DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel Three-Phase Product code : 12630184

Catalog # : .5018ES3E56-S

: 56 Cooling method : IC411 - TEFC Frame Insulation class : F Mounting : F-1 Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line Altitude : 1000 m.a.s.l. Approx. weight³ : 21.4 lb

Protection degree : IP55 Moment of inertia (J) : 0.0584 sq.ft.lb 0.5 Output [HP] 0.5 Poles 4 4 4 50 50 Frequency [Hz] 60 Rated voltage [V] 208-230/460 190/380 220/415 Rated current [A] 1.91-1.72/0.862 1.90/0.950 1.81/0.962 L. R. Amperes [A] 13.3-12.1/6.03 11.0/5.51 11.4/6.06 LRC [A] 7.0x(Code L) 6.3x(Code K) 5.8x(Code J) No load current [A] 1.03-1.20/0.600 1.24/0.618 1.39/0.737 Rated speed [RPM] 1760 1460 1445 Slip [%] 2.22 2.67 3.67 Rated torque [ft.lb] 1.47 1.77 1.79 Locked rotor torque [%] 220 240 180 Breakdown torque [%] 300 250 310 Service factor 1.15 1.15 Temperature rise 80 K 80 K 80 K 0s (cold) 0s (hot) 0s (cold) 0s (hot) Locked rotor time 36s (cold) 20s (hot) Noise level² 52.0 dB(A) 49.0 dB(A) 49.0 dB(A) 25% 65.4 69.5 65.0 50% 70.7 67.2 68.0 Efficiency (%) 75% 75.0 74.0 73.1 75.9 100% 77.0 75.4 0.28 0.26 25% 0.32 50% 0.48 0.48 0.56 Power Factor 75% 0.61 0.69 0.61 100% 0.70 0.78 0.71

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).
- (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. | v. Changes Summary | | Performed | Checked | Date |
|--------------|--------------------|--|-----------|---------|----------|
| | | | | | |
| Performed by | | | | | |
| Checked by | | | | Page | Revision |
| Date | 23/01/2018 | | | 1/ | |