

Three Phase General Purpose Motors

W22 - CAST IRON

Standard Features:

- 50/60 Hz rated (380V on nameplate - 400/415 available)
- Rated 50HZ at same horsepower up to 250HP 1.0 Service Factor for 2,4 & 6 pole motors
- Rated 50Hz at same horsepower up to 125HP 1.0 Service Factor for 8 pole motors
- Class F insulation (impregnation resin and magnet wire are class H)
- F1 mounted (cast iron frames are F2 convertible). Frames 447T and up can easily be F2 converted by simply rotating the terminal box adapter
- Cast iron frames: regreasable ball bearings (frames 254T and up)
- Gasketed conduit box

Inverter Rated*

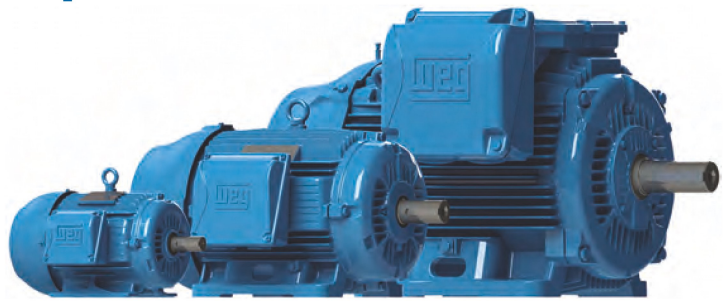
1000:1 for Variable Torque

NEMA Premium®

20:1 Constant Torque up to 250HP

6:1 Constant Torque 300HP and up

* Insulated NDE housing standard on L447/9T and above



Three-Phase
General Purpose
Motors

Features that make a difference:

- All NEMA Premium® ratings have a 1.25 Service Factor (up to 100 HP) resulting in cooler operation and extended life of the motor
- All Cast Iron Construction, including Terminal Box and Fan Cover*
- Solid feet for reduced vibration levels and impact absorption
- Optimized ventilation system for cooler operation and extended life
- High Grade FC200 cast iron provides superior mechanical strength and heat dissipation
- All WEG W22 motors are Totally Enclosed Fan Cooled with a true IP55 rating against dust and moisture. (IP56, IP65 and IP66 available as options)
- Exclusive W-Seal 364T and larger provides superior bearing protection
- Taconite Labyrinth seal 586 Frame and larger
- Exclusive WEG painting system exceed 200hrs ASTM 117 corrosion test (Exceeds IEEE 841 standard)
- Balanced to 0.08 inches per second vibration limits (Meets IEEE 841 standard)
- Four Bolt Conduit Cover with glued Neoprene Gasket
- Impregnation Resin and magnet wire are insulation class H
- Stainless Steel Nameplate - Laser etched with high contrast background
- Corrosion Proof Drains
- Inverter Duty per NEMA MG1, Part 31
- Certified Class I Div 2, Groups A, B, C & D; Class II, Div 2, Groups F & G
- Suitable for IEEE45 and USCG 259 – Marine Duty

*Cast iron fan cover available as an option on 143-215T frames

ADDITIONAL TECHNICAL DATA

HOWEVER, B-12

MECHANICAL DATA: B-68



W22

TEFC - Cast Iron

Three-Phase
General Purpose
Motors

Cooling System

Fan Cover

- Aerodynamic design
- Minimal noise levels
- Superb air flow distribution over frame
- Superior mechanical strength

Fan

- Reinforced fan hub structure
- Low noise design with exceptional air flow

Terminal Box

- Excellent connection quality
- Easy cable handling during installation
- Ample space available for accessory installation
- Easy to maintain
- Mounting F1/F2/F3
- Rotation on 90° stages

Bearing Caps

External

- Finned surface for superb bearing heat dissipation

Internal

- Positive pressure lubrication system
- High quality bearing lubrication
- Reduced bearing temperature

Seal Subsystem

- Excellent dust and moisture protection
- Excellent protection to high-pressure cleaning

Frame

- Low temperature on windings and bearings
- Low noise design
- Terminal box position outlet on top 447T and larger

Pad for vibration sensor

- Displaced 90° from each other

Enhanced Lifting Provisions

- Easy handling - horizontal & vertical
- Superior mechanical strength and handling safety

Solid feet

- Impact resistance
- Ideal for high vibration level applications

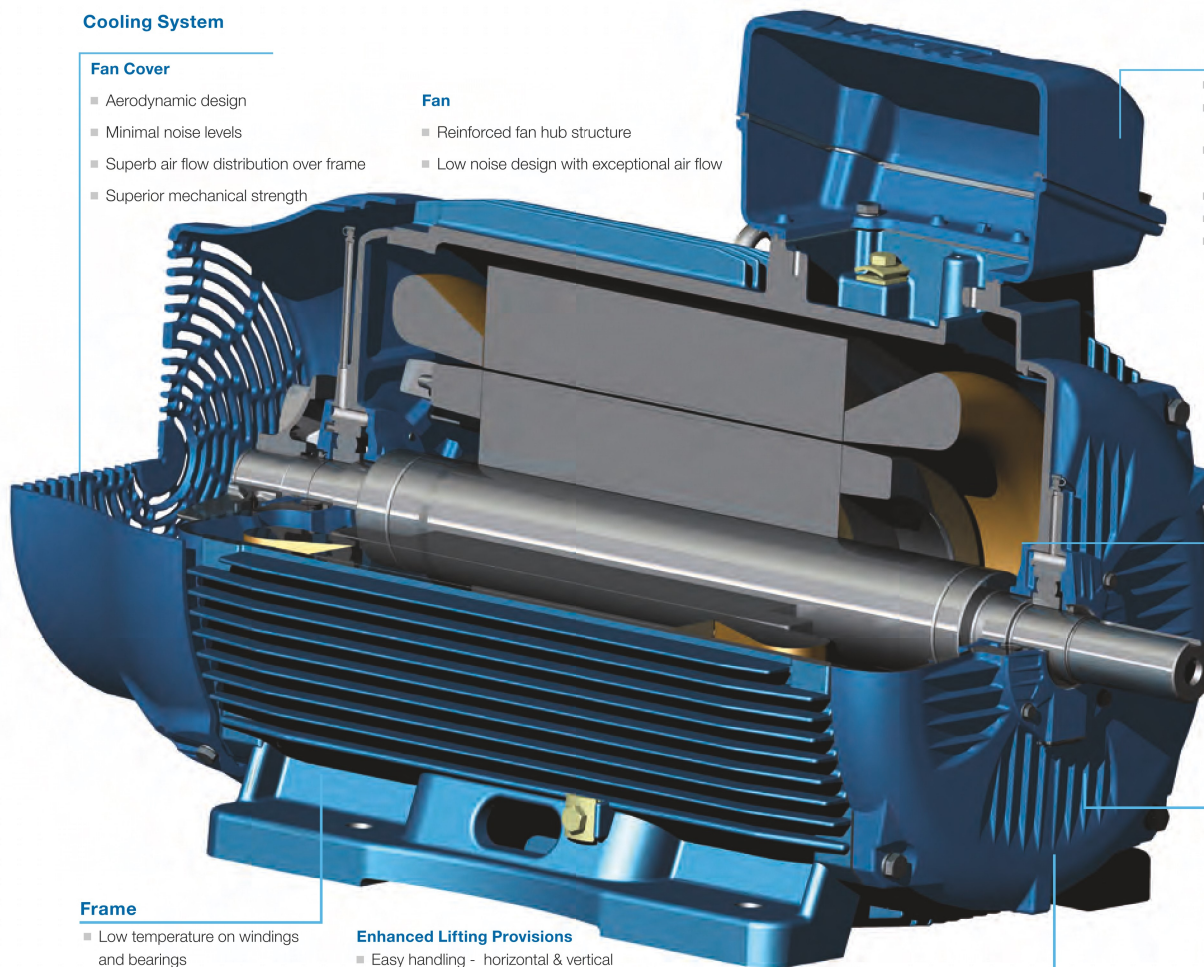
Endshields Subsystem

DE (Drive Endshield)

- Fin design increases air flow
- Bearing moved outwards for better load support
- Bearing heat dissipation for reduced bearing temperature
- Reinforced endshield structure

NDE (Non-Drive Endshield)

- Smooth exterior surface
- Optimal air flow
- Designed for low noise
- Structural rigidity for low vibration
- Insulated housing standard on L447/9T and above



Three-Phase General Purpose Motors

TEFC - ROLLED STEEL

Standard Features:

- Rated Output: 0.25 to 25 HP
- Number of Poles: 2 to 6
- Class F insulation
- Frame Sizes: NEMA 56 to 254/6T
- Frequency: 60 Hz (dual rated 50 Hz 190-220/380-415V)
- F1 mount as standard
- Foot mount / C-face / Footless availability
- Enclosure: TEFC
- Aluminum endshields
- Cast Iron flanges for improved strength (182/4TC and larger)
- Internal bolts, giving a clean surface to the motor, avoiding trapping materials and allowing easy paint job after assembly to the load if required
- Double shielded ball bearings on frames 56 to 213/5T.
- Versions: General Purpose, Jet Pump, Close-coupled Pump type “JM” and “JP”, and Crop Dryer

Optional Features:

- IP56 ingress protection
- F2 and F3 mount
- Enclosure: TEAO and TENV
- Regreasable bearings optional on 182/4T and 213/5T
- Double sealed ball bearings and/or bearing cap
- Drip cover
- Internal AEGIS® SGR
- Space heaters and thermal protection (thermostats and thermistors)
- Refer to the mod section for more options



Three-Phase
General Purpose
Motors

Features that make a difference:

- New ventilation system for improved thermal performance
- Robust foot design suitable for tougher applications
- New and more robust eyebolts design (frames 182/4T and up) plus a second eyebolt on non-drive end allowing vertical lifting capability (frames 213/5T and 254/6T)
- Oversized diagonally split aluminum terminal box that exceeds IP55 requirements
- Terminal box rotatable in 90 degrees increments for flexibility during installation
- Option for internal AEGIS® SGR
- Color coded leads as standard for easy wiring
- Regreasable ball bearings on 254/6T frame as standard (optional for 182/4T and 213/5T)
- IP55 Ingress Protection as standard, being appropriate for severe environments
- Bearing cap as standard on flanged motors, optional on non flanged
- Suitable for VFD operation as per NEMA MG1 part 31.4.4.2
- Motor frame painting system 500 hours salt spray resistant

ADDITIONAL TECHNICAL DATA

ELECTRICAL DATA: B-15

MECHANICAL DATA: B-71

