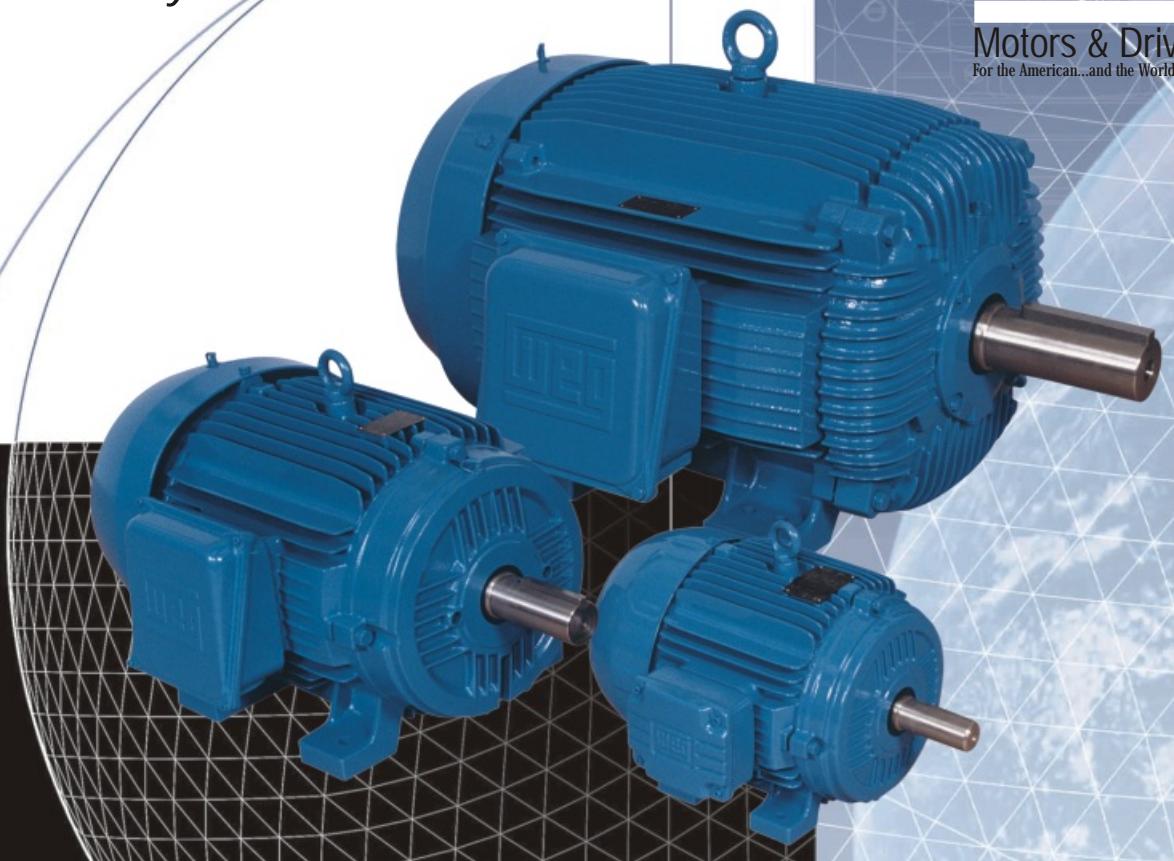




Motors & Drives
For the American...and the World



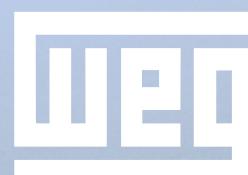
INTEGRAL HORSE POWER MOTORS

General Purpose & Special Purpose
Electric Motors from 1 to 500 HP



WEG QUALITY FEATURES THE EXTRAS THAT REALLY COUNT

- FC 200 Cast Iron: - This is Explosion Proof quality cast iron (higher density), thus stronger with more efficient cooling and lower vibration levels
- Stator Casting Frame: - Uni-body construction - Greater strength and no "Hot Spots"
- Terminal Box: - Oversize Cast Iron Terminal Box on ALL frames fitted with O-Ring rubber sealing gaskets & filled with resistant sponge-like material to seal the lead path through the frame and Rotatable by 90° turns
- Shaft Material: - 4140 High Tensile Steel on Frame 404T and up (4, 6 and 8 Pole)
- 1045 Carbon Steel on Frames 143T to 365T
- 316 Stainless Steel on Jet Pump motors (TEFC & ODP)
- Bearings: - Best Quality Bearings (SKF, FAG or NSK)
- Grease: - Enlarged grease cavities & double strength bearing retainer caps
- Frames 143T to 215T: Alvania R3 - Beige (-20°C to 130°C)
- Frames 254T and up: Esso Unirex N2 - Green (-40°C to 200°C)
- Unirex N2 is a Lithium base grease. Other special greases available upon request
- Design Temp. Rise: - 80°C (Class B) temperature rise
- Winding Impregnation: - Resin Continuous Flow (Trickle) on all windings - 364T to 505T VPI™ (Vacuum Pressure Impregnation) on all windings - 586/7T
- Winding Insulation: - Class F (155°C) Insulation System Tropicalized windings
- Winding Protection: - Thermistors (PTC) (1 per phase in windings) on Frame 324T and up
- Degree of Protection: - IP55 (Severe Duty) (Water projected by a nozzle against the enclosure from any direction shall have no harmful effect)
- V Ring Seals (Prevents water and dust entering the motor around the shaft)
- Tachonite Labyrinth Seals on TEFC - Frame 586/7T (not on Exp. Proof)
- Drain Plugs (To remove excess water that results from condensation)
- Service Factor: - 1.25 on NEMA TEFC motors 1-100 HP and 1.15 on 125 HP and up
- Painting: - Internal/External parts painted with Anti-corrosive alkyd resin base paint.
- Hardware: - All hardware components are galvanized
- Flexibility: - F1 & F2 mount (mechanically reversible)
- Horizontal or Vertical mount - Circlips on Opposite Drive End - Frame 324T and up
- Double Base mounting Frames 364/5T to 586/7T
- Ball bearings for direct coupled and Roller bearings for belt drive applications
- Area Classification: - Class I, Division 2, Group C & D listed on Nameplate
Designed for intermittent hazardous environments (not explosion proof)
- Balancing: - Rotating parts dynamically balanced
According to IEC 34.14 (more stringent than NEMA standards)
- Starting: - Wye Delta starting to reduce Inrush Current when needed
- Torques: - Locked Rotor & Breakdown Torques that exceed Design C for almost ALL ratings (NEMA Design C requires significantly higher LRT and BDT than NEMA Design B)
- the standard for most all other manufacturers)



INDEX



How to use this catalogue	02
How to order WEG Motors	02
Important Facts about WEG motors and EPAct	03

WEG NEMA MOTOR LINE

	Features	Electrical Data	Mechanical Data
SINGLE-PHASE			
General Purpose Motors			
- Open Drip Proof	04	19	41
- Totally Enclosed Fan Cooled	05	19	42
- Farm Duty	06	20	42
THREE-PHASE			
General Purpose Motors			
- ODP (Premium Efficiency)	07	21	44
- TEFC (Standard, Premium and Top Premium Efficiency)	08	22	48
Definite Purpose Motors			
- Close-Coupled Pump motors - ODP - JM and JP type (Premium Efficiency)	09	29	50
- Close-Coupled Pump motors - TEFC - JM and JP type (Standard and Premium Efficiency)	10	30	52
- P-base motors - TEFC - HP and HPH type (Standard and Premium Efficiency)	11	32	53
- Oil Well Pumping Motors - TEFC (design "D" - high slip)	12	28	54
- Saw Arbor Motors - TEFC	13	28	55
- Explosion Proof Motors - TEFC - EExd - UL and CSA approved (Standard and Premium Efficiency)	14	34	56
- Brake motors - TEFC (Standard and Premium Efficiency)	15	36	62
- Two speed DAHLANDER motors - TEFC	16	-	-
- Inverter Duty Motors TEBC	17	38	58
- IEEE 841 - TEFC (Premium Efficiency)	18	40	60

ADDITIONAL INFORMATION

• Three-phase brake motors installation aspects	63
• Hazardous environments	65
• Pulleys maximum acceptable radial and axial loads	66
• Mounting configurations	68
• Unit conversion table	69
• WEG Warranty	69



How to use this industrial motor catalog

This Catalog is divided into four sections as shown below:

1. Motor features

This section includes an abbreviated list of mechanical and electrical features.

You can define the appropriate type of motor according to the application.

2. Electrical data

This section includes tables with the most common electrical data for our motor lines.

3. Mechanical data

These tables include dimensional data for the current motor frames available, as well as table for NEMA flanges.

4. Additional information

This section includes additional information to define the appropriate motor for an application:

4.1 - Brake motor additional information

4.2 - Introduction to hazardous environments

4.3 - Maximum radial and axial forces

For more information, please contact your
nearest WEG distributor / representative.



How to order WEG motors (check list)

We would like to remind you that a complete and clearly specified purchase order will avoid inconvenience and will also save valuable time in processing the order.

Please include as much information as possible in your purchase order.

- Quantity
- A complete description of the motor.

MOTOR DESCRIPTION

Following is a list of the main items, to be included in the motor description:

- Phase: Single-phase, Three-phase...
- Motor Line: Explosion Proof, DAHLANDER...
- Degree of Protection: IP22, IP55...
- Enclosure: ODP, TEFC...
- Frequency: 60Hz, 50Hz...
- Voltage: 208-230/460V, 460V...
- Class of Insulation: F , H ...
- Service Factor: 1.15, 1.0...
- Ambient Temperature: 104°F (40°C)...
- Bearings: Ball, Roller...
- Mounting: F1, F2...
- Type: M-5, T-12, TE-15 (WEG Reference)...
- Output: 7.5 HP, 5.5 kW
- RPM: 3600 rpm or 11 pole...
- Frame: 184T...
- Special Environment or Operating Conditions: High Ambient Temperature...
- Special Electrical or Mechanical Features...
- Other Special or Additional Features...

Important facts about WEG motors and the Energy Policy Act-EPAct

The Department of Energy signed into law an Energy Policy Act in 1992 (EPAct 92) that had been in effect since October 24th 1997. The purpose is energy conservation, since electric motors represent a major impact in energy consumption. Also, the adoption of energy efficiency motors will reduce the needs of new investments in power plants.

MOTORS COVERED BY EPAct 92

- | | | |
|-------------------|---------------------------|--------------------------|
| - General Purpose | - 1 to 200 HP | - 3600, 1800 and 1200RPM |
| - NEMA T-frame | - NEMA Design A or B | - 60Hz - 230 and 460V |
| - TEFC or ODP | - Continuous rated | - Three phase |
| - Foot-mounting | - Squirrel cage induction | - Single phase |
| - Ball Bearings | | |

The above definition is too generic. The Department of Energy provided in June 20, 1997 a guidance to electric motor manufacturers in order to help them to identify what motors are considered "general purpose, definitive purpose or special purpose". They classified the motors in five categories:

- Category I - General purpose as defined by EPAct and applicable from October 24/97 on.
- Category II - Definitive purpose that can be used in most general purpose applications.
EPAct is applicable from October 25/99 on.
- Category III, IV and V - Motors not covered by EPAct (definitive and special motors).

MOTORS NOT COVERED BY EPAct 92

- | | |
|--|-----------------------------|
| - 900 RPM and lower | - Two-speed |
| - NEMA Design C or D | - Inverter Duty Motors |
| - Vertical Mounting | - DC and Brake motors, etc. |
| - Close-couple JM and JP and P-base motors | |

If you need assistance how to identify your motor application is covered by EPAct or not, please feel free to contact WEG

WEG POLICY

- WEG has a large quantity of standard efficiency motors in stock
- WEG also has top efficiency line that exceeds EPAct levels
- All WEG premium efficiency motors meet EPAct levels
- Standard efficiency motors will be still available for installation outside USA

General Purpose Motors - ODP

IP22 - Single-phase

WEG single-phase open drip-proof motors are versatile and reliable. Starting capacitors develop high starting torque. Cast iron frames, rigid bases and oversized ball bearings ensure extended motor life. ODP are suitable when ambient temperatures are not excessive and where dirt and moisture are at a minimum.



Standard features

- 1 phase, 60Hz, 208-230 or 115/208-230 V
- 182/184T cast iron frame
- Squirrel cage rotor / Aluminum die cast
- Open drip proof (IP22)
- Ball bearings
- Dimensions according to NEMA standard
- Class 'F' insulation
- Service factor: 1.25
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300 ft (1000 m)
- 1045 carbon steel shaft
- Usual mounting: F1
- Paint: Enamel alkyd resin base, color RAL 7022 (dark gray)
- NPT threaded holes at T-Box
- Stainless steel nameplate

Applications

- Pumps
- Fans
- Conveyors
- Blowers
- Air Compressors
- Refrigeration Equipment
- Industrial Equipment
- Milling Machines
- Tools
- Milking Machines
- Other moderate to hard starting torque applications

Optional features

- Special voltages
- Flange mounting
- Specially designed shaft
- Second shaft end
- Thermistors or thermostats

RECOGNIZED BY



E 104590

APPROVED BY



LR 38324

Electrical features on page	19
Mechanical tables on page	41
Flange options on page	41

For fractional HP motors, rolled steel frame - NEMA 48 and 56 ODP or TEFC ask for specific catalog	
Single-phase, cast iron frame, totally enclosed motors see page	05

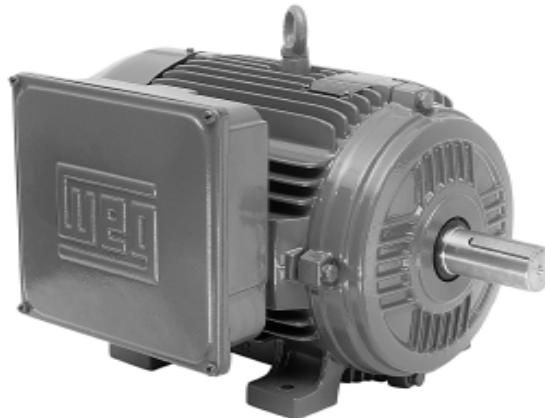
General Purpose Motors

NEMA 56 to W213/5T Frames

TEFC (IP55)

WEG single-phase totally enclosed motors are specially designed for operating in environments of dirt, dust and excess moisture. Starting capacitors, all cast iron frames, rigid bases, reversible shaft rotation and oversized ball bearings are all standard features.

NEMA-T, NEMA 48 & 56 and IEC Metric Frame are available.



Standard features

- Single-phase, 60Hz
- Voltage: From 1,5 up to 3HP = 115/230 or 208-230/460 V
From 5 up to 10HP = 208/230 or 208-230/460 V
VI Pole = 208-230/460 V
- Squirrel cage rotor / Aluminum die cast
- Enclosure TEFC (IP55)
- (V'Ring) Slinger on both endshields
- Ball bearings
- Dimensions according to NEMA standard
- Insulation: - class B up to G145T
- class F for frame W182/4T and up
- Service factor: 1.15
- Steel plate frames: 56 up to 143/5T
- Cast iron frames: W182/4T up to 215T
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300 ft (1000 m)
- 1045 carbon steel shaft
- Usual mounting: F1
- Stainless steel nameplate
- Paint: Enamel alkyd resin base, color RAL 7022 (dark gray)
- NPT threaded holes at T-Box
- Automatic drain plugs

Optional features

- Special voltages
- Specially designed shaft
- Second shaft end
- Thermistors or thermostats
- Drip cover (canopy) for shaft down applications
- Stainless steel shaft
- Flange Mounting

Applications

- Pumps
- Fans
- Conveyors
- Blowers
- Air Compressors
- Machinery
- Industrial Equipment
- Milling Machines
- Wood Lathes

Other moderate to hard starting torque applications

APPROVED BY



LR 38324

RECOGNIZED BY



E 104590

Electrical features on page	19
Mechanical tables on page	42
Flange options on page	43

IEC metric frame motors also available

Single-phase, cast iron frame, open drip proof motors see page

04

Farm Duty Motors - NEMA 56 to W213/5T Frames

TEFC (IP55)

The "FARM DUTY" motor line is specially designed for farm duty and similar applications requiring high starting torque and moderate starting current.

Some standard features such as V'Ring slinger in both drive and opposite drive ends, class F insulation, rigid base, reversible shaft rotation and start capacitors provide versatility for indoor and outdoor use. The manual overload protection available in all frames protects against extreme overloads offering maximum operator safety.

Standard features

- Single-phase, 60Hz, 208-230 or 115/208-230V
- Squirrel cage rotor/ Aluminium die cast
- Enclosure TEFC (IP55)
- V'Ring slinger in both endshields
- Terminal box grounding
- Manual overload protection
- Ball bearings
- Dimensions according to NEMA standard
- Insulation: Class B, up to G145T
Class F, for frame W182/4T and up
- Service factor: 1.15
- Steel plate frames: 56 up to 143/5T
- Cast iron frame W182/4T up to 215T
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300ft (1000m)
- 1045 carbon steel shaft
- Usual mounting: F1
- Double shielded ball bearings
- Paint: Enamel alkyd resin base
- Color: RAL 3002 (red)
- NPT threaded holes at T-Box
- Drain plugs
- Rigid base
- Start capacitor
- Run capacitor for 2HP and up
- High starting torque



Applications

- Silo unloaders
- Stock feeders
- Bin grain storage and draying-spreaders
- Auger unloaders and cross-conveyors
- Feed preparation
- Poultry and Farrowing Sheds
- Water pumping
- Other farm duty machinery

Optional features

- Class H insulation
- Special voltages
- Specially dimensioned shaft
- Second shaft end
- Stainless steel shaft
- Flange mounting

APPROVED BY



LR 38324

RECOGNIZED BY



E 104590

Electrical features on page 20

Mechanical tables on page 42

Flange options on page 43

General Purpose Motors - ODP

Design "B"

Meet EPACT
Levels

These motors are specified for environments where dirt and moisture are minimal. Design 'B', Premium Efficiency, available from frame 143/5T up to 444/5T. These motors are specifically designed to provide maximum ventilation and heat dissipation. NEMA C and D flanges are available

Note: these motors are suitable for horizontal mounting only



Design for Frame 254T up to 445T

Standard features

- PREMIUM EFFICIENCY
- 3 phase, II & IV pole, 60Hz, 208-230/460, 460 or 575 V
- Squirrel cage rotor / Aluminum die cast
- Open drip proof
- Dimensions according to NEMA standard
- NEMA design "B" ratings
- Service Factor: 1.15
- Class F insulation for all frames
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300ft (1000 m)
- 1045 carbon steel shaft (4140 for roller bearings motors)
- Usual mounting: F1 (also available flanged motors)
- Paint: Enamel alkyd resin base
- Color: RAL 5007
- NPT threaded holes at T-Box
- Stainless steel nameplate

Obs: All premium efficiency motors are tested according to IEEE 112 std. - method 'B' or C390 CSA

FOR FRAME 143/5T ONLY

- Welded steel plate frames (welded feet)
- Cast iron endshields fixed with rods
- "ZZ" bearings (double shielded)
- Degree of Protection: IP21

FOR FRAME 182T up to 215T ONLY

- Welded steel plate frames (welded feet)
- Aluminum endshields and T-box
- Cooling system with finned rotor
- Endshields fixed with rods
- "ZZ" bearings (double shielded)
- Degree of protection: IP21

FOR FRAME 254T up to 445T ONLY

- Cast iron frames
- Cast iron endshields, T-box and fan covers
- Endshields fixed with bolts
- Cooling system with finned rotor
- Ball bearings (roller bearings for frames 404T and up, for IV Pole)
- Thermistors (1 per phase) from frame 324T and up
- Regreasable bearings system (frame 254T and up)
- Degree of Protection IP 23

Optional features

- Cable glands
- Special voltages
- Cast iron NEMA 'C' or 'D' flange ('D' flange only for frame 254T and up)
- Specially designed shaft
- Second shaft end
- Thermistors, thermostats or RTD's (PT100)
- Roller bearings on drive end
- IEC metric frames (on request) for frame 254T up to 445T

Applications

- Pumps
- Fans
- Kneader and mixer machines
- Cutter and sawing machines
- Pressing machines
- Industrial equipment
- Conveyors
- Blowers
- Compressors
- Machinery
- Cranes
- Other

APPROVED BY



ALSO ENERGY
VERIFIED CSA
C390-93

LR 38324

RECOGNIZED BY



E 104590

Electrical features on page	21
Mechanical tables and flange options on page	
• For 143/5T Frame	44
• For 182/4T and 213/5T Frames	45
• For 254/6T Frame and up	46

General Purpose Motors - TEFC

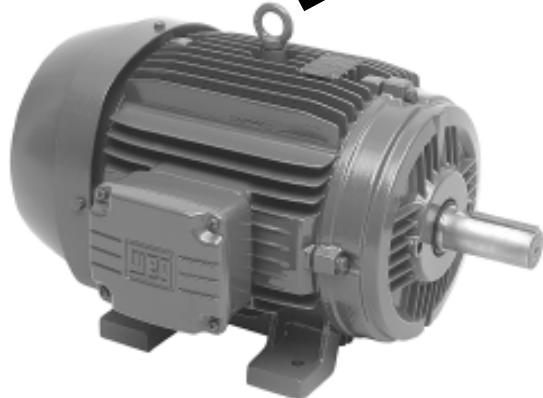
W21 Severe Duty - IP55

Three-phase

These TEFC motors are built according to NEMA specifications and designed for operation in moist or dusty atmospheric conditions without affecting their useful life. Standard and Premium Efficiency WEG motors are tested according to IEEE 112 std., method 'B' and their efficiency values are certified by CSA C390 and NEMA MG1.12.53, both A and B Standards.

Premium Efficiency
Meets EPACT levels

Top Premium Efficiency
Meets EPACT, CEE &
Bonneville Eff. Levels



Standard features

- STANDARD, PREMIUM AND TOP PREMIUM EFFICIENCY
- 3 phase, 60Hz, 208-230/460, 460 or 575 V
- 143T up to 586/7T cast iron frame
- Squirrel cage rotor / Aluminum die cast
- Enclosure: - Standard and Premium Efficiency: TEFC (IP55)
 - Top Premium Efficiency: TEFC (IPW55)
- V'Ring slinger on both endshields
- Ball bearings (roller bearings on frame 404T and up, for IV, VI and VIII pole)
- Dimensions according to NEMA standard
- Class 'F' insulation for all frames
- Temperature rise: Class B (80°C)
- NEMA ratings design 'B' for premium and top premium efficiency motors
- Service factor: See Electrical Features
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300 ft (1000 m)
- 1045 carbon steel shaft (4140 for roller bearings motors)
- Usual mounting: F1
- Stainless steel nameplate
- Paint: Enamel alkyd resin base
- Color: - Standard efficiency motors: RAL 7022
 - Premium and top premium efficiency motors: RAL 5007
 - Top premium efficiency motors: Two components, epoxy polyamide paint
- NPT threaded holes at T-Box
- Automatic drain plugs
- Regreasable bearings system (frame 254T and up)
- Thermistors (1 per phase) from frame 324T and up
- Obs: All premium efficiency motors are tested according to IEEE 112 std. - method 'B' or C390 CSA

Optional features

- Special voltages
- Specially designed shaft
- Space heaters
- Second shaft end
- Thermostats or RTD's (PT100)
- Additional terminal box
- Drip cover (canopy) for shaft down applications
- Cable glands
- Flanged motors
- Roller bearings on drive end for all frames
- Special painting plan

Applications

- Chemical plants
- Compressors
- Pulp and paper mills
- Crushers
- Refineries
- Pumps
- Steel mills
- Fans
- Cement mills
- Other

APPROVED BY



LR 38324

RECOGNIZED BY



E 104 590
(only for Standard
Efficiency Line)

Electrical features on page

- For standard efficiency motors 22
- For premium efficiency motors 24
- For top premium efficiency motors 26

Mechanical tables on page 48

Flange options on page 49

Close-Coupled Pump Motors - ODP

JM & JP Type

WEG offers both JM and JP standardized types of ODP close-coupled pump line of motors. ODP are suitable where dirt and moisture are at a minimum.

Standard features

- PREMIUM EFFICIENCY
- 3 phase, II & IV pole, 60Hz, 208-230/460, 460 or 575 V
- Squirrel cage rotor / Aluminum die cast
- Open drip proof
- Dimensions according to NEMA standard
- NEMA design "B" ratings
- Service Factor: 1.15
- Class "F" insulation for all frames
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300 ft (1000 m)
- 1045 carbon steel shaft
- Usual mounting: F1 (with cast iron "C" Flange)
- Paint: Enamel alkyd resin base
- Color: RAL 5007
- NPT threaded holes at T-Box
- Stainless steel nameplate
Obs: All premium efficiency motors are tested according to IEEE 112 std. - method 'B' or C390 CSA

FOR FRAME 143/5JM/JP ONLY

- Welded steel plate frames (welded feet)
- Cast iron endshields fixed with rods
- Cooling system with finned rotor
- "ZZ" bearings (double shielded)
- Degree of protection: IP 21

FOR FRAME 182JM/JP up to 215JM/JP ONLY

- Welded steel plate frames (welded feet)
- Aluminum endshields and T-box (NDE Endshield)
- Cooling system with finned rotor
- Endshields fixed with rods
- "ZZ" bearings (double shielded)
- Degree of protection: IP 21

FOR FRAME 254JM/JP up to 405JP ONLY

- Cast iron frames
- Cast iron endshields
- Cooling system with finned rotor
- Endshields fixed with bolts
- Ball bearings
- Thermistors (1 per phase) from frame 324JM/JP and up
- Regreasable bearings system (frame 364JM/JP and up)
- Degree of protection: IP 23



Design for frame 182JM/JP up to 215JM/JP only

Optional features

- Cable glands
- Special voltages
- Specially designed shaft
- Second shaft end
- Thermostats or RTD's (PT100)
- Roller bearings on drive end
- IEC metric frames (on request) for frame 254JM/JP up to 405JP

Applications

Specially developed line for industrial and commercial pumping applications.

- Water Pumping
- Process
- Transfer and Circulating Pumps
- Other

APPROVED BY



LR 38324

Electrical features on page 29

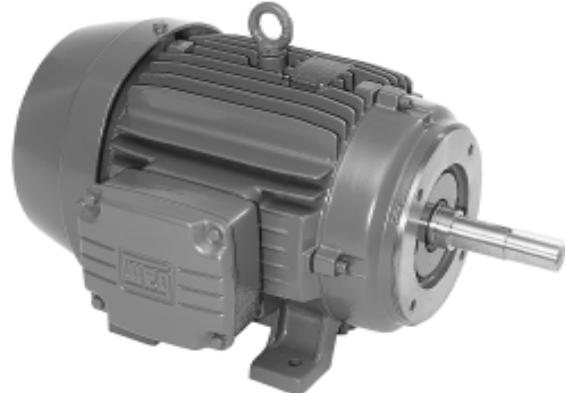
Mechanical tables on page

- For 143/5JM/JP Frames 50
- For 182/4JM/JP and 213/5JM/JP Frames 50
- For 254/6JM/JP Frame and up 51

Close-Coupled Pump Motors - TEFC

IP55 - JM & JP Type

WEG offers both JM and JP standardized types of close-coupled pump motors. Totally enclosed enclosures permit these motors to operate in moist or dusty atmospheres. WEG only uses all copper windings that ensure efficient, reliable motor performance.



Standard features

- STANDARD & PREMIUM EFFICIENCY
- 3 phase, 60Hz, 208-230/460, 460 or 575 V
- From 143JM/JP up to 405JP cast iron frame
- Squirrel cage rotor / Aluminum die cast
- Enclosure TEFC (IP55)
- V'Ring slingers on both endshields
- Ball bearings
- Class 'F' insulation for all frames
- NEMA ratings design 'B' for premium efficiency motors
- Service factor: See Electrical Features
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300 ft (1000 m)
- 1045 carbon steel shaft
- Usual mounting: F1
- Stainless steel nameplate
- Paint: Enamel alkyd resin base
- Color: - standard efficiency motors: RAL 7022
- premium efficiency motors: RAL 5007
- NPT threaded holes at T-Box
- Automatic drain plugs
- Regreasable bearings system (frame 254JM/JP and up)
- Thermistors from 324JM/JP frame and up
Obs: All premium efficiency motors are tested according to IEEE 112 std. - method 'B' or C390 CSA

Applications

Specially developed line for industrial and commercial pumping applications in dusty environments

- Water Pumping
- Process
- Transfer and Circulating Pumps
- Other

APPROVED BY



LR 38324

RECOGNIZED BY



E 104590

Optional features

- Cable glands
- Special voltages
- Specially designed shaft
- Space heaters
- Second shaft end
- Thermostats or RTD's (PT100)
- Additional terminal box
- Stainless steel shaft

WEG can provide these motors with:

Rolled steel frame - NEMA 48 & 56 ODP or TEFC ask for specific catalog

IEC metric frame motor cast iron, TEFC frame, ask for specific catalog

Electrical features on page

- For standard efficiency motors 30
- For premium efficiency motors 31

Mechanical tables on page 52

P-Base Motors

IP55 - HP & HPH Type

HP and HPH types are available. These motors are suitable for dusty or moist environments and provide high starting torque, with efficient performance.



Standard features

- STANDARD & PREMIUM EFFICIENCY
 - 3 phase, 60Hz, 208-230/460, 460 or 575 V
 - HP type: from 143T up to 445T frame
 - HPH type: 284/6T and 404/5T frame
 - Squirrel cage rotor / Aluminum die cast
 - Enclosure TEFC (IP55)
 - V'Ring slingers on both endshields
 - Cast iron frame
 - Ball bearings
 - Class 'F' insulation for all frames
 - Ratings: NEMA design 'B' for premium efficiency motors
 - Service factor: See Electrical Features
 - Continuous duty (S1)
 - 104°F (40°C) ambient temperature
 - Altitude: 3300 ft (1000 m)
 - 1045 carbon steel shaft
 - Usual mounting: V1 - footless
 - Stainless steel nameplate
 - Paint: Enamel alkyd resin base
 - Color: - standard efficiency motors: RAL 7022
- premium efficiency motors: RAL 5007
 - NPT threaded holes at T-Box
 - Drip cover (canopy)
 - Automatic drain plugs
 - Regreasable bearings system (frame 254T and up)
 - Thermistors from 324T frame and up
- Obs: All Premium efficiency motors are tested according to IEEE 112 std. - method 'B' or C390 CSA

Applications

Normal thrust in-line pump applications

- Waste water treatment plants
- Petro chemical industries
- Pulp and paper mills
- Agricultural irrigation
- Other

APPROVED BY



LR 38324

RECOGNIZED BY



E 104590

Optional features

- Cable glands
- Special voltages
- Space heaters
- Second shaft end
- Thermostats or RTD-PT100
- Additional terminal box
- Stainless steel shaft

Electrical features on page

- For standard efficiency motors 32
- For premium efficiency motors 33

Mechanical tables on page 53

Oil Well Pumping Motors - TEFC

IP55 - High Slip - Nema design "D"

These special motors have the high slip and high torque necessary to ensure lower kW/h that oil well beam pumping units demand. WEG oil well pumping motors are requested on specifications for most major oil companies around the world as a result of their long lasting performance, low purchase and maintenance cost.



Standard features

- HIGH TORQUE - NEMA DESIGN 'D' (5 - 8% SLIP)
- Single and triple rated available
- 3 phase, 60Hz, 208-230/460 or 575 V
- 215T up to 445T cast iron frames
- VI Pole
- Squirrel cage rotor / Aluminum die cast
- Enclosure TEFC (IP55)
- V'Ring slinger on both endshields
- 2RS sealing bearings from frame 143T up to 215T
- Dimensions according to NEMA standard
- Class 'F' insulation
- Service factor: 1.15
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300 ft (1000 m)
- 1045 carbon steel shaft (4140 for roller bearings)
- Usual mounting: F2
- Stainless steel nameplate
- Paint: Enamel alkyd resin base, color RAL 7022 dark gray
- NPT threaded holes at T-Box
- Automatic drain plugs
- Regreasable bearings system (frame 364T and up)
- Thermistors (1 per phase) from frame 324T and up

Applications

- Oil Well Pumping Units

RECOGNIZED BY



E 104590

Optional features

- IV and VIII Pole motors
- Special voltages
- Other mountings
- Specially designed shaft
- Space heaters
- Second shaft end
- Thermostats or RTD-PT100
- Additional terminal box
- Stainless steel shaft

Specially improved mechanical protection dust & water protected

NEMA Design 'D' high slip & high torque ensures low Kw/h

Requested on specifications for most major oil companies worldwide

Electrical features on page

- For single rated motors 28
- For triple rated motors 28

Mechanical tables on page 54

Saw Arbor Motors

IP54 - Single and Double Shaft End

Single and double shaft end available, these motors are suitable for a wide range of applications such as circular saws, pendulum saws, polishing machines and others. Motors are all cast iron and have NEMA service factor of 1.15. They can advantageously replace conventional circular saw drive systems.

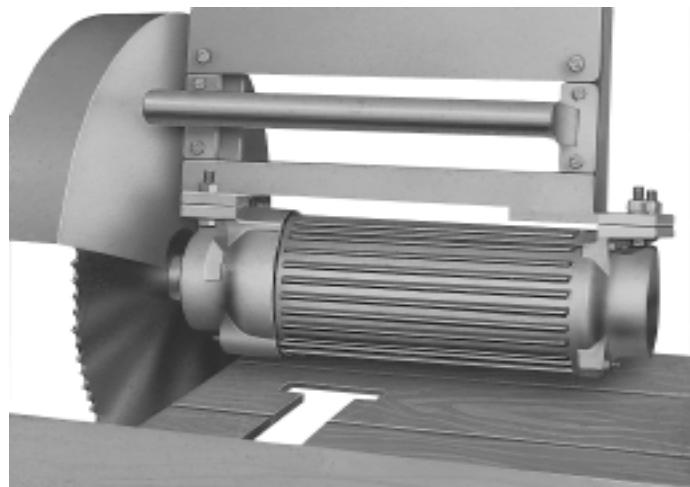


Standard features

- 3 phase, 60Hz, 208-230/460 V or 575 V
- 80S - MS up to 90L - MS IEC metric frames
- Squirrel cage rotor / Aluminum die cast
- Enclosure TEFC (IP54 according to IEC34-5 standard)
- Cast iron frame
- Ball bearings
- Dimensions according to IEC 72
- Class 'F' insulation
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300 ft (1000 m)
- 1045 carbon steel shaft
- Usual mounting: F1
- Stainless steel nameplate
- Paint: Enamel alkyl resin base, color RAL 7022 (dark gray)
- Pg threaded holes at T-Box
- Automatic drain plugs

Applications

- Circular saws
- Pendulum saws
- Grinding machines
- Polishing machines



Optional features

- Special voltages
- Specially dimensioned shaft
- NPT, metric, etc. threaded holes at terminal box
- Stainless steel shaft

APPROVED BY



LR 38324

RECOGNIZED BY



E 104590

Electrical features on page	28
Mechanical tables on page	55
Saw operation guide on page	55

IEC metric frame motors

All cast iron - strong, reliable design & construction

Single and double shaft end available

Special, optimized design

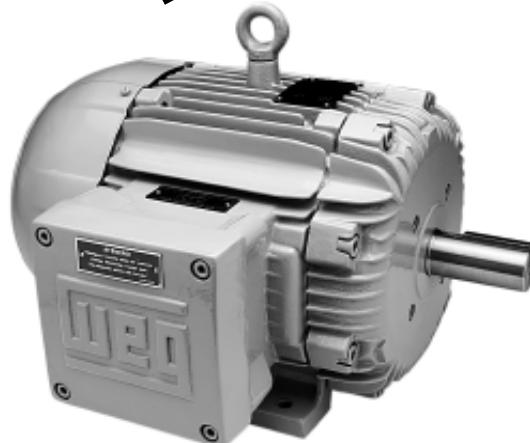
They can advantageously replace conventional circular saw drive systems

Explosion Proof Motors

IP54 - UL and CSA Approved

Premium Efficiency
already complying with
EPACT levels

WEG Explosion proof motors are suitable for applications requiring UL or CSA certification for hazardous locations. Thermally protected with thermostats, all motors manufactured are submitted to hydrostatic as well as other routine testing at the factory to ensure compliance to the required specifications.



Standard features

- STANDARD & PREMIUM EFFICIENCY
 - 3 phase, 60Hz, 208-230/460,460 or 575 V
 - 143T up to 586/7T cast iron frame
 - Squirrel cage rotor / Aluminum die cast
 - Enclosure TEFC (IP54)
 - Ball bearings (roller bearings in frame 404T and up, for IV, VI and VIII pole)
 - Class 'F' insulation
 - Service factor: 1.15
 - Dimensions according to NEMA standard
 - NEMA ratings design 'B' for premium efficiency motors
 - Continuous duty (S1)
 - 104°F (40°C) ambient temperature
 - Altitude: 3300 ft (1000 m)
 - 1045 carbon steel shaft (4140 for roller bearings motors)
 - Usual mounting: F1
 - Stainless steel nameplate
 - Paint: Enamel alkyd resin base
 - Color: -standard efficiency motors: RAL 7022 (dark gray)
 - premium efficiency motors: RAL 5007 blue
 - NPT threaded holes at T-Box
 - Non sparking fan
 - Thermostats
- Obs: Premium efficiency motors are tested according to IEEE 112 std. - method 'B' or C390 CSA

Optional features

- Special voltages
- Other construct form
- Specially designed shaft
- Stainless steel shaft
- Flanged motor

Applications

- Gasoline
- Flour / feed mills
- Grain Elevators
- Fans
- Pumps
- Blowers
- Material Handling Equipment
- Other applications requiring motors UL or CSA listed for hazardous locations

CSA and UL approved



CSA approved - File LR 50962
Division I, class I, groups C and D
Division II, class II, groups F and G



UL approved - File E 87848
Frame 143T up to 326T
Division I, class I, groups C and D
Division II, class II, groups F and G

Frame 364T up to 505Z
Division I, class I, groups C and D
Division II, class II, groups F and G*
* For group G, Service Factor 1.0

Frame 586/7
Division I, class I, groups C and D
Division II, class II, group F

Electrical features on page

- For standard efficiency motors 34
- For premium efficiency motors 24

Mechanical tables on page 56

Flange options on page 57

See a hazardous areas synopsis on page 65

Brake Motors - TEFC

IP55 - Braking Pads Motor

WEG Brake motors consist of an induction motor coupled to a brake disk, forming an integral, compact and robust unit. The unit is TEFC, having the same performance characteristics of WEG TEFC range of motors. The brake is of sturdy construction with few moving parts which ensures long durability with a minimum of maintenance.

Standard features

- STANDARD & PREMIUM EFFICIENCY
- 3 phase, 60Hz, 208-230/460,460 or 575 V
- 143T up to 256T* cast iron frame
- Squirrel cage rotor / Aluminum die cast
- Enclosure TEFC (IP55)
- V'Ring slingers on both endshields
- Ball bearings
- Dimensions according to NEMA standard
- Class of insulation: 'F'
- NEMA Ratings design 'B' for premium efficiency motors
- Service factor: 1.15 (Standard) and 1.25 (Premium efficiency)
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300 ft (1000 m)
- 1045 carbon steel shaft
- Usual mounting: F1
- Stainless steel nameplate
- Paint: Enamel alkyd resin base
- Color: - standard efficiency motors: RAL 7022 (dark gray)
- premium efficiency motors: RAL 5007 blue
- NPT threaded holes at T-Box
- Automatic drain plugs
- Thermistors (1 per phase) from frame 324T and up
- Slow, medium or rapid braking connectors - 230V or 460V
- Manual brake release
Obs: All premium efficiency motors are tested according to IEEE 112 std. - method 'B' or C390 CSA
- * WEG can supply Frames 284/6T and 324/6T "only on request", after receiving load information:
- Braking torque
- Number of stops (brakings) per hour.



Applications

Applications requiring quick stop/start control

- Conveyors
- Gear reducers
- Machine Tools
- Material Handling Equipment
- Other

RECOGNIZED BY



E 104590

See brake connection options maintenance schedule and brake torque adjust on page63

Lining brake motors are also available on special request, ask WEG for more information

Electrical features on page

- For standard efficiency motors36
- For premium efficiency motors.....37

Mechanical tables on page.....62
Flange options on page.....62

Optional features

- Special brake and motor voltages
- Other construct form
- Specially designed shaft
- Space heaters
- Second shaft end
- Thermostats or RTD-PT100
- Additional terminal box
- Roller bearings on drive end
- Drip cover (canopy) for shaft down applications
- Stainless steel shaft
- Flanged motor

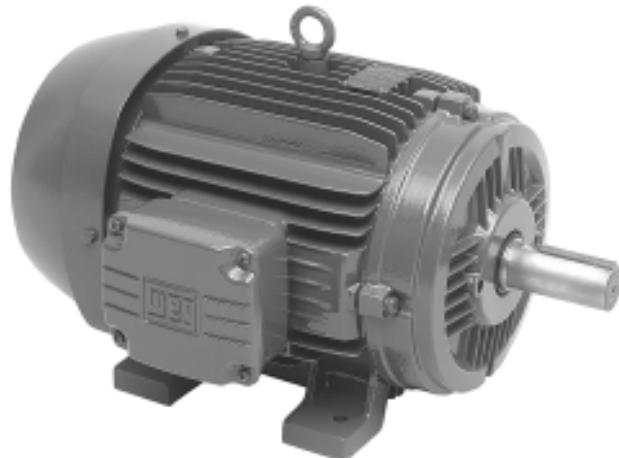
Two Speed Dahlander Motors - TEFC

IP55

WEG Two-Speed dahlander motors are suitable for use in fans, exhausters, tunnels and air conditioning systems. Constant and variable torque available. Totally Enclosed Fan Cooled (TEFC) and Totally Enclosed Air Over (TEAO) models, Three-speed motors, foot, flange or pad mounting are available on request.

Standard features

- 3 phase, 60Hz, 460 or 575 V
- 143T up to 586/7T cast iron frame
- Squirrel cage rotor / Aluminum die cast
- Enclosure TEFC (IP55)
- V'Ring slingers on both endshields
- Ball bearings (roller bearings on frame 404T and up, for IV, VI and VIII pole)
- Dimensions according to NEMA standard
- Class 'F' insulation for all frames
- Service factor: 1.0
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300 ft (1000 m)
- 1045 carbon steel shaft (4140 for roller bearings motors)
- Usual mounting: F1
- Stainless steel nameplate
- Paint: Enamel alkyd resin base, color RAL 7022 (dark gray)
- NPT threaded holes at T-Box
- Automatic drain plugs
- Regreasable bearings system (frame 254T and up)
- Thermistors (1 per phase) from frame 324T and up



Applications

- Fans
- Pumps
- Blowers
- Conveyors
- Farm Equipment
- Saws
- Other

RECOGNIZED BY



E 104590

Optional features

- Special voltages
- Specially designed shaft
- Space heaters
- Second shaft end
- Thermostats or RTD-PT100
- Additional terminal box
- Roller bearings on drive end
- Drip cover (canopy) for shaft down applications
- Aluminum frames (143T up to 184T frames)
- Stainless steel shaft
- Flanged motor
- TEAO

These motors are one winding / constant torque Variable torque motors and three-speed motors available upon request

Please ask WEG for:
Totally enclosed air over motors
Pad mounted motors
IEC metric frame motors

Please contact WEG to obtain performance and mechanical data.

Inverter Duty Motors (IDM) - TEBC

IP55

Meets EPACT
Levels

WEG Inverter Duty Motors (IDM) are provided with a special insulation system suitable to withstand voltage spikes when used with inverters. Reactors or any other filter devices between inverter and motor for insulation system protection are not normally required.



Standard features

PREMIUM EFFICIENCY

- Applications: Constant Torque - Speed range 10:1 (best used with WEG matched VFD's)
- 3 phase, 60Hz, 208-230/460, 460 or 575V
- Enclosure TEBC Blower voltage and frequency: 3 phase, 60Hz
- Noise level up to 77DB (A) (noise pressure)
- Degree of protection: IP55
- NEMA Design B
- Class F insulation (B Temperature rise)
- Service factor: 1.15 at sine wave power 1.00 on inverter power
- 143T up to 586/7T cast iron frame
- Squirrel cage rotor/ Aluminum die cast
- Thermistors (1 per phase) from frame 324T and up
- Insulation System suitable to withstand voltage spikes up to 1600V and rise times to 0.1m, as per NEMA standard MG-1, part 31
- Grounding system between shaft and frame through ring and brush - 504/5T
- Color RAL 5007 (blue)

Applications

- Conveyors
- Chemical plants
- Compressors
- Pulp and paper mills
- Crushers
- Refineries
- Pumps
- Steel mills
- Fans
- Cement mills
- Grinders
- Mixers
- Other

Optional features

- Blower kit from 213T up to 505T frame
- Encoder: Dynapar type HR 526 1024 B5 E1, electrically isolated 1024 pulses 10 pin MS connector, with side located terminal, with extended temperature range, operations from 5 to 24V
- Labyrinth Seal from frame 213/5T
- Space heaters
- Class H insulation
- Special Insulating bearings with Aluminum oxide on D.E. and N.D.E. bearings - Frames 504/5T

Electrical features on page

- For premium efficiency motor 38

Mechanical tables on page..... 58

Flange options on page..... 59

IEEE 841 Motors - TEFC

IPW55

These WEG IEEE 841 Mill and Chemical Duty Motors are specially suited for Pulp and Paper Mills, Petrochemical, Steel Mills and applications requiring Severe Duty long life motors



Standard features

PREMIUM EFFICIENCY

- 3 phase, 60Hz, 460V
- Enclosure TEFC
- Degree of protection: IPW55
- Class F insulation (B Temperature rise)
- NEMA ratings design B
- 40°C ambient
- Service factor: 1.25 - up to 100HP
1.15 - from 125HP and up
- 143T up to 586/7
- All cast iron reinforced construction: frame, endshields, terminal box and fan cover
- Squirrel cage rotor/ Aluminium die cast
- Stainless steel nameplate
- All motors supplied with ball bearings, except roller bearings in drive end for frames 404T and up (IV and VI pole)
- High tensile steel shaft (for frame 404T and up- IV, VI and VIII)
- Brass labyrinth seal on drive end and opposite drive end
- Corrosion resistant epoxy finish
- Special painting plan RAL 5007 blue
- Regreasable ball bearings D.E. and O.D.E.
- Oversized rotatable cast iron conduit box
- Performance tests supplied with each motor:
 - Routine
 - Noise level
 - Vibration

Optional features

- Inverter Duty applications
- Special Voltages
- Specially designed shaft
- Space heaters
- Second shaft end
- Thermostats or RTD's (PT100)
- Additional terminal box
- Drip cover (canopy) for shaft down applications
- Cable glands
- Flanged mounting

Special Features that come standard include:

- Labyrinth tachonite seal, IP55 and IP65: This brass seal has no contact surfaces to wear out. Seal and bearing fully meets IP65 requirements
- Bearing life: 50,000 hours, under normal conditions
- Paint: withstands 5 times salt spray test under ASTM 13 177-90 standard
- Fan: Plastic for frames 143T up to 505T
Brass for frames 586/7T

Applications

- Pumping applications
- Pulp and paper mills
- Petrochemical
- Others

APPROVED BY



LR 38324

Electrical features on page

• For premium efficiency motors.....40

Mechanical tables on page.....60

Flange options on page.....61

ODP Motors - IP22

Single-phase



Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor Current	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η%			Power Factor Cos φ			Service Factor SF	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold Lb.Ft² (s)	Approx. Weight Lb
HP	kW			In A		KVA	Tn	Tl/Tn	Tb/Tn	50	75	100	50	75	100				
				At 115V	At 230V	Code	Lb.Ft												
3	2.2	182T	3520	300	15.0	J	4.41	2.4	2.2	70.0	77.0	78.0	0.64	0.74	0.80	1.25	0.17600	6/13	73
		184T	1745	34.0	17.0	K	8.90	2.7	2.2	68.0	71.0	72.0	0.59	0.71	0.80	1.25	0.38400	6/13	90
5	3.7	184T	3510	42.0	21.0	H	7.36	2.6	2.6	79.0	81.0	82.0	0.92	0.94	0.95	1.25	0.27500	6/13	99
		184T	1730	44.0	22.0	H	14.96	2.3	2.2	75.0	77.0	78.0	0.82	0.88	0.92	1.25	0.44300	6/13	99
7.5	5.5	184T	3520	60.0	30.0	H	11.03	2.0	2.7	81.0	84.0	85.0	0.85	0.93	0.95	1.25	0.46900	6/13	118

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

TEFC Motors - IP55

Single-phase

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current	Locked Rotor Current	Full Load Torque	Locked Rotor Torque	Break-down Torque	Efficiency h%			Power Factor Cos φ			Service Factor SF	Moment of Inertia Wk²	Star Capacitor mF	Run Capacitor V	Approx. Weight Lb	
HP	kW			at 230V (in A)	KVA Code	Tn Lb.Ft	Tl/Tn	Tb/Tn	Tn/Tn	50	75	100	50	75	100					
				At 230V	Code	Lb.Ft														
1/4	0.18	B56	3480	2,50	N	0.37	2.8	3.0	32.0	40.0	46.0	0.61	0.67	0.76	1.15	0.02475	1X145-175	110	---	20,0
1/4	0.18	B56	1750	2,30	N	0.73	3.6	3.0	43.0	51.5	55.6	0.46	0.53	0.61	1.15	0.05457	1X216-259	110	---	19,8
1/3	0.25	B56	3500	2,80	L	0.48	3.2	3.0	46.0	49.0	52.0	0.58	0.66	0.73	1.15	0.02847	1x161-193	110	---	22,0
1/3	0.25	B56	1750	3,00	N	0.98	3.4	2.8	45.0	53.0	57.3	0.46	0.56	0.62	1.15	0.06359	1x216-259	110	---	20,9
1/2	0.37	B56	3500	3,80	L	0.73	3.4	3.0	44.0	51.0	54.1	0.60	0.70	0.77	1.15	0.03274	1x189-227	110	---	23,1
1/2	0.37	B56	1750	3,85	M	1.47	3.3	2.5	49.0	56.0	63.0	0.44	0.54	0.65	1.15	0.07356	1x340-408	110	---	23,1
1/2	0.37	D56	1180	4,90	S	2.20	3.0	2.7	51.0	55.0	60.0	0.48	0.50	0.54	1.15	0.14470	1X145-175	110	1X20	250
3/4	0.55	B56	3500	5,30	L	1.10	3.0	3.0	51.0	58.0	60.6	0.56	0.67	0.75	1.15	0.04105	1x270-324	110	---	27,5
3/4	0.55	B56	1740	5,60	L	2.23	3.0	2.6	54.0	62.0	65.0	0.52	0.58	0.66	1.15	0.09017	1x430-516	110	---	26,0
3/4	0.55	F56H	1160	5,20	K	3.35	2.5	2.4	58.0	61.0	65.5	0.60	0.65	0.70	1.15	0.18030	1X189-227	110	1X30	250
1	0.75	D56	3510	6,30	L	1.47	3.2	3.0	59.0	64.0	67.7	0.56	0.68	0.75	1.15	0.05220	1x340-408	110	---	29,7
1	0.75	D56	1750	7,00	M	2.95	3.2	2.6	58.0	64.0	68.0	0.50	0.60	0.67	1.15	0.12339	1x540-648	110	---	34,1
1.5	1.1	D56	3500	8,50	K	2.21	2.5	2.8	64.0	69.0	70.0	0.61	0.72	0.80	1.15	0.06169	1x430-516	110	---	34,1
1.5	1.1	F56H	1750	9,00	K	4.46	3.0	2.6	66.0	70.0	72.0	0.52	0.62	0.74	1.15	0.18034	1x430-516	110	1X15	250
1.5	1.1	W182T	1170	7,70	H	6.63	2.3	2.2	68.0	76.0	80.0	0.63	0.72	0.78	1.15	0.34574	1X216-259	110	1X40	250
2	1.5	F56H	3490	10,5	J	2.96	2.7	2.6	70.0	73.0	75.0	0.66	0.75	0.81	1.15	0.08068	1x540-648	110	1X10	110
2	1.5	G56H	1750	10,8	J	5.90	2.5	2.2	69.0	72.0	75.0	0.58	0.69	0.80	1.15	0.19933	1x540-648	110	1X20	110
2	1.5	W213/5T	1160	10,0	K	8.92	2.3	2.4	68.0	75.0	80.0	0.68	0.75	0.80	1.15	0.53155	1X216-259	250	1X20	400
2	1.5	W182/4T	1725	10,0	H	0.60	2.9	2.5	64.0	70.0	72.7	0.74	0.82	0.88	1.15	0.21784	1x430-516	110	1x60	250
3.0	2.2	W182T	3480	13,5	J	4.46	2.8	2.6	72.5	77.0	78.8	0.81	0.87	0.91	1.15	0.15187	1X216-259	250	1X15	400
3.0	2.2	W182/4T	1750	14,5	J	0.91	2.9	2.4	69.0	75.0	77.2	0.72	0.80	0.86	1.15	0.23730	1x270-324	250	1x15	400
3.0	2.2	W213/5	1160	13,0	H	13.3	2.2	2.3	71.0	78.0	81.0	0.84	0.89	0.91	1.15	0.61935	1X270-324	250	1X40	400
5.0	3.7	184T	3490	21,0	H	7.41	2.8	2.6	77.0	79.0	80.0	0.90	0.94	0.95	1.15	0.23730	2X216-259	250	1X30	400
5.0	3.7	184T	1730	21,0	H	1.53	2.9	2.4	76.0	78.0	79.4	0.91	0.93	0.95	1.15	0.42714	2x189-227	250	1x40	400
5.0	3.7	W213/5T	1730	21,0	H	1.53	2.9	2.4	76.0	78.0	79.4	0.91	0.93	0.95	1.15	0.44612	2x189-227	250	1x40	400
5.0	3.7	W213/5TZ	1730	21,0	H	1.53	2.9	2.4	76.0	78.0	79.4	0.91	0.93	0.95	1.15	0.44612	2x189-227	250	1x40	400
5.0	3.7	215T	1160	22,0	H	22.3	2.3	2.2	78.0	82.0	83.0	0.80	0.86	0.88	1.15	1.78449	2X270-324	250	2X30	400
7.5	5.5	184T	3495	32,0	G	11.1	2.1	2.1	68.0	74.0	81.5	0.88	0.90	0.92	1.15	0.24679	2X270-324	250	1X45	400
7.5	5.5	213/5T	1730	32,0	H	2.29	2.9	2.4	77.0	80.0	82.0	0.87	0.89	0.92	1.15	0.90648	2x270-324	250	2X30	400
7.5	5.5	213/5TZ	1730	32,0	H	2.29	2.9	2.4	77.0	80.0	82.0	0.87	0.89	0.92	1.15	0.90648	2x270-324	250	2X30	400
10	7.5	215T	3500	38,2	F	14.7	2.5	1.8	84.5	85.5	86.2	0.94	0.95	0.97	1.15	0.57663	2X270-324	250	2X30	400
10	7.5	213/5T	1720	40,0	G	3.07	2.7	2.4	80.0	82.0	83.0	0.90	0.94	0.96	1.15	1.18650	2x270-324	250	2x45	400
12.5	9.2	215T	3500	48,0	H	18.5	2.9	1.7	85.0	87.0	88.0	0.91	0.93	0.95	1.15	0.75412	2x270-324	250	2x30	400
12.5	9.2	215T	1740	48,0	G	37.2	2.2	2.4	79.0	84.0	85.3	0.95	0.96	0.98	1.15	1.32413	2X270-324	250	3X40	400

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.



Farm Duty - NEMA 56 to W213/5T Frames

Single-phase - TEFC (IP55)

Rated Output		NEMA Frame	Rated speed rpm	Full Load Current In (A) at 230V	Locked Rotor Current KVA Code	Full Load Torque Tn Lb.Ft	Locked Rotor Torque TI/Tn	Breakdown Torque Tb/Tn	Efficiency η %			Power Factor cos ϕ			Service Factor SF	Moment of Inertia (Lb.Ft ²)	Allowable Locked Rotor Time (s)	Approx. Weight (Lbs)	Sound dB (A)
HP	kW								50	75	100	50	75	100					
0.33	0.25	B56	1740	3.00	M	0.10	3.4	2.8	45.0	53.0	57.3	0.46	0.56	0.62	1.15	0.06169	6	21	55
0.5	0.37	B56	1740	3.70	K	0.15	3.4	2.8	51.0	58.0	62.6	0.48	0.56	0.69	1.15	0.08068	6	23	55
0.75	0.55	B56	1740	5.50	L	0.23	3.0	2.6	56.0	63.0	66.1	0.52	0.58	0.66	1.15	0.09966	6	25	55
1.0	0.75	F143T	1740	7.50	M	0.30	3.0	2.6	58.0	63.0	66.4	0.60	0.68	0.73	1.15	0.13526	6	32	55
1.0	0.75	D56	1750	7.50	M	0.30	3.0	2.6	58.0	63.0	66.4	0.60	0.68	0.73	1.15	0.13526	6	33	55
1.5	1.1	F56H	1740	9.00	J	0.46	3.0	2.6	66.0	70.0	72.0	0.52	0.62	0.74	1.15	0.19933	6	46	55
1.5	1.1	G145T	1740	9.00	J	0.60	3.0	2.6	66.0	70.0	72.0	0.52	0.62	0.74	1.15	0.19933	6	47	55
2.0	1.5	G56H	1740	11.0	J	0.60	2.8	2.6	68.0	71.0	72.7	0.58	0.69	0.80	1.15	0.21831	6	49	55
2.0	1.5	G145T	1740	11.0	J	0.60	2.8	2.6	68.0	71.0	72.7	0.58	0.69	0.80	1.15	0.21831	6	50	55
2.0	1.5	W182/4T	1725	10.0	H	0.60	2.9	2.5	64.0	70.0	72.7	0.74	0.82	0.88	1.15	0.21784	6	68	60
3.0	2.2	W182/4T	1750	14.5	J	0.91	2.9	2.4	69.0	75.0	77.2	0.72	0.80	0.86	1.15	0.23730	6	73	60
5.0	3.7	184T	1730	21.0	H	1.53	2.9	2.4	76.0	78.0	79.4	0.91	0.93	0.95	1.15	0.42714	6	143	60
5.0	3.7	W213/5T	1730	21.0	H	1.53	2.9	2.4	76.0	78.0	79.4	0.91	0.93	0.95	1.15	0.44612	6	116	60
5.0	3.7	W213/5TZ	1730	21.0	H	1.53	2.9	2.4	76.0	78.0	79.4	0.91	0.93	0.95	1.15	0.44612	6	116	60
7.5	5.5	213/5T	1730	32.0	H	2.29	2.9	2.4	77.0	80.0	82.0	0.87	0.89	0.92	1.15	0.90648	6	154	60
7.5	5.5	213/5TZ	1730	32.0	H	2.29	2.9	2.4	77.0	80.0	82.0	0.87	0.89	0.92	1.15	0.90648	6	154	60
10	7.5	213/5T	1720	40.0	G	3.07	2.7	2.4	80.0	82.0	83.0	0.90	0.94	0.96	1.15	1.18650	6	165	65

1) Guaranteed data, within the permissible tolerances under MG 1-12

2) Efficiencies under CSA C390.1

3) The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

ODP Motors - Design "B"

Premium Efficiency

Meet EPACT
Levels



Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current In A		Locked Rotor Current	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η %			Power Factor Cos ϕ			Service Factor S F	Moment of Inertia Wk² Lb.Ft²	Allowable Locked Rotor Time Hot/Cold (s)	Approx. Weight Lb
HP	KW			At 460V	At 575V	Code	kVA	Tn	Tl/Tn	Tb/Tn	50	75	100	50	75	100			
1.0	0.75	143T	1730	1.4	1.1	M	2.3	3.3	3.2	80.0	81.5	82.5	0.61	0.74	0.81	1.15	0.0954	12/26	33
1.5	1.1	143T	3405	2.0	1.6	L	2.3	3.0	3.5	80.0	81.5	82.5	0.70	0.80	0.86	1.15	0.0325	15/32	29
		145T	1730	2.0	1.6	L	4.5	3.5	3.2	82.5	84.0	84.0	0.64	0.76	0.83	1.15	0.0109	10/22	38
2.0	1.5	145T	3410	2.5	2.0	L	3.0	3.0	3.5	81.5	82.5	84.0	0.78	0.86	0.89	1.15	0.0441	12/26	40
		145T	1715	2.6	2.1	L	6.0	3.0	3.0	82.5	84.0	84.0	0.71	0.82	0.87	1.15	0.1227	10/22	40
3.0	2.2	145T	3400	3.7	3.0	K	4.6	3.5	3.4	81.5	82.5	84.0	0.80	0.88	0.90	1.15	0.0531	8/17	46
		182T	1760	3.9	3.1	K	8.8	2.0	3.0	82.5	85.5	86.5	0.62	0.74	0.81	1.15	0.2281	11/23	47
5.0	3.7	182T	3480	6.0	4.8	H	7.4	2.0	2.9	84.0	85.5	85.5	0.75	0.83	0.88	1.15	0.1305	9/18	48
		184T	1755	6.3	5.0	J	14.8	2.1	3.0	84.0	86.5	87.5	0.66	0.77	0.83	1.15	0.3260	8/18	60
7.5	5.5	184T	3485	9.0	7.2	H	11.2	2.3	3.0	86.5	87.5	87.5	0.78	0.85	0.88	1.15	0.1677	6/14	60
		213T	1755	9.6	7.7	H	22.1	1.8	2.5	85.5	87.5	88.5	0.68	0.78	0.83	1.15	0.7080	8/17	72
10	7.5	213T	3500	12.0	9.6	H	14.8	2.2	3.2	86.5	88.5	88.5	0.78	0.86	0.90	1.15	0.4550	7/15	95
		215T	1760	13.0	10.4	H	29.4	1.8	2.3	86.5	88.5	89.5	0.67	0.78	0.83	1.15	0.9435	8/17	96
15	11	215T	3500	18.0	14.4	G	22.2	2.1	3.1	88.5	89.5	89.5	0.84	0.89	0.90	1.15	0.5915	10/20	126
		254T	1765	19.0	15.2	G	44.2	2.3	3.0	87.5	89.5	91.0	0.70	0.78	0.83	1.15	1.54800	12/26	232
20	15	254T	3530	25.0	20.0	G	29.5	2.0	2.5	88.5	90.2	90.2	0.75	0.80	0.85	1.15	0.90400	12/25	187
		256T	1765	25.0	20.0	G	58.7	2.5	3.2	88.5	89.5	91.0	0.72	0.80	0.83	1.15	1.90500	10/20	287
25	18.5	256T	3530	29.0	23.2	G	36.9	2.0	2.5	89.5	90.2	91.0	0.76	0.85	0.87	1.15	1.07800	10/20	234
		284T	1765	30.0	24.0	G	73.7	2.5	3.0	88.5	91.0	91.7	0.73	0.80	0.84	1.15	2.67000	11/23	306
30	22	284TS	3530	33.0	26.4	G	43.5	2.0	2.7	90.2	91.7	92.4	0.85	0.90	0.90	1.15	2.39100	7/15	348
		286T	1770	36.0	28.8	G	88.3	2.5	3.1	90.2	91.7	92.4	0.75	0.81	0.84	1.15	3.52400	11/22	397
40	30	286TS	3555	45.0	36.0	G	58.3	2.2	2.8	91.7	92.4	92.4	0.85	0.90	0.91	1.15	2.98900	6/13	435
		324T	1765	47.0	37.6	G	117	2.3	2.5	91.0	92.4	93.0	0.75	0.84	0.86	1.15	5.10200	14/30	470
50	37	324TS	3550	55.0	44.0	G	73.0	2.0	2.7	91.7	93.0	93.6	0.80	0.88	0.90	1.15	3.52500	14/30	500
		326T	1765	58.0	46.4	G	147	2.2	2.6	91.0	92.4	93.0	0.75	0.84	0.87	1.15	6.08900	13/27	563
60	45	326TS	3550	67.0	53.6	G	87.7	2.0	2.8	92.4	93.6	94.1	0.82	0.88	0.90	1.15	4.16600	13/28	590
		364/5TS*	1770	70.0	56.0	G	176	2.2	2.6	91.7	93.0	93.6	0.74	0.84	0.86	1.15	12.5800	13/28	660
75	55	364/5TS	3550	81.0	64.8	G	109	1.8	2.8	93.0	94.1	94.1	0.84	0.90	0.91	1.15	6.73500	12/25	728
		364/5TS*	1780	85.0	68.0	G	218	2.4	2.8	93.0	93.6	94.1	0.74	0.82	0.86	1.15	16.3530	10/22	860
100	75	364/5TS	3550	110	88.0	G	146	1.9	3.0	93.6	94.1	94.1	0.86	0.91	0.91	1.15	8.20800	9/19	860
		404/5TS*	1780	115	92.0	G	291	2.4	2.5	93.0	93.6	94.1	0.74	0.84	0.87	1.15	19.7080	9/19	1036
125	90	404/5TS	3555	132	106	G	182	1.8	3.0	93.6	94.1	94.1	0.87	0.91	0.91	1.15	9.26000	6/13	970
		404/5TS*	1775	138	110	G	365	2.4	2.6	93.0	94.1	94.5	0.75	0.84	0.87	1.15	20.9660	8/17	1097
150	110	404/5TS	3555	160	128	G	219	2.1	3.0	93.6	94.1	94.5	0.87	0.91	0.92	1.15	10.1000	6/13	1058
		444/5TS*	1780	165	132	G	436	2.4	2.6	93.6	94.5	95.0	0.75	0.85	0.88	1.15	34.8170	6/13	1290
200	150	444/5TS	3560	217	174	G	292	2.0	2.5	94.1	94.5	94.5	0.89	0.91	0.92	1.15	25.0200	10/20	1605
		444/5TS*	1780	220	176	G	584	2.3	2.4	93.6	94.5	95.0	0.80	0.88	0.90	1.15	48.9320	6/13	1815
250	185	444/5TS	3565	266	213	G	363	2.0	2.5	94.1	94.5	95.0	0.90	0.91	0.92	1.15	29.3700	8/17	1884
		444/5TS*	1780	270	216	G	727	2.4	2.5	94.1	95.4	95.4	0.81	0.88	0.90	1.15	56.4600	5/11	2093
300	220	444/5TS	3565	316	253	G	435	2.0	2.6	94.1	94.5	95.0	0.91	0.91	0.92	1.15	32.6300	7/15	2090

* When motors are to be used with V belt or chain drives, the correct frame size is the frame size shown, but with the suffix letter S omitted.
The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

General Purpose Motors - W21 Severe Duty

IP55 - Three-phase
Standard Efficiency



Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor Current	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η%		Power Factor Cos ϕ		Service Factor S F	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold Lb.Ft²	Allowable Locked Rotor Time Hot/Cold (s)	Approx. Weight Lb		
HP	KW			At 230V	At 575V	Code	kVA	Tn	Tl/Tn	Tb/Tn	50	75	100	50	75	100				
1.0	0.75	143T	1720	3.32	1.33	J	3.07	2.8	3.0	68.0	74.0	75.5	0.53	0.65	0.75	1.15	0.0798	6	13	33
		145T	1140	3.72	1.49	J	4.64	2.8	2.9	67.4	72.8	76.7	0.49	0.60	0.66	1.15	0.11972	8	18	44
		182T	870	4.48	1.79	L	6.08	2.2	2.7	63.2	69.4	72.5	0.42	0.52	0.58	1.15	0.39926	9	20	77
		W182/4T	860	4.51	1.80	H	6.15	1.6	2.2	68.0	70.0	72.0	0.42	0.50	0.58	1.15	0.19952	10	22	44
		143T	3435	4.09	1.64	H	2.26	2.1	2.6	74.0	77.0	78.5	0.78	0.84	0.86	1.15	0.03735	9	20	37
1.5	1.1	145T	1710	4.69	1.88	J	4.53	2.5	2.9	72.0	77.0	80.0	0.53	0.63	0.75	1.15	0.0798	5	11	37
		W182/4T	1160	5.38	2.15	K	6.68	2.4	2.8	68.0	72.0	75.5	0.50	0.61	0.68	1.15	0.19952	8	18	44
		182T	1155	5.15	2.06	H	6.71	2.2	2.6	70.7	77.0	80.1	0.48	0.57	0.67	1.15	0.37709	13	29	60
		184T	865	5.98	2.39	K	8.96	2.1	2.6	63.5	70.3	74.5	0.44	0.55	0.62	1.15	0.39926	11	24	79
		W182/4T	860	6.57	2.63	H	9.01	1.8	2.3	66.0	68.0	70.0	0.51	0.55	0.60	1.15	0.30595	8	18	66
2.0	1.5	145T	3430	5.41	2.16	H	3.08	2.2	2.4	75.5	78.5	80.0	0.76	0.83	0.87	1.15	0.03735	7	15	41
		145T	1720	6.32	2.53	J	6.15	3.0	3.0	74.0	78.5	81.5	0.58	0.69	0.75	1.15	0.11972	5	11	44
		184T	1160	7.50	3.00	H	9.11	2.2	2.5	71.7	78.9	81.0	0.45	0.54	0.62	1.15	0.44363	13	29	82
		W182/4T	1160	7.05	2.82	J	9.11	2.2	2.8	70.0	75.5	78.5	0.51	0.61	0.68	1.15	0.26604	7	15	60
		213T	865	7.56	3.02	L	12.2	2.6	3.0	68.3	72.4	75.5	0.48	0.59	0.66	1.15	1.19089	9	20	119
3.0	2.2	W213/5T	850	7.19	2.88	K	12.4	2.6	3.0	72.0	75.5	77.0	0.50	0.60	0.68	1.15	0.44363	10	22	112
		182T	3510	8.26	3.30	K	4.42	2.3	3.0	74.0	78.5	81.5	0.70	0.78	0.82	1.15	0.14537	6	13	79
		W182/4T	3470	7.99	3.20	J	4.47	2.6	3.0	74.0	75.5	78.5	0.74	0.82	0.88	1.15	0.0798	6	13	42
		145T	3450	8.10	3.24	J	4.49	2.8	3.0	77.5	79.3	78.4	0.73	0.83	0.87	1.15	0.04886	8	18	46
		182T	1750	8.16	3.26	K	8.86	2.6	2.9	75.5	78.5	81.5	0.65	0.74	0.83	1.15	0.28602	5	11	64
5.0	3.7	W182/4T	1720	8.42	3.37	J	9.01	2.7	2.8	77.0	78.5	80.0	0.63	0.74	0.82	1.15	0.14537	6	13	55
		213T	1160	9.93	3.97	J	13.4	2.2	2.8	77.6	81.5	81.8	0.53	0.62	0.68	1.15	0.73594	14	31	106
		W213/5T	1145	9.02	3.61	J	13.5	1.9	2.1	74.0	75.5	78.5	0.61	0.72	0.78	1.15	0.44363	8	18	110
		215T	870	11.9	4.76	L	17.8	2.4	3.0	72.4	76.5	77.5	0.40	0.50	0.60	1.15	1.42907	10	22	137
		W213/5T	865	10.4	4.16	K	17.9	3.0	3.5	75.5	80.0	81.5	0.44	0.56	0.65	1.15	0.66546	11	24	143
7.5	5.5	W182/4T	3490	12.9	5.16	K	7.47	3.0	3.5	75.5	80.0	82.5	0.73	0.82	0.87	1.15	0.13303	5	11	68
		184T	3460	12.8	5.12	H	7.54	2.2	2.7	78.0	83.5	83.5	0.76	0.81	0.87	1.15	0.17261	9	20	84
		184T	1740	13.9	5.56	K	15.0	2.5	2.6	78.5	81.5	84.0	0.67	0.76	0.81	1.15	0.38136	5	11	93
		W182/4T	1720	13.7	5.48	K	15.2	3.0	3.5	78.5	80.0	82.5	0.70	0.81	0.82	1.15	0.23621	6	13	73
		215T	1155	15.1	6.04	J	22.6	2.3	2.9	78.0	81.9	82.9	0.62	0.73	0.74	1.15	0.82794	9	20	115
10	7.5	W213/5T	1140	14.0	5.60	J	22.9	2.0	2.2	81.5	82.5	84.0	0.65	0.74	0.79	1.15	0.62109	7	15	137
		254T	880	20.0	8.00	L	29.6	2.0	2.8	78.2	80.4	81.5	0.42	0.50	0.57	1.15	3.06772	10	22	251
		W254/6T	865	15.1	6.04	K	30.1	2.0	2.8	78.5	82.5	84.0	0.54	0.66	0.73	1.15	2.0245	12	26	227
		213T	3500	18.5	7.40	H	11.1	2.0	2.8	80.0	82.5	84.0	0.79	0.86	0.89	1.15	0.39926	11	24	117
		W213/5T	3500	18.1	7.24	J	11.1	2.5	3.5	84.0	85.5	87.5	0.72	0.81	0.87	1.15	0.19988	6	13	121
15	11	213T	1760	19.2	7.68	L	22.0	2.2	3.4	82.5	85.5	86.5	0.66	0.77	0.83	1.15	0.82794	4	9	117
		W213/5T	1730	18.6	7.44	J	22.4	2.5	3.0	84.0	85.5	86.5	0.70	0.80	0.86	1.15	0.44494	7	15	139
		254T	1170	19.5	7.80	H	33.1	2.3	3.1	86.5	87.5	87.5	0.62	0.74	0.81	1.15	2.386	22	48	223
		W254/6T	1160	21.1	8.44	J	33.4	2.4	2.5	80.0	82.5	84.0	0.60	0.71	0.78	1.15	1.1959	10	22	196
		256T	875	22.5	9.00	G	44.3	1.9	2.7	83.4	85.9	86.3	0.51	0.63	0.71	1.15	3.40858	27	59	280
20	15	W254/6T	860	24.1	9.64	L	45.1	2.5	2.5	77.0	80.0	82.0	0.50	0.62	0.70	1.15	2.73904	7	15	290
		215T	3510	24.5	9.80	H	15.1	2.2	2.8	84.0	85.5	85.5	0.79	0.86	0.90	1.00	0.48798	6	13	132
		W213/5T	3510	24.2	9.68	H	15.1	2.2	2.8	85.5	86.5	86.5	0.81	0.88	0.90	1.15	0.23621	8	18	135
		215T	1760	27.9	11.2	J	30.0	2.3	3.0	80.0	84.0	87.5	0.71	0.75	0.77	1.15	1.01192	5	11	132
		256T	1170	25.8	10.3	H	45.2	2.3	2.9	86.0	87.8	87.9	0.67	0.78	0.83	1.15	2.89729	18	40	254
25	18.5	W254/6T	1165	29.0	11.6	K	45.4	2.5	3.0	82.5	85.5	86.5	0.55	0.65	0.75	1.15	1.56388	7	15	232
		284T	885	26.5	10.6	K	59.7	2.5	2.8	83.5	84.5	85.5	0.67	0.78	0.83	1.15	5.89024	14	31	348
		254T	3530	36.3	14.5	J	22.0	2.0	2.5	78.5	84.0	87.5	0.73	0.82	0.87	1.15	0.90748	10	22	227
		W254/6T	3500	33.5	13.4	J	22.1	2.5	3.5	87.5	88.5	89.5	0.85	0.90	0.92	1.15	0.66546	6	13	213
		254T	1760	37.1	14.8	G	44.0	2.0	2.3	85.5	87.5	88.5	0.70	0.80	0.84	1.15	1.54815	11	24	216
30	22	W254/6T	1755	35.5	14.2	J	44.2	2.4	3.0	86.5	87.5	89.5	0.71	0.82	0.87	1.15	1.3799	6	13	211
		284T	1170	35.5	14.2	K	66.3	2.2	2.8	85.2	87.2	88.3	0.82	0.85	0.88	1.15	6.54471	7	15	287
		286T	880	41.7	16.7	J	88.1	2.0	2.5	85.0	86.2	87.1	0.62	0.72	0.76	1.15	7.19918	10	22	426
		256T	3540	49.5	19.8	J	29.9	2.1	3.0	87.5	88.5	88.5	0.75	0.84	0.86	1.15	1.11692	7	15	251
		W254/6T	3505	45.7	18.3	J	30.2	2.5	3.0	87.5	88.5	89.5	0.88	0.91	0.92	1.15</				

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current In A		Locked Rotor	Full Load	Locked Rotor	Break-Down Torque	Efficiency η %			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold Lb.Ft² (s)	Approx. Weight Lb	
HP	KW			Code	kVA	Tn	Tl/Tn	Tb/Tn		50	75	100	50	75	100					
				At 230V	At 575V	Lb.Ft														
40	30	324TS	3560	94.0	37.6	J	59.4	2.9	2.5	85.0	89.5	91.0	0.80	0.85	0.88	1.15	4.04419	10	22	397
		324T	1770	96.6	38.6	H	119	2.6	2.5	89.5	91.0	91.7	0.74	0.82	0.85	1.15	6.54471	14	31	467
50	37	364/5T	1175	99.0	39.6	G	180	2.2	2.3	89.0	90.4	90.6	0.74	0.81	0.84	1.15	20.1046	22	48	750
		364/5T	885	106	42.4	K	239	2.4	2.4	88.5	89.5	90.7	0.64	0.73	0.78	1.15	23.4554	13	29	794
		326TS	3560	114	45.6	J	73.2	3.2	3.0	88.5	91.0	92.4	0.80	0.85	0.88	1.15	4.89559	10	22	507
		326T	1770	118	47.2	G	147	2.3	2.4	90.2	91.7	91.7	0.76	0.83	0.86	1.15	7.85366	12	26	540
60	45	364/5T	1185	123	49.2	J	220	2.4	2.4	89.2	90.5	91.9	0.70	0.78	0.82	1.15	23.4554	17	37	816
		404/5T	885	129	51.6	K	295	2.0	2.6	88.9	89.8	91.0	0.69	0.78	0.79	1.15	29.0401	12	26	937
		364/5TS	3560	138	55.2	J	89.1	2.5	2.5	86.5	90.2	91.0	0.82	0.87	0.90	1.15	7.23653	9	20	807
		364/5T	1775	139	55.6	G	179	2.3	2.6	90.2	91.0	91.7	0.82	0.87	0.89	1.15	12.4559	10	22	728
75	55	404/5T	1180	149	59.6	J	269	2.4	2.5	89.6	91.0	92.3	0.71	0.79	0.82	1.15	29.0401	15	33	937
		404/5T	885	153	61.2	K	358	2.2	2.9	89.1	91.0	92.0	0.69	0.75	0.80	1.15	32.3908	11	24	990
		364/5TS	3560	168	67.2	J	109	2.8	3.0	89.5	91.7	92.4	0.81	0.87	0.89	1.15	9.36495	7	15	847
		364/5T	1775	170	68.0	J	218	2.2	2.6	89.5	91.7	92.4	0.82	0.86	0.88	1.15	16.6079	7	15	836
100	75	404/5T	1185	184	73.6	J	327	2.4	2.4	89.8	91.5	92.5	0.68	0.76	0.81	1.15	32.3908	13	29	999
		444/5T	890	190	76.0	J	436	1.8	2.4	89.2	91.0	92.2	0.67	0.75	0.79	1.15	62.718	17	37	1422
		404/5TS	3560	225	90.0	K	148	2.4	2.8	90.2	92.4	93.0	0.83	0.88	0.90	1.15	11.919	7	15	977
		404/5T	1780	236	94.4	K	297	3.0	3.0	89.5	91.7	92.4	0.75	0.82	0.86	1.15	23.2511	5	11	975
125	90	444/5T	1185	242	96.8	G	446	2.4	2.5	90.2	92.2	92.7	0.70	0.80	0.84	1.15	62.718	31	68	1429
		444/5T	890	261	104	J	594	2.3	3.0	89.4	91.4	92.5	0.65	0.73	0.78	1.15	73.6255	14	31	1521
		444/5TS	3570	284	114	J	178	2.1	2.6	86.5	89.5	91.7	0.82	0.85	0.87	1.15	25.6693	21	46	1427
		444/5T	1780	283	113	H	356	2.2	2.3	91.0	91.7	92.4	0.81	0.85	0.86	1.15	38.1085	11	24	1407
150	110	444/5T	1185	290	116	F	535	2.3	2.4	91.5	92.8	92.9	0.70	0.80	0.84	1.15	73.6255	35	77	1544
		447T	890	317	127	J	713	2.1	2.4	89.4	91.6	92.7	0.67	0.73	0.77	1.15	103.621	19	42	1958
		504/5T	890	317	127	J	713	2.1	2.4	89.4	91.6	92.7	0.67	0.73	0.77	1.15	103.621	19	42	1958
		444/5TS	3565	340	136	J	217	2.1	2.6	89.5	91.7	92.4	0.82	0.86	0.88	1.15	30.157	23	51	1493
200	150	444/5T	1785	341	136	J	434	2.3	2.5	91.0	92.4	93.1	0.79	0.84	0.87	1.15	55.2573	12	26	1599
		447T	1185	358	143	G	654	2.4	2.4	91.0	92.3	93.0	0.69	0.79	0.83	1.15	87.2598	27	59	1808
		504/5T	1185	358	143	G	654	2.4	2.4	91.0	92.3	93.0	0.69	0.79	0.83	1.15	87.2598	27	59	1808
		447T	890	376	150	J	871	2.1	2.6	90.0	91.9	93.0	0.61	0.71	0.79	1.15	125.436	19	42	2181
250	185	504/5T	890	376	150	J	871	2.1	2.6	90.0	91.9	93.0	0.61	0.71	0.79	1.15	125.436	19	42	2181
		447TS	3570	454	182	J	296	1.8	2.3	90.2	92.4	93.0	0.83	0.87	0.89	1.00	39.0924	22	48	1907
		504/5TS	3570	454	182	J	296	1.8	2.3	90.2	92.4	93.0	0.83	0.87	0.89	1.00	39.0924	22	48	1779
		447T	1780	481	192	J	594	2.3	2.0	91.0	92.4	93.6	0.78	0.82	0.84	1.15	66.6899	14	31	1914
300	220	444/5T	1780	463	185	H	594	2.3	2.0	91.0	92.4	93.6	0.78	0.84	0.87	1.15	66.6899	15	33	1914
		447T	1185	478	191	H	892	2.4	2.4	90.4	92.5	93.7	0.68	0.78	0.84	1.15	125.436	24	53	2174
		504/5T	1185	478	191	J	892	2.4	2.2	90.4	92.5	93.7	0.75	0.81	0.84	1.15	125.436	19	42	2139
		449T	890	544	218	J	1188	2.0	2.1	86.0	90.0	91.0	0.59	0.70	0.76	1.15	160.8853	13	29	3409
350	260	586/7T	890	528	211	H	1188	1.4	2.0	91.0	92.7	93.8	0.60	0.71	0.76	1.15	350.2193	29	64	3473
		504/5TS	3570	558	223	J	365	2.2	2.3	90.2	93.0	93.6	0.86	0.88	0.89	1.00	50.2617	31	68	2375
		447TS	3560	558	223	J	366	2.2	2.3	90.2	93.0	93.6	0.86	0.88	0.89	1.00	50.2617	31	68	2375
		447T	1785	578	231	J	730	2.2	2.1	91.7	93.0	93.6	0.76	0.83	0.86	1.15	89.555	11	24	2216
400	300	504/5T	1785	564	226	J	730	2.2	2.1	91.7	93.0	93.6	0.76	0.83	0.88	1.15	89.555	11	24	2216
		449T	1190	608	243	H	1096	2.5	2.5	93.1	93.8	94.3	0.70	0.78	0.81	1.15	152.7047	27	59	2977
		586/7T	1190	613	245	H	1096	2.0	2.2	91.2	93.0	93.5	0.68	0.76	0.81	1.15	203.5597	54	119	3237
		586/7T	890	620	248	J	1465	1.1	2.0	91.5	93.2	93.7	0.68	0.74	0.80	1.15	387.4767	32	70	3654
450	330	449TS	3575	635	254	H	434	2.2	2.9	92.8	94.1	94.5	0.88	0.91	0.92	1.15	58.0801	25	55	2646
		586/7TS	3570	653	261	G	434	1.2	2.4	91.0	93.6	94.1	0.89	0.90	0.90	1.15	103.621	35	77	2481
		586/7T	1790	667	267	H	866	2.3	2.7	91.7	93.6	94.1	0.81	0.86	0.88	1.15	150.404	27	59	2975
		586/7T	1190	734	294	H	1303	1.9	2.2	92.0	93.5	94.1	0.70	0.78	0.80	1.15	260.1041	62	136	3460
500	370	586/7T	890	741	296	J	1742	1.7	2.2	92.0	93.6	94.3	0.68	0.74	0.79	1.15	461.9914	38	84	4070
		449TS	3575	747	299	G	513	2.1	1.9	93.0	94.1	95.0	0.88	0.91	0.92	1.00	68.1325	8	18	3169
		586/7TS	3570	759	304	H	513	1.2	2.1	91.7	93.6	94.5	0.89	0.90	0.91	1.00	122.7091	34	75	2862
		586/7T	1790	784	314	H	1024	2.4	2.8	92.4	93.6	94.5	0.80	0.85	0.88	1.15	176.9459	26	57	3281



Premium Efficiency Motors - Design "B"

Valid for: General Purpose, Explosion Proof Motors

Meet EPACT
Levels

ELECTRICAL DATA

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor	Full Load	Locked Rotor	Break-Down	Efficiency %		Power Factor Cos Φ			Service Factor S F	Moment of Inertia Wk ²	Allowable Locked Rotor Time Hot/Cold	Approx. Weight Lb		
				In	A	Current	Torque	Torque	Torque	50	75	100	50	75	100					
HP	KW	At 230V	At 575V	kVA	Code	Lb.Ft	Tl/Tn	Tb/Tn												
1.0	0.75	143T*	3495	2.85	1.14	M	1.51	3.0	4.0	74.0	78.5	78.5	0.69	0.79	0.84	1.25	0.03735	23	51	40
		143T	1765	2.90	1.16	L	2.99	2.8	3.9	75.5	80.0	82.5	0.60	0.73	0.79	1.25	0.09312	16	35	44
		145T	1165	3.40	1.36	L	4.54	2.3	3.0	75.5	80.0	80.0	0.48	0.60	0.69	1.25	0.13303	22	48	44
		182T	875	4.63	1.85	M	6.04	3.0	3.5	68.0	72.0	74.0	0.35	0.45	0.55	1.25	0.39926	40	88	95
		143T	3495	3.98	1.59	L	2.22	3.0	4.0	75.5	81.5	82.5	0.69	0.78	0.84	1.25	0.04312	18	40	42
1.5	1.1	145T	1760	4.00	1.60	L	4.40	2.6	3.7	80.0	82.5	84.0	0.65	0.76	0.82	1.25	0.11972	12	26	51
		182T	1165	4.75	1.90	M	6.65	3.2	4.0	81.5	84.0	85.5	0.47	0.58	0.68	1.25	0.48798	36	79	68
		184T	860	5.43	2.17	J	9.01	2.5	2.6	74.0	75.5	77.0	0.47	0.58	0.66	1.25	0.44363	32	70	110
		145T	3480	5.20	2.08	L	3.04	3.5	4.0	80.0	82.5	84.0	0.70	0.81	0.86	1.25	0.04886	13	29	44
		145T	1755	5.28	2.11	K	6.02	2.4	3.2	81.5	84.0	84.0	0.68	0.79	0.85	1.25	0.13303	12	26	53
20	1.5	184T	1165	6.40	2.56	L	9.07	3.0	3.0	84.0	86.5	86.5	0.48	0.60	0.68	1.25	0.62109	35	77	79
		213T	870	6.93	2.77	L	12.2	2.4	2.9	78.5	81.5	82.5	0.47	0.53	0.66	1.25	1.19089	43	95	141
		182T	3500	7.18	2.87	K	4.43	2.5	4.0	80.0	82.5	85.5	0.80	0.87	0.90	1.25	0.15443	23	51	90
		182T	1765	7.80	3.12	K	8.78	2.3	3.2	85.5	87.5	87.5	0.65	0.75	0.81	1.25	0.31782	31	68	88
		213T	1170	8.30	3.32	J	13.3	2.2	2.5	86.5	87.5	87.5	0.60	0.70	0.76	1.25	1.01192	59	130	110
30	2.2	215T	860	8.55	3.42	K	18.0	2.0	2.1	82.5	84.0	84.0	0.60	0.71	0.77	1.25	1.78632	30	66	153
		184T	3480	11.7	4.67	H	7.49	2.4	3.5	85.5	86.5	87.5	0.85	0.90	0.91	1.25	0.19988	28	62	105
		184T	1745	13.0	5.18	H	14.9	2.1	3.0	85.5	87.5	87.5	0.68	0.78	0.82	1.25	0.38136	21	46	93
		215T	1160	13.6	5.44	H	22.5	1.9	2.1	86.5	87.5	87.5	0.65	0.75	0.78	1.25	1.47188	49	108	162
		254T	875	16.7	6.67	H	29.8	2.0	2.8	72.1	85.0	85.7	0.44	0.56	0.65	1.25	2.89729	38	84	232
7.5	5.5	213T	3510	17.3	6.93	G	11.0	2.2	3.0	86.5	88.5	88.5	0.80	0.88	0.90	1.25	0.42144	25	55	121
		213T	1765	18.8	7.52	H	22.0	2.0	2.6	87.5	89.5	89.5	0.66	0.77	0.82	1.25	1.01192	21	46	137
		254T	1170	19.1	7.62	H	33.1	2.3	3.1	88.5	89.5	89.5	0.62	0.74	0.81	1.25	2.386	29	64	236
		256T	875	22.5	9.01	G	44.3	1.9	2.7	83.4	85.9	86.3	0.51	0.63	0.71	1.25	3.40858	41	90	276
		215T	3500	23.1	9.25	G	15.1	2.0	2.6	88.5	89.5	89.5	0.86	0.90	0.91	1.25	0.66546	19	42	160
10	7.5	215T	1765	25.5	10.2	H	29.9	2.0	2.6	88.5	90.2	90.2	0.69	0.79	0.82	1.25	1.3799	19	42	152
		256T	1175	25.3	10.1	H	45.0	2.3	2.9	88.5	89.5	89.5	0.67	0.78	0.83	1.25	2.89729	24	53	278
		284T	880	27.3	10.9	H	60.1	2.5	2.4	86.5	88.5	88.5	0.60	0.72	0.78	1.25	7.19918	53	117	373
		254T	3520	34.0	13.6	F	22.0	2.0	2.7	89.5	90.2	90.2	0.86	0.89	0.90	1.25	1.25653	33	73	254
		254T	1765	35.3	14.1	G	43.9	2.5	2.5	89.5	91.0	91.0	0.74	0.82	0.86	1.25	2.1436	26	57	240
15	11	284T	1180	34.5	13.8	G	65.7	2.3	2.5	89.5	90.2	91.0	0.79	0.85	0.88	1.25	7.19918	21	46	306
		286T	880	38.0	15.2	G	88.1	2.4	2.3	86.5	88.5	88.5	0.68	0.78	0.82	1.25	8.18089	37	81	423
		256T	3520	46.5	18.6	G	30.0	2.0	2.5	89.5	90.2	90.2	0.86	0.90	0.90	1.25	1.53576	21	46	287
		256T	1765	47.5	19.0	G	59.9	2.5	2.5	89.5	91.0	91.0	0.76	0.84	0.87	1.25	2.38178	18	40	273
		286T	1175	47.0	18.8	G	90.0	2.3	2.5	90.2	91.0	91.0	0.80	0.86	0.88	1.25	8.18089	31	68	430
25	18.5	324T	880	55.3	22.1	G	120	2.3	2.3	87.5	89.5	89.5	0.58	0.69	0.76	1.25	9.36495	47	103	512
		284TS	3520	56.8	22.7	G	37.0	2.2	2.8	90.2	91.0	91.0	0.86	0.90	0.90	1.25	2.89729	23	51	313
		284T	1765	59.3	23.7	F	73.9	2.3	2.2	91.0	92.4	92.4	0.77	0.84	0.85	1.25	3.83133	51	112	351
		324T	1175	59.5	23.8	F	111	2.2	2.4	89.5	91.7	91.7	0.72	0.81	0.85	1.25	10.2163	56	123	527
		326T	880	71.0	28.4	G	148	2.6	2.9	87.5	88.5	89.5	0.53	0.65	0.73	1.25	11.919	52	114	587
30	22	286TS	3530	67.5	27.0	G	43.9	2.4	3.0	90.2	91.0	91.0	0.87	0.90	0.90	1.25	3.57901	60	132	388
		286T	1770	70.3	28.1	F	87.6	2.5	2.3	91.0	92.4	92.4	0.76	0.83	0.85	1.25	4.68274	47	103	397
		326T	1175	70.8	28.3	G	132	2.3	2.5	90.2	91.7	91.7	0.70	0.80	0.85	1.25	11.919	35	77	580
		364/5T	885	76.8	30.7	G	175	2.2	2.2	89.5	91.0	91.0	0.66	0.75	0.79	1.25	23.4554	48	106	882
		324TS	3550	90.3	36.1	G	59.6	2.2	2.2	90.2	91.7	91.7	0.87	0.90	0.91	1.25	4.89559	46	101	516
40	30	324T	1770	95.3	38.1	G	119	2.3	2.3	91.7	93.0	93.0	0.76	0.83	0.85	1.25	7.85366	28	62	542
		364/5T	1175	94.3	37.7	G	180	2.3	2.3	92.4	93.0	93.0	0.76	0.83	0.86	1.25	23.4554	35	77	882
		364/5T	885	105	41.9	G	239	2.2	2.2	89.5	91.0	91.0	0.66	0.75	0.79	1.25	29.0401	42	92	953
		326TS	3550	111	44.2	G	73.5	2.1	2.1	91.0	92.4	92.4	0.88	0.90	0.91	1.25	5.32131	33	73	549
		326T	1770	116	46.2	G	147	2.3	2.3	92.4	93.6	93.6	0.77	0.83	0.86	1.25	9.1626	25	55	595
50	37	364/5T	1180	116	46.5	G	221	2.5	2.7	92.4	93.0	93.0	0.74	0.82	0.86	1.25	29.0401	39	86	882
		404/5T	885	130	51.9	G	295	2.2	2.1	90.2	91.7	91.7	0.69	0.75	0.78	1.25	32.3908	29	64	1140
		364/5TS	3560	134	53.4	G	89.1	2.0	2.5	91.0	92.4	93.0	0.80	0.87	0.91	1.25	8.51359	61	134	807
		364/5T	1770	136	54.2	F	179	2.1	2.2	92.4	93.6	93.6	0.83	0.87	0.89	1.				

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor Current kVA	Full Load Torque Tn	Locked Rotor Torque Tl/Tn	Break-Down Torque Tb/Tn	Efficiency η%			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold Lb.Ft² (s)	Approx. Weight Lb		
HP	KW			In	A					Code	Lb.Ft		50	75	100	50	75	100			
% of full load																					
125	90	444/5TS	3560	263	105	F	178	2.0	2.5	92.4	94.1	94.5	0.84	0.90	0.91	1.15	27.9231	72	158	1625	
		444/5T	1780	275	110	G	356	2.0	2.2	93.6	94.5	94.5	0.81	0.85	0.87	1.15	45.7302	37	81	1471	
		444/5T	1185	283	113	G	535	2.1	2.3	93.6	94.1	94.1	0.74	0.80	0.85	1.15	87.2598	40	88	1874	
		447T*	890	290	116	G	713	1.7	2.0	93.0	93.6	93.6	0.73	0.80	0.83	1.15	103.621	30	66	2044	
		504/5T	890	290	116	G	713	1.7	2.0	93.0	93.6	93.6	0.73	0.80	0.83	1.15	103.621	30	66	2044	
		444/5TS	3570	320	128	F	217	2.0	2.5	92.4	94.1	94.5	0.84	0.90	0.91	1.15	33.5078	75	165	1689	
150	110	444/5T	1780	335	134	G	436	2.2	2.3	94.1	95.0	95.0	0.81	0.86	0.87	1.15	57.1628	33	73	1665	
		447T*	1185	343	137	G	654	2.2	2.2	94.5	95.0	95.0	0.74	0.82	0.85	1.15	103.621	40	88	1969	
		504/5T	1185	343	137	G	654	2.2	2.2	94.5	95.0	95.0	0.74	0.82	0.85	1.15	103.621	40	88	1969	
		447T*	890	355	142	G	871	1.7	2.0	93.0	93.6	93.6	0.72	0.80	0.83	1.15	125.436	18	40	2273	
		504/5T	890	355	142	G	871	1.7	2.0	93.0	93.6	93.6	0.72	0.80	0.83	1.15	125.436	18	40	2273	
		447TS*	3570	435	174	G	296	2.2	2.6	93.6	94.5	95.0	0.85	0.90	0.91	1.15	44.677	74	163	1874	
200	150	504/5TS	3570	435	174	G	296	2.2	2.6	93.6	94.5	95.0	0.85	0.90	0.91	1.15	44.677	74	163	1874	
		447T*	1780	460	184	G	594	2.3	2.4	94.1	95.0	95.0	0.80	0.84	0.86	1.15	70.5008	23	51	1996	
		504/5T	1780	460	184	G	594	2.3	2.4	94.1	95.0	95.0	0.80	0.84	0.86	1.15	70.5008	23	51	1996	
		447T*	1185	473	189	G	892	2.4	2.4	94.5	95.0	95.0	0.73	0.80	0.84	1.15	125.436	32	70	2269	
		504/5T	1185	473	189	G	892	2.4	2.4	94.5	95.0	95.0	0.73	0.80	0.84	1.15	125.436	32	70	2269	
		586/7T	890	525	210	G	1188	1.0	2.1	93.6	94.1	94.5	0.60	0.71	0.76	1.00	350.2194	65	143	3815	
250	185	447TS*	3570	535	214	G	365	2.0	2.5	93.6	95.4	95.4	0.88	0.90	0.91	1.15	51.3786	34	75	2068	
		504/5TS	3570	535	214	G	365	2.0	2.5	93.6	95.4	95.4	0.88	0.90	0.91	1.15	51.3786	34	75	2068	
		447T*	1780	565	226	G	732	2.1	2.3	94.5	95.0	95.4	0.81	0.85	0.86	1.15	89.555	22	48	2315	
		504/5T	1780	565	226	G	732	2.1	2.3	94.5	95.0	95.4	0.81	0.85	0.86	1.15	89.555	22	48	2315	
		5008T*	1190	560	224	G	1096	1.7	2.4	94.7	95.3	95.1	0.73	0.82	0.86	1.15	190.5571	15	33	2977	
		586/7T	1190	610	244	G	1096	1.8	2.1	93.0	94.1	95.0	0.68	0.76	0.80	1.15	226.1775	74	163	3605	
300	220	586/7TS	890	635	254	G	1465	1.0	2.1	93.6	94.1	95.0	0.60	0.71	0.77	1.15	387.4767	26	57	4245	
		5008TS*	3570	688	275	F	434	1.8	2.5	92.3	94.0	94.5	0.77	0.84	0.85	1.15	62.3031	32	70	3153	
		586/7TS	3570	650	260	G	434	1.1	2.0	94.1	95.0	95.4	0.87	0.88	0.89	1.15	122.7091	34	75	2977	
		586/7T	1790	673	269	G	866	1.8	2.1	94.5	95.0	95.4	0.81	0.85	0.86	1.15	176.9459	56	123	3440	
		5008T*	1785	685	274	G	869	2.0	3.0	93.5	94.7	95.0	0.73	0.81	0.85	1.15	97.8877	25	55	2677	
		5008T*	1190	660	264	G	1303	1.6	2.1	95.3	95.5	95.1	0.78	0.84	0.87	1.15	222.3167	15	33	3343	
350	260	586/7T	1190	728	291	G	1303	1.8	2.1	93.0	94.1	95.0	0.69	0.76	0.80	1.15	277.0674	75	165	4090	
		586/7T*	890	755	302	G	1742	1.0	2.0	93.6	94.1	95.0	0.60	0.62	0.77	1.15	461.9914	24	53	4476	
		5008TS*	3570	1995	798	F	513	1.8	2.5	93.4	94.8	95.1	0.79	0.85	0.86	1.15	71.2019	61	134	3169	
		586/7TS	3570	768	307	G	513	1.0	2.0	94.1	95.0	95.4	0.87	0.88	0.89	1.15	136.3435	35	77	3208	
		586/7T	1790	795	318	G	1024	1.8	2.1	94.5	95.0	95.4	0.81	0.85	0.86	1.15	185.7932	38	84	3903	
		5008T*	1785	783	313	F	1027	2.0	2.8	94.3	95.2	95.3	0.77	0.84	0.87	1.15	111.8715	21	46	2930	
400	300	5008T*	1190	780	312	G	1540	1.6	2.0	95.7	95.7	95.1	0.80	0.86	0.87	1.15	254.0771	15	33	3722	
		586/7T	1190	855	342	G	1540	1.8	2.0	93.0	94.1	95.4	0.70	0.77	0.80	1.15	327.9573	73	161	4322	
		586/7T*	890	880	352	G	2059	1.1	2.0	93.6	94.1	95.0	0.60	0.64	0.78	1.00	484.3459	25	55	4631	
		586/7T	1790	918	367	G	1181	1.8	2.0	94.5	95.0	95.4	0.81	0.85	0.86	1.15	199.0641	34	75	4289	
		5008T*	1785	885	354	F	1184	2.0	2.7	94.7	95.4	95.4	0.79	0.85	0.88	1.15	125.8556	22	48	3206	
		586/7T	1790	1010	404	G	1299	1.8	2.0	94.5	95.0	95.4	0.81	0.85	0.86	1.15	221.1824	32	70	4807	
450	330	5008T*	1785	988	395	F	1303	2.0	2.7	95.0	95.6	95.6	0.80	0.86	0.88	1.10	139.8395	22	48	3468	
		586/7T*	1190	1085	434	G	1954	1.5	2.1	93.0	94.1	95.4	0.70	0.78	0.80	1.00	367.5384	34	75	4851	
500	370	586/7T	1790	1128	451	G	1457	1.8	2.1	94.5	95.4	95.8	0.82	0.85	0.86	1.00	265.4189	35	77	5027	

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

* Valid only for General Purpose



Top Premium Efficiency Motors -

Design "B"

Valid for: General Purpose Motors

Top Premium Efficiency
Meets EPACT, CEE &
Bonneville Eff. Levels

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor Current	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η%			Power Factor Cos ϕ			Service Factor S F	Moment of Inertia Wk ²	Allowable Locked Rotor Time Hot/Cold	Approx. Weight Lb	
HP	KW			In A	kVA	Tn	Tl/Tn	Tb/Tn		50	75	100	50	75	100					
				At 230V	At 575V	Code	Lb.Ft													
1.0	0.75	143T	3495	2.73	1.09	L	1.51	3.0	4.0	78.5	82.5	84.0	0.65	0.76	0.82	1.25	0.03735	40	88	40
		143T	1765	2.85	1.14	L	2.99	2.9	4.0	80.0	84.0	85.5	0.58	0.71	0.77	1.25	0.09312	20	44	44
		145T	1165	3.40	1.36	L	4.54	2.3	3.0	81.5	84.0	84.0	0.45	0.57	0.66	1.25	0.13303	13	29	44
		182T	875	4.60	1.84	M	6.04	3.0	3.5	74.0	77.0	78.5	0.32	0.42	0.52	1.25	0.39926	22	48	95
1.5	1.1	143T	3495	3.85	1.54	L	2.22	3.0	4.0	80.0	85.5	86.5	0.65	0.86	0.83	1.25	0.04312	20	44	42
		145T	1760	4.00	1.60	L	4.40	2.7	3.8	84.0	85.5	86.5	0.63	0.74	0.80	1.25	0.11972	15	33	51
		182T	1165	4.78	1.91	M	6.65	3.2	4.0	84.0	86.5	87.5	0.45	0.56	0.66	1.25	0.44363	16	35	64
		184T	860	5.40	2.16	J	9.01	2.5	2.6	80.0	82.5	82.5	0.43	0.54	0.62	1.25	0.44363	17	37	111
2.0	1.5	145T	3480	5.25	2.10	L	3.04	3.5	4.0	84.0	85.5	86.5	0.68	0.77	0.83	1.25	0.04886	21	46	44
		145T	1750	5.25	2.10	K	6.04	2.5	3.2	85.5	87.5	86.5	0.66	0.77	0.83	1.25	0.13303	12	26	53
		184T	1165	6.45	2.58	L	9.07	3.0	3.0	86.5	88.5	88.5	0.46	0.58	0.66	1.25	0.53236	31	68	75
		213T	870	6.88	2.75	L	12.20	2.4	2.9	82.5	85.5	85.5	0.45	0.51	0.64	1.25	1.19089	16	35	141
3.0	2.2	182T	3500	7.10	2.84	K	4.43	2.5	4.0	82.5	85.5	87.5	0.79	0.86	0.89	1.25	0.15443	43	95	90
		182T	1765	7.53	3.01	J	8.78	2.5	3.2	87.5	89.5	89.5	0.67	0.77	0.82	1.25	0.31782	33	73	88
		213T	1170	8.35	3.34	J	13.3	2.2	2.5	88.5	89.5	89.5	0.58	0.68	0.74	1.25	1.01192	58	128	110
		215T	860	8.65	3.46	K	18.0	2.0	2.1	84.0	85.5	84.0	0.60	0.71	0.76	1.25	1.78632	16	35	153
5.0	3.7	184T	3480	11.5	4.61	H	7.49	2.4	3.5	87.5	88.5	89.5	0.84	0.89	0.90	1.25	0.19988	29	64	105
		184T	1750	12.4	4.94	J	14.9	2.1	3.0	88.5	90.2	89.5	0.73	0.81	0.84	1.25	0.38136	20	44	93
		215T	1160	13.7	5.46	H	22.5	1.9	2.1	89.5	90.2	89.5	0.63	0.73	0.76	1.25	1.47173	48	106	162
		254T	880	15.8	6.31	H	29.6	2.1	2.9	83.4	86.0	86.6	0.46	0.59	0.68	1.25	2.89729	21	46	218
7.5	5.5	213T	3510	17.3	6.90	G	11.0	2.3	2.8	89.5	90.2	91.0	0.82	0.87	0.88	1.25	0.57664	26	57	121
		213T	1765	17.9	7.17	G	22.0	2.0	2.4	91.0	91.7	91.7	0.72	0.81	0.84	1.25	1.1959	16	35	146
		254T	1170	19.3	7.72	H	33.1	2.3	3.1	89.5	91.0	91.7	0.58	0.71	0.78	1.25	2.386	11	24	236
		256T	875	23.4	9.35	H	44.3	2.0	2.8	84.2	86.6	86.9	0.49	0.60	0.68	1.25	3.40858	23	51	276
10	7.5	215T	3500	23.1	9.23	G	15.1	2.0	2.6	91.0	91.7	91.7	0.80	0.88	0.89	1.25	0.75414	17	37	160
		215T	1765	24.3	9.70	H	29.9	2.3	2.6	91.7	92.4	92.4	0.73	0.81	0.84	1.25	1.3799	17	37	152
		256T	1170	26.3	10.5	J	45.2	2.3	2.9	90.2	91.7	91.7	0.60	0.67	0.78	1.25	2.89729	22	48	279
		284T	880	27.3	10.9	H	60.1	2.5	2.4	91.0	91.7	91.0	0.58	0.70	0.76	1.25	7.19918	53	117	373
15	11	254T	3520	33.8	13.5	F	22.0	2.0	2.7	91.0	91.7	91.7	0.85	0.88	0.89	1.25	1.25653	33	73	254
		254T	1765	35.0	14.0	G	43.9	2.5	2.5	92.4	93.0	93.0	0.73	0.81	0.85	1.25	2.1436	27	59	240
		284T	1180	34.3	13.7	G	65.7	2.3	2.5	91.7	92.4	92.4	0.78	0.84	0.87	1.25	7.19918	33	73	306
		286T	880	38.0	15.2	G	88.1	2.4	2.3	91.0	91.7	91.0	0.66	0.76	0.80	1.25	8.18089	37	81	423
20	15	256T	3520	45.8	18.3	G	30.0	2.0	2.5	91.7	92.4	92.4	0.85	0.89	0.89	1.25	1.53576	25	55	287
		256T	1765	47.0	18.8	G	59.9	2.5	2.5	92.4	93.0	93.0	0.75	0.83	0.86	1.25	2.38178	19	42	273
		286T	1175	46.8	18.7	G	90.0	2.3	2.5	93.0	93.0	92.4	0.79	0.85	0.87	1.25	8.18089	31	68	430
		324T	880	55.0	22.0	G	120	2.3	2.3	91.7	92.4	92.4	0.56	0.67	0.74	1.25	9.36495	25	55	512
25	18.5	284TS	3520	56.8	22.7	G	37.0	2.2	2.8	91.7	92.4	93.0	0.82	0.86	0.88	1.25	2.89729	58	128	313
		284T	1775	59.8	23.9	G	73.5	2.3	2.3	92.4	93.6	93.6	0.71	0.80	0.83	1.25	4.68264	35	77	364
		324T	1175	59.5	23.8	F	111	2.2	2.4	93.0	93.6	93.0	0.71	0.80	0.84	1.25	10.2163	56	123	527
		326T	880	70.8	28.3	G	148	2.6	2.9	91.0	92.4	92.4	0.51	0.63	0.71	1.25	11.919	20	44	587
30	22	286TS	3530	66.8	26.7	G	43.9	2.4	3.0	91.7	93.0	93.0	0.85	0.89	0.89	1.25	3.57901	65	143	388
		286T	1775	70.3	28.1	F	87.4	2.5	2.3	93.0	93.6	93.6	0.75	0.82	0.84	1.25	5.32122	53	117	408
		326T	1175	71.0	28.4	G	132	2.3	2.5	93.0	93.6	93.6	0.68	0.78	0.83	1.25	11.919	35	77	580
		364/5T	885	77.0	30.8	G	175	2.2	2.2	92.4	93.0	93.0	0.64	0.73	0.77	1.25	23.4554	14	31	882
40	30	324TS	3550	89.5	35.8	G	59.6	2.2	2.2	92.4	93.6	93.6	0.86	0.89	0.90	1.25	4.89559	46	101	516
		324T	1770	94.8	37.9	G	119	2.3	2.3	93.0	94.5	94.5	0.75	0.82	0.84	1.25	7.85366	25	55	542
		364/5T	1175	94.3	37.7	G	180	2.3	2.3	93.6	94.1	94.1	0.75	0.82	0.85	1.25	23.4554	24	53	882
		364/5T	885	105	41.8	G	239	2.2	2.2	93.0	93.6	93.6	0.64	0.73	0.77	1.25	29.0401	15	33	953
50	37	326TS	3550	111	44.4	F	73.5	2.1	2.1	92.4	93.6	94.1	0.86	0.88	0.89	1.25	5.32131	33	73	549
		326T	1770	117	46.8	G	147	2.2	2.3	94.1	94.5	94.5	0.75	0.82	0.84	1.25	9.1626	22	48	595
		364/5T	1180	116	46.4	G	221	2.5	2.7	94.1	94.5	94.1	0.73	0.81	0.85	1.25	29.0401	31	68	882
		404/5T	885	136	54.4	G	295	2.2	2.1	92.4	93.0	93.6	0.67	0.73	0.73	1.25	32.3908	11	24	1140
60	45	364/5TS	3560	134	53.4	G	89.1	2.0	2.5	92.4	93.6	94.1	0.79	0.86	0.90	1.25	8.51359	19	42	807
		364/5T	1770	138	55.3	F	179	2												

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current In A		Locked Rotor Current	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η%			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold Lb.Ft² (s)	Approx. Weight Lb	
HP	KW			At 230V	At 575V	Code	kVA	Tn	Tl/Tn	Tb/Tn	50	75	100	50	75	100				
% of full load																				
150	110	444/5TS	3570	323	129	F	217	2.0	2.5	93.6	95.0	95.4	0.83	0.89	0.90	1.15	33.5078	31	68	1689
		444/5T	1780	335	134	G	436	2.2	2.3	95.0	95.8	95.8	0.80	0.85	0.86	1.15	57.1628	22	48	1665
		504/5T	1185	343	137	G	654	2.2	2.2	95.0	95.8	95.8	0.74	0.82	0.85	1.15	103.621	18	40	1969
		504/5T	890	358	143	G	871	1.7	2.0	94.5	95.0	94.5	0.71	0.79	0.82	1.15	125.436	18	40	2273
		504/5TS	3570	443	177	G	296	2.2	2.6	94.1	95.4	95.8	0.84	0.88	0.89	1.15	44.677	37	81	1874
200	150	504/5T	1780	455	182	G	594	2.3	2.4	95.8	96.2	96.2	0.78	0.84	0.86	1.15	70.5008	25	55	1996
		504/5T	1185	468	187	G	892	2.4	2.4	94.5	95.4	95.8	0.72	0.79	0.84	1.15	125.436	30	66	2269
		586/7T	890	523	209	G	1188	1.0	2.1	94.1	94.5	95.0	0.60	0.71	0.76	1.15	350.2193	28	62	3815
		504/5TS	3580	538	215	G	364	2.0	2.5	95.0	95.4	95.8	0.87	0.89	0.90	1.15	50.2617	34	75	2068
250	185	504/5T	1780	568	227	G	732	2.1	2.3	95.4	96.2	96.2	0.80	0.84	0.85	1.15	89.555	30	66	2216
		586/7T	1190	605	242	G	1096	1.8	2.1	93.6	95.0	95.4	0.67	0.75	0.80	1.15	226.1775	33	73	3605
		586/7T	890	633	253	G	1465	1.0	2.1	94.1	94.5	95.4	0.60	0.71	0.77	1.15	387.4767	26	57	4242
		586/7TS	3570	655	262	G	434	1.1	2.0	94.5	95.4	95.8	0.86	0.87	0.88	1.15	122.7091	34	75	2977
300	220	586/7T	1790	675	270	G	866	1.8	2.1	95.0	95.8	96.2	0.80	0.84	0.85	1.15	176.9459	26	57	3440
		586/7T	1190	703	281	G	1303	1.8	2.1	93.6	95.0	95.4	0.68	0.75	0.82	1.15	277.0674	35	77	4090
		586/7T	890	753	301	G	1742	1.0	2.0	94.1	94.5	95.4	0.60	0.62	0.77	1.15	461.9914	24	53	4476
		586/7TS	3570	775	310	G	513	1.0	2.0	94.5	95.4	95.8	0.86	0.87	0.88	1.15	136.3435	35	77	3208
350	260	586/7T	1790	798	319	G	1024	1.8	2.1	95.0	95.8	96.2	0.80	0.84	0.85	1.15	185.7932	24	53	3903
		586/7T	1190	853	341	G	1540	1.8	2.0	93.6	95.0	95.8	0.69	0.76	0.80	1.15	327.9573	30	66	4326
		586/7T	890	878	351	G	2059	1.1	2.0	94.1	94.5	95.4	0.60	0.64	0.78	1.00	484.3459	25	55	4631
400	300	586/7T	1790	920	368	G	1181	1.8	2.0	95.0	95.8	96.2	0.80	0.84	0.85	1.15	199.0641	18	40	4289
		586/7T	1190	983	393	G	1777	1.8	2.0	93.6	95.0	95.8	0.69	0.77	0.80	1.15	367.5384	32	70	4564
450	330	586/7T	1790	1013	405	G	1299	1.8	2.0	95.0	95.8	96.2	0.80	0.84	0.85	1.15	221.1824	24	53	4807
		586/7T	1190	1080	432	G	1954	1.5	2.1	93.6	95.0	95.8	0.69	0.77	0.80	1.00	367.5384	34	75	4851
500	370	586/7T	1790	1135	454	G	1457	1.8	2.1	95.0	95.8	96.2	0.81	0.84	0.85	1.00	265.4189	25	55	5027

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.



Oil Well Pumping Motors - Design "D"

High Slip (5-8%)

Three-Phase Triple Rated Motors

Rated Output		NEMA Frame	RPM	Full Load Current 460V	Locked Rotor Current	Service Factor S F	Moment or Inertia Wk ² Lb . Ft ²	Approx. Weight Lb
HP	KW							
10/7.5/5	7.5/5.5/3.7	256T	1120/1120/1120	13/10/6.5	K	1.15	3.42	286
15/10/7.5	11/7.5/5.5	284T	1125/1125/1120	19/13/10	J	1.15	7.95	396
20/15/10	15/11/7.5	286T	1120/1115/1125	25/19/13	J	1.15	8.85	429
25/20/15	18.5/15/11	324T	1115/1115/1115	30/25/19	K	1.15	11	539
30/25/20	22/18.5/15	326T	1120/1120/1120	38/32/27	J	1.15	12.2	583
40/30/25	30/22/18.5	364/5T	1130/1130/1130	53/36/30	H	1.15	24	847
50/40/30	37/30/22	404/5T	1130/1130/1130	63/53/36	H	1.15	30	990

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

Three-Phase Single Rated Motors

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current In A		Locked Rotor Current KVA Code	Full Load Torque Tn Lb.Ft	Locked Rotor Torque Tl/Tn	Efficiency η %			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk ² Lb.Ft ²	Allowable Locked Rotor Time Hot/Cold (s)	Approx. Weight Lb	
HP	KW			At 230V	At 575V				50	75	100	50	75	100					
3.0	2.2	215T	1110	10.0	4.0	K	10.3259	4.0	70.0	74.0	75.7	0.55	0.65	0.73	1.15	21.1582	19	42	253
5.0	3.7	215T	1080	14.4	5.8	J	17.7015	3.8	77.5	78.1	77.5	0.68	0.77	0.83	1.15	31.7377	25	55	354
7.5	5.5	254T	1125	18.5	7.4	H	25.4459	4.0	80.1	85.3	85.6	0.75	0.83	0.87	1.15	70.5576	14	31	559
10	7.5	256T	1120	25.0	10.0	H	34.1491	3.3	82.0	84.9	85.6	0.75	0.84	0.88	1.15	101.9165	19	42	660
15	11	284T	1130	36.0	14.4	G	50.7442	4.0	83.0	86.9	87.1	0.76	0.84	0.88	1.15	165.5811	27	59	913
20	15	286T	1120	49.0	19.6	G	68.2244	3.2	82.0	87.0	87.3	0.78	0.85	0.88	1.15	180.6342	23	51	986
25	18.5	324T	1135	60.0	24.0	G	84.0820	3.2	85.0	88.0	88.9	0.75	0.83	0.87	1.15	244.7660	16	35	1236
30	22	326T	1135	71.0	28.4	G	101.0459	3.2	85.6	89.0	89.4	0.76	0.83	0.87	1.15	274.1370	16	35	1344
40	30	364/5T	1130	105	42.0	G	134.9737	2.9	85.0	87.0	87.5	0.75	0.80	0.82	1.15	616.5426	34	75	1848
50	37	404/5T	1135	124	49.6	G	168.1639	3.0	84.0	87.0	88.1	0.74	0.81	0.85	1.15	847.7478	18	40	2275
60	45	404/5T	1140	157	62.8	G	201.3542	3.0	85.0	88.0	89.0	0.73	0.79	0.81	1.15	847.7478	28	62	2959
75	55	444/5T	1130	180	72.0	F	253.7210	3.0	80.0	86.0	87.0	0.80	0.85	0.88	1.15	1693.3865	73	161	3397
100	75	444/5T	1125	240	96.0	G	340.0156	3.0	86.0	89.0	88.0	0.83	0.87	0.89	1.00	2383.2830	51	112	4099

Notes: Guaranteed data within the permissible tolerances under MG 1-12
The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

Saw Arbor Motors Single and Double Shaft end

Rated Output		IEC Frame	Rated Speed rpm	Full Load Current In A		Locked Rotor Current KVA Code	Full Load Torque Tn Lb.Ft	Break-Down Torque Tb/Tn	Approx. Weight Lb
HP	KW			At 230V	At 575V				
3.0	2.2	80S-MS	3500	9.6	3.8	J	6.0	3.7	95
5.0	3.7	80S-MS	3500	14.0	5.7	H	10.0	4.2	106
7.5	5.5	80L-MS	3500	21.0	8.5	L	15.1	4.8	128
10	7.5	90L-MS	3470	26.0	11.0	K	20.2	4.2	154

* IV Pole Motors, only on request.

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

Close - Coupled Pump Motors ODP (JM and JP type)

Premium Efficiency



Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η%			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold Lb.Ft² (s)	Approx. Weight Lb
HP	KW			In A		kVA	Tn	Tl/Tn	Tb/Tn	50	75	100	50	75	100				
				At 460V	At 575V	Code	Lb.Ft												
1.0	0.75	E143 JM or JP	1730	2.82	1.13	M	3.06	3.3	3.2	80.0	81.5	82.5	0.61	0.74	0.81	1.15	0.12719	10 22	33
1.5	1.1	E143 JM or JP	3405	3.90	1.56	K	2.28	3.0	3.5	80.0	81.5	82.5	0.70	0.80	0.86	1.15	0.04518	15 33	29
		E145 JM or JP	1730	3.96	1.58	K	4.48	3.5	3.2	82.5	84.0	84.0	0.64	0.76	0.83	1.15	0.14537	11 24	37
2.0	1.5	E145 JM or JP	3410	5.04	2.02	L	3.10	3.0	3.5	81.5	82.5	84.0	0.78	0.86	0.89	1.15	0.0616	12 26	40
		E145 JM or JP	1715	5.16	2.06	L	6.16	3.0	3.0	82.5	84.0	84.0	0.71	0.82	0.87	1.15	0.16352	10 22	40
3.0	2.2	F145 JM or JP	3400	7.30	2.92	K	4.56	3.5	3.4	81.5	82.5	84.0	0.80	0.88	0.90	1.15	0.07392	9 20	46
		182 JM or JP	1760	7.88	3.15	K	8.81	2.4	3.0	82.5	85.5	86.5	0.62	0.74	0.81	1.15	0.25424	14 31	47
5.0	3.7	182 JM or JP	3480	12.3	4.94	J	7.49	2.0	2.9	84.0	85.5	85.5	0.75	0.83	0.88	1.15	0.12719	12 26	48
		184 JM or JP	1755	12.8	5.11	J	14.9	2.1	3.0	84.0	86.5	87.5	0.66	0.77	0.83	1.15	0.31782	13 29	60
7.5	5.5	184 JM or JP	3485	17.9	7.18	J	11.1	2.3	3.0	86.5	87.5	87.5	0.78	0.85	0.88	1.15	0.16352	11 24	60
		213 JM or JP	1755	18.8	7.52	H	22.1	1.8	2.5	85.5	87.5	88.5	0.68	0.78	0.83	1.15	0.68995	8 18	72
10	7.5	213 JM or JP	3500	23.6	9.44	H	15.1	2.2	2.3	86.5	88.5	88.5	0.78	0.86	0.90	1.15	0.44363	12 26	95
		215 JM or JP	1760	25.4	10.2	H	30.0	1.8	2.3	86.5	88.5	89.5	0.67	0.78	0.83	1.15	1.01192	9 20	96
15	11	215 JM or JP	3500	34.2	13.7	G	22.1	2.1	3.1	88.5	89.5	89.5	0.84	0.89	0.90	1.15	0.57673	14 31	126
		254 JM or JP	1765	37.4	15.0	G	43.9	2.2	2.5	89.5	90.2	91.0	0.65	0.75	0.81	1.15	1.54815	14 31	221
20	15	254 JM or JP	3530	49.2	19.7	G	29.9	2.0	2.5	88.5	90.2	90.2	0.75	0.80	0.85	1.15	0.73297	10 22	179
		256 JM or JP	1765	50.4	20.2	G	59.9	2.2	2.5	89.5	89.5	91.0	0.66	0.77	0.82	1.15	1.90542	12 26	273
25	18.5	256 JM or JP	3530	58.6	23.4	G	36.9	2.0	2.5	89.5	90.2	91.0	0.76	0.85	0.87	1.15	0.90748	10 22	225
		284 JM or JP	1765	61.8	24.7	G	73.9	2.5	3.0	90.2	91.7	91.7	0.63	0.76	0.82	1.15	2.66066	13 29	293
30	22	284 JM or JP	3540	66.0	26.4	F	43.8	2.0	2.7	90.2	91.7	92.4	0.84	0.89	0.90	1.15	2.386	12 26	333
		286 JM or JP	1770	71.2	28.5	G	87.6	2.5	3.1	90.2	91.7	92.4	0.75	0.81	0.84	1.15	3.40563	13 29	379
40	30	286 JM or JP	3535	89.6	35.8	G	59.8	1.8	2.4	91.7	92.4	92.4	0.85	0.90	0.91	1.15	2.98251	10 22	417
		324 JM or JP	1765	96.4	38.6	E	120	1.8	2.0	91.7	92.4	93.0	0.74	0.82	0.84	1.15	5.07214	21 46	450
50	37	324 JM or JP	3550	110.2	44.1	F	73.5	2.0	2.7	91.7	93.0	93.6	0.80	0.88	0.90	1.15	3.51206	24 53	478
		326 JM or JP	1765	117.4	47.0	F	148	2.0	2.1	92.4	93.0	93.0	0.74	0.82	0.85	1.15	6.05385	18 40	538
60	45	326 JM or JP	3550	133.4	53.4	F	89.3	2.0	2.8	92.4	93.6	94.1	0.82	0.88	0.90	1.15	4.15061	19 42	564
		364/5 JM or JP	1770	140.4	56.2	G	179	2.2	2.6	91.7	93.0	93.6	0.74	0.84	0.86	1.15	12.4559	16 35	633
75	55	364/5 JM or JP	3550	161.2	64.5	F	109	1.8	2.8	93.0	94.1	94.1	0.84	0.90	0.91	1.15	6.81087	15 33	695
		364/5 JM or JP	1780	170.6	68.2	F	218	2.4	2.8	93.0	93.6	94.1	0.74	0.82	0.86	1.15	16.1927	17 37	825
100	75	364/5 JM or JP	3550	220	88.0	F	149	1.9	3.0	93.6	94.1	94.1	0.86	0.91	0.91	1.15	8.30075	13 29	825
		404/5 JP	1775	230	92.0	G	298	2.4	2.5	93.0	93.6	94.1	0.74	0.84	0.87	1.15	19.5143	10 22	882
125	90	404/5 JP	3555	264	105.6	F	178	1.8	3.0	93.6	94.1	94.1	0.87	0.91	0.91	1.15	9.36495	11 24	931
		404/5 JP	1775	274	109.6	F	357	2.4	2.6	93.0	94.1	94.5	0.75	0.84	0.87	1.15	20.7599	11 24	1052
150	110	404/5 JP	3555	318	127.2	F	218	2.1	3.2	93.6	94.1	94.5	0.87	0.91	0.92	1.15	10.2163	10 22	1014

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.



Close - Coupled Pump Motors TEFC (JM and JP type)

Standard Efficiency

ELECTRICAL DATA

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current In A		Locked Rotor Current kVA	Full Load Torque Tn	Locked Rotor Torque Tl/Tn	Break-Down Torque Tb/Tn	Efficiency %			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold Lb.Ft² (s)	Approx. Weight Lb	
				At 230V	At 575V					Code	Lb.Ft	Tl/Tn	Tb/Tn	50	75	100				
1.0	0.75	143 JM or JP	1720	3.32	1.33	J	3.07	2.8	3.0	68.0	74.0	75.5	0.53	0.65	0.75	1.15	0.0798	6	13	33
1.5	1.1	143 JM or JP	3435	4.09	1.64	H	2.26	2.1	2.6	74.0	77.0	78.5	0.78	0.84	0.86	1.15	0.03735	9	20	37
1.5	1.1	145 JM or JP	1710	4.69	1.88	J	4.53	2.5	2.9	72.0	77.0	80.0	0.53	0.63	0.75	1.15	0.0798	5	11	37
2.0	1.5	145 JM or JP	3430	5.41	2.16	H	3.08	2.2	2.4	75.5	78.5	80.0	0.76	0.83	0.87	1.15	0.03735	7	15	41
2.0	1.5	145 JM or JP	1720	6.32	2.53	J	6.15	3.0	3.0	74.0	78.5	81.5	0.58	0.69	0.75	1.15	0.11972	5	11	44
		182 JM or JP	3510	8.26	3.30	K	4.42	2.3	3.0	74.0	78.5	81.5	0.70	0.78	0.82	1.15	0.14537	6	13	79
3.0	2.2	W182/4 JM or JP3470	7.99	3.20	J	4.47	2.6	3.0	74.0	75.5	78.5	0.74	0.82	0.88	1.15	0.0798	6	13	42	
		#145 JM or JP	3450	8.10	3.24	J	4.49	2.8	3.0	77.5	79.3	78.4	0.73	0.83	0.87	1.15	0.04886	8	18	46
		182 JM or JP	1750	8.16	3.26	K	8.86	2.6	2.9	75.5	78.5	81.5	0.65	0.74	0.83	1.15	0.28602	5	11	64
		W182/4 JM or JP1720	8.42	3.37	J	9.01	2.7	2.8	77.0	78.5	80.0	0.63	0.74	0.82	1.15	0.14537	6	13	55	
		W182/4 JM or JP3490	12.9	5.16	K	7.47	3.0	3.5	75.5	80.0	82.5	0.73	0.82	0.87	1.15	0.13303	5	11	68	
5.0	3.7	182 JM or JP	3460	12.8	5.12	H	7.54	2.2	2.7	78.0	83.5	83.5	0.76	0.81	0.87	1.15	0.17252	9	20	79
		184 JM or JP	3460	12.8	5.12	H	7.54	2.2	2.7	78.0	83.5	83.5	0.76	0.81	0.87	1.15	0.17261	9	20	84
		182 JM or JP	1740	13.7	5.48	K	15.0	2.5	2.6	78.5	81.5	84.0	0.67	0.76	0.81	1.15	0.38134	5	11	88
		184 JM or JP	1740	13.9	5.56	K	15.0	2.5	2.6	78.5	81.5	84.0	0.67	0.76	0.81	1.15	0.38136	5	11	93
		W182/4 JM or JP1720	13.7	5.48	K	15.2	3.0	3.5	78.5	80.0	82.5	0.70	0.81	0.82	1.15	0.23621	6	13	73	
7.5	5.5	213 JM or JP	3500	18.5	7.40	H	11.1	2.0	2.8	80.0	82.5	84.0	0.79	0.86	0.89	1.15	0.39926	11	24	117
		#184 JM or JP	3490	19.1	7.64	J	11.1	2.4	3.4	83.0	85.1	85.2	0.73	0.80	0.85	1.15	0.19988	6	13	95
		213 JM or JP	1760	19.2	7.68	L	22.0	2.2	3.4	82.5	85.5	86.5	0.66	0.77	0.83	1.15	0.82794	4	9	117
10	7.5	213 JM or JP	3510	24.2	9.68	H	15.1	2.2	2.8	85.5	86.5	86.5	0.79	0.86	0.90	1.15	0.48798	6	13	132
		215 JM or JP	3510	24.5	9.80	H	15.1	2.2	2.8	84.0	85.5	85.5	0.79	0.86	0.90	1.15	0.48798	6	13	132
		W213/5 JP	3510	24.2	9.68	H	15.1	2.2	2.8	85.5	86.5	86.5	0.81	0.88	0.90	1.15	0.23621	8	18	135
		213 JM or JP	1760	28.1	11.2	J	30.0	2.3	3.0	80.8	83.8	86.9	0.71	0.75	0.77	1.15	1.01192	5	11	132
		215 JM or JP	1760	27.9	11.2	J	30.0	2.3	3.0	80.0	84.0	87.5	0.71	0.75	0.77	1.15	1.01192	5	11	132
15	11	254 JM or JP	3530	36.3	14.5	J	22.0	2.0	2.5	78.5	84.0	87.5	0.73	0.82	0.87	1.15	0.90748	10	22	227
		#215 JM or JP	3500	34.3	13.7	K	22.1	2.3	2.4	88.2	89.3	89.4	0.84	0.88	0.90	1.15	0.66546	4	9	163
		254 JM or JP	1760	37.1	14.8	G	44.0	2.0	2.3	85.5	87.5	88.5	0.70	0.80	0.84	1.15	1.54815	11	24	216
20	15	#254 JM or JP	3540	49.5	19.8	J	29.9	2.1	3.0	87.5	88.5	88.5	0.75	0.84	0.86	1.15	1.11673	7	15	247
		256 JM or JP	3540	49.5	19.8	J	29.9	2.1	3.0	87.5	88.5	88.5	0.75	0.84	0.86	1.15	1.11692	7	15	251
		256 JM or JP	1760	51.3	20.5	G	60.1	2.1	2.3	86.5	87.5	88.5	0.68	0.79	0.83	1.15	1.90542	9	20	247
25	18.5	284 JM or JP	3540	59.0	23.6	H	36.8	2.3	3.0	85.5	87.5	88.5	0.84	0.88	0.89	1.15	2.386	6	13	306
		#256 JM or JP	3525	58.3	23.3	J	37.0	2.7	3.0	89.5	90.5	90.5	0.78	0.85	0.88	1.15	1.25653	8	18	280
		284 JM or JP	1760	60.4	24.2	J	74.1	2.4	2.2	88.5	89.5	90.2	0.79	0.84	0.86	1.15	3.40563	6	13	273
30	22	#284 JM or JP	3530	69.3	27.7	J	43.9	3.0	2.7	80.0	85.6	88.5	0.86	0.88	0.90	1.15	2.8972	6	13	364
		286 JM or JP	3530	68.6	27.4	H	43.9	2.8	3.0	85.5	87.5	89.5	0.83	0.88	0.90	1.15	2.8972	10	22	368
		286 JM or JP	1765	70.6	28.2	J	87.8	2.8	2.5	88.5	89.5	91.0	0.77	0.83	0.86	1.15	3.83133	6	13	351
40	30	324 JM or JP	3560	94.0	37.6	J	59.4	2.9	2.5	85.0	89.5	91.0	0.80	0.85	0.88	1.15	4.04419	10	22	397
		#286 JM or JP	3550	94.8	37.9	K	59.6	3.0	3.0	88.0	89.5	90.3	0.84	0.87	0.88	1.00	3.40858	7	15	364
		324 JM or JP	1770	96.6	38.6	H	119	2.6	2.5	89.5	91.0	91.7	0.74	0.82	0.85	1.15	6.54471	14	31	467
50	37	#324 JM or JP	3560	114	45.6	J	73.2	3.2	3.0	89.0	91.1	92.2	0.80	0.85	0.88	1.15	4.89559	10	22	507
		326 JM or JP	3560	114	45.6	J	73.2	3.2	3.0	88.5	91.0	92.4	0.80	0.85	0.88	1.15	4.89559	10	22	507
		326 JM or JP	1770	118	47.2	G	147	2.3	2.4	90.2	91.7	91.7	0.76	0.83	0.86	1.15	7.85366	12	26	540
60	45	364/5 JP	3560	138	55.2	J	89.1	2.5	2.5	86.5	90.2	91.0	0.82	0.87	0.90	1.15	7.23653	9	20	807
		#326 JM or JP	3555	136	54.4	H	89.2	3.0	2.8	90.3	91.4	92.0	0.86	0.88	0.90	1.15	5.32131	19	42	595
		#326 JM or JP	1770	145	58.0	H	179	2.2	2.4	90.2	91.7	91.7	0.75	0.82	0.85	1.15	9.1626	6	13	595
75	55	364/5 JM or JP	3560	168	67.2	J	109	2.8	3.0	89.5	91.7	92.4	0.81	0.87	0.89	1.15	9.36495	7	15	847
		364/5 JM or JP	1775	170	68.0	J	218	2.2	2.6	89.5	91.7	92.4	0.82	0.86	0.88	1.15	16.6079	7	15	836
100	75	404/5 JP	3560	225	90.0	K	148	2.4	2.8	90.2	92.4	93.0	0.83	0.88	0.90	1.15	11.919	7	15	977
		404/5 JP	1780	236	94.4	K	297	3.0	3.0	89.5	91.7	92.4	0.75	0.82	0.86	1.15	23.2511	5	11	975

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

Reduced Frames

Close - Coupled Pump Motors TEFC (JM and JP type) - Design "B"

Premium Efficiency



Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η%			Power Factor Cos ϕ			Service Factor S F	Moment of Inertia Wk ² Lb.Ft ²	Allowable Locked Rotor Time Hot/Cold (s)	Approx. Weight Lb	
HP	KW			In A		kVA	Tn	Tl/Tn	Tb/Tn	50	75	100	50	75	100					
				At 230V	At 575V	Code	Lb.Ft													
1.0	0.75	143 JM or JP	1765	2.90	1.16	L	2.99	2.8	3.9	75.5	80.0	82.5	0.60	0.73	0.79	1.25	0.09312	16	35	44
1.5	1.1	143 JM or JP	3495	3.98	1.59	L	2.22	3.0	4.0	75.5	81.5	82.5	0.69	0.78	0.84	1.25	0.04312	18	40	42
1.5	1.1	145 JM or JP	1760	4.00	1.60	L	4.40	2.6	3.7	80.0	82.5	84.0	0.65	0.76	0.82	1.25	0.11972	12	26	51
2	1.5	145 JM or JP	3480	5.20	2.08	L	3.04	3.5	4.0	80.0	82.5	84.0	0.70	0.81	0.86	1.25	0.04886	13	29	44
		145 JM or JP	1755	5.28	2.11	K	6.02	2.4	3.2	81.5	84.0	84.0	0.68	0.79	0.85	1.25	0.13303	12	26	53
		182 JM or JP	3500	7.18	2.87	K	4.43	2.5	4.0	80.0	82.5	85.5	0.80	0.87	0.90	1.25	0.15443	23	51	90
3	2.2	#145 JM or JP	3450	7.43	2.97	K	4.49	2.3	2.4	81.0	84.5	85.5	0.70	0.83	0.87	1.15	0.0546	6	13	51
		182 JM or JP	1765	7.80	3.12	K	8.78	2.3	3.2	85.5	87.5	87.5	0.65	0.75	0.81	1.25	0.31782	31	68	88
5	3.7	184 JM or JP	3480	11.7	4.67	H	7.49	2.4	3.5	85.5	86.5	87.5	0.85	0.90	0.91	1.25	0.19988	28	62	105
		184 JM or JP	1745	13.0	5.18	H	14.9	2.1	3.0	85.5	87.5	87.5	0.68	0.78	0.82	1.25	0.38136	21	46	93
7.5	5.5	213 JM or JP	3510	17.3	6.93	G	11.0	2.2	3.0	86.5	88.5	88.5	0.80	0.88	0.90	1.25	0.42144	25	55	121
		#184 JM or JP	3460	17.5	7.01	H	11.2	2.2	2.3	85.5	87.5	88.5	0.81	0.87	0.89	1.15	0.23621	15	33	119
10	7.5	213 JM or JP	1765	18.8	7.52	H	22.0	2.0	2.6	87.5	89.5	89.5	0.66	0.77	0.82	1.25	0.10192	21	46	137
		215 JM or JP	3500	23.1	9.25	G	15.1	2.0	2.6	88.5	89.5	89.5	0.86	0.90	0.91	1.25	0.66546	19	42	160
15	11	215 JM or JP	1765	25.5	10.2	H	29.9	2.0	2.6	88.5	90.2	90.2	0.69	0.79	0.82	1.25	1.3799	19	42	152
		254 JM or JP	3520	34.0	13.6	F	22.0	2.0	2.7	89.5	90.2	90.2	0.86	0.89	0.90	1.25	1.25653	33	73	254
20	15	#215 JM or JP	3500	34.5	13.8	F	22.1	2.0	2.2	89.0	90.2	90.2	0.80	0.87	0.89	1.15	0.66546	10	22	161
		254 JM or JP	1765	35.3	14.1	G	43.9	2.5	2.5	89.5	91.0	91.0	0.74	0.82	0.86	1.25	2.1436	26	57	240
25	18.5	#254 JM or JP	3520	46.5	18.6	G	30.0	1.8	2.2	89.5	90.5	90.2	0.86	0.90	0.90	1.25	1.39615	21	46	278
		256 JM or JP	3520	46.5	18.6	G	30.0	2.0	2.5	89.5	90.2	90.2	0.86	0.90	0.90	1.25	1.53576	21	46	287
30	22	#256 JM or JP	1765	47.5	19.0	G	59.9	2.5	2.5	89.5	91.0	91.0	0.76	0.84	0.87	1.25	2.38178	18	40	273
		#256 JM or JP	3530	56.8	22.7	G	36.9	2.0	2.2	90.2	91.0	91.0	0.83	0.88	0.90	1.15	1.53576	18	40	287
40	30	284 JM or JP	3520	56.8	22.7	G	37.0	2.2	2.8	90.2	91.0	91.0	0.86	0.90	0.90	1.25	2.89729	23	51	313
		284 JM or JP	1765	59.3	23.7	F	73.9	2.3	2.2	91.0	92.4	92.4	0.77	0.84	0.85	1.25	3.83133	51	112	351
50	37	#284 JM or JP	3530	67.5	27.0	G	43.9	2.4	3.0	90.2	91.0	91.0	0.85	0.90	0.90	1.25	3.57901	64	141	379
		286 JM or JP	3530	67.5	27.0	G	43.9	2.4	3.0	90.2	91.0	91.0	0.87	0.90	0.90	1.25	3.57901	60	132	388
60	45	286 JM or JP	1770	70.3	28.1	F	87.6	2.5	2.3	91.0	92.4	92.4	0.76	0.83	0.85	1.25	4.68274	47	103	397
		324 JM or JP	3550	90.3	36.1	G	59.6	2.2	2.2	90.2	91.7	91.7	0.87	0.90	0.91	1.25	4.89559	46	101	516
75	55	#286 JM or JP	3540	93.3	37.3	K	59.7	2.4	2.8	91.0	91.7	91.7	0.80	0.86	0.88	1.25	3.74934	22	48	408
		324 JM or JP	1770	95.3	38.1	G	119	2.3	2.3	91.7	93.0	93.0	0.76	0.83	0.85	1.25	7.85366	28	62	542
100	75	#324 JM or JP	3550	111	44.2	G	73.5	2.1	2.1	91.0	92.4	92.4	0.88	0.90	0.91	1.25	5.32131	33	73	520
		326 JM or JP	3550	111	44.2	G	73.5	2.1	2.1	91.0	92.4	92.4	0.88	0.90	0.91	1.25	5.32131	33	73	549
100	75	326 JM or JP	1770	116	46.2	G	147	2.3	2.3	92.4	93.6	93.6	0.77	0.83	0.86	1.25	9.1626	25	55	595
		364/5 JP or JP	3560	134	53.4	G	89.1	2.0	2.5	91.0	92.4	93.0	0.80	0.87	0.91	1.25	8.51359	61	134	807
100	75	#326 JM or JP	3540	138	55.2	G	89.6	2.2	2.0	91.0	92.4	93.0	0.83	0.87	0.88	1.15	5.32131	30	66	549
		#326 JM or JP	1770	142	56.8	G	179	2.1	2.3	91.7	93.6	93.6	0.75	0.83	0.85	1.25	9.16239	20	44	595
100	75	364/5 JM or JP	1770	136	54.2	F	179	2.1	2.2	92.4	93.6	93.6	0.83	0.87	0.89	1.25	17.4383	23	51	853
		364/5 JM or JP	3560	163	65.3	F	109	2.0	2.1	91.0	93.0	93.0	0.80	0.88	0.91	1.25	9.79062	46	101	915
100	75	364/5 JM or JP	1775	165	65.9	G	218	2.3	2.4	93.0	94.1	94.1	0.83	0.87	0.89	1.25	19.9295	22	48	900
		404/5 JP	3560	221	88.4	F	148	2.0	2.5	91.7	93.6	93.6	0.81	0.89	0.91	1.25	11.9189	38	84	1206
100	75	404/5 JP	1775	229	91.6	G	298	2.1	2.2	93.6	94.5	94.5	0.80	0.86	0.87	1.25	27.4031	18	40	1118

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

Reduced frames



P Base Motors (HP and HPH type)

Standard Efficiency

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor Current	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η%			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold	Approx. Weight Lb	
				In A	KVA	Tn	Tl/Tn	Tb/Tn		50	75	100	50	75	100					
HP	kW			At 230V	At 575V	Code	Lb.Ft													
1.0	0.75	143 HP	1720	3.32	1.33	J	3.07	2.8	3.0	68.0	74.0	75.5	0.53	0.65	0.75	1.15	0.0798	6	13	33
1.5	1.1	143 HP	3435	4.09	1.64	H	2.26	2.1	2.6	74.0	77.0	78.5	0.78	0.84	0.86	1.15	0.03735	9	20	37
1.5	1.1	145 HP	1710	4.69	1.88	J	4.53	2.5	2.9	72.0	77.0	80.0	0.53	0.63	0.75	1.15	0.0798	5	11	37
2.0	1.5	145 HP	3430	5.41	2.16	H	3.08	2.2	2.4	75.5	78.5	80.0	0.76	0.83	0.87	1.15	0.03735	7	15	41
2.0	1.5	145 HP	1720	6.32	2.53	J	6.15	3.0	3.0	74.0	78.5	81.5	0.58	0.69	0.75	1.15	0.11972	5	11	44
		182 HP	3510	8.26	3.30	K	4.42	2.3	3.0	74.0	78.5	81.5	0.70	0.78	0.82	1.15	0.14537	6	13	79
3.0	2.2	#145 HP	3450	8.10	3.24	J	4.49	2.8	3.0	77.5	79.3	78.4	0.73	0.83	0.87	1.15	0.04886	8	18	46
		182 HP	1750	8.16	3.26	K	8.86	2.6	2.9	75.5	78.5	81.5	0.65	0.74	0.83	1.15	0.28602	5	11	64
5.0	3.7	182 HP	3460	12.8	5.12	H	7.54	2.2	2.7	78.0	83.5	83.5	0.76	0.81	0.87	1.15	0.17252	9	20	79
5.0	3.7	184 HP	3460	12.8	5.12	H	7.54	2.2	2.7	78.0	83.5	83.5	0.76	0.81	0.87	1.15	0.17261	9	20	84
		182 HP	1740	13.7	5.48	K	15.0	2.5	2.6	78.5	81.5	84.0	0.67	0.76	0.81	1.15	0.38134	5	11	88
		184 HP	1740	13.9	5.56	K	15.0	2.5	2.6	78.5	81.5	84.0	0.67	0.76	0.81	1.15	0.38136	5	11	93
7.5	5.5	213 HP	3500	18.5	7.40	H	11.1	2.0	2.8	80.0	82.5	84.0	0.79	0.86	0.89	1.15	0.39926	11	24	117
		#184 HP	3490	19.1	7.64	J	11.1	2.4	3.4	83.0	85.1	85.2	0.73	0.80	0.85	1.15	0.19988	6	13	95
		213 HP	1760	19.2	7.68	L	22.0	2.2	3.4	82.5	85.5	86.5	0.66	0.77	0.83	1.15	0.82794	4	9	117
		213 HP	3510	24.2	9.68	H	15.1	2.2	2.8	85.5	86.5	86.5	0.79	0.86	0.90	1.15	0.48798	6	13	132
10	7.5	215 HP	3510	24.5	9.80	H	15.1	2.2	2.8	84.0	85.5	85.5	0.79	0.86	0.90	1.15	0.48798	6	13	132
		213 HP	1760	28.1	11.2	J	30.0	2.3	3.0	80.8	83.8	86.9	0.71	0.75	0.77	1.15	1.01192	5	11	132
		215 HP	1760	27.9	11.2	J	30.0	2.3	3.0	80.0	84.0	87.5	0.71	0.75	0.77	1.15	1.01192	5	11	132
		254 HP	3530	36.3	14.5	J	22.0	2.0	2.5	78.5	84.0	87.5	0.73	0.82	0.87	1.15	0.90748	10	22	227
15	11	#215 HP	3500	34.3	13.7	K	22.1	2.3	2.4	88.2	89.3	89.4	0.84	0.88	0.90	1.15	0.66546	4	9	163
		254 HP	1760	37.1	14.8	G	44.0	2.0	2.3	85.5	87.5	88.5	0.70	0.80	0.84	1.15	1.54815	11	24	216
		#254 HP	3540	49.5	19.8	J	29.9	2.1	3.0	87.5	88.5	88.5	0.75	0.84	0.86	1.15	1.11673	7	15	247
20	15	256 HP	3540	49.5	19.8	J	29.9	2.1	3.0	87.5	88.5	88.5	0.75	0.84	0.86	1.15	1.11692	7	15	251
		256 HP	1760	51.3	20.5	G	60.1	2.1	2.3	86.5	87.5	88.5	0.68	0.79	0.83	1.15	1.90542	9	20	247
		284 HP or HPH	3540	59.0	23.6	H	36.8	2.3	3.0	85.5	87.5	88.5	0.84	0.88	0.89	1.15	2.386	6	13	306
25	18.5	#256 HP	3525	58.3	23.3	J	37.0	2.7	3.0	89.5	90.5	90.5	0.78	0.85	0.88	1.15	1.25653	8	18	280
		284 HP or HPH	1760	60.4	24.2	J	74.1	2.4	2.2	88.5	89.5	90.2	0.79	0.84	0.86	1.15	3.40563	6	13	273
		#284 HP or HPH	3530	69.3	27.7	J	43.9	3.0	2.7	80.0	85.6	88.5	0.86	0.88	0.90	1.15	2.8972	6	13	364
30	22	286 HP or HPH	3530	68.6	27.4	H	43.9	2.8	3.0	85.5	87.5	89.5	0.83	0.88	0.90	1.15	2.8972	10	22	368
		286 HP or HPH	1765	70.6	28.2	J	87.8	2.8	2.5	88.5	89.5	91.0	0.77	0.83	0.86	1.15	3.83133	6	13	351
		324 HP	3560	94.0	37.6	J	59.4	2.9	2.5	85.0	89.5	91.0	0.80	0.85	0.88	1.15	4.04419	10	22	397
40	30	#286 HP or HPH	3550	94.8	37.9	K	59.6	3.0	3.0	88.0	89.5	90.3	0.84	0.87	0.88	1.00	3.40858	7	15	364
		324 HP	1770	96.6	38.6	H	119	2.6	2.5	89.5	91.0	91.7	0.74	0.82	0.85	1.15	6.54471	14	31	467
50	37	#324 HP	3560	114	45.6	J	73.2	3.2	3.0	89.0	91.1	92.2	0.80	0.85	0.88	1.15	4.89559	10	22	507
		326 HP	3560	114	45.6	J	73.2	3.2	3.0	88.5	91.0	92.4	0.80	0.85	0.88	1.15	4.89559	10	22	507
		326 HP	1770	118	47.2	G	147	2.3	2.4	90.2	91.7	91.7	0.76	0.83	0.86	1.15	7.85366	12	26	540
		364/5 HP	3560	138	55.2	J	89.1	2.5	2.5	86.5	90.2	91.0	0.82	0.87	0.90	1.15	7.23653	9	20	807
60	45	#326 HP	3555	136	54.4	H	89.2	3.0	2.8	90.3	91.4	92.0	0.86	0.88	0.90	1.15	5.32131	19	42	595
		364/5 HP	1775	139	55.6	G	179	2.3	2.6	90.2	91.0	91.7	0.82	0.87	0.89	1.15	12.4559	10	22	728
		#326 HP	1770	145	58.0	H	179	2.2	2.4	90.2	91.7	91.7	0.75	0.82	0.85	1.15	9.1626	6	13	595
75	55	364/5 HP	3560	168	67.2	J	109	2.8	3.0	89.5	91.7	92.4	0.81	0.87	0.89	1.15	9.36495	7	15	847
		364/5 HP	1775	170	68.0	J	218	2.2	2.6	89.5	91.7	92.4	0.82	0.86	0.88	1.15	16.6079	7	15	836
100	75	404/5 HP or HPH	3560	225	90.0	K	148	2.4	2.8	90.2	92.4	93.0	0.83	0.88	0.90	1.15	11.919	7	15	977
		404/5 HP or HPH	1780	236	94.4	K	297	3.0	3.0	89.5	91.7	92.4	0.75	0.82	0.86	1.15	23.2511	5	11	975

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

Reduced frames

P Base Motors (HP and HPH type) - Design "B"

Premium Efficiency



Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current In A		Locked Rotor Current kVA	Full Load Torque Tn	Locked Rotor Torque Tl/Tn	Break-Down Torque Tb/Tn	Efficiency η %			Power Factor Cos φ			Service Factor SF	Moment of Inertia Wk² Lb.Ft²	Allowable Locked Rotor Time Hot/Cold (s)	Approx. Weight Lb	
				At 230V	At 575V					Lb.Ft	Tb/Tn	50	75	100	50	75	100			
% of full load										50	75	100	50	75	100					
1.0	0.75	143 HP	1765	2.90	1.16	L	2.99	2.8	3.9	75.5	80.0	82.5	0.60	0.73	0.79	1.25	0.09312	16	35	44
		143 HP	3495	3.98	1.59	L	2.22	3.0	4.0	75.5	81.5	82.5	0.69	0.78	0.84	1.25	0.04312	18	40	42
1.5	1.1	145 HP	1760	4.00	1.60	L	4.40	2.6	3.7	80.0	82.5	84.0	0.65	0.76	0.82	1.25	0.11972	12	26	51
2.0	1.5	145 HP	3480	5.20	2.08	L	3.04	3.5	4.0	80.0	82.5	84.0	0.70	0.81	0.86	1.25	0.04886	13	29	44
		145 HP	1755	5.28	2.11	K	6.02	2.4	3.2	81.5	84.0	84.0	0.68	0.79	0.85	1.25	0.13303	12	26	53
		182 HP	3500	7.18	2.87	K	4.43	2.5	4.0	80.0	82.5	85.5	0.80	0.87	0.90	1.25	0.15443	23	51	90
3.0	2.2	#145 HP	3450	7.43	2.97	K	4.49	2.3	2.4	81.0	84.5	85.5	0.70	0.83	0.87	1.15	0.0546	6	13	51
		182 HP	1765	7.80	3.12	K	8.78	2.3	3.2	85.5	87.5	87.5	0.65	0.75	0.81	1.25	0.31782	31	68	88
5.0	3.7	184 HP	3480	11.7	4.67	H	7.49	2.4	3.5	85.5	86.5	87.5	0.85	0.90	0.91	1.25	0.19988	28	62	105
		184 HP	1745	13.0	5.18	H	14.9	2.1	3.0	85.5	87.5	87.5	0.68	0.78	0.82	1.25	0.38136	21	46	93
		213 HP	3510	17.3	6.93	G	11.0	2.2	3.0	86.5	88.5	88.5	0.80	0.88	0.90	1.25	0.42144	25	55	121
7.5	5.5	# 184 HP	3460	17.5	7.01	H	11.2	2.2	2.3	85.5	87.5	88.5	0.81	0.87	0.89	1.15	0.23621	15	33	119
		213 HP	1765	18.8	7.52	H	22.0	2.0	2.6	87.5	89.5	89.5	0.66	0.77	0.82	1.25	1.01192	21	46	137
10	7.5	215 HP	3500	23.1	9.25	G	15.1	2.0	2.6	88.5	89.5	89.5	0.86	0.90	0.91	1.25	0.66546	19	42	160
		215 HP	1765	25.5	10.2	H	29.9	2.0	2.6	88.5	90.2	90.2	0.69	0.79	0.82	1.25	1.3799	19	42	152
		254 HP	3520	34.0	13.6	F	22.0	2.0	2.7	89.5	90.2	90.2	0.86	0.89	0.90	1.25	1.25653	33	73	254
15	11	# 215 HP	3500	34.5	13.8	F	22.1	2.0	2.2	89.0	90.2	90.2	0.80	0.87	0.89	1.15	0.66546	10	22	161
		254 HP	1765	35.3	14.1	G	43.9	2.5	2.5	89.5	91.0	91.0	0.74	0.82	0.86	1.25	2.1436	26	57	240
20	15	# 254 HP	3520	46.5	18.6	G	30.0	1.8	2.2	89.5	90.5	90.2	0.86	0.90	0.90	1.25	1.39615	21	46	278
		256 HP	3520	46.5	18.6	G	30.0	2.0	2.5	89.5	90.2	90.2	0.86	0.90	0.90	1.25	1.53576	21	46	287
		256 HP	1765	47.5	19.0	G	59.9	2.5	2.5	89.5	91.0	91.0	0.76	0.84	0.87	1.25	2.38178	18	40	273
		# 256 HP	3530	56.8	22.7	G	36.9	2.0	2.2	90.2	91.0	91.0	0.83	0.88	0.90	1.15	1.53576	18	40	287
25	18.5	284 HP or HPH	3520	56.8	22.7	G	37.0	2.2	2.8	90.2	91.0	91.0	0.83	0.88	0.90	1.25	2.89729	23	51	313
		284 HP or HPH	1765	59.3	23.7	F	73.9	2.3	2.2	91.0	92.4	92.4	0.77	0.84	0.85	1.25	3.83133	51	112	351
		# 284 HP or HPH	3530	67.5	27.0	G	43.9	2.4	3.0	90.2	91.0	91.0	0.85	0.90	0.90	1.25	3.57901	64	141	379
30	22	286 HP or HPH	3530	67.5	27.0	G	43.9	2.4	3.0	90.2	91.0	91.0	0.87	0.90	0.90	1.25	3.57901	60	132	388
		286 HP or HPH	1770	70.3	28.1	F	87.6	2.5	2.3	91.0	92.4	92.4	0.76	0.83	0.85	1.25	4.68274	47	103	397
		324 HP	3550	90.3	36.1	G	59.6	2.2	2.2	90.2	91.7	91.7	0.87	0.90	0.91	1.25	4.89559	46	101	516
40	30	# 286 HP or HPH	3540	93.3	37.3	K	59.7	2.4	2.8	91.0	91.7	91.7	0.80	0.86	0.88	1.25	3.74934	22	48	408
		324 HP	1770	95.3	38.1	G	119	2.3	2.3	91.7	93.0	93.0	0.76	0.83	0.85	1.25	7.85366	28	62	542
		# 324 HP	3550	111	44.2	G	73.5	2.1	2.1	91.0	92.4	92.4	0.88	0.90	0.91	1.25	5.32131	33	73	520
50	37	326 HP	3550	111	44.2	G	73.5	2.1	2.1	91.0	92.4	92.4	0.88	0.90	0.91	1.25	5.32131	33	73	549
		326 HP	1770	116	46.2	G	147	2.3	2.3	92.4	93.6	93.6	0.77	0.83	0.86	1.25	9.1626	25	55	595
		364/5 HP	3560	134	53.4	G	89.1	2.0	2.5	91.0	92.4	93.0	0.80	0.87	0.91	1.25	8.51359	61	134	807
60	45	# 326 HP	3540	138	55.2	G	89.6	2.2	2.0	91.0	92.4	93.0	0.83	0.87	0.88	1.15	5.32131	30	66	549
		326 HP	1770	142	56.8	G	179	2.1	2.3	91.7	93.6	93.6	0.75	0.83	0.85	1.25	9.16239	20	44	595
		364/5 HP	1770	136	54.2	F	179	2.1	2.2	92.4	93.6	93.6	0.83	0.87	0.89	1.25	17.4383	23	51	853
75	55	364/5 HP	3560	163	65.3	F	109	2.0	2.1	91.0	93.0	93.0	0.80	0.88	0.91	1.25	9.79062	46	101	915
		364/5 HP	1775	165	65.9	G	218	2.3	2.4	93.0	94.1	94.1	0.83	0.87	0.89	1.25	19.9295	22	48	900
100	75	404/5 HP or HPH	3560	221	88.4	F	148	2.0	2.6	91.7	93.6	93.6	0.81	0.89	0.91	1.25	11.919	38	84	1206
		404/5 HP or HPH	1775	229	91.6	G	298	2.1	2.2	93.6	94.5	94.5	0.80	0.86	0.87	1.25	27.4031	18	40	1118

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

Reduced frames



Explosion Proof Motors (UL and CSA approved)

Standard Efficiency

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor Current	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η%			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold Lb
				In A	KVA	Tn	Tl/Tn	Tb/Tn		50	75	100	50	75	100			
HP	kW			At 230V	At 575V	Code	Lb.Ft											
1.0	0.75	143T	1720	3.24	1.30	K	3.07	2.7	3.2	67.8	70.2	72.7	0.65	0.73	0.80	1.15	0.0798	10 22 33
		145T	1140	3.85	1.54	J	4.64	2.8	2.9	67.4	70.8	74.0	0.49	0.60	0.66	1.15	0.11972	12 26 44
		182T	870	4.48	1.79	L	6.08	2.2	2.7	63.2	69.4	72.5	0.42	0.52	0.58	1.15	0.39926	10 22 77
1.5	1.1	143T	3435	4.11	1.64	H	2.26	2.1	2.6	74.0	77.0	78.2	0.78	0.84	0.86	1.15	0.03735	9 20 37
		145T	1710	5.05	2.02	K	4.53	2.5	2.7	68.5	71.0	72.9	0.53	0.63	0.75	1.15	0.0798	7 15 37
		182T	1155	5.15	2.06	H	6.71	2.2	2.6	70.7	77.0	80.1	0.48	0.57	0.67	1.15	0.37709	18 40 60
2.0	1.5	184T	865	5.98	2.39	K	8.96	2.1	2.6	63.5	70.3	74.5	0.44	0.55	0.62	1.15	0.39926	12 26 79
		145T	3430	5.41	2.16	H	3.08	2.2	2.3	75.5	78.5	80.0	0.76	0.83	0.87	1.15	0.03735	7 15 41
		145T	1720	6.32	2.53	J	6.15	3.0	3.0	73.2	77.4	79.5	0.58	0.69	0.75	1.15	0.11972	5 11 44
3.0	2.2	184T	1160	7.50	3.00	H	9.11	2.2	2.5	71.7	78.9	81.0	0.45	0.54	0.62	1.15	0.44363	15 33 82
		213T	865	7.56	3.02	L	12.2	2.6	3.0	68.3	72.4	75.5	0.48	0.59	0.66	1.15	1.19089	12 26 119
		182T	3510	8.80	3.52	L	4.42	2.3	3.0	74.5	78.5	80.5	0.70	0.76	0.78	1.15	0.14537	14 31 79
5.0	3.7	182T	1750	8.21	3.28	K	8.86	2.6	2.9	75.1	78.2	81.0	0.65	0.74	0.83	1.15	0.28602	7 15 64
		213T	1160	9.93	3.97	J	13.4	2.2	2.8	77.6	81.5	81.8	0.53	0.62	0.68	1.15	0.73594	15 33 106
		215T	870	11.9	4.76	L	17.8	2.4	3.0	72.4	76.5	77.5	0.40	0.50	0.60	1.15	1.42907	11 24 137
7.5	5.5	184T	3460	13.6	5.44	H	7.54	2.2	2.7	74.8	80.6	82.5	0.76	0.81	0.83	1.15	0.17261	9 20 84
		184T	1740	13.9	5.56	K	15.0	2.5	2.5	78.3	81.5	82.5	0.67	0.76	0.81	1.15	0.38136	7 15 93
		215T	1155	15.1	6.04	J	22.6	2.3	2.9	78.0	81.9	82.9	0.62	0.73	0.74	1.15	0.82794	13 29 115
10	7.5	213T	3500	17.7	7.08	H	11.1	2.0	2.9	84.0	86.5	87.5	0.79	0.86	0.89	1.15	0.39926	16 35 117
		213T	1760	19.6	7.84	L	22.0	2.2	3.4	82.2	84.0	85.0	0.66	0.77	0.83	1.15	0.82794	6 13 117
		254T	1170	19.5	7.80	H	33.1	2.3	3.1	86.5	87.5	87.5	0.62	0.74	0.81	1.15	2.386	27 59 223
15	11	256T	875	22.5	9.00	G	44.3	1.9	2.6	83.4	85.9	86.3	0.51	0.63	0.71	1.15	3.40858	27 59 280
		215T	3510	24.2	9.68	H	15.1	2.2	2.8	85.5	86.5	86.5	0.81	0.88	0.90	1.15	0.48798	5 11 132
		215T	1760	25.8	10.3	J	30.0	2.3	3.0	83.6	85.0	86.9	0.67	0.78	0.84	1.15	1.01192	7 15 132
20	15	256T	1170	25.8	10.3	H	45.2	2.3	2.9	86.0	87.8	87.9	0.67	0.78	0.83	1.15	2.89729	22 48 254
		284T	885	32.4	13.0	J	59.7	2.2	2.8	83.5	84.5	85.5	0.62	0.65	0.68	1.15	5.89024	8 18 348
		254T	3530	36.3	14.5	J	22.0	2.0	2.5	78.5	84.0	87.5	0.76	0.85	0.87	1.15	0.90748	9 20 227
25	18.5	254T	1760	37.2	14.9	G	44.0	2.0	2.3	85.1	87.2	88.3	0.70	0.80	0.84	1.15	1.54815	16 35 216
		284T	1170	35.5	14.2	K	66.3	2.2	2.8	85.2	87.2	88.3	0.82	0.85	0.88	1.15	6.54471	9 20 287
		286T	880	41.7	16.7	J	88.1	2.0	2.5	85.0	86.2	87.1	0.62	0.72	0.76	1.15	7.19918	10 22 426
30	22	256T	3540	48.1	19.2	J	29.9	2.3	3.0	85.0	90.7	91.0	0.75	0.84	0.86	1.15	1.11692	8 18 251
		256T	1760	51.3	20.5	G	60.1	2.1	2.3	85.5	87.5	88.5	0.68	0.79	0.83	1.15	1.90542	12 26 247
		286T	1165	48.1	19.2	J	90.7	2.4	2.8	85.4	87.9	89.0	0.80	0.87	0.88	1.15	7.19918	11 24 397
40	30	324T	885	60.8	24.3	J	119	2.1	2.3	85.4	87.5	87.5	0.53	0.64	0.70	1.15	8.93926	15 33 494
		284TS	3540	59.0	23.6	H	36.8	2.3	3.0	85.5	87.5	88.5	0.84	0.87	0.89	1.15	2.386	7 15 306
		324T	1760	60.4	24.2	J	74.1	2.4	2.2	88.4	88.9	89.4	0.79	0.84	0.86	1.15	3.40563	8 18 273
50	37	324T	1180	61.0	24.4	K	110	2.2	2.4	86.3	87.9	89.5	0.70	0.80	0.85	1.15	8.93926	13 29 494
		326T	880	72.5	29.0	H	148	2.2	2.2	86.2	88.0	89.0	0.66	0.70	0.72	1.15	9.79062	13 29 518
		286TS	3530	68.6	27.4	H	43.9	2.8	3.0	85.5	87.5	89.5	0.83	0.88	0.90	1.15	2.89729	6 13 368
60	45	286T	1765	70.6	28.2	J	87.8	2.8	2.5	88.6	89.3	91.0	0.77	0.83	0.86	1.15	3.83133	9 20 351
		326T	1175	71.2	28.5	G	132	2.1	2.3	88.7	90.0	90.2	0.77	0.84	0.86	1.15	9.79062	28 62 512
		364/5T	885	81.4	32.6	L	175	2.0	2.7	88.1	89.4	90.5	0.60	0.71	0.75	1.15	20.1046	8 18 728
75	55	324TS	3560	94.0	37.6	J	59.4	2.9	2.5	85.0	89.5	91.0	0.80	0.85	0.88	1.15	4.04419	10 22 397
		364/5T	1175	99.0	39.6	G	180	2.2	2.3	89.0	90.4	90.6	0.74	0.81	0.84	1.15	20.1046	19 42 750
		364/5T	885	106	42.4	K	239	2.4	2.4	88.5	89.5	90.7	0.64	0.73	0.78	1.15	23.4554	9 20 794
100	75	326TS	3560	114	45.6	J	73.2	3.2	3.0	89.0	91.1	92.2	0.80	0.85	0.88	1.15	4.89559	10 22 507
		364/5T	1770	118	47.2	G	147	2.3	2.4	90.2	91.7	91.7	0.76	0.83	0.86	1.15	7.85366	16 35 540
		364/5T	1185	123	49.2	J	220	3.0	2.9	89.2	90.5	91.9	0.70	0.78	0.82	1.15	23.4554	17 37 816
125	90	404/5T	885	129	51.6	K	295	2.0	2.6	88.9	89.8	91.0	0.69	0.78	0.79	1.15	29.0401	9 20 937
		364/5TS	3560	138	55.2	J	89.1	2.5	2.5	86.5	90.0	91.0	0.82	0.87	0.90	1.15	7.23653	12 26 807
		364/5T	1775	144	57.6	J	179	2.5	2.8	89.0	90.5	92.0	0.77	0.82	0.85	1.15	14.9471	11 24 761
75	55	404/5T	1180	149	59.6	J	269	2.6	2.6	89.6	91.0	92.3	0.71	0.79	0.82	1.15	29.0401	15 33 937
		404/5T	885	153	61.2	K	358	2.2	2.9	89.1	91.0	92.0	0.69	0.75	0.80	1.15	32.3908	10 22 990
		364/5TS	3560	168	67.2	J	109	2.8	3.0	89.0	91.3	92.4	0.81	0.87	0.89	1.15	9.36495	11 24 847
100	75	364/5T	1775	168	67.2	J	218	2.2	2.6	89.2	91.2	92.2	0.84	0.87	0.89	1.15	18.2687	10 22 836
		404/5T	1185	184	73.6	J	327	3.0	2.6	89.8	91.5	92.5	0.68	0.76	0.81	1.15	32.3908	13 29 999
		444																

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current In A		Locked Rotor Current kVA	Full Load Torque Tn	Locked Rotor Torque Tn	Break-Down Torque Tb/Tn	Efficiency η%			Power Factor Cos ϕ			Service Factor S	Moment of Inertia Wk ² Lb.Ft ²	Allowable Locked Rotor Time Hot/Cold (s)	Approx. Weight Lb	
				At 230V	At 575V					Code	Lb.Ft	Tl/Tn	Tb/Tn	50	75	100				
150	110	444/5TS	3565	340	136	J	217	2.1	2.6	89.0	91.4	92.2	0.82	0.86	0.88	1.15	30.157	34	75	1493
		444/5T	1785	358	143	J	434	2.3	2.5	90.9	91.4	93.0	0.79	0.82	0.83	1.15	55.2573	14	31	1599
		504/5T	1185	358	143	G	654	2.4	2.4	91.0	92.3	93.0	0.69	0.79	0.83	1.15	87.2598	23	51	1808
		504/5T	890	376	150	J	871	2.1	2.6	90.0	91.9	93.0	0.61	0.71	0.79	1.15	125.436	14	31	2181
200	150	504/5TS	3570	454	182	J	296	1.8	2.3	90.0	92.4	93.2	0.83	0.87	0.89	1.00	39.0924	27	59	1779
		504/5T	1780	481	192	J	594	2.3	2.0	91.2	92.2	93.2	0.78	0.82	0.84	1.15	66.6899	20	44	1914
		504/5T	1185	484	194	H	892	2.4	2.4	90.4	92.5	93.7	0.68	0.78	0.83	1.15	125.436	23	51	2174
		586/7T	890	528	211	H	1188	1.4	2.0	91.0	92.7	93.8	0.60	0.71	0.76	1.15	350.2193	34	75	3473
250	185	504/5TS	3560	558	223	J	366	2.2	2.3	90.0	92.9	93.5	0.86	0.88	0.89	1.00	50.2617	25	55	2375
		504/5T	1785	578	231	J	730	2.2	2.1	91.3	92.4	93.4	0.76	0.83	0.86	1.15	89.555	17	37	2216
		586/7T	1190	613	245	H	1096	2.0	2.2	91.2	93.0	93.5	0.68	0.76	0.81	1.15	203.5597	29	64	3237
		586/7T	890	620	248	J	1465	1.8	2.0	91.5	93.2	93.7	0.68	0.74	0.80	1.15	387.4767	28	62	3654
300	220	586/7TS	3570	653	261	G	434	1.2	2.4	91.2	93.5	94.0	0.89	0.90	0.90	1.15	103.621	35	77	2481
		586/7T	1790	665	266	H	866	2.3	2.7	92.0	93.6	94.4	0.81	0.86	0.88	1.15	150.404	24	53	2975
		586/7T	1190	734	294	H	1303	1.3	2.2	92.0	93.5	94.1	0.70	0.78	0.80	1.15	260.1041	33	73	3460
		586/7T	890	741	296	J	1742	1.7	2.2	92.0	93.6	94.3	0.68	0.74	0.79	1.00	461.9914	26	57	4070
350	260	586/7TS	3570	759	304	H	513	1.2	2.1	91.5	93.5	94.5	0.89	0.90	0.91	1.00	122.7091	34	75	2862
		586/7T	1790	784	314	H	1024	2.4	2.8	92.0	93.7	94.6	0.80	0.85	0.88	1.15	176.9459	26	57	3281
		586/7T	1190	841	336	H	1540	2.1	2.3	91.3	93.2	94.6	0.73	0.80	0.82	1.15	327.9573	35	77	3912
		586/7T	890	861	344	J	2059	1.9	2.2	91.2	93.0	94.7	0.69	0.75	0.80	1.00	484.3459	24	53	4289
400	300	586/7T	1790	893	357	H	1181	2.0	2.2	92.2	93.2	94.7	0.81	0.86	0.89	1.15	221.1824	28	62	3693
		586/7T	1190	971	388	H	1777	1.9	2.0	92.3	93.5	94.6	0.74	0.80	0.82	1.00	350.5751	30	66	4139
450	330	586/7T	1790	972	389	H	1299	2.0	2.1	92.0	93.3	94.7	0.82	0.88	0.90	1.15	243.3007	18	40	4104
500	370	586/7T	1785	1100	440	H	1461	2.2	2.4	92.2	93.3	94.8	0.82	0.87	0.89	1.00	265.4189	24	53	4434

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor Current	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η%		Power Factor Cos φ		Service Factor S F	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold Lb.Ft² (s)	Allowable Locked Rotor Time Hot/Cold Lb.			
				In A	KVA	Tn	Tl/Tn	Tb/Tn		50	75	100	50	75	100					
HP	KW			At 230V	At 575V	Code	Lb.Ft													
1.0	0.75	143T	1720	3.32	1.33	J	3.07	2.8	3.0	68.0	74.0	75.5	0.53	0.65	0.75	1.15	0.0798	6	13	33
		145T	1140	3.72	1.49	J	4.64	2.8	2.9	67.4	72.8	76.7	0.49	0.60	0.66	1.15	0.11972	8	18	44
		182T	870	4.48	1.79	L	6.08	2.2	2.7	63.2	69.4	72.5	0.42	0.52	0.58	1.15	0.39926	9	20	77
1.5	1.1	143T	3435	4.09	1.64	H	2.26	2.1	2.6	74.0	77.0	78.5	0.78	0.84	0.86	1.15	0.03735	9	20	37
		145T	1710	4.69	1.88	J	4.53	2.5	2.9	72.0	77.0	80.0	0.53	0.63	0.75	1.15	0.0798	5	11	37
		182T	1155	5.15	2.06	H	6.71	2.2	2.6	70.7	77.0	80.1	0.48	0.57	0.67	1.15	0.37709	13	29	60
		184T	865	5.98	2.39	K	8.96	2.1	2.6	63.5	70.3	74.5	0.44	0.55	0.62	1.15	0.39926	11	24	79
2.0	1.5	145T	3430	5.41	2.16	H	3.08	2.2	2.4	75.5	78.5	80.0	0.76	0.83	0.87	1.15	0.03735	7	15	41
		145T	1720	6.32	2.53	J	6.15	3.0	3.0	74.0	78.5	81.5	0.58	0.69	0.75	1.15	0.11972	5	11	44
		184T	1160	7.50	3.00	H	9.11	2.2	2.5	71.7	78.9	81.0	0.45	0.54	0.62	1.15	0.44363	13	29	82
		213T	865	7.56	3.02	L	12.2	2.6	3.0	68.3	72.4	75.5	0.48	0.59	0.66	1.15	1.19089	9	20	119
3.0	2.2	182T	3510	8.26	3.30	K	4.42	2.3	3.0	74.0	78.5	81.5	0.70	0.78	0.82	1.15	0.14537	6	13	79
		182T	1750	8.16	3.26	K	8.86	2.6	2.9	75.5	78.5	81.5	0.65	0.74	0.83	1.15	0.28602	5	11	64
		213T	1160	9.93	3.97	J	13.4	2.2	2.8	77.6	81.5	81.8	0.53	0.62	0.68	1.15	0.73594	14	31	106
		215T	870	11.9	4.76	L	17.8	2.4	3.0	72.4	76.5	77.5	0.40	0.50	0.60	1.15	1.42907	10	22	137
5.0	3.7	184T	3460	12.8	5.12	H	7.54	2.2	2.7	78.0	83.5	83.5	0.76	0.81	0.87	1.15	0.17261	9	20	84
		184T	1740	13.9	5.56	K	15.0	2.5	2.6	78.5	81.5	84.0	0.67	0.76	0.81	1.15	0.38136	5	11	93
		215T	1155	15.1	6.04	J	22.6	2.3	2.9	78.0	81.9	82.9	0.62	0.73	0.74	1.15	0.82794	9	20	115
		254T	880	20.0	8.00	L	29.6	2.0	2.8	78.2	80.4	81.5	0.42	0.50	0.57	1.15	3.06772	10	22	251
7.5	5.5	213T	3500	18.5	7.40	H	11.1	2.0	2.8	80.0	82.5	84.0	0.79	0.86	0.89	1.15	0.39926	11	24	117
		213T	1760	19.2	7.68	L	22.0	2.2	3.4	82.5	85.5	86.5	0.66	0.77	0.83	1.15	0.82794	4	9	117
		254T	1170	19.5	7.80	H	33.1	2.3	3.1	86.5	87.5	87.5	0.62	0.74	0.81	1.15	2.386	22	48	223
		256T	875	22.5	9.00	G	44.3	1.9	2.7	83.4	85.9	86.3	0.51	0.63	0.71	1.15	3.40858	27	59	280
10	7.5	215T	3510	24.5	9.80	H	15.1	2.2	2.8	84.0	85.5	85.5	0.79	0.86	0.90	1.15	0.48798	6	13	132
		215T	1760	27.9	11.2	J	30.0	2.3	3.0	80.0	84.0	87.5	0.71	0.75	0.77	1.15	1.01192	5	11	132
		256T	1170	25.8	10.3	H	45.2	2.3	2.9	86.0	87.8	87.9	0.67	0.78	0.83	1.15	2.89729	18	40	254
		284T	885	26.5	10.6	K	59.7	2.5	2.8	83.5	84.5	85.5	0.67	0.78	0.83	1.15	5.89024	14	31	348
15	11	254T	3530	36.3	14.5	J	22.0	2.0	2.5	78.5	84.0	87.5	0.73	0.82	0.87	1.15	0.90748	10	22	227
		254T	1760	37.1	14.8	G	44.0	2.0	2.3	85.5	87.5	88.5	0.70	0.80	0.84	1.15	1.54815	11	24	216
		284T	1170	35.5	14.2	K	66.3	2.2	2.8	85.2	87.2	88.3	0.82	0.85	0.88	1.15	6.54471	7	15	287
		286T	880	41.7	16.7	J	88.1	2.0	2.5	85.0	86.2	87.1	0.62	0.72	0.76	1.15	7.19918	10	22	426
20	15	256T	3540	49.5	19.8	J	29.9	2.1	3.0	87.5	88.5	88.5	0.75	0.84	0.86	1.15	1.11692	7	15	251
		256T	1760	51.3	20.5	G	60.1	2.1	2.3	86.5	87.5	88.5	0.68	0.79	0.83	1.15	1.90542	9	20	247
		286T	1165	48.1	19.2	J	90.7	2.4	2.8	85.4	87.9	89.0	0.80	0.87	0.88	1.15	7.19918	8	18	397
		324T	885	60.8	24.3	G	119	2.2	2.4	85.4	87.5	88.5	0.52	0.64	0.70	1.15	8.93926	26	57	494
25	18.5	284T	3540	59.0	23.6	H	36.8	2.3	3.0	85.5	87.5	88.5	0.84	0.88	0.89	1.15	2.386	6	13	306
		284T	1760	60.4	24.2	J	74.1	2.4	2.2	88.5	89.5	90.2	0.79	0.84	0.86	1.15	3.40563	6	13	273
		324T	1175	61.8	24.7	G	111	2.1	2.3	87.0	89.0	89.5	0.74	0.82	0.84	1.15	8.93926	20	44	494
		326T	880	72.5	29.0	H	148	2.2	2.2	86.2	88.0	89.0	0.66	0.70	0.72	1.15	9.79062	12	26	518
30	22	286T	3530	68.6	27.4	H	43.9	2.8	3.0	85.5	87.5	89.5	0.83	0.88	0.90	1.15	2.8972	10	22	368
		286T	1765	70.6	28.2	J	87.8	2.8	2.5	88.5	89.5	91.0	0.77	0.83	0.86	1.15	3.83133	6	13	351
		326T	1175	71.2	28.5	G	132	2.1	2.3	88.7	90.0	92.0	0.77	0.84	0.86	1.15	9.79062	20	44	512
		324T	3560	94.0	37.6	J	59.4	2.9	2.5	85.0	89.5	91.0	0.80	0.85	0.88	1.15	4.04419	10	22	397
40	30	324T	1770	96.6	38.6	H	119	2.6	2.5	89.5	91.0	91.7	0.74	0.82	0.85	1.15	6.54471	14	31	467
		326T	3560	114	45.6	J	73.2	3.2	3.0	88.5	91.0	92.4	0.80	0.85	0.88	1.15	4.89559	10	22	507
50	37	326T	1770	118	47.2	G	147	2.3	2.4	90.2	91.7	91.7	0.76	0.83	0.86	1.15	7.85366	12	26	540

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

IMPORTANT: WEG can supply frames 284/6T and 324/6T "only on request", after receiving load information: - braking torque:

- number of stops (brakings) per hour.

Brake Motors - Design "B"

Premium Efficiency



Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor	Full Load Torque	Locked Rotor Torque	Break-Down Torque	Efficiency η%			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk² Lb.Ft²	Allowable Locked Rotor Time Hot/Cold (s)	Approx. Weight Lb	
HP	KW			In A		kVA	Tn	Tl/Tn	Tb/Tn	% of full load			50	75	100					
				At 230V	At 575V	Code	Lb.Ft													
1.0	0.75	143T	1765	2.90	1.16	L	2.99	2.8	3.9	75.5	80.0	82.5	0.60	0.73	0.79	1.25	0.09312	16	35	44
		145T	1165	3.40	1.36	L	4.54	2.3	3.0	75.5	80.0	80.0	0.48	0.60	0.69	1.25	0.13303	22	48	44
		182T	875	4.63	1.85	M	6.04	3.0	3.5	68.0	72.0	74.0	0.35	0.45	0.55	1.25	0.39926	40	88	95
		143T	3495	3.98	1.59	L	2.22	3.0	4.0	75.5	81.5	82.5	0.69	0.78	0.84	1.25	0.04312	18	40	42
		145T	1760	4.00	1.60	L	4.40	2.6	3.7	80.0	82.5	84.0	0.65	0.76	0.82	1.25	0.11972	12	26	51
		182T	1165	4.75	1.90	M	6.65	3.2	4.0	81.5	84.0	85.5	0.47	0.58	0.68	1.25	0.48798	36	79	68
1.5	1.1	184T	860	5.43	2.17	J	9.01	2.5	2.6	74.0	75.5	77.0	0.47	0.58	0.66	1.25	0.44363	32	70	110
		145T	3480	5.20	2.08	L	3.04	3.5	4.0	80.0	82.5	84.0	0.70	0.81	0.86	1.25	0.04886	13	29	44
		145T	1755	5.28	2.11	K	6.02	2.4	3.2	81.5	84.0	84.0	0.68	0.79	0.85	1.25	0.13303	12	26	53
		184T	1165	6.40	2.56	L	9.07	3.0	3.0	84.0	86.5	86.5	0.48	0.60	0.68	1.25	0.62109	35	77	79
		213T	870	6.93	2.77	L	12.2	2.4	2.9	78.5	81.5	82.5	0.47	0.53	0.66	1.25	1.19089	43	95	141
		182T	3500	7.18	2.87	K	4.43	2.5	4.0	80.0	82.5	85.5	0.80	0.87	0.90	1.25	0.15443	23	51	90
2.0	1.5	182T	1765	7.80	3.12	K	8.78	2.3	3.2	85.5	87.5	87.5	0.65	0.75	0.81	1.25	0.31782	31	68	88
		213T	1170	8.30	3.32	J	13.3	2.2	2.5	86.5	87.5	87.5	0.60	0.70	0.76	1.25	1.01192	59	130	110
		215T	860	8.55	3.42	K	18.0	2.0	2.1	82.5	84.0	84.0	0.60	0.71	0.77	1.25	1.78632	30	66	153
		184T	3480	11.7	4.67	H	7.49	2.4	3.5	85.5	86.5	87.5	0.85	0.90	0.91	1.25	0.19988	28	62	105
		184T	1745	13.0	5.18	H	14.9	2.1	3.0	85.5	87.5	87.5	0.68	0.78	0.82	1.25	0.38136	21	46	93
		215T	1160	13.6	5.44	H	22.5	1.9	2.1	86.5	87.5	87.5	0.65	0.75	0.78	1.25	1.47188	49	108	162
3.0	2.2	254T	875	16.7	6.67	H	29.8	2.0	2.8	72.1	85.0	85.7	0.44	0.56	0.65	1.25	2.89729	38	84	232
		213T	3510	17.3	6.93	G	11.0	2.2	3.0	86.5	88.5	88.5	0.80	0.88	0.90	1.25	0.42144	25	55	121
		213T	1765	18.8	7.52	H	22.0	2.0	2.6	87.5	89.5	89.5	0.66	0.77	0.82	1.25	1.01192	21	46	137
		254T	1170	19.1	7.62	H	33.1	2.3	3.1	88.5	89.5	89.5	0.62	0.74	0.81	1.25	2.386	29	64	236
		256T	875	22.5	9.01	G	44.3	1.9	2.7	83.4	85.9	86.3	0.51	0.63	0.71	1.25	3.40858	41	90	276
		215T	3500	23.1	9.25	G	15.1	2.0	2.6	88.5	89.5	89.5	0.86	0.90	0.91	1.25	0.66546	19	42	160
10	7.5	215T	1765	25.5	10.2	H	29.9	2.0	2.6	88.5	90.2	90.2	0.69	0.79	0.82	1.25	1.3799	19	42	152
		256T	1175	25.3	10.1	H	45.0	2.3	2.9	88.5	89.5	89.5	0.67	0.78	0.83	1.25	2.89729	24	53	278
		284T	880	27.3	10.9	H	60.1	2.5	2.4	86.5	88.5	88.5	0.60	0.72	0.78	1.25	7.19918	53	117	373
		254T	3520	34.0	13.6	F	22.0	2.0	2.7	89.5	90.2	90.2	0.86	0.89	0.90	1.25	1.25653	33	73	254
		254T	1765	35.3	14.1	G	43.9	2.5	2.5	89.5	91.0	91.0	0.74	0.82	0.86	1.25	2.1436	26	57	240
		284T	1180	34.5	13.8	G	65.7	2.3	2.5	89.5	90.2	91.0	0.79	0.85	0.88	1.25	7.19918	21	46	306
20	15	286T	880	38.0	15.2	G	88.1	2.4	2.3	86.5	88.5	88.5	0.68	0.78	0.82	1.25	8.18089	37	81	423
		256T	3520	46.5	18.6	G	30.0	2.0	2.5	89.5	90.2	90.2	0.86	0.90	0.90	1.25	1.53576	21	46	287
		256T	1765	47.5	19.0	G	59.9	2.5	2.5	89.5	91.0	91.0	0.76	0.84	0.87	1.25	2.38178	18	40	273
		286T	1175	47.0	18.8	G	90.0	2.3	2.5	90.2	91.0	91.0	0.80	0.86	0.88	1.25	8.18089	31	68	430
		324T	880	55.3	22.1	G	120	2.3	2.3	87.5	89.5	89.5	0.58	0.69	0.76	1.25	9.36495	47	103	512
		284T	3520	56.8	22.7	G	37.0	2.2	2.8	90.2	91.0	91.0	0.86	0.90	0.90	1.25	2.89729	23	51	313
25	18.5	284T	1765	59.3	23.7	F	73.9	2.3	2.2	91.0	92.4	92.4	0.77	0.84	0.85	1.25	3.83133	51	112	351
		326T	880	71.0	28.4	G	148	2.6	2.9	87.5	88.5	89.5	0.53	0.65	0.73	1.25	11.919	52	114	587
		286T	3530	67.5	27.0	G	43.9	2.4	3.0	90.2	91.0	91.0	0.87	0.90	0.90	1.25	3.57901	60	132	388
		286T	1770	70.3	28.1	F	87.6	2.5	2.3	91.0	92.4	92.4	0.76	0.83	0.85	1.25	4.68274	47	103	397
		326T	1175	70.8	28.3	G	132	2.3	2.5	90.2	91.7	91.7	0.70	0.80	0.85	1.25	11.919	35	77	580
		324T	3550	90.3	36.1	G	59.6	2.2	2.2	90.2	91.7	91.7	0.87	0.90	0.91	1.25	4.89559	46	101	516
40	30	324T	1770	95.3	38.1	G	119	2.3	2.3	91.7	93.0	93.0	0.76	0.83	0.85	1.25	7.85366	28	62	542
		326T	3550	111	44.2	G	73.5	2.1	2.1	91.0	92.4	92.4	0.88	0.90	0.91	1.25	5.32131	33	73	549
50	37	326T	1770	116	46.2	G	147	2.3	2.3	92.4	93.6	93.6	0.77	0.83	0.86	1.25	9.16239	25	55	595

ELECTRICAL DATA

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.

IMPORTANT: WEG can supply frames 284/6T and 324/6T "only on request", after receiving load information:

- braking torque:
- number of stops (brakings) per hour.



Inverter Duty Motors (IDM) - TEBC - IP55

Premium Efficiency

ELECTRICAL DATA

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current		Locked Rotor Current KVA	Full Load Torque Tn	Locked Rotor Torque Tl/Tn	Break-Down Torque Tb/Tn	Efficiency η%			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk² Lb.Ft²	Allowable Locked Rotor Time Hot/Cold (s)	Approx. Weight Lb
				In A	At 230V					Code	Lb.Ft	50	75	100	50	75	100		
HP	KW																		
1.0	0.75	143T	3495	2.85	1.14	M	1.0916	3.0	4.0	74.0	78.5	78.5	0.69	0.79	0.84	1.00	0.8591	23 51	88
		143T	1765	2.90	1.16	L	2.1684	2.8	3.9	75.5	80.0	82.5	0.60	0.73	0.79	1.00	2.1418	16 35	97
		145T	1765	2.90	1.16	L	2.1684	2.8	3.9	75.0	80.0	82.5	0.60	0.73	0.79	1.00	2.1395	16 35	108
		145T	1165	3.40	1.36	L	3.2821	2.3	3.0	75.5	80.0	80.0	0.48	0.60	0.69	1.00	3.0597	22 48	97
		182T	875	4.63	1.85	M	4.3664	3.0	3.5	68.0	72.0	74.0	0.35	0.45	0.55	1.00	9.1830	40 88	209
1.5	1.1	143T	3495	3.98	1.59	L	1.6374	3.0	4.0	75.5	81.5	82.5	0.69	0.78	0.84	1.00	0.9918	18 40	92
		145T	3495	3.98	1.59	L	1.6374	3.0	4.0	75.5	81.5	82.5	0.69	0.78	0.84	1.00	0.9918	18 40	101
		145T	1760	4.00	1.60	L	3.2600	2.6	3.7	80.0	82.5	84.0	0.65	0.76	0.82	1.00	2.7536	12 26	112
		182T	1165	4.75	1.90	M	4.9195	3.2	4.0	81.5	84.0	85.5	0.47	0.58	0.68	1.00	11.2235	36 79	150
		184T	860	5.43	2.17	J	6.6676	2.5	2.6	74.0	75.5	77.0	0.47	0.58	0.66	1.00	10.2035	32 70	242
2.0	1.5	145T	3480	5.20	2.08	L	2.1979	3.5	4.0	80.0	82.5	84.0	0.70	0.81	0.86	1.00	1.1238	13 29	97
		145T	1755	5.28	2.11	K	4.3516	2.4	3.2	81.5	84.0	84.0	0.68	0.79	0.85	1.00	3.0597	12 26	117
		184T	1165	6.40	2.56	L	6.5569	3.0	3.0	84.0	86.5	86.5	0.48	0.60	0.68	1.00	14.2851	35 77	174
		213T	870	6.93	2.77	L	8.7770	2.4	2.9	78.5	81.5	82.5	0.47	0.53	0.66	1.00	27.3905	43 95	310
		182T	3500	7.18	2.87	K	3.2748	2.5	4.0	80.0	82.5	85.5	0.80	0.87	0.90	1.00	3.5519	23 51	198
3.0	2.2	145T	3450	7.43	2.97	K	3.3264	2.3	2.4	81.0	84.5	85.5	0.70	0.83	0.87	1.00	1.2558	6 13	112
		182T	1765	7.80	3.12	K	6.4979	2.3	3.2	85.5	87.5	87.5	0.65	0.75	0.81	1.00	7.3099	31 68	194
		213T	1170	8.30	3.32	J	9.8096	2.2	2.5	86.5	87.5	87.5	0.60	0.70	0.76	1.00	23.2742	59 130	242
		215T	860	8.55	3.42	K	13.3499	2.0	2.1	82.5	84.0	84.0	0.60	0.71	0.77	1.00	41.0854	30 66	337
		184T	3480	11.7	4.67	H	5.4875	2.4	3.5	85.5	86.5	87.5	0.85	0.90	0.91	1.00	4.5972	28 62	231
5.0	3.7	184T	1745	13.0	5.18	H	10.9159	2.1	3.0	85.5	87.5	87.5	0.68	0.78	0.82	1.00	8.7713	21 46	205
		215T	1160	13.6	5.44	H	16.4476	1.9	2.1	86.5	87.5	87.5	0.65	0.75	0.78	1.00	33.8532	49 108	356
		254T	875	16.7	6.67	H	21.8318	2.0	2.8	72.1	85.0	85.7	0.44	0.56	0.65	1.00	66.6377	38 84	510
		213T	3510	17.3	6.93	G	8.1869	2.2	3.0	86.5	88.5	88.5	0.80	0.88	0.90	1.00	9.6931	25 55	266
		184T	3460	17.5	7.01	H	8.2607	2.2	2.3	85.5	87.5	88.5	0.81	0.87	0.89	1.00	5.4328	15 33	262
7.5	5.5	213T	1765	18.8	7.52	H	16.2263	2.0	2.6	87.5	89.5	89.5	0.66	0.77	0.82	1.00	23.2742	21 46	301
		254T	1170	19.1	7.62	H	24.4870	2.3	3.1	88.5	89.5	89.5	0.62	0.74	0.81	1.00	54.8780	29 64	519
		256T	875	22.5	9.01	G	32.7477	1.9	2.7	83.4	85.9	86.3	0.51	0.63	0.71	1.00	78.3973	41 90	607
		215T	3500	23.1	9.25	G	10.9159	2.0	2.6	88.5	89.5	89.5	0.86	0.90	0.91	1.00	15.3056	19 42	352
		215T	1765	25.5	10.2	H	21.6843	2.0	2.6	88.5	90.2	90.2	0.69	0.79	0.82	1.00	31.7377	19 42	334
10	7.5	256T	1175	25.3	10.1	H	32.5264	2.3	2.9	88.5	89.5	89.5	0.67	0.78	0.83	1.00	66.6377	24 53	612
		284T	880	27.3	10.9	H	43.4423	2.5	2.4	86.5	88.5	88.5	0.60	0.72	0.78	1.00	165.5811	53 117	821
		254T	3520	34.0	13.6	F	16.3001	2.0	2.7	89.5	90.2	90.2	0.86	0.89	0.90	1.00	28.9002	33 73	559
		215T	3500	34.5	13.8	F	16.3739	2.0	2.2	89.0	90.2	90.2	0.80	0.87	0.89	1.00	15.3056	14 31	354
		254T	1765	35.3	14.1	G	32.4527	2.5	2.5	89.5	91.0	91.0	0.74	0.82	0.86	1.00	49.3028	26 57	528
20	15	284T	1180	34.5	13.8	G	48.6053	2.3	2.5	89.5	90.2	91.0	0.79	0.85	0.88	1.00	165.5811	21 46	673
		286T	880	38.0	15.2	G	65.1266	2.4	2.3	86.5	88.5	88.5	0.68	0.78	0.82	1.00	188.1605	37 81	931
		254T	3520	46.5	18.6	G	21.6843	1.8	2.2	89.5	90.5	90.2	0.86	0.90	0.90	1.00	32.1115	21 46	612
		256T	3520	46.5	18.6	G	21.6843	2.0	2.5	89.5	90.2	90.2	0.86	0.90	0.90	1.00	35.3225	21 46	631
		256T	1765	47.5	19.0	G	43.2948	2.5	2.5	89.5	91.0	91.0	0.76	0.84	0.87	1.00	54.7809	18 40	601
25	18.5	286T	1175	47.0	18.8	G	65.0529	2.3	2.5	90.2	91.0	91.0	0.80	0.86	0.88	1.00	188.1605	31 68	946
		324T	880	55.3	22.1	G	87.0322	2.3	2.3	87.5	89.5	89.5	0.58	0.69	0.76	1.00	215.3939	47 103	1126
		326T	880	55.3	22.1	G	87.0322	2.3	2.3	87.5	89.5	89.5	0.58	0.69	0.76	1.00	215.3939	47 103	1168
		284TS	3540	56.8	22.7	G	26.9947	2.4	2.3	90.2	91.0	91.0	0.85	0.89	0.90	1.00	66.6377	61 134	689
		256T	3530	56.8	22.7	G	27.0685	2.0	2.2	90.2	91.0	91.0	0.83	0.88	0.90	1.00	35.3225	18 40	631
30	22	284T	1765	59.3	23.7	F	54.1370	2.3	2.2	91.0	92.4	92.4	0.77	0.84	0.85	1.00	88.1206	51 112	772
		324T	1175	59.5	23.8	F	81.1317	2.2	2.4	89.5	91.7	91.7	0.72	0.81	0.85	1.00	234.9749	56 123	1159
		326T	880	71.0	28.4	G	108.4215	2.6	2.9	87.5	88.5	89.5	0.53	0.65	0.73	1.00	274.1370	52 114	1291
		284TS	3550	67.5	27.0	F	32.3052	2.5	2.5	89.5	91.0	91.0	0.86	0.90	0.90	1.00	82.3172	64 141	834
		286TS	3550	67.5	27.0	F	32.3052	2.5	2.5	89.5	91.0	91.0	0.86	0.90	0.90	1.00	82.3172	64 141	854
40	30	286T	1770	70.3	28.1	F	64.7579	2.5	2.3	91.0	92.4	92.4	0.76	0.83	0.85	1.00	107.7030	47 103	873
		326T	1175	70.8	28.3	G	97.3581	2.3	2.5	90.2	91.7	91.7	0.70	0.80	0.85	1.00	274.1370	35 77	1276
		364/5T	885	76.8	30.7	G	129.8107	2.2	2.2	89.5	91.0	91.0	0.66	0.75	0.79	1.00	539.4742	48 106	1940
		324TS	3550	90.3	36.1	G	43.0736	2.2	2.2	90.2	91.7	91.7	0.87	0.90	0.91	1.00	112.5986	46 101	1135
		324T</																	

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current In A		Locked Rotor	Full Load	Locked Rotor	Break-Down Torque	Efficiency η%			Power Factor Cos ϕ			Service Factor S F	Moment of Inertia Wk²	Allowable Locked Rotor Time Hot/Cold Lb.Ft² (s)	Approx. Weight Lb	
HP	KW			At 230V	At 575V	Code	kVA	Tn	Tl/Tn	Tb/Tn	50	75	100	50	75	100				
% of full load																				
75	55	364/5TS	3560	163	65.3	F	80.3941	2.0	2.1	91.0	93.0	93.0	0.80	0.88	0.91	1.00	225.1843	46	101	2013
		364/5T	1775	165	65.9	G	161.5259	2.3	2.4	93.0	94.1	94.1	0.83	0.87	0.89	1.00	458.3785	22	48	1980
		404/5T	1180	174	69.4	G	242.6576	2.5	2.6	93.0	93.6	93.6	0.72	0.81	0.85	1.00	847.7478	26	57	2499
		444/5T	890	179	71.5	G	322.3142	1.7	2.1	91.7	92.4	93.0	0.73	0.80	0.83	1.00	1693.3865	41	90	3265
		404/5TS	3560	221	88.4	F	107.6839	2.0	2.6	91.7	93.6	93.6	0.81	0.89	0.91	1.00	274.1370	38	84	2653
100	75	404/5T	1775	229	91.6	G	215.3678	2.1	2.2	93.6	94.5	94.5	0.80	0.86	0.87	1.00	630.2713	18	40	2460
		444/5T	1185	241	96.4	G	322.3142	2.3	2.6	93.0	94.1	94.1	0.67	0.77	0.83	1.00	1693.3865	49	108	3397
		444/5T	890	244	97.6	G	429.2605	1.7	2.0	92.4	93.0	93.0	0.73	0.80	0.83	1.00	2006.9754	29	64	3793
		444/5TS	3560	263	105	F	134.2361	2.0	2.5	92.4	94.1	94.5	0.84	0.90	0.91	1.00	642.2313	72	158	3575
		444/5T	1780	275	110	G	268.4722	2.0	2.2	93.6	94.5	94.5	0.81	0.85	0.87	1.00	1051.7946	37	81	3236
125	90	444/5T	1185	283	113	G	403.4459	2.1	2.3	93.6	94.1	94.1	0.74	0.80	0.85	1.00	2006.9754	40	88	4123
		447T	890	290	116	G	536.9444	1.7	2.0	93.0	93.6	93.6	0.73	0.80	0.83	1.00	2383.2830	30	66	4497
		504/5T	890	290	116	G	536.9444	1.7	2.0	93.0	93.6	93.6	0.73	0.80	0.83	1.00	2383.2830	30	66	4497
		444/5TS	3570	320	128	F	160.7883	2.0	2.5	92.4	94.1	94.5	0.84	0.90	0.91	1.00	770.6794	75	165	3716
		444/5T	1780	335	134	G	322.3142	2.2	2.3	94.1	95.0	95.0	0.81	0.86	0.87	1.00	1314.7444	33	73	3663
150	110	447T	1185	343	137	G	483.8400	2.2	2.2	94.5	95.0	95.0	0.74	0.82	0.85	1.00	2383.2830	40	88	4332
		504/5T	1185	343	137	G	483.8400	2.2	2.2	94.5	95.0	95.0	0.74	0.82	0.85	1.00	2383.2830	40	88	4332
		447T	890	355	142	G	643.8908	1.7	2.0	93.0	93.6	93.6	0.72	0.80	0.83	1.00	2885.0280	18	40	5001
		504/5T	890	355	142	G	643.8908	1.7	2.0	93.0	93.6	93.6	0.72	0.80	0.83	1.00	2885.0280	18	40	5001
		447TS	3570	435	174	G	213.8927	2.2	2.6	93.6	94.5	95.0	0.85	0.90	0.91	1.00	1027.5710	74	163	4123
200	150	504/5TS	3570	435	174	G	213.8927	2.2	2.6	93.6	94.5	95.0	0.85	0.90	0.91	1.00	1027.5710	74	163	4123
		447T	1780	460	184	G	429.2605	2.3	2.4	94.1	95.0	95.0	0.80	0.84	0.86	1.00	1621.5184	23	51	4391
		504/5T	1780	460	184	G	429.2605	2.3	2.4	94.1	95.0	95.0	0.80	0.84	0.86	1.00	2885.0280	32	70	4992
		504/5T	1185	473	189	G	644.6283	2.4	2.4	94.5	95.0	95.0	0.73	0.80	0.84	1.00	2885.0280	32	70	4992
		586/7T	890	525	210	G	858.5210	1.0	2.1	93.6	94.1	94.5	0.60	0.71	0.76	1.00	8055.0439	65	143	8393
250	185	447TS	3570	535	214	G	267.7346	2.0	2.5	93.6	95.4	95.4	0.88	0.90	0.91	1.00	1181.7078	34	75	4550
		504/5TS	3570	535	214	G	267.7346	2.0	2.5	93.6	95.4	95.4	0.88	0.90	0.91	1.00	1181.7078	34	75	4550
		447T	1780	565	226	G	536.9444	2.1	2.3	94.5	95.0	95.4	0.81	0.85	0.86	1.00	2059.7650	22	48	5093
		504/5T	1780	565	226	G	536.9444	2.1	2.3	94.5	95.0	95.4	0.81	0.85	0.86	1.00	2059.7650	22	48	5093
		5008T	1190	560	224	G	802.4664	1.7	2.4	94.7	95.3	95.1	0.73	0.82	0.86	1.00	4382.8133	15	33	6549
300	220	586/7T	1190	610	244	G	802.4664	1.8	2.1	93.0	94.1	95.0	0.68	0.76	0.80	1.00	5202.0825	74	163	7931
		586/7T	890	635	254	G	1073.1513	1.0	2.1	93.6	94.1	95.0	0.60	0.71	0.77	1.00	8911.9641	26	57	9339
		586/7TS	3570	650	260	G	320.8390	1.1	2.0	94.1	95.0	95.4	0.87	0.88	0.89	1.00	2822.3093	34	75	6549
		586/7T	1790	673	269	G	640.2029	1.8	2.1	94.5	95.0	95.4	0.81	0.85	0.86	1.00	4069.7557	56	123	7568
		5008T	1785	685	274	G	642.4156	2.0	3.0	93.5	94.7	95.0	0.73	0.81	0.85	1.00	2251.4171	25	55	5889
350	260	5008T	1190	660	264	G	963.2547	1.6	2.1	95.3	95.5	95.1	0.78	0.84	0.87	1.00	5113.2841	15	33	7355
		586/7T	1190	728	291	G	963.2547	1.8	2.1	93.0	94.1	95.0	0.69	0.76	0.80	1.00	6372.5502	75	165	8998
		586/7T	890	755	302	G	1287.7815	1.0	2.0	93.6	94.1	95.0	0.60	0.62	0.77	1.00	10625.8022	24	53	9847
		586/7TS	3570	768	307	G	374.6810	1.0	2.0	94.1	95.0	95.4	0.87	0.88	0.89	1.00	3135.9005	35	77	7058
		586/7T	1790	795	318	G	747.1493	1.8	2.1	94.5	95.0	95.4	0.81	0.85	0.86	1.00	4273.2436	38	84	8587
400	300	5008T	1785	783	313	F	749.3620	2.0	2.8	94.3	95.2	95.3	0.77	0.84	0.87	1.00	2573.0445	21	46	6446
		5008T	1190	780	312	G	1124.0430	1.6	2.0	95.7	95.7	95.1	0.80	0.86	0.87	1.00	5843.7733	15	33	8188
		586/7T	1190	855	342	G	1124.0430	1.8	2.0	93.0	94.1	95.4	0.70	0.77	0.80	1.00	7543.0179	73	161	9508
		586/7T	890	880	352	G	1502.4118	1.1	2.0	93.6	94.1	95.0	0.60	0.64	0.78	1.00	11139.9557	25	55	10188
		586/7T	1790	918	367	G	854.0956	1.8	2.0	94.5	95.0	95.4	0.81	0.85	0.86	1.00	4578.4743	34	75	9436
450	330	5008T	1785	885	354	F	856.3083	2.0	2.7	94.7	95.4	95.4	0.79	0.85	0.88	1.00	2894.6788	22	48	7053
		586/7T	1190	988	395	G	1284.0937	1.8	2.0	93.0	94.1	95.4	0.70	0.78	0.80	1.00	8453.3832	62	136	10041
		586/7T	1790	1010	404	G	960.3044	1.8	2.0	94.5	95.0	95.4	0.81	0.85	0.86	1.00	5087.1952	32	70	10575
		5008T	1785	988	395	F	963.2547	2.0	2.7	95.0	95.6	95.6	0.80	0.86	0.88	1.00	3216.3085	22	48	7630
		586/7T	1190	1085	434	G	1444.8820	1.5	2.1	93.0	94.1	95.4	0.70	0.78	0.80	1.00	8453.3832	34	75	10672
500	370	586/7T	1790	1128	451	G	1067.2508	1.8	2.1	94.5	95.4	95.8	0.82	0.85	0.86	1.00	6104.6347	35	77	11059

The values shown are subject to change without prior notice. To obtain guaranteed values, please contact our nearest sales office.



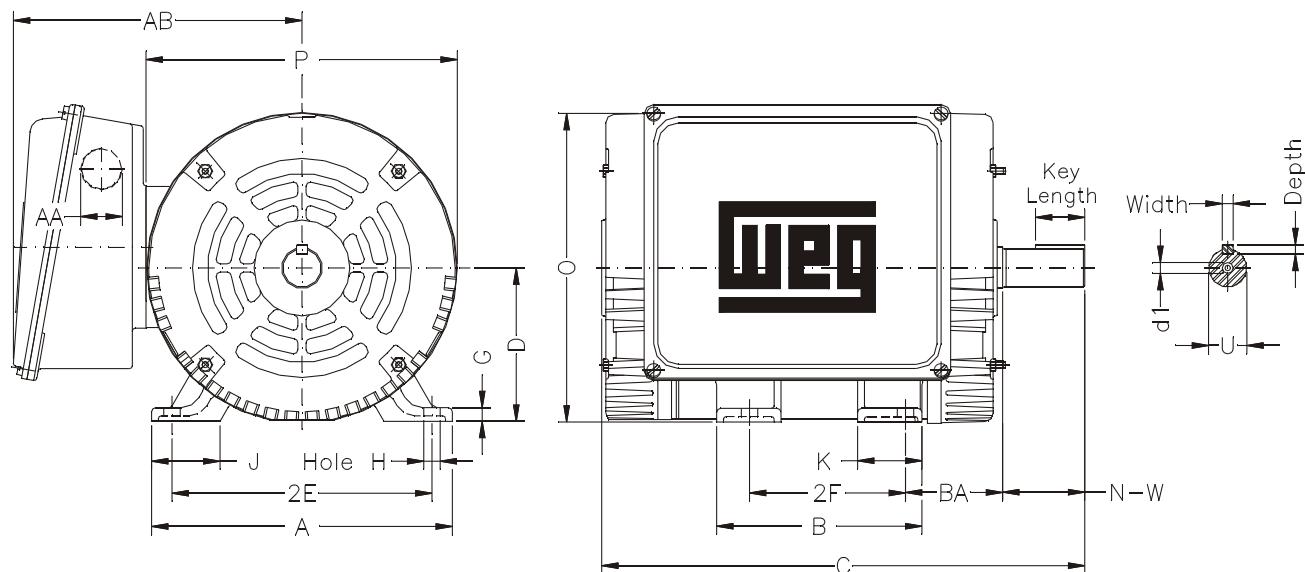
IEEE 841 Motors - TEFC IPW55

Premium Efficiency

Rated Output		NEMA Frame	Rated Speed rpm	Full Load Current In A	Locked Rotor Current kVA	Full Load Torque Tn	Locked Rotor Torque Tl/Tn	Break-Down Torque Tb/Tn	Efficiency η%			Power Factor Cos φ			Service Factor S F	Moment of Inertia Wk ²	Allowable Locked Rotor Time Hot/Cold Lb.Ft ²	Allowable Locked Rotor Time s	Approx. Weight Lb
									% of full load										
HP	kW			At 460V		Code	Lb.Ft	50	75	100	50	75	100						
1.0	0.75	143T	1765	1.5	L	2.99	2.8	3.9	75.5	80.0	82.5	0.60	0.73	0.79	1.15	0.09312	16	35	44
			145T	1165	L	4.54	2.3	3.0	75.5	80.0	80.0	0.48	0.60	0.69	1.15	0.13303	22	48	44
1.5	1.1	143T	3495	2.0	L	2.22	3.0	4.0	75.5	81.5	82.5	0.69	0.78	0.84	1.15	0.04312	18	40	42
			145T	1760	L	4.40	2.6	3.7	80.0	82.5	84.0	0.65	0.76	0.82	1.15	0.11972	12	26	51
2.0	1.5	145T	3480	2.6	L	3.04	3.5	4.0	80.0	82.5	84.0	0.70	0.81	0.86	1.15	0.04886	13	29	44
			184T	1165	L	9.07	3.0	3.0	84.0	86.5	86.5	0.48	0.60	0.68	1.15	0.62109	35	77	79
3.0	2.2	182T	3500	3.6	K	4.43	2.5	4.0	80.0	82.5	85.5	0.80	0.87	0.90	1.15	0.15443	23	51	90
			182T	1765	K	8.78	2.3	3.2	85.5	87.5	87.5	0.65	0.75	0.81	1.15	0.31782	31	68	88
5.0	3.7	184T	3480	5.8	H	7.49	2.4	3.5	85.5	86.5	87.5	0.85	0.90	0.91	1.15	0.19988	28	62	105
			184T	1745	H	14.9	2.1	3.0	85.5	87.5	87.5	0.68	0.78	0.82	1.15	0.38136	21	46	93
7.5	5.5	213T	1160	6.8	H	22.5	1.9	2.1	86.5	87.5	87.5	0.65	0.75	0.78	1.15	1.47188	49	108	162
			213T	3510	G	11.0	2.2	3.0	86.5	88.5	88.5	0.80	0.88	0.90	1.15	0.42144	25	55	121
10	7.5	215T	3500	11.6	G	15.1	2.0	2.6	88.5	89.5	89.5	0.86	0.90	0.91	1.15	0.66546	19	42	160
			215T	1765	H	29.9	2.0	2.6	88.5	90.2	90.2	0.69	0.79	0.82	1.15	1.3799	19	42	152
15	11	254T	1175	12.6	H	45.0	2.3	2.9	88.5	89.5	89.5	0.67	0.78	0.83	1.15	2.89729	24	53	278
			254T	3520	F	22.0	2.0	2.7	89.5	90.2	90.2	0.86	0.89	0.90	1.15	1.25653	33	73	254
20	15	284T	1765	17.6	G	43.9	2.5	2.5	89.5	91.0	91.0	0.74	0.82	0.86	1.15	2.1436	26	57	240
			284T	1180	G	65.7	2.3	2.5	89.5	90.2	91.0	0.79	0.85	0.88	1.15	7.19918	21	46	306
25	18.5	256T	3520	23.3	G	30.0	2.0	2.5	89.5	90.2	90.2	0.86	0.90	0.90	1.15	1.53576	21	46	287
			256T	1765	G	59.9	2.5	2.5	89.5	91.0	91.0	0.76	0.84	0.87	1.15	2.38178	18	40	273
30	22	286T	1175	23.8	G	90.0	2.3	2.5	90.2	91.0	91.0	0.80	0.86	0.88	1.15	8.18089	31	68	430
			284TS	3520	G	37.0	2.2	2.8	90.2	91.0	91.0	0.86	0.90	0.90	1.15	2.89729	23	51	313
40	30	324T	1765	29.6	F	73.9	2.3	2.2	91.0	92.4	92.4	0.77	0.84	0.85	1.15	3.83133	51	112	351
			324T	1175	F	111	2.2	2.4	89.5	91.7	91.7	0.72	0.81	0.85	1.15	10.2163	56	123	527
50	37	286TS	3530	33.8	G	43.9	2.4	3.0	90.2	91.0	91.0	0.87	0.90	0.90	1.15	3.57901	60	132	388
			324TS	3550	G	59.6	2.2	2.2	90.2	91.7	91.7	0.87	0.90	0.91	1.15	4.68274	47	103	397
60	45	326TS	1175	45.1	G	132	2.3	2.5	90.2	91.7	91.7	0.70	0.80	0.85	1.15	11.919	35	77	580
			326TS	3550	G	73.5	2.1	2.1	91.0	92.4	92.4	0.88	0.90	0.91	1.15	5.32131	33	73	549
75	55	364/5T	1770	57.8	G	147	2.3	2.3	92.4	93.6	93.6	0.77	0.83	0.86	1.15	9.1626	25	55	595
			364/5T	1180	G	221	2.5	2.7	92.4	93.0	93.0	0.74	0.82	0.86	1.15	29.0401	39	86	882
100	75	404/5T	1770	66.8	G	89.1	2.0	2.5	91.0	92.4	93.0	0.80	0.87	0.91	1.15	8.51359	61	134	807
			404/5T	1180	F	179	2.1	2.2	92.4	93.6	93.6	0.83	0.87	0.89	1.15	17.4383	23	51	853
125	90	404/5TS	1775	81.6	F	109	2.0	2.1	91.0	93.0	93.0	0.80	0.88	0.91	1.15	9.79062	46	101	915
			404/5T	1180	G	269	2.5	2.7	93.0	93.6	93.6	0.74	0.83	0.86	1.15	34.6247	32	70	1067
150	110	404/5TS	1780	101.5	F	148	2.0	2.6	91.7	93.6	93.6	0.81	0.89	0.91	1.15	19.9295	22	48	900
			404/5TS	1185	F	148	2.0	2.6	91.7	93.6	93.6	0.81	0.89	0.91	1.15	36.8586	26	57	1136
200	150	447TS	1780	110.5	F	148	2.0	2.6	91.7	93.6	93.6	0.81	0.89	0.91	1.15	11.919	38	84	1206
			447TS	1185	G	298	2.1	2.2	93.6	94.5	94.5	0.80	0.86	0.87	1.15	27.4031	18	40	1118
250	185	447TS	1780	120.5	G	446	2.3	2.6	93.0	94.1	94.1	0.67	0.77	0.83	1.15	73.6255	49	108	1544
			447TS	1185	G	446	2.3	2.6	93.0	94.1	94.1	0.67	0.77	0.83	1.15	27.9231	72	158	1625
300	220	504/5TS	1780	167.5	G	436	2.2	2.3	94.1	95.0	95.0	0.81	0.86	0.87	1.15	57.1628	33	73	1665
			447T	1185	G	654	2.2	2.2	94.5	95.0	95.0	0.74	0.82	0.85	1.15	103.621	40	88	1969
350	260	504/5TS	1780	181.3	F	178	2.0	2.5	92.4	94.1	94.5	0.84	0.90	0.91	1.15	44.677	74	163	1874
			447T	1185	G	356	2.0	2.2	93.6	94.5	94.5	0.81	0.85	0.87	1.15	44.677	74	163	1874
400	300	504/5TS	1780	217.5	G	296	2.2	2.6	93.6	94.5	95.0	0.85	0.90	0.91	1.15	51.3786	34	75	2068
			447T	1185	G	594	2.3	2.4	94.1	95.0	95.0	0.80	0.84	0.86	1.15	70.5008	23	51	1996
450	330	504/5TS	1780	236.3	G	892	2.4	2.4	94.5	95.0	95.0	0.73	0.80	0.84	1.15	125.436	32	70	2269
			447TS	1185	G	892	2.4	2.4	94.5	95.0	95.0	0.73	0.80	0.84	1.15	125.436	32	70	2269
500	370	586/7TS	1790	267.5	G	365	2.0	2.5	93.6	95.4	95.4	0.88	0.90	0.91	1.15	51.3786	34	75	2068
			447TS	1190	G	732	2.1	2.3	94.5	95.0	95.4	0.88	0.90	0.91	1.15	89.555	22	48	2315
550	410	586/7TS	1790	282.5	G	732	2.1	2.3	94.5	95.0	95.4	0.81	0.85	0.86	1.15	89.555	22	48	2315
			504/5T	1190	G	1096	1.8	2.1	93.0	94.1	95.0	0.68	0.76	0.80	1.15	226.1775	74	163	3605
600	450	586/7TS	1790	305.0	G	446	2.2	2.2	94.5	95.0	95.0	0.74	0.82	0.85	1.15	122.7091	34	75	2977
			504/5TS	1190	G	866	1.8	2.1	94.5	95.0	95.4	0.81	0.85	0.86	1.15	176.9459	56	123	3440
650	500	586/7TS	1790	336.3	G	1303	1.8	2.1	93.0	94.1	95.0	0.69	0.76	0.80	1.15	277.0674	75	165	4090
			504/5TS	1190	G	513	1.0	2.0	94.1	95.0	95.4	0.87	0.88	0.89	1.15	136.3435	35	77	3208
700	550	586/7TS	1790	363.8	G	1024	1.8	2.1	9										

ODP Motors - IP22

Single-phase

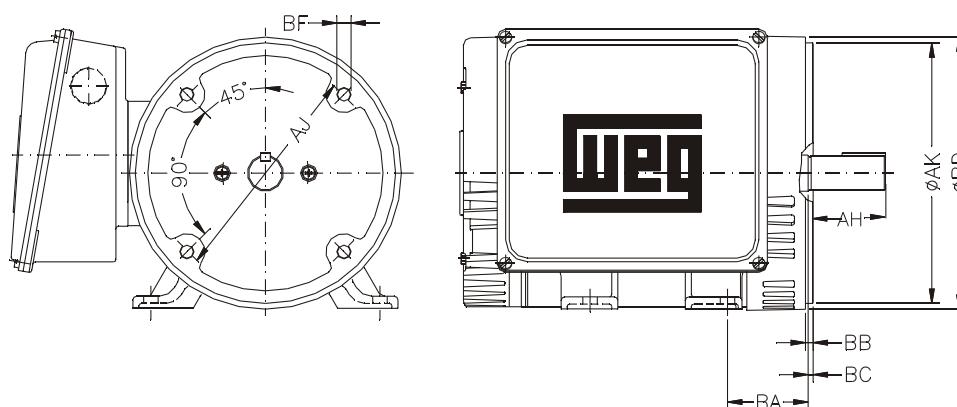


NEMA FRAMES	MOUNTING				A	B	C	D	G	J	K	O	P	KEYWAY		KEY LENGTH	SHAFT EXTENSION		AB	AA	d1	BEARINGS		
	2E	2F	H	BA										WIDTH	DEPTH	N-W	U	D.E.	O.D.E.					
182T	7.500	4.500	0.406	2.750	8.653	5.905	14.448	4.500	0.500	1.929	1.850	8.937	8.968	0.250	0.125	1.771	2.750	1.125	8.346	NPT 1"	A4	6206-Z	6205-Z	
184T	7.500	5.500			6.889	14.870																		

* All dimensions in inches

Flange dimensions

"C" FLANGE



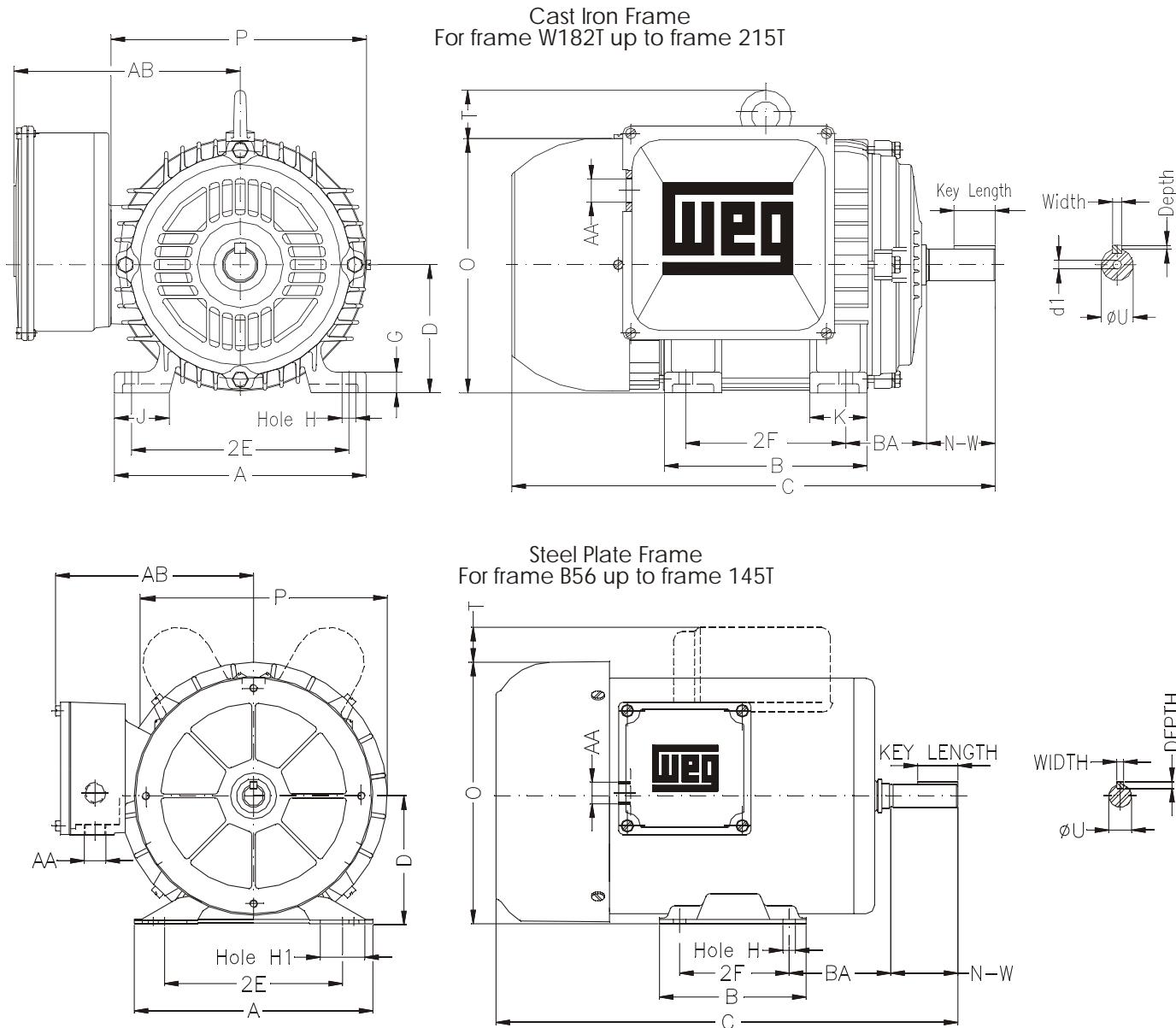
NEMA FRAMES	BA	AJ	AK	BD	BF		BB	BC	AH
					NUMBER	TAP SIZE			
182TC	2.750	7.250	8.500	8.750	4	UNC 1/2" 13	0.250	0.125	2.625
184TC									

* All dimensions in inches



TEFC Motors - IP55 - Single-phase

Cast Iron and Steel Plate Frame
Also valid for Farm Duty

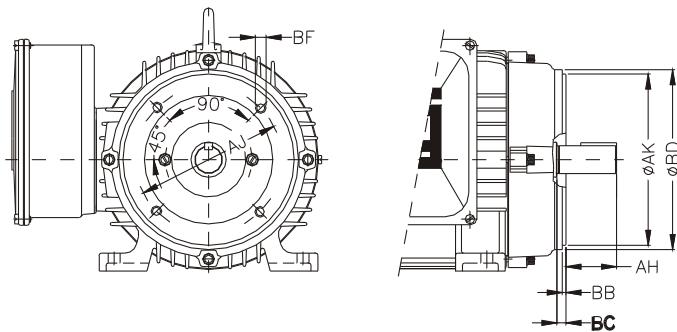


* All dimensions in inches

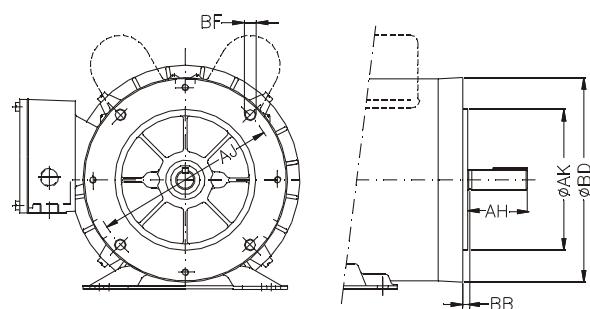
Flange dimensions

"C" FLANGE

Cast Iron Frame
For frame W182T up to frame 215T



Steel Plate Frame
For frame B56 up to frame 145T



NEMA FRAMES	AJ	AK	BD	"C" FLANGE DIMENSIONS		BB	BC	AH
				BF Number	Tap size			
B56C						JNC		
D56C							0.57	
F56HC	5.875	4.500	6.625					
G56HC								
F143TC								
G145TC								
W182/4TC								
184TC	7.250	8.500	8.880					
W213/5TC								
215TC								

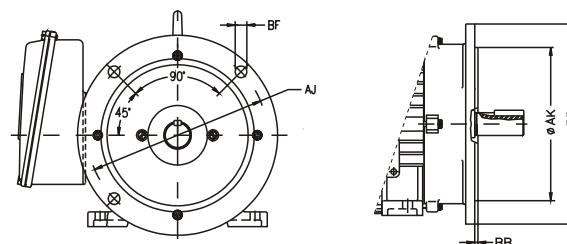
* All dimensions in inches

"D" FLANGE

Cast Iron Frame
For frame W182T up to frame 215T

NEMA FRAMES	AJ	AK	BD	"D" FLANGE DIMENSIONS		BB
				BF Number	Tap size	
W182/4TD						
184TD	10.000	9.000	11.000	4	∅5/8	∅.90
W213/5TD						
215TD						

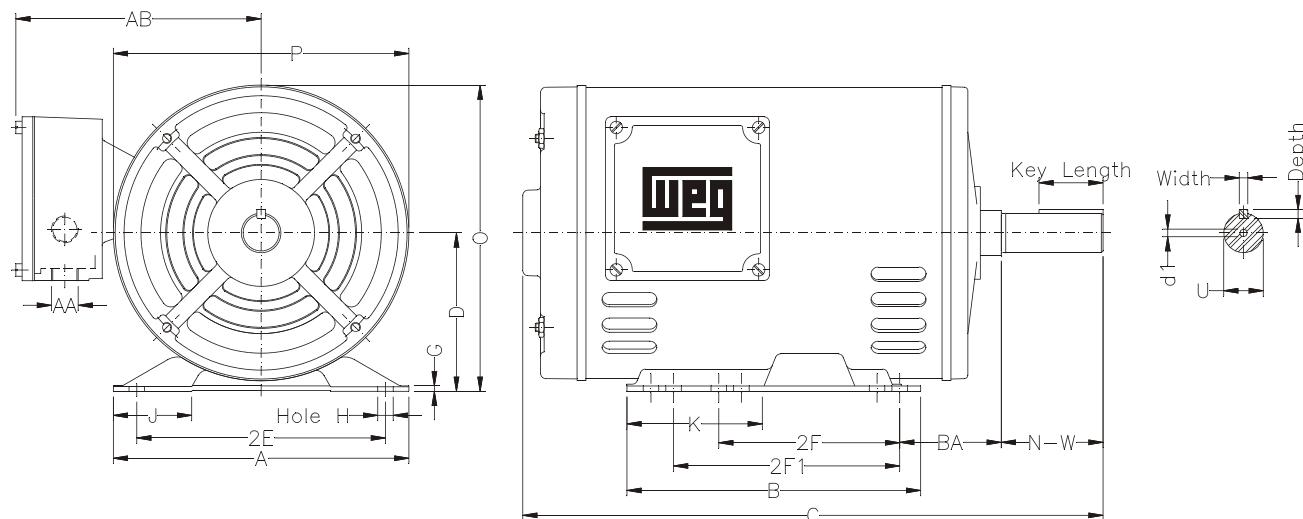
* All dimensions in inches





ODP Motors - Design "B" Premium Efficiency

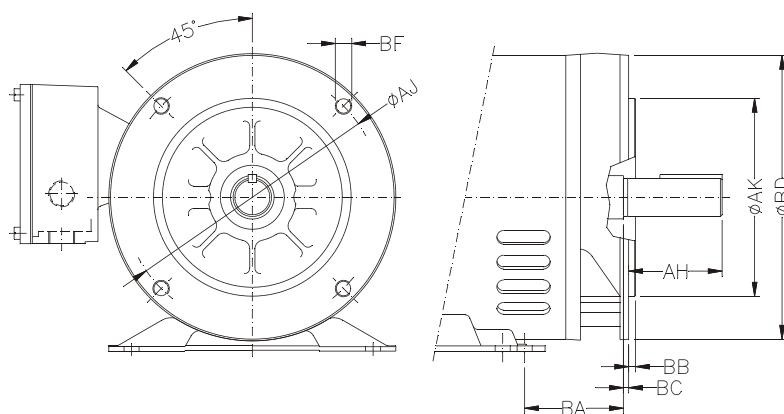
For 143/5T Frame



NEMA FRAMES	MOUNTING					A	B	C	D	G	J	K	O	P	KEYWAY		KEY LENGTH	SHAFT EXTENSION		AB	AA	d1	BEARINGS	
	2E	2F	2F1	H	BA										WIDTH	DEPTH		N-W	U				D.E.	O.D.E.
143/5T	5.500	4.000	5.000	C 544	2.250	6.535	6.495	2.085 2.871	3.500	C 120	1.732	1.688	6.77	6.535	0.127	0.187	1.47	2.250	C 875	5.433	NH112	A2	6205-ZZ	5204-ZZ
143/5TC																								

Flange Dimensions

"C" FLANGE



NEMA FRAME	BA	AJ	AK	BD	BF		BB	BC	AH
					NUMBER	TAP SIZE			
143/5TC	2.250	5.274	4.500	6.535	4	UNC3/8"X16	0.157	0.120	2.123
143/5T									

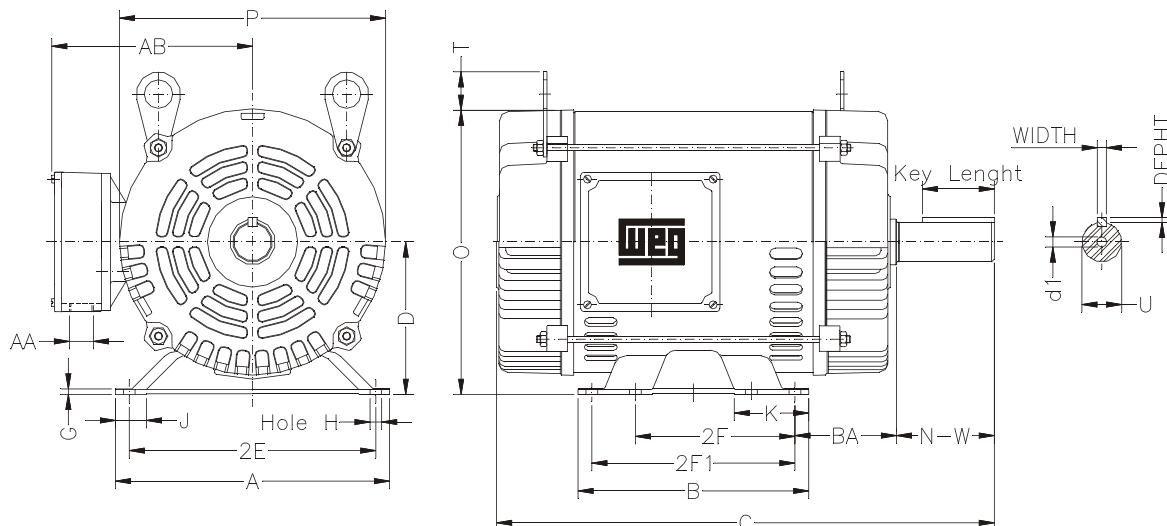
* All dimensions in inches

ODP Motors - Design "B"

Premium Efficiency



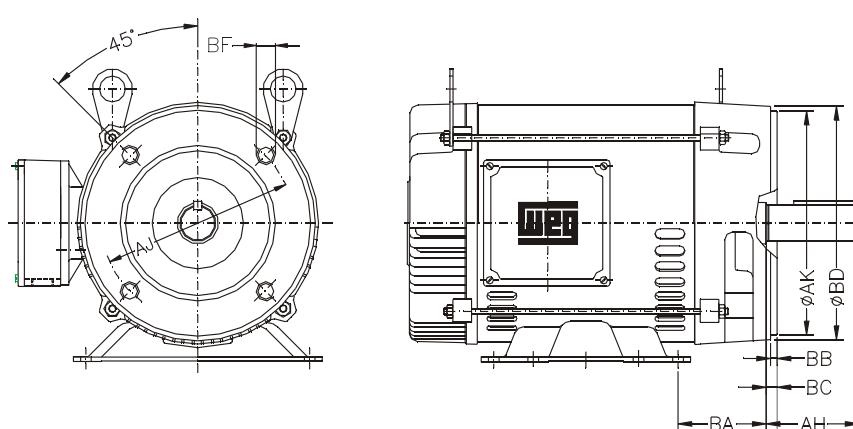
For 182/4T and 213/5T Frames



NEMA FRAMES	MOUNTING					A	B	C	D	G	J	K	O	P	T	KEYWAY		KEY LENGTH	SHAFT EXTENSION		AB	AA	d1	BEARINGS		
	2E	2F	2F1	H	BA											WIDTH	DEPTH		N-W	U				D.E.	O.D.E.	
	182T	7.500	4.500	5.500		2.750	8.661	6.299	13.504	4.500	0.187	1.171	1.988	8.307	7.637	—	0.250	0.250	1.771	2.750	1.125	6.575	NPT 3/4"	A4	6206-ZZ	6205-ZZ
	184T				0.406				14.291																	
	213/5T	8.500	5.500	7.000		3.488	9.448	7.952	17.165	5.250	0.187	1.063	2.567	9.842	8.779	1.378	0.312	0.312	2.480	3.375	1.375	7.795			6208-ZZ	6206-ZZ

Flange Dimensions

"C" FLANGE



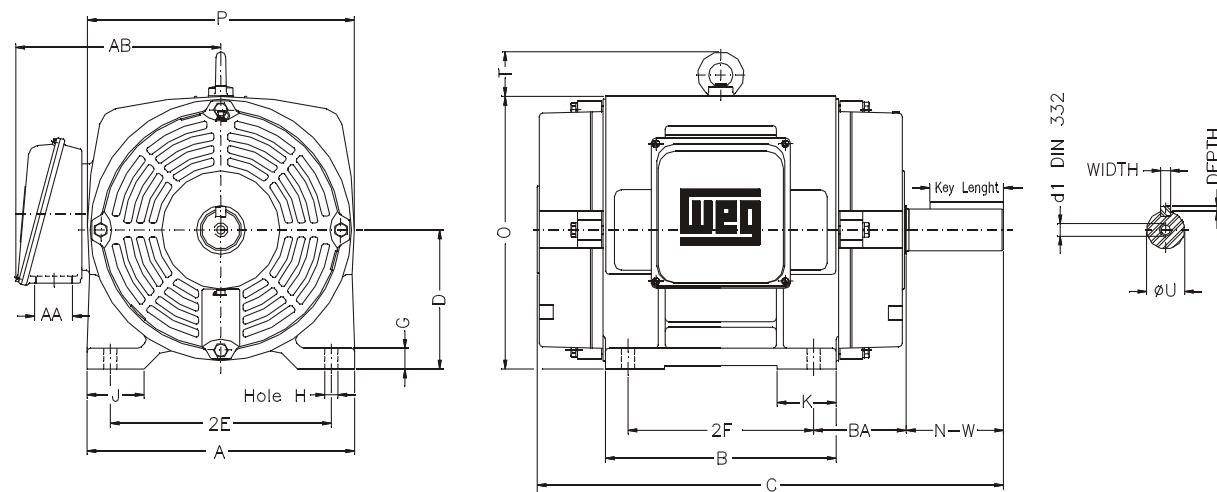
FRAME	BA	AJ	AK	BD	BF		BB	BC	AH	
					NUMBER	TAP SIZE				
182/4 TC	2.750		7.250	8.500	8.875	4	UNC 1/2"x13	0.250	0.125	2.625
213/5 TC	3.500							0.250	0.250	3.125

* All dimensions in inches



ODP Motors - Design "B" Premium Efficiency

For 254/6T Frame and up

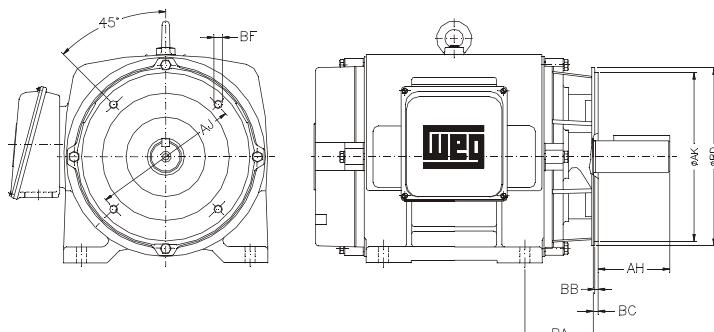


NEMA FRAME	MOUNTING				A	B	C	D	G	J	K	U	P	T	KEYWAY		KEY		SHAFT EXTENSION		AB	AA	d1	BEARINGS	
	2E	2F	H	BA											WIDTH	DEPTH	LENGTH	N.W.	U	2E				O.D.E.	
2401	16.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.025	0.125	1.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
240T		7.000														2.000	0.125	3.125	4.022	1.925					
2401																2.075	0.125	1.125	3.222	4.225					
204TS	11.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.000	0.125	3.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
240T		7.000														2.075	0.125	1.125	3.222	4.225					
204TS	11.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.025	0.125	3.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
324T																2.125	0.125	3.125	4.122	1.925					
324TS	12.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.000	0.125	3.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
324T		7.000														2.075	0.125	1.125	3.222	4.225					
324TS	12.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.025	0.125	3.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
328TS																2.125	0.125	3.125	4.122	1.925					
364TS	14.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.000	0.125	3.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
364TS		7.000														2.075	0.125	1.125	3.222	4.225					
364TS	14.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.025	0.125	3.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
404TS	16.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.000	0.125	3.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
404TS		7.000														2.075	0.125	1.125	3.222	4.225					
404TS	16.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.025	0.125	3.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
444TS	18.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.000	0.125	3.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
444TS		7.000														2.075	0.125	1.125	3.222	4.225					
444TS	18.325	8.252		4.250	10.122	2.100	20.320	6.250	8.025	2.042	2.960	12.124	6.72		2.025	0.125	3.125	4.022	1.925	16.322			6211-2Z	6211-2Z	
444TS		7.000														2.125	0.125	3.125	4.122	1.925					

* All dimensions in inches

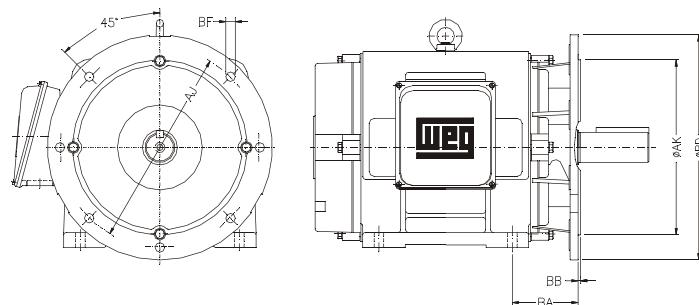
Flange dimensions

"C" FLANGE



NEMA FRAMES	BA	AJ	AK	BD	BF		BB	BC	AH
					NUMBER	TAP SIZE			
254TC	4.250	7.750	8.500	8.875					3.750
256TC									4.375
284TC									3.000
284TSC	4.750	8.000	10.500	11.031					4.375
286TC									3.000
288TSC									5.000
324TC									3.000
324TSC	5.250								5.000
326TC									5.000
328TSC									3.500
364/5TC							0.250	0.250	5.025
364/5TSC	5.675		11.000	12.500	15.562				3.500
404/5TC									7.000
404/5TSC	6.025								7.000
444/5TC									9.250
444/5TSC	7.500		14.000		17.500				9.500

"D" FLANGE



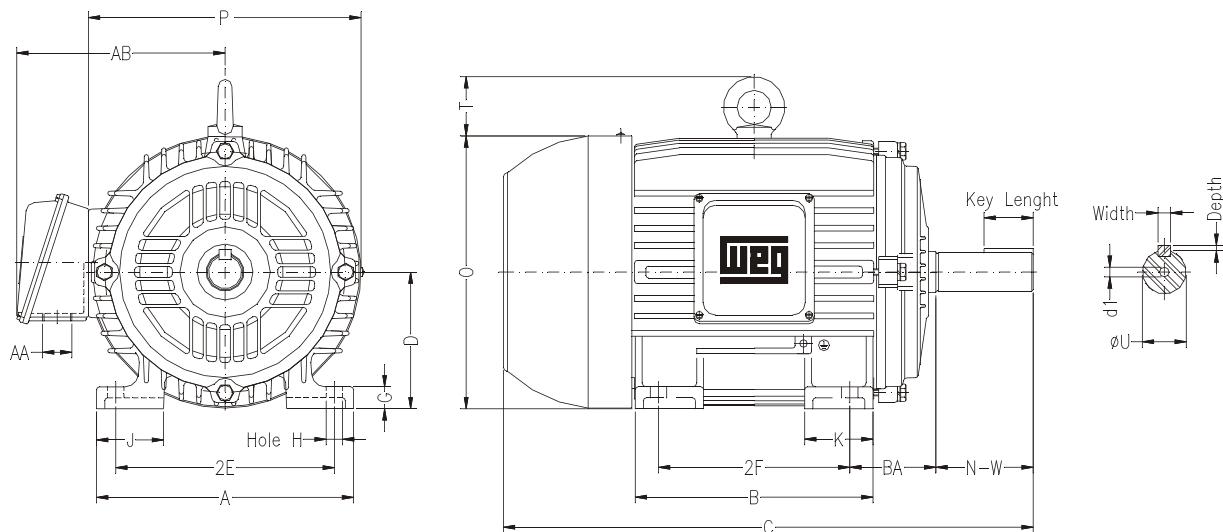
NEMA FRAMES	BA	AJ	AK	BD	BF		BB
					NUMBER	TAP SIZE	
254TC	4.250						
256TC							
284TC							
284TSC	4.750		12.500	13.000	11.031		
286TC							
288TSC							
324TC							
324TSC	5.250						
326TC							
328TSC							
364/5TC							
364/5TSC	5.675		16.000	17.000	15.562		0.250
404/5TC							
404/5TSC	6.025						
444/5TC							
444/5TSC	7.500		20.000	21.000	17.513		

* All dimensions in inches



General Purpose Motors - TEFC - Three Phase

Valid for: Standard, Premium Efficiency, Top Premium Efficiency Motors
and W21 Severe Duty - IP 55



NEMA FRAMES	MOUNTING				A	B	C	D	G	J	K	O	P	T	KEYWAY			SHAFT EXTENSION		AB	AA	d1	BEARINGS			
	2E	2F	H	BA											S	R	E9	N-W	U	D.E.	O.D.E.					
143T	6.500	4.300	0.342	2.230	6.407		8.157	12.346		3.947	1.456	1.554	7.030	7.047		3/8"	1.765	1.575	2.200	0.876	6.500	N-1214*	6200-ZZ	6234-ZZ		
146T		5.000					8.142	12.049																		
W1624T		5.500																								
		5.500																								
162T	7.500	5.500																								
184T		5.500																								
W2125T		5.500																								
213T	8.500	5.500																								
215T		5.500																								
W2646T		5.500																								
254T	10.000	13.300																								
266T		13.300																								
284T		9.500																								
284T		11.000																								
286T		11.000																								
324T		13.500																								
324TS		13.500																								
328T		13.500																								
328TS		13.500																								
364ST		11.250																								
364STS		11.250																								
404GT	14.010	11.250	0.749	1.675	17.165		16.394		8.000	1.480	3.150	4.134	10.532				3/8"	2.610	4.530	6.874	2.375					
404GTS		11.250					16.583																			
404GT		12.244																								
404GTS		12.244																								
444GT		14.500																								
444GTS		14.500																								
444GT		15.500																								
444GTS		15.500																								
447T		23.000																								
447TS		23.000																								
449T		25.000																								
449TS		25.000																								
504ST		15.000																								
504STS		15.000																								
504ST		17.000																								
504STS		17.000																								
506TT		22.000																								
506TTS		22.000																								
509T		26.000																								
509TTS		26.000																								

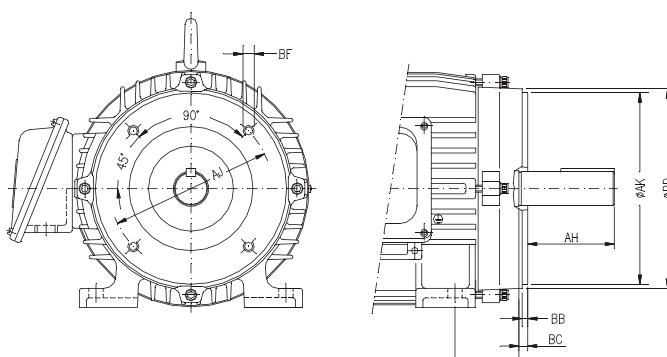
* All dimensions in inches

** NEMA W frames are valid only for standard efficiency motors.

The data for frame 586/7T shown above are for horizontal mounting applications under standard coupling loads.
The customer must indicate when application is vertical or under special coupling loads.

Flange dimensions

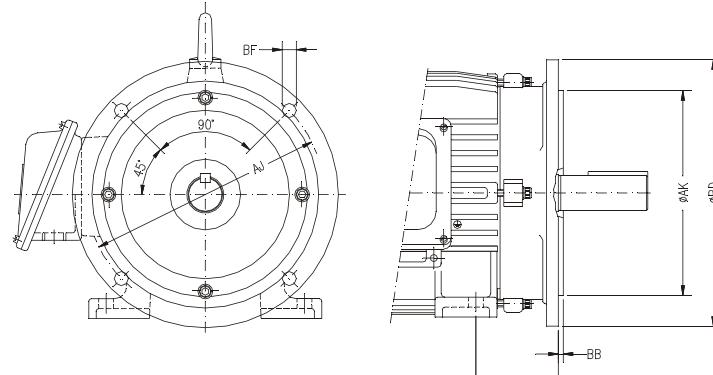
"C" FLANGE



NEMA FRAMES	BA	AJ	AK	BD	BF		BB	BC	AH
					NUMBER	TAP SIZE			
143TC	2.250	5.875	4.500	5.500			0.155		2.25
145TC							0.125		2.625
W182/4TD	2.750								
182TC	2.750								
184TC									
W213/5TC	3.500	7.250	8.500	6.875					
213TC	3.500	7.250	8.500	6.875					
215TC									
W254/8TC	4.250								
254TC	4.250								
256TC									
284TC									
284TSC	4.750	9.000	10.000	11.031					
286TC									
286TSC									
324TC	5.250								
324TSC	5.250								
326TC									
326TSC									
384/5TC	6.875	11.000	12.000	13.551					
384/5TSC	6.875								
404/5TC	6.025								
404/5TSC	6.025								
444/5TC									
444/5TSC	7.500	14.000	16.000	17.913					
447TC									
447TSC									
449TC									
449TSC									
504/5TC	8.500								
504/5TSC	8.500	14.500	16.500						
586/7TC		10.000							
586/7TSC		10.000	20.000	22.000					
5008TD	9.500								
5008TSD	9.500								

NEMA FRAMES	BA	AJ	AK	BD	BF		BB
					NUMBER	TAP SIZE	
143TD	2.250						
145TD							
W182/4TD	2.750						
182TD	2.750						
184TD							
W213/5TD	3.500						
213TD	3.500						
215TD							
W254/8TD	4.250						
254TD	4.250						
256TD							
284TD	4.750						
284TSD	4.750	12.500	11.000	14.000			
286TD							
286TSD							
324TD							
324TSD	5.250						
326TD							
326TSD							
384/5TD	5.875						
384/5TSD	5.875	16.000	14.000	17.718			
404/5TD							
404/5TSD	6.025						
444/5TD							
444/5TSD	7.500	20.000	18.000	21.553			
447TD							
447TSD							
449TD							
449TSD							
504/5TD	8.500						
504/5TSD	8.500	22.000	16.000	24.603			
586/7TD							
586/7TSD	10.000	30.000	28.000	32.000			
5008TD	9.500						
5008TSD	9.500						

"D" FLANGE



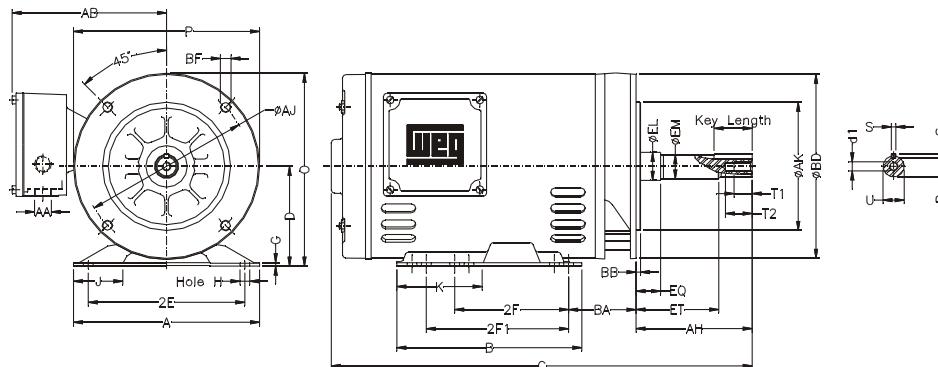
* All dimensions in inches
** NEMA W frames are valid only for standard efficiency motors



Close-Coupled Pump Motors - ODP

JM and JP Type
Premium Efficiency

For 143/5 JM or JP Frame



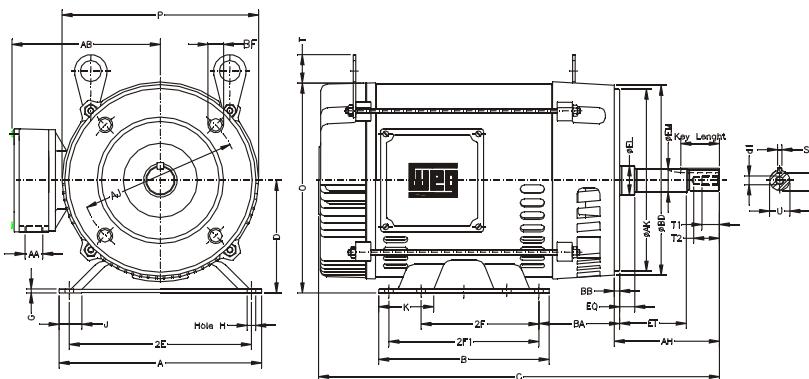
NEMA FRAMES	MOUNTING					A	B	D	G	J	O	P	AB	AA	BEARINGS		NEMA "C" FLANGE													
	2E	2F	2F1	H	BA											D.E.	O.D.E.	AJ	AK	BB	BD									
																		Qty.	Tap Size	Bolt Depth										
E143/5 JM/JP	5.500	4.000	5.000	C 344	2.250	6.535	6.456	3.500	C 120	1.732	6.77	6.535	8.575	NPT 1/2"	6208-ZZ	6204-ZZ	5.074	4.500	0.157	8 498	4	UNC3/8"x18	0.551							
F143/5 JM/JP																														

NEMA FRAMES	SHAFT END - TYPE JM										C				
	LENGTHS			DIAMETERS			KEYWAY		KEY	THREADED HOLE					
	AH	EQ	ET	U	EM	EL	S	R		LENGTH	d1 (UNC)	T1	T2		
E143/5 JM	4.258	C 550	2.550	0.274	1.000	1.156	0.157	0.762	1.654	3/8"x5-2B	C 748	1.02	14.055	JM	
F143/5 JM														14.842	

NEMA FRAMES	SHAFT END - TYPE JP										C				
	LENGTHS			DIAMETERS			KEYWAY		KEY	THREADED HOLE					
	AH	EQ	ET	U	EM	EL	S	R		LENGTH	d1 (UNC)	T1	T2		
E143/5 JP	7.319	1.553	5.941	0.374	1.000	1.250	0.157	0.768	1.654	3/8"x5-2B	C 748	1.02	17.129	JP	
F143/5 JP														17.915	

* All dimensions in inches

For 182/4 JM or JP and 213/5 JM or JP Frames



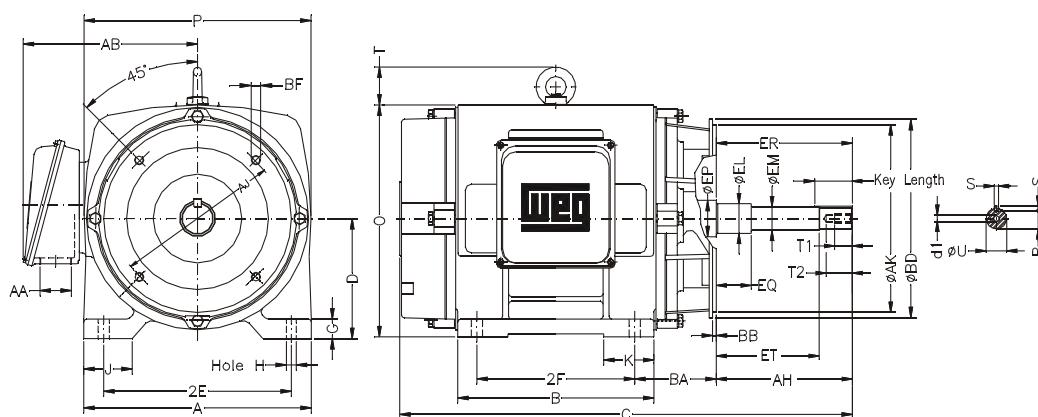
NEMA FRAMES	MOUNTING					A	B	D	G	J	K	O	P	T	AB	AA	BEARINGS		NEMA "C" FLANGE															
	2E	2F	2F1	H	BA													D.E.	O.D.E.	AJ	AK	BB	BD											
																				Qty.	Tap Size													
182 JM/JP	7.500	4.500	5.500		0.406	2.750	8.861	6.299	4.500	0.187	1.17	1.988	8.307	7.637		6.574	NPT 1/2"	6207-ZZ	6205-ZZ	5.834	4.500	0.157	6 496	4	UNC3/8"x16									
184 JM/JP						3.500	9.449	7.952	5.250		1.063	2.567	9.842	8.779	1.378	7.795		6209-ZZ	6206-ZZ	7.250	8.500	0.250	8 858		UNC1/2"x13									
213/5 JM/JP	6.500	5.500	7.000																															

NEMA FRAMES	SHAFT END - TYPE JM										C				
	LENGTHS			DIAMETERS			KEYWAY		KEY	THREADED HOLE					
	AH	EQ	ET	U	EM	EL	S	R		LENGTH	d1 (UNC)	T1	T2		
182 JM	4.258	0.550	2.550	0.374	1.000	1.250	0.157	0.768	1.654	3/8"x5-2B	0.748	1.02	14.527	JM	
184 JM														15.315	
213/5 JM														17.323	

NEMA FRAMES	SHAFT END - TYPE JP										C				
	LENGTHS			DIAMETERS			KEYWAY		KEY	THREADED HOLE					
	AH	EQ	ET	U	EM	EL	S	R		LENGTH	d1 (UNC)	T1	T2		
182 JP	7.319	1.553	5.941	0.374	1.000	1.250	0.157	0.768	1.654	3/8"x5-2B	0.748	1.02	20.236	JP	
184 JP														21.023	
213/5 JP	8.149	2.374	5.905	1.250	1.375	1.750	0.250	1.110	2.569	1/2"x13-2B	0.984	1.496	21.240		

* All dimensions in inches

For 254/6 JM or JP Frames and up



NEMA FRAMES	MOUNTING				A	B	D	G	J	K	O	P	T	AB	AA	BEARINGS		NEMA 1000 WASH				
	2F	2F	H	R6												O.F.	O.O.F.	AJ	AK	BB	BC	
254-WJP	10.300	8.950			4.250	12.150	10.120	5.220	3.787	2.600	2.550	10.204	11.872	2.150	13.375	NF 1.1/2"	A300-2-Z8	6008-2-Z8	7.250	8.500	8.853	1.400-2.5x13
256-WJP	10.300	10.000					11.732															3.551
284-WJP	11.300	9.800			4.750	12.750	11.374	7.000	1.182	2.150	2.350	13.859	13.700		10.950		6512-Z-28	6211-Z-28			4.000	
286-WJP	11.300	11.000					12.750															
322-WJP	12.500	10.900			12.500	12.867	12.250	11.160			9.000	1.285	9.250	9.350	15.551	15.116	2.586	11.248	N772	6212-Z-28	6212-Z-28	0.25
326-WJP	12.500	12.000					14.553															1.400-2.5x11
364/5 JM/WJP	14.300	11.200	9.750	5.875	17.170	15.400	9.000	1.480	2.150	4.140	18.425			17.874	16.970	N-1/2"	6514-C3	6514-C3	10.500	13.133	3.545	
404/5 JP	15.300	12.244	9.000	6.025	18.800	17.750	13.000	1.480	3.000	5.170	19.420				2.900		NL313-C3	EM 4-C3			14.950	
																	FS14-C3					

NEMA FRAMES	SHAFT END - TYPE JM												C	
	LENGTHS				DIAMETERS				KEYWAY		KEY	THREADED HOLE		
AH	ER	EQ	ET	U	EM	EL	EP	S	R	LENGTH	d1 (UNC)	T1	T2	JM
254 JM								1.750						25.180
256 JM								2.183						25.802
284 JM								0.290	1.110	2.000	1/2"X13-28	0.984	1.400	24.281
286 JM								2.350						25.754
324 JM								2.750						26.431
326 JM														24.827
364/5 JM														26.139

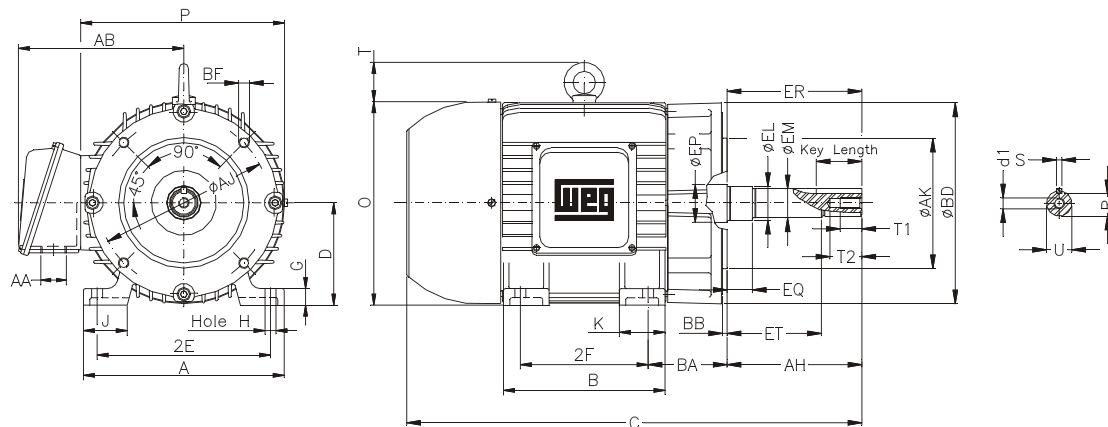
NEMA FRAMES	SHAFT END - TYPE JP												C	
	LENGTHS				DIAMETERS				KEYWAY		KEY	THREADED HOLE		
AH	ER	FQ	FT	U	F1	F2	FP	S	R	LENGTH	d1 (UNC)	T1	T2	JP
254 JP								1.170						25.549
256 JP								2.152	0.260	1.110				26.682
284 JP								2.350						27.411
286 JP														26.804
324 JP														28.311
326 JP														32.607
364/5 JP														32.019
404/5 JP														35.260

* All dimensions in inches



Close - Coupled Pump Motors TEFC (JM and JP type)

Standard and Premium Efficiency



NEMA FRAMES	MOUNTING				A	B	D	G	J	K	O	P	T	AB	AA	BEARINGS		NEMA "C" FLANGE				BF								
	2E	2F	H	BA												D.E.	O.D.E.	AJ	AK	BB	BD	Qty.	Tap Size	Bolt Depth						
143 JM/JP	4 500	6 500	C 314	2.205	6.157	5.157	6 500	0.57	1.166	1.654	7.000	7.017	X	9.102	NPT34"	6206-ZZ	8204-ZZ													
145 JM/JP	5 500					3.1/2																								
W182 JM/JP	7 500	4 500					8.095																							
182 JM/JP	7 500	4 500			2.753	3.661	5.945	4 500	0.72	1.860	2.41*	8.035	7.785		7.013															
184 JM/JP	7 500	4 500					5.945																							
W210/5 JM/JP	8 100	6 500	C 306				9.038	6.260		6.092																				
213 JM/JP	8 100	6 500			3.504	3.764	7.045	6 260	0.827	2.508	3.042	10.053	6.750		7.772															
215 JM/JP	8 100	6 500					8.856				2.135	10.341	6.030																	
W254/5 JM/JP	10 000	8 252					11.725	6.250		6.095	3.455	1.44*	10.570																	
254 JM/JP	10 000	8 252			4.252	12.123	10.020	6 250	0.817	2.520	9.085	12.42*	12.263	2.084	10.078															
256 JM/JP	10 000	8 252					11.725																							
284 JM/JP	11 000	9 500			4.704	13.740	13.077	7.000	1.018	3.160	2.952	14.087	14.384		10.380															
286 JM/JP	11 000	9 500					13.077																							
324 JM/JP	12 500	10 000			1.057	5.293	15.157	6 000	1.307	3.228	3.318	16.955	6.561	2.41*	11.766	NPT2"	9512-C3	9512-C3												
328 JM/JP	12 500	10 000					14.537																							
364 JM/JP	14 000	12 000			0.746	6.746	9.869	17.165	16.384	6 000	1.430	3.159	4.131	16.502	16.740	2.795	14.409	NPT2"												
365 JM/JP	14 000	12 000					12.241																							
404 JP	15 000	15 000			0.743	6.814	10.624	17.672	10.300	1.81*	3.857	5.432	16.486																	

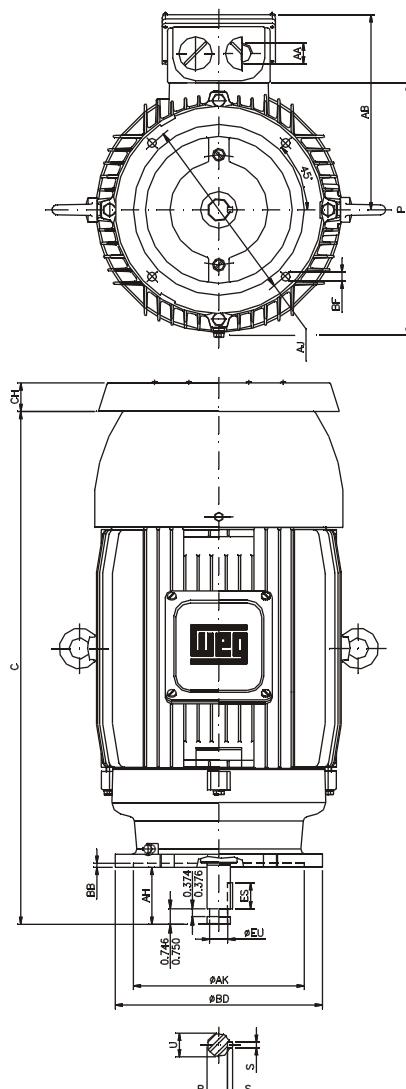
NEMA FRAMES	LENGTHS				DIAMETERS				KEYWAY		KEY LENGTH	THREADED HOLE			C
	AH	ER	EQ	ET	U	E	M	EL	EP	S	R	d1 (UNC)	T1	T2	
143 JM												1/16	1.179		JM
145 JM												1/16	1.179		
W1824 JM												1/16	1.179		
182 JM												1/16	1.179		
184 JM												1/16	1.179		
W2135 JM												1/16	1.179		
213 JM												1/16	1.179		
215 JM												1/16	1.179		
W254/8 JM												1/16	1.179		
264 JM												1/16	1.179		
256 JM												1/16	1.179		
284 JM												1/16	1.179		
286 JM												1/16	1.179		
324 JM												1/16	1.179		
326 JM												1/16	1.179		
364 JM												1/16	1.179		
365 JM												1/16	1.179		

NEMA FRAMES	LENGTHS				DIAMETERS				KEYWAY		KEY LENGTH	THREADED HOLE			C
	AH	ER	EQ	ET	U	E	M	EL	EP	S	R	d1 (UNC)	T1	T2	
143 JP												1/16	1.179		JP
145 JP												1/16	1.179		
W1824 JP												1/16	1.179		
182 JP												1/16	1.179		
184 JP												1/16	1.179		
W2135 JP												1/16	1.179		
213 JP												1/16	1.179		
215 JP												1/16	1.179		
W254/5 JP												1/16	1.179		
254 JP												1/16	1.179		
256 JP												1/16	1.179		
284 JP												1/16	1.179		
286 JP												1/16	1.179		
324 JP												1/16	1.179		
326 JP												1/16	1.179		
364 JP												1/16	1.179		
365 JP												1/16	1.179		
404 JP												1/16	1.179		
406 JP												1/16	1.179		

* All dimensions in inches

P Base Motors (HP and HPH type)

Standard and Premium Efficiency



NEMA FRAMES	AH	AK	AJ	BD	BB	BF	EU	ES	U	S	R	P	AB	C	CH	AA	BEARINGS	
																	D.E.	O.D.E.
143 HP	2750	8.250	9.125	12.000	0.196	0.432	0.587	1.250	0.676	0.187	0.735	7.017	5.905	12.421	1.142	NPT3/4"	E307-ZZ	6204-ZZ
145 HP									11.387									
182 HP									15.504	NPT"	E303-ZZ	6206-ZZ						
184 HP									15.504									
213 HP									19.630	1.378	E309-C3	6207-ZZ						
216 HP									22.126									
254 HP									23.723		6314-C3	6208-C2"						
256 HP									25.465	NPT1 1/2"								
284 HP									28.050		6312-C3	6211-C2"						
286 HP									27.845									
324 HP	1503	3.500	14.750	15.500	0.250	0.637	1.250	3.150	1.182*	0.375	1415*	15.561	11.496	32.403	1.172	NPT2"	6314-C3	6212-C2"
326 HP									31.887									
364/5 HP									33.984	2.795								
404/5 HP									11.059		6316-C3	3312-C3						
444/5 HP									36.074									
284 HPH									28.103	NPT1 1/2"	6316-C3*	6314-C2"						
286 HPH									28.595		6314-C3	6310-C3						
404/5 HPH									28.740		6314-C3	6211-C3						

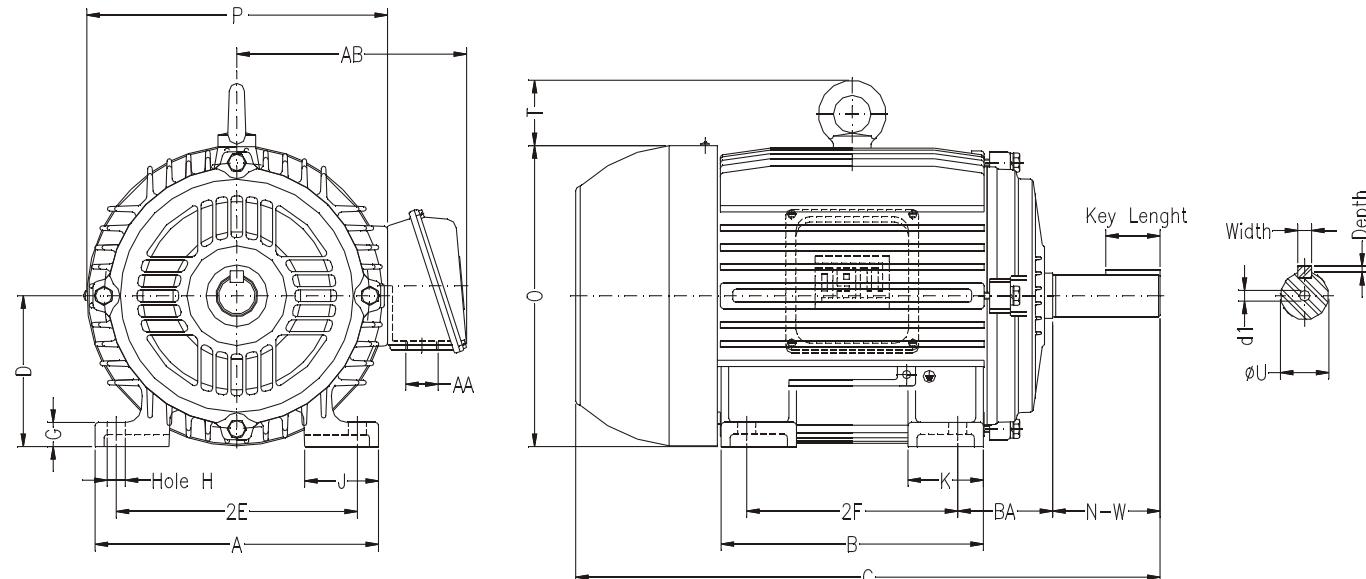
* For 2 poles motors
All dimensions in inches

MECHANICAL DATA



Oil Well Pumping Motors - Design "D"

High Slip (5 – 8%)

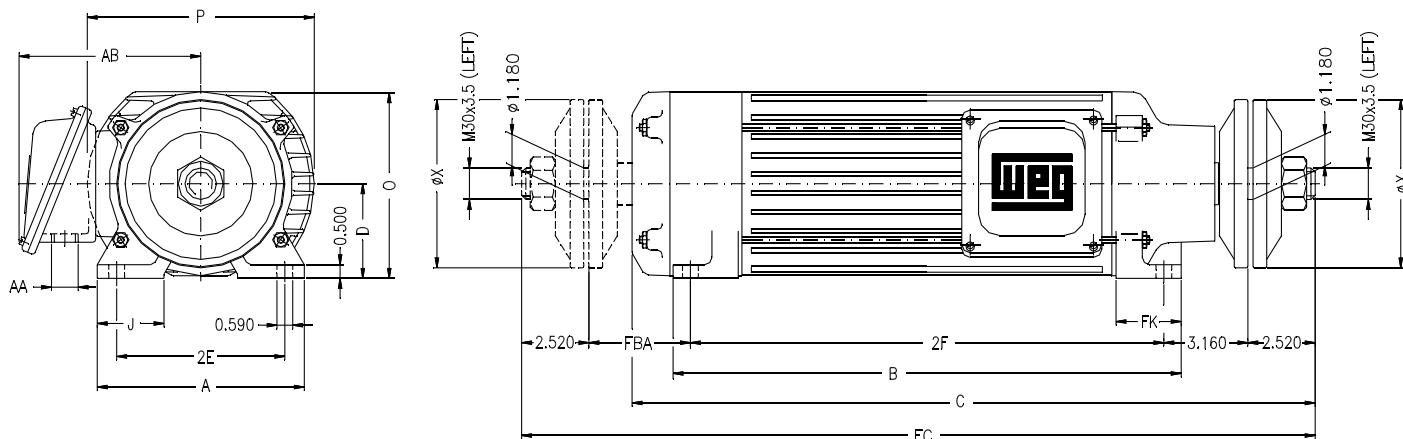


NEMA FRAMES	MOUNTING				A	B	C	D	G	J	K	O	P	T	KEYWAY		KEY WIDTH	SHAFT EXTENSION LENGTH	N-W	U	AB	AA	d1	BEARINGS			
	2F	2F	H	PA											WIDTH	DEPTH	D.F.							Q.D.F.			
215T	9.564	.7100	0.435	0.620	9.814	6.968	10.617	5.265	0.857	0.084	2.150	40.541	40.620	2.770	0.313	0.104	0.240	3.325	1.570	9.562	KPT1*	AV	6204-2RS1	6207-2RS1			
254T	9.252				12.250	12.125	10.000	25.215	5.252	0.817	2.520	2.559	12.421	12.223	2.057	0.375	0.167	2.755	1.000	1.625	10.072	NP11.102*	NP11.102*	E329-C3	6229-C3		
258T	10.202				10.321		11.732	24.545																EM11-C3	6211-C3		
284T	11.302				12.791	13.640	11.575	26.435	7.300	1.010	3.100	2.981	14.087	14.084	2.057			0.248	4.620	1.870	10.948			6312-C3	6212-C3		
286T	11.300				13.371		13.371	27.825										0.600	0.260	3.937	5.250	2.125	1.495	6312-C3	6212-C3		
324T	10.502				12.502	0.657	5.250	15.57	6.200	1.307	3.223	3.046	15.953	15.511	2.447							6314-C3	6214-C3				
326T	12.202				14.607	11.115																6314-C3	6214-C3				
364ST	11.516	0.748	5.875	17.665	16.894	25.705	8.200	1.780	3.150	4.150	18.512				18.740	2.705	0.825	0.312	4.330	5.375	2.375	14.400	KPT3	UNO321	6314-C3		
404ST	12.224				12.224													0.650	0.305	0.612	1.240	2.670			NU315-C3	6214-C3	
444ST	15.504				13.624	0.606	10.625	17.575	36.267	10.000	1.871	3.105	5.431	11.480								NU315-C3	6214-C3				
444ST	15.502				15.502	0.637	7.500	21.525	20.079	45.775	1.000	1.650	3.957	5.521	22.773	33.622	3.543	0.875	1.453	7.037	8.500	3.375	19.213	2xNPTS			

* All dimensions in inches

Saw Arbor Motors

Single and double shaft end



IEC FRAMES	2E	J	A	P	AB	2F	FK	FK1	B	FBA	D	O	C	FC	AA	X	BEARINGS	
																	D.E.	O.D.E.
80S-MS						10.236			12.008			18.543	22.440					
80M-MS	7.480	1.378	8.858	7.480	5.984	12.205	1.772	1.772	13.976	3.150	3.150	20.512	24.409	NPT3/4"	4.724	6307-ZZ	6207-ZZ	
80L-MS						14.173			15.949			22.480	26.377					
90L-MS	6.299	2.500	7.756	8.189	6.575	20.079	2.441	4.960	21.378	3.150	3.543	6.968	26.476	29.842	NPT1"	6.299	6308-ZZ	6208-ZZ

* All dimensions in inches

Saw Operation Guide

MINIMUM SAW DIAMETERS RECOMMENDED

Lumber size (mm)	3 hp				5 hp or 5.5 hp				7.5 hp				10 hp			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Up to 25mm	100 2.0 25	100 2.0 25	100 2.0 25	100 2.0 25												
25 up to 45	150 2.0 25	150 2.0 25	150 1.0 25	150 1.0 25												
45 up to 70	200 2.5 25	200 1.5 25	200 2.5 10	200 2.5 10	200 2.5 25	200 2.5 25	200 1.5 25	200 1.5 25								
70 up to 95	250 1.5 25	300 1.5 25	300 1.5 10	300 1.5 10	250 3.0 25	250 1.5 25	300 1.5 25	250 3.0 10	250 3.0 25	250 3.0 25	300 1.5 25	250 3.0 25	250 3.0 25	250 1.5 25	250 1.5 25	250 1.5 25
95 up to 110	300 3.0 25	300 3.0 10	300 1.5 10	300 1.5 10	300 3.0 25	300 1.5 25	300 3.0 10	300 2.0 10	300 3.0 25	300 1.5 25	300 1.5 10	300 3.0 25	300 3.0 25	300 3.0 25	300 3.0 25	300 1.5 25
110 up to 135	350 2.0 10	350 2.0 10	350 3.0 3	350 2.0 3	350 2.0 25	350 3.0 10	350 2.0 10	350 2.0 10	350 3.0 25	350 3.0 10	350 3.0 10	350 3.0 25	350 3.0 10	350 3.0 25	350 3.0 25	300 2.0 10
135 up to 155	400 3.0 10	400 2.0 10	400 2.0 3	450 3.0 3	400 3.0 10	400 3.0 10	400 3.0 10	400 3.0 10	400 3.0 25	400 3.0 10	400 3.0 10	400 3.0 25	400 3.0 10	400 2.0 25	400 2.0 25	350 2.0 10
155 up to 205	500 2.5 10	500 2.5 3	600 3.0 3		500 3.5 10	500 2.5 10	500 3.0 3	600 3.0 3	500 3.5 25	500 3.5 10	500 3.5 3	500 2.5 25	500 3.5 10	500 3.5 25	500 3.5 10	500 3.5 3
205 up to 250	600 4.5 3	600 3.0 3			600 3.0 10	600 4.5 3	600 4.5 3	800 3.5 3	600 4.5 10	600 4.5 3	600 4.5 10	600 4.5 3	600 4.5 10	600 4.5 3	600 4.5 3	600 4.5 3
250 up to 350	800 3.5 3				800 5.5 3	800 3.5 3			800 3.5 10	800 5.5 3	800 3.5 3	1000 3.5 3	800 5.5 10	800 5.5 3	800 5.5 3	1000 3.5 3
350 up to 450	1000 3.5 3				1000 5.5 3	1000 3.5 3			1000 5.5 3	1000 3.5 3		1000 3.5 10	1000 5.5 3	1000 3.5 3		



EXAMPLE:

1000	3.5	3
------	-----	---

Saw diameter in mm
Saw thickness in mm
Maximum advance speed (m/min)

LUMBER CLASSIFICATION

Lumber tension = 25 to 40 kgf/cm²
Lumber tension = 40 to 63 kgf/cm²
Lumber tension = 63 to 100 kgf/cm²
Lumber tension = 100 to 125 kgf/cm²

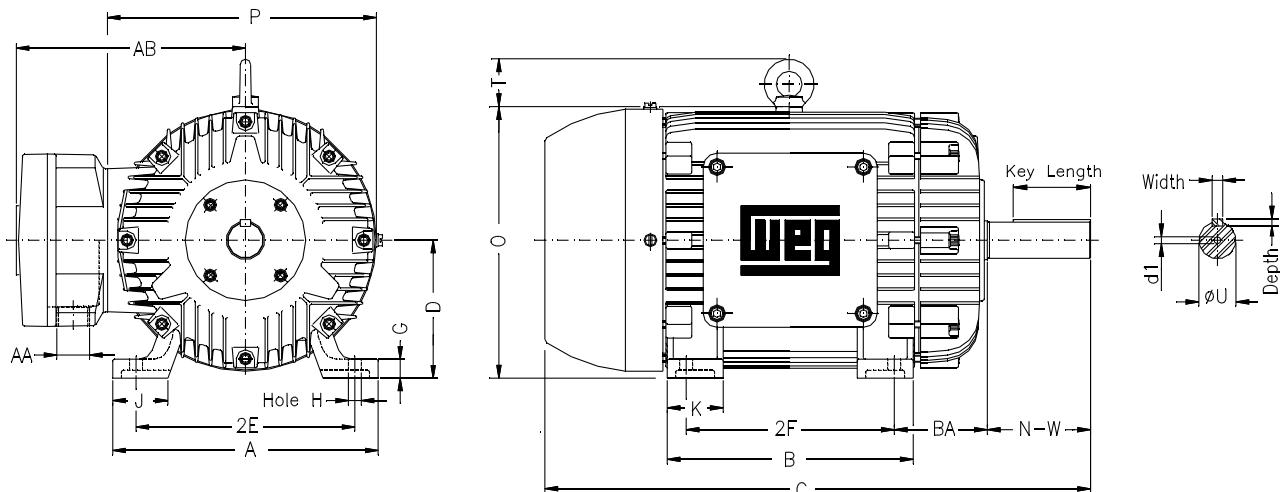
NOTE: If you intend to use saws with smaller diameters and larger thickness than the ones specified above, then the advance speed must be slower.

MECHANICAL DATA



Explosion Proof Motors

Standard and Premium Efficiency (UL and CSA approved)

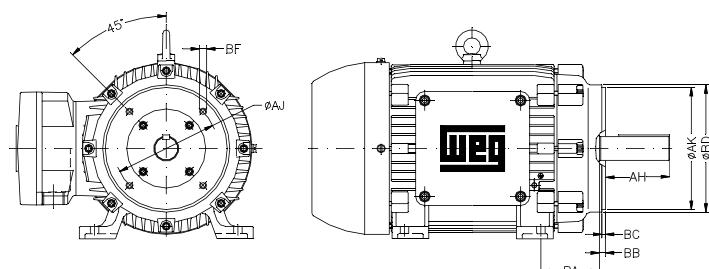


NEMA FRAMES	MOUNTING				A	B	C	D	G	J	K	O	P	T	KEYWAY		KEY LENGTH	SHA XI KOD4 N-W	AB	AA	d1	BEARINGS				
	2E	2F	H	BA											WIDTH	DEPTH	D.E.					O.D.E.				
144T	5000	4,000	C 344	2,280	E 457	1,547	12,700	3,503	0,426	1,456	1,564	7,003	7,000	X	0.67	0.003	1,375	2,250	0,875	6.8-1	NPT 104*					
144G		5,000				1,542	12,702																S2C3-ZZ	S2C4-ZZ		
182T	7000	4,000	C 435	2,780	E 661	1,543	12,900	4,003	0,787	1,950	1,956	5,421	8,005			0.260	0.125	1,750	2,750	1,125	8,240	NPT 104*				
184T		5,000				1,549	12,902																S3C7-ZZ	S2C6-ZZ		
213T	8000	5,000	C 435	3,402	E 754	1,542	17,952	6,253	0,927	2,008	2,005	11,126	10,708			0.215	0.105	2,375	3,270	1,375	9,252	NPT 111*				
216T		7,000				1,546	19,486																S2C6-ZZ	S2C7-ZZ		
264T	10,000	9,302		4,250	-2,120	10,009	22,775	8,250	0,977	2,520	3,066	12,932	12,224	2,087		0.375	0.187	2,975	4,000	1,625	11,003					
266T		10,000				17,732	24,922										0.500	0.250	3,250	4,824	1,875					
284T	9,000		C 507			20,747											0.375	0.187	1,975	3,250	1,025					
284TS	*1000	9,000	C 507	4,280	-2,790	11,007	25,302		1,000	1,034	3,100	2,503	14,002	14,054	2,441		0.375	0.187	1,975	3,250	1,025	11,000	NPT 102*			
286T						22,700											0.500	0.250	3,250	4,824	1,875					
286TS						22,507											0.375	0.187	1,975	3,250	1,025					
324T	10,000					13,071	29,302										0.375	0.187	1,975	3,250	1,025					
324TS	12,500	12,500	C 657	3,280	-2,157	10,009	29,302		8,000	1,034	3,226	3,040	16,992	15,987			0.375	0.187	1,975	3,250	1,025	12,500	NPT 121*			
326T						14,007											0.375	0.187	1,975	3,250	1,025					
326TS						29,302											0.375	0.187	1,975	3,250	1,025					
364/6T	11,250					17,749											0.375	0.187	1,975	3,250	1,025					
364/6TS	*14,000	14,000	C 750	3,870	-2,102	15,395	22,707		5,000	1,480	3,100	4,734	18,090			0.375	0.187	1,975	3,250	1,025						
364/8TS						12,553											0.375	0.187	1,975	3,250	1,025					
404/6T	12,550					18,732											0.375	0.187	1,975	3,250	1,025					
404/6TS	16,000	12,550	C 657	6,325	-2,927	17,629	22,704		10,000	1,911		5,432	16,043			0.375	0.187	1,975	3,250	1,025						
444/6T	14,500					11,670											0.375	0.187	1,975	3,250	1,025					
444/6TS	18,000	14,500		7,500	21,928	20,073	13,767		11,000	1,590		5,581	20,622			0.375	0.187	1,975	3,250	1,025	20,000	NPT 121*				
444/8TS		18,000				18,500											0.375	0.187	1,975	3,250	1,025					
504/6T	15,551					12,550											0.375	0.187	1,975	3,250	1,025					
504/6TS	20,000	15,551	1,250	8,500	24,721	21,869	14,745		12,500	2,116	4,724	5,684	26,197			0.375	0.187	1,975	3,250	1,025	21,000	2xNPT 121*				
508/7T	15,551					18,500											0.375	0.187	1,975	3,250	1,025					
508/7TS	23,000	15,551		11,000	10,000	29,526	28,821	61,306		14,500	2,102	5,296	7,674	30,213	30,704	4,291	1,000	0,600	9,912	11,625	0,875	25,767	UNCPM*	UNCPM*	UNCPM*	UNCPM*
508/7TS		23,000				29,500										0,625	0,312	5,330	7,750	2,375						

* All dimensions in inches
The data for frame 586/7T shown above are for horizontal mounting applications under standard coupling loads.
The customer must indicate when application is vertical or under special coupling loads.

Flange dimensions

"C" FLANGE

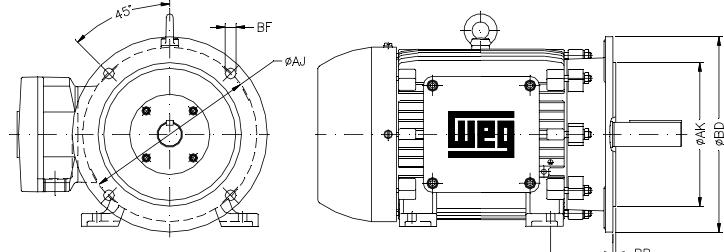


NEMA FRAMES	BA	AJ	AK	BD	BF		BB	BC	AH
					NUMBER	TAP SIZE			
143TC	2.250	5.875	4.000	6.500		UNC5/8"X16	0.156		2.125
145TC								0.125	2.625
182TC	2.750								3.125
184TC									3.750
213TC	3.500	7.250	8.500	8.875					4.375
215TC									5.000
254TC	4.250								4.375
256TC									3.000
284TC									3.000
284TSC	4.750	9.000	10.500	11.031					5.000
286TC									3.600
288TSC									5.000
324TC									3.600
324TSC	5.250								5.625
326TC									3.600
326TSC									7.000
384/5TC									4.000
384/5TSC	5.875	11.000	12.500						8.250
404/5TC									4.600
404/5TSC	5.625								10.375
444/5TC									8.125
444/5TSC	7.500	14.000	15.000						
504/5TC									
504/5TSC	0.500	14.500	15.500						

"D" FLANGE DIMENSIONS

NEMA FRAMES	BA	AJ	AK	BD	BF		BB
					NUMBER	TAP SIZE	
143TD	2.250					D.651	
145TD							
182TD	2.750	10.000	9.000	11.000		0.552	
184TD							
213TD	3.500						
215TD							
254TD	4.250						
256TD							
284TD							
284TSD	4.750	12.500	11.000	11.000			
286TD							
286TSD							
324TD							
324TSD	5.250						
326TD							
326TSD							
384/5TD							
384/5TSD	5.875	15.000	14.000	15.000			
404/5TD							
404/5TSD	6.625						
444/5TD							
444/5TSD	7.500	20.000	18.000	21.656			
504/5TD							
504/5TSD	8.500	22.000		24.803			
586/7TD							
586/7TSD	10.000	30.000	28.000	32.000			

"D" FLANGE

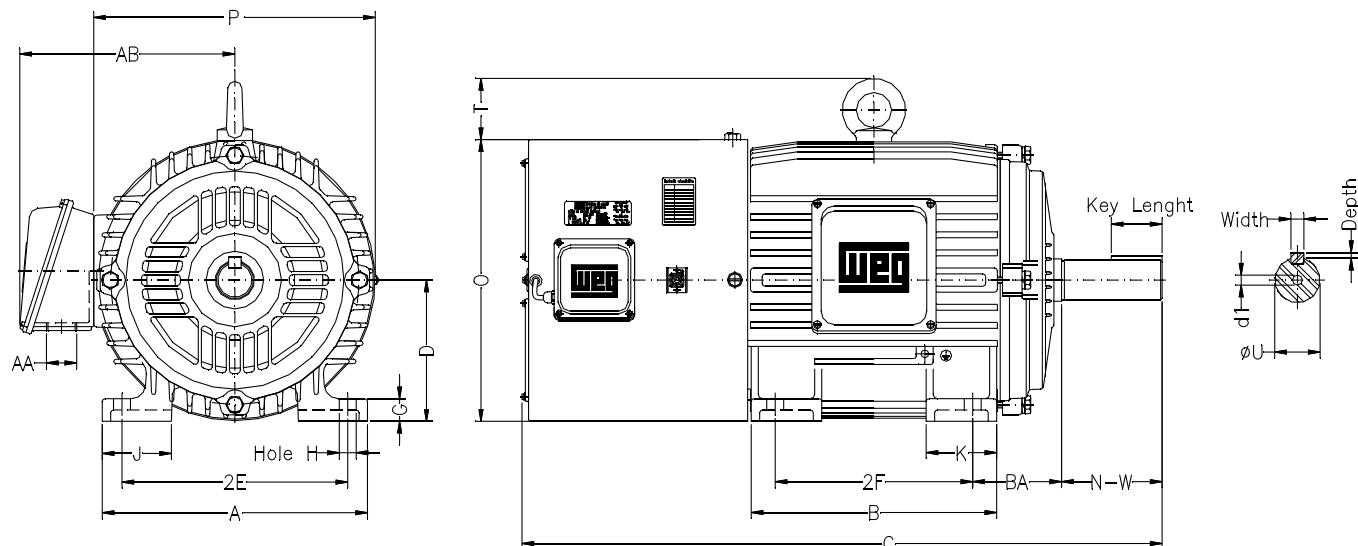


* All dimensions in inches



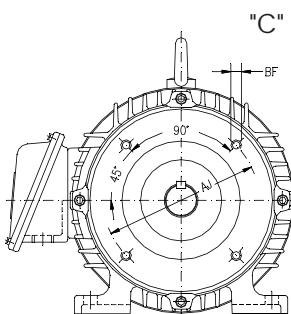
Inverter Duty Motors (IDM) - TEBC IP55

Premium Efficiency

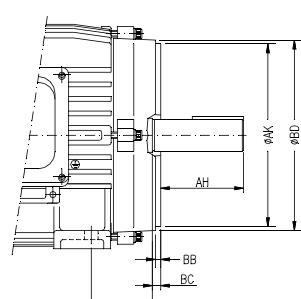


NEMA FRAMES	MOUNTING				A	B	C	D	G	J	K	O	P	T	KEYWAY		KEY LENGTH	SHAFT EXTENSION	AB	AA	d1	BEARINGS		
	2E	2F	II	DA											WIDTH	DEPTH	N-W	U	AB	AA	d1	D.E.	O.D.E.	
143T	4 300	0.314	2.250	6.457	5.117	17.720	8.500	0.577	1.146	1.685	7.000	7.017			0.160	0.290	1.417	2.250	0.075	6.102	NPT24*	E225 ZZ	E224 ZZ	
145T	6 300				6.142	16.509										0.250	0.120	1.771	2.750	1.125	7.400		E227 ZZ	E226 ZZ
182T	4 500				5.905	18.259										0.190	0.160	2.490	3.075	1.375	8.500		E226 ZZ	E225 ZZ
184T	7 500				6.986	25.239										0.300	0.160	2.490	3.075	1.375	8.500		KPT1*	
213T	5 300	0.436			7.307	24.064										0.375	0.167	2.755	4.020	1.625	10.075			
215T	6 300	0.500			8.600	9.781	5.250	0.627	2.008	2.155	10.811	10.850			0.500	0.200	3.240	4.625	1.675	10.063	NPT 10*			
254T	8 752				10.050	25.145	9.250	0.617	2.520	2.569	12.821	12.263			1.907	2.122	4.300	5.074	2.375	14.405				
256T	10 300	0.500	0.529		11.732	32.922	9.250	0.617	2.520	2.569	12.821	12.263			0.375	0.167	2.755	4.020	1.625	10.075				
284T	8 500				11.975	31.845	7.000	1.013	8.150	9.363	14.017	14.064			0.500	0.200	3.240	4.625	1.675	10.063	NPT 10*			
286T	11 300				13.000	32.345										1.907	2.122	4.300	5.074	2.375	14.405			
324T	10 500	0.687			10.980	34.850	6.020	1.507	3.228	5.346	16.953	16.561	2.471		0.325	0.212	4.300	5.074	2.375	14.405	KPT2*			
326T	12 500	0.687	0.700		14.537	35.366										0.750	0.375	5.512	7.250	2.875	14.405			
364/5T	14 0*6	1.1760	0.718	5.675	17.165	15.384	0.697	6.000	1.480	8.150	4.15*	16.502			0.375	0.212	4.300	5.074	2.375	14.405	KPT3*		63-4-C1	
404/5T	16 36*	1.2742		6.825	19.92*	17.677	15.026	10.000	1.61*	8.987	5.683	16.468	16.740	2.795	0.750	0.375	5.512	7.250	2.875	14.405			NU316-C3	NS11-C3
444/5T	16 300	1.650*		21.926	20.079	52.761	1.600	3.927	6.561	22.713					7.097	8.500	3.575	9.213			LNG24*			
447T	20 300	1.650		21.435	23.622	55.310	1.614	3.927	6.561	22.713					0.400		8.845	10.680	3.675	9.873	28NPT3*			
504/5T	20 300	1.600	1.250	24.794	24.989	58.426	12.320	2.148	4.724	5.364	24.243				1.300	0.500	8.842	11.620	3.875	27.483	LNG48*	NU322-C3	NS18-C3	
526/7T	26 300	1.181	10.000	28.506	28.021	80.069	14.320	2.402	5.972	6.374	26.087	32.126	4.20*											
	26 300																							

Flange dimensions

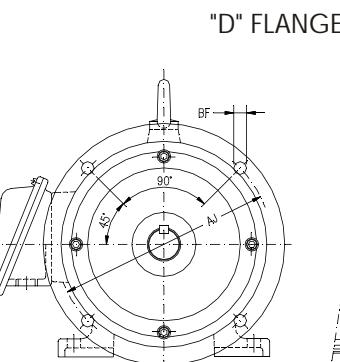


"C" FLANGE

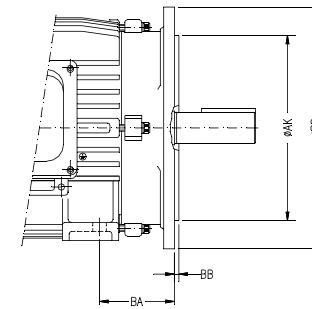


NEMA FRAMES	BA	AJ	AK	BD	BF		BB	BC	AH
					NUMBER	TAP SIZE			
143TC	2.250	5.875	4.500	6.500	4	UNC3/8"x16	3.156	0.125	2.125
145TC									2.625
182TC	2.750								3.125
184TC									3.750
213TC	3.500	7.250	8.500	8.875					4.375
215TC									5.000
254TC	4.250								5.625
256TC									7.000
284TC	4.750	9.000	10.500	11.031					8.250
286TC									10.375
324TC	5.250				8	UNC5/8"x11	3.250	0.250	
326TC									
364/5TC	5.875	11.000	12.500	13.583					
404/5TC	6.625								
444/5TC	7.500	14.000	16.000	16.551					
447TC									
504/5TC	8.500	14.500	16.500	17.913					

NEMA FRAMES	BA	AJ	AK	BD	BF		BB
					NUMBER	TAP SIZE	
143TD	2.250				4	0.562	0.203
145TD							
182TD	2.750	10.000	9.000	11.000			
184TD							
213TD	3.500						
215TD							
254TD	4.250	12.500	11.000	14.000			
256TD							
284TD	4.750						
286TD							
324TD	5.250	16.000	14.000	18.000	8	0.828	0.250
326TD							
364/5TD	5.875						
404/5TD	6.625						
444/5TD	7.500	20.000	18.000	21.653			
447TD							
504/5TD	8.500	22.000					
586/7TD	10.000	30.000	28.000	32.000			



"D" FLANGE



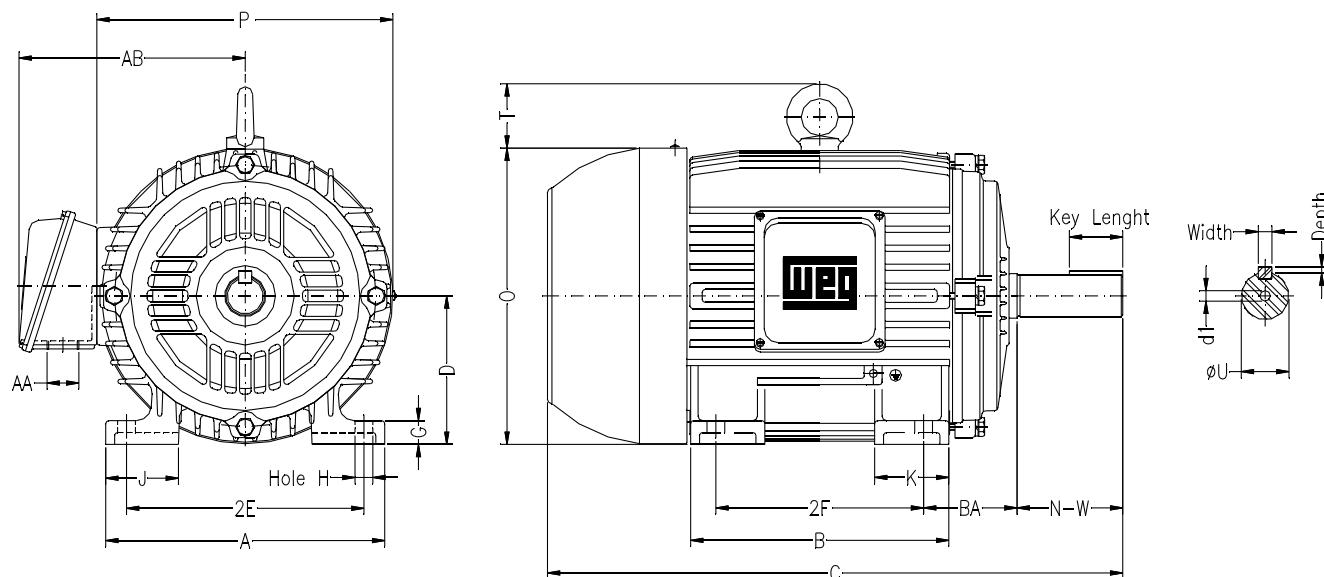
MECHANICAL DATA

* All dimensions in inches



IEEE 841 Motors - TEFC IPW55

Premium Efficiency

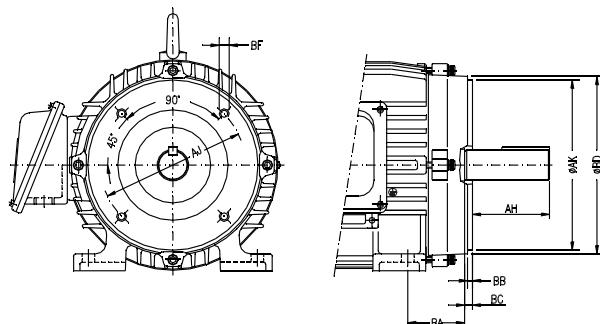


NEMA FRAMES	MOUNTING				A	B	C	D	G	J	K	O	P	T	KEYWAY		KEY LENGTH		SPLIT UNION N-W	U	AB	AA	d1	BEARINGS					
	2E	2F	H	BA											WIDTH	DEPTH	LENGTH	D.E.	O.D.E.	D.E. O.D.E.									
143T	5.500	4.000	0.347	3.200	9.757		5.157	12.250	3.000	0.347	7.450	1.854	7.300	7.047	X	0.198	0.090	1.117	2.200	0.975	0.102	NPTSM*			6226-C3	6204-C3			
145T	5.500	5.000					6.142	13.284																		6307-C3	8206-C3		
182T	7.500	4.500					6.045	14.860	1.500	0.720	7.650	1.866	9.318	8.740		0.250	0.125	1.771	2.750	1.126	7.100						6308-C3	8207-C3	
184T	7.500	6.500					6.050	15.260	1.500	0.720	7.650	1.866	10.841	10.650		0.318	0.158	2.430	3.575	1.375	3.565						6309-C3	8209-C3	
213T	8.500	5.500					6.500	13.071	6.250	0.807	9.008	2.165	10.841	10.650		0.375	0.187	2.755	4.000	1.526	10.075						6310-C3	8210-C3	
215T	8.500	7.000					6.525	13.071																				6311-C3	8211-C3
264T	10.000	8.242					4.200	12.726	8.200	0.617	10.220	3.666	12.421	12.283		0.375	0.187	2.755	4.000	1.526	10.075						6312-C3	8212-C3	
266T	10.000	9.000					7.152	24.540																				6313-C3	8213-C3
284T	11.000	8.000	0.301																									6314-C3	8214-C3
284TS	11.000						4.700	13.700																				6315-C3	8215-C3
286T	11.000																											6316-C3	8216-C3
286TS																												6317-C3	8217-C3
324T																												6318-C3	8218-C3
324TS																												6319-C3	8219-C3
326T	12.500						6.657	8.250	15.57																		6320-C3	8220-C3	
326TS																												6321-C3	8221-C3
364T																												6322-C3	8222-C3
364ST																												6323-C3	8223-C3
364STS																												6324-C3	8224-C3
404ST																												6325-C3	8225-C3
404STS																												6326-C3	8226-C3
444ST																												6327-C3	8227-C3
444STS																												6328-C3	8228-C3
444STS																												6329-C3	8229-C3
447T	19.000																											6330-C3	8230-C3
447TS																												6331-C3	8231-C3
449T																												6332-C3	8232-C3
449TS																												6333-C3	8233-C3
504ST																												6334-C3	8234-C3
504STS																												6335-C3	8235-C3
606T																												6336-C3	8236-C3
606TI																												6337-C3	8237-C3
606TS																												6338-C3	8238-C3
606TII																												6339-C3	8239-C3
606TIS																												6340-C3	8240-C3

* All dimensions in inches

Flange dimensions

"C" FLANGE



"D" FLANGE DIMENSIONS

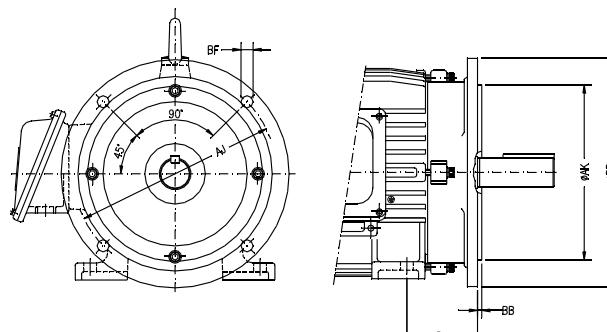
NEMA FRAMES	BA	AJ	AK	BD	BF		BB
					NUMBER	TAP SIZE	
143TD	2.250						
145TD							
182TD	2.750						
184TD							
213TD	3.500						
215TD							
254TD	4.250						
256TD							
284TD							
284TSD	4.750						
286TD							
286TSD							
324TD							
324TSD	5.250						
326TD							
328TSD							
364/5TD							
364/5TSD	5.875						
404/5TD							
404/5TSD	6.625						
444/5TD							
444/5TSD							
447TD							
447TSD	7.500						
449TD							
449TSD							
504/5TD							
504/5TSD	8.500						
586/7TD							
586/7TSD	10.000	30.000	28.000	32.000			

* All dimensions in inches

"C" FLANGE DIMENSIONS

NEMA FRAMES	BA	AJ	AK	BD	BF		BB	BC	AH
					NUMBER	TAP SIZE			
143TC	2.250		5.875	4.500	6.500				
145TC									
182TC	2.750								
184TC									
213TC	3.500		7.250	5.500	6.875				
215TC									
254TC	4.250								
256TC									
284TC									
284TSC	4.750		9.000	10.500	11.03"				
286TSC									
324TC									
324TSC	5.250								
326TC									
328TSC									
364/5TC									
364/5TSC	5.875		11.000	12.500		13.583			
404/5TC									
404/5TSC	6.625								
444/5TC									
444/5TSC									
447TC									
447TSD	7.500		14.000	16.000		17.913			
449TC									
449TSD									
504/5TC									
504/5TSD	8.500		14.500	16.500					
586/7TC									
586/7TSD									

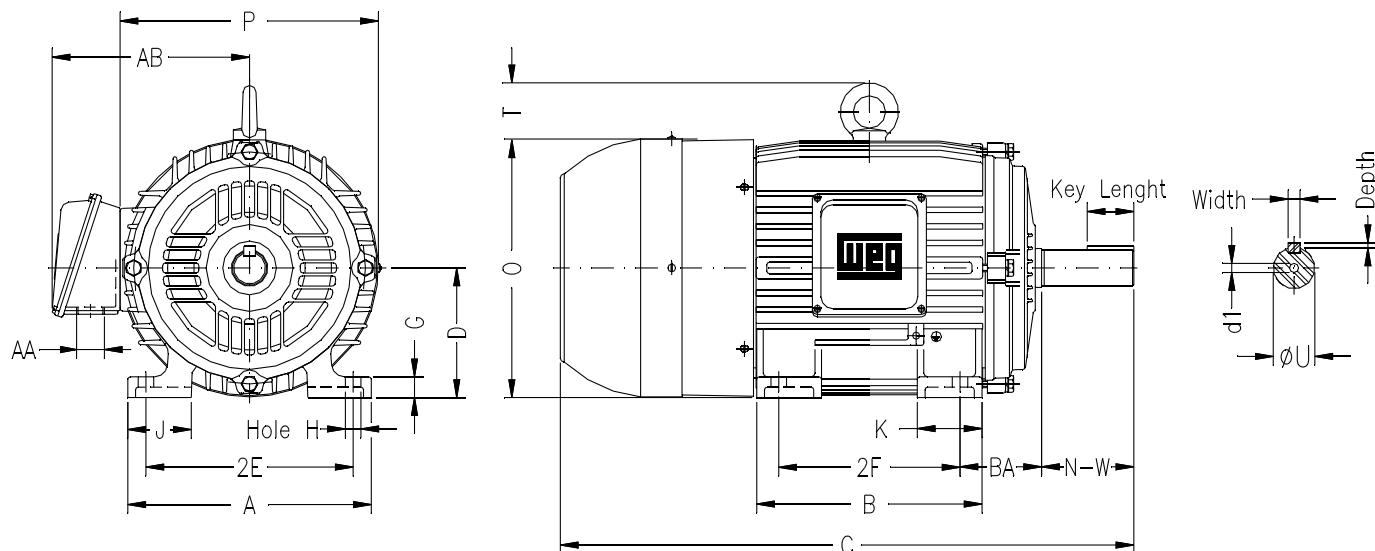
"D" FLANGE





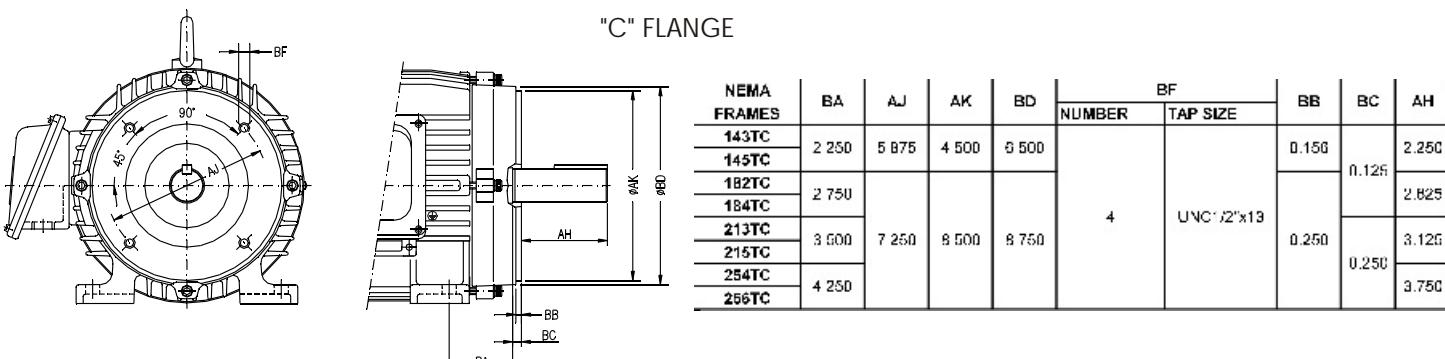
Brake Motors

Standard and Premium Efficiency

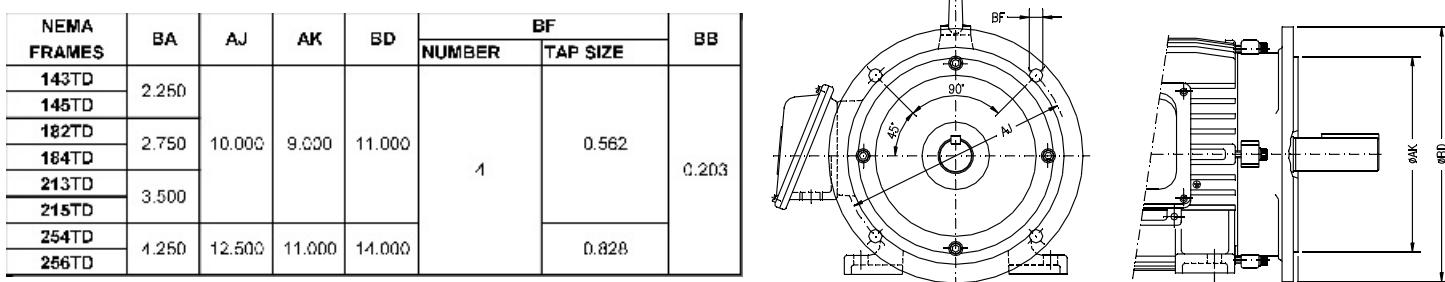


NEMA FRAMES	MOUNTING				A	B	C	D	G	J	K	O	P	T	KEYWAY		KEY LENGTH		SHAFTEXTENSION		AB	AA	d1	BEARINGS		
	2E	2F	H	BA											WIDTH	DEPTH	N-W	U	AB	O.D.E.	O.E.			O.D.E.		
143T	5.500	1.000	0.844	2.900	8.457	5.157	14.736	3.500	0.527	1.465	1.024	1.000	1.047	X	0.188	0.393	1.417	2.250	0.875	0.805	NPT 1/4"			6205 7Z	6205 7Z	
145T	5.500				8.457	5.142	15.773																			
182T	7.500	4.500			8.455	7.813	14.690	0.720	1.860	1.050	0.843	0.740			0.260	0.126	1.771	2.760	1.125	7.147			6307-2Z	6207-2Z		
184T	5.500				8.369	8.612																				
213T	8.500	7.000	0.400		8.369	21.427	5.250	0.627	2.000	2.165	1.024	1.000			0.010	0.160	2.490	3.375	1.375	8.032	N-17		6003-ZZ	6203-ZZ		
215T	8.500				8.553	23.537																				
254T	10.000	7.250	0.527	4.250	12.122	10.500	28.212	6.250	0.817	2.520	2.059	1.240	1.200	2.087	0.375	0.167	2.755	4.000	1.025	10.079	NPT 1/2"		6209-CG	6211-Z-CG		
256T	10.000				11.300	11.430	29.845																			

Flange dimensions



"D" FLANGE



* All dimensions in inches

Three-phase Brake Motor



General description

The brake motor consists of an induction motor coupled to a brake disc, forming an integral, compact and robust unit. The induction motor is totally enclosed with external ventilation, having the same performance characteristics of the WEG TEFC (IP55) range of motors. The brake is of sturdy construction with few moving parts that ensures long durability with a minimum of maintenance. The double face of the pad provides a large surface area of friction, which means only slight pressure is required on the linings, which results in low heat being generated and a minimum of wear. Besides, the brake is cooled by the motor ventilation. As a result, the assembly lasts longer, and provides trouble free performance under the most arduous duty. The electromagnet coil which is protected by epoxy resin, operates continuously on voltages 10% above or below the rated voltage.

The coil is fed with direct current, supplied by a bridge rectifier, which consists of 4 silicon diodes and 3 varistors clamping dangerous voltage transients and allowing fast drop out.

Using direct current enables faster and more uniform braking.

The A.C. supply to the bridge rectifier can be obtained from an independent source or from the motor terminals. The standard coil voltage is 230V 60Hz, but coils for other voltages less than 230 volts can be supplied.

Applications

WEG brake motors are commonly used for machine tools, looms, packing machines, conveyors, washing and bottling machines, rolling bridges, elevators, and printing machines. In a word, they can be used on any machine that requires quick stops for safety's sake and time saving during installation.

Brake operation

When the motor is disconnected from the supply, the coil of the electromagnet is de-energized. This allows pressure to be exerted by the springs to push the armature towards the motor and thus cause the braking pads to be compressed between the armature and the motor endshield.

The brake linings are pressed between the friction surfaces of the armature and the endshield, braking the motor until it comes to a stop. In a new start, the electromagnet coil is energized which, after overcoming the resistance of the springs, allows the armature to be drawn against the electromagnet frame. After the

pressure is removed the brake disc is allowed to move along the splined shaft, resulting in the brake linings moving away from the friction surfaces. Thus the braking action ceases, letting the motor run freely.

Installation

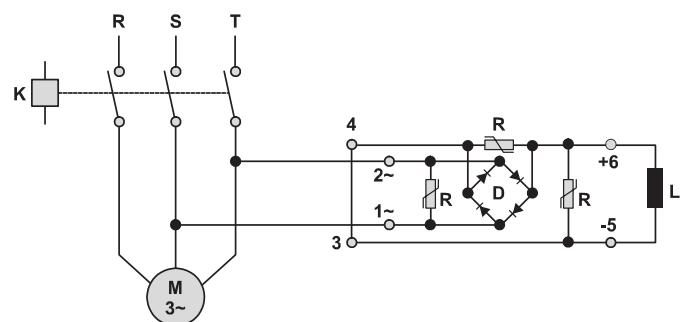
The brake motor can be installed in any position, providing that the brake is not exposed to excessive amounts of water, oil or abrasive dusts, etc., penetrating through the ventilation holes. When it is mounted in the standard position its protection class is that of TEFC IP55.

Connection methods

The brake motor can be connected in any one of three different ways, allowing slow, medium or rapid braking.

a) Slow braking

The bridge rectifier which supplies power to the electromagnet coil is connected directly to the motor terminals, without any interruption.



D - Bridge Rectifier

R - Varistors

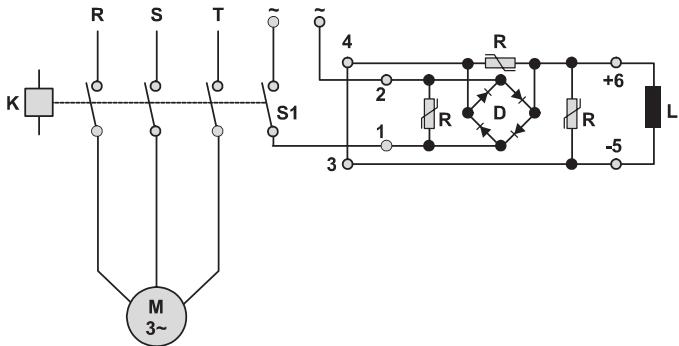
L - Electromagnetic Coil

K - Contactor

note: Normally WEG brake motors are supplied from the factory connected this way.

b) Medium speed braking

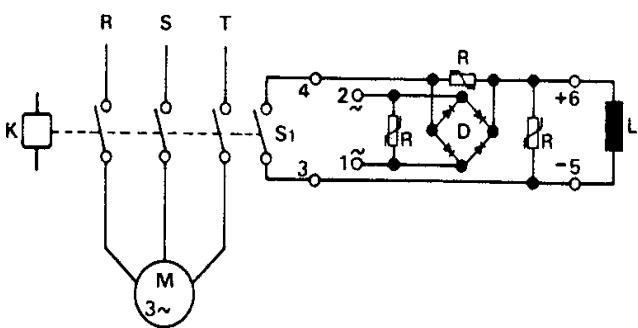
In this case a contact is used to interrupt the A.C. circuit supplying the bridge rectifier. It is essential that this be a N.O. auxiliary contact, of the same contactor controlling the motor to ensure a simultaneous switching on and off of the motor brake.



D - Bridge Rectifier
 R - Varistors
 L - Electromagnetic Coil
 K - Contactor
 S¹ - Auxiliary N.O. Contact

c) Rapid braking

In this case a contact is used to interrupt the direct current electromagnet coil. The contact must be a N.O. auxiliary contact of the motor contactor.



D - Bridge Rectifier
 R - Varistors
 L - Electromagnetic Coil
 K - Contactor
 S¹ - Auxiliary N.O. (normally open) contact

Electrical supply to the brake

The medium and rapid braking systems allow for two alternative ways of connection.

a - Through the motor terminals

When the nameplate shows $\triangle\triangle/\triangle$ connection, connect the bridge rectifier terminals 1 and 2 to the motor terminals 1 and 4 for 230 or 460 volts supply.

When the nameplate shows YY/Y connection, connect the bridge rectifier terminals 1 and 2 to the motor terminals 1 and 2 for 230 volts supply, and to terminals 4 and 5 for 460 volts supply.

230V: Two speed motors

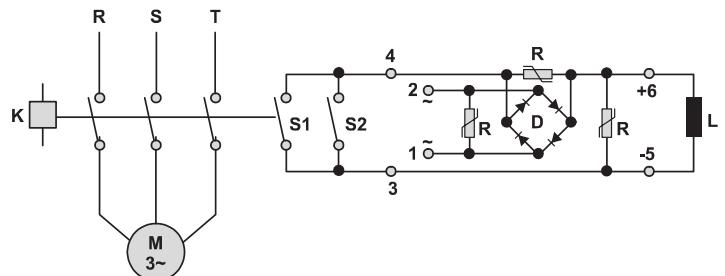
High speed: Connect the bridge rectifier terminals 1

and 2 to the motor terminals 4 and 6.

Low speed: Connect the bridge rectifier terminals 1 and 2 to the motor terminals 1 and 2.

b - Independent supply

For motors of other voltages, connect the bridge rectifier terminals 1 and 2 to the independent 230V source, but always through a N.O. contact which operates simultaneously with the connection of the motor supply. With an independent supply it is possible to electrically release the brake, see connection below:



D - Bridge Rectifier
 R - Varistors
 L - Electromagnetic Coil
 K - Contactor
 S¹ - Auxiliary N.O. contact
 S² - Switch to electrically release the brake

Braking torque

The brake motor is supplied from the factory with preset braking torque values as per table below. A softer stop can be obtained by decreasing the braking torque.

BRAKE WITH 3 SPRINGS FITTED:

This is achieved by reducing the spring pressure between the brake coil and the armature. The value of the resulting braking torque can be obtained by multiplying the corresponding braking torque value shown in table below by the ratio between the new spring pressure and the original spring pressure.

BRAKE WITH MORE THAN 3 SPRINGS FITTED:

This is achieved by removing some of the springs. The value of the resulting braking torque can be obtained by multiplying the corresponding braking torque value shown in table below by the ratio between the remaining quantity and the original quantity of springs.

Important

The springs must be removed in such a way that the remaining springs are symmetrically spaced apart, thus avoiding any friction which could occur due to uneven wear of the linings.

Braking torque:

Frame	Braking torque (Ft.Lb)	Number of springs	Maximum number of operations per hour "no load"				Approx. number of braking operations up to the next adjustment of the air gap "no load"- (x1000)			
			II	IV	VI	VIII	II	IV	VI	VIII
140	6	4	200	400	600	-	75	300	675	-
180	17	9	100	200	300	400	50	170	380	680
210	44	12	50	100	150	200	35	140	300	560
250	98	9	30	60	100	120	25	100	200	400

Brake maintenance

Because of their simple construction WEG brake motors require very little maintenance - basically only a periodical adjustment of the air gap. Where water or dust is likely to penetrate, it is recommended that the brake is periodically cleaned internally.

Please check the WEG installation and maintenance manual for brake motors to maintenance details.

Hazardous Environments

Risk areas

Whenever the ambient air contains, or may contain, flammable or explosive elements, standards require specially constructed motors for these applications. This does not refer to degree of protection, because special requirements are not intended to protect the motor, but to protect installations against possible accidents caused by the motor.

Hazardous ambient

Explosion-proof / flameproof motors are intended to be used in hazardous environments containing flammable or explosive gases, vapours, dust, or fibres. The appropriate standards classify these environments in accordance with the existing hazardous materials and working conditions.

a - Working conditions

Division I - The hazardous element is present in the motor environments even under normal working conditions at the installation place.

Division II - The hazardous element is not normally present in the environment, however, it can appear under abnormal conditions, such as leakage.

b - Types of hazardous material

Class I - Flammable or explosive gases and vapours. This class is subdivided into four groups: A, B, C, and D, depending on the type of gas or vapour taking into account the ease or readiness to ignite and the force of the explosion.

Typical hazardous materials of the different groups are as follows:

- Group A - Acetylene
- Group B - Hydrogen Butadiene
- Group C - Ethylic Ether, Ethylene
- Group D - Gasoline, Naphtha, Solvents in general

Class II - Flammable dusts and electrical conductors. This class is subdivided into three groups: Groups E, F, G, depending on the type of material and the ease in which it can ignite.

Class III - Floating flammable fibres and particles. The requirements of a motor for environments classified as Classes I and II concerns mainly the temperature reached on the external surface and must take into account that accumulation of dust and fibres on the motor retards heat dissipation, causing the motor to "burn out" or to the flammable hazardous materials to ignite.

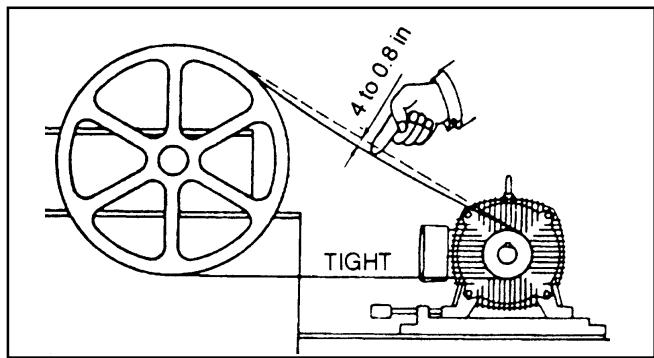
When fixing pulleys, gears, or flanges to the shaft of a TEFC motor the following should be observed:

- a - remove the fan cover at the non-drive of the motor.
- b - before fixing the pulley, firmly support the non-drive end of the shaft to protect the bearings against mechanical shock.

With applications involving belt transmission, unnecessary axial forces on the bearings can be avoided by positioning the shafts parallel to each other and keeping the pulleys perfectly aligned.

Radial Thrusts

Maximum permissible radial thrusts in Lbf. Horizontal mounting					
Frame	Pole	Ball bearings		Roller bearings	
		20,000 Hs	40,000 Hs	20,000 Hs	40,000 Hs
143T	II	123	95	*	*
	IV	154	119	*	*
	VI	179	138	*	*
	VIII	208	160	*	*
145T	II	126	97	*	*
	IV	154	119	*	*
	VI	179	138	*	*
	VIII	208	160	*	*
182 T	II	298	229	*	*
	IV	306	289	*	*
	VI	306	306	*	*
	VIII	306	306	*	*
184 T	II	304	234	*	*
	IV	304	293	*	*
	VI	306	306	*	*
	VIII	306	306	*	*
213 T	II	373	287	*	*
	IV	459	362	*	*
	VI	461	419	*	*
	VIII	461	456	*	*
215 T	II	381	293	*	*
	IV	456	370	*	*
	VI	459	432	*	*
	VIII	461	461	*	*
254 T	II	467	359	1025	959
	IV	595	458	1025	1025
	VI	595	584	1025	1025
	VIII	584	584	1025	1025
256 T	II	474	364	1027	992
	IV	584	465	1025	1025
	VI	582	534	1027	1027
	VIII	582	582	1027	1027



For direct drives the shafts must be carefully aligned using flexible couplings, wherever possible.

Axial Thrusts

Maximum permissible axial thrusts in Lbf for a useful bearing life of 20,000 hours.			
Frame	Pole	Horizontal mounting	
		Lbf	Vertical mounting Lbf
143T	II	115	110
	IV	159	152
	VI	185	176
	VIII	220	212
145T	II	115	110
	IV	154	146
	VI	185	176
	VIII	220	212
182 T	II	273	260
	IV	375	359
	VI	448	432
	VIII	503	485
184 T	II	271	258
	IV	370	353
	VI	445	425
	VIII	503	485
213 T	II	331	311
	IV	456	430
	VI	551	527
	VIII	613	582
215 T	II	326	304
	IV	452	421
	VI	549	522
	VIII	608	573
254 T	II	467	421
	IV	622	571
	VI	820	761
	VIII	730	677
256 T	II	463	410
	IV	615	553
	VI	721	655
	VIII	813	747

Radial Thrusts

Maximum permissible radial thrusts in Lbf. Horizontal mounting					
Frame	Pole	Ball bearings		Roller bearings	
		20,000 Hs	40,000 Hs	20,000 Hs	40,000 Hs
284 TS	II	683	525	1239	1239
284 T	IV	736	847	1307	1307
	VI	739	701	1307	1307
	VIII	741	741	1310	1310
286 TS	II	688	530	1237	1237
286 T	IV	730	635	1305	1305
	VI	730	708	1305	1305
	VIII	730	730	1305	1305
324 TS	II	776	598	1614	1574
324 T	IV	926	713	1744	1744
	VI	1012	818	1744	1744
	VIII	1010	908	1744	1744
326 TS	II	769	592	1609	1585
326 T	IV	926	713	1737	1737
	VI	1005	825	1739	1739
	VIII	999	919	1737	1737
364 TS	II	1014	781	-	-
364 T	IV	1182	910	2152	2152
	VI	1254	1045	2152	2152
	VIII	1254	1164	2152	2152
365 TS	II	985	758	-	-
365 T	IV	1151	886	2141	2141
	VI	1237	1027	2141	2141
	VIII	1230	1146	2138	2138
404 TS	II	955	735	-	-
404 T	IV	1338	1030	2892	2892
	VI	1554	1197	2889	2889
	VIII	1689	1367	2892	2892
405 TS	II	955	735	-	-
405 T	IV	1338	1030	2892	2892
	VI	1532	1180	2888	2888
	VIII	1669	1316	2884	2884
444 TS	II	930	716	-	-
444 T	IV	1706	1314	3763	3763
	VI	1925	1482	3812	3812
	VIII	2154	1659	3812	3812
445 TS	II	893	688	-	-
445 T	IV	1625	1251	3812	3812
	VI	1881	1448	3794	3794
	VIII	2112	1626	3787	3787
447 TS	II	750	578	-	-
447 T	IV	1497	1153	3754	3754
	VI	1724	1327	3715	3715
	VIII	1966	1514	3715	3715

Axial Thrusts

Maximum permissible axial thrusts in Lbf for a useful bearing life of 20,000 hours.			
Frame	Pole	Horizontal mounting	
		Lbf	Vertical mounting
284 TS	II	635	573
284 T	IV	840	769
	VI	972	871
	VIII	1102	1008
286 TS	II	628	558
286 T	IV	836	756
	VI	968	855
	VIII	428	981
324 TS	II	716	628
324 T	IV	950	844
	VI	1113	992
	VIII	1254	1133
326 TS	II	708	606
326 T	IV	941	818
	VI	1107	977
	VIII	1248	1118
364 TS	II	908	783
364 T	IV	1199	1036
	VI	1407	1224
	VIII	1583	1402
365 TS	II	893	750
365 T	IV	1186	999
	VI	1393	1190
	VIII	1570	1367
404 TS	II	875	703
404 T	IV	1164	937
	VI	1373	1129
	VIII	1570	1327
405 TS	II	875	703
405 T	IV	1164	937
	VI	1360	1096
	VIII	1534	1270
444 TS	II	858	613
444 T	IV	1396	1120
	VI	1612	1261
	VIII	1821	1488
445 TS	II	842	569
445 T	IV	1340	994
	VI	1590	1193
	VIII	1797	1420
447 TS	II	769	355
447 T	IV	1250	721
	VI	1481	844
	VIII	1689	1087

Radial Thrusts

Maximum permissible radial thrusts in Lbf. Horizontal mounting						
Frame	Pole	Ball bearings		Roller bearings		
		20,000 Hs	40,000 Hs	20,000 Hs	40,000 Hs	
449 TS	II	736	567	-	-	
449 T	IV	1850	1603	2597	2597	
	VI	1799	1799	3452	3452	
	VIII	1746	1746	3355	3355	
504 TS	II	853	657	-	-	
504 T	IV	1464	1127	4142	3946	
	VI	1656	1275	4041	4041	
	VIII	1810	1394	4030	4030	
505 TS	II	849	654	-	-	
505 T	IV	1420	1093	4030	3825	
	VI	1636	1260	4008	4008	
	VIII	1865	1436	4008	4008	
586/7 TS	II	569	438	-	-	
586/7 T	IV	1874	1508	3710	3710	
	VI	1550	1550	3470	3470	
	VIII	1656	1656	3527	3527	
5008 TS	II	802	557	-	-	
5008 T	IV	1850	1350	3720	3720	
	VI	1800	1428	3580	3580	
	VIII	1800	1630	3720	3720	

Note: 4140 steel shaft was used for roller bearings.

* Motors not available.

Axial Thrusts

Maximum permissible axial thrusts in Lbf for a useful bearing life of 20,000 hours.			
Frame	Pole	Horizontal mounting	Vertical mounting
		Lbf	Lbf
449 TS	II	754	344
449 T	IV	1504	855
	VI	1810	1133
	VIII	2057	1351
504 TS	II	939	527
504 T	IV	1334	913
	VI	1559	1085
	VIII	1733	1217
505 TS	II	939	527
505 T	IV	1250	721
	VI	1484	847
	VIII	1689	1087
586/7 TS	II	677	0
586/7 T	IV	1387	366
	VI	1700	692
	VIII	1947	922
5008 TS	II	792	729
5008 T	IV	1627	1551
	VI	1912	1811
	VIII	2141	2033

Unit conversion table

Quantity	Multiply	Times	Result
Force	Newton (N) Kilogram-force (kgf)	0.1019 2.205	Kilogram-force (kgf) Pound-force (lb)
Length	Meter (m) Inch (in.)	39.37 0.0833	Inches (in.) Feet (ft)
Area	Square meter (m^2) Square inch (sq.in.)	1550 6.94×10^{-3}	Square inches (sq.in.) Square feet (sq.ft.)
Torque	Meter-Newton (mN) Meter-kilogram-force (mkgf) Foot-pound-force (ft.lb)	0.1019 7.233 16	Meter-kilogram-force (mkgf) Foot-pound-force (ft.lb) Ounce-foot (oz.lb)
Pressure	Newton per square meter (N/m^2) Kilogram-force per square centimeter (kgf/cm^2) Pound-force per square inch (psi) Atmosphere (atm) bar	1.019×10^{-5} 14.22 0.06807 1.0132 1.02	Kilogram-force per square centimeter (kgf/cm^2) Pound-force per square inch (psi) Atmosphere (atm) bar Meter of water (mH_2O)
Power	Kilowatt (kW) Horsepower (HP)	1.358 75	Horsepower (HP) Kilogram-force-meter per second (kgfm/s)
Energy	Joule (J) or Newton-meter (Nm) Kilogram-force-meter (kgfm) Kilowatt-hour (kWh) Foot-pound-force (ft.lb)	0.102 2.73×10^{-6} $2.66 \times 10^{+6}$ 0.3238	Kilogram-force-meter (kgfm) Kilowatt-hour (kWh) Foot-pound-force (ft.lb) Calory (cal)
Inertia	Kilogram-square-meter (kgm^2) Square foot pound (sq.ft.lb)	23.73 144	Square foot pound (sq.ft.lb) Square inch pound (sq.in.lb)

WEG Warranty

WEG warrants its products against defects in workmanship and materials for 18 months from the invoice date issued by the factory, authorized distributor or agent limited to 24 months from manufacturing date independent of installation date as long as the following items are fulfilled accordingly:

- Proper transportation, handling and storage;
- Correct installation based on the specified ambient conditions and free of corrosive gases;
- Operation under motor capacity limits;
- Observation of the periodical maintenance services;
- Repair and/or replacement effected only by personnel duly authorized in writing by WEG;
- The failed product be available to the supplier and/or repair shop for a required period to detect the cause of the failure and corresponding repair;
- Immediate notice by the purchaser about failures occurred and that these are accepted by WEG as manufacturing defects.

This warranty does not include disassembly services at the purchaser facilities, transportation costs with product, tickets, accommodation and meals for technical personnel when requested by the customer. The warranty service will be only carried out at WEG Authorized Repair Shops or at WEG's facilities.

Components whose useful life, under normal use, is shorter than the warranty period are not covered by these warranty terms.

The repair and/or replacement of parts or components, when effected by WEG and/or any WEG Authorized Repair Shops, will not give warranty extension.

This constitutes WEG's only warranty in connection with this sale and the company will have no obligation or liability whatsoever to people, third parties, other equipment or installations, including without limitation, any claims for consequential damages or labor costs.

Other products offered by WEG



Mod. 355.06/10.2000



WEG EXPORTADORA
Av. Pref. Waldemar Grubba, 3000
89256-900 Jaraguá do Sul - SC - Brazil
Tel.: (55) 47 372-4000 Fax: (55) 47 372-4060
<http://www.weg.com.br>