DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code:

Catalog #: 35036ET3G449TS-W22

14439979

Frame : 447/9TS 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

: 1000 m.a.s.l. Approx. weight³ : 2983 lb Altitude : IP55 Protection degree Moment of inertia (J) : 68.1 sq.ft.lb

: A Design

Output [HP]		350	300	300	300
Poles		2	2	2	2
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		385	388	375	362
L. R. Amperes [A]		3273	3026	3338	3511
LRC [A]		8.5x(Code J)	7.8x(Code H)	8.9x(Code J)	9.7x(Code K)
No load current [A]	105	105	110	115
Rated speed [RPN	/ 1]	3575	2972	2975	2978
Slip [%]		0.69	0.93	0.83	0.73
Rated torque [ft.lb]		514	530	530	529
Locked rotor torqu	e [%]	240	229	250	270
Breakdown torque	[%]	250	270	300	340
Service factor		1.15	1.15	1.15	1.15
Temperature rise		80 K	105 K	105 K	105 K
Locked rotor time		18s (cold) 10s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)
Noise level ²		81.0 dB(A)			
	25%				
Efficiency (%)	50%	95.4	95.4	95.4	95.4
Linciency (70)	75%	96.2	95.8	95.8	96.2
	100%	96.2	95.8	96.2	96.2
	25%				
Power Factor	50%	0.80	0.80	0.78	0.75
1 OWEI I ACIOI	75%	0.86	0.85	0.85	0.84
	100%	0.88	0.90	0.88	0.88

Non drive end Foundation loads **Drive** end

Bearing type 6314 C3 6314 C3 Max. traction : 3303 lb WSeal Sealing WSeal Max. compression : 6286 lb

Lubrication interval 4000 h 4000 h Lubricant amount 27 g 27 g Mobil Polyrex EM

Lubricant type

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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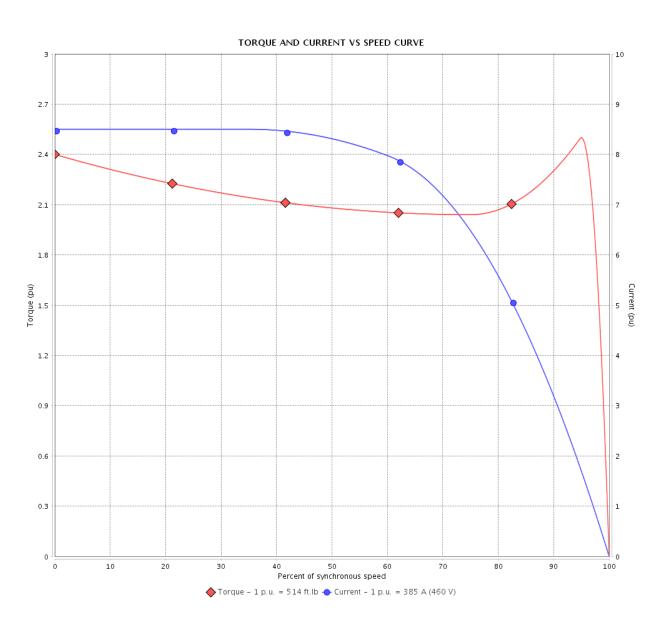
Customer :

Product line : NEMA Premium Efficiency Three- Product line : NEMA Pr

Phase

Product code: 14439979

Catalog #: 35036ET3G449TS-W22



Performance : 460 V 60 Hz 2P Rated current : 385 A Moment of inertia (J) : 68.1 sq.ft.lb **LRC** : 8.5 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 514 ft.lb Service factor Locked rotor torque : 240 % : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 3575 rpm Design : A

Locked rotor time : 18s (cold) 10s (hot)

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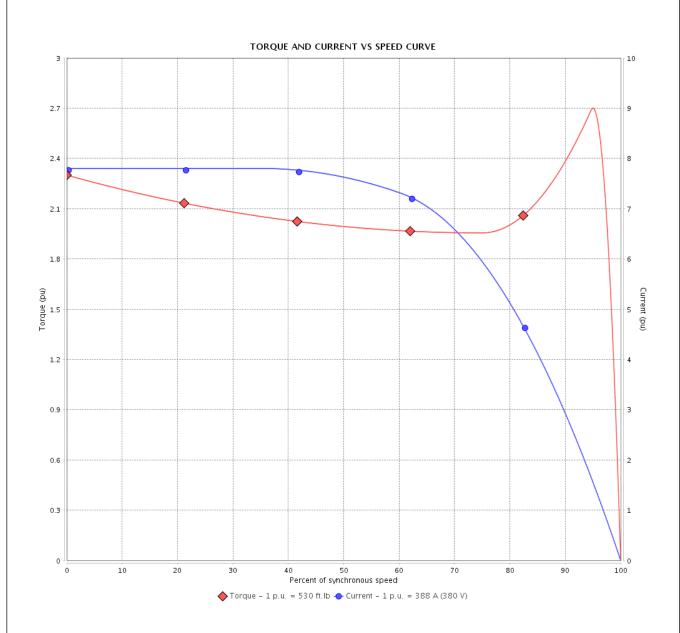


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14439979

Phase

Catalog #: 35036ET3G449TS-W22



Performance : 380 V 50 Hz 2P IE3 Rated current : 388 A Moment of inertia (J) : 68.1 sq.ft.lb **LRC** : 7.8 Duty cycle : Cont.(S1) : 530 ft.lb Insulation class : F Rated torque : 229 % Locked rotor torque Service factor : 1.15 : 105 K Breakdown torque : 270 % Temperature rise Rated speed : 2972 rpm Design : A

Locked rotor time : 14s (cold) 8s (hot)

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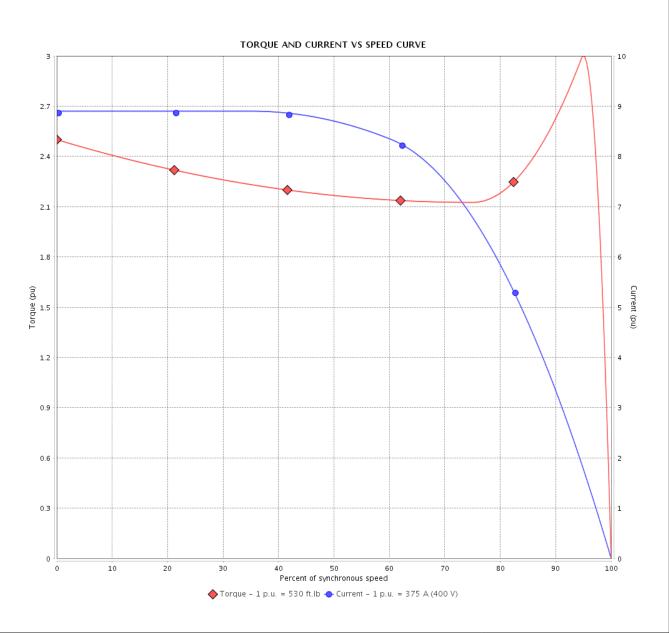
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14439979

Catalog #: 35036ET3G449TS-W22



Performance : 400 V 50 Hz 2P IE3 Rated current : 375 A Moment of inertia (J) : 68.1 sq.ft.lb **LRC** : 8.9 Duty cycle : Cont.(S1) Insulation class Rated torque : 530 ft.lb : F Locked rotor torque : 250 % Service factor : 1.15 Breakdown torque : 300 % Temperature rise : 105 K Rated speed : 2975 rpm Design : A

Locked rotor time : 14s (cold) 8s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 14439979 Catalog #: 35036ET3G449TS-W22 TORQUE AND CURRENT VS SPEED CURVE 4.5 3.5 Torque (pu) Current 0.5 Percent of synchronous speed ◆ Torque - 1 p.u. = 529 ft.lb ◆ Current - 1 p.u. = 362 A (415 V) Performance : 415 V 50 Hz 2P IE3 Rated current : 362 A Moment of inertia (J) : 68.1 sq.ft.lb **LRC** : 9.7 Duty cycle : Cont.(S1) : 529 ft.lb Insulation class : F Rated torque Locked rotor torque : 270 % Service factor : 1.15 : 105 K Breakdown torque : 340 % Temperature rise Rated speed : A : 2978 rpm Design Locked rotor time : 14s (cold) 8s (hot) Rev. **Changes Summary** Performed Checked Date

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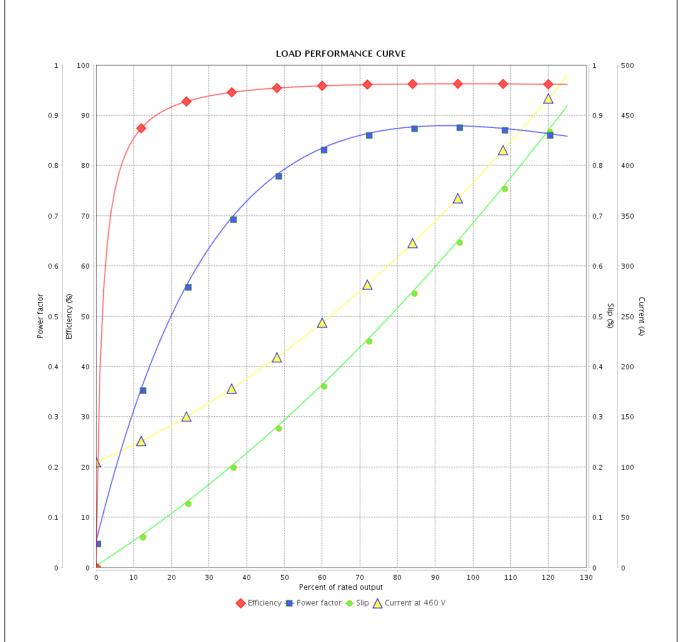
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Phase

Product code: 14439979

Catalog #: 35036ET3G449TS-W22

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Performance	: 460 V 60 Hz 2P				
Rated current	d current : 385 A Moment of inertia (J		` '	: 68.1 sq.ft.lb	
LRC	: 8.5	Duty cycle		: Cont.(S1)	
Rated torque	: 514 ft.lb	Insulation	class	: F	
Locked rotor torque	ocked rotor torque : 240 %		ctor	: 1.15	
Breakdown torque	: 250 %	Temperature rise		: 80 K	
Rated speed	: 3575 rpm	Design		: A	
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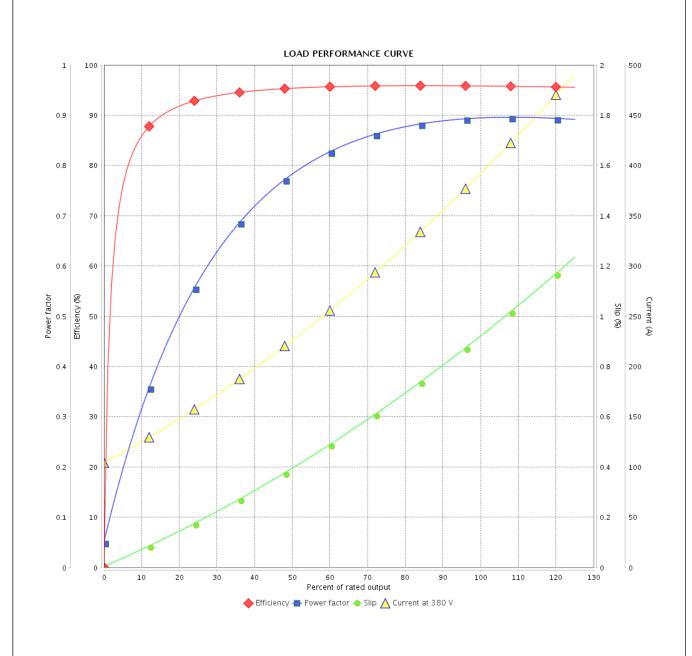
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Product line : NEMA Premium Efficiency Three- Product code : 14439979

Phase

Catalog #: 35036ET3G449TS-W22

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Performance	: 380 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 388 A : 7.8 : 530 ft.lb : 229 % : 270 % : 2972 rpm	Moment o Duty cycle Insulation Service fa Temperatu Design	class ctor	: 68.1 sq.ft.lb : Cont.(S1) : F : 1.15 : 105 K : A	
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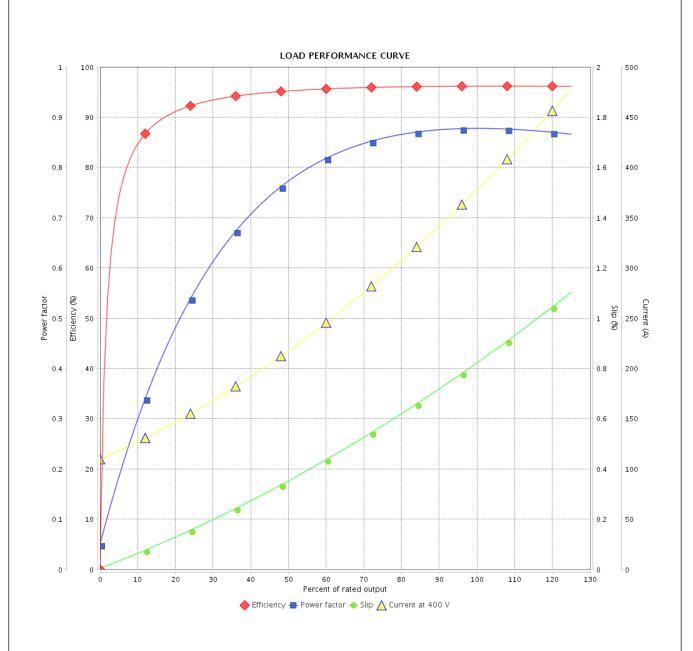
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Phase

Product code: 14439979

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Performance	: 400 V 50 Hz 2P IE3			
LRC : 8.9 I Rated torque : 530 ft.lb I Locked rotor torque : 250 % S Breakdown torque : 300 % S		Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 68.1 sq.ft.lb : Cont.(S1) : F : 1.15 : 105 K : A	
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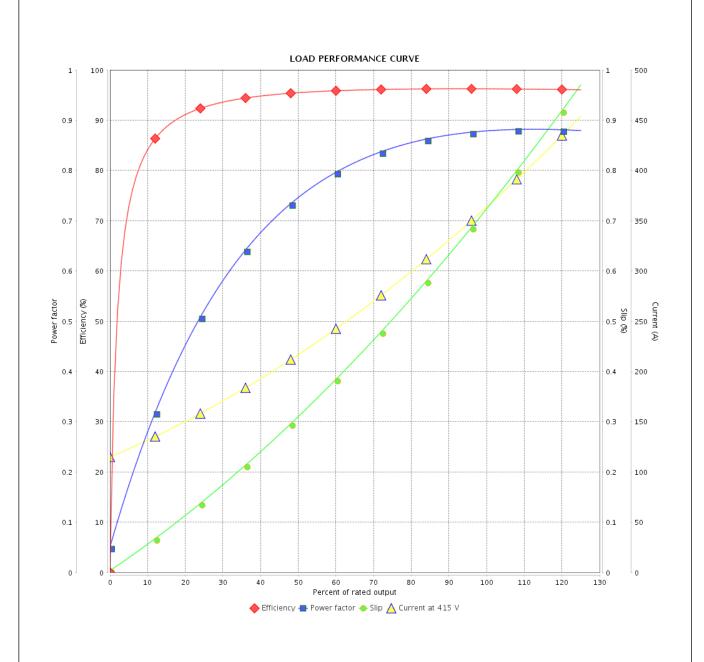
Customer

Product line : NEMA Premium Efficiency Three- Product code : 14439979

Phase

Catalog #: 35036ET3G449TS-W22

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Performance	: 415 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 362 A : 9.7 : 529 ft.lb : 270 % : 340 % : 2978 rpm	Moment of Duty cycle Insulation Service fac Temperatu Design	class	: 68.1 sq.ft.lb : Cont.(S1) : F : 1.15 : 105 K : A	
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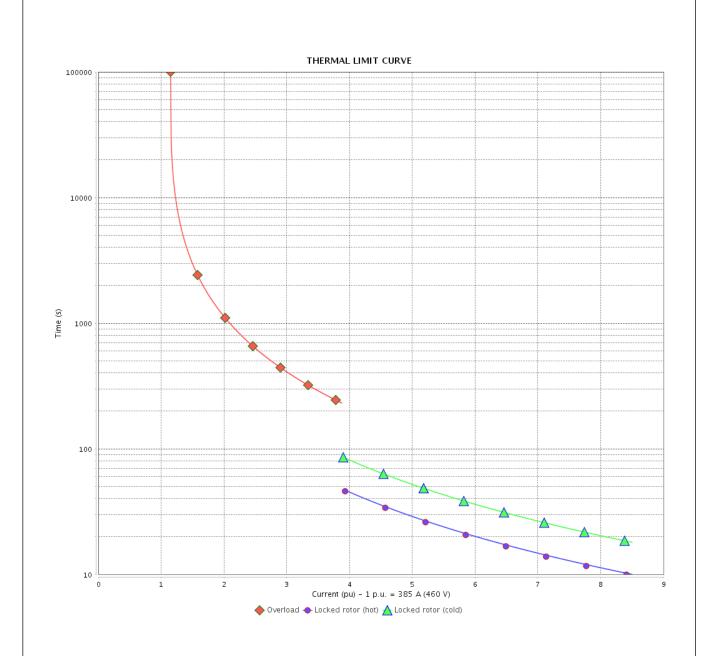


Customer	:				
Product line	: NEMA Premium Effici Phase		Product code :	14439979 35036ET3G4	49TS-W22
Performance Rated current LRC Rated torque Locked rotor torque Breakdown torque	: 460 V 60 Hz 2P : 385 A : 8.5 : 514 ft.lb : 240 % : 250 %	Duty cycle Insulation Service fa Temperatu	class ctor	: 68.1 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K	
Rated speed Heating constant Cooling constant Rev.	: 3575 rpm Changes Summary	Design	Performed	: A Checked	Date
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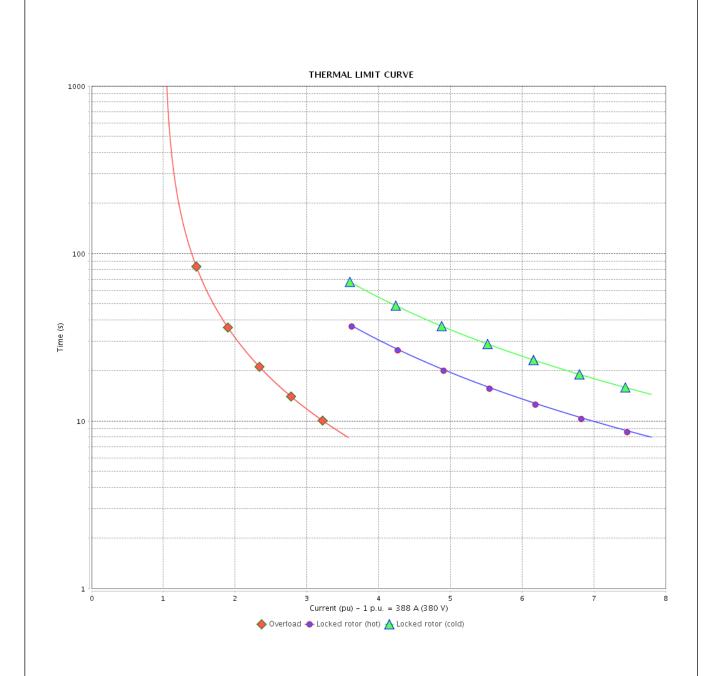


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Product line	: NEMA Premium Efficiency Phase		Product code :	14439979	4070 1400
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Performance	: 380 V 50 Hz 2P IE3	Marray	iinantia (I)	.004 = 64	
Rated current LRC	: 388 A : 7.8	Moment of Duty cycle	inertia (J)	: 68.1 sq.ft.lb : Cont.(S1)	
Rated torque	: 530 ft.lb	Insulation	class	: F	
Locked rotor torque	: 229 %	Service fac	ctor	: 1.15	
Breakdown torque Rated speed	: 270 % : 2972 rpm	Temperatu Design		: 105 K : A	
Heating constant					
Cooling constant					
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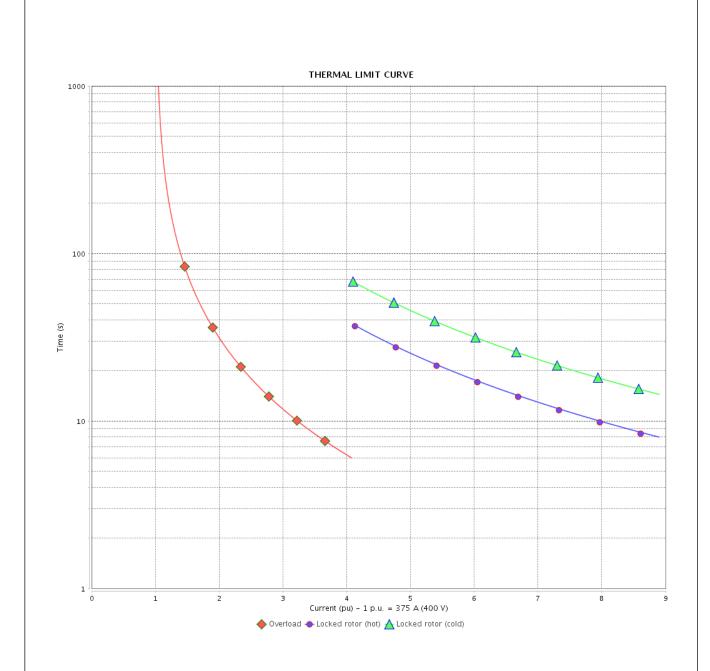


Customer		:				
Product line		: NEMA Premium Efficiency Phase		Product code : Catalog # :	14439979 35036ET3G4	49TS-W22
Performance		: 400 V 50 Hz 2P IE3				
Rated current LRC Rated torque		: 375 A : 8.9 : 530 ft.lb	Moment of Duty cycle Insulation		: 68.1 sq.ft.lb : Cont.(S1) : F	
Locked rotor tord	que	: 250 %	Service fa	actor	: 1.15	
Breakdown torqu Rated speed		: 300 % : 2975 rpm	Temperat Design	ure rise	: 105 K : A	
Heating constan						
Cooling constan	t					
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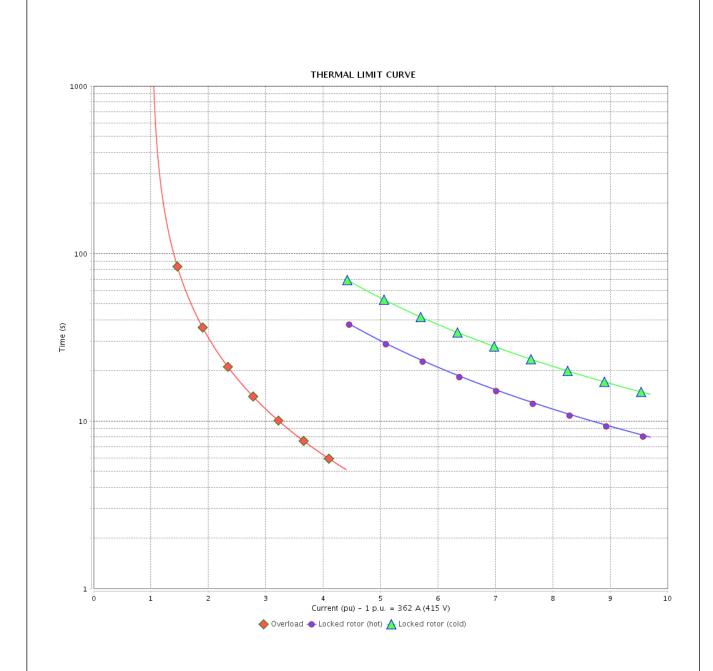


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Product line		: NEMA Premium Efficiency [*] Phase		Product code : Catalog # :	14439979 35036ET3G4	149TS-W22
				Satalog # .	33030E13G-	H-910-W22
Performance Rated current LRC Rated torque Locked rotor toro Breakdown torque Rated speed Heating constant Cooling constant	: : : : : : : : : : :	415 V 50 Hz 2P IE3 362 A 9.7 529 ft.lb 270 % 340 % 2978 rpm Changes Summary	Moment o Duty cycle Insulation Service fa Temperatu Design	class ctor	: 68.1 sq.ft.lb : Cont.(S1) : F : 1.15 : 105 K : A	Date
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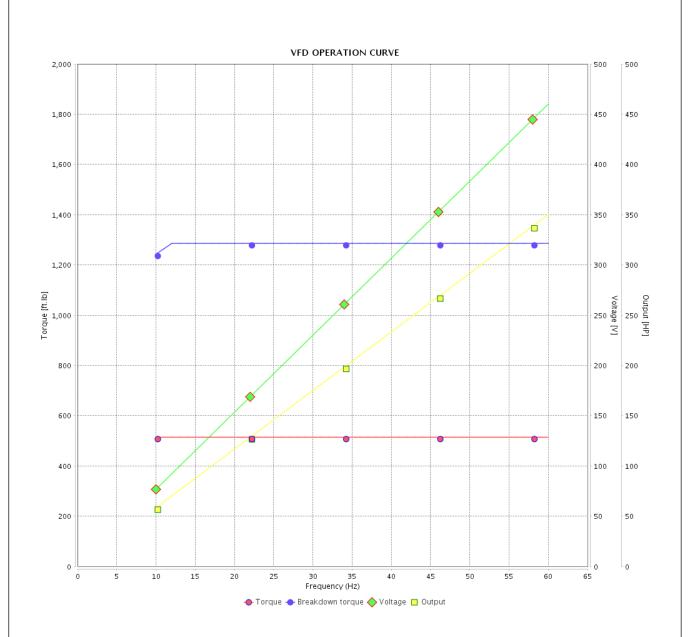
Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 35036ET3G449TS-W22

14439979

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Performance : 460 V 60 Hz 2P : 385 A Rated current Moment of inertia (J) : 68.1 sq.ft.lb **LRC** Duty cycle : 8.5 : Cont.(S1) Insulation class Rated torque : 514 ft.lb : F Locked rotor torque : 240 % Service factor : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 3575 rpm Design : A Rev. Performed Checked Date **Changes Summary** Performed by Page Checked by Revision

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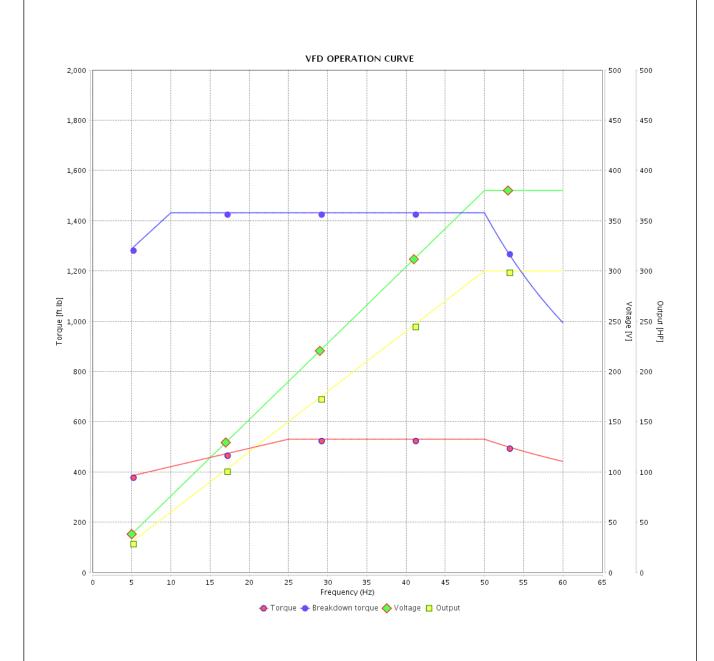
Customer

Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 14439979

Catalog #: 35036ET3G449TS-W22



Performance	: 38	30 V 50 Hz 2P IE3				
Rated current : 38		38 A	Moment of	Moment of inertia (J)		
LRC	: 7.	8	Duty cycle)	: Cont.(S1)	
Rated torque : 53		30 ft.lb	Insulation class		: F	
Locked rotor torque : 22		29 %	Service fa	ctor	: 1.15	
Breakdown torque		70 %	Temperat	Temperature rise		
Rated speed	: 29	972 rpm	Design	Design		
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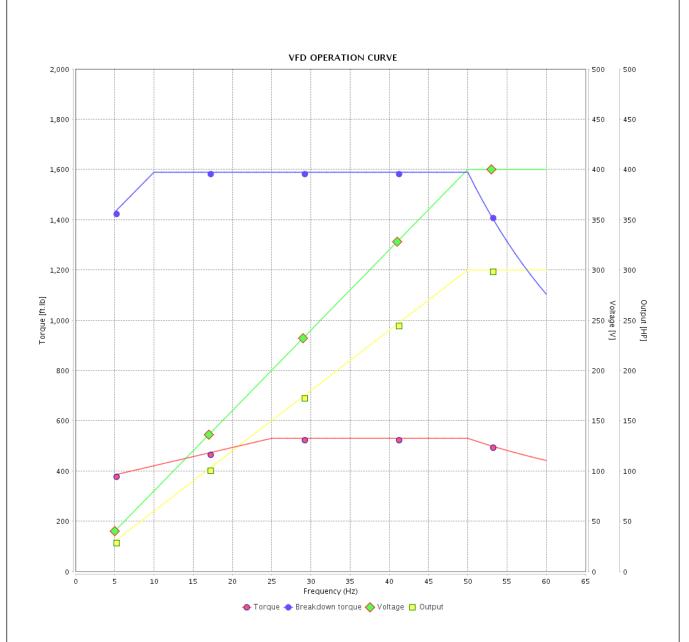
Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14439979

Phase

Catalog #: 35036ET3G449TS-W22

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Performance	: 400 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 375 A : 8.9 : 530 ft.lb : 250 % : 300 % : 2975 rpm	Moment of inertial Duty cycle Insulation class Service factor Temperature rise Design	, ,	: 68.1 sq.ft.lb : Cont.(S1) : F : 1.15 : 105 K : A	
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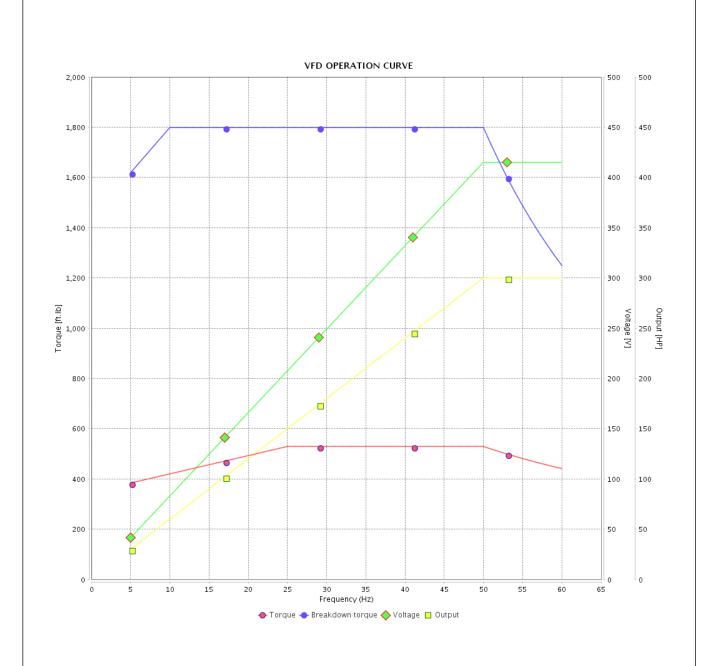
Customer

Product line : NEMA Premium Efficiency Three- Product code : 14439979

Phase

Catalog #: 35036ET3G449TS-W22

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Performance	: 415 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 362 A : 9.7 : 529 ft.lb : 270 % : 340 % : 2978 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 68.1 sq.ff.lb : Cont.(S1) : F : 1.15 : 105 K : A	
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