

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency
Three-Phase

Product code : 14459459

Catalog # : 00156OT3ER143TC-S

Frame : 143/5TC
Output : 1.5 HP (1.1 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 3.70/1.85 A
L. R. Amperes : 31.8/15.9 A
LRC : 8.6x(Code K)
No load current : 1.62/0.809 A
Rated speed : 3510 rpm
Slip : 2.50 %
Rated torque : 2.24 ft.lb
Locked rotor torque : 210 %
Breakdown torque : 330 %
Insulation class : F
Service factor : 1.15
Moment of inertia (J) : 0.0835 sq.ft.lb
Design : B

Locked rotor time : 34s (cold) 19s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Cooling method : IC01 - ODP
Mounting : W-6
Rotation¹ : Both (CW and CCW)
Noise level² : 62.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 29.6 lb

| Output | 25% | | 50% | | 75% | | 100% | |
|----------------|------|------|------|------|------|------|------|------|
| Efficiency (%) | 81.1 | 83.2 | 81.5 | 82.7 | 84.0 | 83.6 | 84.0 | 82.7 |
| | 80.7 | | 81.0 | | 83.3 | | 83.2 | |
| Power Factor | 0.45 | 0.51 | 0.73 | 0.79 | 0.83 | 0.88 | 0.89 | 0.92 |
| | 0.43 | | 0.71 | | 0.83 | | 0.88 | |

Foundation loads
Max. traction : 56 lb
Max. compression : 85 lb

| | Drive end | Non drive end |
|------------------------|----------------------|----------------------|
| Bearing type : | 6205 ZZ | 6203 ZZ |
| Sealing : | Without Bearing Seal | Without Bearing 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 |
|--------------|-----------------|---------------|---------|------|
| | | | | |
| Performed by | | Page 1 / 1 | | |
| Checked by | | | | |
| Date | 26/03/2024 | | | |
| | | Revision | | |