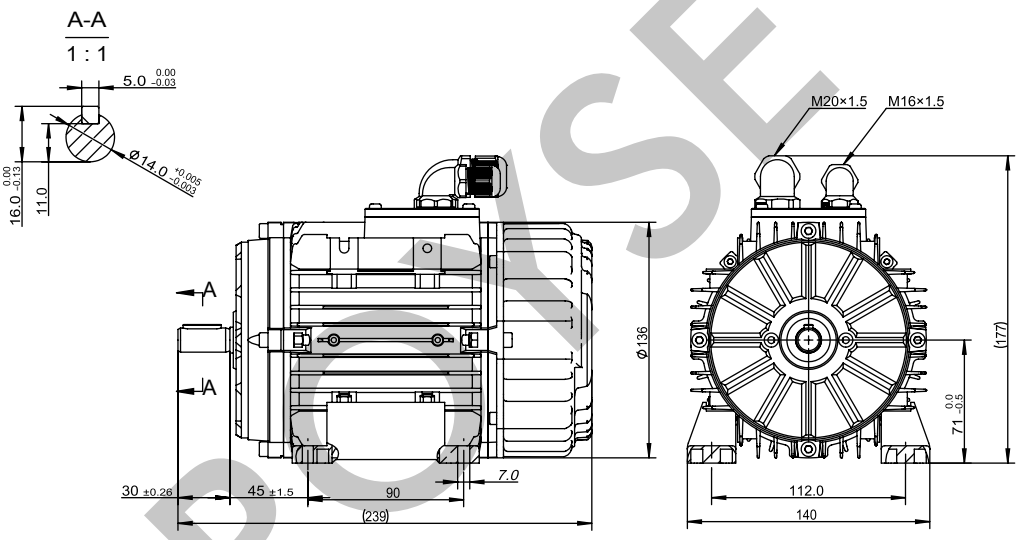


IC 411

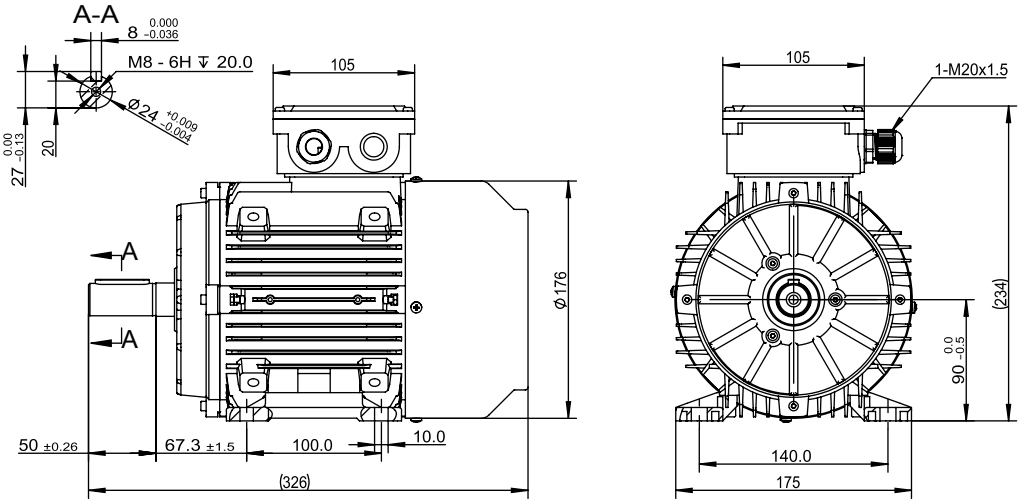


Axial fan load cooling

T71ECI motor with integrated drive (B3)



T90EC motor with fan cooling (B3, IC411)



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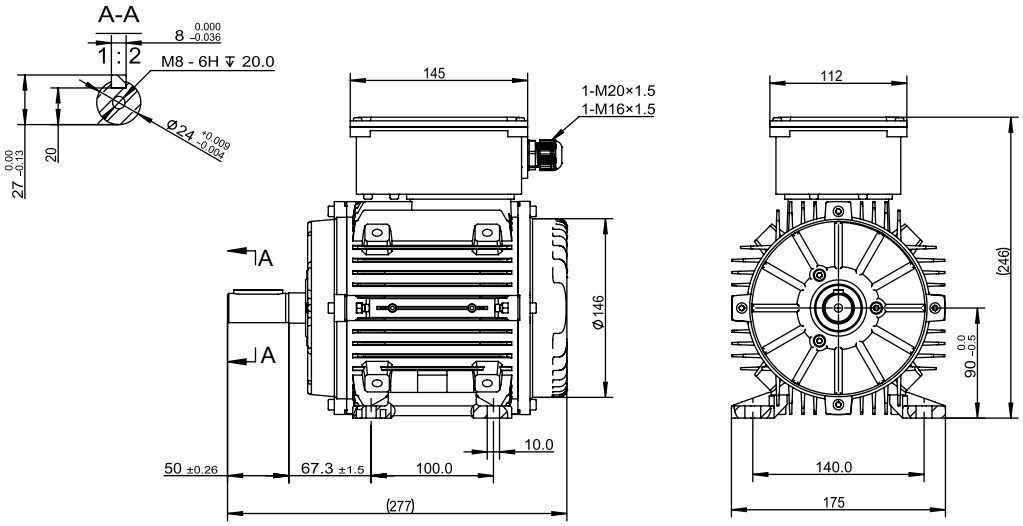
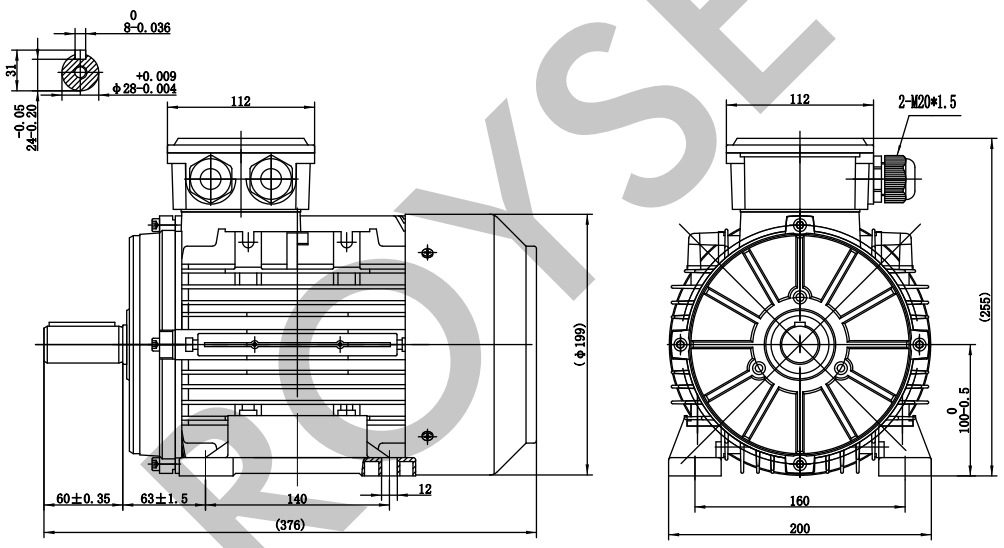
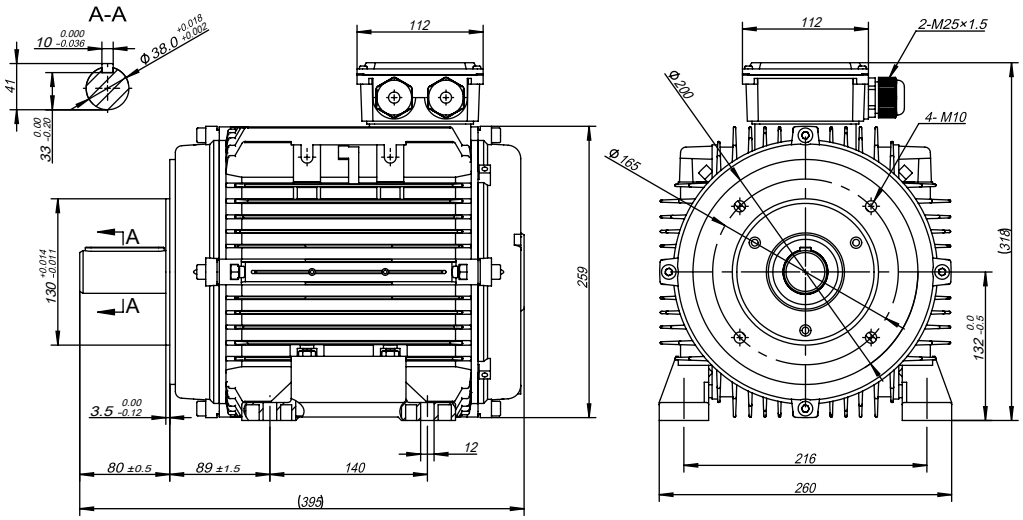
T90ECI motor with integrated drive (B3)



T100EC motor with fan cooling (B3, IC411)



T132EC motor without fan cooling (B3)



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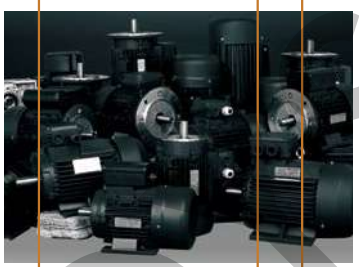

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TECHTOP®

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