

Three Phase Induction Motor - Squirrel Cage



Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11805053

Frame	: 444/5T	Locked rotor time	: 48s (cold) 27s (hot)
Output	: 150 HP (110 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	: 170 A	Protection degree	: IP55
L. R. Amperes	: 1122 A	Cooling method	: IC411 - TEFC
LRC	: 6.6x(Code G)	Mounting	: F-3
No load current	: 58.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1784 rpm	Noise level ²	: 73.0 dB(A)
Slip	: 0.89 %	Starting method	: Direct On Line
Rated torque	: 442 ft.lb	Approx. weight ³	: 1800 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 66.7 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	95.3	95.2	95.4	95.1	95.8	95.5	95.8	95.3	Max. traction	: 2500 lb
	95.2	94.7	95.1	94.8	95.5	95.5	95.3	95.5		
	95.6	95.7	95.4	95.4	95.4	95.4	95.0	95.0		
	95.3		95.4		95.4		95.4			
Power Factor	0.49	0.49	0.74	0.73	0.82	0.83	0.85	0.85	Max. compression	: 4301 lb
	0.45	0.43	0.70	0.68	0.81	0.79	0.85	0.84		
	0.55	0.51	0.79	0.76	0.85	0.83	0.86	0.86		
	0.49		0.74		0.82		0.85			

Losses (%)	P1 (0,9;1,0)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	P2 (0,5;1,0)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	P3 (0,25;1,0)	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	P4 (0,9;0,5)	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	NU-319 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	5000 h	10000 h
Lubricant amount	:	45 g	34 g
Lubricant type	:	Mobil Polyrex EM	

- (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.

Rev.	Changes Summary		Performed	Checked	Date
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DATA SHEET

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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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