

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14407763

Frame	: 326TC	Locked rotor time	: 28s (cold) 16s (hot)
Output	: 50 HP (37 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 48.6 A	Protection degree	: IP55
L. R. Amperes	: 354 A	Cooling method	: IC411 - TEFC
LRC	: 7.3x(Code H)	Mounting	: F-1
No load current	: 20.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1775 rpm	Noise level ²	: 71.0 dB(A)
Slip	: 1.39 %	Starting method	: Direct On Line
Rated torque	: 20.4 kgfm	Approx. weight ³	: 312 kg
Locked rotor torque	: 260 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.3861 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	93.6	94.5	94.5	Max. traction	: 563 kgf
Power Factor	0.65	0.76	0.81	Max. compression	: 879 kgf

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6312 C3	6212 C3
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	21 g	13 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 2 / 3Revision	
Checked by					
Date	28/10/2024				

LOAD PERFORMANCE CURVE

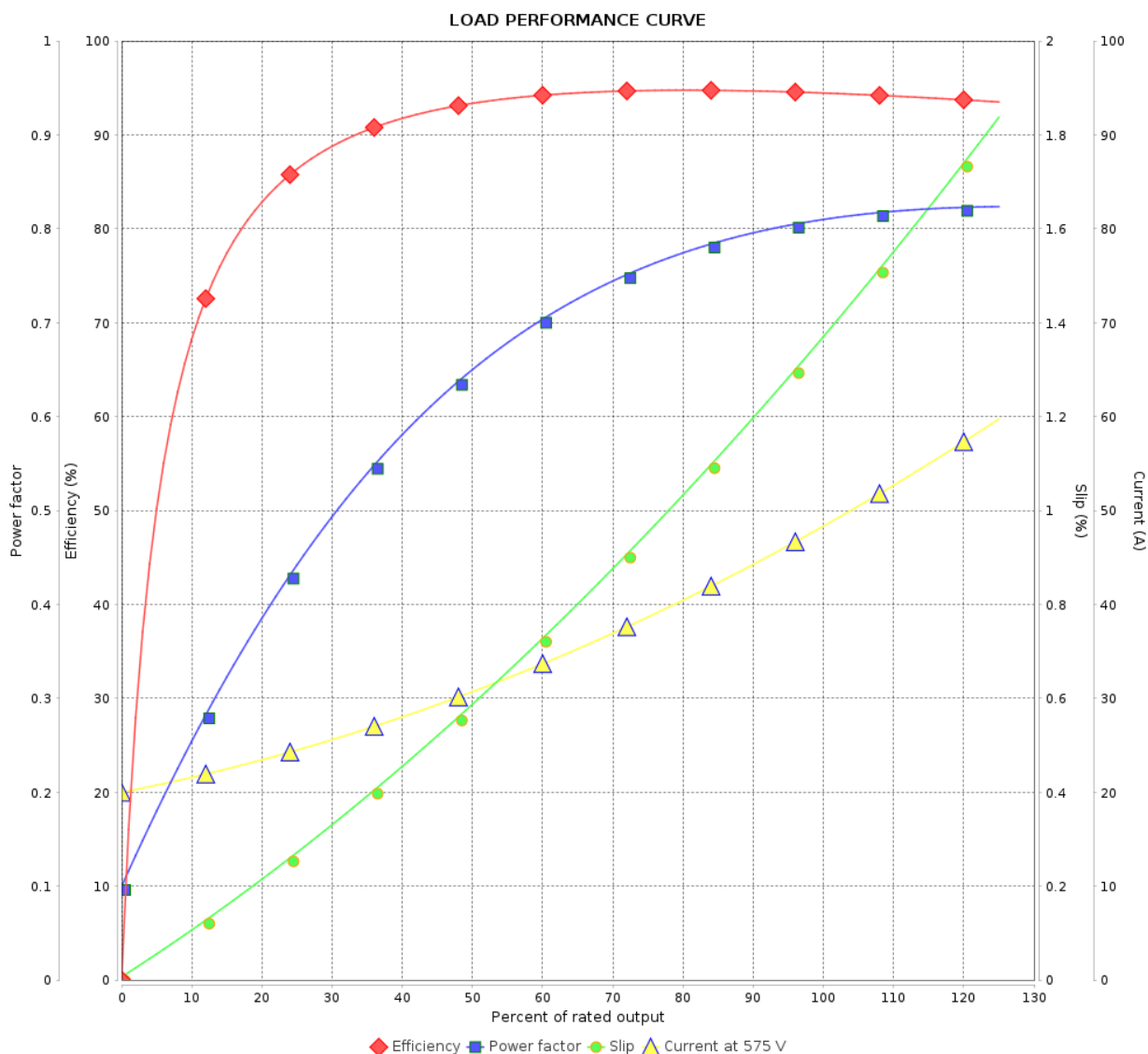
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14407763



Performance : 575 V 60 Hz 4P

Rated current : 48.6 A
LRC : 7.3
Rated torque : 20.4 kgfm
Locked rotor torque : 260 %
Breakdown torque : 280 %
Rated speed : 1775 rpm

Moment of inertia (J) : 0.3861 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 / 3	Revision
Checked by					
Date	28/10/2024				