

# HTM1600 AC Drilling Motor

# **Joliet Electric Motors**

is committed to delivering integrated motor solutions to existing rig fleets and new builds. We focus on proven solutions that improve operational efficiency.



## **RATINGS:**

**Maximum Continuous Power:** 1600HP (1193 KW), 9338 lb-ft., 1430 Amps, 600 - 690 VAC, 900 RPM

Constant Output Speed: 1000 - 1800 RPM

 Intermittent Duty Cycle:
 2250HP (1678 KW), 13,131 lb-ft., 2025 Amps, 600 - 690 VAC, 900 RPM

 Duty Cycle:
 60 sec. ON, 120 sec. OFF
 Constant Output Speed: 800 - 1400 RPM

 Max RPM:
 3000

 Ambient Temp.:
 -40° to +55°

#### **FEATURES & SPECIFICATIONS:**

- Form Wound (VPI).
- Copper Alloy Rotor Bars and End Rings.
- · Class H Insulation.
- (VFD) Inverter Duty.
- 4532 Forged High-Strength Shaft.
- · Single Shaft with Oilfield Hub.
- OPE Insulated Bearing.
- IP44 Enclosure
- Pressurized connection box (IP54) mounted on right or left side of motor as viewed from non-drive end, with bolt on cable connections and terminations for pressure sensor, thermostat, space heater, lockout switch & blower unit.
- Blower Assembly; 20HP, Explosion Proof, 3 Phase, 60 Hz, 460 Volts.
- (6) 100 Ohm Platinum RTD's (2) per phase.
- Pressure sensor, Explosion Proof.
- · Lockout Switch, Explosion Proof.
- Space Heater, 120/240 Volt, Exposion Proof.
- Stub Shaft / Encoder Mount optional.
- · Approx. Weight: 7,560 Lbs.

### **ENGINEERING DATA:**

- · Service Speed:
  - Belt drive: 0~2300 RPM (2300~3000 RPM: short time drive).
  - Direct Coupled: 0~3000 RPM (Continuous).
- Dielectric Test: 4025 V (900\*2.25+2000, 900 V is inverter input Voltage).
- Permissible Vibration +/- 73.5 m/S² (+/-7.5G).
- Noise (@ No-Load): Approx. 91 dB(A) at 1m from motor frame.

Rating:	<b>Continuous:</b>	<b>Intermittent:</b>
Output (HP):	1600	2250
Output (KW):	1193	1678
Voltage (V):	600	600
Current (A):	1430	2025
Speed (min-1):	900	900
Frequency (Hz.):	45.6	46.2
Efficiency (%):	94.0	93.7
Power Factor (%):	87.1	85.1
Slip (%):	1.2	2.08