DATA SHEET

Checked by

Date

28/10/2024

Three Phase Induction Motor - Squirrel Cage



Customer Product line : W21 Explosion Proof NEMA Product code: 14189383 Premium Efficiency Three-Phase Locked rotor time Frame : 213/5T : 41s (cold) 23s (hot) Output : 7.5 HP (5.5 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : 2 Frequency : 60 Hz Ambient temperature : -20°C to +40°C : 1000 m.a.s.l. Rated voltage : 575 V Altitude Rated current : 6.94 A Protection degree : IP55 : IC411 - TEFC L. R. Amperes : 49.9 A Cooling method LRC : 7.2x(Code H) Mounting : F-1 No load current : 2.00 A Rotation¹ : Both (CW and CCW) Rated speed : 3535 rpm Noise level² : 72.0 dB(A) Slip : 1.81 % Starting method : Direct On Line Rated torque : 1.54 kgfm Approx. weight³ : 87.8 kg Locked rotor torque : 229 % Breakdown torque : 300 % : F Insulation class Service factor : 1.15 Moment of inertia (J) : 0.0198 kgm² Design : B 50% 75% Output 100% Foundation loads Efficiency (%) 85.5 88.5 89.5 Max. traction : 41 kgf Power Factor 0.78 0.86 0.89 Max. compression : 129 kgf Losses at normative operating points (speed;torque), in percentage of rated output power P2 (0,5;1,0) P3 (0,25;1,0) P4 (0,9;0,5) P1 (0,9;1,0) P5 (0,5;0,5) P6 (0,5;0,25) P7 (0,25;0,25) 10.7 7.3 6.5 6.2 3.1 2.1 1.1 Drive end Non drive end 6308 2RS Bearing type 6207 2RS Oil Seal Sealing Lip Seal Lubrication interval Lubricant amount Lubricant type Mobil Polyrex EM Notes This revision replaces and cancel the previous one, which These are average values based on tests with sinusoidal must be eliminated. power supply, subject to the tolerances stipulated in NEMA (1) Looking the motor from the shaft end. MG-1. (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. Performed Checked Rev. **Changes Summary** Date Performed by

Page

1/3

Revision

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer	
Customer	

Thermal protection

		•		
ID	Application	Туре	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	28/10/2024			2/3	

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

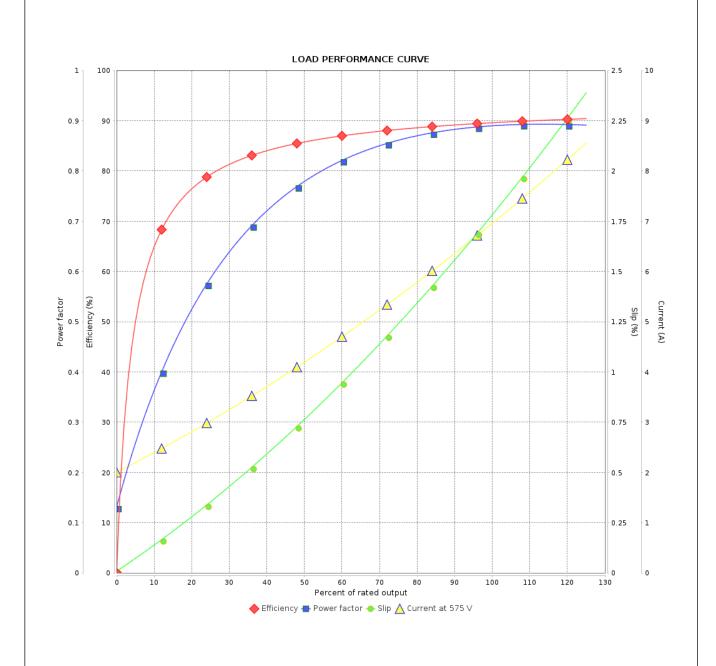


Customer :

Product line : W21 Explosion Proof NEMA

Premium Efficiency Three-Phase

Product code: 14189383



Performance		: 575 V 60 Hz 2P					
Rated current		: 6.94 A		Moment of inertia (J)		: 0.0198 kgm²	
LRC		: 7.2		Duty cycle		: Cont.(S1)	
Rated torque		: 1.54 kgfm		Insulation	class	: F	
Locked rotor tord	que	: 229 %	9 % Service factor		: 1.15		
Breakdown torque : 300 %		: 300 %		Temperature rise		: 80 K	
Rated speed : 35		: 3535 rpm		Design		: B	
Rev.		Changes Summ	nary		Performed	Checked	Date

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

