#### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12408384

Phase

Catalog #: 30036XT3G449TS

Frame : 449TS Cooling method : IC411 - TEFC

Insulation class : F 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
Altitude : 1000 m.a.s.l. Approx. weight³ : 3014 lb

Altitude : 1000 m.a.s.l. Approx. weight : 3014 lb Protection degree : IP55 Moment of inertia (J) : 58.1 sq.ft.lb

Design : A Output [HP] 300 250 250 250 Poles 2 2 2 2 Frequency [Hz] 60 50 50 50 Rated voltage [V] 460 380 400 415 Rated current [A] 327 320 314 302 L. R. Amperes [A] 2518 2869 2688 2732 8.4x(Code J) 7.7x(Code H) 8.7x(Code J) 9.5x(Code K) LRC [A] No load current [A] 81.3 80.0 86.0 90.0 Rated speed [RPM] 3575 2975 2975 2980 Slip [%] 0.69 0.83 0.83 0.67 Rated torque [ft.lb] 441 441 441 441 Locked rotor torque [%] 280 240 260 280 Breakdown torque [%] 340 320 350 380 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 80 K 80 K 80 K Locked rotor time 27s (cold) 15s (hot) 25s (cold) 14s (hot) 25s (cold) 14s (hot) 25s (cold) 14s (hot) Noise level<sup>2</sup> 84.0 dB(A) 84.0 dB(A) 84.0 dB(A) 84.0 dB(A) 25% 94.0 94.4 94.4 94.0 50% 94.5 94.5 94.5 94.5 Efficiency (%) 75% 95.4 95.4 95.4 95.4 95.4 95.8 100% 95.8 95.4 25% 0.59 0.59 0.56 0.54 50% 0.79 0.82 0.82 0.80 Power Factor 75% 0.88 0.88 0.87 0.86 0.90 100% 0.90 0.89 0.89

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

Bearing type : 6314 C3 6314 C3 | Max. traction : 2956 lb Sealing : Oil Seal Lip Seal Max. compression : 5970 lb

3604 h

Lubricant amount : 27 g 27 g Lubricant type : Mobil Polyrex EM

3604 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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# DATA SHEET

### Three Phase Induction Motor - Squirrel Cage



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Customer	

#### Thermal protection

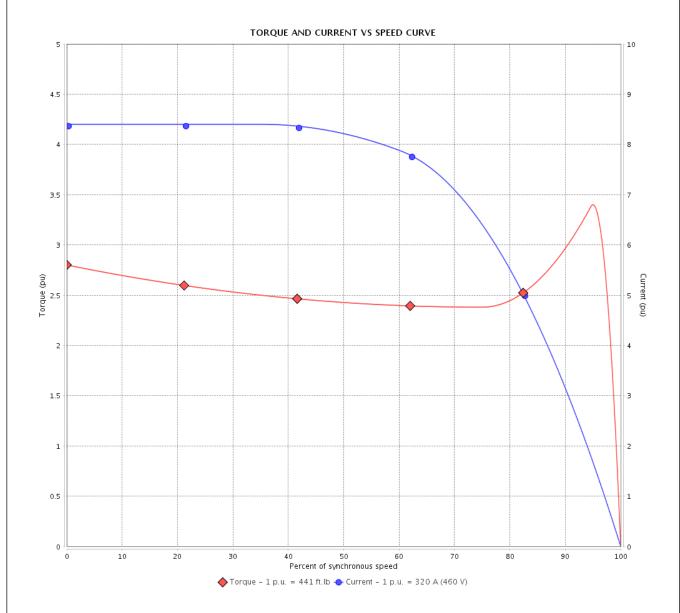
		•		
ID	Application	Туре	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 12408384 Catalog #: 30036XT3G449TS



Performance	: 460 V 60 Hz 2P			
Rated current	: 320 A	Moment of inertia (J)	: 58.1 sq.ft.lb	
LRC	: 8.4	Duty cycle	: Cont.(S1)	
Rated torque	: 441 ft.lb	Insulation class	: F	
Locked rotor torque	: 280 %	Service factor	: 1.15	
Breakdown torque	: 340 %	Temperature rise	: 80 K	
Rated speed	: 3575 rpm	Design	: A	
Locked rotor time	: 27s (cold) 15s (hot)			

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#### Three Phase Induction Motor - Squirrel Cage



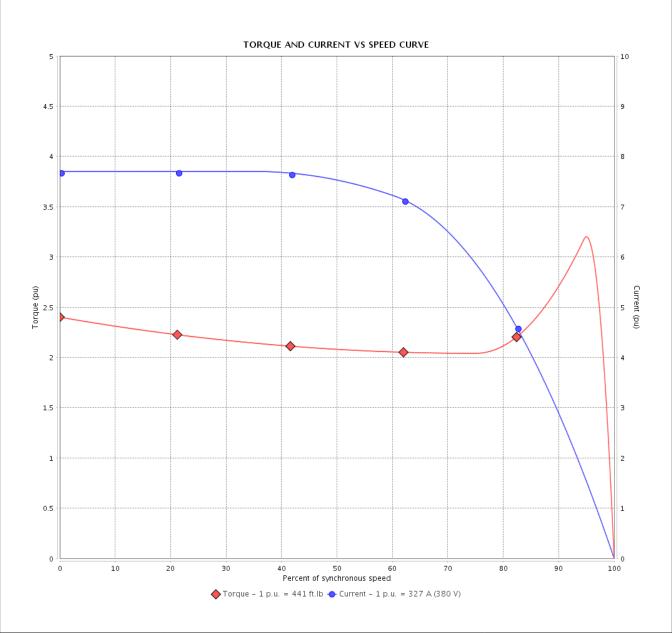
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12408384

Catalog #: 30036XT3G449TS



Performance : 380 V 50 Hz 2P IE2 Rated current : 327 A Moment of inertia (J) : 58.1 sq.ft.lb **LRC** : 7.7 Duty cycle : Cont.(S1) : F : 441 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 240 % : 1.00 : 80 K Breakdown torque : 320 % Temperature rise Rated speed : 2975 rpm Design : A

Locked rotor time : 25s (cold) 14s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 12408384 Catalog #: 30036XT3G449TS TORQUE AND CURRENT VS SPEED CURVE 4.5 3.5 Current Torque (pu) 0.5 Percent of synchronous speed ◆ Torque - 1 p.u. = 441 ft.lb ◆ Current - 1 p.u. = 314 A (400 V) Performance : 400 V 50 Hz 2P IE2 Rated current : 314 A Moment of inertia (J) : 58.1 sq.ft.lb **LRC** : 8.7 Duty cycle : Cont.(S1) Insulation class Rated torque : 441 ft.lb : F : 260 % Locked rotor torque Service factor : 1.00 Breakdown torque : 350 % Temperature rise : 80 K Rated speed : A : 2975 rpm Design Locked rotor time : 25s (cold) 14s (hot) Rev. Performed Checked Date **Changes Summary** 

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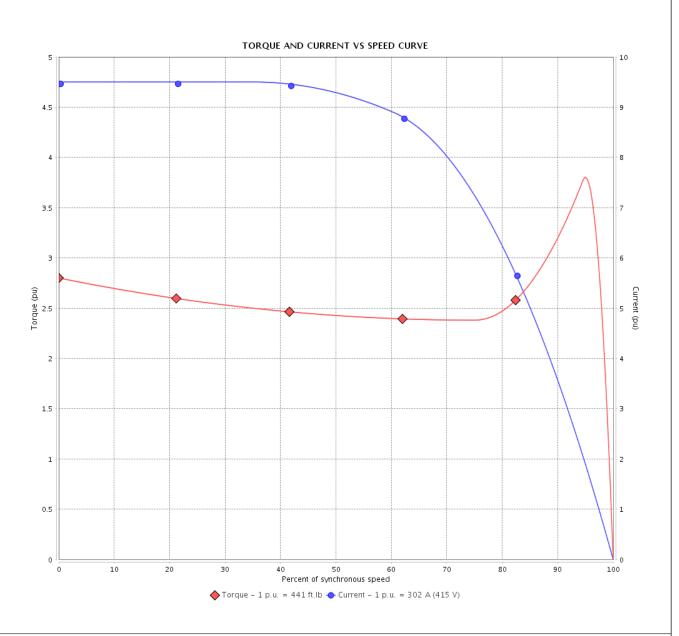


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12408384

Phase

Catalog #: 30036XT3G449TS



Performance	: 415 V 50 Hz 2P IE3			
Rated current	: 302 A	Moment of inertia (J)	: 58.1 sq.ft.lb	
LRC	: 9.5	Duty cycle	: Cont.(S1)	
Rated torque	: 441 ft.lb	Insulation class	: F	
Locked rotor torque	: 280 %	Service factor	: 1.00	
Breakdown torque	: 380 %	Temperature rise	: 80 K	
Rated speed	: 2980 rpm	Design	: A	
Looked notes times	· 25a (aald) 44a (bat)			

Locked rotor time : 25s (cold) 14s (hot)

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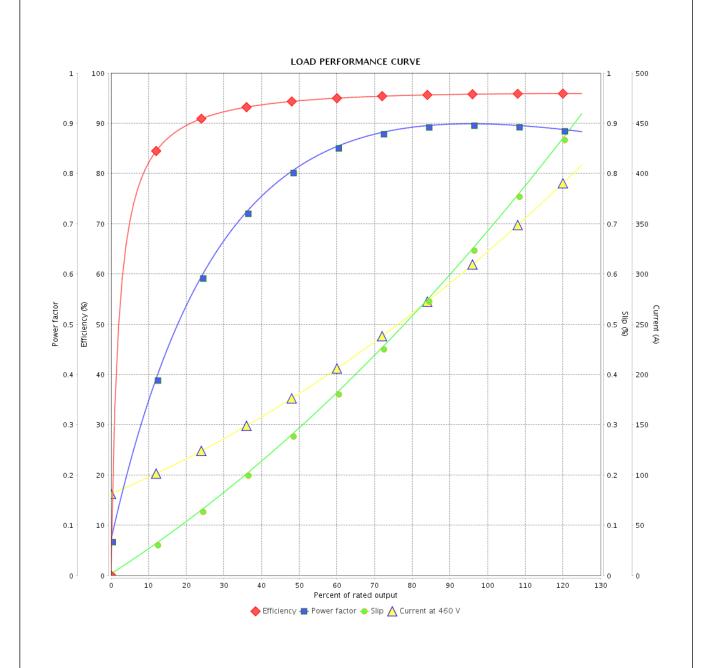


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12408384

Phase

Catalog #: 30036XT3G449TS



Performance	: 460 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 320 A : 8.4 : 441 ft.lb : 280 % : 340 % : 3575 rpm	Moment o Duty cycle Insulation Service fa Temperatu Design	class ctor	: 58.1 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : A	
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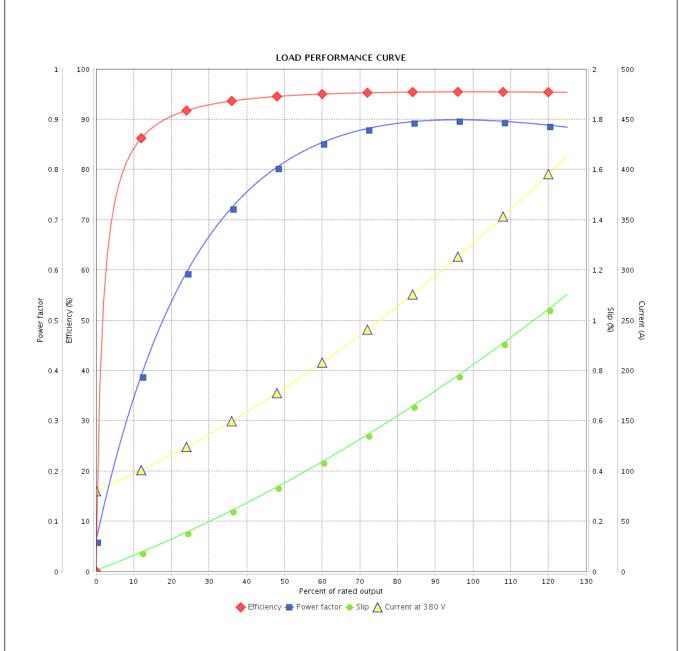
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Phase

Product code: 12408384

Catalog #: 30036XT3G449TS



Performance	: 380 V 50 Hz 2P IE2				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 327 A : 7.7 : 441 ft.lb : 240 % : 320 % : 2975 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 58.1 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : A	
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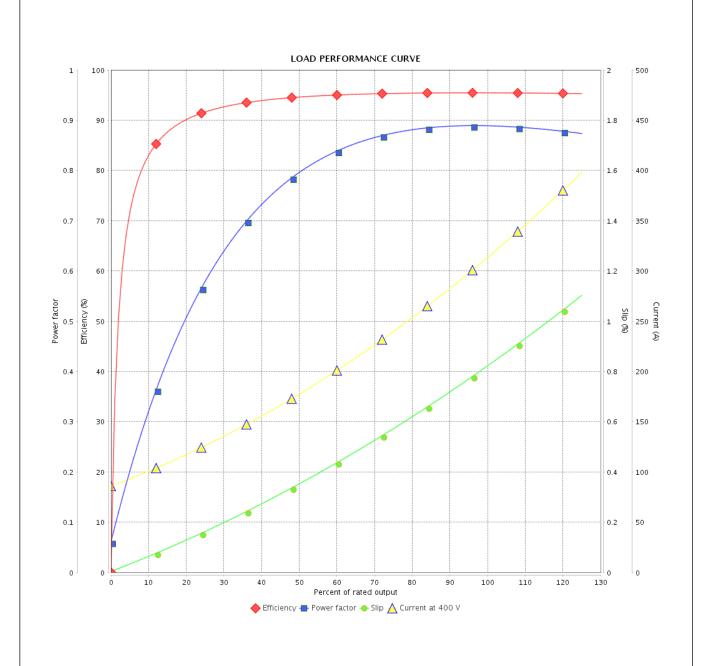
#### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12408384

Catalog #: 30036XT3G449TS



Performance	: 40	00 V 50 Hz 2P IE2					
Rated current : 3 LRC : 8		· <del>-</del>	Duty cycle	Moment of inertia (J) Duty cycle			
Rated torque Locked rotor torqu	: 441 ft.lb Insulation class ue : 260 % Service factor						
Breakdown torque Rated speed		50 % 975 rpm	Temperature rise Design		: 80 K : A		
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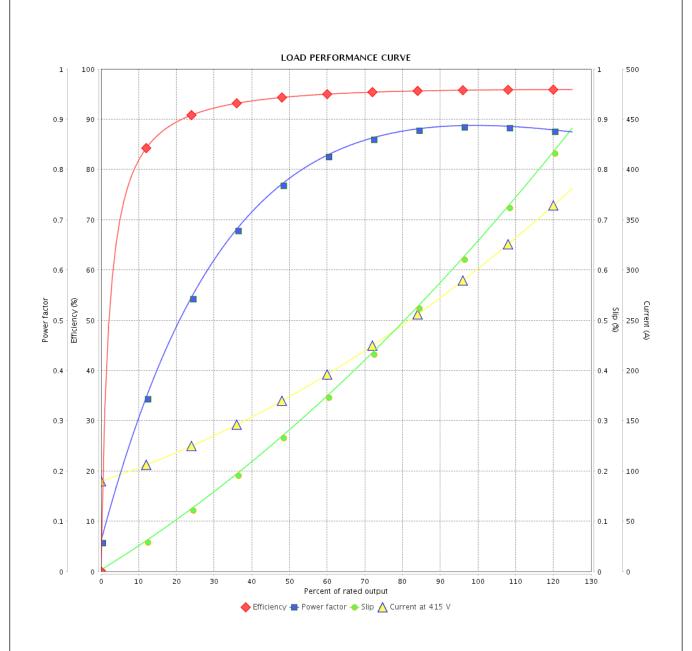


Customer

Product line : NEMA Premium Efficiency Three-

Product code: 12408384

Catalog #: 30036XT3G449TS



Performance	: 4	: 415 V 50 Hz 2P IE3						
Rated current	: 3	02 A	Moment o	of inertia (J)	: 58.1 sq.ft.lb			
LRC	: 9	.5	Duty cycle		: Cont.(S1)			
Rated torque	: 4	41 ft.lb	Insulation	Insulation class				
Locked rotor tord	que : 2	80 %	Service fa	Service factor				
Breakdown torqu	ie : 3	80 %	Temperati	Temperature rise				
Rated speed	: 2	: 2980 rpm			: A			
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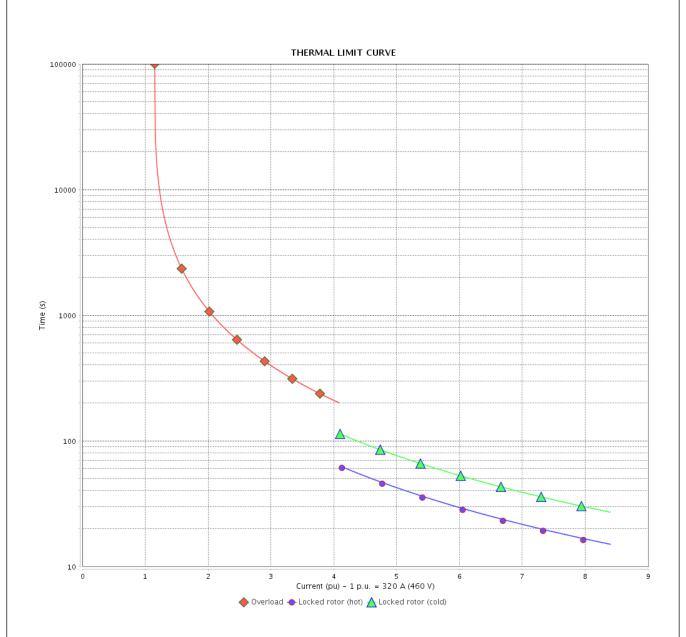


Product line	:	: NEMA Premium Efficiency 1	Γhree-	Product code :	12408384	
		Phase		Catalog # :	30036XT3G4	149TS
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	que ::	460 V 60 Hz 2P 320 A 8.4 441 ft.lb 280 % 340 %	Moment of Duty cycle Insulation Service fa Temperat Design	ı class actor	: 58.1 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : A	
Performance Rated current LRC Rated torque Locked rotor tord Breakdown torq Rated speed Heating constant	que ::	320 A 8.4 441 ft.lb 280 % 340 %	Duty cycle Insulation Service fa Temperat	e ı class actor	: Cont.(S1) : F : 1.15 : 80 K	
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	que ::	320 A 8.4 441 ft.lb 280 % 340 %	Duty cycle Insulation Service fa Temperat	e ı class actor	: Cont.(S1) : F : 1.15 : 80 K	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan Cooling constan	que ::	320 A 8.4 441 ft.lb 280 % 340 % 3575 rpm	Duty cycle Insulation Service fa Temperat	e i class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : A	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan Cooling constan Rev.	que ::	320 A 8.4 441 ft.lb 280 % 340 % 3575 rpm	Duty cycle Insulation Service fa Temperat	e i class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : A	Date
Rated current .RC Rated torque .ocked rotor tor Breakdown torq Rated speed Heating constan	que ::	320 A 8.4 441 ft.lb 280 % 340 % 3575 rpm	Duty cycle Insulation Service fa Temperat	e i class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : A	Date

### Three Phase Induction Motor - Squirrel Cage



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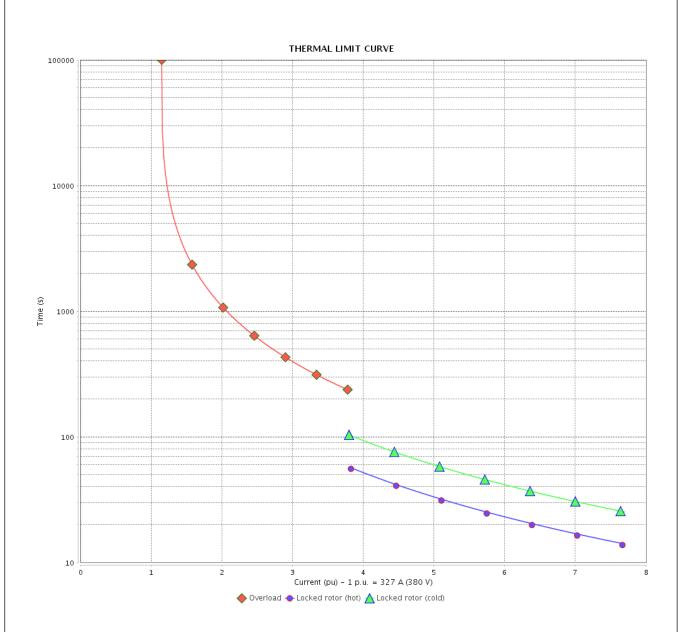


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	Pł	nase				449TS
				Catalog # .		11010
Performance Rated current LRC Rated torque Locked rotor torque Rated speed	: 32 : 7. : 44 : : 24 : : 32	30 V 50 Hz 2P IE2 27 A 7 41 ft.lb 40 % 20 %	Moment of Duty cycle Insulation Service fa Temperat Design	n class actor	: 58.1 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : A	
Heating constant Cooling constant						
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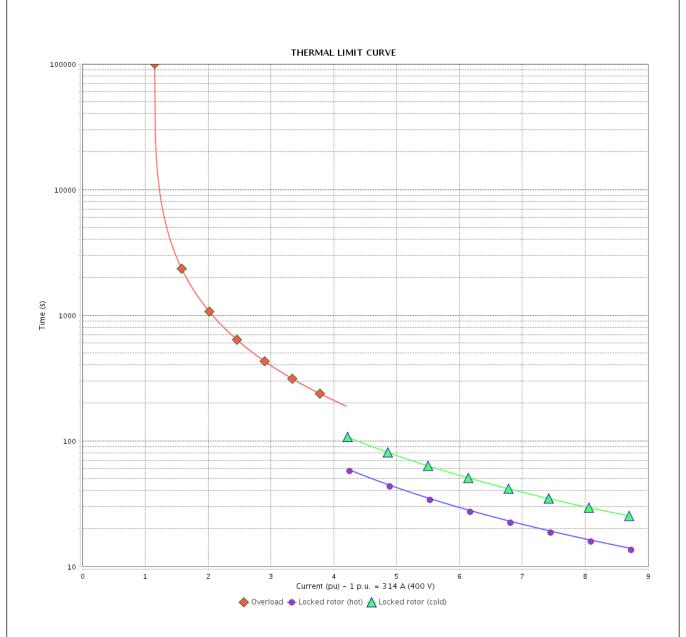


Product line	:	NEMA Premium Efficiency T Phase	hree-	Product code :	12408384	
	Г	-nase		Catalog # :	30036XT3G4	149TS
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	: 3 : 8 : 2 que : 2 ue : 3	3.7 441 ft.lb 260 % 350 %	Moment of Duty cycle Insulation Service fa Temperati Design	class ctor	: 58.1 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : A	
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	13 18 12 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	314 A 3.7 441 ft.lb 260 % 350 %	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	13 18 12 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	814 A 8.7 141 ft.lb 260 % 850 % 2975 rpm	Duty cycle Insulation Service fa Temperate	e class ictor	: Cont.(S1) : F : 1.00 : 80 K	Date
Performance Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan Cooling constan	13 18 12 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	314 A 3.7 441 ft.lb 260 % 350 %	Duty cycle Insulation Service fa Temperate	class ctor ure rise	: Cont.(S1) : F : 1.00 : 80 K : A	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan Cooling constan Rev.	13 18 12 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	814 A 8.7 141 ft.lb 260 % 850 % 2975 rpm	Duty cycle Insulation Service fa Temperate	class ctor ure rise	: Cont.(S1) : F : 1.00 : 80 K : A	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar Cooling constan	13 18 12 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	814 A 8.7 141 ft.lb 260 % 850 % 2975 rpm	Duty cycle Insulation Service fa Temperate	class ctor ure rise	: Cont.(S1) : F : 1.00 : 80 K : A	Date

### Three Phase Induction Motor - Squirrel Cage



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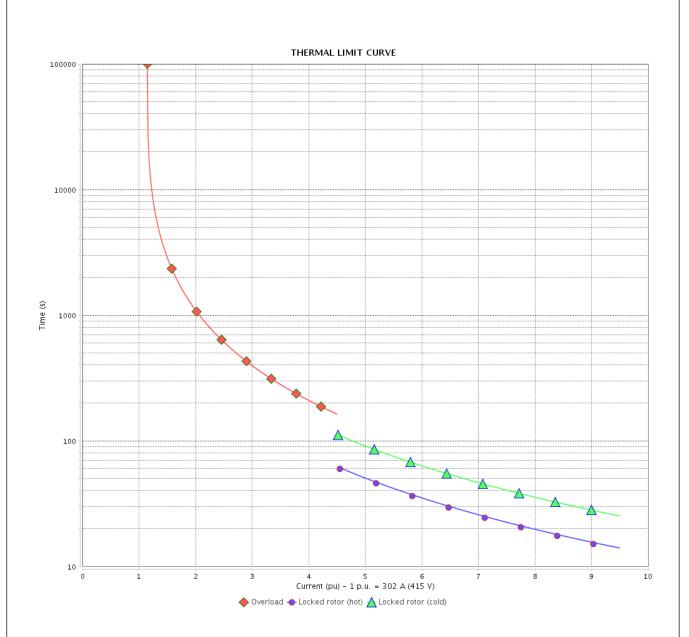


Product line	:	NEMA Premium Efficiency T	Three-	Product code :	12408384	
	P	Phase		Catalog # :	30036XT3G4	149TS
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	: 3 : 9 : 4 :que : 2 : 2	.5 41 ft.lb 80 % 80 %	Moment of Duty cycle Insulation Service fa Temperati Design	class actor	: 58.1 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : A	
Performance Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar	: 3 : 9 : 4 rque : 2 : 2 ue : 3 : 2	02 A .5 41 ft.lb 80 % 80 %	Duty cycle Insulation Service fa Temperate	e class actor	: Cont.(S1) : F : 1.00 : 80 K	
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar Cooling constar	: 3 : 9 : 4 rque : 2 : 2 ue : 3 : 2	02 A .5 41 ft.lb 80 % 80 % 980 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : A	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	: 3 : 9 : 4 rque : 2 : 2 ue : 3 : 2	02 A .5 41 ft.lb 80 % 80 %	Duty cycle Insulation Service fa Temperate	e class actor	: Cont.(S1) : F : 1.00 : 80 K	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar Cooling constar Rev.	: 3 : 9 : 4 rque : 2 : 2 ue : 3 : 2	02 A .5 41 ft.lb 80 % 80 % 980 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : A	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar Cooling constar	: 3 : 9 : 4 rque : 2 : 2 ue : 3 : 2	02 A .5 41 ft.lb 80 % 80 % 980 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : A	Date

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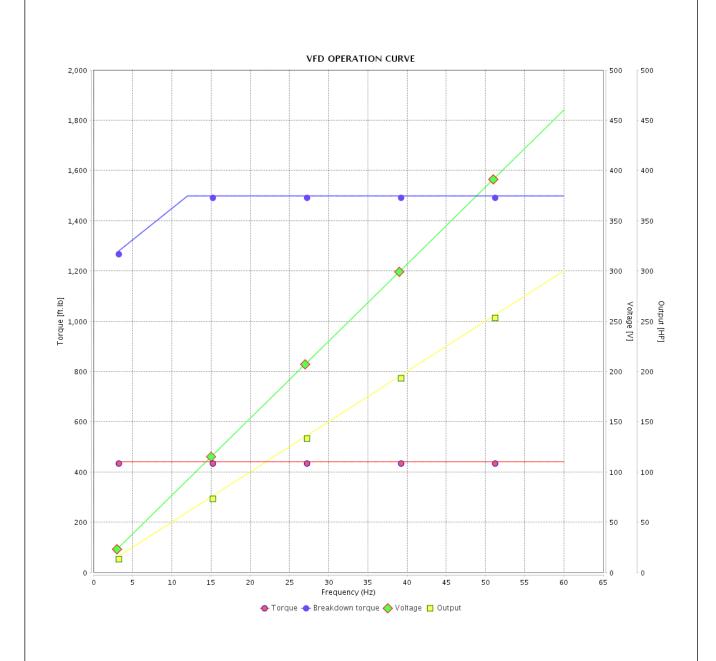


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12408384

Phase

Catalog #: 30036XT3G449TS



Performance	: 4	460 V 60 Hz 2P				
Rated current	::	: 320 A Mome		f inertia (J)	: 58.1 sq.ft.lb	
LRC	: 8.4 Duty cycle		<b>;</b>	: Cont.(S1)		
Rated torque	: 4	441 ft.lb	Insulation class		: F	
Locked rotor torque	e : 2	280 %	Service fa	ctor	: 1.15	
Breakdown torque			ıre rise	: 80 K		
Rated speed	: ;	: 3575 rpm			: A	
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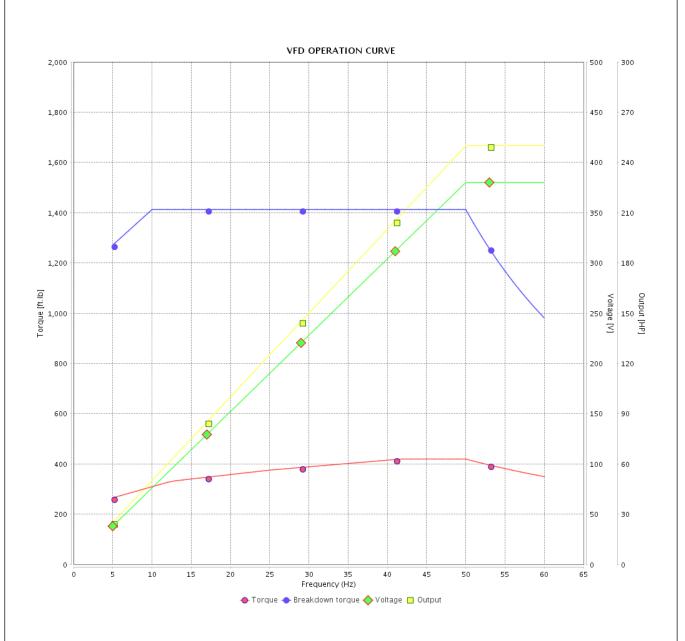
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12408384

Catalog #: 30036XT3G449TS



Performance	: 380 V 50 Hz 2P IE2				
Rated current	: 327 A	Moment of inertia (J)		: 58.1 sq.ft.lb	
LRC	: 7.7	Duty cycle		: Cont.(S1)	
Rated torque	I torque : 441 ft.lb Insulation class		class	: F : 1.00 : 80 K	
Locked rotor torque	: 240 %	Service factor Temperature rise Design			
Breakdown torque	: 320 %				
Rated speed	: 2975 rpm			: A	
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#### Three Phase Induction Motor - Squirrel Cage

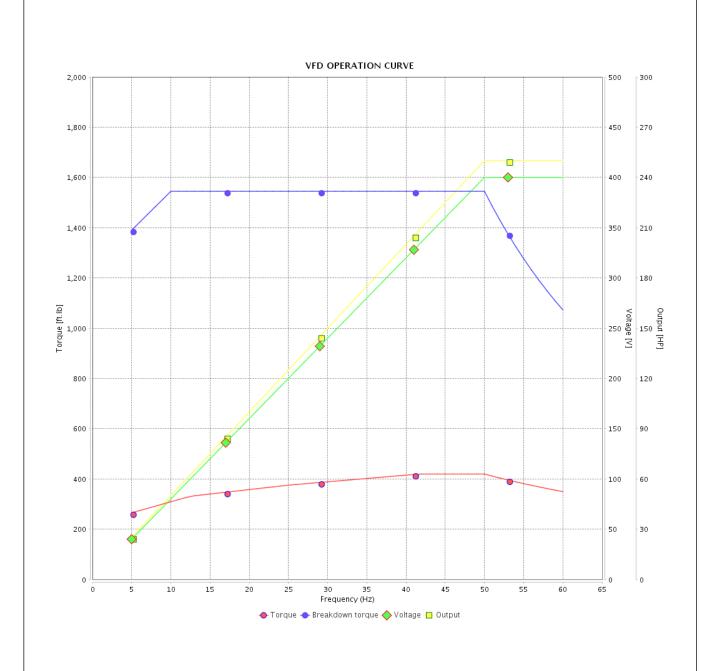


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12408384

Phase

Catalog #: 30036XT3G449TS



Performance	:	400 V 50 Hz 2P IE2				
Rated current	:	: 314 A M		f inertia (J)	: 58.1 sq.ft.lb	
LRC	: 8.7 Duty cycle		<b>;</b>	: Cont.(S1)		
Rated torque	:	441 ft.lb	Insulation class		: F	
Locked rotor torque	e :	260 %	Service factor		: 1.00	
Breakdown torque	torque : 350 % Temperature rise		ıre rise	: 80 K		
Rated speed	:	: 2975 rpm			: A	
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#### Three Phase Induction Motor - Squirrel Cage



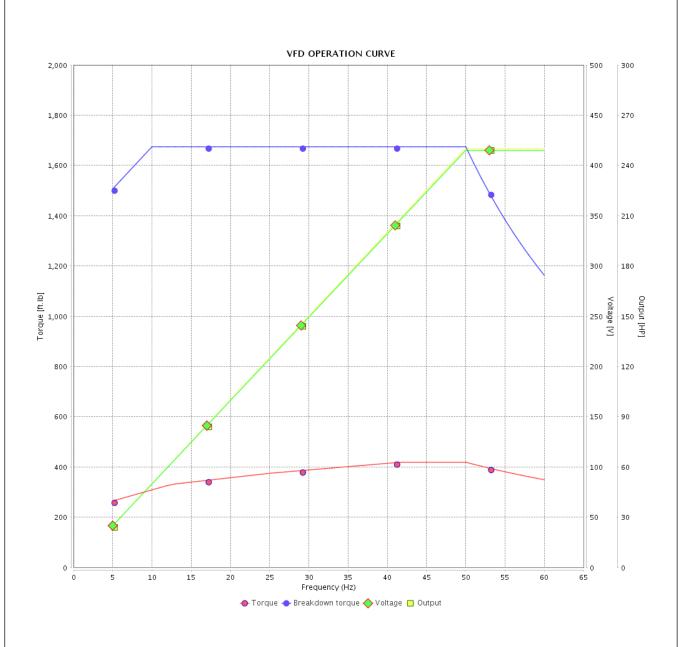
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12408384

Catalog #: 30036XT3G449TS



Performance	: 415 V 50 Hz 2P IE3			
Rated current LRC Rated torque Locked rotor torque	: 302 A : 9.5 : 441 ft.lb : 280 %	Moment of inertia (J) Duty cycle Insulation class Service factor	: 58.1 sq.ft.lb : Cont.(S1) : F : 1.00	
Breakdown torque Rated speed	: 380 % : 2980 rpm	Temperature rise Design	: 80 K : A	
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