

MAX-E1® FAMILY NEMA PREMIUM EFFICIENCY



TYPE AEHE, AEHH8N, AEHH8NCF, AEUH8NDC

Effective 05-01-13
Supercedes 08-01-11



APPLICATIONS:

- Fans & Blowers
- Pumps
- Crushers
- Compressor
- Mixers
- Conveyors
- Any Severe Duty/ Petro-Chem/ Pulp & Paper Application

FEATURES:

- 3/4 - 800 hp: 3600, 1800, 1200, 900 RPM
- 1 - 100 hp: Foot Mounted with C-Flange or Round Body C-Flange
- Totally Enclosed Fan Cooled (IP54 Rating; IP55 Ratings for Frames Sizes 5000 and Larger)
- NEMA Premium Efficient Ratings From 1 - 500 hp, Denoted Catalog Number Prefix of "EP" - Note (1)
- Department of Energy Efficiency Certification # CC002A
- 36 Month Warranty from Date of Manufacture
- 3 Phase, 60 Hz, 230/ 460V (Usable on 208V) – 150 hp and Larger are 460V Only - Note (2)
- 575V Ratings Available, Denoted by a Catalog Number Suffix of "5" - Note (2)
- 1.15 Service Factor – Continuous
- NEMA Design B Torques as a Minimum; Design C Motors are Denoted with a superscript "C"
- Class B Temperature Rise, Class F Insulation with Phenolic Alkyd Resin Varnish – 2 Dips and Bakes
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with NPT Threaded Entrance – F1 Mounted. F2 Available – See EXTRAS/ OPTIONS Below
- Designed for 40°C Ambient Temperature and 3300 ft. Elevation - Note (3)
- CSA Certified for Class I, Division II, Groups B, C, D; Temp Code T3C, Non Sparking, Non Static Fan - Note (4)
- Bidirectional Rotation Except 2 Pole Motors 5000 Frame and Larger which are Uni-directional CCW Facing the Drive-End. See EXTRAS/ OPTIONS Below if CW Rotation is Required.
- Cast Iron Frame, End Brackets, Fan Cover, and Main Conduit Box
- Dual Drilled Feet – Longer Frames. (i.e. 145T Drilled Also for 143T) Through 449T Frames Only (5)
- 1045 Carbon Steel Shaft.
- Aluminum Die Cast Squirrel Cage Rotor Construction for Frames 5011 and Smaller.
Copper/ Copper Alloy Rotor for Frames 5800-6800 Frames.
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat/ Paint Color: Light Grey – Munsell N5.0
- Vacuum De-Gassed Re-greasable Ball Bearings (or Roller) on 280TS Frames and Larger Using Polyrex EM Grease
- Single Shielded Bearings on Frames 140T-280T Pre-Packed with Polyrex EM Grease
- Automatic Grease Discharge Fittings on Frames on Re-Greaseable Motors
- Labyrinth Type Metal Flinger on Both Ends for Frames 280TS to 6800
- Rubber Flinger on Drive-End for Frames 140T to 280T
- Cast Iron Inner and Outer Bearing Caps on Both Ends for Frames 280TS to 6800
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- UL Recognized and CSA Approved for Inverter Duty per NEMA MG 1, Part 31 – 300 hp and Below.
350 hp and Above are Suitable for Inverter Duty per NEMA MG 1, Part 31, 4.4.2 - Note (6)
- Inverter Duty Magnet Wire Capable of Withstanding Voltage Spikes of Up to 2200 Volts
- **Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG1, Part 31.4.4.3.**
- Insulated Non-Drive End Bearing on 2-Pole Motors 600 hp and Larger
- Speed Ranges: 20:1 VT, 10:1 CT. 350 hp and Larger are 3:1 CT
- 9 Leads - 5 hp and Below, 12 Leads - 7.5 hp to 125 hp, 6 Leads - 150 hp and Larger
- Breather Drains in Both End Frames for Vertical Mount.

EXTRAS/ OPTIONS:

Please refer to the modifications document on our web site for a list of common modifications that can be performed.

Notes:

- (1) NEMA Premium Efficiency levels only applies to 1-500 hp, 3600, 1800, 1200 RPM.
- (2) 208V or the current rating will not appear on the motor nameplate. Please see Modification for Nameplate adder. TWMC carries minimal 575V stock. Please check availability to ensure required motors are in stock. Ratings may be available from our Canadian warehouses or factory. Pricing and lead time may vary.
- (3) Please consult factory for suitability in higher ambients and higher elevations.
- (4) Self-Certification applies to 300 hp and above.
- (5) EP3006, EP3502 and EP3504 are not dual drilled.
- (6) Motor service factor is 1.0 when operated on a VFD.