

# MAX-E1<sup>®</sup> NEMA PREMIUM



TYPE: AEHE, AEHH8N, AEHH8NCF, AEUH8NDC

EFFECTIVE:01-01-2015

EXPIRES:UFN

## APPLICATIONS:

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

## FEATURES:

- 3/4 - 800 HP
- 1 - 100 HP - Foot Mounted with C-Flange or Round Body C-Flange
- 3600, 1800, 1200, 900 RPM
- Totally Enclosed Fan Cooled (IP54), (IP55 Ratings for Frames Sizes 5000 and larger)
- NEMA Premium Efficient Ratings From 1-500 HP, Denoted Catalog Prefix "EP" - Note (1)
- Department of Energy Efficiency Certificate # CC002A
- 36 Month Warranty from Date of Manufacture
- 3 Phase 60 Hz - 230/460V (Usable on 208V). 150 HP and Larger is 460V Only - Note (2)
- 575V Ratings Available, Denoted by a Catalog Number Suffix of "5" - Note (2)
- 1.15 Service Factor - Continuous
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum, Design C motors are denoted with a subscript "C"
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded Entrance - F1 Mounted. F2 Available - See "EXTRAS/OPTIONS" Below
- Fabricated Steel Main Lead Box 5000 Frames and larger, up to 500HP, Premium Efficient are CSA Certified for Class I, Div. 2, and Class 2 Div 2 with Auxiliary Plate.
- Fabricated Steel Main Lead Box 5000 Frames and larger, 500HP and above, Epact are CSA Certified for Class I, Div. 2, with Auxiliary Plate.
- Designed for 40°C Ambient Temperature and 3300 ft elevation - Note (3)
- CSA Certified for Class 1, Div. 2, Groups B, C, D Temp Code T3C, Non Sparking, Non Static Fan - Note (4)
- Bi-Directional 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 - Note (5)
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for Frames 5011 and Smaller.  
Copper/Copper Alloy Rotor Construction for 5800 - 6800 Frames
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Light Gray - Munsell N5.0
- Vacuum De-Gassed Re-Greasable Ball Bearings (or Roller type) on 280TS Frames and larger with Polyrex EM Grease
- Double Shielded Bearings on Frames 140T-280T Pre-Packed with Multemp SRL Grease.
- Automatic Grease Discharge Fittings on Frames with Re-Greasable Motors
- Labyrinth Type Metal Flinger on Both Ends for Frames 280TS-6800
- Cast Iron Inner and Outer Bearing Caps for Frames 280TS-6800
- Rubber Flinger on Drive-End for Frames 140T - 280T
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- UL Recognized and CSA Approved for Inverter Duty per NEMA MG1 Part 31 - 300 HP and Below 350 HP and above are Suitable for Inverter Duty Per NEMA MG1 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 - 125 HP, 6 Leads - 150 HP and Larger
- Breather Drains in both End Brackets for Vertical Mounts.

## EXTRAS / OPTIONS:

Please refer to Factory Modification Tabs which show common modifications that can be performed.

## NOTES:

- (1) NEMA Premium Efficiency levels only applies to 1-500 Hp 3600, 1800 and 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 at a higher price or from our factory with a longer lead time. Pricing and lead time may vary.
- (3) Please consult factory for suitability in higher elevations and higher ambients.
- (4) Self Certification applies to 600HP and larger.
- (5) EP3006, EP3502 and EP3504 do not have dual drilled feet.
- (6) Motor service factor is 1.0 when operated on a VFD.