DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14653233

Phase

Catalog #: 20012XT3G447T

Frame : 447T Cooling method : IC411 - TEFC

Insulation class : F Mounting : F-1

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

Ambient temperature : -20°C to +40°C Starting method : Direct On Line
Altitude : 1000 m.a.s.l. Approx. weight³ : 2658 lb

Altitude : 1000 m.a.s.l. Approx. weight³ : 2658 lb
Protection degree : IP55 Moment of inertia (J) : 134 sq.ft.lb

Total and a mortal (a)			040				
Design		: B					
Output [HP] 200		150	150	150			
Poles		6	6	6	6		
Frequency [Hz]		60	50	50	50		
Rated voltage [V]		460	380	400	415		
Rated current [A]		249	228	225	223		
L. R. Amperes [A]		1942	1824	1980	2052		
LRC [A]		7.8x(Code J)	8.0x(Code K)	8.8x(Code L)	9.2x(Code L)		
No load current [A]]	125	123	132	140		
Rated speed [RPN	1]	1190	990	990	990		
Slip [%]		0.83	1.00	1.00	1.00		
Rated torque [ft.lb]		883	796	796	796		
Locked rotor torque [%]		270	270	300	340		
Breakdown torque [%]		280	300	320	360		
Service factor		1.15	1.00	1.00	1.00		
Temperature rise		80 K	80 K	80 K	80 K		
Locked rotor time		25s (cold) 14s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)		
Noise level ²		73.0 dB(A)	73.0 dB(A)	73.0 dB(A)	73.0 dB(A)		
	25%	94.0	93.5	92.7	92.0		
Efficiency (%)	50%	94.5	94.0	93.6	93.0		
Lincicity (70)	75%	95.4	95.0	94.5	94.5		
100%		95.8	95.4	95.4	95.4		
	25%	0.35	0.33	0.30	0.28		
Power Factor	50%	0.60	0.57	0.52	0.50		
1 OWCI I actor	75%	0.73	0.70	0.66	0.63		
	100%	0.79	0.77	0.74	0.72		

<u>Drive end</u> <u>Non drive end</u> Foundation loads

Bearing type : 6319 C3 6316 C3 Max. traction : 6307 lb Sealing : Viton Lip Seal Max. compression : 8965 lb

Oil Seal

Lubrication interval:11094 h12823 hLubricant amount:45 g34 gLubricant 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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DATA SHEET



Customer		

Thermal	protection
HIIGHIIIAI	protection

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

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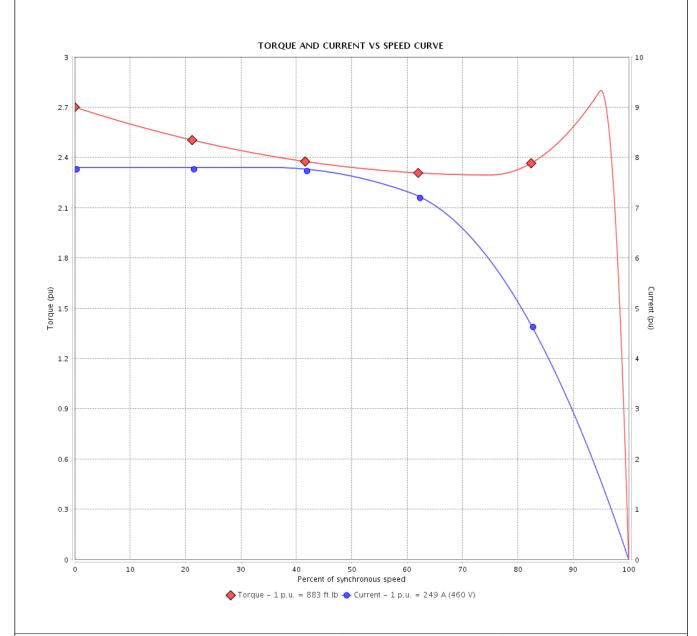
20012XT3G447T

Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14653233

Phase

Catalog #:



Performance	: 460 V 60 Hz 6P			
Rated current	: 249 A	Moment of inertia (J)	: 134 sq.ft.lb	
LRC	: 7.8	Duty cycle	: Cont.(S1)	
Rated torque	: 883 ft.lb	Insulation class	: F	
Locked rotor torque	: 270 %	Service factor	: 1.15	
Breakdown torque	: 280 %	Temperature rise	: 80 K	
Rated speed	: 1190 rpm	Design	: B	
Locked rotor time	: 25s (cold) 14s (hot)			

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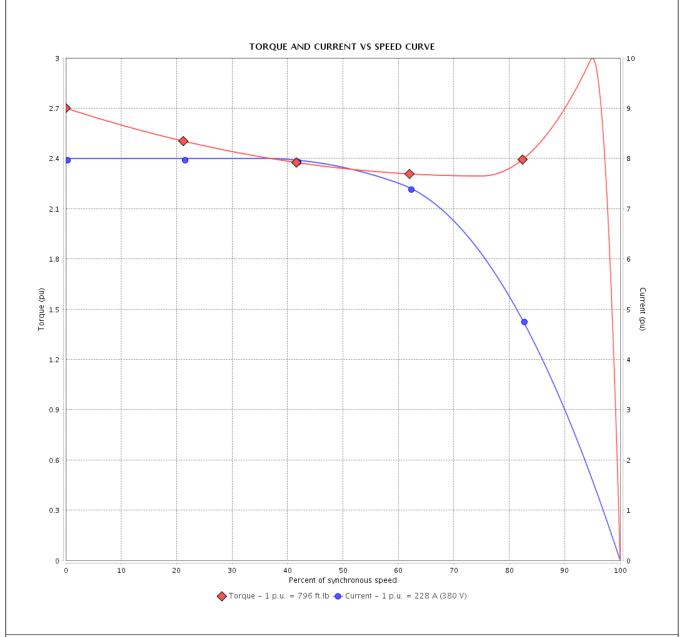
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14653233

Catalog #: 20012XT3G447T



Performance : 380 V 50 Hz 6P IE3 Rated current : 228 A Moment of inertia (J) : 134 sq.ft.lb **LRC** : 8.0 Duty cycle : Cont.(S1) : 796 ft.lb Insulation class Rated torque : F Service factor Locked rotor torque : 270 % : 1.00 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 990 rpm Design : B

Locked rotor time : 21s (cold) 12s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 14653233 Catalog #: 20012XT3G447T TORQUE AND CURRENT VS SPEED CURVE 4.5 3.5 Torque (pu) 40 50 Percent of synchronous speed ◆Torque - 1 p.u. = 796 ft.lb ◆ Current - 1 p.u. = 225 A (400 V)

Performance	: 400 V 50 Hz 6P IE3			
Rated current	: 225 A	Moment of inertia (J)	: 134 sq.ft.lb	
LRC	: 8.8	Duty cycle	: Cont.(S1)	
Rated torque	: 796 ft.lb	Insulation class	: F	
Locked rotor torque	: 300 %	Service factor	: 1.00	
Breakdown torque	: 320 %	Temperature rise	: 80 K	
Rated speed	: 990 rpm	Design	: B	

: 21s (cold) 12s (hot) Locked rotor time

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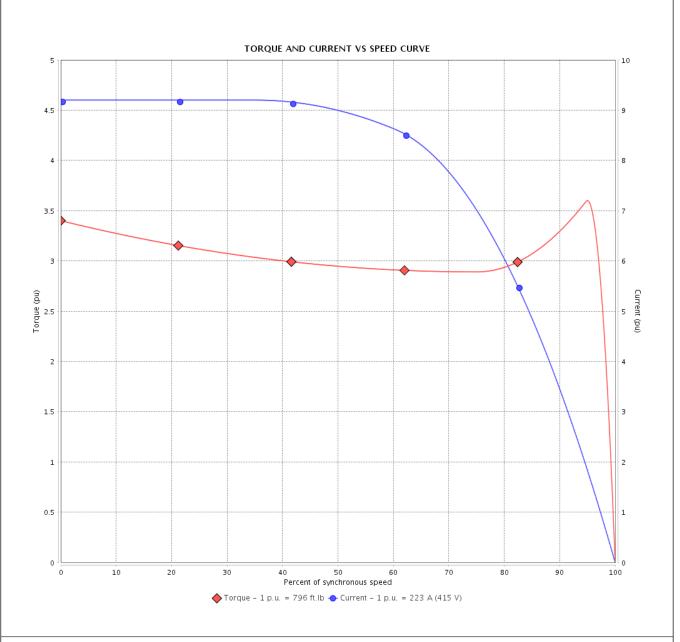
Customer :

Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 14653233

Catalog #: 20012XT3G447T



Performance : 415 V 50 Hz 6P IE3 Rated current : 223 A Moment of inertia (J) : 134 sq.ft.lb **LRC** : 9.2 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 796 ft.lb Service factor Locked rotor torque : 340 % : 1.00 Breakdown torque : 360 % Temperature rise : 80 K Rated speed : B : 990 rpm Design

Locked rotor time : 21s (cold) 12s (hot)

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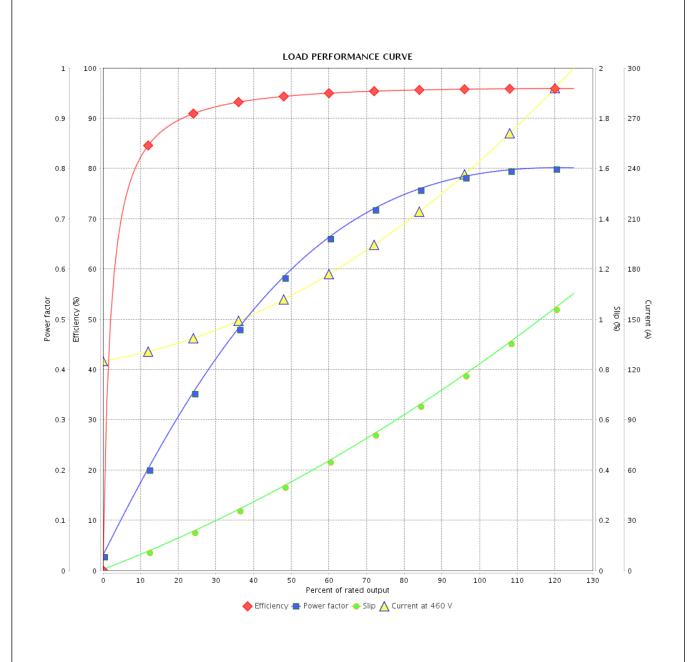


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14653233

Phase

Catalog #: 20012XT3G447T



Performance	: 4	: 460 V 60 Hz 6P					
Rated current	Rated current : 249 A		Moment o	f inertia (J)	: 134 sq.ft.lb		
LRC	: 7	' .8	Duty cycle		: Cont.(S1)		
Rated torque	orque : 883 ft.lb Insulation class		class	: F			
Locked rotor torque	d rotor torque : 270 % Service factor		ctor	: 1.15			
Breakdown torque		280 %	Temperatu	Temperature rise		: 80 K	
Rated speed		190 rpm	Design	Design : B			
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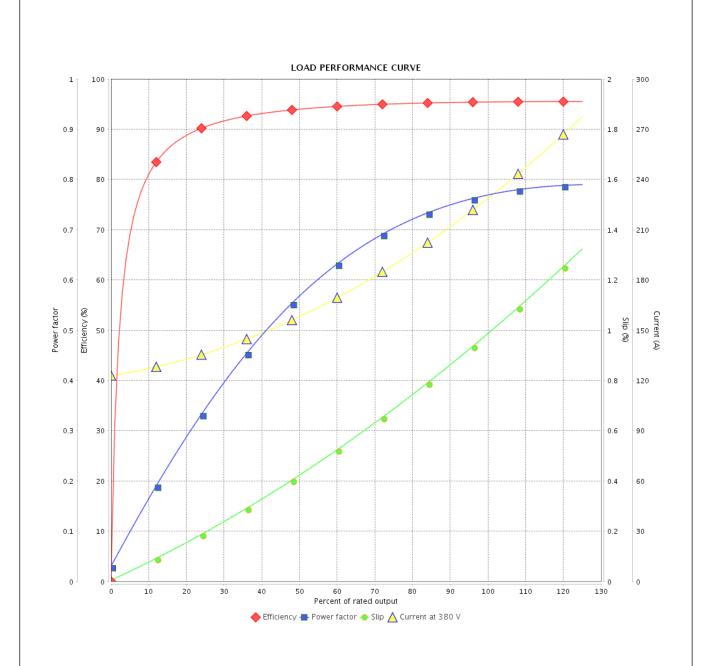
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Performance : 380 V 50 Hz 6P IE3					
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 228 A : 8.0 : 796 ft.lb : 270 % : 300 % : 990 rpm	Moment o Duty cycle Insulation Service fa Temperate Design	class ctor	: 134 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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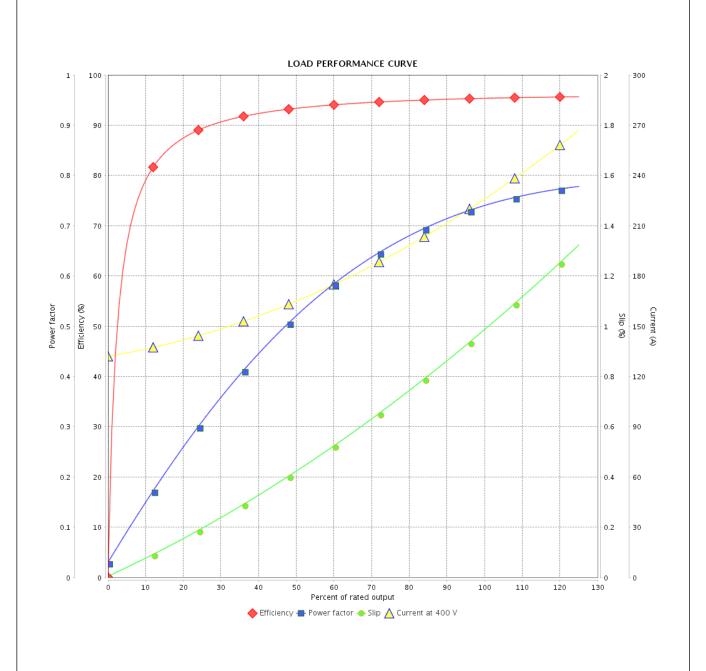
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Customer

Product line : NEMA Premium Efficiency Three-Product code: 14653233

Catalog #: 20012XT3G447T



Performance	: 4	: 400 V 50 Hz 6P IE3					
Rated current ::		225 A	Moment o	f inertia (J)	: 134 sq.ft.lb		
LRC : 8		3.8	Duty cycle	Duty cycle			
		796 ft.lb	Insulation	class	: F		
Locked rotor torque :		300 %	Service fa	Service factor : 1.00			
Breakdown torque		320 %	Temperati	Temperature rise : 80 K			
Rated speed	: 9	990 rpm	Design	Design : B		;	
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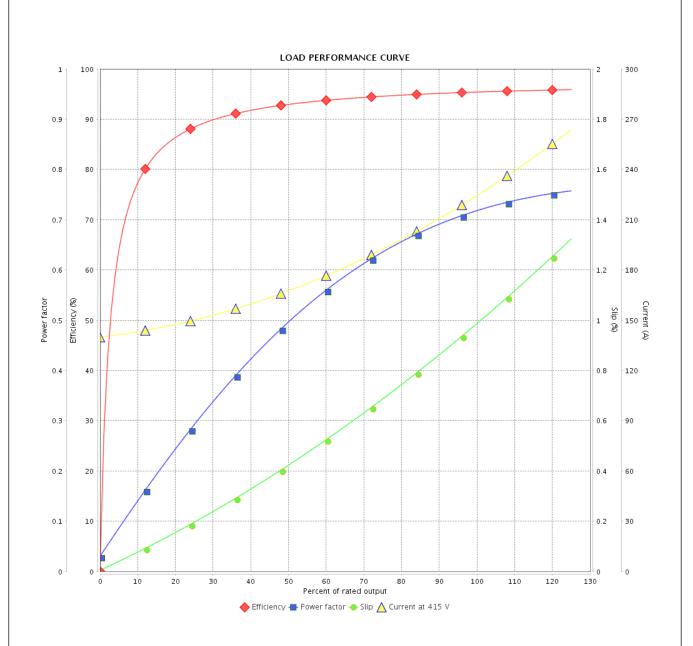
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Performance		: 415 V 50 Hz	6P IE3				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	•	: 223 A : 9.2 : 796 ft.lb : 340 % : 360 % : 990 rpm		Moment o Duty cycle Insulation Service fa Temperatu Design	class ctor	: 134 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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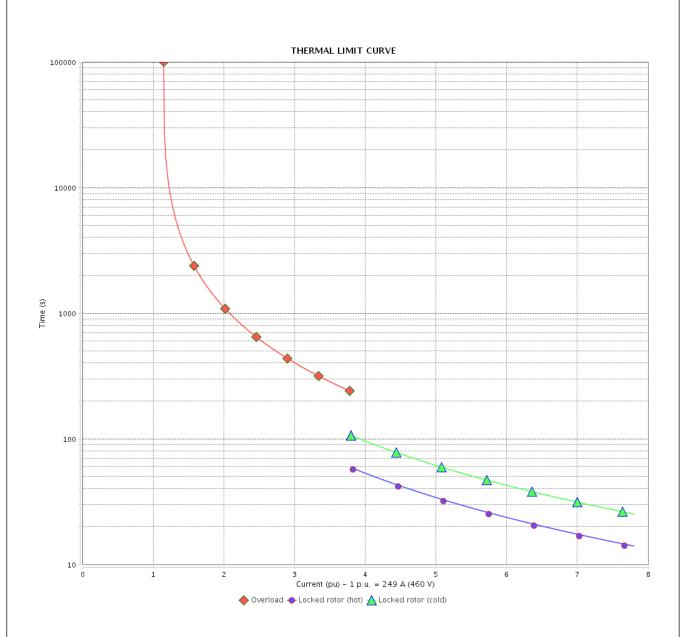


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Product line		NEMA Premium Efficiency hase	Three-	Product code :	14653233	
				Catalog # :	20012XT3G4	147T
Performance	. 11	60 V 60 Hz 6P				
Rated current		49 A	Moment o	of inertia (J)	: 134 sq.ft.lb	
LRC	: 7	.8	Duty cycle	Э	: Cont.(S1)	
Rated torque Locked rotor tord		83 ft.lb 70 %	Insulation Service fa		: F : 1.15	
Breakdown torqu	ie : 28	80 %	Temperat		: 80 K	
Rated speed	: 1	190 rpm	Design		: B	
Heating constan						
Cooling constan	t					
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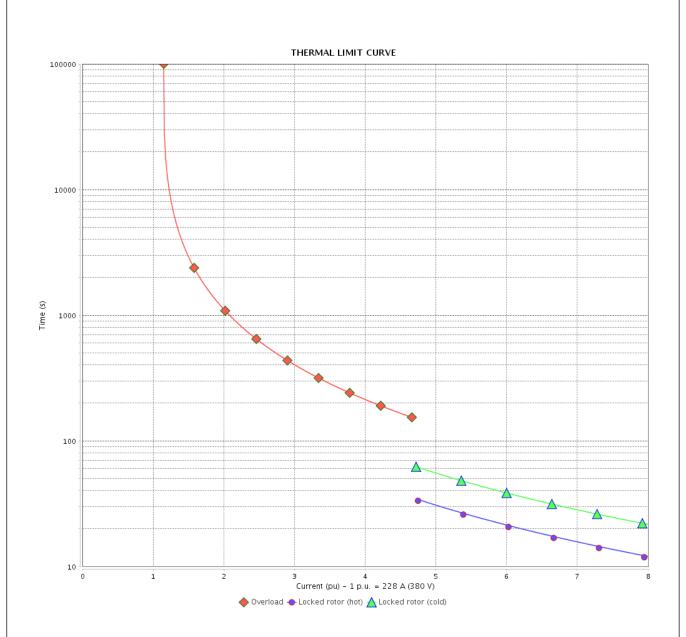


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Product line	: P	NEMA Premium Efficiency Phase		Product code :	14653233	
				Catalog # :	20012XT3G4	47T
<u> </u>		00.1/50.11 00.150				
Performance Rated current		80 V 50 Hz 6P IE3 28 A	Moment	of inertia (J)	: 134 sq.ft.lb	
-RC		.0	Duty cycle	е	: Cont.(S1)	
					` ,	
Rated torque	: 7	96 ft.lb 70 %	Insulation		: F	
Rated torque Locked rotor tor Breakdown torq	: 7 que : 2 ue : 3	70 % 00 %	Service fa Temperat	actor	: F : 1.00 : 80 K	
Rated torque _ocked rotor tor Breakdown torq	: 7 que : 2 ue : 3	70 %	Service fa	actor	: F : 1.00	
Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan	: 7 que : 2 ue : 3 : 9	70 % 00 %	Service fa Temperat	actor	: F : 1.00 : 80 K	
Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan Cooling constan	: 7 que : 2 ue : 3 : 9	70 % 00 % 90 rpm	Service fa Temperat	actor ure rise	: F : 1.00 : 80 K : B	Data
Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan	: 7 que : 2 ue : 3 : 9	70 % 00 %	Service fa Temperat	actor	: F : 1.00 : 80 K	Date
Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan Cooling constan Rev.	: 7 que : 2 ue : 3 : 9	70 % 00 % 90 rpm	Service fa Temperat	actor ure rise	: F : 1.00 : 80 K : B	Date
Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan Cooling constan	: 7 que : 2 ue : 3 : 9	70 % 00 % 90 rpm	Service fa Temperat	actor ure rise	: F : 1.00 : 80 K : B	Date

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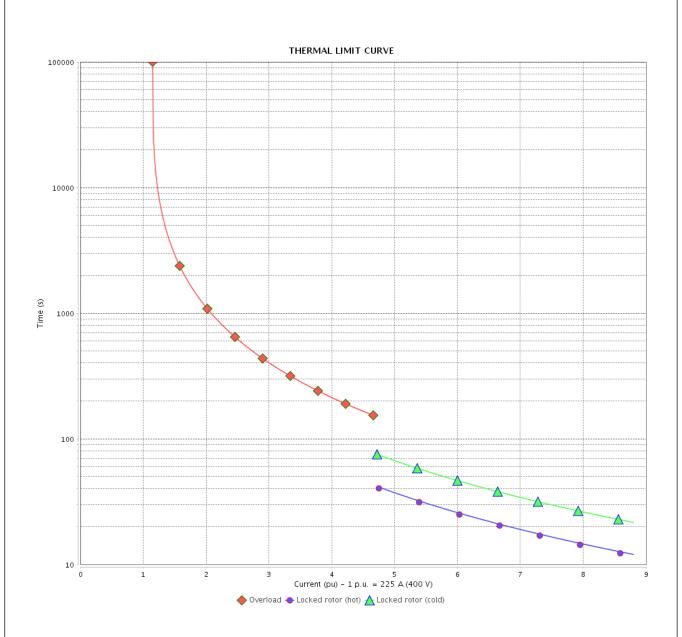


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Product line	: l P	NEMA Premium Efficiency hase		Product code :	14653233	
				Catalog # :	20012XT3G4	47T
Performance	: 40	00 V 50 Hz 6P IE3				
Rated current		25 A	Moment of	of inertia (J)	: 134 sq.ft.lb	
LRC	: 8.		Duty cycle	Э	: Cont.(S1)	
Rated torque Locked rotor tord		96 ft.lb 00 %	Insulation Service fa		: F : 1.00	
Breakdown torqu	ie : 32	20 %	Temperat		: 80 K	
Rated speed	: 99	90 rpm	Design		: B	
Heating constan						
Cooling constan	t	0				
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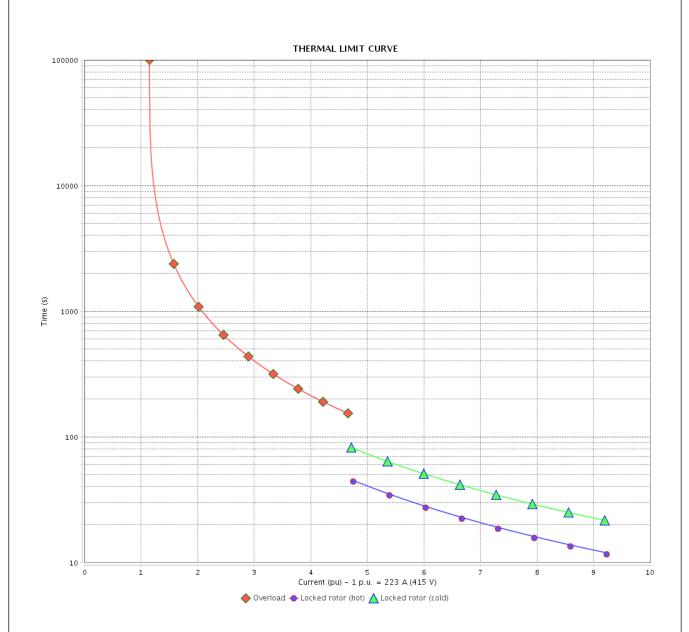


Customer	:					
Product line	: P	NEMA Premium Efficiency hase		Product code :	14653233	
				Catalog # :	20012XT3G4	147T
Performance		15 V 50 Hz 6P IE3 23 A	Moment	of inactio (I)	. 124 og ft lb	
Rated current _RC	: 2		Duty cycle	of inertia (J) e	: 134 sq.ft.lb : Cont.(S1)	
Rated torque		96 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		40 % 60 %	Service fa Temperat		: 1.00 : 80 K	
Rated speed		90 rpm	Design		: B	
Heating constan	t					
Cooling constant						
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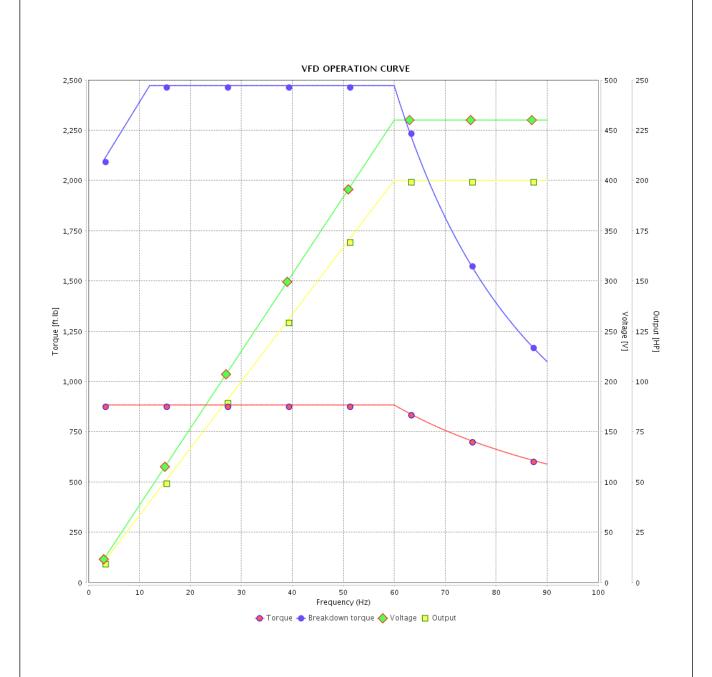
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 14653233

Catalog #: 20012XT3G447T



Performance	: 4	: 460 V 60 Hz 6P						
Rated current		49 A	Moment o	Moment of inertia (J)				
LRC :		.8	Duty cycle	Duty cycle				
Rated torque		83 ft.lb	Insulation class		:F			
Locked rotor toro	μe : 2	70 %	Service fa	Service factor				
Breakdown torqu	ie : 2	80 %	Temperati	Temperature rise				
Rated speed	: 1	190 rpm	Design	Design				
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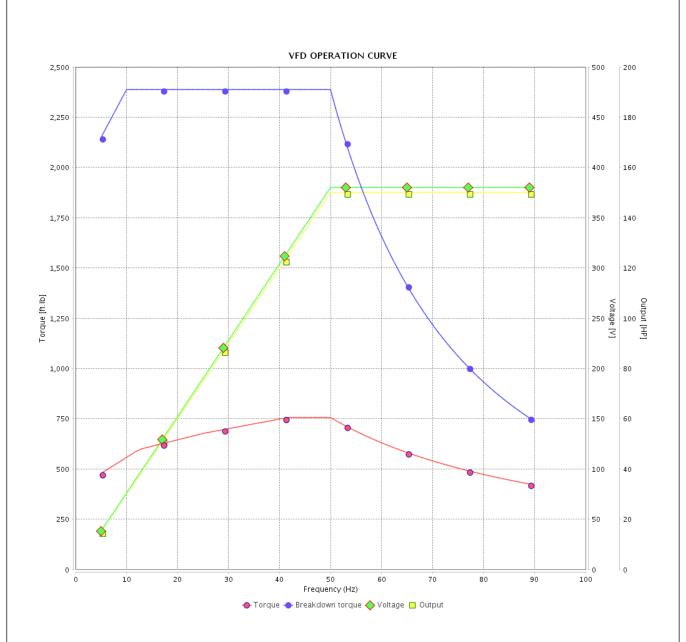
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Product line : NEMA Premium Efficiency Three- Product code :

Phase

Product code: 14653233





Performance	: 380 V 50 Hz (6P IE3				
Rated current LRC Rated torque Locked rotor torq Breakdown torqu Rated speed	: 228 A : 8.0 : 796 ft.lb : 270 % : 300 % : 990 rpm		Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 134 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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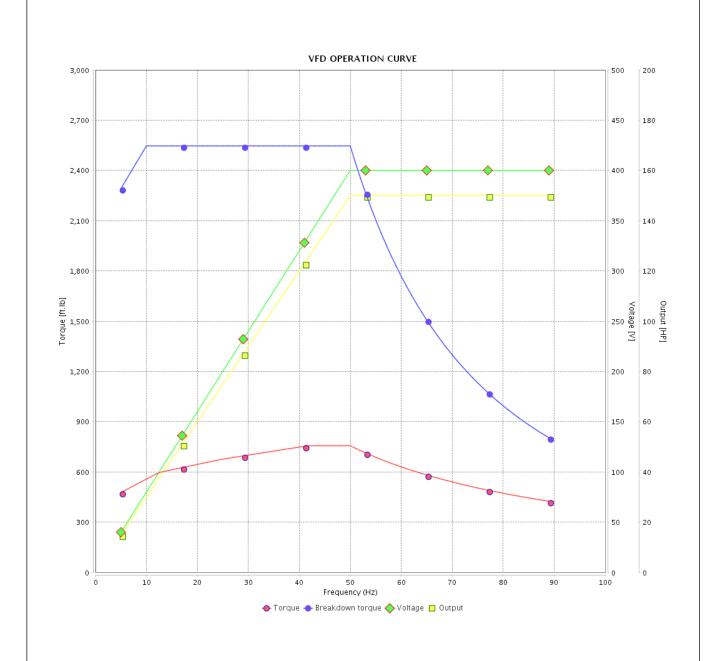
Customer

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Phase

Catalog # : 20012XT3G447T

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Performance		: 400 V 50 Hz 6P IE3						
Rated current	:	: 225 A Moment of		f inertia (J)	: 134 sq.ft.lb			
LRC		8 Duty cycle		: Cont.(S1)				
Rated torque	:	796 ft.lb	Insulation class		:F			
Locked rotor torque	e :	300 %	Service factor		: 1.00			
Breakdown torque		320 %	Temperature rise		: 80 K			
Rated speed	:	990 rpm	Design	Design				
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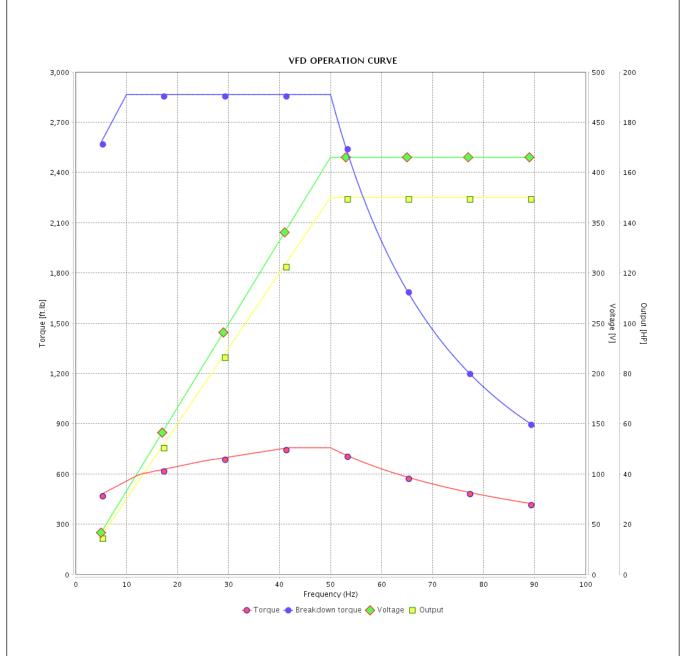
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Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 14653233

Catalog #: 20012XT3G447T



			7-			
: 415 V 50 Hz 6P IE3						
: 223 A : 9.2 : 796 ft.lb : 340 % : 360 % : 990 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 134 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B			
Changes Summary		Performed	Checked	Date		
	: 223 A : 9.2 : 796 ft.lb : 340 % : 360 % : 990 rpm	: 223 A Moment o : 9.2 Duty cycle : 796 ft.lb Insulation : 340 % Service fa : 360 % Temperatu : 990 rpm Design	: 223 A Signature : 223 A Signature : 9.2 Signature : 200 A Signature : 200 A Signature : 200 A Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 223 A Moment of inertia (J) : 134 sq.ft.lb : 9.2 Duty cycle : Cont.(S1) : 796 ft.lb Insulation class : F : 340 % Service factor : 1.00 : 360 % Temperature rise : 80 K : 990 rpm Design : B		

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