

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11997252

Catalog # : 70018ET3G588/9-W22

Frame	: 588/9T	Locked rotor time	: 41s (cold) 23s (hot)
Output	: 700 HP (515.20 kW)	Temperature rise	: 80 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	: 788 A	Protection degree	: IP55
L. R. Amperes	: 5122 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code G)	Mounting	: F-1
No load current	: 240 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1790 rpm	Noise level ²	: 81.0 dB(A)
Slip	: 0.56 %	Starting method	: Direct On Line
Rated torque	: 2050 ft.lb	Approx. weight ³	: 5542 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 220 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 335 sq.ft.lb		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	96.0	96.1	96.2	96.2	96.5	96.5	96.6	96.5	Max. traction	: 8700 lb
	96.1	95.4	96.2	95.8	96.5	96.2	96.5	96.5		
Power Factor	0.51	0.53	0.76	0.77	0.81	0.82	0.85	0.85	Max. compression	: 14242 lb
	0.48	0.45	0.73	0.71	0.79	0.77	0.84	0.83		

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	4.2	4.2	4.2	4.2
	P2 (0,5;1,0)	3.2	3.2	3.2	3.2
	P3 (0,25;1,0)	2.5	2.5	2.5	2.5
	P4 (0,9;0,5)	2.6	2.6	2.6	2.6
	P5 (0,5;0,5)	1.8	1.8	1.8	1.8
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	0.8	0.8	0.8	0.8

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6322 C3	6319 C3
Sealing	:	Taconite Labyrinth	Taconite Labyrinth
Lubrication interval	:	6000 h	8000 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
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Date	29/03/2024			

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Customer :

Space heater information

Voltage: 200 - 240 V

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