

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :								
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	11441798					
		Catalog # :	02036ET3E256T-W22					
Frame	: 254/6T	Cooling method	: IC411 - TEFC					
Insulation class	: F	Mounting	: F-1					
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)					
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line					
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>2</sup>	: 328 lb					
Protection degree	: IP55	Moment of inertia (J)	: 1.54 sq.ft.lb					
Design	: B							
Output [HP]	20	15	15	15	20	20	20	
Poles	2	2	2	2	2	2	2	
Frequency [Hz]	60	50	50	50	50	50	50	
Rated voltage [V]	230/460	380	400	415	380	400	415	
Rated current [A]	46.4/23.2	20.4	19.6	19.1	28.9	27.2	26.2	
L. R. Amperes [A]	283/142	141	151	155	147	155	160	
LRC [A]	6.1x(Code G)	6.9x(Code G)	7.7x(Code H)	8.1x(Code J)	5.1x(Code E)	5.7x(Code F)	6.1x(Code G)	
No load current [A]	13.0/6.50	6.20	6.60	6.90	6.20	6.60	6.90	
Rated speed [RPM]	3525	2935	2945	2950	2885	2905	2915	
Slip [%]	2.08	2.17	1.83	1.67	3.83	3.17	2.83	
Rated torque [ft.lb]	29.8	26.9	26.8	26.8	36.3	36.2	36.0	
Locked rotor torque [%]	200	220	240	270	160	180	200	
Breakdown torque [%]	240	260	280	310	190	210	229	
Service factor	1.25	1.15	1.15	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	105 K	
Locked rotor time	37s (cold) 21s (hot)	28s (cold) 16s (hot)	28s (cold) 16s (hot)	28s (cold) 16s (hot)	28s (cold) 16s (hot)	28s (cold) 16s (hot)	28s (cold) 16s (hot)	
Noise level <sup>2</sup>	72.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	
Efficiency (%)	25%	91.4	90.2	90.2	89.5	93.3	92.1	92.2
	50%	91.0	90.6	90.4	89.8	91.0	91.0	91.0
	75%	91.7	90.9	91.2	91.1	90.2	91.0	91.0
	100%	91.0	91.2	91.2	91.2	87.5	89.5	89.5
Power Factor	25%	0.57	0.54	0.50	0.48	0.63	0.60	0.57
	50%	0.82	0.78	0.75	0.73	0.86	0.84	0.82
	75%	0.87	0.87	0.85	0.84	0.89	0.88	0.87
	100%	0.89	0.90	0.89	0.88	0.90	0.89	0.89
Bearing type	: Drive end : 6309 C3	Non drive end : 6209 C3	Foundation loads					
Sealing	: V'Ring	V'Ring	Max. traction	: 233 lb				
Lubrication interval	: 19000 h	20000 h	Max. compression	: 561 lb				
Lubricant amount	: 13 g	9 g						
Lubricant type	: Mobil Polyrex EM							
Notes USABLE @208V 51.3A SF 1.15 SFA 59.0A								
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



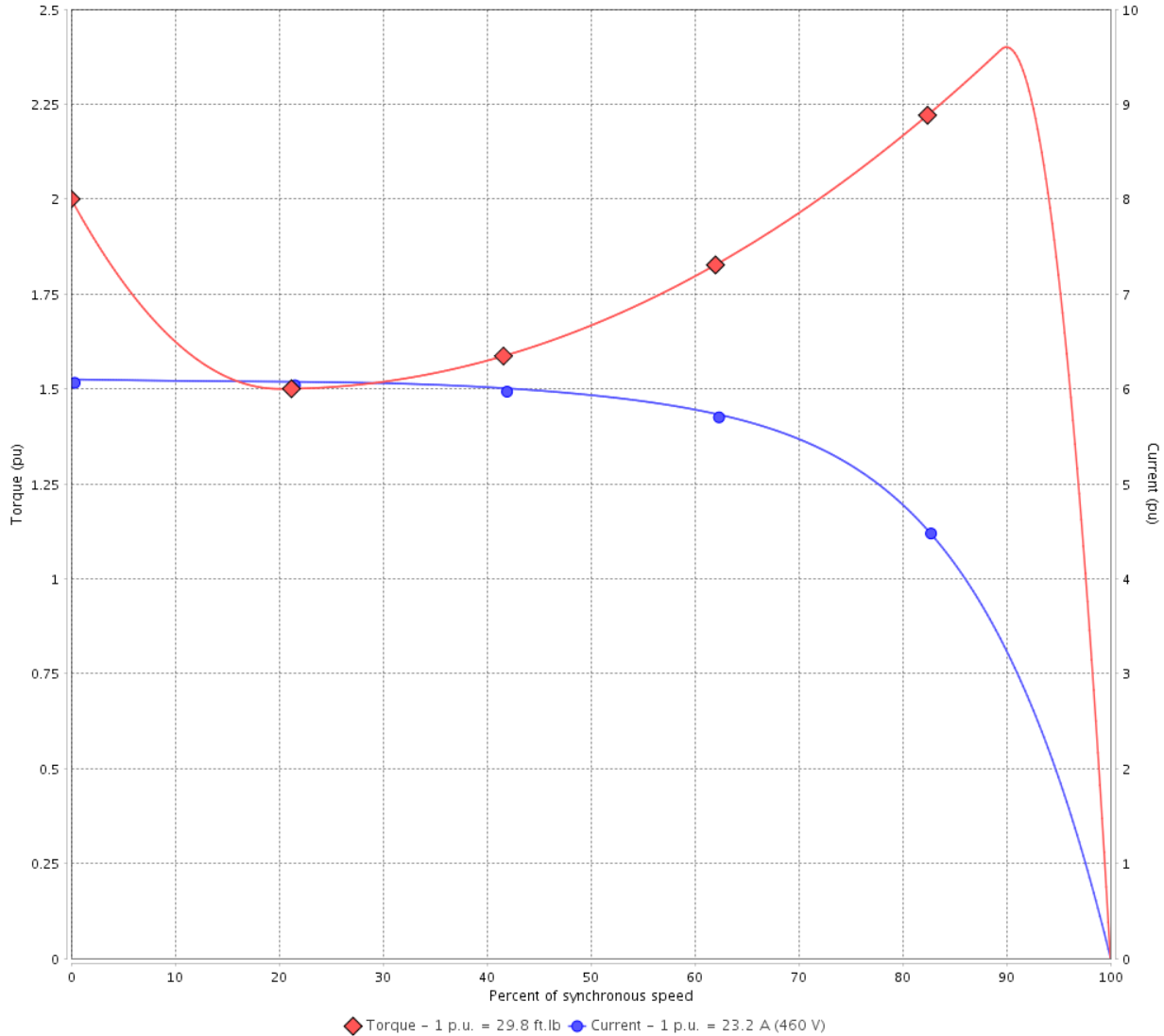
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 46.4/23.2 A  
 LRC : 6.1  
 Rated torque : 29.8 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 3525 rpm

Moment of inertia (J) : 1.54 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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



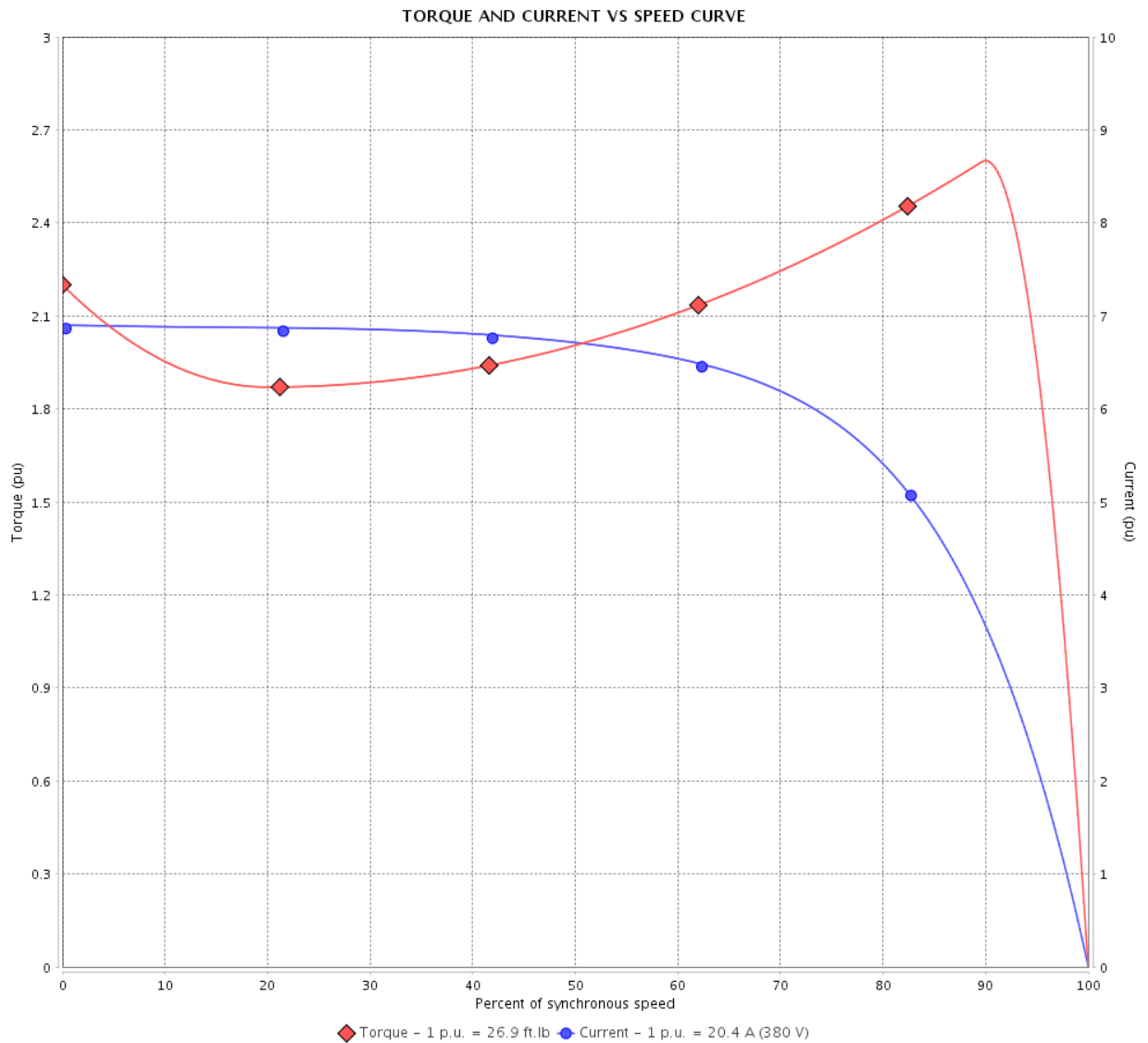
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 380 V 50 Hz 2P IE3

Rated current : 20.4 A  
 LRC : 6.9  
 Rated torque : 26.9 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 2935 rpm

Moment of inertia (J) : 1.54 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Locked rotor time : 28s (cold) 16s (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



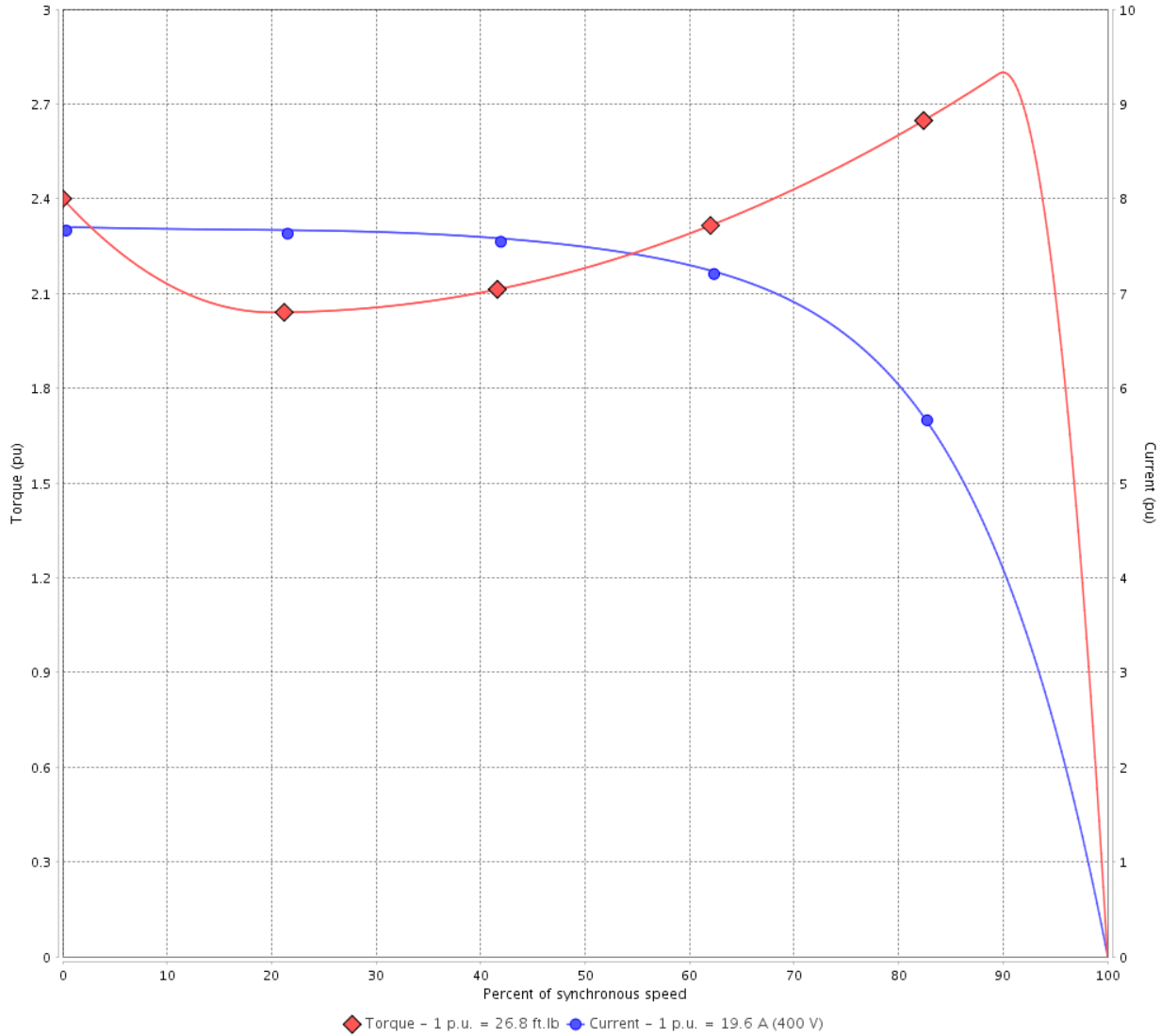
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current	: 19.6 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 26.8 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B

Locked rotor time : 28s (cold) 16s (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



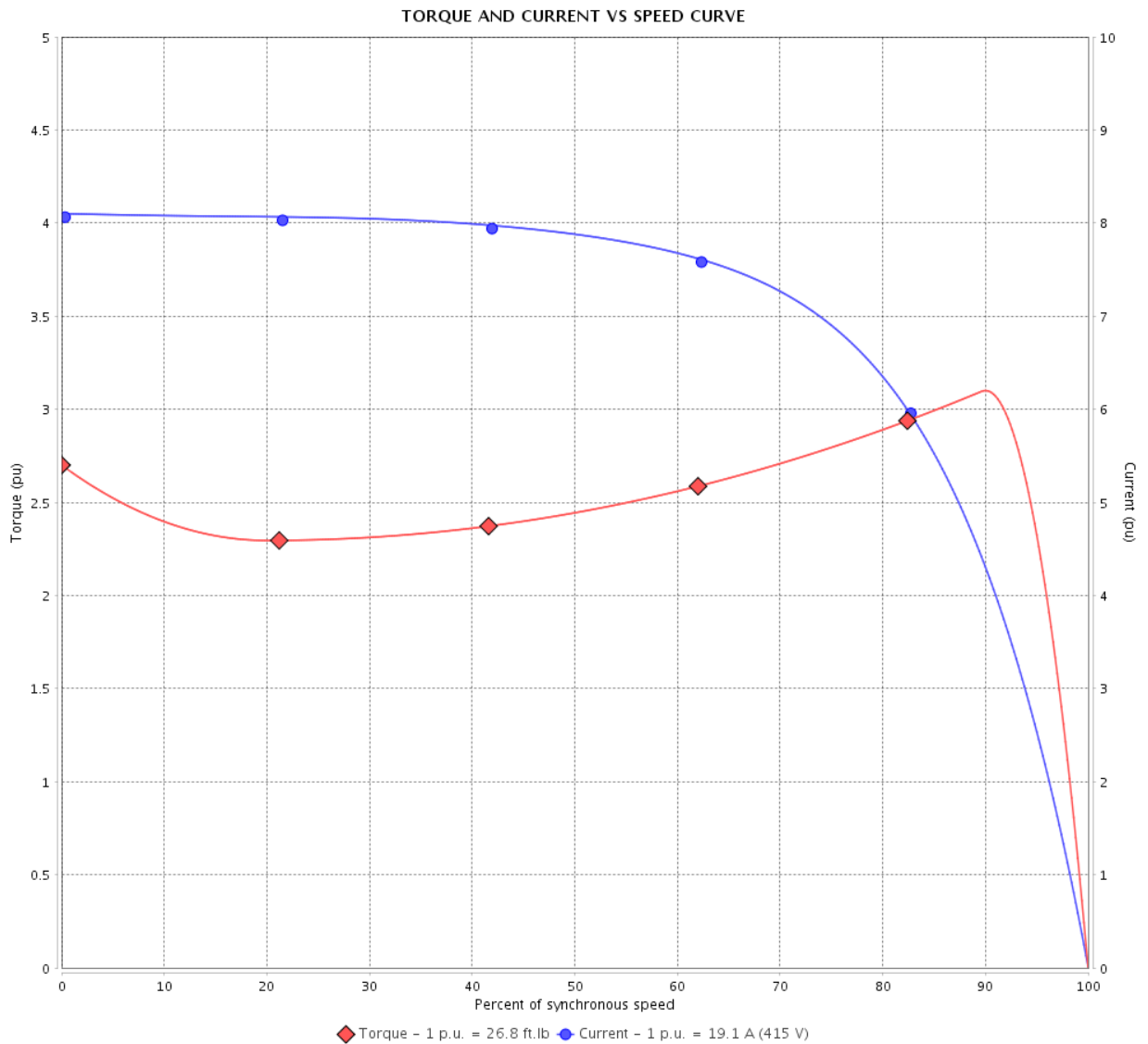
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 415 V 50 Hz 2P IE3

Rated current : 19.1 A  
 LRC : 8.1  
 Rated torque : 26.8 ft.lb  
 Locked rotor torque : 270 %  
 Breakdown torque : 310 %  
 Rated speed : 2950 rpm

Moment of inertia (J) : 1.54 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Locked rotor time : 28s (cold) 16s (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



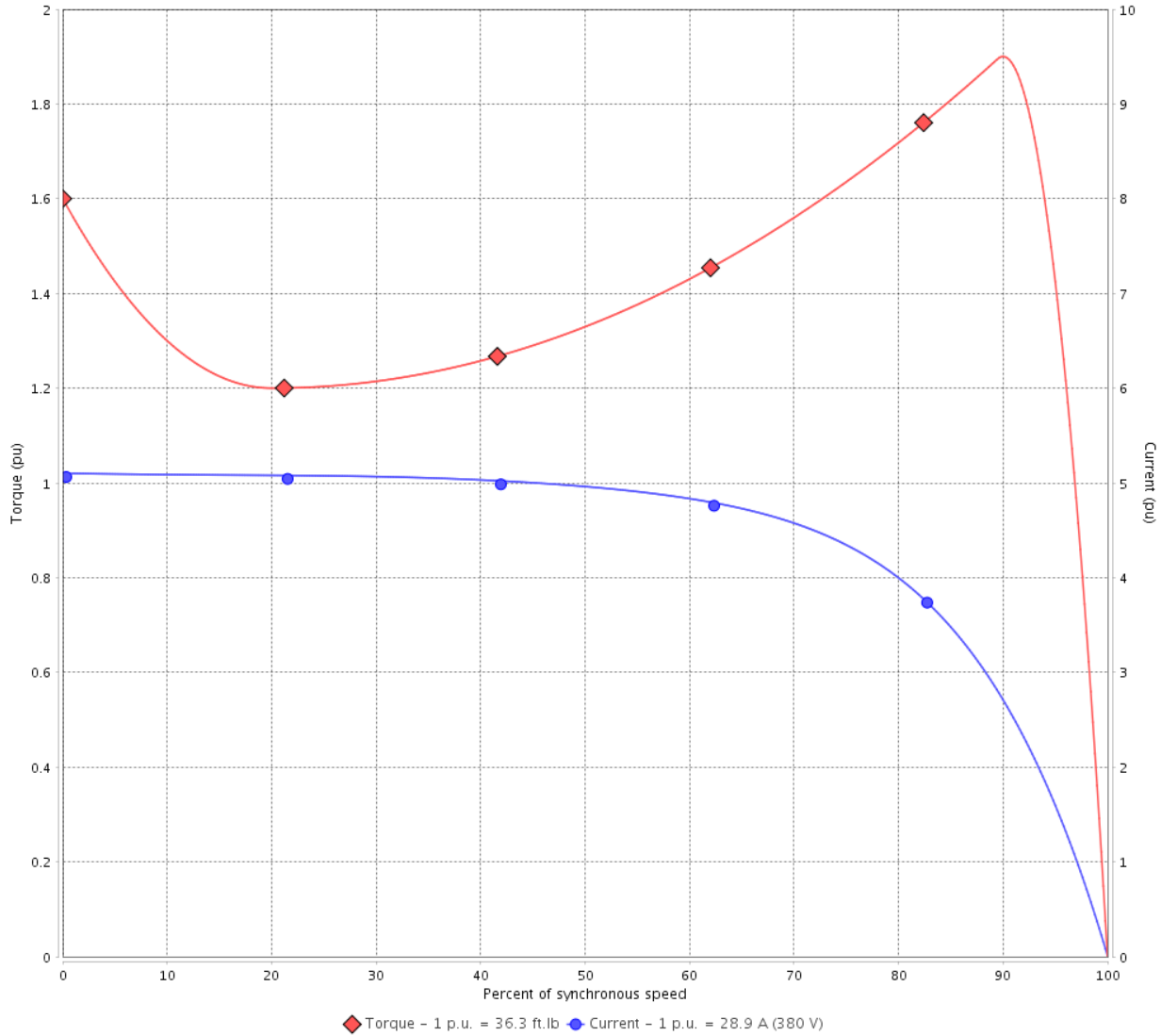
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 2P

Rated current	: 28.9 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 36.3 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 190 %	Temperature rise	: 105 K
Rated speed	: 2885 rpm	Design	: B

Locked rotor time : 28s (cold) 16s (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



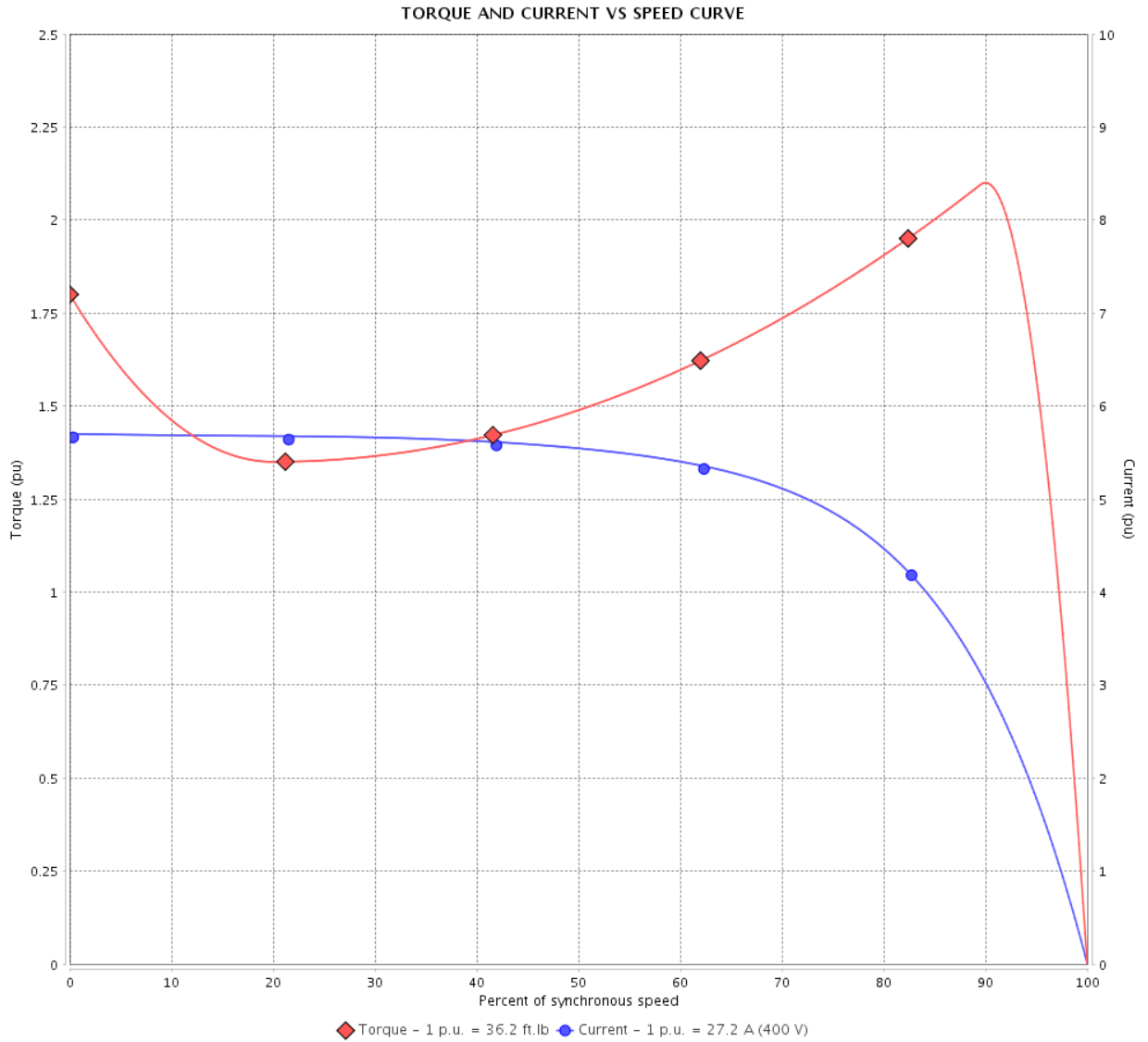
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 400 V 50 Hz 2P IE1

Rated current : 27.2 A  
 LRC : 5.7  
 Rated torque : 36.2 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 210 %  
 Rated speed : 2905 rpm

Moment of inertia (J) : 1.54 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

Locked rotor time : 28s (cold) 16s (hot)

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

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



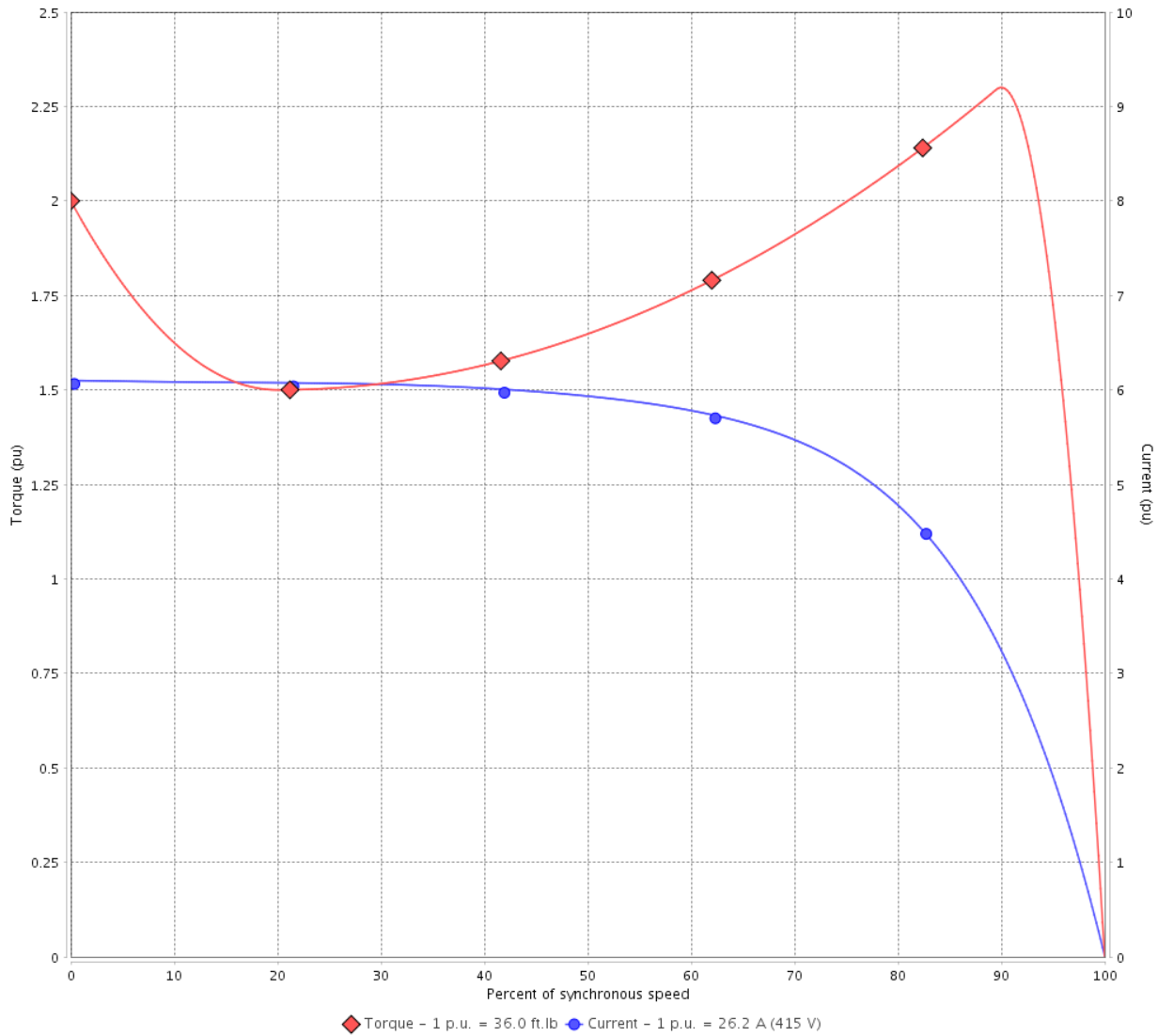
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 2P IE1

Rated current	: 26.2 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 36.0 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 2915 rpm	Design	: B

Locked rotor time : 28s (cold) 16s (hot)

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



# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

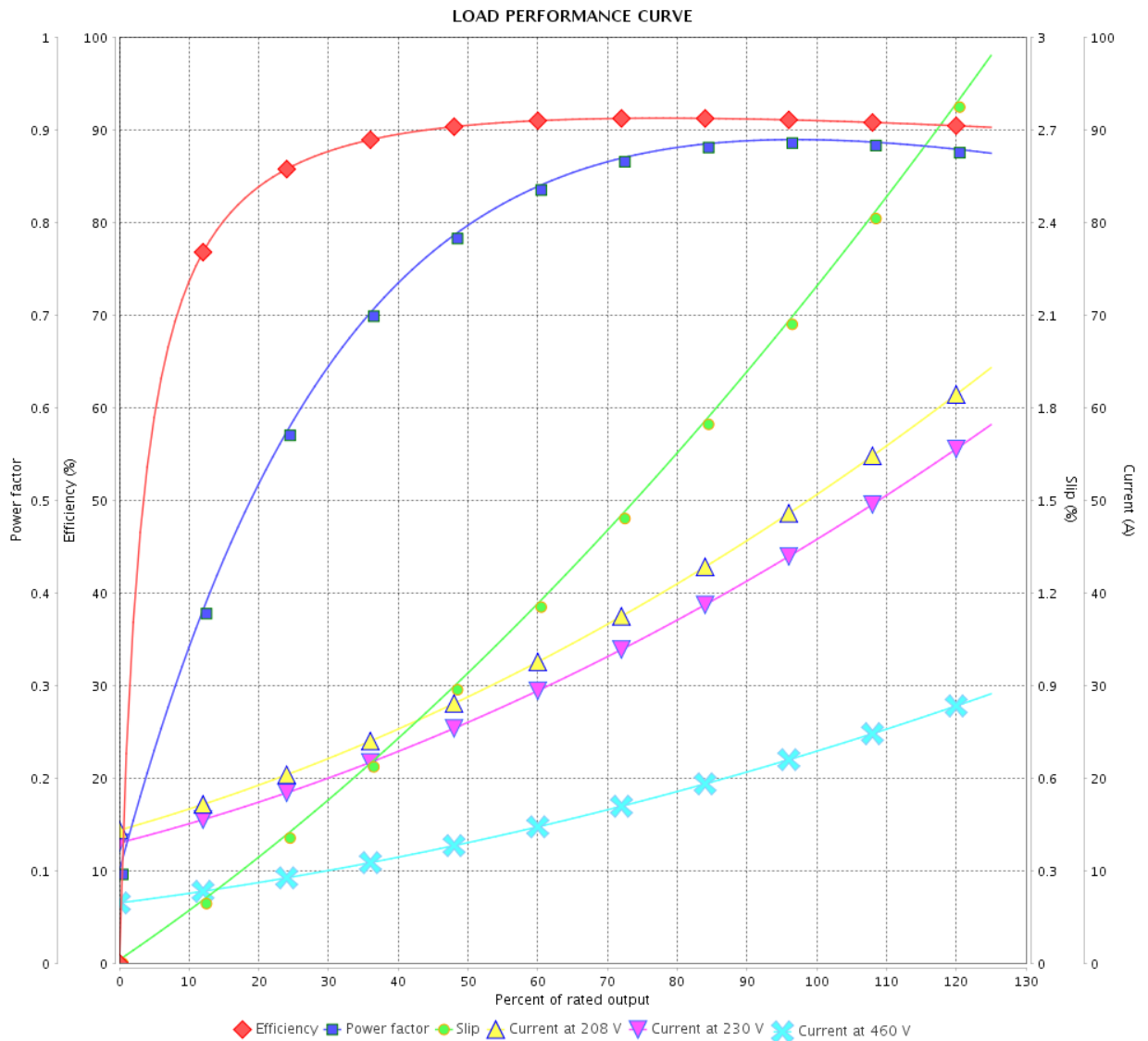


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 230/460 V 60 Hz 2P

Rated current : 46.4/23.2 A  
 LRC : 6.1  
 Rated torque : 29.8 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 3525 rpm

Moment of inertia (J) : 1.54 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				
Date				

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

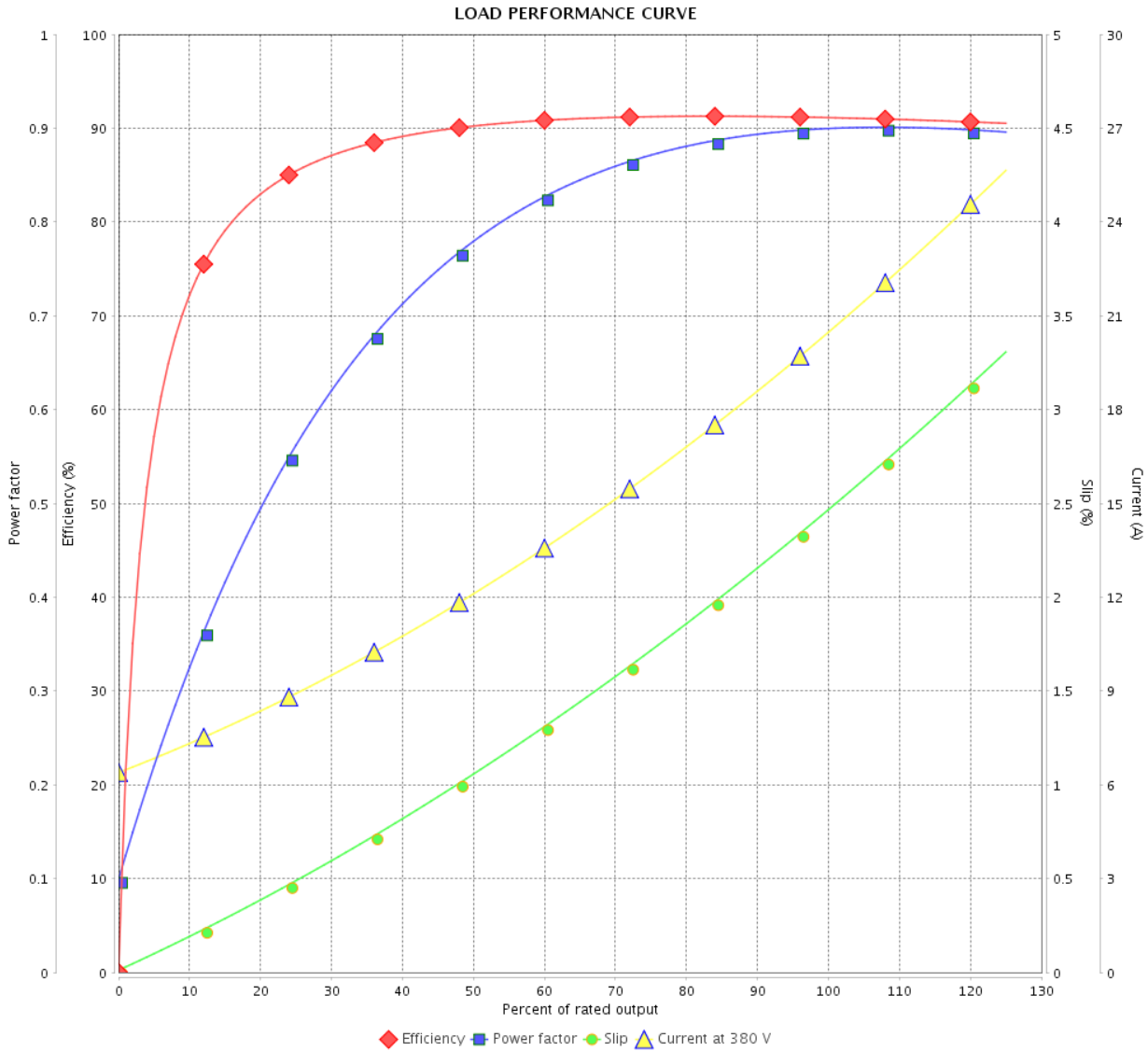


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 380 V 50 Hz 2P IE3

Rated current : 20.4 A  
 LRC : 6.9  
 Rated torque : 26.9 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 2935 rpm

Moment of inertia (J) : 1.54 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				
			10 / 36	

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

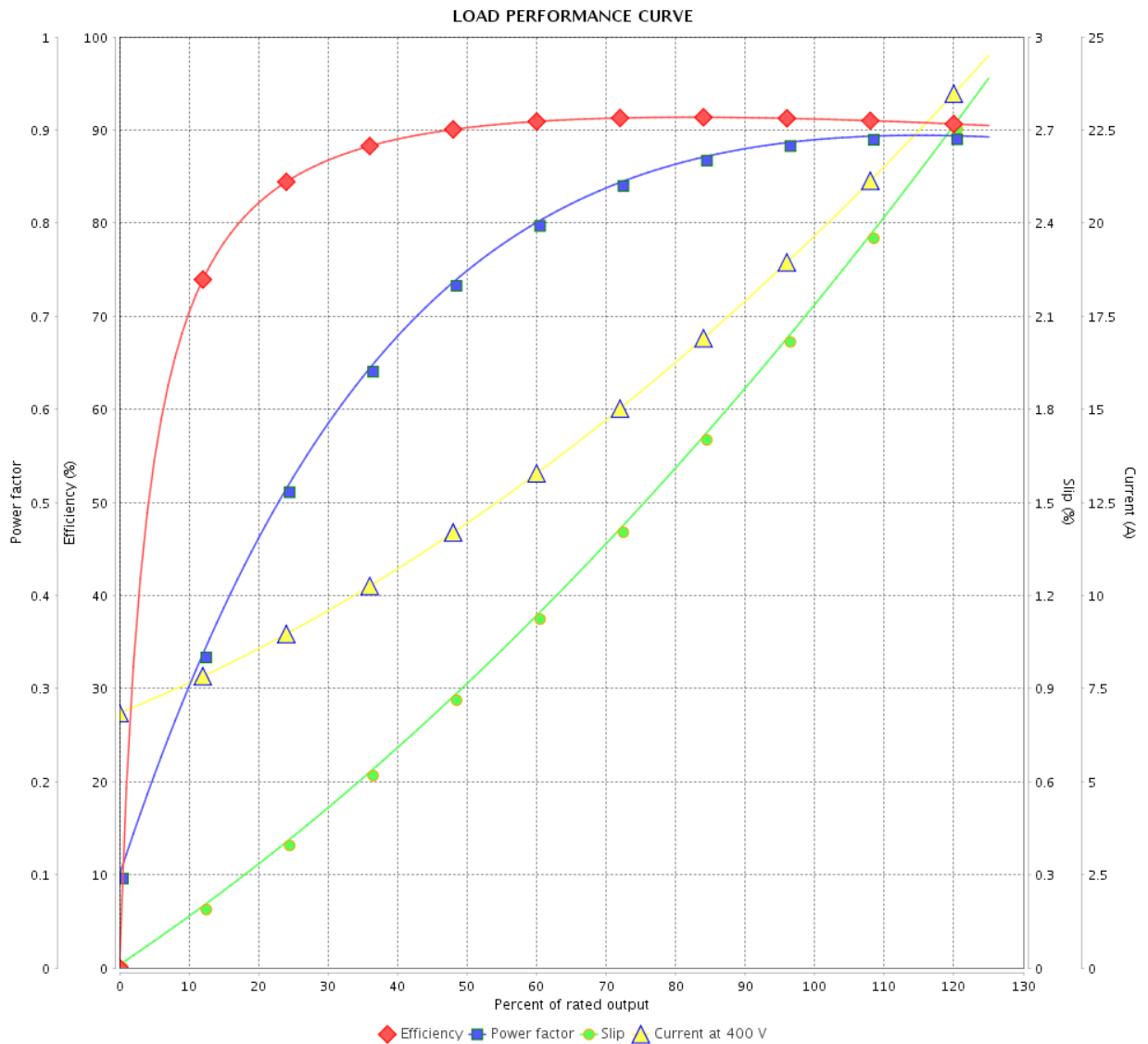


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 400 V 50 Hz 2P IE3

Rated current : 19.6 A  
 LRC : 7.7  
 Rated torque : 26.8 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 280 %  
 Rated speed : 2945 rpm

Moment of inertia (J) : 1.54 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



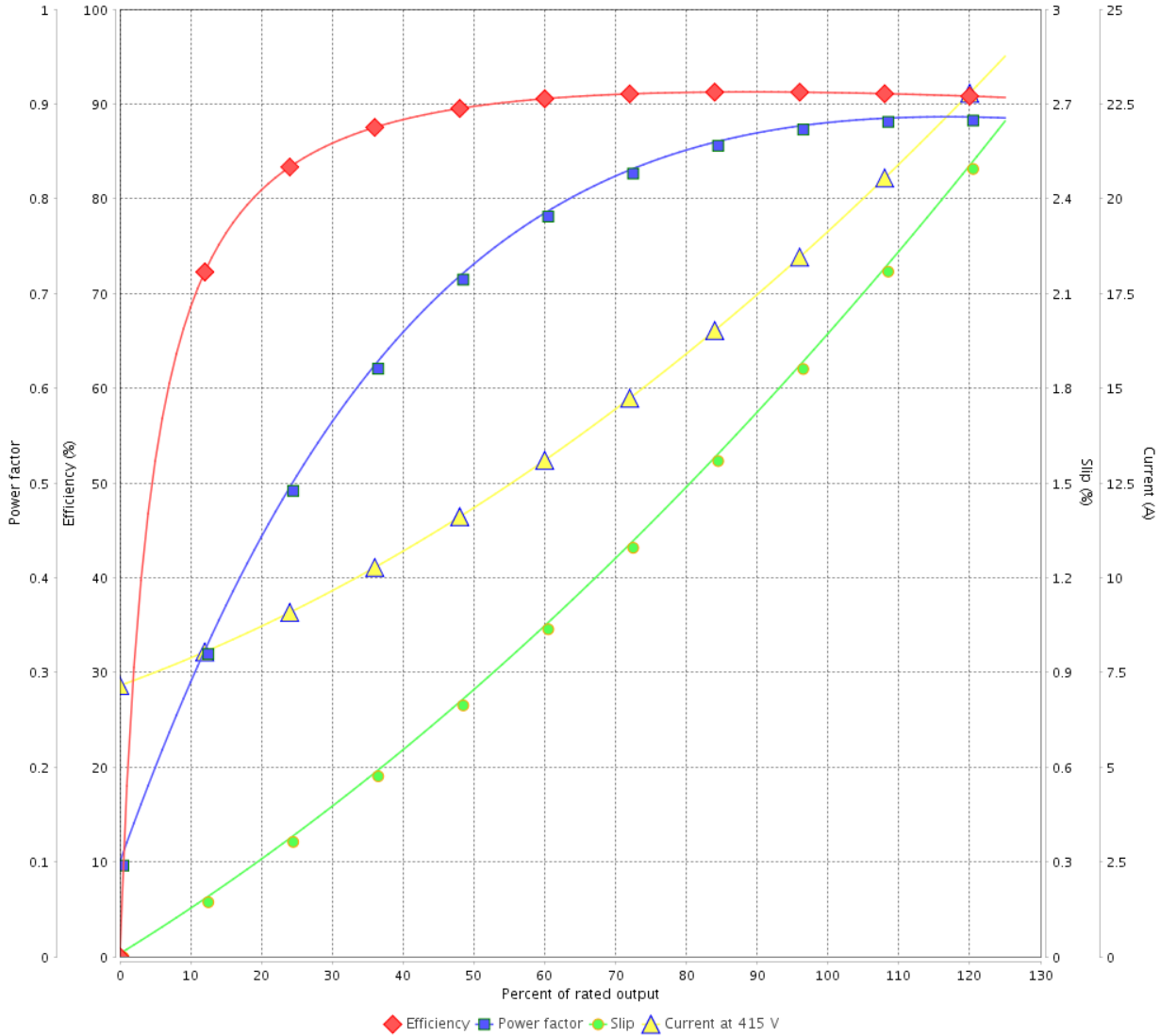
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 2P IE3

Rated current : 19.1 A  
 LRC : 8.1  
 Rated torque : 26.8 ft.lb  
 Locked rotor torque : 270 %  
 Breakdown torque : 310 %  
 Rated speed : 2950 rpm

Moment of inertia (J) : 1.54 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 12 / 36	Revision
Checked by				
Date	14/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

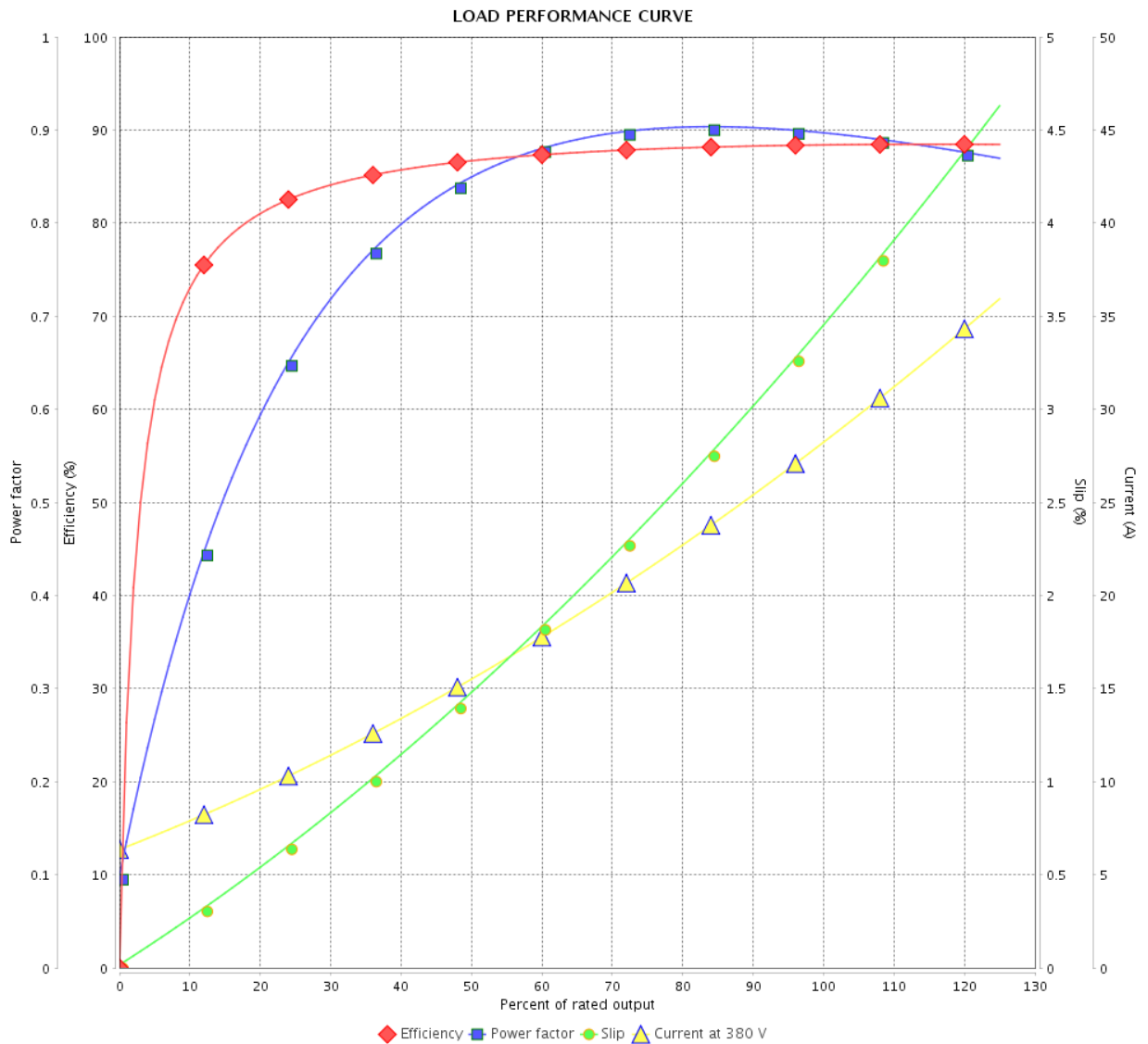


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 380 V 50 Hz 2P

Rated current : 28.9 A  
 LRC : 5.1  
 Rated torque : 36.3 ft.lb  
 Locked rotor torque : 160 %  
 Breakdown torque : 190 %  
 Rated speed : 2885 rpm

Moment of inertia (J) : 1.54 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



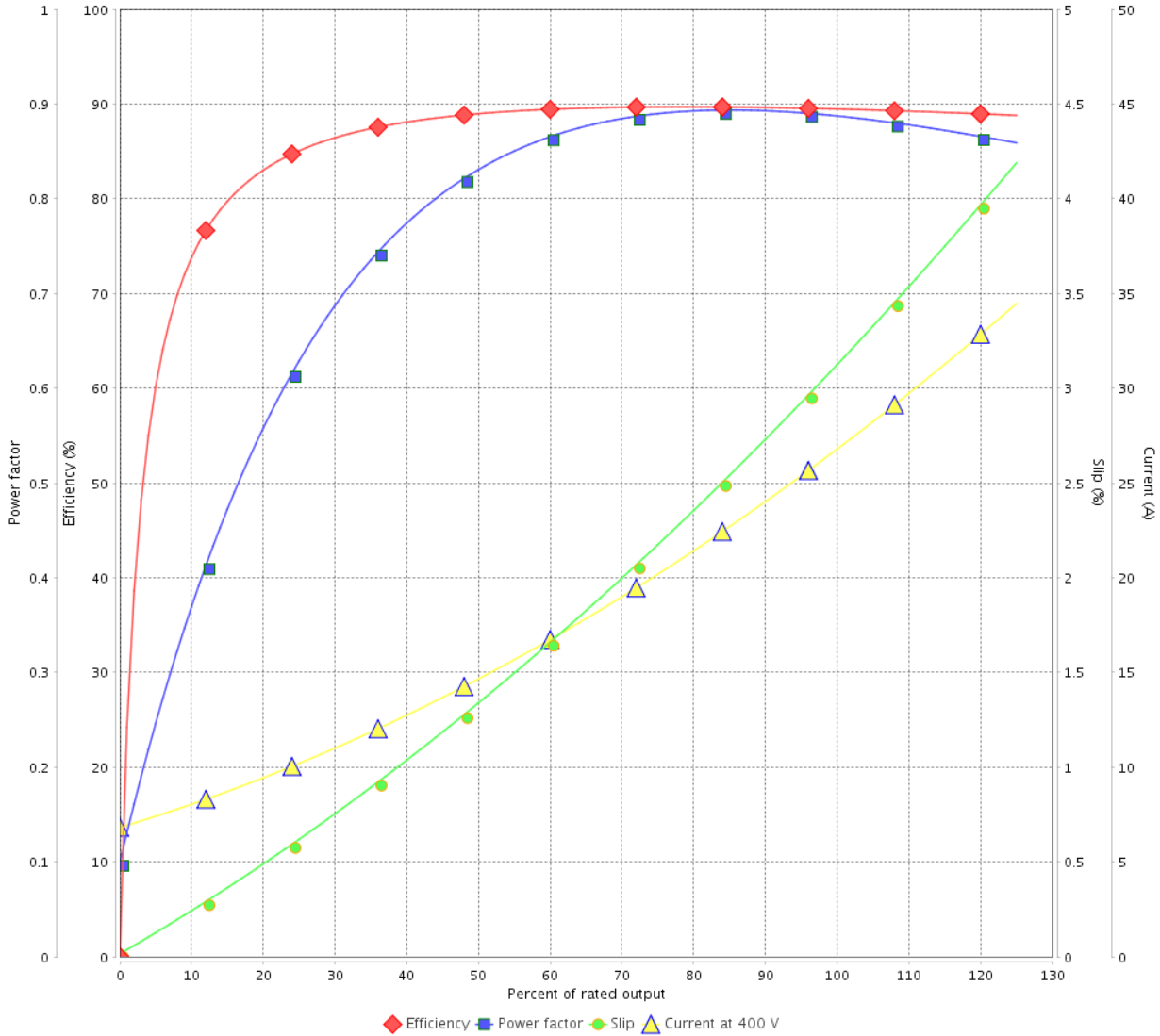
Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 2P IE1

Rated current : 27.2 A  
 LRC : 5.7  
 Rated torque : 36.2 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 210 %  
 Rated speed : 2905 rpm

Moment of inertia (J) : 1.54 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		14 / 36		
Date	14/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

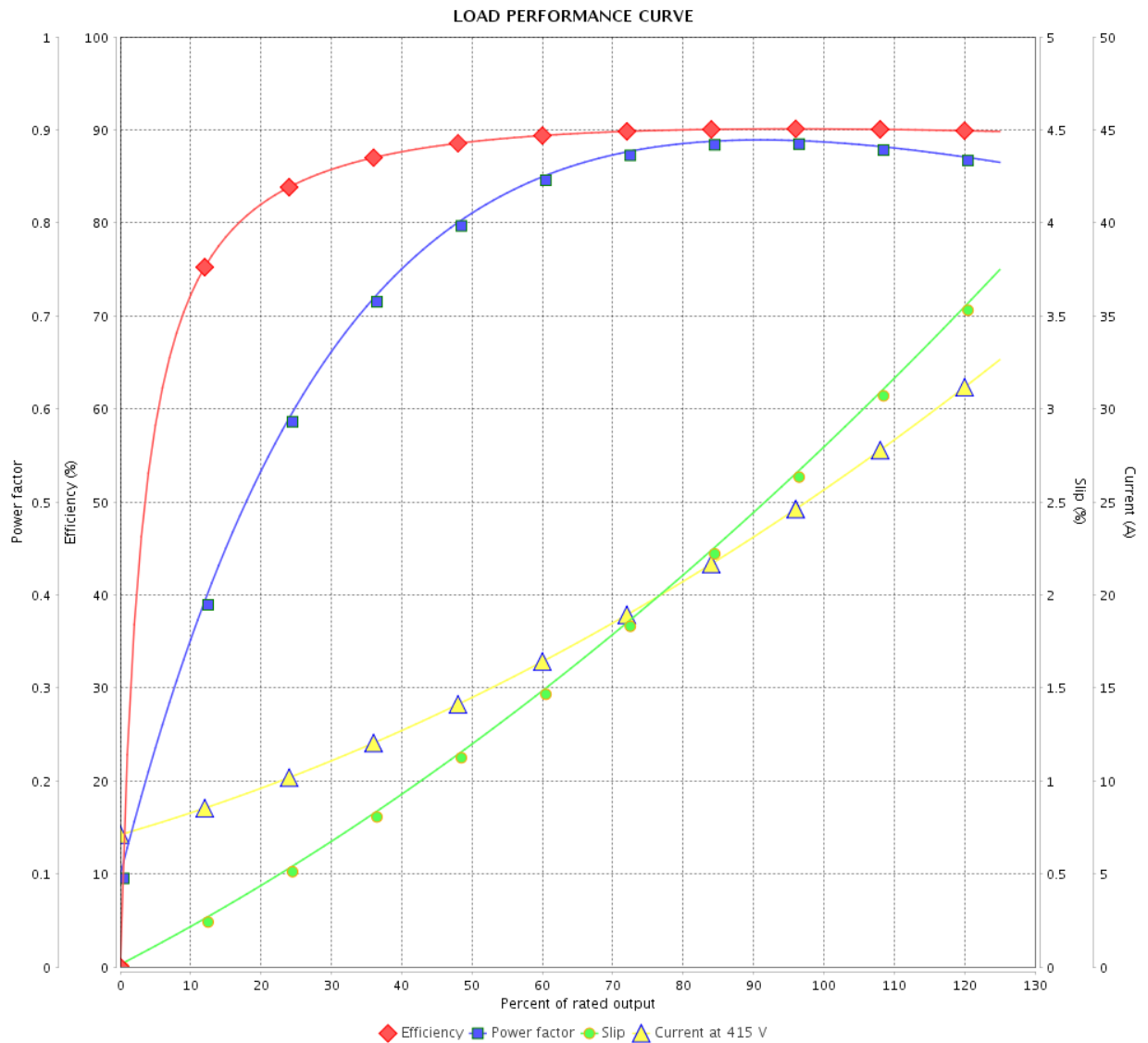


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 415 V 50 Hz 2P IE1

Rated current : 26.2 A  
 LRC : 6.1  
 Rated torque : 36.0 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 229 %  
 Rated speed : 2915 rpm

Moment of inertia (J) : 1.54 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		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 : 11441798  
Catalog # : 02036ET3E256T-W22

Performance : 230/460 V 60 Hz 2P

Rated current	: 46.4/23.2 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 29.8 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 3525 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	

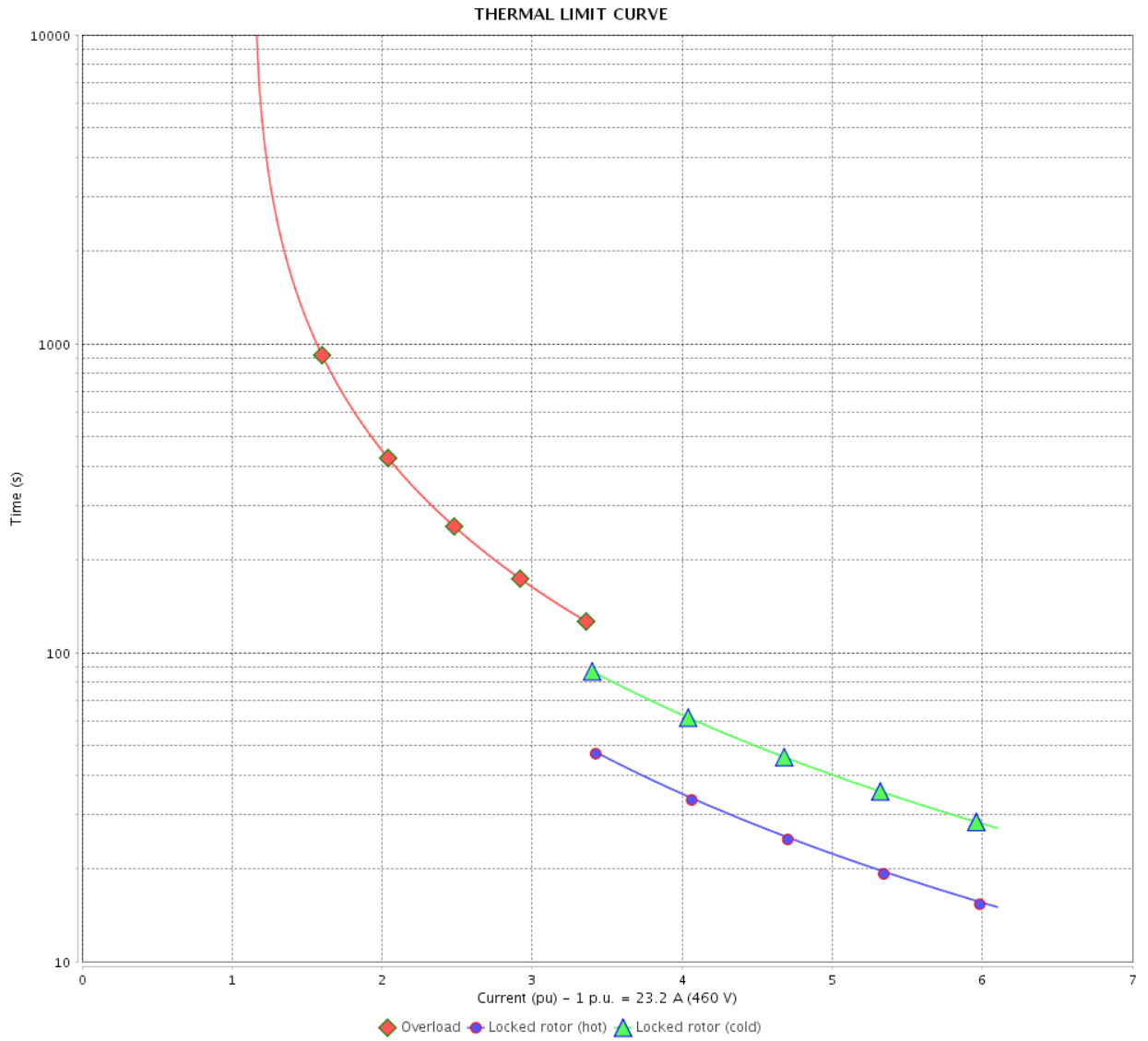


# THERMAL LIMIT CURVE

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 : 11441798  
Catalog # : 02036ET3E256T-W22

Performance : 380 V 50 Hz 2P IE3

Rated current	: 20.4 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 26.9 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2935 rpm	Design	: B

Heating constant

Cooling constant

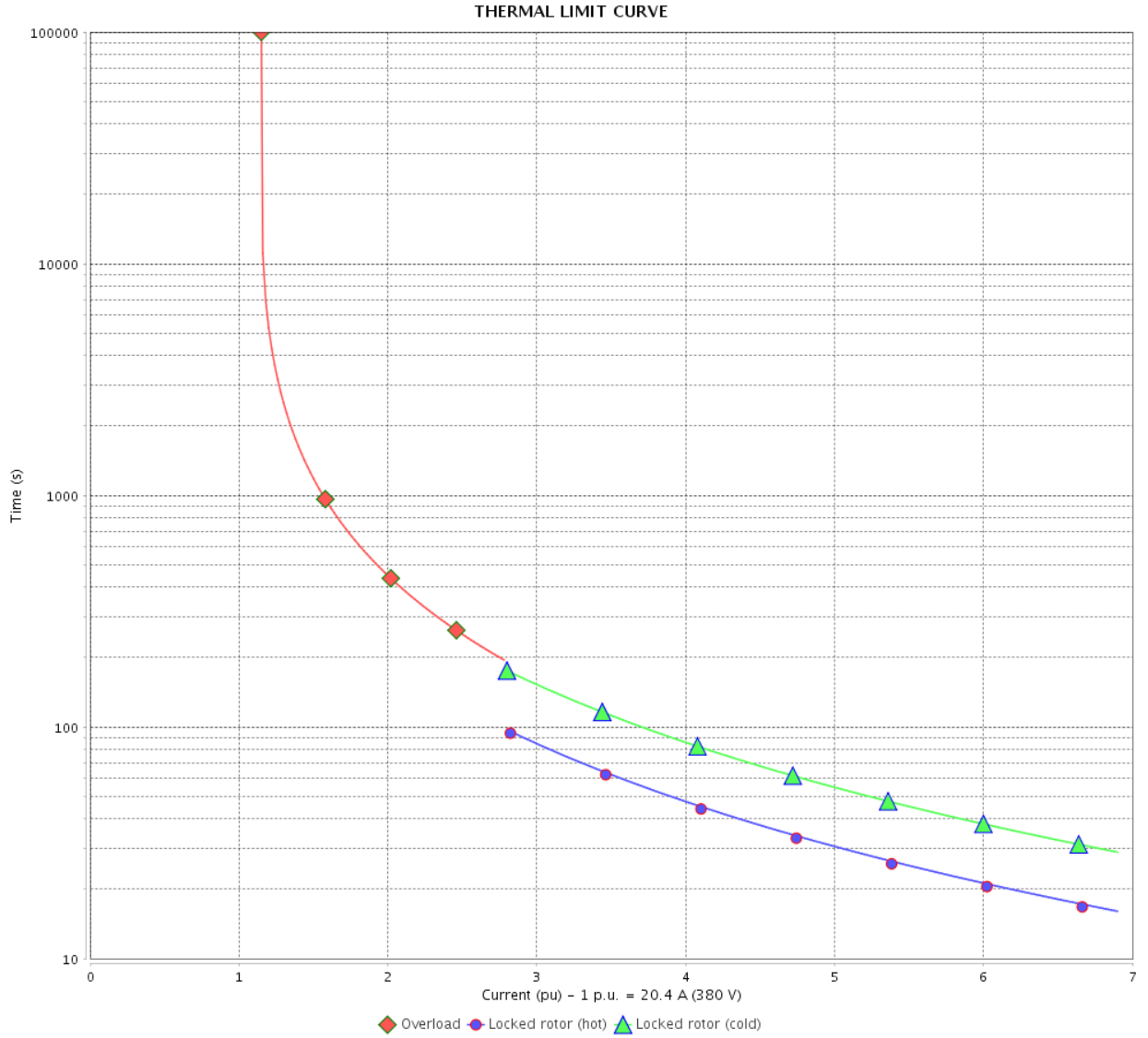
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		18 / 36	

# 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 : 11441798  
Catalog # : 02036ET3E256T-W22

Performance : 400 V 50 Hz 2P IE3

Rated current	: 19.6 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 26.8 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B

Heating constant

Cooling constant

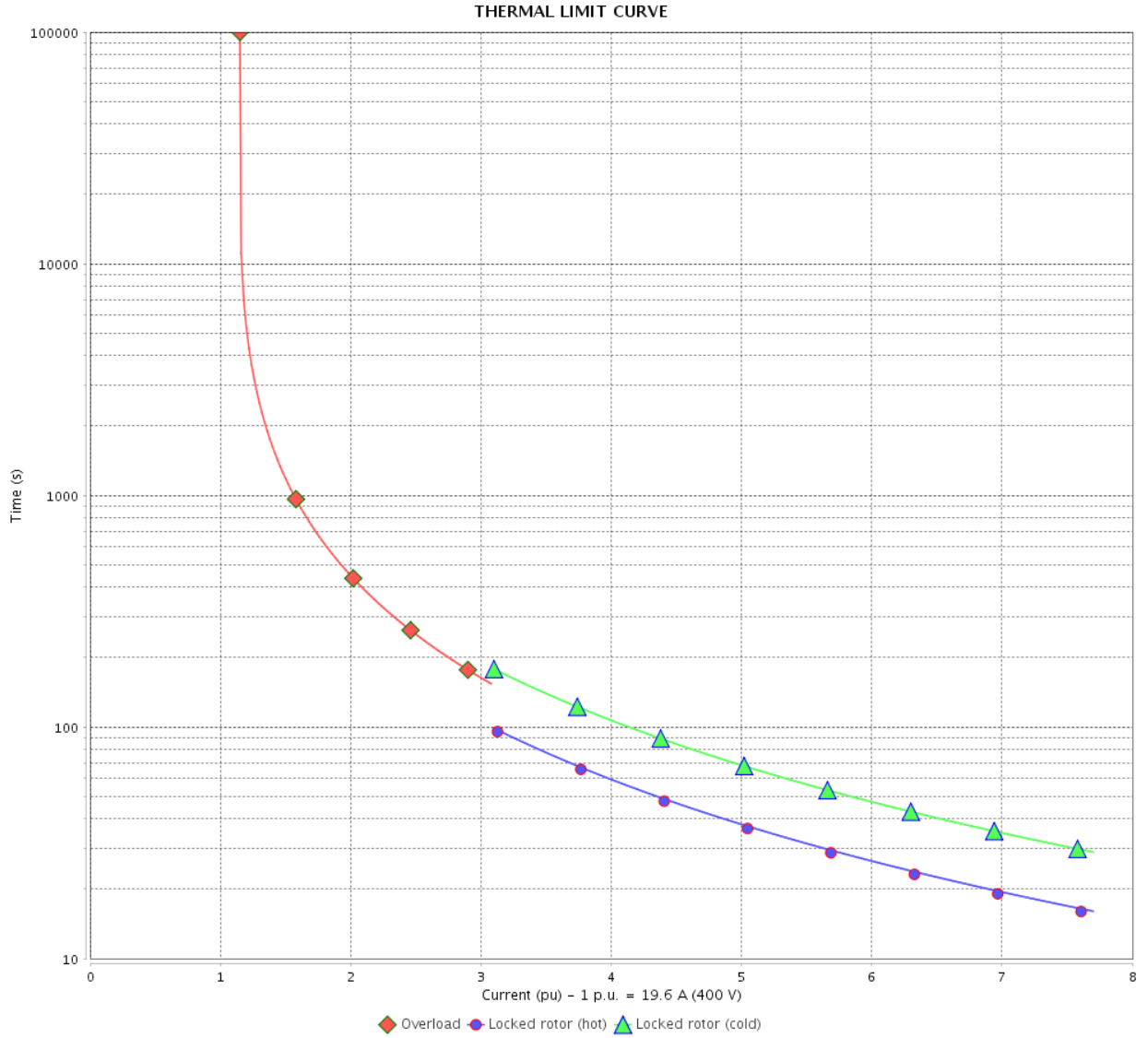
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		20 / 36	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 11441798  
Catalog # : 02036ET3E256T-W22

Performance : 415 V 50 Hz 2P IE3

Rated current	: 19.1 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 26.8 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2950 rpm	Design	: B

Heating constant

Cooling constant

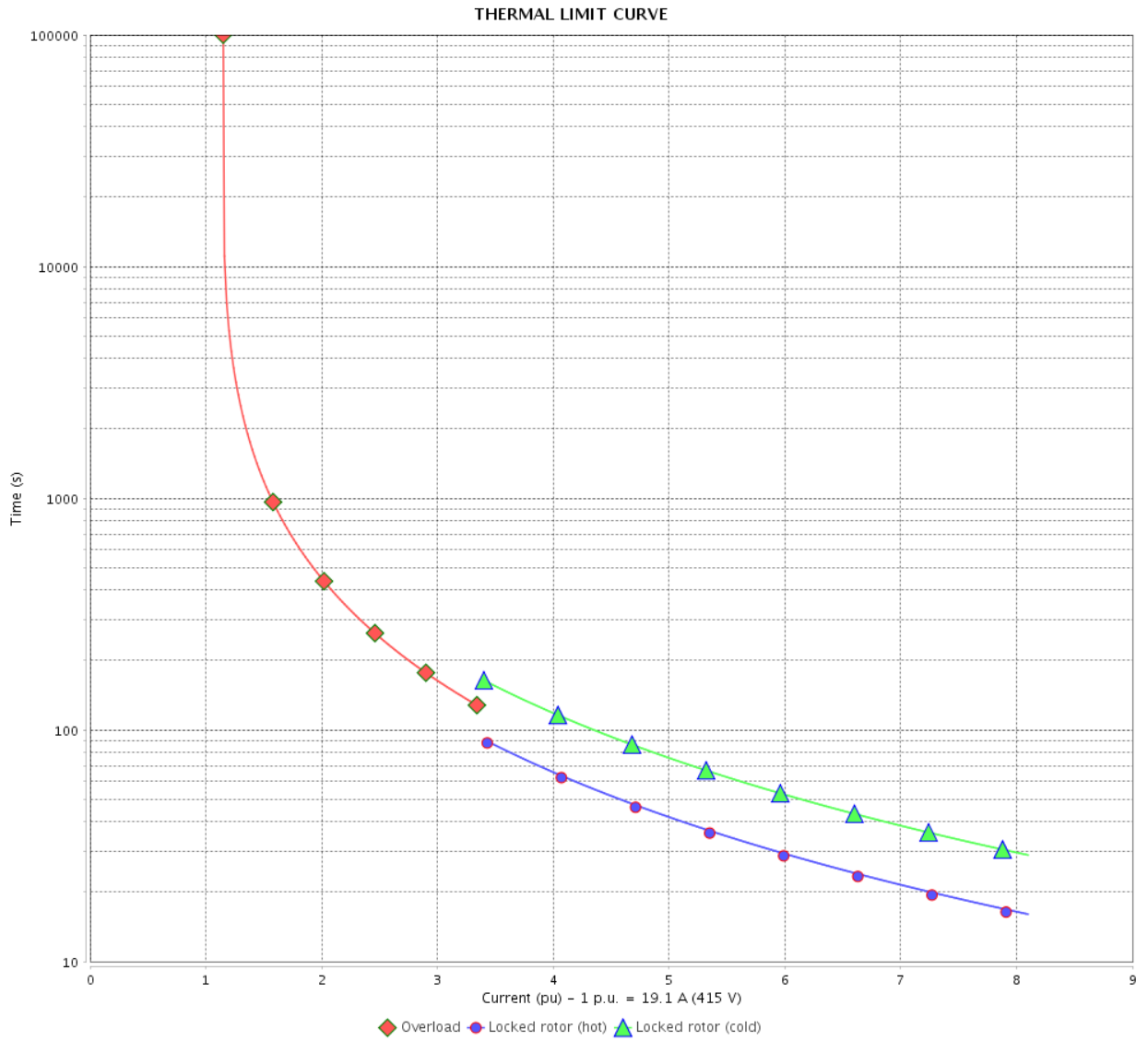
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	14/04/2022		Page 22 / 36	Revision

# 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 : 11441798  
Catalog # : 02036ET3E256T-W22

Performance : 380 V 50 Hz 2P

Rated current	: 28.9 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 36.3 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 190 %	Temperature rise	: 105 K
Rated speed	: 2885 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	

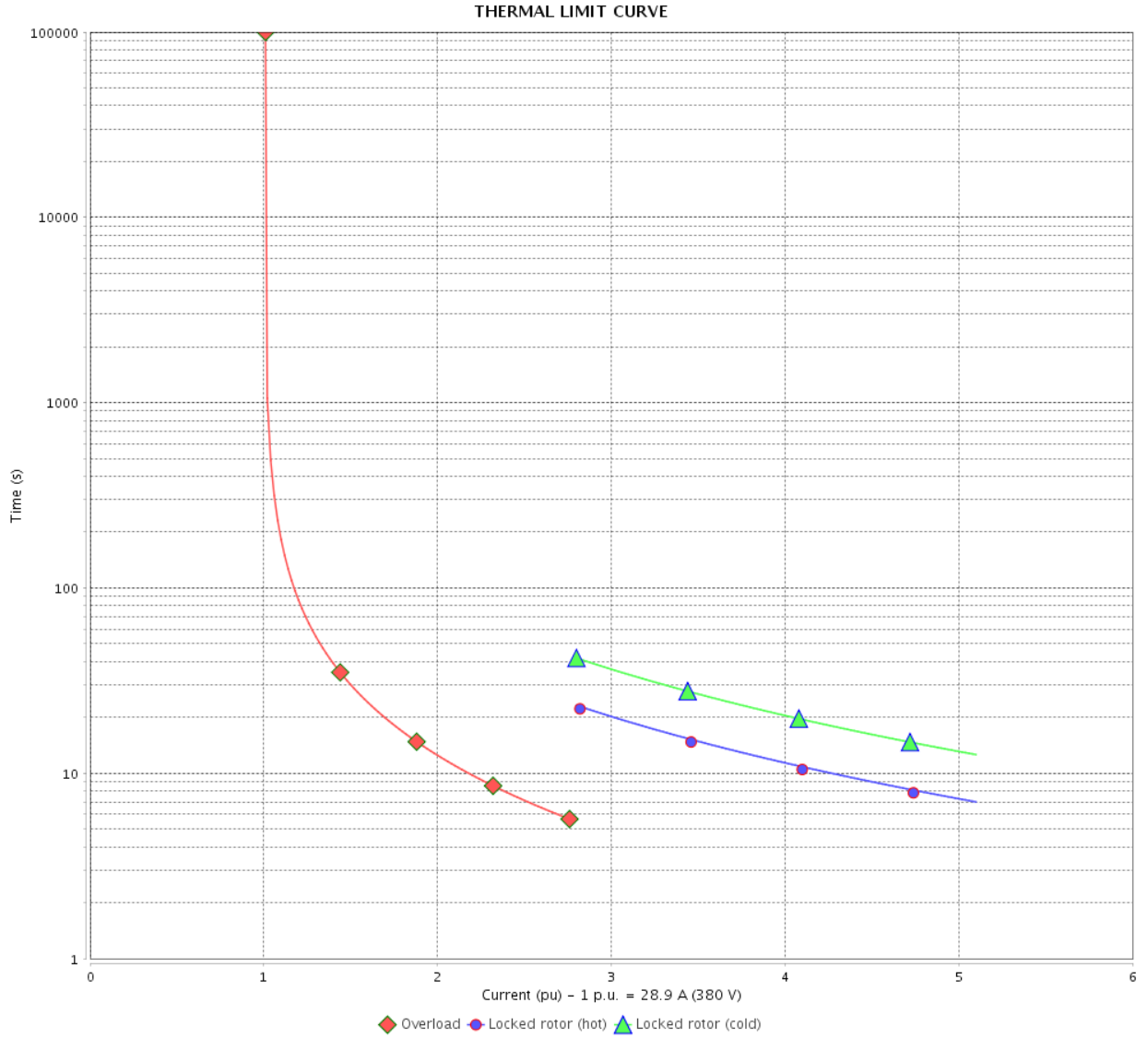


# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 11441798  
Catalog # : 02036ET3E256T-W22

Performance : 400 V 50 Hz 2P IE1

Rated current	: 27.2 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 36.2 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 2905 rpm	Design	: B

Heating constant

Cooling constant

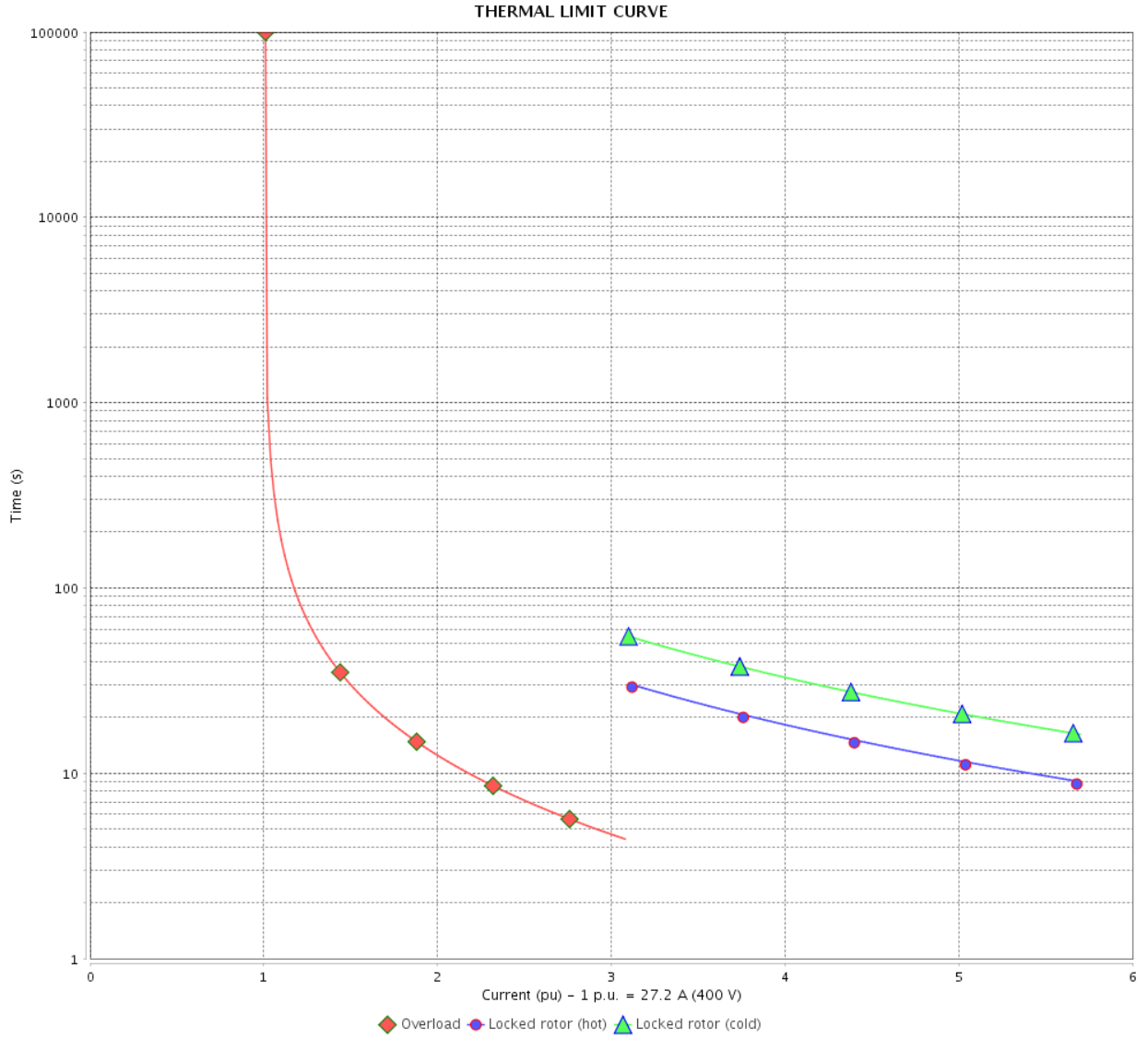
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		26 / 36	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		27 / 36		
Date		14/04/2022		

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 11441798  
Catalog # : 02036ET3E256T-W22

Performance : 415 V 50 Hz 2P IE1

Rated current	: 26.2 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 36.0 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 2915 rpm	Design	: B

Heating constant

Cooling constant

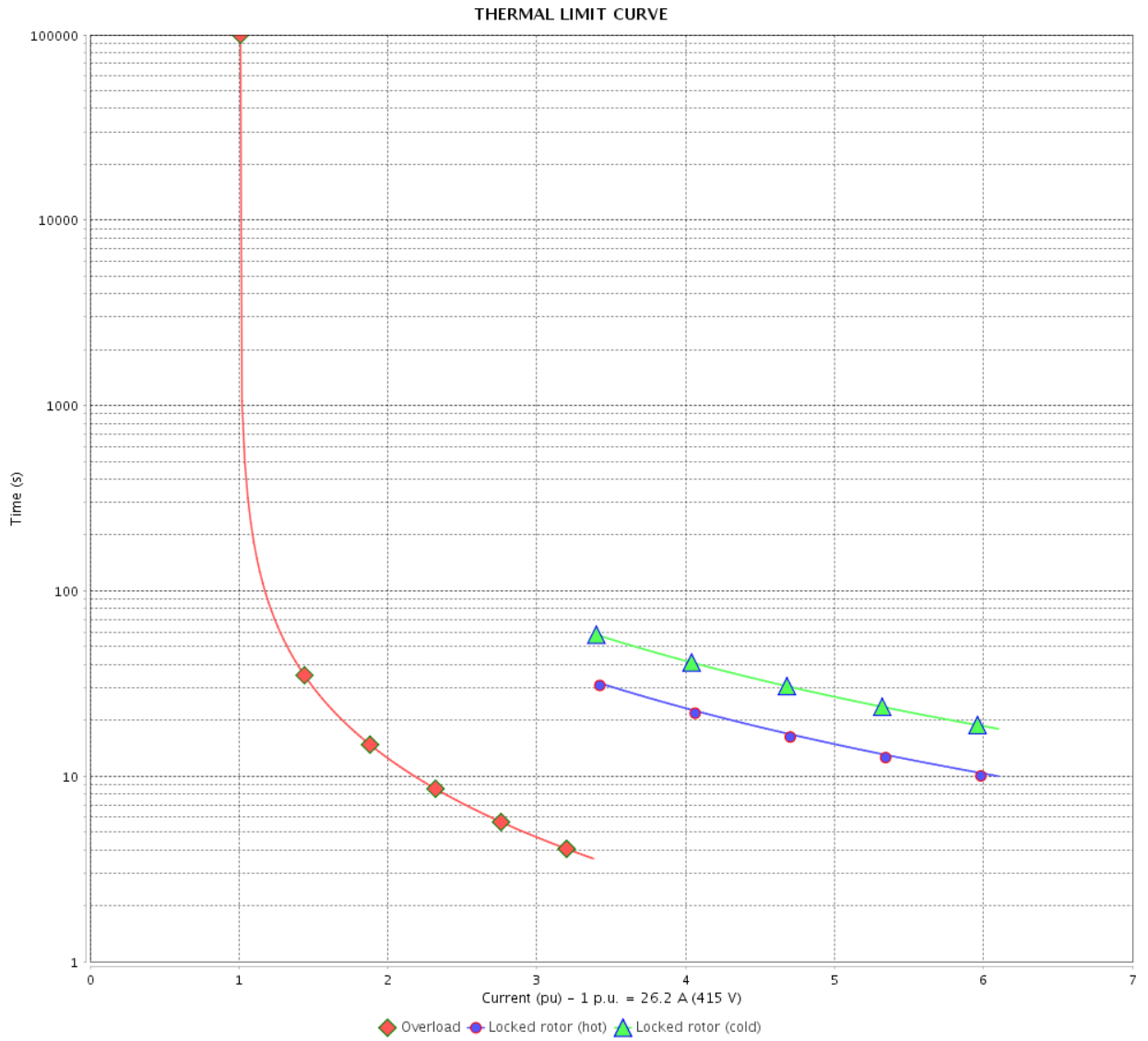
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		28 / 36	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

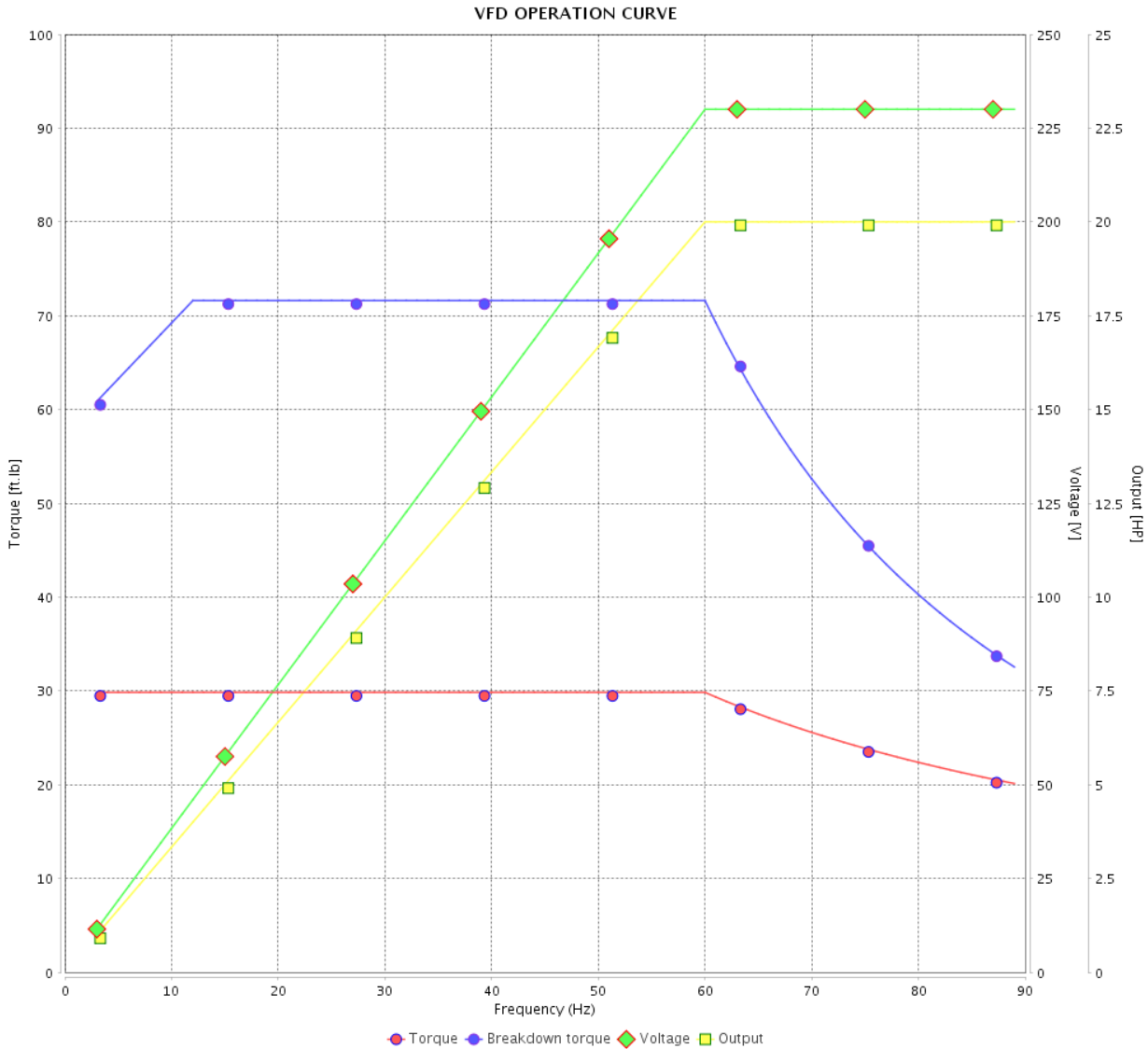


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 230/460 V 60 Hz 2P

Rated current : 46.4/23.2 A  
 LRC : 6.1  
 Rated torque : 29.8 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 3525 rpm

Moment of inertia (J) : 1.54 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			

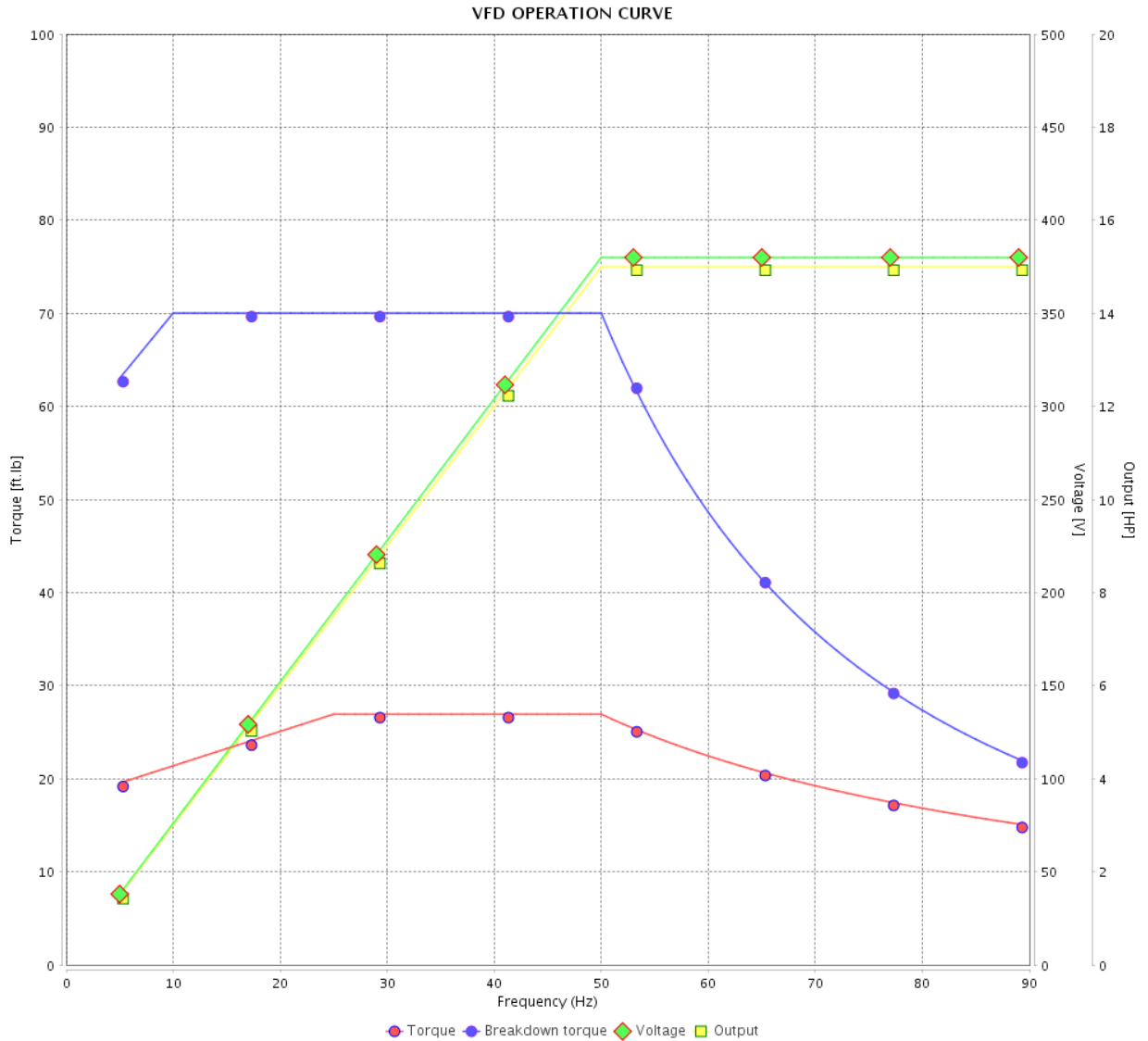
# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 11441798  
 Catalog # : 02036ET3E256T-W22



Performance : 380 V 50 Hz 2P IE3

Rated current	: 20.4 A	Moment of inertia (J)	: 1.54 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 26.9 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2935 rpm	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



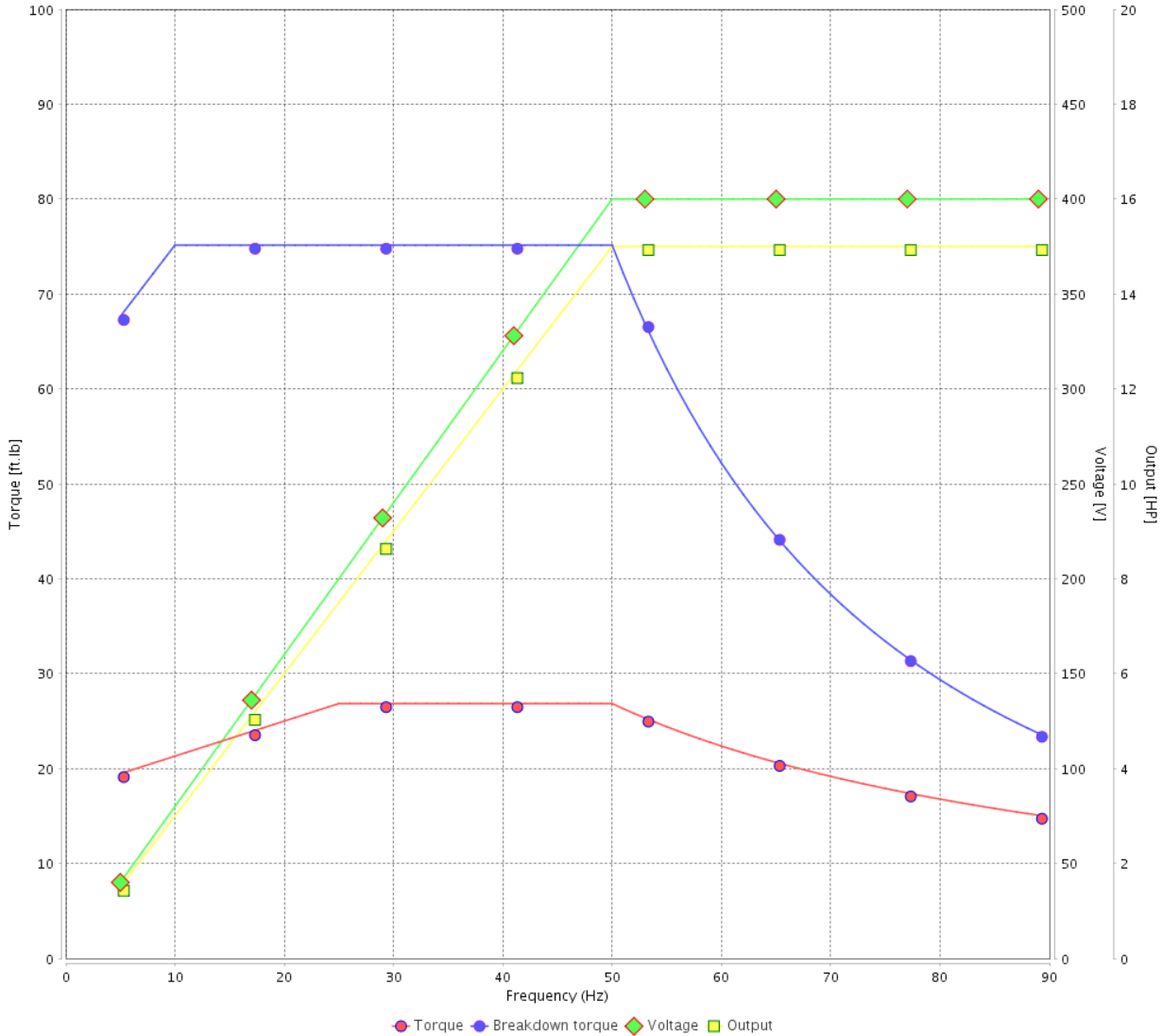
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22

VFD OPERATION CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current : 19.6 A  
 LRC : 7.7  
 Rated torque : 26.8 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 280 %  
 Rated speed : 2945 rpm

Moment of inertia (J) : 1.54 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 32 / 36	Revision
Checked by				
Date	14/04/2022			



# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

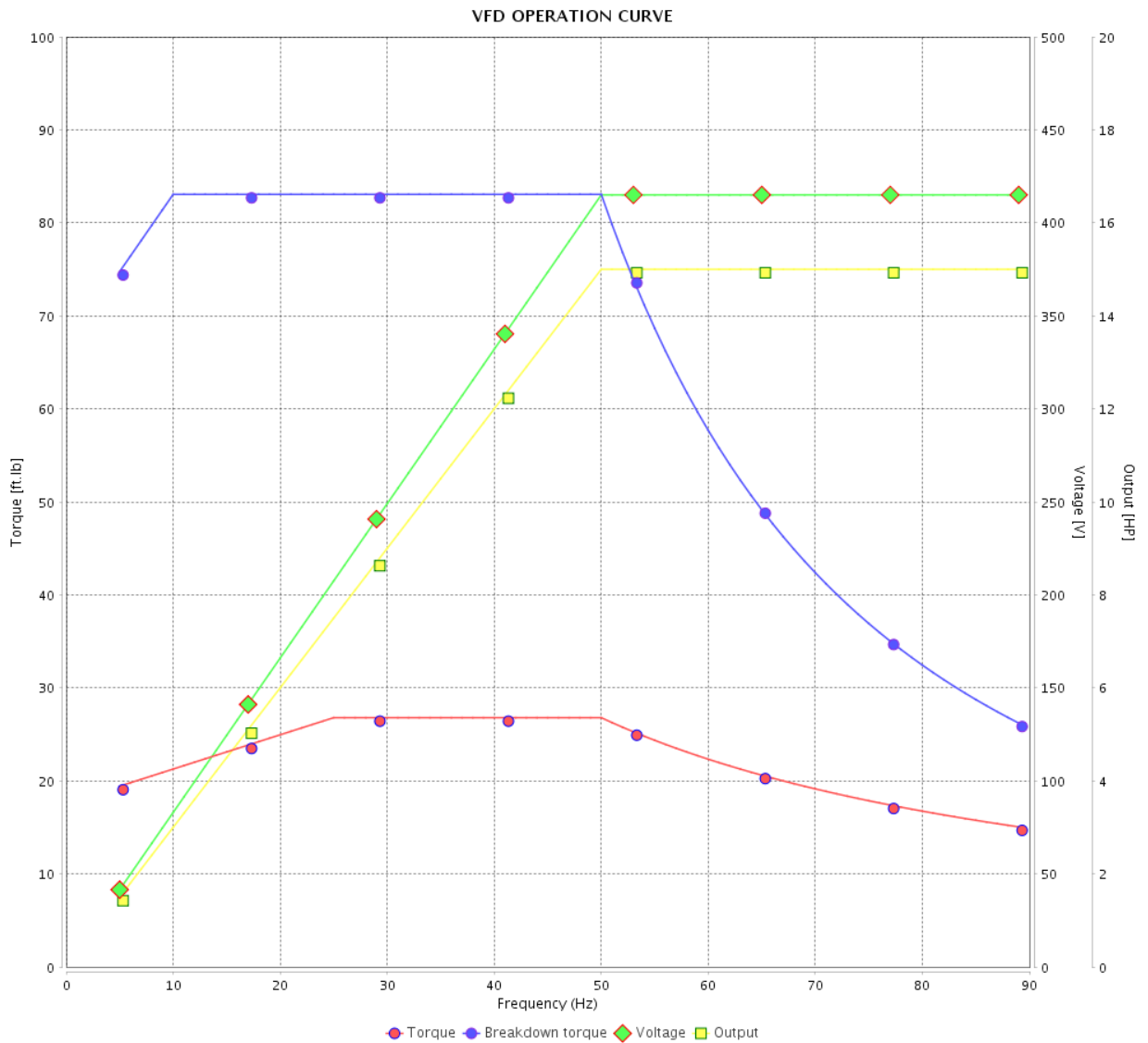


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 415 V 50 Hz 2P IE3

Rated current : 19.1 A  
 LRC : 8.1  
 Rated torque : 26.8 ft.lb  
 Locked rotor torque : 270 %  
 Breakdown torque : 310 %  
 Rated speed : 2950 rpm

Moment of inertia (J) : 1.54 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		33 / 36		
Date	14/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



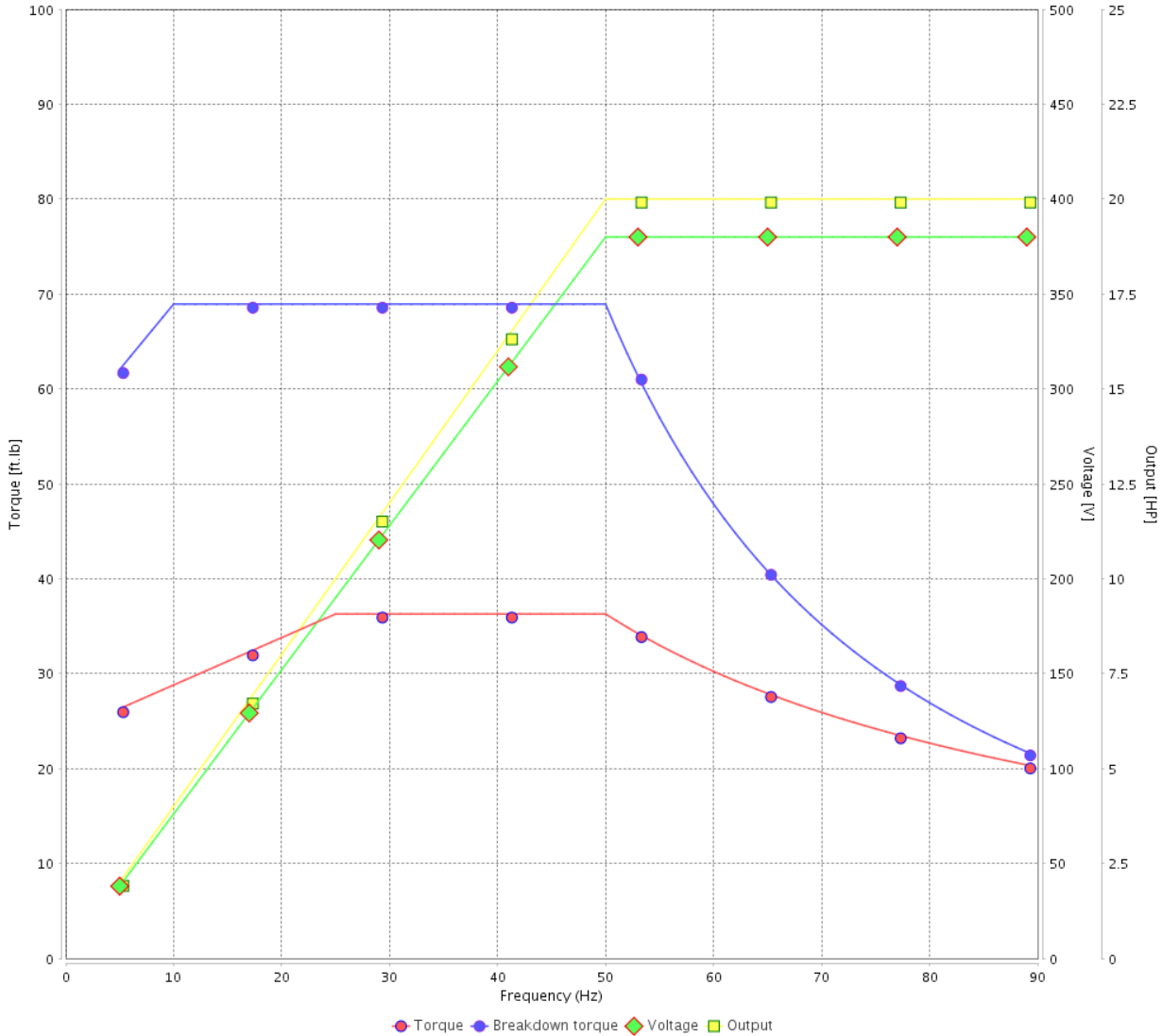
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22

VFD OPERATION CURVE



Performance : 380 V 50 Hz 2P

Rated current : 28.9 A  
 LRC : 5.1  
 Rated torque : 36.3 ft.lb  
 Locked rotor torque : 160 %  
 Breakdown torque : 190 %  
 Rated speed : 2885 rpm

Moment of inertia (J) : 1.54 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				
Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

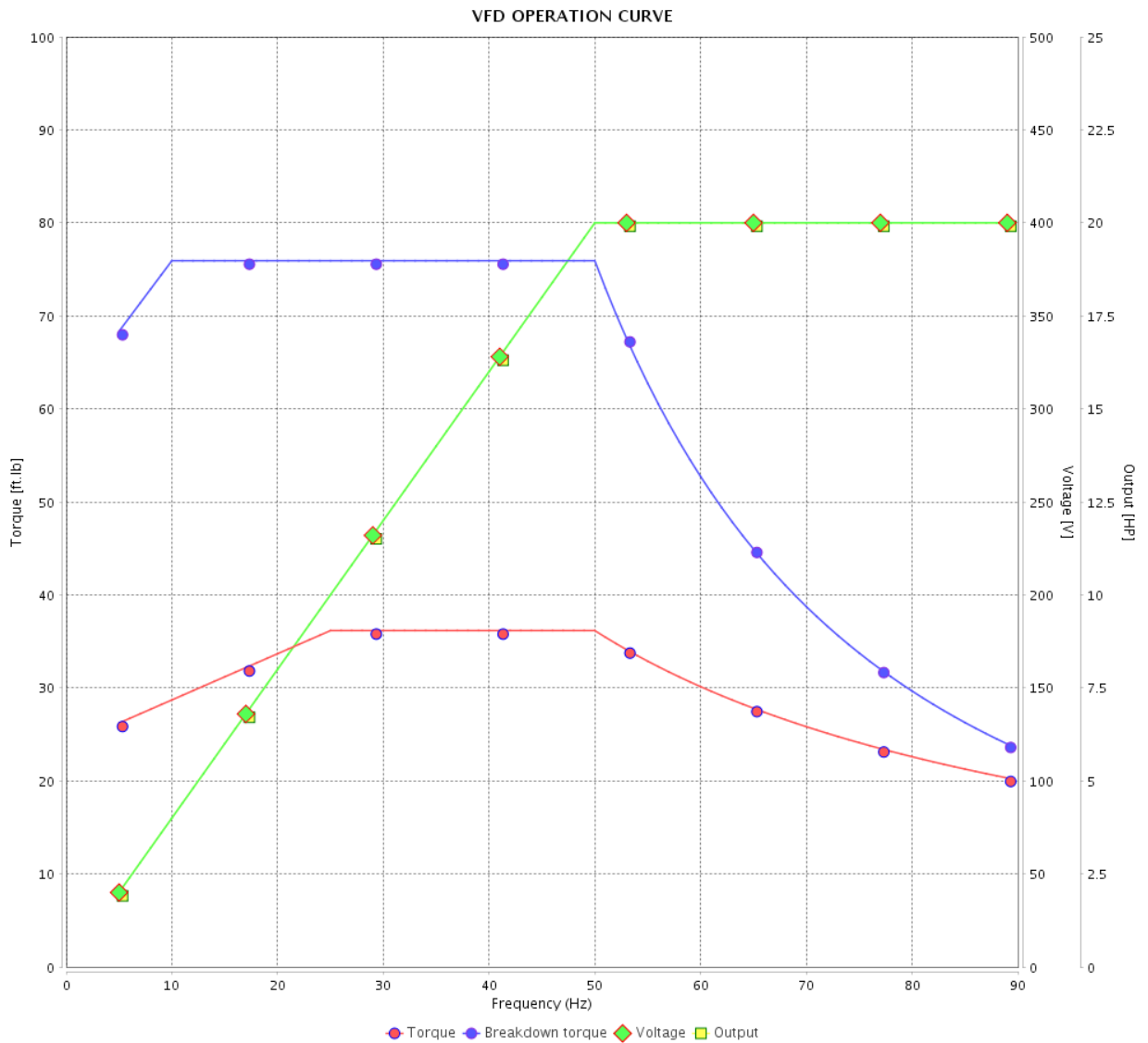


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 400 V 50 Hz 2P IE1

Rated current : 27.2 A  
 LRC : 5.7  
 Rated torque : 36.2 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 210 %  
 Rated speed : 2905 rpm

Moment of inertia (J) : 1.54 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		35 / 36		
Date	14/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

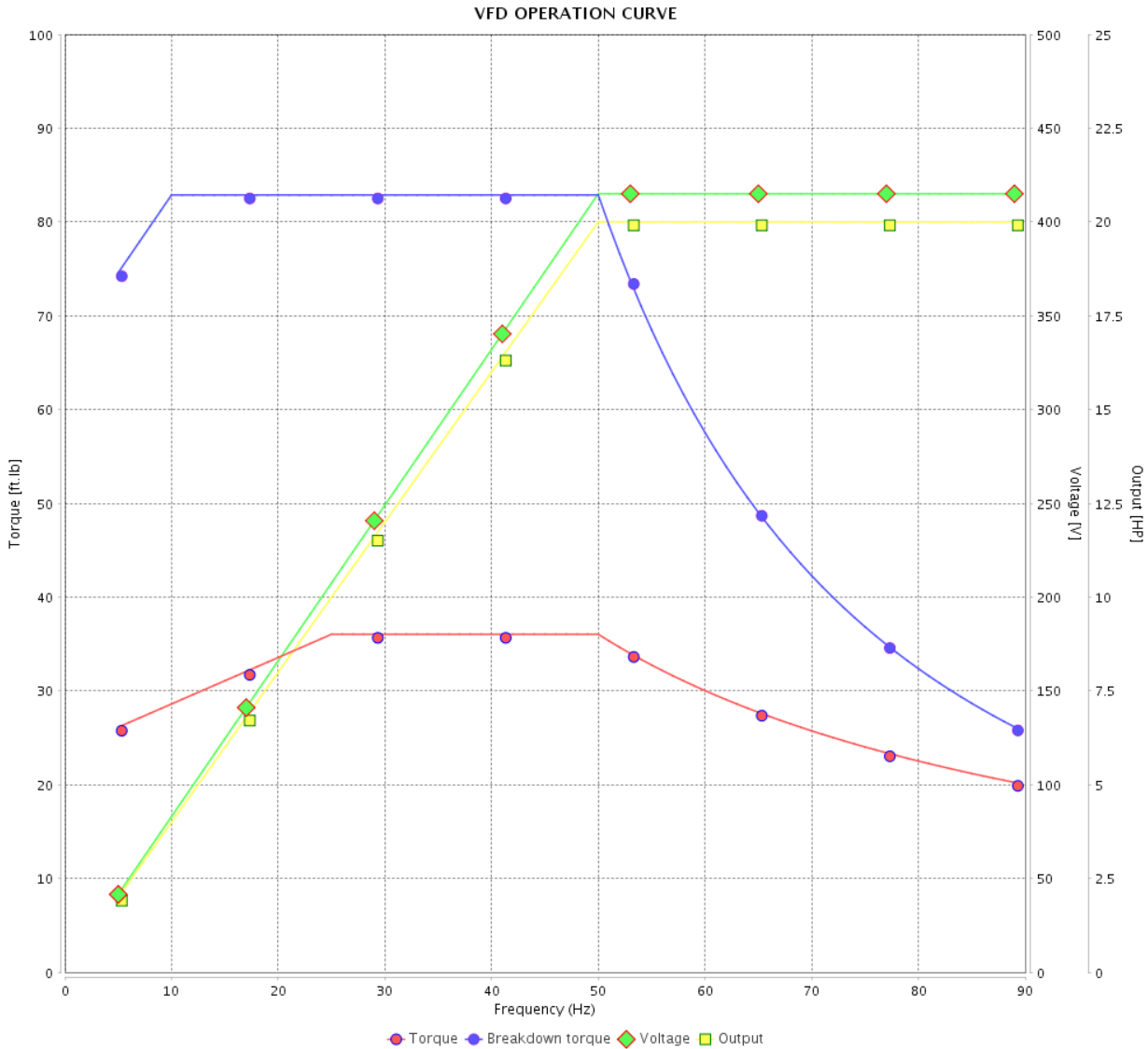


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11441798

Catalog # : 02036ET3E256T-W22



Performance : 415 V 50 Hz 2P IE1

Rated current : 26.2 A  
 LRC : 6.1  
 Rated torque : 36.0 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 229 %  
 Rated speed : 2915 rpm

Moment of inertia (J) : 1.54 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

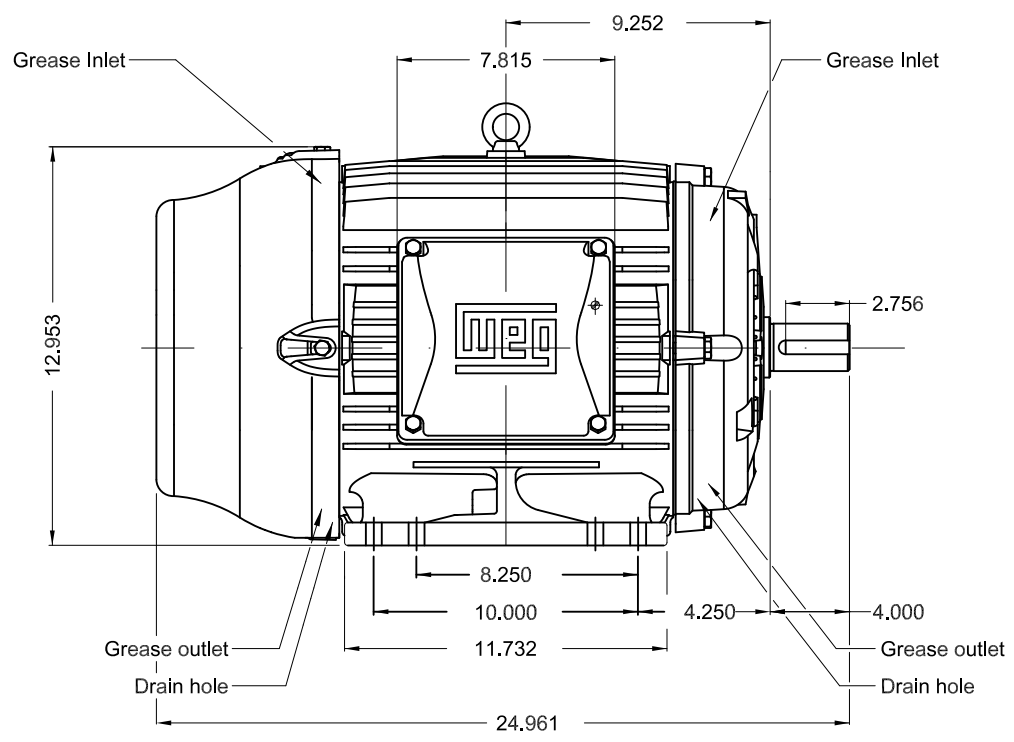
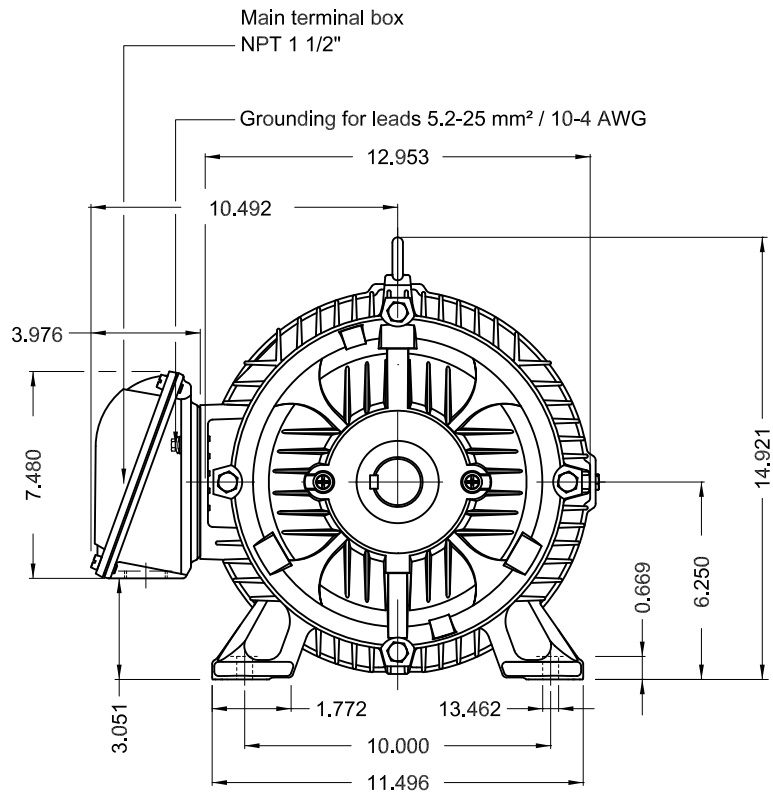
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 36 / 36	Revision
Checked by				
Date	14/04/2022			

1 2 3 4 5 6

A

B

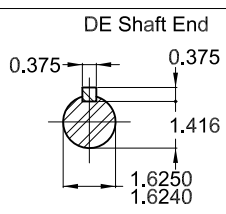
C



D

E

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



20 HP 02 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 254/6T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW  
 WDD



SHEET 1 / 1

Dimensions in inches

XME A3



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 02036ET3E256T-W22

Inverter Duty Motor  
Severe Duty

PH3 60Hz Fr. 254/6T 1000m.a.s.l. IP55 TEFC 303lb

V 230/460 A 46.4/23.2

HP 20 kW 15

SF 1.25 SFA 58.0/29.0

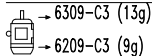
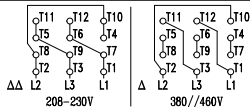
RPM 3525 PF 0.89

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

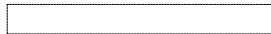
DUTY CONT. DES B Code G

USABLE @208V 51.3A SF 1.15 SFA 59.0

20HP 15kW 50Hz 380V 28.9A 2885RPM SF 1.00 EFF 87.5%



MOBIL POLYREX EM (19000h)



MADE IN BRAZIL  
11441798