

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code : 14421229
Catalog # : E09012EP3Y315SMF3-W2

Frame	: 315S/M	Locked rotor time	: 39s (cold) 22s (hot)
Output	: 90 kW (125 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	: 175/101 A	Protection degree	: IP55
L. R. Amperes	: 1015/584 A	Cooling method	: IC411 - TEFC
LRC	: 5.8	Mounting	: B3T
No load current	: 66.0/38.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 990 rpm	Noise level ²	: 67.0 dB(A)
Slip	: 1.00 %	Starting method	: Direct On Line
Rated torque	: 641 ft.lb	Approx. weight ³	: 1969 lb
Locked rotor torque	: 180 %		
Breakdown torque	: 220 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 108 sq.ft.lb		
Design	: N		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	93.9	93.9	94.0	94.0	94.0	94.0	94.0	94.0	Max. traction	: 2718 lb
	93.7	93.5	93.8	93.6	94.0	94.1	94.0	94.1		
Power Factor	0.45	0.41	0.71	0.67	0.80	0.77	0.83	0.81	Max. compression	: 4687 lb
	0.38	0.39	0.64	0.65	0.74	0.75	0.80	0.81		

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

Losses (%)	P1 (0,9;1,0)	6.2	6.2	6.2	6.1
	P2 (0,5;1,0)	4.9	4.9	4.9	4.8
	P3 (0,25;1,0)	4.5	4.5	4.5	4.4
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	2.1	2.1	2.1	2.0
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	0.9	0.9	0.9	0.9

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6319 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	16000 h	18000 h
Lubricant amount	:	45 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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