

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase Product code : 12862408

Frame	: 225S/M	Locked rotor time	: 14s (cold) 8s (hot)
Output	: 45 kW (60 HP)	Temperature rise	: 80 K
Poles	: 2	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	: 80.3/46.6 A	Protection degree	: IP55
L. R. Amperes	: 666/386 A	Cooling method	: IC411 - TEFC
LRC	: 8.3	Mounting	: B3T
No load current	: 29.0/16.8 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 2970 rpm	Noise level ²	: 74.0 dB(A)
Slip	: 1.00 %	Starting method	: Direct On Line
Rated torque	: 14.8 kgfm	Approx. weight ³	: 393 kg
Locked rotor torque	: 290 %		
Breakdown torque	: 370 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.2861 kgm ²		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	92.0	93.0	94.0	Max. traction	: 382 kgf
Power Factor	0.00	0.72	0.82	0.86	Max. compression	: 775 kgf

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)
6.0	4.6	4.2	3.3	2.0	1.4	0.9

	Drive end	Non drive end
Bearing type	: 6314 C3	6314 C3
Sealing	: WSeal	WSeal
Lubrication interval	: 5000 h	5000 h
Lubricant amount	: 27 g	27 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		Page 1 / 2 Revision		
Checked by				
Date	15/05/2025			

Customer :

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					
Date	15/05/2025			2 / 2	