

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	11924426		
		Catalog # :	25036XT3G447TS		
Frame	: 447TS	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	: 2589 lb		
Protection degree	: IP55	Moment of inertia (J)	: 50.3 sq.ft.lb		
Design	: B				
Output [HP]	250	200	200	200	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	269	265	255	245	
L. R. Amperes [A]	2150	1988	2193	2279	
LRC [A]	8.0x(Code H)	7.5x(Code H)	8.6x(Code J)	9.3x(Code K)	
No load current [A]	60.9	60.2	64.1	67.0	
Rated speed [RPM]	3570	2970	2975	2975	
Slip [%]	0.83	1.00	0.83	0.83	
Rated torque [ft.lb]	368	354	353	353	
Locked rotor torque [%]	240	220	229	240	
Breakdown torque [%]	280	270	300	320	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	
Noise level ²	87.0 dB(A)	87.0 dB(A)	87.0 dB(A)	87.0 dB(A)	
Efficiency (%)	25%	94.5	94.9	94.9	94.5
	50%	95.0	95.0	95.0	95.0
	75%	95.4	95.4	95.4	95.4
	100%	95.8	95.4	95.4	95.8
Power Factor	25%	0.61	0.61	0.58	0.56
	50%	0.83	0.83	0.81	0.79
	75%	0.89	0.89	0.88	0.87
	100%	0.90	0.90	0.89	0.89
Bearing type	: Drive end : 6314 C3	Non drive end : 6314 C3	Foundation loads		
Sealing	: Oil Seal	Lip Seal	Max. traction	: 1717 lb	
Lubrication interval	: 3604 h	3604 h	Max. compression	: 4306 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 / 22	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Thermal protection

ID	Application	Type	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	13/04/2022		2 / 22	

TORQUE AND CURRENT VS SPEED CURVE



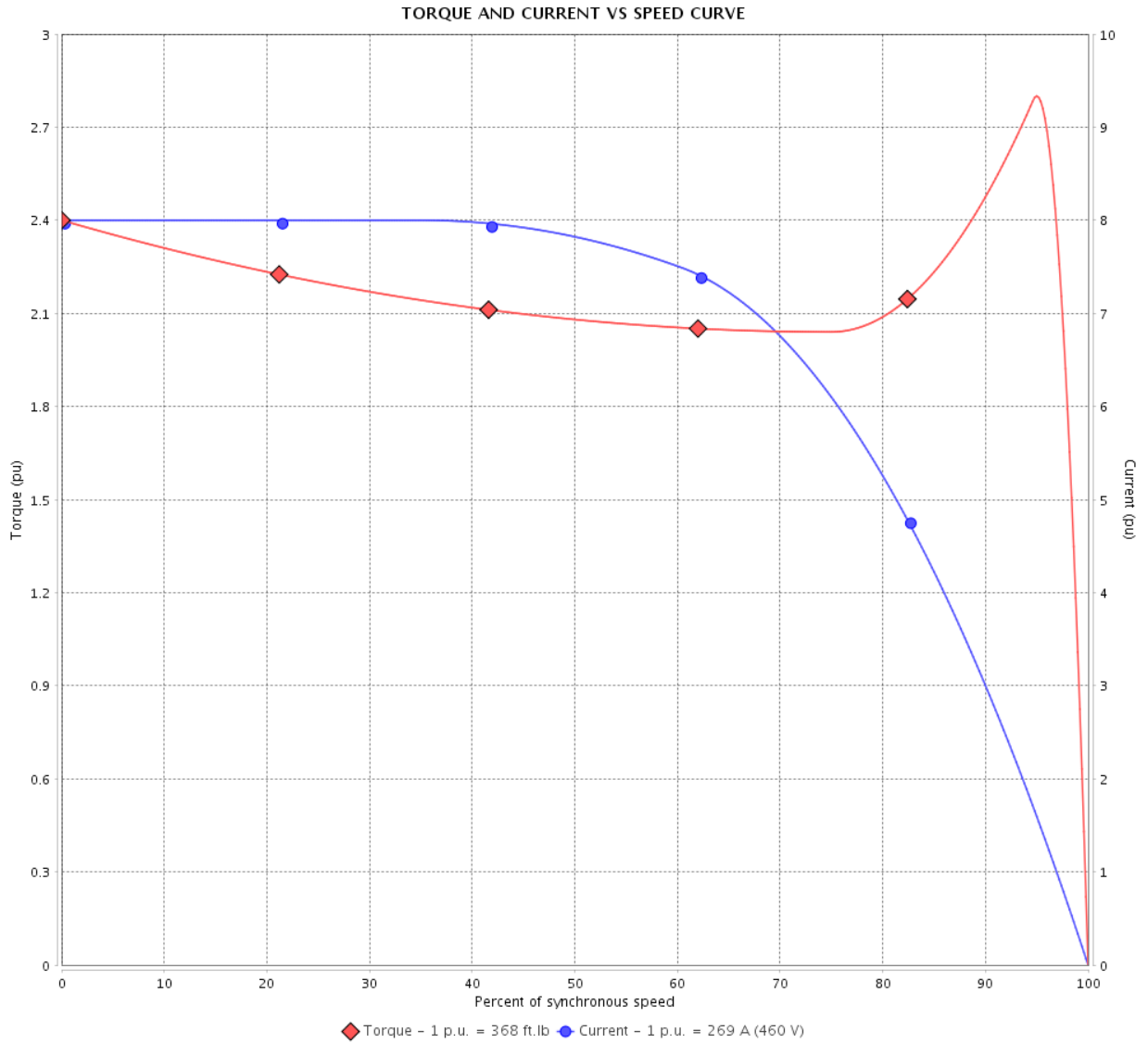
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS



Performance : 460 V 60 Hz 2P

Rated current	: 269 A	Moment of inertia (J)	: 50.3 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 368 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 3570 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



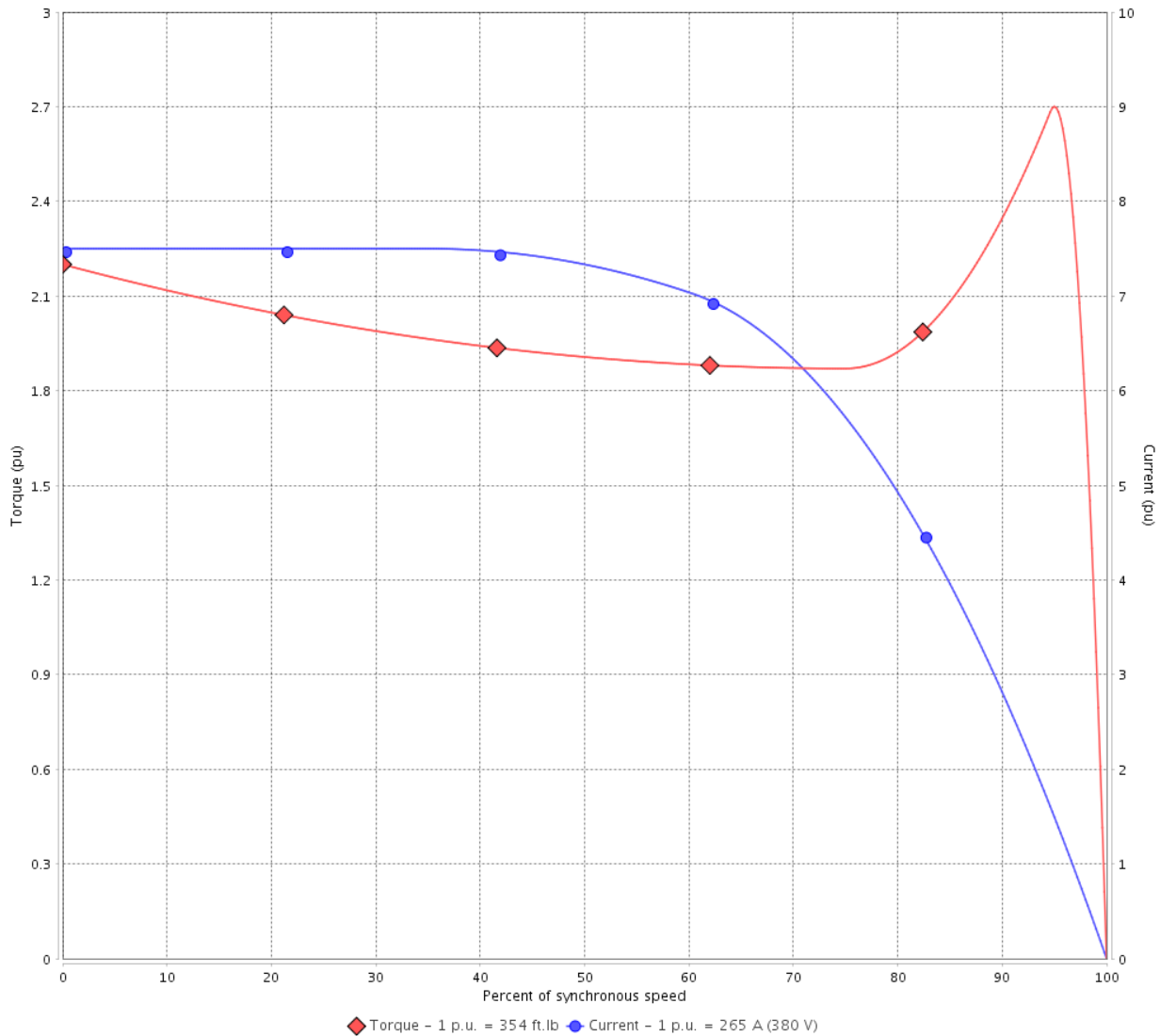
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 2P IE2

Rated current	: 265 A	Moment of inertia (J)	: 50.3 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 354 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 2970 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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

TORQUE AND CURRENT VS SPEED CURVE



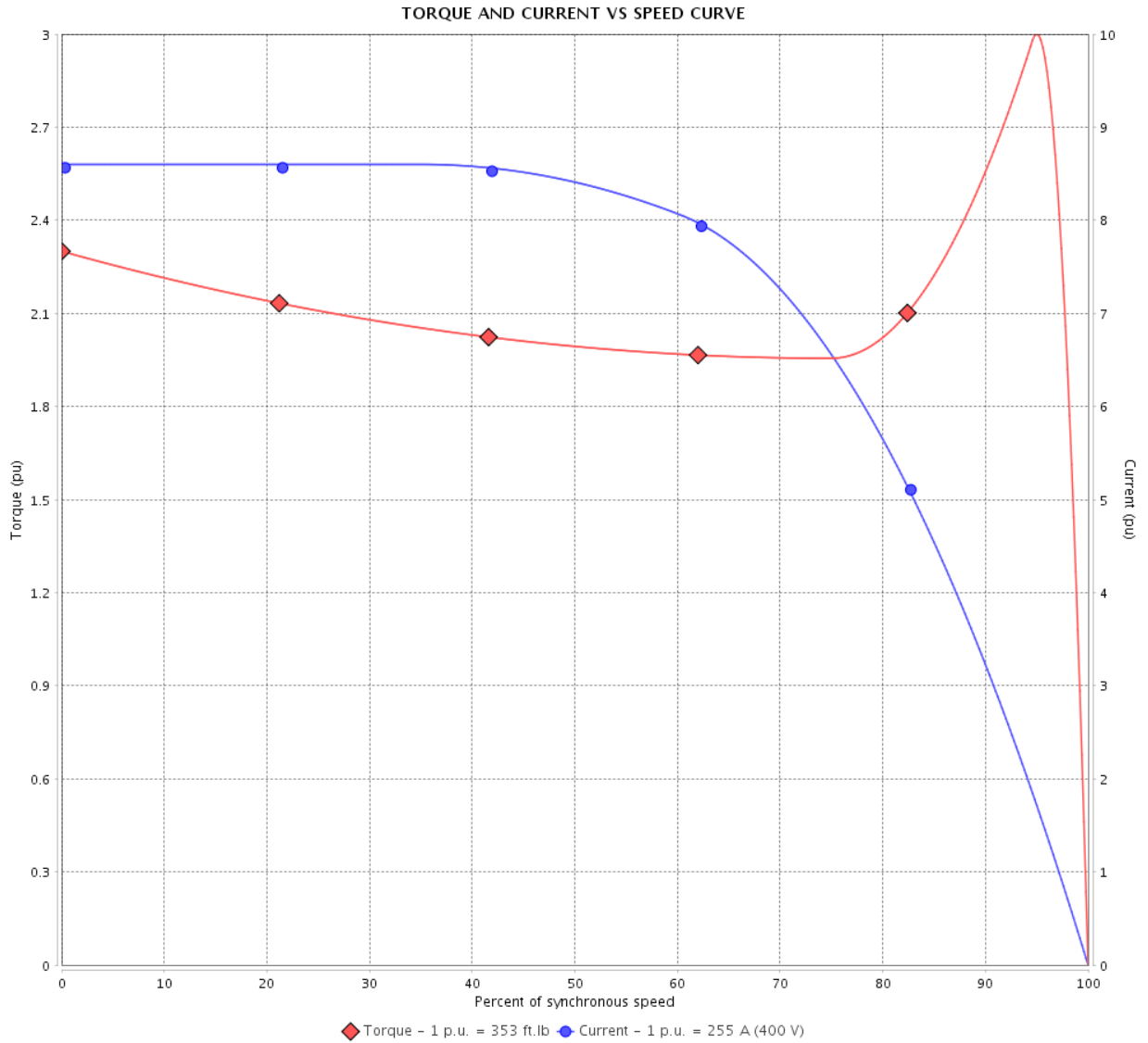
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS



Performance : 400 V 50 Hz 2P IE2

Rated current	: 255 A	Moment of inertia (J)	: 50.3 sq.ft.lb
LRC	: 8.6	Duty cycle	: Cont.(S1)
Rated torque	: 353 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2975 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



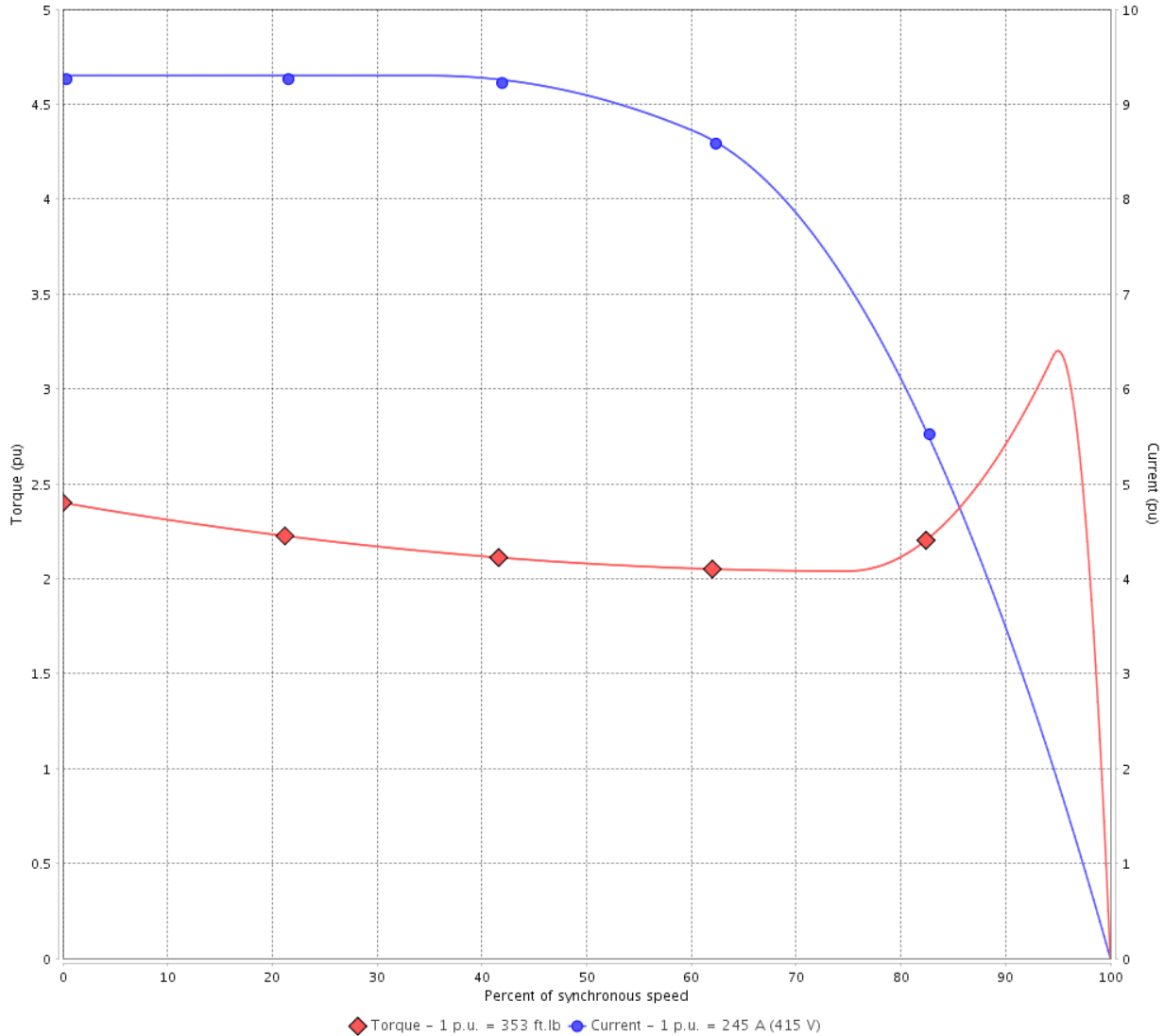
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 2P IE3

Rated current	: 245 A	Moment of inertia (J)	: 50.3 sq.ft.lb
LRC	: 9.3	Duty cycle	: Cont.(S1)
Rated torque	: 353 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 2975 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

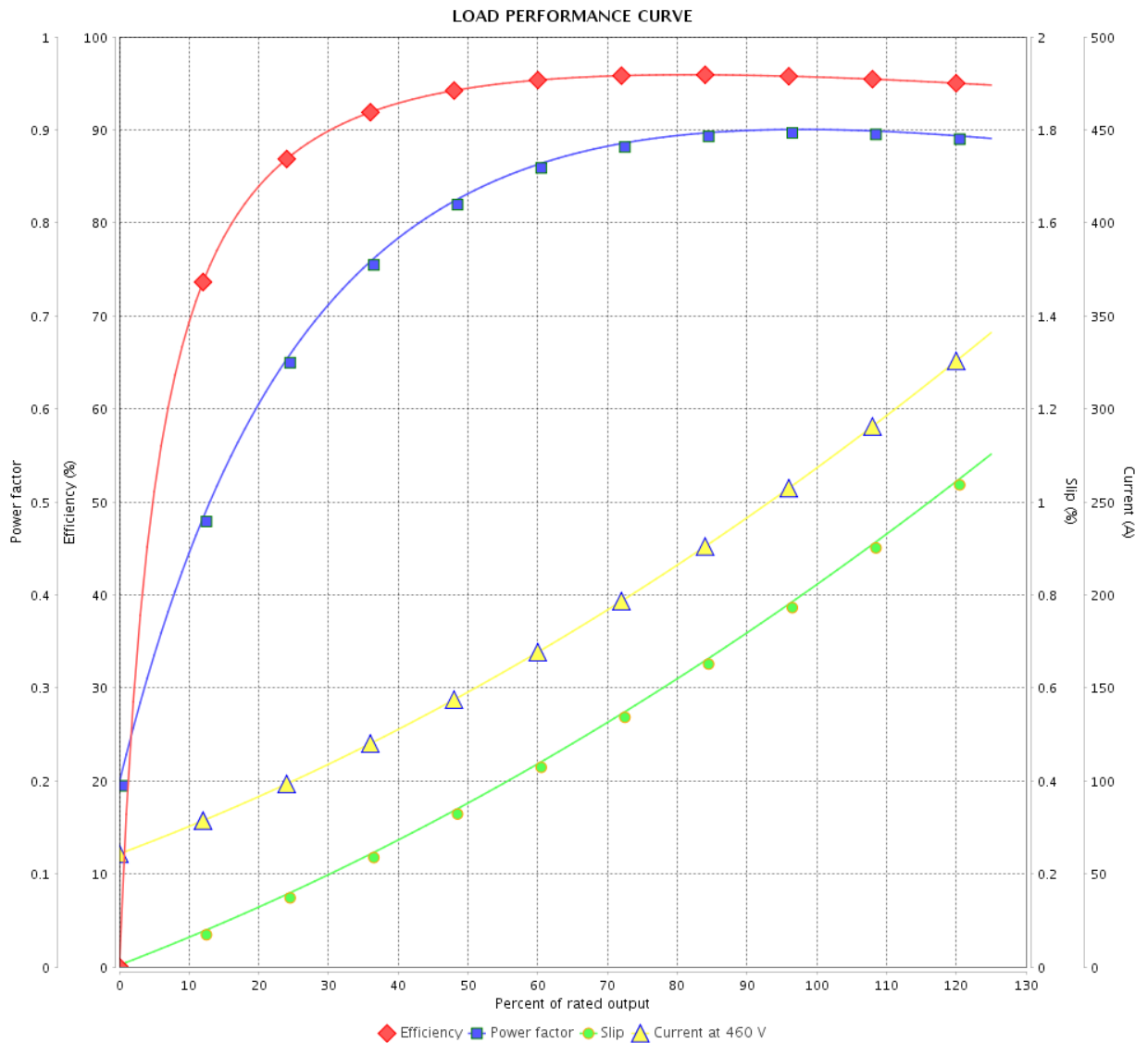


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS



Performance : 460 V 60 Hz 2P

Rated current : 269 A
 LRC : 8.0
 Rated torque : 368 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 3570 rpm

Moment of inertia (J) : 50.3 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

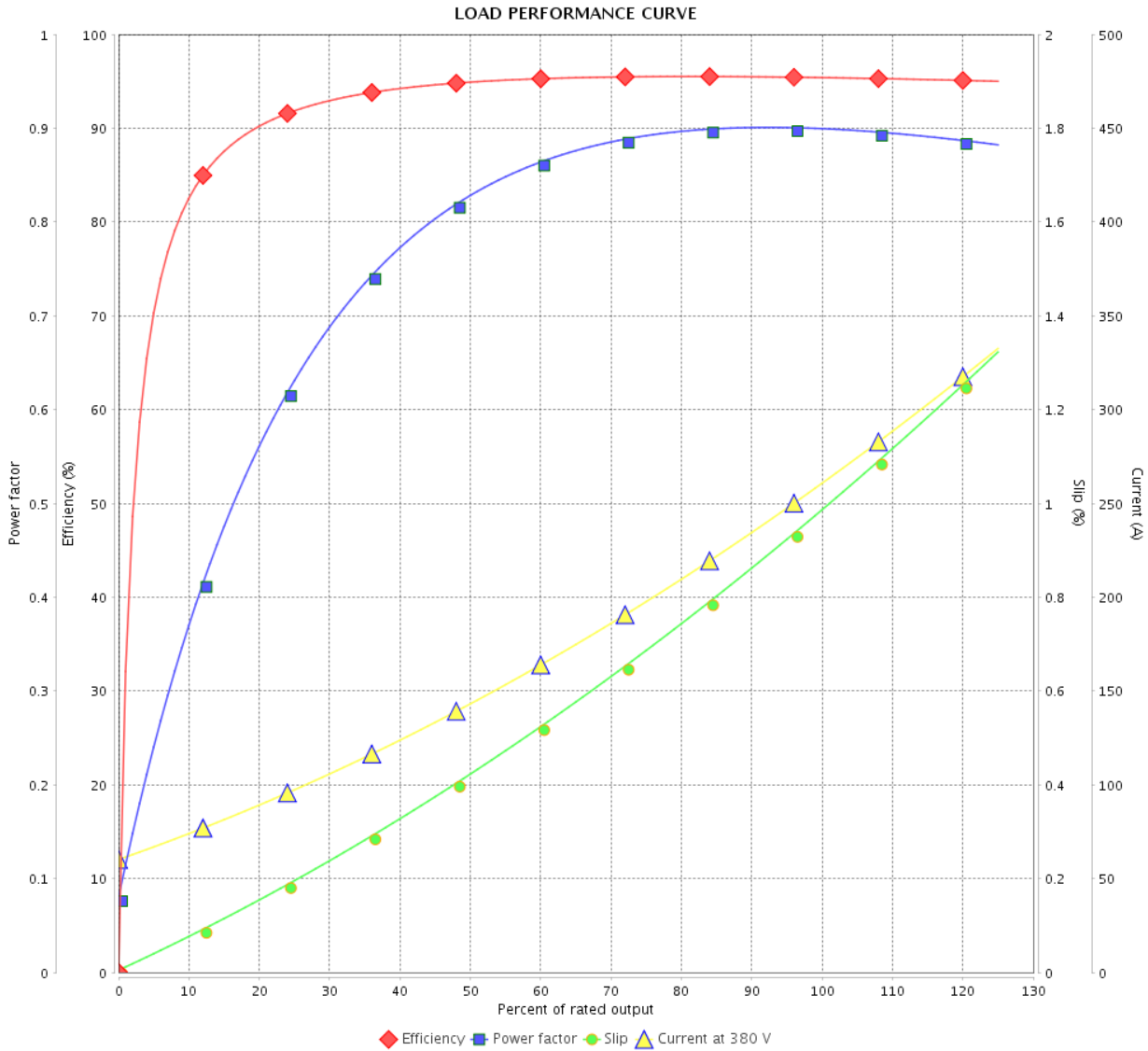


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS



Performance : 380 V 50 Hz 2P IE2

Rated current : 265 A
 LRC : 7.5
 Rated torque : 354 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 270 %
 Rated speed : 2970 rpm

Moment of inertia (J) : 50.3 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

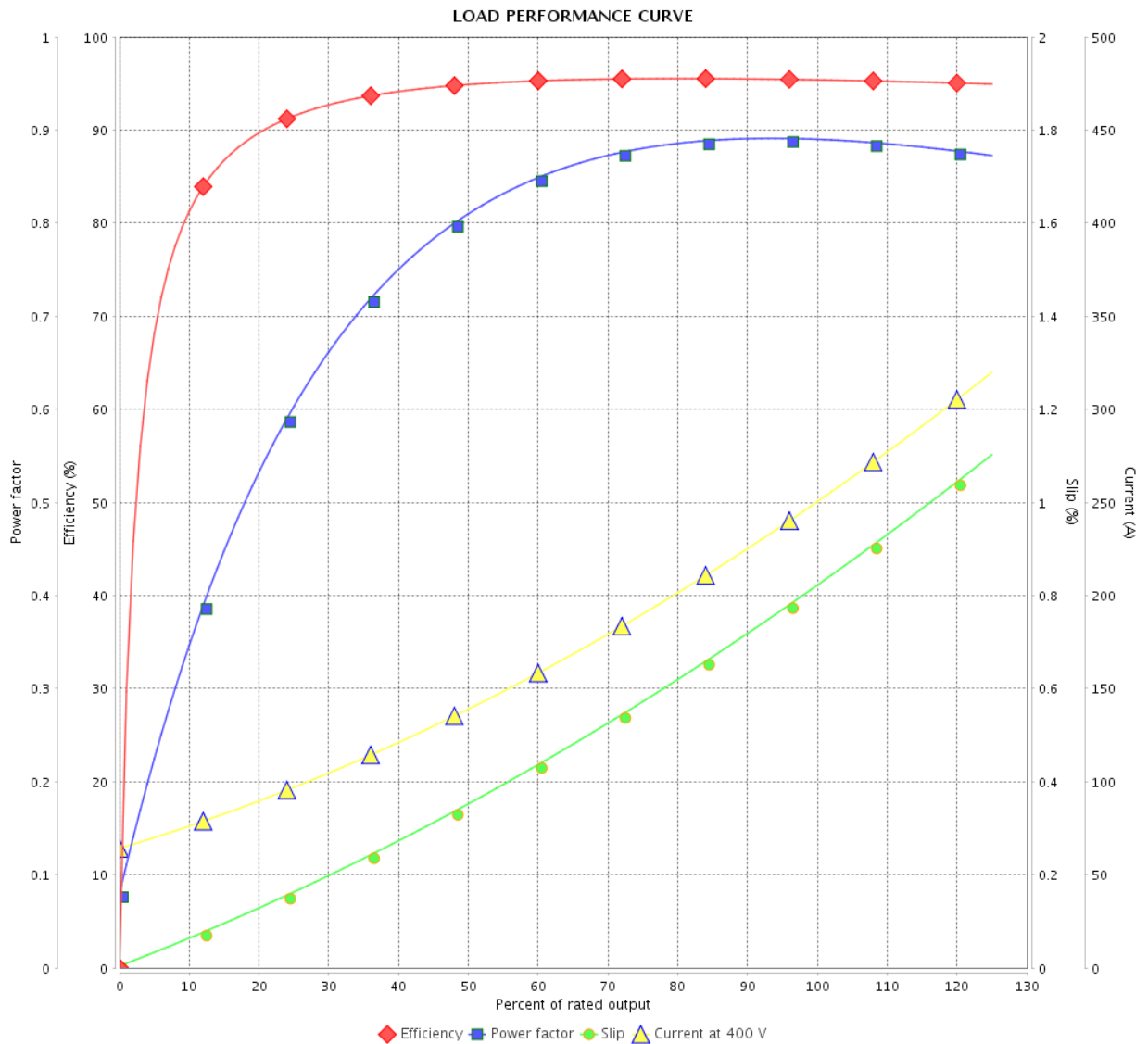


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS



Performance : 400 V 50 Hz 2P IE2

Rated current : 255 A
 LRC : 8.6
 Rated torque : 353 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 300 %
 Rated speed : 2975 rpm

Moment of inertia (J) : 50.3 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 / 22		
Date		13/04/2022		

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

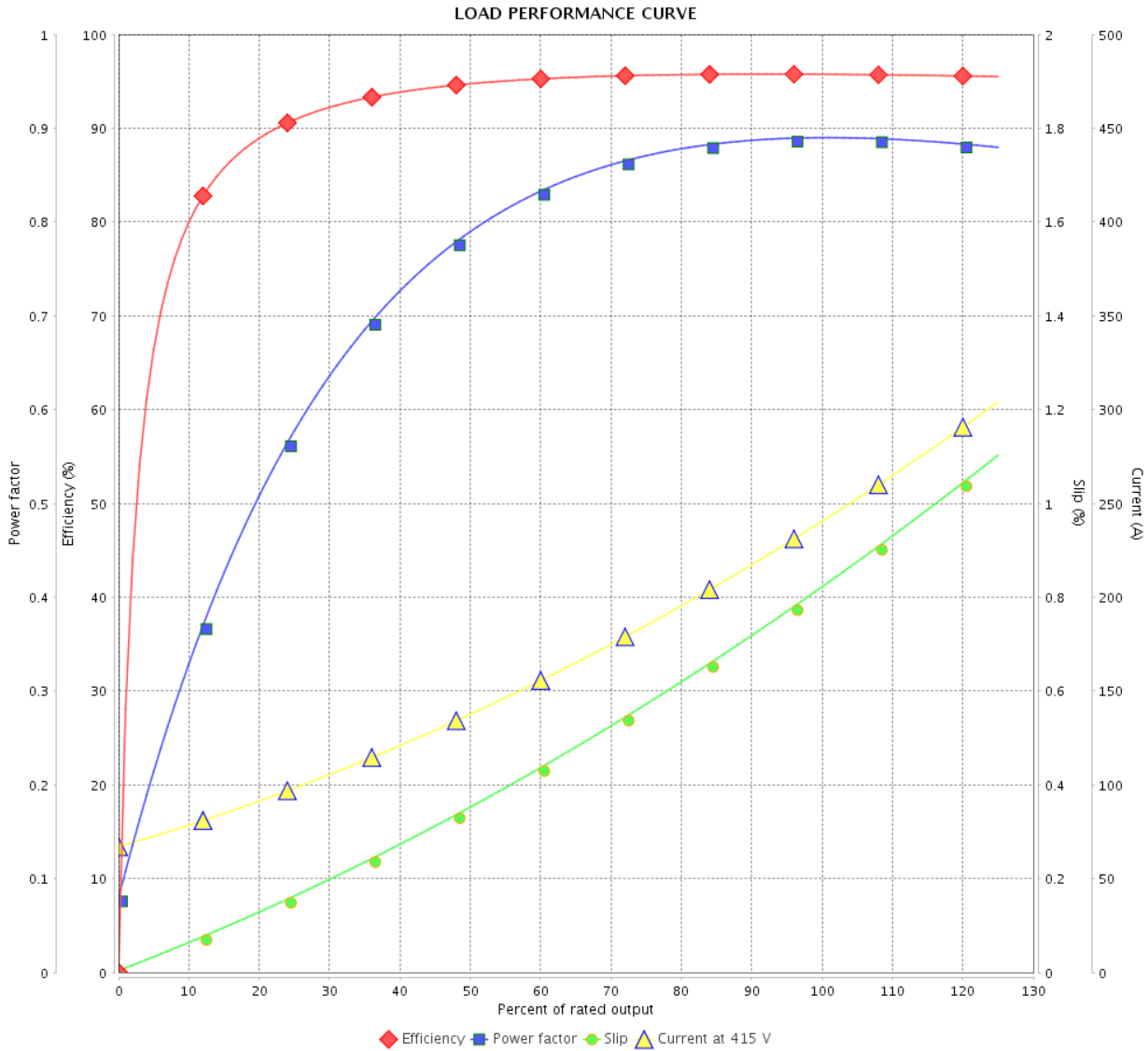


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS



Performance : 415 V 50 Hz 2P IE3

Rated current	: 245 A	Moment of inertia (J)	: 50.3 sq.ft.lb
LRC	: 9.3	Duty cycle	: Cont.(S1)
Rated torque	: 353 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 2975 rpm	Design	: B

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

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS

Performance : 460 V 60 Hz 2P

Rated current : 269 A
 LRC : 8.0
 Rated torque : 368 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 3570 rpm

Moment of inertia (J) : 50.3 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

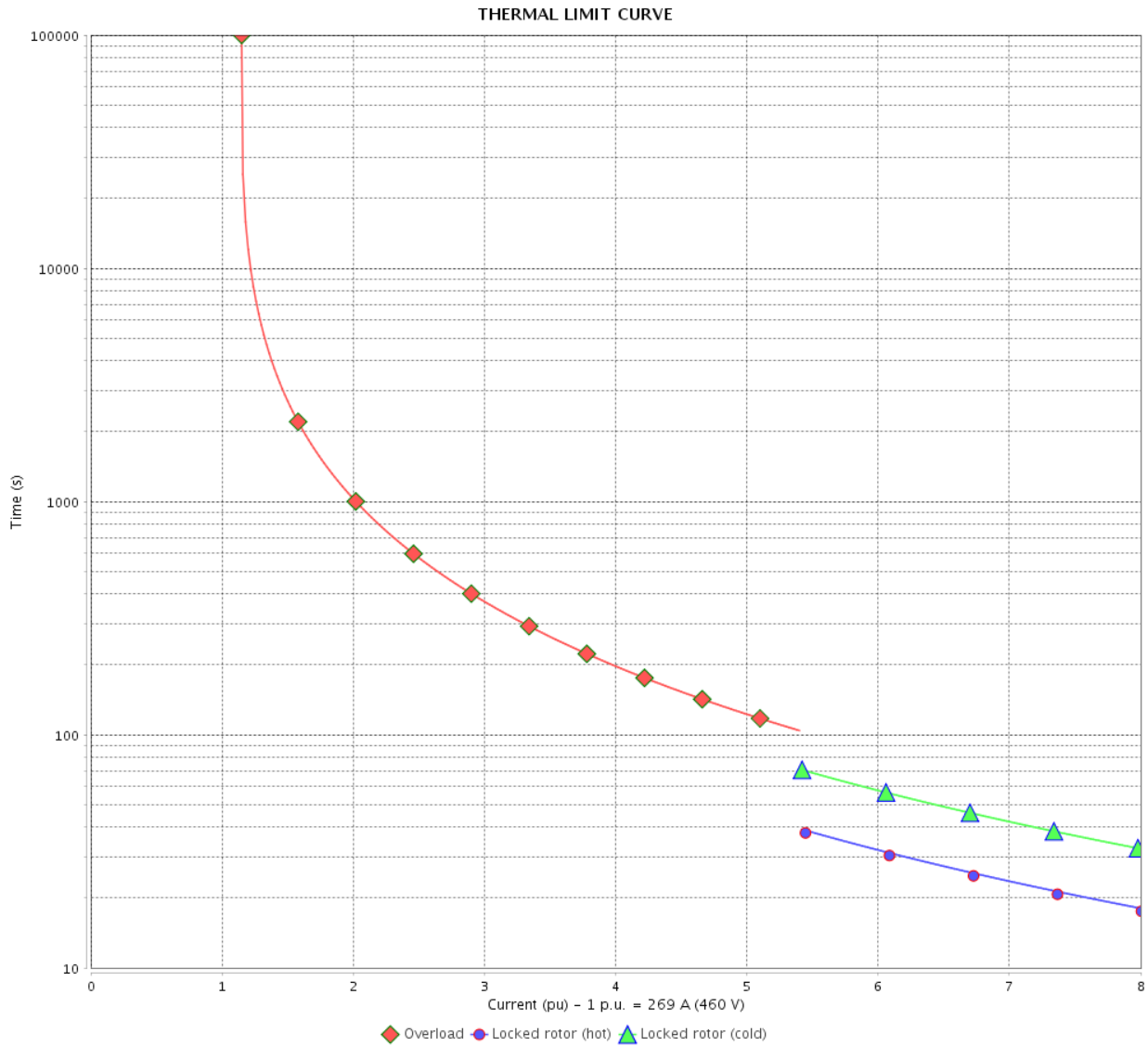
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		11 / 22	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS

Performance : 380 V 50 Hz 2P IE2

Rated current : 265 A
 LRC : 7.5
 Rated torque : 354 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 270 %
 Rated speed : 2970 rpm

Moment of inertia (J) : 50.3 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

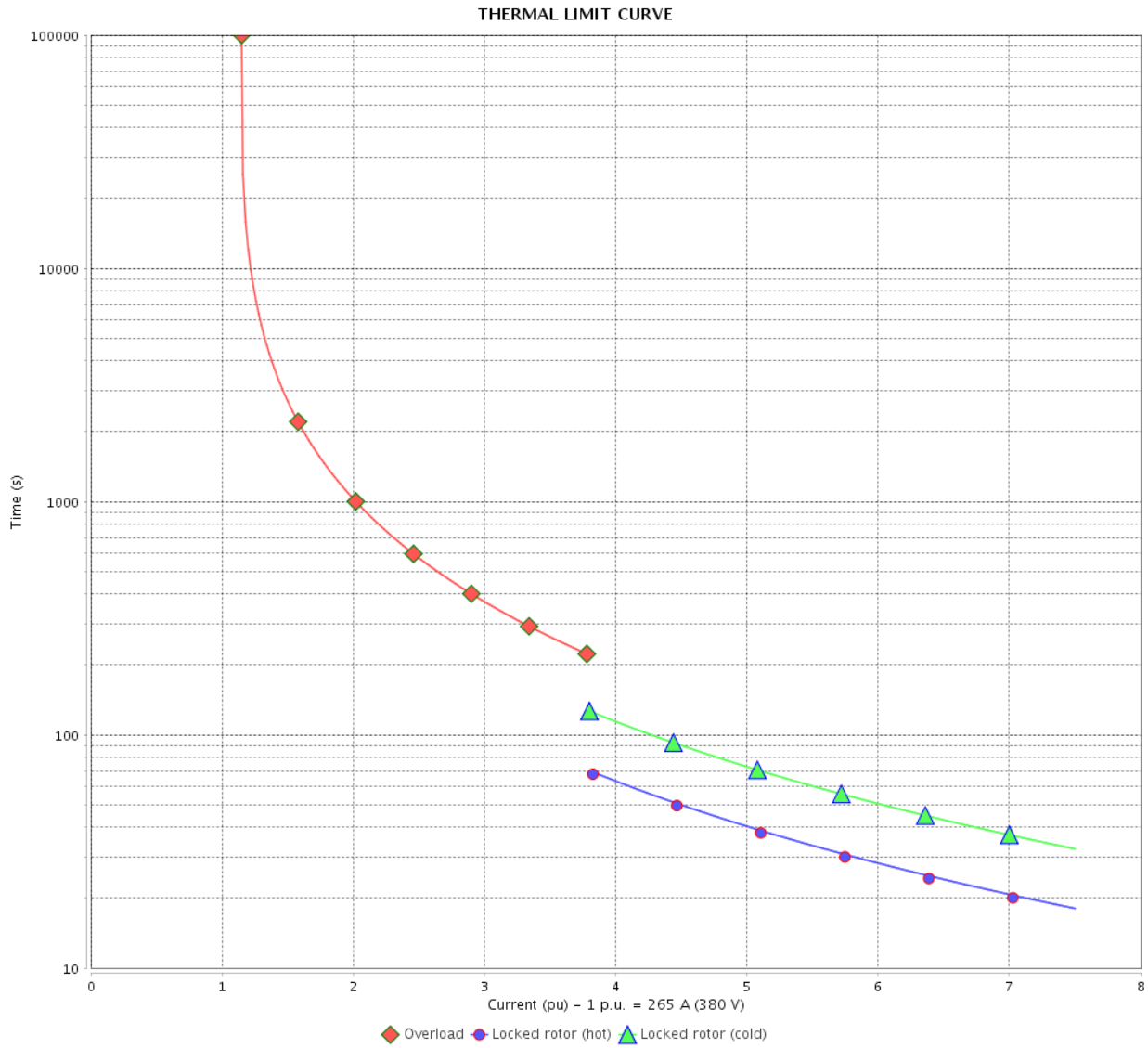
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		13 / 22	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS

Performance : 400 V 50 Hz 2P IE2

Rated current : 255 A
 LRC : 8.6
 Rated torque : 353 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 300 %
 Rated speed : 2975 rpm

Moment of inertia (J) : 50.3 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		15 / 22	

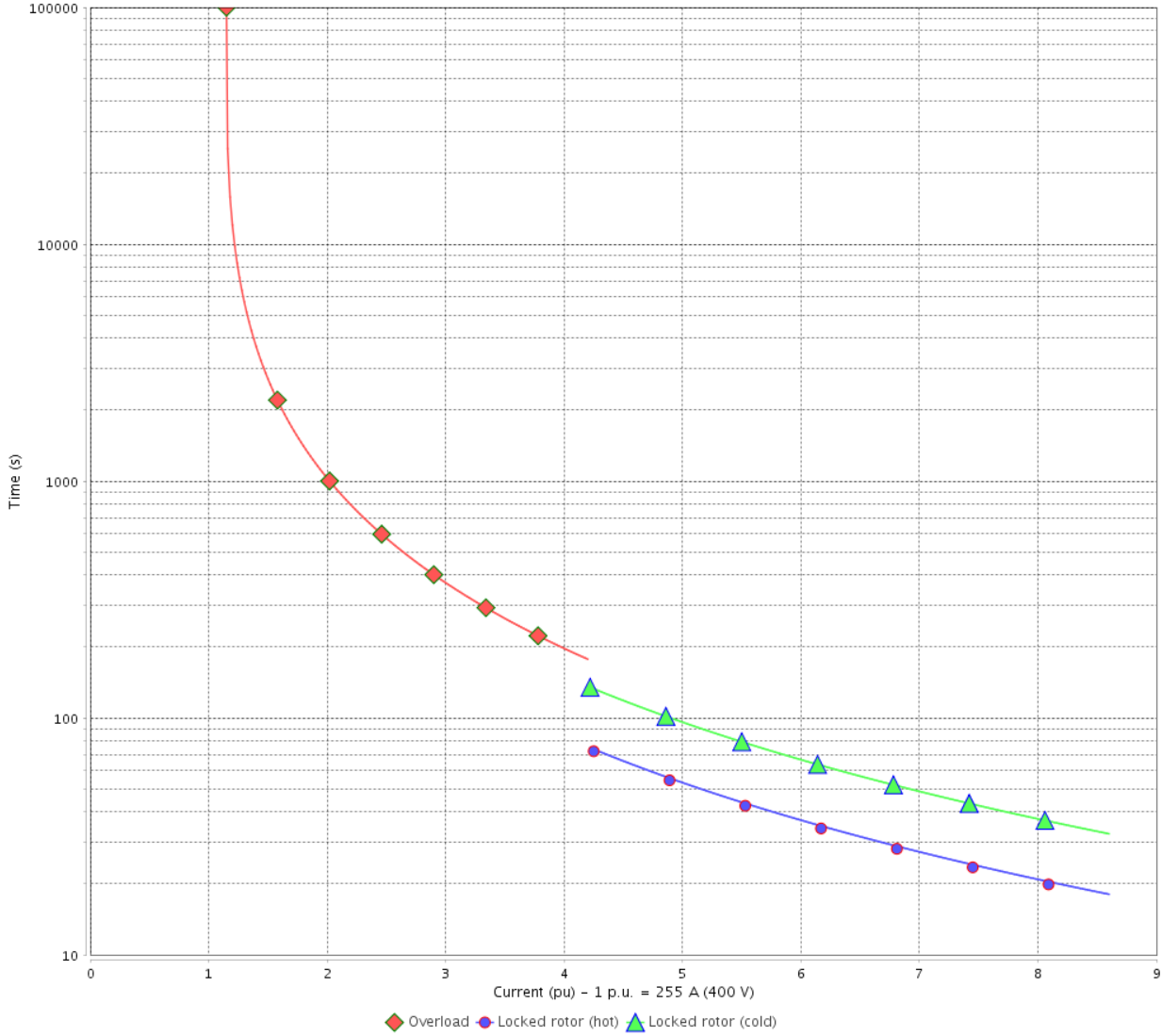
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

THERMAL LIMIT CURVE



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

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
 Product code : 11924426
 Catalog # : 25036XT3G447TS

Performance : 415 V 50 Hz 2P IE3

Rated current : 245 A	Moment of inertia (J) : 50.3 sq.ft.lb
LRC : 9.3	Duty cycle : Cont.(S1)
Rated torque : 353 ft.lb	Insulation class : F
Locked rotor torque : 240 %	Service factor : 1.00
Breakdown torque : 320 %	Temperature rise : 80 K
Rated speed : 2975 rpm	Design : B

Heating constant

Cooling constant

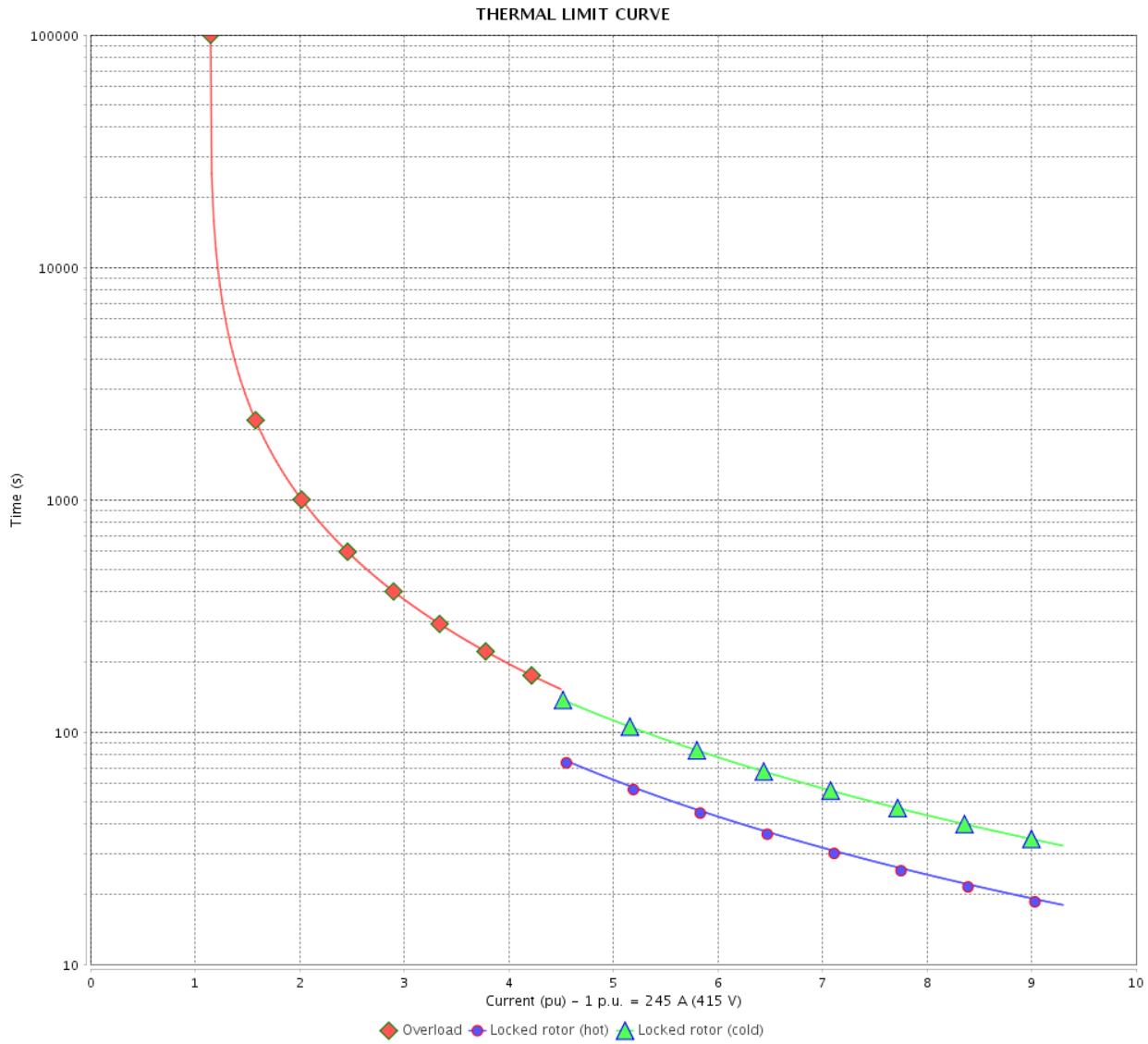
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 17 / 22	Revision
Checked by				
Date	13/04/2022			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

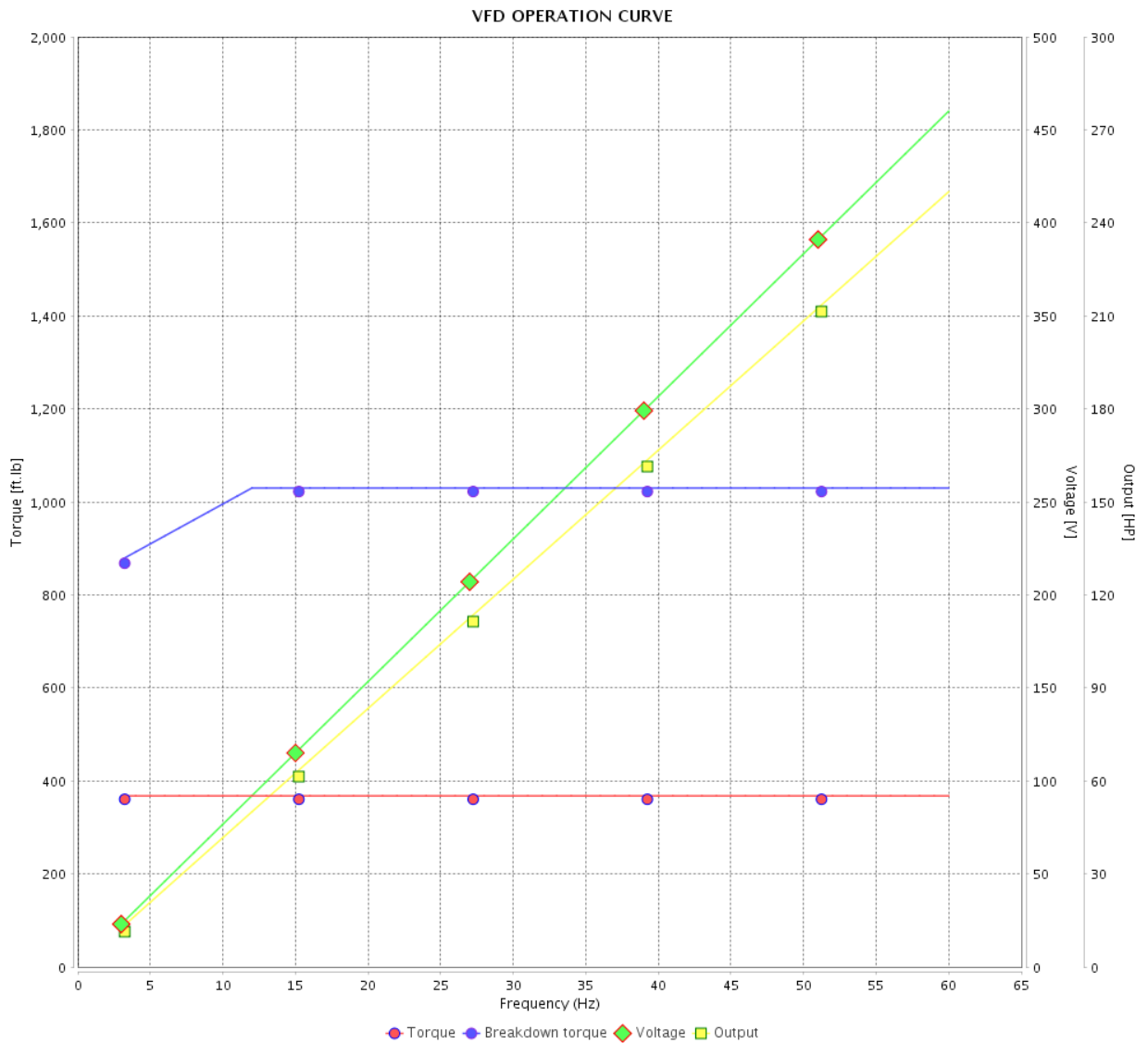


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS



Performance : 460 V 60 Hz 2P

Rated current : 269 A
 LRC : 8.0
 Rated torque : 368 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 3570 rpm

Moment of inertia (J) : 50.3 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 19 / 22	Revision
Checked by				
Date	13/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



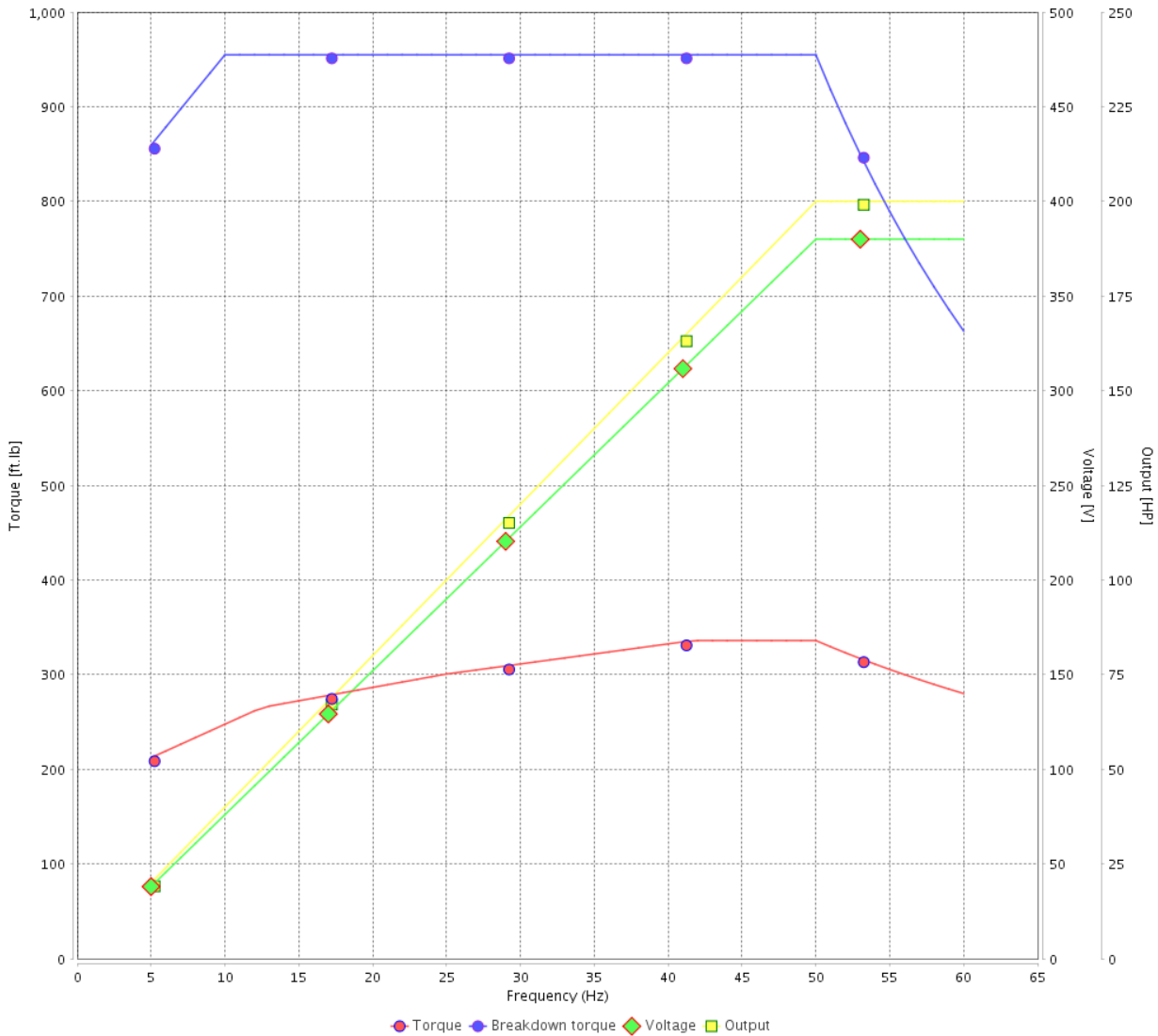
Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS

VFD OPERATION CURVE



Performance : 380 V 50 Hz 2P IE2

Rated current	: 265 A	Moment of inertia (J)	: 50.3 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 354 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 2970 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 20 / 22	Revision
Checked by				
Date	13/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

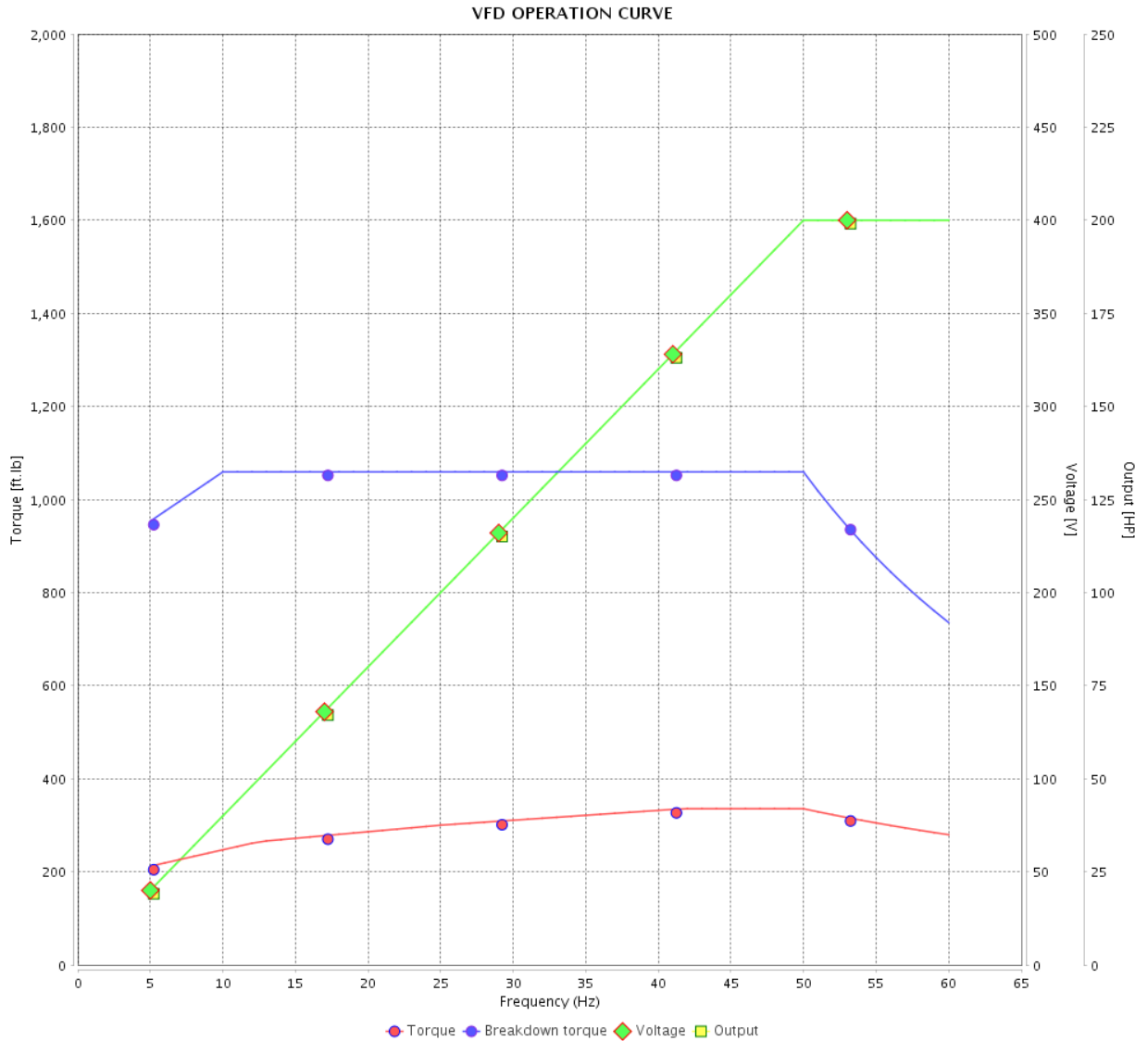


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS



Performance : 400 V 50 Hz 2P IE2

Rated current : 255 A
 LRC : 8.6
 Rated torque : 353 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 300 %
 Rated speed : 2975 rpm

Moment of inertia (J) : 50.3 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



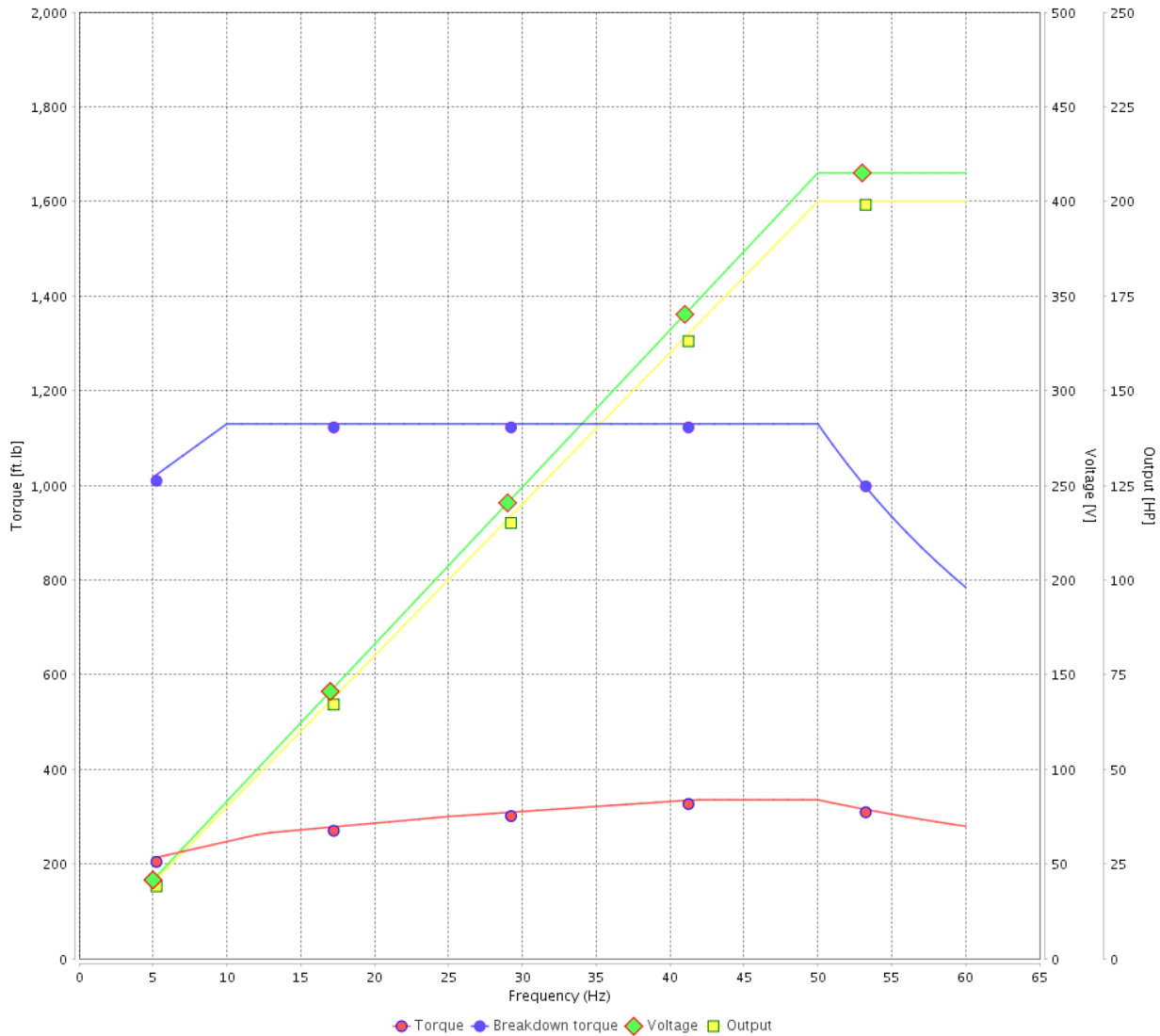
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11924426

Catalog # : 25036XT3G447TS

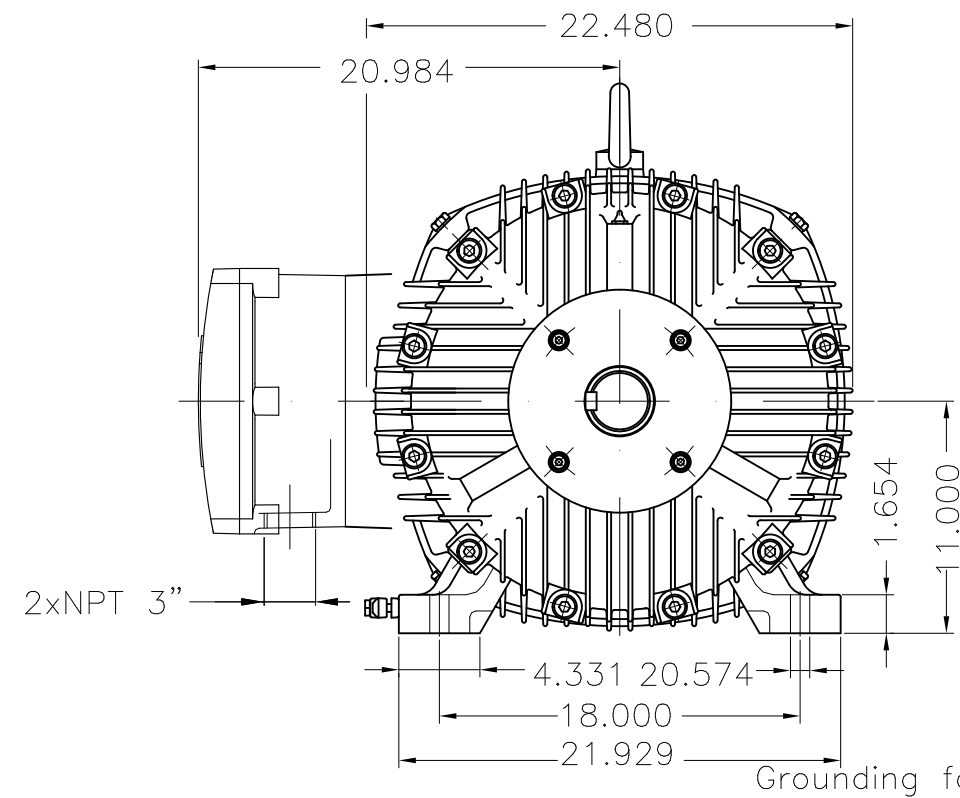
VFD OPERATION CURVE



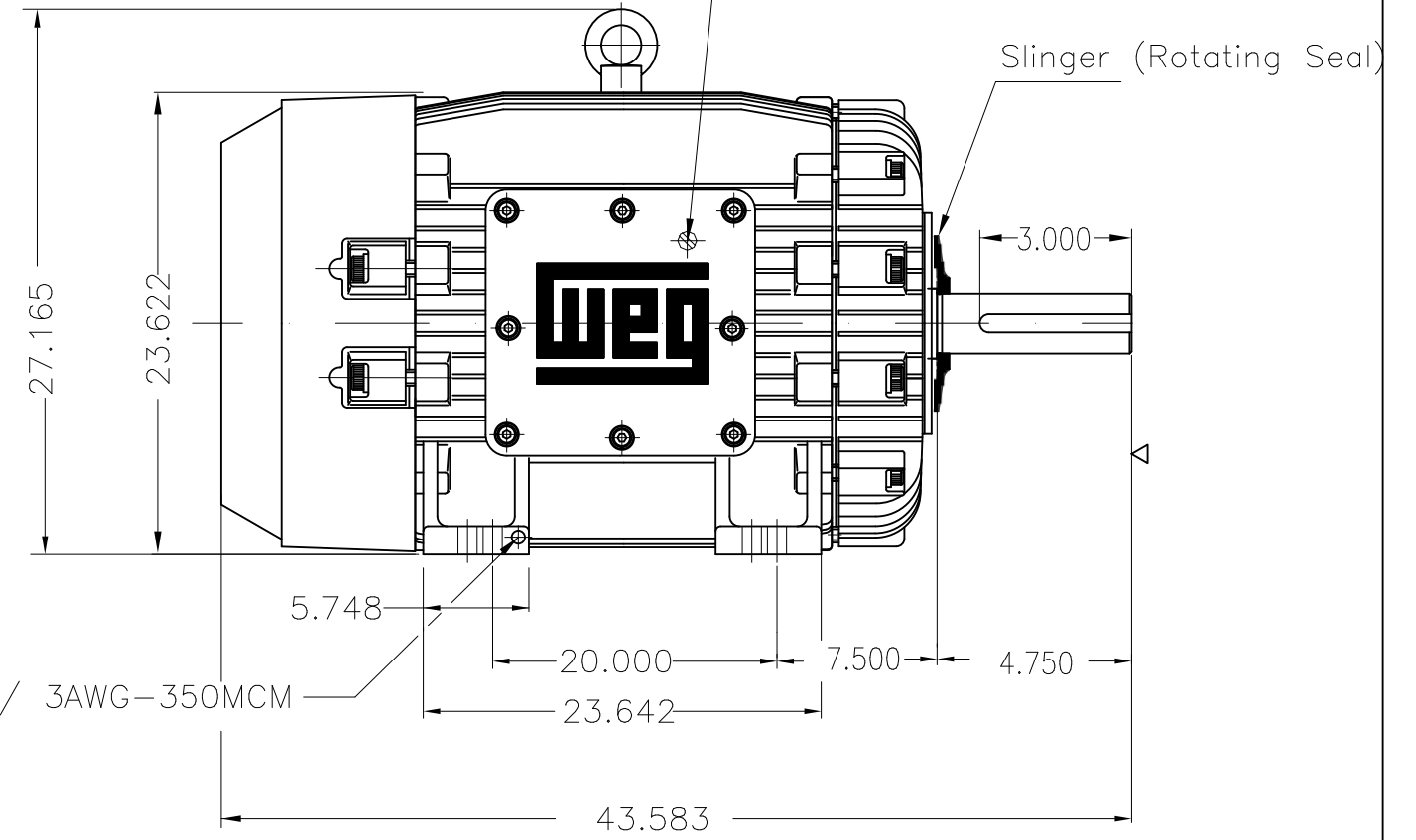
Performance : 415 V 50 Hz 2P IE3

Rated current	: 245 A	Moment of inertia (J)	: 50.3 sq.ft.lb
LRC	: 9.3	Duty cycle	: Cont.(S1)
Rated torque	: 353 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 2975 rpm	Design	: B

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



Grounding for leads 35–70 mm² / 1–2/0 AWG

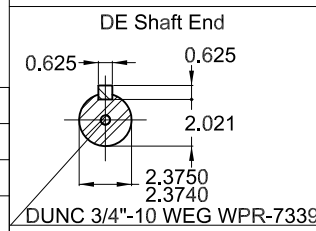


Grounding for leads 25–185 mm² / 3AWG–350MCM

250 HP 02 Poles 60 Hz

A

Color RAL 5009
 Painting plan 202P
 Mounting NEMA F-1
 Mounting B3R(D)



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF.					
CHECKED		FRAME 447TS IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



SHEET 1 / 1