DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 14422358

Catalog #: 00109XT3E182T

Frame : 182/4T 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 Altitude : 123 lb

Protection degree : IP55 Moment of inertia (J) : 0.3991 sq.ft.lb

Design		: B			
Output [HP]		1	1	1	1
Poles		8	8	8	8
Frequency [Hz]		60	50	50	50
Rated voltage [V]		230/460	380	400	415
Rated current [A]		4.80/2.40	2.52	2.56	2.61
L. R. Amperes [A]		28.8/14.4	15.1	15.4	15.7
LRC [A]		6.0x(Code N)	6.0x(Code L)	6.0x(Code M)	6.0x(Code N)
No load current [A]	3.20/1.60	1.60	1.70	1.80
Rated speed [RPI	/ 1]	875	715	715	720
Slip [%]	Slip [%]		4.67	4.67	4.00
Rated torque [ft.lb]		6.00	7.34	7.34	7.29
	Locked rotor torque [%]		240	270	300
Breakdown torque	Breakdown torque [%]		250	280	310
Service factor	Service factor		1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		39s (cold) 22s (hot)			
Noise level ²		50.0 dB(A)	46.0 dB(A)	46.0 dB(A)	46.0 dB(A)
	25%	73.7	74.4	71.5	68.4
Efficiency (%)	50%	74.0	74.7	72.0	70.0
Linciency (70)	75%	75.5	75.5	75.5	74.0
	100%	75.5	75.5	75.5	75.5
	25%	0.18	0.22	0.20	0.19
Power Factor	50%	0.32	0.38	0.35	0.33
i Owei i acioi	75%	0.42	0.50	0.46	0.43
	100%	0.52	0.60	0.56	0.53

Non drive end Foundation loads **Drive** end

6206 2RS Bearing type 6307 2RS Max. traction : 82 lb Sealing Oil Seal Lip Seal Max. compression : 206 lb

Lubrication interval Lubricant amount Lubricant type Mobil Polyrex EM

Notes

USABLE @208V 5.09A SF 1.15 SFA 5.85A

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

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: 14422358 Catalog #: 00109XT3E182T TORQUE AND CURRENT VS SPEED CURVE 4.5 3.5 Torque (pu) Current 0.5 Percent of synchronous speed ◆ Torque - 1 p.u. = 6.00 ft.lb ◆ Current - 1 p.u. = 2.40 A (460 V) Performance : 230/460 V 60 Hz 8P Rated current : 4.80/2.40 A Moment of inertia (J) : 0.3991 sq.ft.lb **LRC** : 6.0 Duty cycle : Cont.(S1) : 6.00 ft.lb Insulation class : F Rated torque : 300 % Locked rotor torque Service factor : 1.15 Breakdown torque : 350 % Temperature rise : 80 K Rated speed : 875 rpm Design : B Locked rotor time : 39s (cold) 22s (hot) Date Rev. Performed Checked **Changes Summary**

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Three Phase Induction Motor - Squirrel Cage



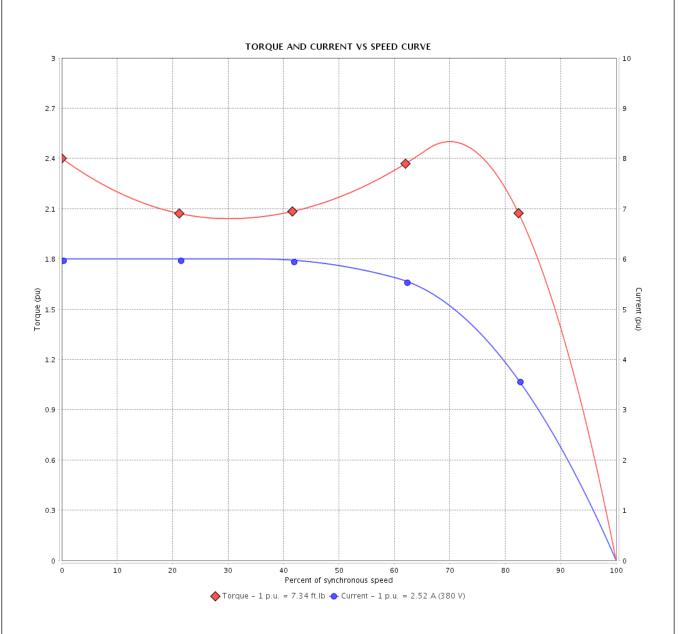
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14422358

Catalog #: 00109XT3E182T



Performance	: 380 V 50 Hz 8P IE3			
Rated current	: 2.52 A	Moment of inertia (J)	: 0.3991 sq.ft.lb	
LRC	: 6.0	Duty cycle	: Cont.(S1)	
Rated torque	: 7.34 ft.lb	Insulation class	: F	
Locked rotor torque	: 240 %	Service factor	: 1.00	
Breakdown torque	: 250 %	Temperature rise	: 80 K	
Rated speed	: 715 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: 14422358 Catalog #: 00109XT3E182T TORQUE AND CURRENT VS SPEED CURVE 2.7 2.1 1.8 Current Torque (pu) 1.2 0.6 0.3 Percent of synchronous speed ◆ Torque - 1 p.u. = 7.34 ft.lb ◆ Current - 1 p.u. = 2.56 A (400 V) Performance : 400 V 50 Hz 8P IE3 Rated current : 2.56 A Moment of inertia (J) : 0.3991 sq.ft.lb **LRC** : 6.0 Duty cycle : Cont.(S1) : 7.34 ft.lb Insulation class : F Rated torque : 270 % Locked rotor torque Service factor : 1.00 Breakdown torque : 280 % Temperature rise : 80 K Rated speed : 715 rpm Design : B Locked rotor time : 39s (cold) 22s (hot) Date Rev. Performed Checked **Changes Summary**

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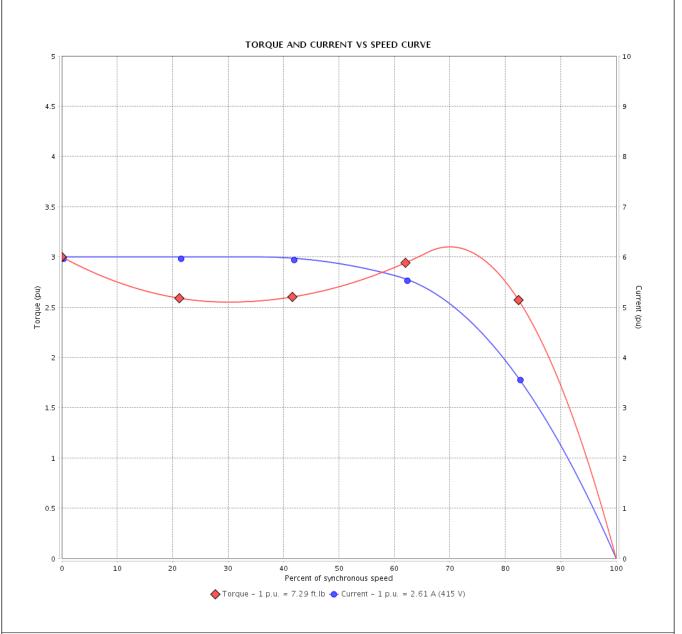
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14422358

Catalog #: 00109XT3E182T



Performance	: 415 V 50 Hz 8P IE3		
Rated current LRC	: 2.61 A : 6.0	Moment of inertia (J) Duty cycle	: 0.3991 sq.ft.lb : Cont.(S1)
Rated torque Locked rotor torque	: 7.29 ft.lb : 300 %	Insulation class Service factor	: F : 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 720 rpm	Design	: B
Looked roter time	: 20a (aald) 22a (bat)		

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

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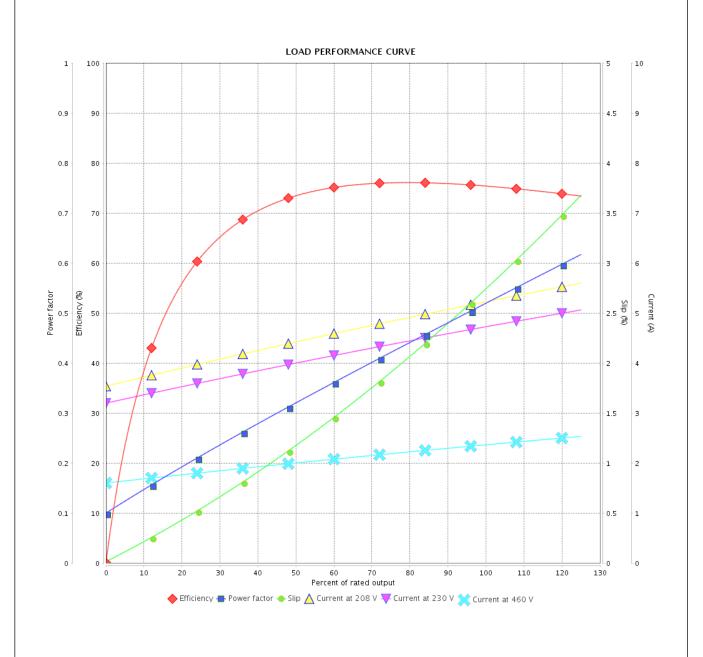


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14422358

Phase

Catalog #: 00109XT3E182T



Performance	: 2	30/460 V 60 Hz 8P				
Rated current	: 4	.80/2.40 A	Moment o	f inertia (J)	: 0.3991 sq.ft.	.lb
LRC	: 6	5.0	Duty cycle		: Cont.(S1)	
Rated torque	: 6	.00 ft.lb	Insulation	class	: F	
Locked rotor torqu	ie : 3	00 %	Service fa	ctor	: 1.15	
Breakdown torque	e : 3	50 %	Temperatu	Temperature rise		
Rated speed	: 8	75 rpm	Design		: B	
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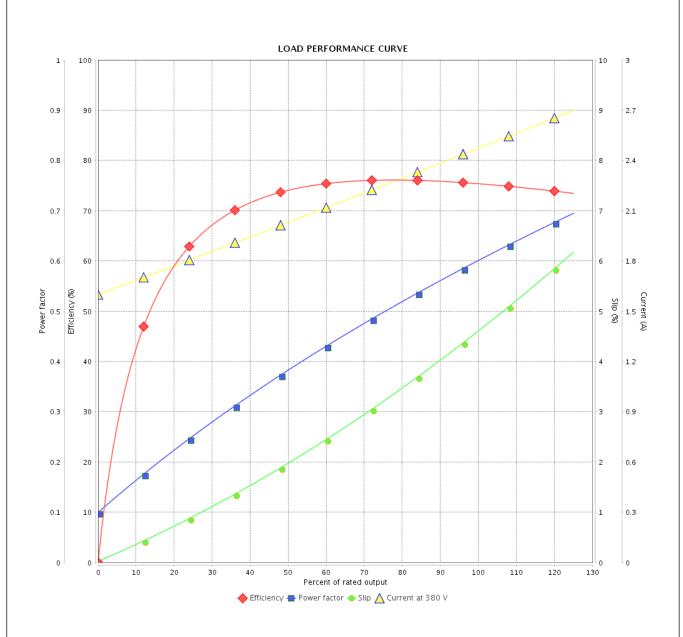
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Product line : NEMA Premium Efficiency Three- Product co

Phase

Product code: 14422358

Catalog #: 00109XT3E182T



Performance	: 380 V 50 Hz 8P IE3				
Rated current LRC Rated torque Locked rotor torq Breakdown torqu Rated speed		Moment of Duty cycle Insulation Service fa Temperat Design	class ctor	: 0.3991 sq.ft.ll : Cont.(S1) : F : 1.00 : 80 K : B	0
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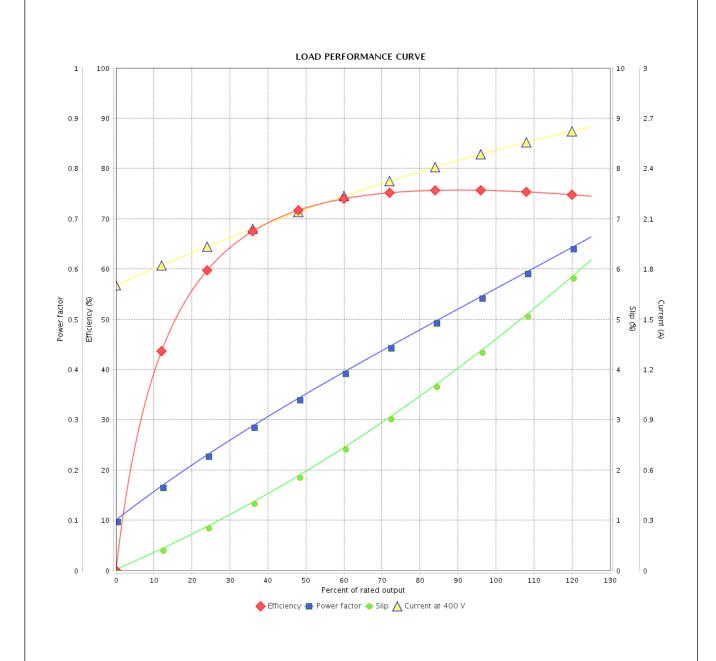


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14422358

Phase

Catalog #: 00109XT3E182T



Performance	: 40	00 V 50 Hz 8P IE3				
Rated current	: 2.	: 2.56 A Moment of		f inertia (J)	: 0.3991 sq.ft.lb	
LRC	: 6.	0	Duty cycle	;	: Cont.(S1)	
Rated torque	: 7.	34 ft.lb	Insulation	class	:F	
Locked rotor torqu	ie : 27	70 %	Service fa	ctor	: 1.00	
Breakdown torque	: 28	30 %	Temperature rise		: 80 K	
Rated speed	: 7	15 rpm	Design		: B	
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Product line : NEMA Premium Efficiency Three- Product code :

Phase

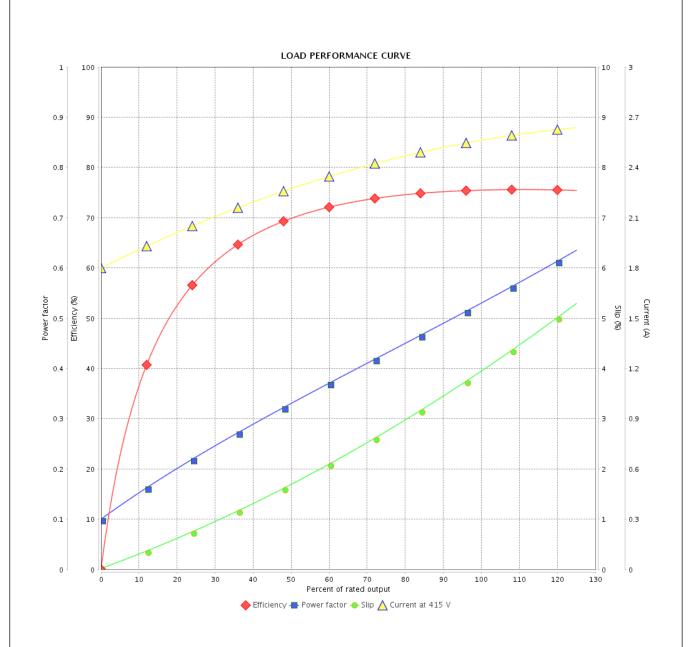
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Performance		: 415 V 50 H	z 8P IE3				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	lue le	: 2.61 A : 6.0 : 7.29 ft.lb : 300 % : 310 % : 720 rpm		Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 0.3991 sq.ft : Cont.(S1) : F : 1.00 : 80 K : B	.lb
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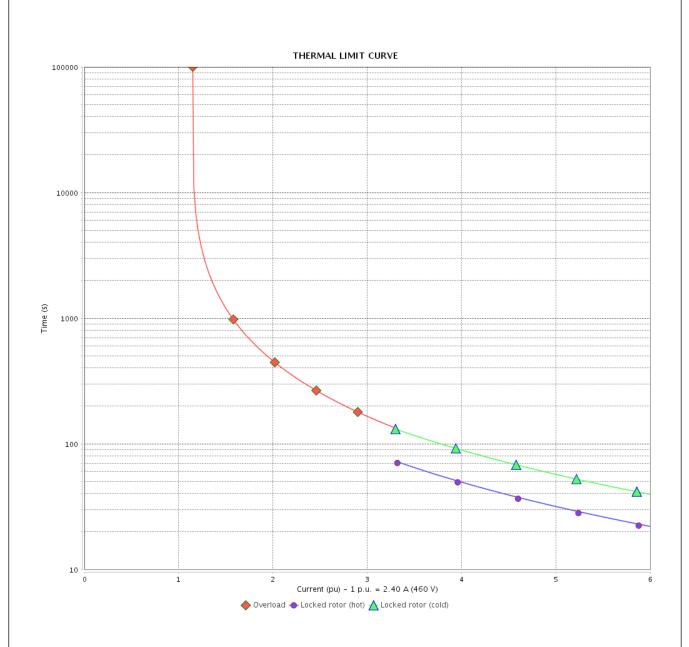


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Product line		NEMA Premium Efficiency T	hree-	Product code :	14422358	
	٢	Tiase		Catalog # :	00109XT3E1	82T
Performance Rated current .RC Rated torque .ocked rotor tor Breakdown torq Rated speed	: 4 : 6 : 6 : que : 3 : 3	.0 .00 ft.lb 00 % 50 %	Duty cycle Insulation Service fa Temperate	class actor	: 0.3991 sq.ft.ll : Cont.(S1) : F : 1.15 : 80 K : B	b
Rated current .RC Rated torque .ocked rotor tor	: 4 : 6 : 6 :que : 3 : 3 : 8	.80/2.40 A .0 .00 ft.lb 00 % 50 %	Duty cycle Insulation Service fa	e class actor	: Cont.(S1) : F : 1.15	b
Rated current .RC Rated torque .ocked rotor tor Breakdown torq Rated speed	: 4 : 6 : 6 : que : 3 : 3 : 8	.80/2.40 A .0 .00 ft.lb 00 % 50 %	Duty cycle Insulation Service fa Temperate	e class actor	: Cont.(S1) : F : 1.15 : 80 K	b
Rated current RC Rated torque ocked rotor tor Greakdown torq Rated speed	: 4 : 6 : 6 : que : 3 : 3 : 8	.80/2.40 A .0 .00 ft.lb 00 % 50 %	Duty cycle Insulation Service fa Temperate	e class actor	: Cont.(S1) : F : 1.15 : 80 K	b
Rated current RC Rated torque ocked rotor tor breakdown torq Rated speed Heating constar Cooling constar	: 4 : 6 : 6 : que : 3 : 3 : 8	.80/2.40 A .0 .00 ft.lb 00 % 50 % 75 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : B	
Rated current RC Rated torque ocked rotor tor Breakdown torq Rated speed Heating constar Cooling constar Rev.	: 4 : 6 : 6 : que : 3 : 3 : 8	.80/2.40 A .0 .00 ft.lb 00 % 50 % 75 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : B	
Rated current RC Rated torque ocked rotor tor Breakdown torq Rated speed Heating constar Cooling constar	: 4 : 6 : 6 : que : 3 : 3 : 8	.80/2.40 A .0 .00 ft.lb 00 % 50 % 75 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : B	

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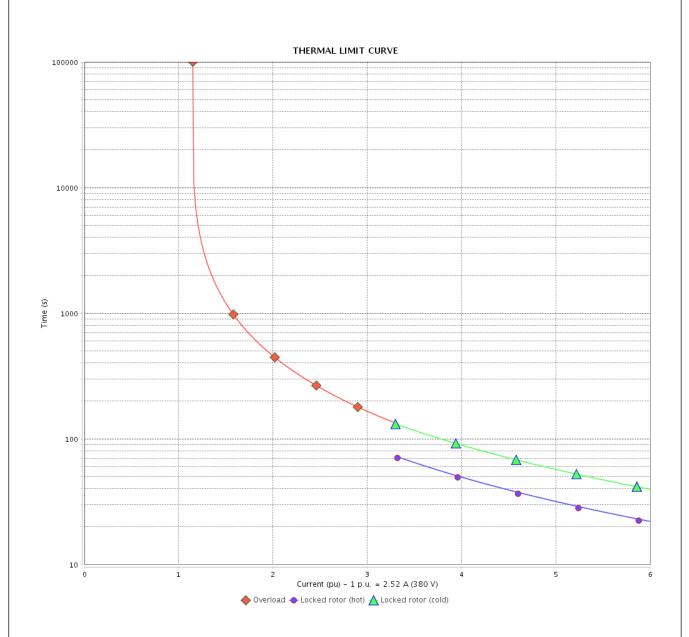


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Product line		NEMA Premium Efficiency	Three-	Product code :	14422358	
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				Catalog # :	00109XT3E1	821
Performance	: 3	80 V 50 Hz 8P IE3				
Rated current		52 A	Moment of	of inertia (J)	: 0.3991 sq.ft.l	b
LRC	: 6		Duty cycle	Э	: Cont.(S1)	
Rated torque Locked rotor tord		.34 ft.lb .40 %	Insulation Service fa		: F : 1.00	
Breakdown torqu		50 %	Temperat		: 80 K	
Rated speed		15 rpm	Design		: B	
Heating constant						
Cooling constant						
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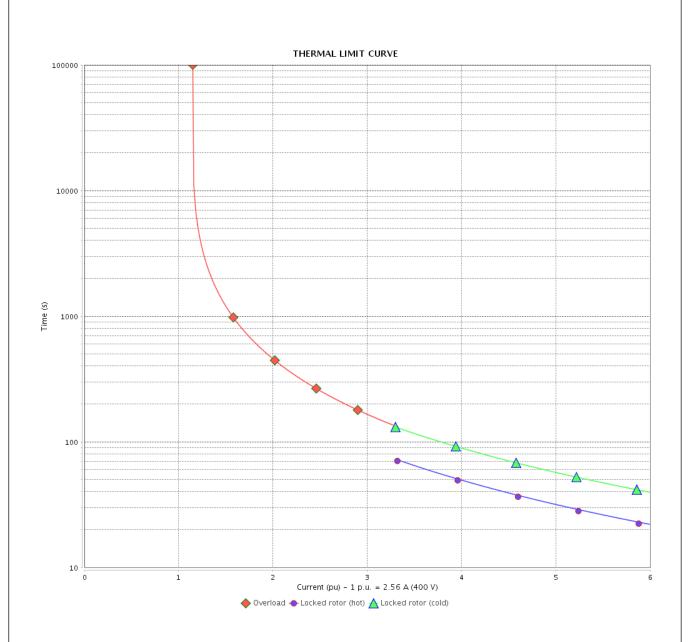


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Product line	: F	NEMA Premium Efficiency Phase	Three-	Product code :	14422358	
				Catalog # :	00109XT3E	182T
Performance	: 4	00 V 50 Hz 8P IE3				
Rated current		2.56 A		of inertia (J)	: 0.3991 sq.ft.	lb
RC Rated torque	: 6 : 7	7.34 ft.lb	Duty cycle Insulation	e ı class	: Cont.(S1) : F	
ocked rotor tord	que : 2	270 %	Service fa	actor	: 1.00	
Breakdown torqı Rated speed		280 % 715 rpm	Temperat Design	ure rise	: 80 K : B	
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Heating constan Cooling constan						
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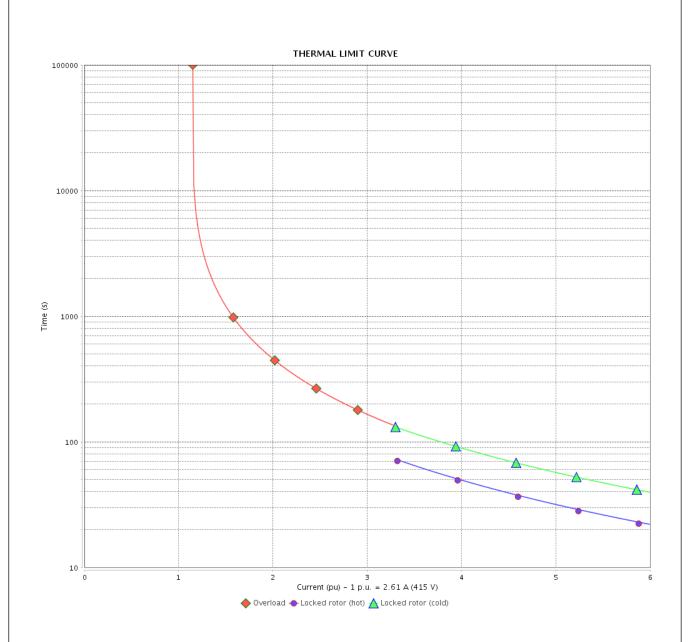


Customer	:					
Product line	:	NEMA Premium Efficiency	Three-	Product code :	14422358	
		Phase		Catalog # :	00109XT3E1	182T
Performance Rated current RC Rated torque ocked rotor tord	: 2 : 6 : 7 que : 3	2.61 A 3.0 7.29 ft.lb	Duty cycle Insulation Service fa	class actor	: 0.3991 sq.ft. : Cont.(S1) : F : 1.00	lb
Breakdown torqu Rated speed Heating constan	: 7	310 % '20 rpm	Temperat Design	ure rise	: 80 K : B	
Cooling constant		Changes Summary		Performed	Checked	Date
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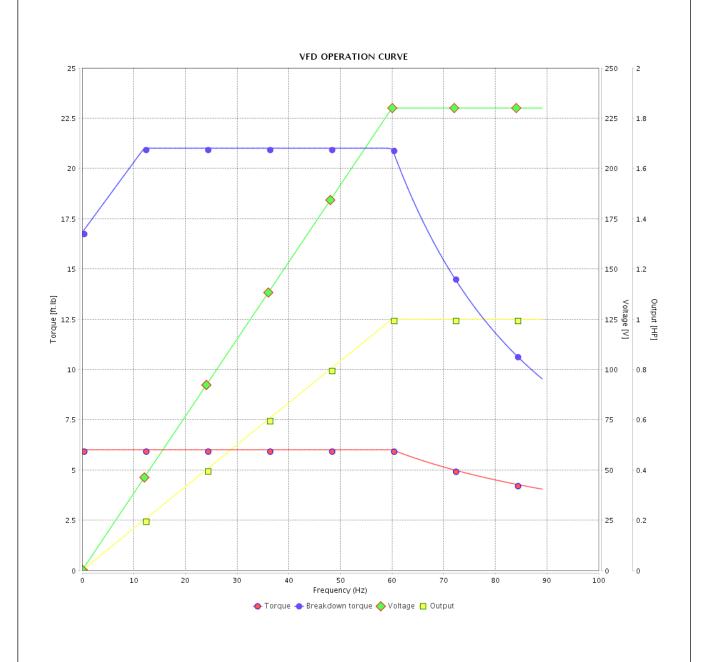
Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 00109XT3E182T

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Performance	erformance : 230/460 V 60 Hz 8P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 4.80/2.40 A : 6.0 : 6.00 ft.lb : 300 % : 350 % : 875 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.3991 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
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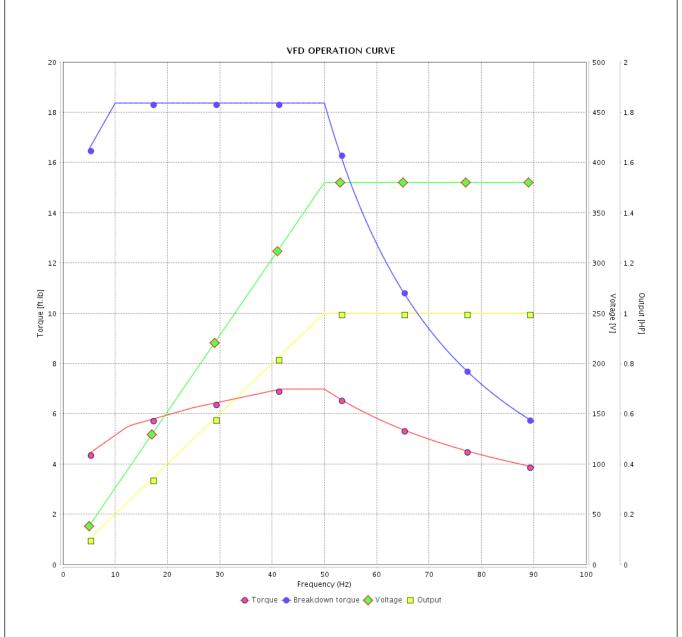
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Product line : NEMA Premium Efficiency Three- F

Phase

Product code: 14422358

Catalog #: 00109XT3E182T



Performance	: 3	880 V 50 Hz 8P IE3				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 6 : 7 que : 2	2.52 A 5.0 7.34 ft.lb 240 % 250 % 715 rpm	Moment of Duty cycle Insulation Service fa Temperation	class ctor	: 0.3991 sq.ft.I : Cont.(S1) : F : 1.00 : 80 K : B	b
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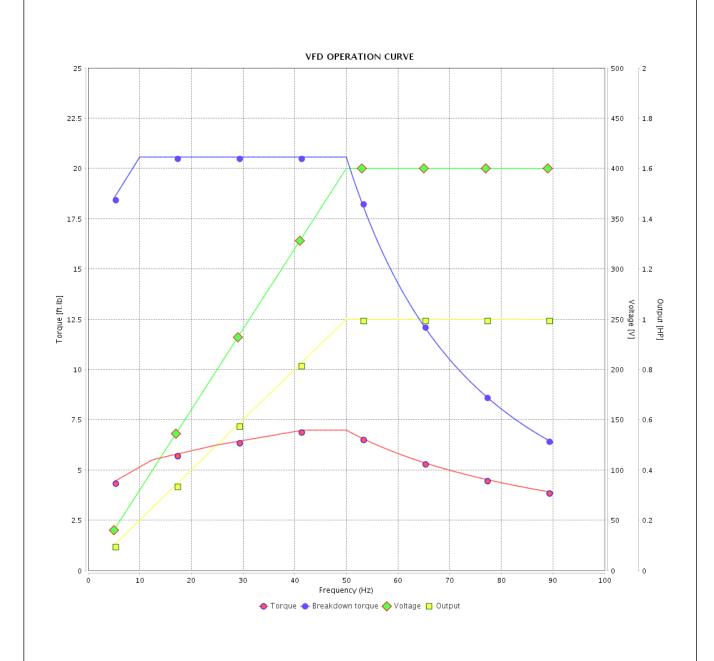
Customer

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Product code: 14422358

Catalog #: 00109XT3E182T



Performance		: 400 V 50 Hz 8P IE3				
Rated current	Rated current : 2.56 A		Moment of	Moment of inertia (J)		.lb
LRC	: 6.0 Duty cycle		;	: Cont.(S1)		
Rated torque : 7.		: 7.34 ft.lb	Insulation	class	: F	
Locked rotor tord	que	: 270 %	Service fa	Service factor		
Breakdown torqu	Breakdown torque : 280 % Temperature rise		ure rise	: 80 K		
Rated speed : 715 rpm		Design		: B		
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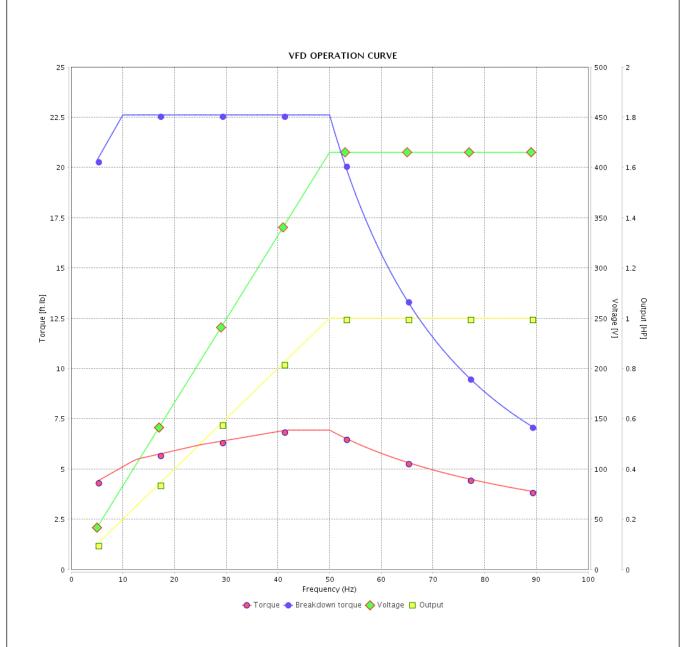
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Product line : NEMA Premium Efficiency Three- Product line : NEMA Pr

Phase

Product code: 14422358

Catalog #: 00109XT3E182T



Performance		: 415 V 50 Hz 8P	IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		: 2.61 A : 6.0 : 7.29 ft.lb : 300 % : 310 % : 720 rpm	Du Ins Se Ter	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.3991 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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