DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14401934

Phase

Catalog #: 00159XT3E184T

Frame : 182/4T Cooling method : IC411 - TEFC

Insulation class : F Mounting : F-1

Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW)

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

Altitude : 1000 m.a.s.l. Approx. weight³ : 134 lb Protection degree : IP55 Moment of inertia (J) : 0.5223 sq.ft.lk

Protection degree : IP55		Moment of ine	Moment of inertia (J) : 0.5223 sq.ft.lb			
Design		: B				
Output [HP]		1.5	1.5	1.5	1.5	
Poles		8	8	8	8	
Frequency [Hz]		60	50	50	50	
Rated voltage [V]		230/460	380	400	415	
Rated current [A]		5.68/2.84	3.04	3.12	3.11	
L. R. Amperes [A]		35.2/17.6	17.6	18.7	19.3	
LRC [A]		6.2x(Code L)	5.8x(Code J)	6.0x(Code K)	6.2x(Code L)	
No load current [A]	3.80/1.90	1.79	1.92	2.04	
Rated speed [RPM]		860	700	710	715	
Slip [%]		4.44	6.67	5.33	4.67	
Rated torque [ft.lb]		9.16	11.3	11.1	11.0	
Locked rotor torque [%]		240	200	229	260	
Breakdown torque [%]		260	190	210	240	
Service factor		1.15	1.00	1.00	1.00	
Temperature rise		80 K	80 K	80 K	80 K	
Locked rotor time		30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)	
Noise level ²		50.0 dB(A)	46.0 dB(A)	46.0 dB(A)	46.0 dB(A)	
	25%	76.6	80.9	79.5	77.5	
Efficiency (%)	50%	77.0	80.0	78.5	77.0	
Elliciency (70)	75%	78.5	80.0	78.5	78.0	
100%		78.5	78.5	77.0	77.0	
	25%	0.23	0.29	0.26	0.24	
Power Factor	50%	0.42	0.51	0.47	0.44	
I OWEI Facior	75%	0.54	0.62	0.58	0.55	
	100%	0.62	0.70	0.66	0.64	

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

Bearing type : 6307 2RS 6206 2RS Max. traction : 102 lb Sealing : Oil Seal Lip Seal Max. compression : 236 lb

Lubricant amount : - - Lubricant type : Mobil Polyrex EM

Notes

Lubrication interval

USABLE @208V 5.97A SF 1.15 SFA 6.87A

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.

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			1 / 22	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer	
Customer	

Thermal protection

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			2 / 22	

Three Phase Induction Motor - Squirrel Cage

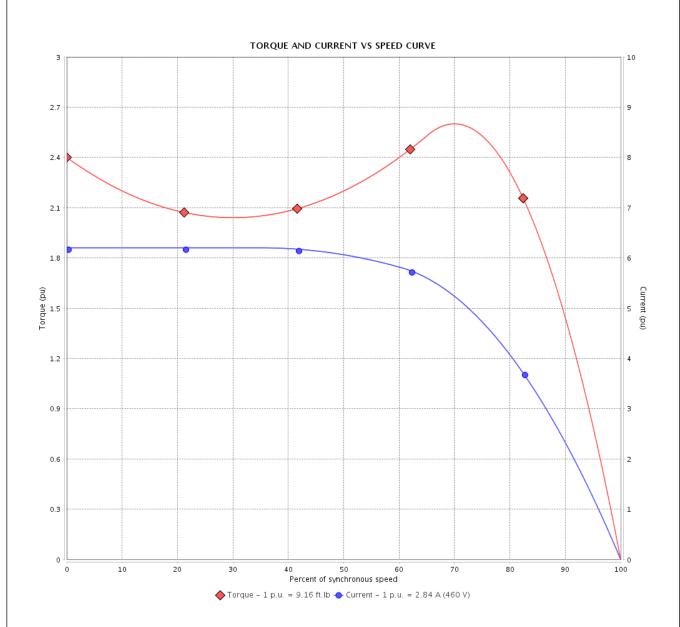


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14401934

Phase

Catalog #: 00159XT3E184T



Performance : 230/460 V 60 Hz 8P Rated current : 5.68/2.84 A Moment of inertia (J) : 0.5223 sq.ft.lb **LRC** : 6.2 Duty cycle : Cont.(S1) : 9.16 ft.lb Insulation class : F Rated torque : 240 % Locked rotor torque Service factor : 1.15 : 260 % Breakdown torque Temperature rise : 80 K : B Rated speed : 860 rpm Design

Locked rotor time : 30s (cold) 17s (hot)

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Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022	1		3 / 22	

Three Phase Induction Motor - Squirrel Cage



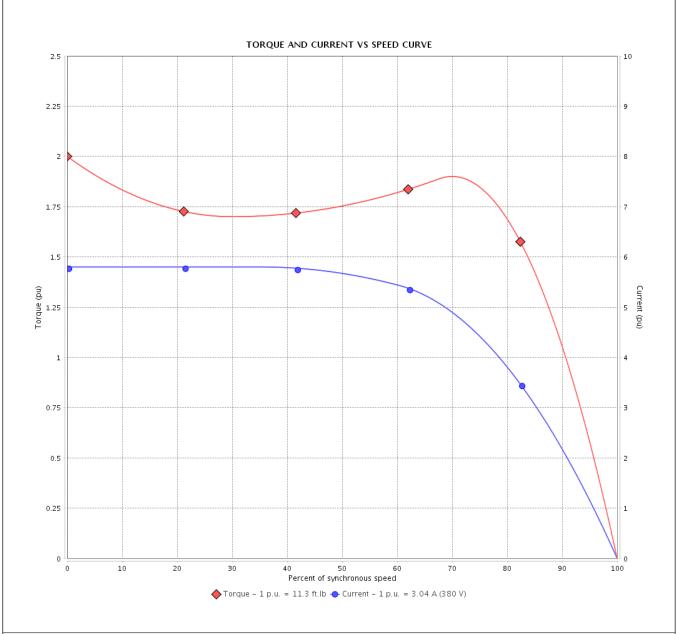
Customer :

Product line : NEMA Premium Efficiency Three- Pro

Phase

Product code: 14401934

Catalog #: 00159XT3E184T



Performance : 380 V 50 Hz 8P IE3 Rated current : 3.04 A Moment of inertia (J) : 0.5223 sq.ft.lb **LRC** : 5.8 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 11.3 ft.lb Service factor Locked rotor torque : 200 % : 1.00 Breakdown torque : 190 % Temperature rise : 80 K Rated speed : 700 rpm Design : B

Locked rotor time : 30s (cold) 17s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			4 / 22	



Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 14401934 Catalog #: 00159XT3E184T TORQUE AND CURRENT VS SPEED CURVE 2.25 1.75 1.5 (bd) 1.25 0.5 0.25 40 50 -Percent of synchronous speed ◆ Torque - 1 p.u. = 11.1 ft.lb ◆ Current - 1 p.u. = 3.12 A (400 V)

Performance	: 400 V 50 Hz 8P IE2			
Rated current	: 3.12 A	Moment of inertia (J)	: 0.5223 sq.ft.lb	
LRC	: 6.0	Duty cycle	: Cont.(S1)	
Rated torque	: 11.1 ft.lb	Insulation class	:F	
Locked rotor torque	: 229 %	Service factor	: 1.00	
Breakdown torque	: 210 %	Temperature rise	: 80 K	
Rated speed	: 710 rpm	Design	: B	
Locked rotor time	: 30s (cold) 17s (hot)			
Rev	Changes Summary	Perform	ned Checked	Date

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Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022	(1)(50.0/4.5)		5 / 22	

Three Phase Induction Motor - Squirrel Cage

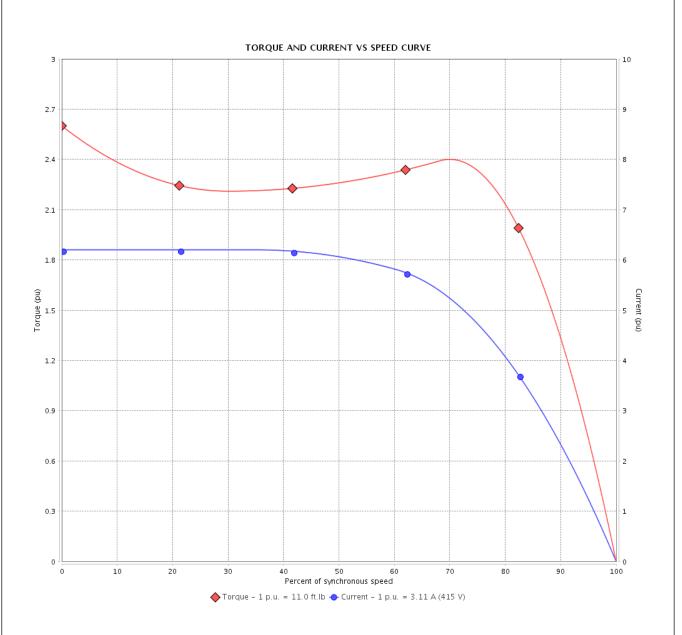


Customer

Product line : NEMA Premium Efficiency Three-

Product code: 14401934

Catalog #: 00159XT3E184T



Performance : 415 V 50 Hz 8P IE2 Rated current : 3.11 A Moment of inertia (J) : 0.5223 sq.ft.lb **LRC** : 6.2 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 11.0 ft.lb Locked rotor torque : 260 % Service factor : 1.00 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : 715 rpm Design : B

Locked rotor time : 30s (cold) 17s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			6 / 22	

Three Phase Induction Motor - Squirrel Cage

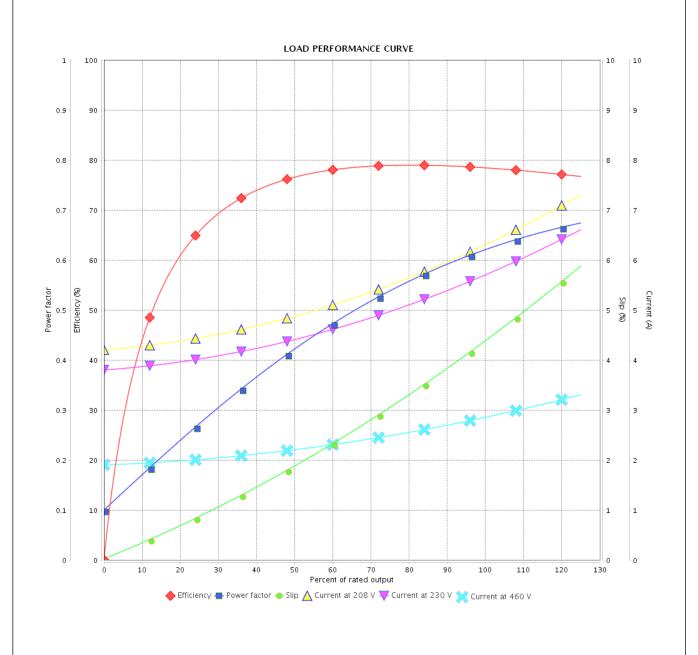


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14401934

Phase

Catalog #: 00159XT3E184T



Performance	: 2	30/460 V 60 Hz 8P				
Rated current		5.68/2.84 A		f inertia (J)	: 0.5223 sq.ft.lb	
LRC	: 6	· 	Duty cycle		: Cont.(S1)	
Rated torque	: 9).16 ft.lb	Insulation	class	: F	
Locked rotor torqu	e : 2	240 %	Service fa	ctor	: 1.15	
Breakdown torque	eakdown torque : 260 % Temperature rise		ıre rise	: 80 K		
Rated speed	: 8	860 rpm	Design		: B	
Rev.		Changes Summary	/	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	11/04/2022				7 / 22	

Three Phase Induction Motor - Squirrel Cage

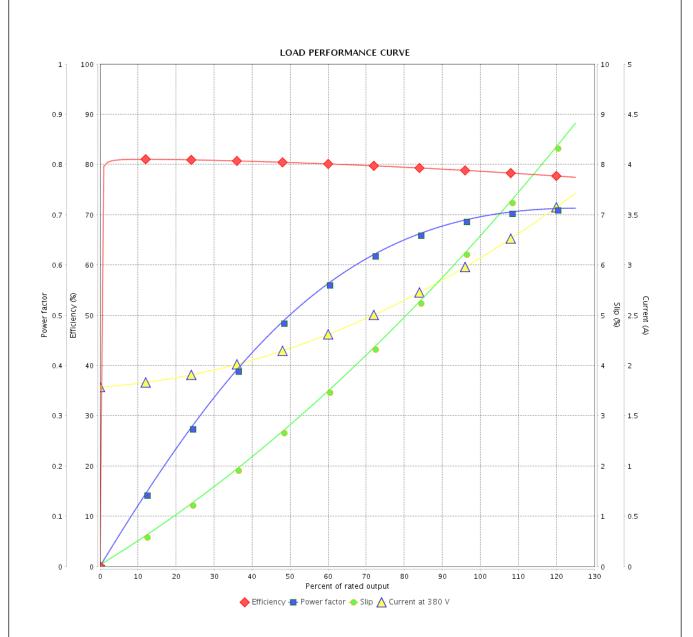


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14401934

Phase

Catalog #: 00159XT3E184T



Performance	: 380 V 50 Hz 8P IE3				
Rated current	: 3.04 A	Moment of	f inertia (J)	: 0.5223 sq.ft.	.lb
LRC	: 5.8	Duty cycle)	: Cont.(S1)	
Rated torque	: 11.3 ft.lb	Insulation	class	: F	
Locked rotor torque	: 200 %	Service factor		: 1.00	
Breakdown torque	: 190 %	Temperature rise		: 80 K	
Rated speed	: 700 rpm	Design		: B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
-				_	
Checked by				Page	Revision

8 / 22

11/04/2022

Date

Three Phase Induction Motor - Squirrel Cage



Customer

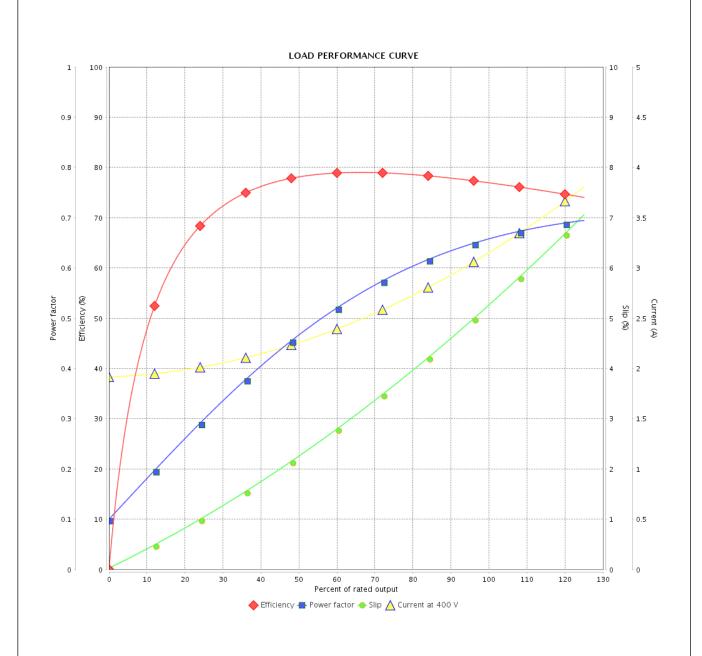
Date

11/04/2022

Product line : NEMA Premium Efficiency Three- Product code : 14401934

Phase

Catalog #: 00159XT3E184T



Performance	: 400 V 50 Hz 8P IE2				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 3.12 A : 6.0 : 11.1 ft.lb : 229 % : 210 % : 710 rpm	Duty cycle : 0 Insulation class : F Service factor : 2 Temperature rise : 8		: 0.5223 sq.ft.l : Cont.(S1) : F : 1.00 : 80 K : B	lb
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

9/22

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

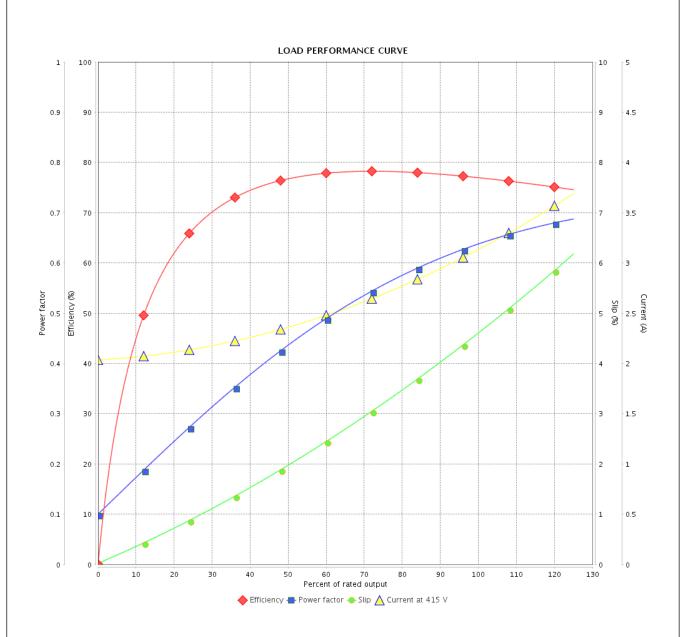
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Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 14401934

Catalog #: 00159XT3E184T



Performance	: 415 V 50 Hz 8P IE2				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 3.11 A : 6.2 : 11.0 ft.lb : 260 % : 240 % : 715 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 0.5223 sq.ft.lt : Cont.(S1) : F : 1.00 : 80 K : B)
Rev.	Changes Summary		Performed	Checked	Date
Performed by					

Page

10 / 22

Revision

Three Phase Induction Motor - Squirrel Cage

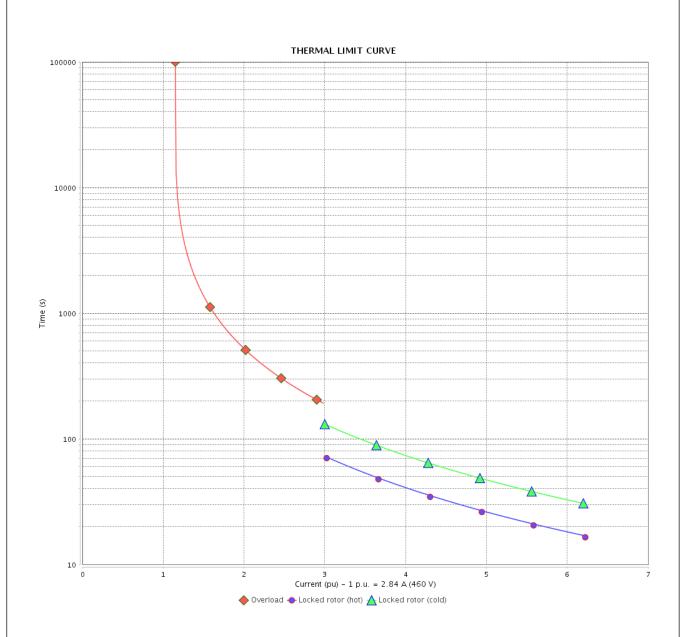


Customer	:					
Product line	:	NEMA Premium Efficiency	Three-	Product code :	14401934	
		hase				
				Catalog # :	00159XT3E1	δ4 I
erformance	: 2	30/460 V 60 Hz 8P				
ated current	: 5	.68/2.84 A		of inertia (J)	: 0.5223 sq.ft.l	b
lated current RC	: 5 : 6	.68/2.84 A .2	Duty cycle	Э	: 0.5223 sq.ft.l : Cont.(S1) : F	b
ated current RC ated torque ocked rotor torg	: 5 : 6 : 9 jue : 2	.68/2.84 A .2 .16 ft.lb 40 %	Duty cycle Insulation Service fa	e class actor	: Cont.(S1) : F : 1.15	b
ated current RC ated torque ocked rotor torg reakdown torqu	: 5 : 6 : 9 uue : 2 ie : 2	.68/2.84 A .2 .16 ft.lb	Duty cycle Insulation	e class actor	: Cont.(S1) : F	b
Performance Rated current RC Rated torque ocked rotor torque reakdown torque Rated speed	: 5 : 6 : 9 uue : 2 ie : 2 : 8	.68/2.84 A .2 .16 ft.lb 40 % 60 %	Duty cycle Insulation Service fa Temperate	e class actor	: Cont.(S1) : F : 1.15 : 80 K	b
lated current RC lated torque ocked rotor torg reakdown torqu	: 5 : 6 : 9 jue : 2 ie : 2 : 8	.68/2.84 A .2 .16 ft.lb 40 % 60 %	Duty cycle Insulation Service fa Temperate	e class actor	: Cont.(S1) : F : 1.15 : 80 K	b
lated current RC lated torque ocked rotor torque reakdown torquated speed	: 5 : 6 : 9 jue : 2 ie : 2 : 8	.68/2.84 A .2 .16 ft.lb 40 % 60 %	Duty cycle Insulation Service fa Temperate	e class actor	: Cont.(S1) : F : 1.15 : 80 K	b
lated current RC Lated torque lated rotor torg reakdown torqu lated speed leating constant cooling constant Rev.	: 5 : 6 : 9 jue : 2 ie : 2 : 8	.68/2.84 A .2 .16 ft.lb 40 % 60 % 60 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : B	
lated current RC lated torque ocked rotor torque reakdown torque lated speed leating constant cooling constant	: 5 : 6 : 9 jue : 2 ie : 2 : 8	.68/2.84 A .2 .16 ft.lb 40 % 60 % 60 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : B	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			12 / 22	

Three Phase Induction Motor - Squirrel Cage

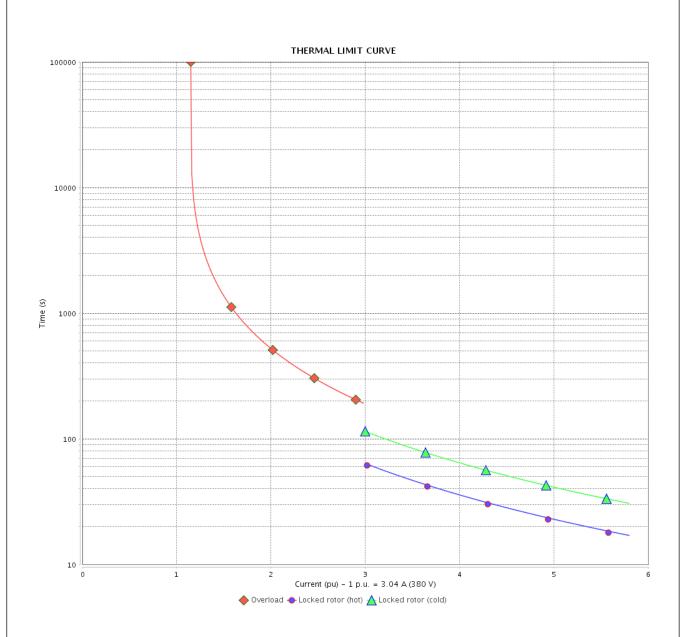


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Product line		NEMA Premium Efficiency in the second		Product code : Catalog # :	14401934 00159XT3E ²	184T
5 ,		201/5011 00150				
Performance		80 V 50 Hz 8P IE3 04 A	Moment	of inartia (I)	: 0 5222 og ff	lh.
Rated current LRC	: 5.		Duty cycle	of inertia (J) e	: 0.5223 sq.ft. : Cont.(S1)	ID
Rated torque	: 11	1.3 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown tord		00 % 90 %	Service fa Temperat		: 1.00 : 80 K	
Rated speed		00 rpm	Design	a. 0 1130	: B	
Heating constan	 t					
Cooling constant						
Rev.		Changes Summary	<u> </u>	Performed	Checked	Date
Performed by					,	
Checked by					Page	Revision
Date	11/04/2022				13 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			14 / 22	

Three Phase Induction Motor - Squirrel Cage

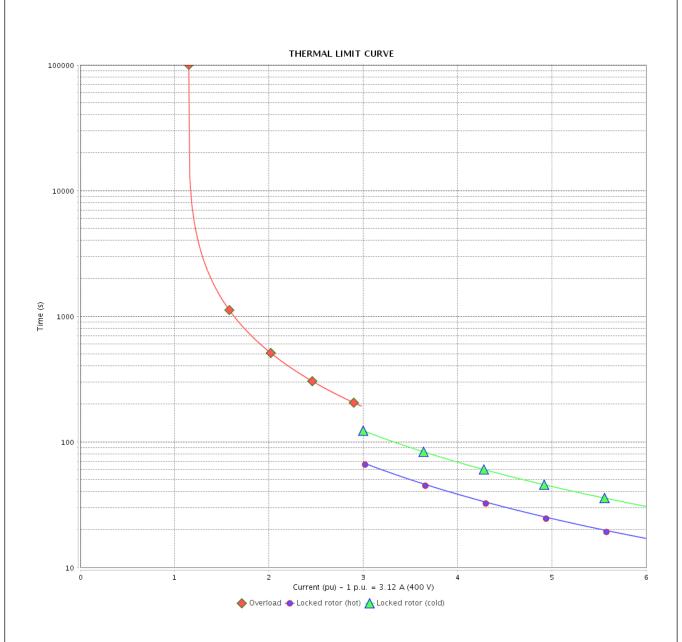


Customer	:					
Product line		NEMA Premium Efficiency ⁻ hase	Three-	Product code :	14401934	
				Catalog #:	00159XT3E	184T
Performance		00 V 50 Hz 8P IE2				
Rated current LRC	: 3. : 6.	.12 A	Moment of Duty cycle	of inertia (J)	: 0.5223 sq.ft. : Cont.(S1)	lb
Rated torque		.u 1.1 ft.lb	Insulation	class	: Cont.(S1) : F	
Locked rotor tord	que : 22	29 %	Service fa	actor	: 1.00	
Breakdown torqu Rated speed		10 % 10 rpm	Temperat Design	ure rise	: 80 K : B	
Heating constan	t					
Cooling constan						
Rev.		Changes Summary		Performed	Checked	Date
Performed by					-	
Checked by]			Page	Revision
Date	11/04/2022				15 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			16 / 22	

Three Phase Induction Motor - Squirrel Cage

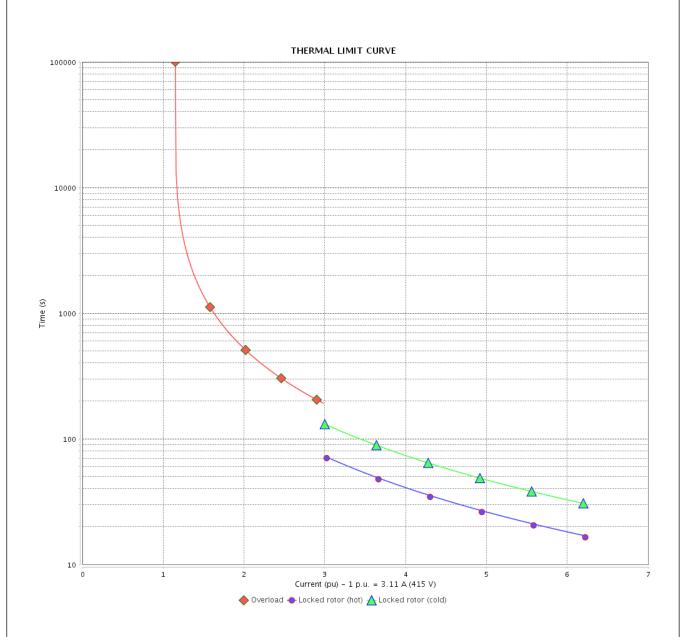


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Product line	:	NEMA Premium Efficiency	Three-	Product code :	14401934	
		hase				104T
				Catalog # :	00159XT3E ²	1041
Performance Rated current .RC Rated torque .ocked rotor toro Breakdown torque Rated speed	: 3 : 6 : 1 que : 2 le : 2 : 7	15 V 50 Hz 8P IE2 .11 A .2 1.0 ft.lb 60 % 40 % 15 rpm	Moment of Duty cycle Insulation Service fa Temperat Design	class actor	: 0.5223 sq.ft. : Cont.(S1) : F : 1.00 : 80 K : B	lb
Cooling constant						
Rev.	•	Changes Summary		Performed	Checked	Date
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Performed by		-			5	Б
Checked by		_			Page	Revision
Date	11/04/2022				17 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by		_		Page	Revision
Date	11/04/2022	1		18 / 22	

Three Phase Induction Motor - Squirrel Cage

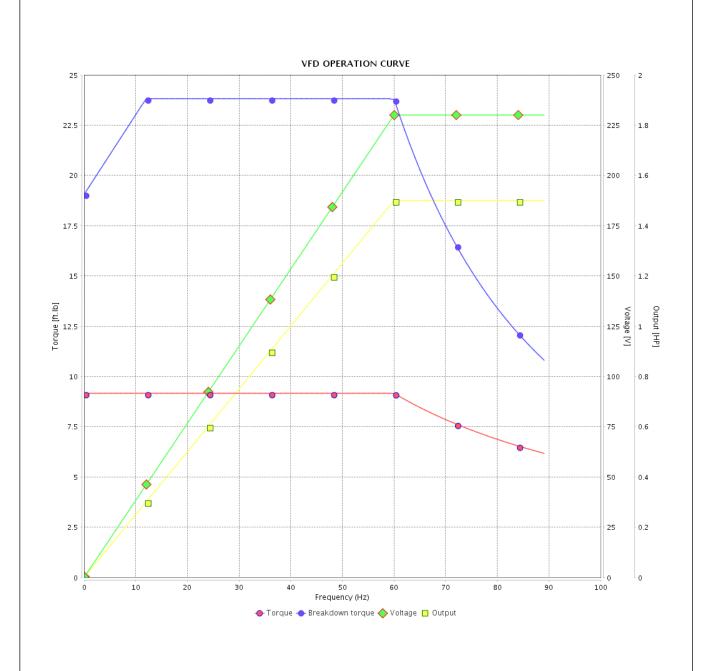


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14401934

Phase

Catalog #: 00159XT3E184T



Performance	: 23	30/460 V 60 Hz 8P				
Rated current	: 5.	.68/2.84 A	68/2.84 A Moment of inertia (J)		: 0.5223 sq.ft.	lb
LRC	: 6.	2	Duty cycle	Э	: Cont.(S1)	
Rated torque	: 9.	.16 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 24	40 %	Service fa	actor	: 1.15	
Breakdown torque	e : 26	60 %	% Temperature rise		: 80 K	
Rated speed	: 86	60 rpm	Design		: B	
Rev.		Changes Summary	/	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	11/04/2022	1			19 / 22	

Three Phase Induction Motor - Squirrel Cage



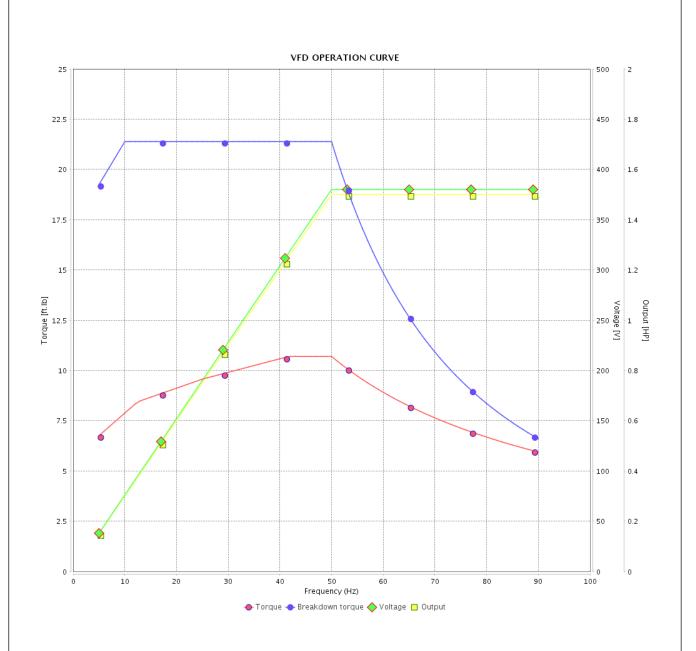
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14401934

Catalog #: 00159XT3E184T



Performance : 380 V 50 Hz 8P IE3 Rated current : 3.04 A Moment of inertia (J) : 0.5223 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 5.8 : 11.3 ft.lb Insulation class : F Rated torque Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 190 % Temperature rise : 80 K Rated speed : 700 rpm Design : B Changes Summary Rev. Performed Checked Date

Performed by					
Checked by				Page	Revision
Date	11/04/2022			20 / 22	
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Three Phase Induction Motor - Squirrel Cage

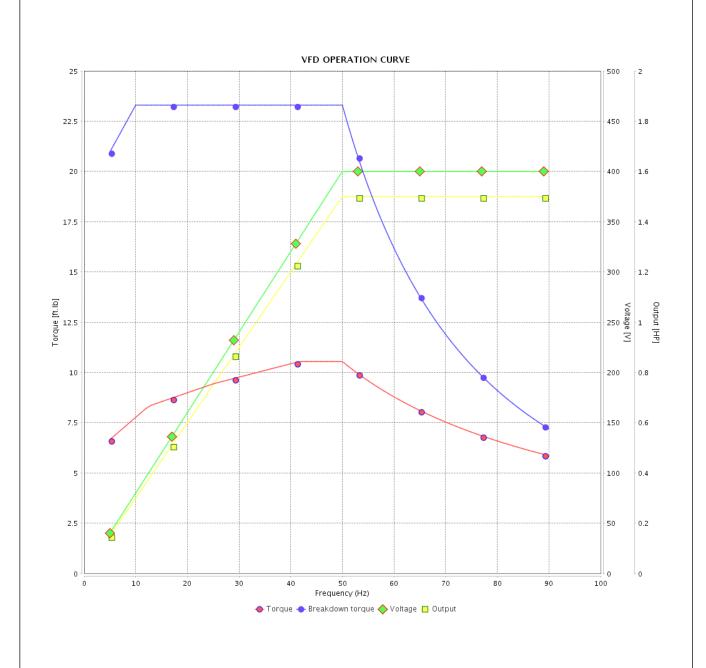


Customer

Product line : NEMA Premium Efficiency Three-Product code:

Catalog #: 00159XT3E184T

14401934



Performance		: 400 V 50 Hz 8P IE2						
Rated current	: 3	: 3.12 A Moment of		of inertia (J)	ertia (J) : 0.5223 sq.ft.lb			
LRC	: 6	.0	Duty cycle		: Cont.(S1)			
Rated torque	: 1	1.1 ft.lb	Insulation	class	: F			
Locked rotor torqu	ue : 2:	29 %	Service factor		: 1.00			
Breakdown torque	e : 2	10 %	Temperature rise		: 80 K			
Rated speed	: 7	10 rpm	Design	Design				
Rev.	Changes Summary			Performed	Checked	Date		
Performed by								
Checked by					Page	Revision		
Date	11/04/2022	1			21 / 22			

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

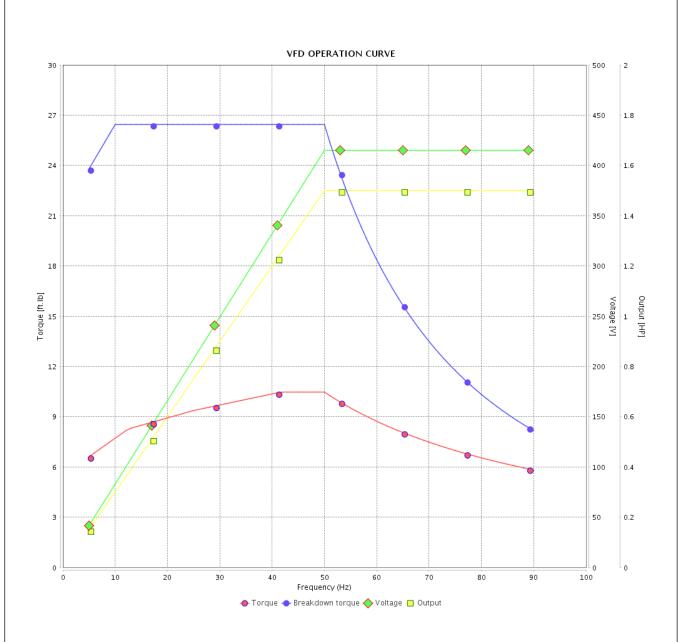
11/04/2022

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14401934

Catalog #: 00159XT3E184T



Performance	: 4	15 V 50 Hz 8P IE2				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 6 : 1 jue : 2	3.11 A 5.2 1.0 ft.lb 260 % 240 % 115 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.5223 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.	Changes Summary			Performed	Checked	Date
Performed by						

Page

22 / 22

Revision

