

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code : 14414752
Catalog # : E01118EP3Y160MF3-W22

Frame	: 160M	Locked rotor time	: 21s (cold) 12s (hot)
Output	: 11 kW (15 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	: 21.9/12.6 A	Protection degree	: IP55
L. R. Amperes	: 131/75.7 A	Cooling method	: IC411 - TEFC
LRC	: 6.0	Mounting	: B3T
No load current	: 9.10/5.24 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1470 rpm	Noise level ²	: 61.0 dB(A)
Slip	: 2.00 %	Starting method	: Direct On Line
Rated torque	: 52.7 ft.lb	Approx. weight ³	: 283 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 2.49 sq.ft.lb		
Design	: N		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	89.6	88.8	89.5	89.0	90.2	90.2	89.8	90.2	Max. traction	: 527 lb
	88.1	87.6	88.5	88.5	90.0	90.2	90.2	91.0		
Power Factor	0.43	0.39	0.69	0.65	0.79	0.76	0.85	0.83	Max. compression	: 810 lb
	0.36	0.37	0.61	0.62	0.73	0.75	0.81	0.82		

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

Losses (%)	P1 (0,9;1,0)	11.3	10.8	10.8	9.8
	P2 (0,5;1,0)	10.1	9.6	9.6	8.8
	P3 (0,25;1,0)	9.1	8.7	8.7	7.9
	P4 (0,9;0,5)	5.3	5.0	5.0	4.6
	P5 (0,5;0,5)	3.8	3.6	3.6	3.3
	P6 (0,5;0,25)	2.5	2.4	2.4	2.2
	P7 (0,25;0,25)	1.8	1.7	1.7	1.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 ZZ C3	6209 ZZ C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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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