

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14541662

Frame	: 143/5TC	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 2 HP (1.5 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 2.15 A	Protection degree	: IP55
L. R. Amperes	: 19.8 A	Cooling method	: IC411 - TEFC
LRC	: 9.2x(Code L)	Mounting	: F-1
No load current	: 0.840 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3490 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 3.06 %	Starting method	: Direct On Line
Rated torque	: 0.416 kgfm	Approx. weight ³	: 33.3 kg
Locked rotor torque	: 360 %		
Breakdown torque	: 400 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0023 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	80.0	84.0	85.5	Max. traction	: 31 kgf
Power Factor	0.64	0.76	0.82	Max. compression	: 64 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)
15.3	10.8	10.1	9.0	4.8	3.4	2.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6205 2RS	6204 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.

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Customer :

Thermal protection

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

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LOAD PERFORMANCE CURVE

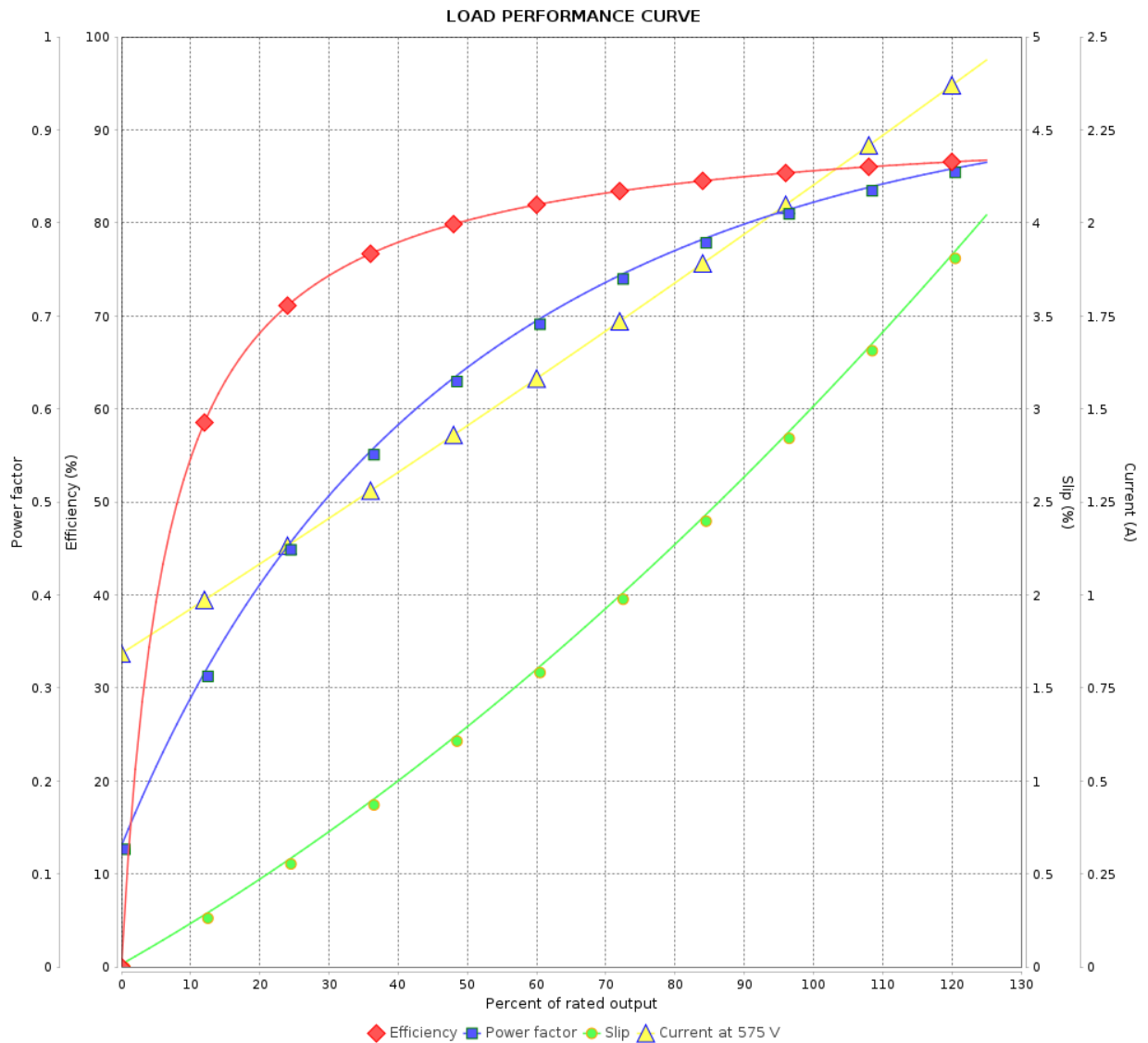
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14541662



Performance : 575 V 60 Hz 2P

Rated current	: 2.15 A	Moment of inertia (J)	: 0.0023 kgm ²
LRC	: 9.2	Duty cycle	: Cont.(S1)
Rated torque	: 0.416 kgfm	Insulation class	: F
Locked rotor torque	: 360 %	Service factor	: 1.15
Breakdown torque	: 400 %	Temperature rise	: 80 K
Rated speed	: 3490 rpm	Design	: B

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