DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 14407412 Catalog #: 04018XT3H324T Frame : 324T Locked rotor time : 34s (cold) 19s (hot) Output : 40 HP (30 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 575 V : 1000 m.a.s.l. Altitude Rated current : 38.6 A Protection degree : IP55 L. R. Amperes : 297 A Cooling method : IC411 - TEFC LRC : 7.7x(Code J) Mounting : F-1 No load current : 18.4 A Rotation¹ : Both (CW and CCW) Rated speed : 1780 rpm Noise level² : 71.0 dB(A) Starting method Slip : 1.11 % : Direct On Line Rated torque : 118 ft.lb Approx. weight³ : 647 lb Locked rotor torque : 270 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 8.17 sq.ft.lb Design 25% 50% 75% 100% Output Foundation loads : 1035 lb Efficiency (%) 92.8 93.0 94.1 94.1 Max. traction Power Factor 0.77 0.83 0.39 0.66 Max. compression : 1682 lb Non drive end Drive end Bearing type 6312 C3 6212 C3 Oil Seal Sealing 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.

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Three Phase Induction Motor - Squirrel Cage



Customer		

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

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TORQUE AND CURRENT VS SPEED CURVE



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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 14407412 Catalog #: 04018XT3H324T TORQUE AND CURRENT VS SPEED CURVE 2.7 2.1 1.8 Current Torque (pu) 1.2 0.6 0.3 Percent of synchronous speed ◆ Torque - 1 p.u. = 118 ft.lb ◆ Current - 1 p.u. = 38.6 A (575 V) Performance : 575 V 60 Hz 4P Rated current : 38.6 A Moment of inertia (J) : 8.17 sq.ft.lb **LRC** : 7.7 Duty cycle : Cont.(S1) : 118 ft.lb Insulation class Rated torque : F Locked rotor torque : 270 % Service factor : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1780 rpm Design : B Locked rotor time : 34s (cold) 19s (hot) Rev. Performed Checked Date **Changes Summary**

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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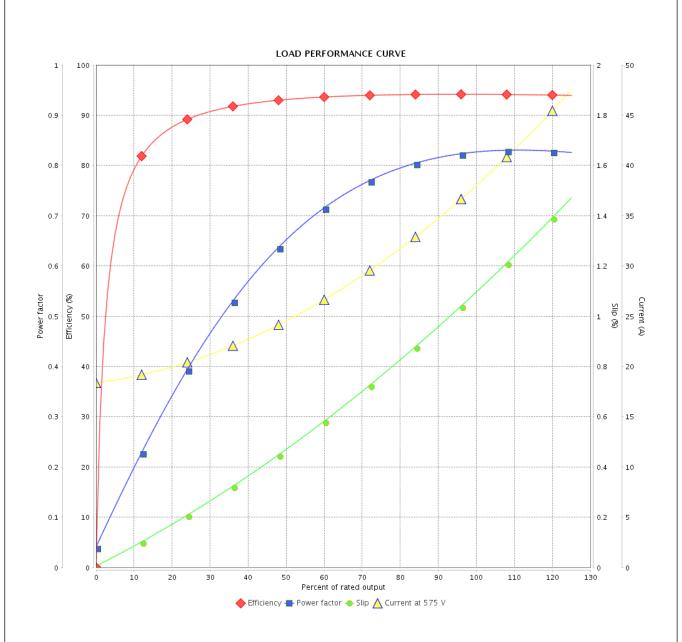
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Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 14407412

Catalog #: 04018XT3H324T



Performance : 575 V 60 Hz 4P Rated current : 38.6 A Moment of inertia (J) : 8.17 sq.ft.lb **LRC** : 7.7 Duty cycle : Cont.(S1) : 118 ft.lb Insulation class Rated torque : F Locked rotor torque : 270 % Service factor : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1780 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



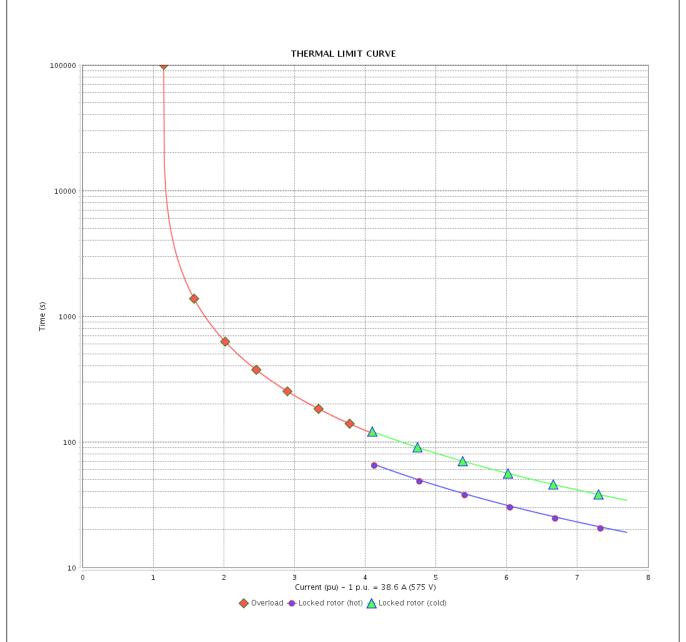
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Product line		NEMA Premium Efficiency 1	Γhree-	Product code :	14407412	
	F	mase		Catalog # :	04018XT3H3	24T
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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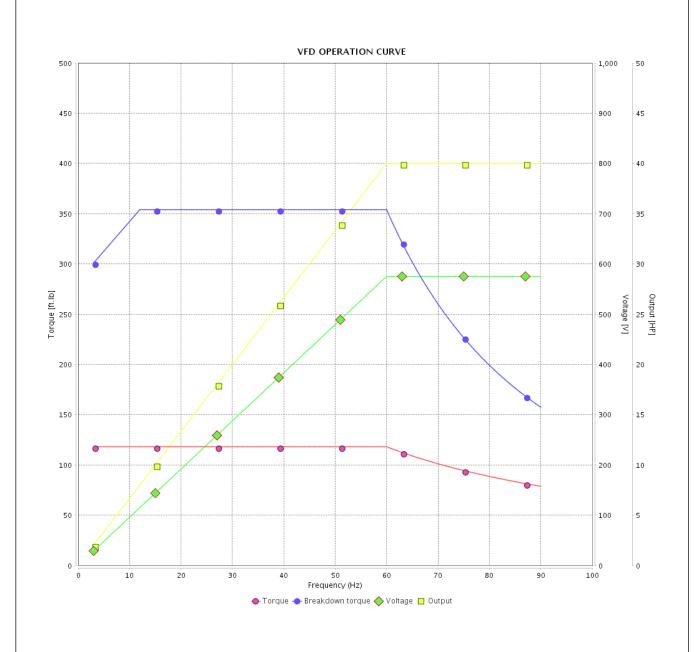
Date

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Product line : NEMA Premium Efficiency Three- Product code : 14407412

Phase

Catalog #: 04018XT3H324T



Performance		: 575 V 60 Hz 4P					
Rated current LRC Rated torque Locked rotor torque Breakdown torque		: 38.6 A : 7.7 : 118 ft.lb : 270 % : 300 % : 1780 rpm	Duty cyc Insulatio Service f Tempera	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise		: 8.17 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K	
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