

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12970188
Catalog # : 04009ST3HIE365T-W22

| | | | |
|-----------------------|-----------------|-----------------------------|------------------------|
| Frame | : 364/5T | Locked rotor time | : 46s (cold) 26s (hot) |
| Output | : 40 HP (30 kW) | Temperature rise | : 80 K |
| Poles | : 8 | Duty cycle | : Cont.(S1) |
| Frequency | : 60 Hz | Ambient temperature | : -20°C to +40°C |
| Rated voltage | : 575 V | Altitude | : 1000 m.a.s.l. |
| Rated current | : 40.7 A | Protection degree | : IP56 |
| L. R. Amperes | : 240 A | Cooling method | : IC411 - TEFC |
| LRC | : 5.9x(Code G) | Mounting | : F-1 |
| No load current | : 17.2 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 882 rpm | Noise level ² | : 60.0 dB(A) |
| Slip | : 2.00 % | Starting method | : Direct On Line |
| Rated torque | : 238 ft.lb | Approx. weight ³ | : 862 lb |
| Locked rotor torque | : 170 % | | |
| Breakdown torque | : 210 % | | |
| Insulation class | : F | | |
| Service factor | : 1.25 | | |
| Moment of inertia (J) | : 29.0 sq.ft.lb | | |
| Design | : B | | |

| | | | | | | |
|----------------|------|------|------|------|------------------|-----------|
| Output | 25% | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 92.7 | 92.4 | 93.0 | 92.4 | Max. traction | : 1281 lb |
| Power Factor | 0.40 | 0.65 | 0.75 | 0.80 | Max. compression | : 2143 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) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 8.1 | 7.1 | 6.5 | 3.6 | 2.6 | 1.6 | 1.2 |

| | | | |
|----------------------|---|------------------|----------------------|
| | | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type | : | 6314 C3 | 6314 C3 |
| Sealing | : | Inpro/Seal | Inpro/Seal |
| Lubrication interval | : | 20000 h | 20000 h |
| Lubricant amount | : | 27 g | 27 g |
| 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 |
|--------------|-----------------|-----------------------------|---------|------|
| | | | | |
| Performed by | | Page Revision 1 / 1 | | |
| Checked by | | | | |
| Date | 25/03/2024 | | | |