

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14293717

Frame	: 182/4TC	Locked rotor time	: 82s (cold) 46s (hot)
Output	: 2 HP (1.5 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	: 2.50 A	Protection degree	: IP55
L. R. Amperes	: 18.8 A	Cooling method	: IC411 - TEFC
LRC	: 7.5x(Code L)	Mounting	: F-1
No load current	: 1.60 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1165 rpm	Noise level ²	: 52.0 dB(A)
Slip	: 2.92 %	Starting method	: Direct On Line
Rated torque	: 1.25 kgfm	Approx. weight ³	: 62.5 kg
Locked rotor torque	: 300 %		
Breakdown torque	: 330 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0224 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	84.5	86.5	88.5	Max. traction	: 55 kgf
Power Factor	0.47	0.58	0.68	Max. compression	: 117 kgf

	Drive end	Non drive end
Bearing type	: 6307 2RS	: 6206 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	21/10/2023			

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 2 / 3	Revision
Checked by					
Date	21/10/2023				

LOAD PERFORMANCE CURVE

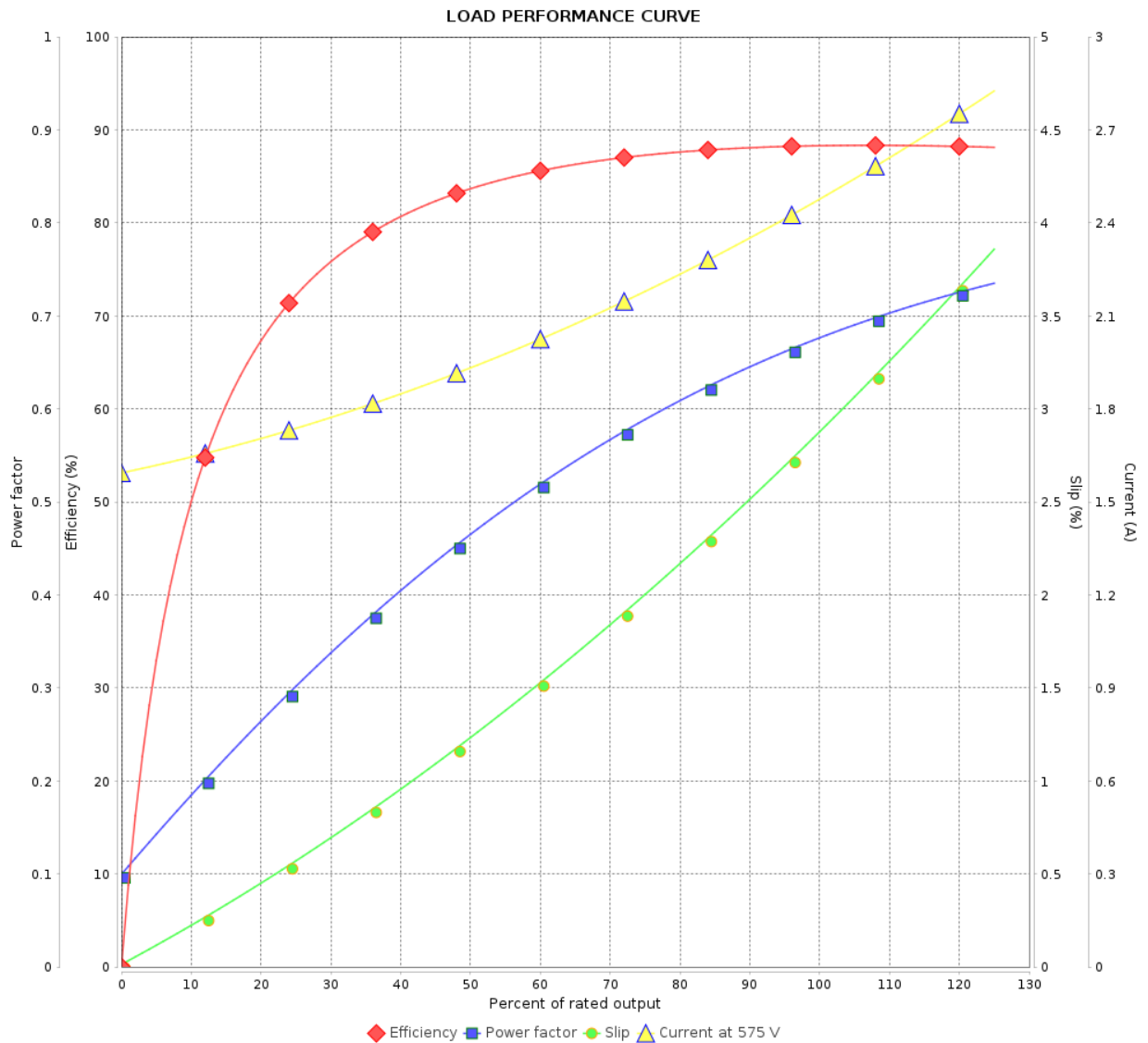
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14293717



Performance : 575 V 60 Hz 6P

Rated current	: 2.50 A	Moment of inertia (J)	: 0.0224 kgm ²
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 1.25 kgfm	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.15
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1165 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 3		
Checked by				
Date	21/10/2023			
		Revision		