

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14011071

Catalog # : 100180T3E404T-W40

Frame : 404/5T
 Output : 100 HP (75 kW)
 Poles : 4
 Frequency : 60 Hz
 Rated voltage : 230/460 V
 Rated current : 229/115 A
 L. R. Amperes : 1560/780 A
 LRC : 6.8x(Code G)
 No load current : 74.0/37.0 A
 Rated speed : 1780 rpm
 Slip : 1.11 %
 Rated torque : 295 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Insulation class : F
 Service factor : 1.25
 Moment of inertia (J) : 21.9 sq.ft.lb
 Design : B

Locked rotor time : 21s (cold) 12s (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 : 69.0 dB(A)
 Starting method : Direct On Line
 Approx. weight³ : 988 lb

Output	25%		50%		75%		100%	
Efficiency (%)	94.9	90.2	95.0	91.9	95.4	92.9	95.4	94.7
	90.3	90.3	92.0	92.0	92.9	92.9	94.7	94.7
Power Factor	0.50	0.48	0.75	0.73	0.83	0.82	0.86	0.86
	0.46	0.43	0.72	0.68	0.80	0.78	0.85	0.84

Foundation loads
 Max. traction : 1892 lb
 Max. compression : 2880 lb

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6316 C3	6212 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	34 g	13 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				
Checked by				
Date	29/03/2024			

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 Revision