

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line	: NEMA Premium Efficiency Three-Phase	Product code	: 12075524		
		Catalog #	: 35018ET3G449TS-W22		
Frame	: 447/9TS	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(S1)	Rotation ¹	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight ²	: 2952 lb		
Protection degree	: IP55	Moment of inertia (J)	: 118 sq.ft.lb		
Design	: A				
Output [HP]	350	300	300	300	300
Poles	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	460	380	400	415	415
Rated current [A]	399	405	389	379	379
L. R. Amperes [A]	3192	2957	3151	3373	3373
LRC [A]	8.0x(Code J)	7.3x(Code H)	8.1x(Code J)	8.9x(Code K)	8.9x(Code K)
No load current [A]	135	135	143	151	151
Rated speed [RPM]	1785	1483	1485	1487	1487
Slip [%]	0.83	1.13	1.00	0.87	0.87
Rated torque [ft.lb]	1030	1060	1060	1060	1060
Locked rotor torque [%]	280	260	290	310	310
Breakdown torque [%]	280	260	290	310	310
Service factor	1.15	1.00	1.00	1.00	1.00
Temperature rise	80 K	105 K	105 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	75.0 dB(A)	71.0 dB(A)	71.0 dB(A)	71.0 dB(A)	71.0 dB(A)
Efficiency (%)	25%	95.7	95.5	95.9	94.9
	50%	95.8	95.8	95.8	95.4
	75%	96.2	95.8	96.2	95.8
	100%	96.2	96.0	96.0	96.2
Power Factor	25%	0.48	0.49	0.45	0.43
	50%	0.73	0.73	0.70	0.68
	75%	0.82	0.82	0.80	0.79
	100%	0.85	0.86	0.85	0.84
Bearing type	: <u>Drive end</u> 6314 C3 <u>Non drive end</u> 6314 C3	Foundation loads			
Sealing	: WSeal WSeal	Max. traction : 7280 lb			
Lubrication interval	: 12000 h 12000 h	Max. compression : 10231 lb			
Lubricant amount	: 27 g 27 g				
Lubricant type	: Mobil Polyrex EM				
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	13/04/2022			1 / 21	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



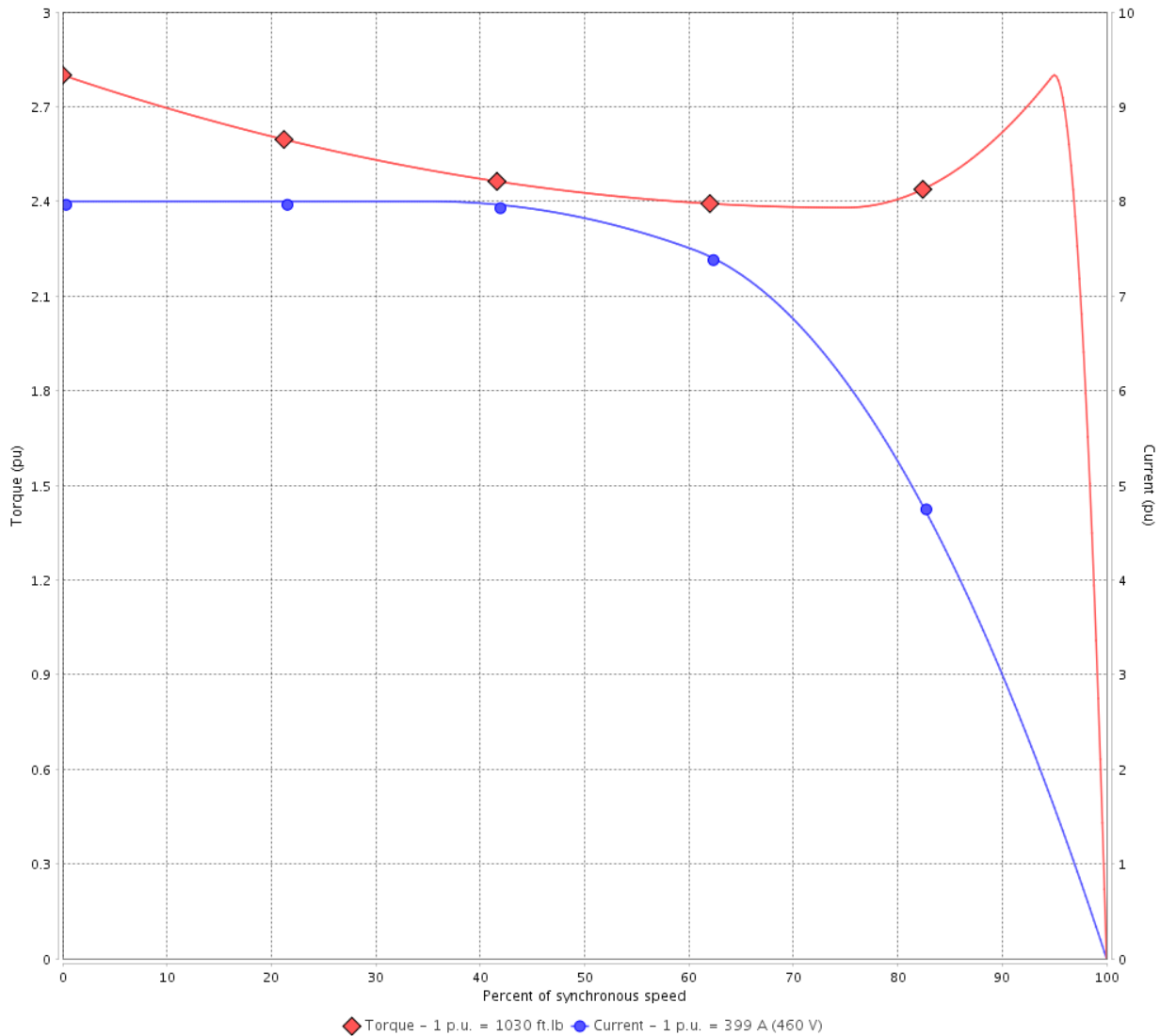
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 4P

Rated current	: 399 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 1030 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: A

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 21	Revision
Checked by				
Date	13/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



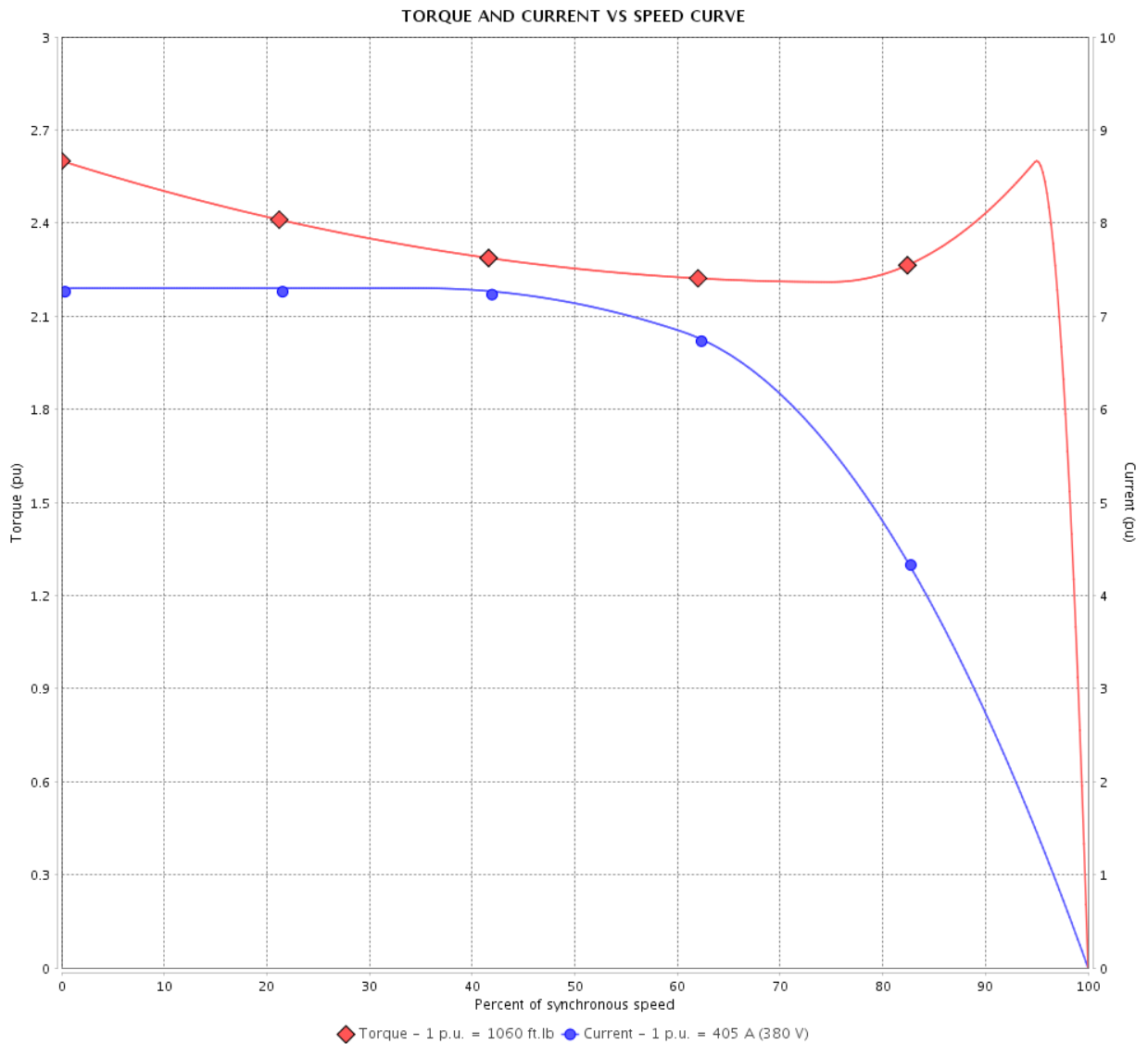
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22



Performance : 380 V 50 Hz 4P IE3

Rated current	: 405 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 1483 rpm	Design	: A

Locked rotor time : 21s (cold) 12s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 21	Revision
Checked by				
Date	13/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



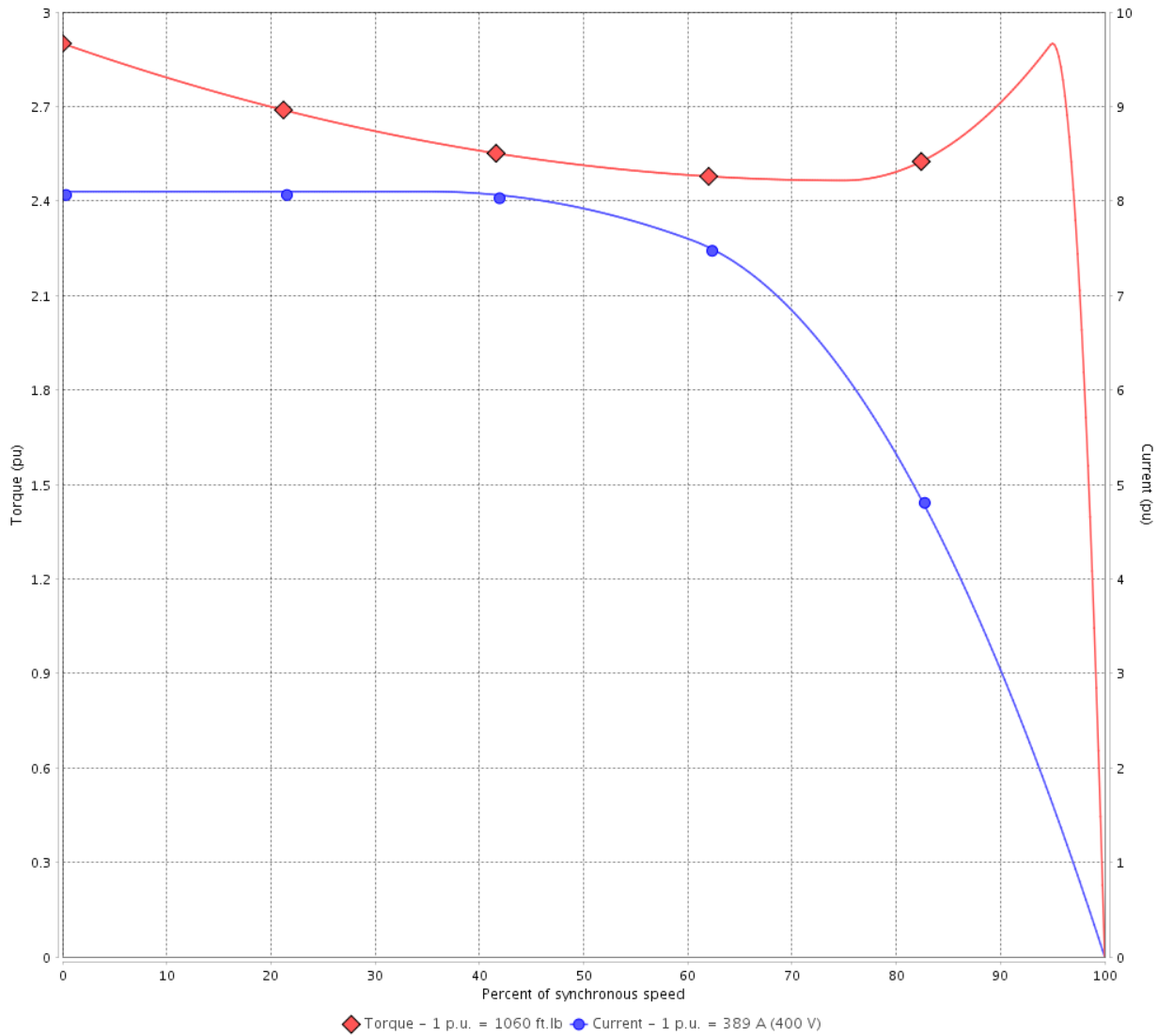
Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 389 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 105 K
Rated speed	: 1485 rpm	Design	: A

Locked rotor time : 21s (cold) 12s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 21	Revision
Checked by				
Date	13/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



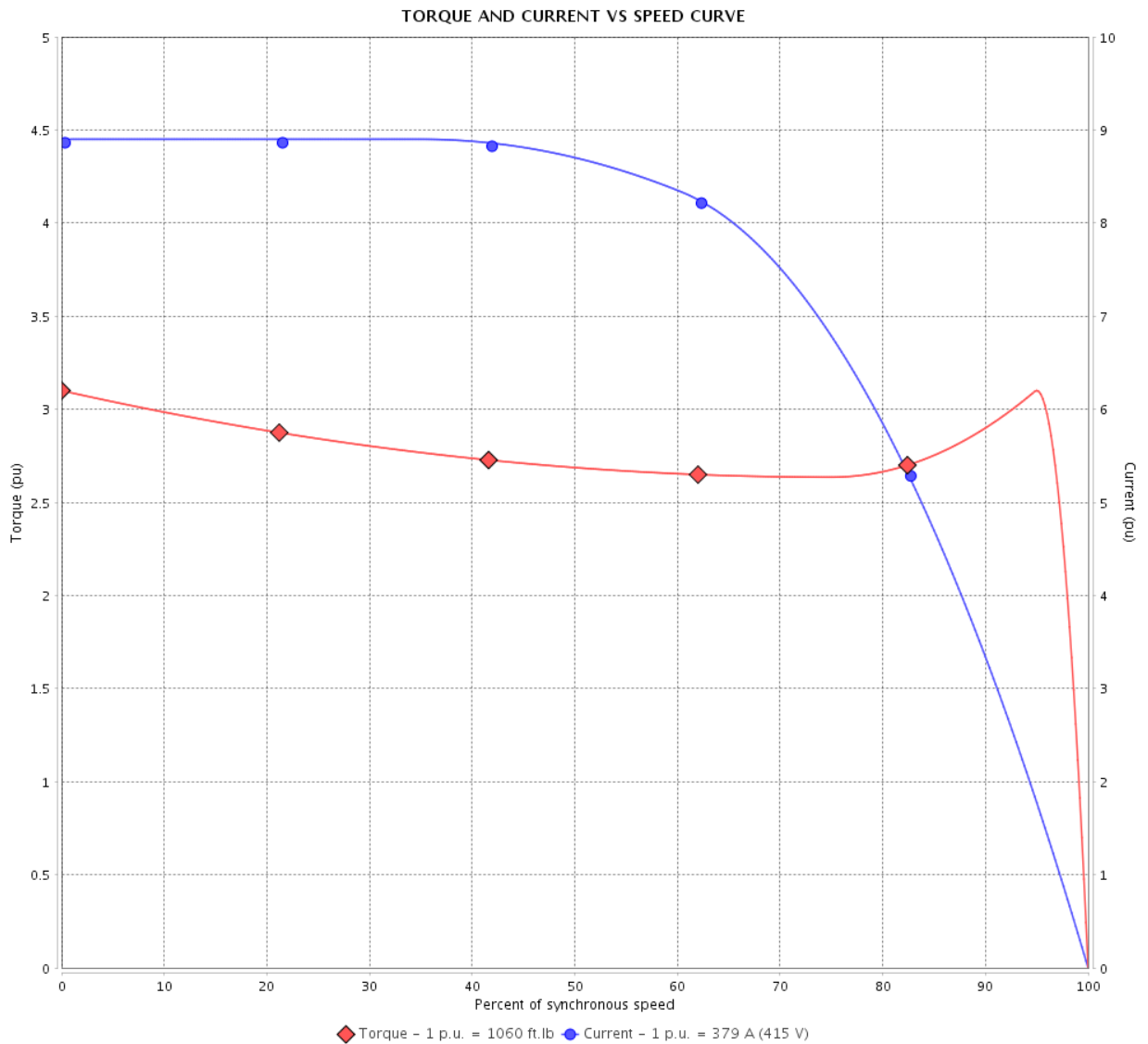
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22



Performance : 415 V 50 Hz 4P IE3

Rated current	: 379 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1487 rpm	Design	: A

Locked rotor time : 21s (cold) 12s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 21	Revision
Checked by				
Date	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

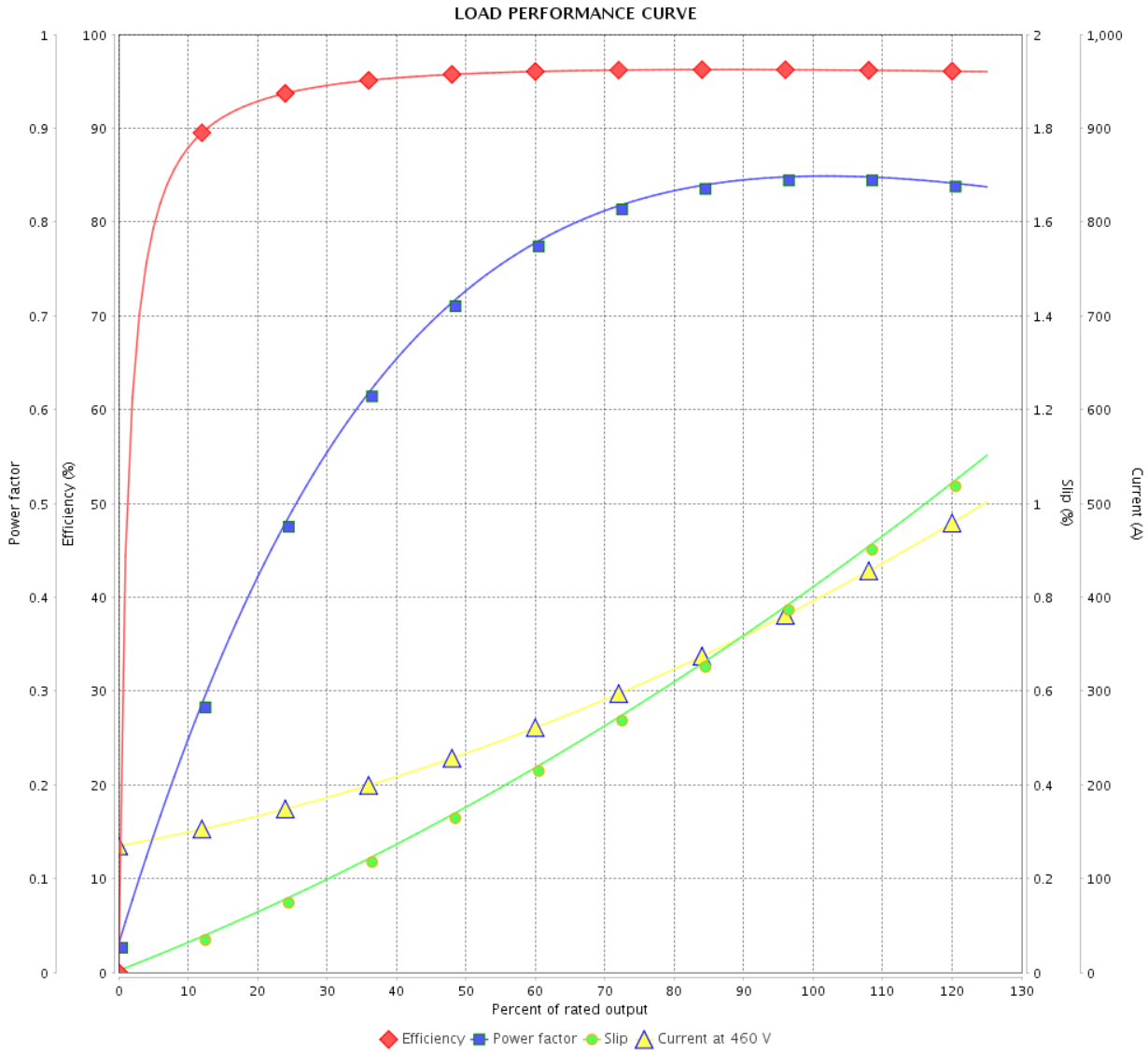


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22



Performance : 460 V 60 Hz 4P

Rated current : 399 A	Moment of inertia (J) : 118 sq.ft.lb
LRC : 8.0	Duty cycle : Cont.(S1)
Rated torque : 1030 ft.lb	Insulation class : F
Locked rotor torque : 280 %	Service factor : 1.15
Breakdown torque : 280 %	Temperature rise : 80 K
Rated speed : 1785 rpm	Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 21	Revision
Checked by				
Date	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

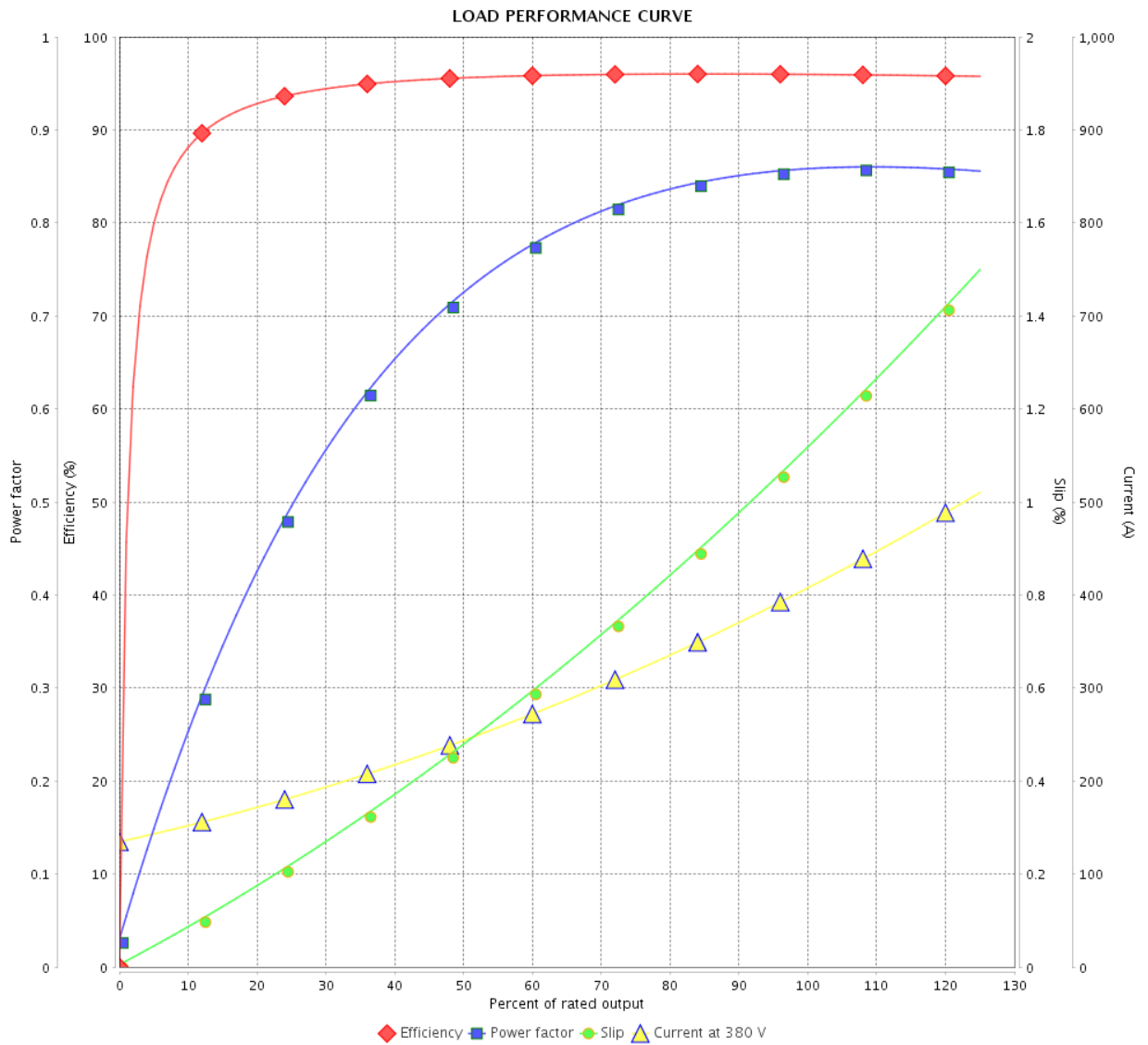


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22



Performance : 380 V 50 Hz 4P IE3

Rated current : 405 A
 LRC : 7.3
 Rated torque : 1060 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 260 %
 Rated speed : 1483 rpm

Moment of inertia (J) : 118 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

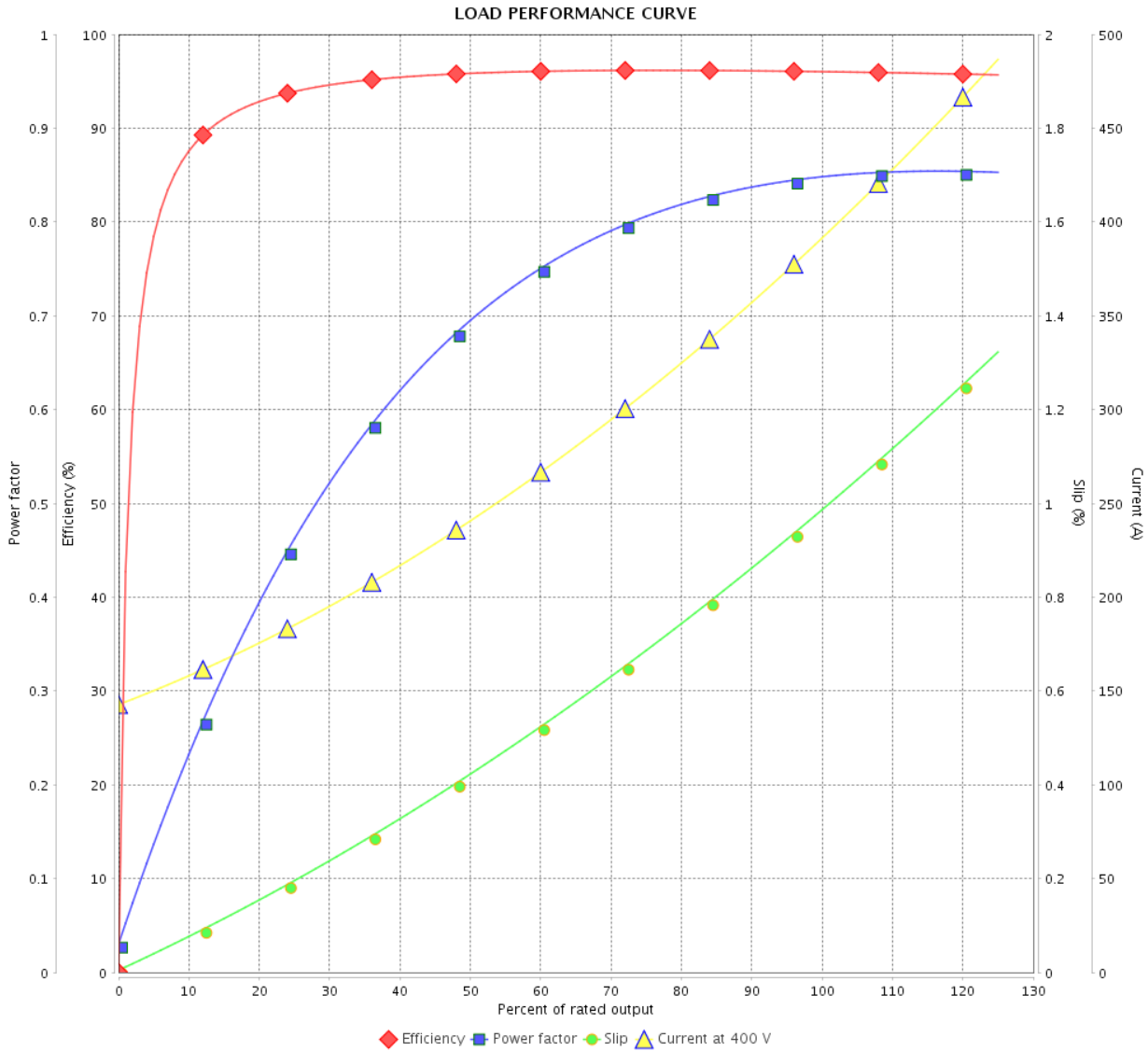


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22



Performance : 400 V 50 Hz 4P IE3

Rated current : 389 A	Moment of inertia (J) : 118 sq.ft.lb
LRC : 8.1	Duty cycle : Cont.(S1)
Rated torque : 1060 ft.lb	Insulation class : F
Locked rotor torque : 290 %	Service factor : 1.00
Breakdown torque : 290 %	Temperature rise : 105 K
Rated speed : 1485 rpm	Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

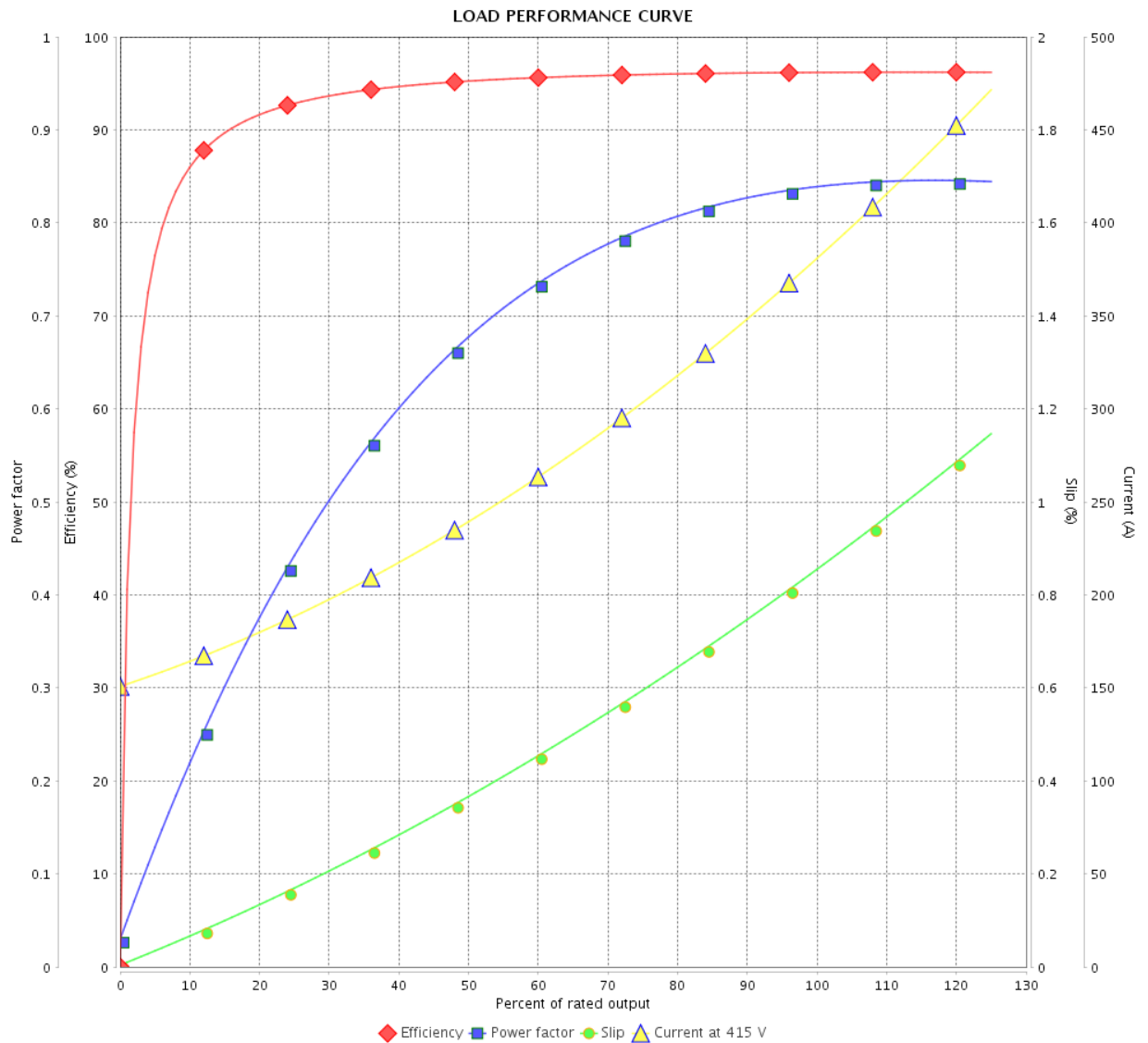


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22



Performance : 415 V 50 Hz 4P IE3

Rated current : 379 A
 LRC : 8.9
 Rated torque : 1060 ft.lb
 Locked rotor torque : 310 %
 Breakdown torque : 310 %
 Rated speed : 1487 rpm

Moment of inertia (J) : 118 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12075524
Catalog # : 35018ET3G449TS-W22

Performance : 460 V 60 Hz 4P

Rated current	: 399 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 1030 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: A

Heating constant

Cooling constant

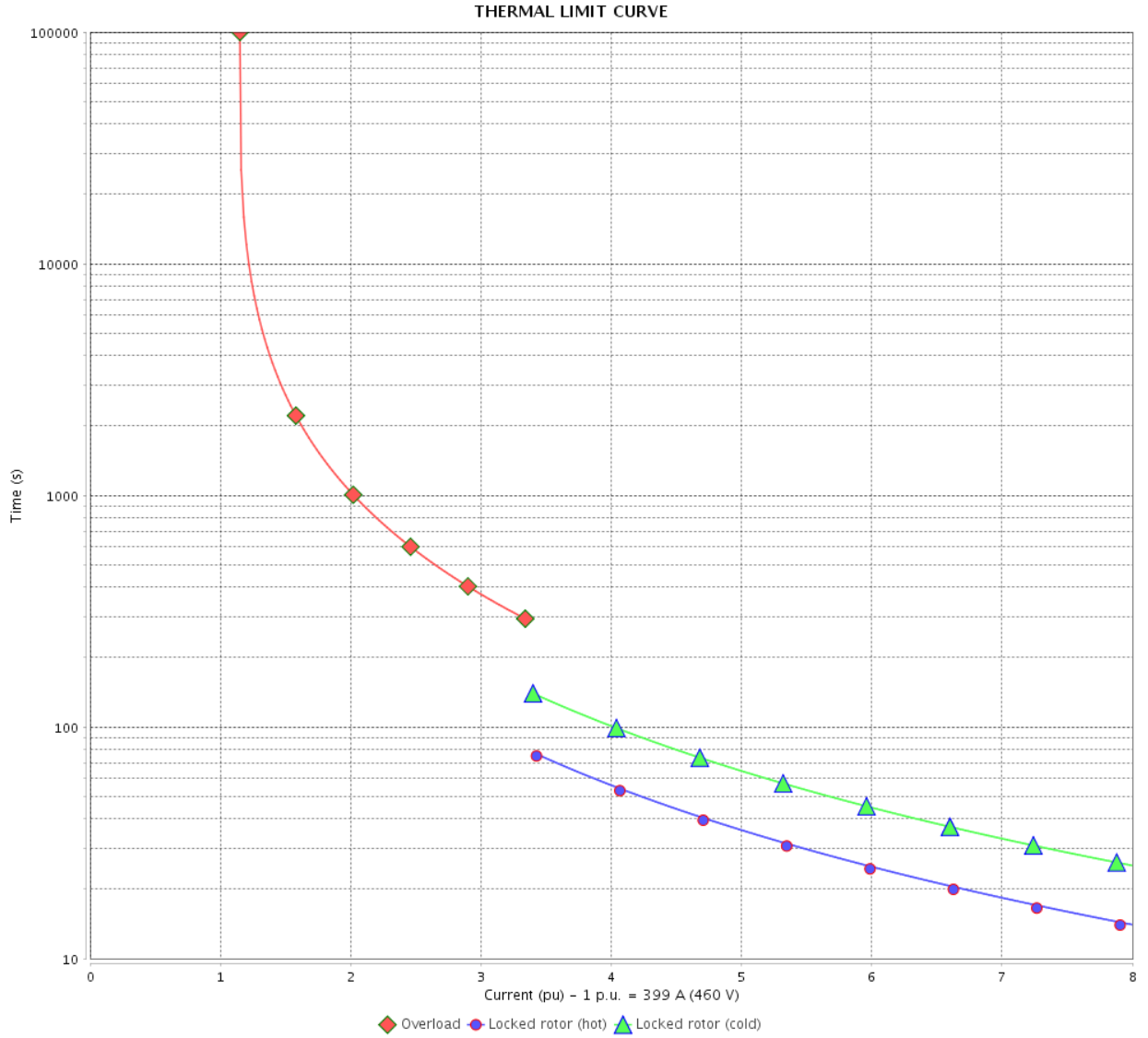
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		10 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 11 / 21		Revision
Checked by				
Date				

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12075524
Catalog # : 35018ET3G449TS-W22

Performance : 380 V 50 Hz 4P IE3

Rated current	: 405 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 1483 rpm	Design	: A

Heating constant

Cooling constant

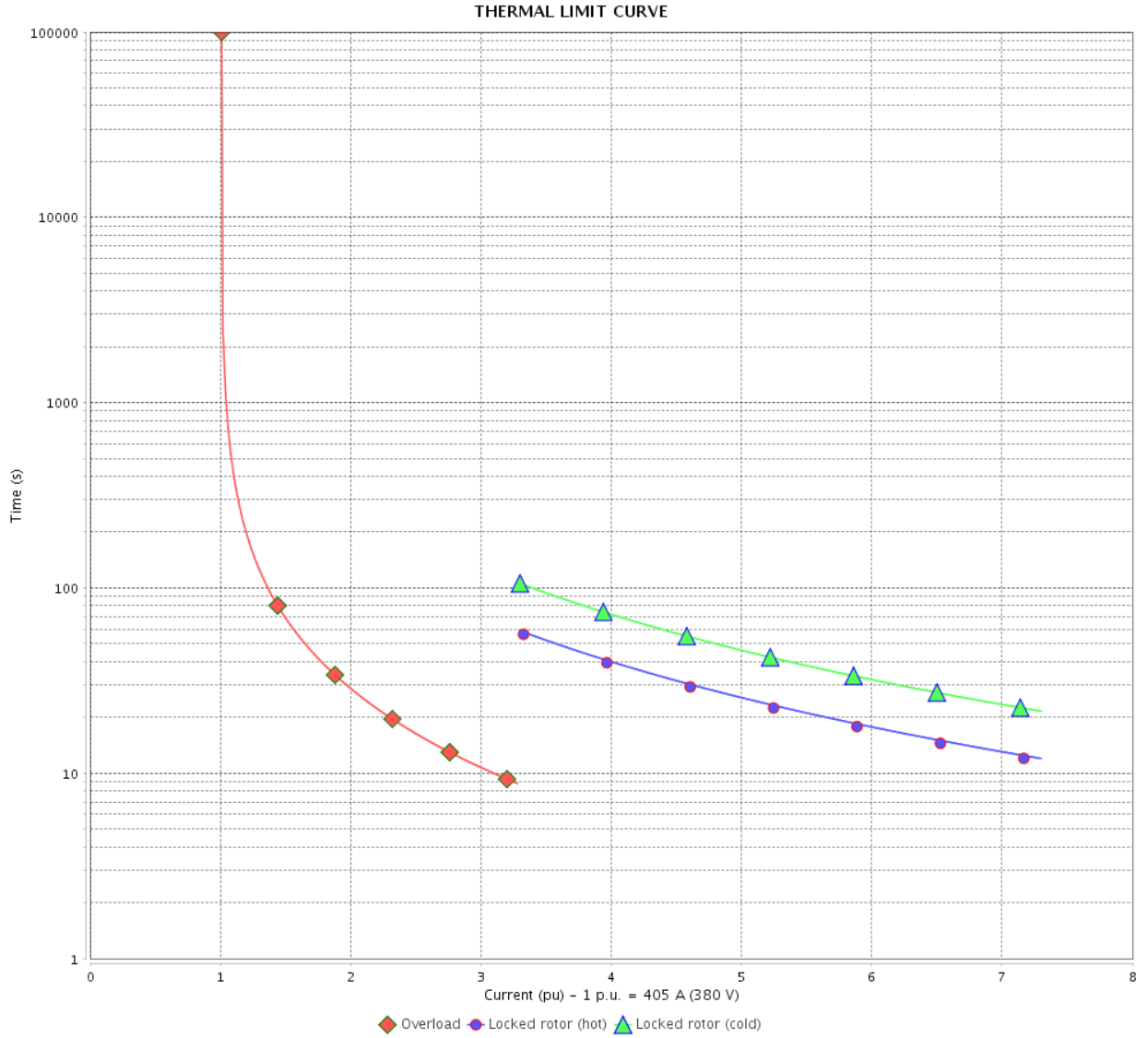
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		12 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12075524
Catalog # : 35018ET3G449TS-W22

Performance : 400 V 50 Hz 4P IE3

Rated current	: 389 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 105 K
Rated speed	: 1485 rpm	Design	: A

Heating constant

Cooling constant

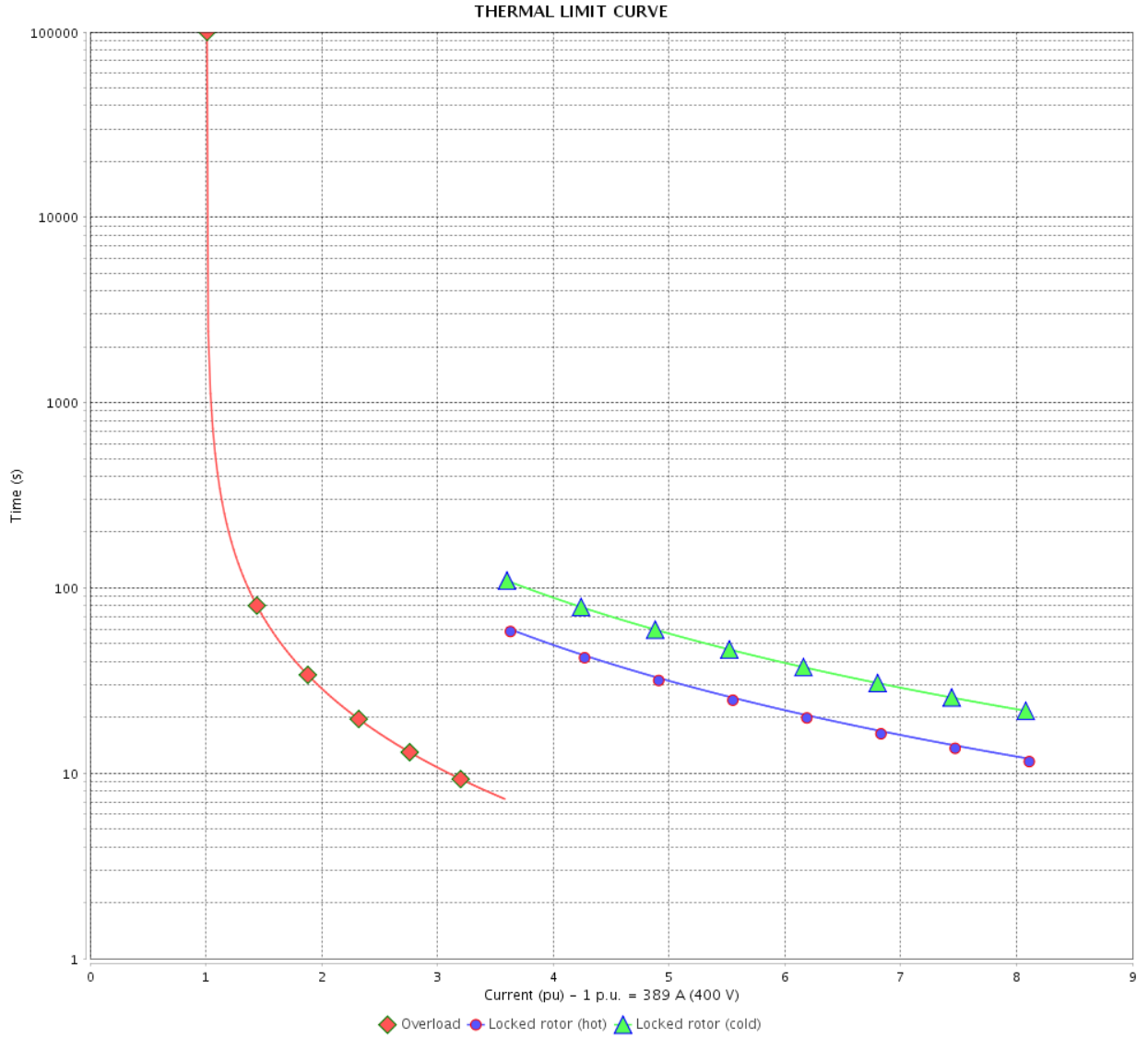
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		14 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		15 / 21		
Date		13/04/2022		

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12075524
Catalog # : 35018ET3G449TS-W22

Performance : 415 V 50 Hz 4P IE3

Rated current	: 379 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1487 rpm	Design	: A

Heating constant

Cooling constant

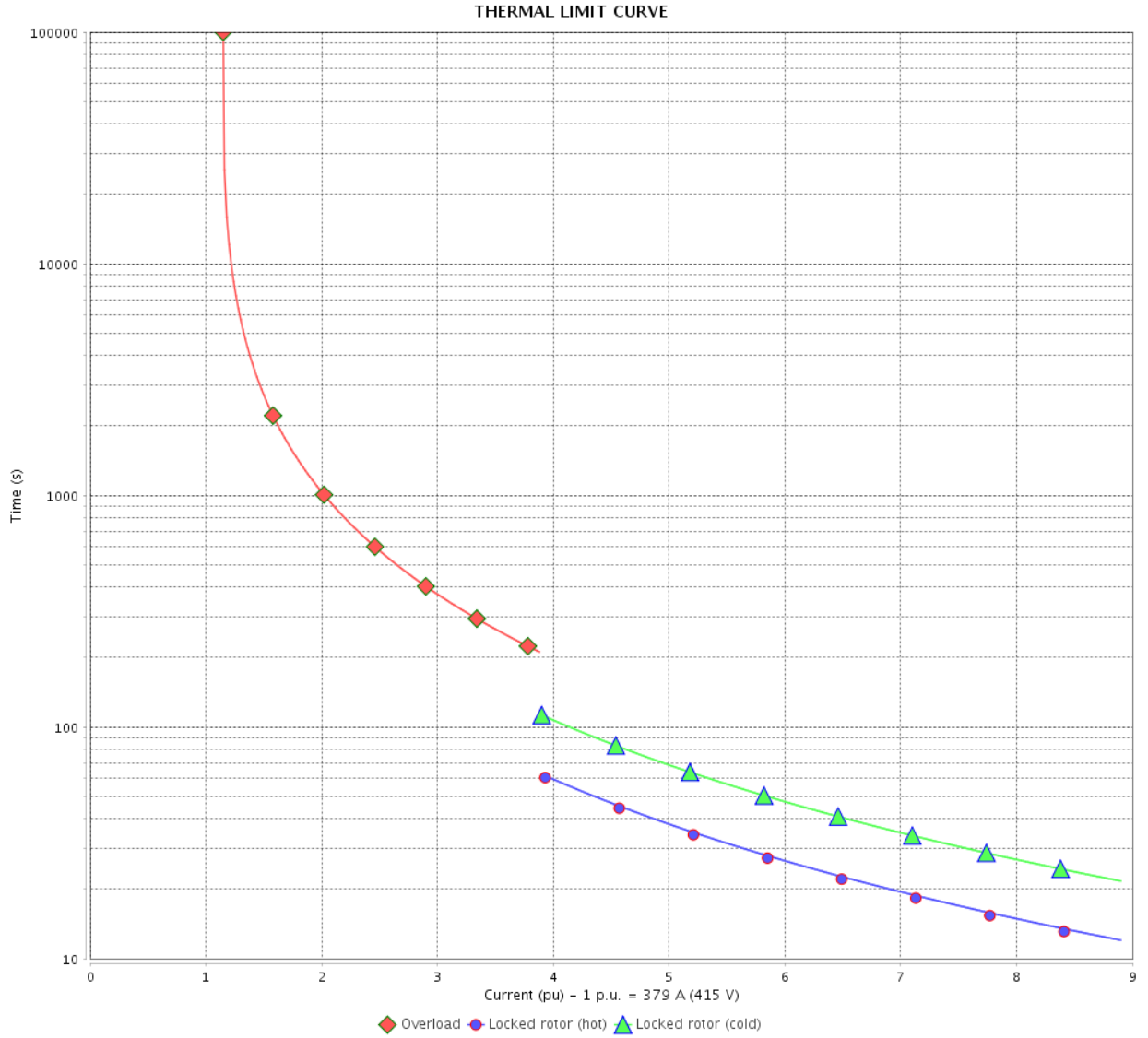
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		16 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 17 / 21		Revision
Checked by				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

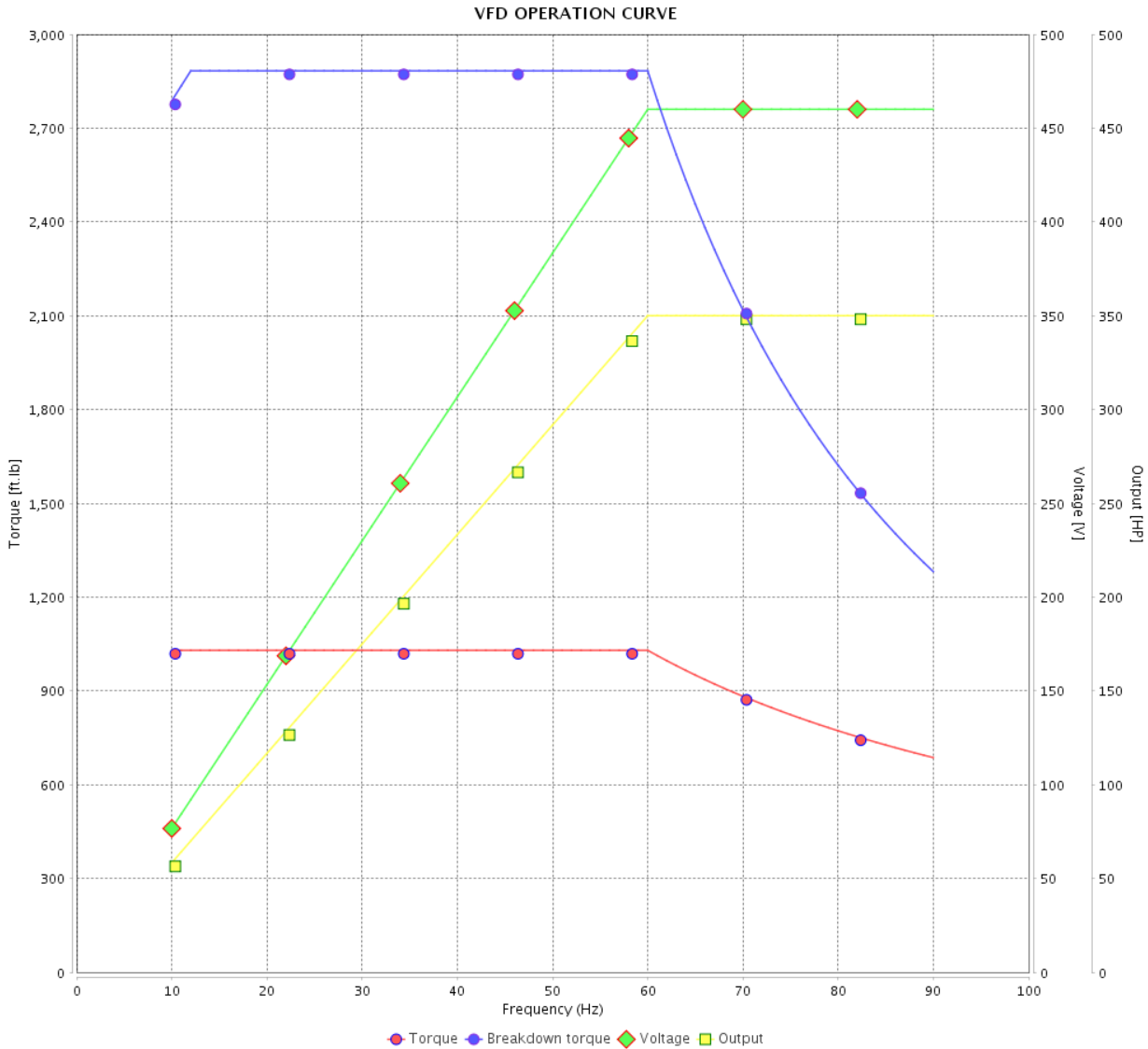


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22



Performance : 460 V 60 Hz 4P

Rated current : 399 A
 LRC : 8.0
 Rated torque : 1030 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 280 %
 Rated speed : 1785 rpm

Moment of inertia (J) : 118 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 18 / 21	Revision
Checked by				
Date	13/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

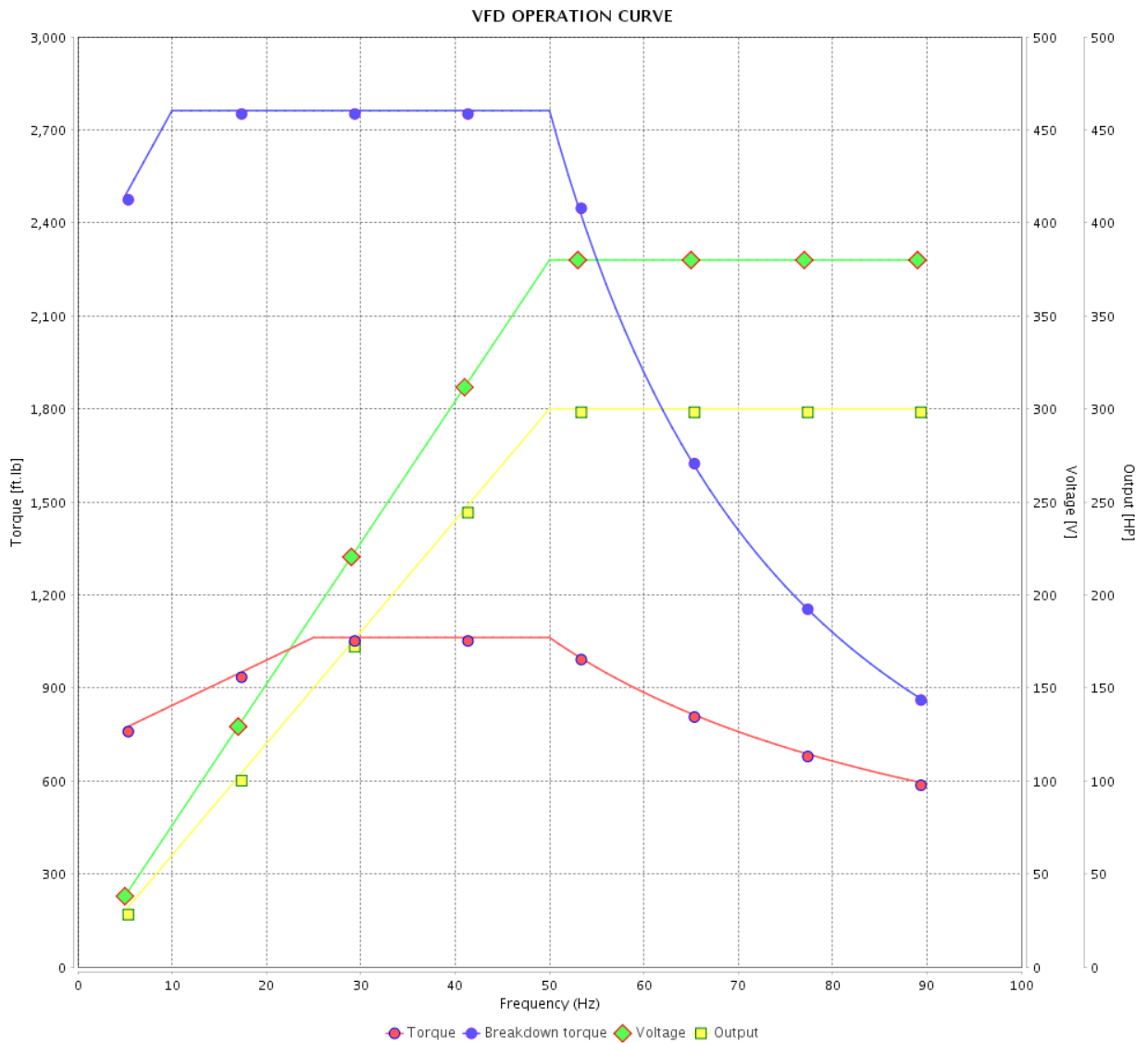


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22



Performance : 380 V 50 Hz 4P IE3

Rated current : 405 A
 LRC : 7.3
 Rated torque : 1060 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 260 %
 Rated speed : 1483 rpm

Moment of inertia (J) : 118 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 19 / 21	Revision
Checked by				
Date	13/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



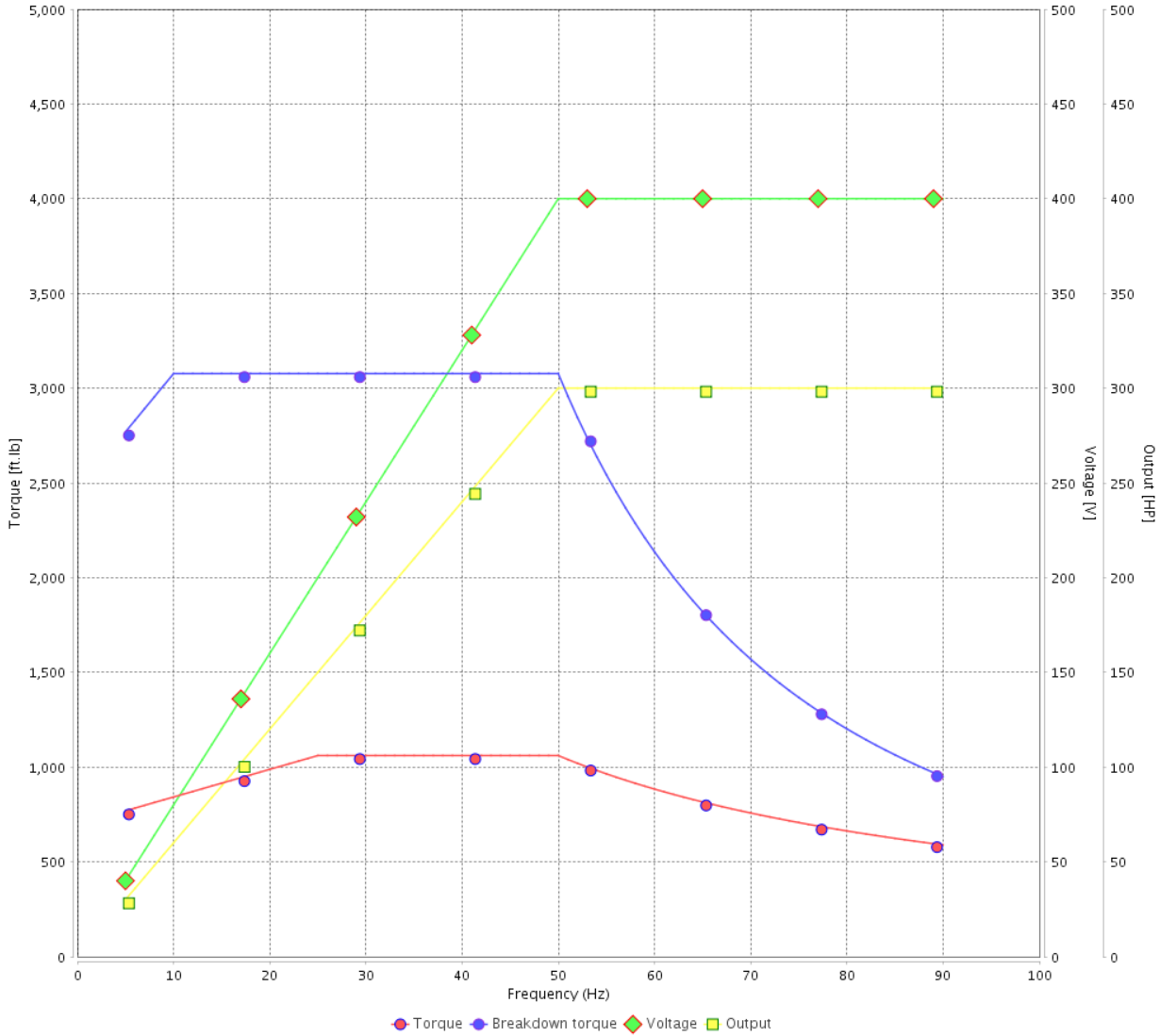
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22

VFD OPERATION CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 389 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 105 K
Rated speed	: 1485 rpm	Design	: A

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 20 / 21	Revision
Checked by				
Date	13/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

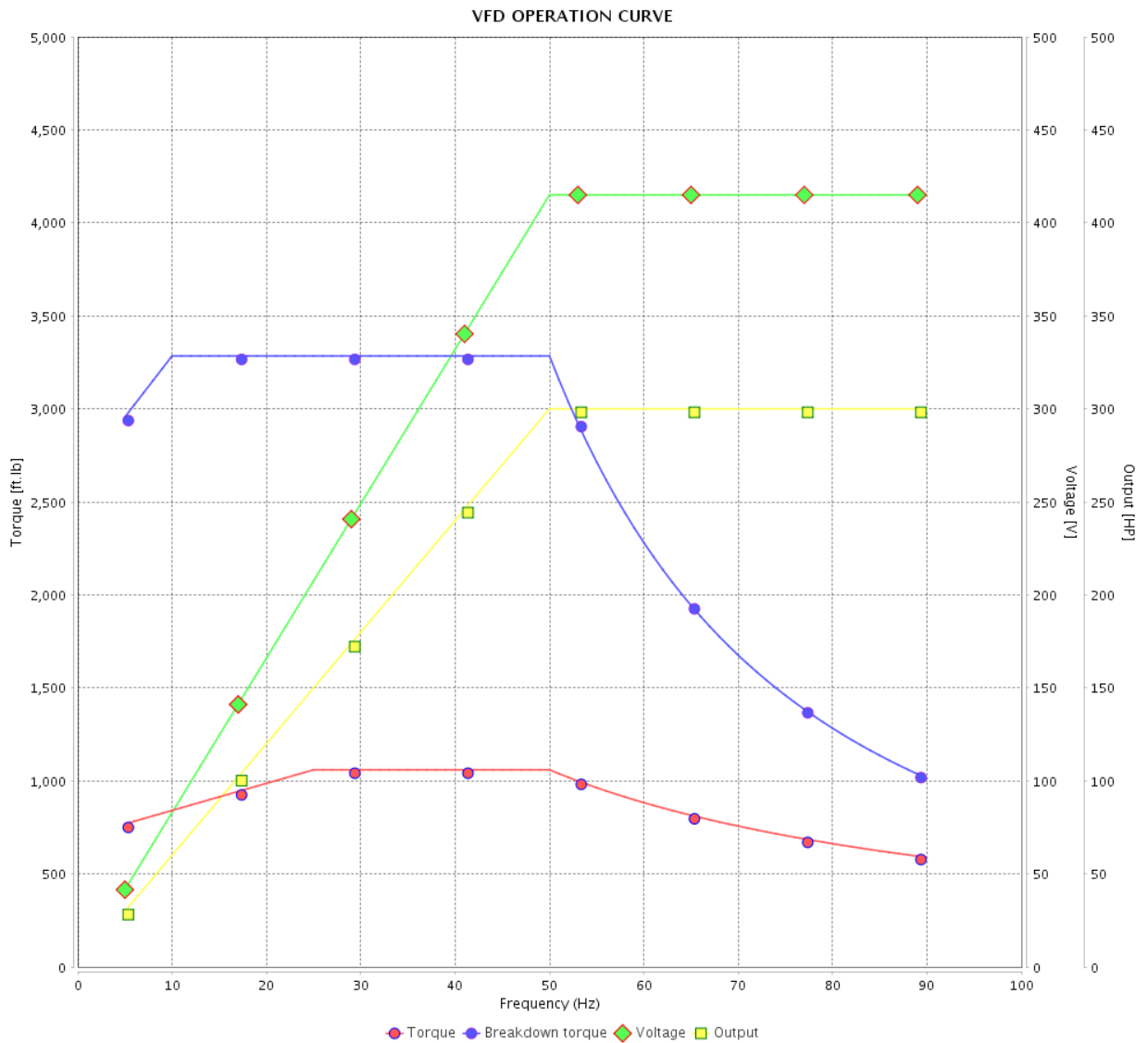


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12075524

Catalog # : 35018ET3G449TS-W22



Performance : 415 V 50 Hz 4P IE3

Rated current : 379 A
 LRC : 8.9
 Rated torque : 1060 ft.lb
 Locked rotor torque : 310 %
 Breakdown torque : 310 %
 Rated speed : 1487 rpm

Moment of inertia (J) : 118 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

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

No reproduction of this drawing is allowed without written permission of WEG Motores

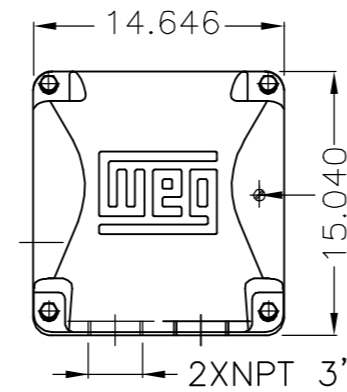
EIXO	
PADRÃO	
OPCIONAL	X
ESPECIAL	

Dimensões em polegadas
Dimensions in inches

CERTIFIED WEG MOTORES

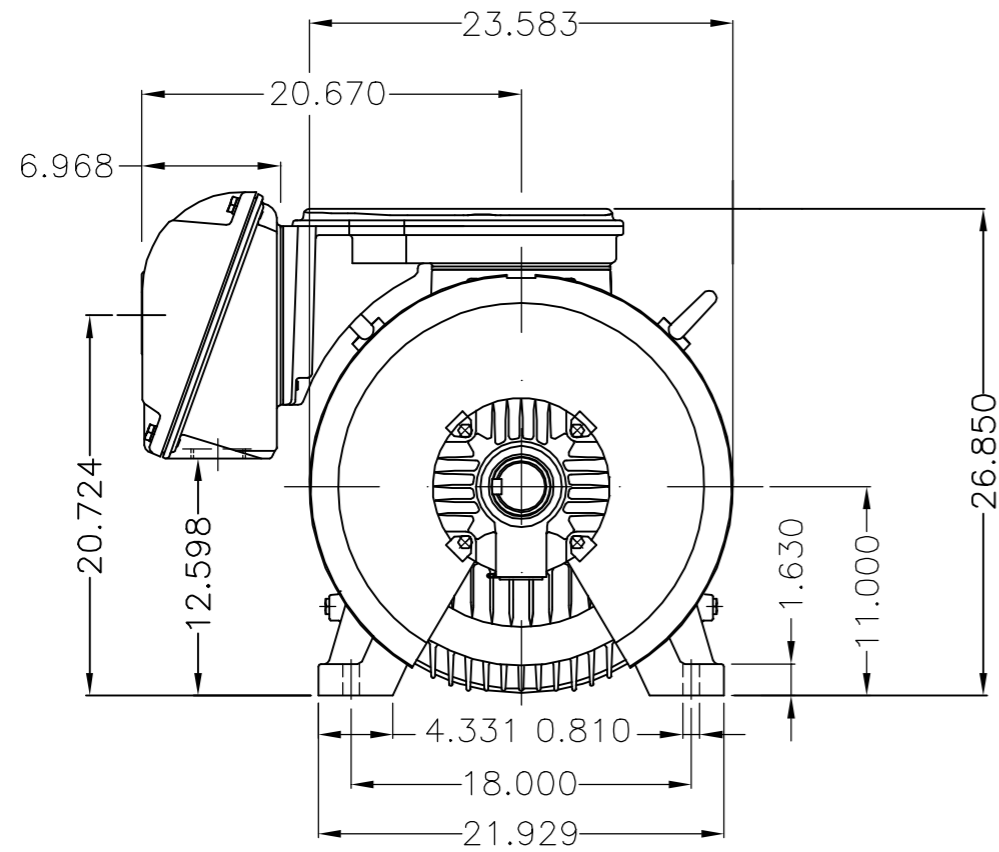
Certified document.
Not subject to changes.

THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

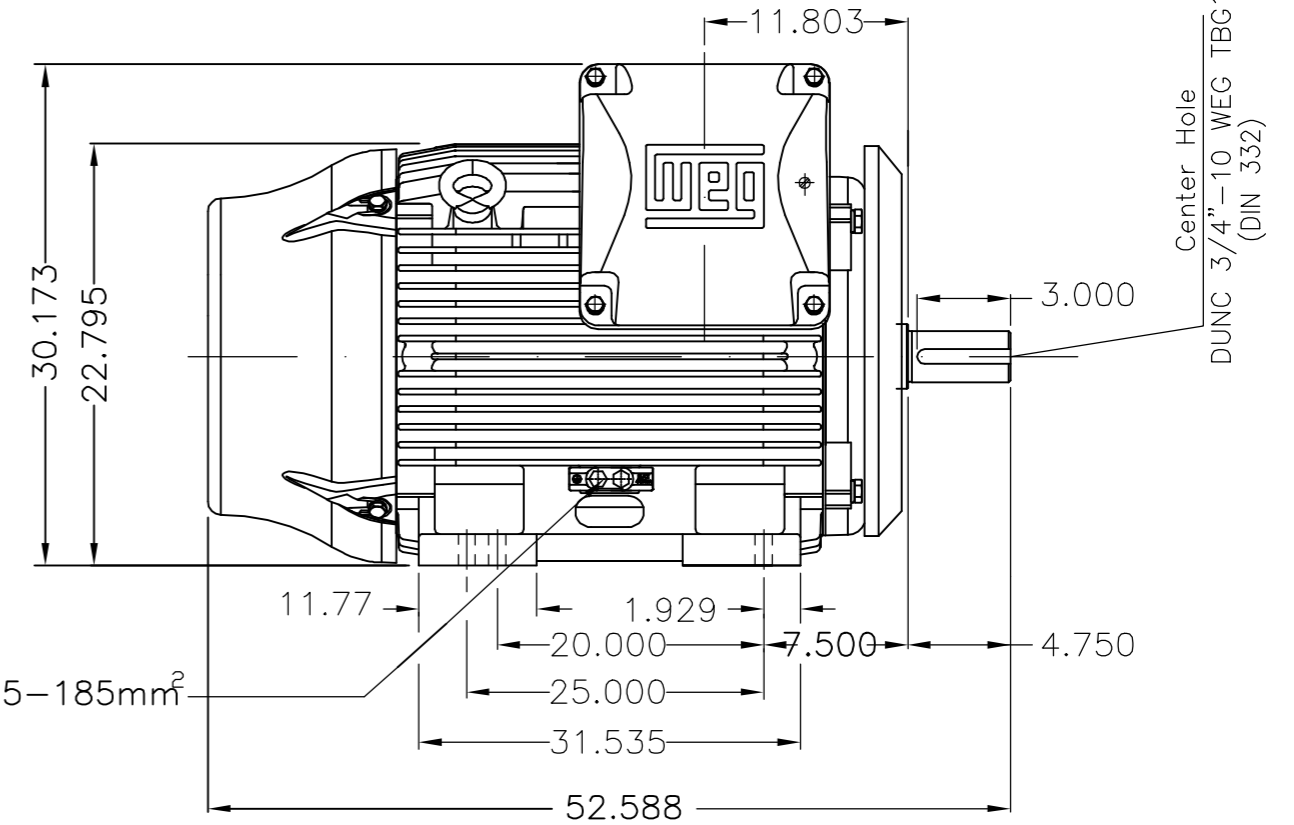


Main terminal box

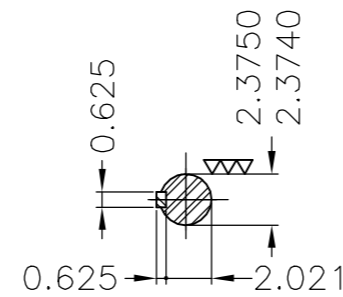
Grounding for leads 35–70mm²



Grounding for leads 25–185mm²



Center Hole
DUNC 3/4"–10 WEG TBG12
(DIN 332)



DE Shaft End

Rolamento dianteiro de esferas 6314 C3 / 6314 C3 DE ball bearing						
Defletor de ar dianteiro / Drive-End Air Deflector						
Ponta de eixo TS / TS shaft end						
Plano de pintura 203A / Painting plan 203A						
Forma construtiva B3D / Mounting B3R(D)						

WEG ELECTRIC CORPORATION – WEC

500000821834		ALT. CONFORME ECM 500000821834	SCHENKEL		RICARDOAN	08.11.2013	02
500000804573		ALT CONF ECM 500000804573	DCARDOSO		RICARDOAN	02.10.2013	01
ECM ECM	LOC LOC	RESUMO MODIFICAÇÃO SUMMARY OF MODIFICATIONS	EXECUTADO EXECUTED	VERIFICADO CHECKED	LIBERADO RELEASED	DATA DATE	VER VER
EXEC. /EXECUTED	SCARMAGNANI	THREE PHASE W22 MOTOR - NEMA PREMIUM EFF			10001718808		
VERIF. /CHECKED		FRAME 447/9TS IP55			000 02		
LIBER. /RELEASED	DVEGINI						
DATA LB /REL DT	27.04.2012	WMO-JGS	JARAGUÁ DO SUL	ENG. MOTORES INDUSTRIAIS	FOLHA/SHEET	1 / 1	

350 HP	04 Poles	60Hz	412462295/0	ELET/MEC	B
300 HP	04 Poles	60Hz	412462296/0	ELET/MEC	A



MADE IN MEXICO
12075524



FOR SAFE AREA
Mod.TE1BFOXON
CC029A

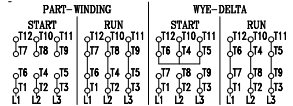


Class I, Div 2, Gr A, B, C and D - T3
Class I, Zone 2, IIC - T3
Class II, Div 2, Gr F and G - T3C
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 6:1, 1.00SF - T3

MODEL 35018ET3G449TS-W22

Inverter Duty Motor
Severe Duty

PH3	60Hz	Fr. 447/9TS	1000m.a.s.l.	IP55	TEFC	2953lb
V 460				A 399		
HP 350				kW 260		
SF 1.15				SFA 459		
RPM 1785				PF 0.85		
AMB 40°C				INS cl. F DT80K	NEMA NOM EFF 96.2%	
DUTY CONT.				DES A Code J		



→ 6314-C3 (27g)
 → 6314-C3 (27g)

MOBIL POLYREX EM (12000h)