DATA SHEET

Three Phase Induction Motor - Squirrel Cage



0.78

Customer

Product line : NEMA Premium Efficiency Three-Product code: 14356574

Catalog #: 30012XT3G449T

Frame : 449T 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 : 3198 lb Moment of inertia (J) : 145 sq.ft.lb

: IP55 Protection degree

Design		: A			- 1
Output [HP]		300	250	250	250
Poles		6	6	6	6
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		351	358	347	349
L. R. Amperes [A]		2773	2828	2741	2757
LRC [A]		7.9x(Code J)	7.9x(Code J)	7.9x(Code J)	7.9x(Code J)
No load current [A]	152	150	165	178
Rated speed [RPN	/ 1]	1190	985	990	990
Slip [%]	Slip [%]		1.50	1.00	1.00
Rated torque [ft.lb]		1320	1330	1330	1330
Locked rotor torque [%]		280	250	300	330
Breakdown torque	[%]	300	280	330	360
Service factor		1.00	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		12s (cold) 7s (hot)			
Noise level ²		70.0 dB(A)	70.0 dB(A)	70.0 dB(A)	70.0 dB(A)
	25%	94.5	94.0	93.9	94.0
Efficiency (%)	50%	95.0	94.1	94.1	94.1
Efficiency (70)	75%	95.4	94.5	95.0	94.5
100%		95.8	94.5	95.0	94.5
	25%	0.41	0.42	0.37	0.34
Power Factor	50%	0.66	0.67	0.62	0.58
I OWEI FACIOI	75%	0.77	0.78	0.74	0.71

Drive end Non drive end Foundation loads

0.83

Bearing type 6322 C3 6319 C3 Max. traction : 11128 lb Sealing Viton Viton Seal

Oil Seal

0.82

Lubrication interval 9212 h 11094 h Lubricant amount 45 g 60 g Mobil Polyrex EM Lubricant type

100%

Max. compression : 14326 lb

0.81

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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Thermal protection

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

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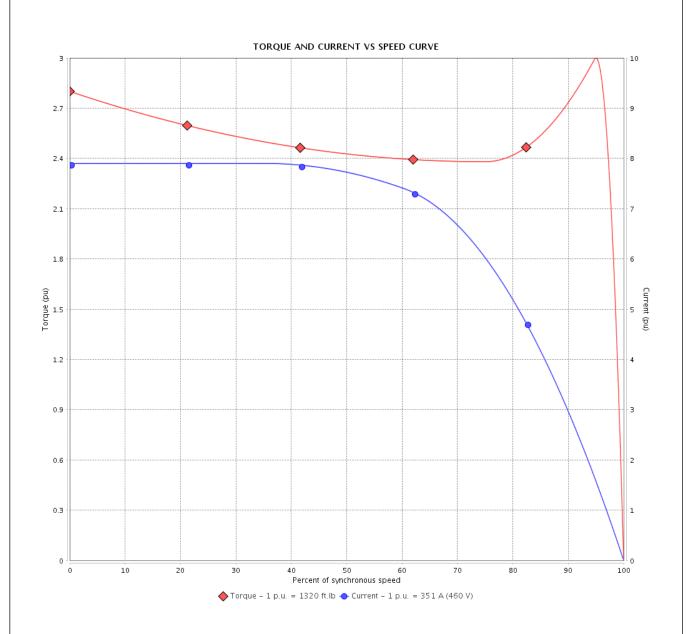


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14356574

Phase

Catalog #: 30012XT3G449T



Performance	: 460 V 60 Hz 6P			
Rated current	: 351 A	Moment of inertia (J)	: 145 sq.ft.lb	
LRC	: 7.9	Duty cycle	: Cont.(S1)	
Rated torque	: 1320 ft.lb	Insulation class	: F	
Locked rotor torque	: 280 %	Service factor	: 1.00	
Breakdown torque	: 300 %	Temperature rise	: 80 K	
Rated speed	: 1190 rpm	Design	: A	
Locked rotor time	· 12s (cold) 7s (hot)			

Locked rotor time : 12s (cold) 7s (hot)

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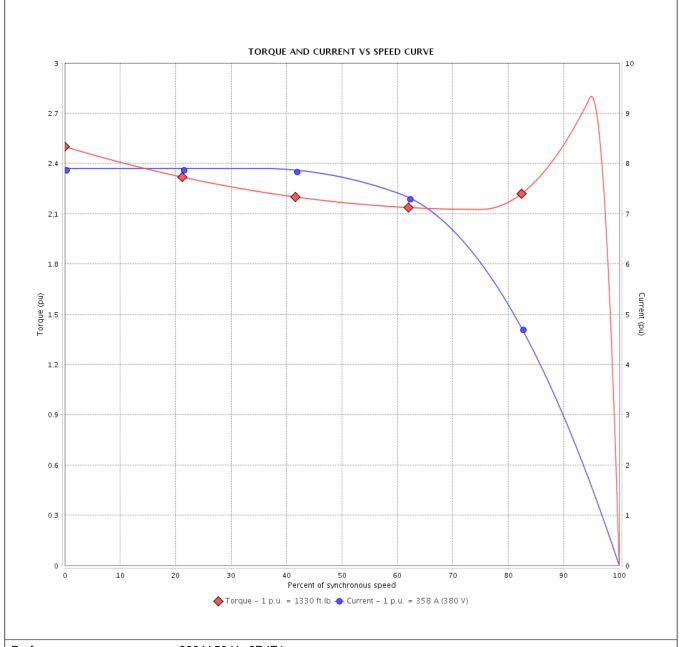
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14356574

Catalog #: 30012XT3G449T



 Performance
 : 380 V 50 Hz 6P IE1

 Rated current
 : 358 A
 Moment of inertia (J)
 : 145 sq.ft.lb

 LRC
 : 7.9
 Duty cycle
 : Cont.(S1)

 Rated torque
 : 1330 ft.lb
 Insulation class
 : F

Locked rotor torque: 250 %Service factor: 1.00Breakdown torque: 280 %Temperature rise: 80 KRated speed: 985 rpmDesign: A

Locked rotor time : 12s (cold) 7s (hot)

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Customer Product line : NEMA Premium Efficiency Three-Product code: 14356574 Catalog #: 30012XT3G449T TORQUE AND CURRENT VS SPEED CURVE

4		•		•						
						•				
3.5										7
3		•					```			6
2.5				*		*				
								•		
2								\	\	
1.5										3
1										2
0.5										1
0	10	20	30	40	50 of synchronous	60	70	80	90	100

Performance	: 400 V 50 Hz 6P IE2			
Rated current	: 347 A	Moment of inertia (J)	: 145 sq.ft.lb	
LRC	: 7.9	Duty cycle	: Cont.(S1)	
Rated torque	: 1330 ft.lb	Insulation class	: F	
Locked rotor torque	: 300 %	Service factor	: 1.00	
Breakdown torque	: 330 %	Temperature rise	: 80 K	
Rated speed	: 990 rpm	Design	: A	
Locked rotor time	: 12s (cold) 7s (hot)			

Locked rotor time	: 12s (cold) 7s (hot)
Locked rotor time	: 12s (cold) /s (not)

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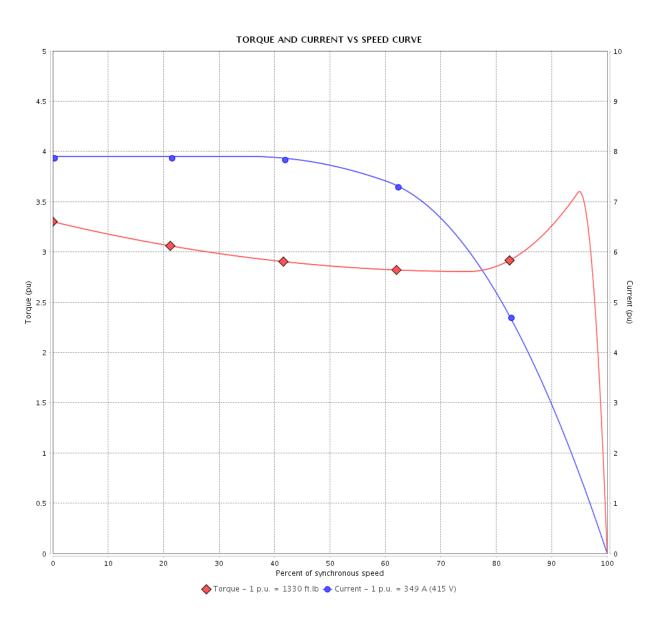


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14356574

Phase

Catalog #: 30012XT3G449T



Performance : 415 V 50 Hz 6P IE1 Rated current : 349 A Moment of inertia (J) : 145 sq.ft.lb **LRC** : 7.9 Duty cycle : Cont.(S1) : F : 1330 ft.lb Insulation class Rated torque : 330 % Service factor Locked rotor torque : 1.00 : 80 K Breakdown torque : 360 % Temperature rise Rated speed : 990 rpm Design : A

Locked rotor time : 12s (cold) 7s (hot)

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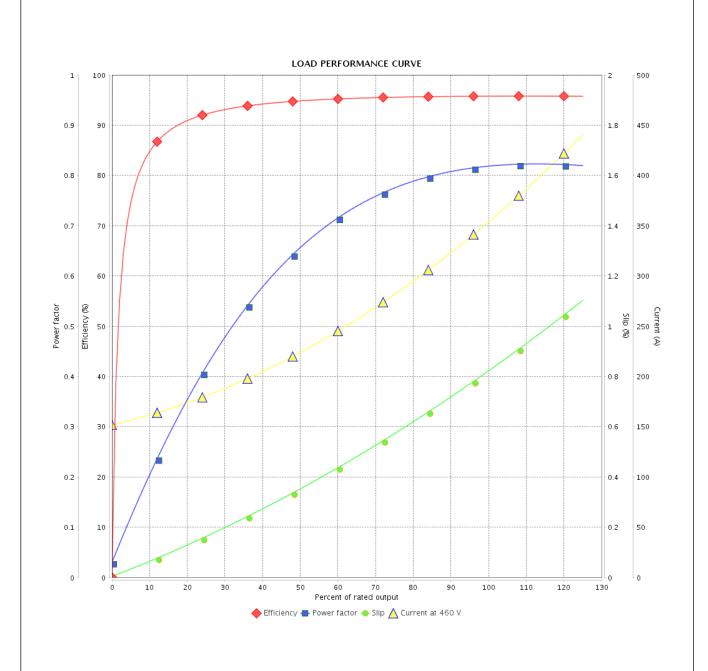


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14356574

Phase

Catalog #: 30012XT3G449T



Performance	:	460 V 60 Hz 6P				
Rated current	:	351 A	Moment o	f inertia (J)	: 145 sq.ft.lb	
LRC	:	7.9	Duty cycle	;	: Cont.(S1)	
Rated torque	:	1320 ft.lb	Insulation	class	:F	
Locked rotor torque	e :	280 %	Service factor		: 1.00	
Breakdown torque	reakdown torque : 300 % Temperature		ıre rise	: 80 K		
Rated speed	:	1190 rpm	Design		: A	
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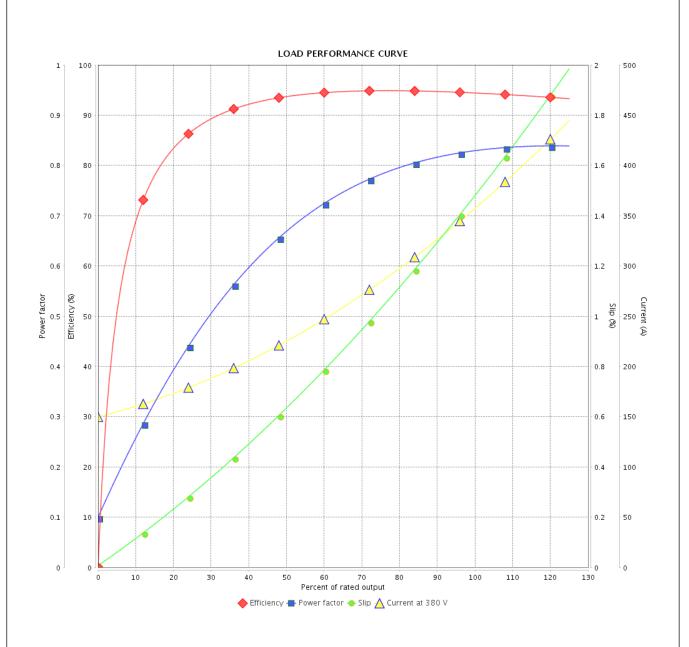
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Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 14356574

Catalog #: 30012XT3G449T



Performance	: 380 V 50 Hz 6P IE1				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 358 A : 7.9 : 1330 ft.lb : 250 % : 280 % : 985 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ector	: 145 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : A	
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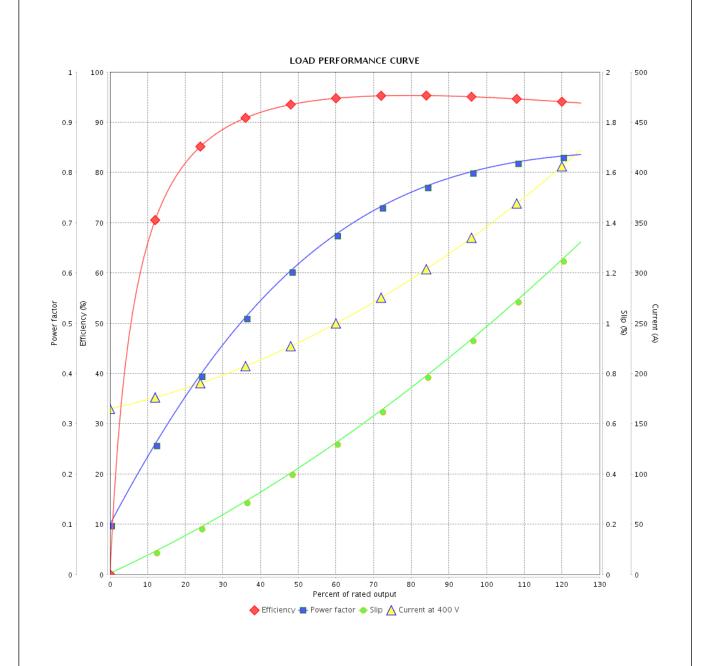
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Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 30012XT3G449T

14356574



Performance	: 4	100 V 50 Hz 6P IE2	<u> </u>			
Rated current	: 3	347 A	Moment o	f inertia (J)	: 145 sq.ft.lb	
LRC	: 7	7.9	Duty cycle	!	: Cont.(S1)	
Rated torque	: 1	1330 ft.lb	Insulation	class	: F	
Locked rotor torqu	e :3	300 %	Service fa	Service factor		
Breakdown torque	kdown torque : 330 % Temperature rise		ıre rise	: 80 K		
Rated speed	: 9	990 rpm	Design		: A	
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Product line : NEMA Premium Efficiency Three- Product code :

Phase

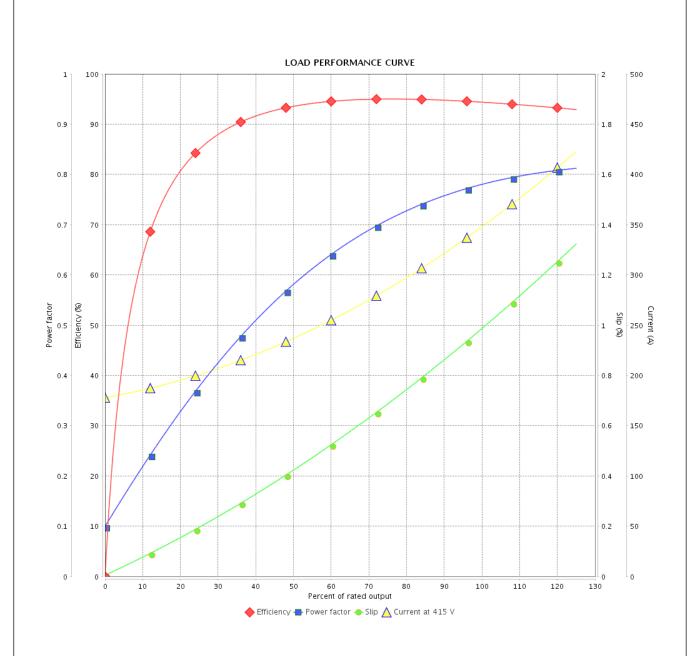
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Performance	: 415 V 50 Hz 6P IE1				
Rated current	: 349 A	Moment of	f inertia (J)	: 145 sq.ft.lb	
LRC	: 7.9	Duty cycle)	: Cont.(S1)	
Rated torque	: 1330 ft.lb Insulation class		: F		
·		Service factor : 1.00		: 1.00	
Breakdown torque	: 360 %	Temperate	ıre rise	: 80 K	
Rated speed	: 990 rpm	Design		: A	
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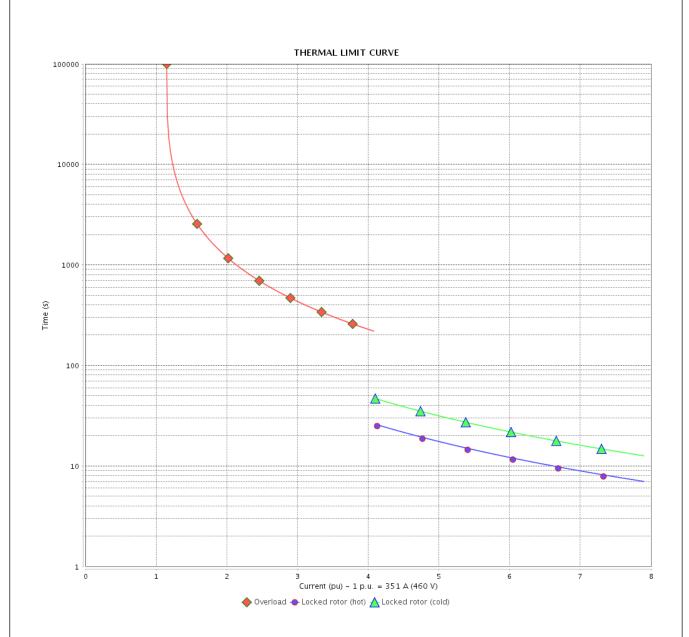


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Product line	:1:	NEMA Premium Efficiency	Three-	Product code :	14356574	
	P	hase		Catalog # :	30012XT3G	449T
					300127130	
Performance	· 16	60 V 60 Hz 6P				
Rated current		51 A	Moment o	f inertia (J)	: 145 sq.ft.lb	
LRC	: 7.	9	Duty cycle	;	: Cont.(S1)	
Rated torque Locked rotor tord		320 ft.lb 30 %	Insulation Service fa		: F : 1.00	
Breakdown torqu		00 %	Temperati		: 80 K	
Rated speed		190 rpm	Design		: A	
Heating constan	t					
Cooling constant						
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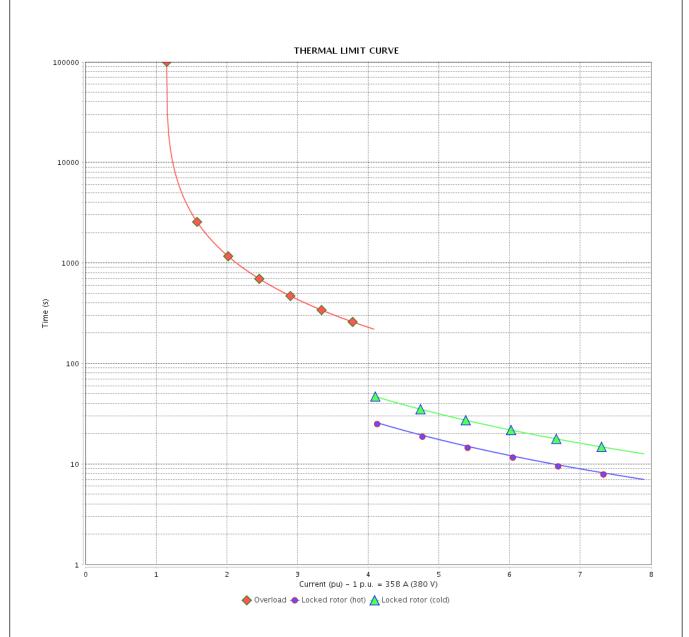


Customer	:					
Product line		NEMA Premium Efficiency hase		Product code :	14356574	
				Catalog # :	30012XT3G4	49T
Performance		80 V 50 Hz 6P IE1	I			
Rated current _RC	: 3 : 7	58 A .9	Moment of Duty cycle	of inertia (J)	: 145 sq.ft.lb : Cont.(S1)	
Rated torque	: 1	330 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		50 % 80 %	Service fa Temperat		: 1.00 : 80 K	
Rated speed		85 rpm	Design		: A	
Heating constant						
Cooling constant		01 0		D ()	01 1 1	D 1
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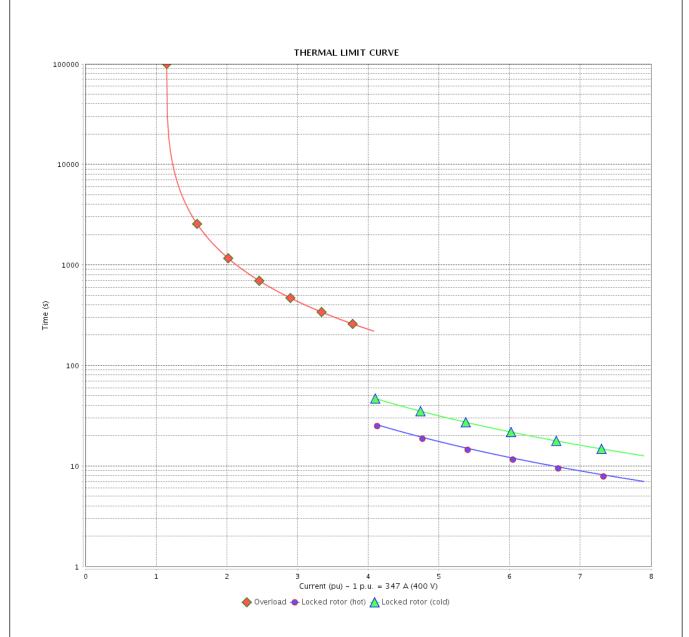


Customer	:					
Product line		NEMA Premium Efficiency hase		Product code :	14356574	
				Catalog # :	30012XT3G4	49T
Performance	: 4	00 V 50 Hz 6P IE2				
Rated current		47 A	Moment of	of inertia (J)	: 145 sq.ft.lb	
LRC Rated torque	: 7	.9 330 ft.lb	Duty cycle Insulation	e Lolace	: Cont.(S1) : F	
Locked rotor tor		00 %	Service fa		: 1.00	
Breakdown torq		30 %	Temperat	ure rise	: 80 K	
Rated speed		90 rpm	Design		: A	
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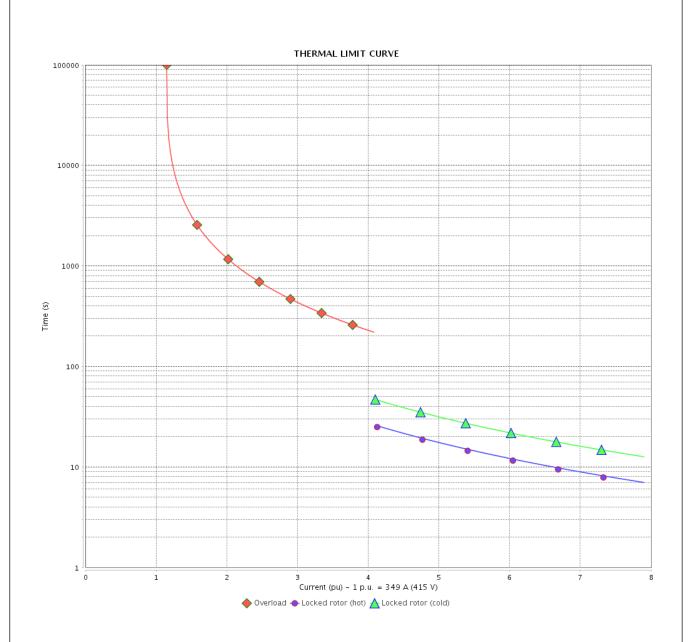


Customer	:					
Product line		NEMA Premium Efficiency hase		Product code :	14356574	
				Catalog # :	30012XT3G4	49T
Performance	: 4	15 V 50 Hz 6P IE1				
Rated current LRC	: 34 : 7	49 A	Moment of Duty cycle	of inertia (J)	: 145 sq.ft.lb : Cont.(S1)	
Rated torque	: 1:	330 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		30 % 60 %	Service fa Temperat		: 1.00 : 80 K	
Rated speed		90 rpm	Design		: A	
Heating constant						
Cooling constant Rev.		Changes Summary		Performed	Checked	Date
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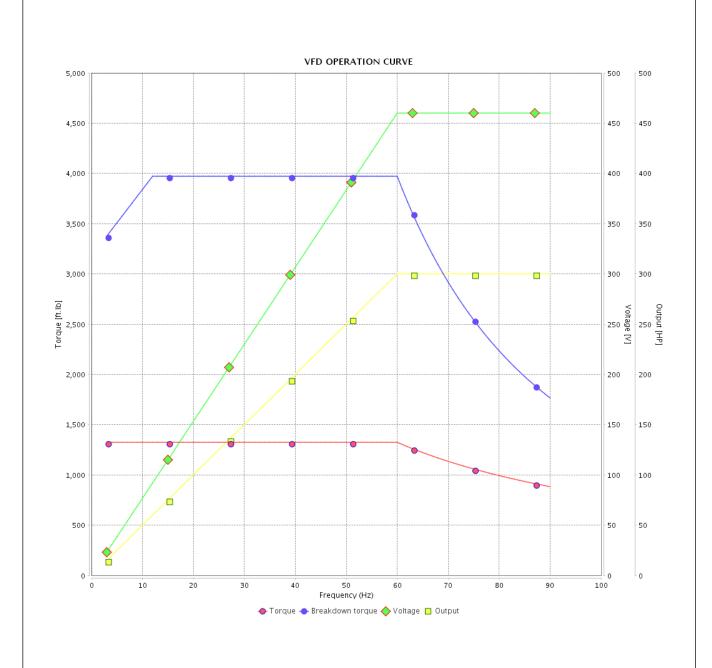
Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog # : 30012XT3G449T

14356574

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Performance	: 460 V 60 Hz 6P				
Rated current	: 351 A	Moment of inertia (J)		: 145 sq.ft.lb	
LRC	: 7.9	Duty cycle		: Cont.(S1)	
Rated torque	: 1320 ft.lb	: 1320 ft.lb Insulation class : 280 % Service factor : 300 % Temperature rise		: F : 1.00	
Locked rotor torque	: 280 %				
Breakdown torque	: 300 %			: 80 K	
Rated speed	: 1190 rpm	Design		: A	
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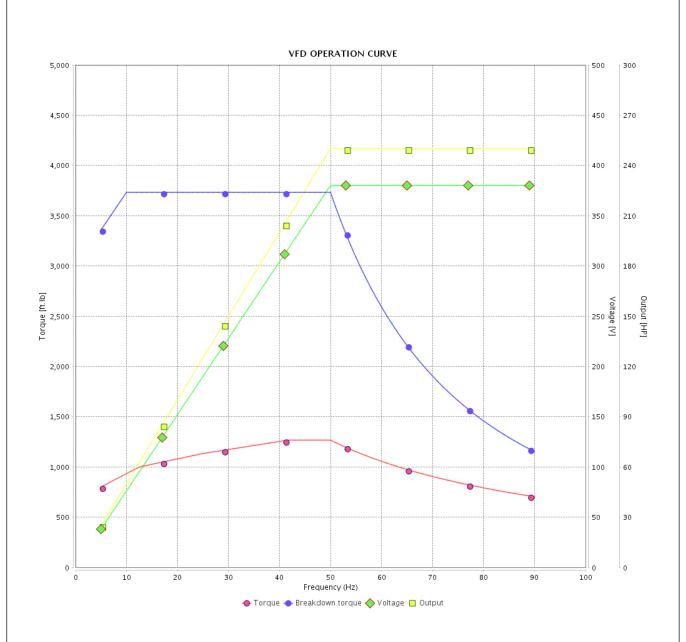
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Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14356574

Catalog #: 30012XT3G449T



Performance : 380 V 50 Hz 6P IE1 Rated current : 358 A Moment of inertia (J) : 145 sq.ft.lb **LRC** : 7.9 Duty cycle : Cont.(S1) : 1330 ft.lb Insulation class : F Rated torque Locked rotor torque : 250 % Service factor : 1.00 Breakdown torque : 280 % Temperature rise : 80 K Rated speed : 985 rpm Design : A Rev. Performed Checked Date **Changes Summary** Performed by

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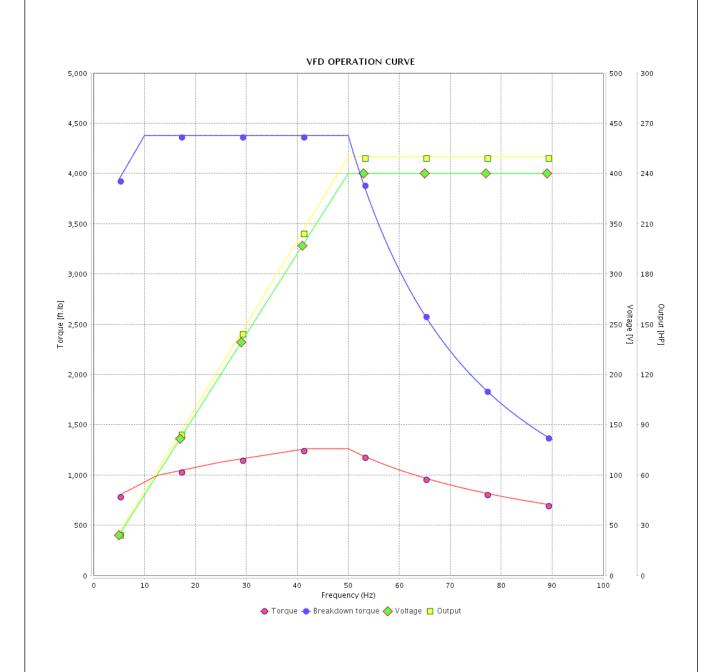
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Phase

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	: 145 sq.ft.lb	
LRC : 7.9 Duty cycle : Cont.(S1)	: Cont.(S1)	
Rated torque : 1330 ft.lb Insulation class : F	:F	
Locked rotor torque : 300 % Service factor : 1.00	: 1.00	
Breakdown torque : 330 % Temperature rise : 80 K	: 80 K	
Rated speed : 990 rpm Design : A	: A	
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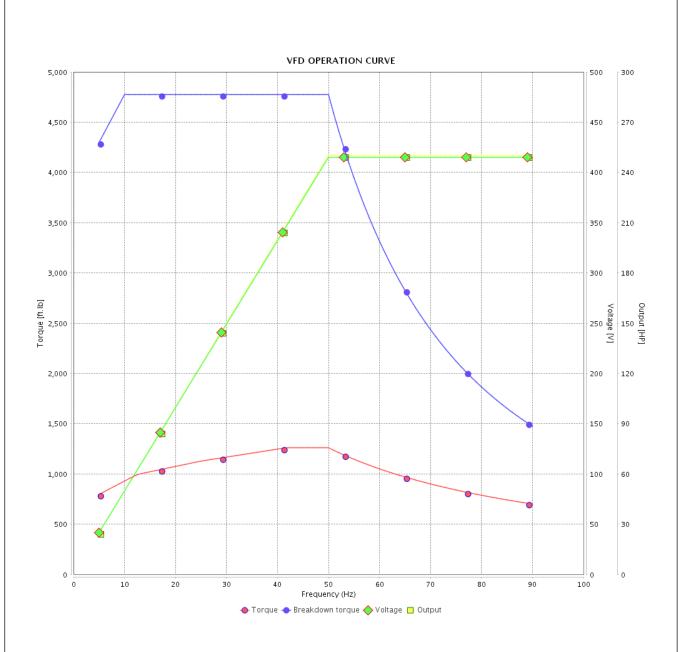
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Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14356574

Catalog #: 30012XT3G449T



Performance	: 4′	15 V 50 Hz 6P IE1				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 7. : 13 jue : 33 ie : 36	49 A 9 330 ft.lb 30 % 60 % 90 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 145 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : A	
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