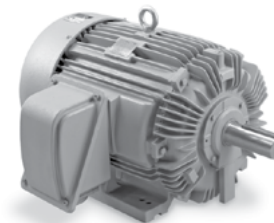


MODEL: OPTIM® TEFC
TYPE: AEHH8N, AEHE

Effective 03-05-16
 Supercedes All Previous



APPLICATIONS

- Fans & Blowers
- Pumps
- Crushers
- Compressor
- Mixers
- Conveyors

PRODUCT OVERVIEW

- 1-800HP
- 60Hz, 230/460V (Usable on 208V), 460V or 575V
- 3600, 1800, 1200 & 900 RPM
- Totally Enclosed Fan Cooled IP54 Design, IP55 for 5000 Frames and Larger
- Horizontal F1 Mount
- *NEMA Premium Efficiency

DESIGN FEATURES

- 1.15 S.F. Sine Wave Power; 1.0 S.F. VFD Power
- Continuous Duty
- Class F Insulation
- NEMA Design B or C
- Class B Temperature Rise
- 40°C Ambient
- Max Elevation 3300ft

MECHANICAL FEATURES

- Oversized, Double Shielded Vacuum Degassed Ball Bearings Frames 140T-280T and Open Bearings with Regreaseable Provisions Frames 280TS, 320T and Larger
- Polyrex EM Grease in all Regreaseable Bearings, Multemp SRL Grease in Sealed Bearings
- Dynamically Balanced Die-Cast Aluminum Rotor up to 449T Frames; Copper/Copper Alloy 5000 and Larger
- Cast-Iron Frame and End Brackets
- Cast-Iron Conduit Box up to 449T Frames; Fabricated Steel Conduit Box 5000 Frames and Larger, Gasketed, F1 Mounting
- Non-Sparking Plastic Fan up to 449T 4,6 & 8 Pole Motors; Bronze Fan 440TS 2 Pole Motors; Aluminum Fan 5000 Frames and Larger
- Number of Leads 230/460V: 9 Leads 1-5HP; 12 Leads 7.5-125HP; 6 Leads 150 and Above
- Number of Leads 575V: 3 Leads up to 449T; 6 Leads 5000 Frames and Larger
- Solderless Lug Terminals on All Leads
- Grounding Terminal Inside Main Terminal Box, Additional Grounding Terminal on Frame for 5000 Frames and Larger
- Interchangeable F1 and F2 mounting up to 449T
- Dual Drilled Feet for Longer Frames (i.e. 145T also Drilled for 143T) 449T and Below
- Paint System: Phenolic Rust Proof Base with Lacquer Top Coat
- Stainless Steel Nameplate
- Insulated NDE Bearing Standard for 600HP and larger 2 Pole motors
- Rubber Flinger on DE up to 280T; Steel Flinger on Both Ends 280TS and Larger
- **HPE™ High Pulse Endurance Spike Resistant Wire
- 2 Dips Phenolic Alkyd Resin Varnish 140T-440T, 2 Dips Epoxy Resin 5000 Frames and Larger; Spray Enamel Top Coat on all Frames
- Bi-Directional Rotation Except 3600RPM Motors 5000 Frames and Larger Which are CW From NDE
- Winding RTD's, Space Heaters and Provisions for Bearing RTD's Standard 5000 Frames and Larger

OTHER FEATURES

- *CSA Certified for Class I, Division II, Groups B, C and D and Class I, Zone 2, Groups IIB+H2, IIB and IIA
- **Meets NEMA MG1 Part 31.4.4.2
- **Inverter Duty Speed Range 10:1 CT and 20:1 VT up to 300HP; 3:1 CT and 20:1 VT 301-600HP
- ABS Type Certified (5000 Frames and Larger)

* Applies to 1-600HP Only

** Precautions should be taken to eliminate or reduce voltage spikes and shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG1, Part 31.4.4.