

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IE3 Three-Phase

Product code : 12881494

Frame	: 160M	Locked rotor time	: 25s (cold) 14s (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	: 220/380 V	Altitude	: 1000 m.a.s.l.
Rated current	: 37.1/21.5 A	Protection degree	: IP55
L. R. Amperes	: 260/151 A	Cooling method	: IC411 - TEFC
LRC	: 7.0	Mounting	: B5T
No load current	: 15.5/9.00 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1475 rpm	Noise level ²	: 61.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 71.3 Nm	Approx. weight ³	: 146 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 270 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.1191 kgm ²		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.4 90.7	91.4 91.6	91.4 91.4	Max. traction	: 2631 N
	90.6 90.5	91.4 92.2	91.4 92.4		
Power Factor	0.69 0.65	0.80 0.77	0.85 0.83	Max. compression	: 4063 N
	0.61 0.62	0.74 0.75	0.81 0.81		

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

Losses (%)	P1 (0,9;1,0)	9.2	9.2	9.2	8.0
	P2 (0,5;1,0)	8.0	8.0	8.0	7.0
	P3 (0,25;1,0)	7.7	7.7	7.7	6.7
	P4 (0,9;0,5)	4.4	4.4	4.4	3.9
	P5 (0,5;0,5)	3.2	3.2	3.2	2.8
	P6 (0,5;0,25)	2.2	2.2	2.2	1.9
	P7 (0,25;0,25)	1.6	1.6	1.6	1.4

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type	6309 ZZ C3	6209 ZZ C3
Sealing	Oil Seal	Lip Seal
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).

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.

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(3) Approximate weight subject to changes after manufacturing process.
(4) At 100% of full load.

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Thermal protection

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

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