DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12408380

Catalog #: 20018XT3G447T

Frame : 447T Cooling method : IC411 - TEFC

Insulation class : F Mounting : F-1

Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW) : -20°C to +40°C Ambient temperature Starting method : Direct On Line

: 1000 m.a.s.l. Approx. weight³ : 2590 lb Altitude

Protection degree		: IP55 Moment of inertia (J)		ertia (J)	: 76.2 sq.ft.lb	
Design		: B				
Output [HP]		200	150	150	150	
Poles		4	4	4	4	
Frequency [Hz]		60	50	50	50	
Rated voltage [V]		460	380	400	415	
Rated current [A]		230	209	202	197	
L. R. Amperes [A]		1587	1526	1616	1675	
LRC [A]		6.9x(Code G)	7.3x(Code H)	8.0x(Code H)	8.5x(Code J)	
No load current [A]	74.0	73.0	77.0	81.0	
Rated speed [RPN	/ 1]	1780	1480	1485	1485	
Slip [%]		1.11	1.33	1.00	1.00	
Rated torque [ft.lb]		589	530	530	529	
Locked rotor torqu	e [%]	229	240	280	300	
Breakdown torque	[%]	240	260	290	320	
Service factor		1.15	1.00	1.00	1.00	
Temperature rise		80 K	80 K	80 K	80 K	
Locked rotor time		45s (cold) 25s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	
Noise level ²		82.0 dB(A)	82.0 dB(A)	82.0 dB(A)	82.0 dB(A)	
	25%	95.7	95.3	95.3	95.3	
Efficiency (%)	50%	95.8	95.4	95.4	95.4	
Elliciency (70)	75%	96.2	95.4	95.8	95.8	
	100%	96.2	95.4	95.8	95.8	
	25%	0.47	0.44	0.41	0.38	
Power Factor	50%	0.70	0.67	0.63	0.61	
I OWEL FACIOI	75%	0.80	0.78	0.75	0.73	

Drive end Non drive end Foundation loads

0.84

6319 C3 Bearing type 6316 C3 Max. traction : 3230 lb Sealing Viton Viton Seal Max. compression : 5820 lb

0.85

Oil Seal

7038 h 8569 h Lubrication interval 45 g Lubricant amount 34 g

100%

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.

0.82

0.81

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

DATA SHEET



Customer		

Thermal	protection
HIIGHIIIAI	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	14/04/2022			2 / 22	

Three Phase Induction Motor - Squirrel Cage

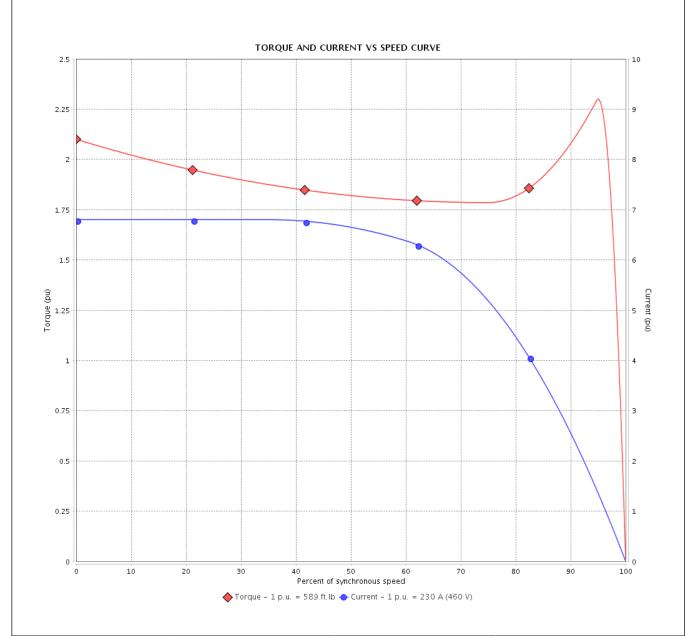


20018XT3G447T

Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12408380 Phase

Catalog #:



Performance : 460 V 60 Hz 4P Rated current : 230 A Moment of inertia (J) : 76.2 sq.ft.lb **LRC** : 6.9 Duty cycle : Cont.(S1) : 589 ft.lb Insulation class : F Rated torque : 229 % Locked rotor torque Service factor : 1.15 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : 1780 rpm Design : B Locked rotor time : 45s (cold) 25s (hot)

 Rev.
 Changes Summary
 Performed
 Checked
 Date

 Performed by
 Checked by
 Page
 Revision

 Date
 14/04/2022
 3 / 22

Three Phase Induction Motor - Squirrel Cage



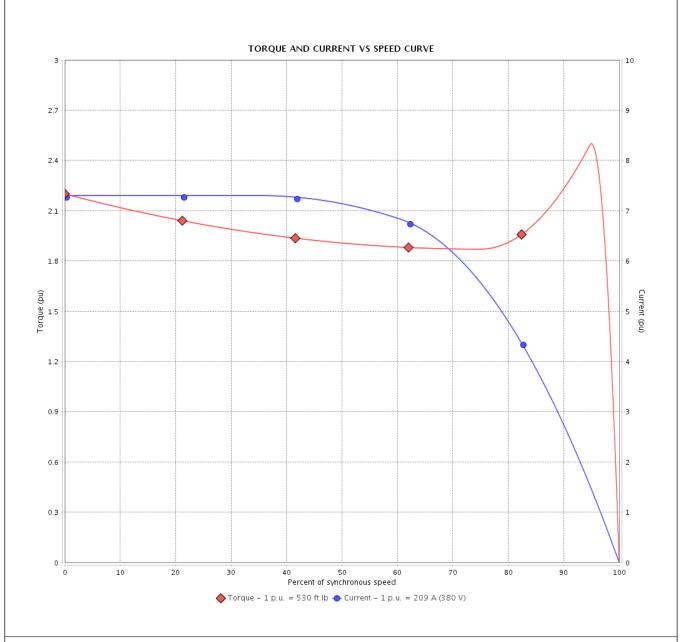
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12408380

Catalog # : 20018XT3G447T



Performance : 380 V 50 Hz 4P IE3 Rated current : 209 A Moment of inertia (J) : 76.2 sq.ft.lb **LRC** : 7.3 Duty cycle : Cont.(S1) : F : 530 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 240 % : 1.00 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 1480 rpm Design : B

Locked rotor time : 36s (cold) 20s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			4 / 22	



Revision

Page

5/22

Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 12408380 Catalog #: 20018XT3G447T 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. = 530 ft.lb ◆ Current - 1 p.u. = 202 A (400 V) Performance : 400 V 50 Hz 4P IE3 Rated current : 202 A Moment of inertia (J) : 76.2 sq.ft.lb **LRC** : 8.0 Duty cycle : Cont.(S1) : 530 ft.lb Insulation class : F Rated torque Locked rotor torque : 280 % Service factor : 1.00 Breakdown torque : 290 % Temperature rise : 80 K Rated speed : 1485 rpm Design : B Locked rotor time : 36s (cold) 20s (hot) Rev. Performed Checked Date **Changes Summary**

Performed by Checked by

Date

14/04/2022

Three Phase Induction Motor - Squirrel Cage

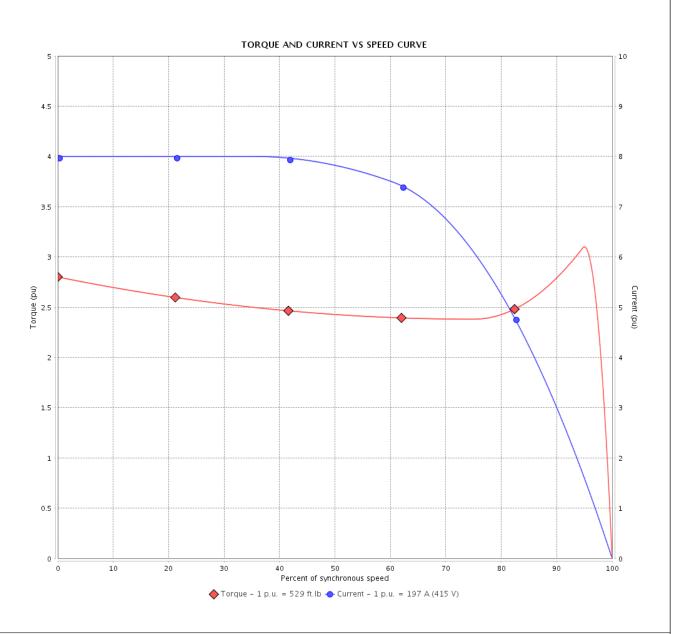


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12408380

Phase

Catalog #: 20018XT3G447T



Performance : 415 V 50 Hz 4P IE3 Rated current : 197 A Moment of inertia (J) : 76.2 sq.ft.lb **LRC** : 8.5 Duty cycle : Cont.(S1) Insulation class Rated torque : 529 ft.lb : F Locked rotor torque : 300 % Service factor : 1.00 Breakdown torque : 320 % Temperature rise : 80 K Rated speed : 1485 rpm Design : B

Locked rotor time : 36s (cold) 20s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			6 / 22	

Three Phase Induction Motor - Squirrel Cage

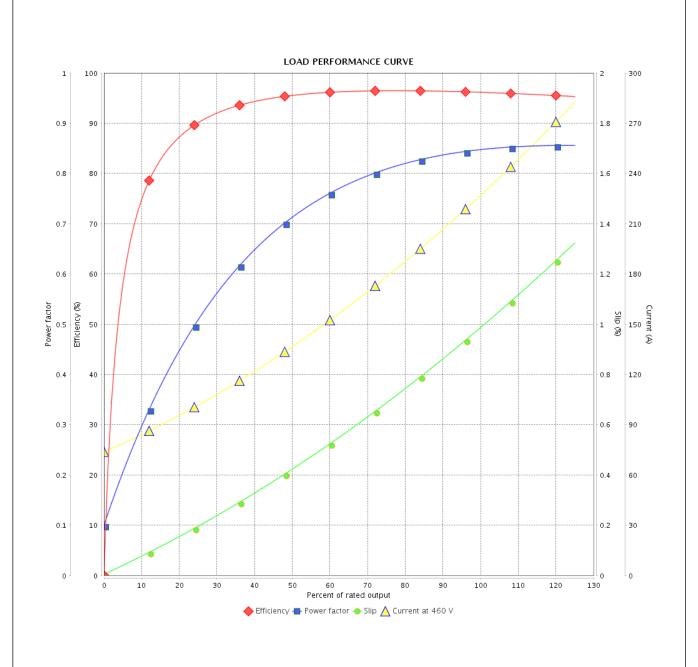


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12408380

Phase

Catalog #: 20018XT3G447T



Performance	: 4	60 V 60 Hz 4P				
Rated current	: 2	30 A	Moment o	f inertia (J)	: 76.2 sq.ft.lb	
LRC	: 6	.9	Duty cycle	;	: Cont.(S1)	
Rated torque	: 5	89 ft.lb	Insulation	class	: F	
Locked rotor torq	ue : 2	29 %	Service fa	ctor	: 1.15	
Breakdown torqu	e : 2	40 %	Temperatu	ıre rise	: 80 K	
Rated speed	: 1	780 rpm	Design		: B	
Rev.		Changes Summar	ry	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	14/04/2022				7 / 22	

Three Phase Induction Motor - Squirrel Cage

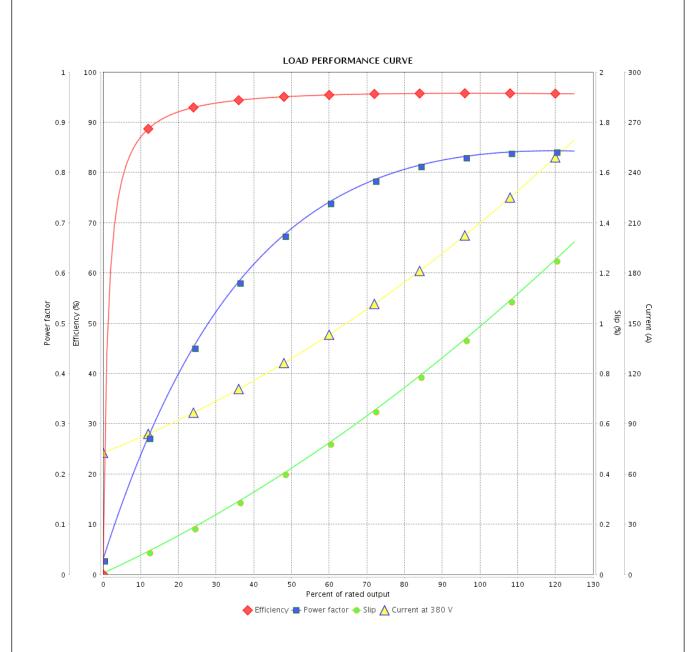


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12408380

Phase

Catalog #: 20018XT3G447T



Performance	: 38	30 V 50 Hz 4P IE3				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 7. : 53 que : 24 ue : 26	09 A 3 30 ft.lb 40 % 60 % 480 rpm	Moment of Duty cycle Insulation Service fa Temperature Design	class ctor	: 76.2 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision

8 / 22

14/04/2022

Date

Three Phase Induction Motor - Squirrel Cage

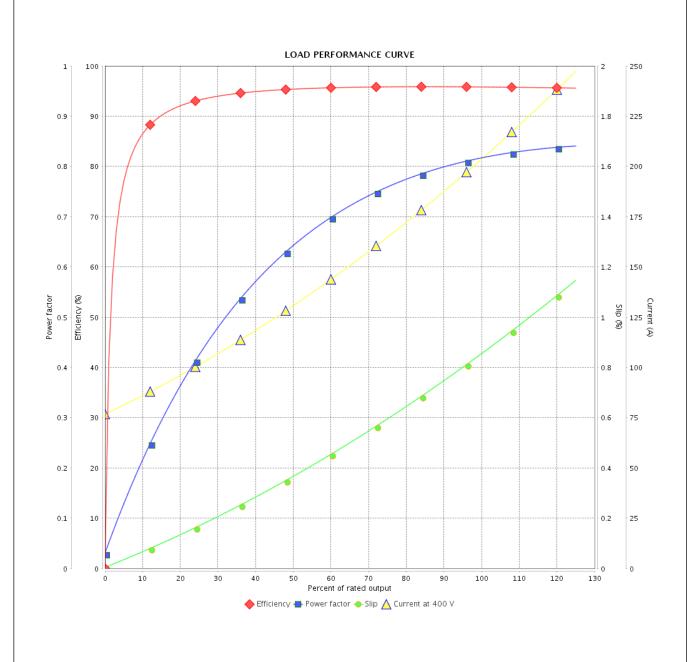


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12408380

Phase

Catalog #: 20018XT3G447T



					1	
Performance		400 V 50 Hz 4P IE3				
Rated current	:	202 A	Moment of	f inertia (J)	: 76.2 sq.ft.lb	
LRC	:	8.0	Duty cycle)	: Cont.(S1)	
Rated torque	:	530 ft.lb	Insulation	class	: F	
Locked rotor torque	e :	280 %	Service fa	ctor	: 1.00	
Breakdown torque	:	290 %	Temperati	Temperature rise		
Rated speed	:	1485 rpm	Design		: B	
Rev.		Changes Summary	/	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	14/04/2022				9/22	

Three Phase Induction Motor - Squirrel Cage



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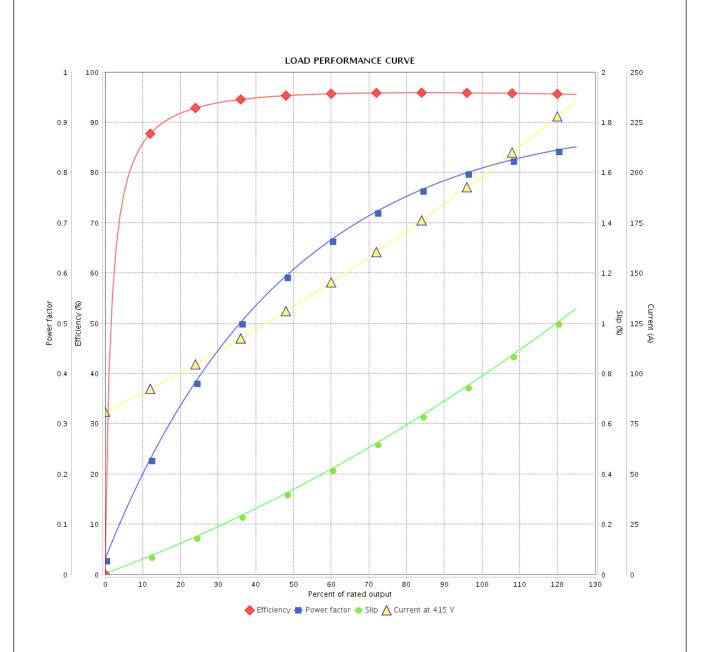
Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 20018XT3G447T

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10/22



Performance	: 415 V 50 Hz 4P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 197 A : 8.5 : 529 ft.lb : 300 % : 320 % : 1485 rpm	Moment of Duty cycle Insulation of Service fact Temperatur Design	class tor	: 76.2 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

14/04/2022

Date

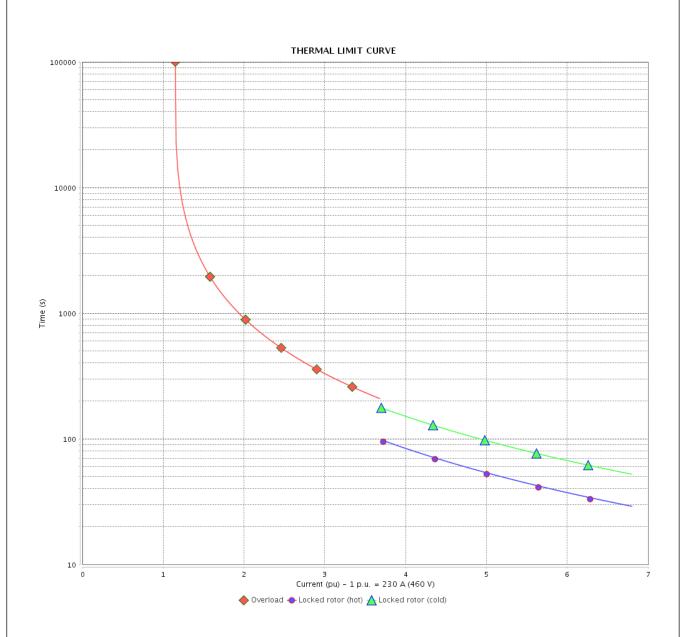


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CC : 6.9 Duty cycle : Cont.(S1) ated torque : 589 ft.lb Insulation class : F cked rotor torque : 229 % Service factor : 1.15 eakdown torque : 240 % Temperature rise : 80 K ated speed : 1780 rpm Design : B eating constant Rev. Changes Summary Performed Checked Date	Performance	: 4	60 V 60 Hz 4P				
ated torque : 589 ft.lb Insulation class : F cked rotor torque : 229 % Service factor : 1.15 eakdown torque : 240 % Temperature rise : 80 K ated speed : 1780 rpm Design : B eating constant Rev. Changes Summary Performed Checked Date	Rated current			Moment of	of inertia (J)	: 76.2 sq.ft.lb	
cked rotor torque : 229 % Service factor : 1.15 eakdown torque : 240 % Temperature rise : 80 K ated speed : 1780 rpm Design : B eating constant coling constant Rev. Changes Summary Performed Checked Date	RC Rated torque			Duty cycle	e class	: Cont.(S1) : F	
ated speed : 1780 rpm Design : B eating constant Poling constant Rev. Changes Summary Performed Checked Date	ocked rotor torc	jue : 2	29 %	Service fa	actor	: 1.15	
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	Checked by		-			Page	Revision
Date 14/04/2022 11 / 22	·	14/04/2022	-				. (0 1101011

Three Phase Induction Motor - Squirrel Cage



Customer



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

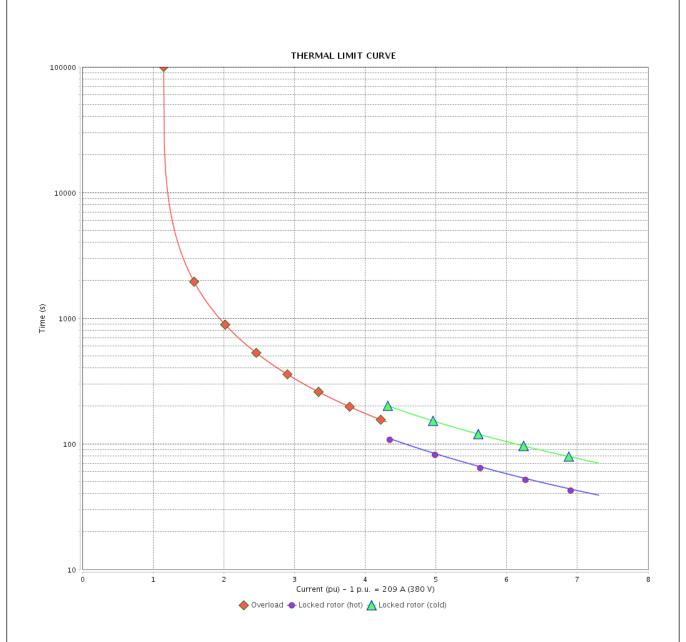


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Product line	: P	NEMA Premium Efficiency hase		Product code :	12408380	
				Catalog # :	20018XT3G4	147T
Performance		80 V 50 Hz 4P IE3		6 : (: ()	700 611	
Rated current -RC	: 2 : 7	09 A .3	Duty cycle	of inertia (J) e	: 76.2 sq.ft.lb : Cont.(S1)	
Rated torque	: 5	30 ft.lb	Insulation	class	: F	
_ocked rotor tord Breakdown torqu		40 % 60 %	Service fa Temperat		: 1.00 : 80 K	
Rated speed		480 rpm	Design	ure rise	: B	
Heating constan	 t					
Cooling constant						
Rev.		Changes Summary		Performed	Checked	Date
_						
Performed by						
Checked by					Page	Revision
Date	14/04/2022				13 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



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

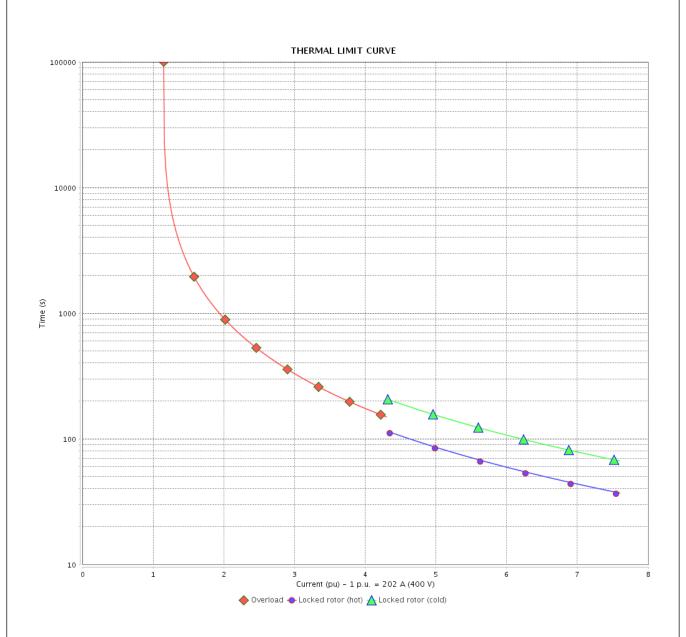


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Product line	: P	NEMA Premium Efficiency hase		Product code :	12408380	
				Catalog # :	20018XT3G4	147T
		00.1/50.11 40.150				
Performance Rated current		00 V 50 Hz 4P IE3 02 A	Momont	of inertia (J)	: 76.2 sq.ft.lb	
RC	: 8	.0	Duty cycle	Э	: Cont.(S1)	
Rated torque		30 ft.lb 80 %	Insulation Service fa		: F : 1.00	
_ocked rotor tord Breakdown torqu		80 % 90 %	Temperat		: 1.00 : 80 K	
Rated speed		485 rpm	Design		: B	
Heating constan	t					
Cooling constant						
Rev.		Changes Summary		Performed	Checked	Date
Performed by		_			.	Б ::
Checked by	14/04/0000	-			Page	Revision
Date	14/04/2022				15 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			16 / 22	

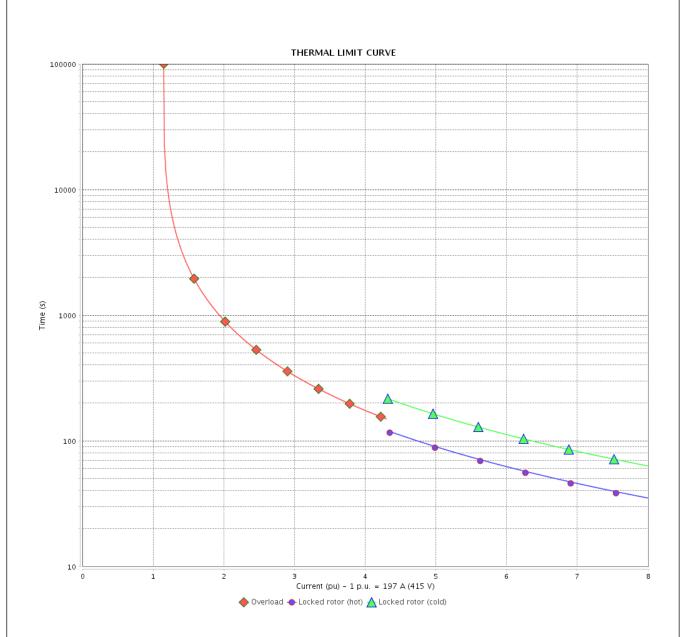


Customer	:	:				
Product line	,	: NEMA Premium Efficiency	/ Three-	Product code :	12408380	
1 Toddot iiiTo		Phase				
				Catalog # :	20018XT3G4	1471
Performance	:	415 V 50 Hz 4P IE3				
Rated current		197 A	Moment of	of inertia (J)	: 76.2 sq.ft.lb	
LRC Rated torque		8.5 529 ft.lb	Duty cycle Insulation	e Lolass	: Cont.(S1) : F	
Locked rotor tord	que ::	300 %	Service fa	actor	: 1.00	
Breakdown torqu		320 % 1485 rpm	Temperat Design	ure rise	: 80 K : B	
Rated speed		100 τριτί	Design		. .	
Heating constant						
Cooling constant		Changes Summary		Performed	Checked	Date
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Performed by						
Checked by					Page	Revision
Date	14/04/2022				17 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary		Checked	Date
Performed by					
Checked by		-		Page	Revision
Date	14/04/2022			18 / 22	

Three Phase Induction Motor - Squirrel Cage

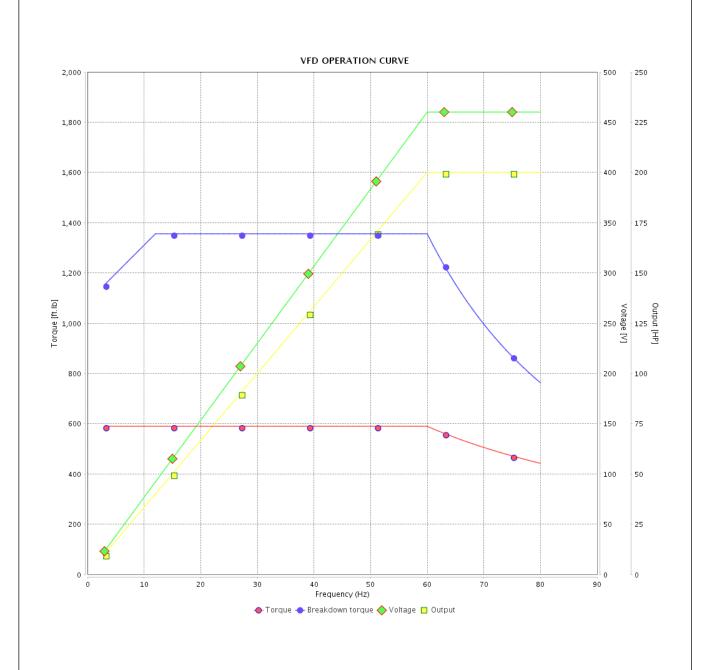


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12408380

Phase

Catalog #: 20018XT3G447T



Performance	: 460 V 60 Hz 4P				
RC : 6.9 Duty		Moment of inertia (J) Duty cycle Insulation class		: 76.2 sq.ft.lb : Cont.(S1) : F	
Cated torque Locked rotor torque Breakdown torque Rated speed	: 229 % : 240 % : 1780 rpm	Service factor Temperature rise Design		: 1.15 : 80 K : B	
Rev.	Changes Summary	'	Performed	Checked	Date
Performed by					
Checked by				Page	Revision

19/22

14/04/2022

Date

Three Phase Induction Motor - Squirrel Cage



Revision

20 / 22

Customer

Checked by

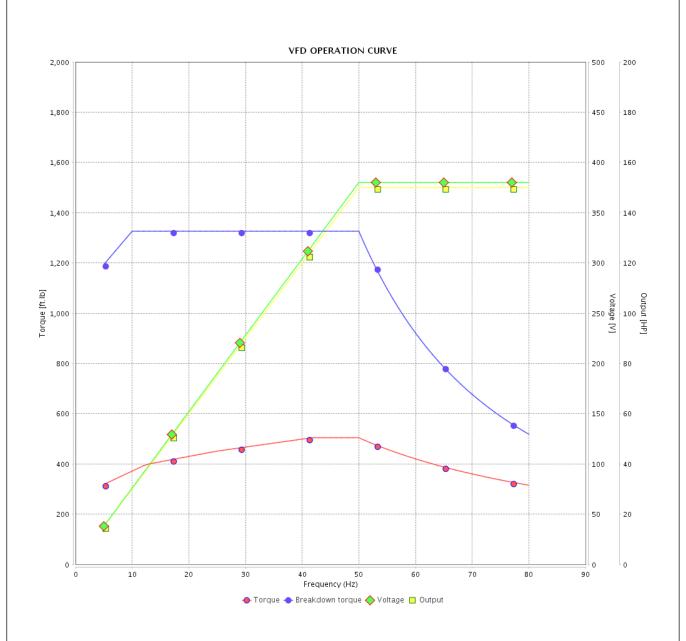
Date

14/04/2022

Product line : NEMA Premium Efficiency Three-

Product code: 12408380

Catalog #: 20018XT3G447T



Performance : 380 V 50 Hz 4P IE3 : 209 A Rated current Moment of inertia (J) : 76.2 sq.ft.lb **LRC** : 7.3 Duty cycle : Cont.(S1) : 530 ft.lb Insulation class : F Rated torque Locked rotor torque : 240 % Service factor : 1.00 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 1480 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Page

Three Phase Induction Motor - Squirrel Cage

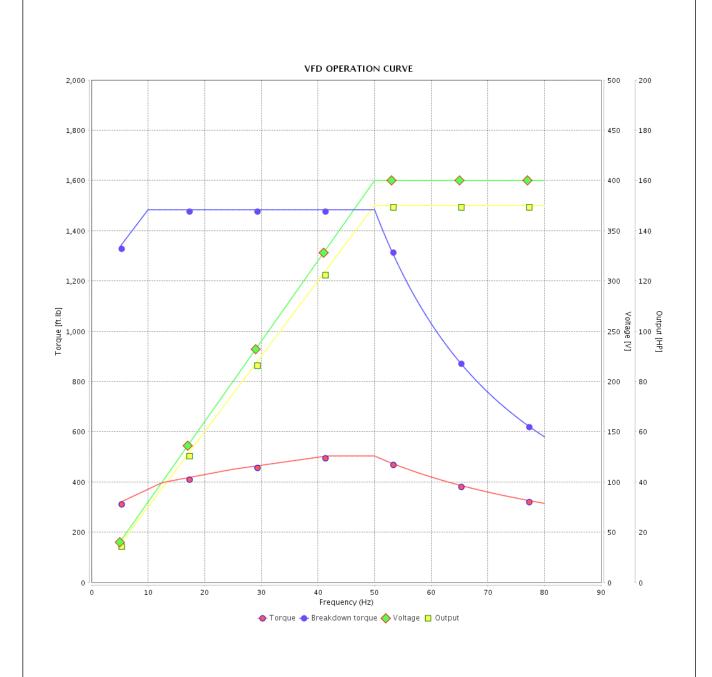


Customer

Product line : NEMA Premium Efficiency Three-Product code:

Catalog #: 20018XT3G447T

12408380



Performance	: 4	00 V 50 Hz 4P IE3				
Rated current	: 2	02 A	Moment o	f inertia (J)	: 76.2 sq.ft.lb	
LRC	: 8	.0	Duty cycle)	: Cont.(S1)	
Rated torque	: 5	30 ft.lb	Insulation	class	: F	
Locked rotor torque		80 %	Service fa	ctor	: 1.00	
Breakdown torqu	ie : 2	90 %	Temperati	Temperature rise		
Rated speed	: 1	485 rpm	Design		: B	
Rev.		Changes Summa	ry	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	14/04/2022				21 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer

Checked by

14/04/2022

Product line : NEMA Premium Efficiency Three-Product code:

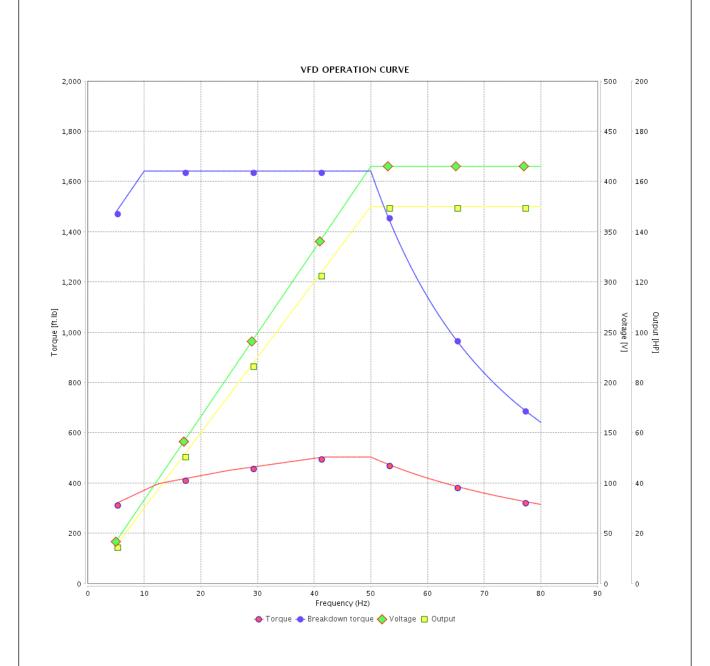
Catalog #: 20018XT3G447T

12408380

Page

22 / 22

Revision



Performance	: 4	415 V 50 Hz 4P IE3				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 8 : 5 : 1 : 1 : 2 : 3	197 A 3.5 529 ft.lb 300 % 320 % 1485 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 76.2 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date	
Performed by						

