

# MAX-E1® FAMILY



AEHH8N, NEMA PREMIUM (1 HP - 500 HP) [EP]

AEHE, HIGH EFFICIENCY [E]

AEHH8NCF, NEMA PREMIUM, FOOTED C-FACE (1 HP - 300 HP) [EP\_C]

AEUH8NDC, NEMA PREMIUM, ROUND BODY C-FACE (1 HP - 100 HP) [EPV\_C]



Effective 07-08-18  
Supersedes 03-24-17

## APPLICATIONS:

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

## FEATURES:

- Output Range: 3/4 - 800 HP
- Speed: 3600, 1800, 1200 & 900 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP54 for 280 Frames and below, IP55 for 280TS Frames and above)
- Voltage: 230/460V (Usable on 208V); 150HP and Larger is 460V Only<sup>(1,2)</sup>
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3 Minimum<sup>(7,8)</sup>
- CSA Certified for Class II, Div. 2, Groups F & G - Temp Code T3 Minimum<sup>(7,8,12)</sup> (444T and Above)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum; Various Ratings also Meet Design C
- Cast Iron Frame, End Brackets & Fan Cover and Main Conduit Box<sup>(9)</sup>
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40°C Ambient Temperature<sup>(3)</sup>
- Designed for 3300 ft. Elevation<sup>(4)</sup>
- Bi-Directional Rotation; Except 2 Pole "Hybrid" and F# 5000 and Larger Ratings are Counter-Clockwise facing the DE
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F# 140T - 449T  
Copper/Copper Alloy Rotor Construction for F# 5000 and Larger<sup>(10)</sup>
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Light Gray - Munsell N5.0
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 140T - 280T (Non-regreasable)
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM for F# 280TS and Larger
- Automatic Grease Discharge Fittings on Regreasable Models
- Labyrinth Type Metal Flinger on Both Ends for F# 280TS and Larger
- Cast Iron Inner and Outer Bearing Caps for F#280TS and Larger
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Use per NEMA MG-1 Part 31.4.4.2<sup>(5,6,11)</sup>
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque (350 HP and Larger are 3:1 Constant Torque)<sup>(11)</sup>
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP to 125 HP;
- 6 Leads for 150 HP and Larger
- Motors are U.L. Recognized, CSA Approved, CE Marked. ABS Design Assessment from 250 HP-800 HP<sup>(11)</sup>
- Dual Drilled Feet Available on Most Ratings - Longer Frames (i.e. 145T Drilled also for 143T)
- 2-Pole Motors 600 HP and Larger are Form Wound and Insulated Non-Drive End Bearing
- Rubber Dust Flinger on Drive-End for F# 140T - 280T
- Catalog Numbers Ending in "R" Come Standard with Roller Bearings for Belted Applications.

## EXTRAS/ OPTIONS:

Please refer to pages 147 - 154 for common modifications that can be performed.

## Notes:

- (1) TWMC carries minimal MAX-E1® 575V stock; please check availability to ensure required motors are available. 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.
- (2) Motors 7.5 HP & up are Suitable for Wye/Delta Starting.
- (3) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
- (4) Consult a Stock Product Application Specialist for suitability at higher elevations.
- (5) Motor service factor is 1.0 when operated on a VFD.
- (6) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1. Part 31.
- (7) Catalog# EP3502, EP3504, EP4002T & EP4004T are "Hybrid" ratings; Not CSA Certified (Self-Certify Only) for hazardous locations, and not dual drilled.
- (8) Catalog# EP3006 also not CSA Certified for Hazardous Locations (Self-Certify Only).
- (9) F# 5000 and with Larger with Pressed Steel Plate Main Conduit Box.
- (10) F# 5007 - 5011 8 Pole Ratings are Aluminum Die Cast Squirrel Cage Rotor Construction.
- (11) EP4002T & EP4004T are hybrid frames and not VFD suitable.
- (12) Various temp codes apply to ratings. Consult a product specialist for accurate code.