DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer Product line : W22 NEMA Premium Efficiency Product code: 13249044 Three-Phase Catalog #: 15018ET3G445TC-W22G Frame : 444/5TC Locked rotor time : 48s (cold) 27s (hot) Output : 150 HP (110 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 460 V : 1000 m.a.s.l. Altitude Rated current : 170 A Protection degree : IP55 L. R. Amperes : 1122 A Cooling method : IC411 - TEFC LRC : 6.6x(Code G) Mounting : F-1 No load current : 58.0 A Rotation¹ : Both (CW and CCW) Rated speed : 1780 rpm Noise level² : 73.0 dB(A) Starting method Slip : 1.11 % : Direct On Line Rated torque : 443 ft.lb Approx. weight³ : 1824 lb Locked rotor torque : 200 % Breakdown torque : 250 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 66.7 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 95.8 Efficiency (%) 95.3 95.4 95.8 Max. traction : 2493 lb Power Factor 0.74 0.82 0.85 0.49 Max. compression : 4317 lb Non drive end Drive end Bearing type 6319 C3 6316 C3 Sealing WSeal WSeal Lubrication interval 8000 h 10000 h Lubricant amount 45 g 34 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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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



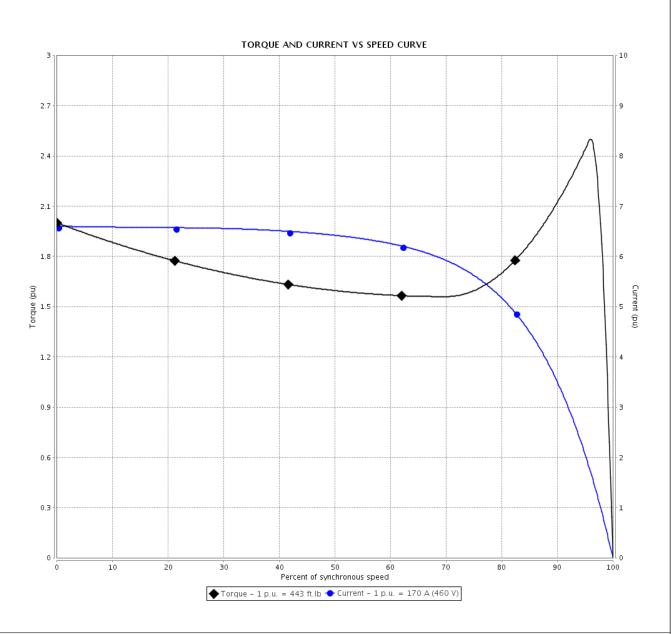
Customer :

Product line : W22 NEMA Premium Efficiency

Three-Phase

Product code: 13249044

Catalog #: 15018ET3G445TC-W22G



Performance : 460 V 60 Hz 4P Rated current : 170 A Moment of inertia (J) : 66.7 sq.ft.lb **LRC** : 6.6 Duty cycle : Cont.(S1) Insulation class Rated torque : 443 ft.lb : F Locked rotor torque : 200 % Service factor : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1780 rpm Design : B

Locked rotor time : 48s (cold) 27s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

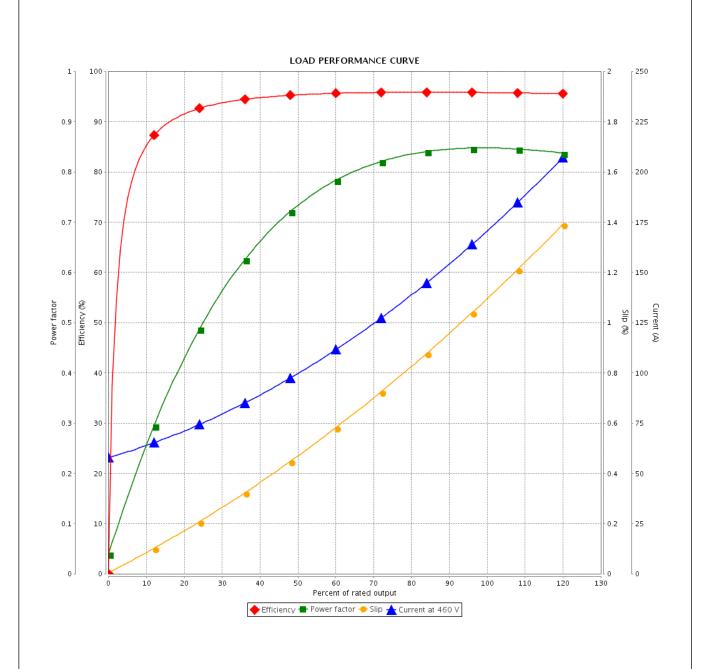


Customer

Product line : W22 NEMA Premium Efficiency Product code: 13249044

Three-Phase

Catalog #: 15018ET3G445TC-W22G



Performance : 460 V 6		60 V 60 Hz 4P				
Rated current : 1		70 A	Moment o	Moment of inertia (J)		
LRC : 6.6		.6	Duty cycle	Duty cycle		
Rated torque : 4		43 ft.lb	Insulation	Insulation class		
Locked rotor tord	que : 20	00 %	Service fa	Service factor		
Breakdown torqu	ie : 29	: 250 % Temperature rise Design		ure rise	: 80 K	
Rated speed	: 17			: B		
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



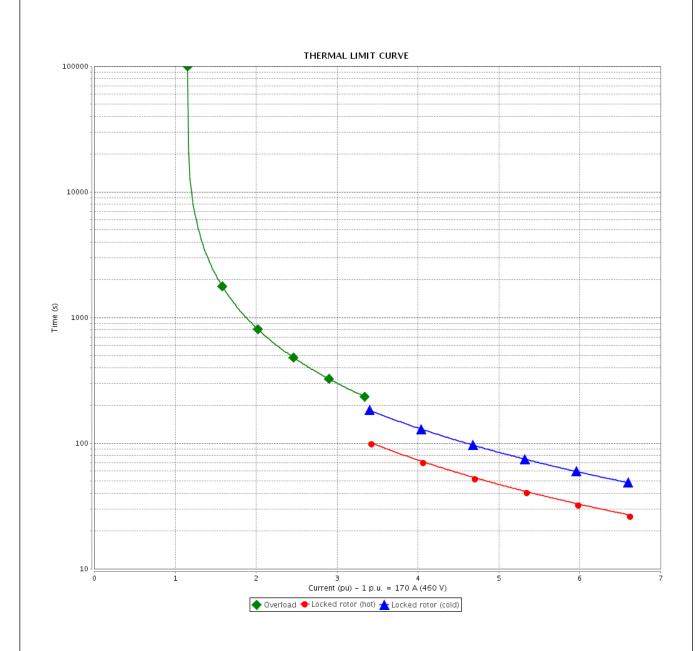
Customer	:				_	
Product line		N22 NEMA Premium Efficie	ency f	Product code :	13249044	
	Ti	Three-Phase		Catalog # :	15018ET3G4	45TC-W22G
Performance	: 46	60 V 60 Hz 4P				
Rated current LRC Rated torque Locked rotor torq Breakdown torqu	: 6. : 44 ue : 20 ie : 25	43 ft.lb 00 % 50 %	Moment of Duty cycle Insulation Service fac Temperatu	class	: 66.7 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K	
Rated speed		780 rpm	Design		: B	
Heating constant						
Cooling constant Rev.		Changes Summary		Performed	Checked	Date
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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



Revision

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Customer :

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Date

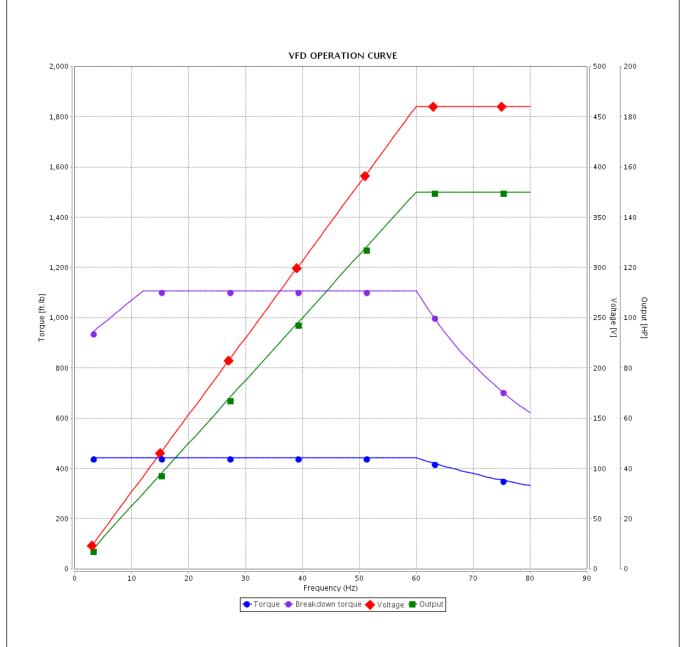
13/04/2020

Product line : W22 NEMA Premium Efficiency

Three-Phase

Product code: 13249044

Catalog #: 15018ET3G445TC-W22G



Performance : 460 V 60 Hz 4P : 170 A Rated current Moment of inertia (J) : 66.7 sq.ft.lb **LRC** Duty cycle : 6.6 : Cont.(S1) Insulation class : 443 ft.lb : F Rated torque Locked rotor torque : 200 % Service factor : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1780 rpm Design : B Rev. Performed Checked **Changes Summary** Date Performed by

