

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : MGE
Customer reference : MGE

Product line : W20 Three-Phase

Product code : 16469273

Frame	: 160M	Locked rotor time	: 21s (cold) 0s (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	: 400/690 V	Altitude	: 1000 m.a.s.l.
Rated current	: 21.5/12.4 A	Protection degree	: IP55
L. R. Amperes	: 165/95.8 A	Cooling method	: IC411 - TEFC
LRC	: 7.7	Mounting	: B3T
No load current	: 10.6/6.17 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1470 rpm	Noise level ²	: 62.0 dB(A)
Slip	: 2.00 %	Starting method	: Direct On Line
Rated torque	: 71.5 Nm	Approx. weight ³	: 111 kg
Locked rotor torque	: 290 %		
Breakdown torque	: 310 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.1025 kgm ²		
Design	: N		

Output	50%	75%	100%
Efficiency (%)	89.2	90.3	91.4
Power Factor	0.63	0.75	0.81

Foundation loads	
Max. traction	: 2944 N
Max. compression	: 4036 N

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

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
9.0	7.3	7.1	5.0	3.4	2.5	1.8

	Drive end	Non drive end
Bearing type	: 6209 ZZ C3	: 6209 ZZ C3
Sealing	: V'Ring	: V'Ring
Lubrication interval	: -	: -
Lubricant amount	: -	: -
Lubricant type	: Mobil Polyrex EM	

Notes
PTC

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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Thermal protection

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

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