

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 14532418

Catalog # : 00312XT3H213T

Frame : 213/5T
Output : 3 HP (2.2 kW)
Poles : 6
Frequency : 60 Hz
Rated voltage : 575 V
Rated current : 3.53 A
L. R. Amperes : 24.7 A
LRC : 7.0x(Code K)
No load current : 2.00 A
Rated speed : 1175 rpm
Slip : 2.08 %
Rated torque : 13.4 ft.lb
Locked rotor torque : 180 %
Breakdown torque : 290 %
Insulation class : F
Service factor : 1.15
Moment of inertia (J) : 1.20 sq.ft.lb
Design : B

Locked rotor time : 104s (cold) 58s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : F-1
Rotation¹ : Both (CW and CCW)
Noise level² : 55.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 197 lb

Output 25% 50% 75% 100%

Efficiency (%) 85.4 86.5 88.5 89.5
Power Factor 0.29 0.50 0.62 0.70

Foundation loads

Max. traction : 121 lb
Max. compression : 317 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

| P1 (0,9;1,0) | P2 (0,5;1,0) | P3 (0,25;1,0) | P4 (0,9;0,5) | P5 (0,5;0,5) | P6 (0,5;0,25) | P7 (0,25;0,25) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 11.0 | 8.4 | 7.5 | 6.8 | 4.3 | 3.4 | 2.4 |

| | | | |
|------------------------|--|------------------|----------------------|
| | | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type : | | 6308 2RS | 6207 2RS |
| Sealing : | | Oil Seal | Lip Seal |
| Lubrication interval : | | - | - |
| Lubricant amount : | | - | - |
| Lubricant type : | | Mobil Polyrex EM | |

Notes:

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

| Rev. | Changes Summary | Performed | Checked | Date |
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| Checked by | | | | |
| Date | 28/03/2024 | | | |

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Customer :

Thermal protection

| ID | Application | Type | Quantity | Sensing Temperature |
|----|-------------|----------------------|-----------|---------------------|
| 1 | Winding | Thermostat - 2 wires | 1 x Phase | 155 °C |

| | | | | | |
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