

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14454549

Frame	: 284TSC	Locked rotor time	: 59s (cold) 33s (hot)
Output	: 25 HP (18.5 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	: 22.8 A	Protection degree	: IP55
L. R. Amperes	: 153 A	Cooling method	: IC411 - TEFC
LRC	: 6.7x(Code G)	Mounting	: F-1
No load current	: 5.04 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3545 rpm	Noise level ²	: 75.0 dB(A)
Slip	: 1.53 %	Starting method	: Direct On Line
Rated torque	: 5.12 kgfm	Approx. weight ³	: 213 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.1086 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.7	92.4	92.4	Max. traction	: 68 kgf
Power Factor	0.78	0.85	0.88	Max. compression	: 283 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)
7.8	5.9	5.0	3.7	2.1	1.2	0.7

	Drive end	Non drive end
Bearing type	: 6311 C3	6211 C3
Sealing	: Oil Seal	Lip Seal
Lubrication interval	: 11517 h	14226 h
Lubricant amount	: 18 g	11 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.

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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

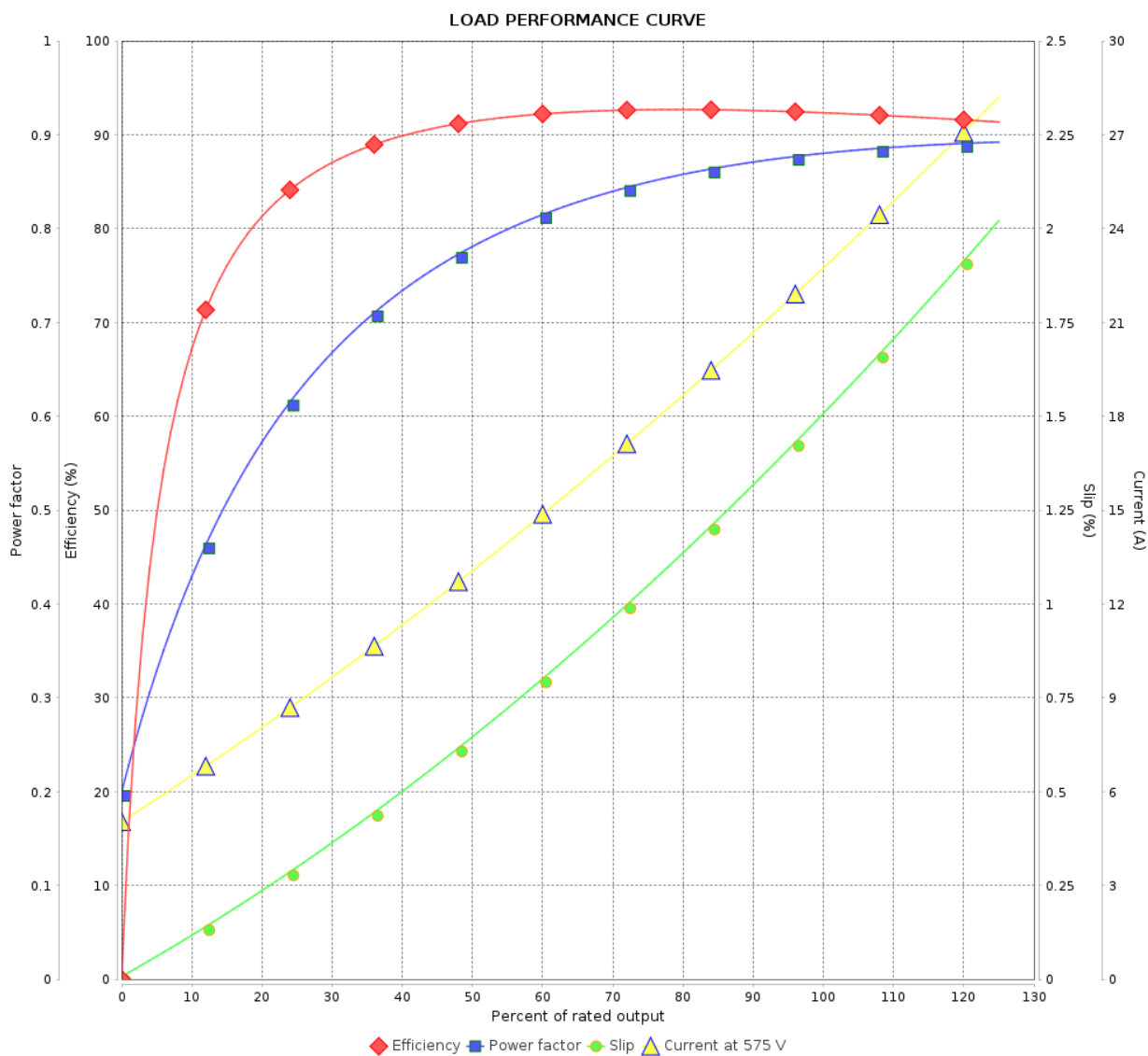
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14454549



Performance : 575 V 60 Hz 2P

Rated current : 22.8 A
LRC : 6.7
Rated torque : 5.12 kgfm
Locked rotor torque : 240 %
Breakdown torque : 240 %
Rated speed : 3545 rpm

Moment of inertia (J) : 0.1086 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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