

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 14409581

Catalog # : 02009XT3E324T

Frame : 324T
Output : 20 HP (15 kW)
Poles : 8
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 55.0/27.5 A
L. R. Amperes : 292/146 A
LRC : 5.3x(Code G)
No load current : 28.8/14.4 A
Rated speed : 880 rpm
Slip : 2.22 %
Rated torque : 119 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 229 %
Insulation class : F
Service factor : 1.15
Moment of inertia (J) : 9.37 sq.ft.lb
Design : B

Locked rotor time : 45s (cold) 25s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : F-1
Rotation¹ : Both (CW and CCW)
Noise level² : 56.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 622 lb

Output	25%		50%		75%		100%	
Efficiency (%)	91.5	92.1	91.7	91.0	92.4	91.0	92.4	89.5
	89.2	89.2	89.5	89.5	90.2	90.2	90.2	90.2
Power Factor	0.32	0.38	0.56	0.63	0.67	0.73	0.74	0.78
	0.35	0.32	0.59	0.55	0.69	0.67	0.76	0.74

Foundation loads
Max. traction : 927 lb
Max. compression : 1502 lb

	Drive end	Non drive end
Bearing type	: 6312 C3	6212 C3
Sealing	: Oil Seal	Lip Seal
Lubrication interval	: 20000 h	20000 h
Lubricant amount	: 21 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.

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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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