

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code : 14420736
Catalog # : E03718EP3Y225SMF3-W2

Frame	: 225S/M	Locked rotor time	: 14s (cold) 8s (hot)
Output	: 37 kW (50 HP)	Temperature rise	: 80 K
Poles	: 4	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	: 72.2/41.6 A	Protection degree	: IP55
L. R. Amperes	: 484/279 A	Cooling method	: IC411 - TEFC
LRC	: 6.7	Mounting	: B3T
No load current	: 25.0/14.4 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1480 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 1.33 %	Starting method	: Direct On Line
Rated torque	: 176 ft.lb	Approx. weight ³	: 754 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 10.5 sq.ft.lb		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	92.1	91.7	92.2	91.9	92.7	92.7	92.7	92.7	Max. traction	: 1123 lb
	91.5	91.1	91.7	91.5	92.7	92.7	92.7	93.0		
Power Factor	0.49	0.45	0.75	0.70	0.82	0.80	0.84	0.83	Max. compression	: 1877 lb
	0.43	0.44	0.68	0.70	0.78	0.80	0.82	0.83		

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

Losses (%)	P1 (0,9;1,0)	7.6	7.6	7.6	6.6
	P2 (0,5;1,0)	6.3	6.3	6.3	5.5
	P3 (0,25;1,0)	5.7	5.7	5.7	5.0
	P4 (0,9;0,5)	3.5	3.5	3.5	3.0
	P5 (0,5;0,5)	2.2	2.2	2.2	2.0
	P6 (0,5;0,25)	1.4	1.4	1.4	1.2
	P7 (0,25;0,25)	0.9	0.9	0.9	0.8

		Drive end	Non drive end
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	14000 h	14000 h
Lubricant amount	:	27 g	27 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	26/03/2024			

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Revision

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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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