

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12408388

Catalog # : 50018XT3G586/7

Frame	: 586/7T	Locked rotor time	: 45s (cold) 25s (hot)
Output	: 500 HP (370 kW)	Temperature rise	: 105 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 568 A	Protection degree	: IP55
L. R. Amperes	: 3578 A	Cooling method	: IC411 - TEFC
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 140 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1790 rpm	Noise level ²	: 83.0 dB(A)
Slip	: 0.56 %	Starting method	: Direct On Line
Rated torque	: 1470 ft.lb	Approx. weight ³	: 4805 lb
Locked rotor torque	: 210 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 256 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	95.7	96.1	95.8	95.8	96.2	96.2	95.8	Max. traction	: 5252 lb	
	95.7	95.3	95.8	95.4	96.2	96.2	96.2			96.2
Power Factor	0.58	0.58	0.81	0.81	0.84	0.84	0.85	0.85	Max. compression	: 10042 lb
	0.54	0.51	0.78	0.76	0.83	0.81	0.85	0.84		

				<u>Drive end</u>		<u>Non drive end</u>
Bearing type	:			6322 C3		6319 C3
Sealing	:			Viton Oil Seal		Viton Seal
Lubrication interval	:			5138 h		7038 h
Lubricant amount	:			60 g		45 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	28/03/2024			

Page 1 / 2
Revision

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Customer :

Thermal protection

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 2 / 2Revision	
Checked by					
Date	28/03/2024				