### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12373790

Catalog #: 00152ST3QIE182TC-W22

Frame : 182/4TC 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> : 106 lb Altitude

Protection degree · IP55 Moment of inertia (J) : 0.4879 sq.ft.lb

Protection degree		: IP55	Moment of ine	ertia (J) : 0.48	79 sq.π.lb
Design		: B			
Output [HP]		1.5	1.5	1.5	1.5
Poles		6	6	6	6
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		2.54	2.68	2.62	2.64
L. R. Amperes [A]		19.8	16.9	18.1	19.5
LRC [A]		7.8x(Code M)	6.3x(Code J)	6.9x(Code K)	7.4x(Code L)
No load current [A	]	1.63	1.60	1.71	1.80
Rated speed [RPI	<b>/</b> []	1170	955	960	965
Slip [%]		2.50	4.50	4.00	3.50
Rated torque [ft.lb]	]	6.73	8.25	8.21	8.16
Locked rotor torqu	e [%]	320	250	300 330	
Breakdown torque	[%]	400	290	330	370
Service factor		1.25	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		28s (cold) 16s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level <sup>2</sup>		52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
	25%	82.8	86.0	84.1	82.8
Efficiency (9/)	50%	84.0	85.5	84.5	84.0
Efficiency (%)	75%	86.5	86.5	86.5	85.5
	100%	87.5	85.5	86.5	86.5
	25%	0.25	0.29	0.27	0.25
Power Factor	50%	0.45	0.52	0.48	0.45
FUWEI FACIOI	75%	0.54	0.63	0.60	0.57
	100%	0.62	0.73	0.70	0.67

Non drive end Foundation loads **Drive** end

Bearing type 6207 C3 6206 C3 Max. traction : 140 lb Sealing Inpro/Seal Inpro/Seal Max. compression : 246 lb

20000 h Lubrication interval 20000 h 5 g Lubricant amount 7 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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#### Three Phase Induction Motor - Squirrel Cage



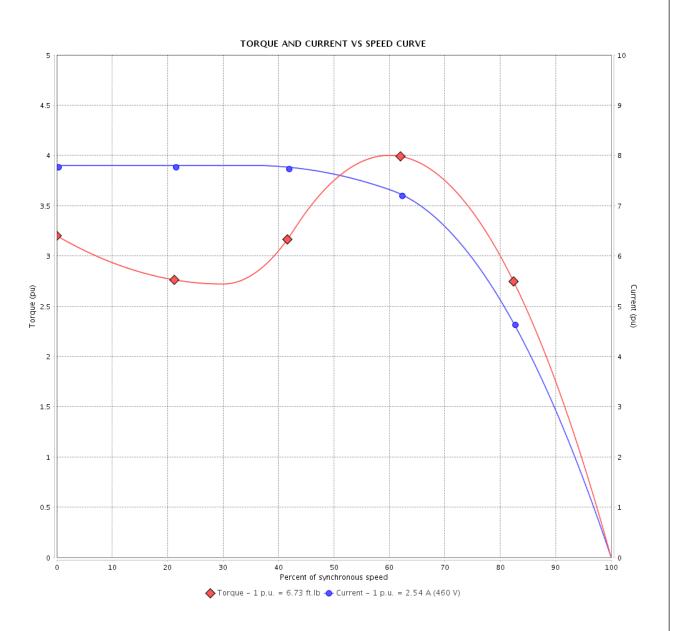
Customer :

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 00152ST3QIE182TC-W22

12373790



Performance : 460 V 60 Hz 6P Rated current : 2.54 A Moment of inertia (J) : 0.4879 sq.ft.lb **LRC** : 7.8 Duty cycle : Cont.(S1) : F : 6.73 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 320 % : 1.25 Breakdown torque : 400 % Temperature rise : 80 K Rated speed : 1170 rpm Design : B

Locked rotor time : 28s (cold) 16s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 12373790 Catalog #: 00152ST3QIE182TC-W22 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. = 8.25 ft.lb ◆ Current - 1 p.u. = 2.68 A (380 V) Performance : 380 V 50 Hz 6P IE4 Rated current : 2.68 A Moment of inertia (J) : 0.4879 sq.ft.lb **LRC** : 6.3 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 8.25 ft.lb Locked rotor torque : 250 % Service factor : 1.00 Breakdown torque : 290 % Temperature rise : 80 K Rated speed : 955 rpm Design : B Locked rotor time : 25s (cold) 14s (hot) Date Rev. Performed Checked **Changes Summary** 

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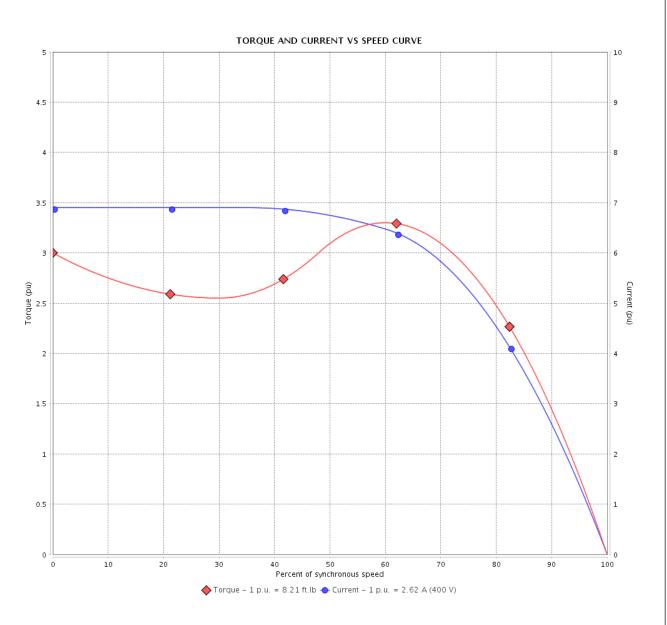


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12373790

Phase

Catalog #: 00152ST3QIE182TC-W22



Performance	: 400 V 50 Hz 6P IE4		
Rated current	: 2.62 A	Moment of inertia (J)	: 0.4879 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 8.21 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B
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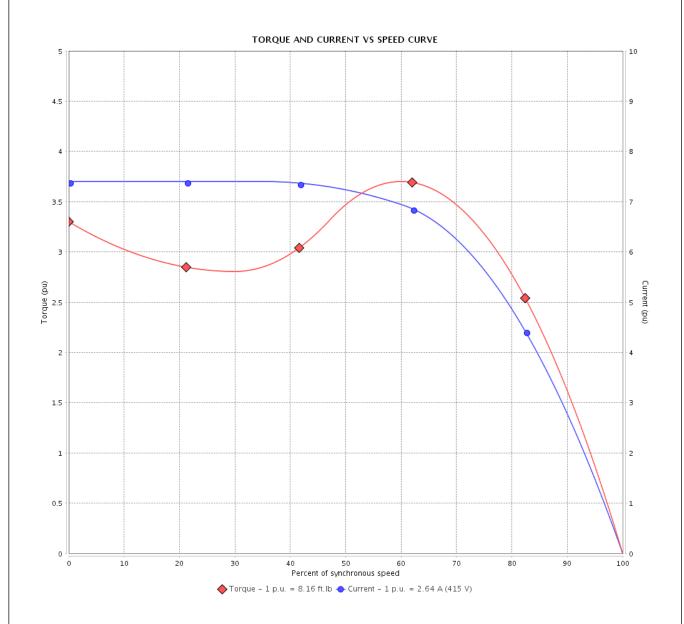
Locked rotor time : 25s (cold) 14s (hot)

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Customer Product line : NEMA Premium Efficiency Three-Product code: 12373790 Catalog #: 00152ST3QIE182TC-W22



Performance	: 415 V 50 Hz 6P IE4		
Rated current	: 2.64 A	Moment of inertia (J)	: 0.4879 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 8.16 ft.lb	Insulation class	:F
Locked rotor torque	: 330 %	Service factor	: 1.00
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B
Locked rotor time	: 25s (cold) 14s (hot)		-

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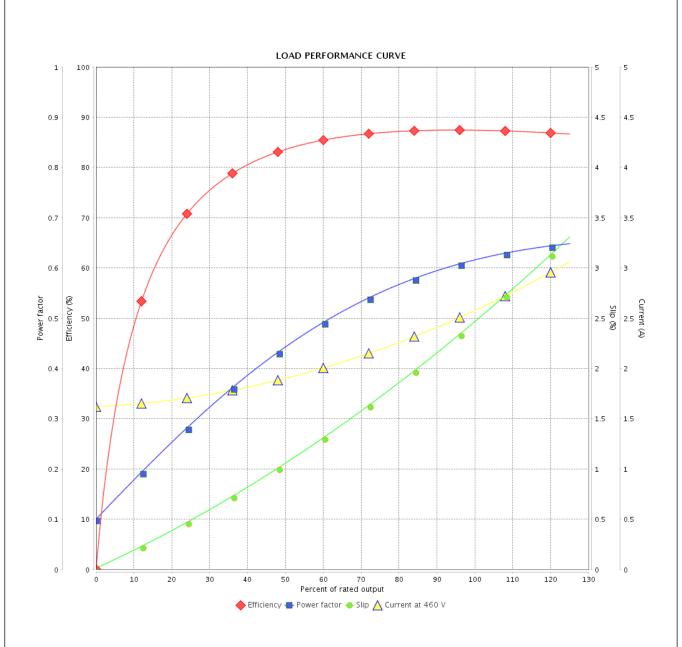
Customer

Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 12373790

Catalog #: 00152ST3QIE182TC-W22



Performance : 460 V 60 Hz 6P : 2.54 A Rated current Moment of inertia (J) : 0.4879 sq.ft.lb **LRC** : 7.8 Duty cycle : Cont.(S1) : 6.73 ft.lb Insulation class Rated torque : F Locked rotor torque : 320 % Service factor : 1.25 Breakdown torque : 400 % Temperature rise : 80 K Rated speed : 1170 rpm Design : B Rev. Performed Checked Date **Changes Summary** 

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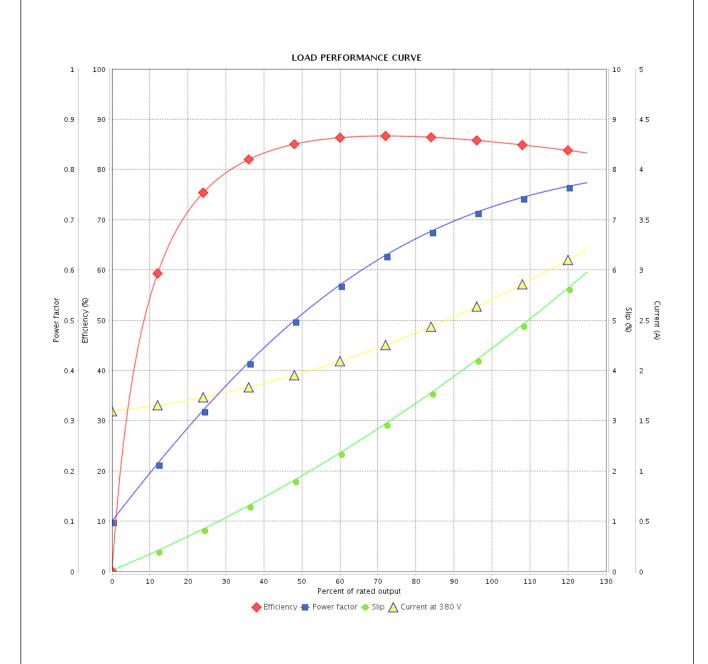


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12373790

Phase

Catalog #: 00152ST3QIE182TC-W22



Performance : 380 V 50 Hz 6P IE4						
Rated current	: 2	2.68 A	Moment o	f inertia (J)	: 0.4879 sg.ft.lb	
LRC	: 6	3.3	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	: 8	3.25 ft.lb	Insulation	class	: F	
Locked rotor torqu	e : 2	250 %	Service fa	ctor	: 1.00	
Breakdown torque	: 2	290 %	Temperature rise		: 80 K	
Rated speed	: 9	: 955 rpm		Design		
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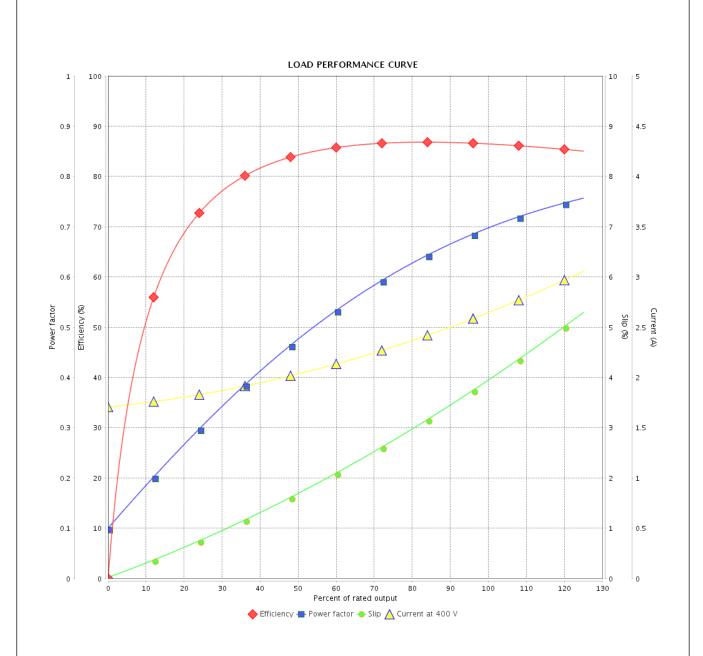
Product line : NEMA Premium Efficiency Three- Product code :

Phase

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Performance	: 400 V 50 Hz 6P IE4			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 2.62 A : 6.9 : 8.21 ft.lb : 300 % : 330 % : 960 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	le : Cont.(S1) n class : F actor : 1.00	
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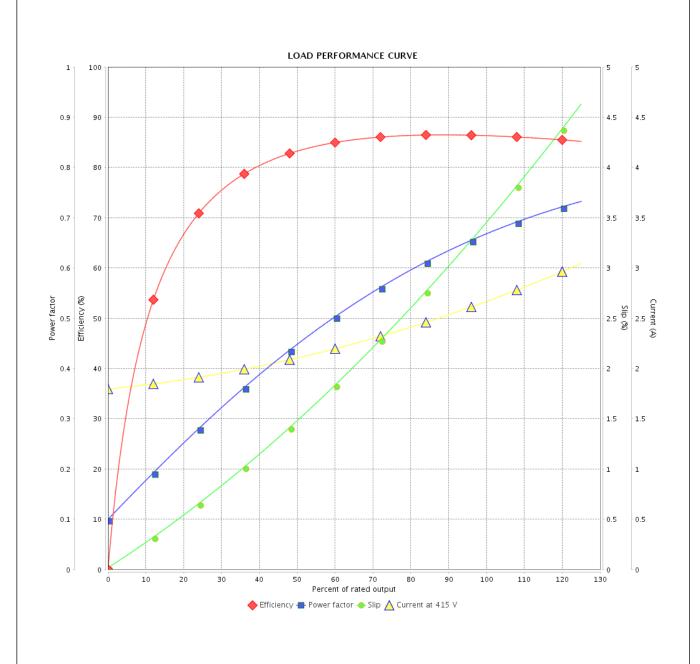


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12373790

Phase

Catalog #: 00152ST3QIE182TC-W22



Performance	:	415 V 50 Hz 6P IE4				
Rated current	:	2.64 A	Moment o	Moment of inertia (J)		.lb
LRC	:	7.4	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	:	8.16 ft.lb	Insulation	class	: F	
Locked rotor torque	e :	330 %	Service fa	ctor	: 1.00	
Breakdown torque	:	370 %	Temperature rise		: 80 K : B	
Rated speed	: 965 rpm		Design			
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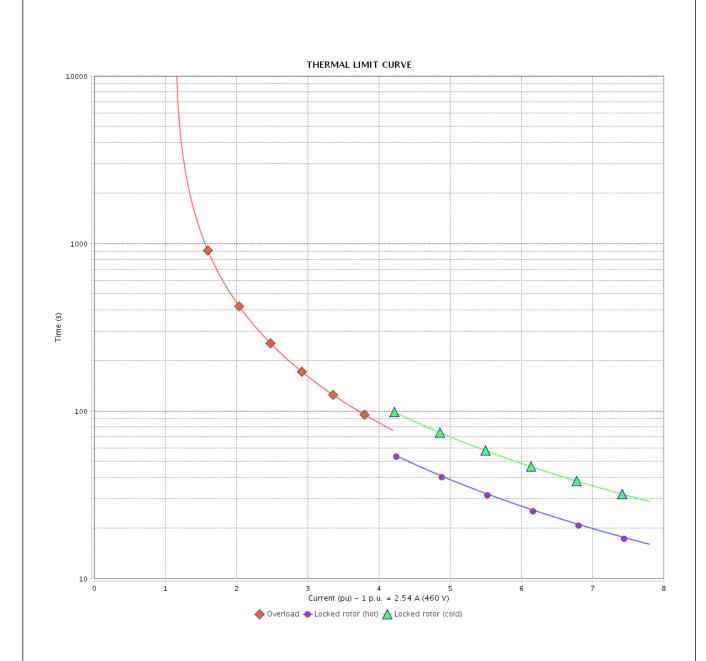


Customer		:				
Product line		: NEMA Premium Efficiency Phase		Product code :	12373790	5400T0 W00
				Catalog # :	00152513Q11	E182TC-W22
Performance		: 460 V 60 Hz 6P				
Rated current		: 2.54 A	Moment o	of inertia (J)	: 0.4879 sq.ft.ll	b
LRC Rated torque		: 7.8 : 6.73 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord		: 320 %	Service fa	ictor	: 1.25	
Breakdown torqu Rated speed		: 400 % : 1170 rpm	Temperati Design	ure rise	: 80 K : B	
Heating constant			_			
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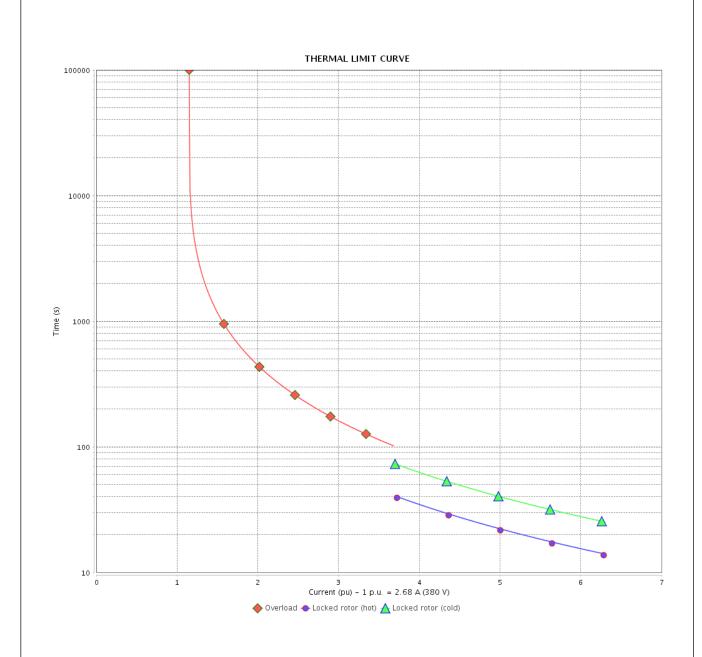


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Product line		: NEMA Premium Efficiency	Three-	Product code :	12373790	
		Phase				E400E0 M/00
				Catalog # :	00152513QII	E182TC-W22
Performance		: 380 V 50 Hz 6P IE4				
Rated current		: 2.68 A	Moment o	of inertia (J)	: 0.4879 sq.ft.l	b
LRC Rated torque		: 6.3 : 8.25 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord		: 250 %	Service fa		. r : 1.00	
Breakdown torqu	ie :	: 290 %	Temperat		: 80 K	
Rated speed		: 955 rpm	Design		: B	
Heating constant						
Cooling constant	t	Oh a sa a sa		D(	Ob. 1	D :
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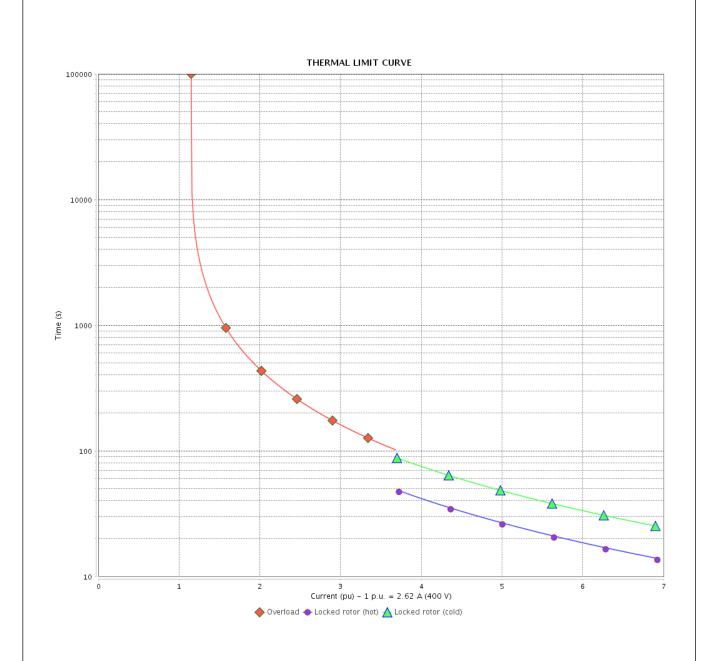


Customer		:				
Product line		: NEMA Premium Efficiency Phase		Product code : Catalog # :	12373790	E182TC-W22
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Performance		: 400 V 50 Hz 6P IE4				
Rated current		: 2.62 A	Moment of	of inertia (J)	: 0.4879 sq.ft.ll	b
LRC Rated torque		: 6.9 : 8.21 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord	que	: 300 %	Service fa	ictor	: 1.00	
Breakdown torqu Rated speed		: 330 % : 960 rpm	Temperati Design	ure rise	: 80 K : B	
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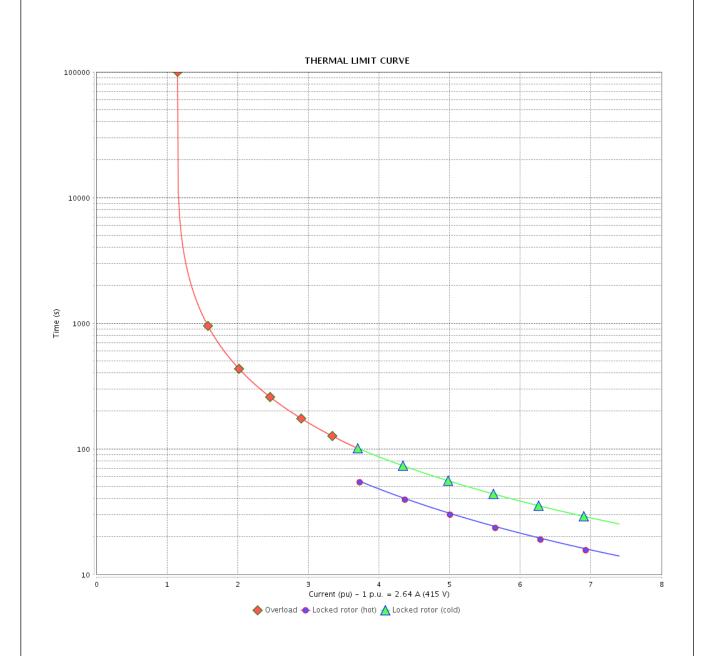


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Product line		: NEMA Premium Efficiency Phase		Product code :	12373790	
				Catalog # :	00152ST3QII	E182TC-W22
Performance		415 V 50 Hz 6P IE4				
Rated current		2.64 A	Moment o	f inertia (J)	: 0.4879 sq.ft.ll	b
LRC	:	7.4	Duty cycle	9	: Cont.(S1)	
Rated torque Locked rotor torqu		8.16 ft.lb 330 %	Insulation Service fa		: F : 1.00	
Breakdown torque		370 %	Temperati		: 80 K	
Rated speed		965 rpm	Design		: B	
Heating constant						
Cooling constant				,		
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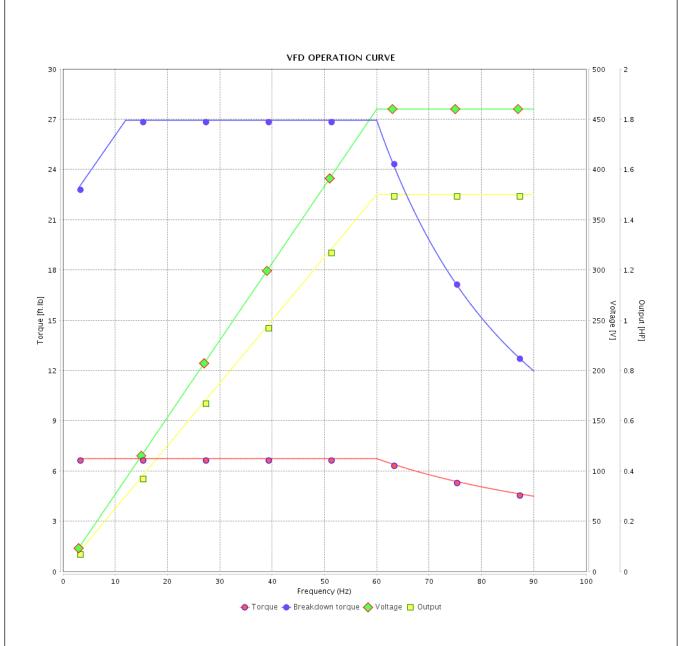
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Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12373790

Catalog #: 00152ST3QIE182TC-W22



Performance : 460 V 60 Hz 6P : 2.54 A Rated current Moment of inertia (J) : 0.4879 sq.ft.lb **LRC** : 7.8 Duty cycle : Cont.(S1) Insulation class : 6.73 ft.lb : F Rated torque Locked rotor torque : 320 % Service factor : 1.25 Breakdown torque : 400 % Temperature rise : 80 K Rated speed : 1170 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

#### Three Phase Induction Motor - Squirrel Cage



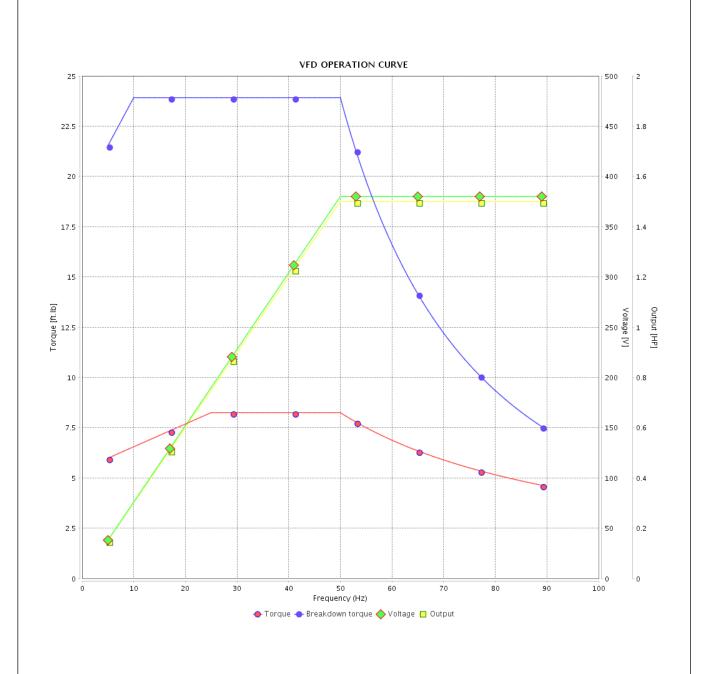
Customer

Product line : NEMA Premium Efficiency Three- Product code : 12373790

Phase

Catalog #: 00152ST3QIE182TC-W22

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: 2.68 A	Moment of	finartia (I)	0.4070	
0.0		i ili <del>c</del> ilia (J)	: 0.4879 sq.ft.lb	
: 6.3	Duty cycle		: Cont.(S1)	
: 8.25 ft.lb	Insulation class		: F	
: 250 %	Service factor		: 1.00	
: 290 %	Temperature rise		: 80 K	
: 955 rpm	Design		: B	
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	: 250 % : 290 % : 955 rpm	: 8.25 ft.lb       Insulation         : 250 %       Service far         : 290 %       Temperature         : 955 rpm       Design	: 8.25 ft.lb Insulation class : 250 % Service factor : 290 % Temperature rise : 955 rpm Design	: 8.25 ft.lb       Insulation class       : F         : 250 %       Service factor       : 1.00         : 290 %       Temperature rise       : 80 K         : 955 rpm       Design       : B         Changes Summary       Performed       Checked

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Product line : NEMA Premium Efficiency Three- Product of

Phase

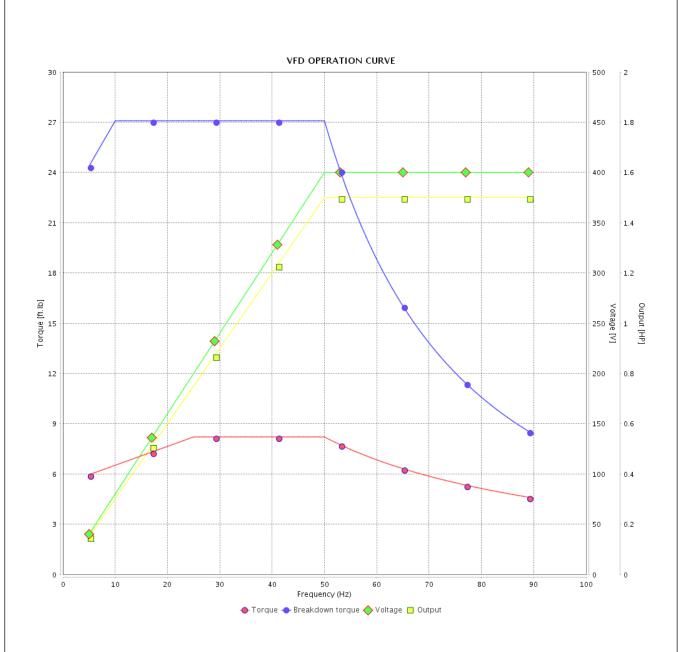
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Performance		: 400 V 50 Hz	z 6P IE4				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	•	: 2.62 A : 6.9 : 8.21 ft.lb : 300 % : 330 % : 960 rpm		Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 0.4879 sq.ft. : Cont.(S1) : F : 1.00 : 80 K : B	lb
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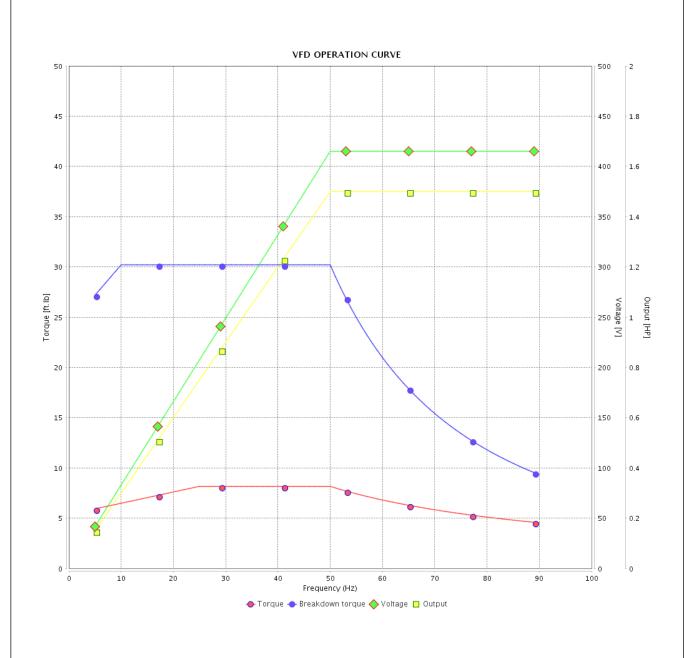


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12373790

Phase

Catalog #: 00152ST3QIE182TC-W22



Performance	: 4	15 V 50 Hz 6P IE4				
Rated current : 2.64 A		Moment o	Moment of inertia (J)		.lb	
LRC	: 7	'.4	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	: 8	3.16 ft.lb	Insulation	class	: F	
Locked rotor torque	e : 3	30 %	Service fa	ctor	: 1.00	
Breakdown torque	: 3	370 %	Temperature rise		: 80 K	
Rated speed	: 9	165 rpm	Design		: B	
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