

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :								
Product line		: NEMA Premium Efficiency Three-Phase			Product code :		12424297	
					Catalog # :		02536ST3QIE284TS-W22	
Frame : 284/6TS				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> : 402 lb				
Protection degree : IP55				Moment of inertia (J) : 2.69 sq.ft.lb				
Design : B								
Output [HP]	25	20	20	20	25	25	25	
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]	29.1	28.5	27.4	26.7	35.7	33.6	32.5	
L. R. Amperes [A]	183	177	189	200	175	185	202	
LRC [A]	6.3x(Code G)	6.2x(Code G)	6.9x(Code H)	7.5x(Code J)	4.9x(Code E)	5.5x(Code F)	6.2x(Code G)	
No load current [A]	8.20	8.00	8.20	8.70	7.70	8.20	8.70	
Rated speed [RPM]	3545	2945	2950	2955	2920	2930	2935	
Slip [%]	1.53	1.83	1.67	1.50	2.67	2.33	2.17	
Rated torque [ft.lb]	37.0	35.7	35.6	35.5	45.0	44.8	44.7	
Locked rotor torque [%]	240	220	250	240	180	200	220	
Breakdown torque [%]	250	240	270	300	200	200	240	
Service factor	1.25	1.00	1.00	1.00	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	30s (cold)	25s (cold)	25s (cold)	25s (cold)	25s (cold)	25s (cold)	25s (cold)	
	17s (hot)	14s (hot)	14s (hot)	14s (hot)	14s (hot)	14s (hot)	14s (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%							
	50%	91.0	90.2	90.3	89.8	89.0	91.0	
	75%	91.7	90.7	91.1	91.1	89.5	91.0	
	100%	91.7	91.9	91.9	91.9	89.5	91.0	
Power Factor	25%							
	50%	0.78	0.79	0.76	0.73	0.83	0.79	
	75%	0.85	0.85	0.84	0.83	0.87	0.86	
	100%	0.87	0.87	0.86	0.85	0.88	0.87	
Bearing type	Drive end		Non drive end		Foundation loads			
	: 6311 C3		: 6211 C3		Max. traction : 267 lb			
	: Inpro/Seal		: Inpro/Seal		Max. compression : 669 lb			
	: 14000 h		: 17000 h					
	: 18 g		: 11 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



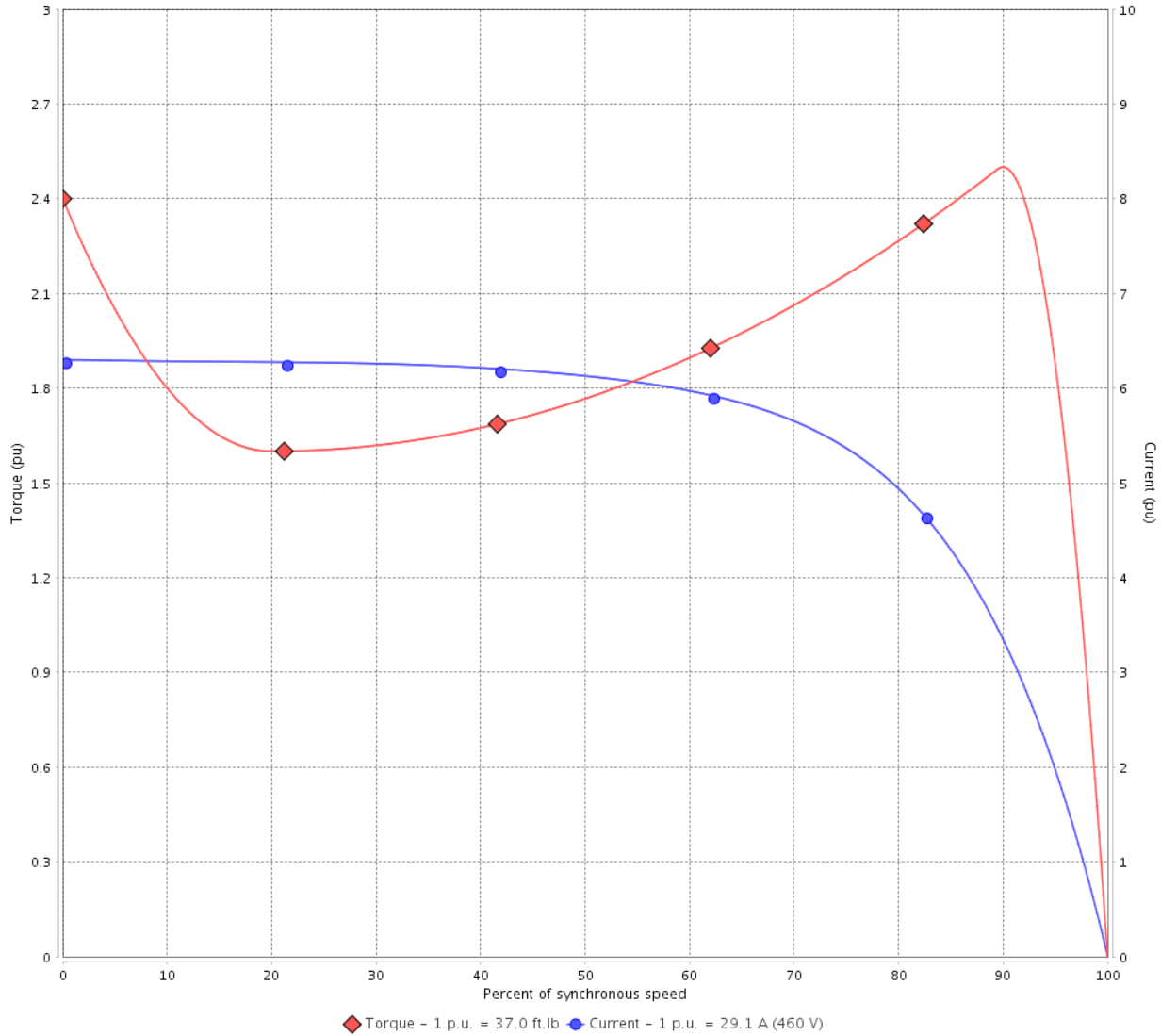
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 2P

Rated current	: 29.1 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 37.0 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3545 rpm	Design	: B

Locked rotor time : 30s (cold) 17s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



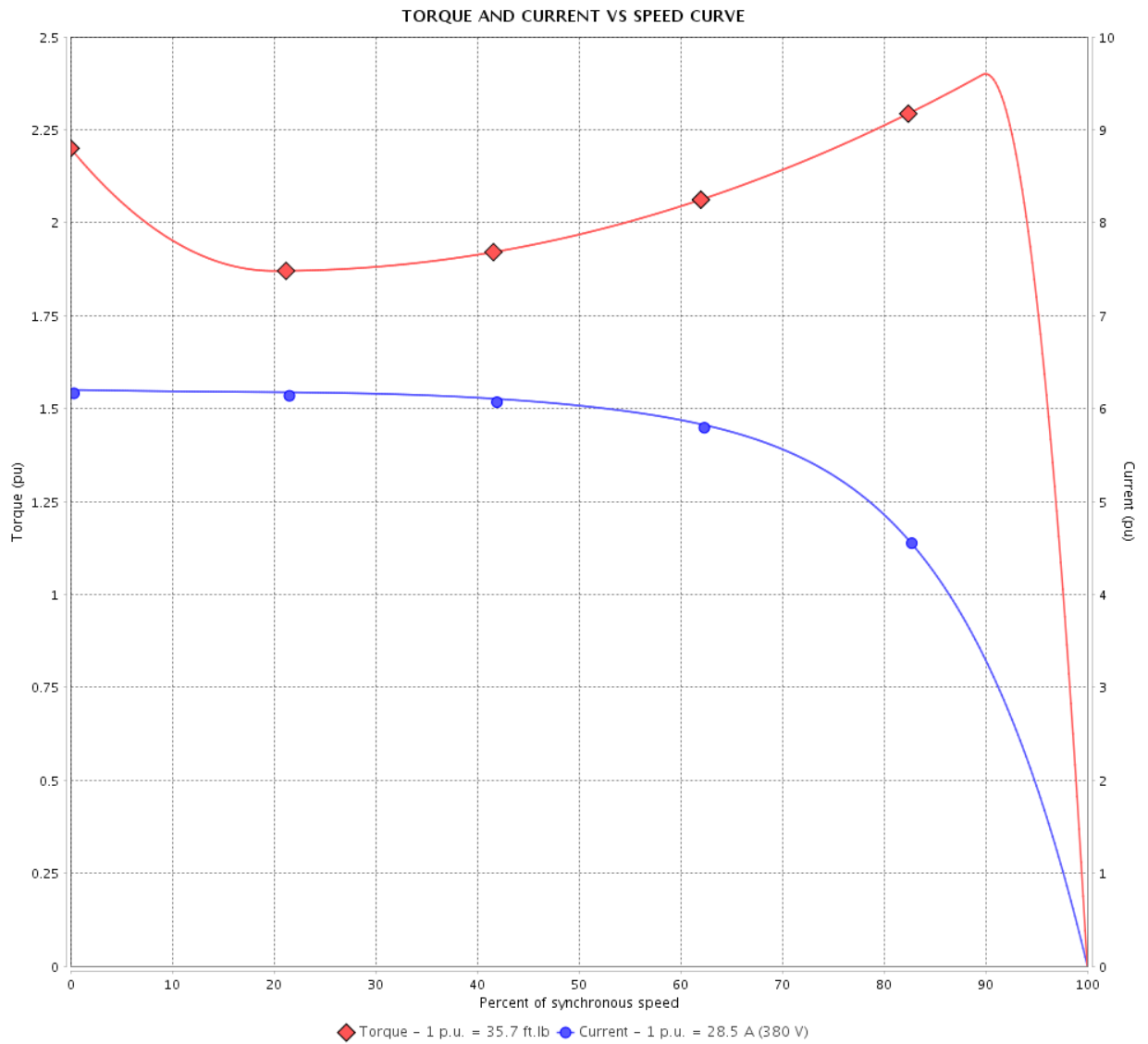
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 380 V 50 Hz 2P IE3

Rated current : 28.5 A  
 LRC : 6.2  
 Rated torque : 35.7 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 240 %  
 Rated speed : 2945 rpm

Moment of inertia (J) : 2.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Locked rotor time : 25s (cold) 14s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



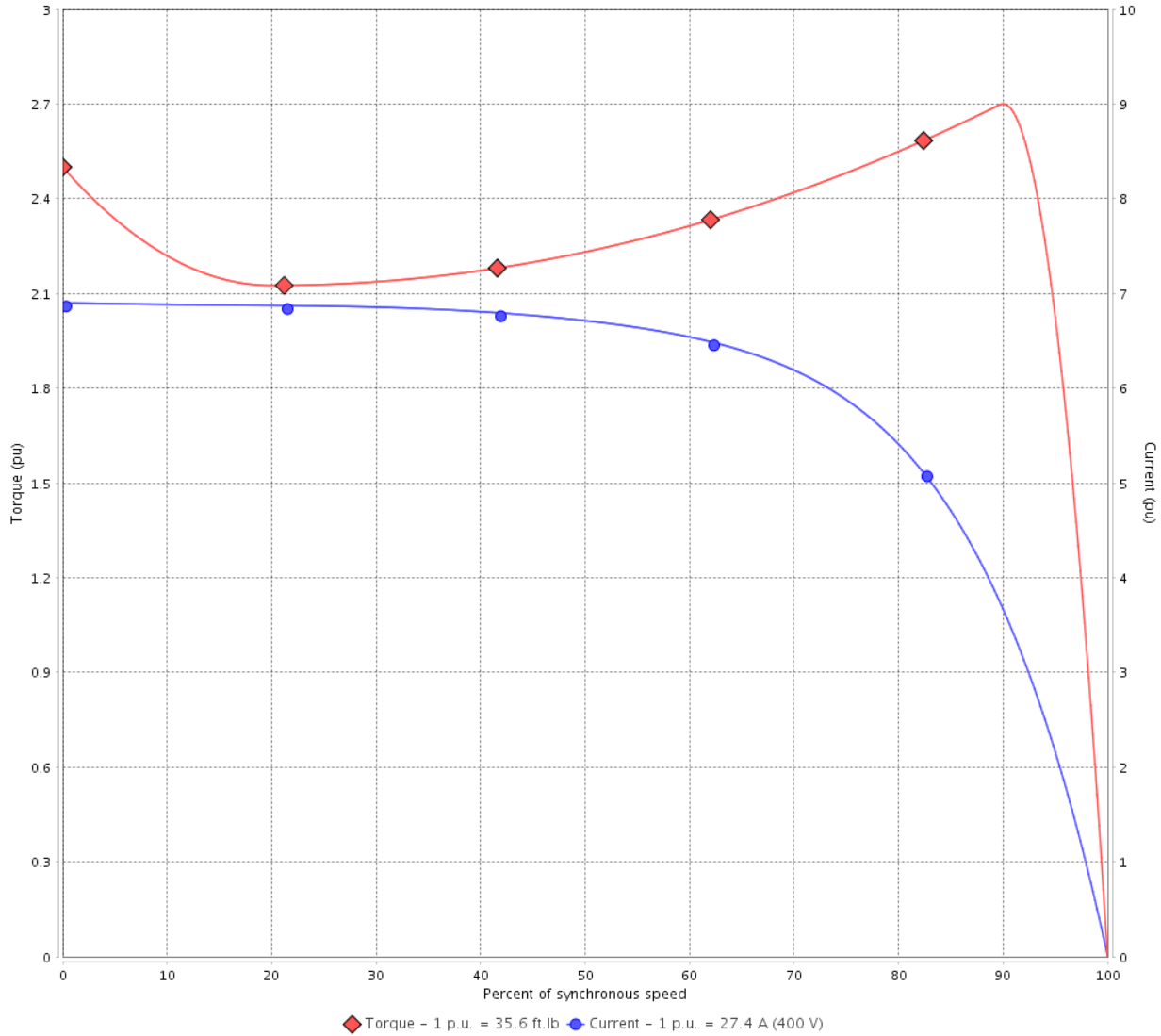
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current	: 27.4 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 35.6 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 2950 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



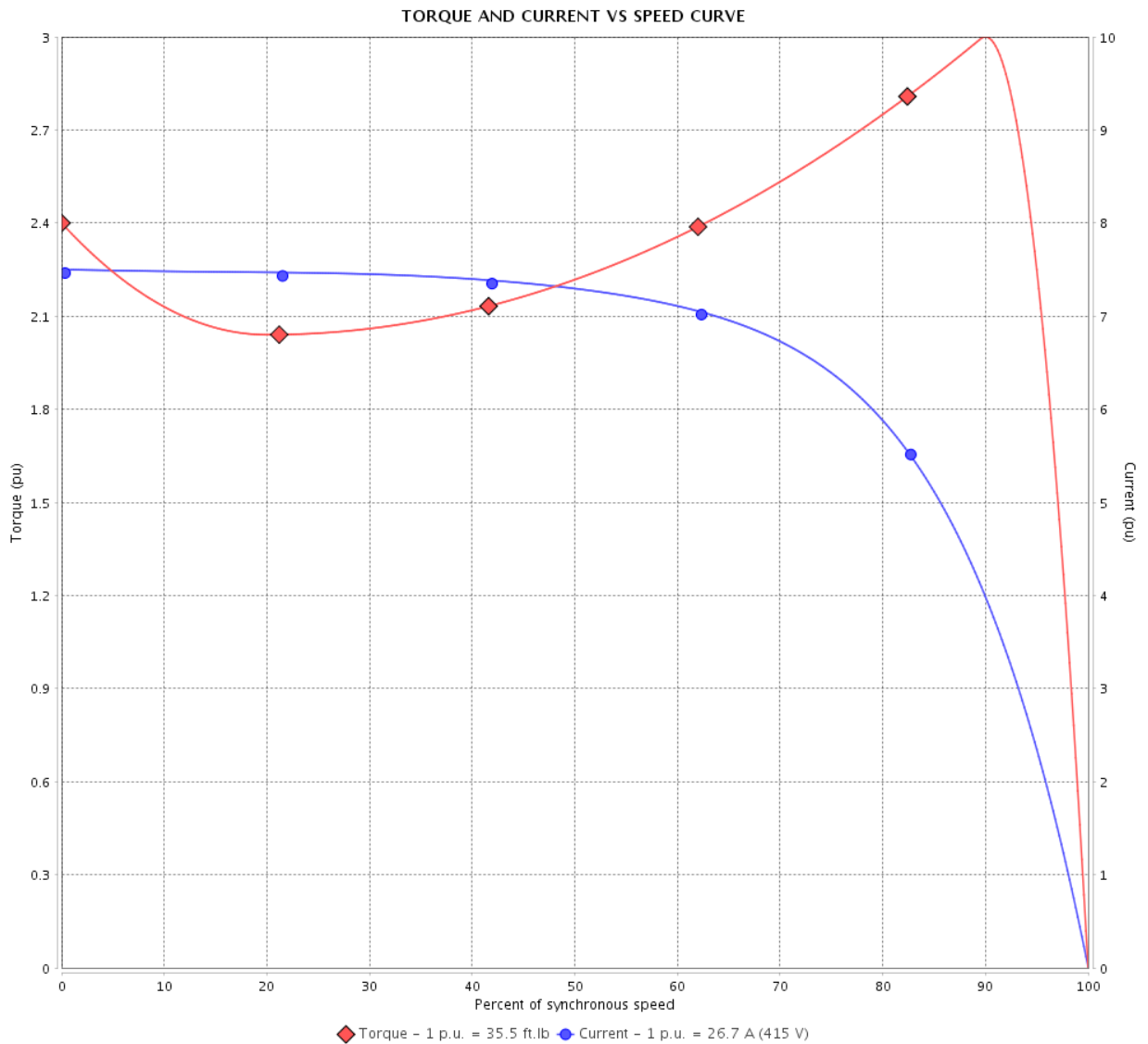
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Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 415 V 50 Hz 2P IE3

Rated current : 26.7 A  
 LRC : 7.5  
 Rated torque : 35.5 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 300 %  
 Rated speed : 2955 rpm

Moment of inertia (J) : 2.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Locked rotor time : 25s (cold) 14s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



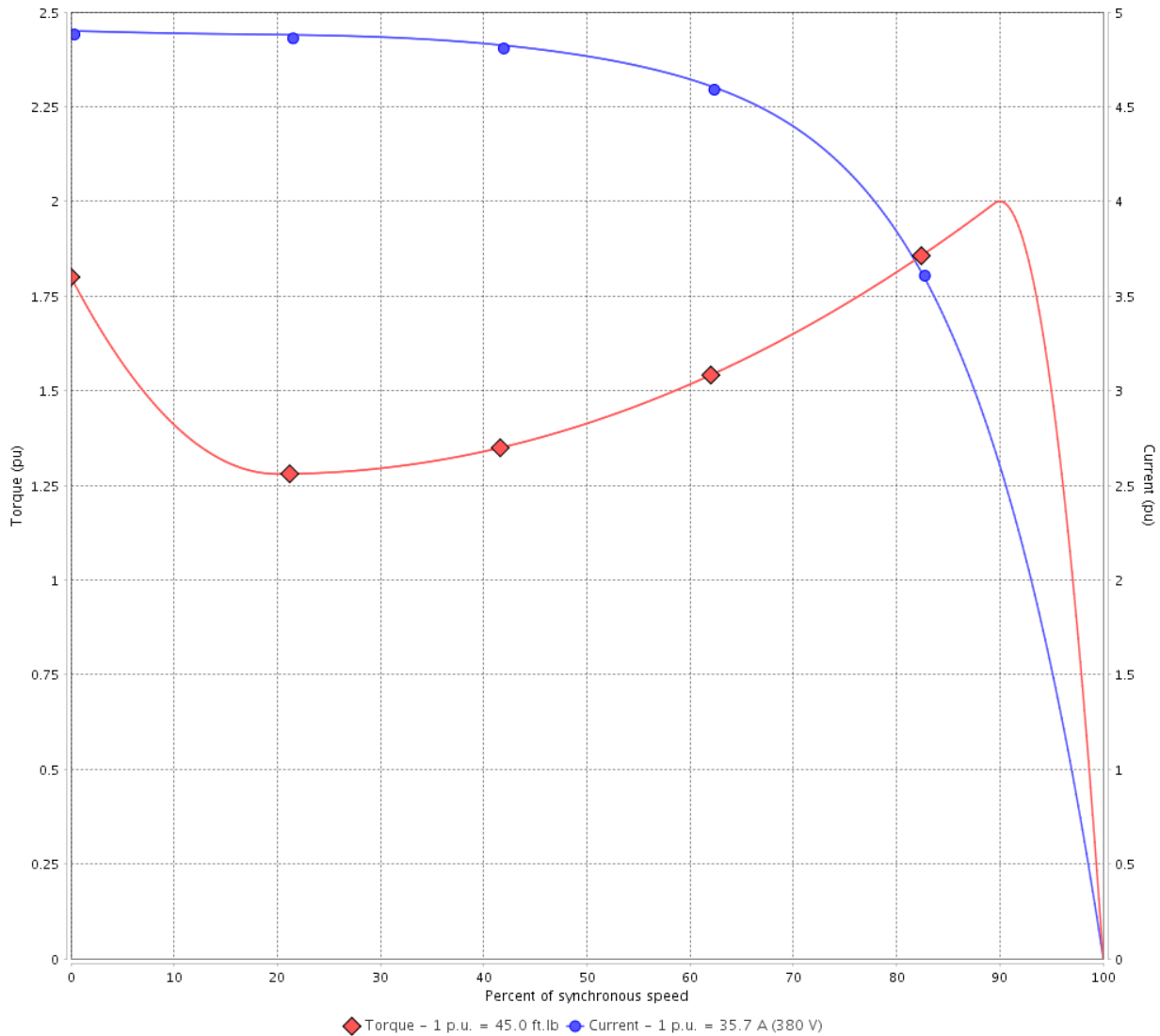
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 2P IE1

Rated current	: 35.7 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 4.9	Duty cycle	: Cont.(S1)
Rated torque	: 45.0 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 2920 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



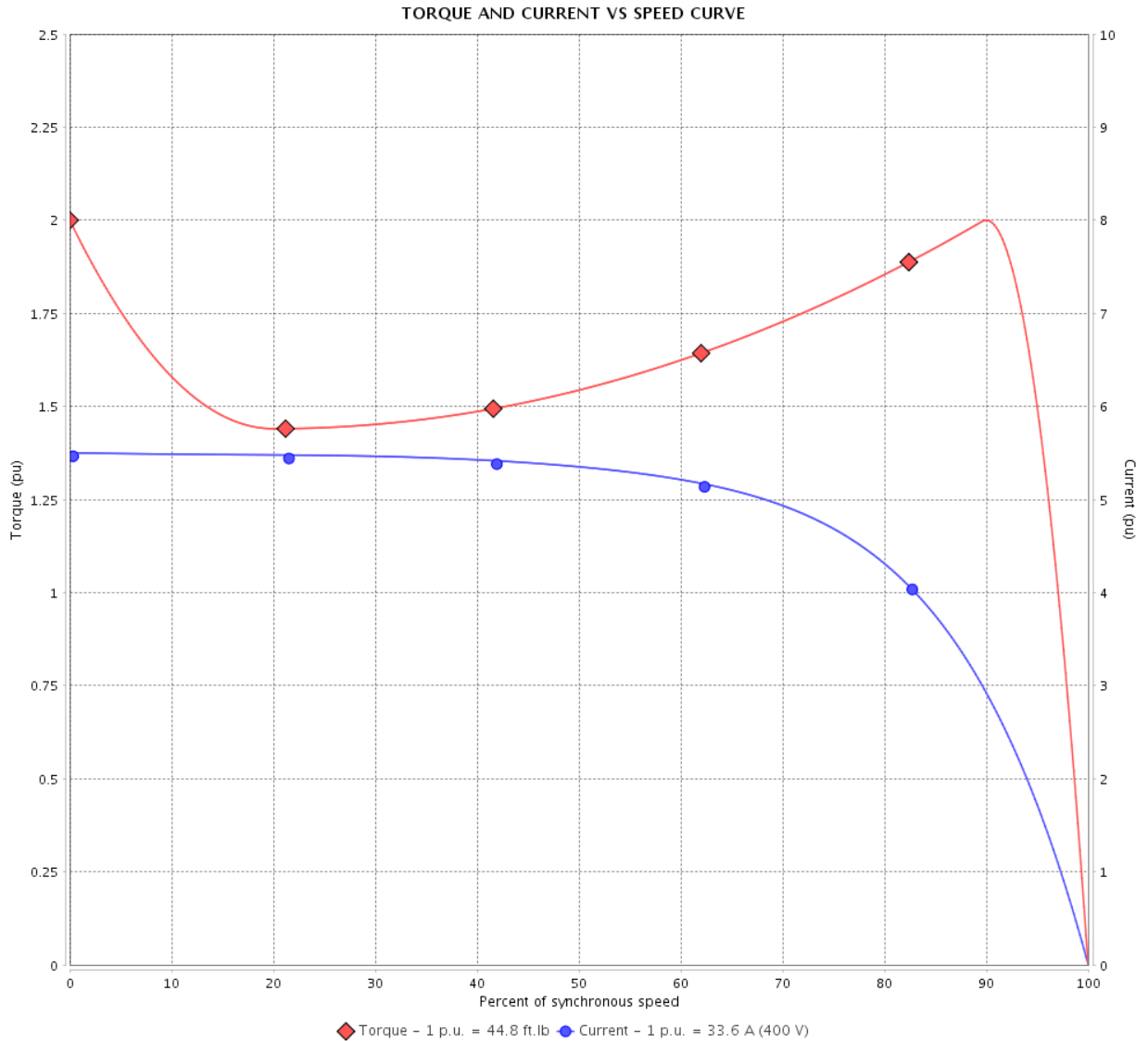
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 400 V 50 Hz 2P IE1

Rated current	: 33.6 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 44.8 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 2930 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



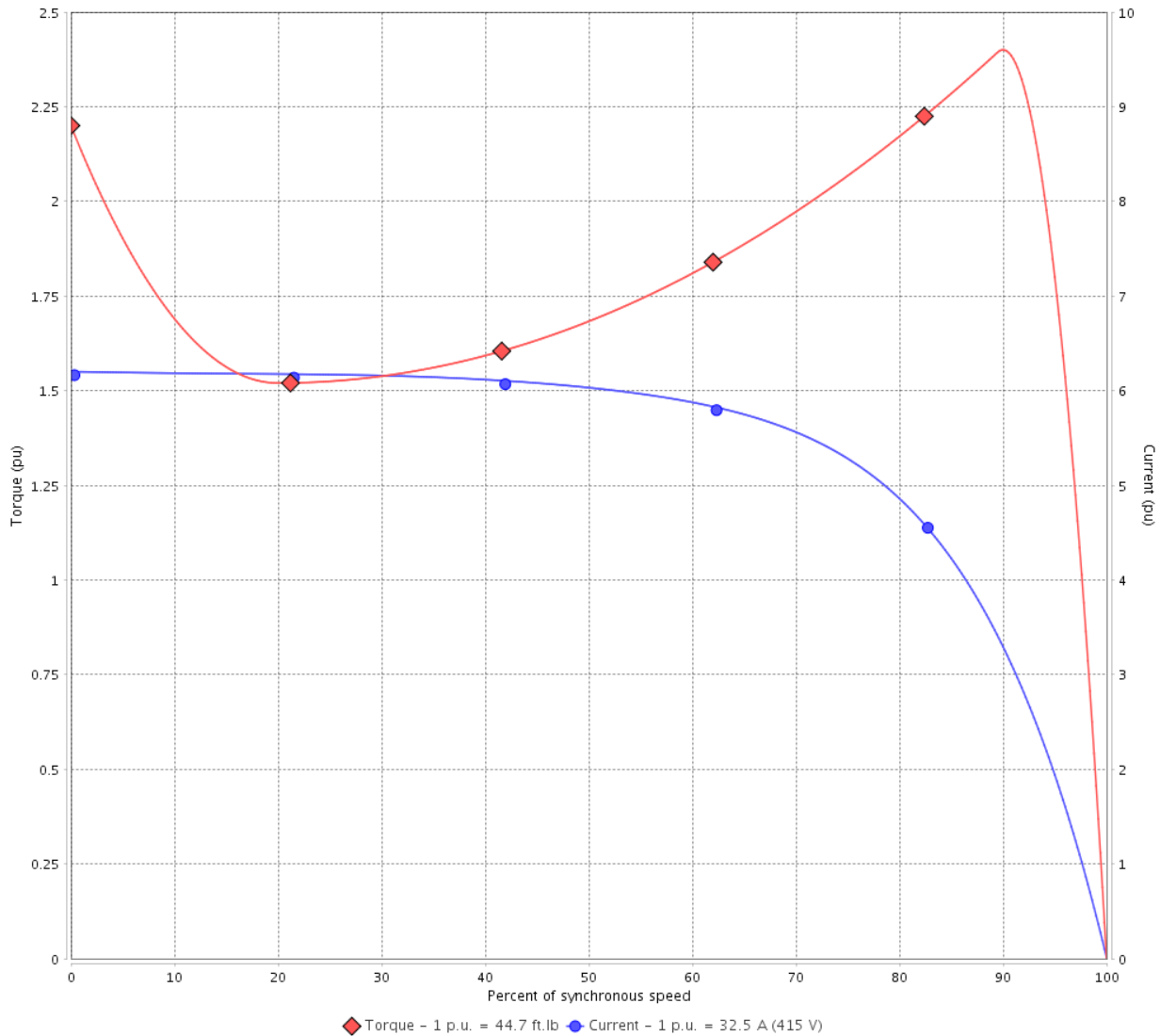
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 2P IE2

Rated current	: 32.5 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 44.7 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 2935 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

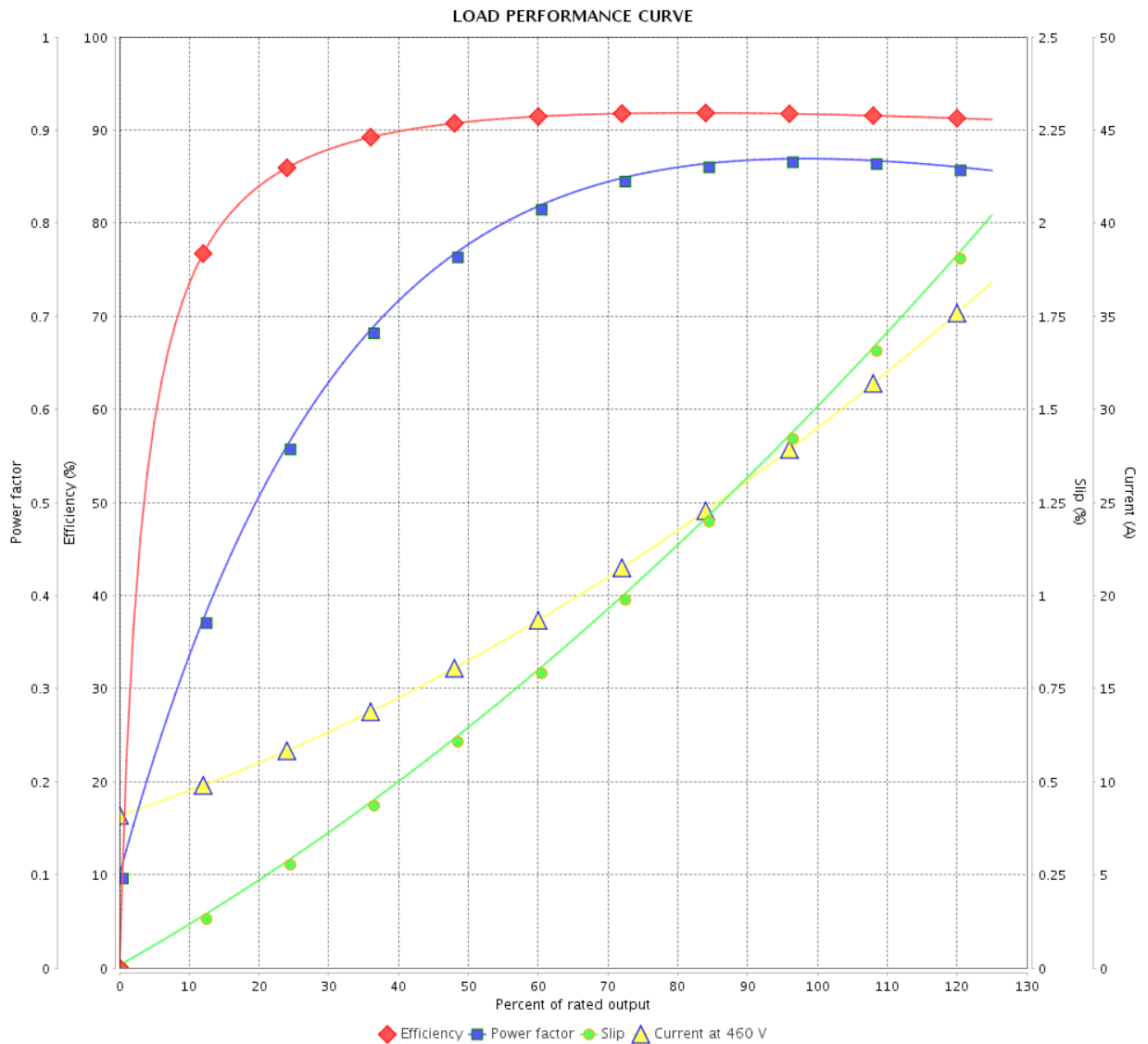


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 460 V 60 Hz 2P

Rated current : 29.1 A  
 LRC : 6.3  
 Rated torque : 37.0 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 250 %  
 Rated speed : 3545 rpm

Moment of inertia (J) : 2.69 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



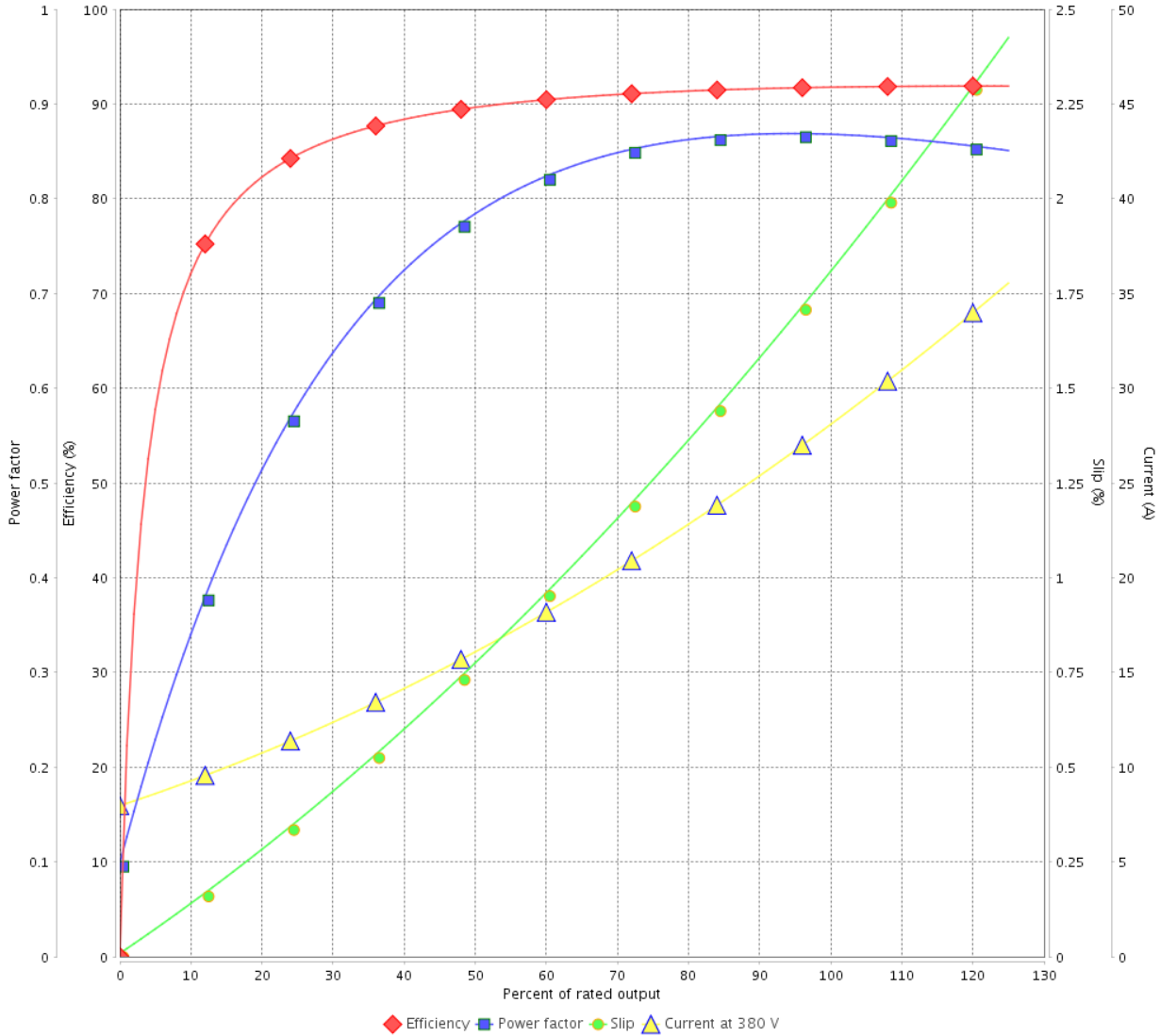
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 2P IE3

Rated current : 28.5 A  
 LRC : 6.2  
 Rated torque : 35.7 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 240 %  
 Rated speed : 2945 rpm

Moment of inertia (J) : 2.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

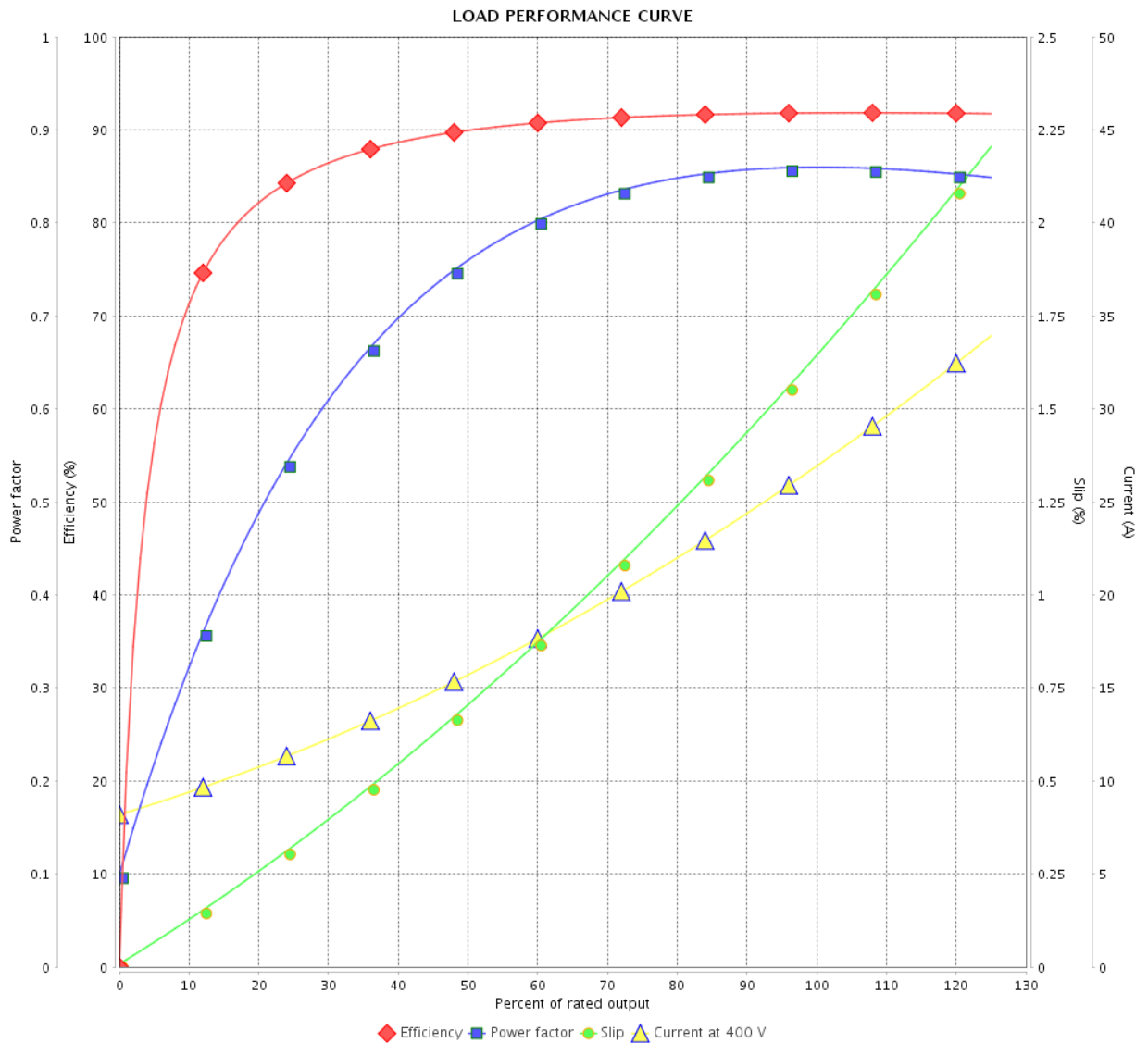


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 400 V 50 Hz 2P IE3

Rated current : 27.4 A  
 LRC : 6.9  
 Rated torque : 35.6 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 270 %  
 Rated speed : 2950 rpm

Moment of inertia (J) : 2.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



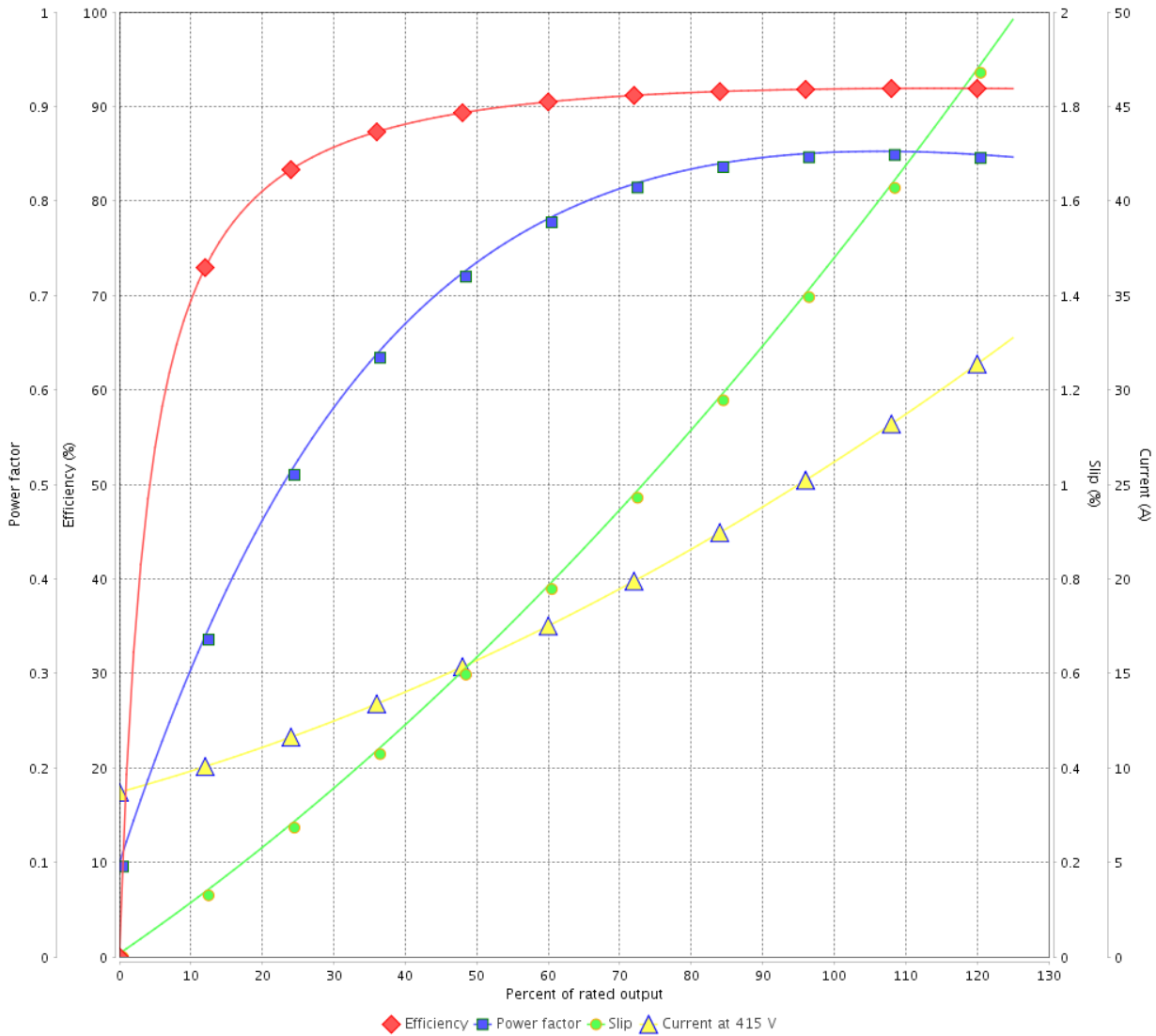
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 2P IE3

Rated current : 26.7 A  
 LRC : 7.5  
 Rated torque : 35.5 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 300 %  
 Rated speed : 2955 rpm

Moment of inertia (J) : 2.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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## Three Phase Induction Motor - Squirrel Cage

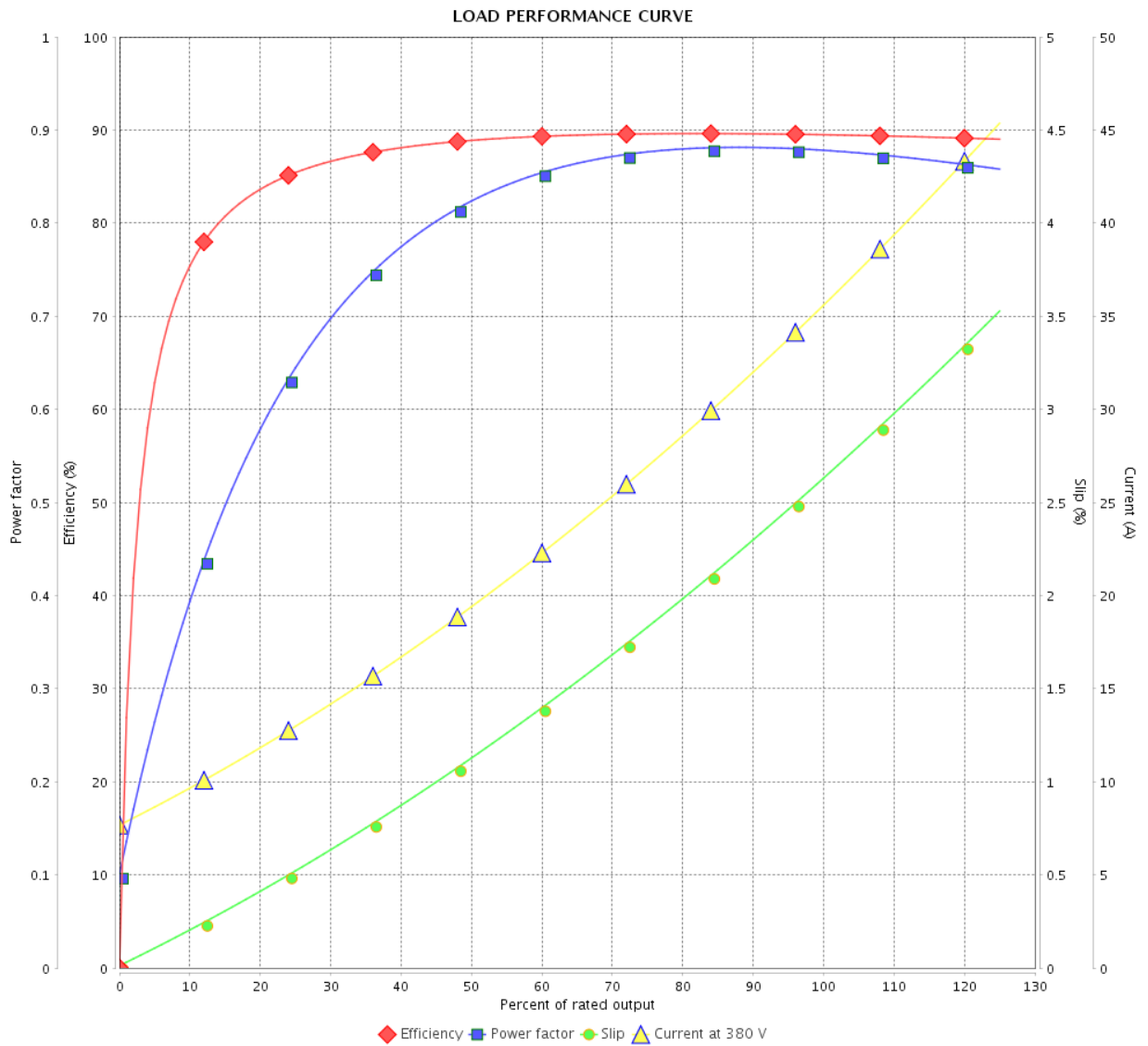


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 380 V 50 Hz 2P IE1

Rated current : 35.7 A  
 LRC : 4.9  
 Rated torque : 45.0 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 200 %  
 Rated speed : 2920 rpm

Moment of inertia (J) : 2.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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Three Phase Induction Motor - Squirrel Cage



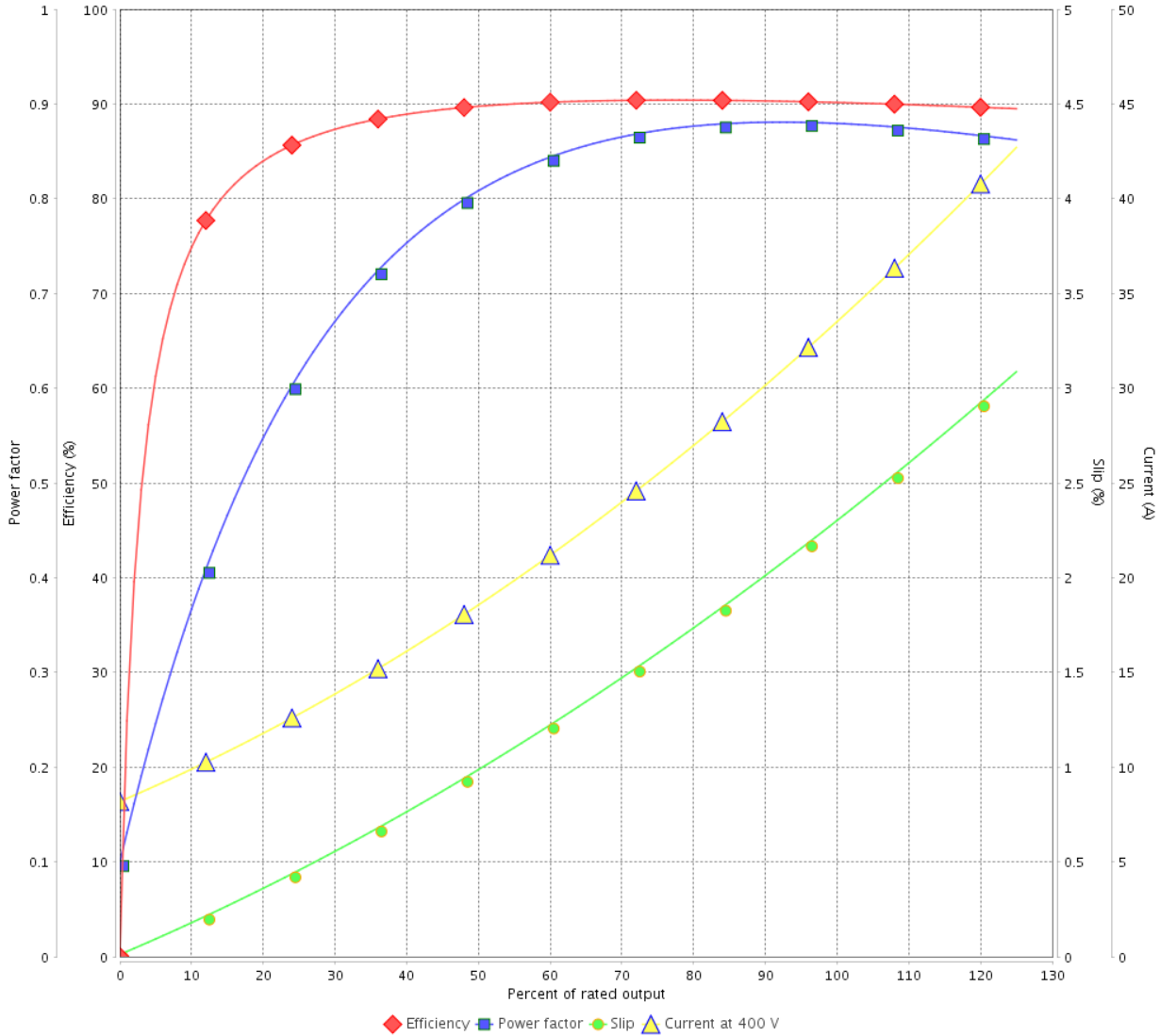
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 2P IE1

Rated current : 33.6 A  
 LRC : 5.5  
 Rated torque : 44.8 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 200 %  
 Rated speed : 2930 rpm

Moment of inertia (J) : 2.69 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

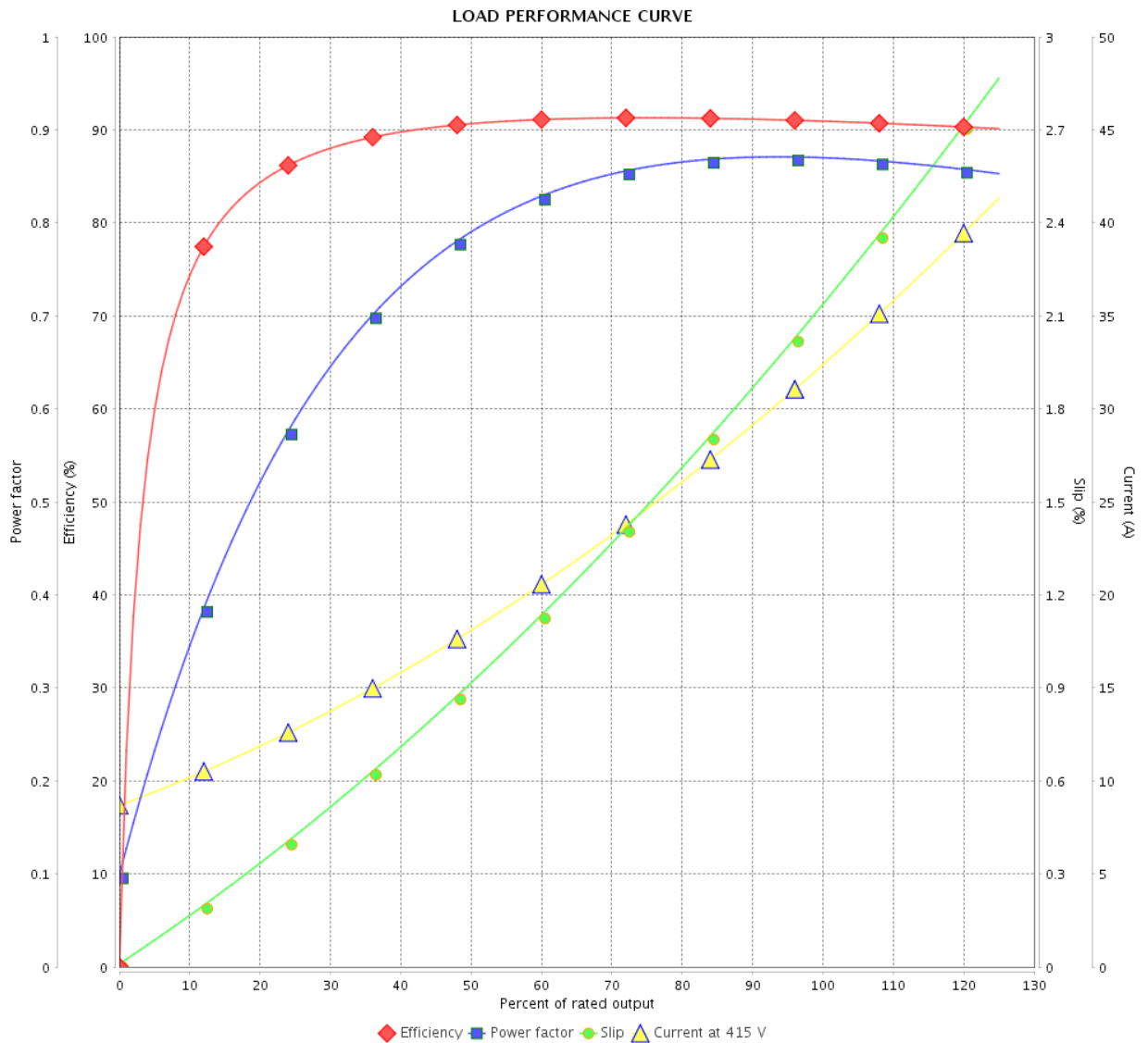


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 415 V 50 Hz 2P IE2

Rated current : 32.5 A  
 LRC : 6.2  
 Rated torque : 44.7 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 240 %  
 Rated speed : 2935 rpm

Moment of inertia (J) : 2.69 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 : 12424297  
Catalog # : 02536ST3QIE284TS-W22

Performance : 460 V 60 Hz 2P

Rated current	: 29.1 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 37.0 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3545 rpm	Design	: B

Heating constant

Cooling constant

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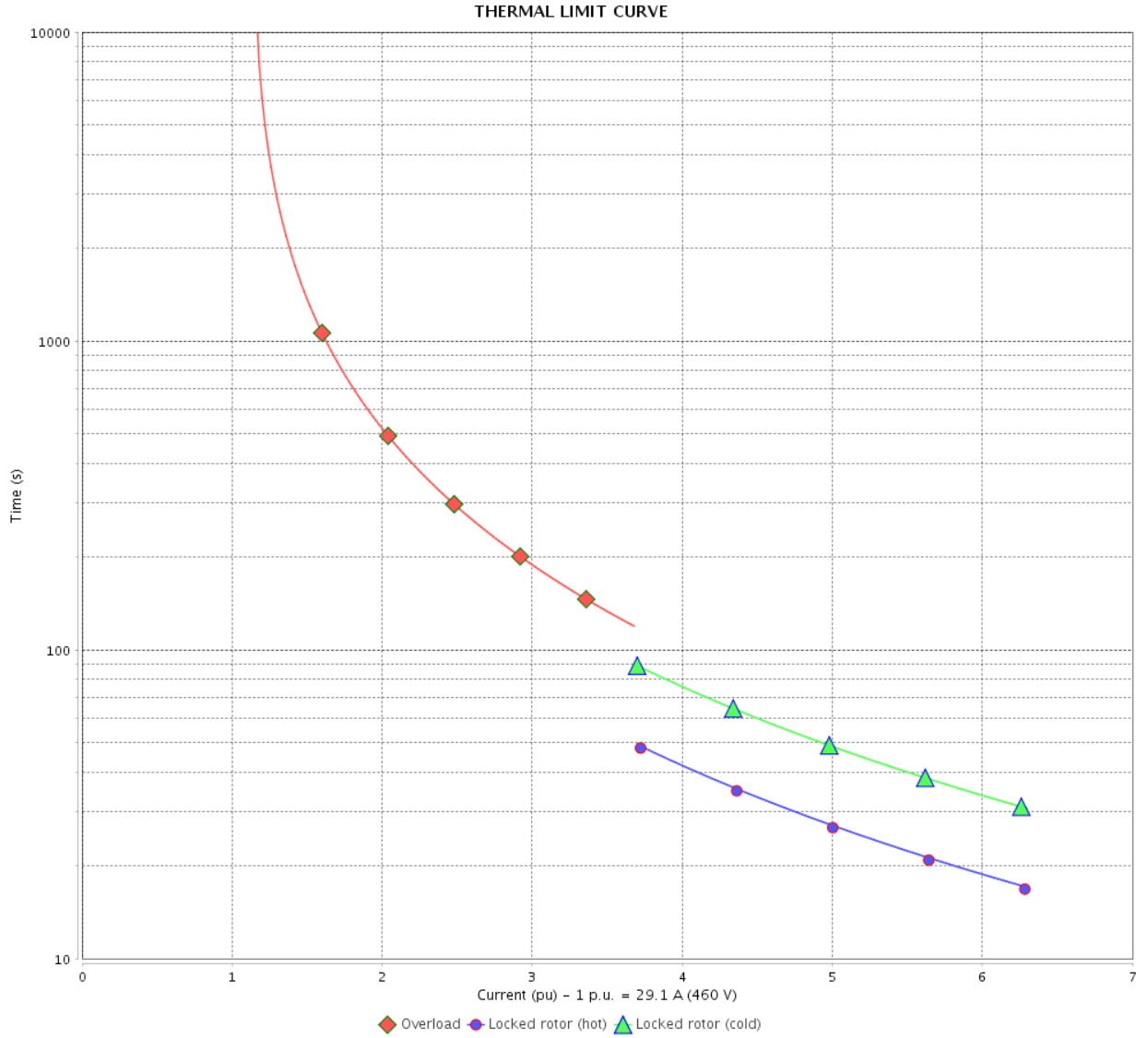


# THERMAL LIMIT CURVE

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 : 12424297

Catalog # : 02536ST3QIE284TS-W22

Performance : 380 V 50 Hz 2P IE3

Rated current	: 28.5 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 35.7 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B

Heating constant

Cooling constant

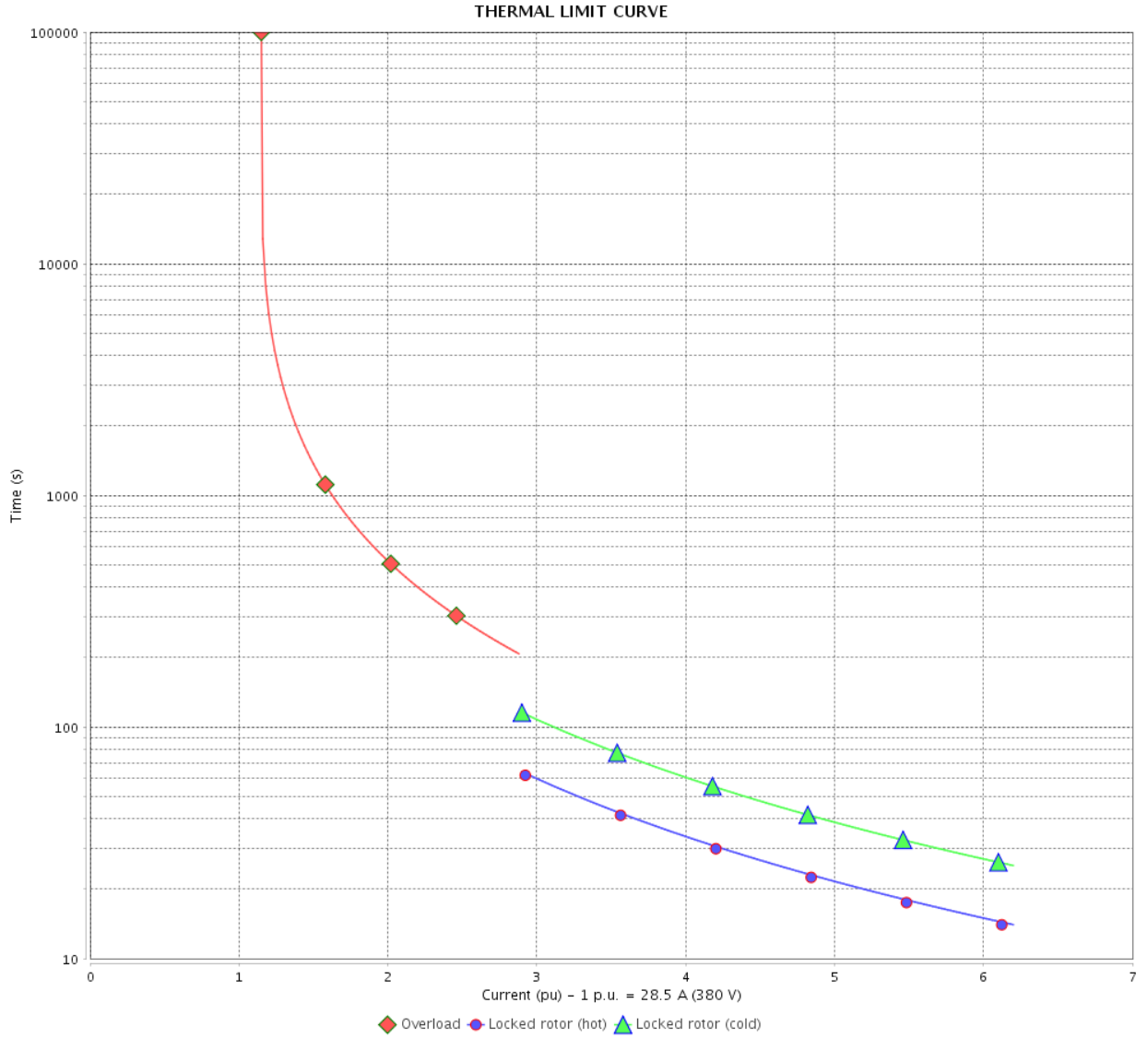
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

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 Product code : 12424297  
 Catalog # : 02536ST3QIE284TS-W22

Performance : 400 V 50 Hz 2P IE3

Rated current : 27.4 A	Moment of inertia (J) : 2.69 sq.ft.lb
LRC : 6.9	Duty cycle : Cont.(S1)
Rated torque : 35.6 ft.lb	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.00
Breakdown torque : 270 %	Temperature rise : 80 K
Rated speed : 2950 rpm	Design : B

Heating constant

Cooling constant

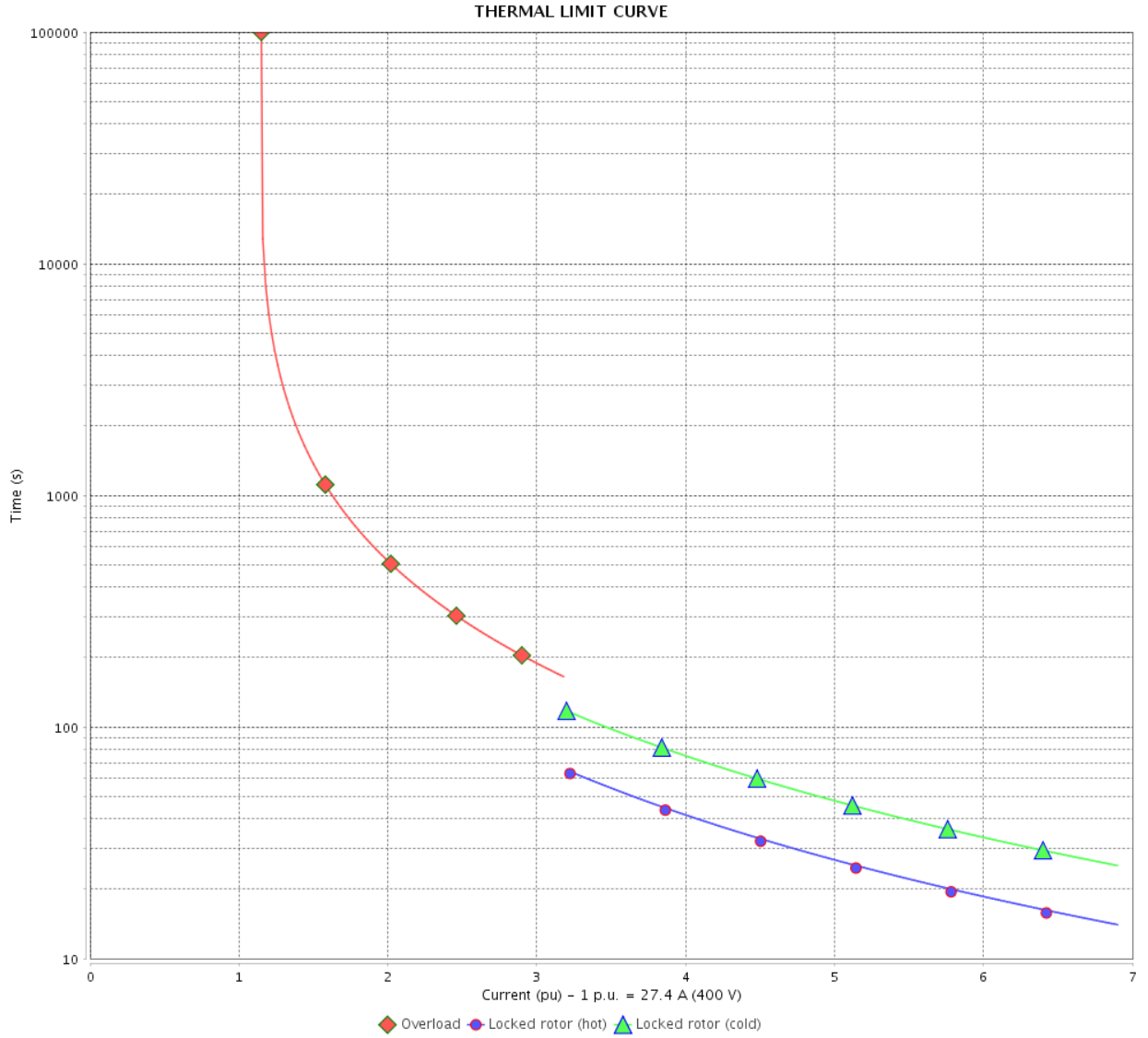
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Performance : 415 V 50 Hz 2P IE3

Rated current	: 26.7 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 35.5 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2955 rpm	Design	: B

Heating constant

Cooling constant

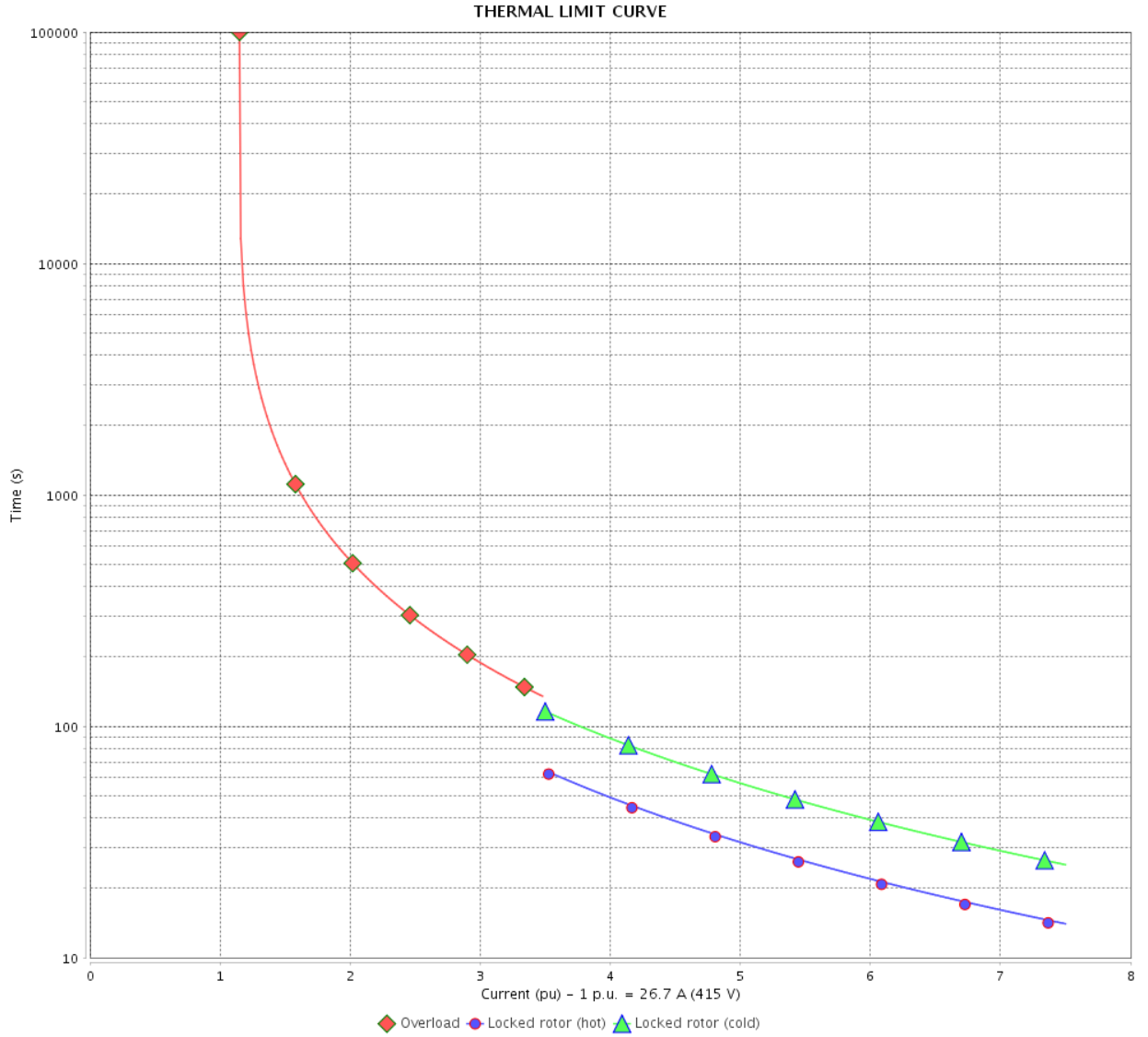
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Rated current	: 35.7 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 4.9	Duty cycle	: Cont.(S1)
Rated torque	: 45.0 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 2920 rpm	Design	: B

Heating constant

Cooling constant

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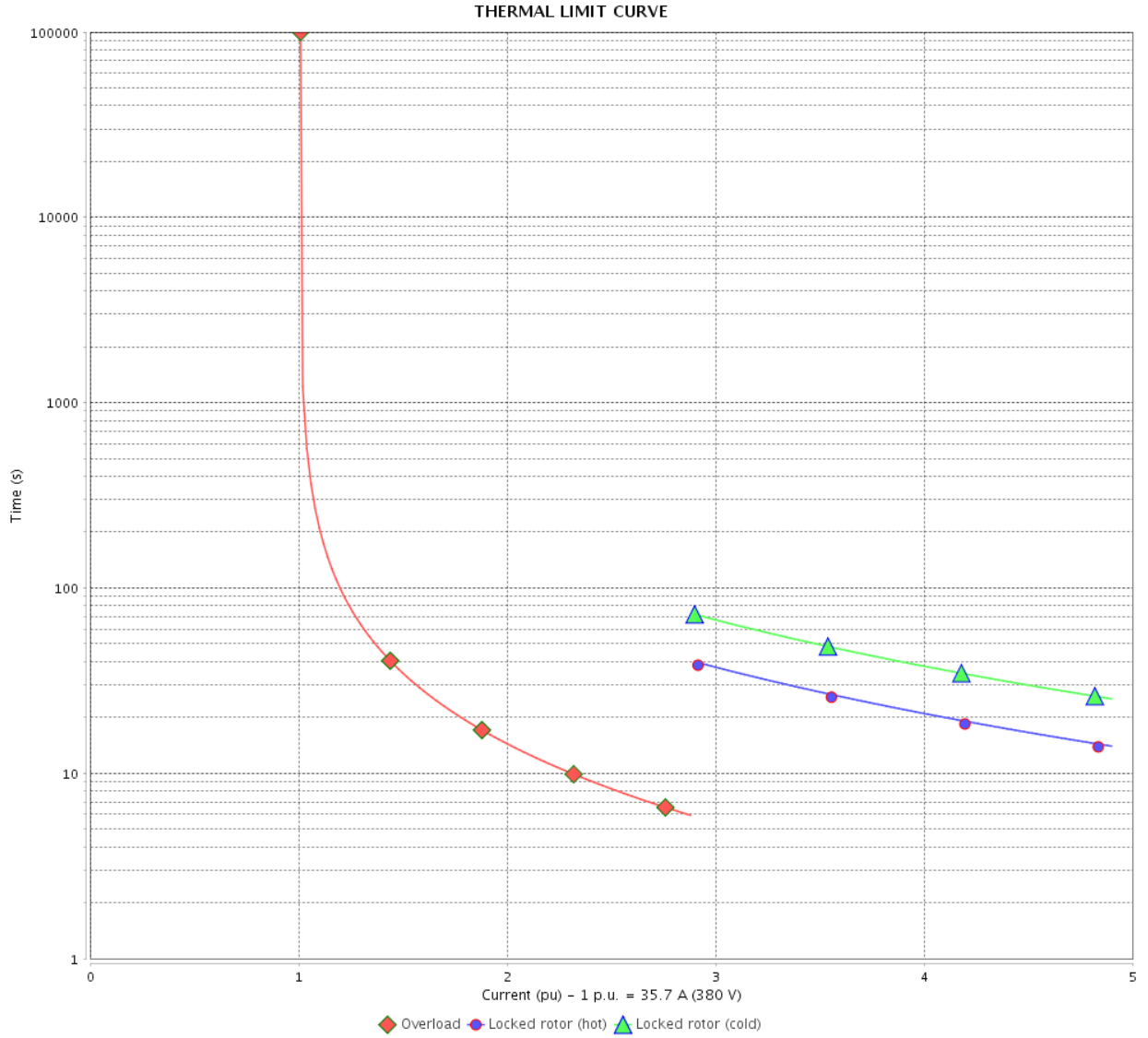


# THERMAL LIMIT CURVE

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 : 12424297  
Catalog # : 02536ST3QIE284TS-W22

Performance : 400 V 50 Hz 2P IE1

Rated current	: 33.6 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 44.8 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 2930 rpm	Design	: B

Heating constant

Cooling constant

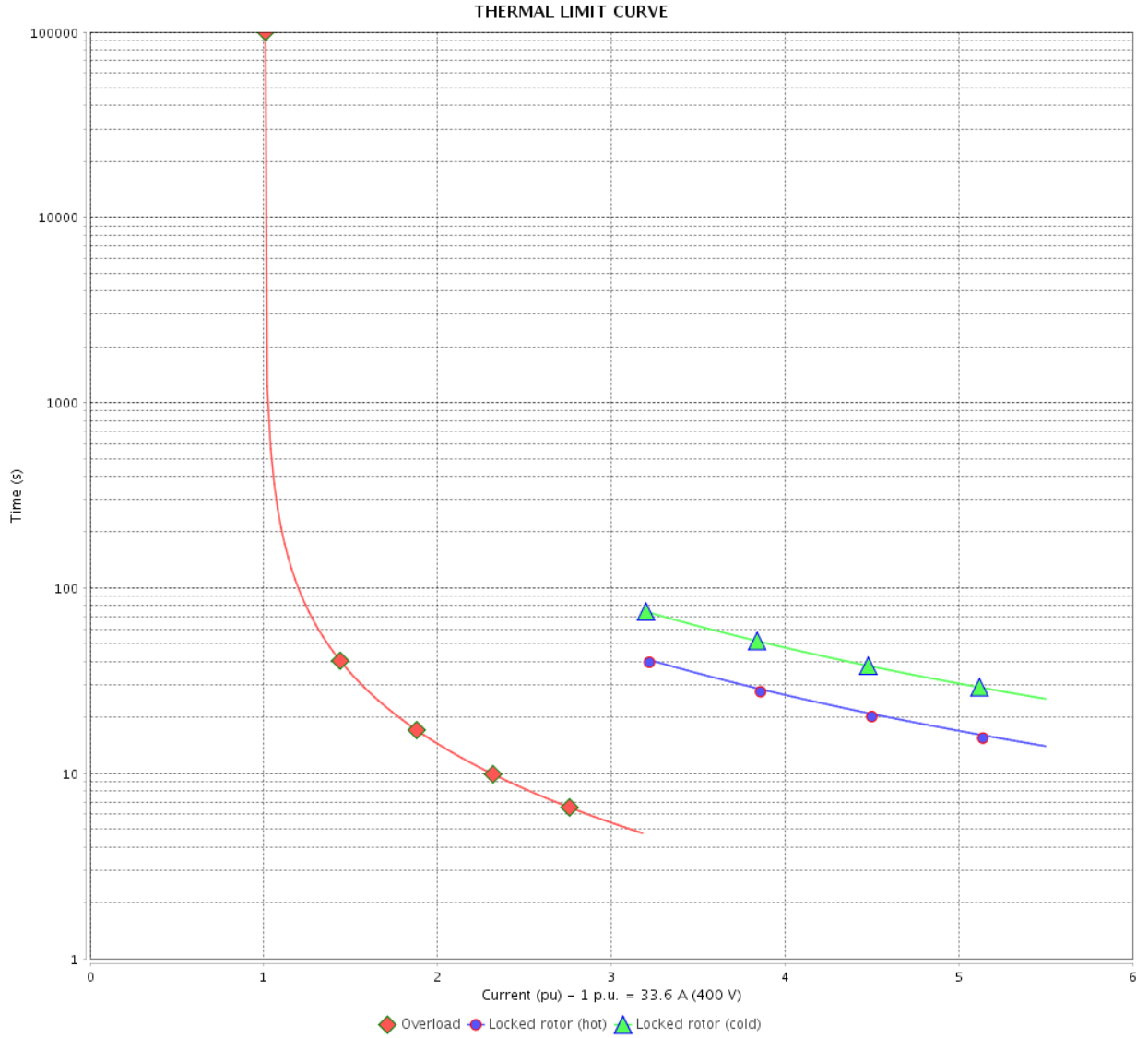
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	14/04/2022		Page 26 / 36	Revision

# 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 : 12424297  
Catalog # : 02536ST3QIE284TS-W22

Performance : 415 V 50 Hz 2P IE2

Rated current	: 32.5 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 44.7 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 2935 rpm	Design	: B

Heating constant

Cooling constant

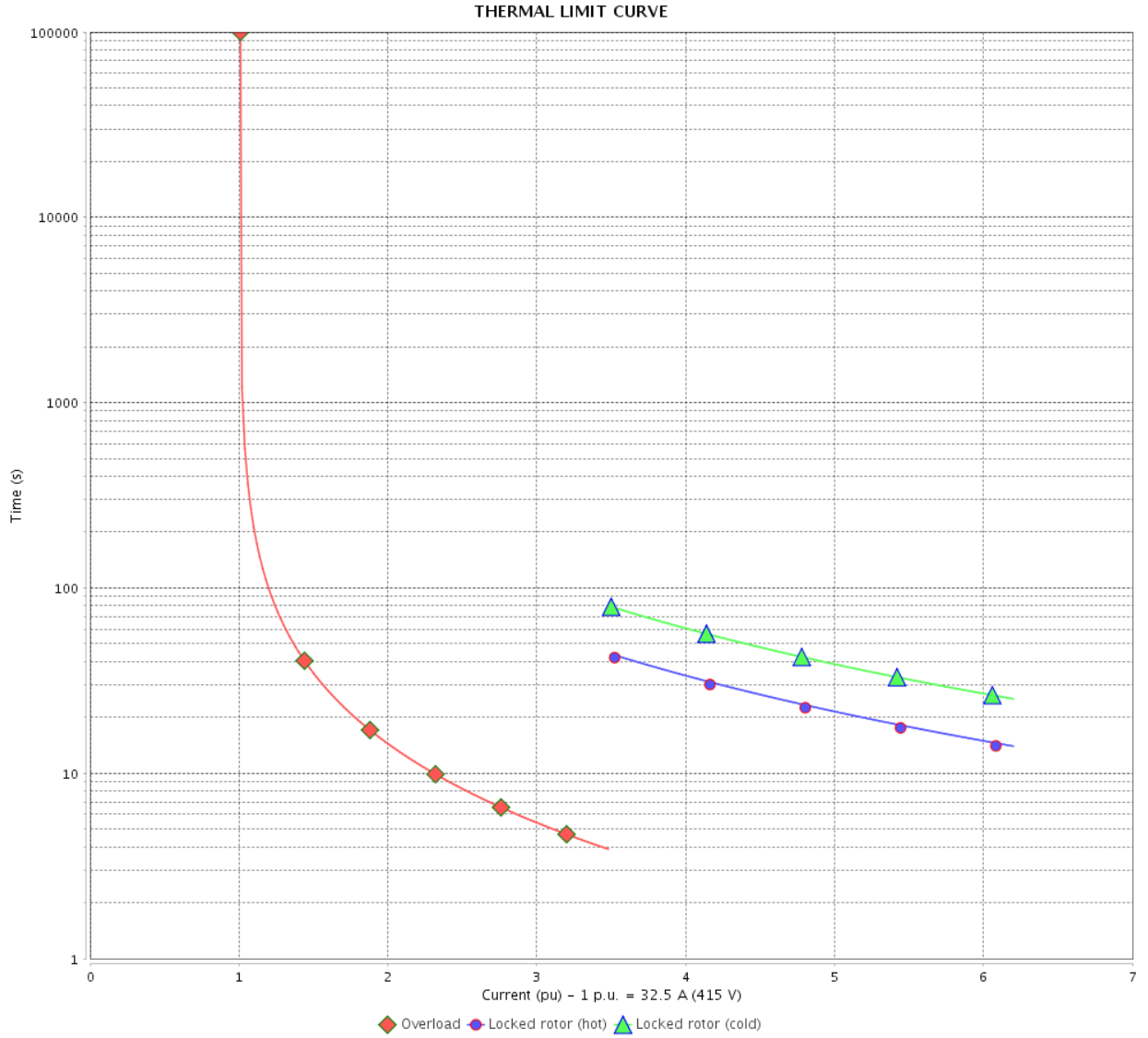
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		28 / 36	

# 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

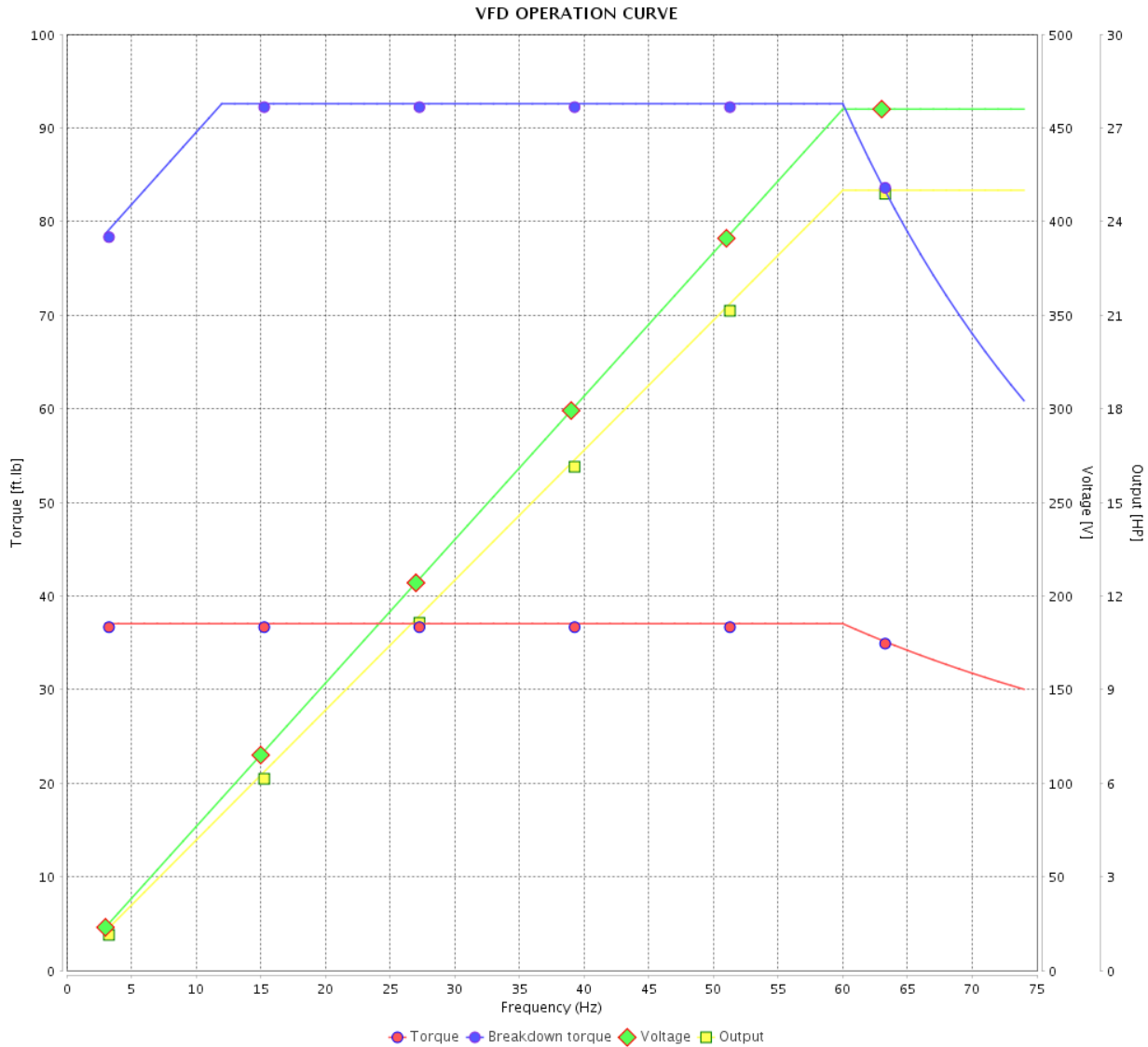


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 460 V 60 Hz 2P

Rated current : 29.1 A  
 LRC : 6.3  
 Rated torque : 37.0 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 250 %  
 Rated speed : 3545 rpm

Moment of inertia (J) : 2.69 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

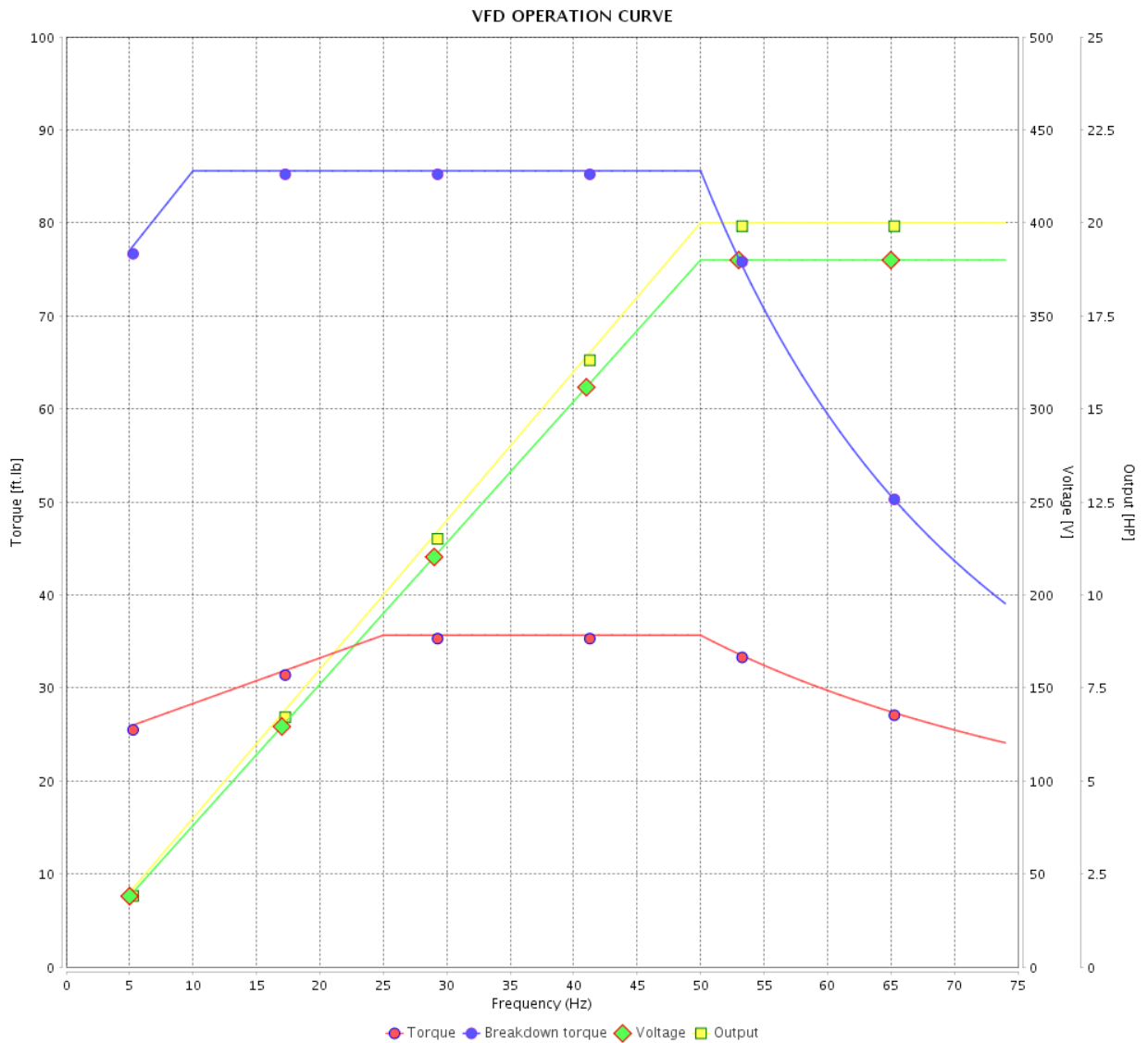


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 380 V 50 Hz 2P IE3

Rated current : 28.5 A  
 LRC : 6.2  
 Rated torque : 35.7 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 240 %  
 Rated speed : 2945 rpm

Moment of inertia (J) : 2.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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Performed by		Page		Revision
Checked by		31 / 36		
Date		14/04/2022		

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



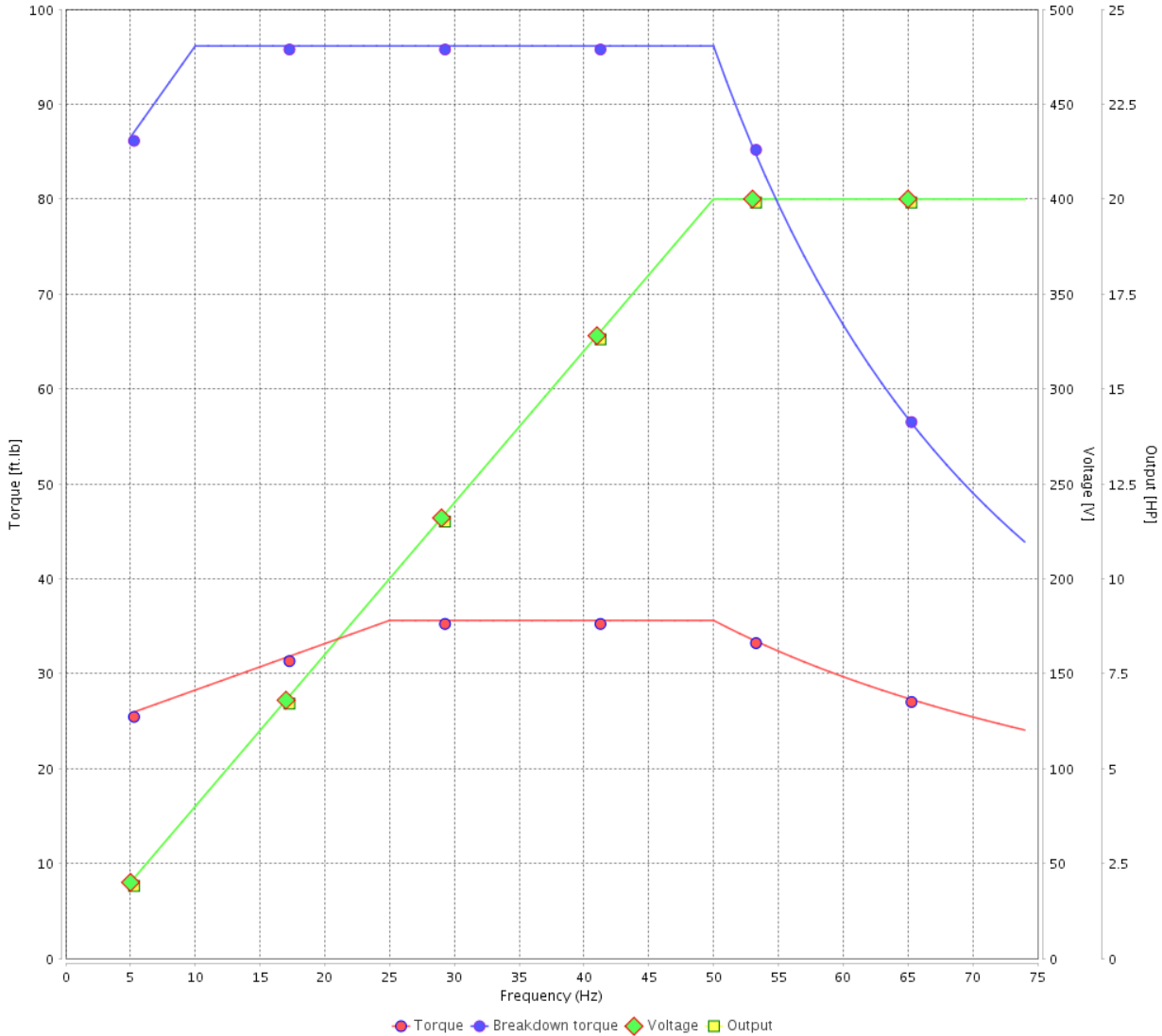
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22

VFD OPERATION CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current : 27.4 A  
 LRC : 6.9  
 Rated torque : 35.6 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 270 %  
 Rated speed : 2950 rpm

Moment of inertia (J) : 2.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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Date	14/04/2022			



# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

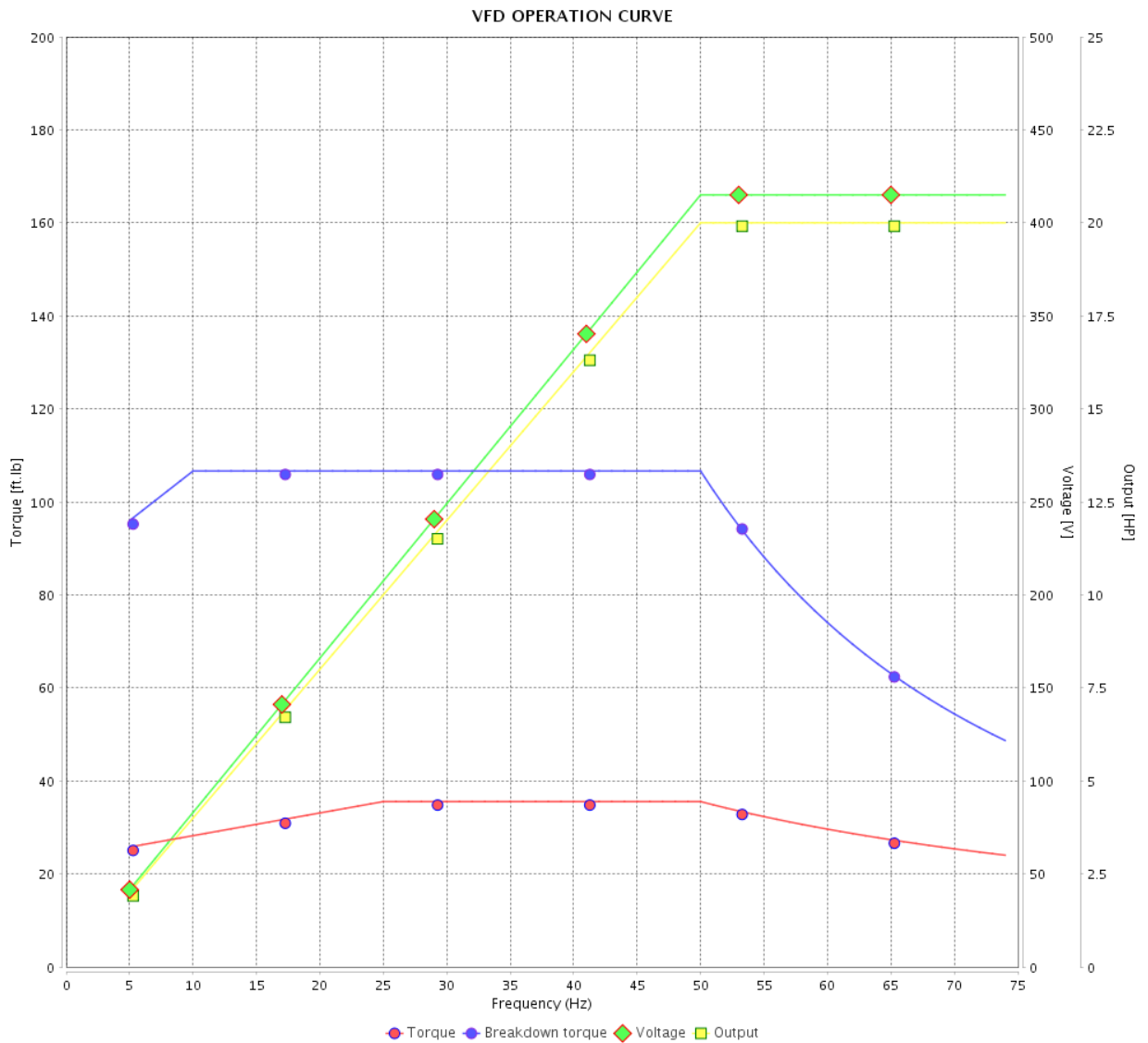


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 415 V 50 Hz 2P IE3

Rated current : 26.7 A  
 LRC : 7.5  
 Rated torque : 35.5 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 300 %  
 Rated speed : 2955 rpm

Moment of inertia (J) : 2.69 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
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Date		14/04/2022		

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



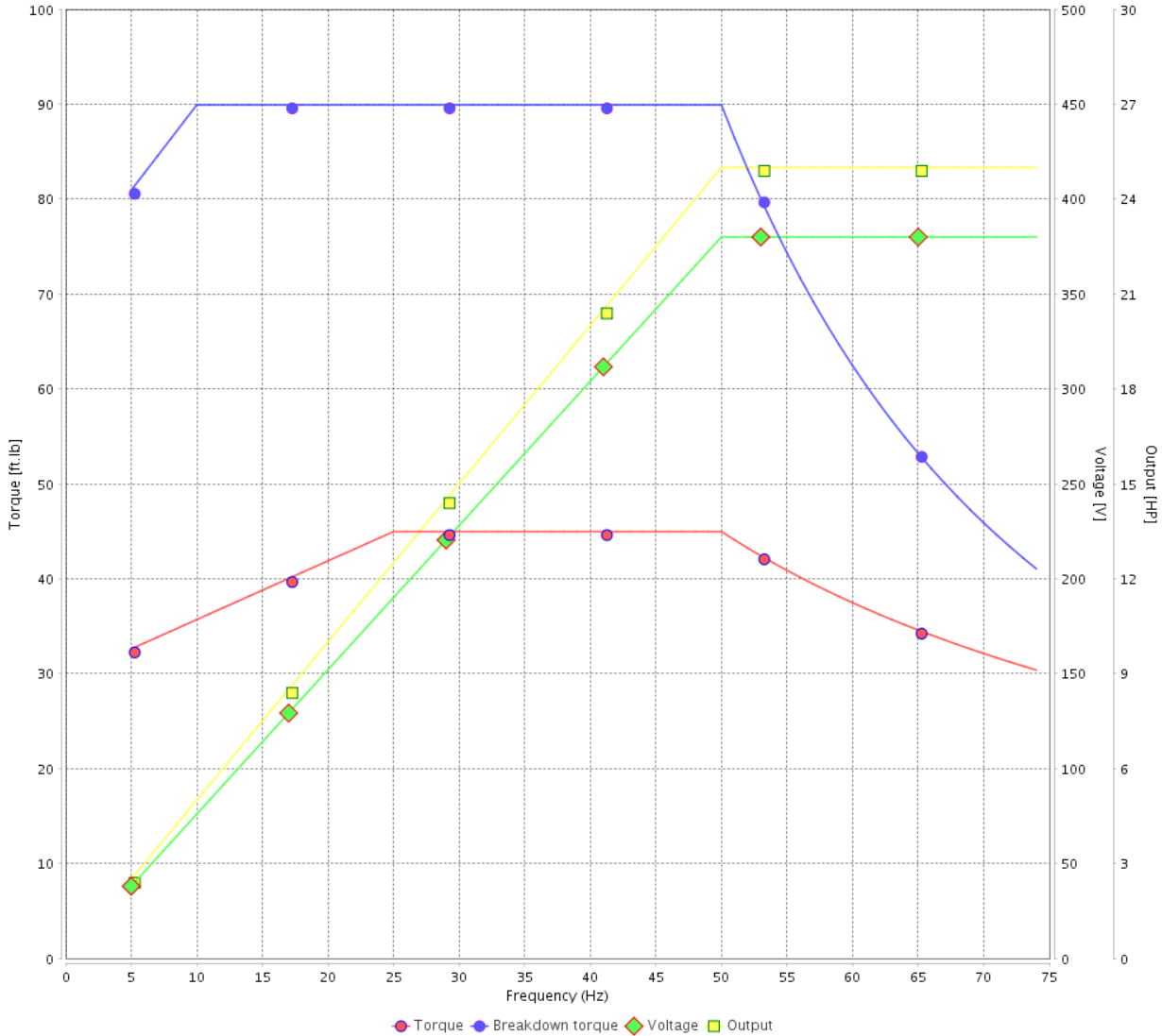
Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22

VFD OPERATION CURVE



Performance : 380 V 50 Hz 2P IE1

Rated current : 35.7 A  
 LRC : 4.9  
 Rated torque : 45.0 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 200 %  
 Rated speed : 2920 rpm

Moment of inertia (J) : 2.69 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

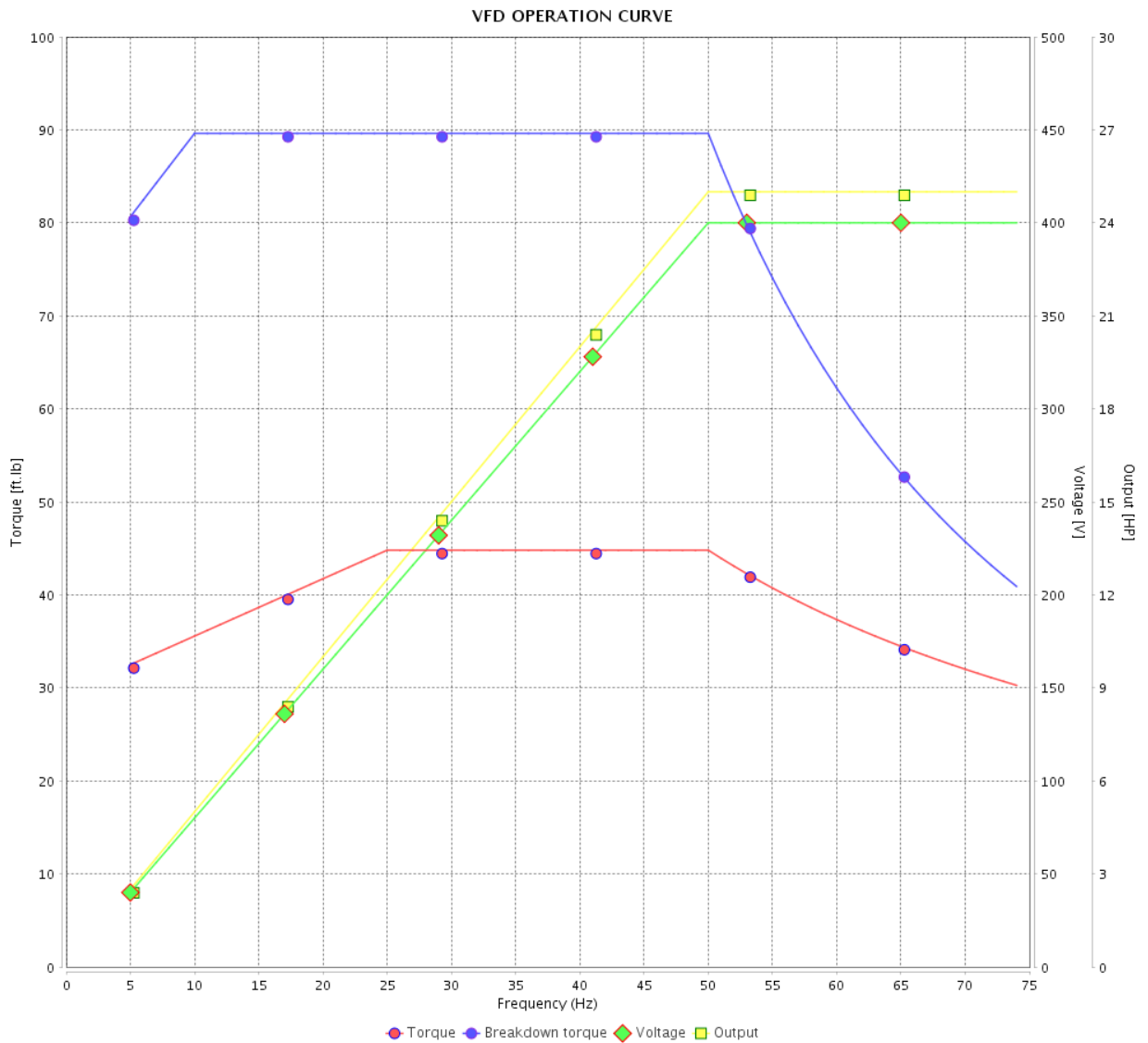


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22



Performance : 400 V 50 Hz 2P IE1

Rated current : 33.6 A  
 LRC : 5.5  
 Rated torque : 44.8 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 200 %  
 Rated speed : 2930 rpm

Moment of inertia (J) : 2.69 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



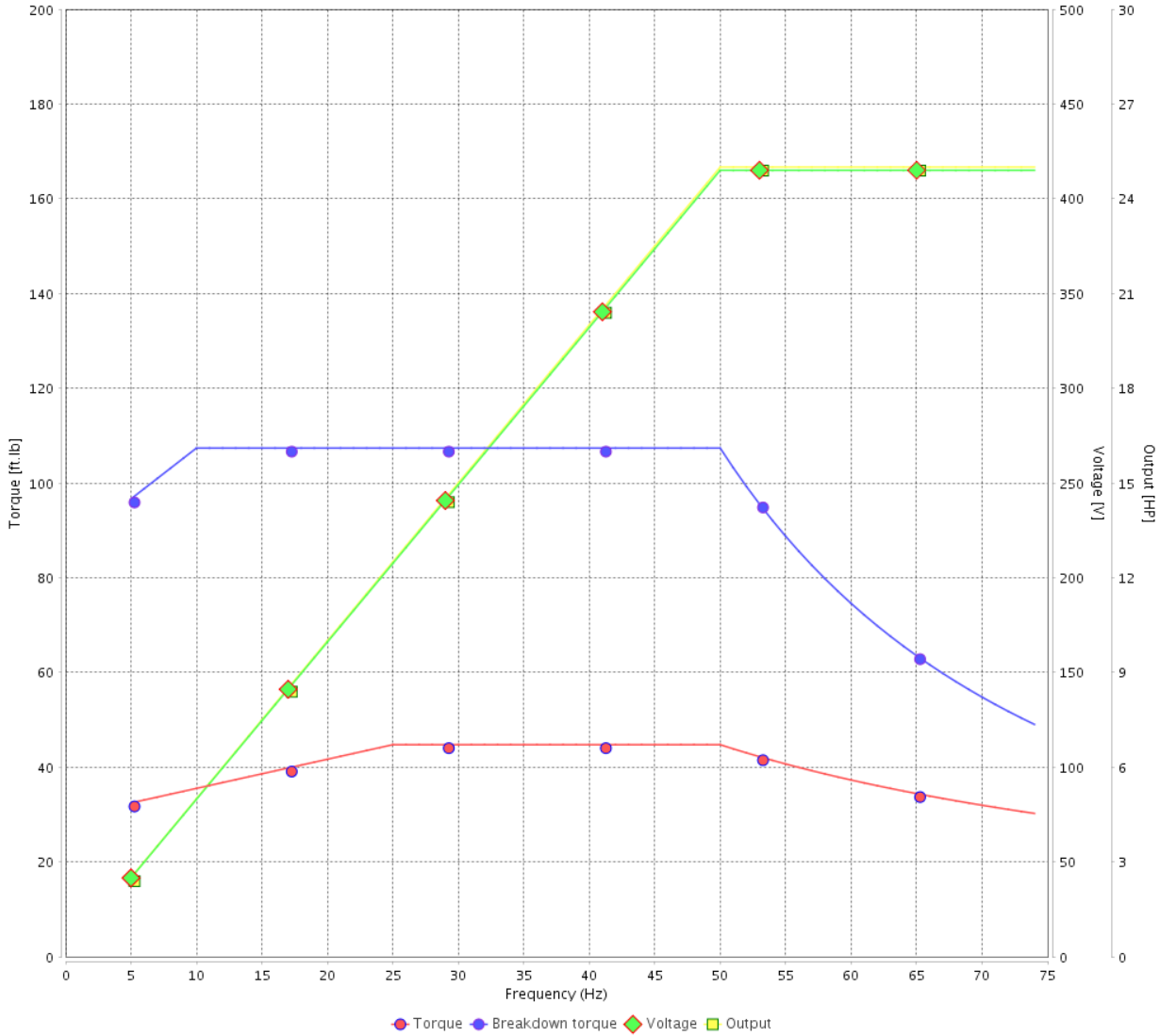
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12424297

Catalog # : 02536ST3QIE284TS-W22

VFD OPERATION CURVE



Performance : 415 V 50 Hz 2P IE2

Rated current : 32.5 A  
 LRC : 6.2  
 Rated torque : 44.7 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 240 %  
 Rated speed : 2935 rpm

Moment of inertia (J) : 2.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

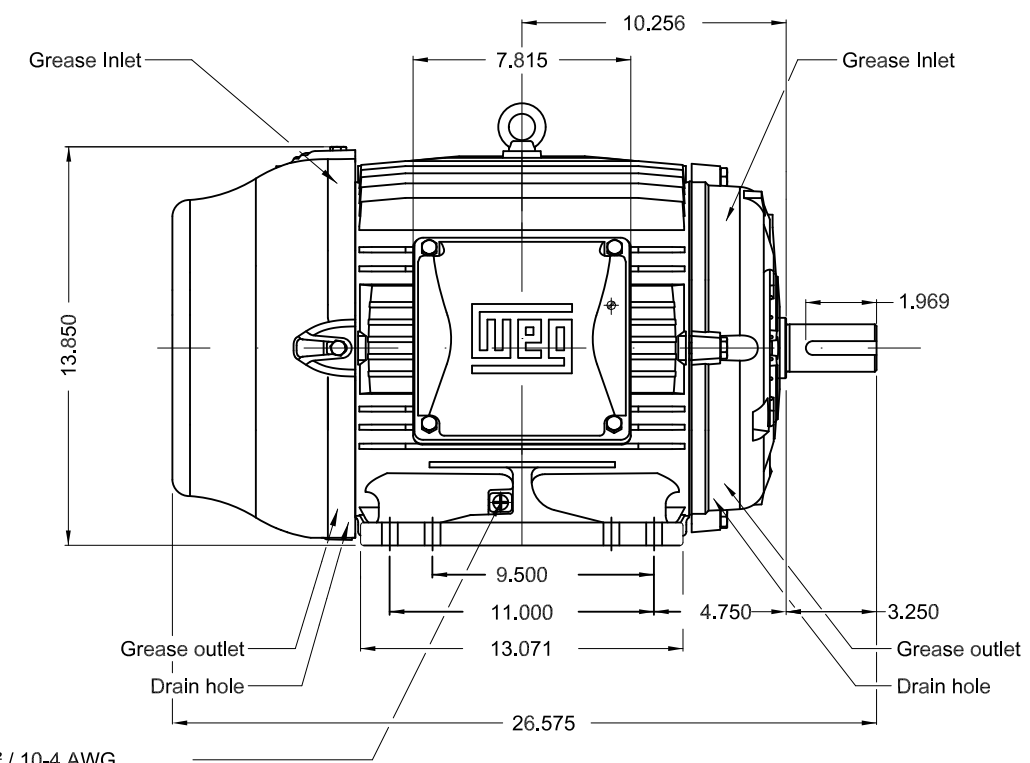
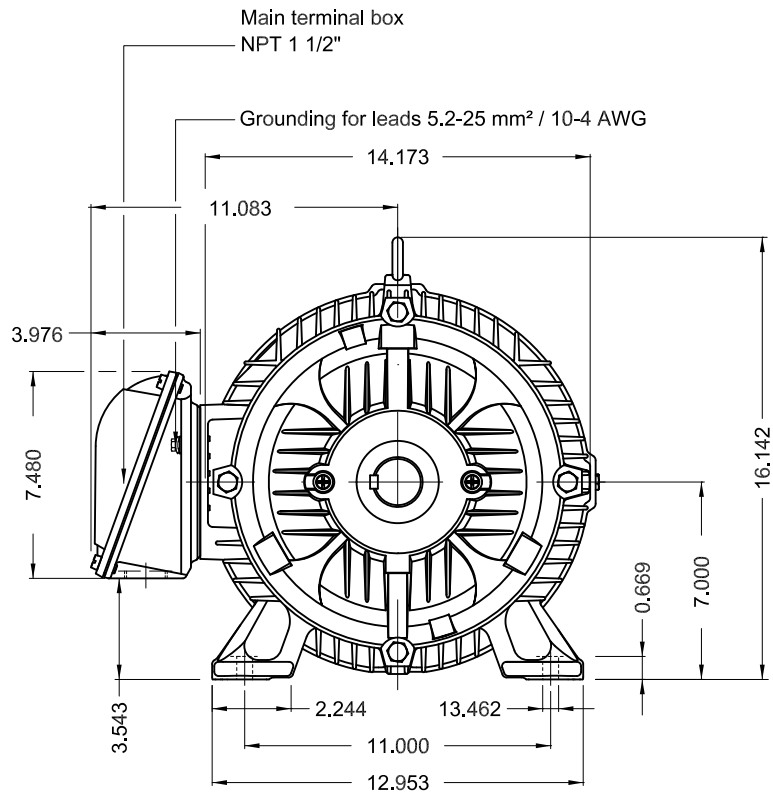
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

1 2 3 4 5 6

A

B

C

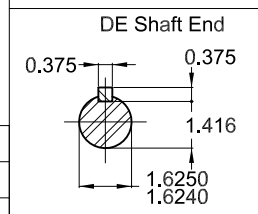


Grounding for leads 5.2-25 mm² / 10-4 AWG

D

E

Color RAL 5009  
 Painting plan 202E  
 Mounting B3R(D)



25 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 284/6TS IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW  
 WDD



Dimensions in inches XME A3



**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 02536ST3QIE284TS-W22



Inverter Duty Motor  
Severe Duty

MADE IN BRAZIL  
12424297

PH3 60Hz Fr. 284/6TS 1000m.a.s.l. IP55 TEFC 402lb

V 460

A 29.1

HP 25

kW 18.5

SF 1.25

SFA 36.4

RPM 3545

PF 0.87

AMB 40°C

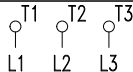
INS cl. F DT80K

NEMA NOM EFF 91.7%

DUTY CONT.

DES B Code G

GUARANT. EFF 90.2%



460V



→ 6311-C3 (18g) 55BC03X30

→ 6211-C3 (11g) 55BC02X30



MOBIL POLYREX EM (14000h)

