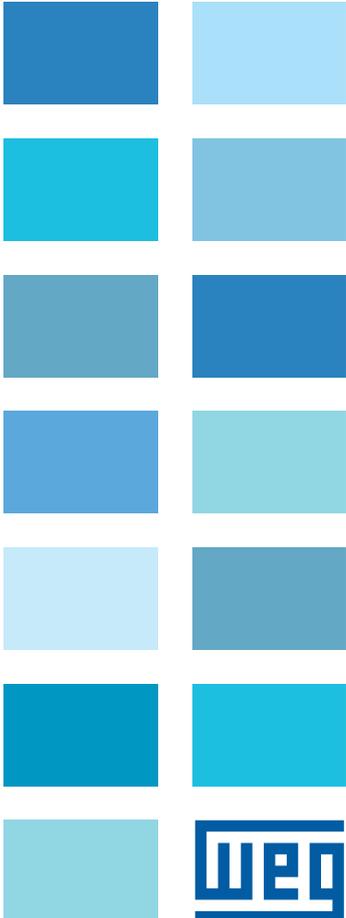


W01 Rolled Steel

Integral Horsepower Motor

Technical Catalogue
NEMA Market



W01 Rolled Steel

The new generation of WEG general purpose steel motors.

The motors of the W01 Rolled Steel line are the perfect option for applications where performance, robustness and light-weight are required in an all-in-one solution.

Presenting a whole new electrical and mechanical design, the new platform of Rolled Steel motors are made to run cooler, last longer and to be easier to install and maintain. The Premium Efficiency motors meet or exceed all NEMA Premium requirements for energy efficiency, while the High Efficiency motors meet or exceed the EPC requirements certified by the Department of Energy. Available in two options, the TEFC motors are designed for operating in environments of dirt, dust and moisture, on indoor and outdoor applications, while the ODP motors are designed for environments where dirt and moisture are minimal.

With Design "B" torques and energy efficient designs from 143/5T through 254/6T frames, these motors are specifically designed to provide maximum ventilation and heat dissipation. The scenario of increasing demand for more compact and efficient electric motors creates the need to develop new products with higher performance, quality, reliability and that exceed the requirements of customers. In accordance with this premise, WEG developed the new W01 Rolled Steel platform.



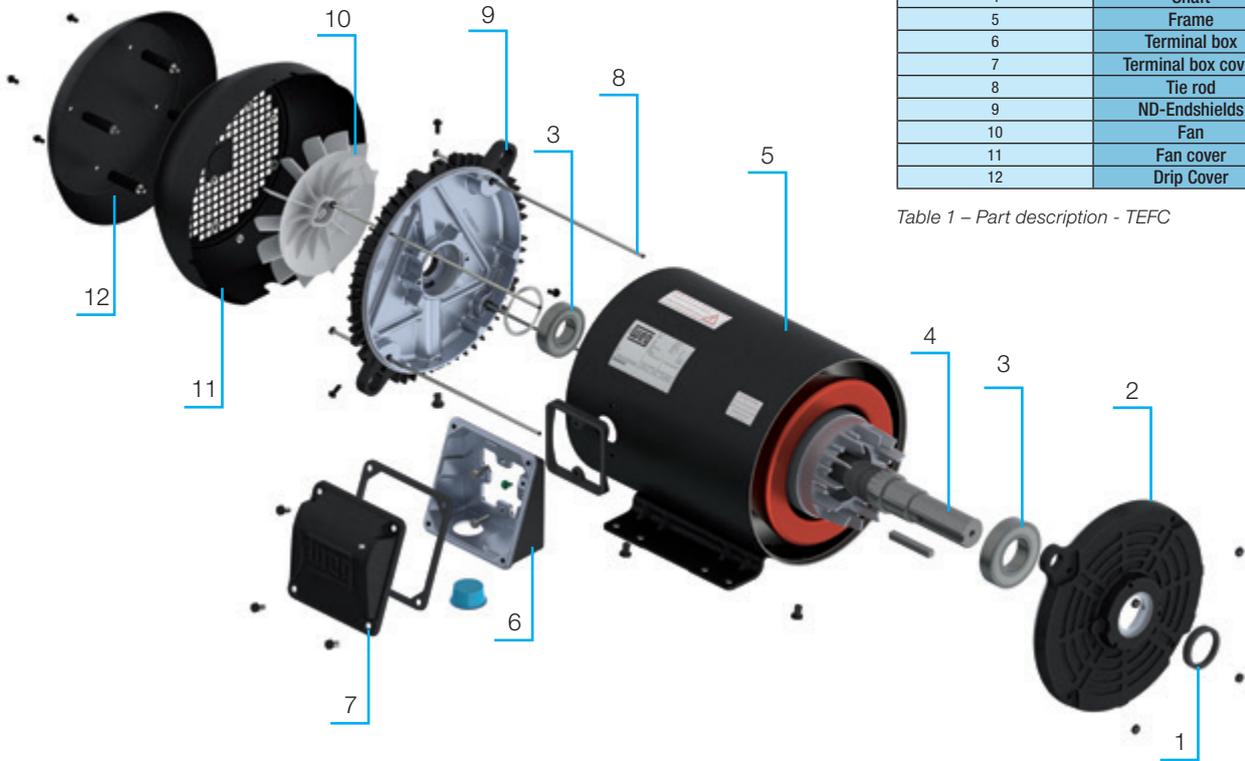
Main features and benefits of the W01 Rolled Steel motors

- New ventilation system for improved thermal performance
- Visual identity along the full scope and with internal bolts
- Robust feet design suitable for tougher applications (frames 182/4T and up)
- New and more robust eyebolts design, integrated to the endshields
- Oversized diagonally split aluminum terminal box that exceeds IP55 requirements and rotatable in 90° increments for flexibility during installation
- Option for internal AEGIS® SGR
- Suitable for VFD operation as per NEMA MG1 part 31.4.4.2
- Color coded/numbered leads as standard for easy wiring
- Regreasable ball bearings on 254/6T frame as standard
- Bearing cap as standard on all flanged motors
- Motor frame painting system resistant to a minimum of 500 hours minimum ASTM B117 salt spray



Visual index

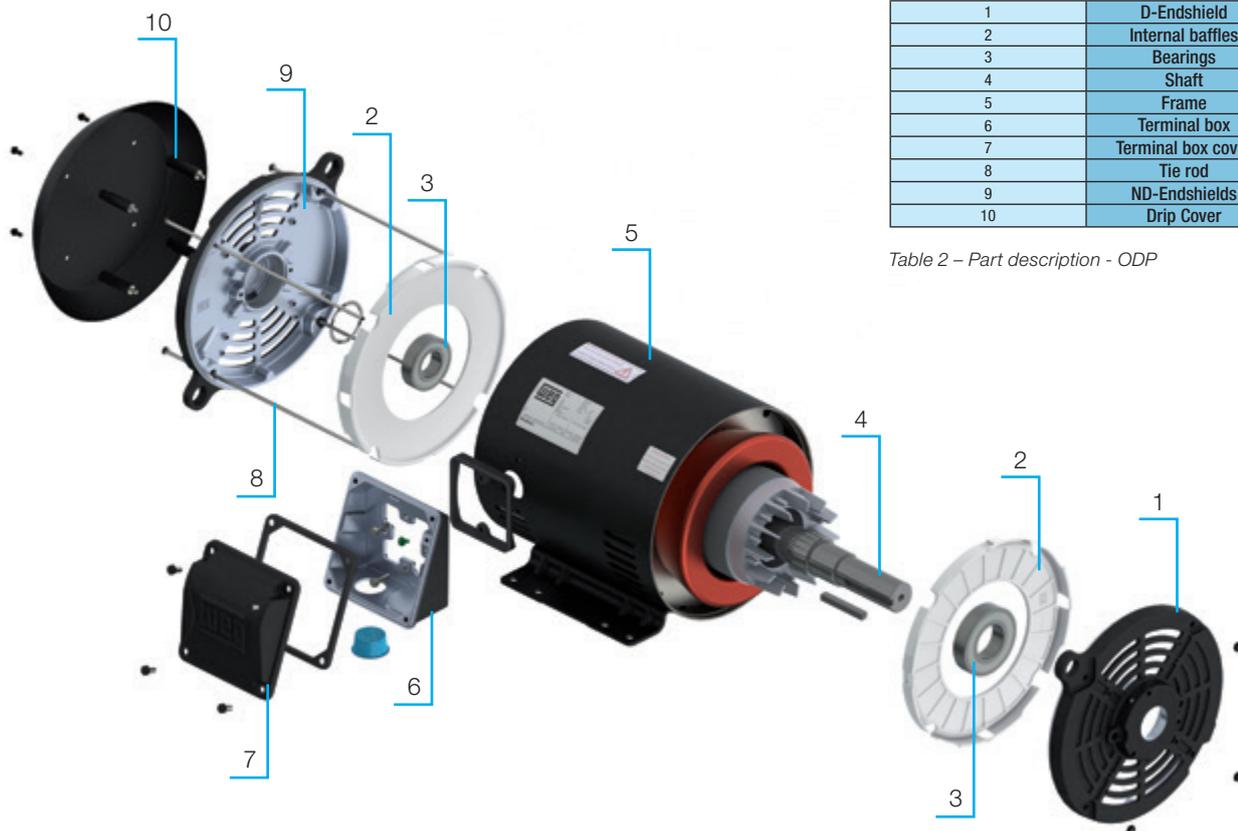
TEFC



1	Sealing system
2	D-Endshield
3	Bearings
4	Shaft
5	Frame
6	Terminal box
7	Terminal box cover
8	Tie rod
9	ND-Endshields
10	Fan
11	Fan cover
12	Drip Cover

Table 1 – Part description - TEFC

ODP



1	D-Endshield
2	Internal baffles
3	Bearings
4	Shaft
5	Frame
6	Terminal box
7	Terminal box cover
8	Tie rod
9	ND-Endshields
10	Drip Cover

Table 2 – Part description - ODP

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1. Standards

The W01 Rolled Steel motors meet the requirements and regulations of the current versions of the following standards:

Standard	Title
NEMA MG 1	Motor and Generators
UL 1004-1	Rotating Electrical Machines – General Requirements
CSA C22.2 No 100	Motor and Generators
CSA C390	Test Methods, Marking Requirements and Energy Efficiency Levels for Three-Phase Induction Motors
IEEE STD 112	IEEE Standard Test Procedure for Polyphase Induction Motors and Generators

Table 3 – Standards observed in the motor design.

2. Construction Details

The information contained herein refers to the standard mounting features and the most common variants of the W01 Rolled Steel line.

Motors for special applications and/or customized are also available upon request. Please, contact the nearest WEG office.

2.1 Frame

Produced in steel plate SAE 1010, the frames of the W01 Rolled Steel motors are covered with a new nano-ceramic coating and painted with polyurethane base powder painting, independently of finishing painting plan, ensuring resistance to salt spray test, overcoming 500 hours according ASTM B117/03.

Frame	Steel thickness (mm)
143/5T	1.9
182/4T	3.0
213/5T	4.25
254/6T	4.75

Table 4 – Steel thickness of frames

2.1.1 Feet

The all new designed feet on frames 182/4T up to 254/6T, welded to the frame, increases mechanical resistance and motor natural frequency, resulting in a more robust product with lower vibration levels on the application.



Figure 1 – Feet on frames 182/4T up to 254/6T

2.2 Eyebolts

To improve handling and installation in the various mountings options available, the new W01 Rolled Steel motors now present eyebolts integrated to the endshields or threaded on the flanges as standard on frames 182/4T up to 254/6T. The two eyebolt lifting way promotes a better controlled and safer handling compared to one eyebolt systems. Also its design assures a minimum overall space required to accommodate the motor in the application.

On motors of frames 182/4T, two eyebolts, each one integrated on D endshield and ND endshield and on frames 213/5T and 254/6T, one eyebolt integrated on D endshield, plus two eyebolts diagonally positioned integrated to the ND endshield, making vertical lifting easier.



Figure 3 – Eyebolts on 213/5T and 254/6T frames.



Figure 4 – Threaded eyebolt on motors with flange.

Note:

For horizontal motors, lifting must happen simultaneously through the two eyebolts, one located on each endshield. For vertical motors, lifting must happen simultaneously through the two eyebolts located on the ND endshield (when available). Despite the eyebolts being engineered to support over-weight load, it is not allowed the use of them as the only device to lift motor coupled to the load.

2.3 Grounding terminals

The W01 Rolled Steel motors are fitted with grounding means inside the terminal box (see Figure 5). For frames 56 up to 213/5T, the grounding terminal is a green bolt. while for frames 254/6T a grounding lug for leads from AWG 18 up to AWG 8 is available as standard.

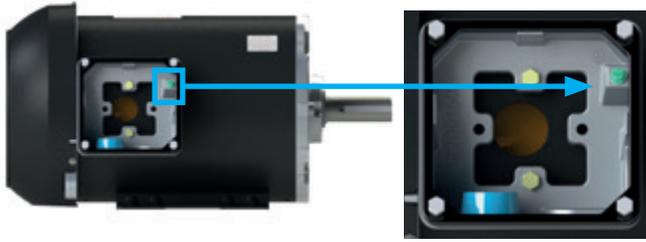


Figure 5 – Detail of the grounding terminal.

Note:

The incorrect/inadequate dimensioning or failure to use grounding devices can cause serious damage to the machine and people involved in the operation of the motor. Before powering up the motor, ensure that it is properly grounded and that all grounding components are in perfect operating conditions.

2.4 - Shaft Grounding device – AEGIS® SGR

W01 Rolled Steel motors, on all frames and configurations, can optionally be supplied with an AEGIS® grounding brush (see Figure 6) installed on the internal bearing cap, which prevents, when operated with VFDs, the discharge of electric current from the rotor to the motor frame through the bearings avoiding its premature wear.

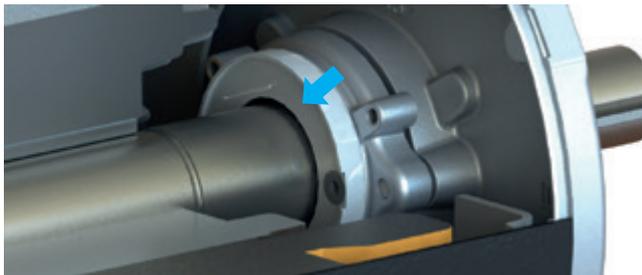


Figure 6 – AEGIS® grounding brush installed on the bearing cap.

2.5 Terminal box

Manufactured in die cast aluminum - SAE 305, the terminal box have internal space exceeding the requirements of NEMA MG 1 and designed so it can be rotated in steps of 90°, allowing more flexibility for the leads inlet positioning in a standard stock product. The ingress protection meets IP66 grade and following the W22 products, the terminal box is diagonally split for easier handling of leads and connections. As standard, the leads inlet is non-threaded, allowing the use of cable glands or clamp connectors from different gauges. Threaded inlets and two additional inlets are also available upon request.



Figure 7 – Terminal box components.

2.6 Stator winding

The stator windings of the W01 Rolled Steel motors are supplied with Class F insulation and temperature rise class B (80 K). Other combinations can also be provided on request.

2.7 Endshields and Flanges

In accordance with market trends, the W01 Rolled Steel platform endshields are produced in die cast aluminum SAE 305, providing mechanical strength and lightweight. Flanges for frames 143/5T are also produced in die cast aluminum while flanges for frames 182/4T up to 254/6T are produced in cast iron FC-200.



Figure 9 – ODP flange (left) and TEFC flange (right).

2.8 Drains

The TEFC Rolled Steel motors have drains which avoid the accumulation of condensed liquids or their ingress into the motor. Consequently these devices prevent corrosion or damage to internal parts of the motor. As standard, the drains are plugs made of rubber and assembled on the frames or flanges, depending on configurations.

Note:

The drains are factory assembled in the closed position (see Figure 10) as standard and must be opened periodically to remove condensed water. In environments with high condensation, IP55 motors can be installed with drains in the opened position. However, for IP56 motors, the drains must be kept closed, just opening it during maintenance.



Figure 10 – Closed drain position (detail).

2.9 Ventilation System

The motors of the W01 Rolled Steel line comply with the specification of Totally Enclosed Fan Cooled (TEFC IC-411) or Open Drip Proof (ODP IC-01) according to NEMA MG-1 Part 6 standard.

Upon request, WEG can supply non-ventilated (TENV) and Air Over (TEAO) versions.

The ODP motors have internal radial fans composed by the aluminum fins on the rotor and internal baffles to guide the airflow. The air flows from outside through the endshields inlets going expelled by the frame outlets. On the TEFC motors, an external radial fan made of polypropylene is mounted on the NDE shaft and protected by the fan cover. Both, ODP and TEFC ventilation system, were developed with computational fluid dynamics softwares and validated with prototypes in order to optimize the airflow through the frame and coil heads, reducing noise level and the output wasted with ventilation, while at the same time improving heat transfer.

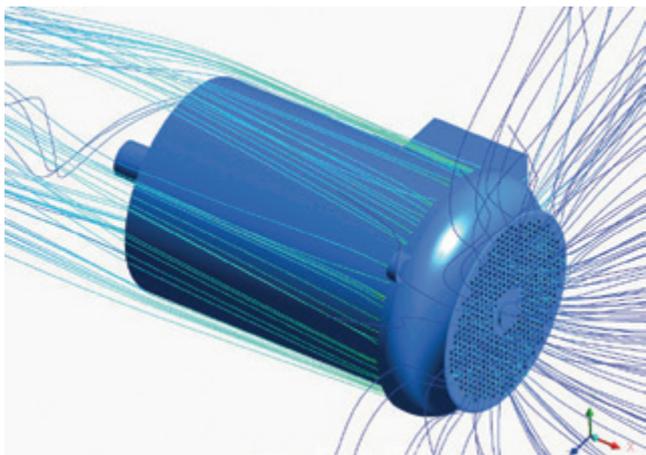


Figure 11 – Demonstration of the airflow – TEFC motor.

2.10 Fan cover

The fan covers are built in ABS plastic for frames 143/5T, which ensures rigidity in accordance with UL 1004-1 of 6.8 J, also providing painting adherence without any surface treatment, making it perfect for customers whom want to repaint the motor in the application. On these frames the new fan cover is also ready for the easy addition of a drip cover without any disassembly operation. Just screw tight the drip cover kit rods in the shown holes in the figure below. For frames 182/4T up to 254/6T, the fan covers are made of steel plate painted with powder coating, ensuring resistance that overcomes 500 h in salt spray test. For frames 254/6T, the fan cover has an aerodynamic profile, presenting high mechanical strength and high impact absorption, with significant reduction in the noise level and temperature (see Figure 13).

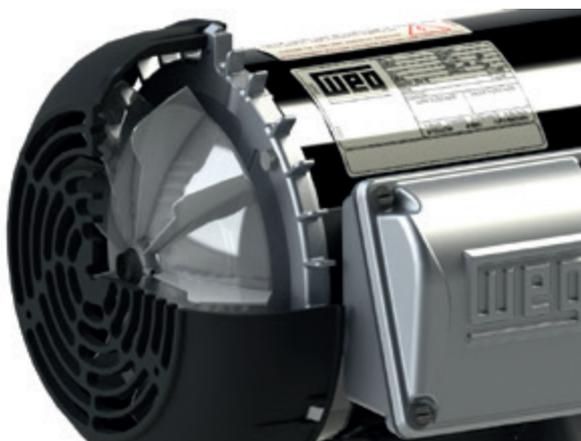


Figure 12 – Fan cover and drip cover (detail) – frames 143/5T.



Figure 13 – Fan cover for frames 254/6T.

2.11 Nameplate

The nameplates are made of polyester and contain information describing the mounting features and motor performance. In addition, it also informs the serial number of the motor and its manufacturing date. Figure 14 shows the layout of the nameplate on the W01 Rolled Steel motor.

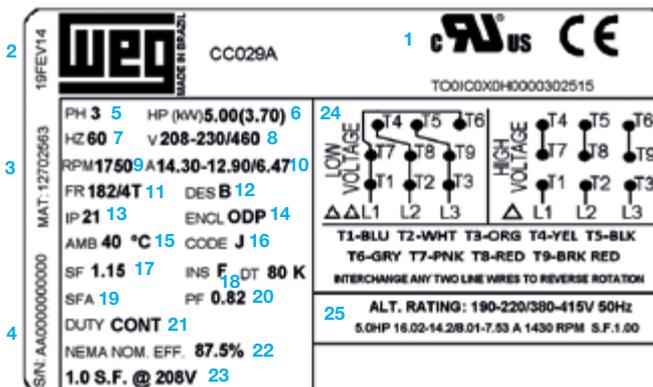


Figure 14- Nameplate.

1	Certifications
2	Manufacturing date
3	Motor Code
4	Serial number
5	Number of phases
6	Output power
7	Frequency
8	Rated voltage
9	Speed
10	Rated current
11	Frame model
12	Design code
13	Degree of protection
14	Enclosure type
15	Ambient temperature
16	NEMA code letters for locked-rotor kVA
17	Duty factor
18	Insulation class
19	Duty factor current
20	Power factor
21	Duty cycle
22	Efficiency level
23	Duty factor at specific voltage
24	Wiring diagram
25	Alternative rating data

Table 6 – Description of the data on the motor nameplate.

3. Shaft/Bearings/Stresses

3.1 Shaft

The shafts of the W01 Rolled Steel motors comply with NEMA MG 1 and undergo several numerical analyses until reaching the final dimensioning. Among the evaluation steps are: calculation of fatigue considering the stress concentration, torsion, bending and traction-compression efforts, stress and deformation, torsional and modal analysis.

The standard shaft material is AISI 1040/45 steel, and with an A type key provided. WEG can also provide motors with double-end shaft (upon request), shaft end with special dimensions, and shafts made of AISI 4140, the stainless steel grades AISI 304, AISI 316 and AISI 420, for highly corrosive environments, all upon request. The dimensions for the shaft and key can be found in section 13. Mechanical data.

3.2 Bearings

The standard on frames 143/5T up to 213/5T is double shielded ball bearings (ZZ type) and permanently lubricated. For frames 254/6T, a relubrication system consisted by grease fittings and single shielded ball bearings is provided as standard. For increased bearing life, this relubrication system can also be supplied on motors from frames 182/4T up to 213/5T as optional.

By default, the bearings are grease lubricated and have L10h lifetime of 26.280 hours, for the conditions and loads defined by NEMA MG 1 – part 14.42. The bearing lifetime depends on the type and size of the bearing, radial and axial loads they are subject to, the operating conditions (ambient temperature), the speed and grease life. Thus, its lifetime is closely related to its correct use, maintenance and lubrication. By respecting the amount of grease and lubrication intervals, the bearings can reach the lifetime values aforementioned.

The standard ball bearing sizes can be found in section 10. Construction Features.

Note:

The bearing lifetime, L10h, in terms of operating hour, is the life that 90% of bearings have reached or even exceeded when motors are operated in compliance with the data provided in this catalog.

The bearings lifetime can be reduced when the motors are fed by frequency inverters and operate at non-nominal high speed.

3.2.1 Bearing Lubrication

As mentioned, the bearings on motors from 143/5T to 213/5T frame are of the double-shielded type and are greased for its life, and motors on 254/6T frames are supplied with a lubrication system with grease fittings on the D and ND endshields. The lubrication intervals are informed on the motor nameplate, and can also be seen in Table 7.

Speed (RPM)	Bearing type	Lubrication Interval (h)
3600	6309	20.000
1800		25.000
1200		

Table 7 - Relubrication intervals for 254/6T frame.

It is extremely important to follow the lubrication intervals specified on the motor nameplate. The re-lubrication interval set on the motor plate considers the bearing temperature of 70°C. For different bearing temperatures the motor manual must be consulted. An excessive or insufficient lubrication may increase the bearing temperature during operation, resulting in premature wear of the bearings and consequent reduction of their useful life.

Mobil Polyrex EM is the standard lubricant used in the W01 Rolled Steel motors. Besides the grease mentioned, there are others that are compatible (mineral oil, polyurea-based) and can also be used. For these cases refer to the Installation, Operation and Maintenance Manual of the motor, available at www.weg.net/us

Notes:

For operation of the motors under other than normal operating conditions, such as: ambient temperature above 40°C, altitude higher than 1000 m (3,300 ft) above sea level and axial and/or radial load above the specified in the tables in this catalog imply on special lubrication interval. For these cases, please refer to WEG.

Bearing life may be reduced when a motor is driven by a VFD at speeds above nominal. Speed itself is one of the factors taken into consideration when determining motor bearing life. Horizontal mounting motors that will be applied on vertical position must have the lubrication interval reduced by half. The use of greases not recommended by WEG or in different quantities than the specification may result in loss of the motor warranty.

For compensation of axial displacements, the motors have spring washers as standard on the ND endshield. Also, all motors with flange have a locked D bearing by an internal bearing cap. Upon request, the bearing cap can be supplied as optional for all other mounting configurations. The bearing cap have an “U” format (see Figure 15) that allows easy installation in the field without the expense of removing the DE bearing in case where addition of flange is required on standard motors.



Figure 15 – “U” format bearing cap to fix DE bearing

Table 8 lists the materials of the bearing caps used in the W01 Rolled Steel motors.

Frame	DE Bearings	Material
143/5T	6203 / 6204 / 6205	Aluminum SAE 305
143/5JM / JP	6206	Cast iron FC-200
182/4T – 182/4JM / JP	6206 / 6207	Cast iron FC-200
213/5T – 213/5JM / JP	6208 / 6209	Cast iron FC-200
254/6T – 254/6JM / JP	6309	Cast iron FC-200

Table 8– Bearing cap specification.

3.3 Maximum radial loads

The table below show the maximum allowable radial loads for the W01 Rolled Steel motors. The values of the maximum load were calculated considering a L10h bearing lifetime of 26,280 h. The maximum radial load values consider the axial load equal to zero. For applications involving simultaneously axial and radial load, refer to WEG on bearing lifetime.

3.3.1 Radial loads

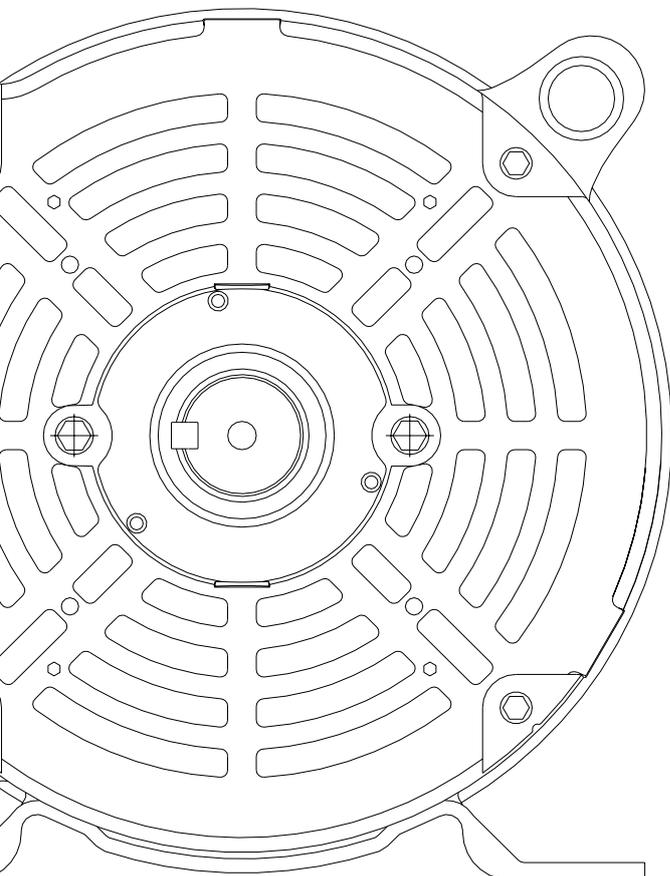
The values shown in Table 9 for the maximum radial overhung loads consider the load application at center of the length of the shaft end (N-W Dimension) on horizontal mounting.

Maximum radial overhung loads (pounds)			
Frame	II poles	IV poles	VI poles
143/5T	109	154	176
182/4T	180	227	260
213/5T	230	300	350
254/6T	470	589	705

Table 9 – Maximum allowable radial loads at 60 Hz for ball bearings (According NEMA MG 1 – Table 14-1A).

Notes:

- 1 - All belt loads are considered to act in vertically downward direction.
- 2 - Overhung loads include belt tension and weight of sheave.
- 3 - For load at end of the shaft subtract 15%.
- 4 - Radial overhung load limits based on bearing L-10 life of 26.280 hours.
- 5 - Overhung load limits do not include any effect of unbalanced magnetic pull.



4. Mounting forms

The standard motors are supplied in the F1 mounting, with the terminal box on the left side of the frame, when looking at the drive end of the motor.

The mounting designation for the W01 Rolled Steel motors follows the NEMA MG-1 Part 4 standard. Different mounting forms can be provided, as shown in Table 10.

Floor mountings			
Assembly F-1	Assembly F-2	Assembly F-3	
Wall mountings			
Assembly W-1	Assembly W-2	Assembly W-3	Assembly W-4
Assembly W-5	Assembly W-6	Assembly W-7	Assembly W-8
Assembly W-9	Assembly W-10	Assembly W-11	Assembly W-12
Ceiling mountings			
Assembly C-1	Assembly C-2	Assembly C-3	

Table 10 – Mounting forms.

5. Degree of Protection, Bearing Sealing and Painting

5.1 Degree of Protection

The W01 Rolled Steel motors are provided with protection as specified by NEMA MG 1 Part 5 standard.

For the TEFC motors, the standard degree of protection is IP55, where:

- The first characteristic numeral 5 indicates that the enclosure provides protection against contact or approach to live or moving parts inside the enclosure. The ingress of dust is not totally prevented, but dust does not enter in quantity enough to interfere with the satisfactory operation of the machine.
- The second characteristic numeral 5 indicates that the motor is protected against water thrown by a nozzle from any direction and it cannot have harmful effect.

For the ODP motors, the degree of protection is IP21, where:

- The first characteristic numeral 2 indicates that the enclosure provides protection against contact or approach to live or moving parts inside the enclosure by fingers or solid objects greater than Ø 0.4724in.
- The second characteristic numeral 1: indicates that the motor is protected against vertically falling dripping water.

5.2 Bearing Sealing

The standard seal used on the D endshield in the TEFC motors are “V” Ring made of nitrile rubber (ASTM D2000 M2BG 610), optionally. The motors can be supplied with slinger, rubber lip seal or rubber oil seal.

Note:

For vertical mounting motors with shaft end to upwards, motors are supplied with slinger, in addition to the standard seal.

5.3 Coating

The painting plan of the motors from frames 143/5T up to 254/6T provides minimal resistance of 500 h to the salt spray test according to ASTM B117/03 standard and corrosion category C2, according to ISO 12944-2 standard. In the table below there are the standard painting plans for all W01 Rolled Steel motors:

Frame	WEG Painting Plan
143/5T	207N
182/4T	
213/5T	
254/6T	

Table 11 – WEG painting plans for W01 Rolled Steel motors

Plan	Recommended Use
207N	Regular environments, not too severe and sheltered, for domestic purpose, with low relative humidity and normal temperature variations
	Specific use recommendations: for application in motors with steel plate frames in which packaging process demands quick drying painting.

Table 12 – Recommended use for WEG painting plans

Notes:

None of the painting plans mentioned are recommended for direct exposure to acid vapors, alkalis and solvents.

6. Voltage / Frequency

According to NEMA MG 1 Part 12, the motor shall operate successfully under running conditions at rated load with a variation in the voltage or the frequency up to the following:

- Plus or minus 10 percent of rated voltage, at rated frequency.
- Plus or minus 5 percent of rated frequency, at rated voltage.
- A combined variation in voltage and frequency of 10 percent (sum of absolute values) of the rated values, provided the frequency variation does not exceed plus or minus 5 percent of rated frequency.

Performance within these voltage and frequency variations will not necessarily be in accordance with the standards established for operation at rated voltage and frequency.

7. Environment

According to NEMA MG 1 Part 14 standard, the normal operating conditions of electric motors are:

- Ambient temperature between -20°C and 40°C;
- Altitude not exceeding 3300 feet (1000 m) above sea level.

For temperatures and altitudes other than those indicated above, use Table 11 to find the correction factor that must be used to define the available useful output power.

T (°C)	Altitude (m)								
	1000	1500	2000	2500	3000	3500	4000	4500	5000
10							0,97	0,92	0,88
15						0,98	0,94	0,90	0,86
20					1,00	0,95	0,91	0,87	0,83
25				1,00	0,95	0,93	0,89	0,85	0,81
30			1,00	0,96	0,92	0,90	0,86	0,82	0,78
35		1,00	0,95	0,93	0,90	0,88	0,84	0,80	0,75
40	1,00	0,97	0,94	0,90	0,86	0,82	0,80	0,76	0,71
45	0,95	0,92	0,90	0,88	0,85	0,81	0,78	0,74	0,69
50	0,92	0,90	0,87	0,85	0,82	0,80	0,77	0,72	0,67
55	0,88	0,85	0,83	0,81	0,78	0,76	0,73	0,70	0,65
60	0,83	0,82	0,80	0,77	0,75	0,73	0,70	0,67	0,62
65	0,79	0,76	0,74	0,72	0,70	0,68	0,66	0,62	0,58
70	0,74	0,71	0,69	0,67	0,66	0,64	0,62	0,58	0,53
75	0,70	0,68	0,66	0,64	0,62	0,60	0,58	0,53	0,49
80	0,65	0,64	0,62	0,60	0,58	0,56	0,55	0,48	0,44

Table 13 - Correction factors considering altitude and ambient temperature.

Notes:

Motor for special applications which will operate in temperatures under -20°C or over 40°C can be evaluated upon request.

W01 motors are wound with the WISE® insulation system which consists of enamelled conductor wire meeting temperatures up to 200°C and impregnated with solvent free resin. The WISE® system also permits motor operation with variable speed drives (see section 8).

8. Operation characteristics

During installation and any intervention on the machine, all recommendations for handling, lifting and maintenance must be observed.

8.1 Three-phase motors operating with frequency inverter

The W01 Rolled Steel motors have a design suitable for applications with variable speed. The exclusive insulation technology WISE® ensures high electrical insulation performance. The Table 14 defines the criteria for frequency inverter applications.

Voltage	Peak voltage on motor terminals	dV/dt* on motor terminals	Rise time*	Time between pulses
V < 460 V	≤ 1600 V	≤ 5200 V/μs	≥ 0.1 μs	≥ 6 μs
460 ≤ V < 575 V	≤ 2000 V	≤ 6500 V/μs		
575 ≤ V ≤ 690 V	≤ 2400 V	≤ 7800 V/μs		

*According NEMA MG 1 – part 30 and 31.

Table 14 – Frequency inverter application criteria for low voltage motors.

Notes:

- 1 - If any of the conditions listed in Table 14 is not met a filter must be installed at the inverter output.
- 2 - The maximum switching frequency recommended for the inverter is 5 kHz. Switching frequencies above this value can accelerate the degradation of the insulation system and cause damage to the bearings.
- 3 - General purpose motors with rated voltage greater than 460V and for which there was no indication of operation with frequency inverter at the purchase are suitable to handle the electrical features defined to the 575V. If such conditions are not fully met, filters must be installed at the inverter output.
- 4 - General purpose dual voltage motors (i.e. 380/660V and 400/690V) and for which there was no indication of operation with frequency inverter at the purchase, are suitable to handle the electrical features defined to higher voltage only if the defined limits to 460V were fully met. Otherwise, filters must be installed at the inverter output.

8.1.1 Influence of the Inverter on the Temperature Rise of the Motor

The induction motor may present a higher temperature rise when fed by a frequency inverter, than when fed with sine wave voltage. This over-rise in temperature is due to the combination of two factors: the increase of losses on the motor as a function of the harmonic components of the PWM voltage supplied by the inverter, and the reduction of the effectiveness of the cooling system when the self-ventilated motor operates at low frequencies. Basically the following solutions can be used to prevent the motor overheating:

- Reduction of the rated torque
- Use of an independent cooling system (forced ventilation)
- Use of the exclusive “Optimal Flow” WEG solution.

Criteria for torque reduction

In order to keep the temperature rise of WEG motors within acceptable levels, when under VSD supply, the speed range-related loadability limits established in table below must be respected.

Frames	Enclosure	Eff	Pole	Turndown Ratio		
				CT		VT
				<1HP	≥1HP	
143/5T up to 254/6T	TEFC	High	All	2:1		1000:1
		NEMA	2	10:1		
		Premium	4-6	4:1		
	ODP	High	All	2:1		
		NEMA	2	3:1		
		Premium	4-6	5:1		

Table 15 – Criteria for torque reduction

For more detailed information on motors operated with frequency inverter, refer to the Technical Guide - Induction motors fed by PWM frequency inverters, which can be found at <http://catalog.weg.net/files/wegnet/WEG-induction-motors-fed-by-pwm-frequency-converters-technical-guide-028-technical-article-english.pdf>

8.1.2 Common-mode voltages

The common mode voltages occur when the sum of the voltages at the inverter output is different from zero. They are the main reason why currents flow through the motor bearings driven by static inverter. Although not frequent on small motors, poorly made installations increase odds of its presence. These currents may cause premature wear in the rolling elements and ball bearing races, reducing the useful life of the bearings and causing machine faults. W01 Rolled Steel motors may be prepared to avoid the flow of this currents upon request (see item 2.4. AEGIS® Grounding brush).

9. Installation characteristics

A minimum distance between fan cover and wall must be taken into account when dimensioning the installations for the W01 Rolled Steel motors (see Figure 16 and minimum distance for W dimension in Table 16).

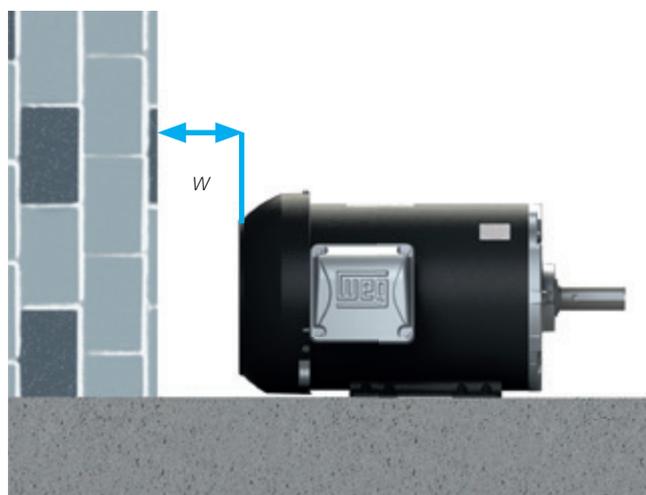


Figure 16 – Distance between fan cover and wall.

Frame	W (inch)
143/5T	1.30
182/4T	1.61
213/5T	1.97
254/6T	2.56

Table 16 – Minimum distance between fan cover and wall

10. Construction Features

10.1 W01 Rolled Steel - TEFC

Frame			143/5T	182/4T	213/5T	254/6T
Mechanical Features						
Nameplate Marking			CSA, cULus			
Mounting	Std, High, NEMA Premium Efficiency		F-1/B3R(D)			
Frame	Material		Steel plate			
Degree of Protection			IP55			
Grounding			Terminal box			Grounding lug
Cooling method			Totally enclosed fan cooled - TEFC			
Fan	Material		Plastic			
Fan cover	Material		Plastic	Steel plate		
Endshields	Material		Aluminium			
Drain plug			Automatic rubber drain plug			
Bearing	Shielded/clearance DE		ZZ			Z / C3
	Shielded/clearance NDE		ZZ			Z / C3
	Locating bearing		W/O Lock on DE and spring washer on NDE			
	Drive end	2P	6205	6206	6208	6309
		4-6P				
Non-drive end	2P	6203	6205	6206	6208	
	4-6P					
Bearing seal	Drive end		V-ring			
	Non-drive end		W/O			
Joint seal			W/O			
Lubrication	Type of grease		Mobil Polyrex EM			
	Grease fitting		W/O	With		
Terminal block			W/O			
Terminal box	Material		Aluminium - Diagonal			
Additional Terminal box			W/O Additional Terminal Box			
Lead inlet	Main	Size	1 hole ø 28,4 (for NPT 3/4")		1 hole ø 35 (for NPT 1")	1 hole ø 44 (for NPT 1 1/4")
	Accessories		W/O			
Plug			Stopping plug			
Shaft	Material		AISI 1040/45			
	Threaded hole		A3.15	A4		
	Shaft key		A key			
Vibration level (IEC)			Grade A			
Nameplate	Material		Mylar nameplate			
Painting	Painting plan		207N			
	Color	Std Eff, High Eff	Munsell N1 - Flat			
		NEMA Premium	Munsell N1 - Flat			
Eye bolt			W/O	With - 2		
Electrical Features						
Design	Std Eff		-			
	High Efficiency		B			
	NEMA Premium Eff		B			
	NEMA Premium Eff - Single		L			-
Voltage	50Hz	Std Eff	220/380 w/ 6 term			
		Std Eff - Single	-			
	60Hz	Std Eff, High Eff, NEMA Premium	208-230/460V w/ 9 term			208-230/460V w/ 12 term
Std Eff - Single		115/208-230V	208-230/460V		-	
Winding	Impregnation		Dip and Bake			
	Insulation class		F (DT 80K)			
	Leads		Color coded lead CSA/UL			
	Terminal Leads		Without terminal (Stripped wire)			
Service factor	50Hz	Std Eff - Three	1.00			
		Std Eff - Single	1.00			
	60Hz	Std Eff, High Eff, NEMA Premium	1.15 (208V - 1.0)			
		Std Eff - Monof	1.15 (208V - 1.0)			
Rotor			Aluminium die cast			
Thermal protection			W/O			
Space heaters			W/O			

10.2 W01 Rolled Steel – ODP

Frame			143/5T	182/4T	213/5T	254/6T	
Mechanical Features							
Nameplate Marking			CSA, cULus				
Mounting	Std, High, NEMA Premium Efficiency		F-1/B3R(D)				
	Oil Well Pumping (Design D)		-	F-2/B3L(E)			
Frame	Material		Rolled Steel				
Degree of Protection			IP21				
Grounding			Terminal box		Grounding lug		
Cooling method			ODP				
Fan	Material		W/O				
Fan cover			W/O				
Internal air baffle			Plastic (Nylon)				
Endshields	Material		Aluminum				
Drain plug			W/O				
Bearing	Shielded/clearance DE		ZZ		Z / C3		
	Shielded/clearance NDE		ZZ		Z / C3		
	Locating bearing		W/O Lock on DE and spring washer on NDE				
	Drive end	2P 4-6P	6205	6206	6208	6309	
Bearing seal	Non-drive end	2P 4-6P	6203 – 3ph 6202 – 1ph	6205	6206	6208	
	Joint seal		W/O				
Lubrication	Type of grease		Mobil Polyrex EM				
	Grease fitting		W/O		With		
Terminal block			W/O				
Terminal box	Material		Aluminum - Diagonal				
Additional Terminal box			W/O Additional Terminal Box				
Lead inlet	Main	Size	1 hole ø 28,4 (for NPT 3/4")		1 hole ø 35 (for NPT 1")	1 hole ø 44 (for NPT 1 1/4")	
	Accessories		W/O				
Shaft	Plug		Stopping plug				
	Material		SAE 1040/45				
	Center hole	A3.15	A4				
Nameplate	Shaft key		A key				
	Balancing without/half/full key		A Grade				
Painting	Material		Mylar nameplate				
	Painting plan		207N				
	Color	Std Eff, High Eff	Munsell N1 - Flat				
		NEMA Premium Oil Well Pumping	Munsell N1 - Flat RAL 9010				
Eye bolt			W/O	With - 2			
Electrical Features							
Design	Nenhum e Premium Efficiency		-				
	High Efficiency		B				
	NEMA Premium		B				
	Oil Well Pumping		-	D			
Standard voltage	Standard e Premium Efficiency - Single		L				
	50 Hz	Std Eff Std Eff - Single	220/380 w/ 6 term				
	60 Hz	Std, High Eff, Premium Eff and NEMA Premium	208-230/460V w/ 9 term			208-230/460V w/ 12 term	
Std, Premium Eff - Single		115/208-230V	208-230/460V				
Winding	Impregnation		Dip and Bake				
	Insulation class		F (DT 80K)				
	Leads		Color coded lead CSA/UL				
	Terminal Leads		Without terminal (Stripped wire)				
Service factor	Std and Premium Efficiency		-				
	High Eff and NEMA Premium Eff		1.15 (208V - 1.0)				
	Oil Well Pumping		-	1,00			
	Std e Premium Eff - Single		According to "SF ODP" spreadsheet				
Rotor			Aluminium die cast				
Thermal protection			W/O				
Space heaters			W/O				

11. Optionals

11.1 W01 Rolled Steel - TEFC

Features	General Purpose						
	Single phase			Three phase			
	143/5T	182/4T	213/5T	143/5T	182/4T	213/5T	254/6T
Electrical Optionals							
Service factor (60Hz)							
Service factor 1.15	SD	SD	SD	SD	SD	SD	SD
Service factor 1.25	S	S	S	S	S	S	S
Service factor (50Hz)							
Service factor 1.00	SD	SD	SD	SD	SD	SD	SD
Service factor 1.15	S	S	S	S	S	S	S
Service factor 1.25	S	S	S	S	S	S	S
Voltage (60 Hz)							
208-230/460V - 9 leads	NA	NA	NA	SD	SD	SD	NA
208-230/460V - 12 leads	NA	NA	NA	NA	NA	NA	SD
575V - 3 leads	NA	NA	NA	O	NA	NA	NA
575V - 6 leads	NA	NA	NA	O	O	O	O
230/460V - 9 leads	NA	NA	NA	O	O	O	NA
230/460V - 12 leads	NA	NA	NA	NA	NA	NA	O
200V - 6 leads	NA	NA	NA	O	O	O	O
200/400V - 9 leads	NA	NA	NA	O	O	O	NA
200/400V - 12 leads	NA	NA	NA	NA	NA	NA	O
480V - 3 leads	NA	NA	NA	O	NA	NA	NA
480V - 6 leads	NA	NA	NA	O	O	O	O
100/200V	O	O	O	NA	NA	NA	NA
110/220V	O	O	O	NA	NA	NA	NA
115/208-230V	SD	O	O	NA	NA	NA	NA
208-230V/460V	O	SD	SD	NA	NA	NA	NA
115/230V	O	O	O	NA	NA	NA	NA
120/240V	O	O	O	NA	NA	NA	NA
208-230V	O	O	O	NA	NA	NA	NA
220V	O	O	O	NA	NA	NA	NA
230V	O	O	O	NA	NA	NA	NA
Voltage (50Hz)							
220/380V - 6 leads	SD	SD	SD	SD	SD	SD	SD
230/400V - 6 leads	O	O	O	O	O	O	O
380V - 3 leads	O	NA	NA	O	NA	NA	NA
400V - 3 leads	O	NA	NA	O	NA	NA	NA
110/220V	SD	SD	SD	NA	NA	NA	NA
Insulation class							
F DT 80K	SD	SD	SD	SD	SD	SD	SD
F DT 105K	O	O	O	O	O	O	O
H DT 80K	S	S	S	S	S	S	S
H DT 105K	S	S	S	S	S	S	S
H DT 125K	S	S	S	S	S	S	S
Space Heater							
110-127 V	O	O	O	O	O	O	O
200-240 V	O	O	O	O	O	O	O
Winding thermal protection							
Manual	S	S	S	S	S	S	S
Automatic	S	S	S	S	S	S	S
Bimetal thermal protector - 130°C Alarm	O	O	O	O	O	O	O
Bimetal thermal protector - 155°C Alarm	O	O	O	O	O	O	O
PTC Thermistor - 130°C - Alarm	O	O	O	O	O	O	O
PTC Thermistor - 155°C - Alarm	O	O	O	O	O	O	O
Bimetal thermal protector - 130°C Tripping	O	O	O	O	O	O	O
Bimetal thermal protector - 155°C Tripping	O	O	O	O	O	O	O
Bimetal thermal protector - 180°C Tripping	S	S	S	S	S	S	S
PTC Thermistor - 130°C - Tripping	O	O	O	O	O	O	O
PTC Thermistor - 155°C - Tripping	O	O	O	O	O	O	O
PTC Thermistor - 180°C - Tripping	S	S	S	S	S	S	S

Notes: Other optional features, on request.

Some combinations of optional features are not possible - please contact WEG.

SD – Standard
O – Optional

S – Special
NA – Not Available

11.1 W01 Rolled Steel - TEFC

Features	General Purpose						
	Single phase			Three phase			
	143/5T	182/4T	213/5T	143/5T	182/4T	213/5T	254/6T
Mechanical Optionals							
Flange							
Flange FF (IEC) or D (NEMA)	S	S	S	S	S	S	S
Flange C	0	0	0	0	0	0	0
Inferior C Flange	NA	NA	NA	NA	NA	NA	NA
Without flange	SD	SD	SD	SD	SD	SD	SD
Drip cover							
Drip cover	0	0	0	0	0	0	0
Degree of protection							
IP44	NA	NA	NA	NA	NA	NA	NA
IP55	SD	SD	SD	SD	SD	SD	SD
IP56	0	0	0	0	0	0	0
Bearing Seal							
V-RING	SD	SD	SD	SD	SD	SD	SD
Nitrilic rubber lip seal	0	0	0	0	0	0	0
Nitrilic rubber oil seal	0	0	0	0	0	0	0
Painting Plan							
207N	SD	SD	SD	SD	SD	SD	SD
Shaft Grounding							
AEGIS ring	NA	NA	NA	0	0	0	0
Grease fitting							
Carbon steel grease fitting	NA	0	0	NA	0	0	SD
Stainless steel grease fitting	NA	0	0	NA	0	0	0
Grease outlet							
Grease outlet by plastic plug	NA	0	0	NA	0	0	0
DE / NDE Bearing Type (Ball Bearing)							
2RS	0	0	0	0	0	0	0
ZZ	SD	SD	SD	SD	SD	SD	S
ZZ-C3	0	0	0	0	0	0	S
Z	NA	0	0	NA	0	0	S
Z-C3	NA	0	0	NA	0	0	SD
Bearing cap							
Without bearing cap	SD	SD	SD	SD	SD	SD	NA
Bearing cap	0	0	0	0	0	0	SD
Shaft Material							
SAE 1040/45	SD	SD	SD	SD	SD	SD	SD
SAE 4140	0	0	0	0	0	0	0
AISI 304 (stainless steel)	0	0	0	0	0	0	0
AISI 316 (stainless steel)	0	0	0	0	0	0	0
AISI 420 (stainless steel)	S	S	S	S	S	S	S
Key							
B Key	S	S	S	S	S	S	S
Shaft							
Second Shaft End	S	S	S	S	S	S	S
Threaded center hole (shaft)	0	0	0	0	0	0	0
Cooling Method							
TEFC (fan cooled)	SD	SD	SD	SD	SD	SD	SD
TEAO (air over)	S	S	S	S	S	S	S
TENV (non ventilated)	S	S	S	S	S	S	S
Fan							
Plastic	SD	SD	SD	SD	SD	SD	SD
Balance Type							
Normal balance with 1/2 key	SD	SD	SD	SD	SD	SD	SD
Normal balance without key	0	0	0	0	0	0	0
Normal balance with full key	0	0	0	0	0	0	0
Reduced balance with 1/2 key	0	0	0	0	0	0	0
Reduced balance without key	0	0	0	0	0	0	0
Reduced balance with full key	0	0	0	0	0	0	0
Terminal Box Optionals							
Plug							
Threaded plastic plug	NA	NA	NA	NA	NA	NA	SD
Flat Plastic plug	SD	SD	SD	SD	SD	SD	NA
Cable Gland							
Plastic	0	0	0	0	0	0	0
Terminal Block							
BMC - 6 terminals	S	S	S	S	S	S	S

11.2 W01 Rolled Steel – ODP

Features	General Purpose						
	Single phase			Three phase			
	143/5T	182/4T	213/5T	143/5T	182/4T	213/5T	254/6T
Electrical Optionals							
Voltage (60 Hz)							
208-230/460V - 9 leads	NA	NA	NA	SD	SD	SD	NA
208-230/460V - 12 leads	NA	NA	NA	NA	NA	NA	SD
575V - 3 leads	NA	NA	NA	O	NA	NA	NA
575V - 6 leads	NA	NA	NA	O	O	O	O
230/460V - 9 leads	NA	NA	NA	O	O	O	NA
230/460V - 12 leads	NA	NA	NA	NA	NA	NA	O
200V - 6 leads	NA	NA	NA	O	O	O	O
200/400V - 9 leads	NA	NA	NA	O	O	O	NA
200/400V - 12 leads	NA	NA	NA	NA	NA	NA	O
480V - 3 leads	NA	NA	NA	O	NA	NA	NA
480V - 6 leads	NA	NA	NA	O	O	O	O
100/200V	O	O	O	NA	NA	NA	NA
110/220V	O	O	O	NA	NA	NA	NA
115/208-230V	SD	O	O	NA	NA	NA	NA
208-230V/460V	O	SD	SD	NA	NA	NA	NA
115/230V	O	O	O	NA	NA	NA	NA
120/240V	O	O	O	NA	NA	NA	NA
208-230V	O	O	O	NA	NA	NA	NA
220V	O	O	O	NA	NA	NA	NA
230V	O	O	O	NA	NA	NA	NA
Voltage (50Hz)							
220/380V - 6 leads	NA	NA	NA	SD	SD	SD	SD
230/400V - 6 leads	NA	NA	NA	O	O	O	O
380V - 3 leads	NA	NA	NA	O	NA	NA	NA
380/660V - 6 leads	NA	NA	NA	O	O	O	O
400V - 3 leads	NA	NA	NA	O	NA	NA	NA
415V - 3 leads	NA	NA	NA	O	NA	NA	NA
440V - 3 leads	NA	NA	NA	O	NA	NA	NA
110/220V	SD	SD	SD	NA	NA	NA	NA
Class of Insulation							
F DT 70K	NA	NA	NA	NA	NA	NA	NA
F DT 80K	SD	SD	SD	SD	SD	SD	SD
F DT 105K	O	O	O	O	O	O	O
H DT 80K	S	S	S	S	S	S	S
H DT 105K	S	S	S	S	S	S	S
H DT 125K	S	S	S	S	S	S	S
Space Heater							
110-127 V	O	O	O	O	O	O	O
200-240 V	O	O	O	O	O	O	O
Winding thermal protection							
Manual	O	O	O	S	S	S	S
Automatic	O	O	O	S	S	S	S
Bimetal thermal protector - 130°C Alarm	O	O	O	O	O	O	O
Bimetal thermal protector - 155°C Alarm	O	O	O	O	O	O	O
PTC Thermistor - 130°C - Alarm	O	O	O	O	O	O	O
PTC Thermistor - 155°C - Alarm	O	O	O	O	O	O	O
Bimetal thermal protector - 130°C Tripping	O	O	O	O	O	O	O
Bimetal thermal protector - 155°C Tripping	O	O	O	O	O	O	O
Bimetal thermal protector - 180°C Tripping	S	S	S	S	S	S	S
PTC Thermistor - 130°C - Tripping	O	O	O	O	O	O	O
PTC Thermistor - 155°C - Tripping	O	O	O	O	O	O	O
PTC Thermistor - 180°C - Tripping	S	S	S	S	S	S	S
Termocouple - Tripping	S	S	S	S	S	S	S

Notes: Other optional features, on request.

Some combinations of optional features are not possible - please contact WEG.

SD – Standard
O – Optional

S – Special
NA – Not Available

11.2 W01 Rolled Steel – ODP

Features	General Purpose						
	Single phase			Three phase			
	143/5T	182/4T	213/5T	143/5T	182/4T	213/5T	254/6T
Mechanical Optionals							
Flange							
Flange FF (IEC) or D (NEMA)	NA	S	S	S	S	S	S
Flange C	0	0	0	0	0	0	0
Inferior C Flange	NA	NA	NA	NA	NA	NA	NA
Without flange	SD	SD	SD	SD	SD	SD	SD
Drip cover							
Drip Cover	0	0	0	0	0	0	0
Degree of protection							
IP21	SD	SD	SD	SD	SD	SD	SD
Painting Plan							
207N	SD	SD	SD	SD	SD	SD	SD
Shaft Grounding							
AEGIS ring	NA	NA	NA	0	0	0	0
Shaft							
Threaded center hole (shaft)	0	0	0	0	0	0	0
Grease fitting							
Carbon steel grease fitting	NA	0	0	NA	0	0	SD
Stainless steel grease fitting	NA	0	0	NA	0	0	0
Grease outlet							
Grease outlet by plastic plug	NA	0	0	NA	0	0	0
DE / NDE Bearing Type (Ball Bearings)							
2RS	0	0	0	0	0	0	0
ZZ	SD	SD	SD	SD	SD	SD	S
ZZ-C3	0	0	0	0	0	0	S
Z	NA	0	0	NA	0	0	S
Z-C3	NA	0	0	NA	0	0	SD
Bearing cap							
Without bearing cap	SD	SD	SD	SD	SD	SD	SD
Bearing cap	0	0	0	0	0	0	0
Resilient base							
With	0	NA	NA	NA	NA	NA	NA
Shaft Material							
SAE 1040/45	SD	SD	SD	SD	SD	SD	SD
SAE 4140	0	0	0	0	0	0	0
AISI 304 (stainless steel)	0	0	0	0	0	0	0
AISI 316 (stainless steel)	0	0	0	0	0	0	0
AISI 420 (stainless steel)	S	S	S	S	S	S	S
Key							
B Key	S	S	S	S	S	S	S
Shaft							
Second Shaft End	S	S	S	S	S	S	S
Balance Type							
Without balance (2 poles)	NA	NA	NA	NA	NA	NA	NA
Normal balance with 1/2 key	SD	SD	SD	SD	SD	SD	SD
Normal balance without key	0	0	0	0	0	0	0
Normal balance with full key	0	0	0	0	0	0	0
Reduced balance with 1/2 key	0	0	0	0	0	0	0
Reduced balance without key	0	0	0	0	0	0	0
Reduced balance with full key	0	0	0	0	0	0	0
Vibration							
Grade B	0	0	0	0	0	0	0
Terminal Box Optionals							
Cable Gland							
Plastic	NA	0	0	0	0	0	0
Terminal Block							
BMC - 6 terminals	S	S	S	S	S	S	S
Single phase (terminal board)	NA	NA	NA	NA	NA	NA	NA

12. Electrical data

12.1 General Purpose - ODP - High Efficiency - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings			
				HP	kW				Code	ll/ln				Hot	Cold	% of full load			Power Factor				DE	NDE		
																Efficiency			Power Factor							
																50	75	100	50						75	100
II pole																										
1	0,75	143/5T	1,48	K	7,5	2,4	3,2	0,0278	27	59	25,4	1,15	3490	77,0	80,0	80,0	0,69	0,80	0,87	1,35	11,181	7,480	6205 ZZ	6203 ZZ		
1,5	1,1	143/5T	2,22	J	7,8	2,4	3,2	0,0358	22	48	29,3	1,15	3495	81,5	82,5	82,5	0,73	0,84	0,89	1,88	11,181	7,480	6205 ZZ	6203 ZZ		
2	1,5	143/5T	2,96	K	8,0	2,5	3,4	0,0439	17	37	34,0	1,15	3500	82,5	84,0	84,0	0,74	0,84	0,89	2,52	11,575	7,874	6205 ZZ	6203 ZZ		
3	2,2	143/5T	4,47	J	7,8	2,5	3,1	0,0496	12	26	37,0	1,15	3475	84,0	84,0	84,0	0,73	0,84	0,89	3,69	11,969	8,268	6205 ZZ	6203 ZZ		
5	3,7	182/4T	7,38	H	7,0	1,8	2,9	0,1217	15	33	53,4	1,15	3510	85,5	86,5	85,5	0,71	0,82	0,87	6,24	13,976	7,874	6206 ZZ	6205 ZZ		
7,5	5,5	182/4T	11,1	H	7,0	1,8	2,8	0,1559	8	18	62,8	1,15	3500	87,5	88,5	87,5	0,74	0,84	0,89	8,86	14,764	8,661	6206 ZZ	6205 ZZ		
10	7,5	213/5T	14,7	G	6,4	1,8	2,6	0,3816	8	18	103	1,15	3530	87,5	88,5	88,5	0,72	0,83	0,87	12,2	16,575	10,236	6208 ZZ	6206 ZZ		
15	11	213/5T	22,0	G	6,5	1,9	2,6	0,4651	6	13	117	1,15	3525	88,5	89,5	89,5	0,73	0,83	0,88	17,5	16,969	10,630	6208 ZZ	6206 ZZ		
20	15	254/6T	29,4	G	6,0	1,8	2,4	0,6974	9	20	151	1,15	3520	88,5	89,5	90,2	0,75	0,84	0,88	23,7	20,472	12,992	6309 Z-C3	6208 Z-C3		
25	18,5	254/6T	36,7	G	6,2	1,8	2,8	0,8718	9	20	169	1,15	3530	90,2	91,0	91,0	0,75	0,84	0,88	29,0	20,472	12,992	6309 Z-C3	6208 Z-C3		
IV pole																										
1	0,75	143/5T	2,94	L	7,4	2,8	3,3	0,0907	0	0	30,0	1,15	1760	77,0	81,5	82,5	0,46	0,60	0,70	1,63	11,181	7,480	6205 ZZ	6203 ZZ		
1,5	1,1	143/5T	4,43	K	7,6	2,7	3,5	0,1168	12	26	35,9	1,15	1755	80,0	84,0	84,0	0,52	0,65	0,75	2,19	11,575	7,874	6205 ZZ	6203 ZZ		
2	1,5	143/5T	5,94	K	7,4	2,6	3,1	0,1296	10	22	39,0	1,15	1745	81,5	84,0	84,0	0,55	0,69	0,77	2,91	11,969	8,268	6205 ZZ	6203 ZZ		
3	2,2	182/4T	8,81	J	6,8	2,2	2,9	0,2164	0	0	50,7	1,15	1765	85,5	86,5	86,5	0,59	0,72	0,79	4,04	13,976	7,874	6206 ZZ	6205 ZZ		
5	3,7	182/4T	14,8	J	7,0	2,0	2,8	0,3080	9	20	66,4	1,15	1750	86,5	87,5	87,5	0,62	0,75	0,82	6,47	15,157	9,055	6206 ZZ	6205 ZZ		
7,5	5,5	213/5T	22,1	H	6,5	2,0	2,6	0,8040	10	22	101	1,15	1760	87,5	88,5	88,5	0,67	0,79	0,84	9,29	16,575	10,236	6208 ZZ	6206 ZZ		
10	7,5	213/5T	29,4	H	6,5	2,1	2,7	1,03	8	18	116	1,15	1760	89,5	90,2	89,5	0,68	0,79	0,85	12,4	16,575	10,236	6208 ZZ	6206 ZZ		
15	11	254/6T	44,2	G	6,0	1,9	2,3	1,22	13	29	152	1,15	1760	90,2	91,0	91,0	0,66	0,77	0,82	18,5	20,472	12,992	6309 Z-C3	6208 Z-C3		
20	15	254/6T	59,0	F	5,5	1,9	2,2	1,28	12	26	166	1,15	1755	91,0	91,0	91,0	0,67	0,78	0,81	25,5	20,472	12,992	6309 Z-C3	6208 Z-C3		
VI pole																										
1	0,75	143/5T	4,51	K	5,9	2,2	2,9	0,1296	19	42	38,1	1,15	1150	77,0	80,0	80,0	0,47	0,60	0,69	1,71	11,969	8,268	6205 ZZ	6203 ZZ		
1,5	1,1	182/4T	6,64	K	6,8	2,0	3,1	0,3918	29	64	61,5	1,15	1170	81,5	84,0	84,0	0,49	0,62	0,71	2,31	14,764	8,661	6206 ZZ	6205 ZZ		
2	1,5	182/4T	8,86	K	6,9	2,1	3,1	0,4786	24	53	71,0	1,15	1170	82,5	85,5	85,5	0,51	0,64	0,72	3,06	15,551	9,449	6206 ZZ	6205 ZZ		
3	2,2	213/5T	13,2	J	6,5	2,3	2,7	0,9029	19	42	107	1,15	1180	84,0	85,5	86,5	0,52	0,66	0,74	4,31	16,575	10,236	6208 ZZ	6206 ZZ		
5	3,7	213/5T	22,1	G	5,5	2,1	2,4	0,9006	23	51	109	1,15	1170	86,5	87,5	87,5	0,58	0,70	0,77	6,89	16,575	10,236	6208 ZZ	6206 ZZ		
7,5	5,5	254/6T	33,1	G	5,0	2,0	2,3	1,50	30	66	157	1,15	1175	86,5	88,5	88,5	0,65	0,72	0,77	10,8	20,472	12,992	6309 Z-C3	6208 Z-C3		
10	7,5	254/6T	43,9	G	5,2	2,1	2,4	2,00	28	62	184	1,15	1180	88,5	90,2	90,2	0,53	0,66	0,73	14,3	20,472	12,992	6309 Z-C3	6208 Z-C3		

1) Values for three-phase 60Hz motors;

2) To obtain nominal current (In) in 230V, just multiply the current value by 2.

12.3 General Purpose - TEFC - High Efficiency - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings			
				HP	kW				Code	II/In				Hot	Cold	% of full load			Power Factor				DE	NDE		
																Efficiency			Power Factor							
																50	75	100	50						75	100
II pole																										
1	0,75	143/5T	1,48	K	7,9	2,3	3,3	0,0275	22	48	26,2	1,15	3510	70,0	75,5	77,0	0,69	0,80	0,86	1,42	13,189	7,480	6205 ZZ	6203 ZZ		
1,5	1,1	143/5T	2,23	K	8,1	2,7	3,0	0,0358	17	37	29,5	1,15	3480	77,0	81,5	82,5	0,72	0,83	0,88	1,90	13,189	7,480	6205 ZZ	6203 ZZ		
2	1,5	143/5T	2,96	K	8,5	2,8	3,5	0,0465	14	31	35,7	1,15	3500	82,5	84,0	84,0	0,71	0,82	0,88	2,55	13,583	7,874	6205 ZZ	6203 ZZ		
3	2,2	182/4T	4,43	K	8,3	2,3	3,5	0,1391	27	59	59,5	1,15	3510	82,5	85,5	85,5	0,69	0,80	0,85	3,80	16,339	8,661	6206 ZZ	6205 ZZ		
5	3,7	182/4T	7,41	H	7,4	2,1	3,4	0,1739	16	35	68,6	1,15	3495	86,5	87,5	87,5	0,74	0,84	0,89	5,96	16,732	9,055	6206 ZZ	6205 ZZ		
7,5	5,5	213/5T	11,0	H	7,0	2,4	3,1	0,4665	13	29	118	1,15	3525	86,5	88,5	88,5	0,75	0,84	0,89	8,76	19,291	10,630	6208 ZZ	6206 ZZ		
10	7,5	213/5T	14,7	G	6,7	2,2	2,8	0,5496	10	22	133	1,15	3520	88,5	89,5	89,5	0,75	0,84	0,89	11,8	20,079	11,417	6208 ZZ	6206 ZZ		
15	11	254/6T	22,1	H	6,6	1,9	2,8	0,7050	12	26	156	1,15	3520	87,5	89,5	90,2	0,68	0,79	0,85	18,0	22,559	12,992	6309 Z-C3	6208 Z-C3		
20	15	254/6T	29,5	G	6,3	1,9	2,6	1,05	12	26	193	1,15	3515	90,2	91,0	90,2	0,78	0,86	0,89	23,5	22,559	12,992	6309 Z-C3	6208 Z-C3		
25	18,5	254/6T	36,7	J	8,3	2,4	3,4	1,31	8	18	221	1,15	3530	91,0	91,7	91,0	0,77	0,85	0,89	28,7	23,346	13,780	6309 Z-C3	6208 Z-C3		
High-Output Design																										
3	2,2	143/5T	4,47	J	8,4	2,7	3,3	0,1407	9	20	44,1	1,15	3480	84,0	85,5	85,5	0,78	0,87	0,91	3,55	14,37	8,661	6205 ZZ	6203 ZZ		
7,5	5,5	182/4T	11,2	J	8,0	2,7	3,6	0,1913	19	42	79,4	1,15	3480	88,5	89,5	88,5	0,77	0,86	0,90	8,67	17,126	9,449	6206 ZZ	6205 ZZ		
15	11	213/5T	22,1	J	8,2	2,8	3,3	0,6341	11	24	154	1,15	3520	90,2	91,0	90,2	0,76	0,85	0,89	17,2	21,654	12,992	6208 ZZ	6206 ZZ		
IV pole																										
1	0,75	143/5T	2,94	L	7,6	2,9	3,5	0,0973	18	40	32,2	1,15	1760	78,5	82,5	82,5	0,50	0,64	0,73	1,56	13,189	7,480	6205 ZZ	6203 ZZ		
1,5	1,1	143/5T	4,42	K	7,8	2,7	3,4	0,1232	13	29	37,9	1,15	1760	81,5	84,0	84,0	0,53	0,67	0,76	2,16	13,583	7,874	6205 ZZ	6203 ZZ		
2	1,5	143/5T	5,90	K	7,5	2,6	3,3	0,1419	10	22	42,3	1,15	1755	81,5	84,0	84,0	0,53	0,67	0,76	2,95	14,370	8,661	6205 ZZ	6203 ZZ		
3	2,2	182/4T	8,83	K	7,7	2,4	3,5	0,2935	16	35	63,9	1,15	1760	85,5	87,5	87,5	0,58	0,71	0,78	4,05	16,339	8,661	6206 ZZ	6205 ZZ		
5	3,7	182/4T	14,8	J	7,2	2,0	3,0	0,3695	8	18	76,5	1,15	1750	86,5	87,5	87,5	0,61	0,74	0,81	6,55	17,913	10,236	6206 ZZ	6205 ZZ		
7,5	5,5	213/5T	22,0	H	7,1	2,3	2,9	1,07	11	24	122	1,15	1765	88,5	89,5	89,5	0,67	0,79	0,85	9,07	19,291	10,630	6208 ZZ	6206 ZZ		
10	7,5	213/5T	29,5	H	6,8	2,1	2,6	1,29	8	18	140	1,15	1755	89,5	89,5	89,5	0,72	0,82	0,87	12,1	20,472	11,811	6208 ZZ	6206 ZZ		
15	11	254/6T	44,2	H	6,4	2,2	2,8	1,65	11	24	169	1,15	1760	89,5	90,2	91,0	0,63	0,75	0,81	18,7	22,559	12,992	6309 Z-C3	6208 Z-C3		
20	15	254/6T	58,9	G	5,9	2,1	2,7	2,15	12	26	197	1,15	1760	91,0	91,0	91,0	0,67	0,78	0,83	24,9	22,559	12,992	6309 Z-C3	6208 Z-C3		
VI pole																										
1	0,75	143/5T	4,52	K	6,3	2,7	3,2	0,1037	31	68	35,9	1,15	1145	77,0	80,0	80,0	0,49	0,62	0,71	1,66	13,189	7,480	6205 ZZ	6203 ZZ		
1,5	1,1	182/4T	6,64	K	6,9	2,1	3,2	0,4786	32	70	71,0	1,15	1170	81,5	84,0	85,5	0,50	0,62	0,71	2,27	17,126	9,449	6206 ZZ	6205 ZZ		
2	1,5	182/4T	8,86	M	8,4	2,6	3,7	0,5657	20	44	80,5	1,15	1170	82,5	85,5	86,5	0,47	0,60	0,69	3,15	17,913	10,236	6206 ZZ	6205 ZZ		
3	2,2	213/5T	13,2	H	6,2	2,3	2,8	0,8104	36	79	101	1,15	1175	85,5	87,5	87,5	0,53	0,66	0,74	4,26	18,898	10,236	6208 ZZ	6206 ZZ		
5	3,7	213/5T	22,0	J	6,4	2,5	2,8	1,08	20	44	122	1,15	1175	86,5	87,5	87,5	0,55	0,68	0,75	7,08	19,291	10,630	6208 ZZ	6206 ZZ		
7,5	5,5	254/6T	33,1	G	5,5	2,2	2,4	1,84	27	59	179	1,15	1175	87,5	89,5	89,5	0,55	0,67	0,74	10,4	22,559	12,992	6309 Z-C3	6208 Z-C3		
10	7,5	254/6T	44,1	G	5,5	2,2	2,4	2,17	20	44	196	1,15	1175	88,5	89,5	89,5	0,56	0,68	0,75	14,0	22,559	12,992	6309 Z-C3	6208 Z-C3		

1) Values for three-phase 60Hz motors;

2) To obtain nominal current (In) in 230V. just multiply the current value by 2.

12.4 General Purpose - TEFC - NEMA Premium - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings			
				HP	kW				Code	ll/ln				Hot	Cold	% of full load			Power Factor				DE	NDE		
																Efficiency			Power Factor							
																50	75	100	50						75	100
II pole																										
1	0,75	143/5T	1,48	K	7,8	2,0	3,0	0,0643	22	48	26,2	1,15	3510	72,0	77,0	78,5	0,65	0,76	0,83	1,44	13,189	7,480	6205 ZZ	6203 ZZ		
1,5	1,1	143/5T	2,21	L	9,1	2,3	3,0	0,1023	17	37	34,2	1,15	3520	80,0	82,5	84,0	0,71	0,82	0,88	1,87	13,189	7,480	6205 ZZ	6203 ZZ		
2	1,5	143/5T	2,94	L	9,9	2,5	3,0	0,1279	13	29	40,1	1,15	3520	82,5	85,5	85,5	0,73	0,83	0,89	2,47	13,976	8,268	6205 ZZ	6203 ZZ		
3	2,2	182/4T	4,42	K	8,8	2,2	3,0	0,1564	22	48	63,5	1,15	3515	84,0	86,5	86,5	0,71	0,82	0,87	3,67	16,339	8,661	6206 ZZ	6205 ZZ		
5	3,7	182/4T	7,40	J	7,8	2,2	3,0	0,2079	17	37	78,5	1,15	3500	87,5	88,5	88,5	0,76	0,85	0,89	5,90	17,913	10,236	6206 ZZ	6205 ZZ		
7,5	5,5	213/5T	11,0	H	7,6	2,6	3,0	0,5496	15	33	133	1,15	3530	87,5	88,5	89,5	0,76	0,85	0,89	8,67	20,079	11,417	6208 ZZ	6206 ZZ		
10	7,5	213/5T	14,7	H	7,5	2,6	3,0	0,7188	12	26	161	1,15	3530	89,5	90,2	90,2	0,80	0,88	0,91	11,5	21,654	12,992	6208 ZZ	6206 ZZ		
15	11	254/6T	22,0	H	7,0	2,0	3,0	0,8718	14	31	175	1,15	3525	89,5	91,0	91,0	0,73	0,83	0,87	17,4	22,559	12,992	6309 Z-C3	6208 Z-C3		
20	15	254/6T	29,5	G	6,6	2,0	2,9	1,22	12	26	211	1,15	3515	90,0	91,0	91,0	0,81	0,88	0,91	22,7	23,346	13,780	6309 Z-C3	6208 Z-C3		
25	18,5	254/6T	36,7	J	8,3	2,4	3,4	1,31	8	18	221	1,15	3530	91,0	91,7	91,7	0,77	0,85	0,89	28,5	23,346	13,780	6309 Z-C3	6208 Z-C3		
High-Output Design																										
3	2,2	143/5T	4,44	K	9,5	3,0	3,8	0,1663	10	22	48,1	1,15	3500	84,0	86,5	86,5	0,78	0,87	0,91	3,51	15,157	9,449	6205 ZZ	6203 ZZ		
7,5	5,5	182/4T	11,2	J	8,0	2,7	3,6	0,1913	19	42	79,4	1,15	3480	88,5	89,5	89,5	0,77	0,86	0,90	8,57	17,126	9,449	6206 ZZ	6205 ZZ		
15	11	213/5T	22,1	J	8,2	2,8	3,3	0,6341	11	24	154	1,15	3520	90,2	91,0	91,0	0,76	0,85	0,89	17,0	21,654	12,992	6208 ZZ	6206 ZZ		
IV pole																										
1	0,75	143/5T	2,94	M	8,6	2,8	3,0	0,1232	19	42	37,9	1,15	1765	82,5	84,0	85,5	0,52	0,66	0,75	1,47	13,583	7,874	6205 ZZ	6203 ZZ		
1,5	1,1	143/5T	4,44	K	8,2	2,7	3,0	0,1101	21	46	37,9	1,15	1750	85,5	86,5	86,5	0,59	0,72	0,79	2,02	13,583	7,874	6205 ZZ	6203 ZZ		
2	1,5	143/5T	5,94	K	8,2	2,7	3,0	0,1296	15	33	42,3	1,15	1745	85,5	87,5	86,5	0,60	0,73	0,80	2,72	13,976	8,268	6205 ZZ	6203 ZZ		
3	2,2	182/4T	8,81	K	8,8	2,2	3,0	0,4017	18	40	80,3	1,15	1765	87,5	88,5	89,5	0,61	0,74	0,81	3,81	17,913	10,236	6206 ZZ	6205 ZZ		
5	3,7	182/4T	14,8	J	7,0	2,2	3,0	0,3080	16	35	71,4	1,15	1750	88,5	89,5	89,5	0,60	0,73	0,80	6,49	17,913	10,236	6206 ZZ	6205 ZZ		
7,5	5,5	213/5T	22,0	H	7,3	2,6	3,0	0,9380	22	48	120	1,15	1770	90,2	91,0	91,7	0,64	0,76	0,82	9,07	18,898	10,236	6208 ZZ	6206 ZZ		
10	7,5	213/5T	29,4	H	7,0	2,5	3,0	1,07	15	33	130	1,15	1760	91,0	91,0	91,7	0,67	0,78	0,84	12,2	19,291	10,630	6208 ZZ	6206 ZZ		
15	11	254/6T	43,9	H	6,6	2,5	3,0	2,15	19	42	197	1,15	1770	91,0	92,4	92,4	0,64	0,76	0,82	18,2	22,559	12,992	6309 Z-C3	6208 Z-C3		
20	15	254/6T	58,7	H	6,7	2,7	3,0	2,64	16	35	227	1,15	1765	91,7	92,4	93,0	0,66	0,77	0,82	24,7	23,346	13,780	6309 Z-C3	6208 Z-C3		
VI pole																										
1	0,75	143/5T	4,52	J	5,8	2,3	2,8	0,1597	31	68	38,6	1,15	1145	80,0	82,5	82,5	0,50	0,63	0,72	1,58	13,583	7,874	6205 ZZ	6203 ZZ		
1,5	1,1	182/4T	6,64	K	6,9	2,4	3,4	0,2800	55	121	65,9	1,15	1170	84,0	86,5	87,5	0,50	0,63	0,71	2,22	16,339	8,661	6206 ZZ	6205 ZZ		
2	1,5	182/4T	8,86	K	7,5	2,6	3,7	0,3424	44	97	76,1	1,15	1170	84,0	86,5	88,5	0,50	0,62	0,71	3,00	17,126	9,449	6206 ZZ	6205 ZZ		
3	2,2	213/5T	13,2	H	6,4	2,3	2,9	1,08	46	101	130	1,15	1175	85,5	88,5	89,5	0,55	0,67	0,74	4,17	19,291	10,630	6208 ZZ	6206 ZZ		
5	3,7	213/5T	22,0	H	6,0	2,2	2,5	1,26	30	66	144	1,15	1175	87,5	88,5	89,5	0,59	0,71	0,77	6,74	20,079	11,417	6208 ZZ	6206 ZZ		
7,5	5,5	254/6T	33,1	G	5,4	2,0	2,3	2,34	42	92	204	1,15	1175	89,5	89,5	91,0	0,58	0,70	0,76	9,98	22,559	12,992	6309 Z-C3	6208 Z-C3		
10	7,5	254/6T	44,1	G	5,4	2,1	2,3	2,83	30	66	234	1,15	1175	90,2	91,0	91,0	0,57	0,69	0,75	13,8	23,346	13,780	6309 Z-C3	6208 Z-C3		

1) Values for three-phase 60Hz motors;

2) To obtain nominal current (In) in 230V. just multiply the current value by 2.

12.5 Jet Pump - JM - ODP - High Efficiency - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings		
				Code	ll/ln				Hot	Cold				% of full load			Power Factor	DE	NDE						
														Efficiency	Power Factor										
HP	kW												50	75	100	50	75	100							
II pole																									
1	0,75	1435JM	1,48	K	7,5	2,4	3,2	0,0278	27	59	25,4	1,15	3490	77,0	80,0	80,0	0,69	0,80	0,87	1,35	13,701	7,874	6206 ZZ	6203 ZZ	
1,5	1,1	1435JM	2,22	J	7,8	2,4	3,2	0,0358	22	48	29,3	1,15	3495	81,5	82,5	82,5	0,73	0,84	0,89	1,88	13,701	7,874	6206 ZZ	6203 ZZ	
2	1,5	1435JM	2,96	K	8,0	2,5	3,4	0,0439	17	37	34,0	1,15	3500	82,5	84,0	84,0	0,74	0,84	0,89	2,52	13,701	7,874	6206 ZZ	6203 ZZ	
3	2,2	1435JM	4,47	J	7,8	2,5	3,1	0,0496	12	26	37,0	1,15	3475	84,0	84,0	84,0	0,73	0,84	0,89	3,69	14,094	8,268	6206 ZZ	6203 ZZ	
5	3,7	182/4JM	7,38	H	7,0	1,8	2,9	0,1217	15	33	53,4	1,15	3510	85,5	86,5	85,5	0,71	0,82	0,87	6,24	15,472	7,874	6207 ZZ	6205 ZZ	
7,5	5,5	182/4JM	11,1	H	7,0	1,8	2,8	0,1559	8	18	62,8	1,15	3500	87,5	88,5	87,5	0,74	0,84	0,89	8,86	16,260	8,661	6207 ZZ	6205 ZZ	
10	7,5	2135JM	14,7	G	6,4	1,8	2,6	0,3816	8	18	103	1,15	3530	87,5	88,5	88,5	0,72	0,83	0,87	12,2	17,717	10,236	6209 ZZ	6206 ZZ	
15	11	2135JM	22,0	G	6,5	1,9	2,6	0,4651	6	13	117	1,15	3525	88,5	89,5	89,5	0,73	0,83	0,88	17,5	18,110	10,630	6209 ZZ	6206 ZZ	
20	15	2546JM	29,4	G	6,0	1,8	2,4	0,6974	9	20	151	1,15	3520	88,5	89,5	90,2	0,75	0,84	0,88	23,7	21,969	12,992	6309 Z-C3	6208 Z-C3	
25	18,5	2546JM	36,7	G	6,2	1,8	2,8	0,8718	9	20	169	1,15	3530	90,2	91,0	91,0	0,75	0,84	0,88	29,0	21,969	12,992	6309 Z-C3	6208 Z-C3	
IV pole																									
1	0,75	1435JM	2,94	L	7,4	2,8	3,3	0,0907	0	0	30,0	1,15	1760	77,0	81,5	82,5	0,46	0,60	0,70	1,63	13,701	7,874	6206 ZZ	6203 ZZ	
1,5	1,1	1435JM	4,43	K	7,6	2,7	3,5	0,1168	12	26	35,9	1,15	1755	80,0	84,0	84,0	0,52	0,65	0,75	2,19	14,094	8,268	6206 ZZ	6203 ZZ	
2	1,5	1435JM	5,94	K	7,4	2,6	3,1	0,1296	10	22	39,0	1,15	1745	81,5	84,0	84,0	0,55	0,69	0,77	2,91	14,488	8,661	6206 ZZ	6203 ZZ	
3	2,2	182/4JM	8,81	J	6,8	2,2	2,9	0,2164	0	0	50,7	1,15	1765	85,5	86,5	86,5	0,59	0,72	0,79	4,04	15,472	7,874	6207 ZZ	6205 ZZ	
5	3,7	182/4JM	14,8	J	7,0	2,0	2,8	0,3080	9	20	66,4	1,15	1750	86,5	87,5	87,5	0,62	0,75	0,82	6,47	16,654	9,055	6207 ZZ	6205 ZZ	
7,5	5,5	2135JM	22,1	H	6,5	2,0	2,6	0,8040	10	22	101	1,15	1760	87,5	88,5	88,5	0,67	0,79	0,84	9,29	17,717	10,236	6209 ZZ	6206 ZZ	
10	7,5	2135JM	29,4	H	6,5	2,1	2,7	1,03	8	18	116	1,15	1760	89,5	90,2	89,5	0,68	0,79	0,85	12,4	17,717	10,236	6209 ZZ	6206 ZZ	
15	11	2546JM	44,2	G	6,0	1,9	2,3	1,22	13	29	152	1,15	1760	90,2	91,0	91,0	0,66	0,77	0,82	18,5	21,969	12,992	6309 Z-C3	6208 Z-C3	
20	15	2546JM	59,0	F	5,5	1,9	2,2	1,28	12	26	166	1,15	1755	91,0	91,0	91,0	0,67	0,78	0,81	25,5	21,969	12,992	6309 Z-C3	6208 Z-C3	
VI pole																									
1	0,75	1435JM	4,51	K	5,9	2,2	2,9	0,1296	19	42	38,1	1,15	1150	77,0	80,0	80,0	0,47	0,60	0,69	1,71	14,488	8,661	6206 ZZ	6203 ZZ	
1,5	1,1	182/4JM	6,64	K	6,8	2,0	3,1	0,3918	29	64	61,5	1,15	1170	81,5	84,0	84,0	0,49	0,62	0,71	2,31	16,260	8,661	6207 ZZ	6205 ZZ	
2	1,5	182/4JM	8,86	K	6,9	2,1	3,1	0,4786	24	53	71,0	1,15	1170	82,5	85,5	85,5	0,51	0,64	0,72	3,06	17,047	9,449	6207 ZZ	6205 ZZ	
3	2,2	2135JM	13,2	J	6,5	2,3	2,7	0,9029	19	42	107	1,15	1180	84,0	85,5	86,5	0,52	0,66	0,74	4,31	17,717	10,236	6209 ZZ	6206 ZZ	
5	3,7	2135JM	22,1	G	5,5	2,1	2,4	0,9006	23	51	109	1,15	1170	86,5	87,5	87,5	0,58	0,70	0,77	6,89	17,717	10,236	6209 ZZ	6206 ZZ	
7,5	5,5	2546JM	33,1	G	5,0	2,0	2,3	1,50	30	66	157	1,15	1175	86,5	88,5	88,5	0,53	0,65	0,72	10,8	21,969	12,992	6309 Z-C3	6208 Z-C3	
10	7,5	2546JM	43,9	G	5,2	2,1	2,4	2,00	28	62	184	1,15	1180	88,5	90,2	90,2	0,53	0,66	0,73	14,3	21,969	12,992	6309 Z-C3	6208 Z-C3	



12.6 Jet Pump - JM - ODP - NEMA Premium - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque TI/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						C (in)	FC (in)	Bearings		
														% of full load										Full load current In (A)
														Efficiency			Power Factor							
														HP	kW	50	75	100	50			75	100	
II pole																								
1	0,75	1435JM	1,48	L	8,3	2,1	3,3	0,0643	22	48	25,4	1,15	3510	74,0	78,5	80,0	0,66	0,78	0,85	1,38	13,701	7,874	6206 ZZ	6203 ZZ
1,5	1,1	1435JM	2,21	K	8,6	2,1	3,3	0,0835	19	42	29,3	1,15	3510	81,5	84,0	84,0	0,73	0,83	0,89	1,85	13,701	7,874	6206 ZZ	6203 ZZ
2	1,5	1435JM	2,95	K	8,9	2,2	3,3	0,1151	14	31	36,8	1,15	3510	84,0	85,5	85,5	0,77	0,86	0,91	2,42	14,094	8,268	6206 ZZ	6203 ZZ
3	2,2	1435JM	4,47	J	8,0	2,3	3,0	0,1279	9	20	39,9	1,15	3480	84,0	85,5	85,5	0,76	0,86	0,90	3,59	14,488	8,661	6206 ZZ	6203 ZZ
5	3,7	1824JM	7,38	J	7,6	1,9	3,0	0,1386	12	26	58,7	1,15	3510	85,5	86,5	86,5	0,73	0,83	0,88	6,10	16,260	8,661	6207 ZZ	6205 ZZ
7,5	5,5	1824JM	11,1	H	7,4	1,8	2,9	0,1818	10	22	69,9	1,15	3500	88,5	88,5	88,5	0,76	0,85	0,90	8,67	16,654	9,055	6207 ZZ	6205 ZZ
10	7,5	2135JM	14,7	H	6,8	2,0	2,8	0,4651	11	24	117	1,15	3535	88,5	89,5	89,5	0,74	0,84	0,88	12,0	18,110	10,630	6209 ZZ	6206 ZZ
15	11	2135JM	22,0	H	6,9	2,1	2,8	0,5512	8	18	131	1,15	3535	90,2	90,2	90,2	0,77	0,86	0,89	17,2	18,898	11,417	6209 ZZ	6206 ZZ
20	15	2546JM	29,4	G	6,0	1,8	2,4	0,7848	13	29	151	1,15	3525	90,2	91,0	91,0	0,76	0,83	0,87	23,8	21,969	12,992	6309 Z-C3	6208 Z-C3
25	18,5	2546JM	36,7	G	6,3	1,8	2,9	0,9155	9	20	174	1,15	3530	91,0	91,7	91,7	0,73	0,83	0,87	29,1	21,969	12,992	6309 Z-C3	6208 Z-C3
IV pole																								
1	0,75	1435JM	2,94	L	8,0	2,9	3,6	0,1101	22	48	34,4	1,15	1760	81,5	84,0	85,5	0,51	0,65	0,73	1,51	13,701	7,874	6206 ZZ	6203 ZZ
1,5	1,1	1435JM	4,42	L	8,7	2,8	3,3	0,1426	15	33	41,9	1,15	1760	84,0	86,5	86,5	0,56	0,69	0,77	2,07	14,882	9,055	6206 ZZ	6203 ZZ
2	1,5	1435JM	5,96	K	7,7	2,6	3,2	0,1168	17	37	39,0	1,15	1740	85,5	86,5	86,5	0,61	0,74	0,81	2,69	14,882	9,055	6206 ZZ	6203 ZZ
3	2,2	1824JM	8,81	K	8,4	2,2	3,3	0,3092	15	33	65,9	1,15	1765	87,5	88,5	89,5	0,60	0,73	0,80	3,86	16,654	9,055	6207 ZZ	6205 ZZ
5	3,7	1824JM	14,7	J	7,2	2,0	3,1	0,4003	12	26	79,8	1,15	1760	88,5	88,5	89,5	0,63	0,76	0,82	6,33	17,835	10,236	6207 ZZ	6205 ZZ
7,5	5,5	2135JM	22,0	J	7,3	2,4	3,2	1,03	13	29	116	1,15	1770	89,5	90,2	91,0	0,65	0,77	0,82	9,25	17,717	10,236	6209 ZZ	6206 ZZ
10	7,5	2135JM	29,3	H	7,0	2,5	3,5	1,30	14	31	137	1,15	1770	90,2	91,0	91,7	0,64	0,77	0,83	12,4	17,717	10,236	6209 ZZ	6206 ZZ
15	11	2546JM	43,8	H	6,7	2,4	3,0	1,82	17	37	175	1,15	1775	91,7	92,4	93,0	0,62	0,73	0,80	18,6	21,969	12,992	6309 Z-C3	6208 Z-C3
20	15	2546JM	58,5	G	6,3	2,4	2,9	2,23	15	33	198	1,15	1770	92,4	92,4	93,0	0,63	0,74	0,81	25,0	21,969	12,992	6309 Z-C3	6208 Z-C3
VI pole																								
1	0,75	1435JM	4,51	K	6,1	2,5	3,0	0,1419	24	53	35,3	1,15	1150	78,5	81,5	82,5	0,47	0,60	0,69	1,65	13,701	7,874	6206 ZZ	6203 ZZ
1,5	1,1	1824JM	6,67	J	6,5	2,0	3,1	0,2178	46	101	56,0	1,15	1165	84,0	85,5	86,5	0,51	0,63	0,71	2,25	15,472	7,874	6207 ZZ	6205 ZZ
2	1,5	1824JM	8,89	J	6,6	2,0	3,0	0,2800	33	73	66,1	1,15	1165	85,5	86,5	87,5	0,53	0,66	0,73	2,95	16,260	8,661	6207 ZZ	6205 ZZ
3	2,2	2135JM	13,2	H	5,9	2,1	2,6	0,8104	39	86	98,3	1,15	1175	86,5	87,5	88,5	0,56	0,68	0,75	4,16	17,717	10,236	6209 ZZ	6206 ZZ
5	3,7	2135JM	22,0	H	5,9	2,2	2,5	1,08	29	64	118	1,15	1175	88,5	89,5	89,5	0,58	0,70	0,77	6,74	18,110	10,630	6209 ZZ	6206 ZZ
7,5	5,5	2546JM	33,1	F	5,1	2,0	2,3	2,00	37	81	187	1,15	1175	88,5	90,2	90,2	0,56	0,68	0,75	10,2	21,969	12,992	6309 Z-C3	6208 Z-C3
10	7,5	2546JM	43,9	G	5,3	2,1	2,3	2,50	34	75	209	1,15	1180	91,0	91,7	91,7	0,56	0,68	0,74	13,9	21,969	12,992	6309 Z-C3	6208 Z-C3

12.7 Jet Pump - JM - TEFC - High Efficiency - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings	
				Code	II/In				Hot	Cold				% of full load			Power Factor	DE	NDE					
														Efficiency										
														50	75	100								
II pole																								
1	0,75	1435JM	1,48	K	7,9	2,3	3,3	0,0275	22	48	26,2	1,15	3510	70,0	75,5	77,0	0,69	0,80	0,86	1,42	15,709	7,874	6206 ZZ	6203 ZZ
1,5	1,1	1435JM	2,23	K	8,1	2,7	3,0	0,0358	17	37	29,5	1,15	3480	77,0	81,5	82,5	0,72	0,83	0,88	1,90	15,709	7,874	6206 ZZ	6203 ZZ
2	1,5	1435JM	2,96	K	8,5	2,8	3,5	0,0465	14	31	35,7	1,15	3500	82,5	84,0	84,0	0,71	0,82	0,88	2,55	15,709	7,874	6206 ZZ	6203 ZZ
3	2,2	1824JM	4,43	K	8,3	2,3	3,5	0,1391	27	59	59,5	1,15	3510	82,5	85,5	85,5	0,69	0,80	0,85	3,80	17,835	8,661	6207 ZZ	6205 ZZ
5	3,7	1824JM	7,41	H	7,4	2,1	3,4	0,1739	16	35	68,6	1,15	3495	86,5	87,5	87,5	0,74	0,84	0,89	5,96	18,228	9,055	6207 ZZ	6205 ZZ
7,5	5,5	2135JM	11,0	H	7,0	2,4	3,1	0,4665	13	29	118	1,15	3525	86,5	88,5	88,5	0,75	0,84	0,89	8,76	20,433	10,630	6209 ZZ	6206 ZZ
10	7,5	2135JM	14,7	G	6,7	2,2	2,8	0,5496	10	22	133	1,15	3520	88,5	89,5	89,5	0,75	0,84	0,89	11,8	21,220	11,417	6209 ZZ	6206 ZZ
15	11	2546JM	22,1	H	6,6	1,9	2,8	0,7050	12	26	156	1,15	3520	87,5	89,5	90,2	0,68	0,79	0,85	18,0	24,055	12,992	6309 Z-C3	6208 Z-C3
20	15	2546JM	29,5	G	6,3	1,9	2,6	1,05	12	26	193	1,15	3515	90,2	91,0	90,2	0,78	0,86	0,89	23,5	24,055	12,992	6309 Z-C3	6208 Z-C3
25	18,5	2546JM	36,7	J	8,3	2,4	3,4	1,31	8	18	221	1,15	3530	91,0	91,7	91,0	0,77	0,85	0,89	28,7	24,843	13,780	6309 Z-C3	6208 Z-C3
High-Output Design																								
3	2,2	1435JM	4,47	J	8,4	2,7	3,3	0,1407	9	20	44,1	1,15	3480	84,0	85,5	85,5	0,78	0,87	0,91	3,55	16,890	9,055	6206 ZZ	6203 ZZ
7,5	5,5	1824JM	11,2	J	8,0	2,7	3,6	0,1913	19	42	79,4	1,15	3480	88,5	89,5	88,5	0,77	0,86	0,90	8,67	18,622	9,449	6207 ZZ	6205 ZZ
15	11	2135JM	22,1	J	8,2	2,8	3,3	0,6341	11	24	154	1,15	3520	90,2	91,0	90,2	0,76	0,85	0,89	17,2	22,795	12,992	6209 ZZ	6206 ZZ
IV pole																								
1	0,75	1435JM	2,94	L	7,6	2,9	3,5	0,0973	18	40	32,2	1,15	1760	78,5	82,5	82,5	0,50	0,64	0,73	1,56	15,709	7,874	6206 ZZ	6203 ZZ
1,5	1,1	1435JM	4,42	K	7,8	2,7	3,4	0,1232	13	29	37,9	1,15	1760	81,5	84,0	84,0	0,53	0,67	0,76	2,16	16,102	8,268	6206 ZZ	6203 ZZ
2	1,5	1435JM	5,90	K	7,5	2,6	3,3	0,1419	10	22	42,3	1,15	1755	81,5	84,0	84,0	0,53	0,67	0,76	2,95	16,890	9,055	6206 ZZ	6203 ZZ
3	2,2	1824JM	8,83	K	7,7	2,4	3,5	0,2935	16	35	63,9	1,15	1760	85,5	87,5	87,5	0,58	0,71	0,78	4,05	17,835	8,661	6207 ZZ	6205 ZZ
5	3,7	1824JM	14,8	J	7,2	2,0	3,0	0,3695	8	18	76,5	1,15	1750	86,5	87,5	87,5	0,61	0,74	0,81	6,55	19,409	10,236	6207 ZZ	6205 ZZ
7,5	5,5	2135JM	22,0	H	7,1	2,3	2,9	1,07	11	24	122	1,15	1765	88,5	89,5	89,5	0,67	0,79	0,85	9,07	20,433	10,630	6209 ZZ	6206 ZZ
10	7,5	2135JM	29,5	H	6,8	2,1	2,6	1,29	8	18	140	1,15	1755	89,5	89,5	89,5	0,72	0,82	0,87	12,1	21,614	11,811	6209 ZZ	6206 ZZ
15	11	2546JM	44,2	H	6,4	2,2	2,8	1,65	11	24	169	1,15	1760	89,5	90,2	91,0	0,63	0,75	0,81	18,7	24,055	12,992	6309 Z-C3	6208 Z-C3
20	15	2546JM	58,9	G	5,9	2,1	2,7	2,15	12	26	197	1,15	1760	91,0	91,0	91,0	0,67	0,78	0,83	24,9	24,055	12,992	6309 Z-C3	6208 Z-C3
VI pole																								
1	0,75	1435JM	4,52	K	6,3	2,7	3,2	0,1037	31	68	35,9	1,15	1145	77,0	80,0	80,0	0,49	0,62	0,71	1,66	15,709	7,874	6206 ZZ	6203 ZZ
1,5	1,1	1824JM	6,64	K	6,9	2,1	3,2	0,4786	32	70	71,0	1,15	1170	81,5	84,0	85,5	0,50	0,62	0,71	2,27	18,622	9,449	6207 ZZ	6205 ZZ
2	1,5	1824JM	8,86	M	8,4	2,6	3,7	0,5657	20	44	80,5	1,15	1170	82,5	85,5	86,5	0,47	0,60	0,69	3,15	19,409	10,236	6207 ZZ	6205 ZZ
3	2,2	2135JM	13,2	H	6,2	2,3	2,8	0,8104	36	79	101	1,15	1175	85,5	87,5	87,5	0,53	0,66	0,74	4,26	20,039	10,236	6209 ZZ	6206 ZZ
5	3,7	2135JM	22,0	J	6,4	2,5	2,8	1,08	20	44	122	1,15	1175	86,5	87,5	87,5	0,55	0,68	0,75	7,08	20,433	10,630	6209 ZZ	6206 ZZ
7,5	5,5	2546JM	33,1	G	5,5	2,2	2,4	1,84	27	59	179	1,15	1175	87,5	89,5	89,5	0,55	0,67	0,74	10,4	24,055	12,992	6309 Z-C3	6208 Z-C3
10	7,5	2546JM	44,1	G	5,5	2,2	2,4	2,17	20	44	196	1,15	1175	88,5	89,5	89,5	0,56	0,68	0,75	14,0	24,055	12,992	6309 Z-C3	6208 Z-C3

12.8 Jet Pump - JM - TEFC - NEMA Premium - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings				
				HP	kW				Code	ll/ln				Hot	Cold	% of full load			Efficiency				Power Factor			DE	NDE
																50	75	100					50	75	100		
II pole																											
1	0,75	1435JM	1,48	K	7,8	2,0	3,0	0,0643	22	48	26,2	1,15	3510	72,0	77,0	78,5	0,65	0,76	0,83	1,44	15,709	7,874	6206 ZZ	6203 ZZ			
1,5	1,1	1435JM	2,21	L	9,1	2,3	3,0	0,1023	17	37	34,2	1,15	3520	80,0	82,5	84,0	0,71	0,82	0,88	1,87	15,709	7,874	6206 ZZ	6203 ZZ			
2	1,5	1435JM	2,94	L	9,9	2,5	3,0	0,1279	13	29	40,1	1,15	3520	82,5	85,5	85,5	0,73	0,83	0,89	2,47	16,496	8,661	6206 ZZ	6203 ZZ			
3	2,2	1824JM	4,42	K	8,8	2,2	3,0	0,1564	22	48	63,5	1,15	3515	84,0	86,5	86,5	0,71	0,82	0,87	3,67	17,835	8,661	6207 ZZ	6205 ZZ			
5	3,7	1824JM	7,40	J	7,8	2,2	3,0	0,2079	17	37	78,5	1,15	3500	87,5	88,5	88,5	0,76	0,85	0,89	5,90	19,409	10,236	6207 ZZ	6205 ZZ			
7,5	5,5	2135JM	11,0	H	7,6	2,6	3,0	0,5496	15	33	133	1,15	3530	87,5	88,5	89,5	0,76	0,85	0,89	8,67	21,220	11,417	6209 ZZ	6206 ZZ			
10	7,5	2135JM	14,7	H	7,5	2,6	3,0	0,7188	12	26	161	1,15	3530	89,5	90,2	90,2	0,80	0,88	0,91	11,5	22,795	12,992	6209 ZZ	6206 ZZ			
15	11	2546JM	22,0	H	7,0	2,0	3,0	0,8718	14	31	175	1,15	3525	89,5	91,0	91,0	0,73	0,83	0,87	17,4	24,055	12,992	6309 Z-C3	6208 Z-C3			
20	15	2546JM	29,5	G	6,6	2,0	2,9	1,22	12	26	211	1,15	3515	90,0	91,0	91,0	0,81	0,88	0,91	22,7	24,843	13,780	6309 Z-C3	6208 Z-C3			
25	18,5	2546JM	36,7	J	8,3	2,4	3,4	1,31	8	18	221	1,15	3530	91,0	91,7	91,7	0,77	0,85	0,89	28,5	24,843	13,780	6309 Z-C3	6208 Z-C3			
High-Output Design																											
7,5	5,5	1824JM	11,2	J	8,0	2,7	3,6	0,1913	19	42	79,4	1,15	3480	88,5	89,5	89,5	0,77	0,86	0,90	8,57	18,622	9,449	6207 ZZ	6205 ZZ			
15	11	2135JM	22,1	J	8,2	2,8	3,3	0,6341	11	24	154	1,15	3520	90,2	91,0	91,0	0,76	0,85	0,89	17,0	22,795	12,992	6209 ZZ	6206 ZZ			
IV pole																											
1	0,75	1435JM	2,94	M	8,6	2,8	3,0	0,1232	19	42	37,9	1,15	1765	82,5	84,0	85,5	0,52	0,66	0,75	1,47	16,102	8,268	6206 ZZ	6203 ZZ			
1,5	1,1	1435JM	4,44	K	8,2	2,7	3,0	0,1101	21	46	37,9	1,15	1750	85,5	86,5	86,5	0,59	0,72	0,79	2,02	16,102	8,268	6206 ZZ	6203 ZZ			
2	1,5	1435JM	5,94	K	8,2	2,7	3,0	0,1296	15	33	42,3	1,15	1745	85,5	87,5	86,5	0,60	0,73	0,80	2,72	16,496	8,661	6206 ZZ	6203 ZZ			
3	2,2	1824JM	8,81	K	8,8	2,2	3,0	0,4017	18	40	80,3	1,15	1765	87,5	88,5	89,5	0,61	0,74	0,81	3,81	19,409	10,236	6207 ZZ	6205 ZZ			
5	3,7	1824JM	14,8	J	7,0	2,2	3,0	0,3080	16	35	71,4	1,15	1750	88,5	89,5	89,5	0,60	0,73	0,80	6,49	19,409	10,236	6207 ZZ	6205 ZZ			
7,5	5,5	2135JM	22,0	H	7,3	2,6	3,0	0,9380	22	48	120	1,15	1770	90,2	91,0	91,7	0,64	0,76	0,82	9,07	20,039	10,236	6209 ZZ	6206 ZZ			
10	7,5	2135JM	29,4	H	7,0	2,5	3,0	1,07	15	33	130	1,15	1760	91,0	91,0	91,7	0,67	0,78	0,84	12,2	20,433	10,630	6209 ZZ	6206 ZZ			
15	11	2546JM	43,9	H	6,6	2,5	3,0	2,15	19	42	197	1,15	1770	91,0	92,4	92,4	0,64	0,76	0,82	18,2	24,055	12,992	6309 Z-C3	6208 Z-C3			
20	15	2546JM	58,7	H	6,7	2,7	3,0	2,64	16	35	227	1,15	1765	91,7	92,4	93,0	0,66	0,77	0,82	24,7	24,843	13,780	6309 Z-C3	6208 Z-C3			
VI pole																											
1	0,75	1435JM	4,52	K	6,3	2,7	3,2	0,1037	31	68	35,9	1,15	1145	77,0	80,0	80,0	0,49	0,62	0,71	1,66	15,709	7,874	6206 ZZ	6203 ZZ			
1,5	1,1	1824JM	6,64	K	6,9	2,1	3,2	0,4786	32	70	71,0	1,15	1170	81,5	84,0	85,5	0,50	0,62	0,71	2,27	18,622	9,449	6207 ZZ	6205 ZZ			
2	1,5	1824JM	8,86	M	8,4	2,6	3,7	0,5657	20	44	80,5	1,15	1170	82,5	85,5	86,5	0,47	0,60	0,69	3,15	19,409	10,236	6207 ZZ	6205 ZZ			
3	2,2	2135JM	13,2	H	6,2	2,3	2,8	0,8104	36	79	101	1,15	1175	85,5	87,5	87,5	0,53	0,66	0,74	4,26	20,039	10,236	6209 ZZ	6206 ZZ			
5	3,7	2135JM	22,0	J	6,4	2,5	2,8	1,08	20	44	122	1,15	1175	86,5	87,5	87,5	0,55	0,68	0,75	7,08	20,433	10,630	6209 ZZ	6206 ZZ			
7,5	5,5	2546JM	33,1	G	5,5	2,2	2,4	1,84	27	59	179	1,15	1175	87,5	89,5	89,5	0,55	0,67	0,74	10,4	24,055	12,992	6309 Z-C3	6208 Z-C3			
10	7,5	2546JM	44,1	G	5,5	2,2	2,4	2,17	20	44	196	1,15	1175	88,5	89,5	89,5	0,56	0,68	0,75	14,0	24,055	12,992	6309 Z-C3	6208 Z-C3			

12.9 Jet Pump - JP - ODP - High Efficiency - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings			
				Code	II/In				Hot	Cold				% of full load			50	75	100				Power Factor		DE	NDE
														Efficiency	50	75							100			
II pole																										
1	0,75	1435JP	1,48	K	7,5	2,4	3,2	0,0278	27	59	25,4	1,15	3490	77,0	80,0	80,0	0,69	0,80	0,87	1,35	16,772	7,874	6206 ZZ	6203 ZZ		
1,5	1,1	1435JP	2,22	J	7,8	2,4	3,2	0,0358	22	48	29,3	1,15	3495	81,5	82,5	82,5	0,73	0,84	0,89	1,88	16,772	7,874	6206 ZZ	6203 ZZ		
2	1,5	1435JP	2,96	K	8,0	2,5	3,4	0,0439	17	37	34,0	1,15	3500	82,5	84,0	84,0	0,74	0,84	0,89	2,52	16,772	7,874	6206 ZZ	6203 ZZ		
3	2,2	1435JP	4,47	J	7,8	2,5	3,1	0,0496	12	26	37,0	1,15	3475	84,0	84,0	84,0	0,73	0,84	0,89	3,69	17,165	8,268	6206 ZZ	6203 ZZ		
5	3,7	1824JP	7,38	H	7,0	1,8	2,9	0,1217	15	33	53,4	1,15	3510	85,5	86,5	85,5	0,71	0,82	0,87	6,24	18,543	7,874	6207 ZZ	6205 ZZ		
7,5	5,5	1824JP	11,1	H	7,0	1,8	2,8	0,1559	8	18	62,8	1,15	3500	87,5	88,5	87,5	0,74	0,84	0,89	8,86	19,331	8,661	6207 ZZ	6205 ZZ		
10	7,5	2135JP	14,7	G	6,4	1,8	2,6	0,3816	8	18	103	1,15	3530	87,5	88,5	88,5	0,72	0,83	0,87	12,2	21,575	10,236	6209 ZZ	6206 ZZ		
15	11	2135JP	22,0	G	6,5	1,9	2,6	0,4651	6	13	117	1,15	3525	88,5	89,5	89,5	0,73	0,83	0,88	17,5	21,969	10,630	6209 ZZ	6206 ZZ		
20	15	2546JP	29,4	G	6,0	1,8	2,4	0,6974	9	20	151	1,15	3520	88,5	89,5	90,2	0,75	0,84	0,88	23,7	24,843	12,992	6309 Z-C3	6208 Z-C3		
25	18,5	2546JP	36,7	G	6,2	1,8	2,8	0,8718	9	20	169	1,15	3530	90,2	91,0	91,0	0,75	0,84	0,88	29,0	24,843	12,992	6309 Z-C3	6208 Z-C3		
IV pole																										
1	0,75	1435JP	2,94	L	7,4	2,8	3,3	0,0907	0	0	30,0	1,15	1760	77,0	81,5	82,5	0,46	0,60	0,70	1,63	16,772	7,874	6206 ZZ	6203 ZZ		
1,5	1,1	1435JP	4,43	K	7,6	2,7	3,5	0,1168	12	26	35,9	1,15	1755	80,0	84,0	84,0	0,52	0,65	0,75	2,19	17,165	8,268	6206 ZZ	6203 ZZ		
2	1,5	1435JP	5,94	K	7,4	2,6	3,1	0,1296	10	22	39,0	1,15	1745	81,5	84,0	84,0	0,55	0,69	0,77	2,91	17,559	8,661	6206 ZZ	6203 ZZ		
3	2,2	1824JP	8,81	J	6,8	2,2	2,9	0,2164	0	0	50,7	1,15	1765	85,5	86,5	86,5	0,59	0,72	0,79	4,04	18,543	7,874	6207 ZZ	6205 ZZ		
5	3,7	1824JP	14,8	J	7,0	2,0	2,8	0,3080	9	20	66,4	1,15	1750	86,5	87,5	87,5	0,62	0,75	0,82	6,47	19,724	9,055	6207 ZZ	6205 ZZ		
7,5	5,5	2135JP	22,1	H	6,5	2,0	2,6	0,8040	10	22	101	1,15	1760	87,5	88,5	88,5	0,67	0,79	0,84	9,29	21,575	10,236	6209 ZZ	6206 ZZ		
10	7,5	2135JP	29,4	H	6,5	2,1	2,7	1,03	8	18	116	1,15	1760	89,5	90,2	89,5	0,68	0,79	0,85	12,4	21,575	10,236	6209 ZZ	6206 ZZ		
15	11	2546JP	44,2	G	6,0	1,9	2,3	1,22	13	29	152	1,15	1760	90,2	91,0	91,0	0,66	0,77	0,82	18,5	24,843	12,992	6309 Z-C3	6208 Z-C3		
20	15	2546JP	59,0	F	5,5	1,9	2,2	1,28	12	26	166	1,15	1755	91,0	91,0	91,0	0,67	0,78	0,81	25,5	24,843	12,992	6309 Z-C3	6208 Z-C3		
VI pole																										
1	0,75	1435JP	4,51	K	5,9	2,2	2,9	0,1296	19	42	38,1	1,15	1150	77,0	80,0	80,0	0,47	0,60	0,69	1,71	17,165	8,268	6206 ZZ	6203 ZZ		
1,5	1,1	1824JP	6,64	K	6,8	2,0	3,1	0,3918	29	64	61,5	1,15	1170	81,5	84,0	84,0	0,49	0,62	0,71	2,31	19,331	8,661	6207 ZZ	6205 ZZ		
2	1,5	1824JP	8,86	K	6,9	2,1	3,1	0,4786	24	53	71,0	1,15	1170	82,5	85,5	85,5	0,51	0,64	0,72	3,06	20,118	9,449	6207 ZZ	6205 ZZ		
3	2,2	2135JP	13,2	J	6,5	2,3	2,7	0,9029	19	42	107	1,15	1180	84,0	85,5	86,5	0,52	0,66	0,74	4,31	21,575	10,236	6209 ZZ	6206 ZZ		
5	3,7	2135JP	22,1	G	5,5	2,1	2,4	0,9006	23	51	109	1,15	1170	86,5	87,5	87,5	0,58	0,70	0,77	6,89	21,575	10,236	6209 ZZ	6206 ZZ		
7,5	5,5	2546JP	33,1	G	5,0	2,0	2,3	1,50	30	66	157	1,15	1175	86,5	88,5	88,5	0,53	0,65	0,72	10,8	24,843	12,992	6309 Z-C3	6208 Z-C3		
10	7,5	2546JP	43,9	G	5,2	2,1	2,4	2,00	28	62	184	1,15	1180	88,5	90,2	90,2	0,53	0,66	0,73	14,3	24,843	12,992	6309 Z-C3	6208 Z-C3		

12.10 Jet Pump - JP - ODP - NEMA Premium - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings							
				HP	kW				Code	ll/ln				Hot	Cold	% of full load			50				75	100	Power Factor			DE	NDE	
																Efficiency	50	75							100	50	75			100
II pole																														
1	0,75	1435.P	1,48	L	8,3	2,1	3,3	0,0643	22	48	25,4	1,15	3510	74,0	78,5	80,0	0,66	0,78	0,85	1,38	16,772	7,874	6206 ZZ	6203 ZZ						
1,5	1,1	1435.P	2,21	K	8,6	2,1	3,3	0,0835	19	42	29,3	1,15	3510	81,5	84,0	84,0	0,73	0,83	0,89	1,85	16,772	7,874	6206 ZZ	6203 ZZ						
2	1,5	1435.P	2,95	K	8,9	2,2	3,3	0,1151	14	31	36,8	1,15	3510	84,0	85,5	85,5	0,77	0,86	0,91	2,42	17,165	8,268	6206 ZZ	6203 ZZ						
3	2,2	1435.P	4,47	J	8,0	2,3	3,0	0,1279	9	20	39,9	1,15	3480	84,0	85,5	85,5	0,76	0,86	0,90	3,59	17,559	8,661	6206 ZZ	6203 ZZ						
5	3,7	1824.P	7,38	J	7,6	1,9	3,0	0,1386	12	26	58,7	1,15	3510	85,5	86,5	86,5	0,73	0,83	0,88	6,10	19,331	8,661	6207 ZZ	6205 ZZ						
7,5	5,5	1824.P	11,1	H	7,4	1,8	2,9	0,1818	10	22	69,9	1,15	3500	88,5	88,5	88,5	0,76	0,85	0,90	8,67	19,724	9,055	6207 ZZ	6205 ZZ						
10	7,5	2135.P	14,7	H	6,8	2,0	2,8	0,4651	11	24	117	1,15	3535	88,5	89,5	89,5	0,74	0,84	0,88	12,0	21,969	10,630	6209 ZZ	6206 ZZ						
15	11	2135.P	22,0	H	6,9	2,1	2,8	0,5512	8	18	131	1,15	3535	90,2	90,2	90,2	0,77	0,86	0,89	17,2	22,756	11,417	6209 ZZ	6206 ZZ						
20	15	2546.P	29,4	G	6,0	1,8	2,4	0,7848	13	29	151	1,15	3525	90,2	91,0	91,0	0,76	0,83	0,87	23,8	24,843	12,992	6309 Z-C3	6208 Z-C3						
25	18,5	2546.P	36,7	G	6,3	1,8	2,9	0,9155	9	20	174	1,15	3530	91,0	91,7	91,7	0,73	0,83	0,87	29,1	24,843	12,992	6309 Z-C3	6208 Z-C3						
IV pole																														
1	0,75	1435.P	2,94	L	8,0	2,9	3,6	0,1101	22	48	34,4	1,15	1760	81,5	84,0	85,5	0,51	0,65	0,73	1,51	16,772	7,874	6206 ZZ	6203 ZZ						
1,5	1,1	1435.P	4,42	L	8,7	2,8	3,3	0,1426	15	33	41,9	1,15	1760	84,0	86,5	86,5	0,56	0,69	0,77	2,07	17,953	9,055	6206 ZZ	6203 ZZ						
2	1,5	1435.P	5,96	K	7,7	2,6	3,2	0,1168	17	37	39,0	1,15	1740	85,5	86,5	86,5	0,61	0,74	0,81	2,69	17,953	9,055	6206 ZZ	6203 ZZ						
3	2,2	1824.P	8,81	K	8,4	2,2	3,3	0,3092	15	33	65,9	1,15	1765	87,5	88,5	89,5	0,60	0,73	0,80	3,86	19,724	9,055	6207 ZZ	6205 ZZ						
5	3,7	1824.P	14,7	J	7,2	2,0	3,1	0,4003	12	26	79,8	1,15	1760	88,5	88,5	89,5	0,63	0,76	0,82	6,33	20,906	10,236	6207 ZZ	6205 ZZ						
7,5	5,5	2135.P	22,0	J	7,3	2,4	3,2	1,03	13	29	116	1,15	1770	89,5	90,2	91,0	0,65	0,77	0,82	9,25	21,575	10,236	6209 ZZ	6206 ZZ						
10	7,5	2135.P	29,3	H	7,0	2,5	3,5	1,30	14	31	137	1,15	1770	90,2	91,0	91,7	0,64	0,77	0,83	12,4	21,575	10,236	6209 ZZ	6206 ZZ						
15	11	2546.P	43,8	H	6,7	2,4	3,0	1,82	17	37	175	1,15	1775	91,7	92,4	93,0	0,62	0,73	0,80	18,6	24,843	12,992	6309 Z-C3	6208 Z-C3						
20	15	2546.P	58,5	G	6,3	2,4	2,9	2,23	15	33	198	1,15	1770	92,4	92,4	93,0	0,63	0,74	0,81	25,0	24,843	12,992	6309 Z-C3	6208 Z-C3						
VI pole																														
1	0,75	1435.P	4,51	K	6,1	2,5	3,0	0,1419	24	53	35,3	1,15	1150	78,5	81,5	82,5	0,47	0,60	0,69	1,65	16,772	7,874	6206 ZZ	6203 ZZ						
1,5	1,1	1824.P	6,67	J	6,5	2,0	3,1	0,2178	46	101	56,0	1,15	1165	84,0	85,5	86,5	0,51	0,63	0,71	2,25	18,543	7,874	6207 ZZ	6205 ZZ						
2	1,5	1824.P	8,89	J	6,6	2,0	3,0	0,2800	33	73	66,1	1,15	1165	85,5	86,5	87,5	0,53	0,66	0,73	2,95	19,331	8,661	6207 ZZ	6205 ZZ						
3	2,2	2135.P	13,2	H	5,9	2,1	2,6	0,8104	39	86	98,3	1,15	1175	86,5	87,5	88,5	0,56	0,68	0,75	4,16	21,575	10,236	6209 ZZ	6206 ZZ						
5	3,7	2135.P	22,0	H	5,9	2,2	2,5	1,08	29	64	118	1,15	1175	88,5	89,5	89,5	0,58	0,70	0,77	6,74	21,969	10,630	6209 ZZ	6206 ZZ						
7,5	5,5	2546.P	33,1	F	5,1	2,0	2,3	2,00	37	81	187	1,15	1175	88,5	90,2	90,2	0,56	0,68	0,75	10,2	24,843	12,992	6309 Z-C3	6208 Z-C3						
10	7,5	2546.P	43,9	G	5,3	2,1	2,3	2,50	34	75	209	1,15	1180	91,0	91,7	91,7	0,56	0,68	0,74	13,9	24,843	12,992	6309 Z-C3	6208 Z-C3						

12.11 Jet Pump - JP - TEFC - High Efficiency - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings							
				HP	kW				Code	ll/ln				Hot	Cold	% of full load			50				75	100	Power Factor			DE	NDE	
																Efficiency	50	75							100	50	75			100
II pole																														
1	0,75	1435JP	1,48	K	7,9	2,3	3,3	0,0275	22	48	26,2	1,15	3510	70,0	75,5	77,0	0,69	0,80	0,86	1,42	18,780	7,874	6206 ZZ	6203 ZZ						
1,5	1,1	1435JP	2,23	K	8,1	2,7	3,0	0,0358	17	37	29,5	1,15	3480	77,0	81,5	82,5	0,72	0,83	0,88	1,90	18,780	7,874	6206 ZZ	6203 ZZ						
2	1,5	1435JP	2,96	K	8,5	2,8	3,5	0,0465	14	31	35,7	1,15	3500	82,5	84,0	84,0	0,71	0,82	0,88	2,55	18,780	7,874	6206 ZZ	6203 ZZ						
3	2,2	1824JP	4,43	K	8,3	2,3	3,5	0,1391	27	59	59,5	1,15	3510	82,5	85,5	85,5	0,69	0,80	0,85	3,80	20,906	8,661	6207 ZZ	6205 ZZ						
5	3,7	1824JP	7,41	H	7,4	2,1	3,4	0,1739	16	35	68,6	1,15	3495	86,5	87,5	87,5	0,74	0,84	0,89	5,96	21,299	9,055	6207 ZZ	6205 ZZ						
7,5	5,5	2135JP	11,0	H	7,0	2,4	3,1	0,4665	13	29	118	1,15	3525	86,5	88,5	88,5	0,75	0,84	0,89	8,76	24,291	10,630	6209 ZZ	6206 ZZ						
10	7,5	2135JP	14,7	G	6,7	2,2	2,8	0,5496	10	22	133	1,15	3520	88,5	89,5	89,5	0,75	0,84	0,89	11,8	25,079	11,417	6209 ZZ	6206 ZZ						
15	11	2546JP	22,1	H	6,6	1,9	2,8	0,7050	12	26	156	1,15	3520	87,5	89,5	90,2	0,68	0,79	0,85	18,0	26,929	12,992	6309 Z-C3	6208 Z-C3						
20	15	2546JP	29,5	G	6,3	1,9	2,6	1,05	12	26	193	1,15	3515	90,2	91,0	90,2	0,78	0,86	0,89	23,5	26,929	12,992	6309 Z-C3	6208 Z-C3						
25	18,5	2546JP	36,7	J	8,3	2,4	3,4	1,31	8	18	221	1,15	3530	91,0	91,7	91,0	0,77	0,85	0,89	28,7	27,717	13,780	6309 Z-C3	6208 Z-C3						
High-Output Design																														
3	2,2	1435JP	4,47	J	8,4	2,7	3,3	0,1407	9	20	44,1	1,15	3480	84,0	85,5	85,5	0,78	0,87	0,91	3,55	19,961	9,055	6206 ZZ	6203 ZZ						
7,5	5,5	1824JP	11,2	J	8,0	2,7	3,6	0,1913	19	42	79,4	1,15	3480	88,5	89,5	88,5	0,77	0,86	0,90	8,67	21,693	9,449	6207 ZZ	6205 ZZ						
15	11	2135JP	22,1	J	8,2	2,8	3,3	0,6341	11	24	154	1,15	3520	90,2	91,0	90,2	0,76	0,85	0,89	17,2	26,654	12,992	6209 ZZ	6206 ZZ						
IV pole																														
1	0,75	1435JP	2,94	L	7,6	2,9	3,5	0,0973	18	40	32,2	1,15	1760	78,5	82,5	82,5	0,50	0,64	0,73	1,56	18,780	7,874	6206 ZZ	6203 ZZ						
1,5	1,1	1435JP	4,42	K	7,8	2,7	3,4	0,1232	13	29	37,9	1,15	1760	81,5	84,0	84,0	0,53	0,67	0,76	2,16	19,173	8,268	6206 ZZ	6203 ZZ						
2	1,5	1435JP	5,90	K	7,5	2,6	3,3	0,1419	10	22	42,3	1,15	1755	81,5	84,0	84,0	0,53	0,67	0,76	2,95	19,961	9,055	6206 ZZ	6203 ZZ						
3	2,2	1824JP	8,83	K	7,7	2,4	3,5	0,2935	16	35	63,9	1,15	1760	85,5	87,5	87,5	0,58	0,71	0,78	4,05	20,906	8,661	6207 ZZ	6205 ZZ						
5	3,7	1824JP	14,8	J	7,2	2,0	3,0	0,3695	8	18	76,5	1,15	1750	86,5	87,5	87,5	0,61	0,74	0,81	6,55	22,480	10,236	6207 ZZ	6205 ZZ						
7,5	5,5	2135JP	22,0	H	7,1	2,3	2,9	1,07	11	24	122	1,15	1765	88,5	89,5	89,5	0,67	0,79	0,85	9,07	24,291	10,630	6209 ZZ	6206 ZZ						
10	7,5	2135JP	29,5	H	6,8	2,1	2,6	1,29	8	18	140	1,15	1755	89,5	89,5	89,5	0,72	0,82	0,87	12,1	25,472	11,811	6209 ZZ	6206 ZZ						
15	11	2546JP	44,2	H	6,4	2,2	2,8	1,65	11	24	169	1,15	1760	89,5	90,2	91,0	0,63	0,75	0,81	18,7	26,929	12,992	6309 Z-C3	6208 Z-C3						
20	15	2546JP	58,9	G	5,9	2,1	2,7	2,15	12	26	197	1,15	1760	91,0	91,0	91,0	0,67	0,78	0,83	24,9	26,929	12,992	6309 Z-C3	6208 Z-C3						
VI pole																														
1	0,75	1435JP	4,52	K	6,3	2,7	3,2	0,1037	31	68	35,9	1,15	1145	77,0	80,0	80,0	0,49	0,62	0,71	1,66	18,780	7,874	6206 ZZ	6203 ZZ						
1,5	1,1	1824JP	6,64	K	6,9	2,1	3,2	0,4786	32	70	71,0	1,15	1170	81,5	84,0	85,5	0,50	0,62	0,71	2,27	21,693	9,449	6207 ZZ	6205 ZZ						
2	1,5	1824JP	8,86	M	8,4	2,6	3,7	0,5657	20	44	80,5	1,15	1170	82,5	85,5	86,5	0,47	0,60	0,69	3,15	22,480	10,236	6207 ZZ	6205 ZZ						
3	2,2	2135JP	13,2	H	6,2	2,3	2,8	0,8104	36	79	101	1,15	1175	85,5	87,5	87,5	0,53	0,66	0,74	4,26	23,898	10,236	6209 ZZ	6206 ZZ						
5	3,7	2135JP	22,0	J	6,4	2,5	2,8	1,08	20	44	122	1,15	1175	86,5	87,5	87,5	0,55	0,68	0,75	7,08	24,291	10,630	6209 ZZ	6206 ZZ						
7,5	5,5	2546JP	33,1	G	5,5	2,2	2,4	1,84	27	59	179	1,15	1175	87,5	89,5	89,5	0,55	0,67	0,74	10,4	26,929	12,992	6309 Z-C3	6208 Z-C3						
10	7,5	2546JP	44,1	G	5,5	2,2	2,4	2,17	20	44	196	1,15	1175	88,5	89,5	89,5	0,56	0,68	0,75	14,0	26,929	12,992	6309 Z-C3	6208 Z-C3						

12.12 Jet Pump - JP - TEFC - NEMA Premium - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings							
				HP	kW				Code	II/In				Hot	Cold	% of full load			50				75	100	Power Factor			DE	NDE	
																Efficiency	50	75							100	50	75			100
II pole																														
1	0,75	1435.P	1,48	K	7,8	2,0	3,0	0,0643	22	48	26,2	1,15	3510	72,0	77,0	78,5	0,65	0,76	0,83	1,44	18,780	7,874	6206 ZZ	6203 ZZ						
1,5	1,1	1435.P	2,21	L	9,1	2,3	3,0	0,1023	17	37	34,2	1,15	3520	80,0	82,5	84,0	0,71	0,82	0,88	1,87	18,780	7,874	6206 ZZ	6203 ZZ						
2	1,5	1435.P	2,94	L	9,9	2,5	3,0	0,1279	13	29	40,1	1,15	3520	82,5	85,5	85,5	0,73	0,83	0,89	2,47	19,567	8,661	6206 ZZ	6203 ZZ						
3	2,2	1824.P	4,42	K	8,8	2,2	3,0	0,1564	22	48	63,5	1,15	3515	84,0	86,5	86,5	0,71	0,82	0,87	3,67	20,906	8,661	6207 ZZ	6205 ZZ						
5	3,7	1824.P	7,40	J	7,8	2,2	3,0	0,2079	17	37	78,5	1,15	3500	87,5	88,5	88,5	0,76	0,85	0,89	5,90	22,480	10,236	6207 ZZ	6205 ZZ						
7,5	5,5	2135.P	11,0	H	7,6	2,6	3,0	0,5496	15	33	133	1,15	3530	87,5	88,5	89,5	0,76	0,85	0,89	8,67	25,079	11,417	6209 ZZ	6206 ZZ						
10	7,5	2135.P	14,7	H	7,5	2,6	3,0	0,7188	12	26	161	1,15	3530	89,5	90,2	90,2	0,80	0,88	0,91	11,5	26,654	12,992	6209 ZZ	6206 ZZ						
15	11	2546.P	22,0	H	7,0	2,0	3,0	0,8718	14	31	175	1,15	3525	89,5	91,0	91,0	0,73	0,83	0,87	17,4	26,929	12,992	6309 Z-C3	6208 Z-C3						
20	15	2546.P	29,5	G	6,6	2,0	2,9	1,22	12	26	211	1,15	3515	90,0	91,0	91,0	0,81	0,88	0,91	22,7	27,717	13,780	6309 Z-C3	6208 Z-C3						
25	18,5	2546.P	36,7	J	8,3	2,4	3,4	1,31	8	18	221	1,15	3530	91,0	91,7	91,7	0,77	0,85	0,89	28,5	27,717	13,780	6309 Z-C3	6208 Z-C3						
High-Output Design																														
7,5	5,5	1824.P	11,2	J	8,0	2,7	3,6	0,1913	19	42	79,4	1,15	3480	88,5	89,5	89,5	0,77	0,86	0,90	8,57	21,693	9,449	6207 ZZ	6205 ZZ						
15	11	2135.P	22,1	J	8,2	2,8	3,3	0,6341	11	24	154	1,15	3520	90,2	91,0	91,0	0,76	0,85	0,89	17,0	26,654	12,992	6209 ZZ	6206 ZZ						
IV pole																														
1	0,75	1435.P	2,94	M	8,6	2,8	3,0	0,1232	19	42	37,9	1,15	1765	82,5	84,0	85,5	0,52	0,66	0,75	1,47	19,173	8,268	6206 ZZ	6203 ZZ						
1,5	1,1	1435.P	4,44	K	8,2	2,7	3,0	0,1101	21	46	37,9	1,15	1750	85,5	86,5	86,5	0,59	0,72	0,79	2,02	19,173	8,268	6206 ZZ	6203 ZZ						
2	1,5	1435.P	5,94	K	8,2	2,7	3,0	0,1296	15	33	42,3	1,15	1745	85,5	87,5	86,5	0,60	0,73	0,80	2,72	19,567	8,661	6206 ZZ	6203 ZZ						
3	2,2	1824.P	8,81	K	8,8	2,2	3,0	0,4017	18	40	80,3	1,15	1765	87,5	88,5	89,5	0,61	0,74	0,81	3,81	22,480	10,236	6207 ZZ	6205 ZZ						
5	3,7	1824.P	14,8	J	7,0	2,2	3,0	0,3080	16	35	71,4	1,15	1750	88,5	89,5	89,5	0,60	0,73	0,80	6,49	22,480	10,236	6207 ZZ	6205 ZZ						
7,5	5,5	2135.P	22,0	H	7,3	2,6	3,0	0,9380	22	48	120	1,15	1770	90,2	91,0	91,7	0,64	0,76	0,82	9,07	23,898	10,236	6209 ZZ	6206 ZZ						
10	7,5	2135.P	29,4	H	7,0	2,5	3,0	1,07	15	33	130	1,15	1760	91,0	91,0	91,7	0,67	0,78	0,84	12,2	24,291	10,630	6209 ZZ	6206 ZZ						
15	11	2546.P	43,9	H	6,6	2,5	3,0	2,15	19	42	197	1,15	1770	91,0	92,4	92,4	0,64	0,76	0,82	18,2	26,929	12,992	6309 Z-C3	6208 Z-C3						
20	15	2546.P	58,7	H	6,7	2,7	3,0	2,64	16	35	227	1,15	1765	91,7	92,4	93,0	0,66	0,77	0,82	24,7	27,717	13,780	6309 Z-C3	6208 Z-C3						
VI pole																														
1	0,75	1435.P	4,52	J	5,8	2,3	2,8	0,1597	31	68	38,6	1,15	1145	80,0	82,5	82,5	0,50	0,63	0,72	1,58	19,173	8,268	6206 ZZ	6203 ZZ						
1,5	1,1	1824.P	6,64	K	6,9	2,4	3,4	0,2800	55	121	65,9	1,15	1170	84,0	86,5	87,5	0,50	0,63	0,71	2,22	20,906	8,661	6207 ZZ	6205 ZZ						
2	1,5	1824.P	8,86	K	7,5	2,6	3,7	0,3424	44	97	76,1	1,15	1170	84,0	86,5	88,5	0,50	0,62	0,71	3,00	21,693	9,449	6207 ZZ	6205 ZZ						
3	2,2	2135.P	13,2	H	6,4	2,3	2,9	1,08	46	101	130	1,15	1175	85,5	88,5	89,5	0,55	0,67	0,74	4,17	24,291	10,630	6209 ZZ	6206 ZZ						
5	3,7	2135.P	22,0	H	6,0	2,2	2,5	1,26	30	66	144	1,15	1175	87,5	88,5	89,5	0,59	0,71	0,77	6,74	25,079	11,417	6209 ZZ	6206 ZZ						
7,5	5,5	2546.P	33,1	G	5,4	2,0	2,3	2,34	42	92	204	1,15	1175	89,5	89,5	91,0	0,58	0,70	0,76	9,98	26,929	12,992	6309 Z-C3	6208 Z-C3						
10	7,5	2546.P	44,1	G	5,4	2,1	2,3	2,83	30	66	234	1,15	1175	90,2	91,0	91,0	0,57	0,69	0,75	13,8	27,717	13,780	6309 Z-C3	6208 Z-C3						

12.13 Grain Dryer - ODP AO - High Efficiency - Three Phase

Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque TI/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings	
				Code	II/In				Hot	Cold				% of full load			Power Factor	DE	NDE					
														50	75	100							50	75
1,5	1,1	1435T*	2,19	R	11,3	4,3	6,2	0,1092	13	29	40,0	1,00	3550	71,1	77,5	80,7	0,50	0,63	0,72	2,38	12,401	7,874	6205 ZZ	6203 ZZ
3	2,2	1435T*	4,45	J	7,2	2,1	3,1	0,1092	10	22	40,0	1,00	3495	80,7	83,1	83,1	0,72	0,83	0,89	3,73	12,401	7,874	6205 ZZ	6203 ZZ
3	2,2	1435T*	4,40	L	9,5	3,1	4,4	0,1478	10	22	40,6	1,00	3530	79,0	82,9	84,2	0,64	0,77	0,84	3,90	13,188	8,661	6205 ZZ	6203 ZZ
4,5	3,3	1435T*	6,70	H	6,8	2,1	2,8	0,1478	8	18	40,6	1,00	3480	82,7	84,0	83,2	0,77	0,87	0,91	5,47	13,188	8,661	6205 ZZ	6203 ZZ
5	3,7	1824T*	7,32	K	9,0	2,3	4,0	0,1913	15	33	61,2	1,00	3540	85,2	87,6	88,2	0,67	0,79	0,85	6,19	15,551	8,661	6206 ZZ	6205 ZZ
7,5	5,5	1824T*	11,1	G	6,2	1,5	2,5	0,1913	10	22	61,2	1,00	3490	87,1	87,4	86,2	0,79	0,87	0,91	8,80	15,551	8,661	6206 ZZ	6205 ZZ
7,5	5,5	1824T*	11,0	K	9,2	2,6	4,0	0,2174	10	22	71,4	1,00	3530	85,7	87,8	88,1	0,68	0,80	0,86	9,11	16,338	9,449	6206 ZZ	6205 ZZ
10	7,5	1824T*	14,8	H	7,1	1,9	3,0	0,2174	9	20	71,4	1,00	3500	87,4	88,1	87,3	0,76	0,86	0,90	12,0	16,338	9,449	6206 ZZ	6205 ZZ
10	7,5	2135T*	14,6	J	7,7	2,2	3,3	0,6787	10	22	90,4	1,00	3545	85,7	87,8	88,1	0,68	0,80	0,86	12,4	17,519	10,630	6208 ZZ	6206 ZZ
15	11	2135T*	22,1	E	5,3	1,5	2,2	0,6787	8	18	90,4	1,00	3515	87,8	87,9	88,6	0,80	0,88	0,91	17,5	17,519	10,630	6208 ZZ	6206 ZZ

12.14 Grain Dryer - TEAO - High Efficiency - Three Phase

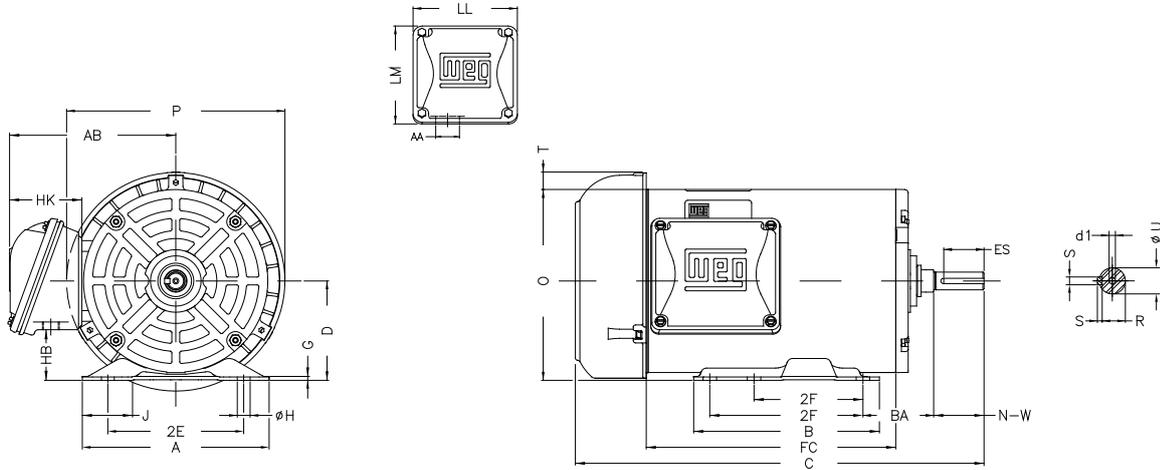
Output		Frame	Full Load Torque (ft.lb)	Locked Rotor Current		Locked Rotor Torque TI/Tn	Break-down Torque Tb/Tn	Inertia J (sq. ft.lb)	Allowable locked rotor time (s)		Weight (lb)	Service Factor	Rated speed (rpm)	460 V						Full load current In (A)	C (in)	FC (in)	Bearings	
				Code	II/In				Hot	Cold				% of full load			Power Factor	DE	NDE					
														50	75	100							50	75
1,5	1,1	1435T*	2,19	R	11,5	4,5	6,2	0,1092	15	33	35,9	1,00	3550	69,5	76,3	79,7	0,51	0,63	0,72	2,41	12,401	7,874	6205 ZZ	6203 ZZ
3	2,2	1435T*	4,47	J	7,2	2,2	2,9	0,1092	10	22	35,9	1,00	3480	79,3	81,7	81,7	0,73	0,84	0,89	3,80	12,401	7,874	6205 ZZ	6203 ZZ
3	2,22	1435T*	4,41	N	11,0	4,1	5,1	0,1478	8	18	43,6	1,00	3525	77,7	82,1	83,8	0,63	0,76	0,83	4,01	13,582	9,055	6205 ZZ	6203 ZZ
4,5	3,3	1435T*	6,69	J	8,0	2,7	3,3	0,1478	7	15	43,6	1,00	3485	82,1	84,1	83,9	0,76	0,86	0,90	5,49	13,582	9,055	6205 ZZ	6203 ZZ
5	3,7	1824T*	7,33	N	11,2	3,9	5,2	0,1913	10	22	71,0	1,00	3535	83,6	86,7	87,8	0,61	0,74	0,82	6,45	16,338	9,449	6206 ZZ	6205 ZZ
7,5	5,5	1824T*	11,1	J	8,1	2,6	3,5	0,1913	10	22	71,0	1,00	3495	86,7	87,9	87,5	0,74	0,84	0,89	8,86	16,338	9,449	6206 ZZ	6205 ZZ
7,5	5,5	1824T*	11,0	L	9,5	3,2	4,4	0,2174	10	22	88,8	1,00	3520	88,4	89,8	89,8	0,67	0,79	0,85	9,04	17,913	10,236	6206 ZZ	6205 ZZ
10	7,5	1824T*	14,9	H	7,3	2,3	3,2	0,2174	9	20	88,8	1,00	3480	89,3	89,4	88,3	0,76	0,86	0,90	11,8	17,913	10,236	6206 ZZ	6205 ZZ
10	7,5	2135T*	14,6	H	7,3	3,5	4,6	0,6787	7	15	128	1,00	3550	90,9	92,3	92,5	0,63	0,76	0,82	12,2	17,913	11,023	6208 ZZ	6206 ZZ
15	11	2135T*	22,1	H	7,0	2,3	2,9	0,6787	7	15	128	1,00	3510	91,8	91,8	91,0	0,76	0,85	0,88	17,3	17,913	11,023	6208 ZZ	6206 ZZ

1) Values for three-phase 60Hz motors;

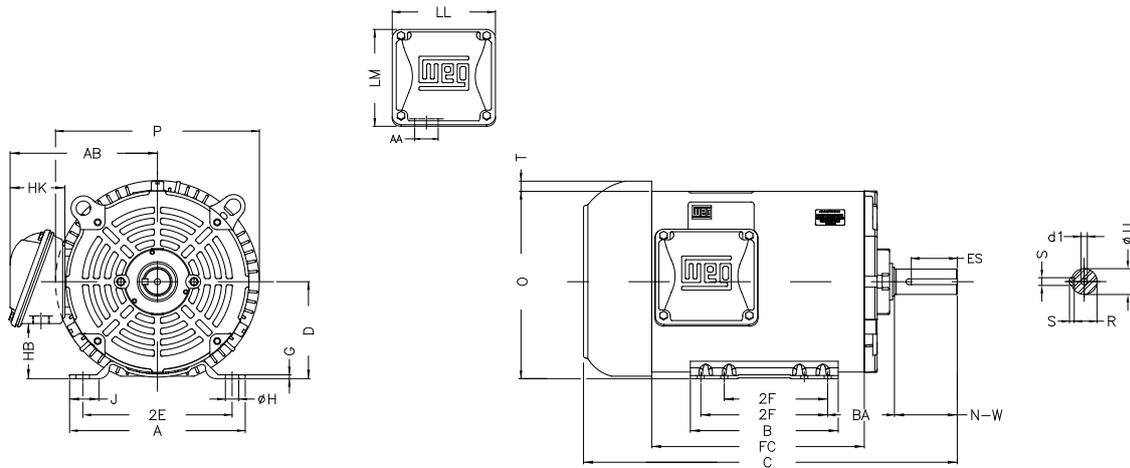
2) To obtain nominal current (In) in 230V, just multiply the current value by 2.

13. Mechanical data

13.1 TEFC - General Purpose - Frame 143



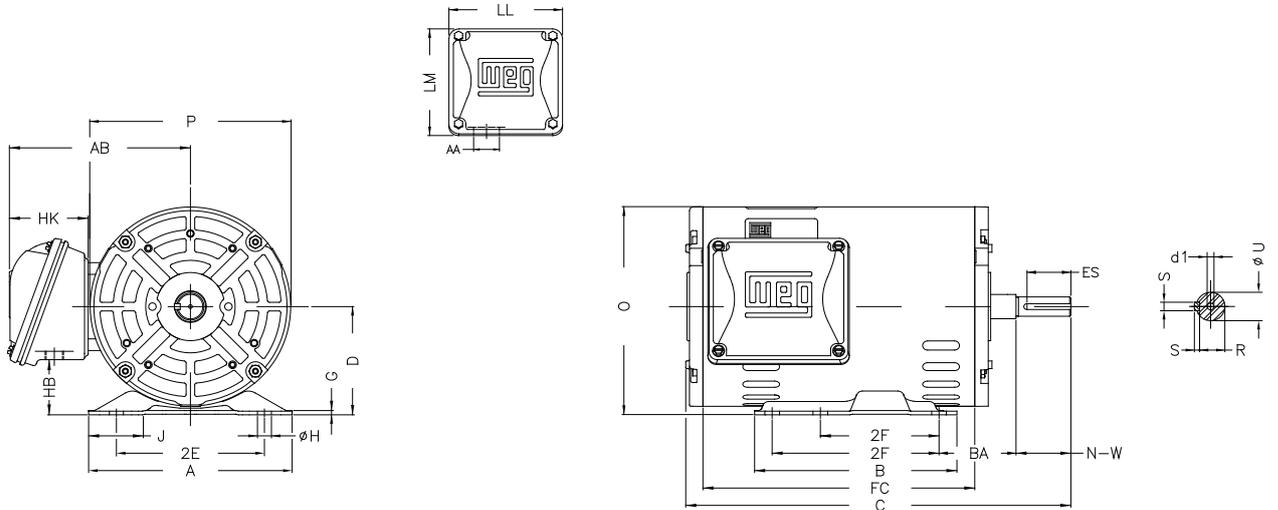
13.2 TEFC - General Purpose - Frames 182 to 254



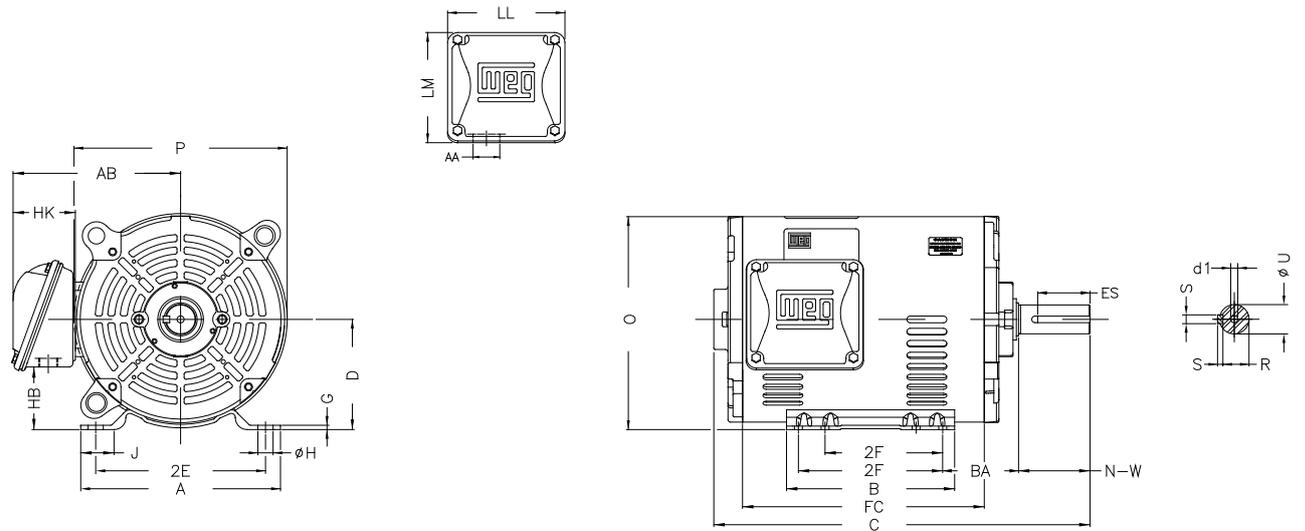
Frame	2E	J	A	P	AB	2F	B	BA	Shaft end					
									U	d1	N-W	ES	R	S
143/5T	5.500	1.732	6.535	7.638	5.882	4.000/5.000	6.496	2.250	0.875	A 3,15	2.250	1.417	0.771	0.187
182/4T	7.500	1.299	8.661	9.435	6.696		6.299	2.750	1.125		2.750	1.969	0.984	0.250
213/5T	8.500	1.575	9.449	11.306	7.973	5.500/7.000	7.953	3.500	1.375	A 4	3.380	2.480	1.203	0.313
254/6T	10.000	1.693	11.417	13.180	9.448	8.252/10.000	11.417	4.250	1.625		4.000	2.756	1.416	0.375

Frame	D	G	HB	O	HK	Hole H	LL	LM	AA	T
143/5T	3.500	0.120	1.783	6.724	2.638	0.343	4.543	4.106	1.118"	0,603
182/4T	4.500	0.167	2.784	8.557	2.629	0.406	4.563	4.090		0,661
213/5T	5.250		2.982	10.144	3.022		5.551	5.250	1.377"	0,761
254/6T	6.250	0.187	3.631	12.010	3.645	0.530	6.299	6.017	1.732"	0,830

13.3 ODP - General Purpose - Frame 143



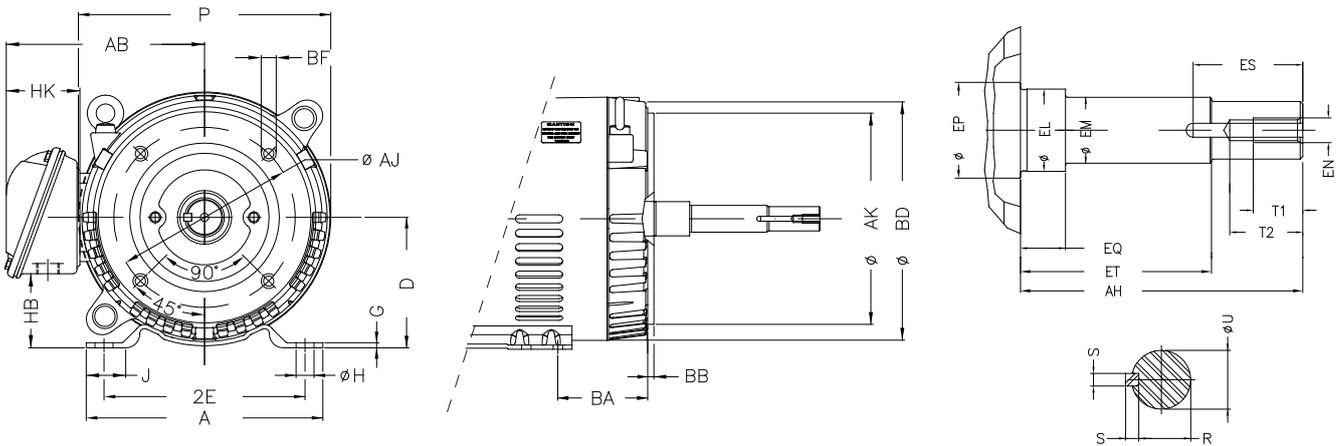
13.4 ODP - General Purpose - Frames 182 to 254



Frame	2E	J	A	P	AB	2F	B	BA	Shaft end					
									U	d1	N-W	ES	R	S
143/5T	5.500	1.732	6.535	6.456	5.882	4.000/5.000	6.496	2.250	0.875	A 3,15	2.250	1.417	0.771	0.187
182/4T	7.500	1.299	8.661	8.114	6.696	4.500/5.500	6.299	2.750	1.125		2.750	1.969	0.984	0.250
213/5T	8.500	1.575	9.449	9.846	7.973	5.500/7.000	7.953	3.500	1.375	A 4	3.380	2.480	1.203	0.313
254/6T	10.000	1.693	11.417	11.558	9.448	8.252/10.000	11.417	4.250	1.625		4.000	2.756	1.416	0.375

Frame	D	G	HB	O	HK	Hole H	LL	LM	AA	T
143/5T	3.500	0.120	1.783	6.724	2.638	0.343	4.543	4.106	1.118"	0,603
182/4T	4.500	0.167	2.784	8.557	2.629	0.406	4.563	4.090		0,661
213/5T	5.250		2.982	10.144	3.022		5.551	5.250	1.377"	0,761
254/6T	6.250	0.187	3.631	12.010	3.645	0.530	6.299	6.017	1.732"	0,830

13.5 JM/JP - Jet Pump - Frame 143 to 254



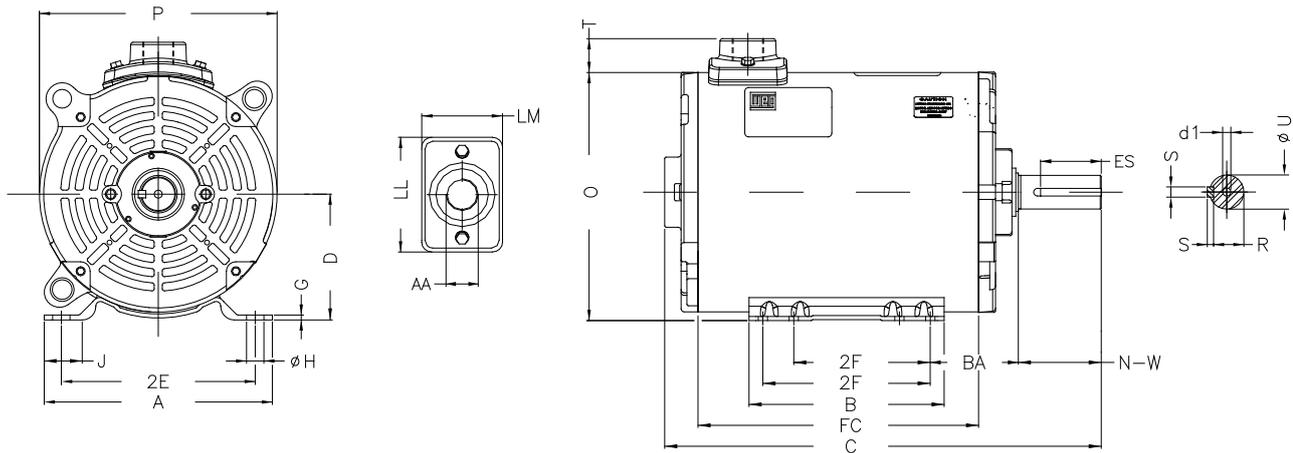
JM

Frame	Flange	AH	BA	U	EN	EL	EM	EP	EQ	ES	ET	R	S	AJ	AK	BD	BF	T	BF Number
143/5JM	FC-149	4.267	2.750	0.874	EUNC 3/8"-16	1.156	1.000	1.179	0.630	1.575	2.880	0.768	0.187	5.874	4.500	6.028	UNC 3/8"x16	0.157	4
182/4JM	FC-149	4.258	3.500	0.874	EUNC 3/8"-16	1.250	1.000	1.376	0.630	1.653	2.880	0.768	0.187	5.874	4.500	6.496	UNC 3/8"x16	0.138	4
213/5JM	FC-184	4.258	4.250	0.874	EUNC 3/8"-16	1.250	1.000	1.769	0.630	1.575	2.880	0.768	0.187	7.250	8.500	9.401	UNC 1/2"x13	0.250	4
254/6JM	FC-184	5.250	4.750	1.249	EUNC 1/2"-13	1.750	1.375	1.769	0.630	2.559	3.006	1.110	0.250	7.250	8.500	11.084	UNC 1/2"x13	0.250	4

JP

Frame	Flange	AH	BA	U	EN	EL	EM	EP	EQ	ES	ET	R	S	AJ	AK	BD	BF	T	BF Number
143/5JP	FC-149	7.319	2.750	0.874	EUNC 3/8"-16	1.156	1.000	1.179	1.563	1.654	5.941	0.768	0.187	5.874	4.500	6.028	UNC 3/8"x16	0.157	4
182/4JP	FC-149	7.319	3.500	0.874	EUNC 3/8"-16	1.250	1.000	1.376	1.563	1.654	5.941	0.768	0.187	5.874	4.500	6.496	UNC 3/8"x16	0.138	4
213/5JP	FC-184	8.130	4.250	1.250	EUNC 1/2"-13	1.750	1.375	1.769	2.374	2.560	5.886	1.110	0.250	7.250	8.500	9.401	UNC 1/2"x13	0.250	4
254/6JP	FC-184	8.130	4.750	1.249	EUNC 1/2"-13	1.750	1.375	1.769	2.382	2.559	5.886	1.110	0.250	7.250	8.500	11.084	UNC 1/2"x13	0.250	4

13.6 Grain Dryer - Frame 143 to 213

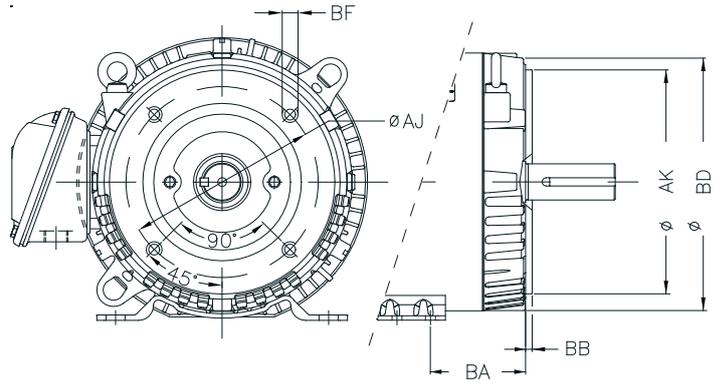
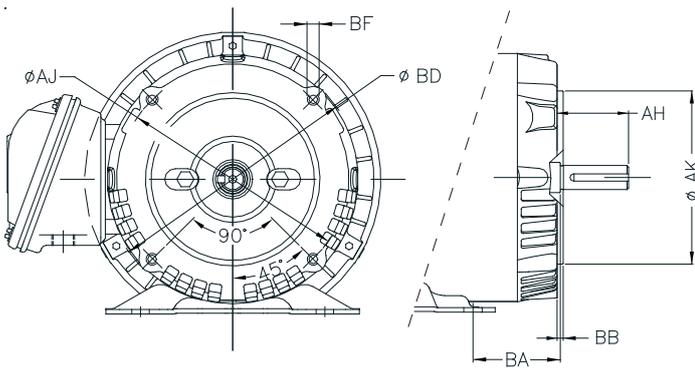


Frame	2E	J	A	P	2F	B	BA	Shaft end					
								U	d1	N-W	ES	R	S
143/5T	5.500	1.732	6.535	6.456	4.000/5.000	6.496	2.250	0.875	EUNC 1/4"-20	3.000	1.417	0.771	0.187
182/4T	7.500	1.299	8.661	8.114	4.500/5.500	6.299	2.750	1.125	EUNC 1/4"-20	3.500	1.969	0.984	0.250
213/5T	8.500	1.575	9.449	9.846	5.500/7.000	7.953	3.500	1.125	EUNC 1/4"-20	3.750	1.969	0.984	0.250

Frame	D	G	O	Hole H	LL	LM	AA	T
143/5T	3.500	0.120	6.724	0.343	2.669	1.890	NPT 3/4"	0,883
182/4T	4.500	0.167	8.557	0.406	2.699	1.890	NPT 3/4"	0,883
213/5T	5.250	0.167	10.144	0.406	2.699	1.890	NPT 1"	0,883

13.7 Flange “C” - Frames 143

13.8 Flange “C” - Frames 182 up to 254



Frame	BA	Flange					
		AJ	AK	BB	BD	BF	AH
143/5TC	2.750	5.874	4.500	0.157	6.450	UNC 3/8"x16	2.129
182/4TC	3.500	7.250	8.500	0.250	8.858	UNC 1/2"x13	2.620
213/5TC	4.250				9.401		3.129
254/6TC	4.750				11.084		3.750

14. Drip cover

Both configurations, ODP and TEFC motors, can be supplied with drip cover. Also there are add on kits available for the standard motor. The additional in the overall motor length can be seen in the table below:

Frame	CH	
	TEFC	ODP
143/5T	1.30	1.30
182/4T	1.34	1.34
213/5T	1.93	1.26
254/6T	2.16	1.39



Figure 17 – TEFC and ODP motors with drip cover.

15. Packaging

W01 motors in frames 56 to 213/5T are packaged in cardboard boxes (see figure 18).



Figure 18 – Cardboard box.



Figure 19 – Wooden crates.

For frame 254/6T, the motors are packaged in wooden crates (see figure 19).

Frame	External height (in)	External width (in)	External length (in)	Weight (lbf)	Volume (ft³)
ODP					
143/5T	9.055	11.811	17.795	1.334	1.095
213/5T	14.173	16.260	23.622	9.467	3.355
254/6T	15.867	20.157	29.133	21.713	5.378
TEFC					
143/5	10.039	13.386	21.260	2.767	1.660
213/5	14.173	16.260	25.197	4.636	3.355
254/6	15.827	20.157	29.134	21.713	5.378

Packaging dimensions, weights and volumes are in tables opposite.

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