

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 13510724

Frame	: 447TS	Locked rotor time	: 32s (cold) 18s (hot)
Output	: 250 HP (185 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	: 215 A	Protection degree	: IP55
L. R. Amperes	: 1720 A	Cooling method	: IC411 - TEFC
LRC	: 8.0x(Code H)	Mounting	: F-1
No load current	: 48.7 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3570 rpm	Noise level ²	: 87.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 50.8 kgfm	Approx. weight ³	: 1177 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 2.12 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	95.0	95.4	95.8	Max. traction	: 656 kgf
Power Factor	0.83	0.89	0.90	Max. compression	: 1833 kgf

	Drive end	Non drive end
Bearing type	: 6314 C3	6314 C3
Sealing	: Oil Seal	Lip Seal
Lubrication interval	: 3604 h	3604 h
Lubricant amount	: 27 g	27 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	13/01/2024			

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	13/01/2024				

LOAD PERFORMANCE CURVE

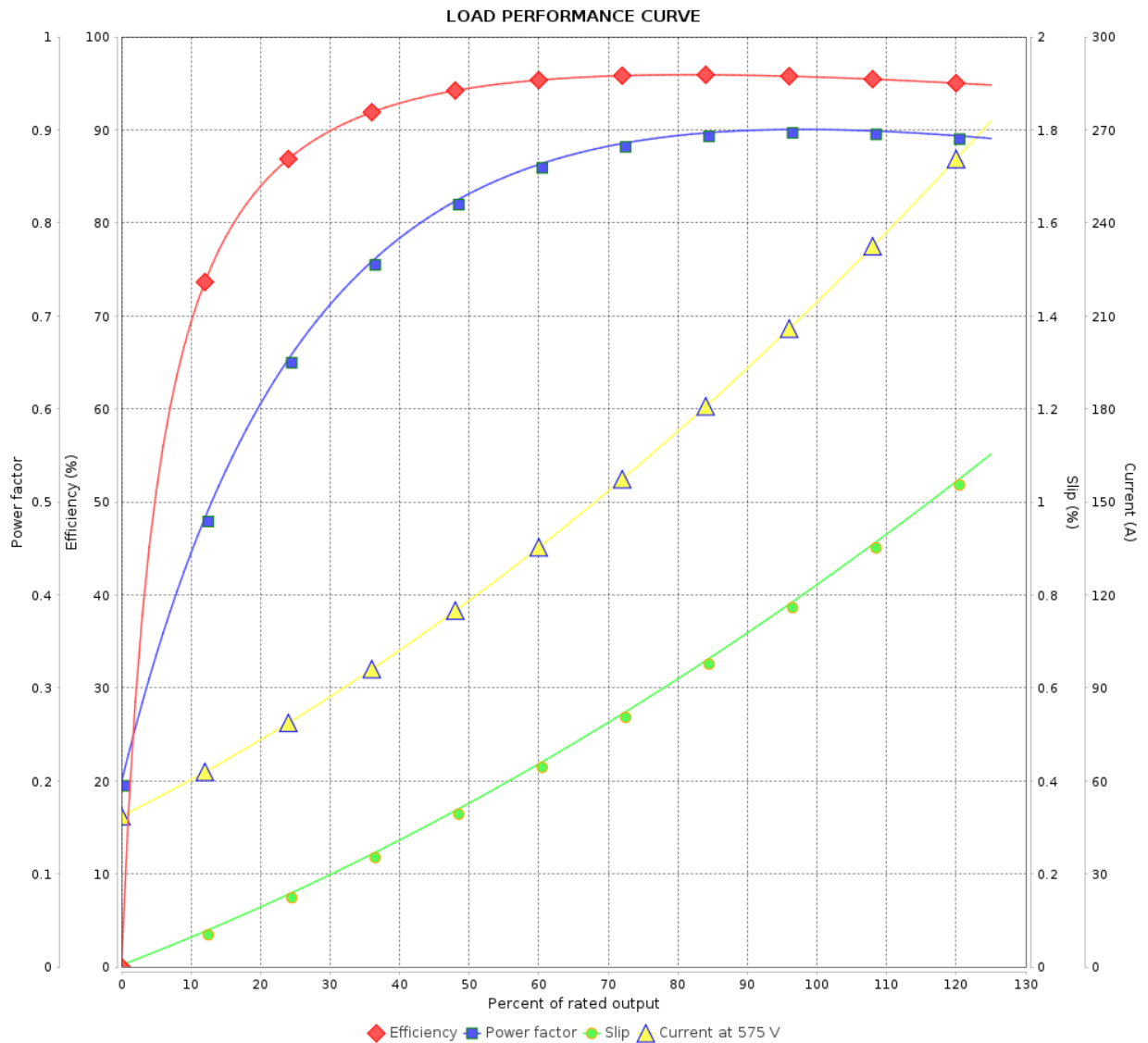
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 13510724



Performance : 575 V 60 Hz 2P

Rated current : 215 A
LRC : 8.0
Rated torque : 50.8 kgfm
Locked rotor torque : 240 %
Breakdown torque : 280 %
Rated speed : 3570 rpm

Moment of inertia (J) : 2.12 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				
Checked by				
Date	13/01/2024		Page 3 / 3	Revision