DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 14335121

45012ET3GRB586/7-W22 Catalog #:

Frame : 586/7T 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 · 4385 lb Approx. weight3

Altitude		: 1000 m.a.s.i.	'''		D CO Reaft Ib	
Protection degree		: IP55	Moment of ine	ertia (J) : 368	sq.ft.lb	
Output [HP]		450	400	400	400	
Poles		6	6	6	6	
Frequency [Hz]		60	50	50	50	
Rated voltage [V]		460	380	400	415	
Rated current [A]		532	580	558	542	
L. R. Amperes [A]		3245	3074	3292	3415	
LRC [A]		6.1x(Code G)	5.3x(Code F)	5.9x(Code G)	6.3x(Code G)	
No load current [A]	210	208	223	235	
Rated speed [RPN	/ 1]	1190	990	990	990	
Slip [%]		0.83	1.00	1.00	1.00	
Rated torque [ft.lb]		1980	2120	2120 2120		
Locked rotor torque [%]		210	180	200	220	
Breakdown torque	Breakdown torque [%]		190	210	229	
Service factor		1.15	1.00 1.00		1.00	
Temperature rise		80 K	105 K	105 K 105 K		
Locked rotor time		45s (cold) 25s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	
Noise level ²		77.0 dB(A)	73.0 dB(A)	73.0 dB(A)	73.0 dB(A)	
	25%	95.7	96.0	96.0	95.7	
Efficiency (%)	50%	95.8	95.8	95.8	95.8	
Lilloleticy (70)	75%	96.2	96.2	96.2	96.2	
	100%	96.2	95.8	95.8	96.2	
	25%	0.43	0.45	0.42	0.39	
Power Factor	50%	0.67	0.70	0.67	0.64	
1 OWCI I actor	75%	0.77	0.79	0.77	0.75	
	100%	0.81	0.82	0.81	0.80	

Non drive end Foundation loads Drive end

60 g

Bearing type NU-322 C3 6319 C3 Max. traction : 7989 lb Sealing

Taconite Taconite Max. compression : 12374 lb Labyrinth Labyrinth 13000 h Lubrication interval 7000 h

Mobil Polyrex EM

45 g

Notes

Lubricant amount

Lubricant type

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	13/04/2022			1 / 22	

DATA SHEET



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Customer	:					
		Space	heater informati	ion		
Voltage: 200 - 24	10 V					
Rev.		Changes Summary		Performed	Checked	Date
Performed by			l			
Checked by					Page	Revision
Date	13/04/2022				2 / 22	

Three Phase Induction Motor - Squirrel Cage

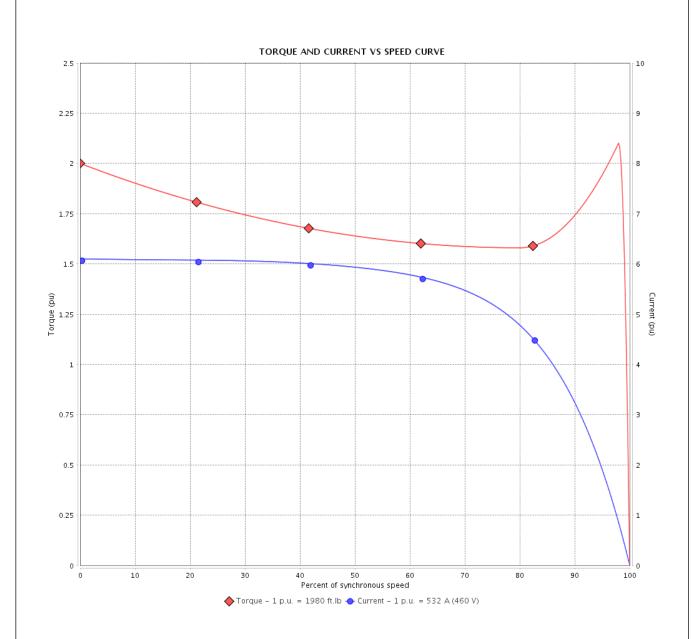


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14335121

Phase

Catalog #: 45012ET3GRB586/7-W22



Performance	: 460 V 60 Hz 6P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 532 A : 6.1 : 1980 ft.lb : 210 % : 210 % : 1190 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise	: 368 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K	

Locked rotor time : 45s (cold) 25s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			3 / 22	

Three Phase Induction Motor - Squirrel Cage



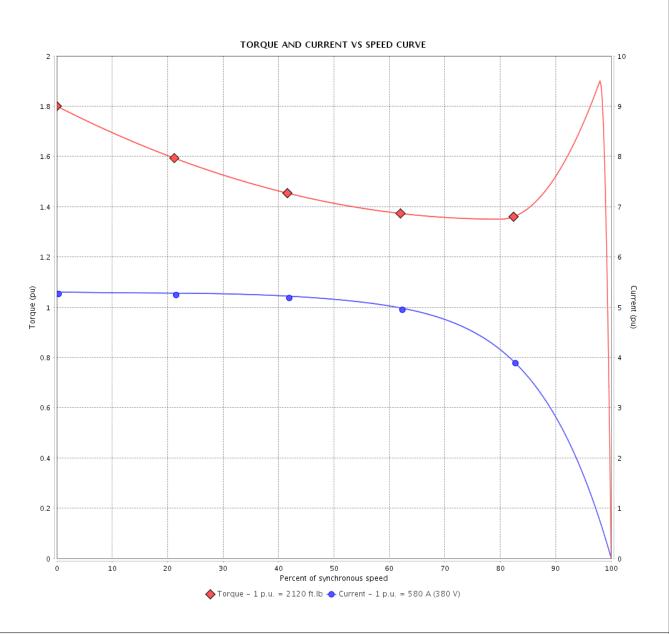
Customer :

Product line : NEMA Premium Efficiency Three- Pr

Phase

Product code: 14335121

Catalog #: 45012ET3GRB586/7-W22



Performance : 380 V 50 Hz 6P IE3

: 990 rpm

Rated current : 580 A
LRC : 5.3
Rated torque : 2120 ft.lb
Locked rotor torque : 180 %
Breakdown torque : 190 %

Rated speed

Moment of inertia (J) : 368 sq.ft.lb Duty cycle : Cont.(S1)

Insulation class : F
Service factor : 1.00
Temperature rise : 105 K

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			4 / 22	

Three Phase Induction Motor - Squirrel Cage

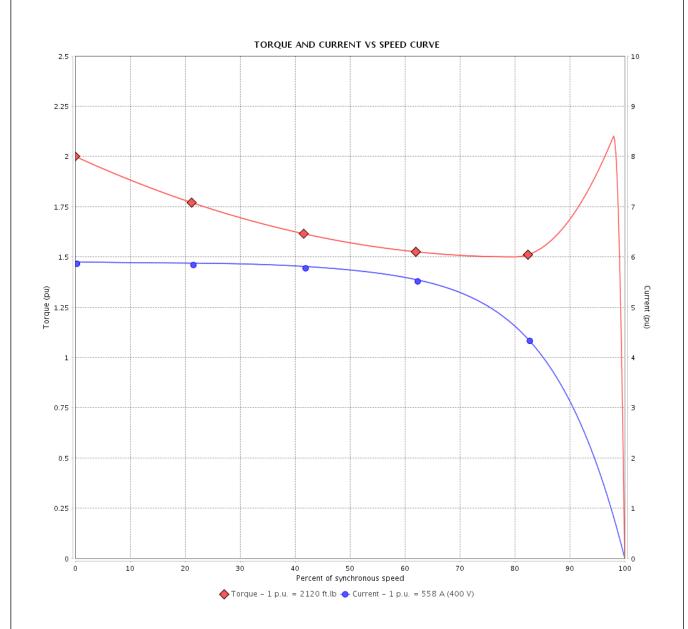


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14335121

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Catalog #: 45012ET3GRB586/7-W22



Performance	: 400 V 50 Hz 6P IE3			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 558 A : 5.9 : 2120 ft.lb : 200 % : 210 % : 990 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise	: 368 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K	

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

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Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			5 / 22	

Three Phase Induction Motor - Squirrel Cage

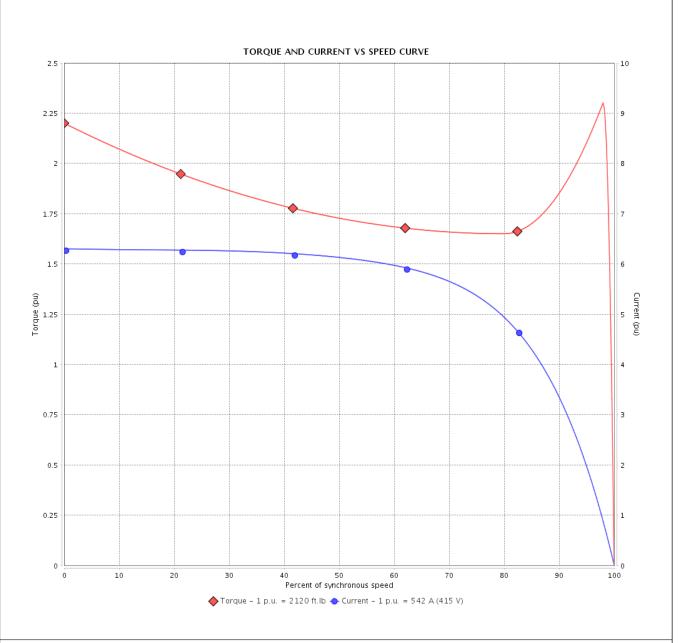


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14335121

Phase

Catalog #: 45012ET3GRB586/7-W22



Performance : 415 V 50 Hz 6P IE3 Rated current : 542 A Moment of inertia (J) : 368 sq.ft.lb **LRC** : 6.3 Duty cycle : Cont.(S1) : 2120 ft.lb Insulation class Rated torque : F Service factor Locked rotor torque : 220 % : 1.00 Breakdown torque : 229 % Temperature rise : 105 K Rated speed : 990 rpm

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			6 / 22	

Three Phase Induction Motor - Squirrel Cage

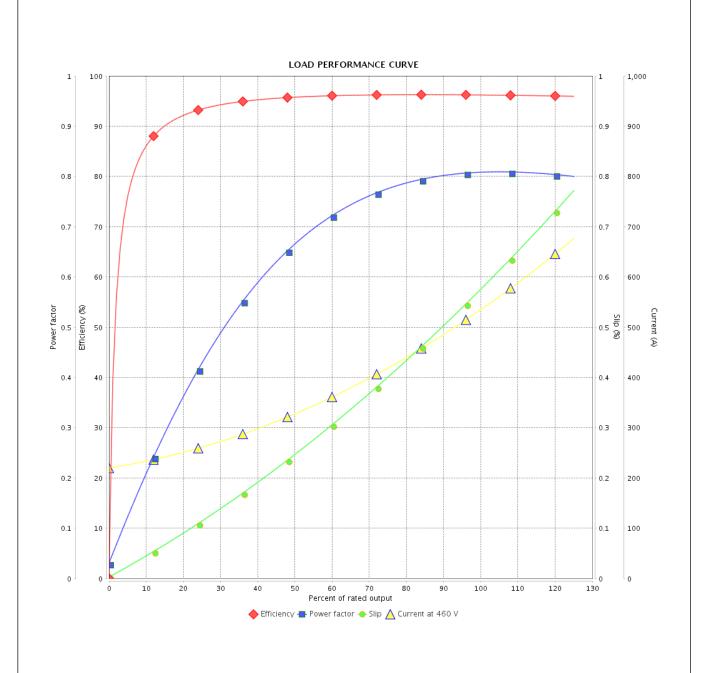


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14335121

Phase

Catalog #: 45012ET3GRB586/7-W22



Performance	: 460 V 60 I	Hz 6P			
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	•	Duty of Insula Servio	ent of inertia (J) cycle tion class ee factor erature rise	: 368 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K	
Rev.	Change	s Summary	Performed	Checked	Date

Rev.	Changes Summary		Performed	Checked	Date	
Performed by						
Checked by					Page	Revision
Date	13/04/2022				7 / 22	

Three Phase Induction Motor - Squirrel Cage

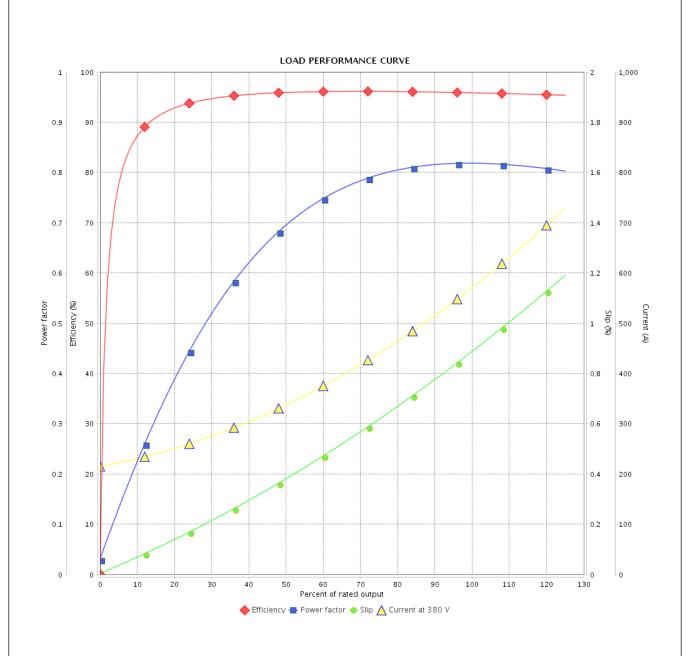


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14335121

Phase

Catalog #: 45012ET3GRB586/7-W22



Donformono		· 200 \/ 50 H= 6D IE2						
Performance		: 380 V 50 Hz 6P IE3						
Rated current		: 580 A	Moment of inertia (J)		Moment of inertia (J) : 368 sq.ft.ll		: 368 sq.ft.lb	
LRC		: 5.3	Duty cycle	9	: Cont.(S1)			
Rated torque : 2120 ft.lb		: 2120 ft.lb	Insulation class : F		: F			
Locked rotor torc	que	: 180 %	Service fa	ictor	: 1.00			
Breakdown torqu	ıe	: 190 %	Temperati	ure rise	: 105 K			
Rated speed		: 990 rpm						
Rev.		Changes Summary	1	Performed	Checked	Date		

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			8 / 22	

Three Phase Induction Motor - Squirrel Cage

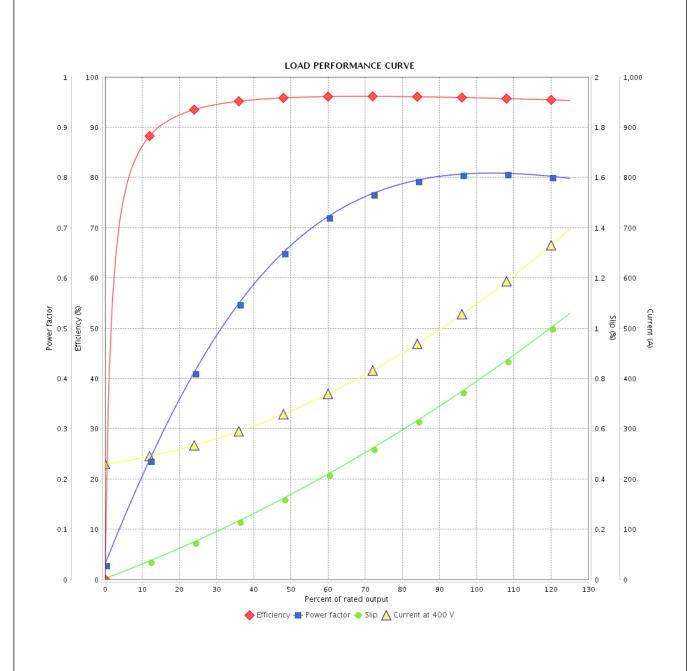


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14335121

Phase

Catalog #: 45012ET3GRB586/7-W22



Performance	: 400 V 5	50 Hz 6P IE3			
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed		Ib Duty cycle Insulation Service fa Temperat	class ctor	: 368 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K	
Rev.	Chan	nges Summary	Performed	Checked	Date

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			Page	Revision
13/04/2022			9 / 22	
				Page

Three Phase Induction Motor - Squirrel Cage



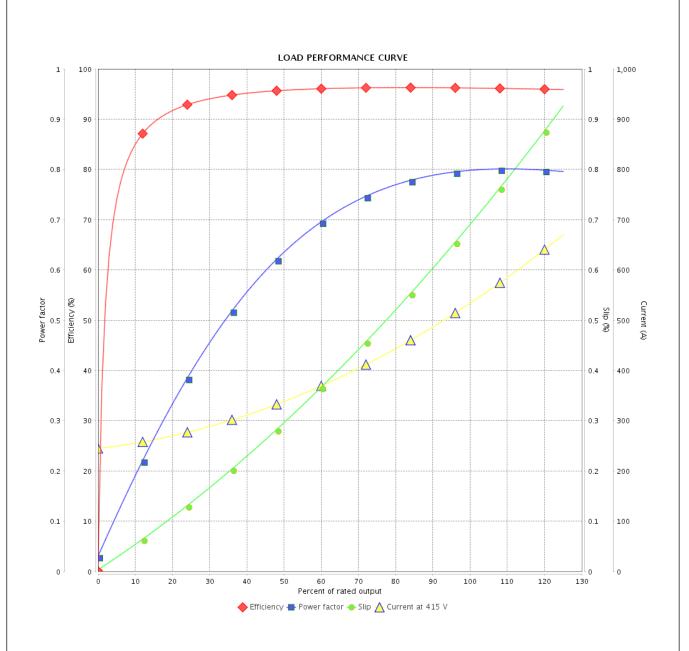
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Product line : NEMA Premium Efficiency Three- Product code :

Phase

Product code: 14335121

Catalog #: 45012ET3GRB586/7-W22



Performance : 415 V 50 Hz 6P IE3 Rated current : 542 A Moment of inertia (J) : 368 sq.ft.lb **LRC** Duty cycle : 6.3 : Cont.(S1) : 2120 ft.lb Insulation class Rated torque : F Locked rotor torque : 220 % Service factor : 1.00 Breakdown torque : 229 % Temperature rise : 105 K Rated speed : 990 rpm

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Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			10 / 22	

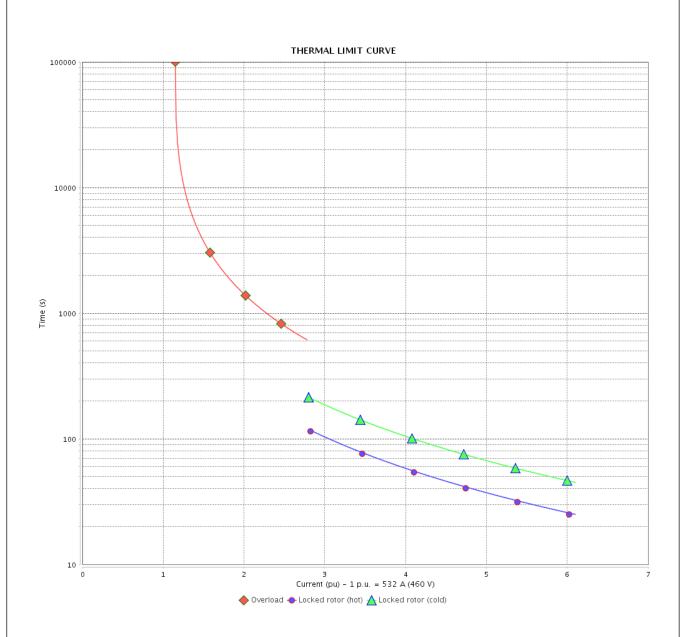


Product line		NEMA Premium Efficiency T	hree-	Product code :	14335121	
	Р	hase		Catalog # :	45012ET3GF	RB586/7-W22
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	: 5: : 6: : 1! que : 2' ue : 2' : 1	.1 980 ft.lb 10 %	Moment of Duty cycle Insulation Service fa	class ictor	: 368 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K	
Performance Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar Cooling constan	: 5: : 6: : 1! que : 2: ue : 2: : 1:	32 A .1 980 ft.lb 10 %	Duty cycle Insulation Service fa	e class actor	: Cont.(S1) : F : 1.15	
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed	: 5: : 6: : 1! que : 2: ue : 2: : 1:	32 A .1 980 ft.lb 10 %	Duty cycle Insulation Service fa	e class actor	: Cont.(S1) : F : 1.15	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar Cooling constan	: 5: : 6: : 1! que : 2: ue : 2: : 1:	32 A .1 .980 ft.lb 10 % 10 % 190 rpm	Duty cycle Insulation Service fa	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan Cooling constan Rev.	: 5: : 6: : 1! que : 2: ue : 2: : 1:	32 A .1 .980 ft.lb 10 % 10 % 190 rpm	Duty cycle Insulation Service fa	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K	Date
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constar Cooling constan	: 5: : 6: : 1! que : 2: ue : 2: : 1:	32 A .1 .980 ft.lb 10 % 10 % 190 rpm	Duty cycle Insulation Service fa	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K	Date

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by		-		Page	Revision
Date	13/04/2022			12 / 22	

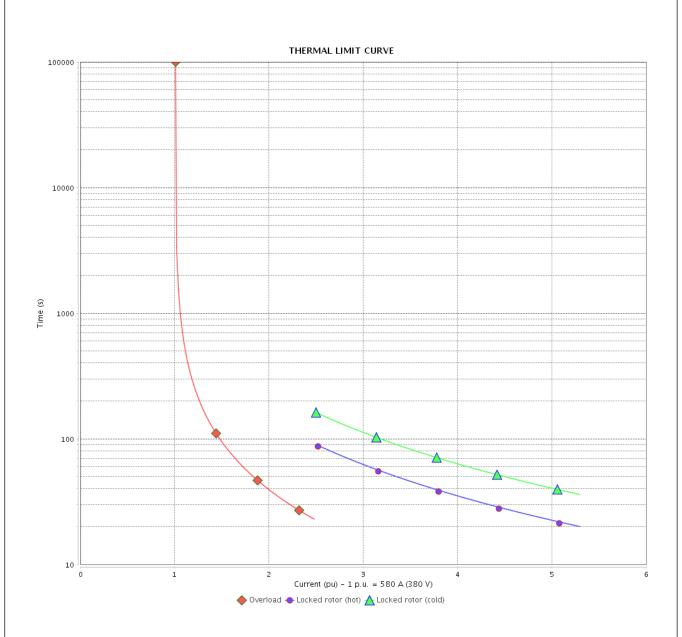


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Product line	. 1	NEMA Premium Efficiency	Three	Product code :	14335121	
Product line	 P	hase				
				Catalog # :	45012ET3GF	RB586/7-W22
Performance		80 V 50 Hz 6P IE3	Mamanta	of in autic (I)	. 200 an # lb	
Rated current LRC	: 5	80 A .3	Duty cycle	of inertia (J) e	: 368 sq.ft.lb : Cont.(S1)	
Rated torque	: 2	120 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		80 % 90 %	Service fa Temperat		: 1.00 : 105 K	
Rated speed		90 rpm	. S.II.porat			
Heating constan	t					
Cooling constan						
Rev.		Changes Summary		Performed	Checked	Date
		1				
Performed by		_			_	5
Checked by	40/04/0000	_			Page	Revision
Date	13/04/2022				13 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by		_		Page	Revision
Date	13/04/2022	1		14 / 22	

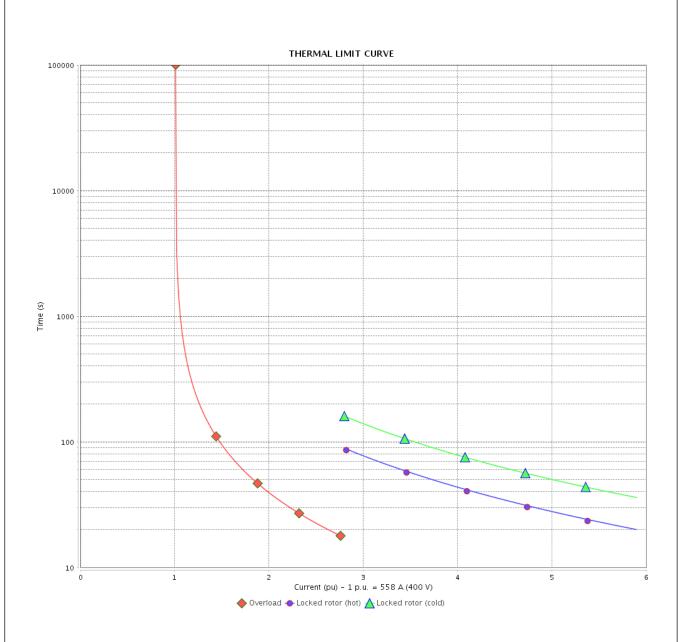


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Product line	. 1	NEMA Premium Efficiency	Three	Product code :	14335121	
Product line	. i P	hase				
				Catalog # :	45012ET3GF	RB586/7-W22
Performance		00 V 50 Hz 6P IE3	Mamanta	of in outin (1)	. 200 an # lb	
Rated current LRC	: 5:	58 A .9	Duty cycle	of inertia (J) e	: 368 sq.ft.lb : Cont.(S1)	
Rated torque		120 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		00 % 10 %	Service fa Temperat		: 1.00 : 105 K	
Rated speed		90 rpm				
Heating constan	t					
Cooling constan						
Rev.		Changes Summary		Performed	Checked	Date
		1				
Performed by		_				Б
Checked by	12/04/2022	_			Page	Revision
Date	13/04/2022				15 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
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Performed by					
Checked by				Page	Revision
Date	13/04/2022			16 / 22	

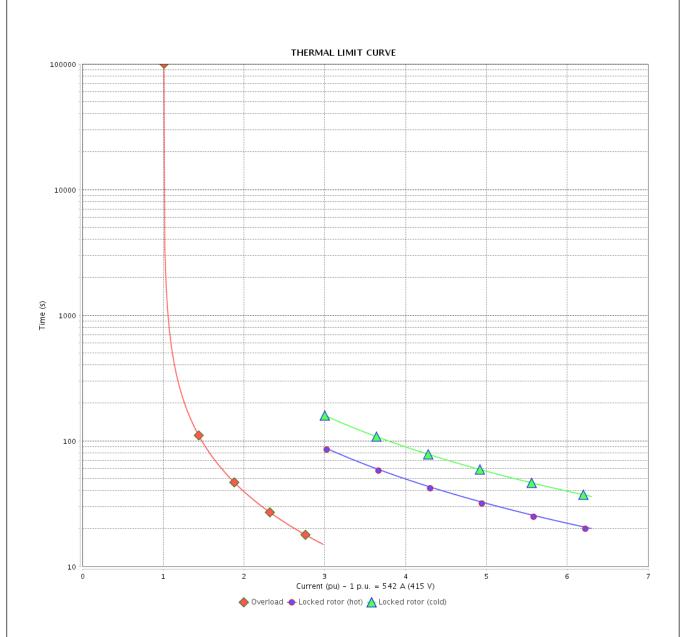


Customer	:					
Product line	. 1	NEMA Premium Efficiency	Three	Product code :	14335121	
Product line	P	hase				
				Catalog # :	45012ET3GF	RB586/7-W22
Domformore		45.V.50.H= CD.IF2				
Performance Rated current		15 V 50 Hz 6P IE3 42 A	Moment o	of inertia (J)	: 368 sq.ft.lb	
LRC	: 6.	3	Duty cycle	Э	: Cont.(S1)	
Rated torque Locked rotor tord		120 ft.lb 20 %	Insulation Service fa		: F : 1.00	
Breakdown torqu		20 <i>%</i> 29 %	Temperat		: 1.00 : 105 K	
Rated speed	: 99	90 rpm				
Heating constan	t					
Cooling constan	t					
Rev.		Changes Summary		Performed	Checked	Date
Dorformanilla		1				
Performed by Checked by		_			Page	Revision
Date	13/04/2022	-			17 / 22	IVENISION
Date	10/07/2022	1			11166	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022	_		18 / 22	

Three Phase Induction Motor - Squirrel Cage



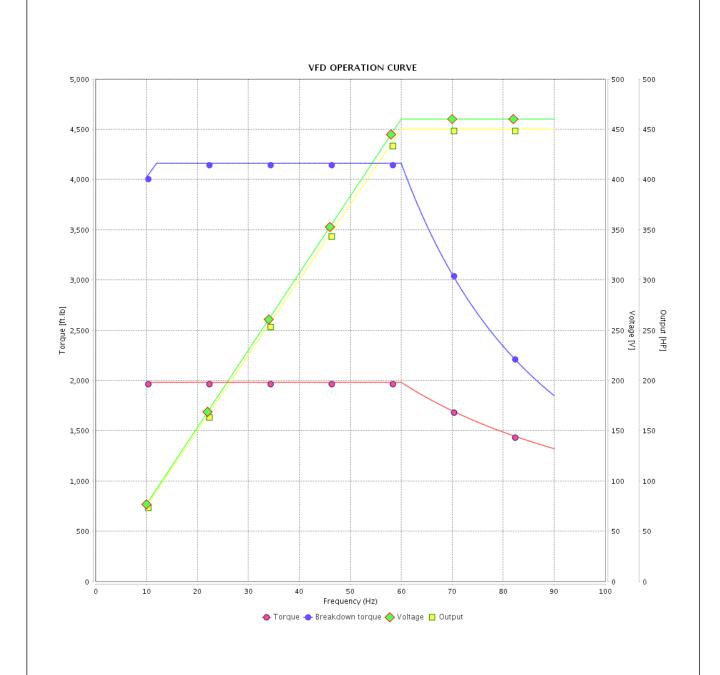
Customer

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Product code: 14335121

Catalog #: 45012ET3GRB586/7-W22



Locked rotor torque : 210 % Service factor : 1.15
Breakdown torque : 210 % Temperature rise : 80 K
Rated speed : 1190 rpm

 Rev.
 Changes Summary
 Performed
 Checked
 Date

 Performed by
 Checked by
 Page
 Revision

 Date
 13/04/2022
 19 / 22

Three Phase Induction Motor - Squirrel Cage



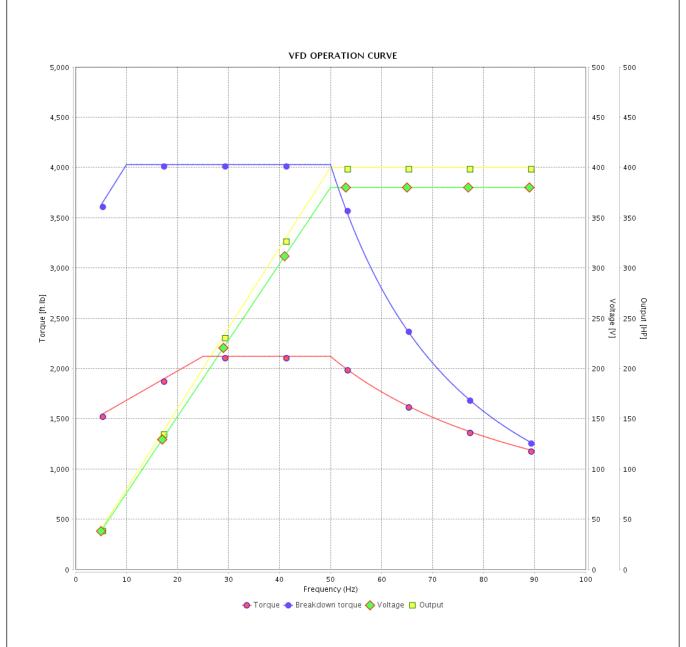
Customer :

Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 14335121

Catalog #: 45012ET3GRB586/7-W22



Performance : 380 V 50 Hz 6P IE3

Rated current : 580 A Moment of inertia (J) : 368 sq.ft.lb LRC : 5.3 Duty cycle : Cont.(S1) Rated torque : 2120 ft.lb Insulation class : F

Locked rotor torque : 180 % Service factor : 1.00
Breakdown torque : 190 % Temperature rise : 105 K
Rated speed : 990 rpm

 Rev.
 Changes Summary
 Performed
 Checked
 Date

 Performed by
 Page
 Revision

 Date
 13/04/2022
 20 / 22

Three Phase Induction Motor - Squirrel Cage



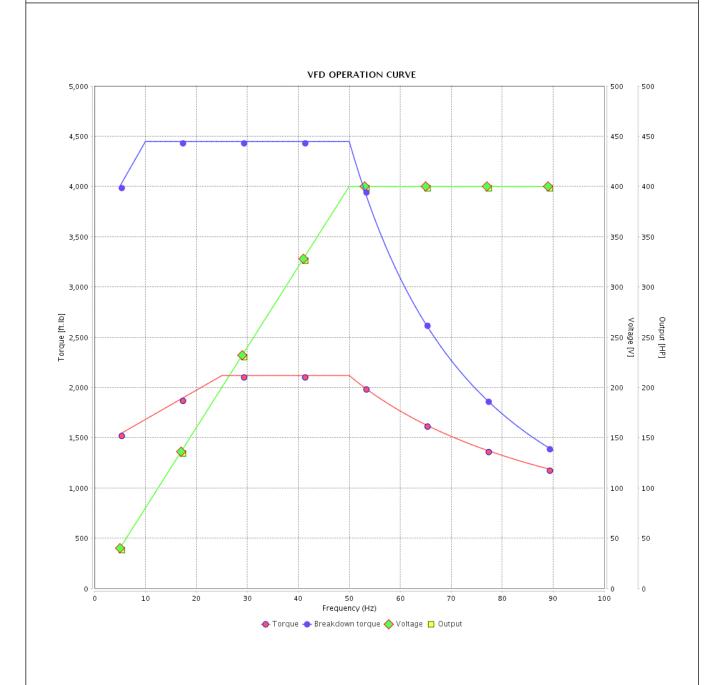
Customer

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog # : 45012ET3GRB586/7-W22

14335121



Performance : 400 V 50 Hz 6P IE3					
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	•	Moment of Duty cycle Insulation Service fac Temperatu	class ctor	: 368 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K	
Rev. Changes Summary			Performed	Checked	Date

Rev.	Changes Summary		Performed		Checked	Date
Performed by						
Checked by					Page	Revision
Date	13/04/2022				21 / 22	

Three Phase Induction Motor - Squirrel Cage

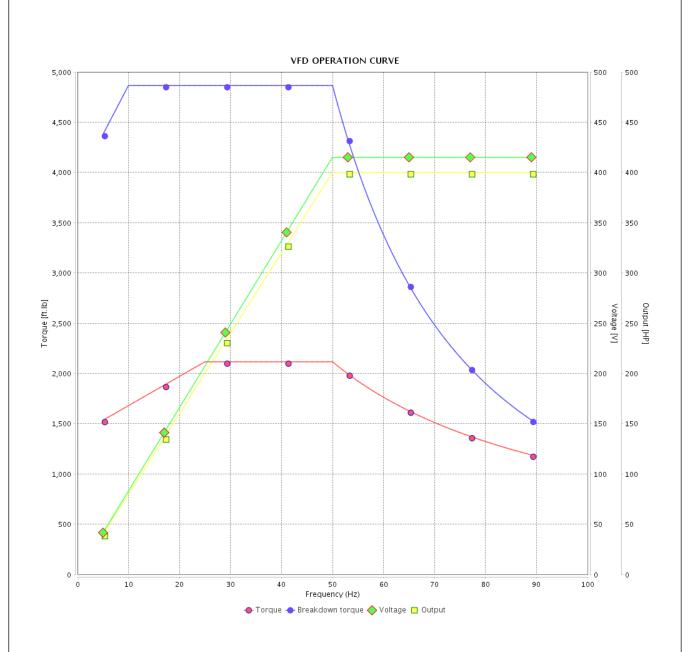


Customer

Product line : NEMA Premium Efficiency Three-Product code:

Catalog #: 45012ET3GRB586/7-W22

14335121



Performance : 415 V 50 Hz 6P IE3

: 229 %

: 542 A Rated current Moment of inertia (J) : 368 sq.ft.lb **LRC** : 6.3 Duty cycle : Cont.(S1) : 2120 ft.lb Insulation class Rated torque : F Locked rotor torque : 220 % Service factor : 1.00

Breakdown torque Rated speed : 990 rpm

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Rev.	Changes Summary		Performed	Checked	Date	
Performed by						
Checked by					Page	Revision
Date	13/04/2022	1			22 / 22	

Temperature rise

: 105 K

