

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer							
Product line		: NEMA Premium Efficiency Three-Phase		Product code :		12092272	
				Catalog # :		02036ST3QIE256TC-W22	
Frame		: 254/6TC		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>		: 321 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]	460	380	400	415	380	400	415
Rated current [A]	23.2	20.4	19.6	19.1	28.6	27.2	26.0
L. R. Amperes [A]	142	141	151	155	146	155	159
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]	6.50	6.40	6.85	7.15	6.40	6.85	7.15
Rated speed [RPM]	3520	2925	2935	2940	2895	2905	2915
Slip [%]	2.22	2.50	2.17	2.00	3.50	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)	28s (cold)	28s (cold)	28s (cold)	28s (cold)	28s (cold)	28s (cold)
	21s (hot)	16s (hot)	16s (hot)	16s (hot)	16s (hot)	16s (hot)	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	90.1	90.2	89.5	92.4	91.5
	50%	91.0	90.6	90.4	89.8	91.0	91.0
	75%	91.7	90.9	91.2	91.1	90.2	91.0
	100%	91.0	91.2	91.2	91.2	88.5	90.2
Power Factor	25%	0.57	0.53	0.50	0.48	0.63	0.57
	50%	0.82	0.78	0.75	0.73	0.86	0.82
	75%	0.87	0.87	0.85	0.84	0.89	0.87
	100%	0.89	0.90	0.89	0.88	0.90	0.89
Bearing type	: Drive end		: Non drive end		Foundation loads		
	: 6309 C3		: 6209 C3		Max. traction : 236 lb		
	: Inpro/Seal		: Inpro/Seal		Max. compression : 558 lb		
	: 19000 h		: 20000 h				
	: 13 g		: 9 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.			
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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



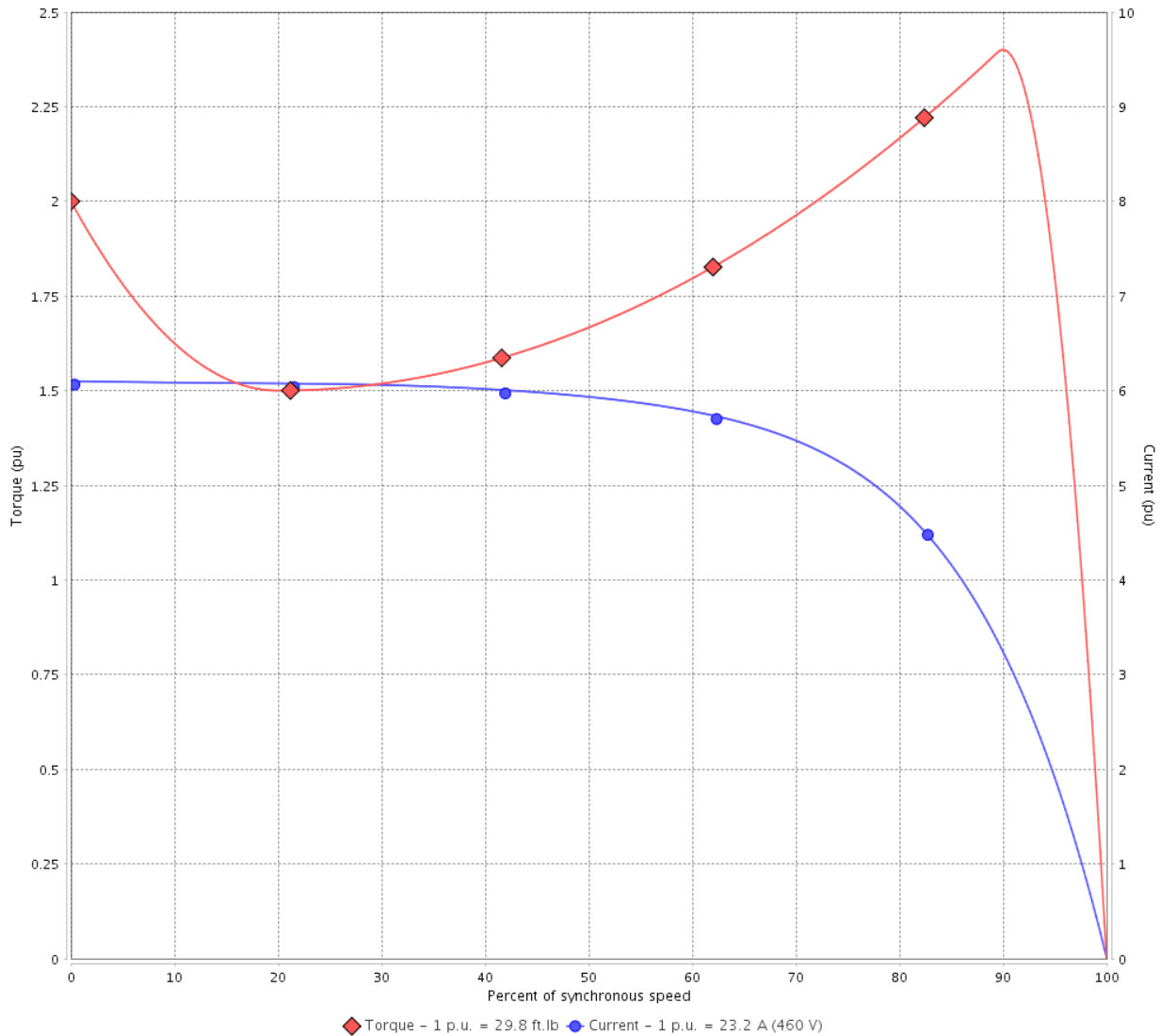
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 2P

Rated current	: 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	: 3520 rpm	Design	: B

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

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# TORQUE AND CURRENT VS SPEED CURVE



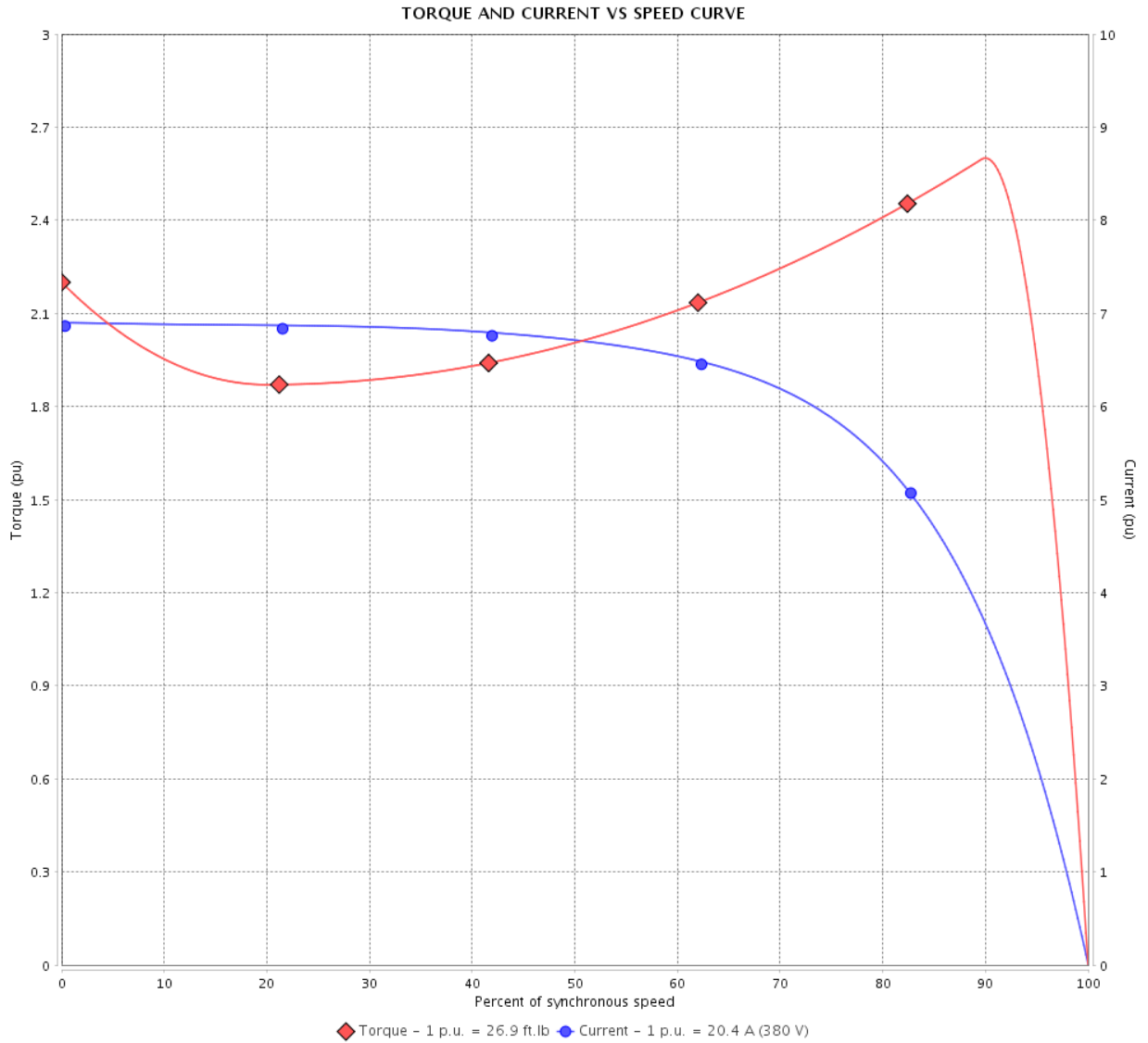
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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 : 2925 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)

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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



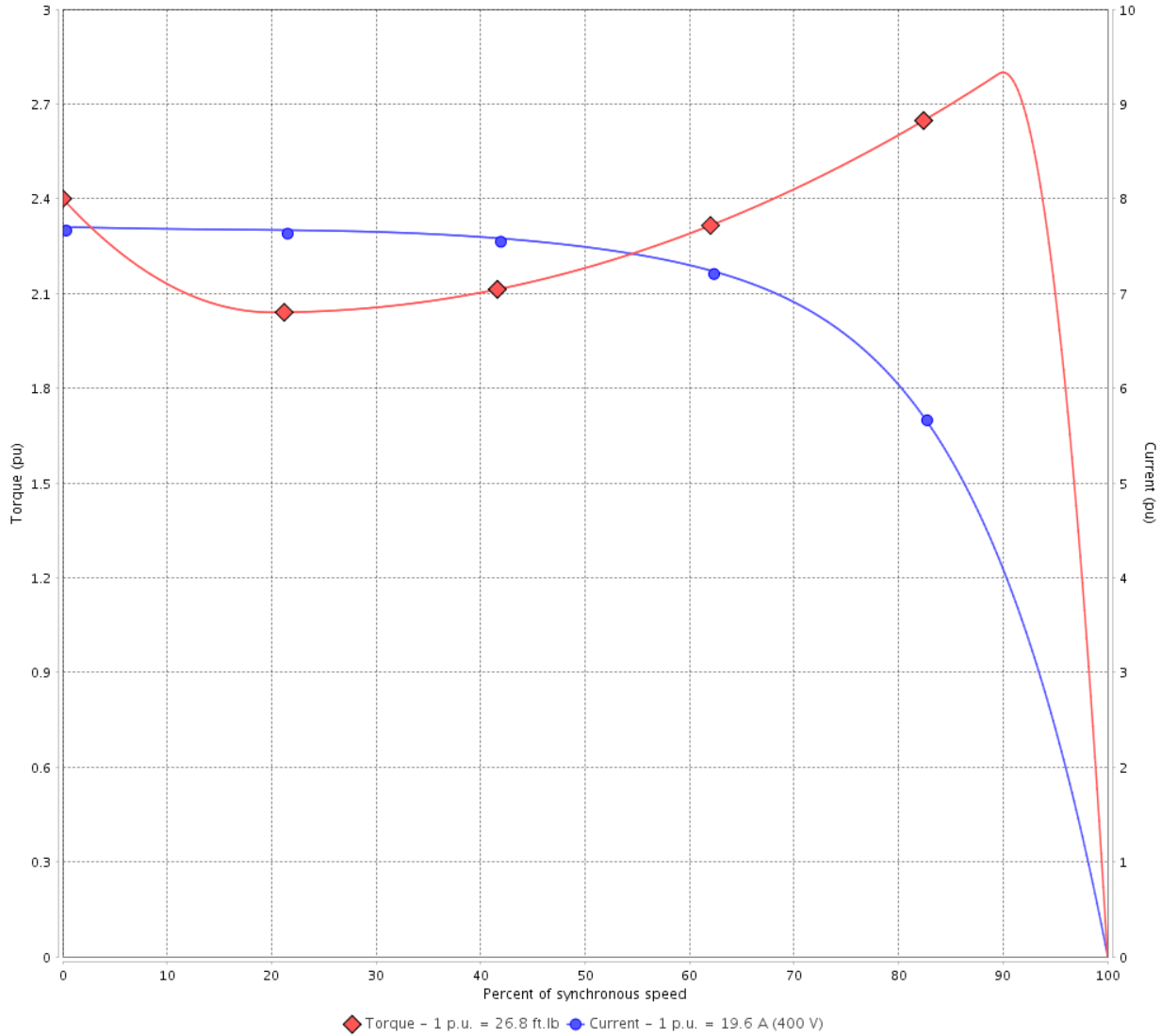
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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	: 2935 rpm	Design	: B

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

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# TORQUE AND CURRENT VS SPEED CURVE



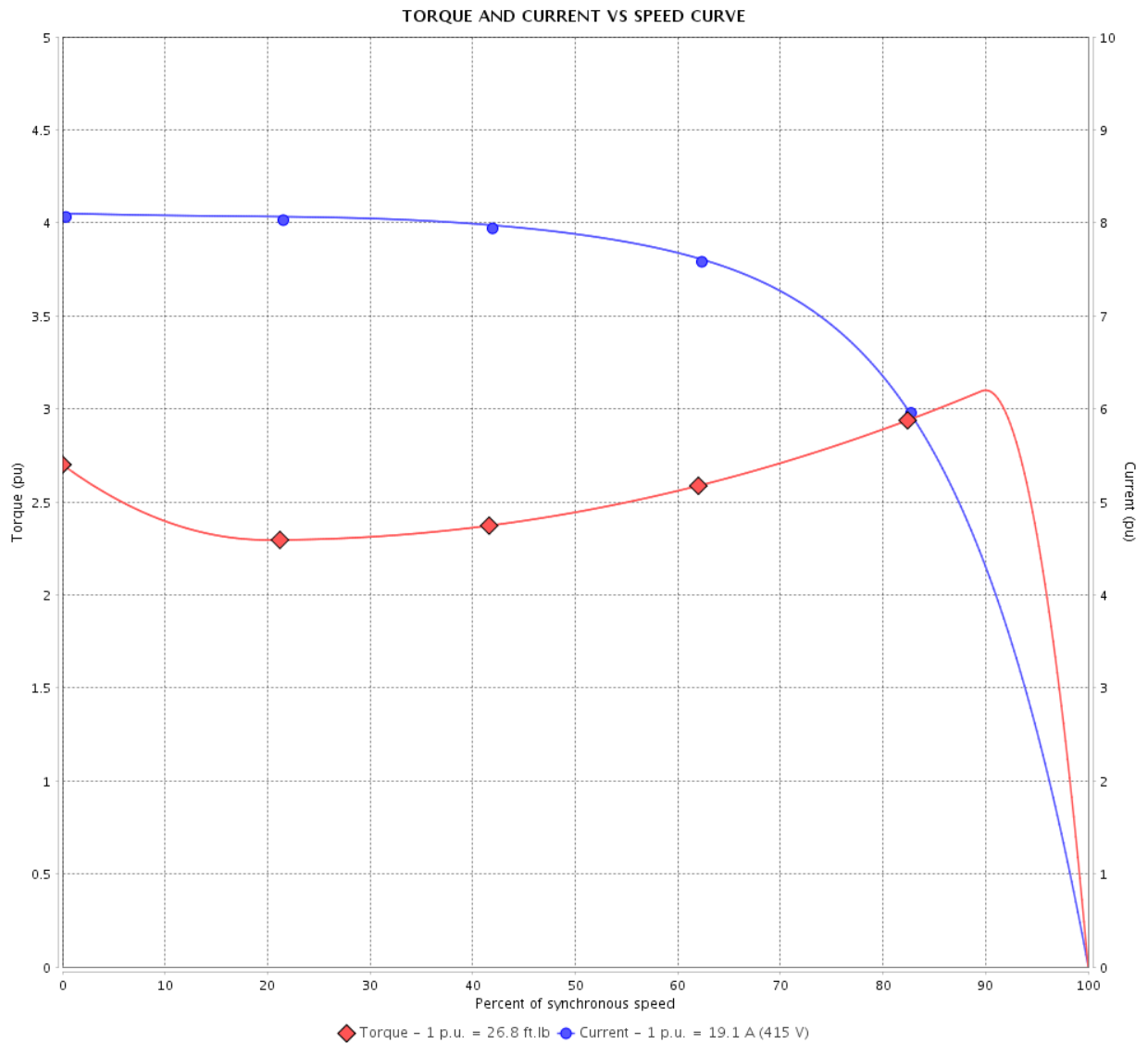
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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	: 2940 rpm	Design	: B

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

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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



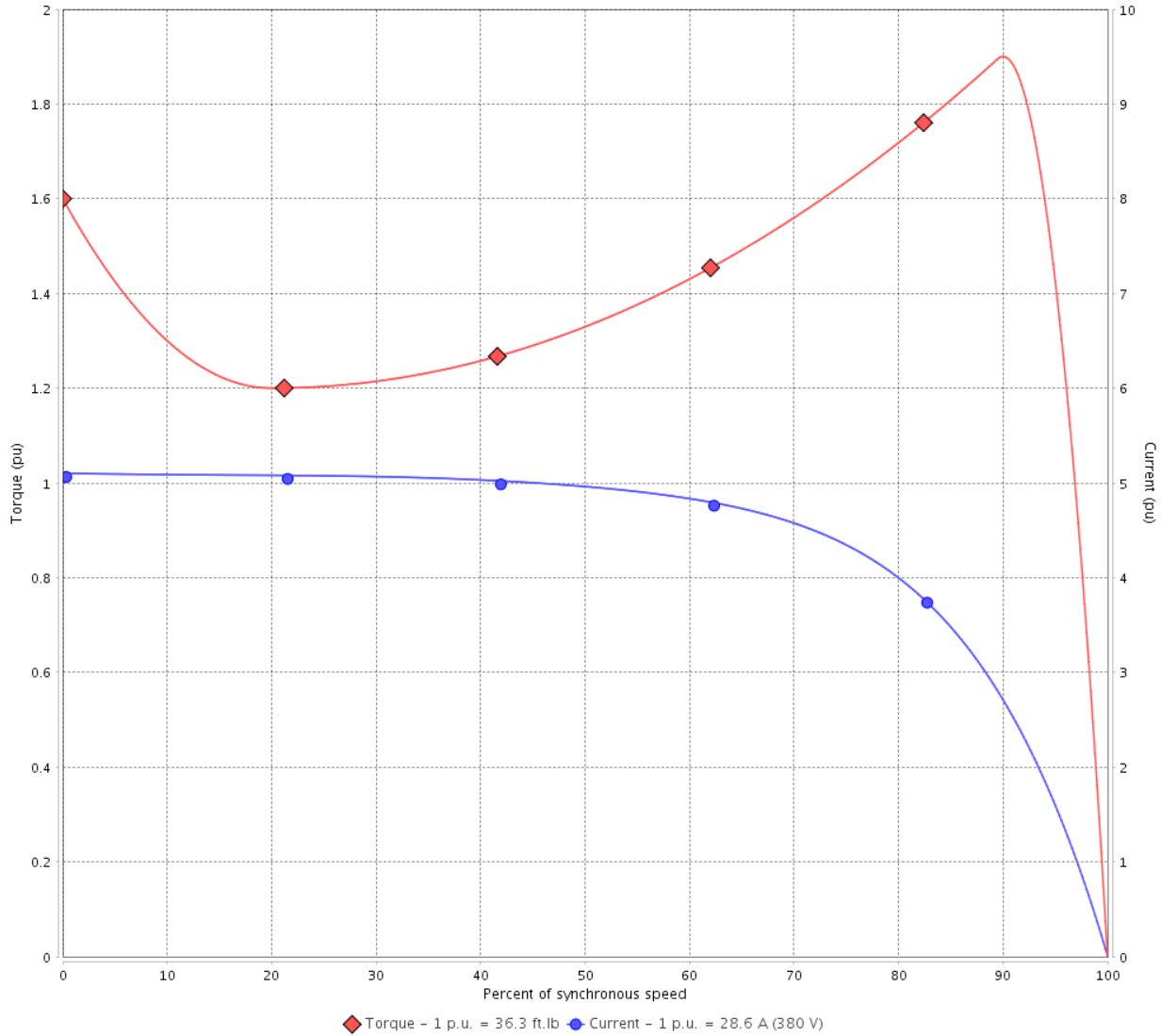
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 2P

Rated current	: 28.6 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	: 2895 rpm	Design	: B

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

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# TORQUE AND CURRENT VS SPEED CURVE



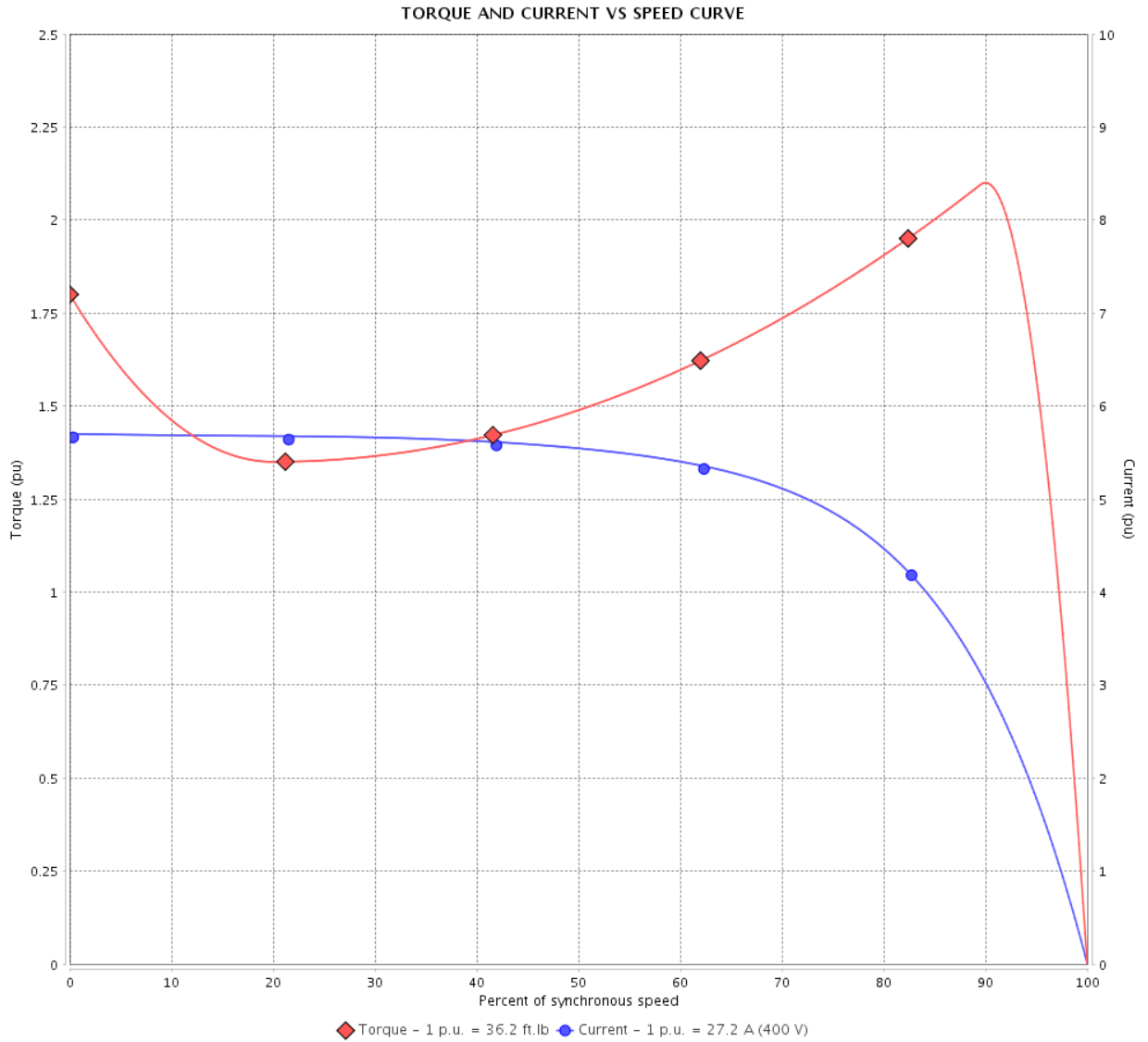
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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

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

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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



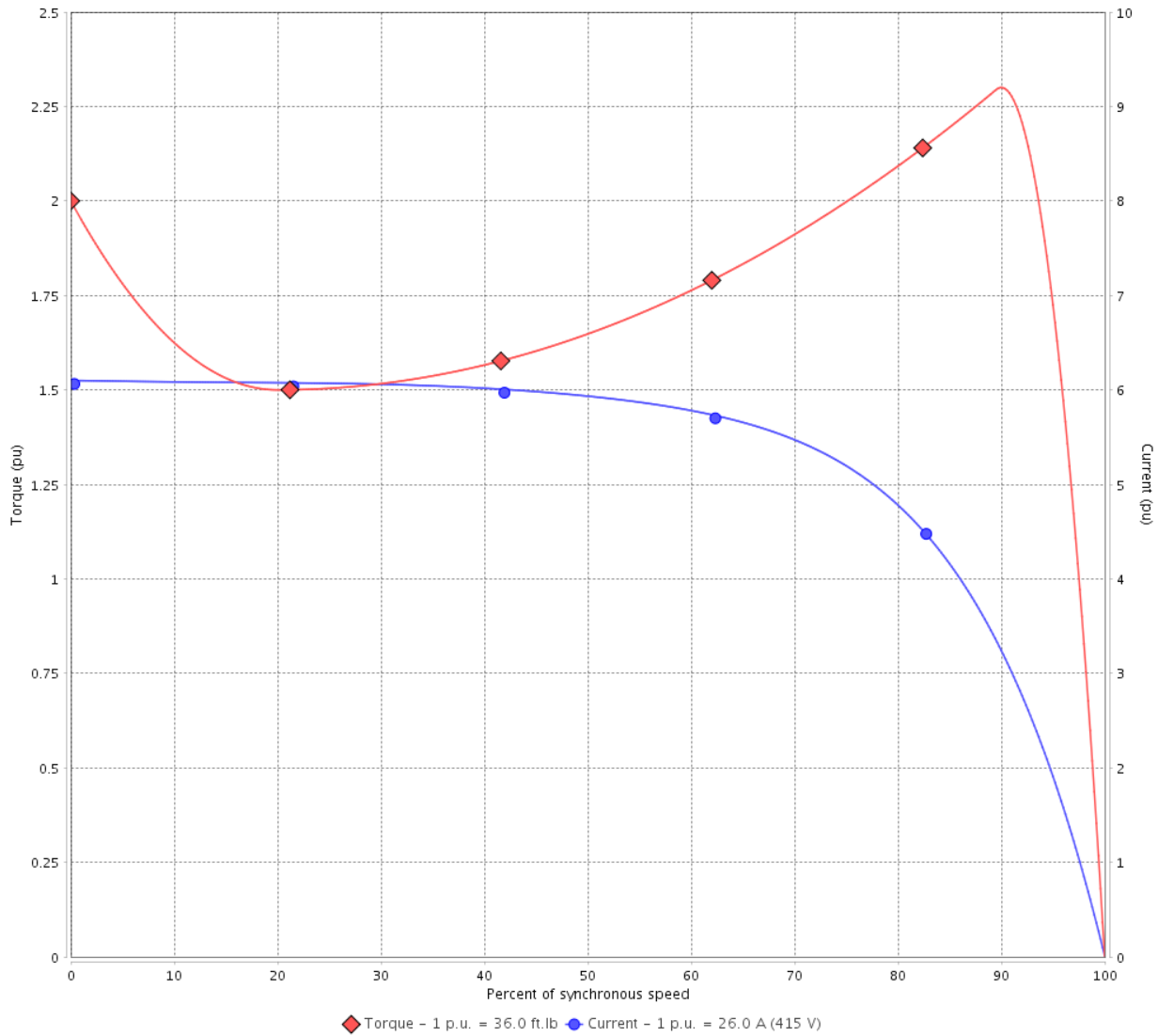
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 2P IE1

Rated current	: 26.0 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)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

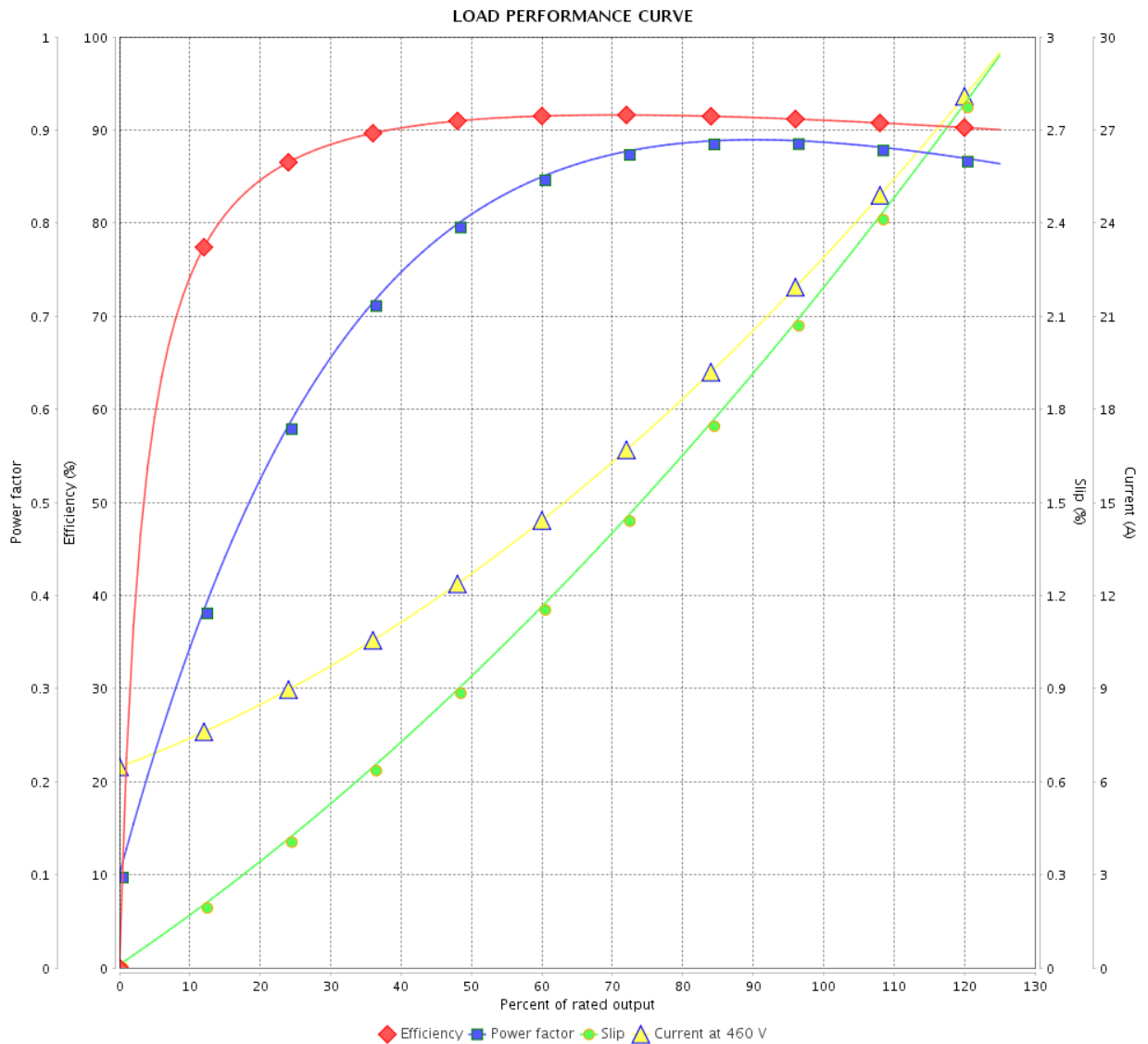


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-W22



Performance : 460 V 60 Hz 2P

Rated current : 23.2 A  
 LRC : 6.1  
 Rated torque : 29.8 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 3520 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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



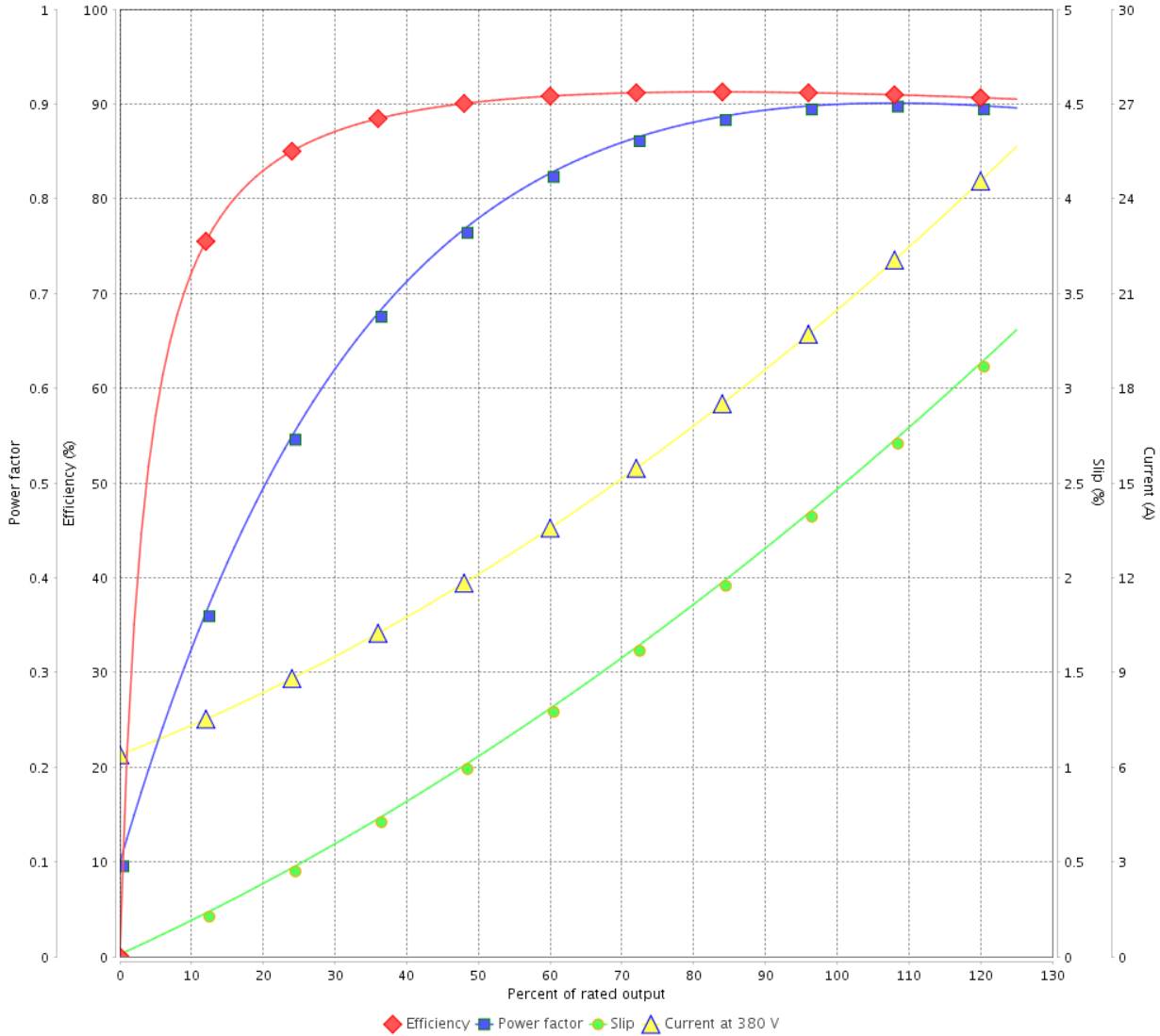
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-W22

LOAD PERFORMANCE CURVE



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 : 2925 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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

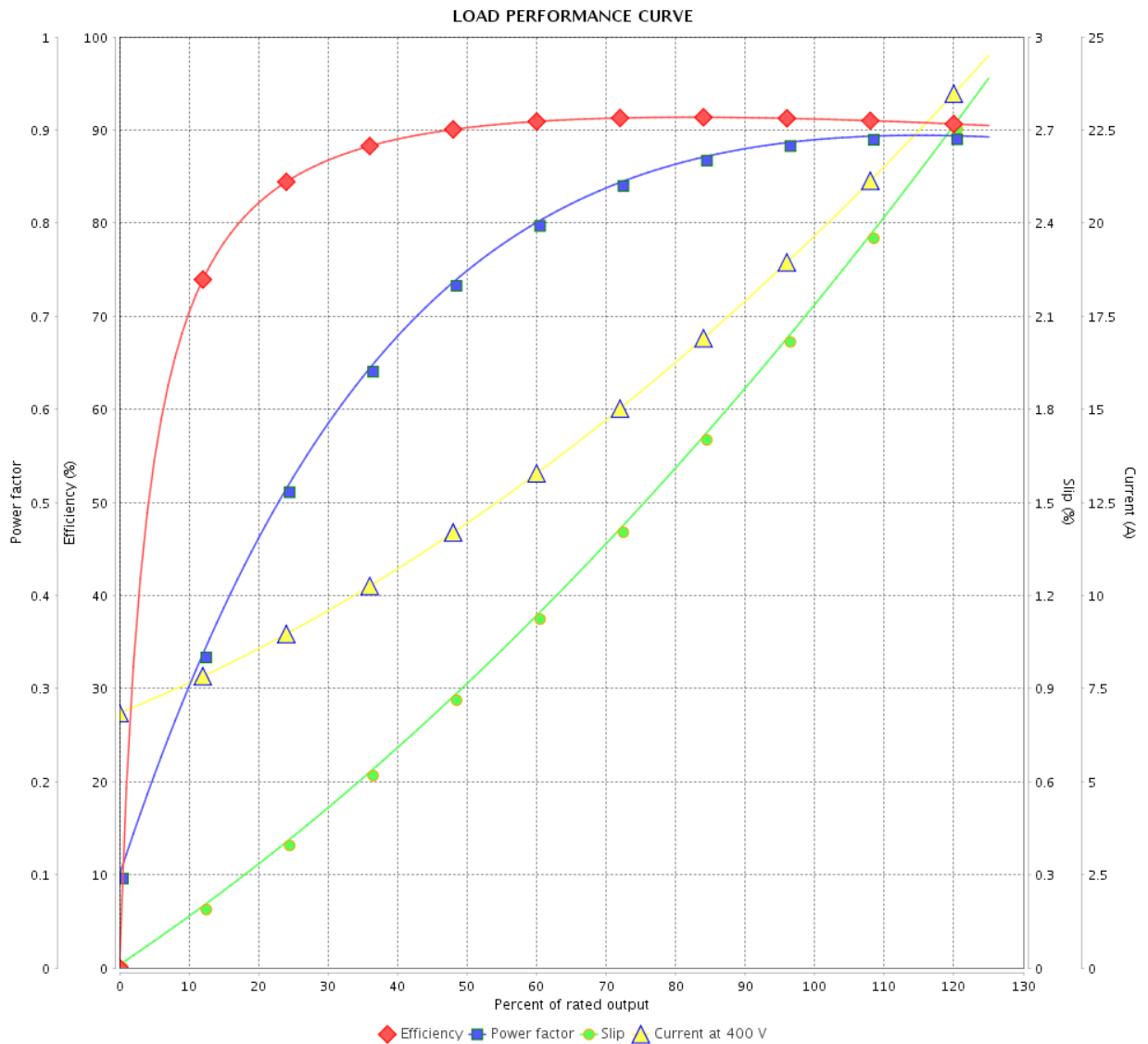


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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 : 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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



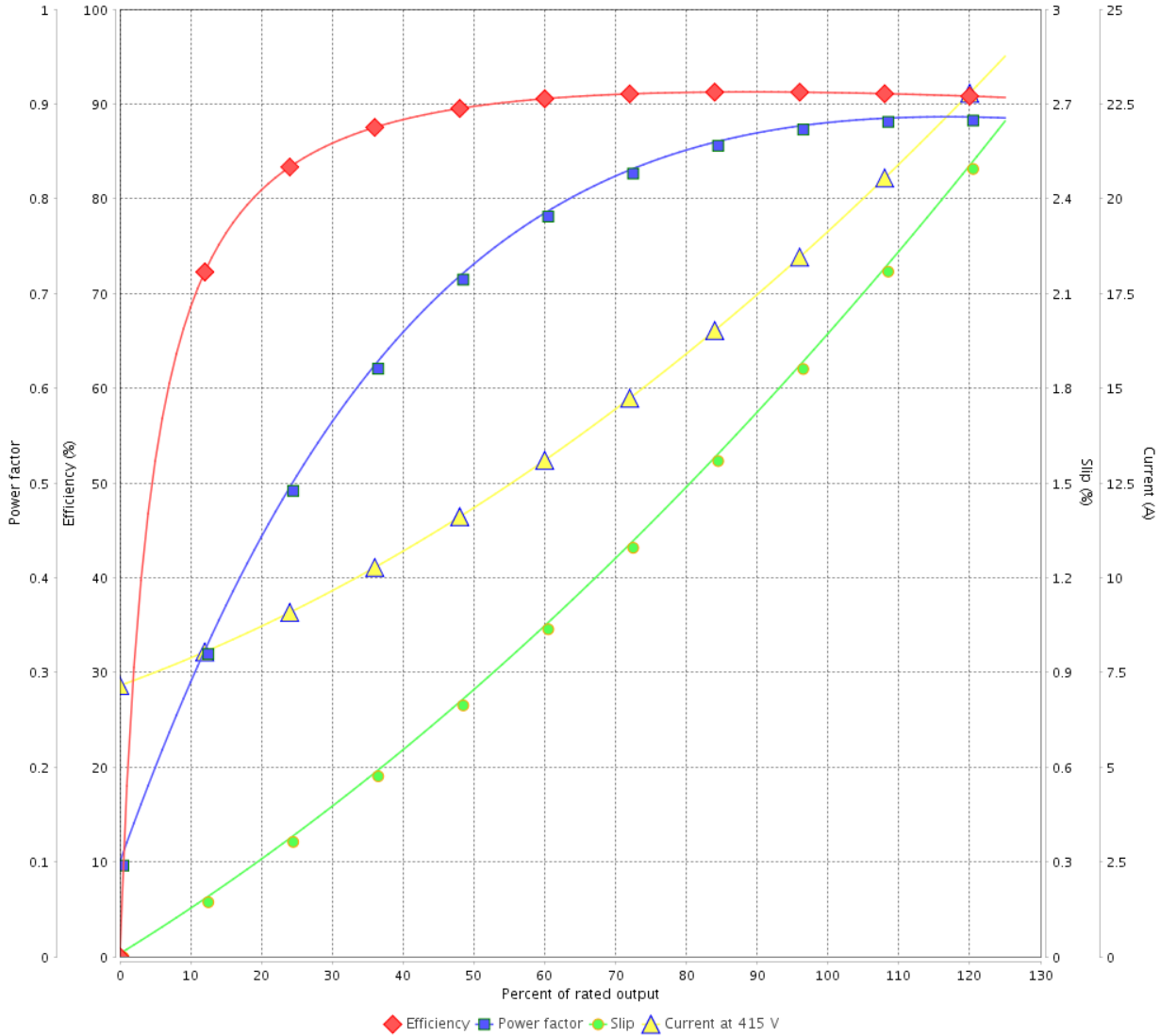
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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 : 2940 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

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## Three Phase Induction Motor - Squirrel Cage

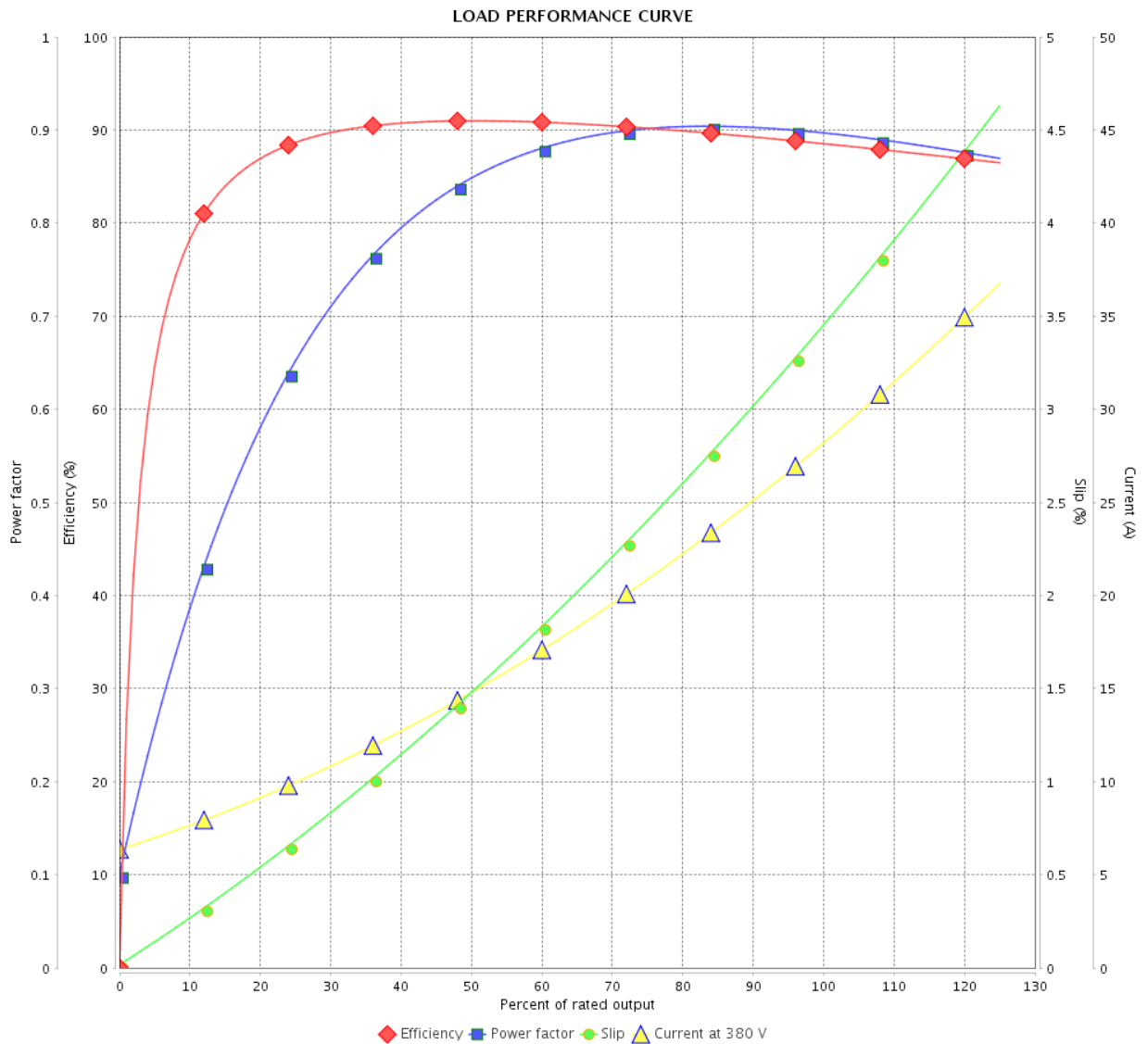


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-W22



Performance : 380 V 50 Hz 2P

Rated current : 28.6 A  
 LRC : 5.1  
 Rated torque : 36.3 ft.lb  
 Locked rotor torque : 160 %  
 Breakdown torque : 190 %  
 Rated speed : 2895 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

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



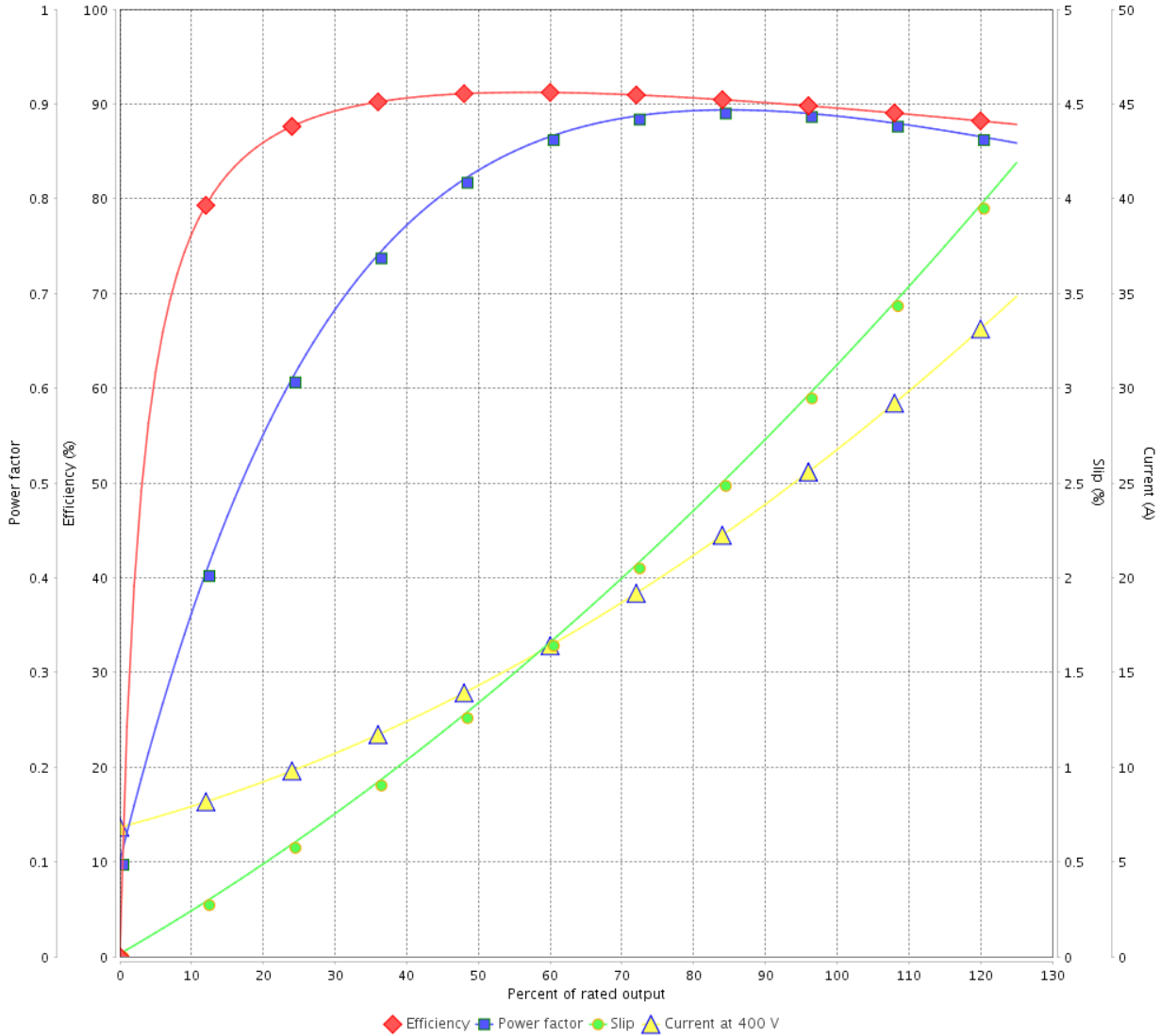
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

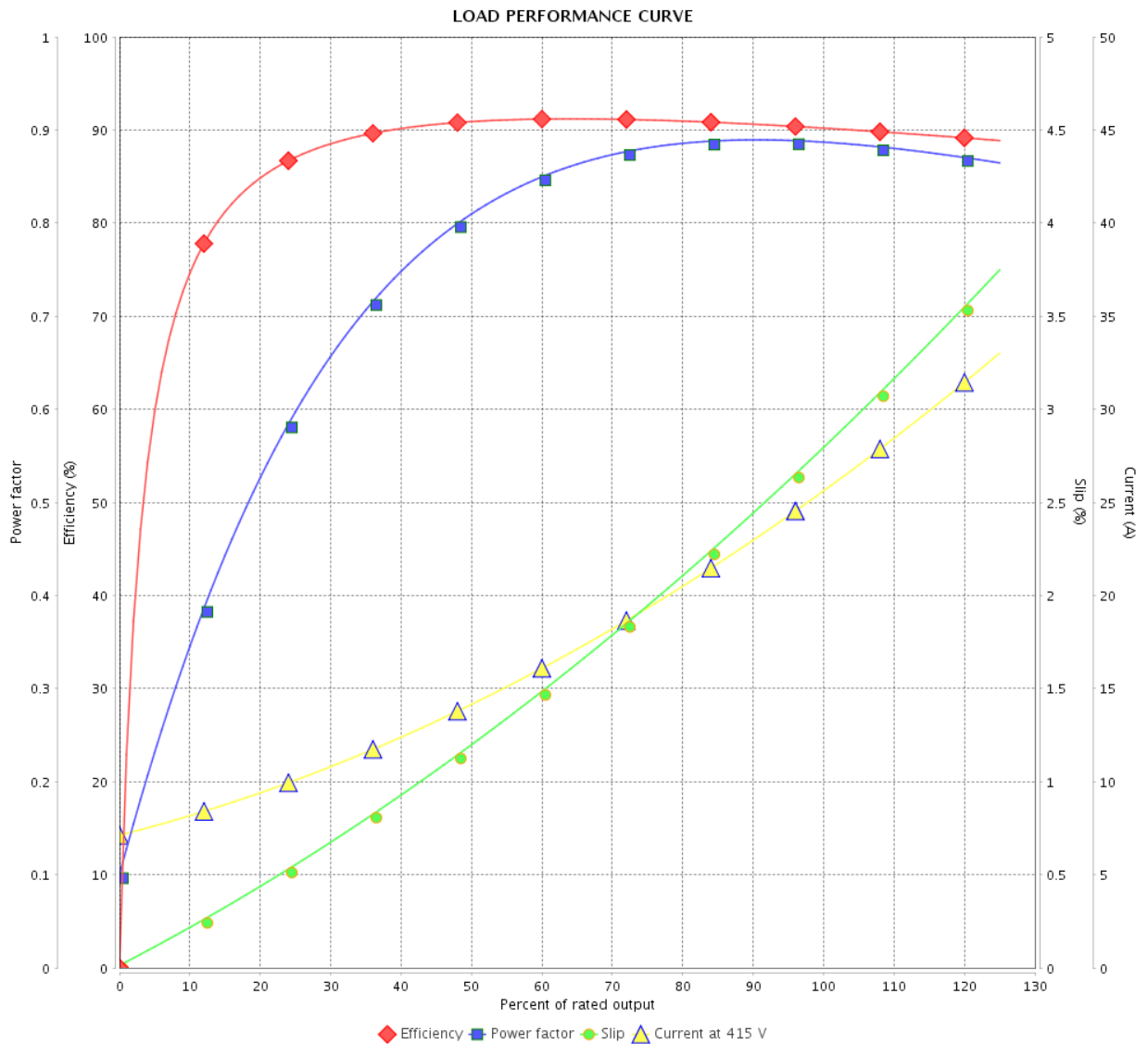


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-W22



Performance : 415 V 50 Hz 2P IE1

Rated current : 26.0 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

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12092272  
Catalog # : 02036ST3QIE256TC-W22

Performance : 460 V 60 Hz 2P

Rated current	: 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	: 3520 rpm	Design	: B

Heating constant

Cooling constant

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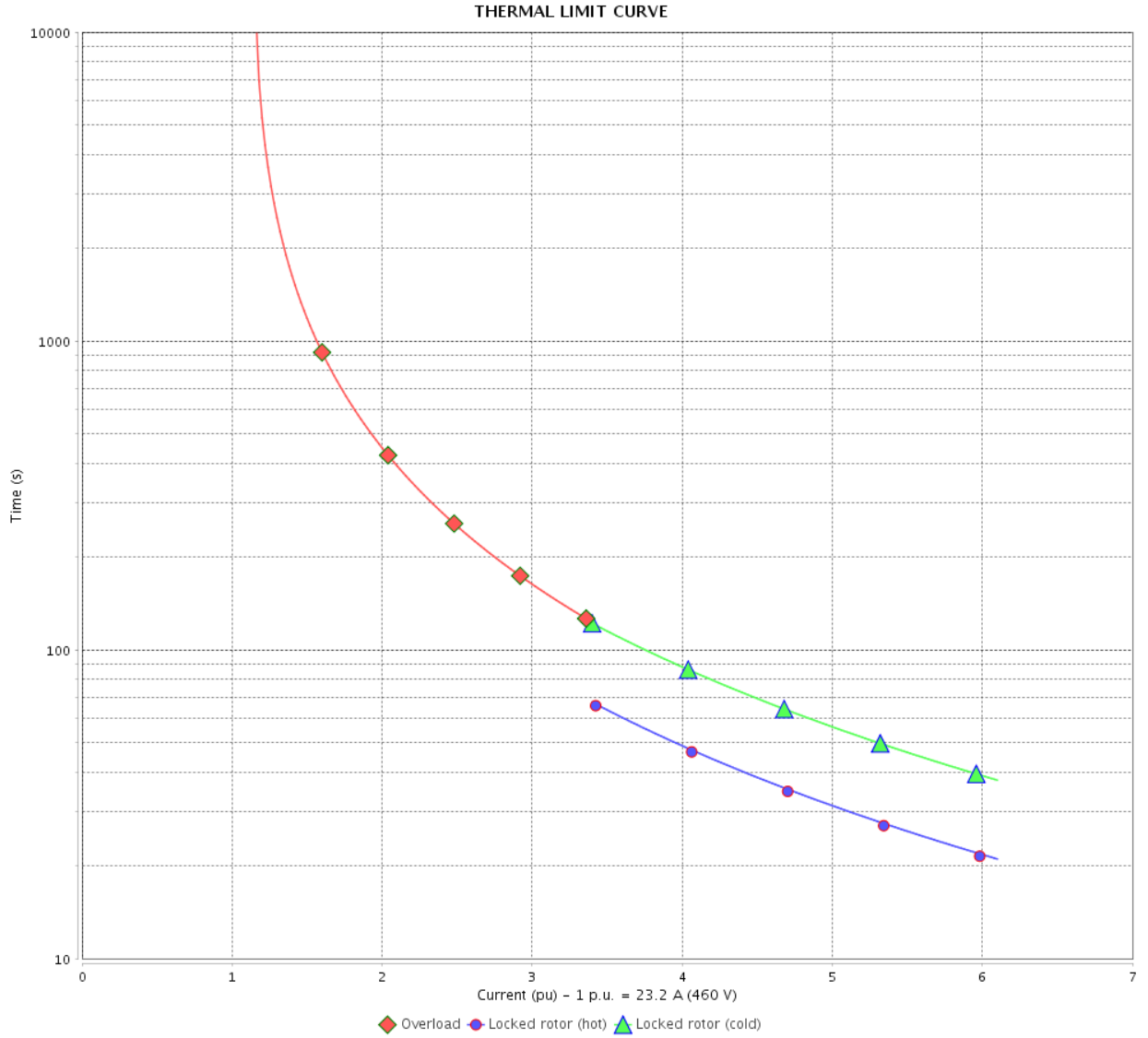


# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 12092272  
 Catalog # : 02036ST3QIE256TC-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 : 2925 rpm	Design : B

Heating constant

Cooling constant

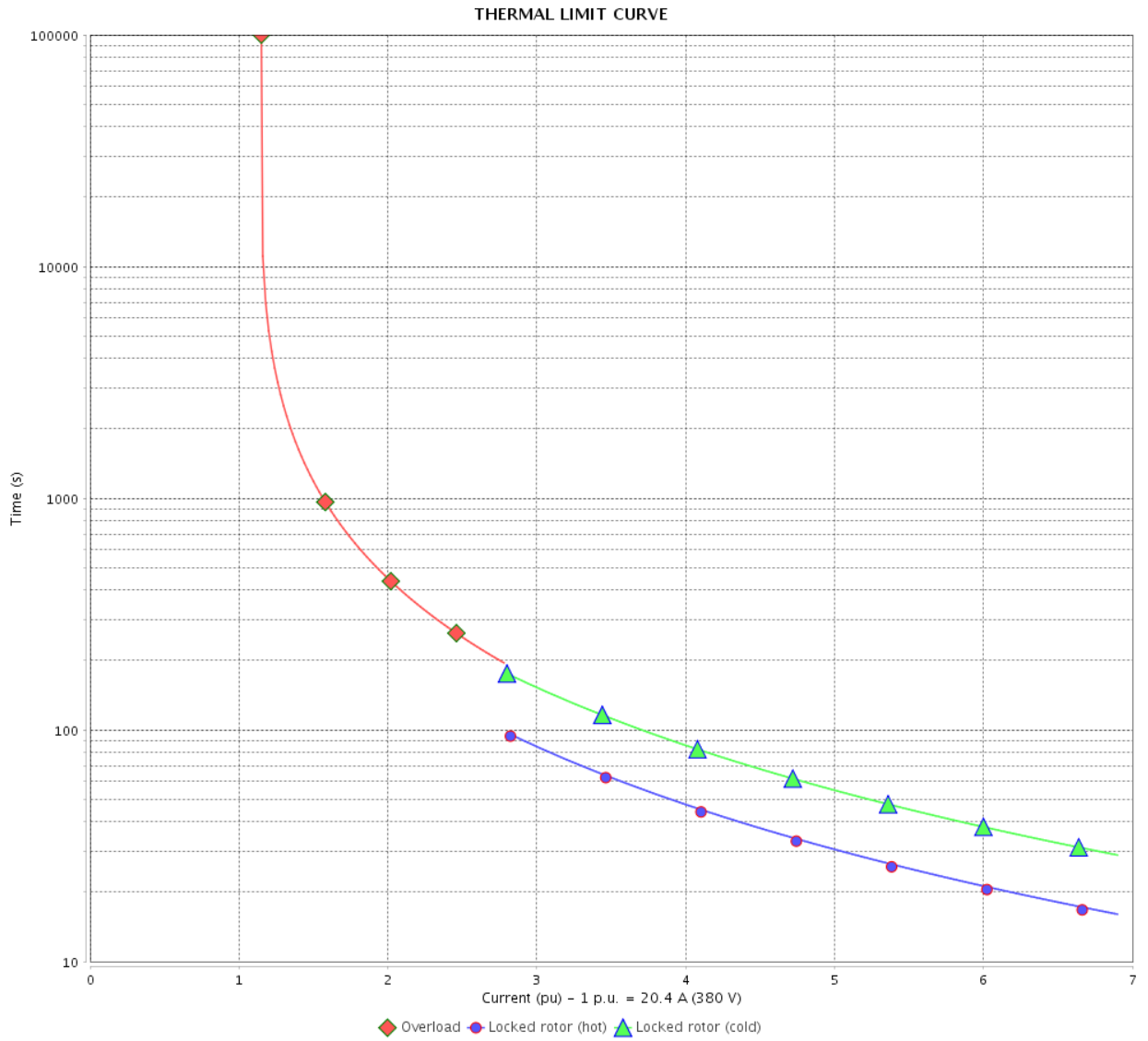
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

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Product code : 12092272  
Catalog # : 02036ST3QIE256TC-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	: 2935 rpm	Design	: B

Heating constant

Cooling constant

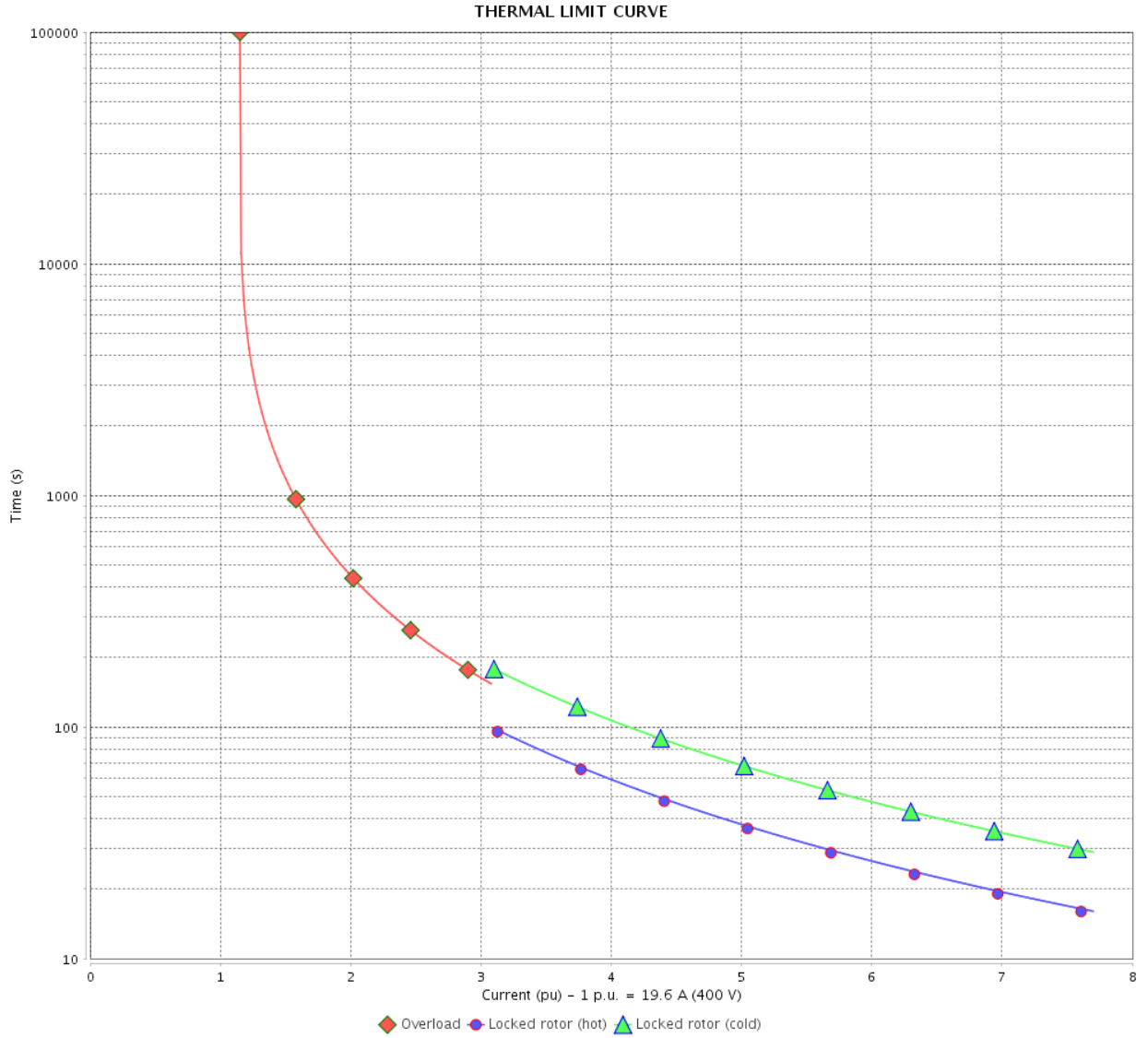
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 12092272

Catalog # : 02036ST3QIE256TC-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	: 2940 rpm	Design	: B

Heating constant

Cooling constant

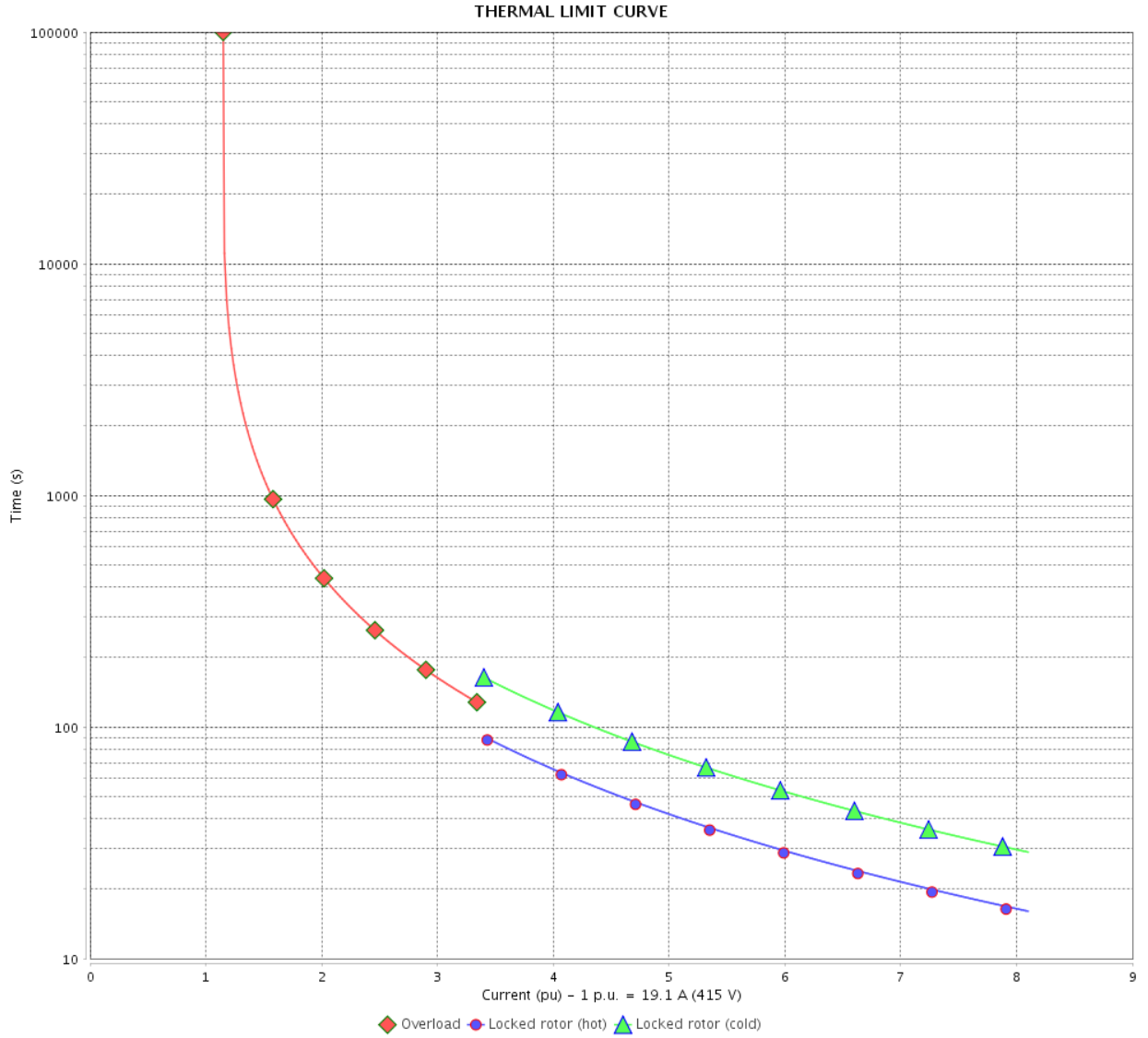
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Three Phase Induction Motor - Squirrel Cage



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Rev.	Changes Summary	Performed	Checked	Date
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## Three Phase Induction Motor - Squirrel Cage

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Product code : 12092272  
Catalog # : 02036ST3QIE256TC-W22

Performance : 380 V 50 Hz 2P

Rated current	: 28.6 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	: 2895 rpm	Design	: B

Heating constant

Cooling constant

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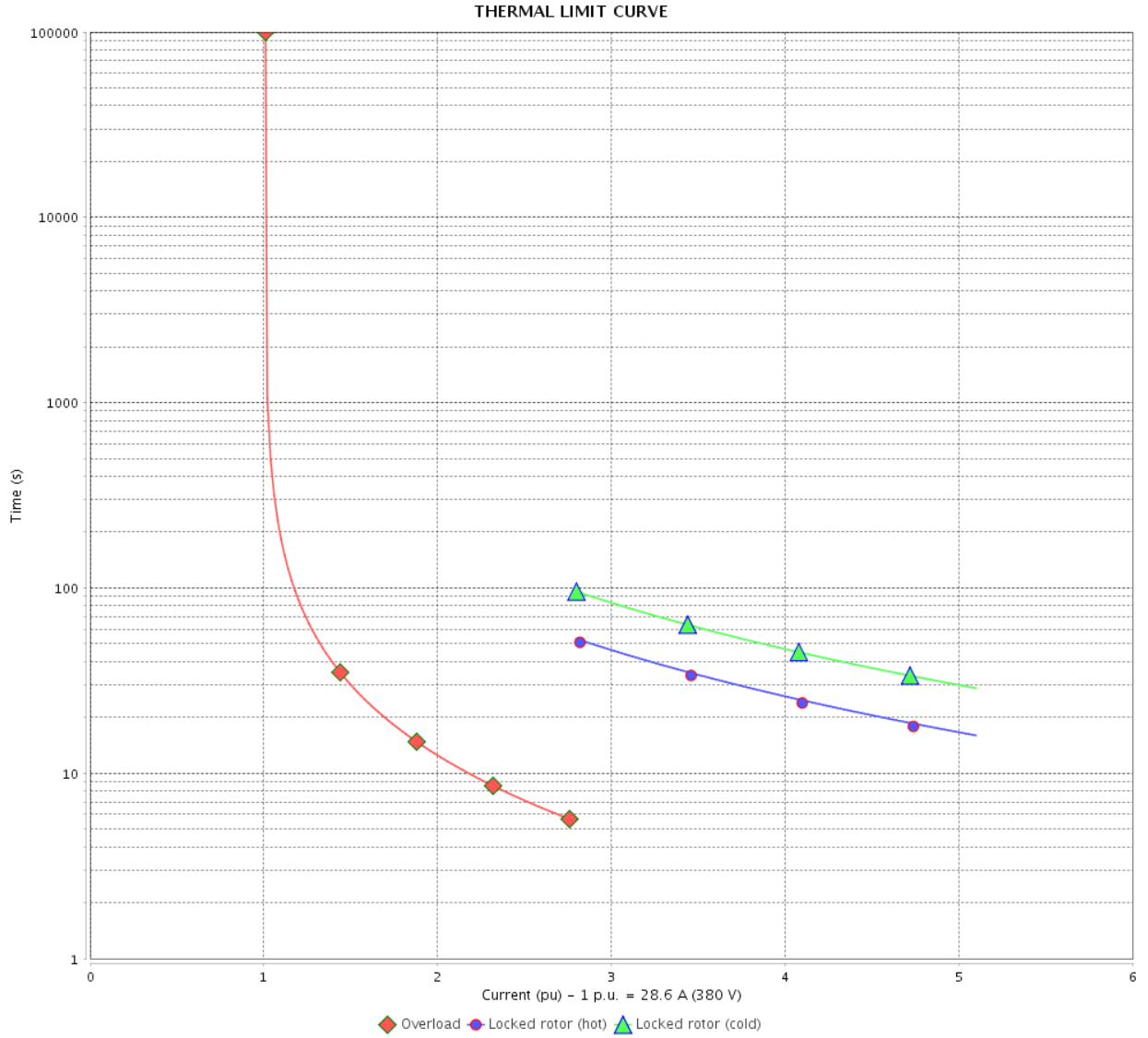


# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Checked by				
Date				

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12092272  
Catalog # : 02036ST3QIE256TC-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

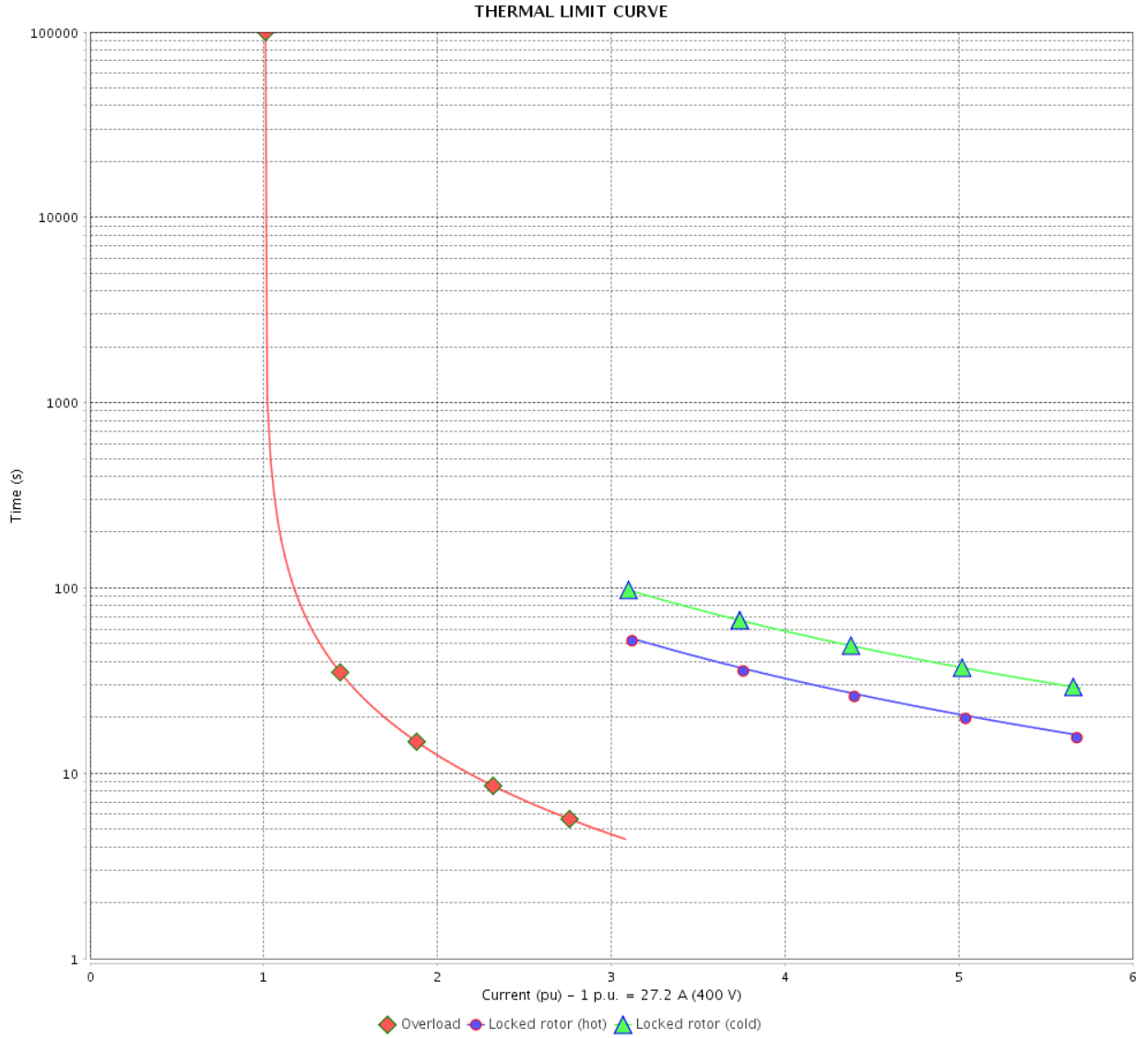
Rev.	Changes Summary	Performed	Checked	Date
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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



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



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Performed by		Page		Revision
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Date	14/04/2022			

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12092272  
Catalog # : 02036ST3QIE256TC-W22

Performance : 415 V 50 Hz 2P IE1

Rated current	: 26.0 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

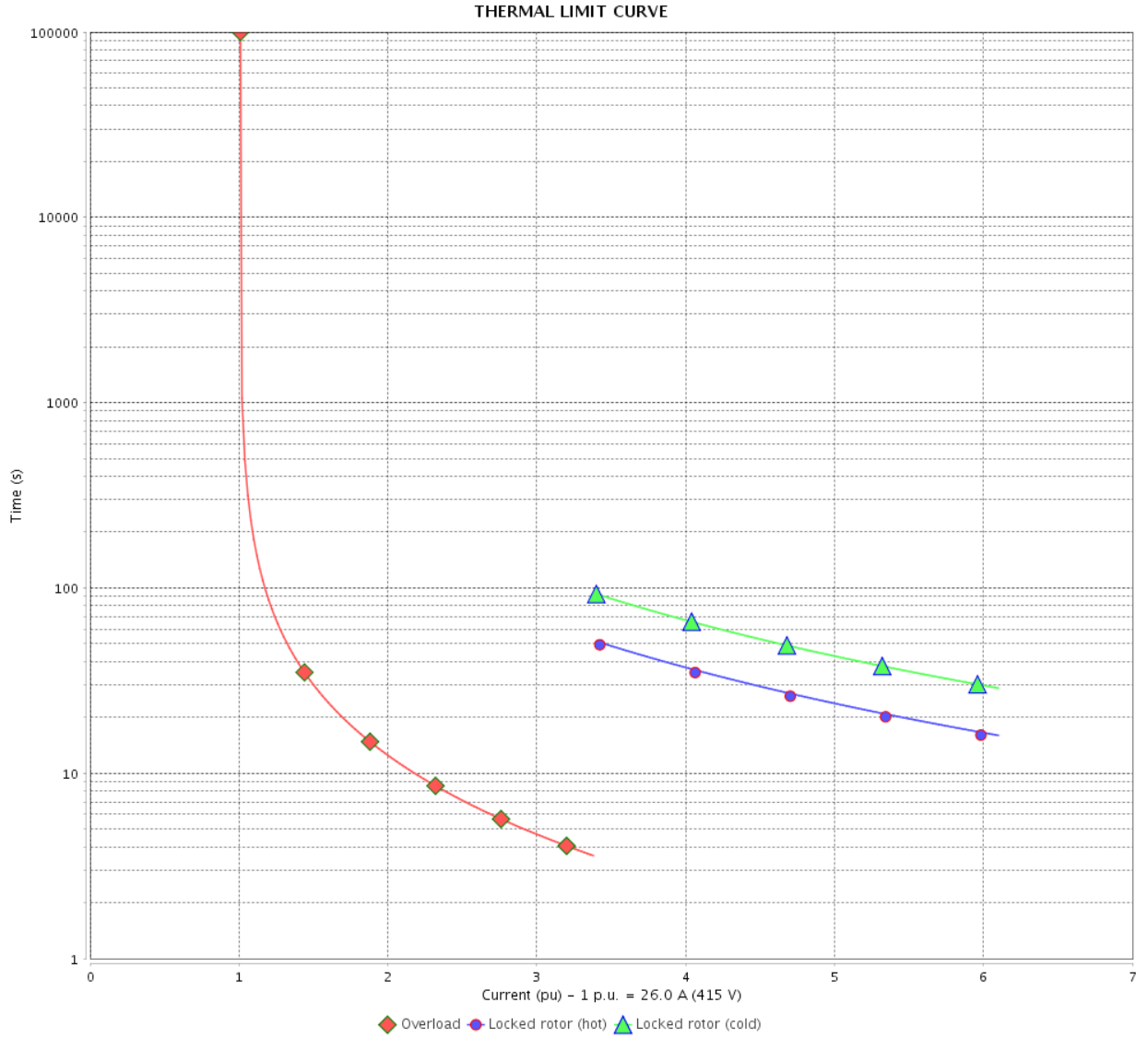
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

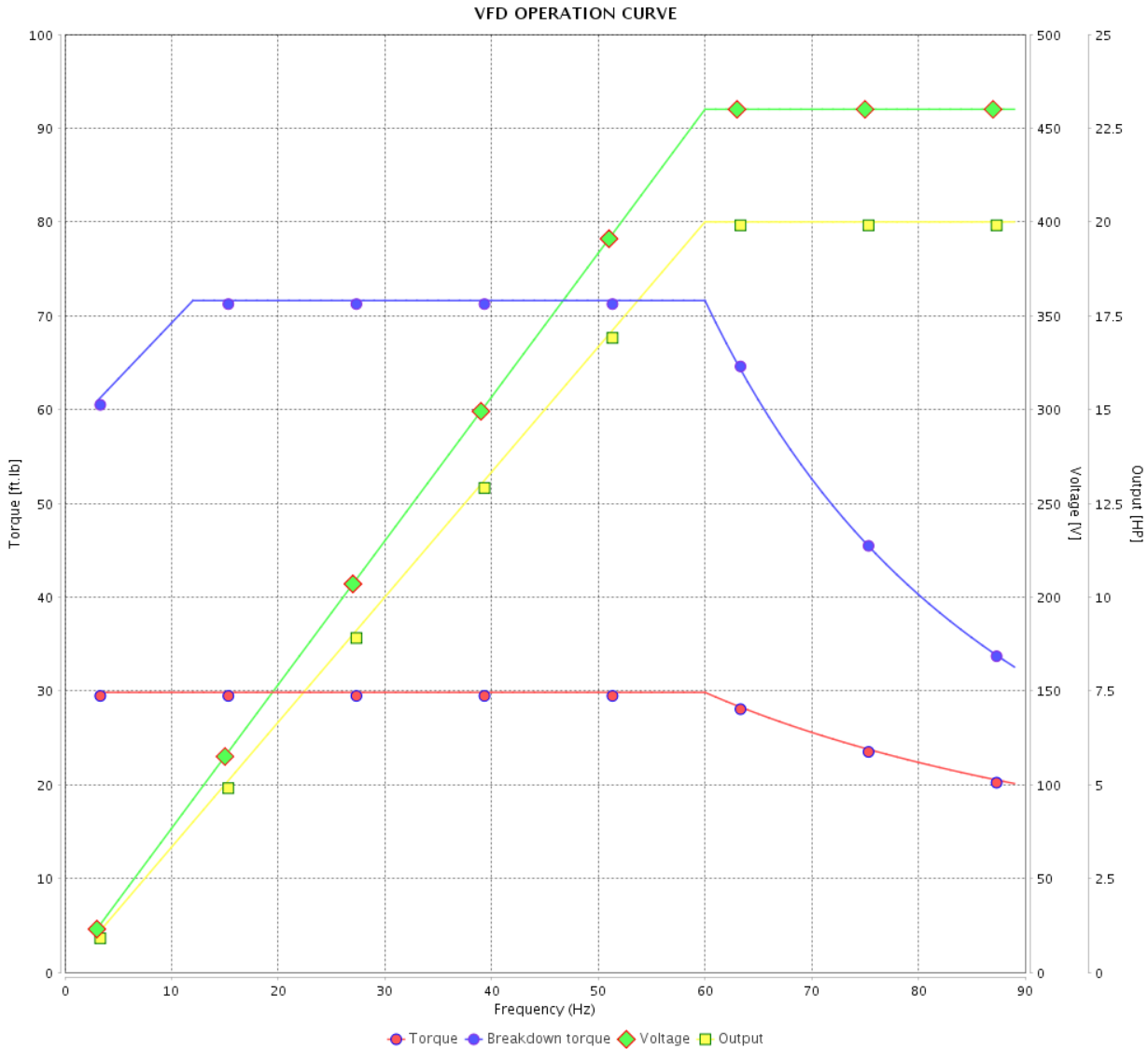


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-W22



Performance : 460 V 60 Hz 2P

Rated current : 23.2 A  
 LRC : 6.1  
 Rated torque : 29.8 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 3520 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

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Date	14/04/2022			

# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

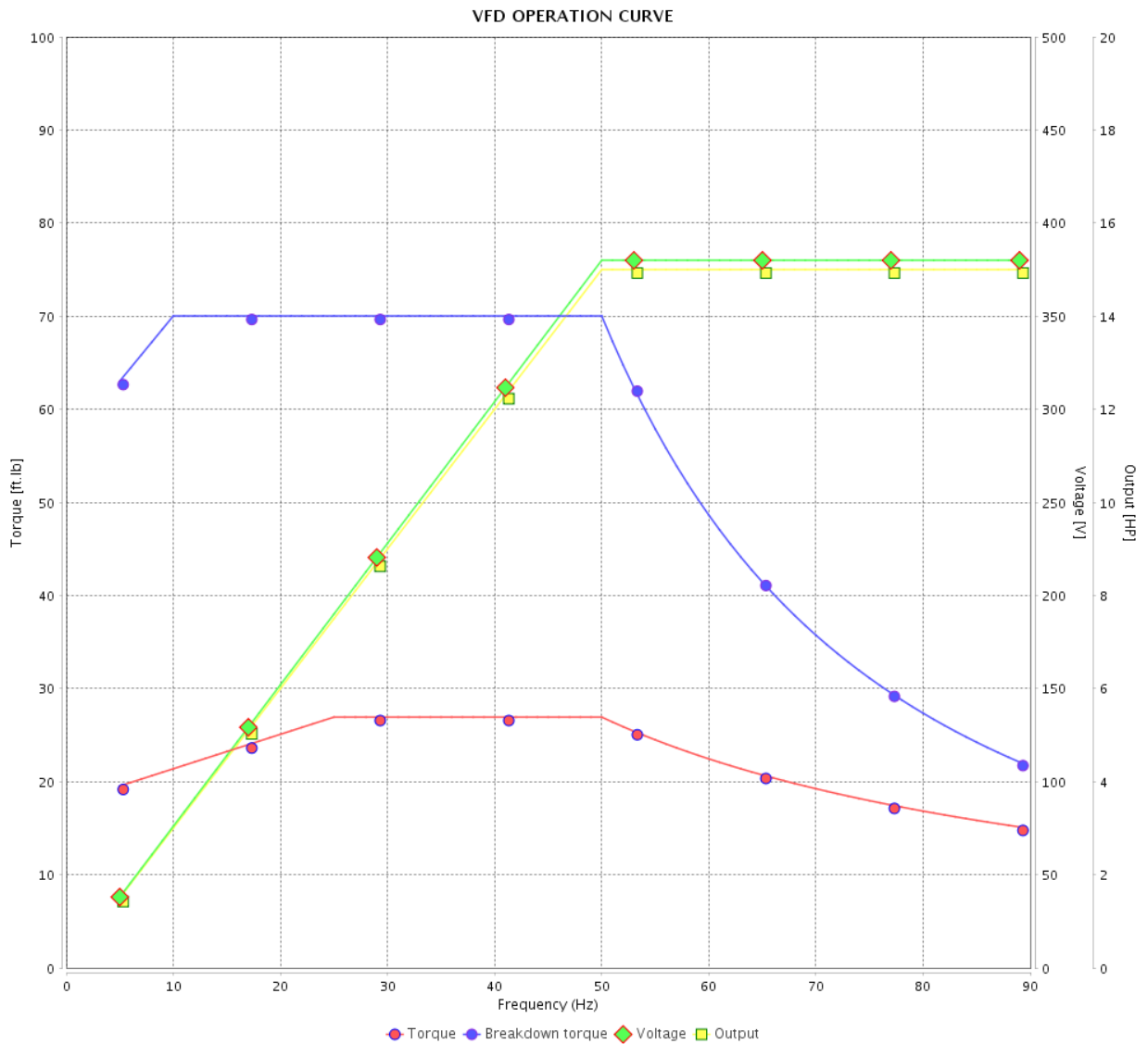


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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 : 2925 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

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Date	14/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



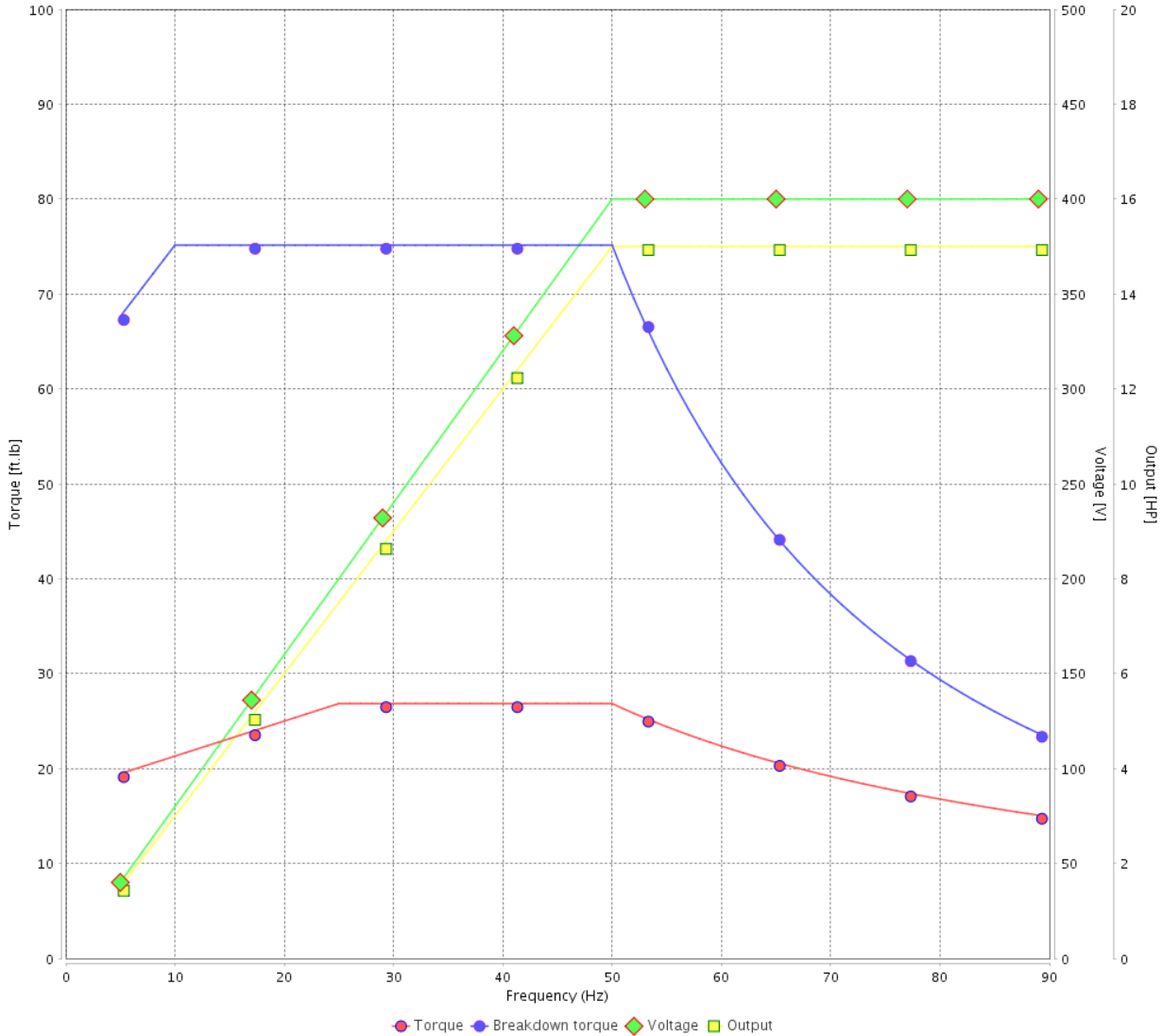
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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 : 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

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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

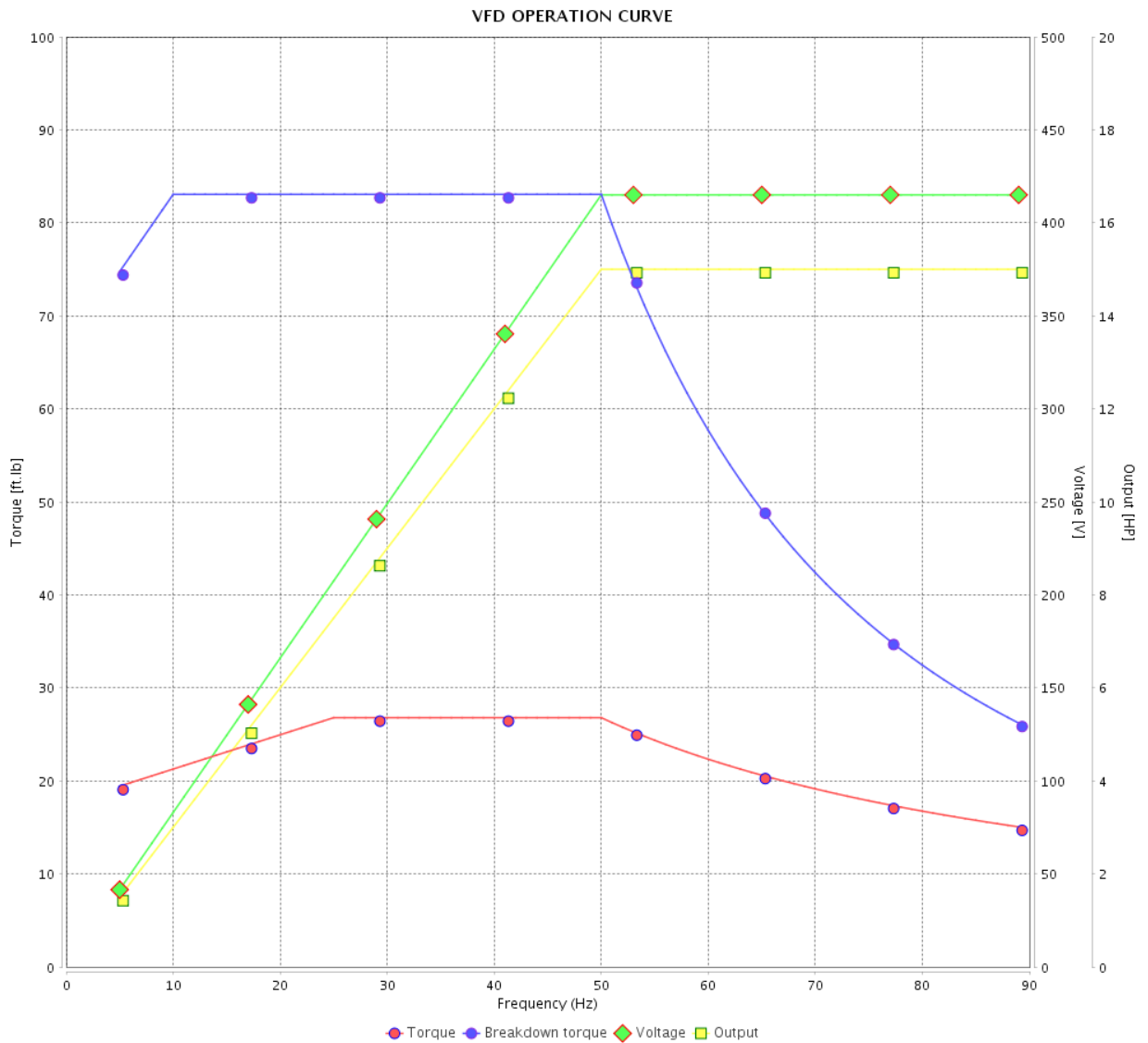


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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 : 2940 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
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Checked by				
Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



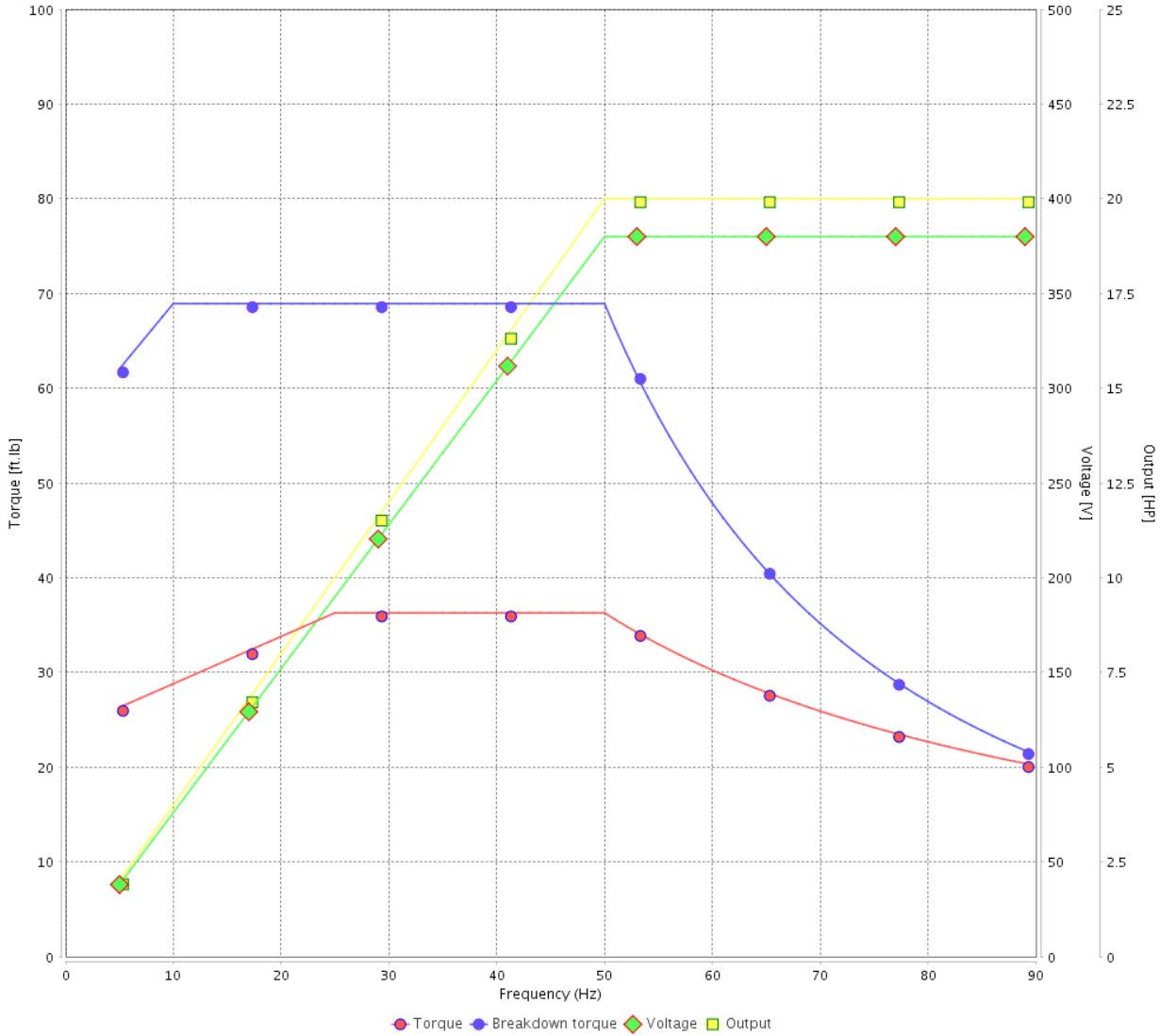
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-W22

VFD OPERATION CURVE



Performance : 380 V 50 Hz 2P

Rated current : 28.6 A  
 LRC : 5.1  
 Rated torque : 36.3 ft.lb  
 Locked rotor torque : 160 %  
 Breakdown torque : 190 %  
 Rated speed : 2895 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
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# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

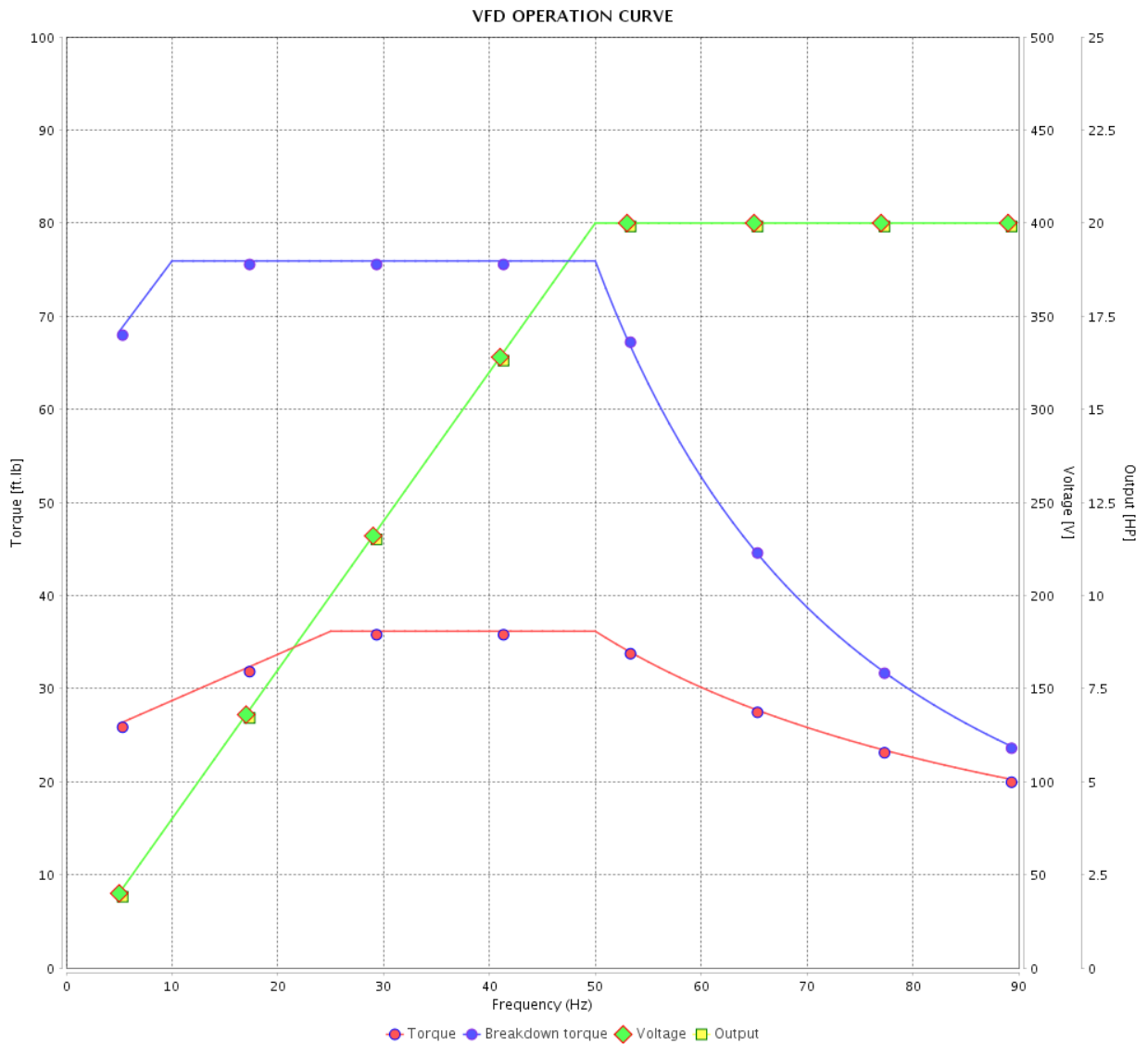


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-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
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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



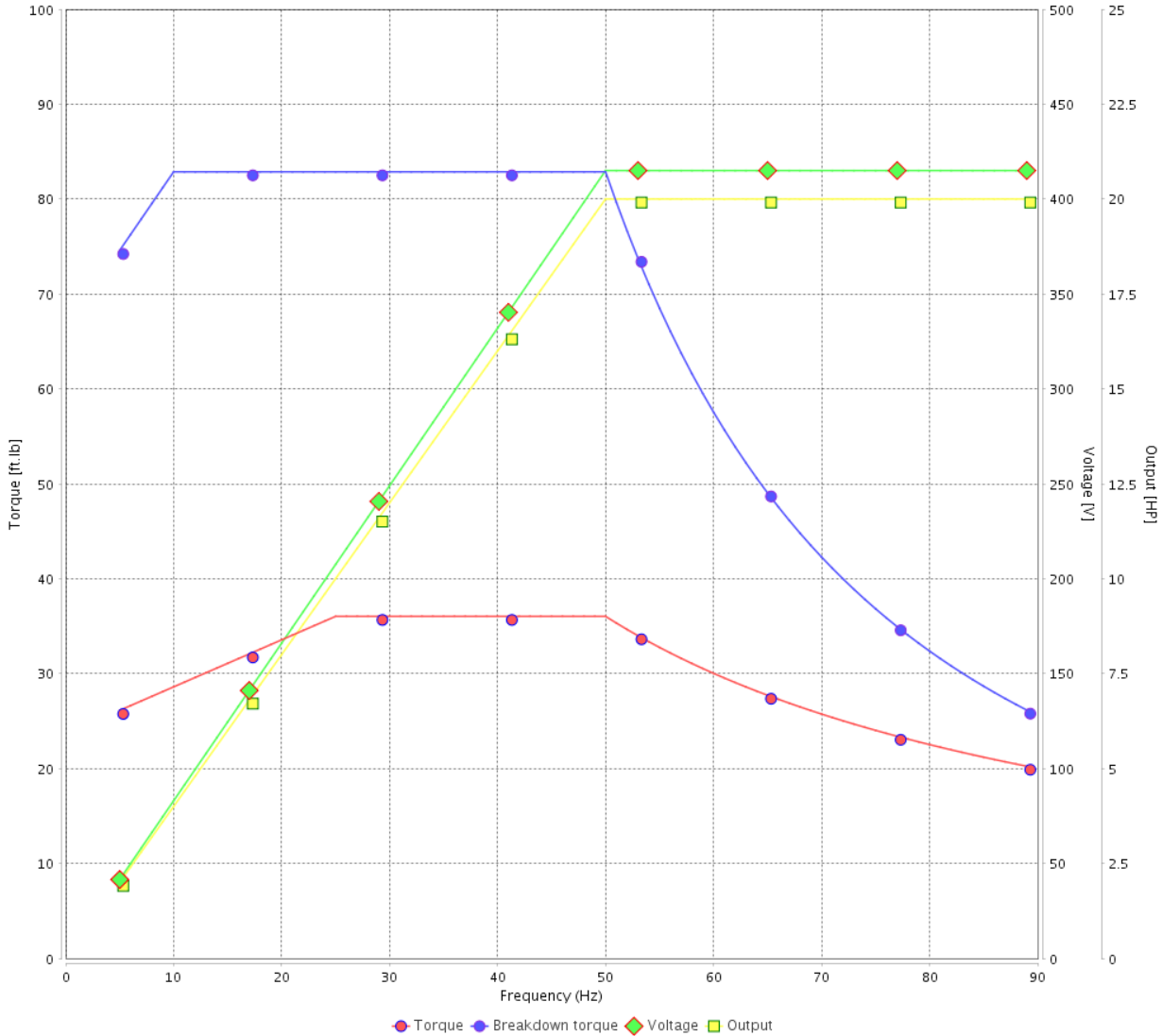
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12092272

Catalog # : 02036ST3QIE256TC-W22

VFD OPERATION CURVE



Performance : 415 V 50 Hz 2P IE1

Rated current : 26.0 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

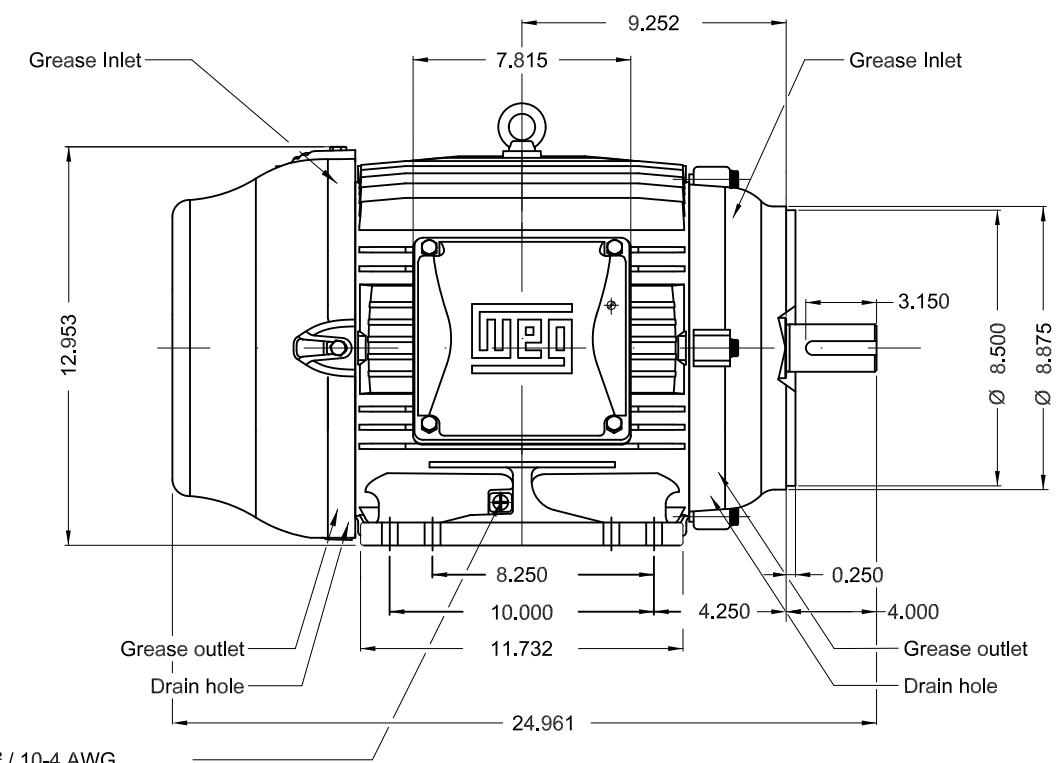
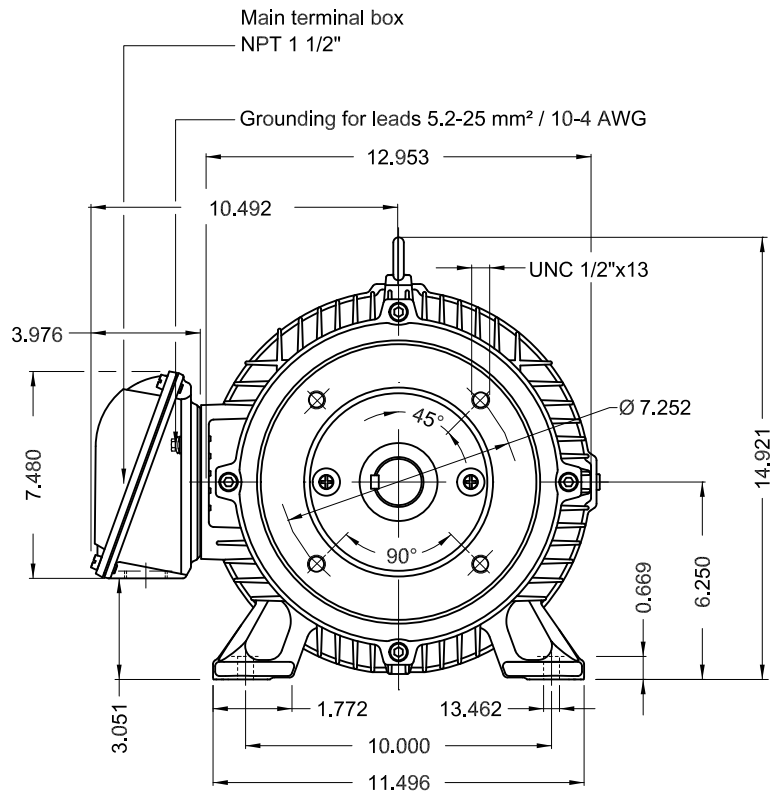
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

1 2 3 4 5 6

A

B

C

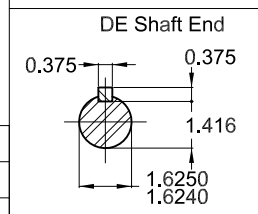


Grounding for leads 5.2-25 mm² / 10-4 AWG

D

E

Color RAL 5009  
 Painting plan 202E  
 Mounting B34R(D)



20 HP 02 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF.					
CHECKED		FRAME 254/6TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW  
 WDD





**NEMA**  
Premium  
W22



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

MODEL 02036ST3QIE256TC-W22

Inverter Duty Motor  
Severe Duty



PH3 60Hz Fr. 254/6TC 1000m.a.s.l. IP55 TEFC 309lb

V 460

A 23.2

HP 20

kW 15

SF 1.25

SFA 29.0

RPM 3520

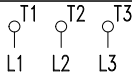
PF 0.89

AMB 40°C

INS cl. F DT80K NEMA NOM EFF 91.0%

DUTY CONT.

DES B Code G GUARANT. EFF 89.5%



460V

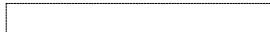


→ 6309-C3 (13g) 45BC03X30

→ 6209-C3 (9g) 45BC02X30



MOBIL POLYREX EM (19000h)



MADE IN BRAZIL  
12092272