

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: NEMA Premium Efficiency Three-Phase	Product code :	11408339	
			Catalog # :	25009ET3G449T-W22	
Frame	: L447/9T	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	: 3429 lb		
Protection degree	: IP55	Moment of inertia (J)	: 255 sq.ft.lb		
Design	: B				
Output [HP]	250	200	200	200	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	308	300	292	289	
L. R. Amperes [A]	1848	1740	1869	1965	
LRC [A]	6.0x(Code G)	5.8x(Code G)	6.4x(Code H)	6.8x(Code H)	
No load current [A]	130	130	140	150	
Rated speed [RPM]	890	740	740	740	
Slip [%]	1.11	1.33	1.33	1.33	
Rated torque [ft.lb]	1480	1420	1420	1420	
Locked rotor torque [%]	200	190	210	229	
Breakdown torque [%]	229	229	250	270	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	105 K	105 K	105 K	
Locked rotor time	43s (cold) 24s (hot)	45s (cold) 25s (hot)	39s (cold) 22s (hot)	37s (cold) 21s (hot)	
Noise level ²	64.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	
Efficiency (%)	25%	95.3	94.9	94.9	
	50%	95.4	95.0	95.0	
	75%	95.4	95.0	95.0	
	100%	95.4	95.0	95.0	
Power Factor	25%	0.40	0.40	0.36	
	50%	0.65	0.65	0.60	
	75%	0.75	0.75	0.72	
	100%	0.79	0.80	0.78	
Bearing type	: <u>Drive end</u> 6322 C3 <u>Non drive end</u> 6319 C3	Foundation loads			
Sealing	: WSeal WSeal	Max. traction	: 8502 lb		
Lubrication interval	: 14000 h 17000 h	Max. compression	: 11930 lb		
Lubricant amount	: 60 g 45 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



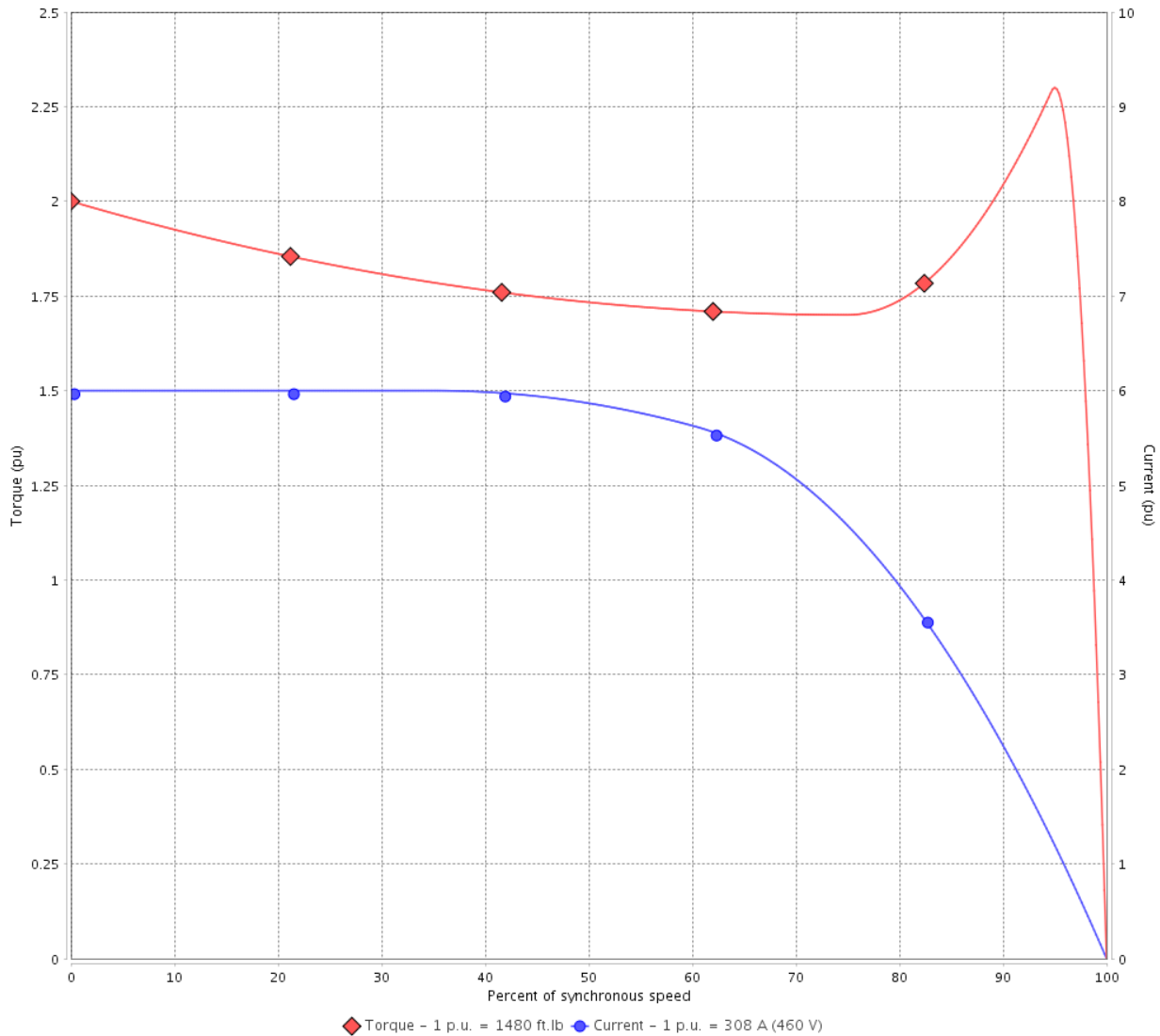
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408339

Catalog # : 25009ET3G449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 8P

Rated current	: 308 A	Moment of inertia (J)	: 255 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 1480 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 890 rpm	Design	: B

Locked rotor time : 43s (cold) 24s (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



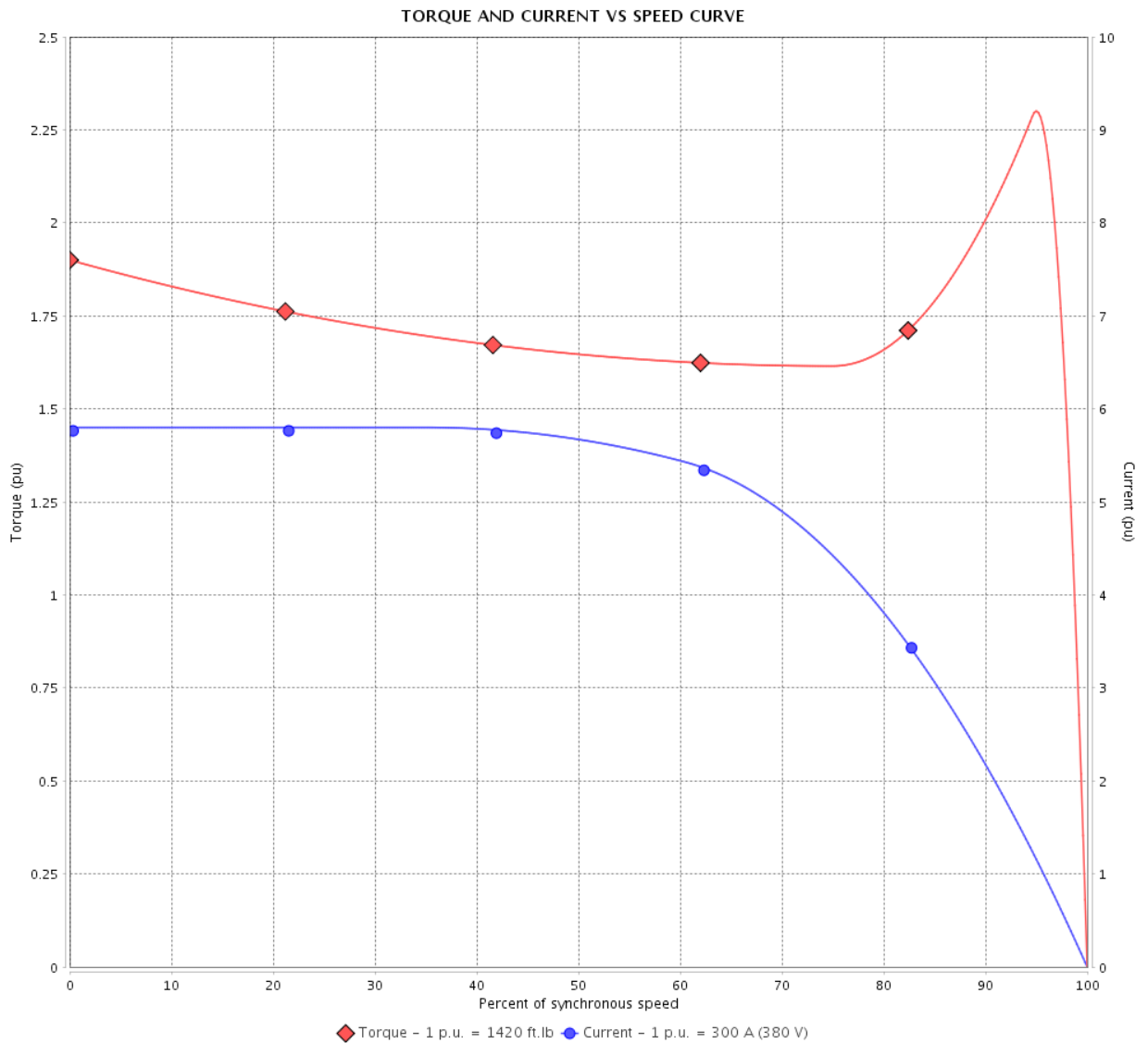
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408339

Catalog # : 25009ET3G449T-W22



Performance : 380 V 50 Hz 8P IE3

Rated current	: 300 A	Moment of inertia (J)	: 255 sq.ft.lb
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 1420 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

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



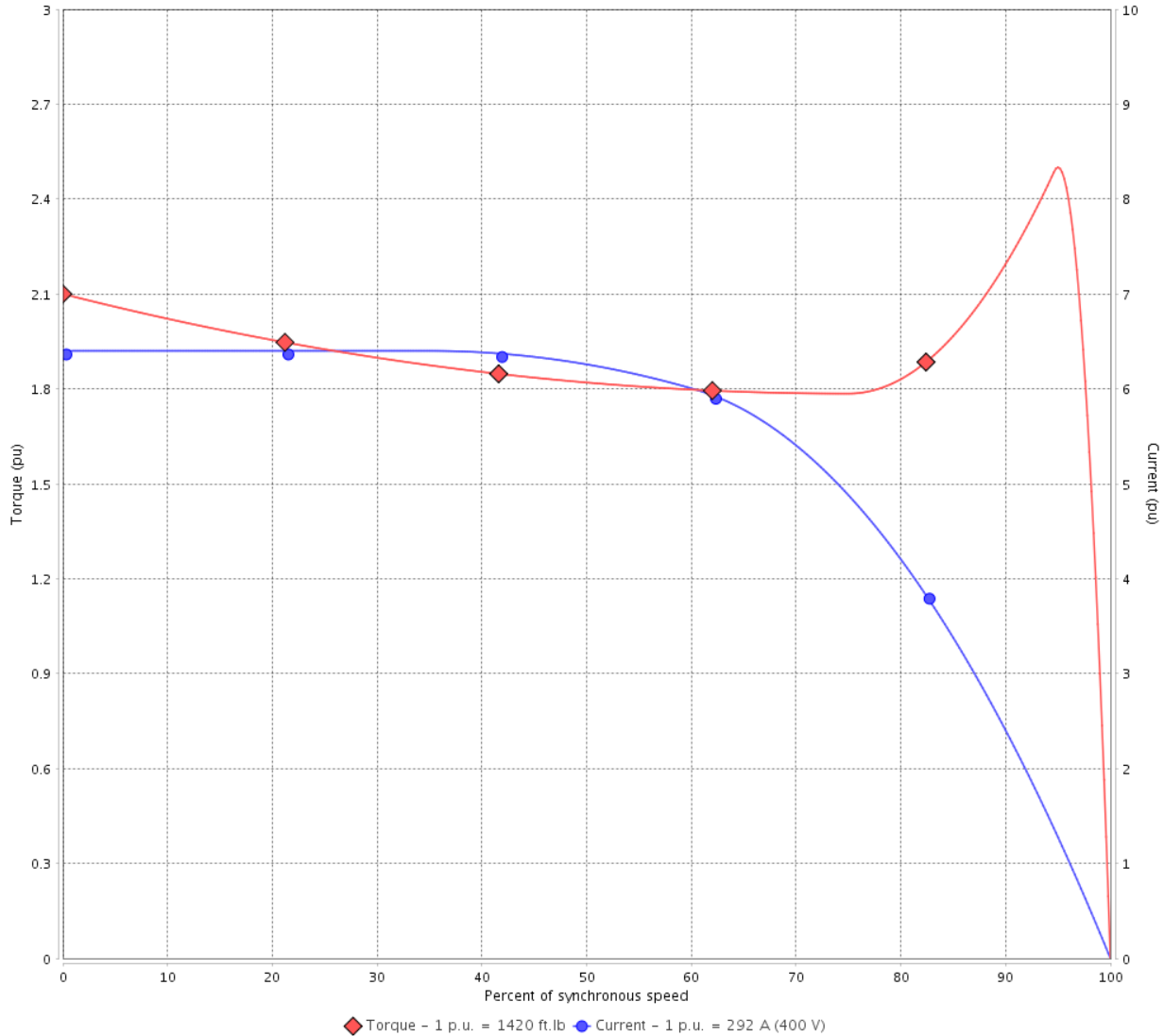
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408339

Catalog # : 25009ET3G449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 8P IE3

Rated current	: 292 A	Moment of inertia (J)	: 255 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 1420 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (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



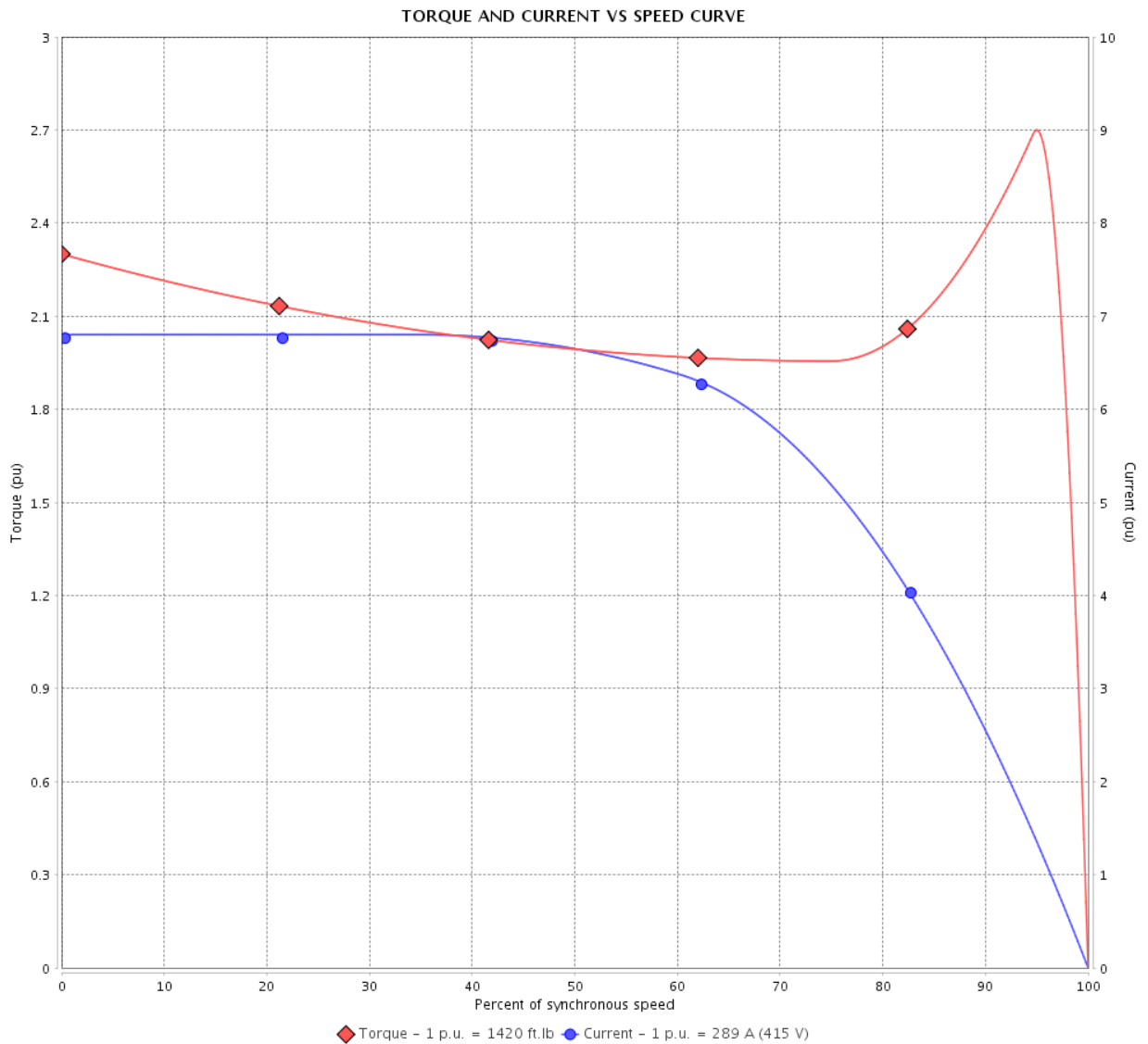
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408339

Catalog # : 25009ET3G449T-W22



Performance : 415 V 50 Hz 8P IE3

Rated current	: 289 A	Moment of inertia (J)	: 255 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 1420 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

Locked rotor time : 37s (cold) 21s (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

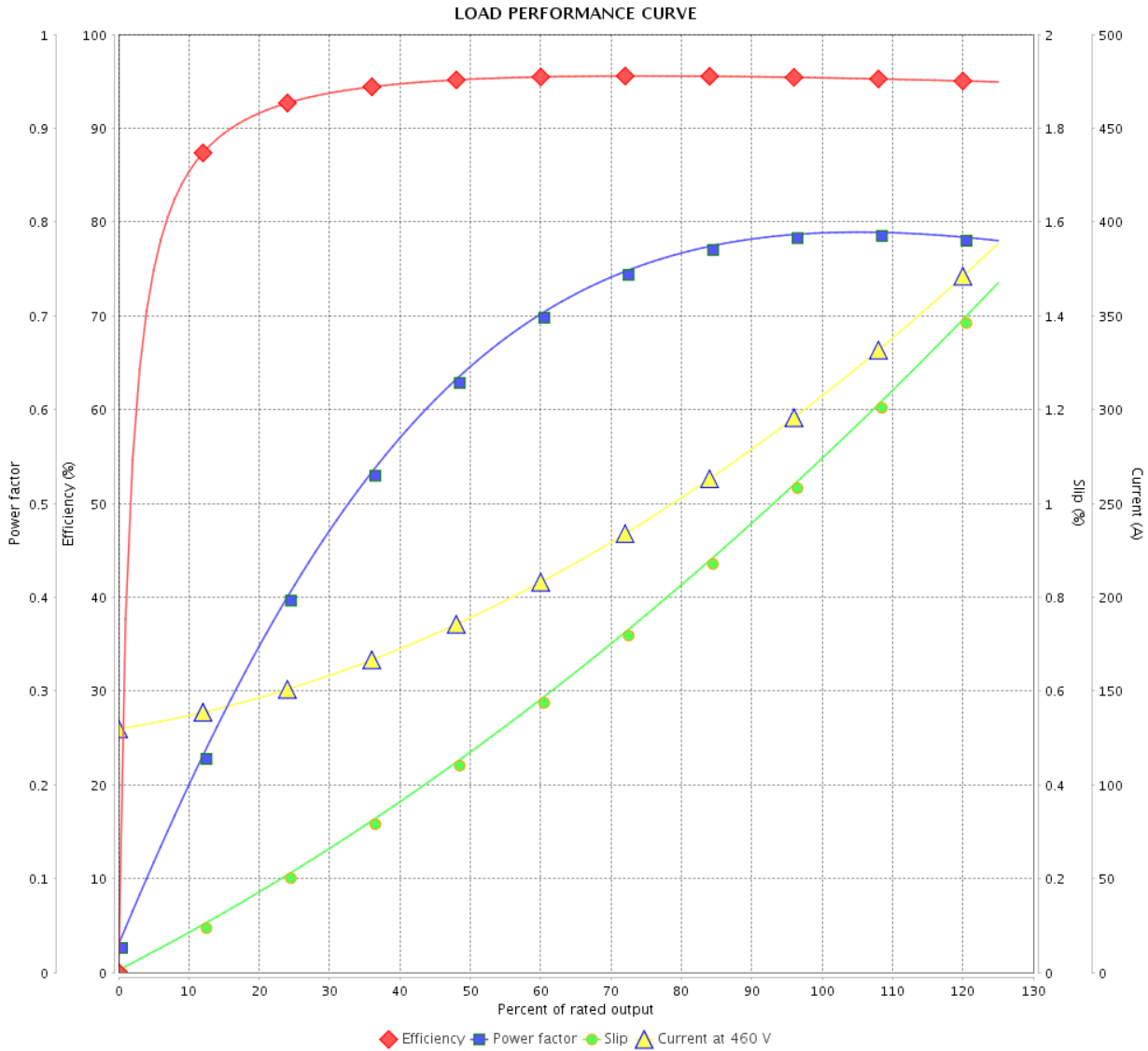


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408339

Catalog # : 25009ET3G449T-W22



Performance : 460 V 60 Hz 8P

Rated current	: 308 A	Moment of inertia (J)	: 255 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 1480 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 890 rpm	Design	: B

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

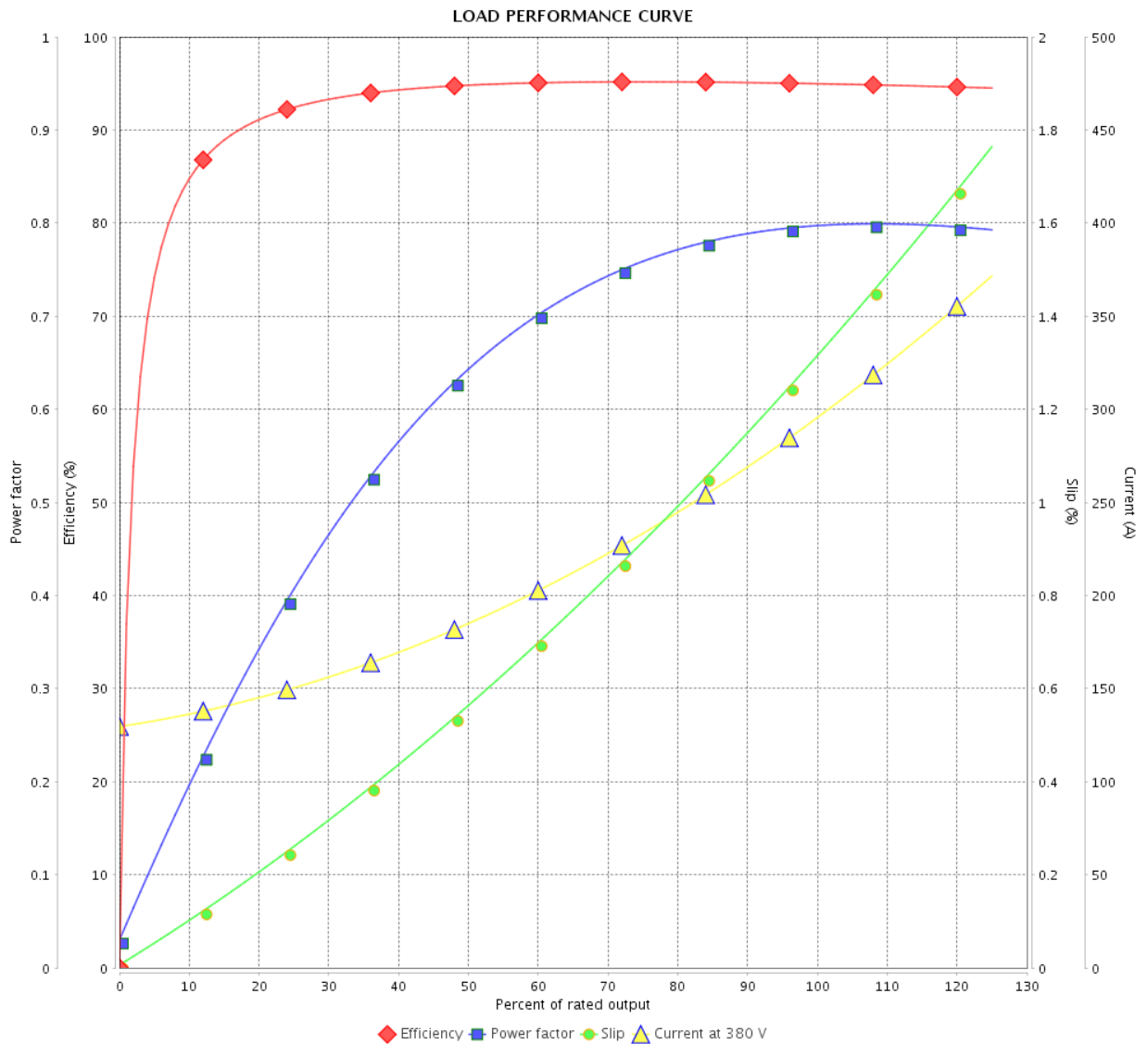
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Three Phase Induction Motor - Squirrel Cage



Customer :

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 Product code : 11408339
 Catalog # : 25009ET3G449T-W22



Performance : 380 V 50 Hz 8P IE3

Rated current : 300 A	Moment of inertia (J) : 255 sq.ft.lb
LRC : 5.8	Duty cycle : Cont.(S1)
Rated torque : 1420 ft.lb	Insulation class : F
Locked rotor torque : 190 %	Service factor : 1.00
Breakdown torque : 229 %	Temperature rise : 105 K
Rated speed : 740 rpm	Design : B

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Checked by				
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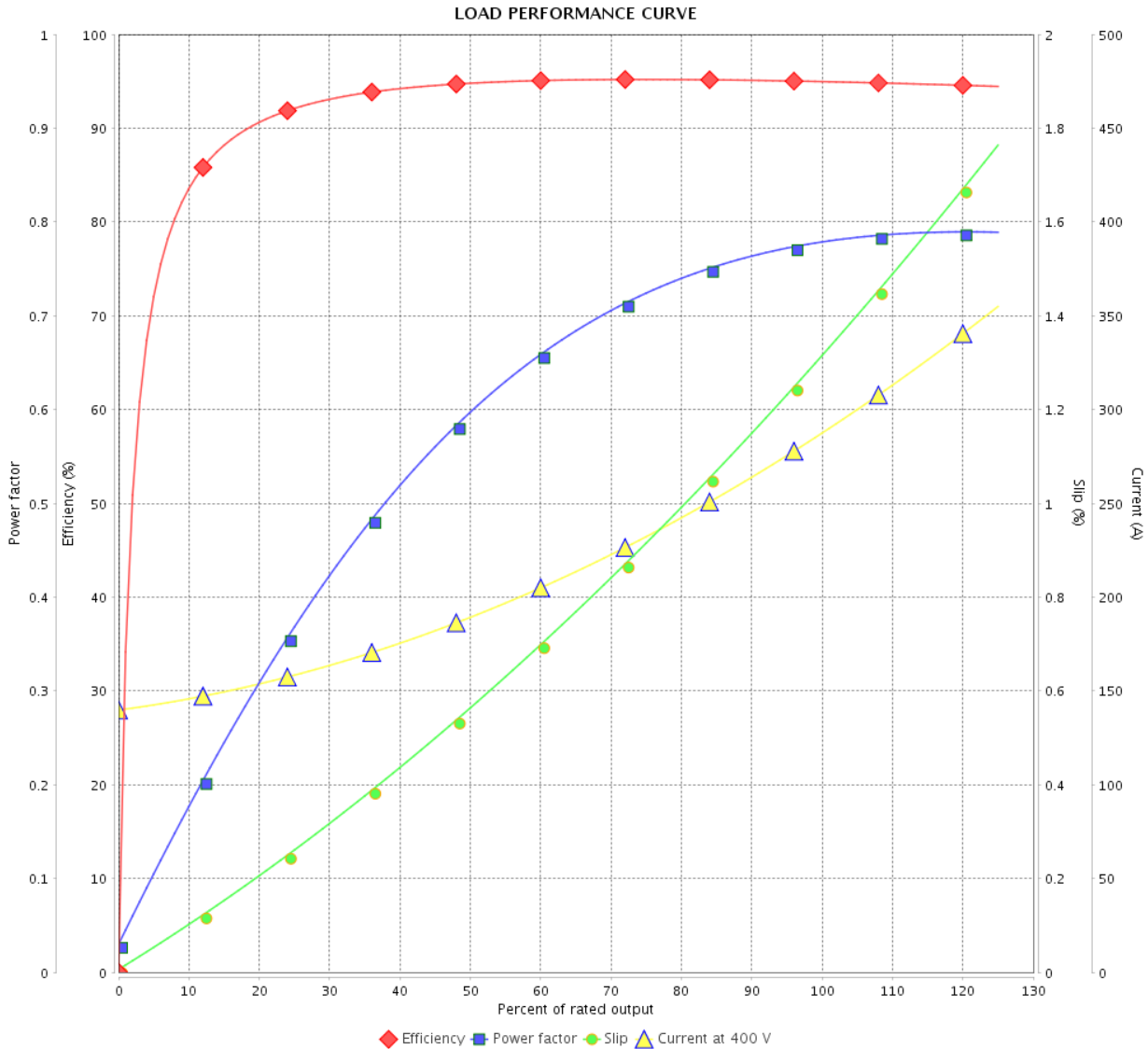


Customer :

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Catalog # : 25009ET3G449T-W22



Performance : 400 V 50 Hz 8P IE3

Rated current	: 292 A	Moment of inertia (J)	: 255 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 1420 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

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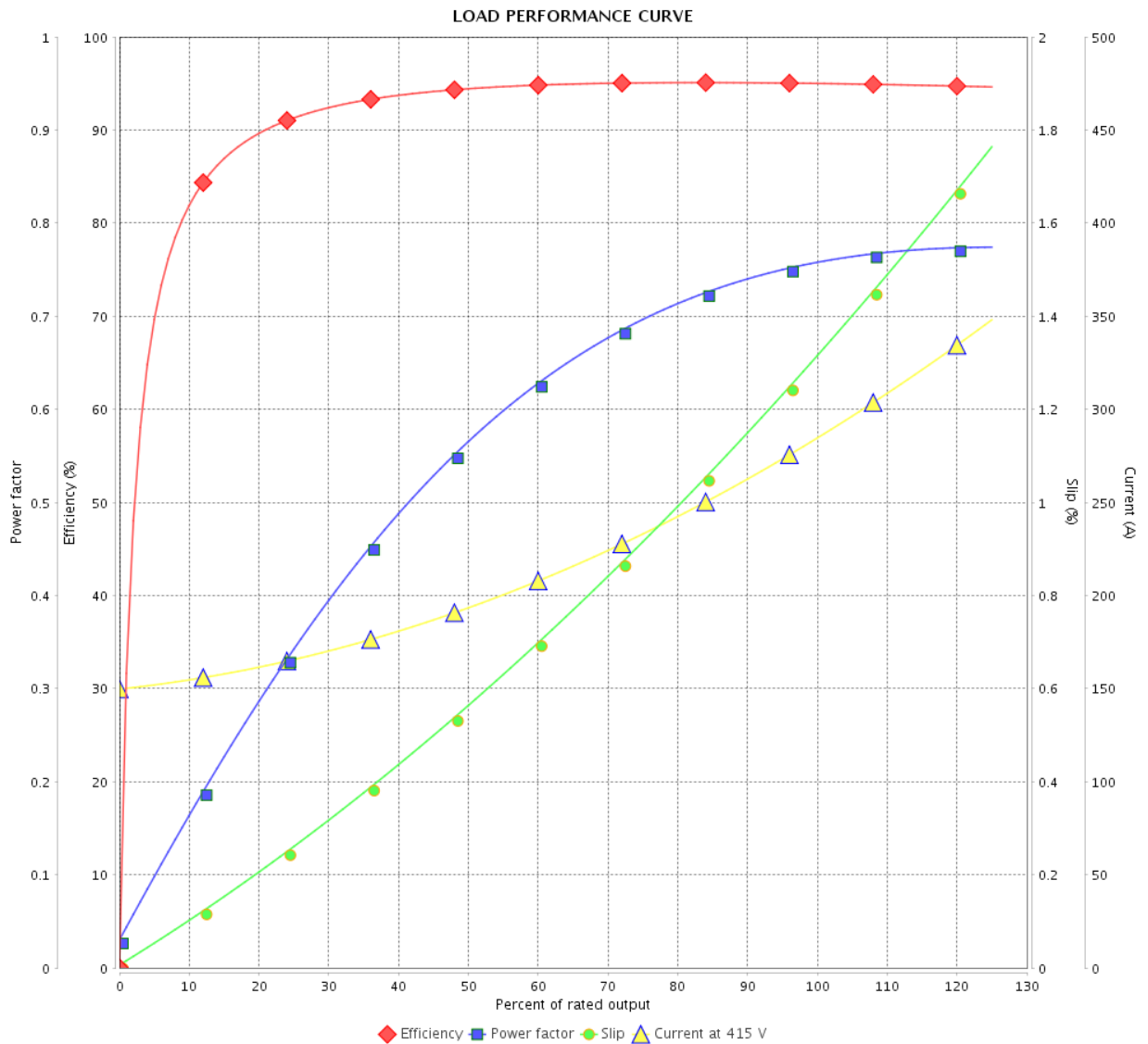
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 Catalog # : 25009ET3G449T-W22



Performance : 415 V 50 Hz 8P IE3

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LRC : 6.8	Duty cycle : Cont.(S1)
Rated torque : 1420 ft.lb	Insulation class : F
Locked rotor torque : 229 %	Service factor : 1.00
Breakdown torque : 270 %	Temperature rise : 105 K
Rated speed : 740 rpm	Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 / 21		
Date		13/04/2022		

THERMAL LIMIT CURVE



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Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 890 rpm	Design	: B

Heating constant

Cooling constant

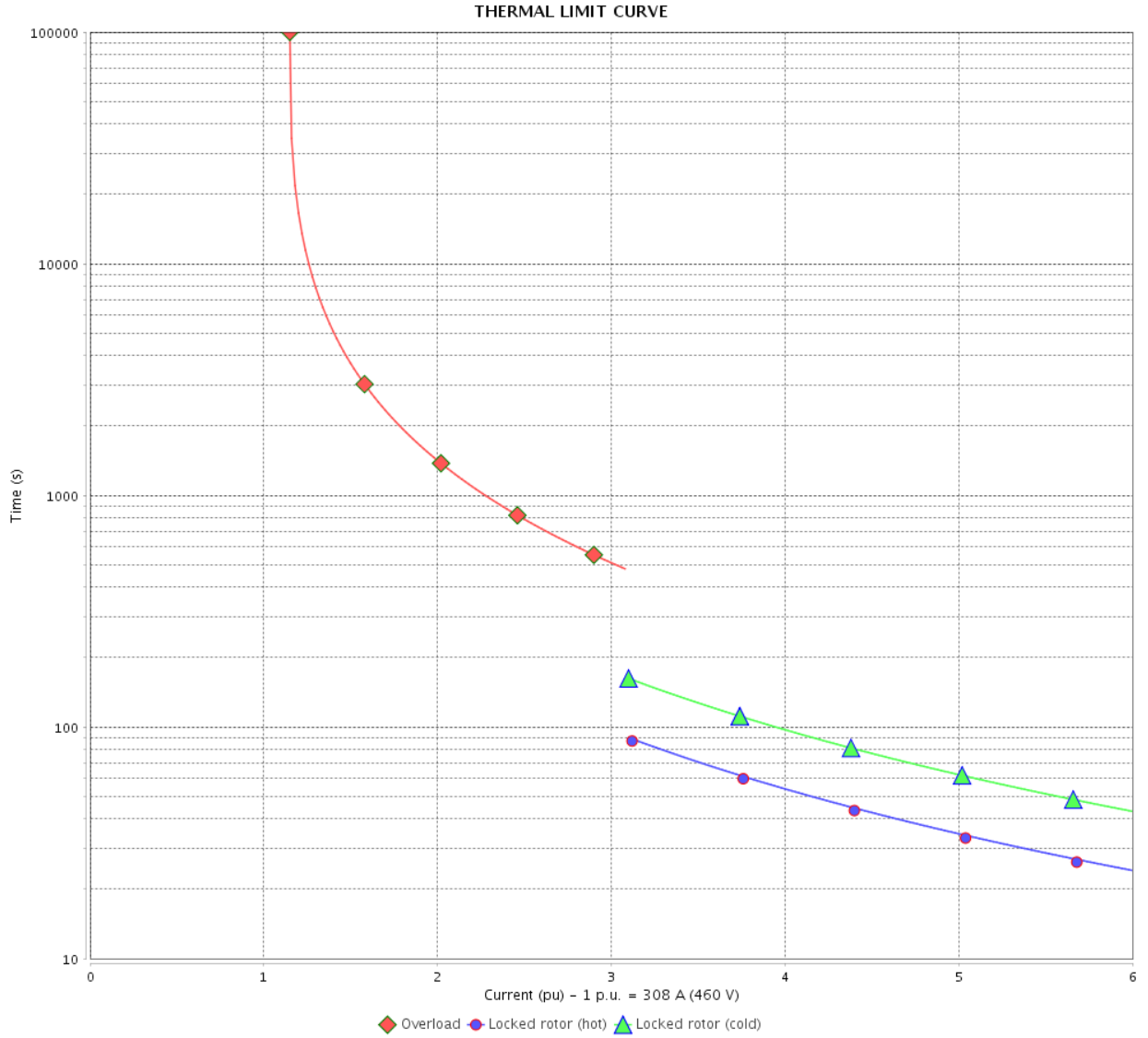
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Performed by				
Checked by			Page	Revision
Date	13/04/2022		10 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		11 / 21		
Date		13/04/2022		

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Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

Heating constant

Cooling constant

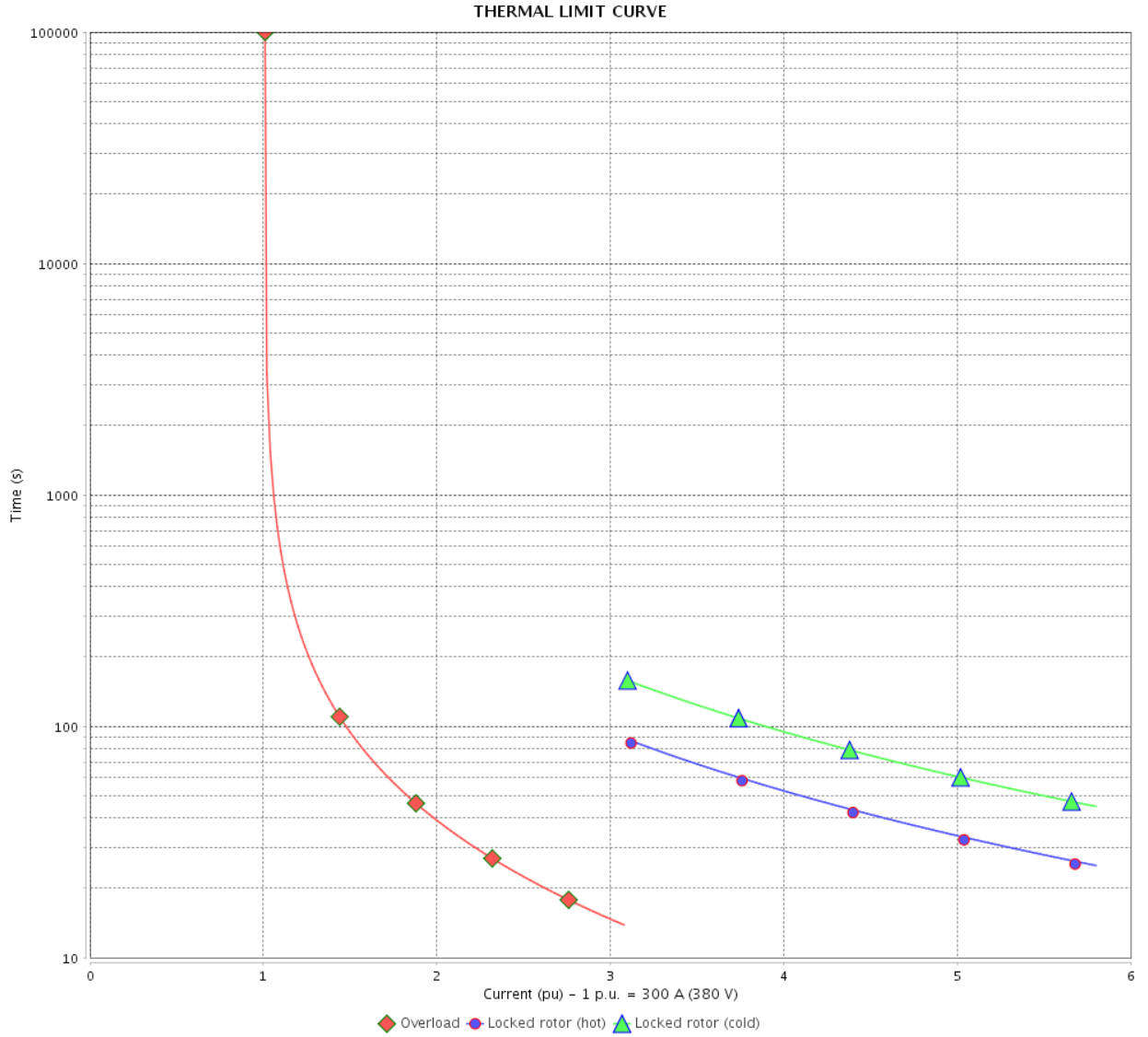
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Performed by				
Checked by			Page	Revision
Date	13/04/2022		12 / 21	

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		13 / 21		
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LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 1420 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

Heating constant

Cooling constant

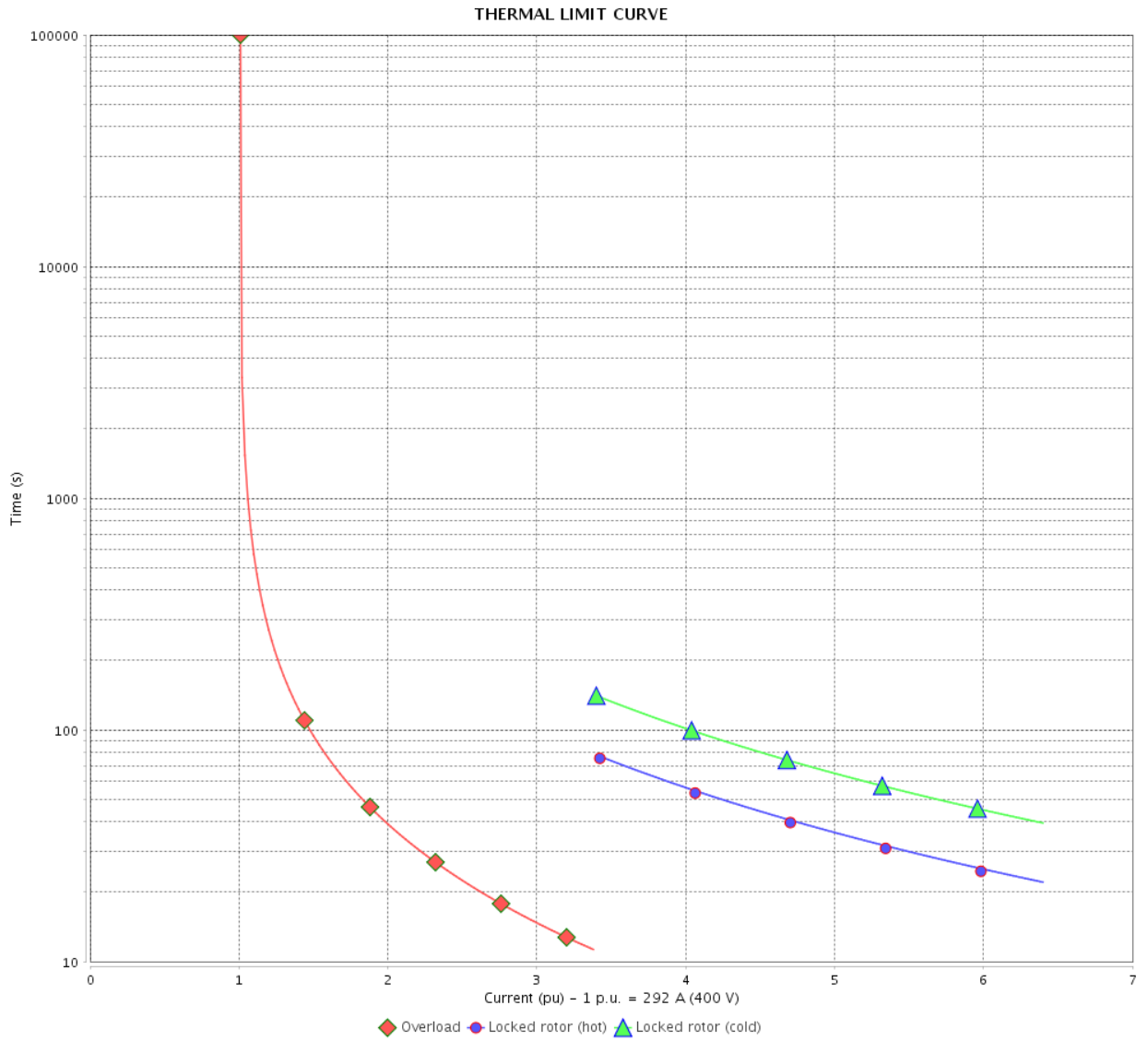
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Checked by			Page	Revision
Date	13/04/2022		14 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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

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LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 1420 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

Heating constant

Cooling constant

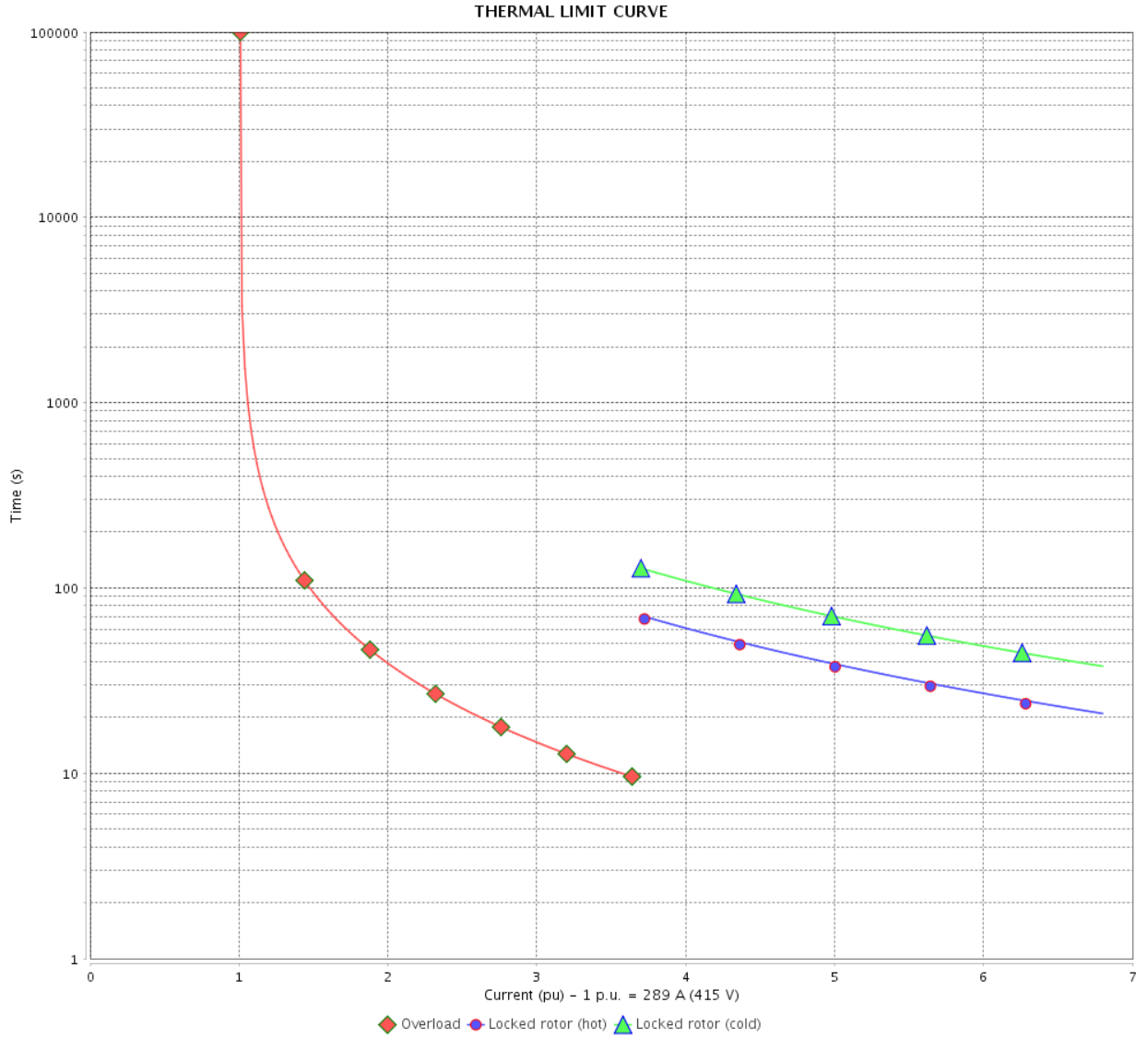
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Checked by			Page	Revision
Date	13/04/2022		16 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		17 / 21		
Date		13/04/2022		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



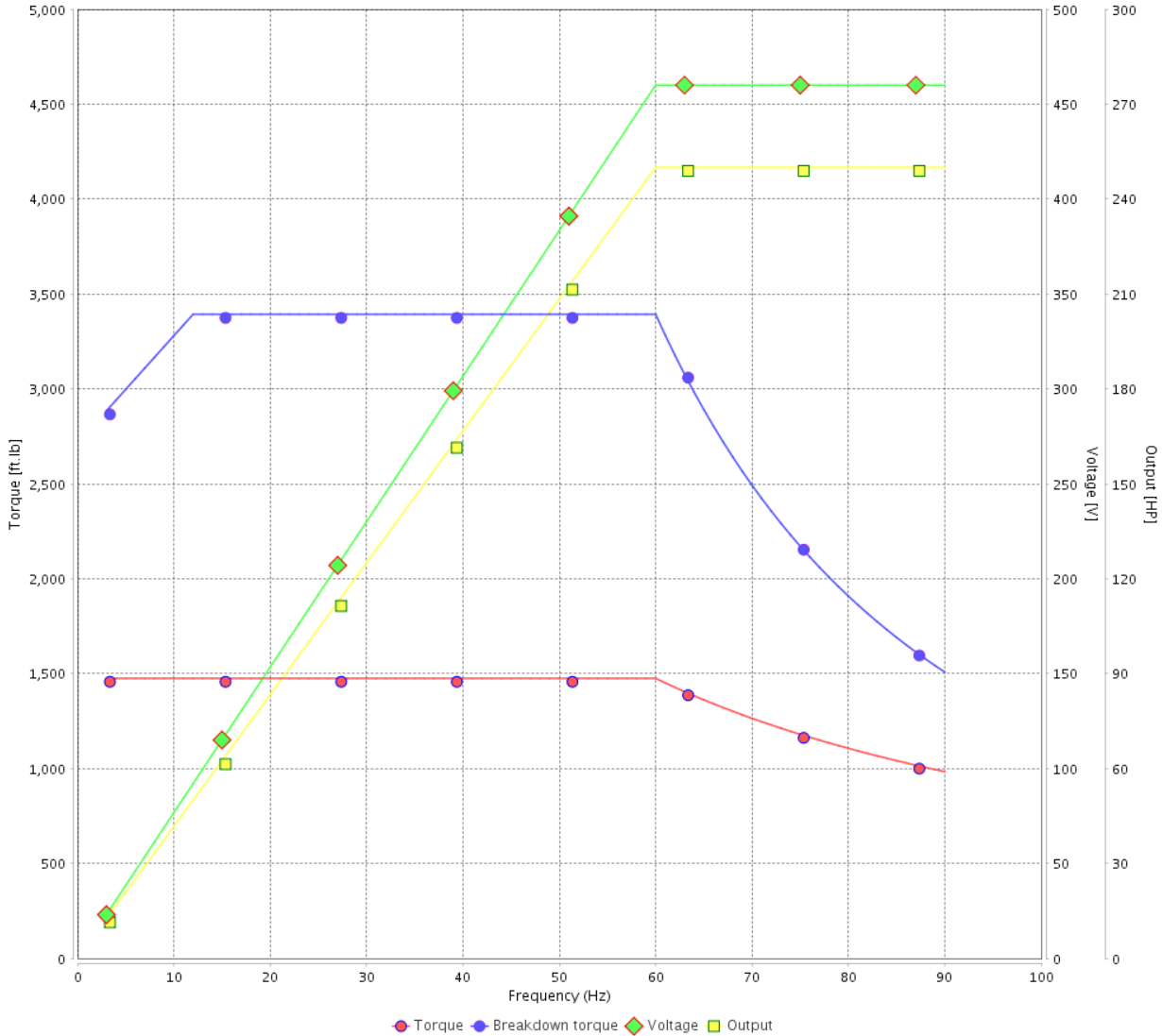
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408339

Catalog # : 25009ET3G449T-W22

VFD OPERATION CURVE



Performance : 460 V 60 Hz 8P

Rated current : 308 A
 LRC : 6.0
 Rated torque : 1480 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 229 %
 Rated speed : 890 rpm

Moment of inertia (J) : 255 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				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

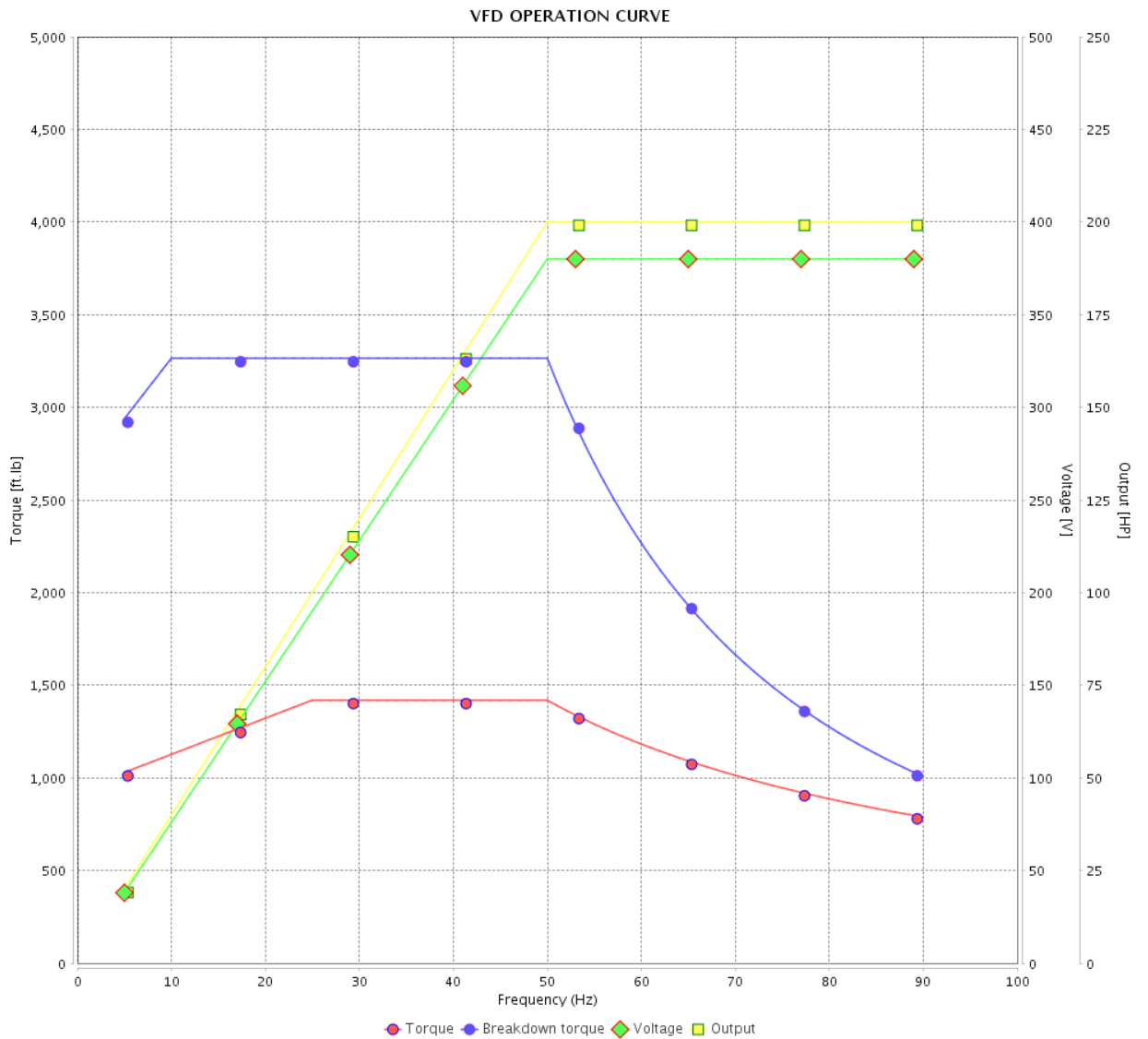


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408339

Catalog # : 25009ET3G449T-W22



Performance : 380 V 50 Hz 8P IE3

Rated current : 300 A
 LRC : 5.8
 Rated torque : 1420 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 740 rpm

Moment of inertia (J) : 255 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



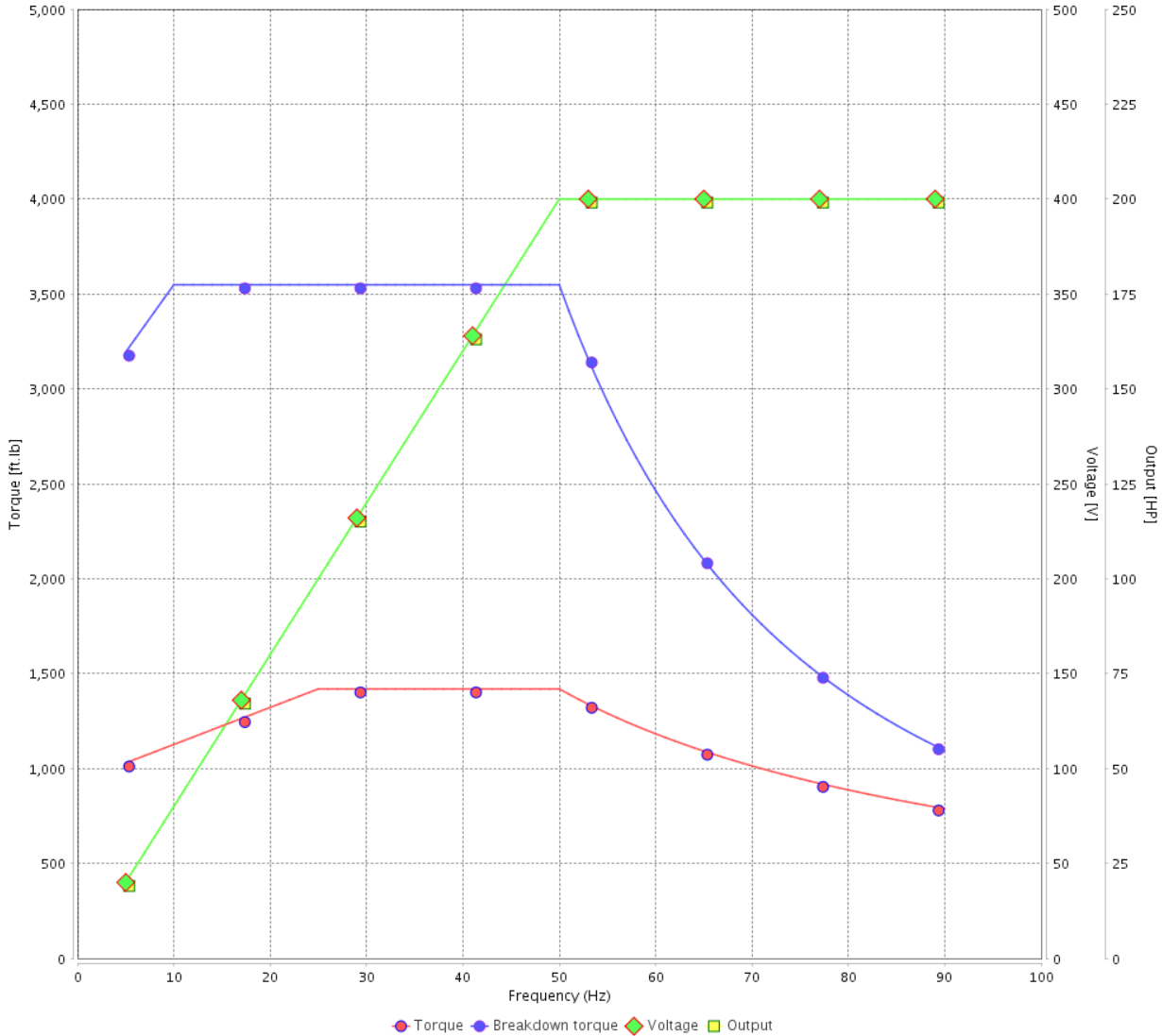
Customer :

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Catalog # : 25009ET3G449T-W22

VFD OPERATION CURVE



Performance : 400 V 50 Hz 8P IE3

Rated current	: 292 A	Moment of inertia (J)	: 255 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 1420 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

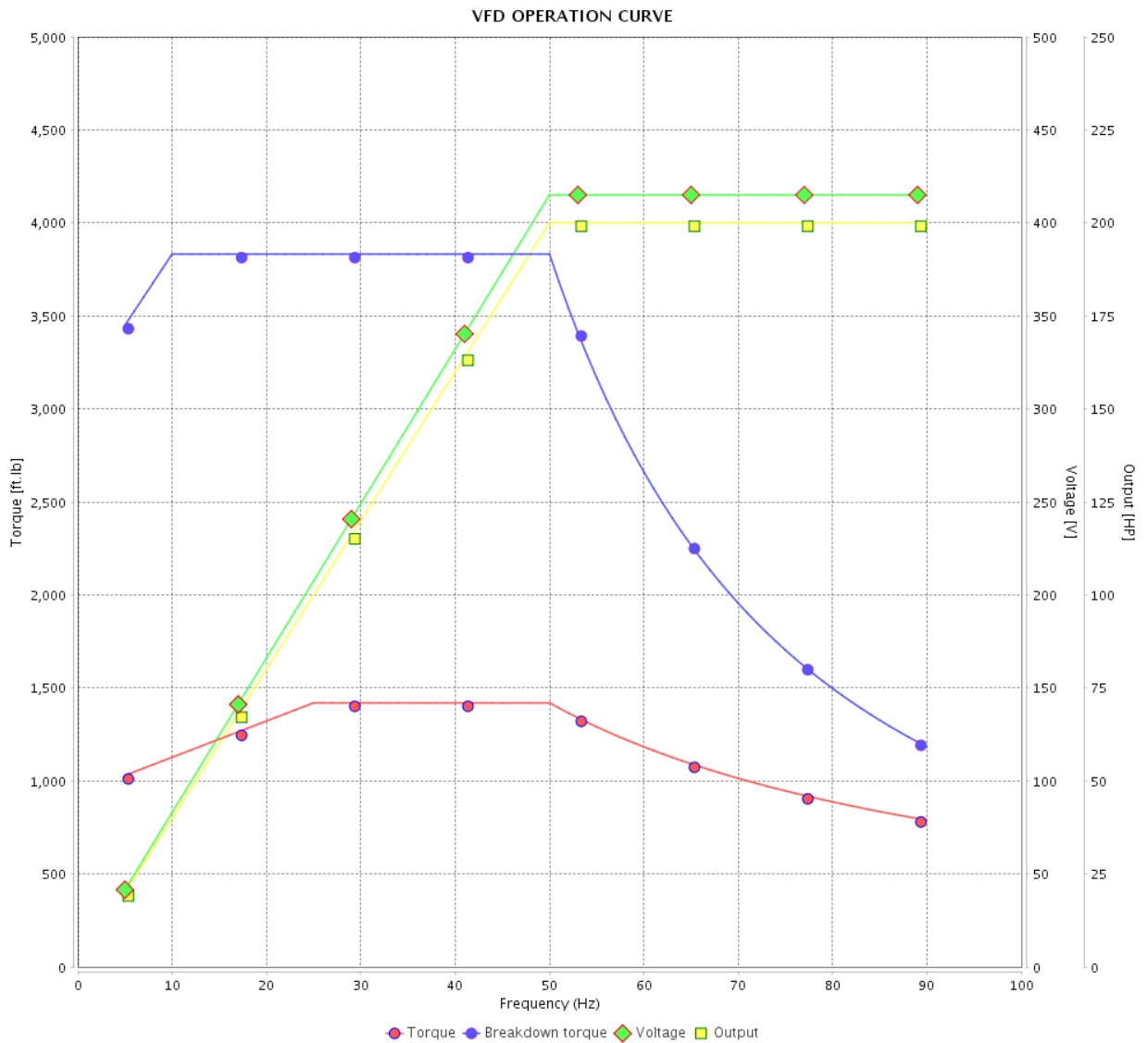


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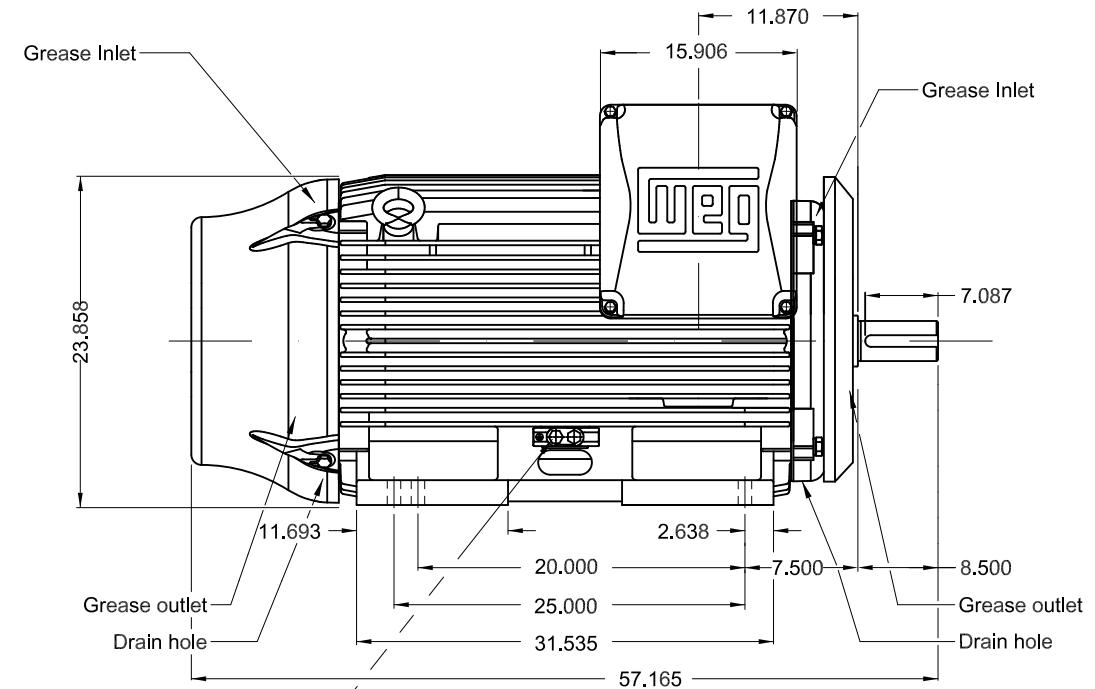
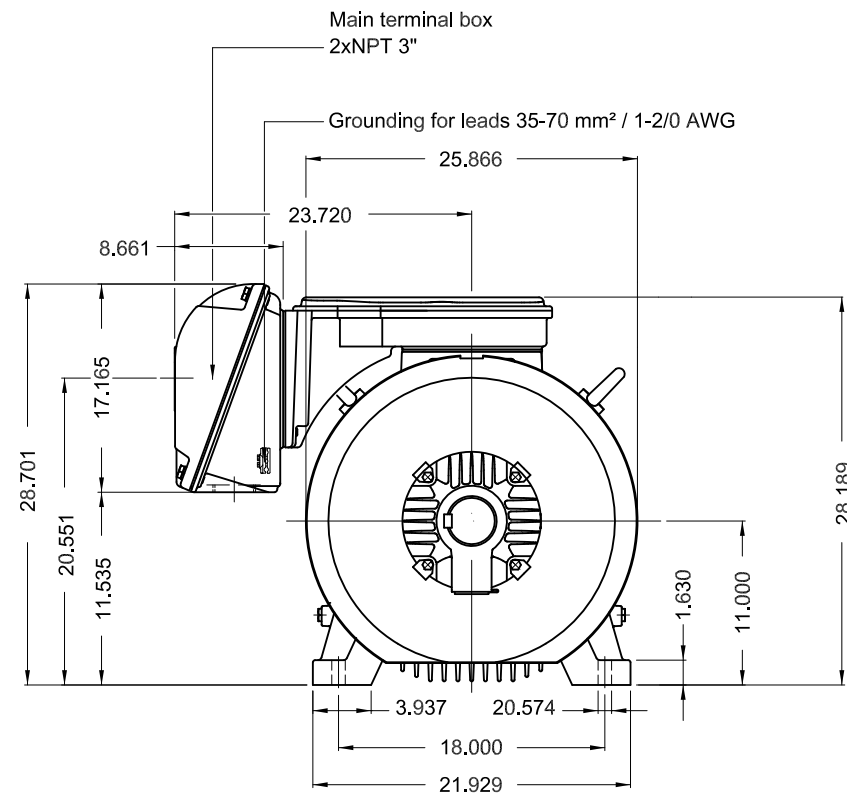


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 Rated torque : 1420 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 270 %
 Rated speed : 740 rpm

Moment of inertia (J) : 255 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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Performed by		Page		Revision
Checked by		21 / 21		
Date		13/04/2022		

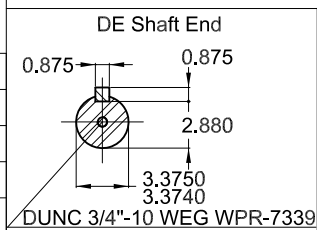


Grounding for leads 25-185 mm² / 3AWG-350MCM

250 HP 08 Poles 60 Hz

Dimensions in inches

- NDE endshield with electrically insulated bearing hub
- Drive-End Air Deflector
- Color RAL 5009
- Painting plan 203A
- Mounting B3R(D)



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF. FRAME L447/9T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

PREVIEW
WDD



MADE IN BRAZIL
11408339



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 and D,
VT 1000:1, CT 20:1, 1.00SF - T2B

MODEL 25009ET3G449T-W22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. L447/9T 1000m.a.s.l. IP55 TEFC 3429lb

V 460

A 308

HP 250

kW 185

SF 1.15

SFA 354

RPM 890

PF 0.79

AMB 40°C

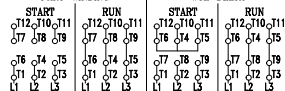
INS cl. F DT80K

NEMA NOM EFF 95.4%

DUTY CONT.

DES B Code G

PART-WINDING



→ 6322-C3 (60g)

→ 6319-C3 (45g)

MOBIL POLYREX EM (14000h)

