

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14298049

Frame	: 213/5TC	Locked rotor time	: 102s (cold) 57s (hot)
Output	: 5 HP (3.7 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 5.46 A	Protection degree	: IP55
L. R. Amperes	: 37.2 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code J)	Mounting	: F-1
No load current	: 2.76 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1170 rpm	Noise level ²	: 55.0 dB(A)
Slip	: 2.50 %	Starting method	: Direct On Line
Rated torque	: 3.10 kgfm	Approx. weight ³	: 97.2 kg
Locked rotor torque	: 170 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0620 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	88.5	89.5	89.5	Max. traction	: 99 kgf
Power Factor	0.58	0.70	0.76	Max. compression	: 199 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)
11.1	9.1	8.9	5.7	3.9	2.8	2.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6308 2RS	6207 2RS
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).
- (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 NEMA MG-1.

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 1 / 3 Revision		
Checked by				
Date	28/10/2024			

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Customer :

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				2 / 3	
Date	28/10/2024				

LOAD PERFORMANCE CURVE

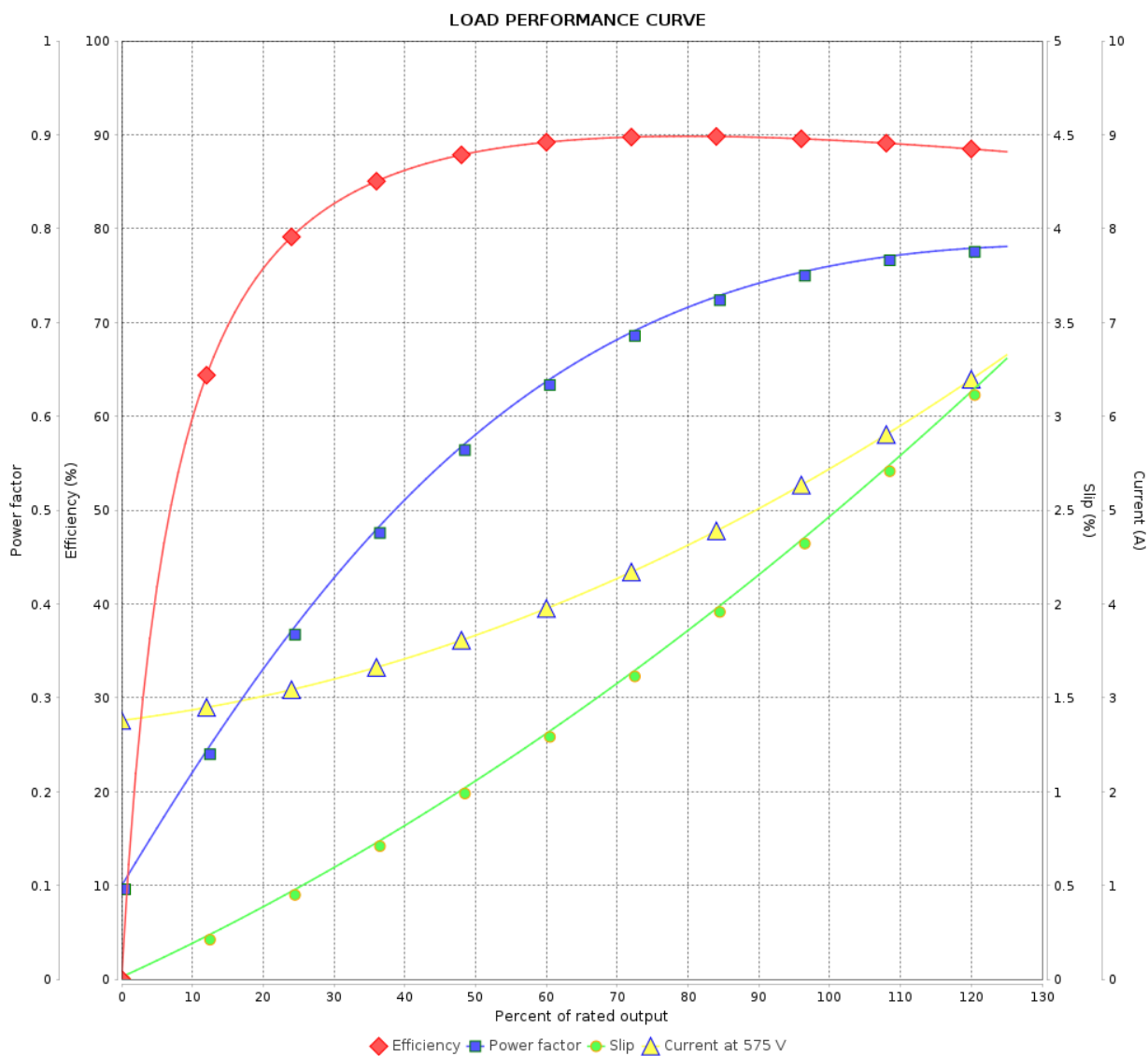
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Customer :

Product line : W21 Explosion Proof NEMA
Premium Efficiency Three-Phase

Product code : 14298049



Performance : 575 V 60 Hz 6P

Rated current : 5.46 A
LRC : 6.8
Rated torque : 3.10 kgfm
Locked rotor torque : 170 %
Breakdown torque : 260 %
Rated speed : 1170 rpm

Moment of inertia (J) : 0.0620 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 3Revision		
Checked by				
Date	28/10/2024			