

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code : 14421090  
Catalog # : E05536EP3Y250SMF3-W2

Frame	: 250S/M	Locked rotor time	: 16s (cold) 9s (hot)
Output	: 55 kW (75 HP)	Temperature rise	: 80 K
Poles	: 2	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	: 99.6/57.4 A	Protection degree	: IP55
L. R. Amperes	: 697/401 A	Cooling method	: IC411 - TEFC
LRC	: 7.0	Mounting	: B3T
No load current	: 24.6/14.2 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 2960 rpm	Noise level <sup>2</sup>	: 75.0 dB(A)
Slip	: 1.33 %	Starting method	: Direct On Line
Rated torque	: 131 ft.lb	Approx. weight <sup>3</sup>	: 1107 lb
Locked rotor torque	: 260 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 8.86 sq.ft.lb		
Design	: N		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	92.8	92.5	92.8	92.7	93.4	93.4	93.2	93.5	Max. traction	: 554 lb
	92.2	91.5	92.5	91.9	93.5	93.2	93.7	93.5		
Power Factor	0.60	0.55	0.83	0.79	0.88	0.86	0.90	0.89	Max. compression	: 1661 lb
	0.51	0.53	0.75	0.76	0.84	0.86	0.88	0.88		

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

Losses (%)	P1 (0,9;1,0)	7.0	6.7	6.4	6.7
	P2 (0,5;1,0)	5.5	5.2	5.0	5.2
	P3 (0,25;1,0)	4.7	4.5	4.4	4.5
	P4 (0,9;0,5)	3.5	3.3	3.2	3.3
	P5 (0,5;0,5)	2.1	2.0	1.9	2.0
	P6 (0,5;0,25)	1.3	1.2	1.2	1.2
	P7 (0,25;0,25)	0.8	0.7	0.7	0.7

		Drive end	Non drive end
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	5000 h	5000 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.

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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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