

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :								
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12447063					
		Catalog # :	02009ET3E324T-W22					
Frame	: 324/6T	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	: 510 lb					
Protection degree	: IP55	Moment of inertia (J)	: 9.37 sq.ft.lb					
Design	: B							
Output [HP]	20	15	15	15	20	20	20	
Poles	8	8	8	8	8	8	8	
Frequency [Hz]	60	50	50	50	50	50	50	
Rated voltage [V]	230/460	380	400	415	380	400	415	
Rated current [A]	56.6/28.3	26.5	26.4	27.1	33.4	32.6	32.7	
L. R. Amperes [A]	283/142	133	142	152	134	143	150	
LRC [A]	5.0x(Code G)	5.0x(Code G)	5.4x(Code H)	5.6x(Code J)	4.0x(Code D)	4.4x(Code E)	4.6x(Code F)	
No load current [A]	32.0/16.0	15.7	17.6	19.3	15.7	17.6	19.3	
Rated speed [RPM]	880	730	730	735	725	725	730	
Slip [%]	2.22	2.67	2.67	2.00	3.33	3.33	2.67	
Rated torque [ft.lb]	119	108	108	107	145	145	144	
Locked rotor torque [%]	190	190	210	240	140	160	180	
Breakdown torque [%]	220	229	260	280	170	190	210	
Service factor	1.25	1.00	1.15	1.15	1.00	1.15	1.15	
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	80 K	
Locked rotor time	48s (cold) 27s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	
Noise level ²	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	
Efficiency (%)	25%							
	50%	89.5	88.5	87.4	86.3	89.5	87.5	
	75%	91.0	89.6	89.0	88.5	89.5	89.5	
	100%	91.0	89.5	89.3	89.0	88.5	88.5	
Power Factor	25%							
	50%	0.54	0.51	0.46	0.42	0.61	0.52	
	75%	0.66	0.64	0.60	0.56	0.72	0.65	
	100%	0.73	0.72	0.69	0.65	0.77	0.72	
Bearing type	: Drive end 6312 C3	: Non drive end 6212 C3	Foundation loads					
Sealing	: V'Ring	: V'Ring	Max. traction	: 904 lb				
Lubrication interval	: 20000 h	: 20000 h	Max. compression	: 1414 lb				
Lubricant amount	: 21 g	: 13 g						
Lubricant type	: Mobil Polyrex EM							
Notes USABLE @208V 62.6A SF 1.15 SFA 72.0A								
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	14/04/2022				1 / 36			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



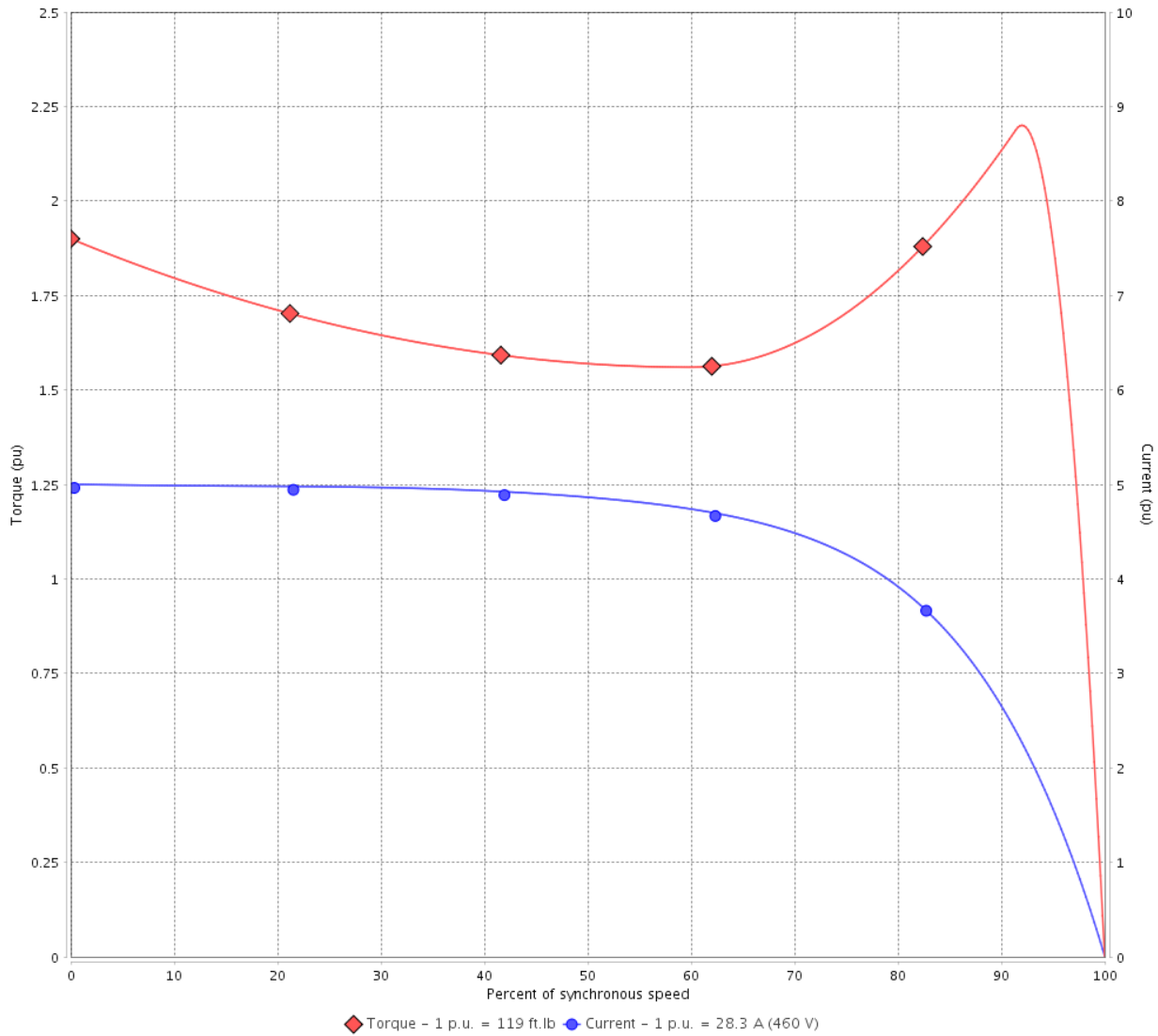
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 8P

Rated current	: 56.6/28.3 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.0	Duty cycle	: Cont.(S1)
Rated torque	: 119 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 880 rpm	Design	: B

Locked rotor time : 48s (cold) 27s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 36	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



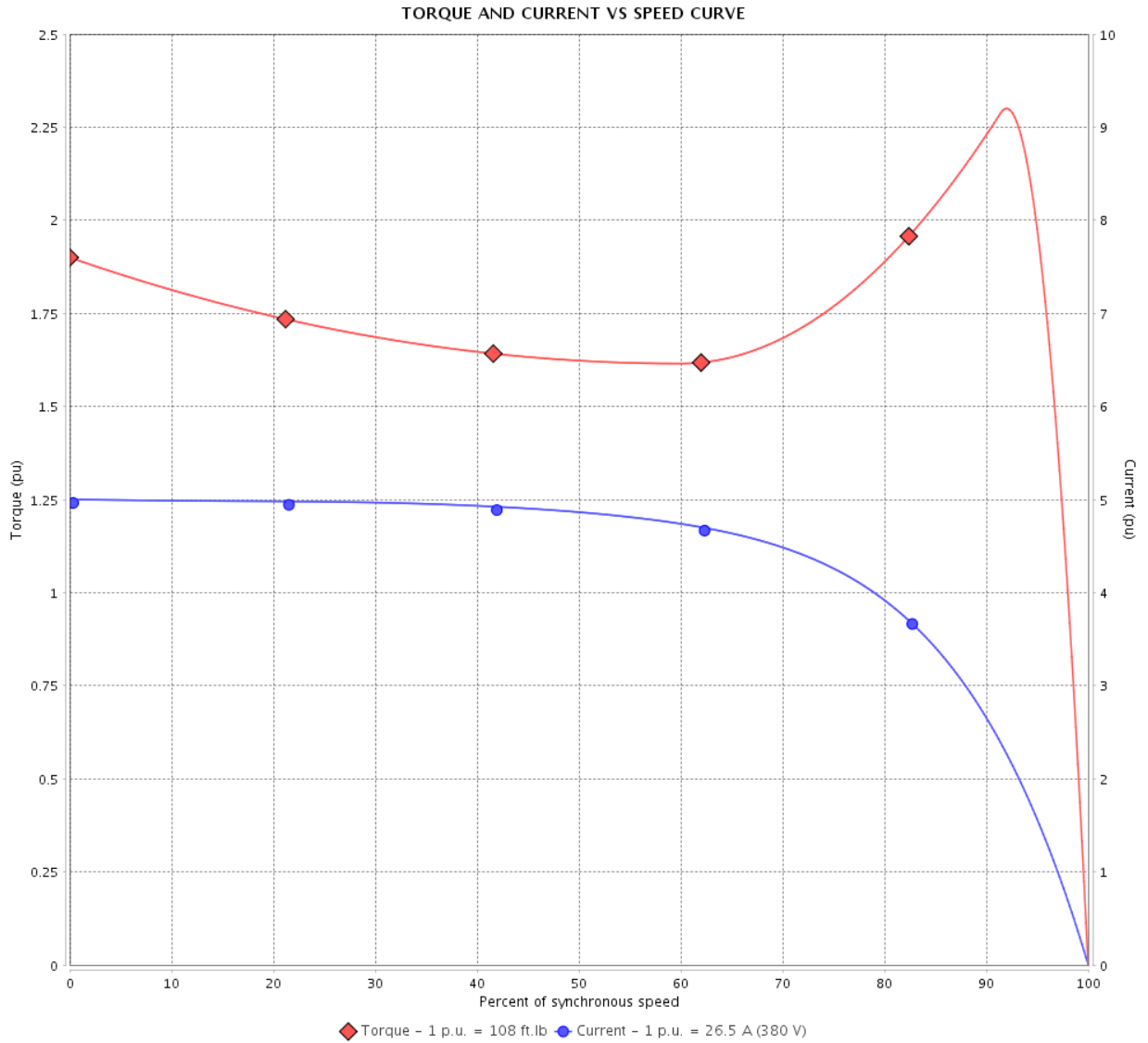
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22



Performance : 380 V 50 Hz 8P IE3

Rated current	: 26.5 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.0	Duty cycle	: Cont.(S1)
Rated torque	: 108 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 36	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



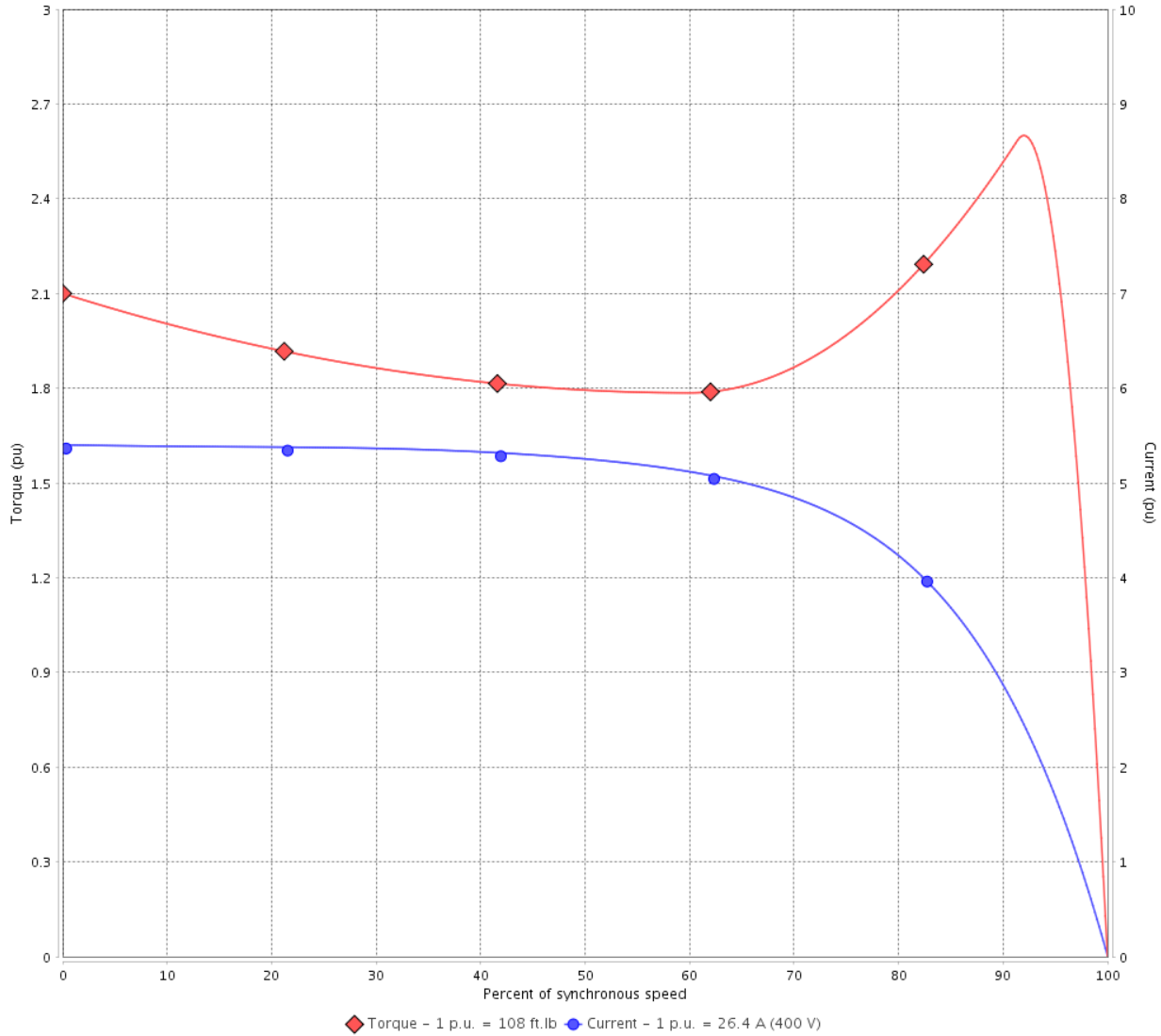
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 8P IE3

Rated current	: 26.4 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 108 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 36	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



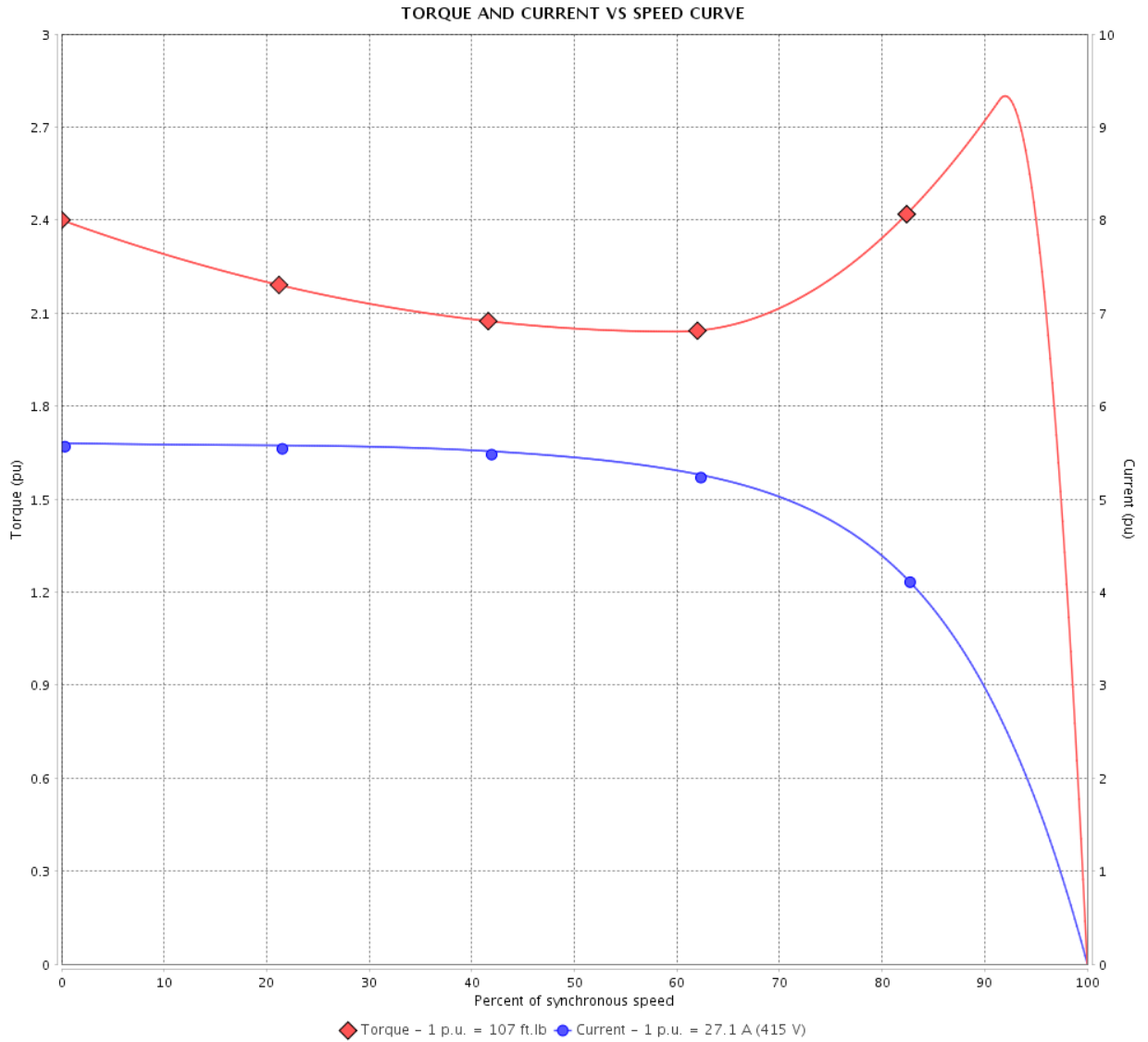
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22



Performance : 415 V 50 Hz 8P IE3

Rated current	: 27.1 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 107 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 735 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 36	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



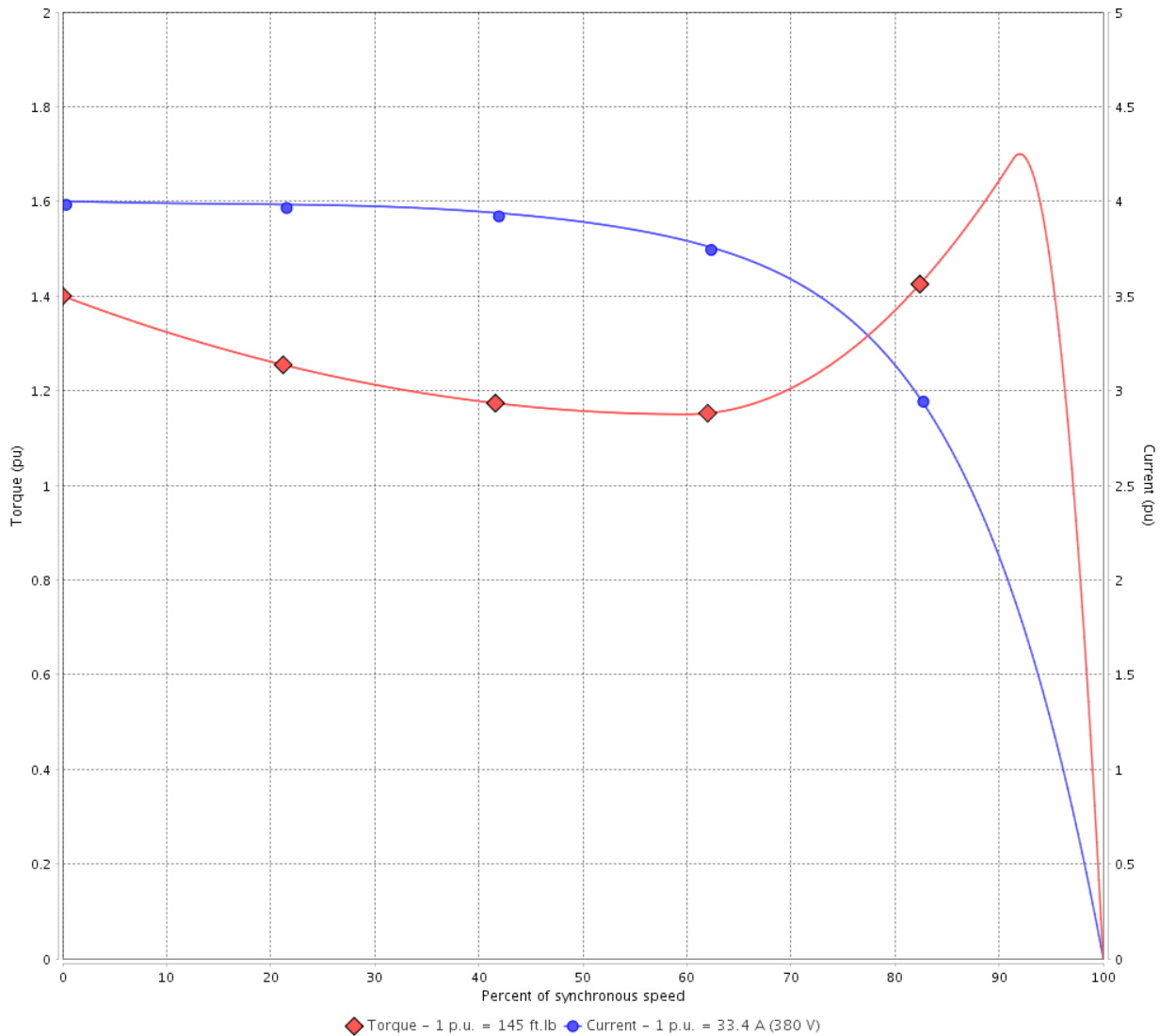
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 8P IE2

Rated current	: 33.4 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 4.0	Duty cycle	: Cont.(S1)
Rated torque	: 145 ft.lb	Insulation class	: F
Locked rotor torque	: 140 %	Service factor	: 1.00
Breakdown torque	: 170 %	Temperature rise	: 105 K
Rated speed	: 725 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 36	Revision
Checked by				
Date	14/04/2022			

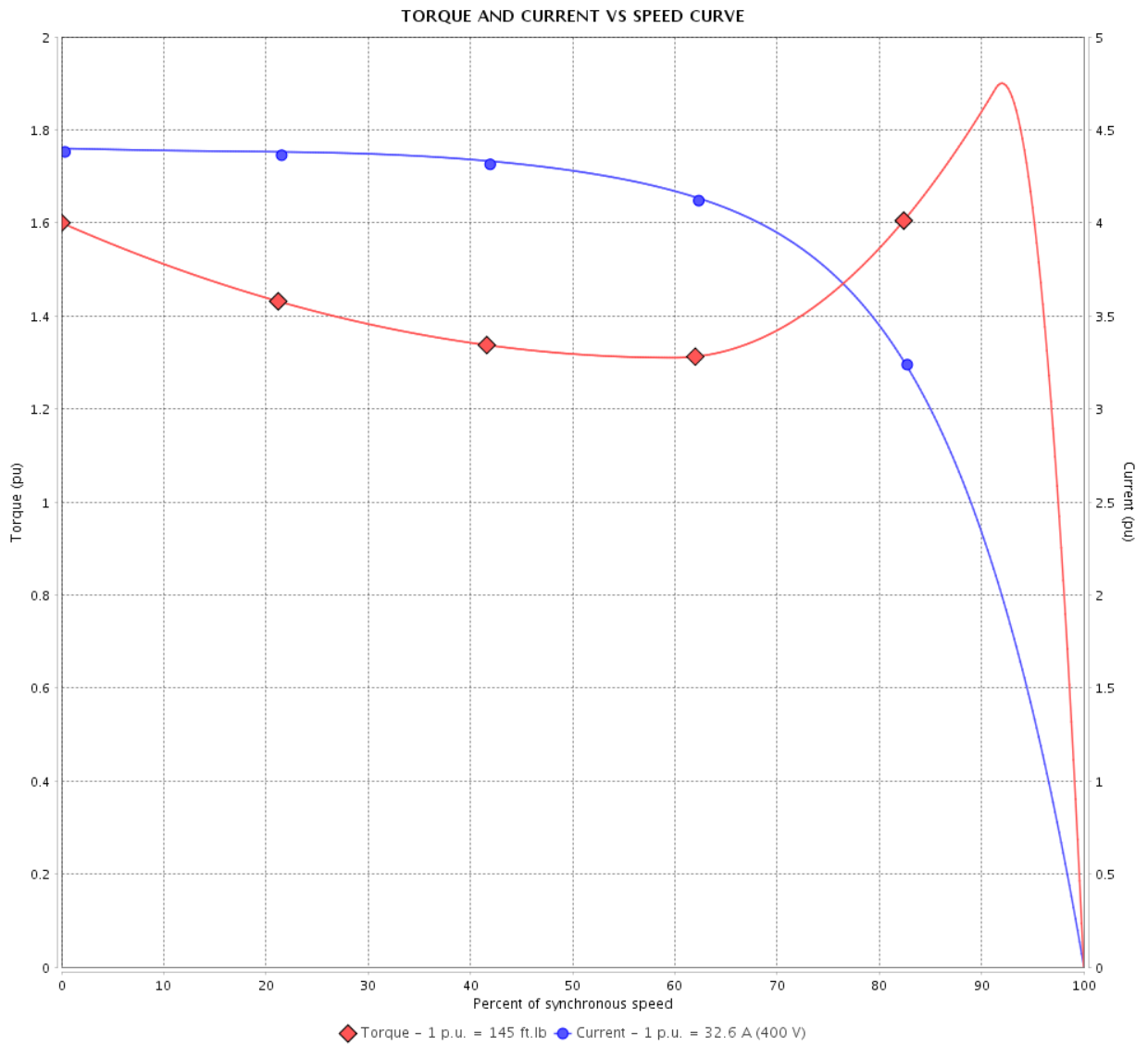
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
 Product code : 12447063
 Catalog # : 02009ET3E324T-W22



Performance : 400 V 50 Hz 8P IE2

Rated current	: 32.6 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 4.4	Duty cycle	: Cont.(S1)
Rated torque	: 145 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.15
Breakdown torque	: 190 %	Temperature rise	: 105 K
Rated speed	: 725 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 7 / 36	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



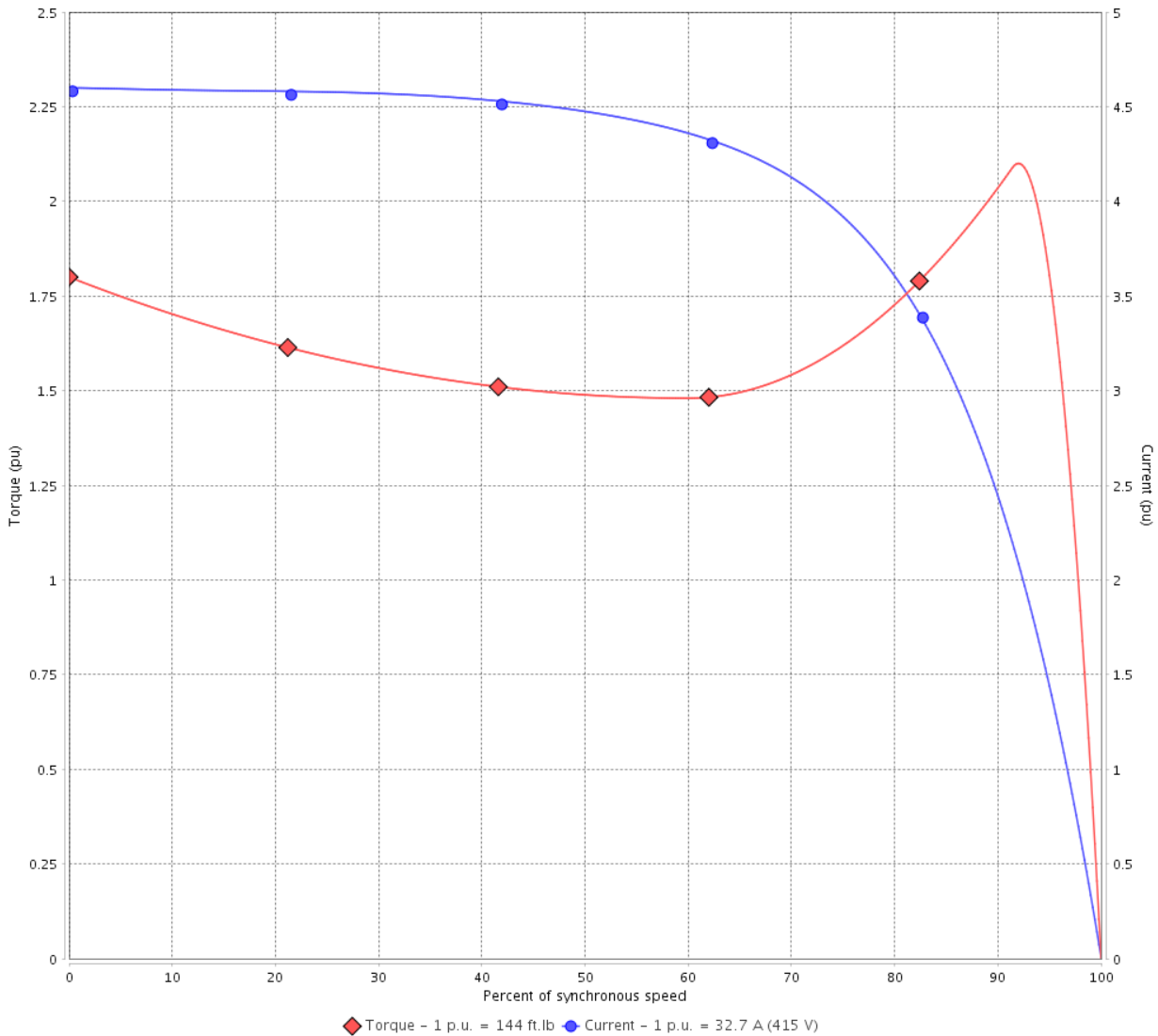
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 8P IE2

Rated current	: 32.7 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 4.6	Duty cycle	: Cont.(S1)
Rated torque	: 144 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		8 / 36		
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

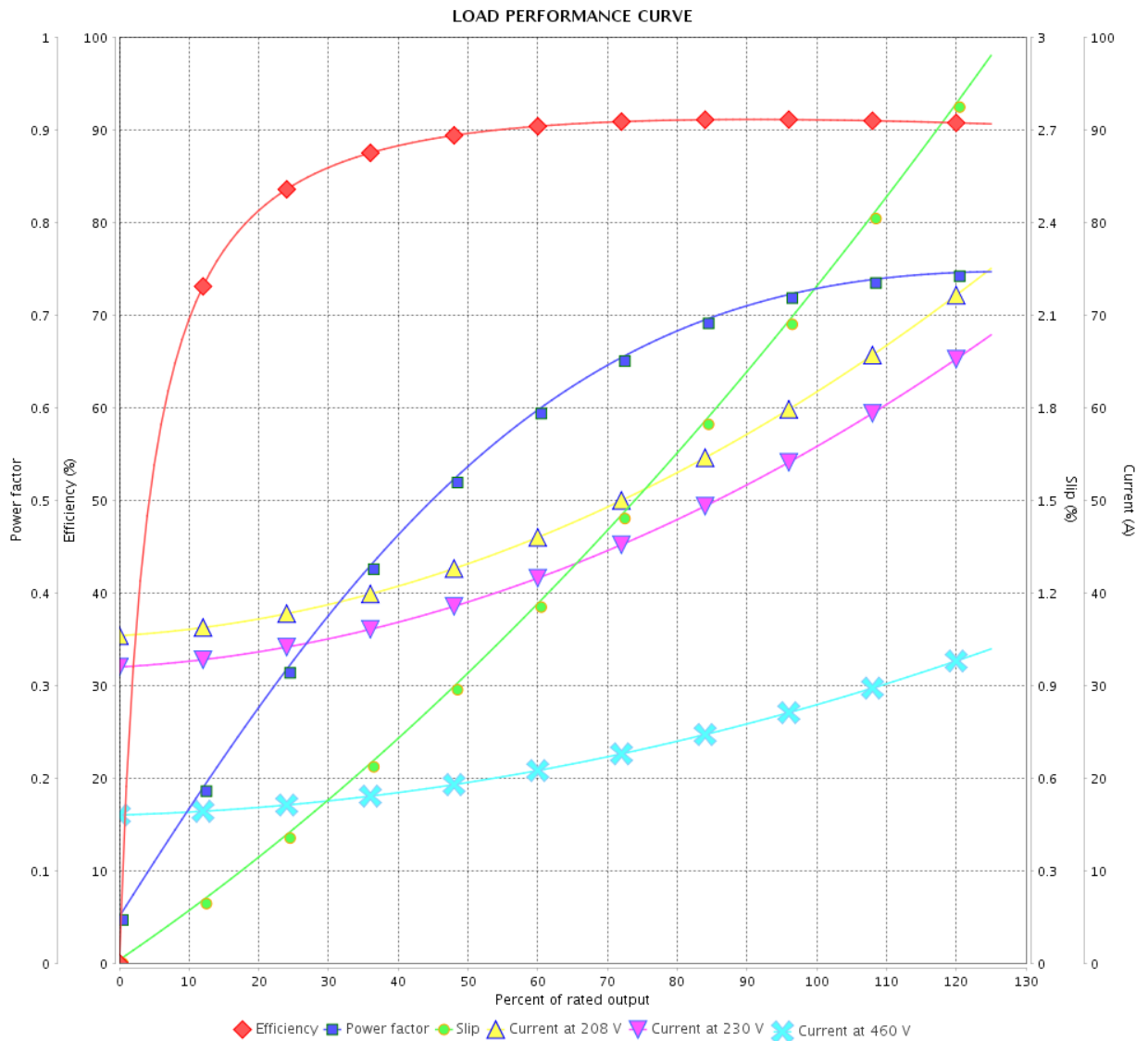


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22



Performance : 230/460 V 60 Hz 8P

Rated current : 56.6/28.3 A
 LRC : 5.0
 Rated torque : 119 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 220 %
 Rated speed : 880 rpm

Moment of inertia (J) : 9.37 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 / 36		
Date		14/04/2022		

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



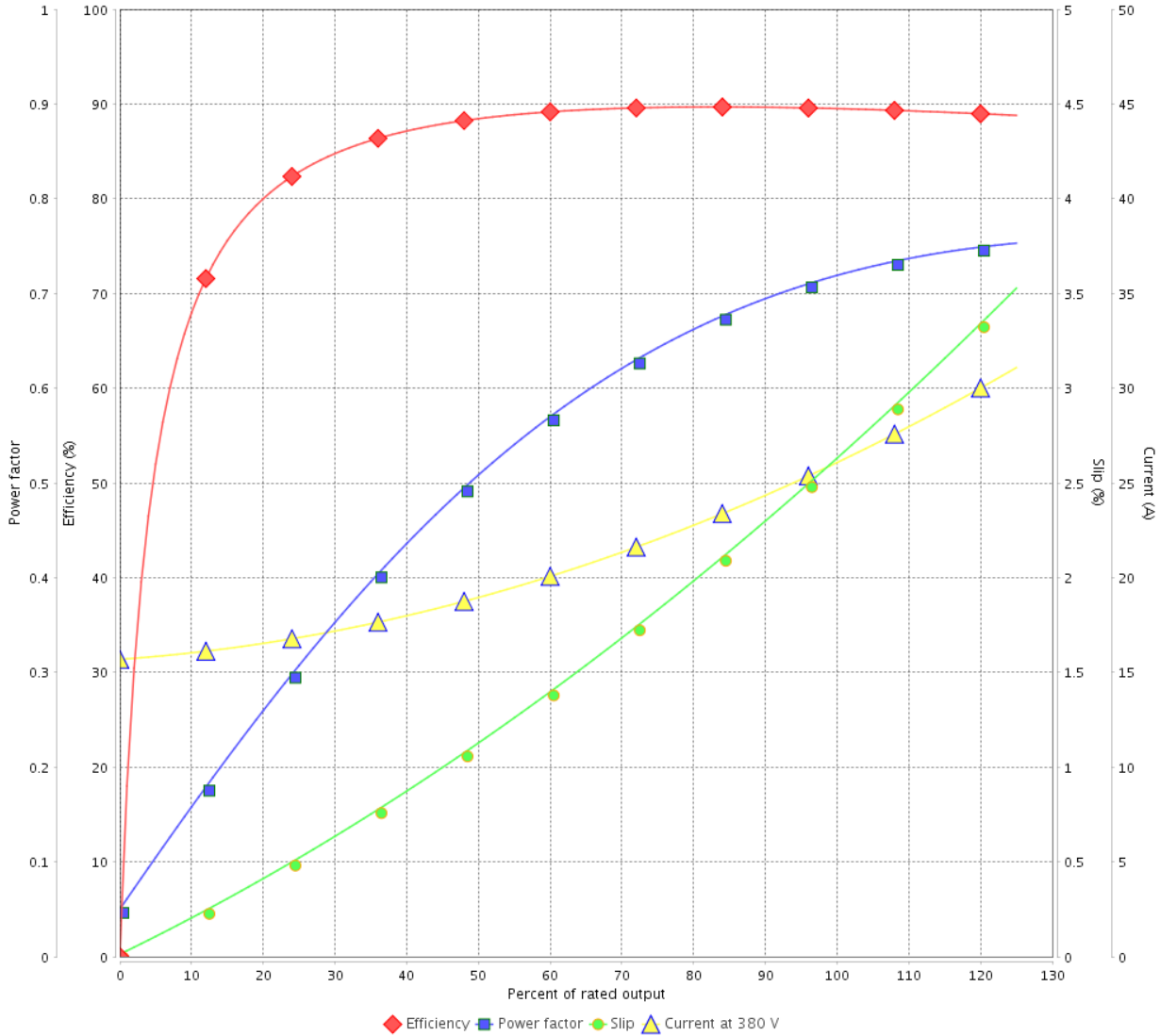
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 8P IE3

Rated current : 26.5 A
 LRC : 5.0
 Rated torque : 108 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 730 rpm

Moment of inertia (J) : 9.37 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 10 / 36	Revision
Checked by				
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

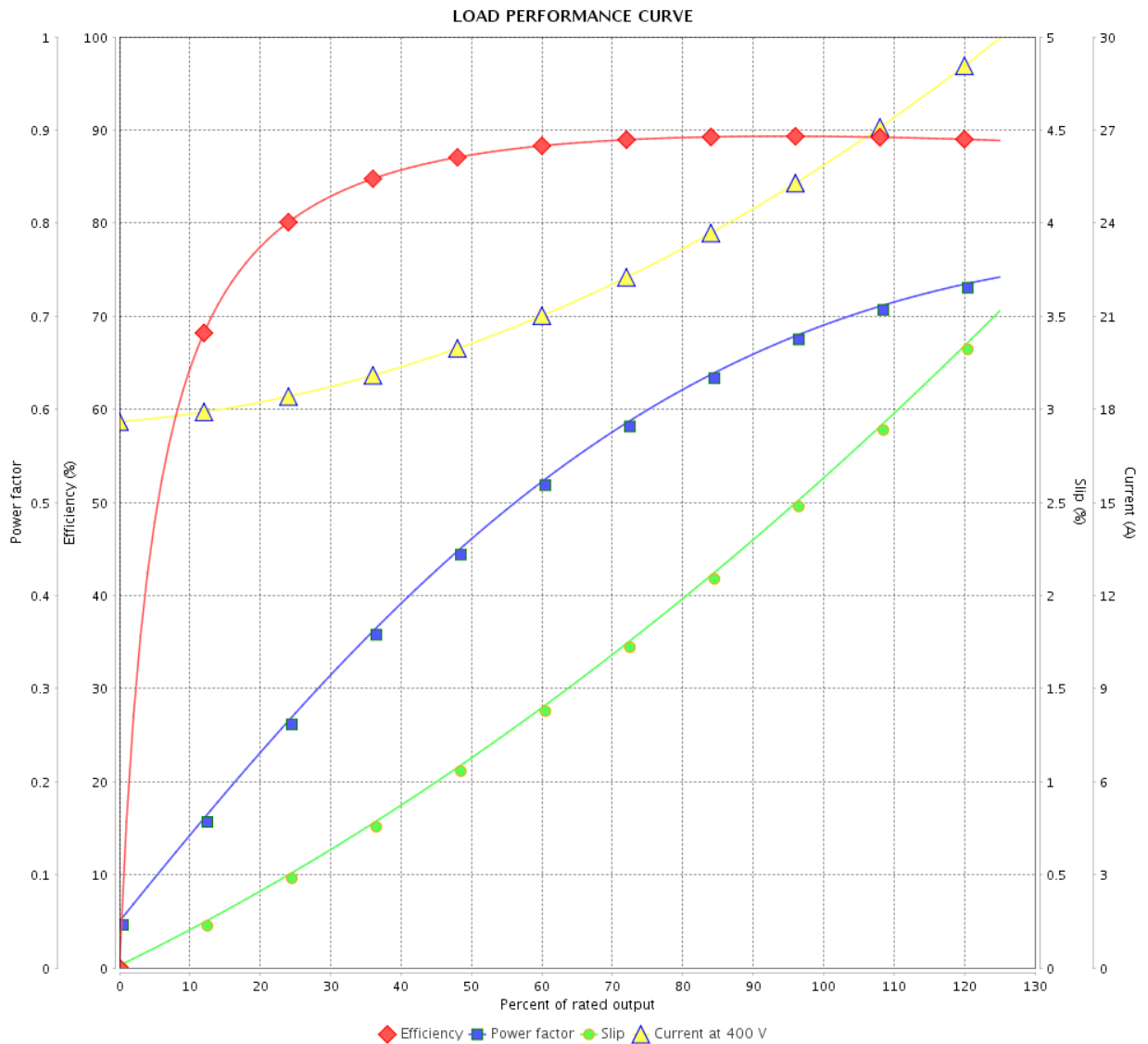


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22



Performance : 400 V 50 Hz 8P IE3

Rated current : 26.4 A
 LRC : 5.4
 Rated torque : 108 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 260 %
 Rated speed : 730 rpm

Moment of inertia (J) : 9.37 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		11 / 36		
Date		14/04/2022		

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



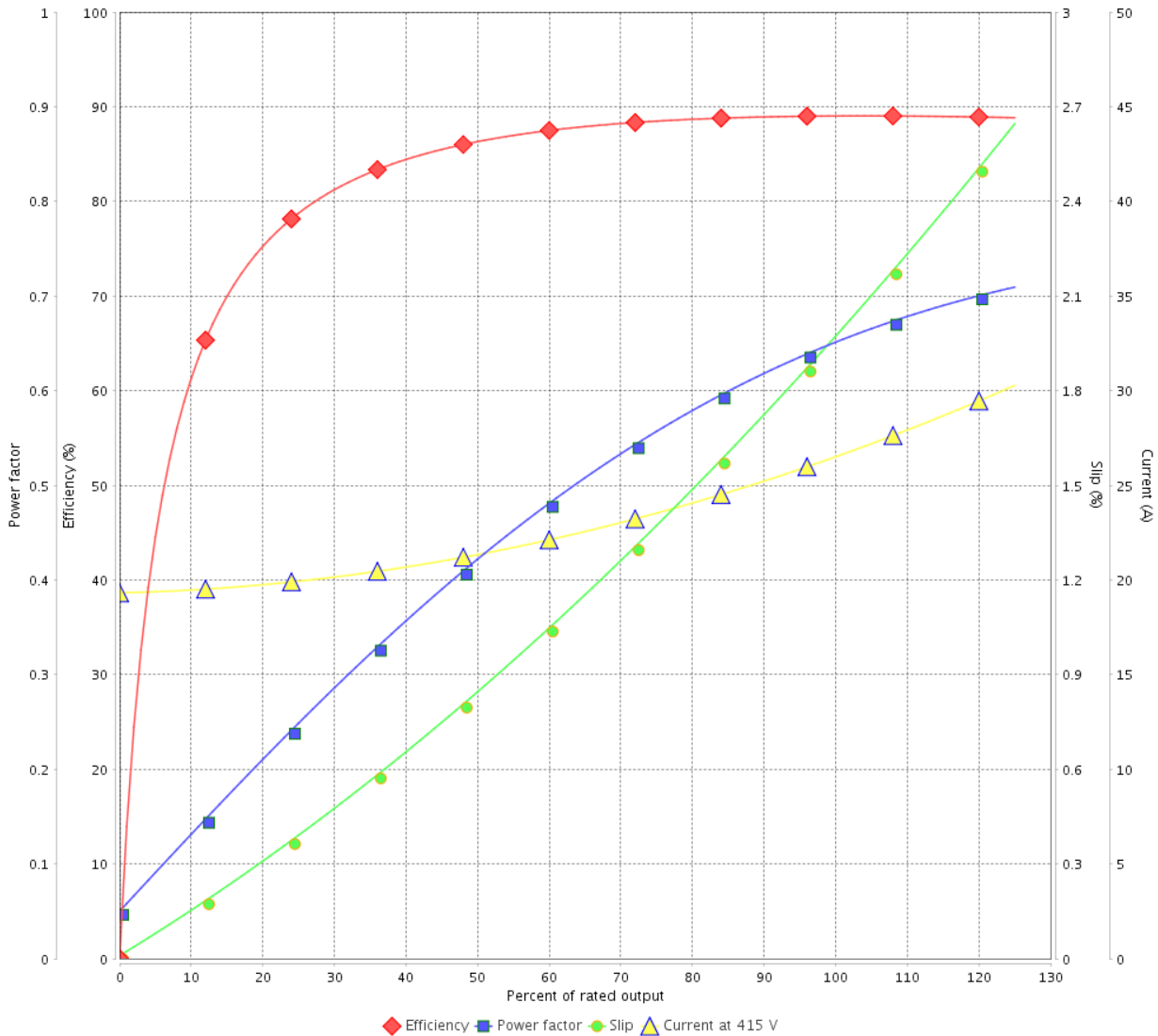
Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 8P IE3

Rated current	: 27.1 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 107 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 735 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		12 / 36		
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

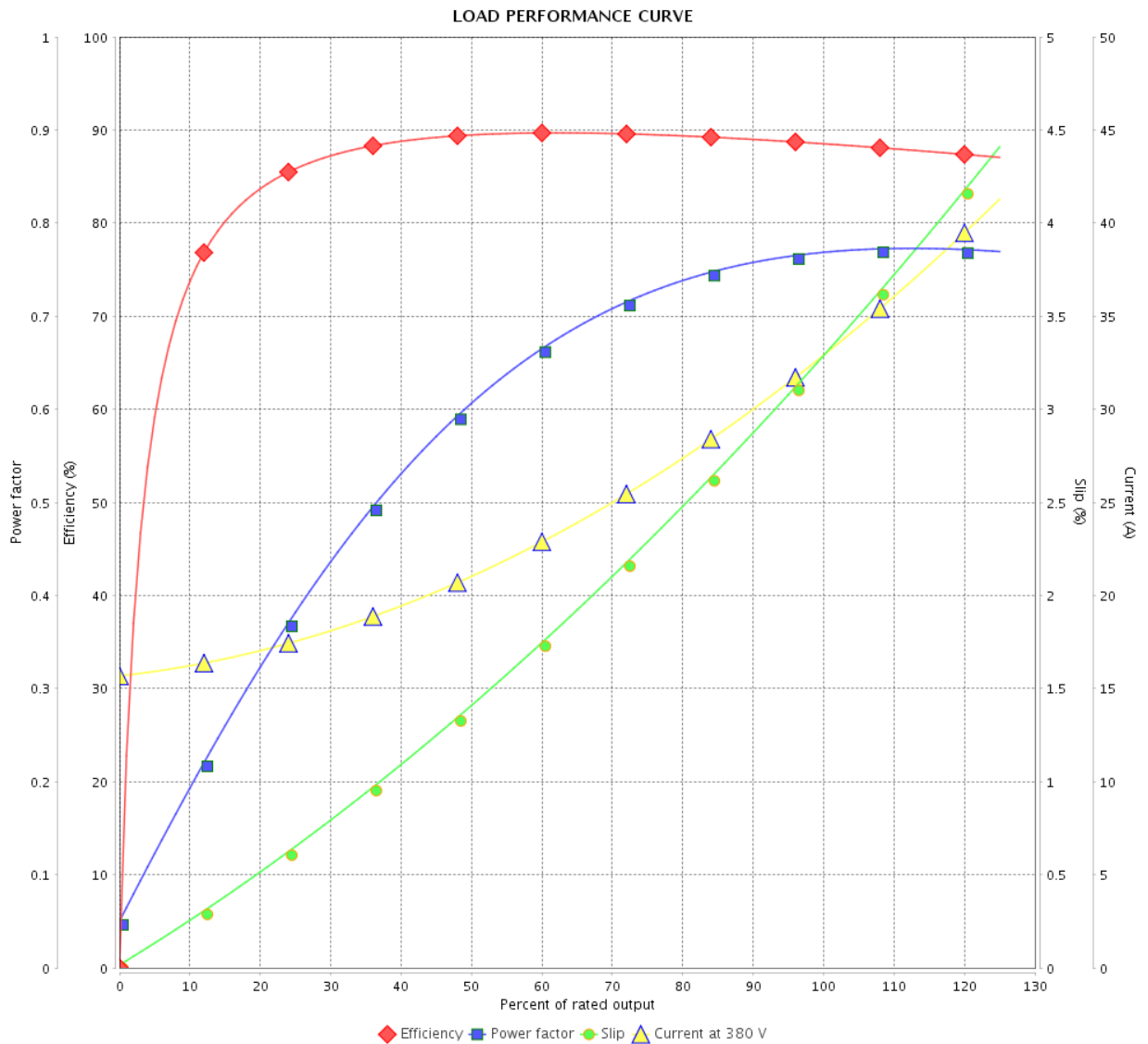


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22



Performance : 380 V 50 Hz 8P IE2

Rated current : 33.4 A
 LRC : 4.0
 Rated torque : 145 ft.lb
 Locked rotor torque : 140 %
 Breakdown torque : 170 %
 Rated speed : 725 rpm

Moment of inertia (J) : 9.37 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		13 / 36		
Date		14/04/2022		

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



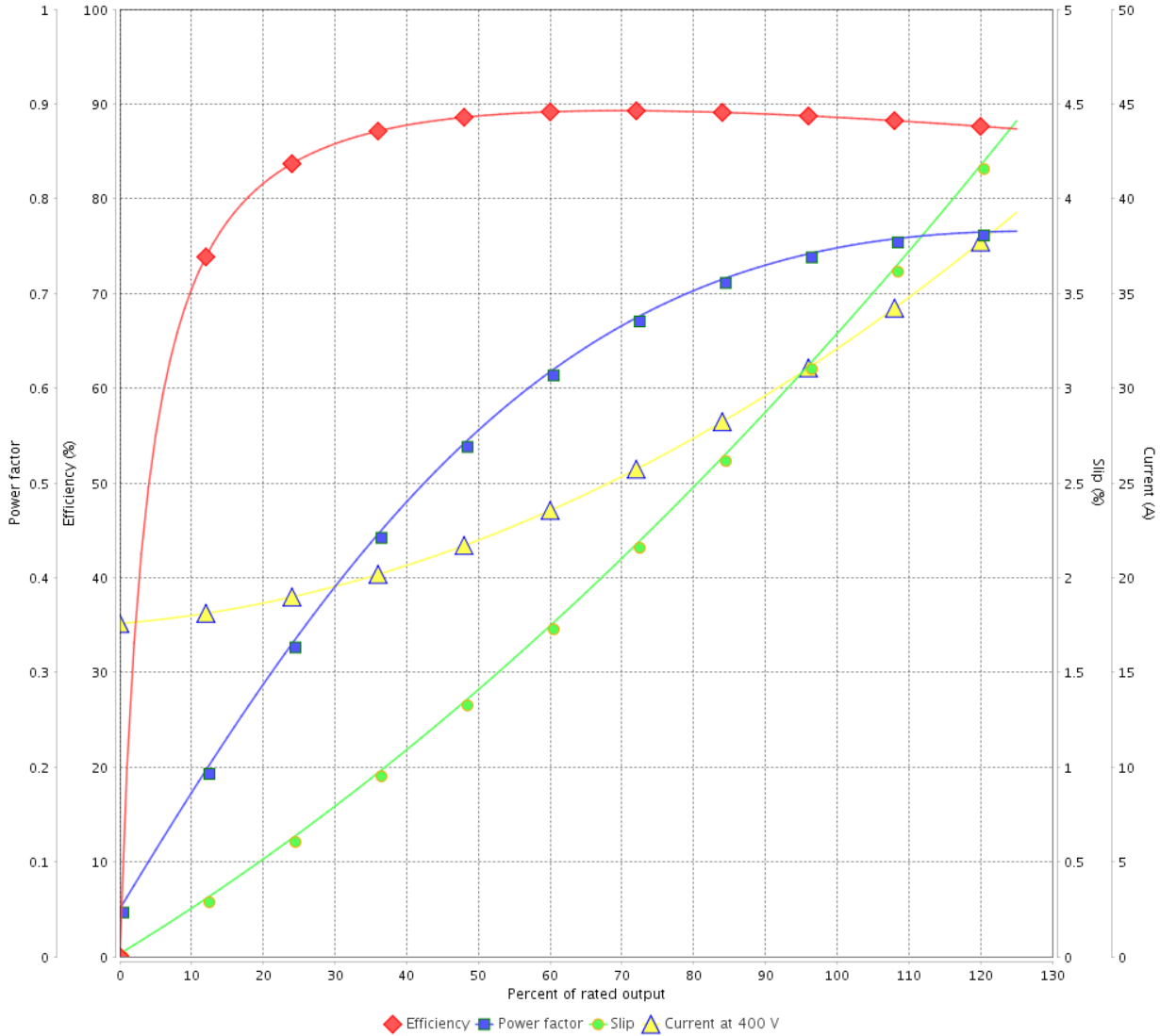
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 8P IE2

Rated current : 32.6 A
 LRC : 4.4
 Rated torque : 145 ft.lb
 Locked rotor torque : 160 %
 Breakdown torque : 190 %
 Rated speed : 725 rpm

Moment of inertia (J) : 9.37 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		14 / 36		
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

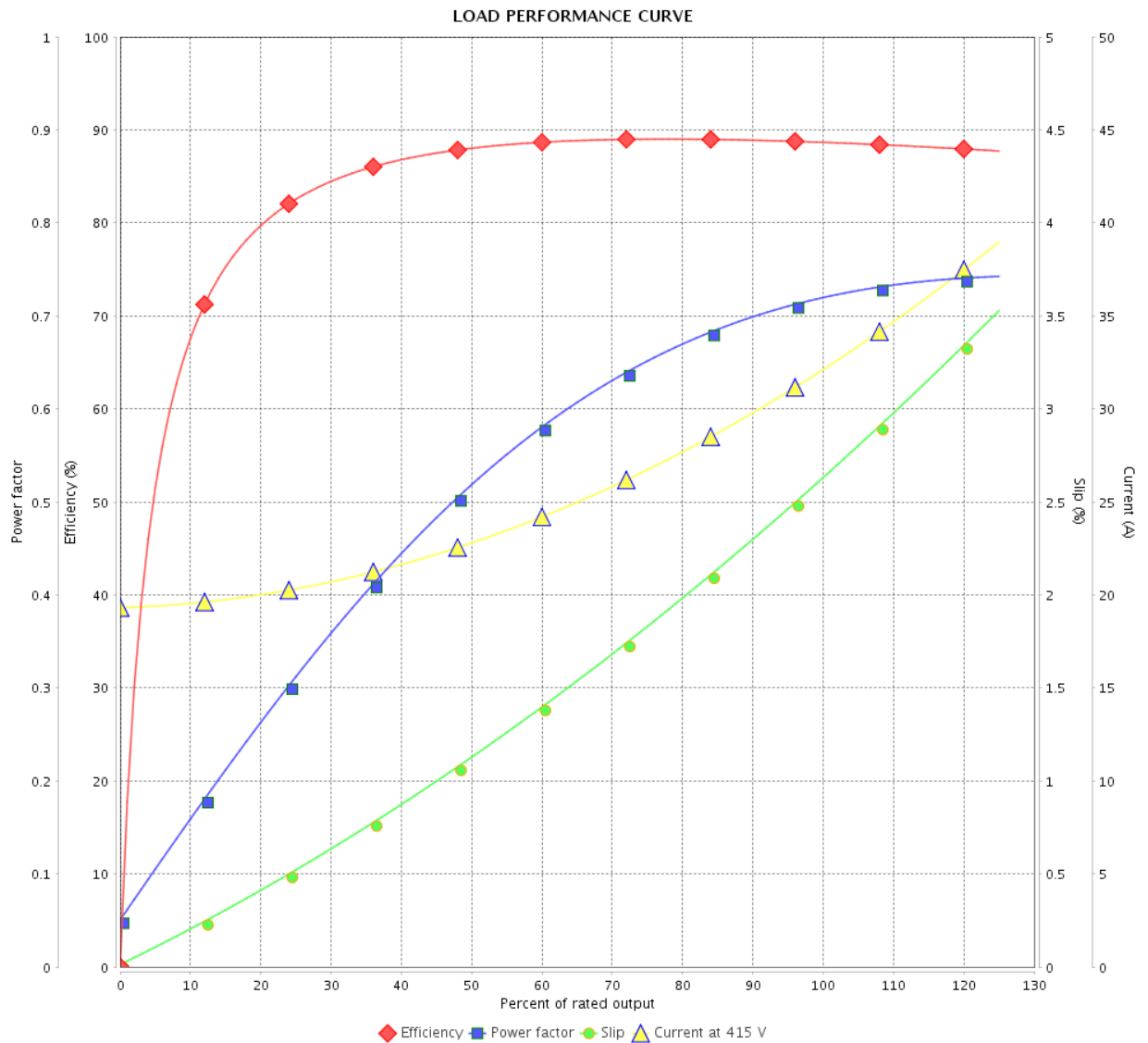


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22



Performance : 415 V 50 Hz 8P IE2

Rated current : 32.7 A
 LRC : 4.6
 Rated torque : 144 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 210 %
 Rated speed : 730 rpm

Moment of inertia (J) : 9.37 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		15 / 36		
Date		14/04/2022		

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12447063
Catalog # : 02009ET3E324T-W22

Performance : 230/460 V 60 Hz 8P

Rated current	: 56.6/28.3 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.0	Duty cycle	: Cont.(S1)
Rated torque	: 119 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 880 rpm	Design	: B

Heating constant

Cooling constant

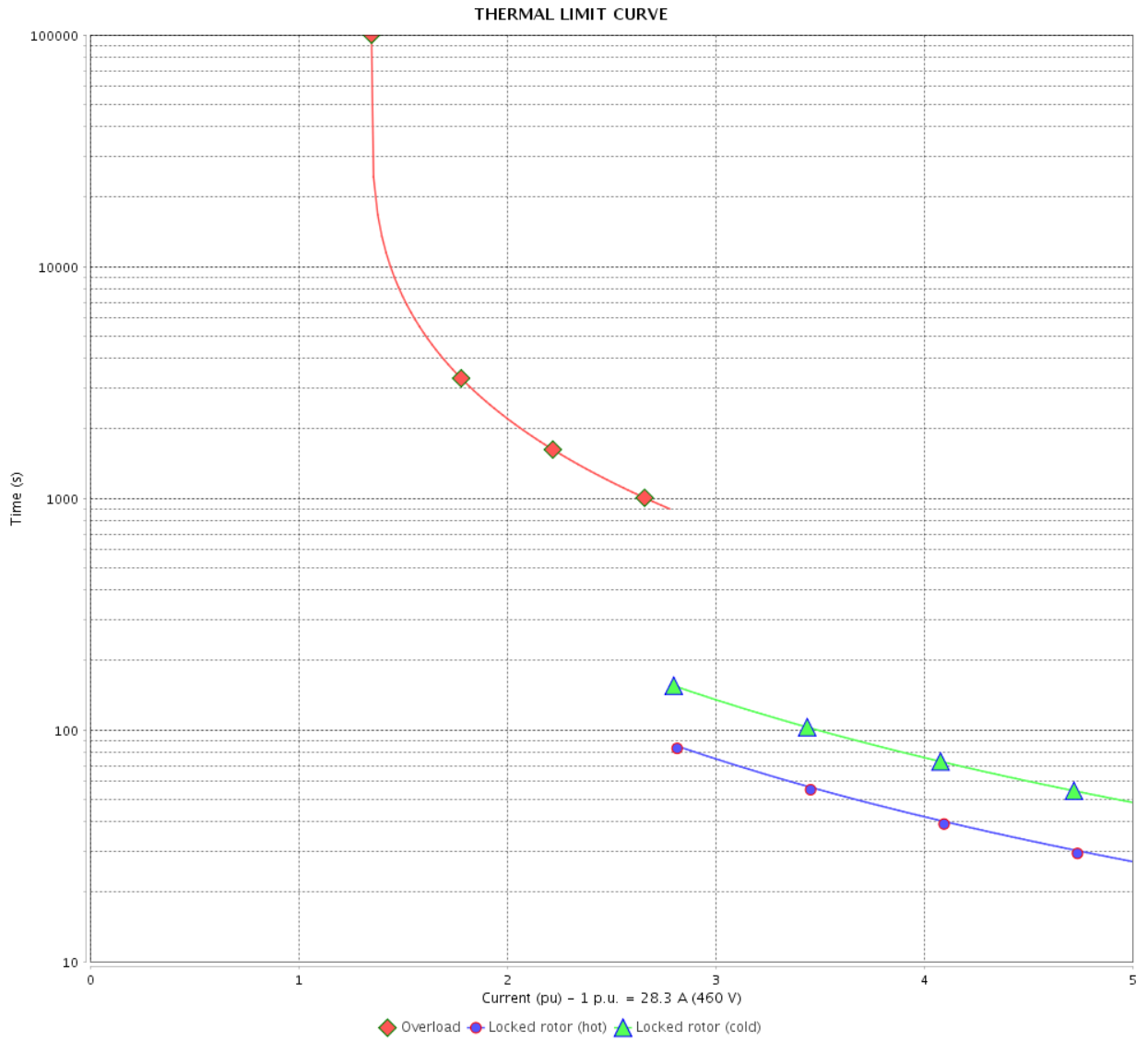
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		16 / 36	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		17 / 36		
Date		14/04/2022		

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12447063
Catalog # : 02009ET3E324T-W22

Performance : 380 V 50 Hz 8P IE3

Rated current	: 26.5 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.0	Duty cycle	: Cont.(S1)
Rated torque	: 108 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

Heating constant

Cooling constant

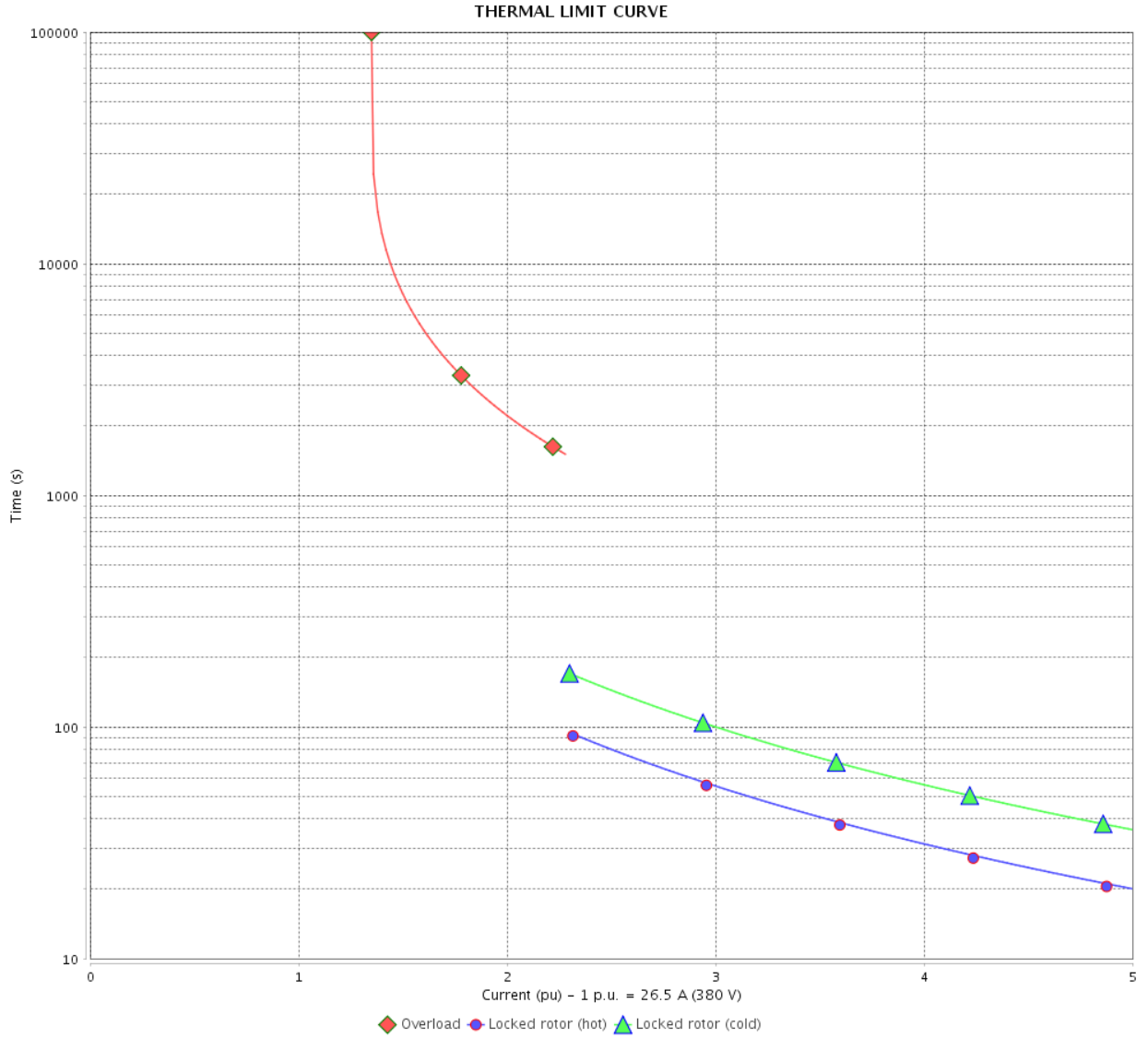
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		18 / 36	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 19 / 36		Revision
Checked by				
Date				

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12447063
Catalog # : 02009ET3E324T-W22

Performance : 400 V 50 Hz 8P IE3

Rated current	: 26.4 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 108 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

Heating constant

Cooling constant

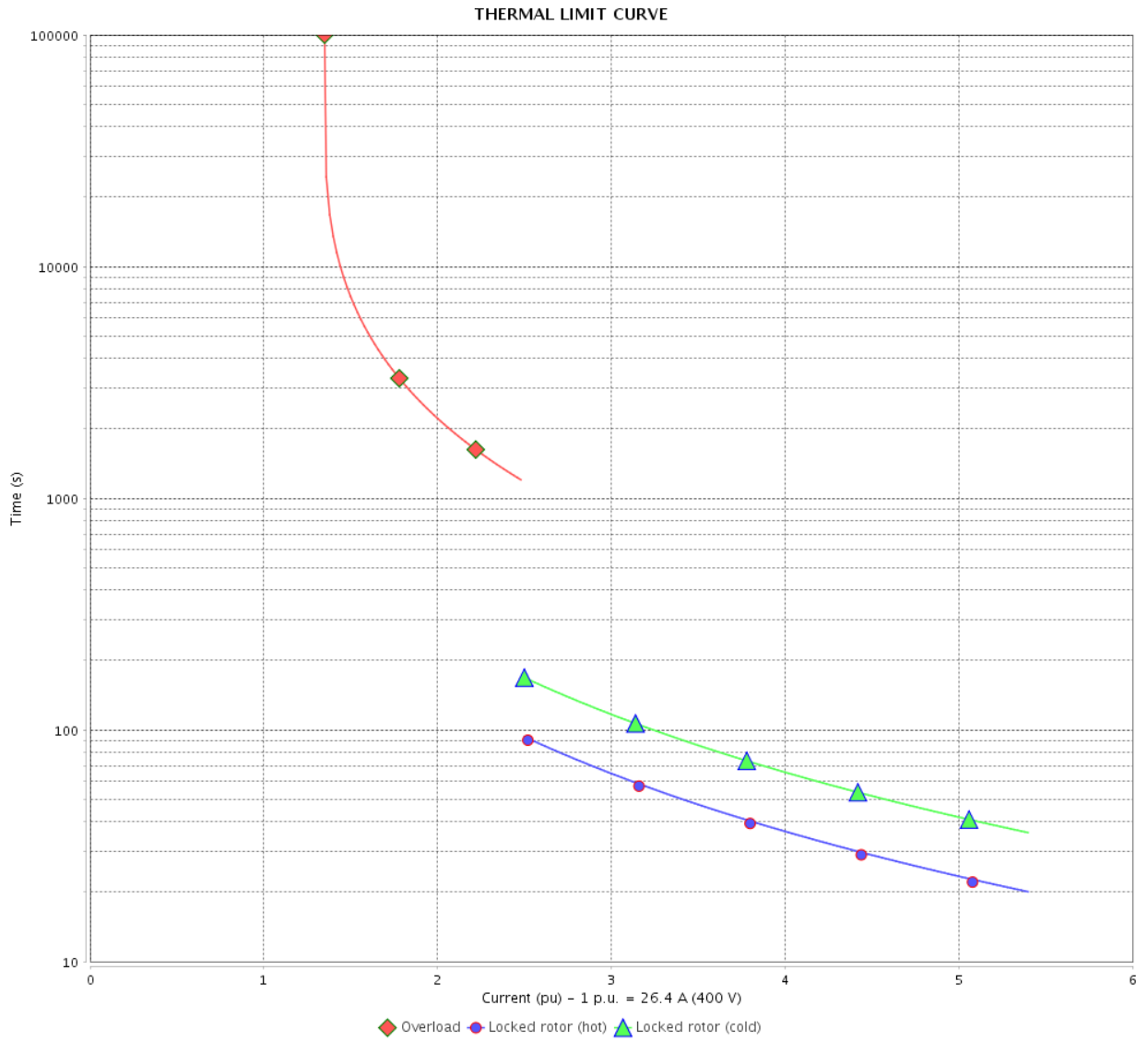
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		20 / 36	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		21 / 36		
Date		14/04/2022		

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12447063
Catalog # : 02009ET3E324T-W22

Performance : 415 V 50 Hz 8P IE3

Rated current	: 27.1 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 107 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 735 rpm	Design	: B

Heating constant

Cooling constant

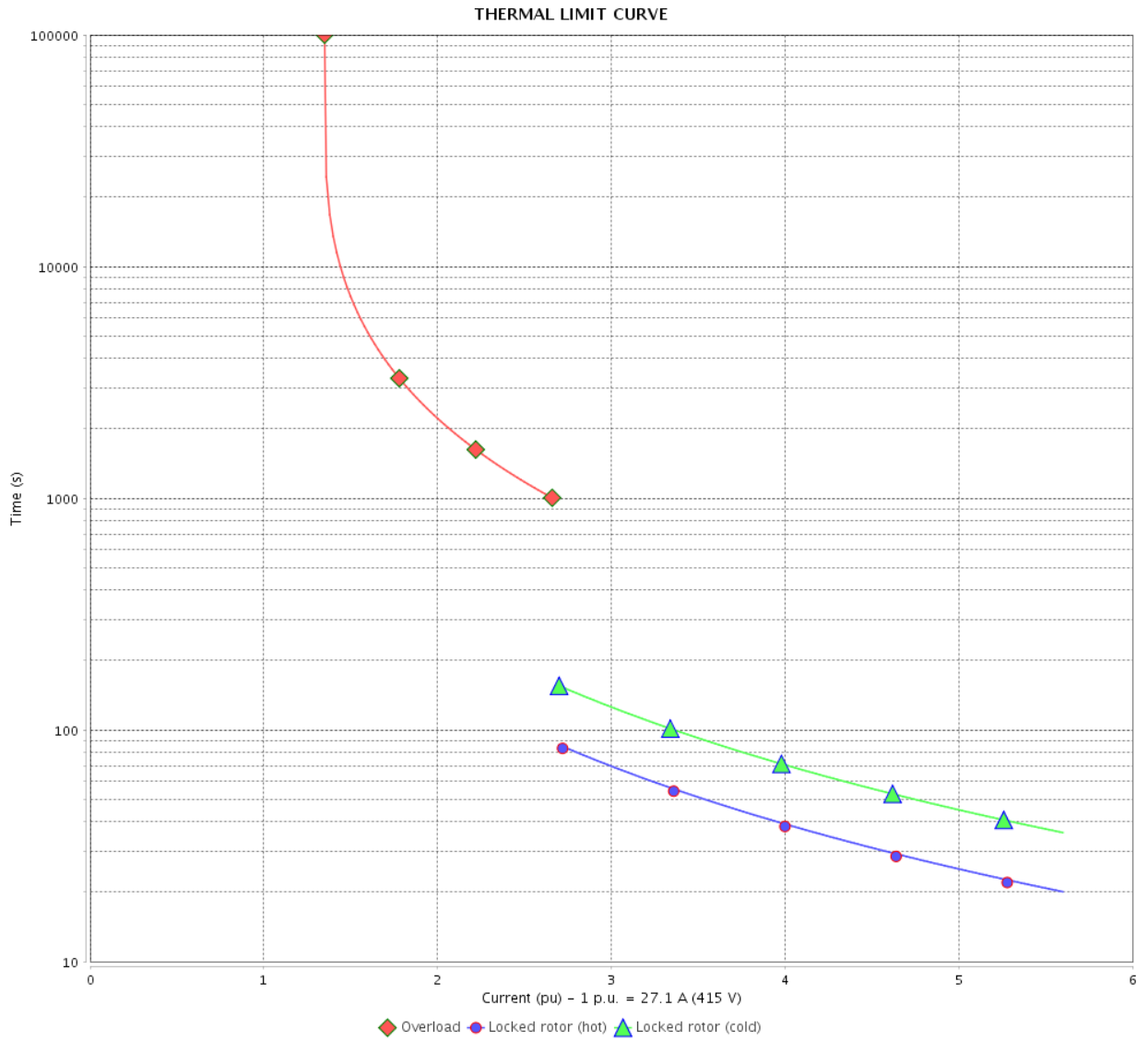
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		22 / 36	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 23 / 36		Revision
Checked by				
Date				

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12447063
Catalog # : 02009ET3E324T-W22

Performance : 380 V 50 Hz 8P IE2

Rated current	: 33.4 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 4.0	Duty cycle	: Cont.(S1)
Rated torque	: 145 ft.lb	Insulation class	: F
Locked rotor torque	: 140 %	Service factor	: 1.00
Breakdown torque	: 170 %	Temperature rise	: 105 K
Rated speed	: 725 rpm	Design	: B

Heating constant

Cooling constant

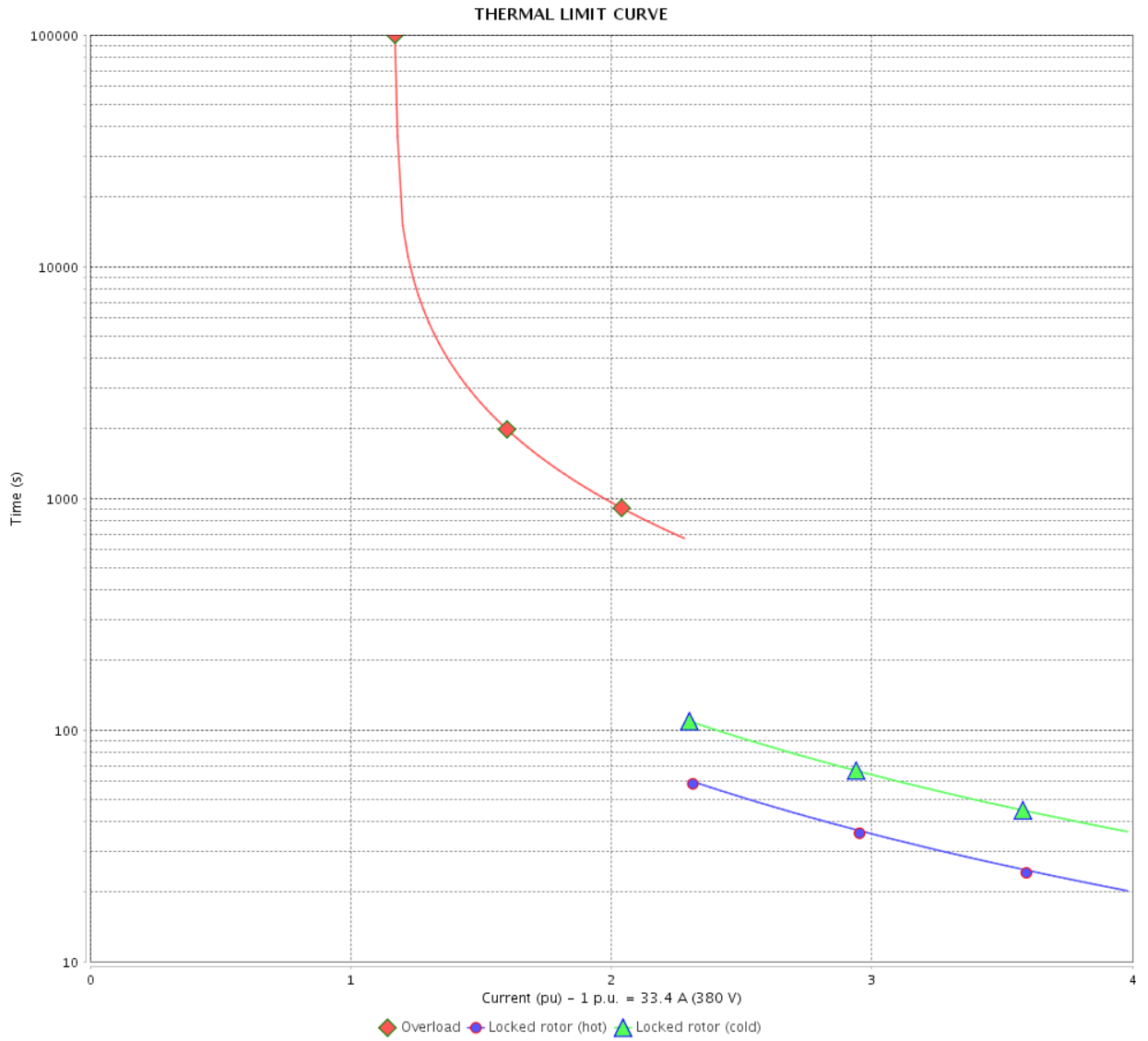
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		24 / 36	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		25 / 36		
Date		14/04/2022		

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12447063
Catalog # : 02009ET3E324T-W22

Performance : 400 V 50 Hz 8P IE2

Rated current	: 32.6 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 4.4	Duty cycle	: Cont.(S1)
Rated torque	: 145 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.15
Breakdown torque	: 190 %	Temperature rise	: 105 K
Rated speed	: 725 rpm	Design	: B

Heating constant

Cooling constant

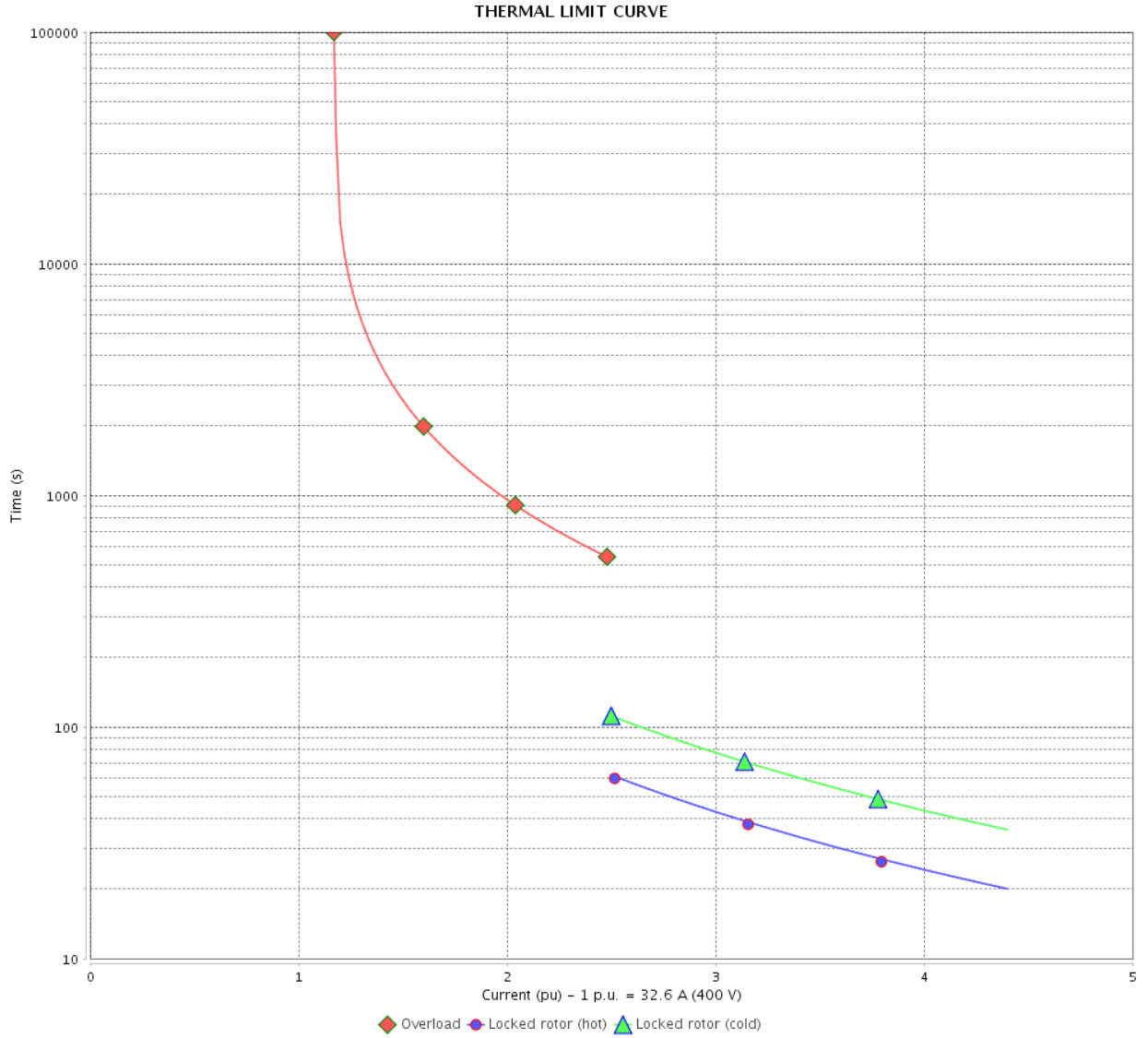
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		26 / 36	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 27 / 36		Revision
Checked by				
Date				

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12447063
Catalog # : 02009ET3E324T-W22

Performance : 415 V 50 Hz 8P IE2

Rated current	: 32.7 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 4.6	Duty cycle	: Cont.(S1)
Rated torque	: 144 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

Heating constant

Cooling constant

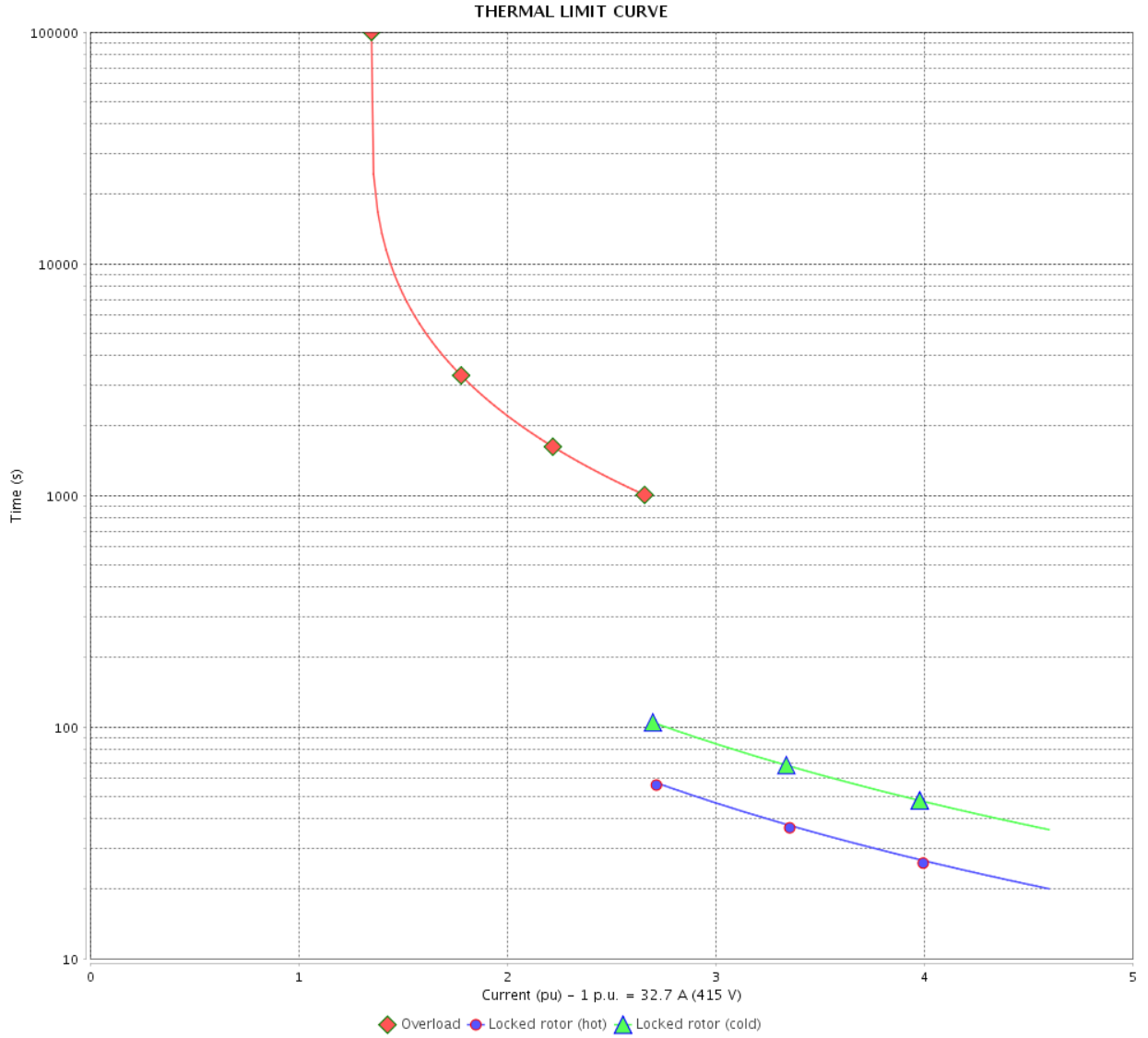
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		28 / 36	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		29 / 36		
Date		14/04/2022		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

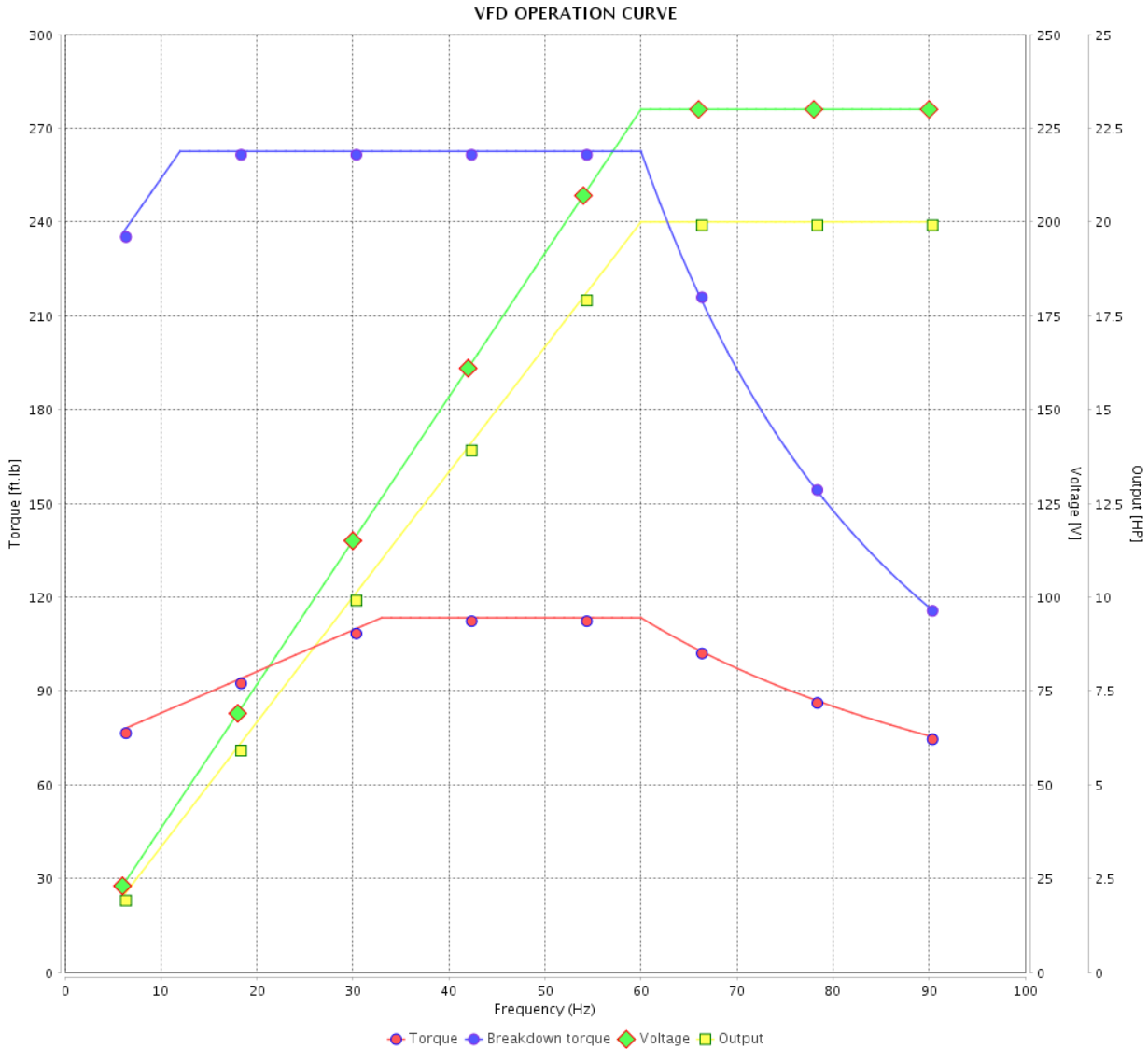


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22



Performance : 230/460 V 60 Hz 8P

Rated current : 56.6/28.3 A
 LRC : 5.0
 Rated torque : 119 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 220 %
 Rated speed : 880 rpm

Moment of inertia (J) : 9.37 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 30 / 36	Revision
Checked by				
Date	14/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

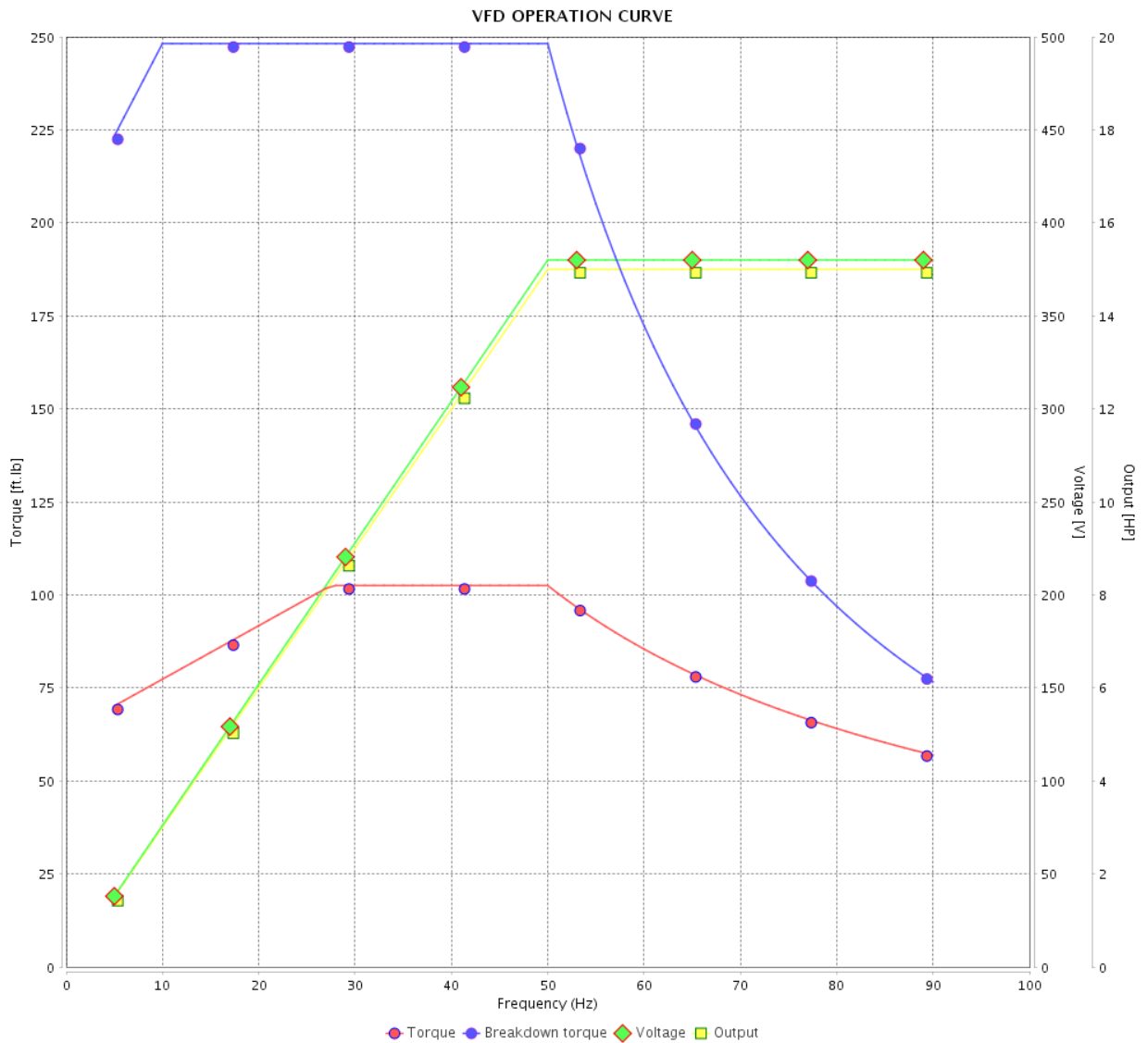


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22



Performance : 380 V 50 Hz 8P IE3

Rated current : 26.5 A
 LRC : 5.0
 Rated torque : 108 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 730 rpm

Moment of inertia (J) : 9.37 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			31 / 36	
Date	14/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

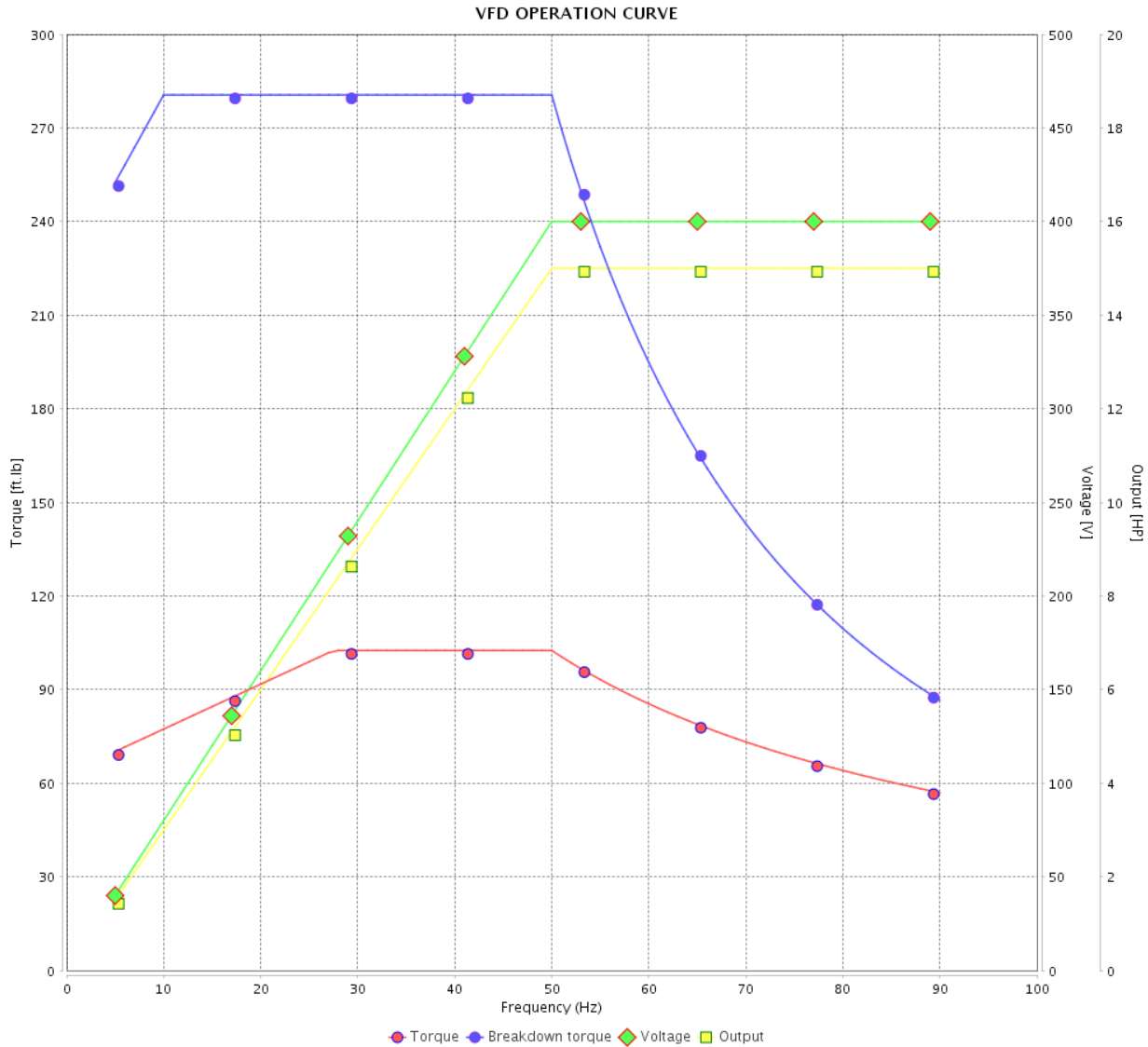


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22



Performance : 400 V 50 Hz 8P IE3

Rated current	: 26.4 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 108 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 32 / 36	Revision
Checked by				
Date	14/04/2022			

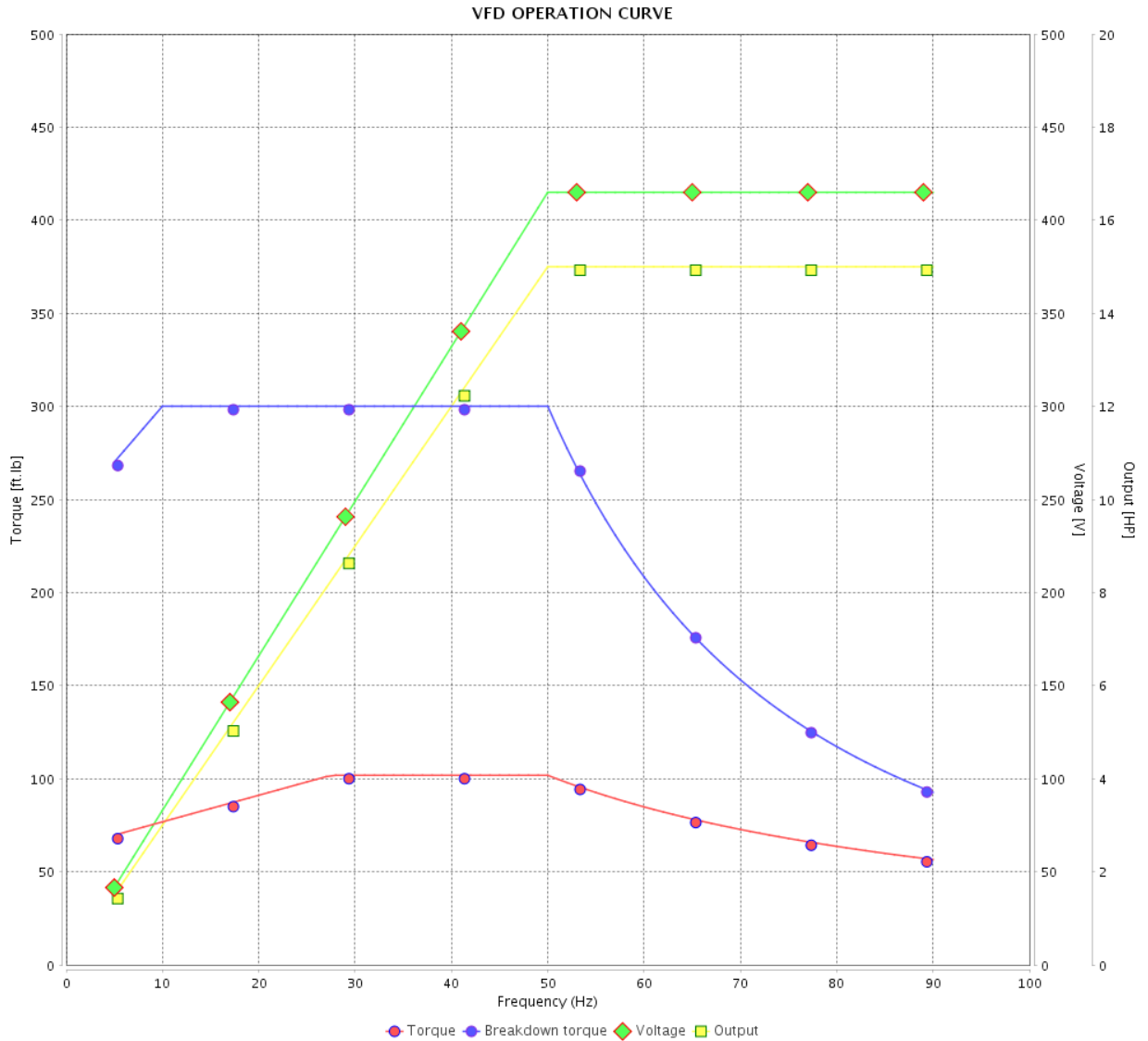
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
 Product code : 12447063
 Catalog # : 02009ET3E324T-W22



Performance : 415 V 50 Hz 8P IE3

Rated current	: 27.1 A	Moment of inertia (J)	: 9.37 sq.ft.lb
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 107 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 735 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		33 / 36		
Date	14/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

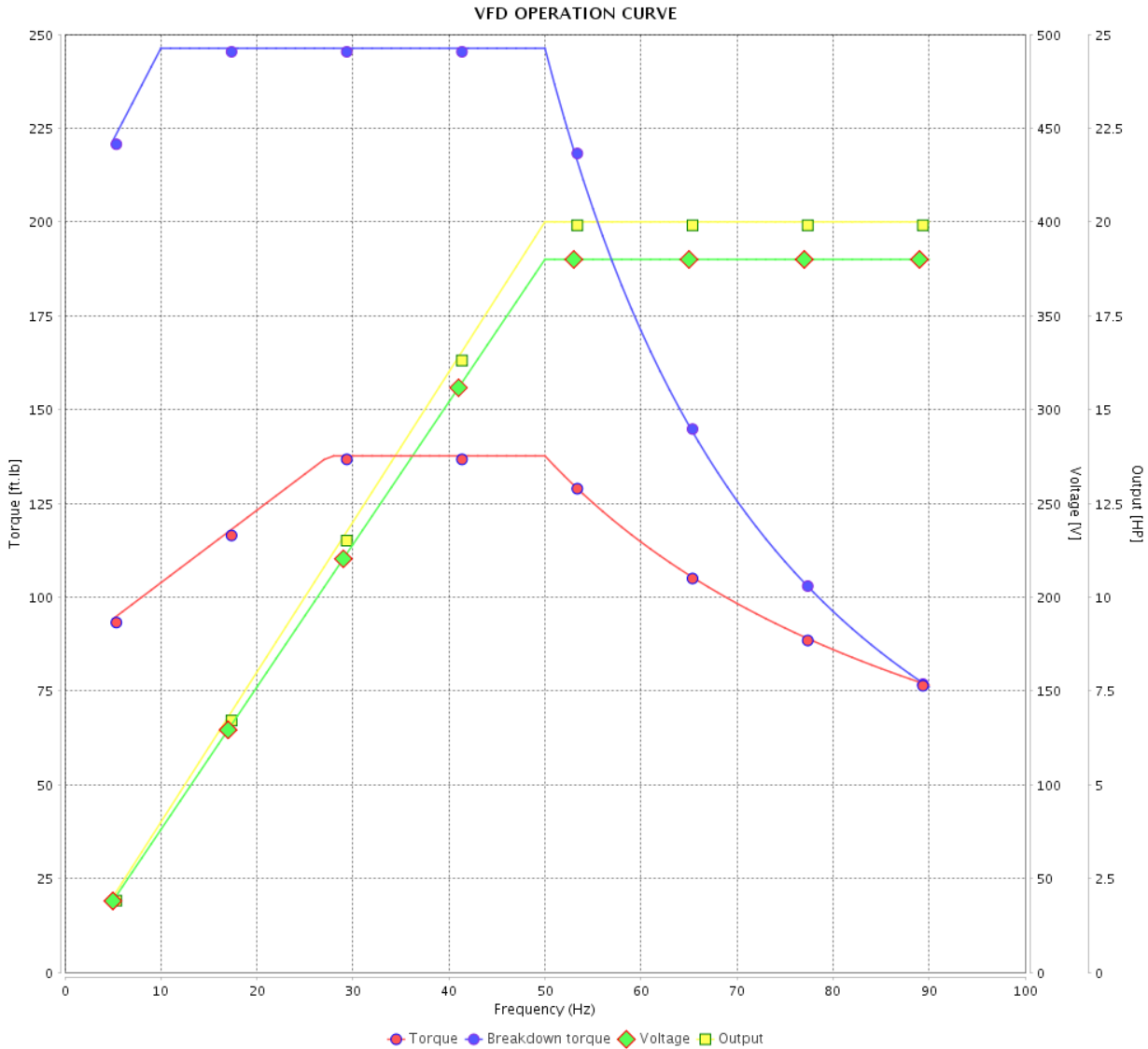


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22



Performance : 380 V 50 Hz 8P IE2

Rated current : 33.4 A
 LRC : 4.0
 Rated torque : 145 ft.lb
 Locked rotor torque : 140 %
 Breakdown torque : 170 %
 Rated speed : 725 rpm

Moment of inertia (J) : 9.37 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 34 / 36	Revision
Checked by				
Date	14/04/2022			

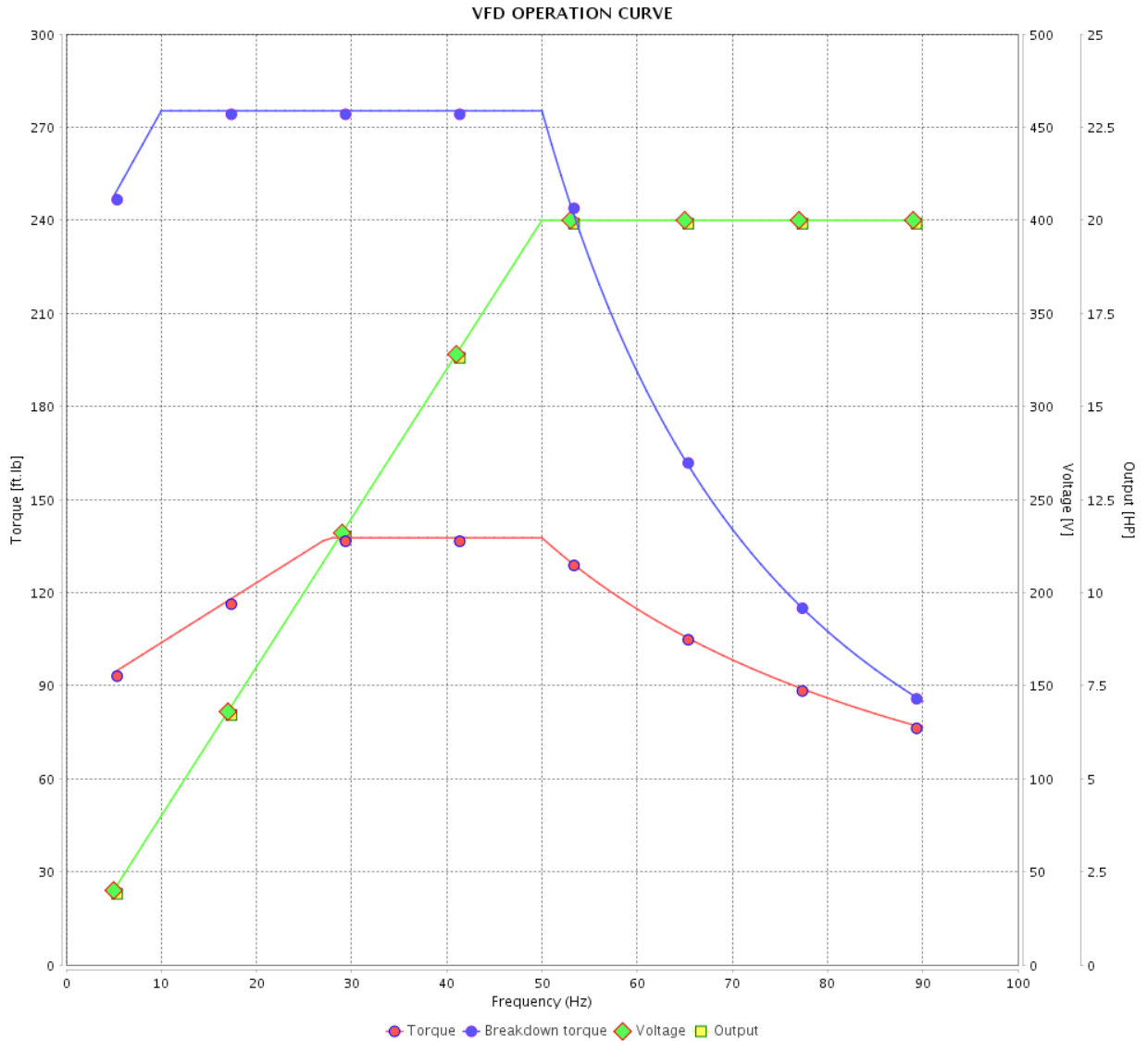
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
 Product code : 12447063
 Catalog # : 02009ET3E324T-W22



Performance : 400 V 50 Hz 8P IE2

Rated current : 32.6 A	Moment of inertia (J) : 9.37 sq.ft.lb
LRC : 4.4	Duty cycle : Cont.(S1)
Rated torque : 145 ft.lb	Insulation class : F
Locked rotor torque : 160 %	Service factor : 1.15
Breakdown torque : 190 %	Temperature rise : 105 K
Rated speed : 725 rpm	Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 35 / 36
Checked by				
Date	14/04/2022			
				Revision

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



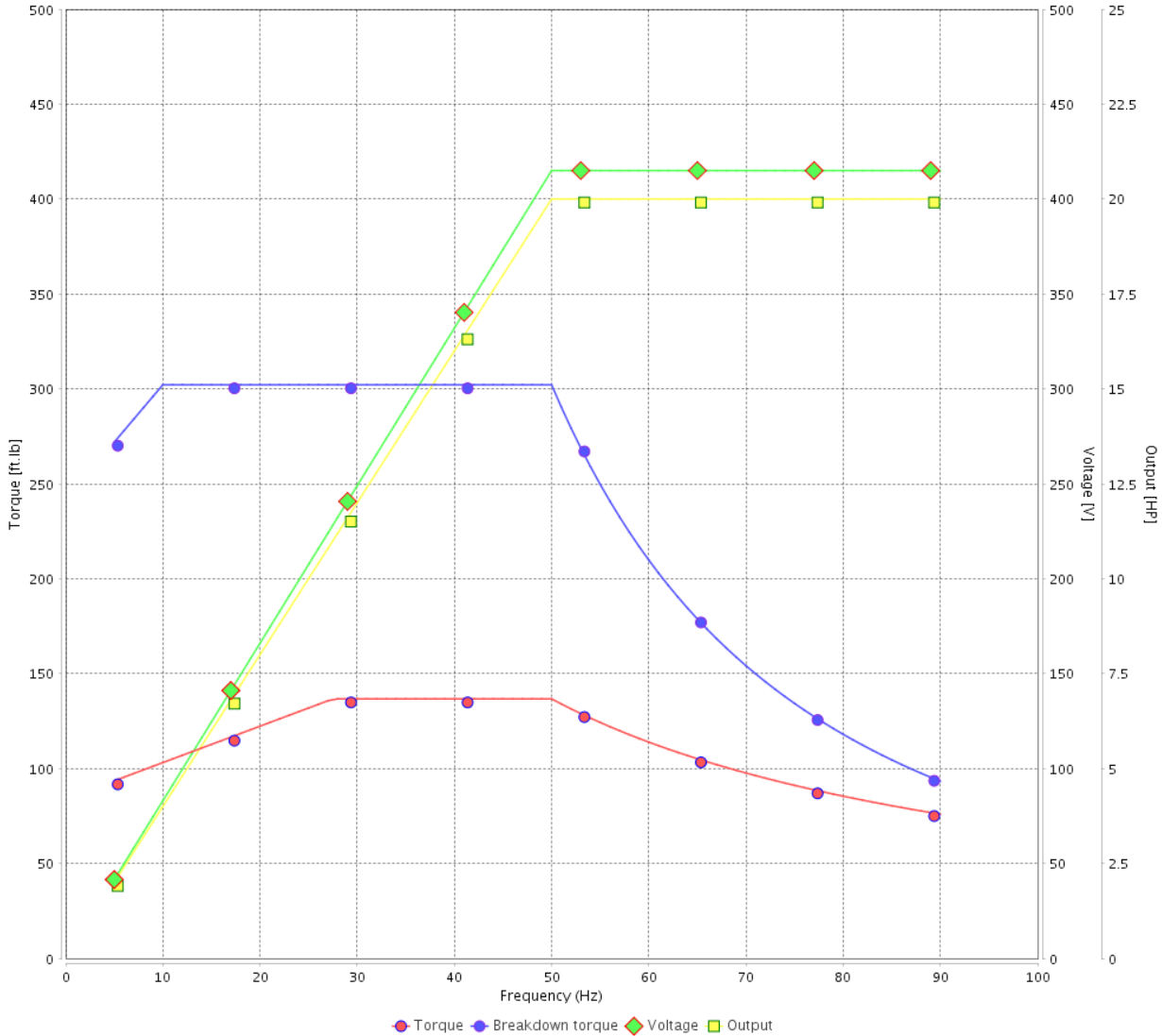
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447063

Catalog # : 02009ET3E324T-W22

VFD OPERATION CURVE



Performance : 415 V 50 Hz 8P IE2

Rated current : 32.7 A
 LRC : 4.6
 Rated torque : 144 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 210 %
 Rated speed : 730 rpm

Moment of inertia (J) : 9.37 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

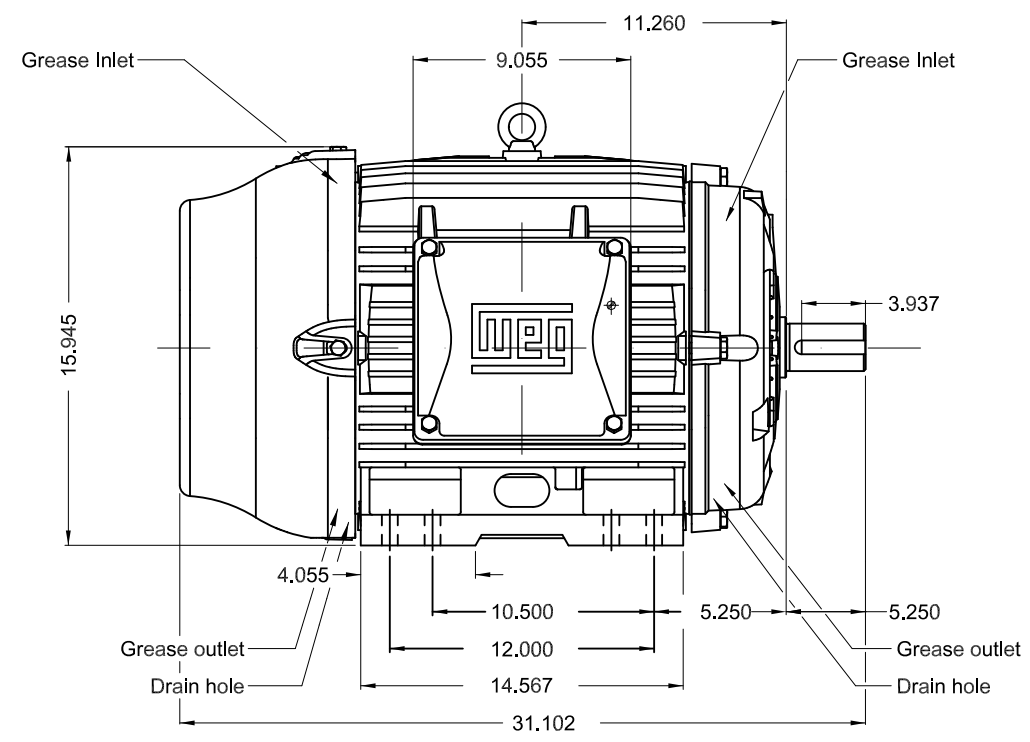
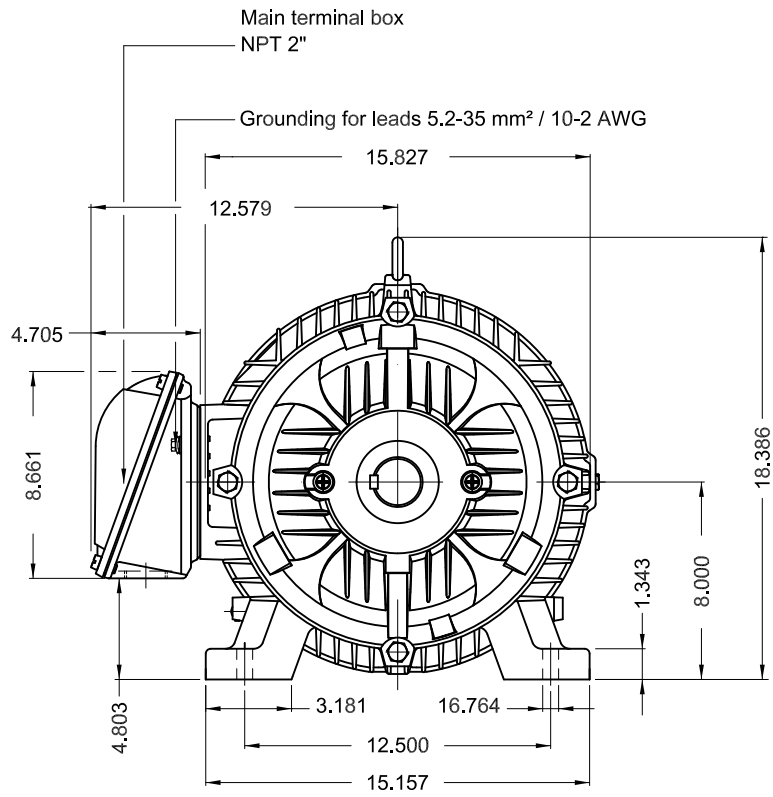
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 36 / 36	Revision
Checked by				
Date	14/04/2022			

1 2 3 4 5 6

A

B

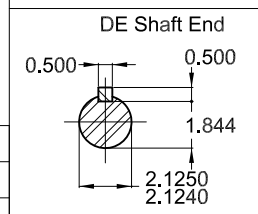
C



D

E

Color RAL 5009
 Painting plan 203A
 Mounting B3R(D)



20 HP 08 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF. FRAME 324/6T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

PREVIEW
 WDD



MADE IN BRAZIL
12447063



NEMA
Premium
W22



FOR SAFE AREA
Mod.TE1BFOXON
CC029A



For use on 60Hz
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 - T4
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 20:1, 1.00SF - T3A

MODEL 02009ET3E324T-W22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 324/6T 1000m.a.s.l. IP55 TEFC 510lb

V 230/460 A 56.6/28.3

HP 20 kW 15

SF 1.25 SFA 70.8/35.4

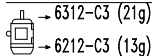
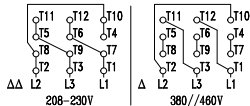
RPM 880 PF 0.73

AMB 40°C INS cl. F DT80K NEMA NOM EFF 91.0%

DUTY CONT. DES B Code G

USABLE @208V 62.6A SF 1.15 SFA 72.0

20HP 15kW 50Hz 380V 33.4A 725RPM SF 1.00 EFF 88.5% (IE2)



MOBIL POLYREX EM (20000h)

