

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code : 14421027
Catalog # : E05512EP3Y280SMF3-W2

Frame	: 280S/M	Locked rotor time	: 37s (cold) 21s (hot)
Output	: 55 kW (75 HP)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380/660 V	Altitude	: 1000 m.a.s.l.
Rated current	: 109/62.8 A	Protection degree	: IP55
L. R. Amperes	: 654/377 A	Cooling method	: IC411 - TEFC
LRC	: 6.0	Mounting	: B3T
No load current	: 44.0/25.3 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 985 rpm	Noise level ²	: 65.0 dB(A)
Slip	: 1.50 %	Starting method	: Direct On Line
Rated torque	: 394 ft.lb	Approx. weight ³	: 1387 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 56.0 sq.ft.lb		
Design	: N		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	93.0	92.8	93.1	92.9	93.1	93.1	93.1	93.1	Max. traction	: 1915 lb
	92.4	92.9	92.5	93.0	93.1	93.6	93.1	93.6		
Power Factor	0.43	0.38	0.68	0.64	0.77	0.74	0.82	0.80	Max. compression	: 3302 lb
	0.36	0.38	0.61	0.64	0.72	0.74	0.78	0.79		

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

Losses (%)	P1 (0,9;1,0)	7.1	7.1	7.1	6.5
	P2 (0,5;1,0)	5.8	5.8	5.8	5.3
	P3 (0,25;1,0)	5.5	5.5	5.5	5.0
	P4 (0,9;0,5)	3.6	3.6	3.6	3.3
	P5 (0,5;0,5)	2.4	2.4	2.4	2.2
	P6 (0,5;0,25)	1.6	1.6	1.6	1.5
	P7 (0,25;0,25)	1.1	1.1	1.1	1.0

		Drive end	Non drive end
Bearing type	:	6316 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	18000 h	18000 h
Lubricant amount	:	34 g	34 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 IEC 60034-1.

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Customer :

Thermal protection

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

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