

JEMEC

Driving machines for better



**JEM series three phase
asynchronous motor**

JEM1 series three phase asynchronous motor

■ Introduction

JEM1 series 3 phase asynchronous motor complies to efficiency class IE1 (60Hz) of IEC 60034-30 -1: 2014

JEM1 series three phase asynchronous motor adopts cast iron house, low-loss silicon steel sheet and high purity copper wire, has advantages such as high efficiency, low vibration and noise, low temperature rise, high compatibility, high reliability, strong structure etc. This series motors are suitable to drive all kinds of general purpose machines such as compressors, ventilators, pumps, etc., with continuous duty (S1), constant or various speed. And widely used in petrol chemical, pulp&paper, cement, steel, mining and water treatment etc.

■ Features

- Frame material: Cast Iron
- Standard color: RAL 5001 (Blue green)
- Rated power output: 0.55kW~355kW at 50Hz.
- All motors' efficiency reaches efficiency class IE1 (60Hz) according to IEC 60034-30-1: 2014
- Optimized compact style construction.
- Standard mounting construction according to IEC 60034-7: IM B3, IM B5, IM B35 and etc.
- All motors are designed to IP55 degree of protection (IEC 60034-5), and higher protection degree (IP68 the highest) is available by customers' request
 - Re-greasing devices for frame size 280 and above as standard, and for frame size 100 ~ 250 as option.
 - Insulation system is designed for temperature class 155 (F). At rated output with line-fed operation, the motors can be used in temperature class 130 (B).
 - Self ventilated motors with radial-flow fans (cooling method IC 411 according to IEC 60034-6) as standard, forced air cool with external separately driven fans as option.

■ Working environment

$-20^{\circ}\text{C} \leq T \leq 20^{\circ}\text{C}$: 100%

$20^{\circ}\text{C} < T \leq 30^{\circ}\text{C}$: 95%

$30^{\circ}\text{C} < T \leq 40^{\circ}\text{C}$: 55%

Degrees of motor protection IP55 (IEC 60034-5).

Altitude shall not exceed 1000m above sea-level (IEC 60034-1).

Allowed air temperature between -20°C and 40°C (IEC 60034-1).

Permitted relative humidity:

$-20^{\circ}\text{C} \leq T \leq 20^{\circ}\text{C}$: 100 %

$20^{\circ}\text{C} < T \leq 30^{\circ}\text{C}$: 95 %

$30^{\circ}\text{C} < T \leq 40^{\circ}\text{C}$: 55 %

For higher coolant temperatures and/or site altitudes higher than 1000 m above sea level, the specified motor output must be reduced by using the factor k_{HT} . The results in an admissible output

(P_{adm}) of the motor: $P_{adm} = P_{rated} \cdot k_H$

Factor k_{HT} for different site altitudes and / or coolant temperature							
Ambient temperature	Site altitude above sea level						
	1000 m	1500 m	2000m	2500 m	3000 m	3500 m	4000 m
<30℃	1.07	1.04	1.00	0.96	0.92	0.88	0.82
30 ~ 40 ℃	1.00	0.97	0.94	0.90	0.86	0.82	0.77
45 ℃	0.96	0.93	0.9	0.86	0.82	0.79	0.74
50℃	0.92	0.89	0.86	0.83	0.79	0.75	0.71
55 ℃	0.87	0.84	0.82	0.78	0.75	0.71	0.67
60 ℃	0.82	0.79	0.77	0.74	0.70	0.67	0.63

■ Reference standards

Title	IEC standard	Chinese standard
Rotating electrical machines – Part 1: Rating and performance	IEC 60034-1	GB/T 755
Rotating electrical machines – Part 2-1: Standard methods for determining	IEC 60034-2-1	GB/T 25442
Rotating electrical machines – Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) - Classification	IEC 60034-5	GB/T 4942.1
Rotating electrical machines – Part 6: Methods of cooling (IC Code)	IEC 60034-6	GB/T 1993
Rotating electrical machines – Part 7: Classification of types of construction, mounting arrangements and terminal box position (IM Code)	IEC 60034-7	GB/T 997
Rotating electrical machines – Part 8: Terminal markings and direction of	IEC 60034-8	GB/T 1971
Rotating electrical machines – Part 9: Noise limits	IEC 60034-9	GB/T 10069.3
Rotating electrical machines – Part 14: Mechanical vibration of certain machines with shaft heights 56 mm and higher – Measurement, evaluation and limits of vibration severity	IEC 60034-14	GB/T 10068
Rotating electrical machines – Part 1: Frame numbers 56 to 400 and flange numbers 55 to 1080	IEC 60072-1	GB/T 4772.1
General requirements for safety of small and medium size rotating electrical machines		GB/T 14711
Electrical insulation – Thermal evaluation and designation	IEC 60085	GB/T 11021
Classification of environmental conditions Part 2-1: Environmental conditions appearing in nature – Temperature and humidity	IEC 60721-2-1	GB/T 4797.1
Standard voltages	IEC 60038	GB/T 156
Rotating electrical machines – Part 12: Starting performance of single-speed three-phase cage induction motors	IEC 60034-12	GB/T 21210
Rotating electrical machines -Part 30-1: Efficiency classes of line operated AC motors (IE code)	IEC 60034-30-1	GB/T 32891.1

■ Nameplate

<div> <div>⊕</div> <div> JEMEC 3-Phase Asynchronous Motor </div> <div>Driving machines for better</div> <div>⊕</div> </div>						
Type: JEM1-280M-4 ①		S/N: JMC2020610001 ②			③ IE1	
④ IM: B3	⑤ Ins Cl. F	⑥ IP55	⑦ AMB: -20 ~ 40°C	⑧ IC411	⑨ 600kg	
⑩ V	⑪ Hz	⑫ kW	⑬ A	⑭ Eff.	⑮ Cos?	⑯ RPM
400Δ / 690Y	60	90	160/92.9	93.2%	0.87	1785
⑰ Bearing DE: 6317/C3 ⑱ Bearing NDE: 6314/C3 ⑲ Re-greas interval: 4000h ⑳ Quantity: 30g			Protection ⑳ Winding: 3*PTC 150°C ㉑ Bearing: 2*PT100 ㉒ Heater: 60W/230V			
⊕ ㉔ IEC 60034-1			㉕ Date: JUN, 2020 ⊕			

- | | | | |
|----|----------------------|----|--------------------------|
| 1 | Type | 14 | Efficiency |
| 2 | Series number | 15 | Power factor |
| 3 | Efficiency class | 16 | Rated speed |
| 4 | Type of construction | 17 | Bearing at drive end |
| 5 | Insulation class | 18 | Bearing at non-drive end |
| 6 | Degree of protection | 19 | Re-grease time interval |
| 7 | Ambient temperature | 20 | Re-grease quantity |
| 8 | Weight | 21 | Thermistors in winding |
| 9 | Cooling method | 22 | Thermistors for bearing |
| 10 | Rated voltage | 23 | Anti-condensation heater |
| 11 | Frequency | 24 | Standard |
| 12 | Rated power | 25 | Manufacturing time |
| 13 | Rated current | | |

■ Mechanical design

■ Construction and mounting type

Construction type	With feet and without flange on the end-shield (DE)					
Mounting type	I M B3 FS 80 ~ 355	I M B6 FS 80 ~ 315	I M B7 FS 80 ~ 315	I M B8 FS 80 ~ 315	I M V5 FS 80 ~ 315	I M V6 FS 80 ~ 315
Diagram						
Construction type	Without feet and with flange on the end-shield (DE)			With feet and with flange on the end-shield (DE)		
Mounting type	I M B5 FS 80 ~ 315	IM V1 FS 80 ~ 355	I M V3 FS 80 ~ 315	I M B35 FS 80 ~ 355	I M V15 FS 80 ~ 315	I M V35 FS 80 ~ 315
Diagram						
Construction type	Without feet and with C-flange on the end-shield (DE)			With feet and with C-flange on the end-shield (DE)		
Mounting type	I M B14 FS 80 ~ 160	I M V18 FS 80 ~ 160	I M V19 FS 80 ~ 160	I M B34 FS 80 ~ 160	I M V17 FS 80 ~ 160	I M V37 FS 80 ~ 160
Diagram						

■ Degree of protection

All motors are designed to IP55 degree of protection (IEC 60034-5) , and higher protection degree (IP68 the highest) is available by customers' request

The IP code consists of IP code letters and two obligatory digits, meaning:			
The first digit (protection from introduction of solid foreign matter)		The second digit (protection against penetration of water and its harmful effects)	
IP	Definition	IP	Definition
0	No protection	0	No protection
1	Diameter \geq 50mm	1	Dropping vertically
2	Diameter \geq 12.5mm	2	Dropping (up to 15°)
3	Diameter \geq 2.5mm	3	Sprayed
4	Diameter \geq 1.0mm	4	Splashed
5	Limited protection against dust	5	In stream
6	Dust tight	6	In strong steam
		7	Under short-time immersion
		8	Under permanent immersion

■ Noise

The noise of JEM1 series motor conform to IEC60039-9 “Noise Limits ”. It is specified measuring-surface sound power level L_{Wfa} in dB (A). This is the spatial mean value of the sound power levels measured on the measuring surface. The measuring surface is a cube 1 m away from the motor surface.

Please refer to the Technical data table for the actual noise value.

■ Vibration

The rotors of JEM1 series motors are all dynamically balanced to severity grade A using a half key.

The effective vibration values for unloaded motors not exceed grad A in table below. If there's special vibration requirements, the rotors are balanced to severity grade B.

Grade	frame size	80≤H≤132		H>132	
	Vibration value	Seff	Veff	Seff	Veff
		(μ m)	(mm/s)	(μ m)	(mm/s)
A	Free suspension	45	2.8	45	2.8
	Rigid mounting	–	–	37	2.3
B	Free suspension	18	1.1	29	1.8
	Rigid mounting	–	–	24	1.5

Note:

Seff = effective vibration displacement

Veff = effective vibration velocity

■ Bearing system

JEM1 series motors are supplied with the ball bearing as standard. These bearings are either of the sealed or re-greaseable type.:

For FS80 ~ 160, the floating bearings are assembled;

for FS180 ~ 355, floating bearing at DE, and fixed bearing at NDE assembled;

As standard, Frame size 80 ~ 132 motors are not with regreasing device, but 160 and above motors with regreaseable bearing and regreasing device. If necessary, 100 ~ 250 motor can be configured with regreaseable bearing and regreasing device.

■ Bearing size

	Driving end		Non-driving end	
Frame size	2 Pole	4 ⁺ Pole	2 Pole	4 ⁺ Pole
80	6204ZZ/C3	6204ZZ/C3	6204ZZ/C3	6204ZZ/C3
90	6205ZZ/C3	6205ZZ/C3	6205ZZ/C3	6205ZZ/C3
100	6206ZZ/C3	6206ZZ/C3	6206ZZ/C3	6206ZZ/C3
112	6306ZZ/C3	6306ZZ/C3	6306ZZ/C3	6306ZZ/C3
132	6308ZZ/C3	6308ZZ/C3	6308ZZ/C3	6308ZZ/C3
160	6309/C3	6309/C3	6309/C3	6309/C3
180	6311/C3	6311/C3	6311/C3	6311/C3
200	6312/C3	6312/C3	6312/C3	6312/C3
225	6313/C3	6313/C3	6313/C3	6313/C3
250	6314/C3	6314/C3	6314/C3	6313/C3
280	6314/C3	6317/C3	6314/C3	6314/C3
315	6317/C3	6317/C3	6317/C3	6317/C3
355	6319/C3	6322/C3	6319/C3	6322/C3

■ Regreasing interval and grease quantity (Horizontal installation)

Frame size	2p		4p		6p		8p	
	Interval (h)	Quantity (g)	Interval (h)	Quantity (g)	Interval (h)	Quantity (g)	Interval (h)	Quantity (g)
160	2000	20	3000	20	3000	20	3000	20
180	2000	20	3000	20	3000	20	3000	20
200	2000	25	3000	25	3000	25	3000	25
225	2000	25	3000	25	3000	25	3000	25
250	2000	30	3000	30	3000	30	3000	30
280	3000	30	4000	40	4000	40	4000	40
315	3000	40	4000	45	6000	45	6000	45
355	3000	45	4000	60	6000	60	6000	60

Note:

If the coolant temperature is increased by 10 K, the grease lifetime and regreasing interval are halved.

■ Bearing lifetime (nominal lifetime)

Generally, the bearing lifetime is defined by the bearing size, the bearing load, the operating condition, the speed and the grease lifetime. The nominal bearing lifetime of JEM1 series motor is defined according standardized calculation procedures (ISO 281) and is reached or even exceeded for 90% of the bearings when the motors are operated in compliance with the data provide in the catalog.

The bearing lifetime of motors with horizontal type of construction is at least 40,000 hours if there is no additional axial loading at the coupling output and at least 20,000 hours with the maximum admissible loads. This assumes that the motor is operated at 50Hz.

When the motor runs outside of normal conditions, the bearing life will be reduced, such as the following conditions.

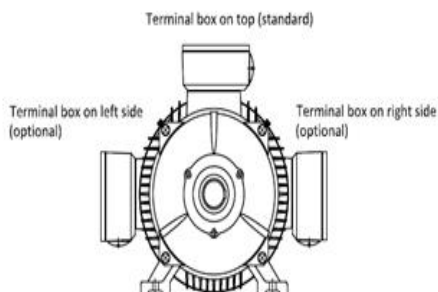
- When motor runs beyond the rated speed, the increase of motor vibration will result in the extra radial and axial force on bearing.

This will reduce the life of bearing;

- When the motor vibration increase due to the environment or other equipment, the bearing also will endure more radial and axial force. This also will reduce the life of bearing;

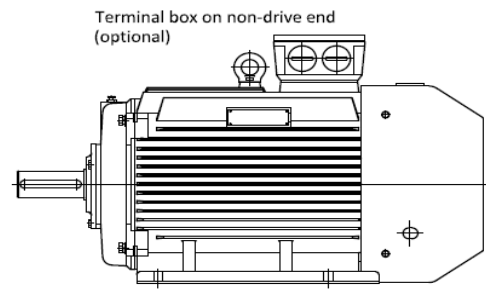
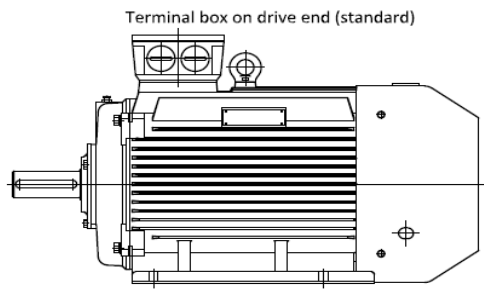
- If the coolant temperature is increased by 10 °C, the grease lifetime and regreasing interval is halved.

■ Location of the terminal box



The terminal box position of JEM1 series motor is on the top of house, drive end (standard position). It can also be located on right or left side of the motor house.

If there is interfere between the terminal box and other components, the terminal box can be moved from the drive end (DE) to non-drive end (NDE)



The terminal box can be rotated by 90°, so it is easy to adjust the cable entry to left, right, drive end or non-drive end.

■ Cooling and ventilation

The JEM1 standard motors are fitted with a radial flow fan, the fan is bi-directional rotation, the cooling method is IC411 in accordance with IEC60034-6.

Backward curved fan is optional to reduce the ventilation noise. In this case the motor could rotate in only one direction.

For some special application, separately driven fan should be considered to be configured.

- The use of a separately driven fan is recommended to increase motor utilization at low speed;
- When motor speed significantly higher than the synchronous speed, the separately fan is also recommended to be used. It can help reduce the motor noise.

For some application like fan, the motor without fan is optional. In this case the motor must be cooled by the air overflowed its surface, the cooling method is IC418.

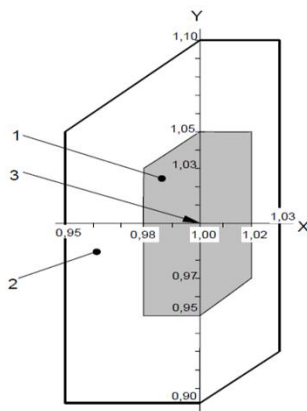
■ Electrical design

■ Rated output

The rated output power of JEM1 series motors means that the motor runs under continuous duty S1 operation when operated at ambient temperature from -20 °C to 40 °C and at altitudes of up to 1000 m over sea.

■ Voltage and frequency

According to IEC 60034-1, the voltage and frequency fluctuations are differentiated between Category A (combination of voltage deviation $\pm 5\%$ and frequency deviation $\pm 2\%$) and Category B (combination of voltage deviation $\pm 10\%$ and frequency deviation $+3\% / -5\%$). JEM1 series motors can supply their rated torque in both Category A and B. In Category A, the temperature rise is approximately 10 K higher than during normal operation.



X axis: Frequency p.u

Y axis: Voltage p.u

1: Zone A

2: Zone B (outside Zone A)

3: Rating point

■ Tolerance for electrical data

No.	Quantity	Tolerance
1	Efficiency η $P_{rated} \leq 150kW$ $P_{rated} > 150kW$	-15% of (1- η) -10% of (1- η)
2	Power factor	-1/6 (1-cos ϕ) Minimum absolute value: 0.02 Maximum absolute value: 0.07
3	Slip (at full load and working temperature) $P_{rated} < 1kW$ $P_{rated} \geq 1kW$	Slip $\pm 30\%$ Slip $\pm 20\%$
4	Locked rotor current	+20%
5	Locked rotor torque	-15% ~ +25%
6	Breakdown torque	-10%
7	Moment of inertia	$\pm 10\%$
8	Current of no load	+30%
9	Rated current	+10%

■ Overload times

According to IEC60034-1, JEM1 series motors are designed to withstand overload capacity of 1.5 times rated current for 2 minutes at rated voltage and frequency.

■ Insulation system

JEM1 series motors are designed for insulation class F (155 °C) with temperature rise class B (80K). If the motor works at high ambient temperature, or there's factors affect the motor cooling, insulation class H is optional to increase the motor's reliability.

■ Motor protection

◆ winding protection

When motor encounter failures such as overload, over/under voltage, shortage, phase loss etc, the motor's winding temperature may exceed its insulation maximum withstand temperature, cause the motor damage. To use of thermal protectors and thermal detectors incorporated into the stator winding in order to protect them against serious damage due to thermal overloads.

◆ PTC thermistors protection

A PTC thermistors is a typical thermally sensitive semi-conductor resistors, when the temperature exceeds the certain temperature (Curie temperature), the resistance increase significantly with temperature. When a limit temperature is reached (nominal tripping temperature), the resistance of PTC thermistors will have a step change. This is evaluated by a tripping unit and can be used to open auxiliary circuits.

Motor winding is protected with PTC thermistors with 3 embedded temperature sensors for tripping, the tripping temperature is optional. For JEM1 series motor with class F insulation, the tripping temperature is 150 °C

Motor winding is protected with two sets of three temperature sensors, one set is for warning, another set for tripping. For JEM1 series motor with class F insulation, the warning temperature is 140 °C, and tripping temperature is 150 °C.

◆ PT100 resistance thermometers protection

PT100 platinum thermometers are a high precision, high sensitivity, better linear temperature resistance, more stable performance, and high reliability sensor. For JEM1 series motors whose frame size above 280, PT100s are optional. Normally each phase winding equips 2 PT100s, 6 PT100s for 3 phase windings, of which 3 for operation, 3 for spare.

◆ Bearing protection

Overheating is a major indicator of an underlying problem affecting a bearing, so it is an important measure to keep the motor running safe by monitoring the bearings' temperature. The temperature is monitored through PT100 resistance thermometers screwed into the bearing plates of motor driven end(DE) and non-drive-end(NDE). The wires are routed through the main connection box. It is optional for JEM1 series frame size 280 and above motors.

◆ Anti-condensation heater

Motors whose windings are at risk of condensation due to the climatic conditions, e.g. inactive motors in humid atmospheres or motors that are subjected to widely fluctuating temperatures can be equipped with anti-condensation heaters.

Anti-condensation heaters must be switched off during operation. When motor shut down, the heaters must be switched on.

Anti-condensation heater is optional for all JEM1 series electric motors.

■ Inverter fed operation

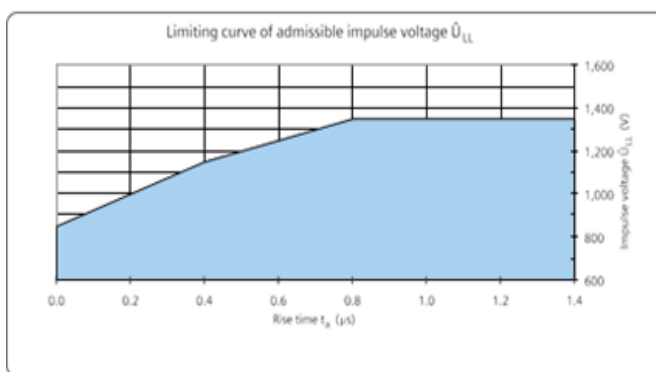
Standard JEM1 series motor supports limited VSD application

◆ Voltage withstand levels

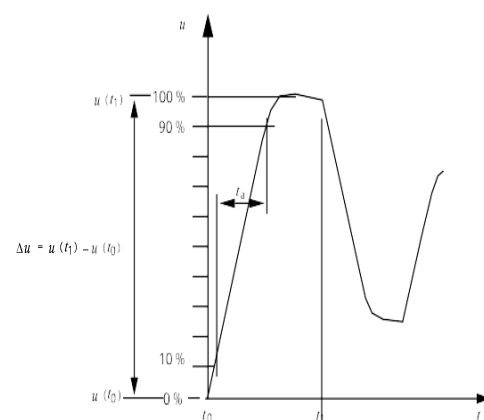
The insulation system of converter fed motor is subject to higher dielectric stresses than in the case of sinusoidal power supply. The dielectric stress of the winding insulation is determined by the peak voltage, short rise time and high repetition rate of the impulses produced by the converter, the characteristics and the length of the connection leads between converter and motor, the design of the winding and other systems parameters.

The standard insulation of the JEM1 series motors is designed to withstand voltage peak and rise time which is shown in the diagram

JEM1 series motor has optional reinforced insulation system for inverter-fed operation that the voltage peak and rise time exceeds the above chart.



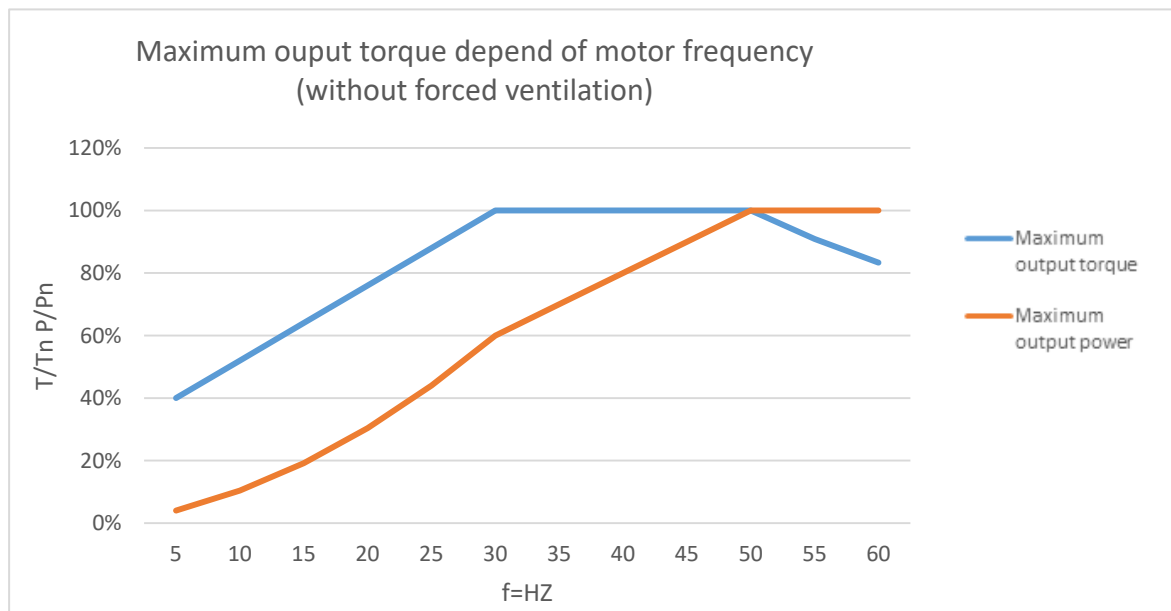
The values refer to standard IEC 60034-17 and GB/T 20161.



◆ Frequency range and load torque

By usage with rated torque, the suggested lowest frequency not less than 30Hz. If the motor needs to usage under 30Hz, forced ventilation is needed.

When operated frequency over 50HZ, the output power of motor can't exceed its rated output. In case the frequency exceeds 60HZ, special balancing is required for compliance with the specified limit values, forced ventilation is needed to reduce the ventilation noise and loss.



◆ Bearing current

When the motors are fed by inverter, harmful shaft current will be generated. The current will destroy the bearing in a relevant short time. So, for motor frame size 250 and above, measures must be taken to prevent the bearing current. JEM1 series motors have the following options to prevent bearing current.

- Insulation bearings
- Insulation end-shield
- High temperate coating ceramics shaft

■
 Technical data table

■
 2P (60Hz, IE1)

Type	Rated Output		Rated Speed	Rated Current (A)			Efficiency	Power factor	Rated torque	Locked current /rated torque	Breakdown torque /rated torque	Locked current /rated current	Moment of inertia (J)	Noise		Weight
	kW	HP	r/min	380V	400V	415V	%	Cos Φ	Nm	T _{st} /T _N	T _{brk} /T _N	I _{st} /I _N	Kgm ²	L _p dB(A)	L _w dB(A)	kg
JEM1-80M1-2	0.75	1	3415	1.88	1.78	1.72	74.0	0.82	2.10	2.2	2.3	6.1	0.0008	61	73	13
JEM1-80M2-2	1.1	1.5	3400	2.57	2.44	2.35	78.5	0.83	3.09	2.2	2.3	7.0	0.0011	61	73	14
JEM1-90S-2	1.5	2	3400	3.39	3.22	3.10	81.0	0.83	4.21	2.2	2.3	7.0	0.0012	66	78	19
JEM1-90L-2	2.2	3	3400	4.83	4.58	4.42	81.5	0.85	6.18	2.2	2.3	7.0	0.0015	66	78	23
JEM1-100L-2	3	4	3400	6.38	6.06	5.84	83.1	0.86	8.43	2.2	2.3	7.5	0.0048	70	82	32
JEM1-112M-2	4	5.5	3470	8.24	7.83	7.54	84.8	0.87	11.0	2.2	2.3	7.5	0.0059	71	83	38
JEM1-132S1-2	5.5	7.5	3490	11.2	10.6	10.2	86.0	0.87	15.1	2.2	2.3	7.5	0.010	74	86	53
JEM1-132S2-2	7.5	10	3490	15.0	14.2	13.7	87.5	0.87	20.5	2.2	2.3	7.5	0.016	74	86	57
JEM1-160M1-2	11	15	3520	21.7	20.6	19.9	87.5	0.88	29.8	2.2	2.3	7.5	0.040	80	92	99
JEM1-160M2-2	15	20	3520	29.3	27.8	26.8	88.5	0.88	40.7	2.2	2.3	7.5	0.047	80	92	109
JEM1-160L-2	18.5	25	3520	35.3	33.5	32.3	89.5	0.89	50.2	2.2	2.3	7.5	0.060	80	92	125
JEM1-180M-2	22	30	3530	42.0	39.9	38.4	89.5	0.89	59.5	2.0	2.3	7.5	0.085	82	95	157
JEM1-200L1-2	30	40	3535	56.8	53.9	52.0	90.2	0.89	81.0	2.0	2.3	7.5	0.16	85	98	210
JEM1-200L2-2	37	50	3535	69.0	65.6	63.2	91.5	0.89	100.0	2.0	2.3	7.5	0.19	85	98	230
JEM1-225M-2	45	60	3560	83.8	79.6	76.7	91.7	0.89	121	2.0	2.3	7.5	0.32	85	98	297
JEM1-250M-2	55	75	3560	102	96.5	93.0	92.4	0.89	148	2.0	2.3	7.5	0.40	85	99	380
JEM1-280S-2	75	100	3560	138	131	126	93.0	0.89	201	2.0	2.3	7.5	0.76	86	100	510
JEM1-280M-2	90	125	3560	163	155	150	93.0	0.90	241	2.0	2.3	7.5	0.94	86	100	540
JEM1-315S-2	110	150	3570	200	190	183	93.0	0.90	294	1.8	2.2	7.1	1.2	88	102	920
JEM1-315M-2	132	175	3570	238	226	218	93.6	0.90	353	1.8	2.2	7.1	1.3	88	102	970
JEM1-315L1-2	160	215	3570	287	273	263	94.1	0.90	428	1.8	2.2	7.1	1.8	91	105	1080
JEM1-315L2-2	185	250	3570	332	315	304	94.1	0.90	495	1.8	2.2	7.1	2.0	91	105	1170
JEM1-315L3-2	200	270	3570	359	341	329	94.1	0.90	535	1.8	2.2	7.1	2.2	91	105	1170
JEM1-355M1-2	220	300	3575	395	375	361	94.1	0.90	589	1.6	2.2	7.1	3.7	94	109	1620
JEM1-355M2-2	250	335	3575	449	426	411	94.1	0.90	669	1.6	2.2	7.1	4.4	94	109	1630
JEM1-355L1-2	280	375	3575	502	477	460	94.1	0.90	749	1.6	2.2	7.1	5.2	94	109	1720
JEM1-355L2-2	315	420	3575	559	531	512	94.1	0.91	843	1.6	2.2	7.1	5.2	94	109	1760
JEM1-355L3-2	355	476	3575	630	598	577	94.1	0.91	950	1.6	2.2	7.1	6.0	94	109	1970

■ 4P (60Hz, IE1)

Type	Rated Output		Reted Speed	Rated Current (A)			Efficiency	Power factor	Rated torque	Locked current /rated torque t	Breakdown torque /rated torque	Locked current /rated current	Moment of inertia (J)	Noise		Weight
	kW	HP	r/min	380V	400V	415V	%	Cos Φ	Nm	T _{st} /T _N	T _{max} /T _N	I _{st} /I _N	Kgm ²	L _p dB(A)	L _w dB(A)	kg
JEM1-80M1-4	0.55	1	1420	1.38	1.31	1.26	80.8	0.75	3.7	2.4	2.3	6.6	0.0018	44	56	18
JEM1-80M2-4	0.75	1	1420	1.84	1.75	1.69	82.5	0.75	5.04	2.3	2.3	6.6	0.0023	44	56	19
JEM1-90S-4	1.1	1.5	1420	2.61	2.48	2.39	84.1	0.76	7.40	2.3	2.3	6.8	0.0034	47	59	23
JEM1-90L-4	1.5	2	1420	3.47	3.30	3.18	85.3	0.77	10.1	2.3	2.3	7.0	0.0043	47	59	26
JEM1-100L1-4	2.2	3	1440	4.76	4.52	4.36	86.7	0.81	14.6	2.3	2.3	7.6	0.01	52	64	38
JEM1-100L2-4	3	4	1440	6.34	6.02	5.80	87.7	0.82	19.9	2.3	2.3	7.6	0.014	52	64	43
JEM1-112M-4	4	5.5	1450	8.37	7.95	7.66	88.6	0.82	26.3	2.2	2.3	7.8	0.02	53	65	48
JEM1-132S-4	5.5	7.5	1460	11.2	10.7	10.3	89.6	0.83	36	2.0	2.3	7.9	0.032	59	71	69
JEM1-132M-4	7.5	10	1460	15.0	14.3	13.7	90.4	0.84	49.1	2.0	2.3	7.5	0.036	59	71	77
JEM1-160M-4	11	15	1470	21.5	20.4	19.7	91.4	0.85	71.5	2.2	2.3	7.7	0.089	61	73	120
JEM1-160L-4	15	20	1470	28.8	27.3	26.3	92.1	0.86	97.4	2.2	2.3	7.8	0.11	61	73	133
JEM1-180M-4	18.5	25	1475	35.3	33.5	32.3	92.6	0.86	120	2.0	2.3	7.8	0.17	63	76	172
JEM1-180L-4	22	30	1475	41.8	39.7	38.3	93	0.86	142	2.0	2.3	7.8	0.2	63	76	195
JEM1-200L-4	30	40	1475	56.6	53.8	51.8	93.6	0.86	194	2.0	2.3	7.3	0.42	63	76	268
JEM1-225S-4	37	50	1480	68.7	65.2	62.9	95.2	0.86	239	2.0	2.3	7.4	0.46	65	78	299
JEM1-225M-4	45	60	1480	1485	79.2	76.3	95.4	0.86	290	2.0	2.3	7.4	0.53	65	78	337
JEM1-250M-4	55	75	1480	99.2	94.3	90.9	95.7	0.88	355	2.2	2.3	7.4	0.8	65	79	432
JEM1-280S-4	75	100	1485	135	128	124	96.0	0.88	482	2.0	2.3	6.9	1.5	66	80	576
JEM1-280M-4	90	125	1485	162	154	148	96.1	0.88	579	2.0	2.3	6.9	1.8	66	80	661
JEM1-315S-4	110	150	1490	195	185	179	96.3	0.89	705	2.0	2.2	7.0	2.9	74	88	982
JEM1-315M-4	132	175	1490	234	222	214	96.4	0.89	846	2.0	2.2	7.0	3.3	74	88	1015
JEM1-315L1-4	160	215	1490	283	269	259	96.6	0.89	1026	2.0	2.2	7.1	3.9	74	88	1050
JEM1-315L2-4	185	250	1490	323	307	296	96.7	0.90	1186	2.0	2.2	7.1	4.9	74	88	1087
JEM1-315L3-4	200	270	1490	349	332	320	96.7	0.90	1282	2.0	2.2	7.1	5.1	74	88	1111
JEM1-355M1-4	220	300	1490	384	365	352	96.7	0.90	1410	2.0	2.2	7.1	8.2	80	95	1527
JEM1-355M2-4	250	335	1490	436	415	400	96.7	0.90	1602	2.0	2.2	7.1	8.9	80	95	1547
JEM1-355L1-4	280	375	1490	489	464	448	96.7	0.90	1795	2.0	2.2	7.1	9.2	80	95	1670
JEM1-355L2-4	315	420	1490	550	522	504	96.7	0.90	2019	2.0	2.2	7.1	10	80	95	1827
JEM1-355L3-4	355	476	1490	620	589	567	96.7	0.90	2275	2.0	2.2	7.1	11	80	95	2012

■ 6P (60Hz, IE1)

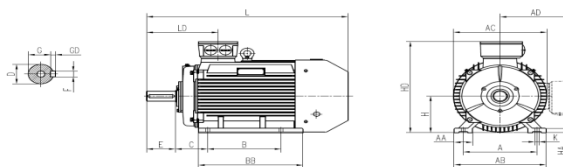
Type	Rated Output		Rated Speed	Rated Current (A)			Efficiency	Power factor	Rated torque	Locked current /rated torque	Breakdown torque /rated torque	Locked current /rated current	Moment of inertia (J)	Noise		Weight
	kW	HP		380V	400V	415V								L _P dB(A)	L _w dB(A)	
JEM1-80M1-6	0.37	0.5	1065	1.31	1.25	1.20	62.0	0.69	3.32	1.9	2.0	4.7	0.0	45	60	14
JEM1-80M2-6	0.55	0.75	1065	1.78	1.69	1.63	66.0	0.71	4.93	1.9	2.1	4.7	0.0	45	60	15
JEM1-90S-6	0.75	1	1100	2.23	2.12	2.04	72.0	0.71	6.51	2.0	2.1	5.5	0.0	48	63	19
JEM1-90L-6	1.1	1.5	1100	3.09	2.94	2.83	75.0	0.72	9.55	2.0	2.1	5.5	0.0	48	63	23
JEM1-100L-6	1.5	2	1095	4.00	3.80	3.66	77.0	0.74	13.1	2.0	2.1	5.5	0.0	52	67	28
JEM1-112M-6	2.2	3	1130	5.68	5.39	5.20	78.5	0.75	18.6	2.0	2.1	6.5	0.0	56	71	38
JEM1-132S-6	3	4	1155	7.48	7.11	6.85	81.2	0.75	24.8	2.1	2.1	6.5	0.0	60	75	50
JEM1-132M1-6	4	5.5	1155	9.67	9.19	8.85	83.8	0.75	33.1	2.1	2.1	6.5	0.0	60	75	59
JEM1-132M2-6	5.5	7.5	1155	12.9	12.3	11.8	85.0	0.76	45.5	2.1	2.1	6.5	0.0	60	75	68
JEM1-160M-6	7.5	10	1165	17.4	16.6	16.0	86.0	0.76	61.5	2.0	2.1	6.5	0.1	64	79	98
JEM1-160L-6	11	15	1165	24.4	23.2	22.3	89.0	0.77	90.2	2.0	2.1	6.5	0.2	64	79	120
JEM1-180L-6	15	20	1165	31.8	30.2	29.1	89.5	0.80	123	2.0	2.1	7.0	0.2	64	79	162
JEM1-200L1-6	18.5	25	1170	39.0	37.0	35.7	90.2	0.80	151	2.1	2.1	7.0	0.4	67	82	202
JEM1-200L2-6	22	30	1170	44.5	42.2	40.7	91.7	0.82	180	2.1	2.1	7.0	0.4	67	82	217
JEM1-225M-6	30	40	1175	59.9	56.9	54.8	91.7	0.83	244	2.0	2.1	7.0	0.9	67	82	277
JEM1-250M-6	37	50	1175	72.1	68.5	66.0	91.7	0.85	301	2.1	2.1	7.0	1.0	69	84	380
JEM1-280S-6	45	60	1175	87.7	83.3	80.3	91.7	0.85	366	2.1	2.0	7.0	2.0	71	86	434
JEM1-280M-6	55	75	1175	107	101	97.7	92.1	0.85	447	2.1	2.0	7.0	2.8	71	86	540
JEM1-315S-6	75	100	1190	144	137	132	93.0	0.85	602	2.0	2.0	7.0	3.2	76	91	861
JEM1-315M-6	90	125	1190	173	164	158	93.0	0.85	722	2.0	2.0	7.0	3.8	76	91	940
JEM1-315L1-6	110	150	1190	209	199	191	94.1	0.85	883	2.0	2.0	6.7	4.8	76	91	1110
JEM1-315L2-6	132	175	1190	245	233	224	94.1	0.87	1059	2.0	2.0	6.7	5.7	76	91	1175
JEM1-355M1-6	160	215	1190	297	282	272	94.1	0.87	1284	1.9	2.0	6.7	8.6	83	98	1459
JEM1-355M2-6	185	250	1190	343	326	314	94.1	0.87	1485	1.9	2.0	6.7	9.5	83	98	1617
JEM1-355M3-6	200	270	1190	371	353	340	94.1	0.87	1605	1.9	2.0	6.7	11	83	98	1936
JEM1-355L1-6	220	300	1190	408	388	374	94.1	0.87	1766	1.9	2.0	6.7	11	83	98	1956
JEM1-355L2-6	250	335	1190	464	441	425	94.1	0.87	2006	1.9	2.0	6.7	12	83	98	1981

■ 8P (60Hz, IE1)

Type	Rated Output		Rated Speed	Rated Current (A)			Efficiency	Power factor	Rated torque	Locked current /rated torque	Breakdown torque /rated torque	Locked current /rated current	Moment of inertia (J)	Noise		Weight
	kW	HP		380V	400V	415V								L _P dB(A)	L _w dB(A)	
JEM1-80M1-8	0.18	0.25	775	1.14	1.08	1.04	40.0	0.60	2.22	1.8	1.9	3.3	0.0019	43	58	14
JEM1-80M2-8	0.25	0.34	775	1.25	1.19	1.15	50.5	0.60	3.08	1.8	1.9	3.3	0.0022	43	58	16
JEM1-90S-8	0.37	0.5	805	1.63	1.55	1.49	57.5	0.60	4.39	1.8	1.9	4.0	0.0044	47	62	20
JEM1-90L-8	0.55	0.75	805	2.34	2.22	2.14	59.5	0.60	6.52	1.8	2.0	4.0	0.0055	47	62	22
JEM1-100L1-8	0.75	1	820	2.70	2.56	2.47	64.0	0.66	8.73	1.8	2.0	4.0	0.0	50	65	30
JEM1-100L2-8	1.1	1.5	820	3.34	3.18	3.06	73.5	0.68	12.8	1.8	2.0	5.0	0.0	50	65	35
JEM1-112M-8	1.5	2	840	4.35	4.13	3.99	77.0	0.68	17.1	1.8	2.0	5.0	0.0	52	67	39
JEM1-132S-8	2.2	3	855	6.12	5.82	5.61	78.0	0.70	24.6	1.8	2.0	6.0	0.0	55	70	56
JEM1-132M-8	3	4	855	6.70	6.36	6.13	94.5	0.72	33.5	1.8	2.0	6.0	0.0	55	70	67
JEM1-160M1-8	4	5.5	865	8.93	8.49	8.18	94.5	0.72	44.2	1.9	2.0	6.0	0.1	59	74	97
JEM1-160M2-8	5.5	7.5	865	13.6	12.9	12.5	84.0	0.73	60.7	2.0	2.0	6.0	0.1	59	74	104
JEM1-160L-8	7.5	10	865	18.1	17.2	16.6	85.0	0.74	82.8	2.0	2.0	6.0	0.1	59	74	120
JEM1-180L-8	11	15	875	25.5	24.2	23.3	87.5	0.75	120	2.0	2.0	6.6	0.2	61	76	180
JEM1-200L-8	15	20	875	34.3	32.6	31.4	88.5	0.75	164	2.0	2.0	6.6	0.4	64	79	240
JEM1-225S-8	18.5	25	875	42.3	40.2	38.8	88.5	0.75	202	1.9	2.0	6.6	0.5	64	79	270
JEM1-225M-8	22	30	875	48.1	45.7	44.1	90.2	0.77	240	1.9	2.0	6.6	0.8	64	79	313
JEM1-250M-8	30	40	875	64.8	61.5	59.3	90.2	0.78	327	1.9	2.0	6.6	1.2	66	81	433
JEM1-280S-8	37	50	880	79.2	75.2	72.5	91.0	0.78	402	1.9	2.0	6.6	2.5	67	82	470
JEM1-280M-8	45	60	885	96.3	91.5	88.2	91.0	0.78	486	1.9	2.0	6.6	2.8	67	82	603
JEM1-315S-8	55	75	885	114	108	105	91.5	0.80	594	1.8	2.0	6.6	3.2	73	88	895
JEM1-315M-8	75	100	885	155	147	142	92.0	0.80	809	1.8	2.0	6.6	4.0	73	88	1010
JEM1-315L1-8	90	125	885	183	173	167	92.5	0.81	971	1.8	2.0	6.6	4.9	73	88	1110
JEM1-315L2-8	110	150	885	223	212	204	92.5	0.81	1187	1.8	2.0	6.4	5.5	73	88	1210
JEM1-355M1-8	132	175	890	268	254	245	92.5	0.81	1416	1.8	2.0	6.4	9.3	81	96	1480
JEM1-355M2-8	160	215	890	324	308	297	92.5	0.81	1717	1.8	2.0	6.4	11.4	81	96	1568
JEM1-355L1-8	185	250	890	375	356	344	92.5	0.81	1985	1.8	2.0	6.4	12.4	81	96	1925
JEM1-355L2-8	200	270	890	401	381	367	92.5	0.82	2146	1.8	2.0	6.4	12.4	81	96	1945

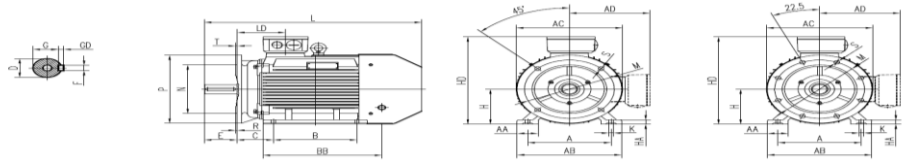
■ Dimension drawings

◆ B3 construction



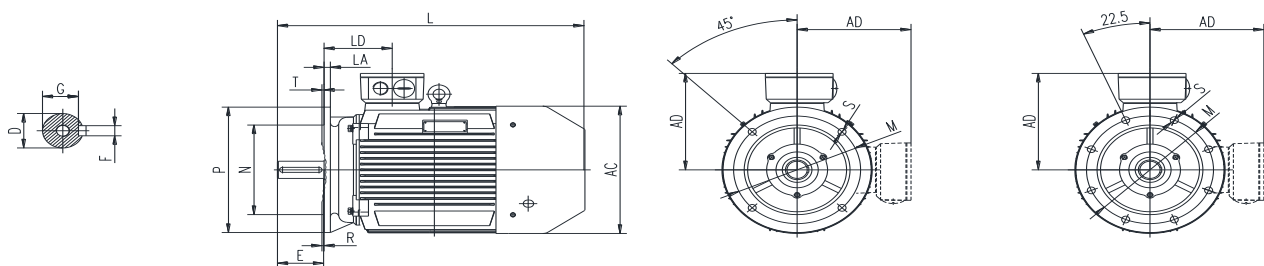
Frame size	Poles	Dimensions in mm																	
		A	AA	B	C	D	E	F	G	H	K	AB	AC	AD	HD	L	BB	HA	LD
80	2 ⁺	125	34	100	50	19	40	6	15.5	80	10	160	158	140	220	335	160	12	112
90S	2 ⁺	140	36	100	56	24	50	8	20	90	10	176	168	155	245	350	165	12	125
90L	2 ⁺	140	36	125	56	24	50	8	20	90	10	176	168	155	245	380	195	12	125
100L	2 ⁺	160	40	140	63	28	60	8	24	100	12	200	197	165	275	430	200	14	143
112M	2 ⁺	190	45	140	70	28	60	8	24	112	12	226	220	185	305	430	200	15	147
132S	2 ⁺	216	55	140	89	38	80	10	33	132	12	270	259	205	340	470	186	18	179
132M	2 ⁺	216	55	178	89	38	80	10	33	132	12	270	259	205	340	500	224	18	179
160M	2	254	65	210	108	42	110	12	37	160	14.5	315	314	255	420	620	260	20	256
	4 ⁺	254	65	210	108	42	110	12	37	160	14.5	315	314	255	420	620	260	20	256
160L	2	254	65	254	108	42	110	12	37	160	14.5	315	314	255	420	660	305	20	256
	4 ⁺	254	65	254	108	42	110	12	37	160	14.5	315	314	255	420	660	305	20	256
180M	2	279	70	241	121	48	110	14	42.5	180	14.5	349	357	275	420	700	311	22	271
	4 ⁺	279	70	241	121	48	110	14	42.5	180	14.5	349	357	275	420	700	311	22	271
180L	4 ⁺	279	70	279	121	48	110	14	42.5	180	14.5	349	357	275	420	740	349	22	271
200L	2	318	70	305	133	55	110	16	49	200	18.5	388	397	310	470	790	349	25	296
	4 ⁺	318	70	305	133	55	110	16	49	200	18.5	388	397	310	470	790	349	25	296
225S	4 ⁺	356	75	286	149	60	140	18	53	225	18.5	435	445	330	555	820	370	28	329
225M	2	356	75	311	149	55	110	16	49	225	18.5	435	445	330	555	815	395	28	299
	4 ⁺	356	75	311	149	60	140	18	53	225	18.5	435	445	330	555	845	395	28	329
250M	2	406	80	349	168	60	140	18	53	250	24	484	484	365	560	910	445	30	347
	4 ⁺	406	80	349	168	65	140	18	58	250	24	484	484	365	560	910	445	30	347
280S	2	457	85	368	190	65	140	18	58	280	24	542	546	395	675	970	485	35	355
	4 ⁺	457	85	368	190	75	140	20	67.5	280	24	542	546	395	675	970	485	35	355
280M	2	457	85	419	190	65	140	18	58	280	24	542	546	395	675	1020	535	35	355
	4 ⁺	457	85	419	190	75	140	20	67.5	280	24	542	546	395	675	1020	535	35	355
315S	2	508	120	406	216	65	140	18	58	315	28	630	618	600	855	1285	630	45	416
	4 ⁺	508	120	406	216	80	170	22	71	315	28	630	618	600	855	1315	630	45	446
315M	2	508	120	457	216	65	140	18	58	315	28	630	618	600	855	1475	680	45	416
	4 ⁺	508	120	457	216	80	170	22	71	315	28	630	618	600	855	1515	680	45	446
315L	2	508	120	508	216	65	140	18	58	315	28	630	618	600	855	1475	680	45	416
	4 ⁺	508	120	508	216	80	170	22	71	315	28	630	618	600	855	1515	680	45	446
355M	2	610	120	560	254	75	140	20	67.5	355	28	726	700	650	1000	1500	750	52	424
	4 ⁺	610	120	560	254	95	170	25	86	355	28	726	700	650	1000	1530	750	52	454
355L	2	610	120	630	254	75	140	20	67.5	355	28	726	700	650	1000	1500	750	52	424
	4 ⁺	610	120	630	254	95	170	25	86	355	28	726	700	650	1000	1530	750	52	454

◆ B35 construction



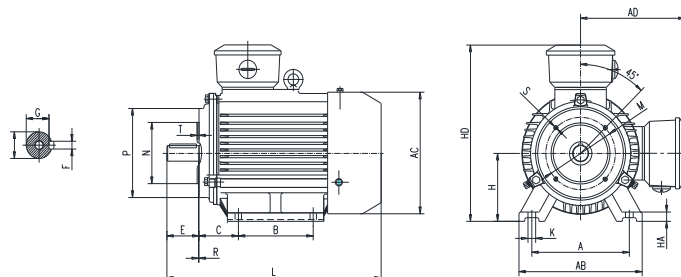
Frame size	Flange No.	Poles	Dimensions in mm																											
			A	AA	B	C	D	E	F	G	H	K	AB	AC	AD	HD	L	BB	HA	LD	Flange holes	M	N	P	R	s	T			
80	FF165	2°	125	34	100	50	19	40	6	15.5	80	10	160	158	140	220	335	160	12	72	4	165	130	200	0	12	3.5			
90S	FF165	2°	140	36	100	56	24	50	8	20	90	10	176	168	155	245	350	165	12	75	4	165	130	200	0	12	3.5			
90L	FF165	2°	140	36	125	56	24	50	8	20	90	10	176	168	155	245	380	195	12	75	4	165	130	200	0	12	3.5			
100L	FF215	2°	160	40	140	63	28	60	8	24	100	12	200	197	165	275	430	200	14	83	4	215	180	250	0	14.5	4			
112M	FF215	2°	190	45	140	70	28	60	8	24	112	12	226	220	185	305	430	200	15	87	4	215	180	250	0	14.5	4			
132S	FF265	2°	216	55	140	89	38	80	10	33	132	12	270	259	205	340	470	186	18	99	4	265	230	300	0	14.5	4			
132M	FF265	2°	216	55	178	89	38	80	10	33	132	12	270	259	205	340	500	224	18	99	4	265	230	300	0	14.5	4			
160M	FF300	2	254	65	210	108	42	110	12	37	160	14.5	315	314	255	420	620	260	20	146	4	300	250	350	0	18.5	5			
	FF300	4°	254	65	210	108	42	110	12	37	160	14.5	315	314	255	420	620	260	20	146	4	300	250	350	0	18.5	5			
160L	FF300	2	254	65	254	108	42	110	12	37	160	14.5	315	314	255	420	660	305	20	146	4	300	250	350	0	18.5	5			
	FF300	4°	254	65	254	108	42	110	12	37	160	14.5	315	314	255	420	660	305	20	146	4	300	250	350	0	18.5	5			
180M	FF300	2	279	70	241	121	48	110	14	42.5	180	14.5	349	357	275	420	700	311	22	161	4	300	250	350	0	18.5	5			
180L	FF300	4°	279	70	241	121	48	110	14	42.5	180	14.5	349	357	275	420	700	311	22	161	4	300	250	350	0	18.5	5			
	FF300	4°	279	70	279	121	48	110	14	42.5	180	14.5	349	357	275	420	740	349	22	161	4	300	250	350	0	18.5	5			
200L	FF350	2	318	70	305	133	55	110	16	49	200	18.5	388	397	310	470	790	349	25	186	4	350	300	400	0	18.5	5			
	FF350	4°	318	70	305	133	55	110	16	49	200	18.5	388	397	310	470	790	349	25	186	4	350	300	400	0	18.5	5			
225S	FF400	4°	356	75	286	149	60	140	18	53	225	18.5	435	445	330	555	820	370	28	189	8	400	350	450	0	18.5	5			
225M	FF400	2	356	75	311	149	55	110	16	49	225	18.5	435	445	330	555	815	395	28	189	8	400	350	450	0	18.5	5			
	FF400	4°	356	75	311	149	60	140	18	53	225	18.5	435	445	330	555	845	395	28	189	8	400	350	450	0	18.5	5			
250M	FF500	2	406	80	349	168	60	140	18	53	250	24	484	484	365	560	910	445	30	207	8	500	450	550	0	18.5	5			
	FF500	4°	406	80	349	168	65	140	18	58	250	24	484	484	365	560	910	445	30	207	8	500	450	550	0	18.5	5			
280S	FF500	2	457	85	368	190	65	140	18	58	280	24	542	546	395	675	970	485	35	215	8	500	450	550	0	18.5	5			
	FF500	4°	457	85	368	190	75	140	20	67.5	280	24	542	546	395	675	970	485	35	215	8	500	450	550	0	18.5	5			
280M	FF500	2	457	85	419	190	65	140	18	58	280	24	542	546	395	675	1020	535	35	215	8	500	450	550	0	18.5	5			
	FF500	4°	457	85	419	190	75	140	20	67.5	280	24	542	546	395	675	1020	535	35	215	8	500	450	550	0	18.5	5			
315S	FF600	2	508	120	406	216	65	140	18	58	315	28	630	618	600	855	1285	630	45	276	8	600	550	660	0	24	6			
	FF600	4°	508	120	406	216	80	170	22	71	315	28	630	618	600	855	1315	630	45	276	8	600	550	660	0	24	6			
315M	FF600	2	508	120	457	216	65	140	18	58	315	28	630	618	600	855	1475	680	45	276	8	600	550	660	0	24	6			
	FF600	4°	508	120	457	216	80	170	22	71	315	28	630	618	600	855	1515	680	45	276	8	600	550	660	0	24	6			
315L	FF600	2	508	120	508	216	65	140	18	58	315	28	630	618	600	855	1475	680	45	276	8	600	550	660	0	24	6			
	FF600	4°	508	120	508	216	80	170	22	71	315	28	630	618	600	855	1515	680	45	276	8	600	550	660	0	24	6			
355M	FF740	2	610	120	560	254	75	140	20	67.5	355	28	726	700	650	1000	1500	750	52	254	8	740	680	800	0	24	6			
	FF740	4°	610	120	560	254	95	170	25	86	355	28	726	700	650	1000	1530	750	52	284	8	740	680	800	0	24	6			
355L	FF740	2	610	120	630	254	75	140	20	67.5	355	28	726	700	650	1000	1500	750	52	284	8	740	680	800	0	24	6			
	FF740	4°	610	120	630	254	95	170	25	86	355	28	726	700	650	1000	1530	750	52	284	8	740	680	800	0	24	6			

◆ B5 construction



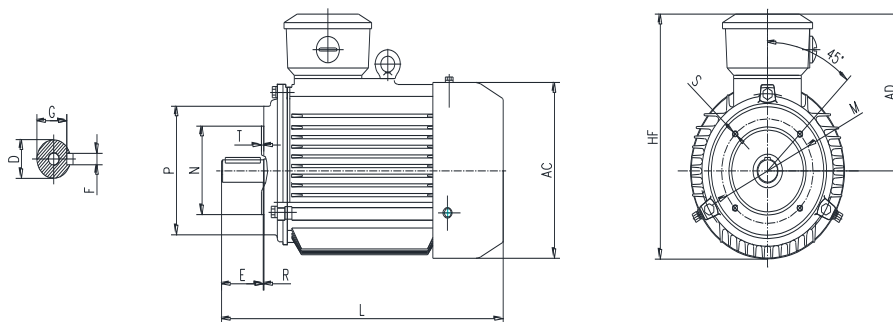
Frame size	Flange No.	Poles	Dimensions in mm															
			D	E	F	G	M	N	P	S	T	Flange holes	AC	L	LD	LA	AD	R
80	FF165	2 ⁺	19	40	6	15.5	165	130	200	12	3.5	4	158	335	72	12	140	0
90S	FF165	2 ⁺	24	50	8	20	165	130	200	12	3.5	4	168	350	75	12	155	0
90L	FF165	2 ⁺	24	50	8	20	165	130	200	12	3.5	4	168	380	75	12	155	0
100L	FF215	2 ⁺	28	60	8	24	215	180	250	14.5	4	4	197	430	83	13	165	0
112M	FF215	2 ⁺	28	60	8	24	215	180	250	14.5	4	4	220	430	87	14	185	0
132S	FF265	2 ⁺	38	80	10	33	265	230	300	14.5	4	4	259	470	99	14	205	0
132M	FF265	2 ⁺	38	80	10	33	265	230	300	14.5	4	4	259	500	99	14	205	0
160M	FF300	2 ⁺	42	110	12	37	300	250	350	18.5	5	4	314	620	146	15	255	0
160L	FF300	2 ⁺	42	110	12	37	300	250	350	18.5	5	4	314	620	146	15	255	0
180M	FF300	2 ⁺	48	110	14	42.5	300	250	350	18.5	5	4	357	700	161	15	275	0
180L	FF300	2 ⁺	48	110	14	42.5	300	250	350	18.5	5	8	357	740	161	15	275	0
200L	FF350	2 ⁺	55	110	16	49	350	300	400	18.5	5	8	397	790	186	17	310	0
225S	FF400	4 ⁺	60	140	18	53	400	350	450	18.5	5	8	445	820	189	20	330	0
225M	FF400	2	55	110	16	49	400	350	450	18.5	5	8	445	815	189	20	330	0
	FF400	4 ⁺	60	140	18	53	400	350	450	18.5	5	8	445	845	189	20	330	0
250M	FF500	2	60	140	18	53	500	450	550	18.5	5	8	484	910	207	22	365	0
	FF500	4 ⁺	65	140	18	58	500	450	550	18.5	5	8	484	910	207	22	365	0
280S	FF500	2	65	140	18	58	500	450	550	18.5	5	8	546	970	215	22	395	0
	FF500	4 ⁺	75	140	20	67.5	500	450	550	18.5	5	8	546	970	215	22	395	0
280M	FF500	2	65	140	18	58	500	450	550	18.5	5	8	546	1020	215	22	395	0
	FF500	4 ⁺	75	140	20	67.5	500	450	550	18.5	5	8	546	1020	215	22	395	0

◆ B34 construction



Frame size	Poles	Dimensions in mm																Overall dimensions					Flange holes
		A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	AB	AC	AD	HD	L		
80	2 ⁺	125	100	50	19	40	6	15.5	80	10	100	80	120	0	M6	3.0	160	158	140	220	335	4	
90S	2 ⁺	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	176	168	155	245	350	4	
90L	2 ⁺	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	176	168	155	245	380	4	
100L	2 ⁺	160	140	63	28	60	8	24	100	12	130	110	160	0	M8	3.5	200	197	165	275	430	4	
112M	2 ⁺	190	140	70	28	60	8	24	112	12	130	110	160	0	M8	3.5	226	220	185	305	430	4	

◆ B14 construction



Frame size	Poles	Dimensions in mm										Flange holes	Overall dimensions			
		D	E	F	G	M	N	P	R	S	T		AC	AD	HF	L
80	2 ⁺	19	40	6	15.5	100	80	120	0	M6	3.0	4	158	140	220	335
90S	2 ⁺	24	50	8	20	115	95	140	0	M8	3.0	4	168	155	240	350
90L	2 ⁺	24	50	8	20	115	95	140	0	M8	3.0	4	168	155	240	380
100L	2 ⁺	28	60	8	24	130	110	160	0	M8	3.5	4	197	165	265	430
112M	2 ⁺	28	60	8	24	130	110	160	0	M8	3.5	4	220	185	295	430



Frame Size	Poles	Dimensions in mm										Range holes	Overall dimensions			
		D	E	F	G	M	N	P	R	S	T		AC	AD	HF	L
180M	2 ⁺	48	110	14	42.5	300	250	350	0	18.5	5	4	314	255	430	750
180L	2 ⁺	48	110	14	42.5	300	250	350	0	18.5	5	4	357	275	430	790
200L	2 ⁺	55	110	16	49	350	300	400	0	18.5	5	4	357	275	475	840
225S	4 ⁺	60	140	18	53	400	350	450	0	18.5	5	8	397	310	535	870
225M	2	55	140	16	49	400	350	450	0	18.5	5	8	397	310	535	870
	4 ⁺	60	140	18	53											900
250M	2	60	140	18	53	500	450	550	0	18.5	5	8	445	330	605	990
	4 ⁺	65	140	18	58											
280S	2	65	140	18	58	500	450	550	0	18.5	5	8	484	365	670	1030
	4 ⁺	75	140	20	67.5											1090
280M	2	65	140	18	58	500	450	550	0	18.5	5	8	546	395	670	1060
	4 ⁺	75	140	20	67.5											1110
315S	2	65	140	18	58	600	550	660	0	24	6	8	618	600	930	1385
	4 ⁺	80	170	22	71											1415
315M/L	2	65	140	18	58	600	550	660	0	24	6	8	618	600	930	1545
	4 ⁺	80	170	22	71											1575
355M/L	2	75	140	20	67.5	740	680	800	0	24	6	8	700	650	1050	1580
	4 ⁺	95	17070	25	86											1610

淮安市捷美达机电设备有限公司

电话: 0517-80969998

0517-80969995

邮箱: info@jemec.com.cn

网址: www.jemec.com.cn

地址: 江苏省淮安市通源路12号海创空间1102

Huaian JEMEC Machinery Co., Ltd

Tel: +86 517 80969998

+86-517-80969995

E-mail: info@jemec.com.cn

Website: www.jemec.com.cn

Address: 1102 Hai Chuang Plaza, No.12 Tong Yuan Rd,
Huaian city Jiangsu Province , P.R.China