DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12182294

Catalog #: 50012ET3G586/7-W22

Frame : 586/7T Cooling method : IC411 - TEFC

Insulation class 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 : 4688 lb

Protection degree	legree : IP55 Moment of inertia (J) : 368 sq.ft.lb				
Output [HP]		500	450	450	450
Poles		6	6	6	6
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		603	646	629	614
L. R. Amperes [A]		3618	3424	3711	3930
LRC [A]		6.0x(Code G)	5.3x(Code F)	5.9x(Code G)	6.4x(Code G)
No load current [A]		240	235	255	275
Rated speed [RPM	1]	1192	991	992	993
Slip [%]		0.67	0.90	0.80	0.70
Rated torque [ft.lb]		2200	2380	2380	2380
Locked rotor torque [%]		200	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	96.5	96.1	95.3
Efficiency (%)	50%	95.8	96.2	95.8	95.4
Efficiency (70)	75%	96.2	96.2	96.2	95.8
	100%	96.2	95.8	95.8	95.8
	25%	0.42	0.45	0.41	0.37
Power Factor	50%	0.66	0.69	0.65	0.61
1 OWELL ACIO	75%	0.76	0.78	0.75	0.73
	100%	0.80	0.81	0.79	0.78

Drive end Non drive end Foundation loads

Bearing type 6322 C3 6319 C3 Max. traction : 9076 lb Sealing

Taconite Taconite Max. compression : 13764 lb Labyrinth Labyrinth 13000 h Lubrication interval 11000 h

Lubricant amount 60 g 45 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.

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

DATA SHEET



Three Pha	se Induction	n Motor - Squirrel Cage			
Customer	:				
		Space heater informa	tion		
Voltage: 200 - 24	10 V				
Rev.		Changes Summary	Performed	Checked	Date
		<u> </u>			
Performed by					
Checked by				Page	Revision
Date	12/04/2022			2 / 22	

Three Phase Induction Motor - Squirrel Cage

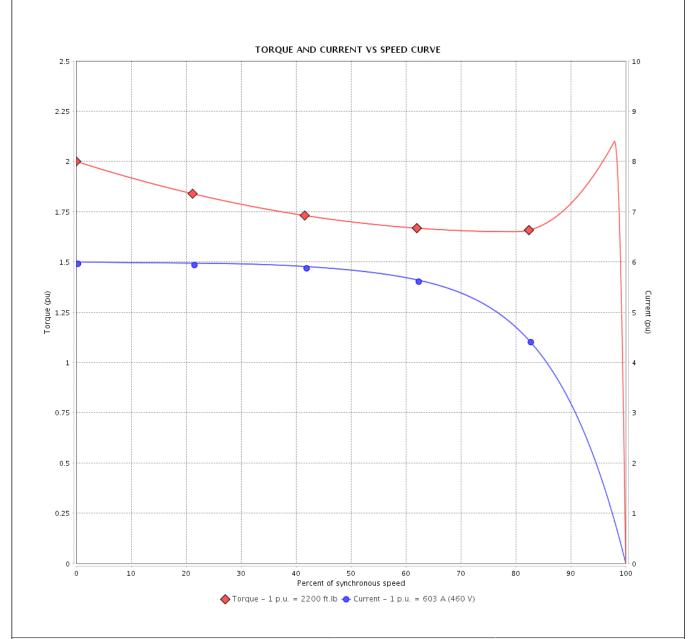


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12182294

Phase

Catalog #: 50012ET3G586/7-W22



Performance	: 460 V 60 Hz 6P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 603 A : 6.0 : 2200 ft.lb : 200 % : 210 % : 1192 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise	: 368 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K	
Looked reter time	: 450 (cold) 250 (bot)			

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

Rev.	Changes Summary Performed			Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			3 / 22	

Three Phase Induction Motor - Squirrel Cage



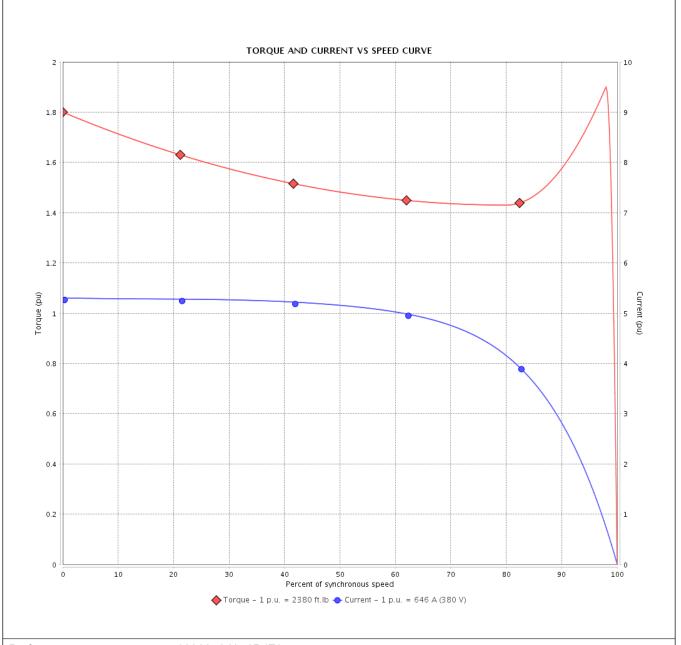
Customer :

Product line : NEMA Premium Efficiency Three- Produ

Phase

Product code: 12182294

Catalog #: 50012ET3G586/7-W22



Performance : 380 V 50 Hz 6P IE3

Rated current : 646 A Moment of inertia (J)

: 368 sq.ft.lb **LRC** : 5.3 Duty cycle : Cont.(S1) : 2380 ft.lb Insulation class Rated torque : F Locked rotor torque : 180 % Service factor : 1.00 Breakdown torque : 190 % Temperature rise : 105 K

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

: 991 rpm

Rated speed

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



Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 12182294 Catalog #: 50012ET3G586/7-W22 TORQUE AND CURRENT VS SPEED CURVE 2.25

1.75				*					
						*		\	
1.5									6
nd.									
Lordue (bg)									
-									
1									4
0.75							-		3
0.5									2
									\
0.25									\ \ ,
0.23									1
و ا									
0	10	20	30	40 Percent	50 of synchronous sp	60 peed	70 8	30 9	90 100
			◆ Torque -			1 p.u. = 629 A (4	00 V)		

Rated current : 629 A Moment of inertia (J) : 368 sq.ft.lb LRC : 5.9 Duty cycle : Cont.(S1) : 2380 ft.lb Insulation class : F Rated torque : 200 % Locked rotor torque Service factor : 1.00 : 210 % Breakdown torque Temperature rise : 105 K Rated speed : 992 rpm Locked rotor time : 36s (cold) 20s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			5 / 22	

Three Phase Induction Motor - Squirrel Cage



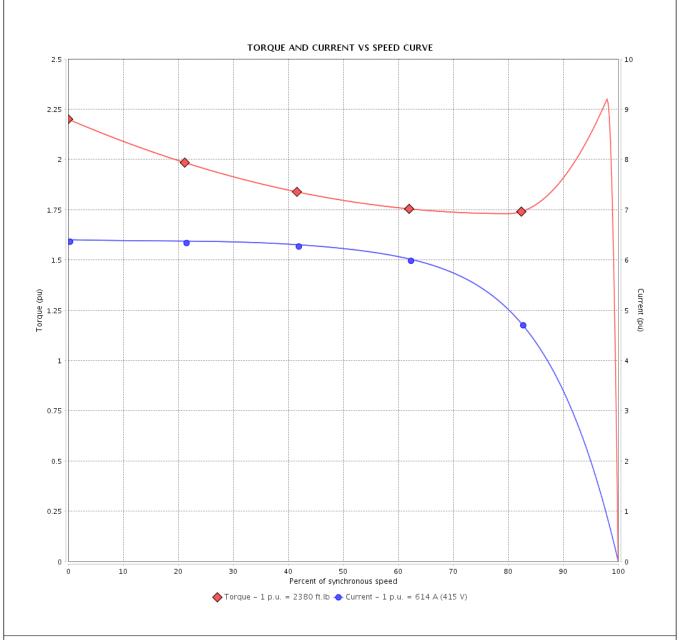
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12182294

Catalog #: 50012ET3G586/7-W22



Performance : 415 V 50 Hz 6P IE3

Rated current : 614 A
LRC : 6.4
Rated torque : 2380 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 229 %

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)

: 993 rpm

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

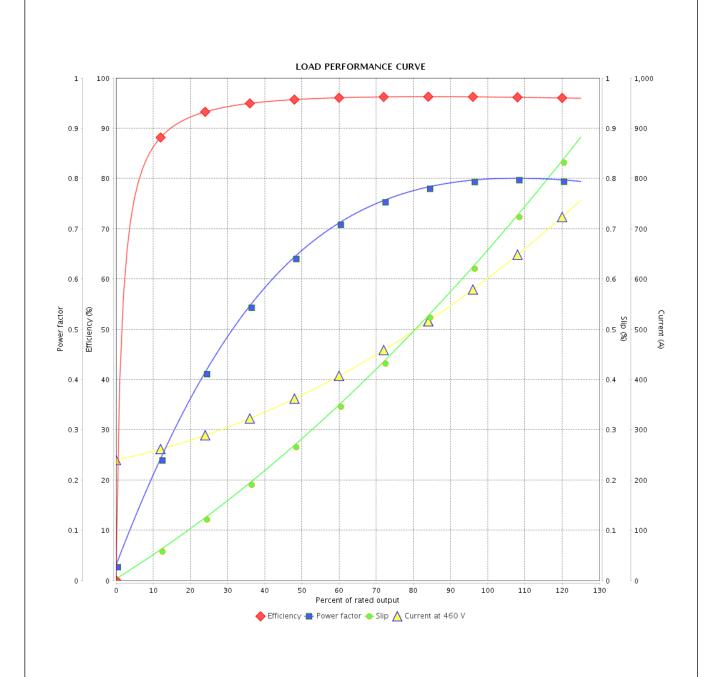
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three- Product code : 12182294

Phase



Douformon	. 460 V 60 H= 6D			
Performance	: 460 V 60 Hz 6P			
Rated current	: 603 A	Moment of inertia (J)	: 368 sq.ft.lb	
LRC	: 6.0	Duty cycle	: Cont.(S1)	
Rated torque	: 2200 ft.lb	Insulation class	: F	
Locked rotor torque	: 200 %	Service factor	: 1.15	
Breakdown torque	: 210 %	Temperature rise	: 80 K	
Rated speed	: 1192 rpm			

•		·			
Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			7 / 22	

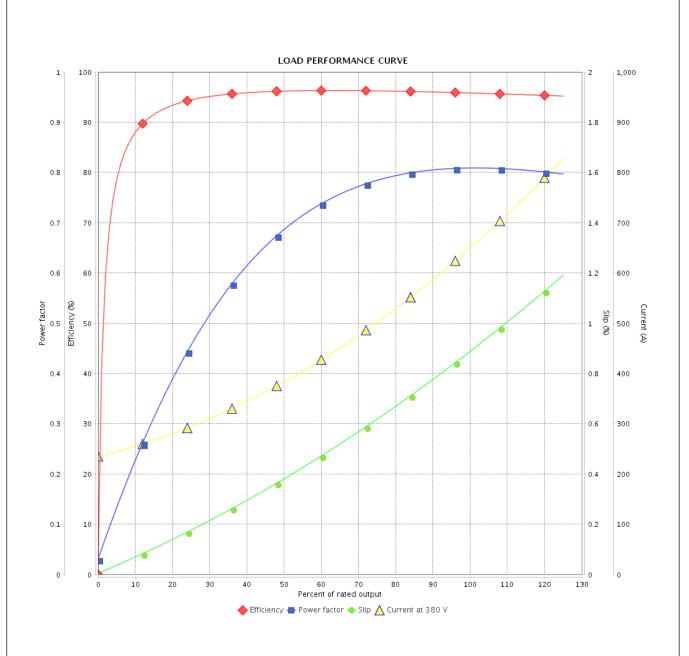
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12182294

Phase



Performance	: 380 V 50	Hz 6P IE3			
Rated current LRC Rated torque Locked rotor torq Breakdown torqu Rated speed		Duty cyc Insulation Service f Tempera	n class actor	: 368 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K	
Rev.	Chanc	ges Summary	Performed	Checked	Date

•					
Rev.		Changes Summary	Performed	Checked	Date
Performed by		I			
Checked by				Page	Revision
Date	12/04/2022	-		8 / 22	

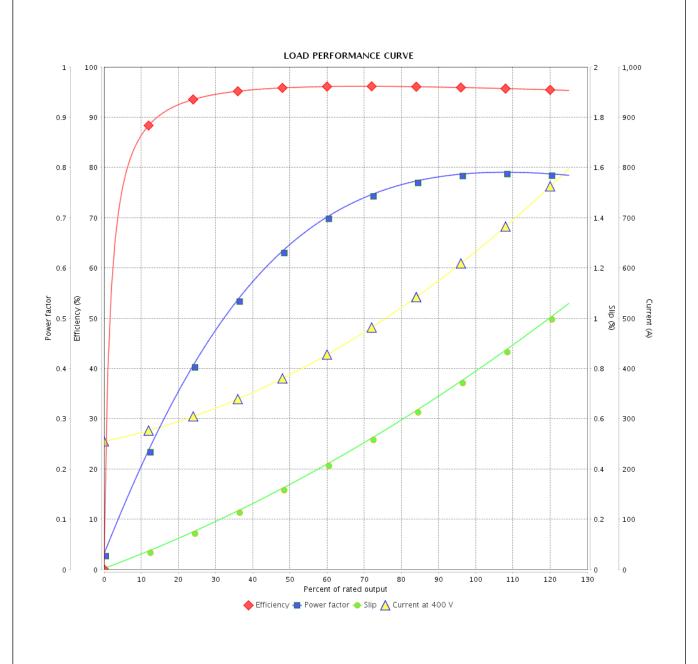
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three- Product code : 12182294

Phase



: 629 A : 5.9 : 2380 ft.lb	Duty cycle Insulation		: 368 sq.ft.lb : Cont.(S1) : F	
: 200 % : 210 % : 992 rpm	Service fa Temperati		: 1.00 : 105 K	
Changes Summary		Performed	Checked	Date
	: 210 % : 992 rpm	: 210 % Temperation : 992 rpm	: 210 % Temperature rise : 992 rpm	: 210 % Temperature rise : 105 K : 992 rpm

Performed by						
Checked by					Page	Revision
Date	12/04/2022				9 / 22	
This do	cument is exclusive	property of WEG S/A	Penrinting is not all	awad without written	authorization of ME	C S/A

Three Phase Induction Motor - Squirrel Cage

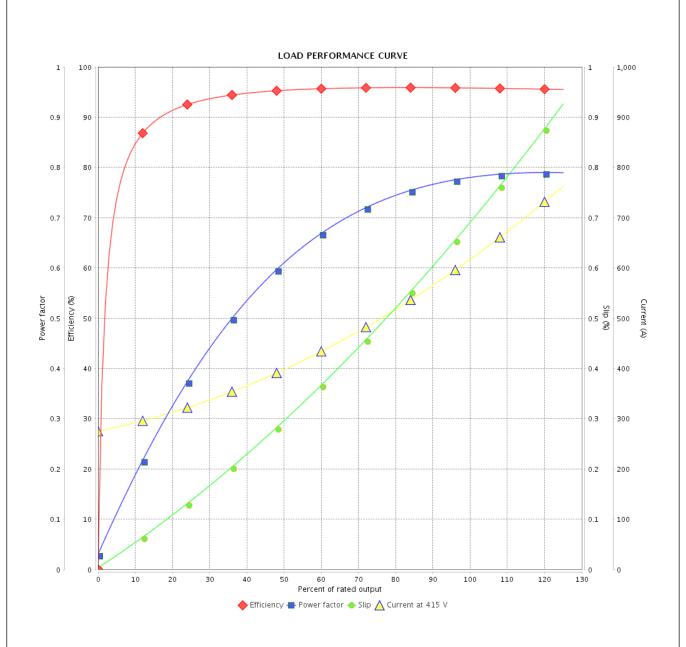


Customer

Product line : NEMA Premium Efficiency Three-

Product code: 12182294

Catalog #: 50012ET3G586/7-W22



Performance : 415 V 50 Hz 6P IE3

: 229 %

: 614 A Rated current Moment of inertia (J) : 368 sq.ft.lb **LRC** : 6.4 Duty cycle : Cont.(S1) : 2380 ft.lb Insulation class Rated torque : F Locked rotor torque : 220 % Service factor : 1.00

Breakdown torque Rated speed : 993 rpm

rated speed	. 0	55 ipin				
Rev.		Changes Summary Perfo		Performed	Checked	Date
Performed by						
Checked by		-			Page	Revision
Date	12/04/2022	1			10 / 22	

Temperature rise

: 105 K

Three Phase Induction Motor - Squirrel Cage

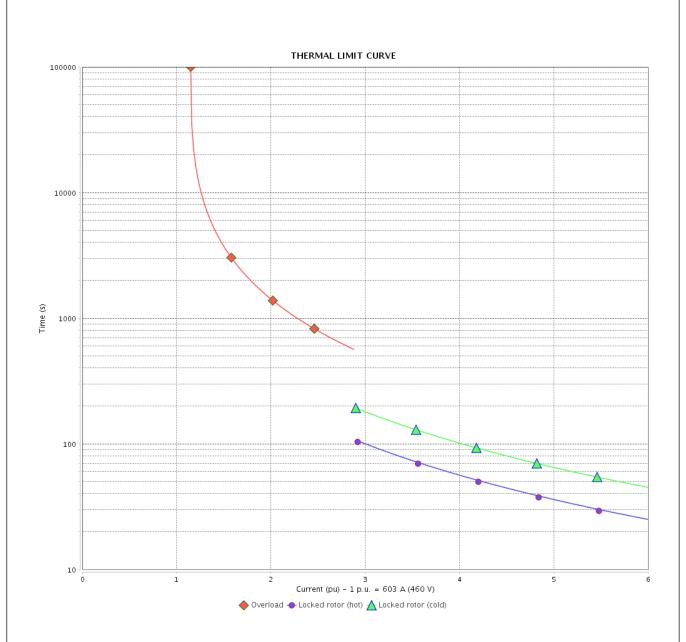


Customer	:					
Product line		NEMA Premium Efficiency [*] hase	Three-	Product code : Catalog # :	12182294 50012ET3G5	86/7-W22
Performance		60 V 60 Hz 6P				
Rated current LRC	: 60 : 6.	03 A	Moment of Duty cycle	of inertia (J)	: 368 sq.ft.lb : Cont.(S1)	
Rated torque		200 ft.lb	Insulation	r class	: F	
Locked rotor tord		00 %	Service fa		: 1.15	
Breakdown torqu Rated speed		10 % 192 rpm	Temperat	ture rise	: 80 K	
		- · • · · · · · ·				
Heating constant Cooling constant						
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

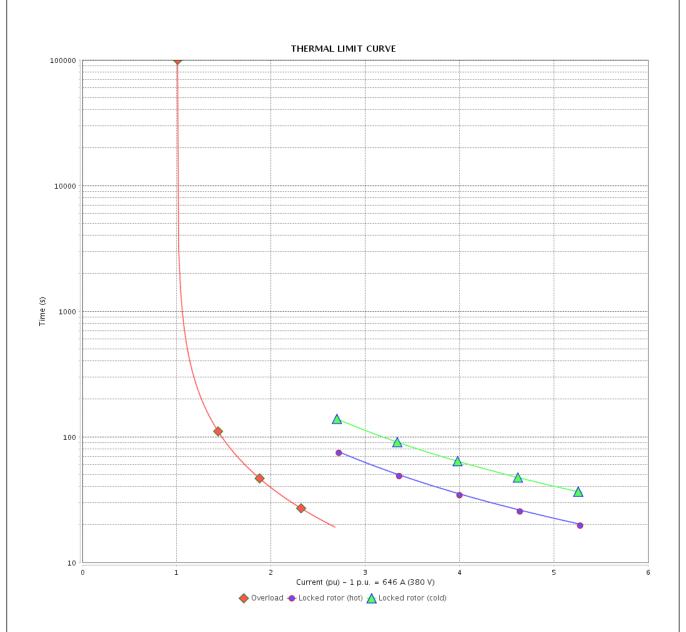


Product line		NEMA Premium Efficiency T	hree-	Product code :	12182294	
	F	hase	(Catalog # :	50012ET3G5	86/7-W22
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 6 : 5 : 2 que : 1 ue : 1 : 9	.3 380 ft.lb 80 %	Moment o Duty cycle Insulation Service fa Temperatu	class ctor	: 368 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K	
Performance Rated current LRC Rated torque Locked rotor tord Breakdown torque Rated speed Heating constant	: 6 : 5 : 2 que : 1 ue : 1 : 9	46 A .3 380 ft.lb 80 % 90 %	Duty cycle Insulation Service fa	class ctor	: Cont.(S1) : F : 1.00	
Rated current .RC Rated torque .ocked rotor torque Breakdown torque Rated speed Heating constant Cooling constant	: 6 : 5 : 2 que : 1 ue : 1 : 9	46 A .3 380 ft.lb 80 % 90 % 91 rpm	Duty cycle Insulation Service fa	class ctor ire rise	: Cont.(S1) : F : 1.00 : 105 K	Date
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 6 : 5 : 2 que : 1 ue : 1 : 9	46 A .3 380 ft.lb 80 % 90 %	Duty cycle Insulation Service fa	class ctor	: Cont.(S1) : F : 1.00	Date
Rated current .RC Rated torque .ocked rotor tord Breakdown torqu Rated speed Heating constant Cooling constant Rev.	: 6 : 5 : 2 que : 1 ue : 1 : 9	46 A .3 380 ft.lb 80 % 90 % 91 rpm	Duty cycle Insulation Service fa	class ctor ire rise	: Cont.(S1) : F : 1.00 : 105 K	Date
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed Heating constant Cooling constant	: 6 : 5 : 2 que : 1 ue : 1 : 9	46 A .3 380 ft.lb 80 % 90 % 91 rpm	Duty cycle Insulation Service fa	class ctor ire rise	: Cont.(S1) : F : 1.00 : 105 K	Date

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

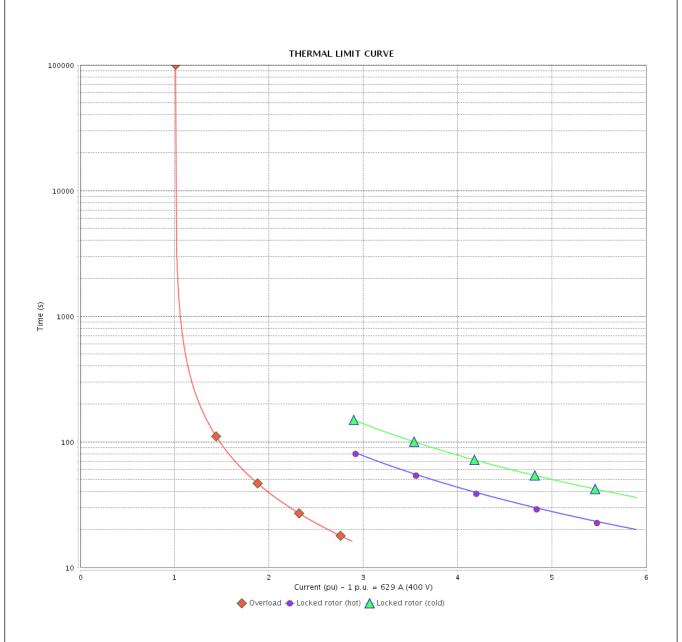


Customer	:					
Product line	: 1 Pl	NEMA Premium Efficiency hase		Product code : Catalog # :	12182294 50012ET3G	586/7-W22
Performance	: 40	00 V 50 Hz 6P IE3				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 5. : 23 que : 20 ue : 27	29 A .9 380 ft.lb 00 % 10 % 92 rpm	Moment of Duty cycle Insulation Service fa Temperate	class ictor	: 368 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K	
Heating constant						
Rev.		Changes Summary		Performed	Checked	Date
		T				
Performed by		_			_	Б
Checked by	12/04/2022	_			Page	Revision
Date	12/04/2022				15 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



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

Three Phase Induction Motor - Squirrel Cage

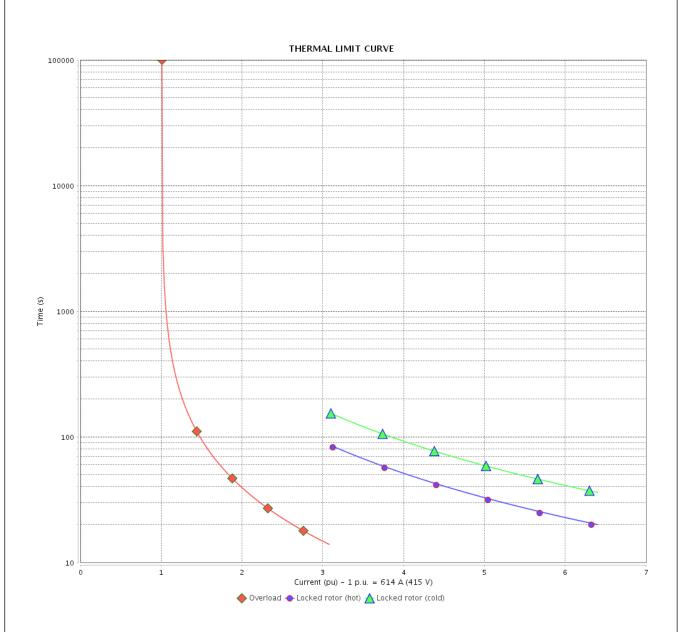


Customer	:					
Product line		NEMA Premium Efficiency ¹ hase	Three-	Product code : Catalog # :	12182294 50012ET3G5	86/7-W22
Performance		15 V 50 Hz 6P IE3				
Rated current LRC	: 6 ⁻ : 6.	14 A	Moment of Duty cycle	of inertia (J)	: 368 sq.ft.lb : Cont.(S1)	
Rated torque		380 ft.lb	Insulation	class	: F	
Locked rotor tord	que : 22	20 %	Service fa	actor	: 1.00	
Breakdown torqu Rated speed		29 % 93 rpm	Temperat	ure rise	: 105 K	
		JO IPIII				
Heating constant						
Cooling constant		Changes Summani		Performed	Checked	Date
Kev.		Changes Summary		renomea	Спескеа	Date
Performed by						
Checked by		-			Page	Revision
Date	12/04/2022	-			17 / 22	INGVISION
		1			. ==-	

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



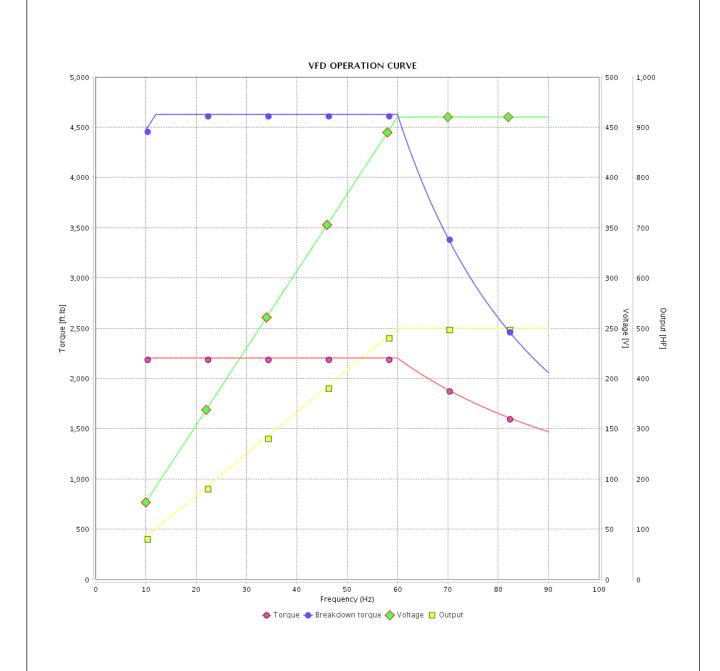
Customer

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 50012ET3G586/7-W22

12182294



Performance : 460 V 60 Hz 6P Rated current : 603 A Moment of inertia (J) : 368 sq.ft.lb **LRC** : 6.0 Duty cycle : Cont.(S1) : 2200 ft.lb Insulation class Rated torque : F Locked rotor torque : 200 % Service factor : 1.15 Breakdown torque : 210 % Temperature rise : 80 K Rated speed : 1192 rpm

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			19 / 22	

Three Phase Induction Motor - Squirrel Cage



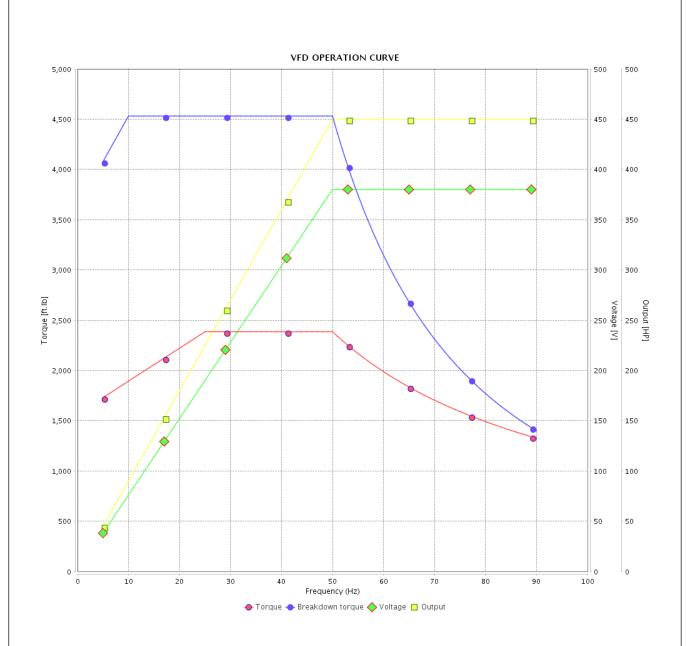
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12182294

Catalog #: 50012ET3G586/7-W22



Performance : 380 V 50 Hz 6P IE3

Rated current : 646 A Moment of inertia (J) : 368 sq.ft.lb LRC : 5.3 Duty cycle : Cont.(S1)

Rated torque : 2380 ft.lb Insulation class : F
Locked rotor torque : 180 % Service factor : 1.00
Breakdown torque : 190 % Temperature rise : 105 K

Rated speed : 991 rpm

·		•			
Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			20 / 22	

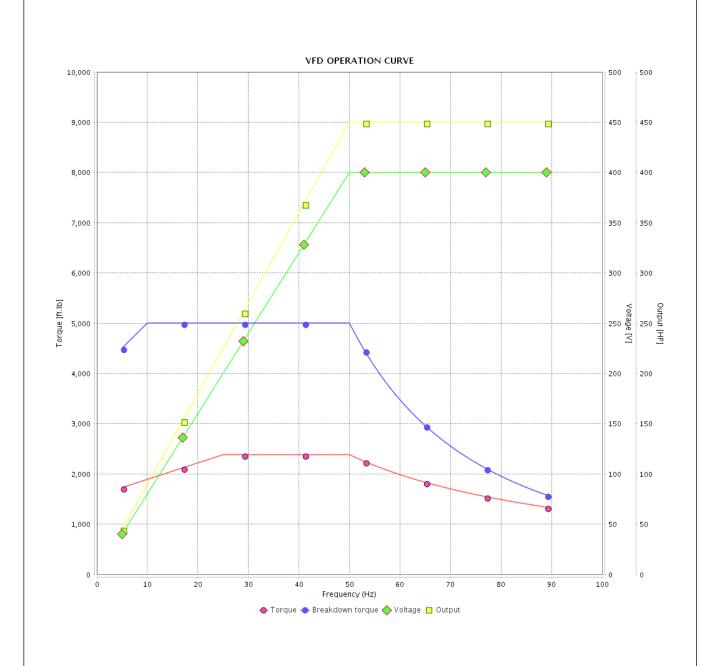
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three- Product code : 12182294

Phase



Performance		: 400 V 50 Hz 6P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	•	: 629 A : 5.9 : 2380 ft.lb : 200 % : 210 % : 992 rpm	Moment Duty cycl Insulation Service f Tempera	n class actor	: 368 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K	
Rev.		Changes Summary	·	Performed	Checked	Date
			Performed	Checked	Date	

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			21 / 22	

Three Phase Induction Motor - Squirrel Cage



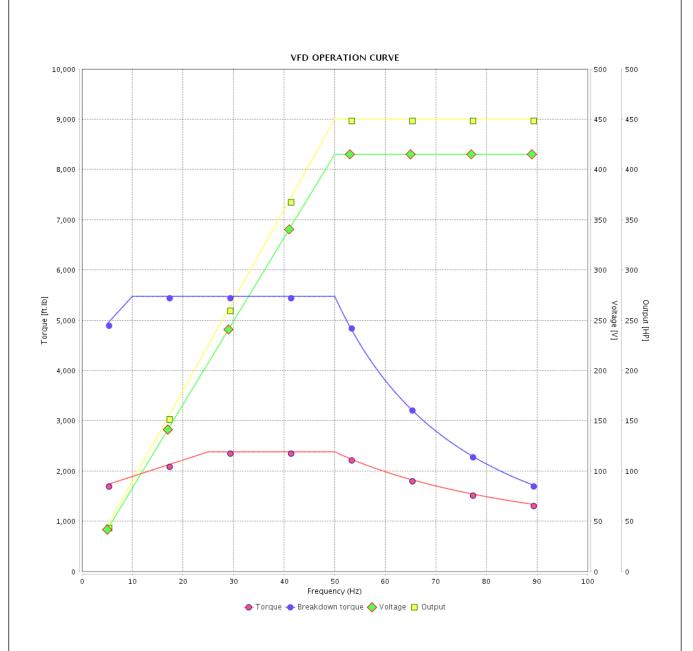
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12182294

Catalog #: 50012ET3G586/7-W22



Performance : 415 V 50 Hz 6P IE3

: 614 A Rated current Moment of inertia (J) : 368 sq.ft.lb **LRC** : 6.4 Duty cycle : Cont.(S1) : 2380 ft.lb Insulation class Rated torque : F Locked rotor torque : 220 % Service factor : 1.00 Breakdown torque : 229 % Temperature rise : 105 K

Rated speed : 993 rpm

ivaled speed	. 3	95 ipiii				
Rev.	Changes Summary		Performed	Checked	Date	
Performed by						
Checked by					Page	Revision
Date	12/04/2022				22 / 22	

