

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : MGE
Customer reference : MGE

Product line : W22 IE4 Three-Phase

Product code : 17010360

Frame	: 280S/M	Locked rotor time	: 72s (cold) 40s (hot)
Output	: 75 kW (100 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	: 136/78.8 A	Protection degree	: IP55
L. R. Amperes	: 1046/606 A	Cooling method	: IC411 - TEFC
LRC	: 7.7	Mounting	: B3T
No load current	: 50.0/29.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1486 rpm	Noise level ²	: 69.0 dB(A)
Slip	: 0.93 %	Starting method	: Direct On Line
Rated torque	: 481 Nm	Approx. weight ³	: 778 kg
Locked rotor torque	: 260 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 2.85 kgm ²		
Design	: NE		

Output	50%	75%	100%
Efficiency (%)	95.3	95.8	96.0
Power Factor	0.70	0.80	0.83

Foundation loads	
Max. traction	: 7057 N
Max. compression	: 14692 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)
3.8	2.9	2.6	1.9	1.2	0.8	0.5

	Drive end	Non drive end
Bearing type	: 6316 C3	6316 C3
Sealing	: WSeal	WSeal
Lubrication interval	: 13000 h	13000 h
Lubricant amount	: 34 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	05/10/2023			
		Page		Revision
		1 / 2		

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : MGE
Customer reference : MGE

Thermal protection

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				2 / 2	
Date	05/10/2023				

