DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 11496971

Catalog #: 10012XT3G444T

Frame : 444/5T Cooling method : IC411 - TEFC

Insulation class Mounting : F-1

Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW)

: -20°C to +40°C Starting method Ambient temperature : Direct On Line Altitude : 1000 m.a.s.l. Approx. weight³ : 2095 lb

: IP55 Protection degree Moment of inertia (J) : 87.3 sq.ft.lb

- i i otootion dogio	•	00	Wiement of the		oquiu
Design		: B			
Output [HP]		100	75	75	75
Poles		6	6	6	6
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		121	110	108	105
L. R. Amperes [A]		822	770	842	872
LRC [A]		6.8x(Code H)	7.0x(Code H)	7.8x(Code J)	8.3x(Code K)
No load current [A]]	48.7	48.2	51.6	54.1
Rated speed [RPN	1]	1190	990	990	995
Slip [%]		0.83	1.00	1.00	0.50
Rated torque [ft.lb]		441	398	398	396
	Locked rotor torque [%]		240	260	290
Breakdown torque	[%]	260	260	320	350
Service factor		1.15	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		88s (cold) 49s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level ²		70.0 dB(A)	66.0 dB(A)	66.0 dB(A)	66.0 dB(A)
	25%	94.0	93.5	92.8	92.8
Efficiency (%)	50%	94.1	93.6	93.0	93.0
Lincichoy (70)	75%	95.0	94.1	94.5	94.5
	100%	95.0	94.1	94.5	94.5
	25%	0.41	0.39	0.36	0.33
Power Factor	50%	0.66	0.63	0.59	0.56
1 OWCI I actor	75%	0.76	0.74	0.71	0.68
	100%	0.82	0.81	0.78	0.77

Drive end Non drive end Foundation loads

Bearing type 6219 C3 6316 C3 Max. traction : 2646 lb Sealing Oil Seal Lip Seal Max. compression : 4740 lb

12823 h

12202 h

Lubricant amount 28 g 34 g Mobil Polyrex EM Lubricant type

Notes

Lubrication interval

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

		<u> </u>		
ID	Application	Туре	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 11496971 Catalog #: 10012XT3G444T 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. = 441 ft.lb ◆ Current - 1 p.u. = 121 A (460 V) Performance : 460 V 60 Hz 6P Rated current : 121 A Moment of inertia (J) : 87.3 sq.ft.lb **LRC** : 6.8 Duty cycle : Cont.(S1) Insulation class Rated torque : 441 ft.lb : F : 229 % Locked rotor torque Service factor : 1.15 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 1190 rpm Design : B Locked rotor time : 88s (cold) 49s (hot) Date Performed Checked Rev. **Changes Summary**

Checked by Revision Page 13/04/2022 3/22 Date This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

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Three Phase Induction Motor - Squirrel Cage



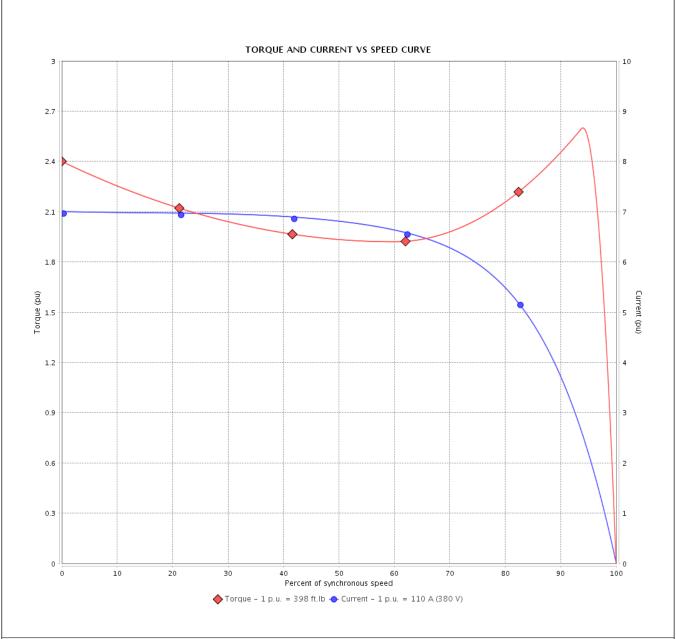
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 11496971

Catalog #: 10012XT3G444T



Performance : 380 V 50 Hz 6P IE3 Rated current : 110 A Moment of inertia (J) : 87.3 sq.ft.lb **LRC** : 7.0 Duty cycle : Cont.(S1) Insulation class Rated torque : 398 ft.lb : F Service factor Locked rotor torque : 240 % : 1.00 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 990 rpm Design : B

Locked rotor time : 36s (cold) 20s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 11496971 Catalog #: 10012XT3G444T TORQUE AND CURRENT VS SPEED CURVE 4.5

3.5										
3										
2.5		•								
2						•				
1.5										
1									\	
0.5										
0 1	10	20	30	40 Percent	50 of synchronous	60 speed	70	80	90	100

Rated current : 108 A Moment of inertia (J) : 87.3 sq.ft.lb LRC : 7.8 Duty cycle : Cont.(S1) Rated torque : 398 ft.lb Insulation class : F Locked rotor torque : 260 % Service factor : 1.00 Breakdown torque : 320 % Temperature rise : 80 K Rated speed : 990 rpm Design : B Locked rotor time : 36s (cold) 20s (hot)	Performance	: 400 V 50 Hz 6P IE3			
Locked rotor time : 36s (cold) 20s (hot)	LRC Rated torque Locked rotor torque Breakdown torque	: 7.8 : 398 ft.lb : 260 % : 320 %	Duty cycle Insulation class Service factor Temperature rise	: Cont.(S1) : F : 1.00 : 80 K	
	Locked rotor time	: 36s (cold) 20s (hot)			

		20 (00.0) 200 ()			
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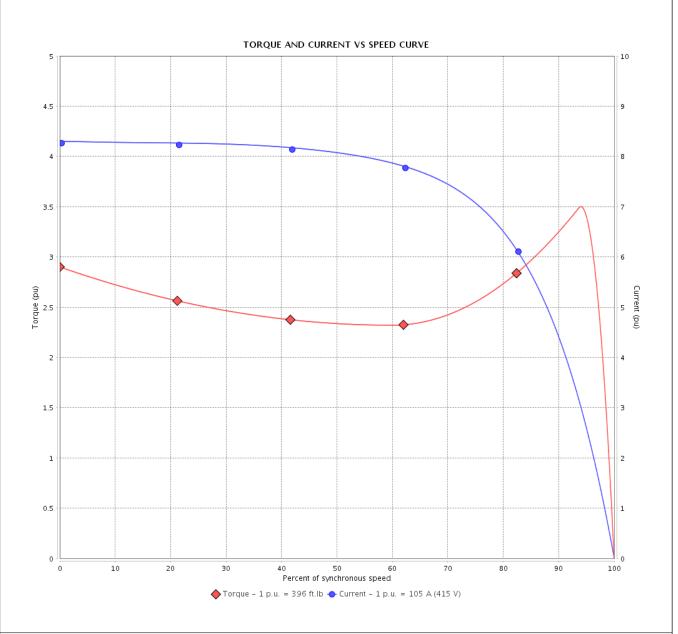


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 11496971

Phase

Catalog #: 10012XT3G444T



Performance : 415 V 50 Hz 6P IE3 Rated current : 105 A Moment of inertia (J) : 87.3 sq.ft.lb **LRC** : 8.3 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 396 ft.lb Service factor Locked rotor torque : 290 % : 1.00 Breakdown torque : 350 % Temperature rise : 80 K Rated speed : 995 rpm Design : B

Locked rotor time : 36s (cold) 20s (hot)

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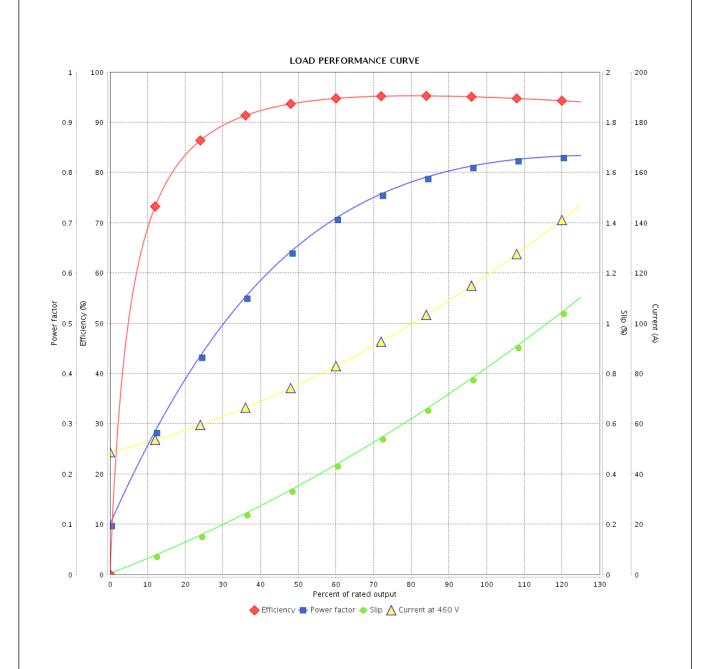
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Customer

Product line : NEMA Premium Efficiency Three-Product code: 11496971

Catalog #: 10012XT3G444T



Performance	: 40	60 V 60 Hz 6P				
Rated current	Rated current : 121 A		Moment of	of inertia (J)	: 87.3 sq.ft.lb	
LRC	: 6.	.8	Duty cycle	e ` ´	: Cont.(S1)	
Rated torque	: 44	41 ft.lb	Insulation	class	: F	
Locked rotor torq	ue : 22	29 %	Service fa	actor	: 1.15	
Breakdown torqu	e : 20	60 %	Temperat	ure rise	: 80 K	
Rated speed	: 1	190 rpm	Design		: B	
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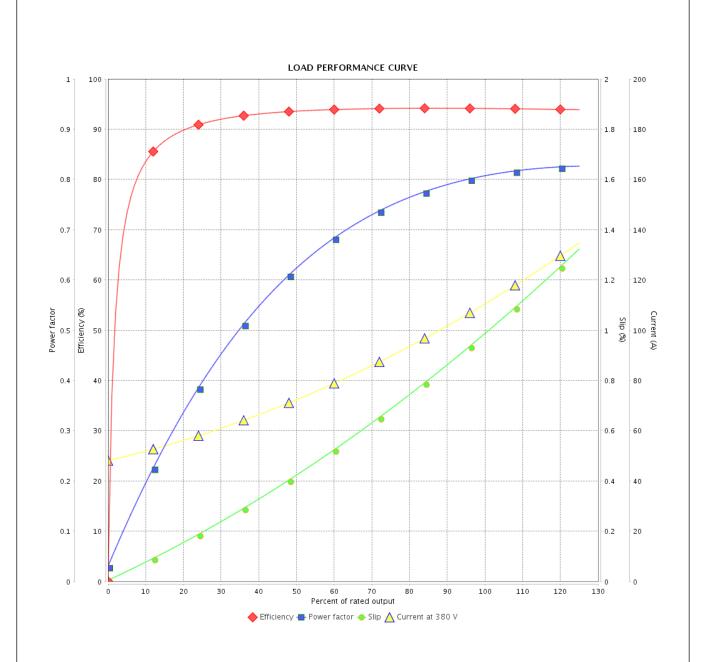
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Phase

Catalog #: 10012XT3G444T

11496971

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Performance	: 380 V 50 Hz 6P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 110 A : 7.0 : 398 ft.lb : 240 % : 260 % : 990 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 87.3 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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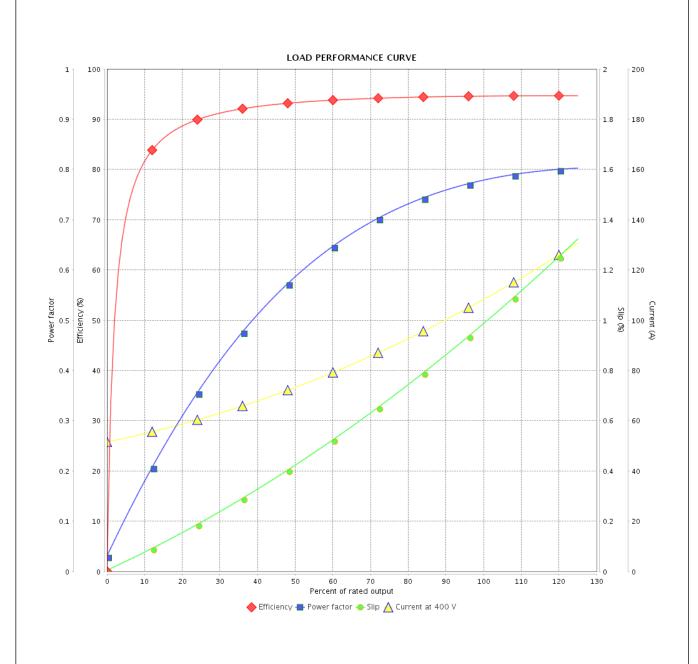


Customer

Product line : NEMA Premium Efficiency Three- Product code : 11496971

Phase

Catalog #: 10012XT3G444T



Performance	ance : 400 V 50 Hz 6P IE3						
		08 A					
LRC	: 7			Duty cycle			
Rated torque		.98 ft.lb		Insulation class			
Locked rotor torque	e :2	260 %	Service factor		: F : 1.00		
Breakdown torque	: 3	20 %	Temperati	Temperature rise		: 80 K	
Rated speed		: 990 rpm Desig			: B		
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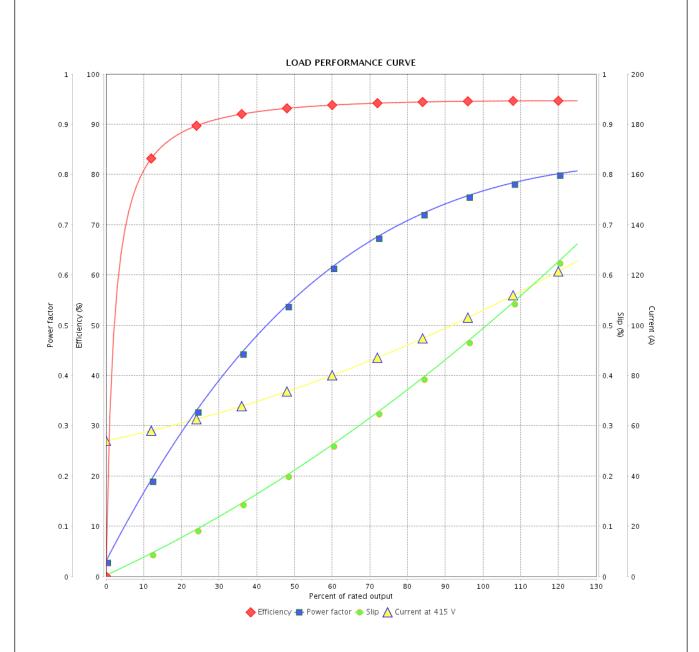


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 11496971

Phase

Catalog #: 10012XT3G444T



Performance	Performance : 415 V 50 Hz 6P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 87.3 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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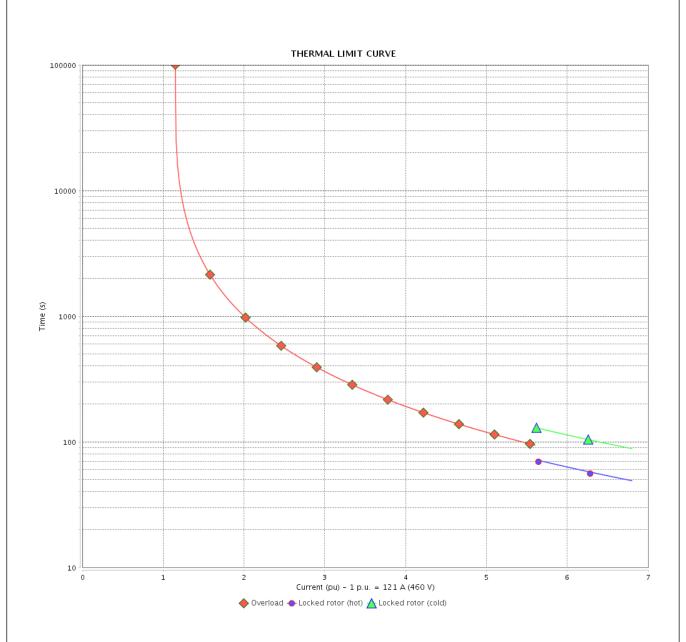


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Product line		NEMA Premium Efficiency	Three-	Product code :	11496971	
1 Toddot iiiic		hase				4.4
				Catalog # :	10012XT3G4	441
Performance		60 V 60 Hz 6P				
Rated current LRC	: 1 : 6	21 A 8	Moment of Duty cycle	of inertia (J)	: 87.3 sq.ft.lb : Cont.(S1)	
Rated torque	: 4	41 ft.lb	Insulation	class	: F	
Locked rotor tord	jue : 2	29 % 60 %	Service fa		: 1.15	
Breakdown torqu Rated speed		60 % 190 rpm	Temperat Design	ure rise	: 80 K : B	
		•				
Heating constant Cooling constant						
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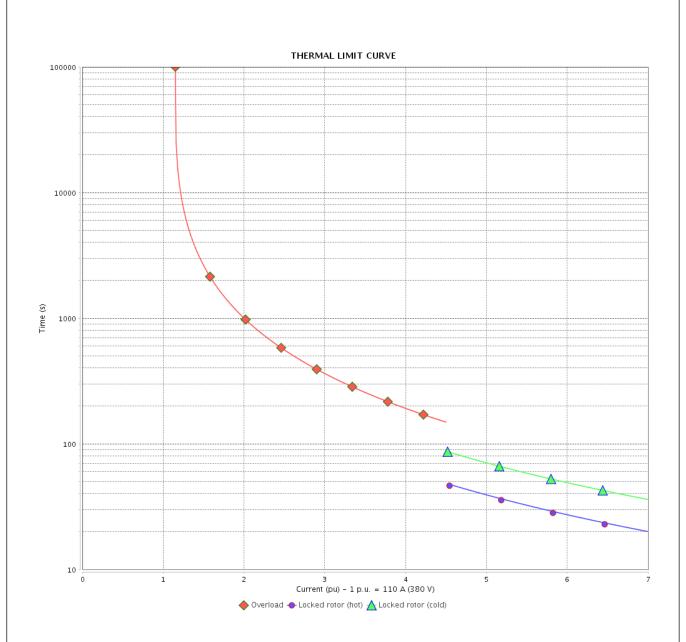


Product line	:	NEMA Premium Efficiency	Three-	Product code :	11496971	
	Р	hase		Catalog # :	10012XT3G4	144T
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 1 : 7 : 3 jue : 2 ie : 2 : 9	80 V 50 Hz 6P IE3 10 A .0 98 ft.lb 40 % 60 % 90 rpm	Moment of Duty cycle Insulation Service for Temperat Design	ı class actor	: 87.3 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Performance Rated current LRC Rated torque Locked rotor torc Breakdown torqu Rated speed Heating constant	: 1 : 7 : 3 : 3 : 2: : 9	10 A .0 98 ft.lb 40 % 60 %	Duty cycle Insulation Service fa Temperat	e ı class actor	: Cont.(S1) : F : 1.00 : 80 K	
Rated current LRC Rated torque Locked rotor torce Breakdown torque Rated speed Heating constant	: 1 : 7 : 3 : 3 : 2: : 9	10 A .0 98 ft.lb 40 % 60 % 90 rpm	Duty cycle Insulation Service fa Temperat	e i class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Data
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 1 : 7 : 3 : 3 : 2: : 9	10 A .0 98 ft.lb 40 % 60 %	Duty cycle Insulation Service fa Temperat	e ı class actor	: Cont.(S1) : F : 1.00 : 80 K	Date
Rated current LRC Rated torque Locked rotor torce Breakdown torque Rated speed Heating constant Cooling constant Rev.	: 1 : 7 : 3 : 3 : 2: : 9	10 A .0 98 ft.lb 40 % 60 % 90 rpm	Duty cycle Insulation Service fa Temperat	e i class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Date
Rated current LRC Rated torque Locked rotor torce Breakdown torque Rated speed Heating constant Cooling constant	: 1 : 7 : 3 : 3 : 2: : 9	10 A .0 98 ft.lb 40 % 60 % 90 rpm	Duty cycle Insulation Service fa Temperat	e i class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Date

Three Phase Induction Motor - Squirrel Cage



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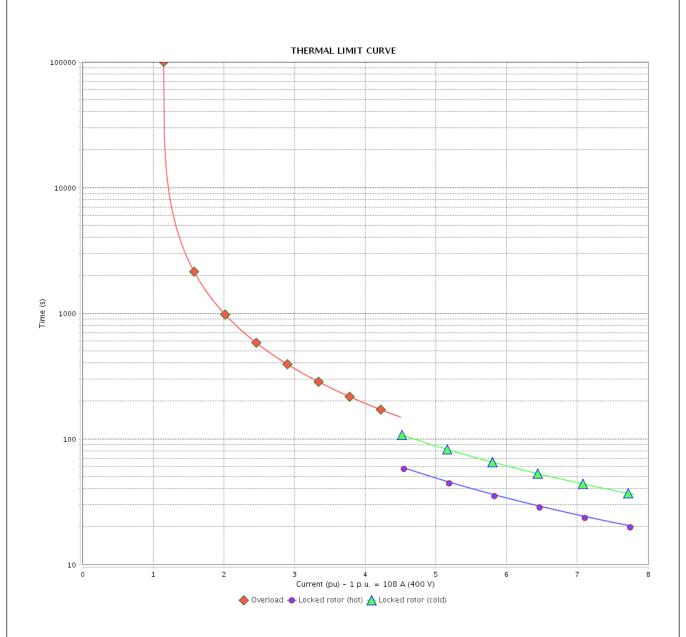


Product line		NEMA Premium Efficiency T	hree-	Product code :	11496971	
	F	Phase		Catalog # :	10012XT3G4	44T
Performance Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	: 1 : 7 : 3 que : 2 ue : 3 : 9	7.8 898 ft.lb 260 % 820 %	Moment of Duty cycle Insulation Service fa Temperate Design	class ictor	: 87.3 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar	: 1 : 7 : 3 que : 2 ue : 3 : 9	08 A 7.8 998 ft.lb 60 % 620 %	Duty cycle Insulation Service fa Temperate	e class ictor	: Cont.(S1) : F : 1.00 : 80 K	
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	: 1 : 7 : 3 que : 2 ue : 3 : 9	08 A 7.8 998 ft.lb 60 % 620 %	Duty cycle Insulation Service fa Temperate	e class ictor	: Cont.(S1) : F : 1.00 : 80 K	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar Cooling constan	: 1 : 7 : 3 que : 2 ue : 3 : 9	08 A 7.8 998 ft.lb 260 % 320 % 990 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar Cooling constan	: 1 : 7 : 3 que : 2 ue : 3 : 9	08 A 7.8 998 ft.lb 260 % 320 % 990 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan Cooling constan Rev.	: 1 : 7 : 3 que : 2 ue : 3 : 9	08 A 7.8 998 ft.lb 260 % 320 % 990 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Date

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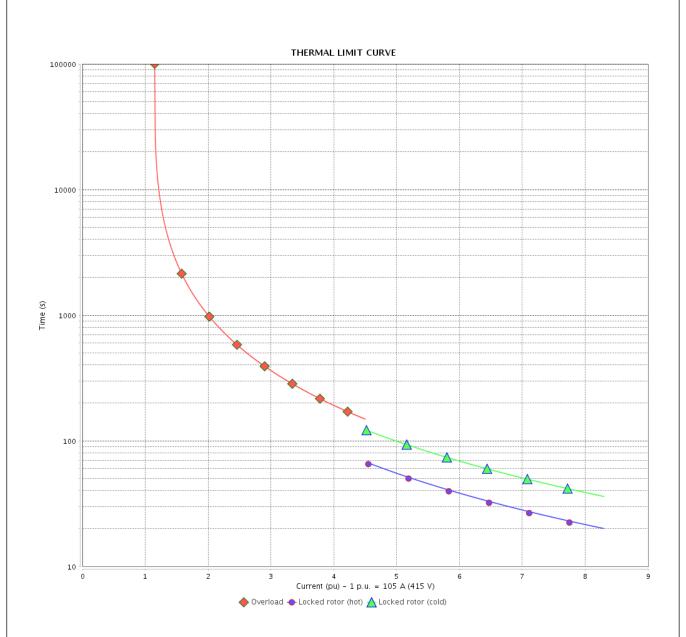


Customer	:					
Product line	: I P	NEMA Premium Efficiency hase		Product code : Catalog # :	11496971 10012XT3G	444T
Performance		15 V 50 Hz 6P IE3	N4- :	.ft utt - / IV	.07.0	
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 8. : 39 que : 29 ue : 38	05 A 3 96 ft.lb 90 % 50 % 95 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class actor	: 87.3 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Heating constan						
Cooling constant	t	Changes Summan		Dowforms	Chaolead	Doto
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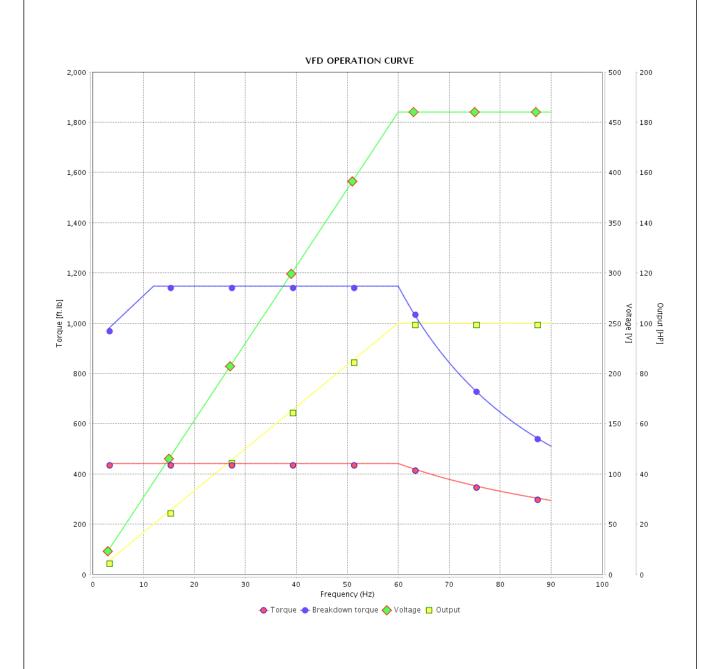
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 11496971

Catalog #: 10012XT3G444T



Performance	ormance : 460 V 60 Hz 6P					
Rated current	current : 121 A Moment of inertia (J)		: 87.3 sq.ft.lb			
LRC	: 6	.8	Duty cycle	Duty cycle		
Rated torque	: 4	41 ft.lb	Insulation	Insulation class		
Locked rotor tord	que : 2	29 %	Service factor		: 1.15	
Breakdown torqu	ıe : 2	: 260 % Temperature rise Design		ure rise	: 80 K	
Rated speed	: 1				: B	
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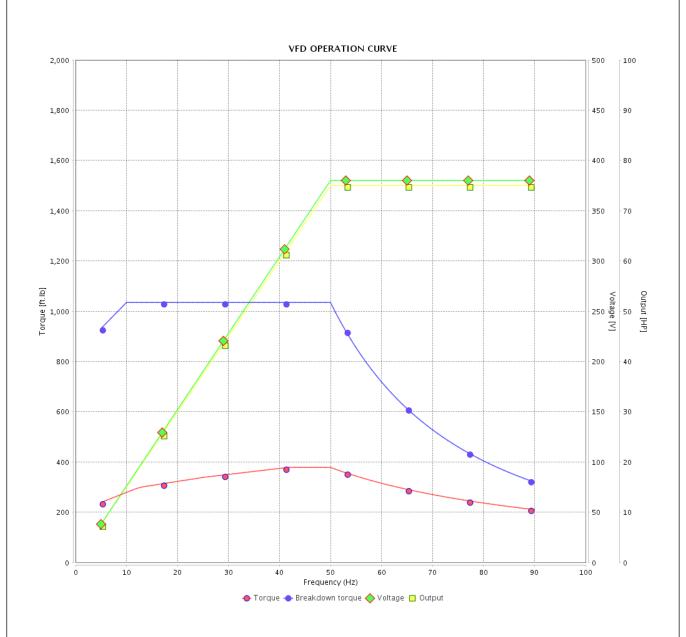
Customer :

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Product code: 11496971

Catalog #: 10012XT3G444T



Performance : 380 V 50 Hz 6P IE3				
rent : 110 A		class	: Cont.(S1) lass : F or : 1.00	
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	: 110 A : 7.0 : 398 ft.lb : 240 % : 260 % : 990 rpm	: 110 A Moment of 27.0 Duty cycle insulation Service factors 240 % Temperature : 990 rpm Design	: 110 A : 7.0 : 398 ft.lb : 240 % : 260 % : 990 rpm Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 110 A Moment of inertia (J) : 87.3 sq.ft.lb : 7.0 Duty cycle : Cont.(S1) : 398 ft.lb Insulation class : F : 240 % Service factor : 1.00 : 260 % Temperature rise : 80 K : 990 rpm Design : B Changes Summary Performed Checked

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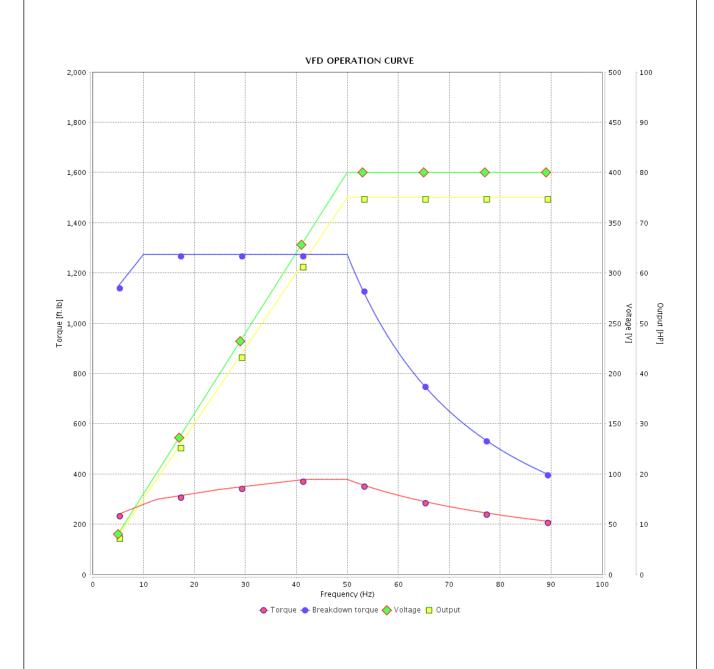


Customer

Product line : NEMA Premium Efficiency Three- Product code : 11496971

Phase

Catalog #: 10012XT3G444T



Performance	: 400 V 50 Hz 6P IE3	: 400 V 50 Hz 6P IE3				
Rated current	: 108 A	Moment of inertia (J)		: 87.3 sq.ft.lb		
LRC	: 7.8 Duty cycle			: Cont.(S1)		
Rated torque	: 398 ft.lb	398 ft.lb Insulation class		:F		
Locked rotor torque		Service factor	Service factor Temperature rise			
Breakdown torque		Temperature r				
Rated speed	: 990 rpm	Design		: B		
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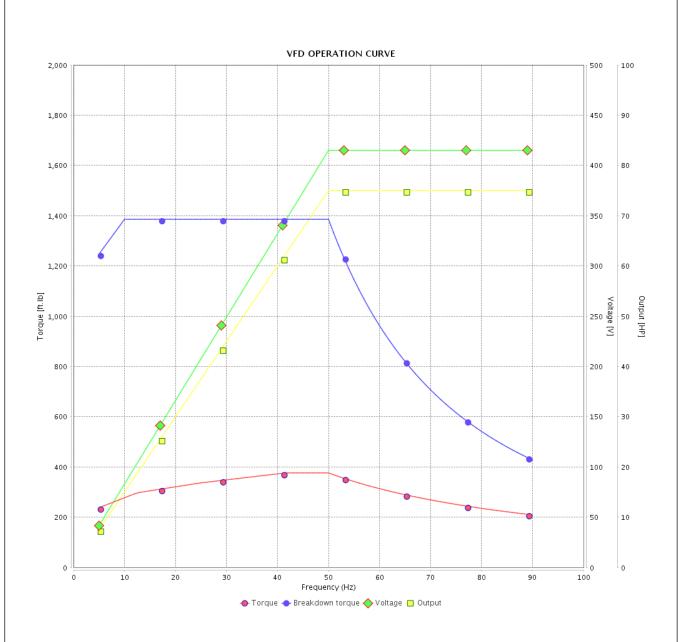
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 11496971

Catalog #: 10012XT3G444T



Performance	: 415 V 50 Hz 6P IE3				
Rated current	: 105 A	Moment of inertia (J)		: 87.3 sq.ft.lb	
LRC	: 8.3	Duty cycle		: Cont.(S1)	
Rated torque	: 396 ft.lb	Insulation class		: F	
Locked rotor torque	: 290 %	Service factor		: 1.00	
Breakdown torque	: 350 %	Temperatu	re rise	: 80 K	
Rated speed	: 995 rpm	Design		: B	
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