

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14501324

Catalog # : 02012OT3E286T-W40G

Frame : 284/6T
Output : 20 HP (15 kW)
Poles : 6
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 48.5/24.3 A
L. R. Amperes : 311/155 A
LRC : 6.4x(Code G)
No load current : 18.0/9.00 A
Rated speed : 1175 rpm
Slip : 2.08 %
Rated torque : 89.4 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 260 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 6.89 sq.ft.lb
Design : B

Locked rotor time : 27s (cold) 15s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP23
Cooling method : IC01 - ODP
Mounting : F-1
Rotation¹ : Both (CW and CCW)
Noise level² : 59.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 386 lb

| Output | 25% | | 50% | | 75% | | 100% | |
|----------------|------|------|------|------|------|------|------|------|
| Efficiency (%) | 91.5 | 89.7 | 91.7 | 89.9 | 92.4 | 90.3 | 92.4 | 90.3 |
| | 89.7 | 89.7 | 89.9 | 89.9 | 90.3 | 90.3 | 90.3 | 90.3 |
| Power Factor | 0.46 | 0.42 | 0.71 | 0.68 | 0.80 | 0.79 | 0.84 | 0.84 |
| | 0.39 | 0.37 | 0.64 | 0.62 | 0.76 | 0.74 | 0.82 | 0.81 |

Foundation loads

Max. traction

Max. compression

| | Drive end | Non drive end |
|----------------------|----------------------|----------------------|
| Bearing type | 6311 Z C3 | 6211 Z C3 |
| Sealing | Without Bearing Seal | Without Bearing Seal |
| Lubrication interval | 20000 h | 20000 h |
| Lubricant amount | 18 g | 11 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 1 / 1 | | |
| Checked by | | | | |
| Date | 29/03/2024 | | | |
| | | | Revision | |