DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 14275902

Catalog #: 00152XT3E182T

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

Altitude : 1000 m.a.s.l. Approx. weight³ : 124 lb

			7	.,	
Protection degree		: IP55	Moment of inc	ertia (J) : 0.42	12 sq.ft.lb
Design		: B			
Output [HP]	Output [HP]		1.5	1.5	1.5
Poles		6	6	6	6
Frequency [Hz]		60	50	50	50
Rated voltage [V]		230/460	380	400	415
Rated current [A]		4.64/2.32	2.68	2.62	2.64
L. R. Amperes [A]		30.6/15.3	13.9	14.4	15.6
LRC [A]		6.6x(Code K)	5.2x(Code G)	5.5x(Code H)	5.9x(Code J)
No load current [A	.]	2.80/1.40	1.40	1.50	1.60
Rated speed [RPM]		1165	950	960	960
Slip [%]		2.92	5.00	5.00 4.00	
Rated torque [ft.lb]		6.76	8.29	8.21	8.21
Locked rotor torque [%]		229	190	220	250
Breakdown torque [%]		330	240	250	290
Service factor	Service factor		1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		63s (cold) 35s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²		52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
	25%	83.3	85.9	84.1	82.8
Efficiency (%)	50%	84.5	85.5	84.5	84.0
Linciency (70)	75%	86.5	86.5	86.5	85.5
	100%	87.5	85.5	86.5	86.5
	25%	0.27	0.31	0.28	0.26
Power Factor	50%	0.47	0.52	0.48	0.45
1 01101 1 40101	75%	0.59	0.63	0.60	0.57

Drive end Non drive end Foundation loads

0.73

Bearing type 6307 2RS 6206 2RS Max. traction : 90 lb Sealing Oil Seal Lip Seal Max. compression : 214 lb

0.68

Lubrication interval Lubricant amount

Lubricant type Mobil Polyrex EM

Notes

USABLE @208V 5.13A SF 1.15 SFA 5.90A

100%

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.

0.70

0.67

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Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022	_			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	12/04/2022			2 / 22	



Revision

Page

3/22

Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 14275902 Catalog #: 00152XT3E182T TORQUE AND CURRENT VS SPEED CURVE 4.5 3.5 Current Torque (pu) 0.5 Percent of synchronous speed ◆ Torque - 1 p.u. = 6.76 ft.lb ◆ Current - 1 p.u. = 2.32 A (460 V) Performance : 230/460 V 60 Hz 6P Rated current : 4.64/2.32 A Moment of inertia (J) : 0.4212 sq.ft.lb **LRC** : 6.6 Duty cycle : Cont.(S1) : 6.76 ft.lb Insulation class : F Rated torque : 229 % Locked rotor torque Service factor : 1.15 Breakdown torque : 330 % Temperature rise : 80 K Rated speed : 1165 rpm Design : B Locked rotor time : 63s (cold) 35s (hot) Date Rev. Performed Checked **Changes Summary**

Performed by Checked by

Date

12/04/2022

Three Phase Induction Motor - Squirrel Cage



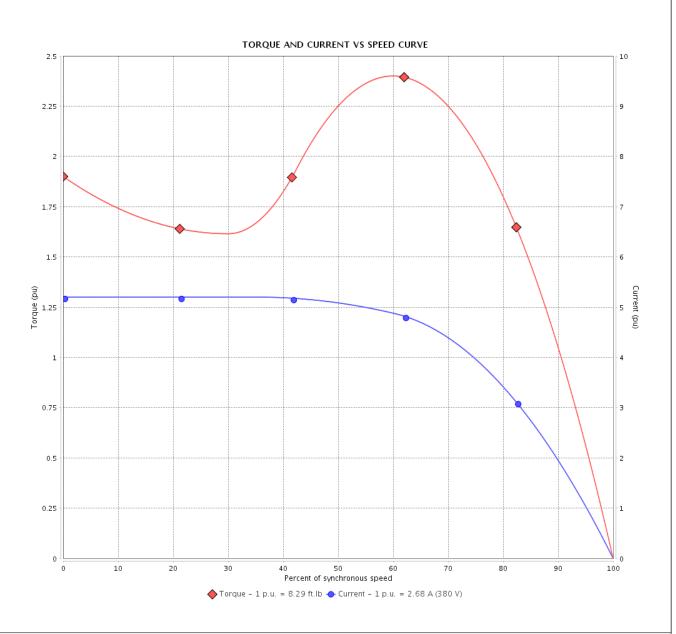
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14275902

Catalog #: 00152XT3E182T



Performance : 380 V 50 Hz 6P IE4 Rated current : 2.68 A Moment of inertia (J) : 0.4212 sq.ft.lb **LRC** : 5.2 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 8.29 ft.lb Service factor Locked rotor torque : 190 % : 1.00 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : B : 950 rpm Design

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			4 / 22	



Revision

Page

5/22

Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 14275902 Catalog #: 00152XT3E182T 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. = 8.21 ft.lb ◆ Current - 1 p.u. = 2.62 A (400 V) Performance : 400 V 50 Hz 6P IE4 Rated current : 2.62 A Moment of inertia (J) : 0.4212 sq.ft.lb **LRC** : 5.5 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 8.21 ft.lb : 220 % Locked rotor torque Service factor : 1.00 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 960 rpm Design : B Locked rotor time : 25s (cold) 14s (hot) Rev. Performed Checked Date **Changes Summary**

Performed by Checked by

Date

12/04/2022

Three Phase Induction Motor - Squirrel Cage



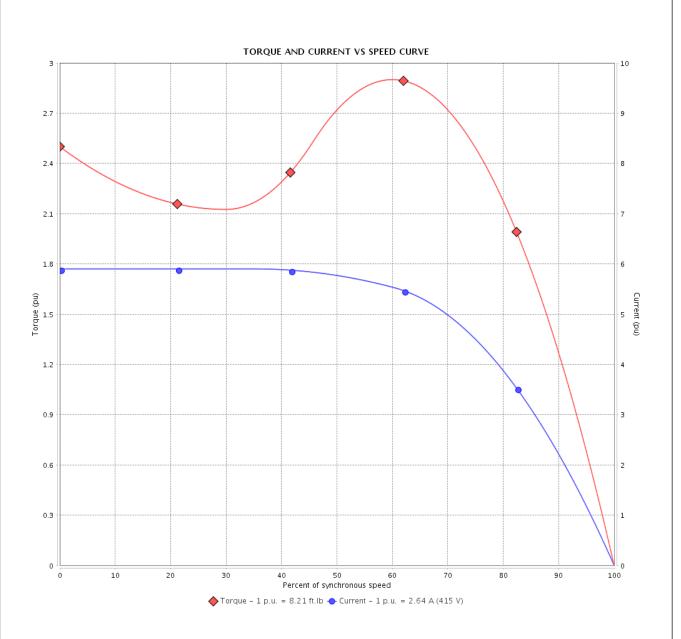
Customer :

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog # : 00152XT3E182T

14275902



Performance	: 415 V 50 Hz 6P IE4		
Rated current	: 2.64 A	Moment of inertia (J)	: 0.4212 sq.ft.lb
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 8.21 ft.lb	Insulation class	:F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B
Locked rotor time	: 25s (cold) 14s (bot)		

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			6 / 22	

Three Phase Induction Motor - Squirrel Cage

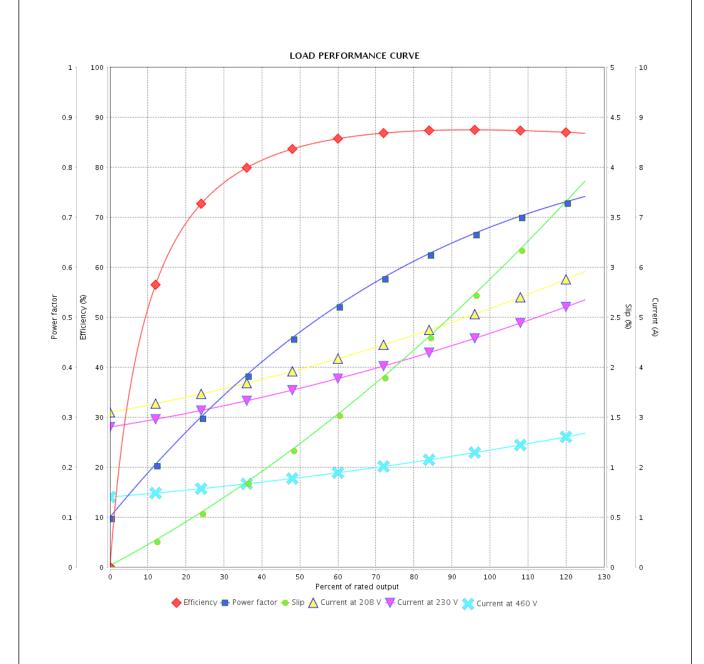


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14275902

Phase

Catalog #: 00152XT3E182T



Performance	::	230/460 V 60 Hz 6P				
Rated current	: 4	4.64/2.32 A	Moment o	Moment of inertia (J)		.lb
LRC		6.6	Duty cycle)	: Cont.(S1)	
Rated torque		6.76 ft.lb	Insulation	class	: F	
Locked rotor torque	e ::	229 %	Service fa	Service factor		
Breakdown torque	::	330 %	Temperature rise		: 80 K	
Rated speed	:	: 1165 rpm		Design		
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Data	12/04/2022				7 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :

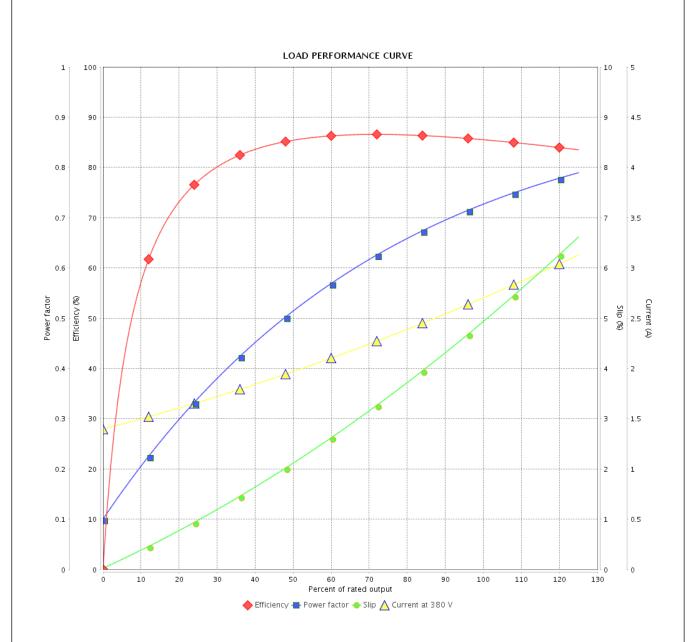
Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 00152XT3E182T

14275902

8 / 22



Performance	: 380 V 50 Hz 6P IE4				
Rated current	: 2.68 A	Moment of inertia (J)	: 0.4212 sq.ft	.lb	
LRC	: 5.2	Duty cycle	: Cont.(S1)		
Rated torque	: 8.29 ft.lb	Insulation class	: F		
Locked rotor torque	: 190 %	Service factor	: 1.00	: 1.00	
Breakdown torque	: 240 %	Temperature rise	: 80 K		
Rated speed	: 950 rpm	Design	: B		
Rev.	Changes Summary	Performe	ed Checked	Date	
Performed by					
Checked by			Page	Revision	

12/04/2022

Date

Three Phase Induction Motor - Squirrel Cage

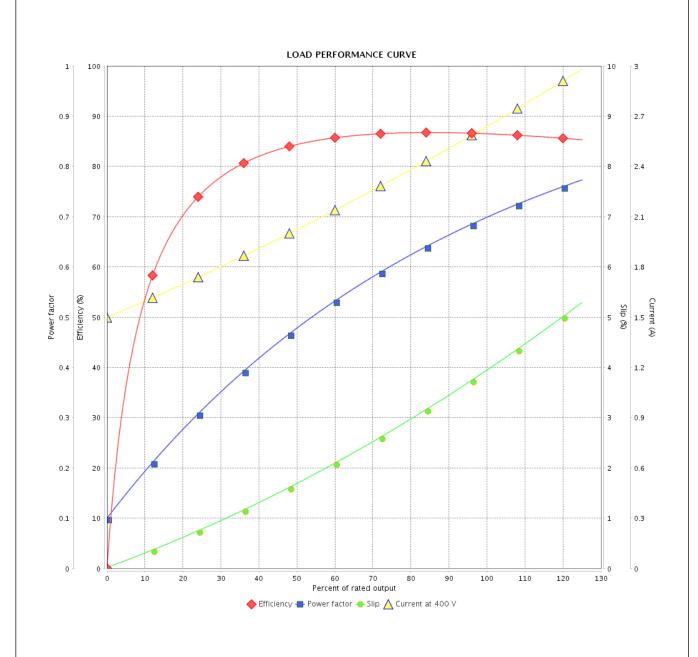


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14275902

Phase

Catalog #: 00152XT3E182T



: 400 V 50 Hz 6P IE4					
: 2.62 A Moment of i		Moment of inertia (J) : 0.42		:12 sq.ft.lb	
: 5.5			: Cont.(S1)		
: 8.21 ft.lb	Insulation class		:F		
: 220 %	Service factor		: 1.00		
: 250 %	Temperature rise		: 80 K		
: 960 rpm	Design		: B		
Changes Summary		Performed	Checked	Date	
	: 2.62 A : 5.5 : 8.21 ft.lb : 220 % : 250 % : 960 rpm	: 2.62 A	: 2.62 A : 5.5 : 8.21 ft.lb : 220 % : 250 % : 960 rpm Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 2.62 A Moment of inertia (J) : 0.4212 sq.ff : 5.5 Duty cycle : Cont.(S1) : 8.21 ft.lb Insulation class : F : 220 % Service factor : 1.00 : 250 % Temperature rise : 80 K : 960 rpm Design : B	

Rev.		Changes Summary	Performed	Checked	Date
Performed by			·		
Checked by				Page	Revision
Date	12/04/2022			9 / 22	

Three Phase Induction Motor - Squirrel Cage



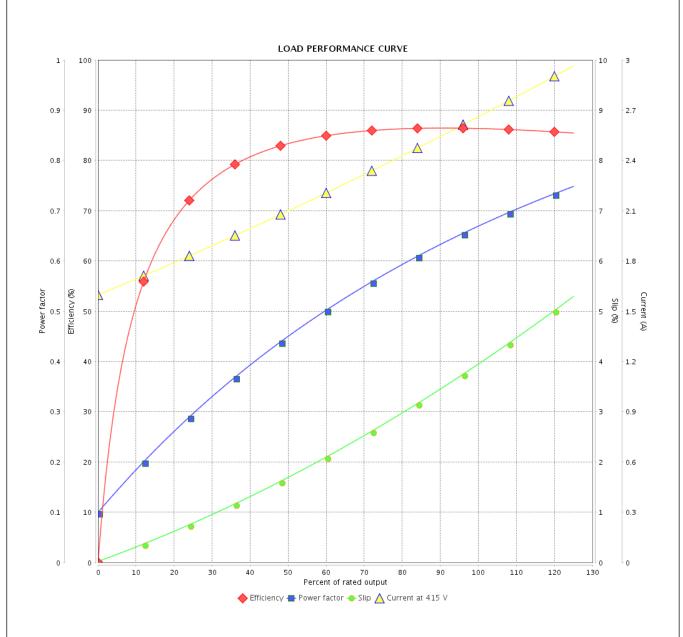
Customer :

Product line : NEMA Premium Efficiency Three- Product co

Phase

Product code: 14275902

Catalog #: 00152XT3E182T



Performance	: 415 V 50 Hz 6P IE4				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 2.64 A : 5.9 : 8.21 ft.lb : 250 % : 290 % : 960 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.4212 sq.ft. : Cont.(S1) : F : 1.00 : 80 K : B	lb
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

10 / 22

12/04/2022

Date

Three Phase Induction Motor - Squirrel Cage

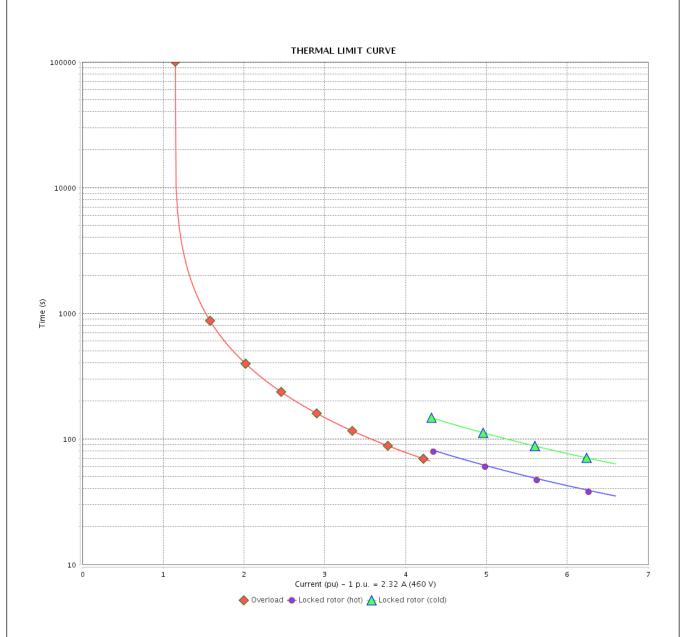


Customer	:					
Product line	: I P	NEMA Premium Efficiency hase		Product code : Catalog # :	14275902 00152XT3E	182T
Performance Rated current LRC Rated torque Locked rotor tord Breakdown torque Rated speed	: 4. : 6. : 6. que : 22 ue : 33	30/460 V 60 Hz 6P 64/2.32 A 6 76 ft.lb 29 % 30 % 165 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ictor	: 0.4212 sq.ft. : Cont.(S1) : F : 1.15 : 80 K : B	lb
Heating constant				D. (
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				11 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



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

Three Phase Induction Motor - Squirrel Cage

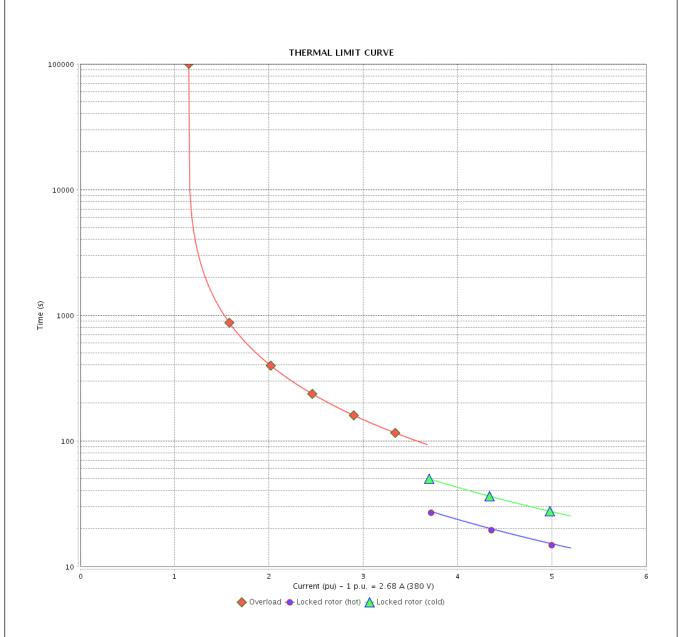


Product line	: l	NEMA Premium Efficiency T hase	hree-	Product code :	14275902	
	· ·			Catalog # :	00152XT3E1	82T
Performance Rated current .RC Rated torque .ocked rotor tor	: 2 : 5 : 8 : que : 1	.2 .29 ft.lb 90 %	Duty cycle Insulation Service fa	class actor	: 0.4212 sq.ft.ll : Cont.(S1) : F : 1.00	b
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	: 2 : 5 : 8 : 9 : 9: : 9:	.68 A .2 .29 ft.lb 90 % 40 %	Duty cycle Insulation	e class actor	: Cont.(S1) : F	b
Rated current .RC Rated torque .ocked rotor tor Breakdown torq Rated speed	: 2 : 5 : 8 : que : 1! ue : 2 : 9	.68 A .2 .29 ft.lb 90 % 40 %	Duty cycle Insulation Service fa Temperate	e class actor	: Cont.(S1) : F : 1.00 : 80 K	b
Rated current RC Rated torque ocked rotor tor Breakdown torq Rated speed Heating constan Cooling constan	: 2 : 5 : 8 : que : 1! ue : 2 : 9	.68 A .2 .29 ft.lb 90 % 40 % 50 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	
Rated current RC Rated torque ocked rotor tor Breakdown torq Rated speed	: 2 : 5 : 8 : que : 1! ue : 2 : 9	.68 A .2 .29 ft.lb 90 % 40 %	Duty cycle Insulation Service fa Temperate	e class actor	: Cont.(S1) : F : 1.00 : 80 K	b
Rated current RC Rated torque ocked rotor tor Breakdown torq Rated speed Heating constant Cooling constant Rev.	: 2 : 5 : 8 : que : 1! ue : 2 : 9	.68 A .2 .29 ft.lb 90 % 40 % 50 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	
Rated current .RC Rated torque .ocked rotor tor Breakdown torq Rated speed Heating constar Cooling constar	: 2 : 5 : 8 : que : 1! ue : 2 : 9	.68 A .2 .29 ft.lb 90 % 40 % 50 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by		-		Page	Revision
Date	12/04/2022	1		14 / 22	

Three Phase Induction Motor - Squirrel Cage

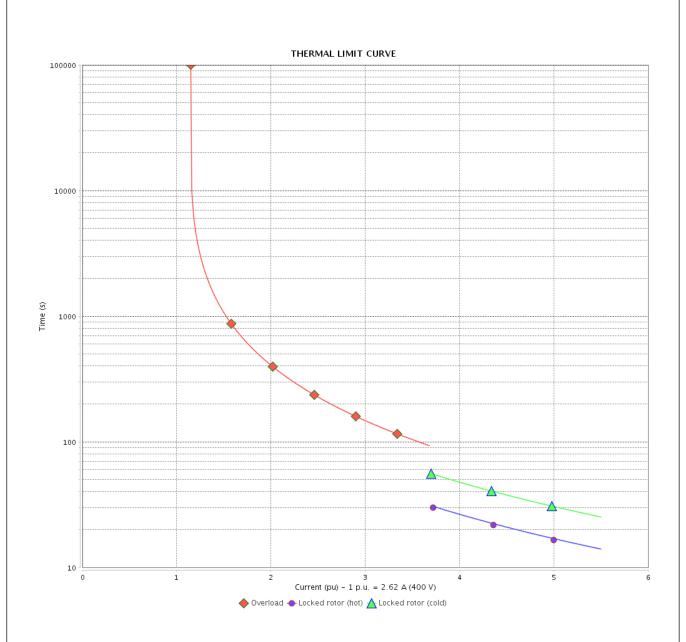


Performance : 400 V 50 Hz 6P IE4 Rated current : 2.62 A	oduct code : 14275902 talog # : 00152XT3E182	Т
Performance : 400 V 50 Hz 6P IE4 Rated current : 2.62 A		T
Performance : 400 V 50 Hz 6P IE4 Rated current : 2.62 A	g	
Rated current : 2.62 A Moment of inert RC : 5.5 Duty cycle Rated torque : 8.21 ft.lb Insulation class ocked rotor torque : 220 % Service factor treakdown torque : 250 % Temperature ris		
	: Cont.(S1) ass : F or : 1.00	
Rated speed : 960 rpm Design Heating constant	rise : 80 K : B	
Cooling constant Rev. Changes Summary Pe	Performed Checked	Date
Performed by		
Checked by Date 12/04/2022	Page	Revisio

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
		, , , , , , , , , , , , , , , , , , ,			
Performed by					I
Checked by				Page	Revision
Date	12/04/2022			16 / 22	

Three Phase Induction Motor - Squirrel Cage

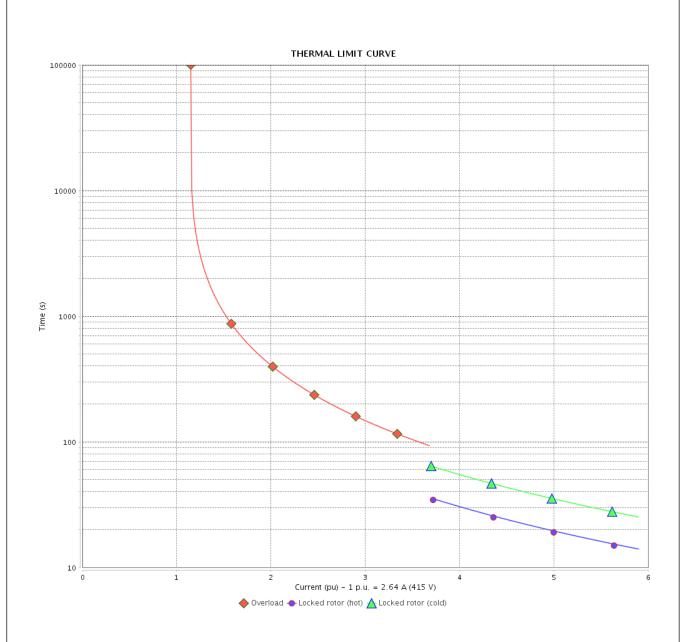


Customer	:					
Product line		NEMA Premium Efficiency	Three-	Product code :	14275902	
1 Toddet line	F	Phase				
				Catalog # :	00152XT3E1	821
Performance		15 V 50 Hz 6P IE4				
Rated current LRC	: 2 : 5	2.64 A 5.9	Moment o	of inertia (J)	: 0.4212 sq.ft.l : Cont.(S1)	b
Rated torque	: 8	3.21 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu	que : 2	250 % 290 %	Service fa Temperat		: 1.00 : 80 K	
Rated speed		190 % 160 rpm	Design	ure rise	: B	
Heating constan						
Cooling constan						
Rev.		Changes Summary	1	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				17 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			18 / 22	

Three Phase Induction Motor - Squirrel Cage

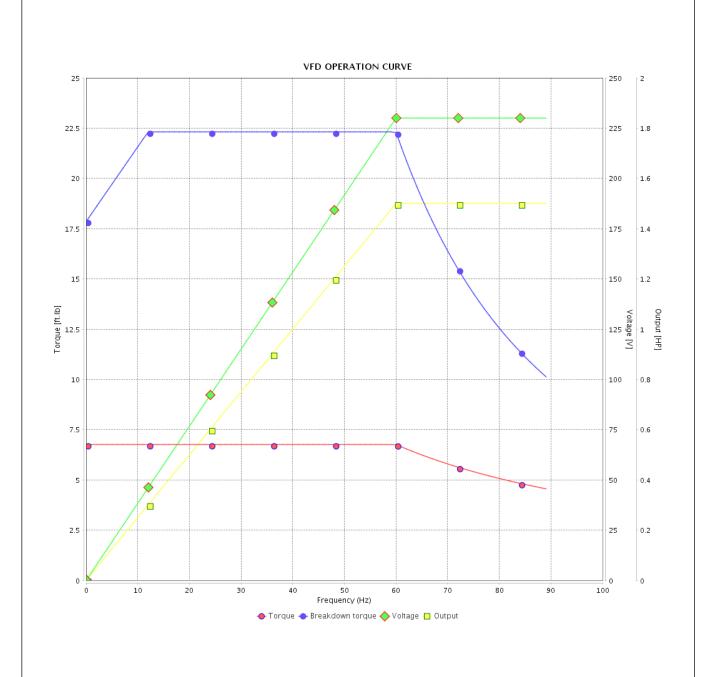


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14275902

Phase

Catalog #: 00152XT3E182T



Performance	: 2	: 230/460 V 60 Hz 6P				
Rated current	: 4	: 4.64/2.32 A		f inertia (J)	: 0.4212 sq.ft.lb	
LRC	: 6	.6	Duty cycle)	: Cont.(S1)	
Rated torque	: 6	.76 ft.lb	Insulation	class	: F	
Locked rotor torqu	ıe : 2	29 %	Service fa	ctor	: 1.15	
Breakdown torque	· · · · · · · · · · · · · · · · · · ·		ıre rise	: 80 K		
Rated speed : 1165 rpm		Design		: B		
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by		-			Page	Revision
Date	12/04/2022				19 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

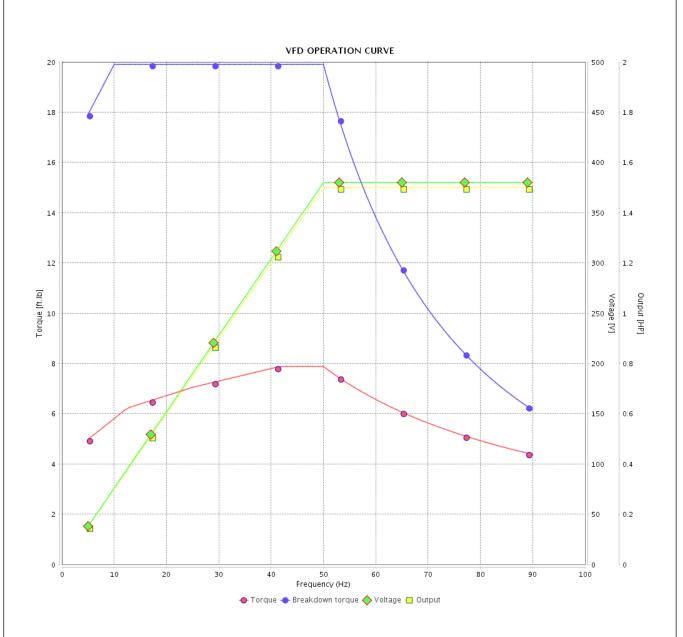
12/04/2022

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14275902

Catalog #: 00152XT3E182T



Performance	: 3	80 V 50 Hz 6P IE4				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 5 : 8 jue : 1 ie : 2	.68 A .2 .29 ft.lb 90 % 40 % 50 rpm	Moment of Duty cycle Insulation Service fa Temperati Design	class ctor	: 0.4212 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						

Page

20 / 22

Revision

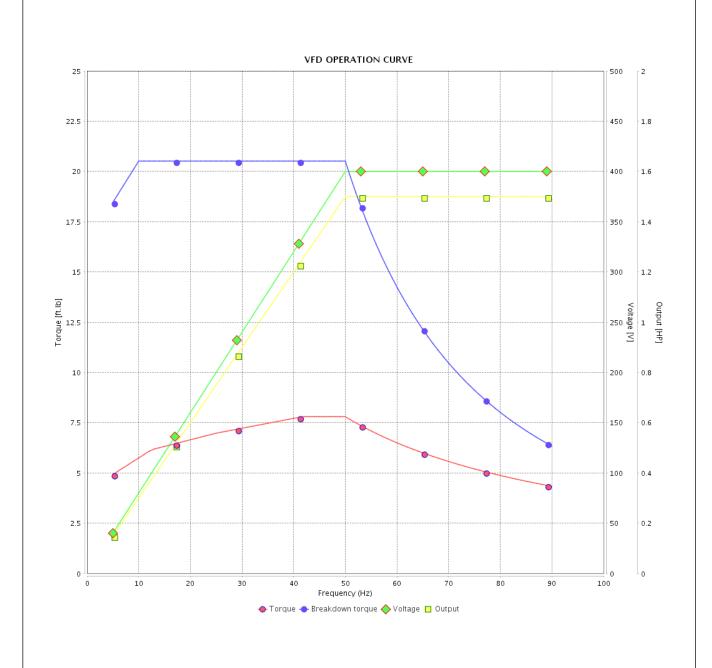
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 14275902

Catalog #: 00152XT3E182T



Performance	: 4	400 V 50 Hz 6P IE4				
Rated current	: 2	: 2.62 A Mon		f inertia (J)	: 0.4212 sq.ft	.lb
LRC	: 5	.5	Duty cycle)	: Cont.(S1)	
Rated torque	: 8	.21 ft.lb	Insulation	class	: F	
Locked rotor tord	que : 2	20 %	Service fa	ctor	: 1.00	
Breakdown torque : 2		50 %	Temperati	Temperature rise		
Rated speed		60 rpm	rpm Design		: B	
Rev.		Changes Summar	У	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022	1			21 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

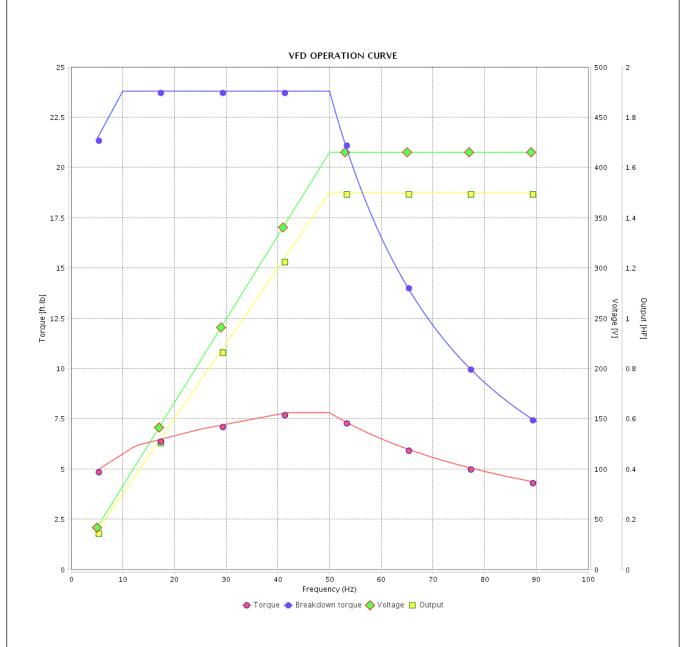
12/04/2022

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14275902

Catalog #: 00152XT3E182T



Performance	: 415 V 50 Hz 6P IE4				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 2.64 A : 5.9 : 8.21 ft.lb : 250 % : 290 % : 960 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.4212 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					

Page

22 / 22

Revision

