

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14407375

Frame	: 254TC	Locked rotor time	: 55s (cold) 31s (hot)
Output	: 15 HP (11 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	: 13.9 A	Protection degree	: IP55
L. R. Amperes	: 94.7 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code G)	Mounting	: F-1
No load current	: 4.80 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3540 rpm	Noise level ²	: 75.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 3.08 kgfm	Approx. weight ³	: 147 kg
Locked rotor torque	: 200 %		
Breakdown torque	: 270 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0500 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	90.0	90.5	91.0	Max. traction	: 57 kgf
Power Factor	0.74	0.83	0.87	Max. compression	: 203 kgf

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	15797 h	18447 h
Lubricant amount	:	13 g	9 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 NEMA MG-1.

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

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



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

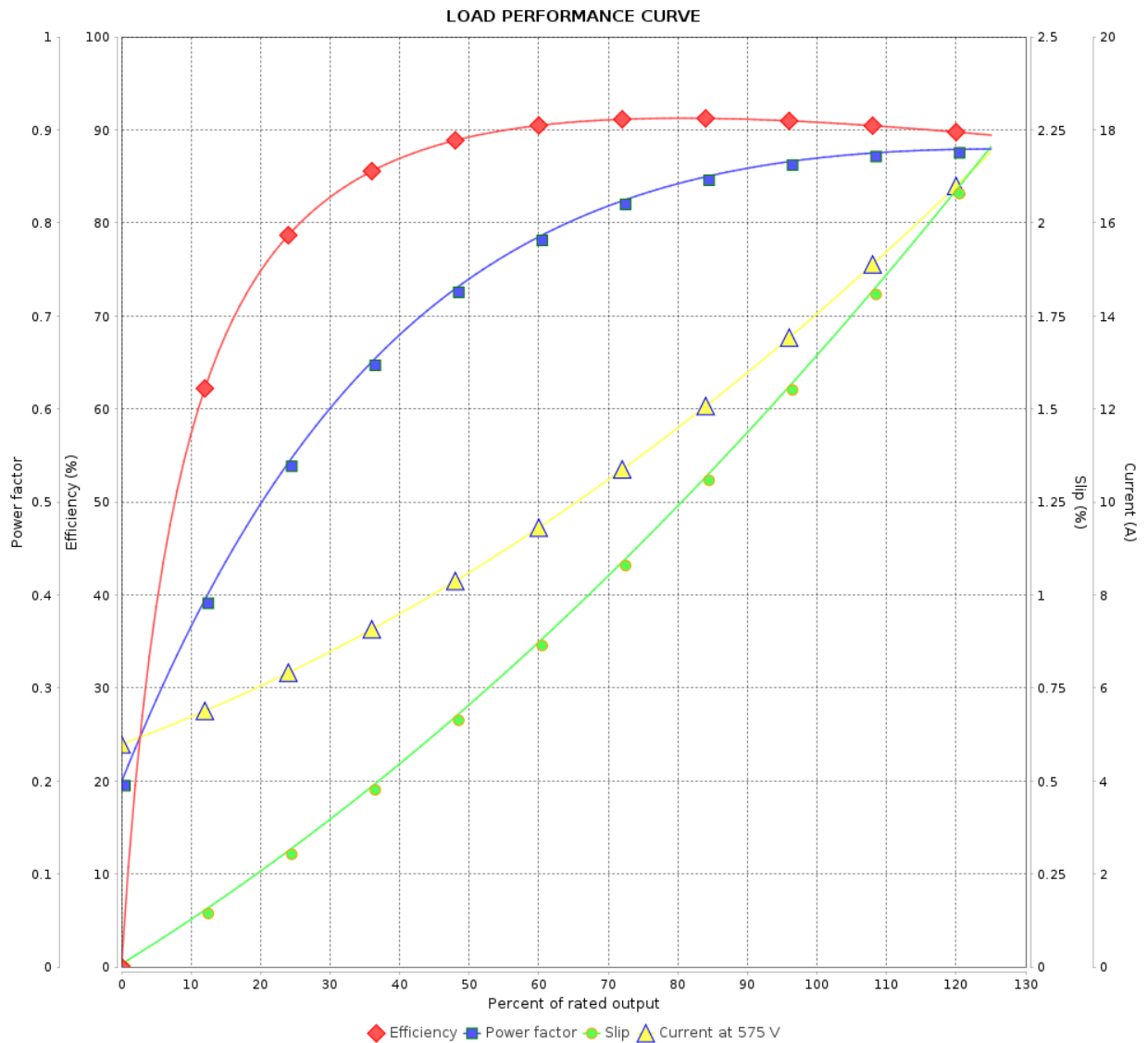
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14407375



Performance : 575 V 60 Hz 2P

Rated current	: 13.9 A	Moment of inertia (J)	: 0.0500 kgm ²
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 3.08 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 3540 rpm	Design	: B

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

