### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 11408913

50018ET3GRB449T-W22 Catalog #:

Frame : L447/9T Cooling method : IC411 - TEFC

Insulation class Mounting : F-1

Duty cycle : Cont.(S1) Rotation<sup>1</sup> : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line

: 1000 m.a.s.l. Approx. weight<sup>3</sup> : 3528 lb Altitude

: IP55 Protection degree

Moment of inertia (J) : 160 sq.ft.lb Design : B

_ = 33.g.:					
Output [HP]		500	450	450	450
Poles		4	4	4	4
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		568	606	589	582
L. R. Amperes [A]			5122		
LRC [A]		8.8x(Code J)	7.1x(Code G)	, , , , ,	
No load current [A	]	225	222	245	267
Rated speed [RPN	<i>/</i> 1]	1789	1487	1489	1490
Slip [%]		0.61	0.87	0.73	0.67
Rated torque [ft.lb]		1470	1590	1590	1590
Locked rotor torqu	e [%]	300	270	300	320
Breakdown torque [%]		280	260	290	310
Service factor		1.00	1.00	1.00	1.00
Temperature rise		105 K	125 K	125 K	105 K
Locked rotor time		39s (cold) 22s (hot)	37s (cold) 21s (hot) 34s (cold) 19s (hot)		32s (cold) 18s (hot)
Noise level <sup>2</sup>		79.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)
	25%	95.3	95.7	95.0	95.0
	50%	95.4	95.8	95.4	95.4
	75%	96.2	96.2	95.8	95.8
	100%	96.2	96.2	96.2	96.2
	25%	0.45	0.48	0.44	0.40
Power Factor	50%	0.72	0.74	0.70	0.66
I OWEI FACIOI	75%	0.81	0.83	0.80	0.77
	100%	0.85	0.86	0.84	0.82

Drive end Non drive end Foundation loads

Bearing type NU-322 C3 6319 C3 Max. traction : 11343 lb WSeal Sealing WSeal Max. compression : 14871 lb

8000 h

Lubricant amount 45 g 60 g Mobil Polyrex EM Lubricant type

4000 h

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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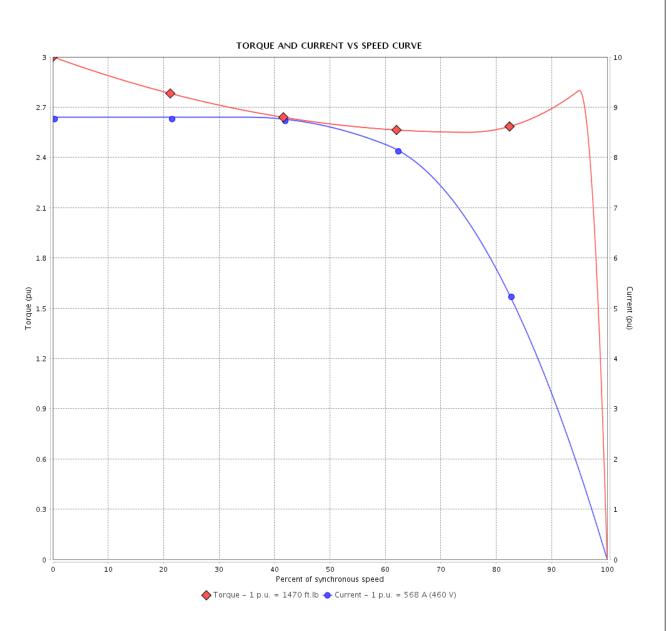


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 11408913

Phase

Catalog #: 50018ET3GRB449T-W22



Performance	: 460 V 60 Hz 4P			
Rated current	: 568 A	Moment of inertia (J)	: 160 sq.ft.lb	
LRC	: 8.8	Duty cycle	: Cont.(S1)	
Rated torque	: 1470 ft.lb	Insulation class	: F	
Locked rotor torque	: 300 %	Service factor	: 1.00	
Breakdown torque	: 280 %	Temperature rise	: 105 K	
Rated speed	: 1789 rpm	Design	: B	
Locked rotor time	: 39s (cold) 22s (hot)			

Locked rotor time : 39s (cold) 22s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 11408913 50018ET3GRB449T-W22 Catalog #: TORQUE AND CURRENT VS SPEED CURVE 2.1 1.8 Lorque (bu) 1.2 0.6 0.3 40 50 Percent of synchronous speed ◆ Torque - 1 p.u. = 1590 ft.lb ◆ Current - 1 p.u. = 606 A (380 V)

Performance	: 380 V 50 Hz 4P IE3		
Rated current LRC	: 606 A : 7.1	Moment of inertia (J) Duty cycle	: 160 sq.ft.lb : Cont.(S1)
Rated torque Locked rotor torque Breakdown torque Rated speed	: 1590 ft.lb : 270 % : 260 % : 1487 rpm	Insulation class Service factor Temperature rise Design	: F : 1.00 : 125 K : B
Locked rotor time	: 37s (cold) 21s (hot)		

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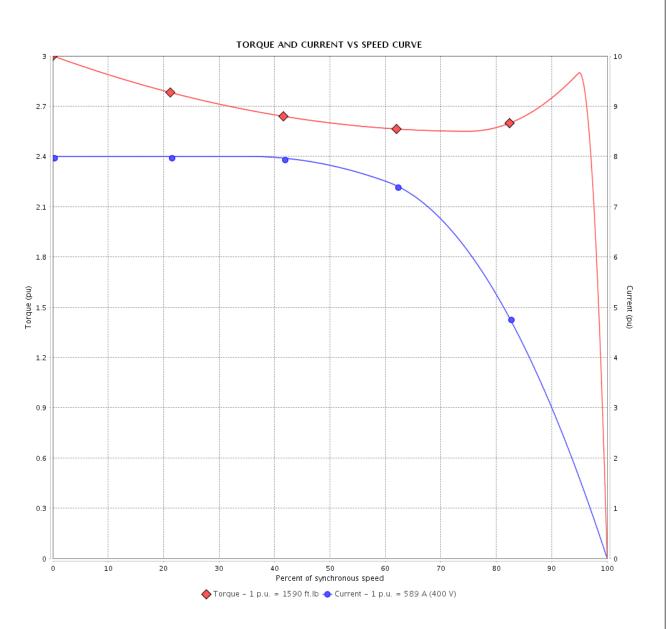


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 11408913

Phase

Catalog #: 50018ET3GRB449T-W22



Performance : 400 V 50 Hz 4P IE3 Rated current : 589 A Moment of inertia (J) : 160 sq.ft.lb **LRC** : 8.0 Duty cycle : Cont.(S1) : 1590 ft.lb Insulation class Rated torque : F Locked rotor torque : 300 % Service factor : 1.00 Breakdown torque : 290 % Temperature rise : 125 K Rated speed : 1489 rpm Design : B

Locked rotor time : 34s (cold) 19s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 11408913 Catalog #: 50018ET3GRB449T-W22 TORQUE AND CURRENT VS SPEED CURVE 4.5 3.5 Current Torque (pu) 0.5 Percent of synchronous speed ◆ Torque - 1 p.u. = 1590 ft.lb ◆ Current - 1 p.u. = 582 A (415 V) Performance : 415 V 50 Hz 4P IE3 Rated current : 582 A Moment of inertia (J) : 160 sq.ft.lb **LRC** : 8.8 Duty cycle : Cont.(S1) : 1590 ft.lb Insulation class : F Rated torque : 320 % Locked rotor torque Service factor : 1.00 : 105 K Breakdown torque : 310 % Temperature rise Rated speed : 1490 rpm Design : B Locked rotor time : 32s (cold) 18s (hot) Date Rev. Performed Checked **Changes Summary** 

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#### Three Phase Induction Motor - Squirrel Cage



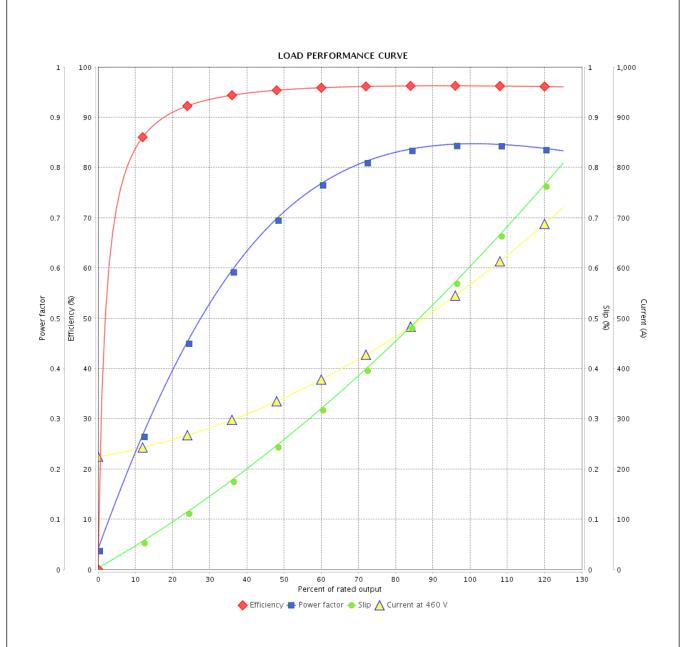
Customer :

Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 11408913

Catalog # : 50018ET3GRB449T-W22



Performance : 460 V 60 Hz 4P : 568 A Moment of inertia (J) : 160 sq.ft.lb Rated current **LRC** : 8.8 Duty cycle : Cont.(S1) : 1470 ft.lb Insulation class Rated torque : F Locked rotor torque : 300 % Service factor : 1.00 Breakdown torque : 280 % Temperature rise : 105 K Rated speed : 1789 rpm Design : B

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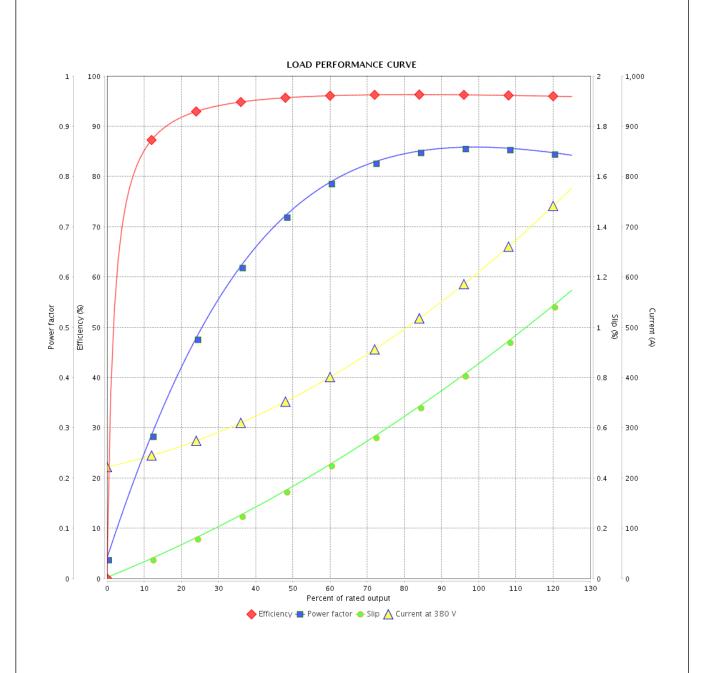


Customer

Product line : NEMA Premium Efficiency Three- Product code : 11408913

Phase

Catalog #: 50018ET3GRB449T-W22



Performance	:	380 V 50 Hz 4P IE3				
Rated current	d current : 606 A		Moment o	f inertia (J)	: 160 sq.ft.lb	
LRC	:	7.1	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	:	1590 ft.lb	Insulation	class	: F	
Locked rotor torque		270 %	Service fa	ctor	: 1.00	
Breakdown torque	:	260 %	Temperature rise		: 125 K	
Rated speed	:	1487 rpm	Design		: B	
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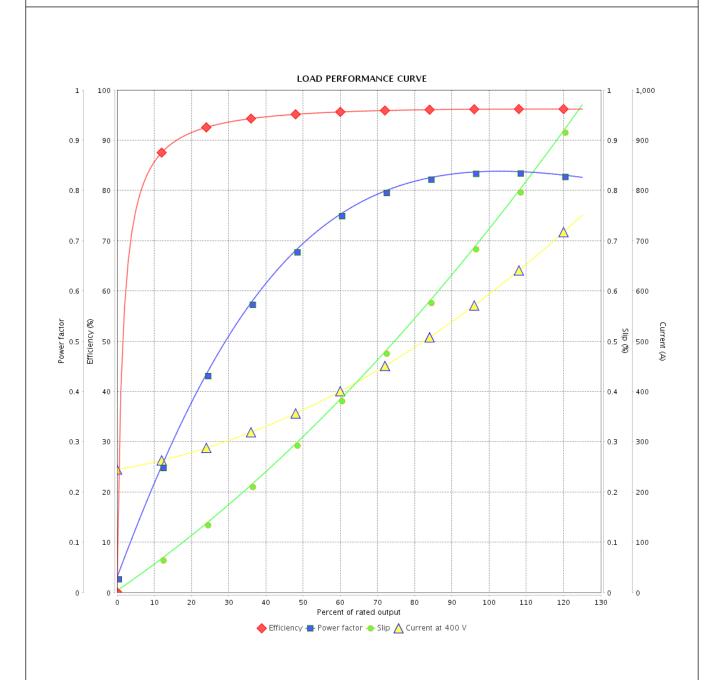
Product line : NEMA Premium Efficiency Three- Product code :

Phase

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Performance	: 400 V 50 Hz 4P IE3				
Rated current			inertia (J)	: 160 sq.ft.lb	
LRC	: 8.0	Duty cycle		: Cont.(S1)	
Rated torque	: 1590 ft.lb	Insulation of	class	: F	
Locked rotor torque	: 300 %	Service factor Temperature rise		: 1.00	
Breakdown torque	: 290 %			: 125 K	
Rated speed	: 1489 rpm	Design		: B	
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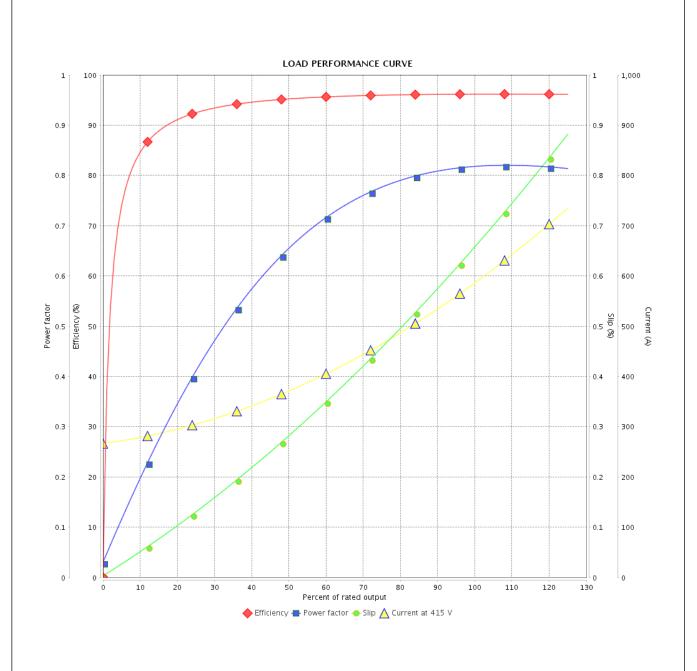


Customer

Product line : NEMA Premium Efficiency Three- Product code : 11408913

Phase

Catalog # : 50018ET3GRB449T-W22



Performance	: 4	: 415 V 50 Hz 4P IE3				
Rated current	urrent : 582 A		Moment o	f inertia (J)	: 160 sq.ft.lb	
LRC	: 8	3.8	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	: 1	1590 ft.lb	Insulation	class	: F	
Locked rotor torque	e : 3	320 %	Service fa	ctor	: 1.00	
Breakdown torque	: 3	310 %	Temperature rise		: 105 K	
Rated speed	: 1	1490 rpm	Design		: B	
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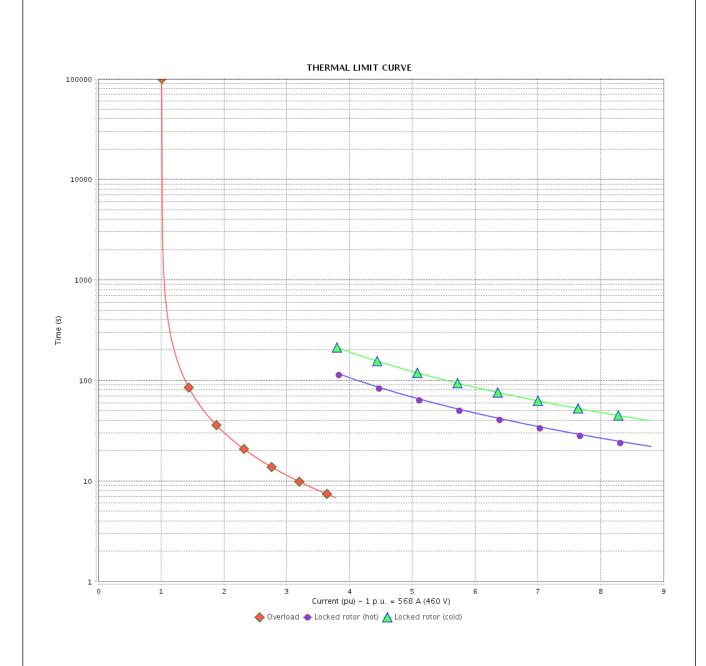


Customer	:					
Product line		NEMA Premium Efficiency	Three-	Product code :	11408913	
	PI	hase		Catalog # :	50018ET3GR	B449T-W22
Performance		60 V 60 Hz 4P				
Rated current LRC	: 56 : 8.	68 A 8	Moment o Duty cycle	f inertia (J)	: 160 sq.ft.lb : Cont.(S1)	
Rated torque	: 14	470 ft.lb	Insulation	class	: F	
Locked rotor torque Breakdown torque		00 % 30 %	Service fa Temperatu		: 1.00 : 105 K	
Rated speed		789 rpm	Design		: B	
Heating constant						
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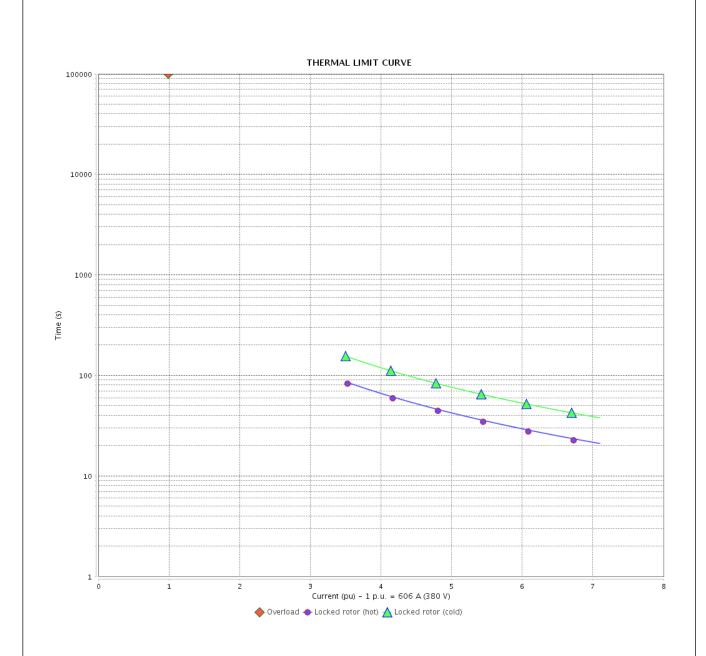


Customer	:				
Product line	: NEMA Premium Efficiency Phase		Product code :	11408913 50018ET3GR	D440T W22
			Catalog # :	500 10E 13GR	.D4491-VVZZ
Performance	: 380 V 50 Hz 4P IE3				
Rated current	: 606 A	Moment o	f inertia (J)	: 160 sq.ft.lb	
LRC	: 7.1	Duty cycle	;	: Cont.(S1)	
Rated torque	: 1590 ft.lb	Insulation		: F : 1.00	
Locked rotor torque Breakdown torque	: 270 % : 260 %	Service fa Temperatu		: 1.00 : 125 K	
Rated speed	: 1487 rpm	Design		: B	
Heating constant					
Cooling constant					
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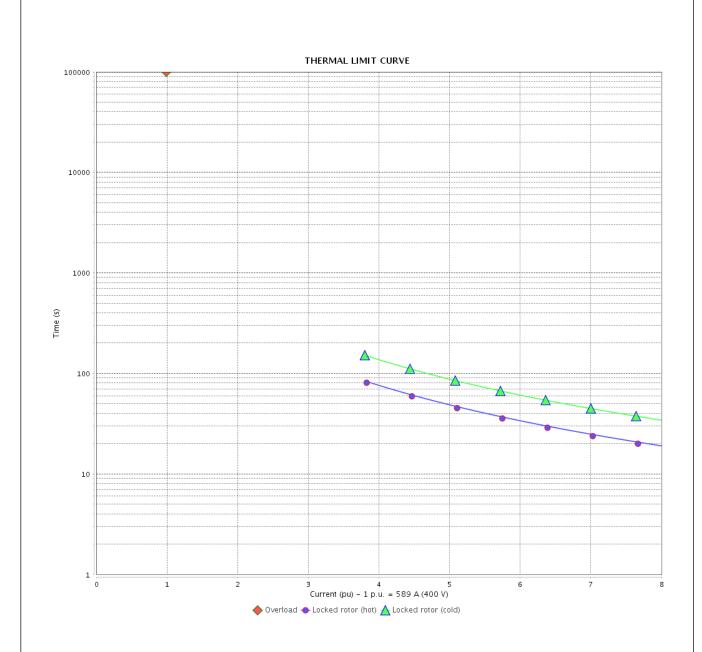


Customer	:					
Product line		NEMA Premium Efficiency	Three-	Product code :	11408913	
	P	hase	1	Catalog # :	50018ET3GR	B449T-W22
Performance		00 V 50 Hz 4P IE3		61C. (D.	400 5 "	
Rated current LRC	: 58 : 8.	39 A 0	Moment o Duty cycle	f inertia (J)	: 160 sq.ft.lb : Cont.(S1)	
Rated torque	: 15	590 ft.lb	Insulation	class	: F	
Locked rotor torque Breakdown torque		00 % 90 %	Service fa Temperatu		: 1.00 : 125 K	
Rated speed		489 rpm	Design		: B	
Heating constant						
Cooling constant						
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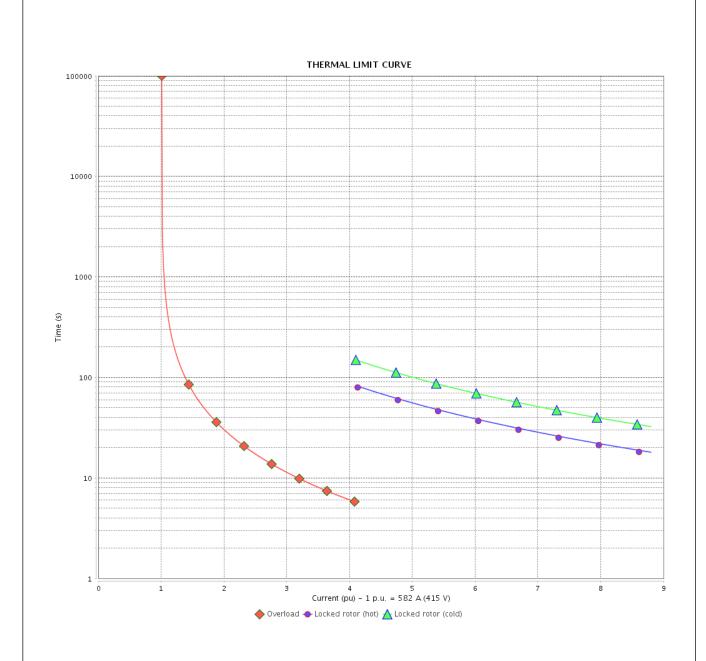


Customer		:				
Product line		: NEMA Premium Efficiency Phase		Product code : Catalog # :	11408913 50018ET3GR	B449T-W22
Performance		: 415 V 50 Hz 4P IE3				
Rated current LRC		: 582 A : 8.8	Duty cycle		: 160 sq.ft.lb : Cont.(S1)	
Rated torque Locked rotor tord		: 1590 ft.lb : 320 %	Insulation Service fa		: F : 1.00	
Breakdown torqu	ue	: 310 %	Temperat		: 105 K	
Rated speed		: 1490 rpm	Design		: B	
Heating constant						
Cooling constant	t 	Changes Summary		Performed	Checked	Date
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#### Three Phase Induction Motor - Squirrel Cage



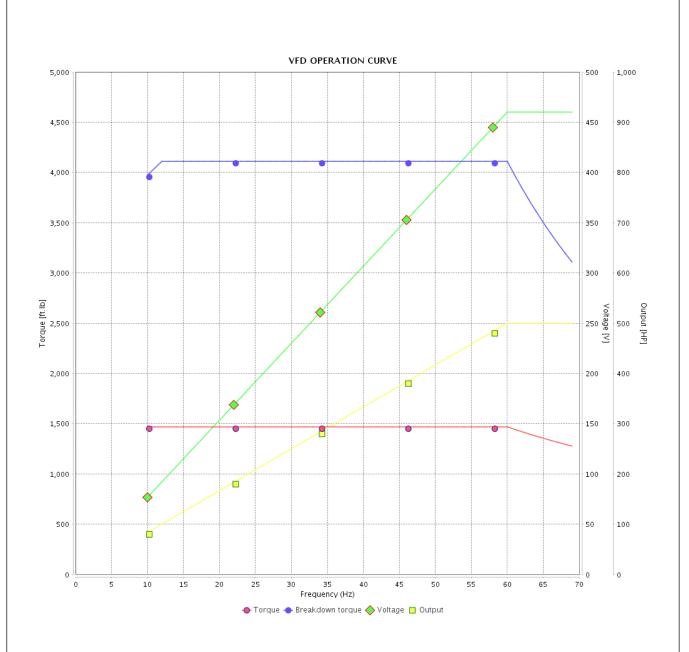
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 11408913

Catalog #: 50018ET3GRB449T-W22



Performance : 460 V 60 Hz 4P Rated current : 568 A Moment of inertia (J) : 160 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 8.8 : 1470 ft.lb Insulation class : F Rated torque Locked rotor torque : 300 % Service factor : 1.00 Breakdown torque : 280 % Temperature rise : 105 K Rated speed : 1789 rpm Design : B Rev. Performed Checked Date **Changes Summary** 

#### Three Phase Induction Motor - Squirrel Cage



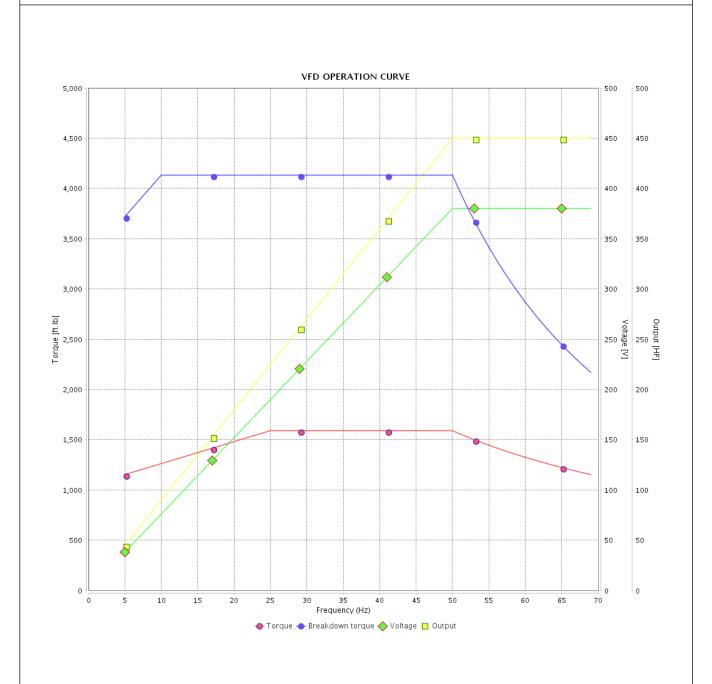
Customer

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 50018ET3GRB449T-W22

11408913



Performance	: 3	380 V 50 Hz 4P IE3				
Rated current : 6		606 A	Moment o	Moment of inertia (J)		
LRC	: 7	7.1	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	: 1	1590 ft.lb			: F	
Locked rotor torqu	ie : 2	270 %	Service factor		: 1.00	
Breakdown torque	: 2	260 %	Temperature rise		: 125 K	
Rated speed	: 1	1487 rpm	Design		: B	
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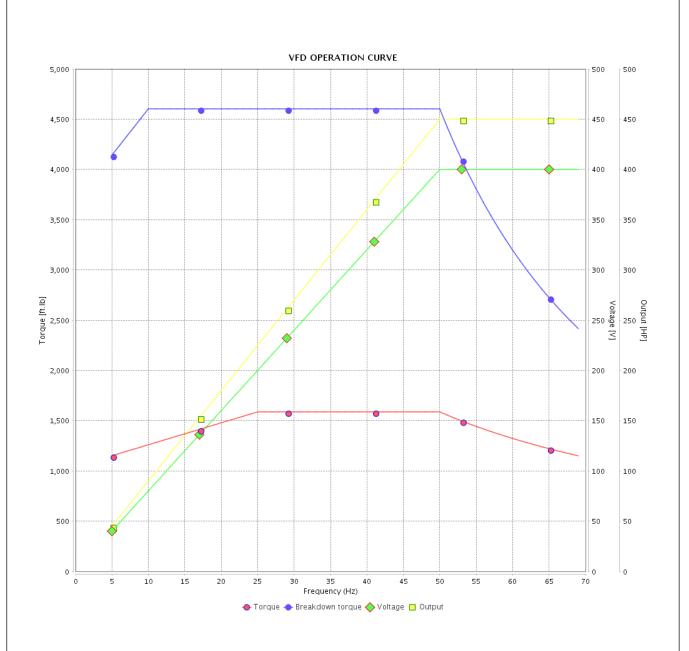
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Phase

Product code: 11408913

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Performance	: 400 V 50 Hz 4P IE3				
Rated current LRC	: 589 A : 8.0	Moment of inertia (J) Duty cycle		: 160 sq.ft.lb : Cont.(S1)	
Rated torque Locked rotor torque Breakdown torque Rated speed	: 1590 ft.lb e : 300 % : 290 % : 1489 rpm	Insulation class Service factor Temperature rise		: F : 1.00 : 125 K : B	
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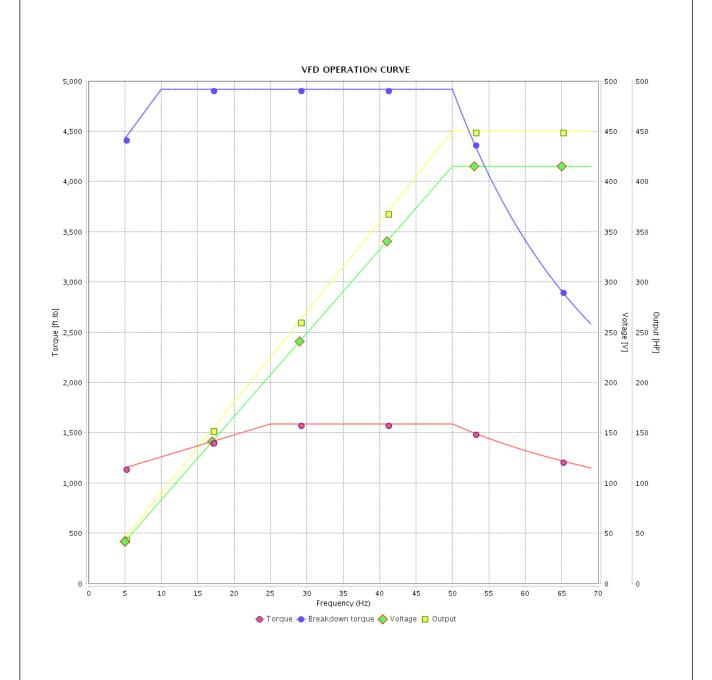


Customer

Product line : NEMA Premium Efficiency Three- Product code : 11408913

Phase

Catalog #: 50018ET3GRB449T-W22



Performance	: 4	15 V 50 Hz 4P IE3				
Rated current	: 5	: 582 A		Moment of inertia (J)		
LRC	: 8	.8	Duty cycle	;	: Cont.(S1)	
Rated torque	: 1:	590 ft.lb	Insulation	class	: F	
Locked rotor torqu	ie : 3:	20 %	Service fa	ctor	: 1.00	
Breakdown torque	: : 3	10 %	Temperature rise		: 105 K	
Rated speed	: 1	490 rpm	Design		: B	
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