### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12424289

Catalog #: 01009ST3QIE284T-W22

Frame : 284/6T Cooling method : IC411 - TEFC

Insulation class Mounting : F-1

Duty cycle : Cont.(S1) Rotation<sup>1</sup> : Both (CW and CCW)

: -20°C to +40°C Ambient temperature Starting method : Direct On Line

: 1000 m.a.s.l. Approx. weight<sup>3</sup> : 365 lb Altitude

Protection degree		: IP55	Moment of ine	ertia (J) : 7.20	sq.ft.lb		
Design		: B					
Output [HP]		10	10	10	10		
Poles		8	8	8	8		
Frequency [Hz]		60	50	50	50		
Rated voltage [V]		460	380	400	415		
Rated current [A]		13.4	16.1	15.3	15.1		
L. R. Amperes [A]		75.0	70.8	75.0	78.5		
LRC [A]		5.6x(Code G)	4.4x(Code E)	4.9x(Code F)	5.2x(Code G)		
No load current [A]		6.50	6.40	6.90	7.35		
Rated speed [RPN	<b>/</b> 1]	880	725	725	730		
Slip [%]		2.22	3.33	3.33	2.67		
Rated torque [ft.lb]		59.7	72.4	72.4	71.9		
Locked rotor torque [%]		200	150	170	190		
Breakdown torque [%]		240	190	210	229		
Service factor		1.25	1.00	1.15	1.15		
Temperature rise		80 K	105 K	105 K	105 K		
Locked rotor time		57s (cold) 32s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)		
Noise level <sup>2</sup>		54.0 dB(A)	52.0 dB(A)	52.0 dB(A)	52.0 dB(A)		
	25%						
Efficiency (%)	50%	89.5	89.5	88.5	88.5		
Liliciency (70)	75%	90.2	88.5	88.5	89.5		
	100%	90.2	87.5	88.5	88.5		
	25%						
Power Factor	50%	0.61	0.68	0.64	0.61		
I OWEI FACIOI	75%	0.72	0.77	0.74	0.72		
	100%		0.81	0.80	0.78		

Drive end Non drive end Foundation loads

Bearing type 6311 C3 6211 C3 Max. traction : 539 lb Sealing Inpro/Seal Inpro/Seal Max. compression : 904 lb

Lubrication interval 20000 h 20000 h Lubricant amount 18 g 11 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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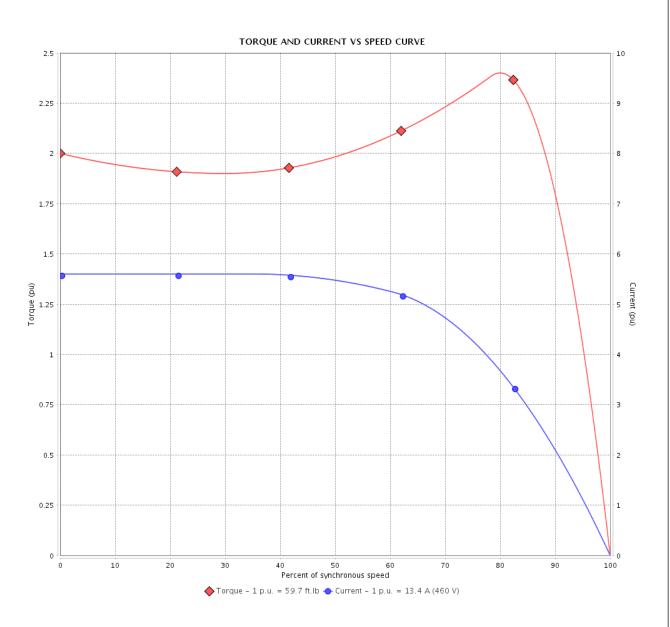
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12424289

Catalog #: 01009ST3QIE284T-W22



Performance : 460 V 60 Hz 8P Rated current : 13.4 A Moment of inertia (J) : 7.20 sq.ft.lb **LRC** : 5.6 Duty cycle : Cont.(S1) : 59.7 ft.lb Insulation class Rated torque : F Service factor Locked rotor torque : 200 % : 1.25 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : 880 rpm Design : B

Locked rotor time : 57s (cold) 32s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 12424289 Catalog #: 01009ST3QIE284T-W22 TORQUE AND CURRENT VS SPEED CURVE 4.5 1.8 3.5 1.4 1.2 Torque (pu) 0.8 0.4 0.2 0.5 Percent of synchronous speed ◆ Torque - 1 p.u. = 72.4 ft.lb ◆ Current - 1 p.u. = 16.1 A (380 V) Performance : 380 V 50 Hz 8P IE3 Rated current : 16.1 A Moment of inertia (J) : 7.20 sq.ft.lb **LRC** : 4.4 Duty cycle : Cont.(S1) : 72.4 ft.lb Insulation class Rated torque : F : 150 % Locked rotor torque Service factor : 1.00 : 105 K Breakdown torque : 190 % Temperature rise Rated speed : 725 rpm Design : B Locked rotor time : 45s (cold) 25s (hot) Date Rev. Performed Checked **Changes Summary** Performed by

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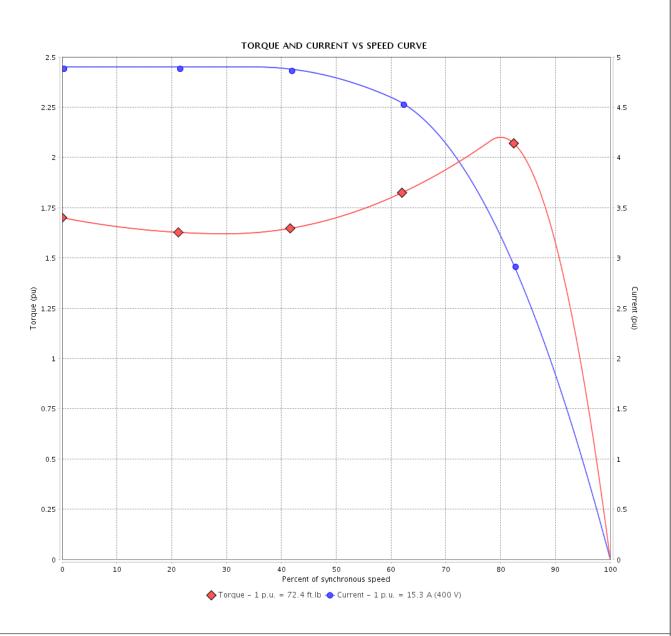
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12424289

Catalog #: 01009ST3QIE284T-W22



Performance	: 400 V 50 Hz 8P IE3		
Rated current	: 15.3 A	Moment of inertia (J)	: 7.20 sq.ft.lb
LRC	: 4.9	Duty cycle	: Cont.(S1)
Rated torque	: 72.4 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 725 rpm	Design	: B
Looked votov time	. 45a (aald) 25a (bat)		

Locked rotor time : 45s (cold) 25s (hot)

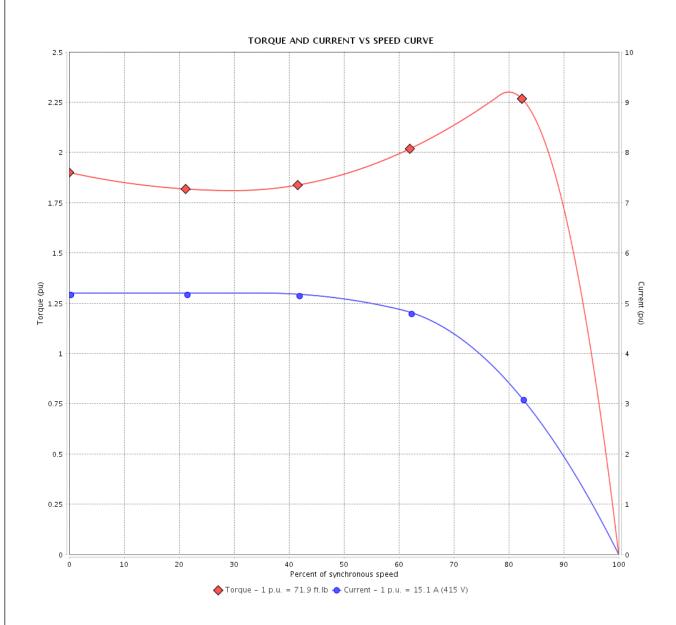
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Customer Product line : NEMA Premium Efficiency Three-Product code: 12424289

> Catalog #: 01009ST3QIE284T-W22



Performance	: 415 V 50 Hz 8P IE3		
Rated current	: 15.1 A	Moment of inertia (J)	: 7.20 sq.ft.lb
LRC	: 5.2	Duty cycle	: Cont.(S1)
Rated torque	: 71.9 ft.lb	Insulation class	:F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 730 rpm	Design	: B
Locked rotor time	: 45s (cold) 25s (hot)		-

Locked folor tilling	t . •	105 (COId) 205 (HOL)			
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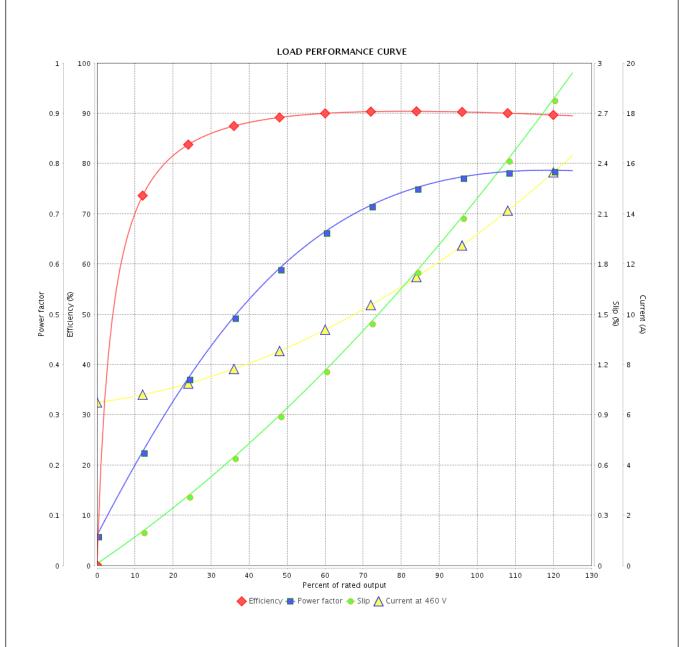
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Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 12424289

Catalog #: 01009ST3QIE284T-W22



Performance : 460 V 60 Hz 8P : 13.4 A Rated current Moment of inertia (J) : 7.20 sq.ft.lb **LRC** : 5.6 Duty cycle : Cont.(S1) : 59.7 ft.lb Insulation class Rated torque : F Locked rotor torque : 200 % Service factor : 1.25 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : 880 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

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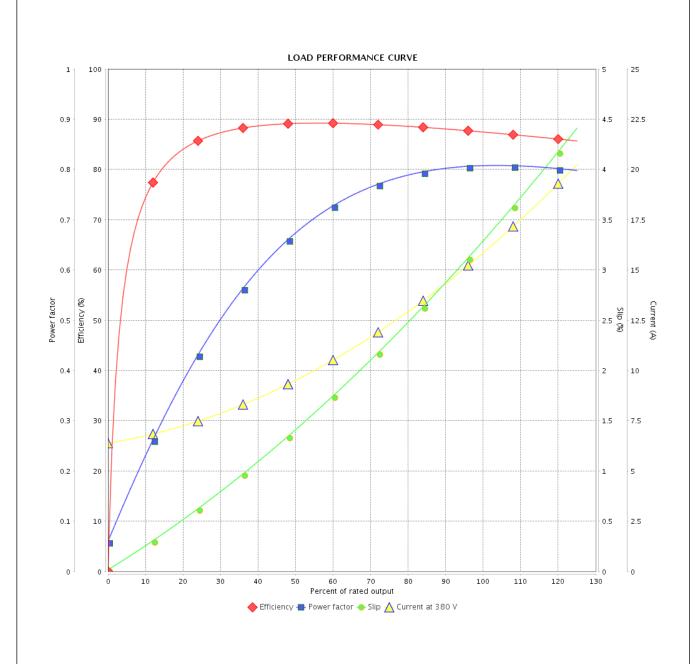


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12424289

Phase

Catalog #: 01009ST3QIE284T-W22



Performance	:	380 V 50 Hz 8P IE3	3			
Rated current	:	16.1 A	Moment o	f inertia (J)	: 7.20 sq.ft.lb	
LRC	:	4.4	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	:	72.4 ft.lb	Insulation	class	: F	
Locked rotor torqu	ie :	150 %	Service fa	ctor	: 1.00	
Breakdown torque	:	190 %	Temperati	ıre rise	: 105 K	
Rated speed	:	725 rpm	Design		: B	
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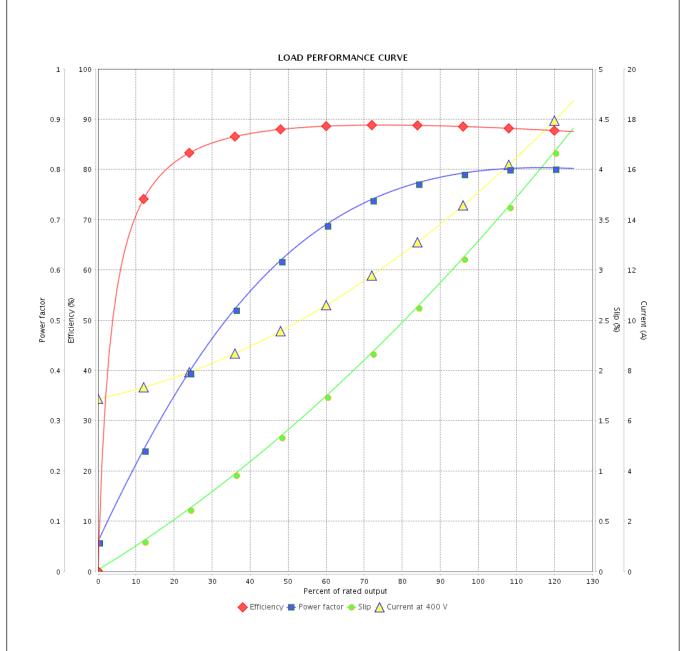
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Product line : NEMA Premium Efficiency Three- Product code : 12424289

Phase

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Performance	: 40	00 V 50 Hz 8P IE3				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 4. : 72 que : 17 ue : 21	5.3 A 9 2.4 ft.lb 70 % 10 % 25 rpm	Moment of Duty cycle Insulation Service fa Temperature Design	class ctor	: 7.20 sq.ft.lb : Cont.(S1) : F : 1.15 : 105 K : B	
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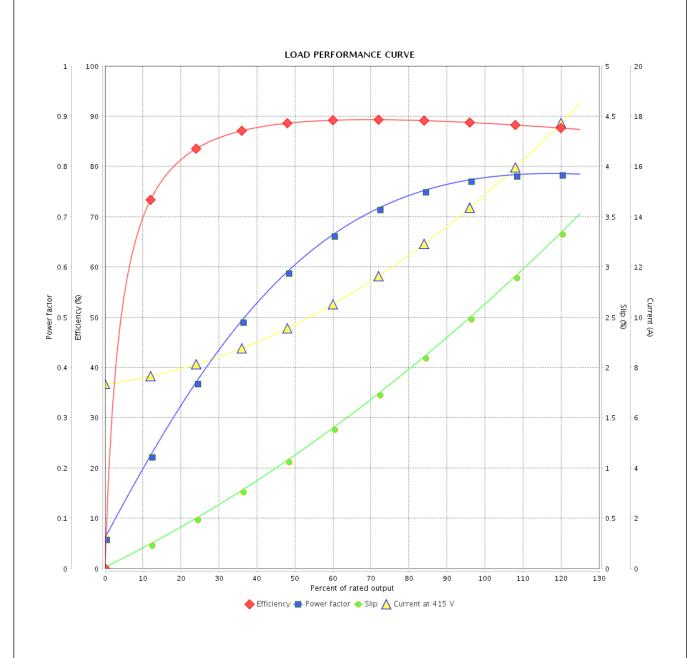
Customer

Product line : NEMA Premium Efficiency Three- Product code : 12424289

Phase

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Performance	: 415 V 50 Hz 8P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 15.1 A : 5.2 : 71.9 ft.lb : 190 % : 229 % : 730 rpm	Moment of inertia Duty cycle Insulation class Service factor Temperature rise Design	(J)	: 7.20 sq.ft.lb : Cont.(S1) : F : 1.15 : 105 K : B	
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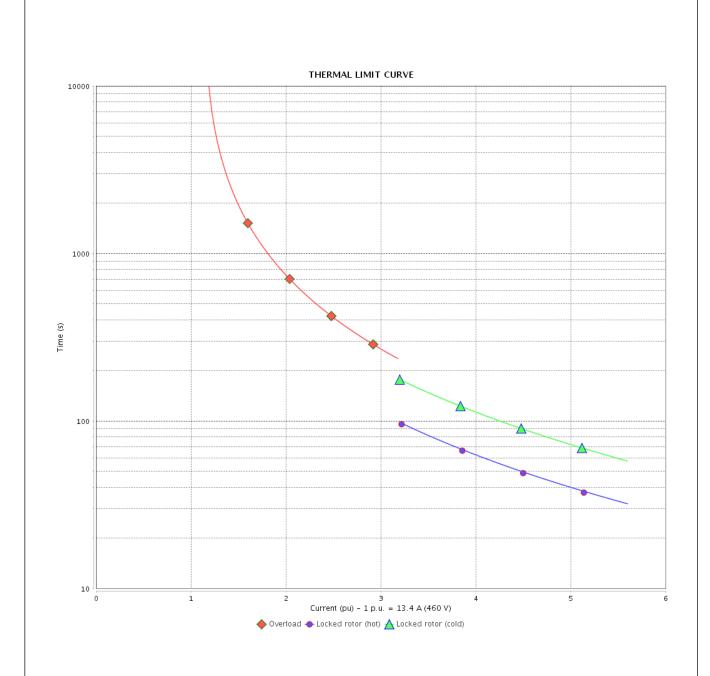


Customer		:				
Product line		: NEMA Premium Efficiency Phase		Product code : Catalog # :	12424289 01009ST3QIE	:284T-W22
Performance		460 V 60 Hz 8P				
Rated current LRC		13.4 A 5.6	Moment of Duty cycle	of inertia (J)	: 7.20 sq.ft.lb : Cont.(S1)	
Rated torque Locked rotor tord		59.7 ft.lb 200 %	Insulation Service fa	class	: F : 1.25	
Breakdown torqu	ie :	240 %	Temperati		: 80 K	
Rated speed		880 rpm	Design		: B	
Heating constant						
Cooling constant	l	Changes Summary		Performed	Checked	Date
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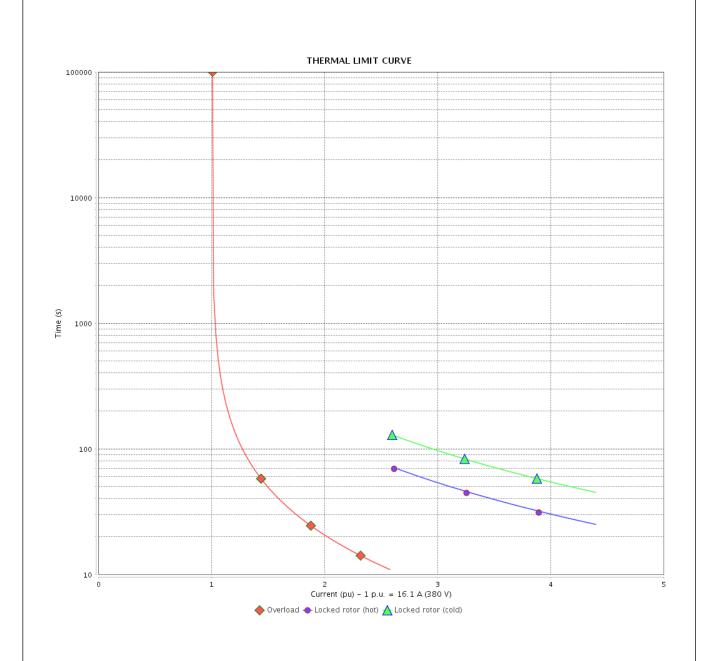


Customer	:					
Product line		NEMA Premium Efficiency	Three-	Product code :	12424289	
	P	hase		Catalog # :	01009ST3QIE	284T-W22
Performance		30 V 50 Hz 8P IE3	T			
Rated current LRC	: 16 : 4.	6.1 A 4	Moment of Duty cycle	f inertia (J)	: 7.20 sq.ft.lb : Cont.(S1)	
Rated torque	: 72	2.4 ft.lb	Insulation	class	: F	
Locked rotor torq Breakdown torqu		50 % 90 %	Service fa Temperatu		: 1.00 : 105 K	
Rated speed		25 rpm	Design	ire rise	: B	
Heating constant						
Cooling constant						
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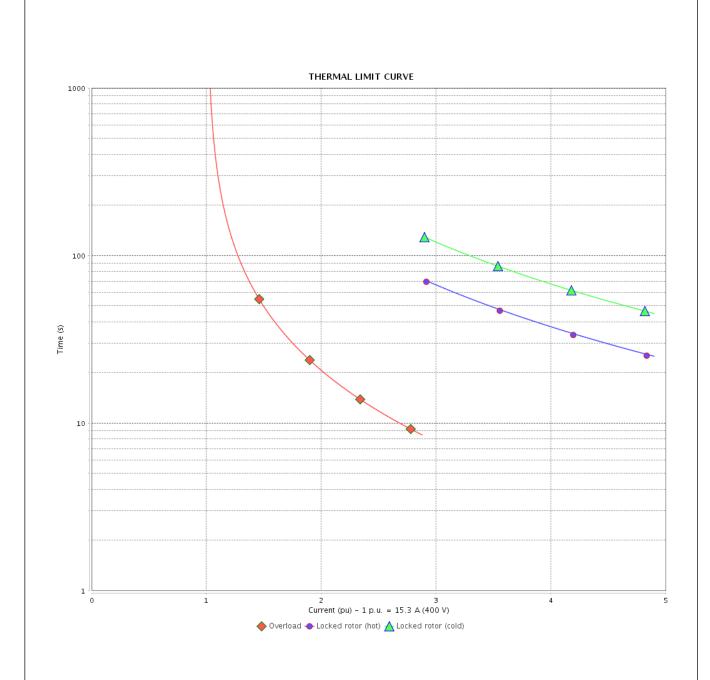


Customer		:				
Product line		: NEMA Premium Efficiency Phase		Product code : Catalog # :	12424289 01009ST3QIE	284T-W22
Performance		: 400 V 50 Hz 8P IE3				
Rated current LRC		: 15.3 A : 4.9	Moment o	of inertia (J)	: 7.20 sq.ft.lb	
Rated torque		: 72.4 ft.lb	Duty cycle Insulation	class	: Cont.(S1) : F	
Locked rotor torg		: 170 % : 210 %	Service fa		: 1.15 : 105 K	
Breakdown torqu Rated speed		: 210 % : 725 rpm	Temperat Design	uic lisc	: 105 K	
Heating constan						
Cooling constant	t	01 0				
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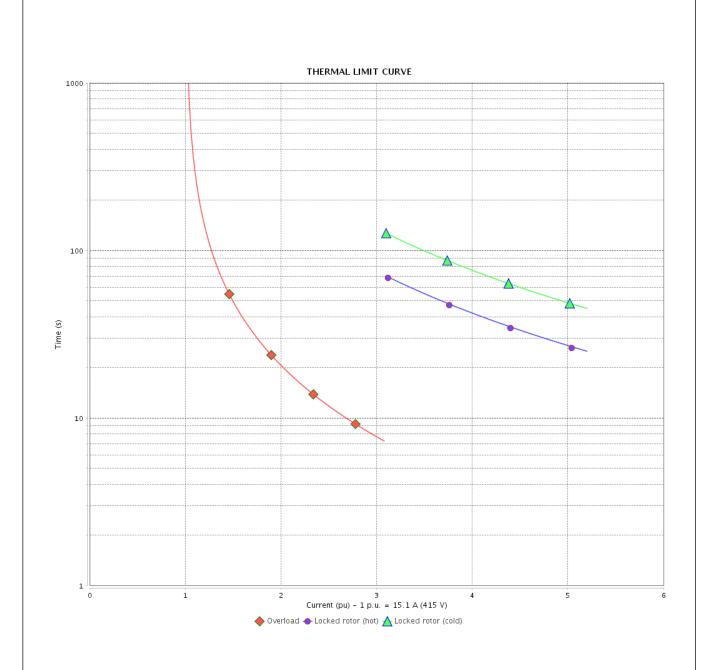


Customer		:				
Product line		: NEMA Premium Efficiency Phase		Product code : Catalog # :	12424289 01009ST3QIE	284T-W22
				<u> </u>		
Performance		: 415 V 50 Hz 8P IE3				
Rated current LRC		: 15.1 A : 5.2	Duty cycle		: 7.20 sq.ft.lb : Cont.(S1)	
Rated torque Locked rotor tord		: 71.9 ft.lb : 190 %	Insulation Service fa		: F : 1.15	
Breakdown torqu	ue	: 229 %	Temperat		: 105 K	
Rated speed		: 730 rpm	Design		: B	
Heating constant						
Cooling constant	t 	Changes Summary		Performed	Checked	Date
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Product line : NEMA Premium Efficiency Three-

Phase

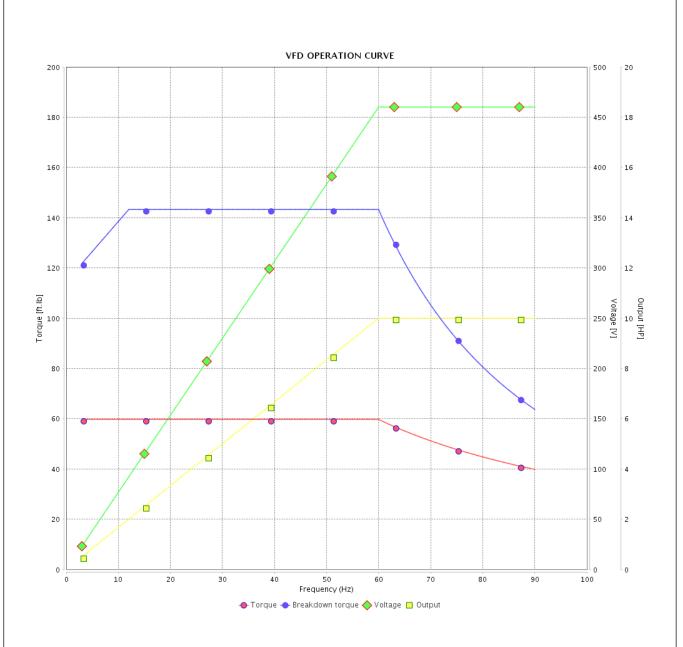
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Catalog #: 01009ST3QIE284T-W22

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Performance	: 4	60 V 60 Hz 8P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 5 : 5 jue : 2 ie : 2	3.4 A .6 9.7 ft.lb 00 % 40 % 80 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 7.20 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
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#### Three Phase Induction Motor - Squirrel Cage



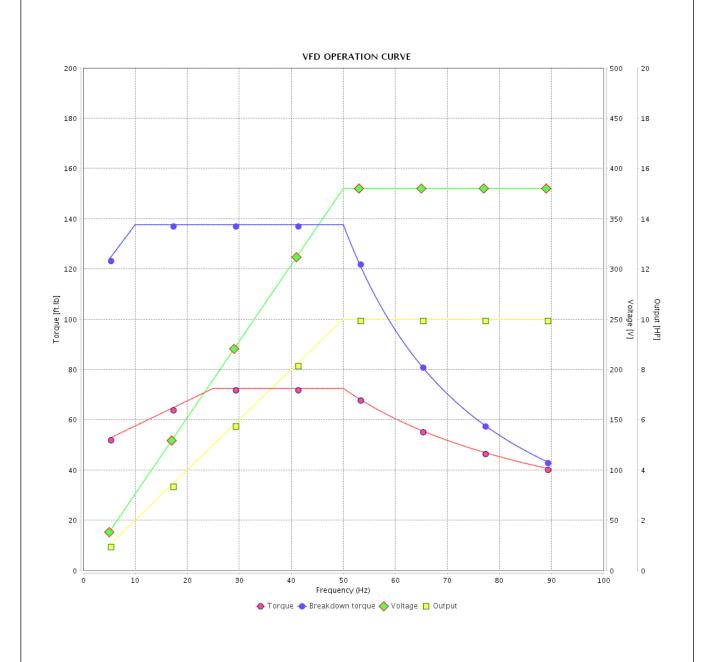
Customer

Product line : NEMA Premium Efficiency Three- Product code : 12424289

Phase

Catalog #: 01009ST3QIE284T-W22

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Performance	: 380 V 50 Hz 8P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 16.1 A : 4.4 : 72.4 ft.lb : 150 % : 190 % : 725 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 7.20 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K : B	
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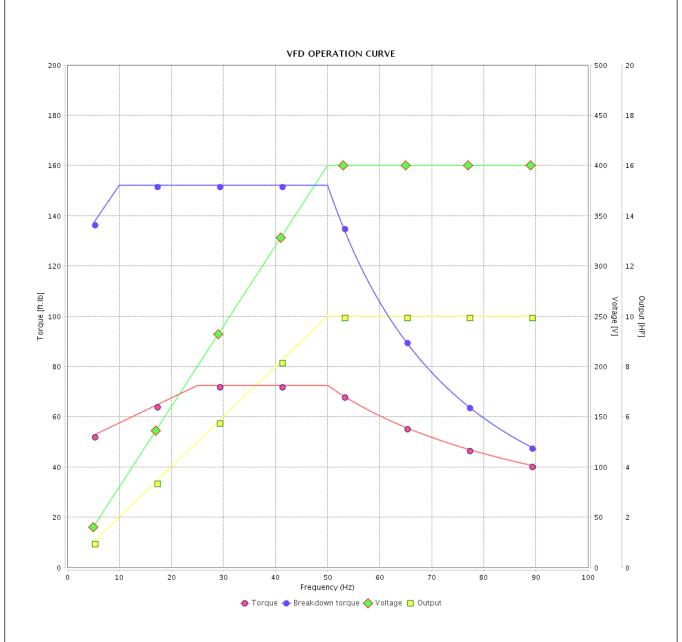
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Phase

Product code: 12424289

Catalog #: 01009ST3QIE284T-W22

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				,	
Performance	: 400 V 50 Hz 8P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 15.3 A : 4.9 : 72.4 ft.lb : 170 % : 210 % : 725 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 7.20 sq.ft.lb : Cont.(S1) : F : 1.15 : 105 K : B	
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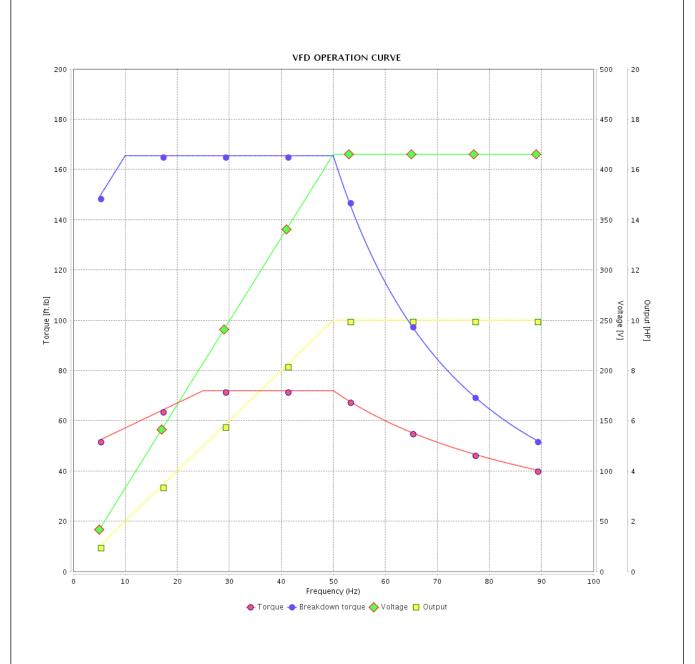


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12424289

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Catalog #: 01009ST3QIE284T-W22



Performance	: 4	15 V 50 Hz 8P IE3				
Rated current : 1		5.1 A	Moment o	Moment of inertia (J)		
LRC	: 5	.2	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque : 7		1.9 ft.lb	Insulation	class	: F	
Locked rotor torque : '		90 %	Service fa	ctor	: 1.15	
		29 %	Temperati	Temperature rise		
Rated speed	: 7	30 rpm	Design		: B	
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