

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12822416				
		Catalog # :	00518ST3QIER184TC-W2				
Frame	: 184TC	Cooling method	: IC411 - TEFC				
Insulation class	: F	Mounting	: W-6				
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>	: 113 lb				
Protection degree	: IP55	Moment of inertia (J)	: 0.4003 sq.ft.lb				
Design	: B						
Output [HP]	5	4	4	4	5	5	5
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	6.45	6.42	6.13	6.14	7.74	7.44	7.35
L. R. Amperes [A]	48.4	44.9	47.2	50.4	44.9	47.6	50.7
LRC [A]	7.5x(Code J)	7.0x(Code J)	7.7x(Code K)	8.2x(Code K)	5.8x(Code G)	6.4x(Code H)	6.9x(Code J)
No load current [A]	3.20	3.15	3.45	3.70	3.15	3.45	3.70
Rated speed [RPM]	1755	1455	1455	1460	1440	1445	1450
Slip [%]	2.50	3.00	3.00	2.67	4.00	3.67	3.33
Rated torque [ft.lb]	15.0	14.4	14.4	14.4	18.3	18.2	18.1
Locked rotor torque [%]	229	229	260	290	180	210	229
Breakdown torque [%]	320	300	350	380	240	280	300
Service factor	1.25	1.15	1.15	1.15	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level <sup>2</sup>	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%	88.2	87.7	86.4	86.2	89.2	88.1
	50%	88.5	87.5	86.7	86.5	88.5	87.5
	75%	89.5	88.2	88.2	88.2	87.5	88.5
	100%	89.5	87.7	88.2	88.2	86.5	87.5
Power Factor	25%	0.37	0.37	0.33	0.30	0.43	0.36
	50%	0.62	0.61	0.57	0.53	0.69	0.61
	75%	0.74	0.75	0.71	0.67	0.80	0.74
	100%	0.80	0.81	0.79	0.76	0.84	0.80
Bearing type	: Drive end : 6207 C3	Non drive end : 6206 C3	Foundation loads				
Sealing	: Inpro/Seal	Inpro/Seal	Max. traction	: 291 lb			
Lubrication interval	: 20000 h	20000 h	Max. compression	: 404 lb			
Lubricant amount	: 7 g	5 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



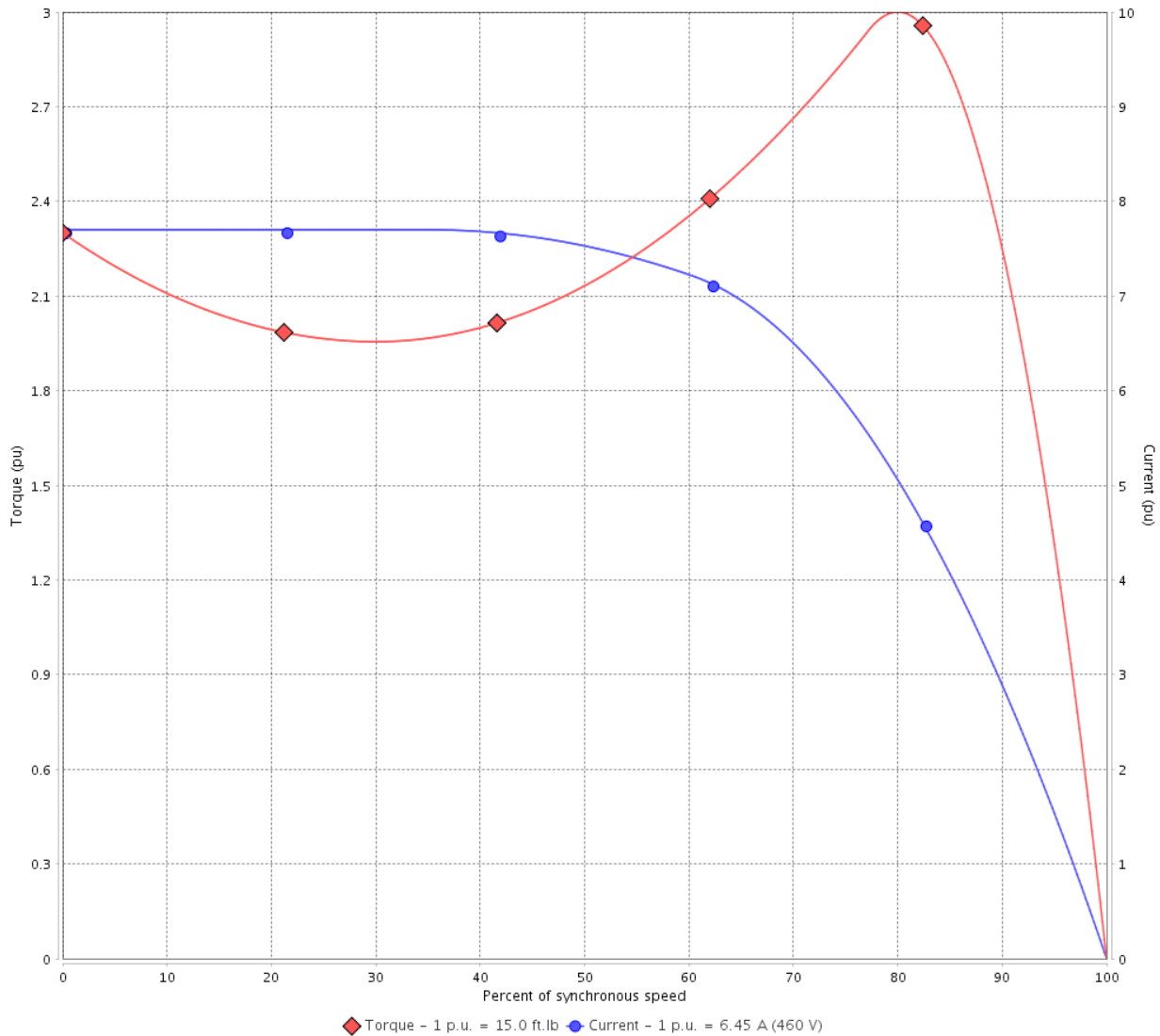
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 4P

Rated current	: 6.45 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



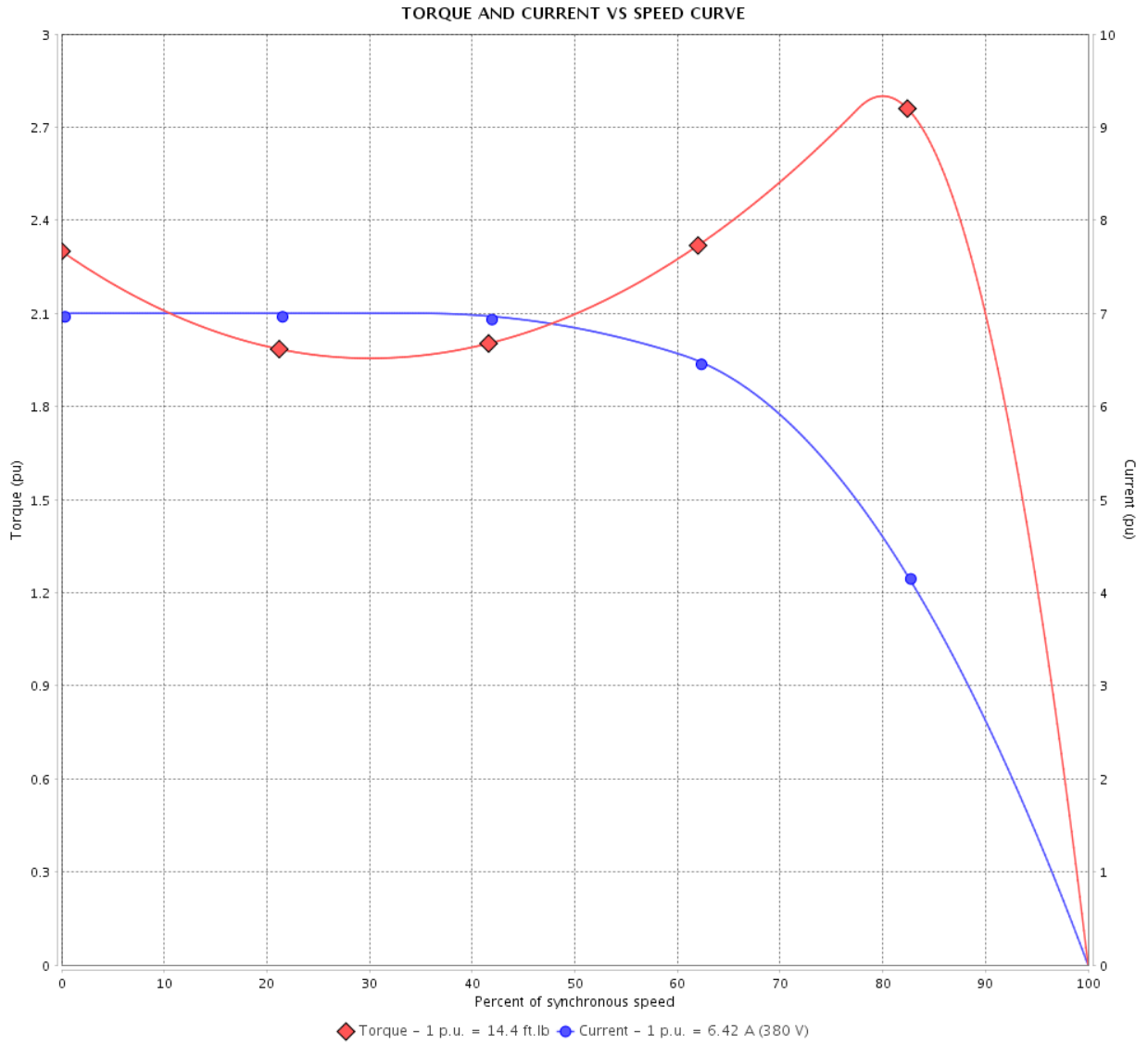
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2



Performance : 380 V 50 Hz 4P IE3

Rated current	: 6.42 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 14.4 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



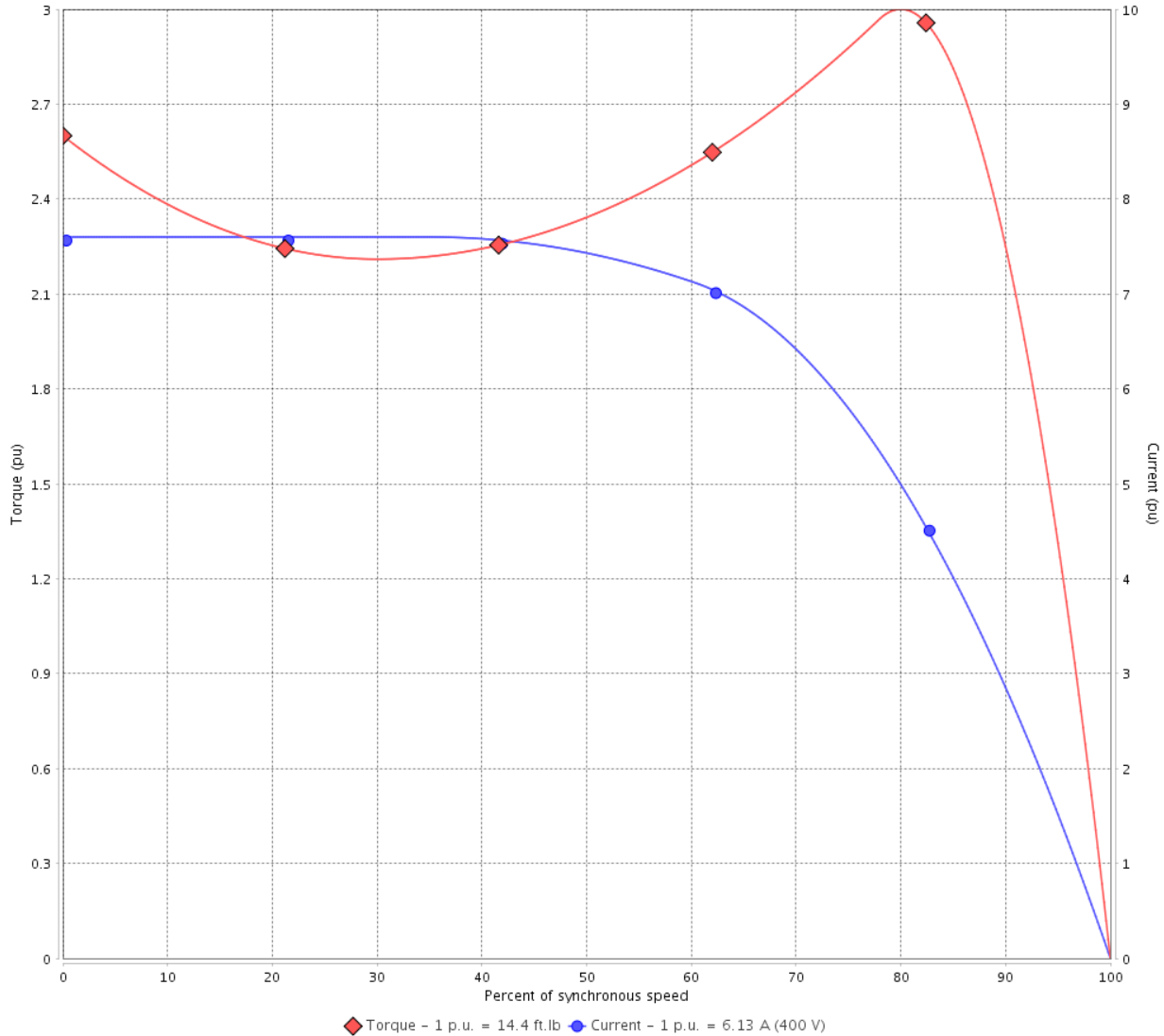
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QUIER184TC-W2

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 6.13 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 14.4 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.15
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



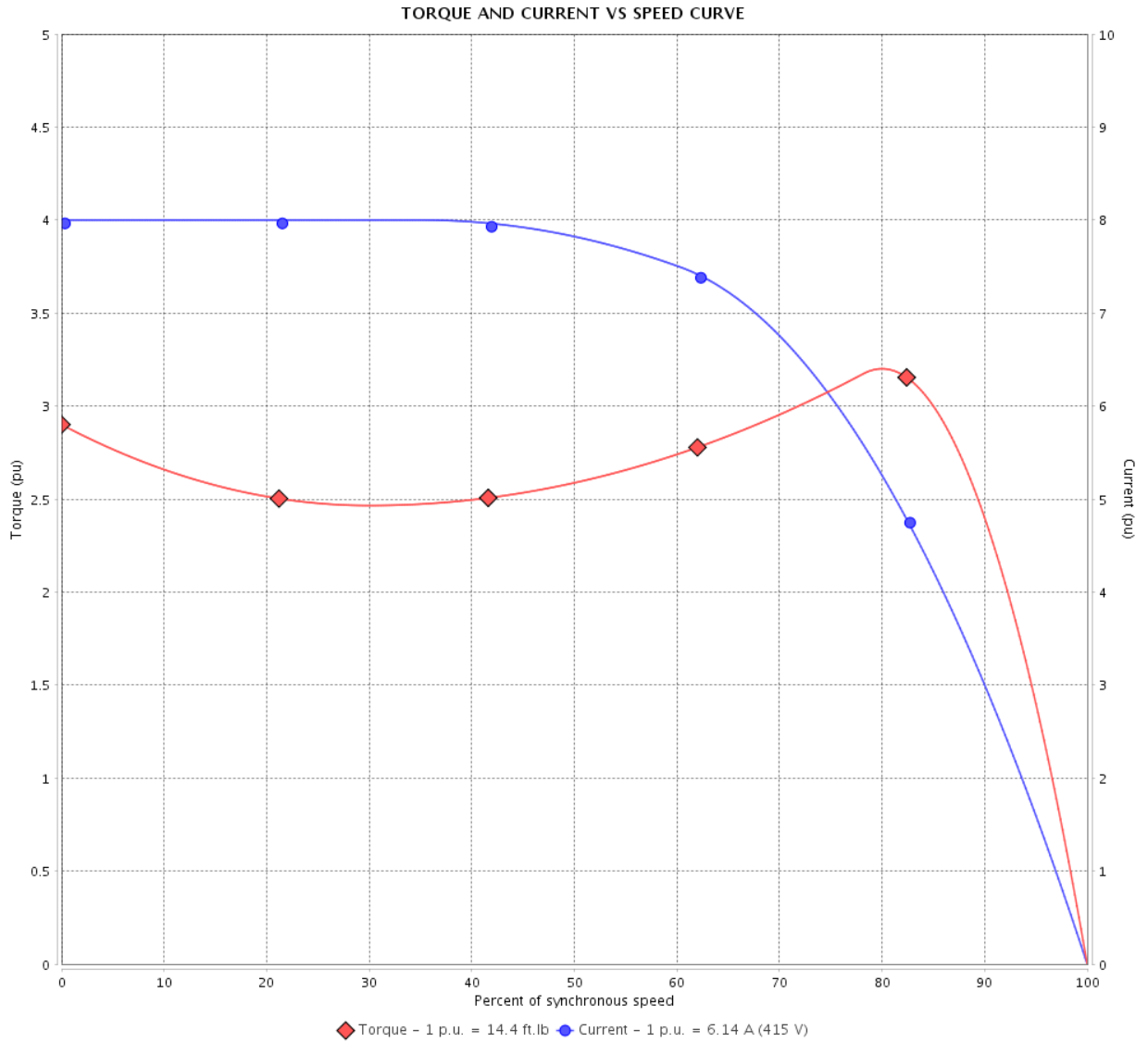
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2



Performance : 415 V 50 Hz 4P IE3

Rated current	: 6.14 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 14.4 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.15
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



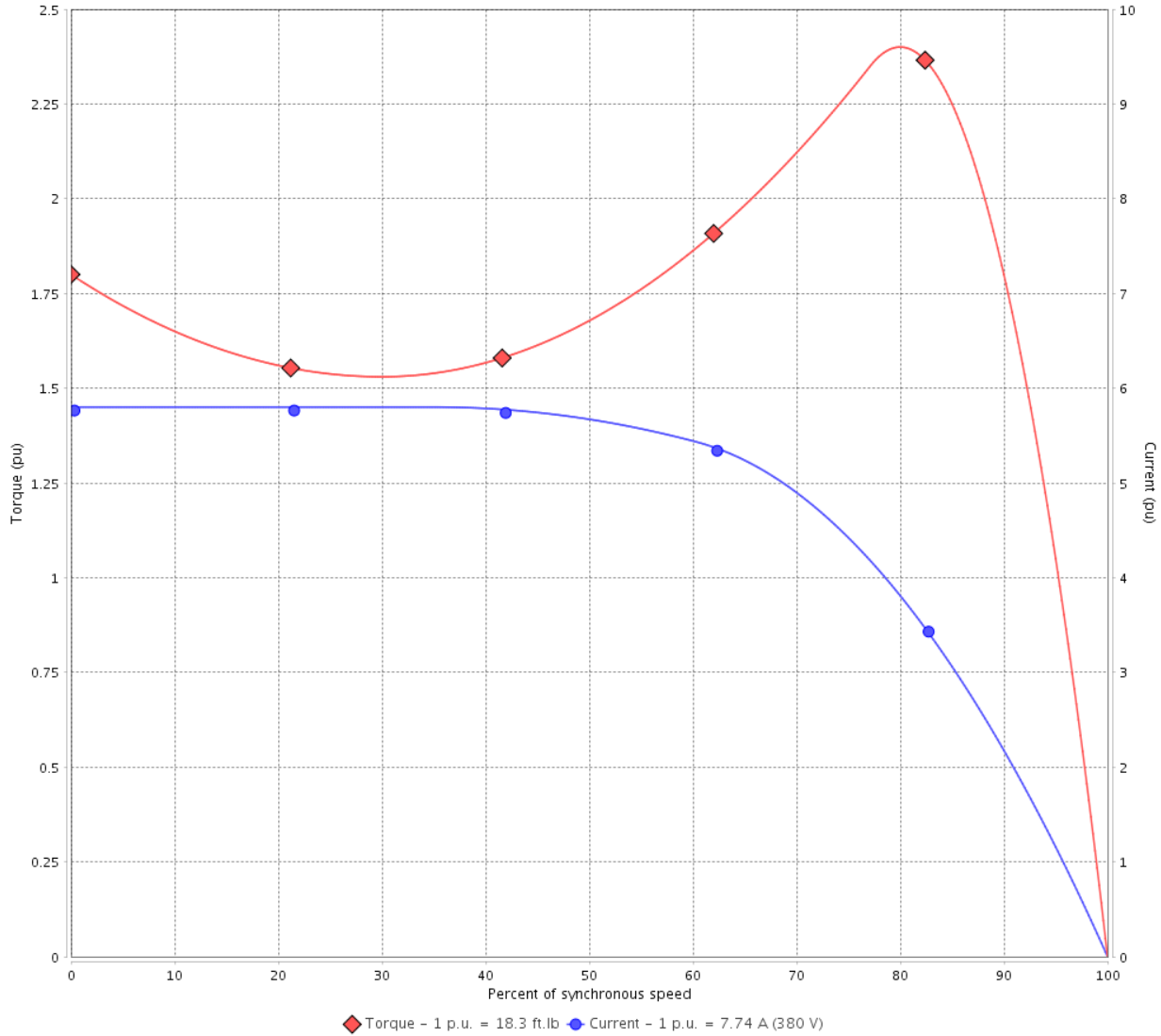
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QUIER184TC-W2

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 4P IE2

Rated current	: 7.74 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 18.3 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1440 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



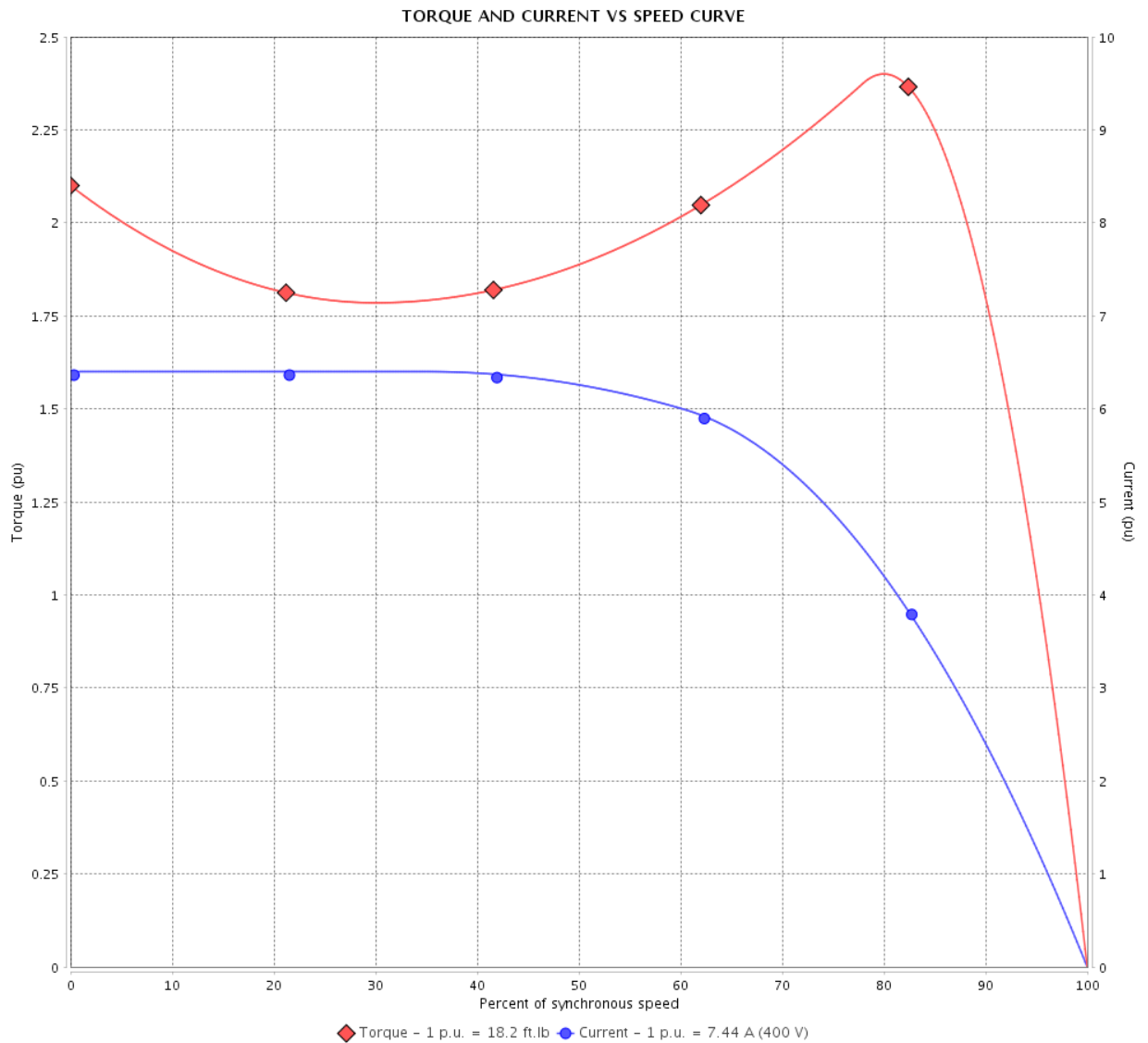
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2



Performance : 400 V 50 Hz 4P IE2

Rated current : 7.44 A  
 LRC : 6.4  
 Rated torque : 18.2 ft.lb  
 Locked rotor torque : 210 %  
 Breakdown torque : 280 %  
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Locked rotor time : 21s (cold) 12s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



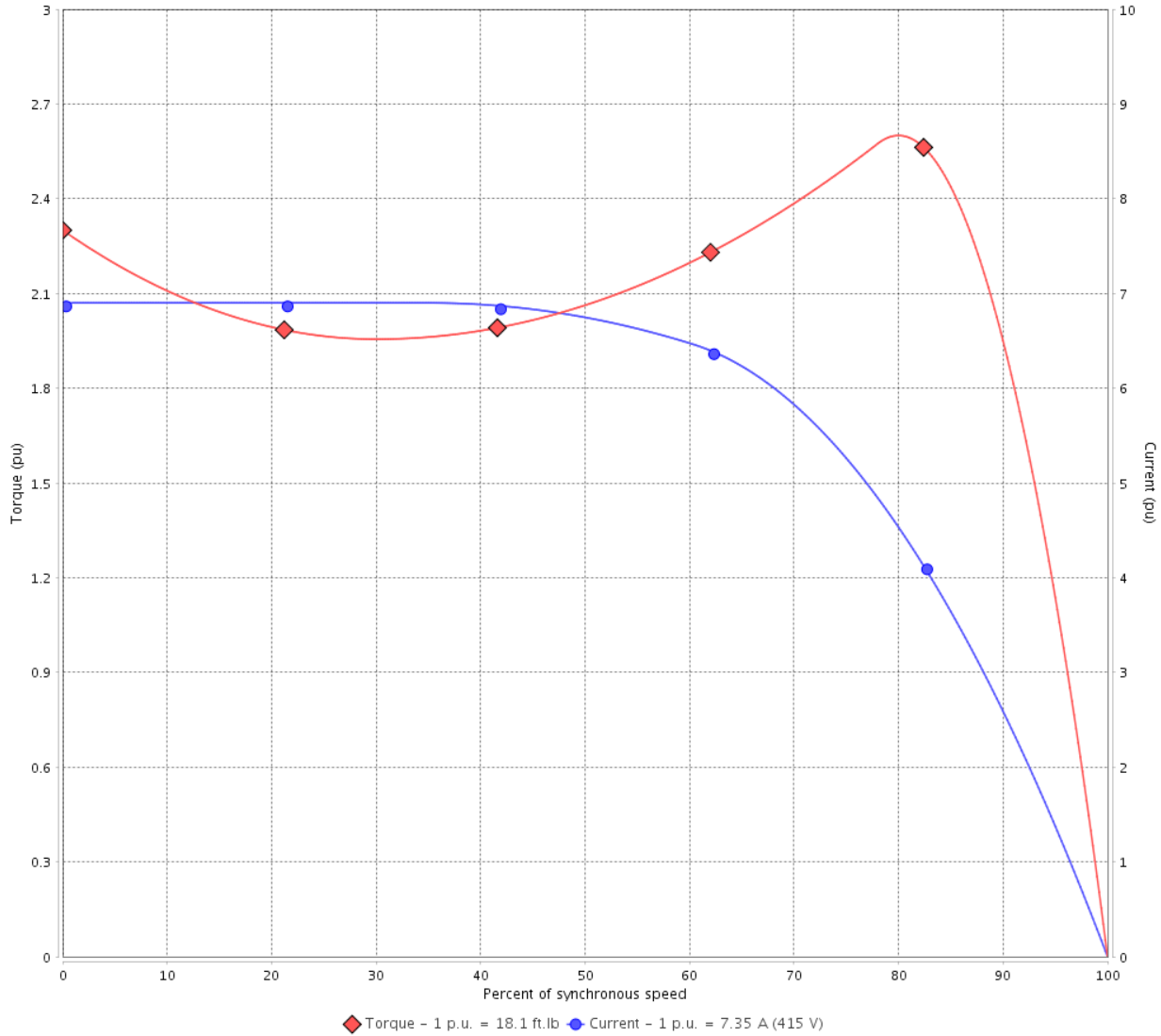
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QUIER184TC-W2

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 4P IE2

Rated current	: 7.35 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 18.1 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

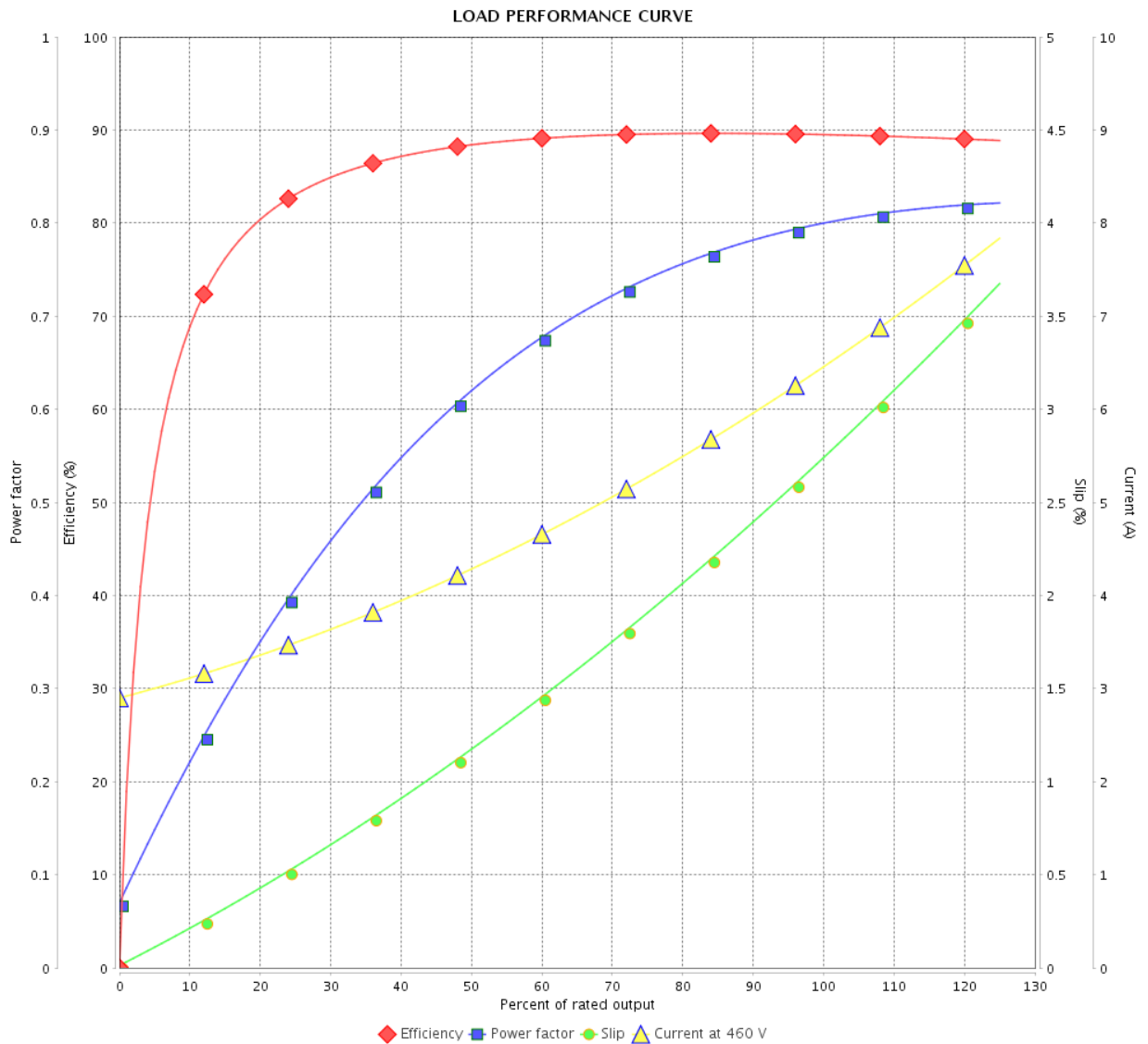


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2



Performance : 460 V 60 Hz 4P

Rated current : 6.45 A  
 LRC : 7.5  
 Rated torque : 15.0 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 320 %  
 Rated speed : 1755 rpm

Moment of inertia (J) : 0.4003 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



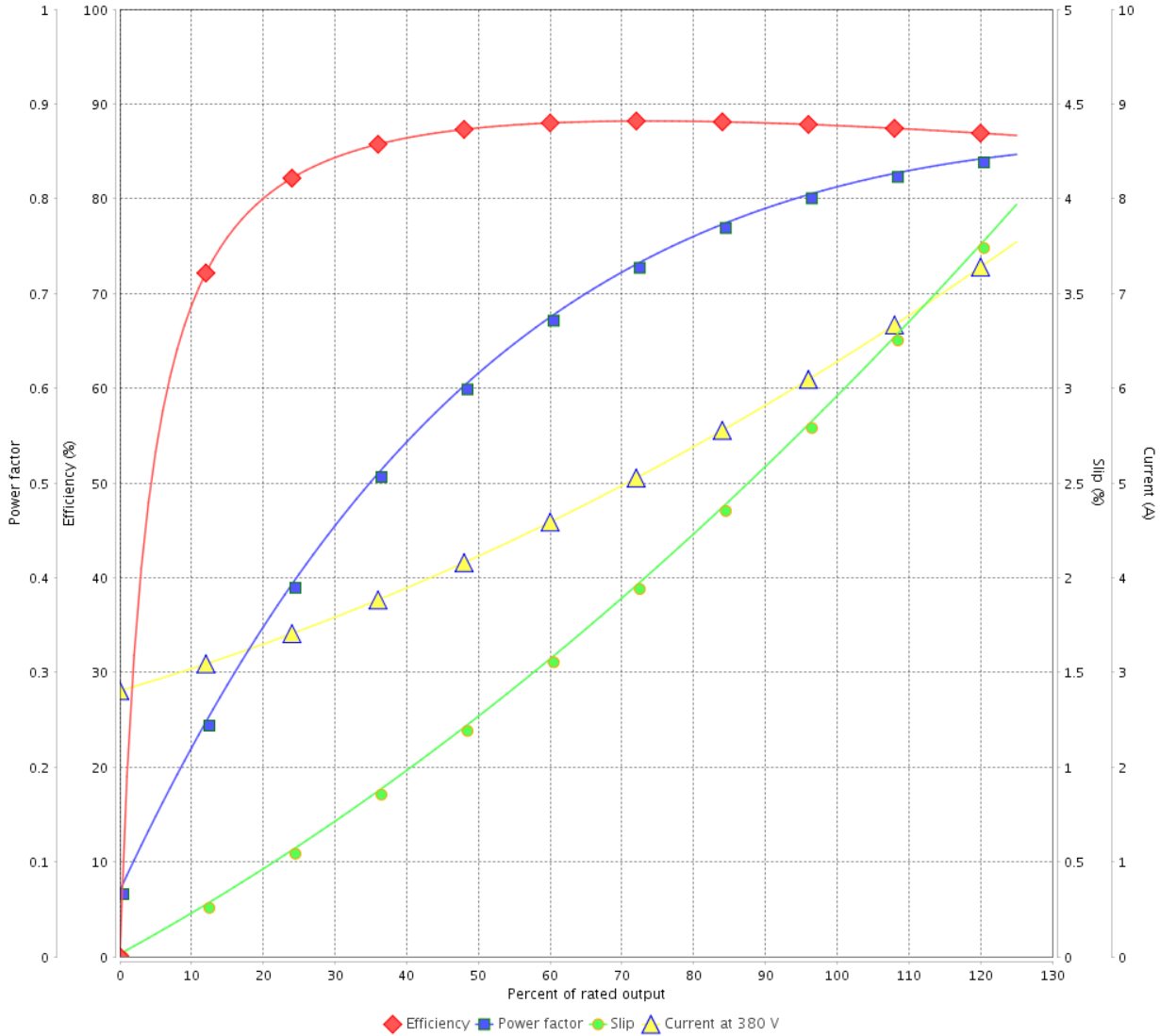
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 4P IE3

Rated current : 6.42 A  
 LRC : 7.0  
 Rated torque : 14.4 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 300 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.4003 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

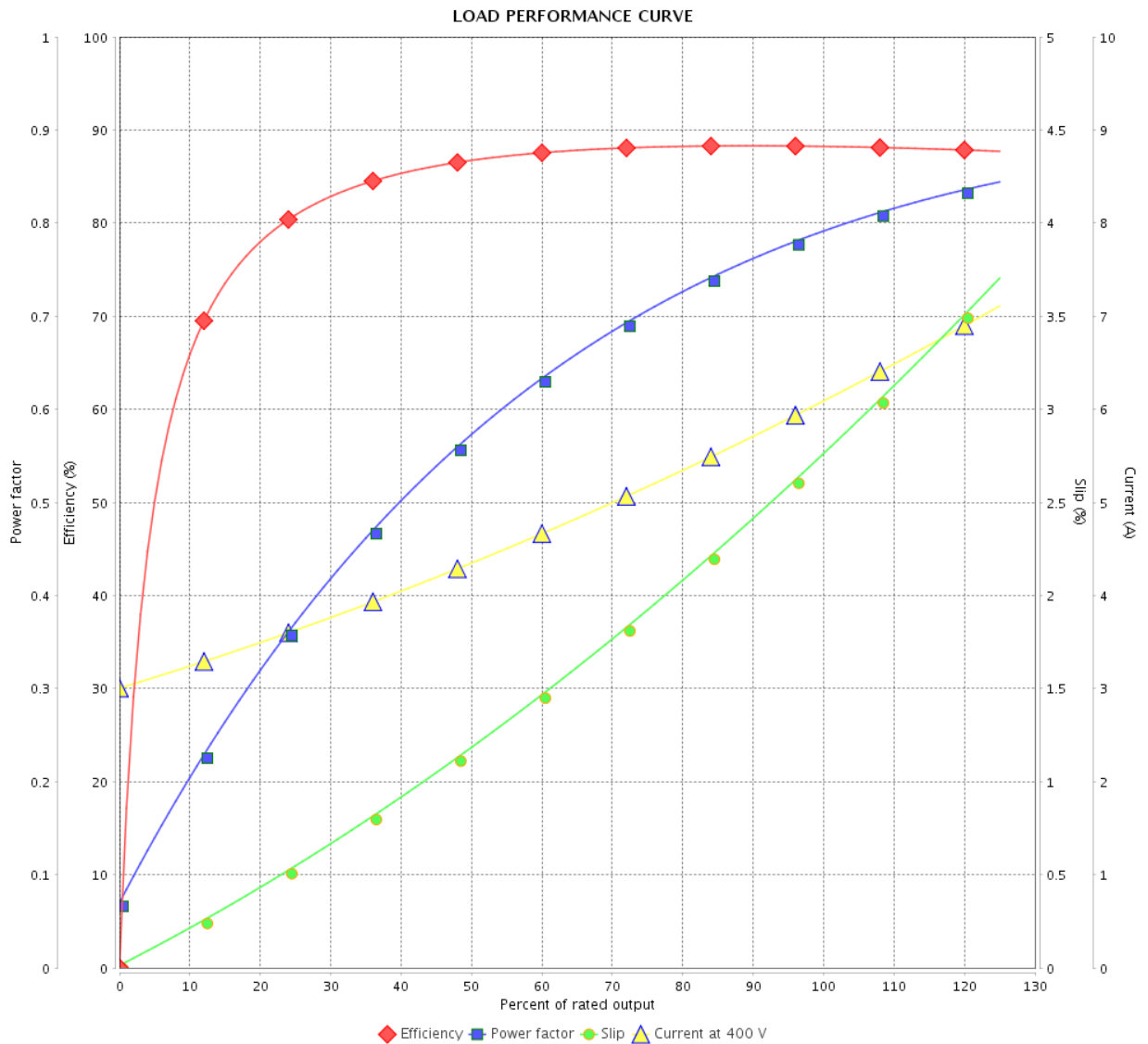


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2



Performance : 400 V 50 Hz 4P IE3

Rated current : 6.13 A  
 LRC : 7.7  
 Rated torque : 14.4 ft.lb  
 Locked rotor torque : 260 %  
 Breakdown torque : 350 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.4003 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



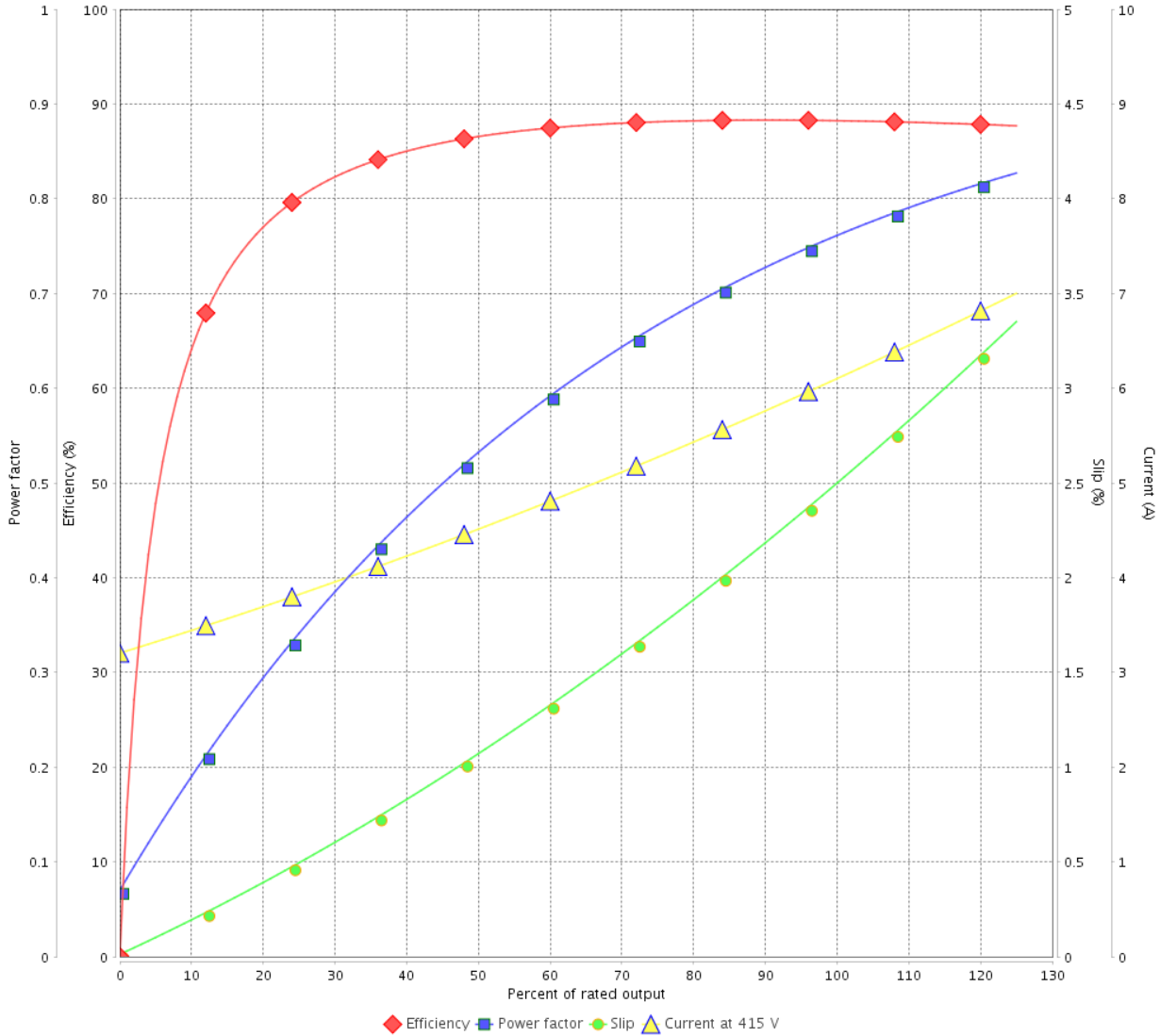
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QUIER184TC-W2

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 4P IE3

Rated current : 6.14 A  
 LRC : 8.2  
 Rated torque : 14.4 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 380 %  
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.4003 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

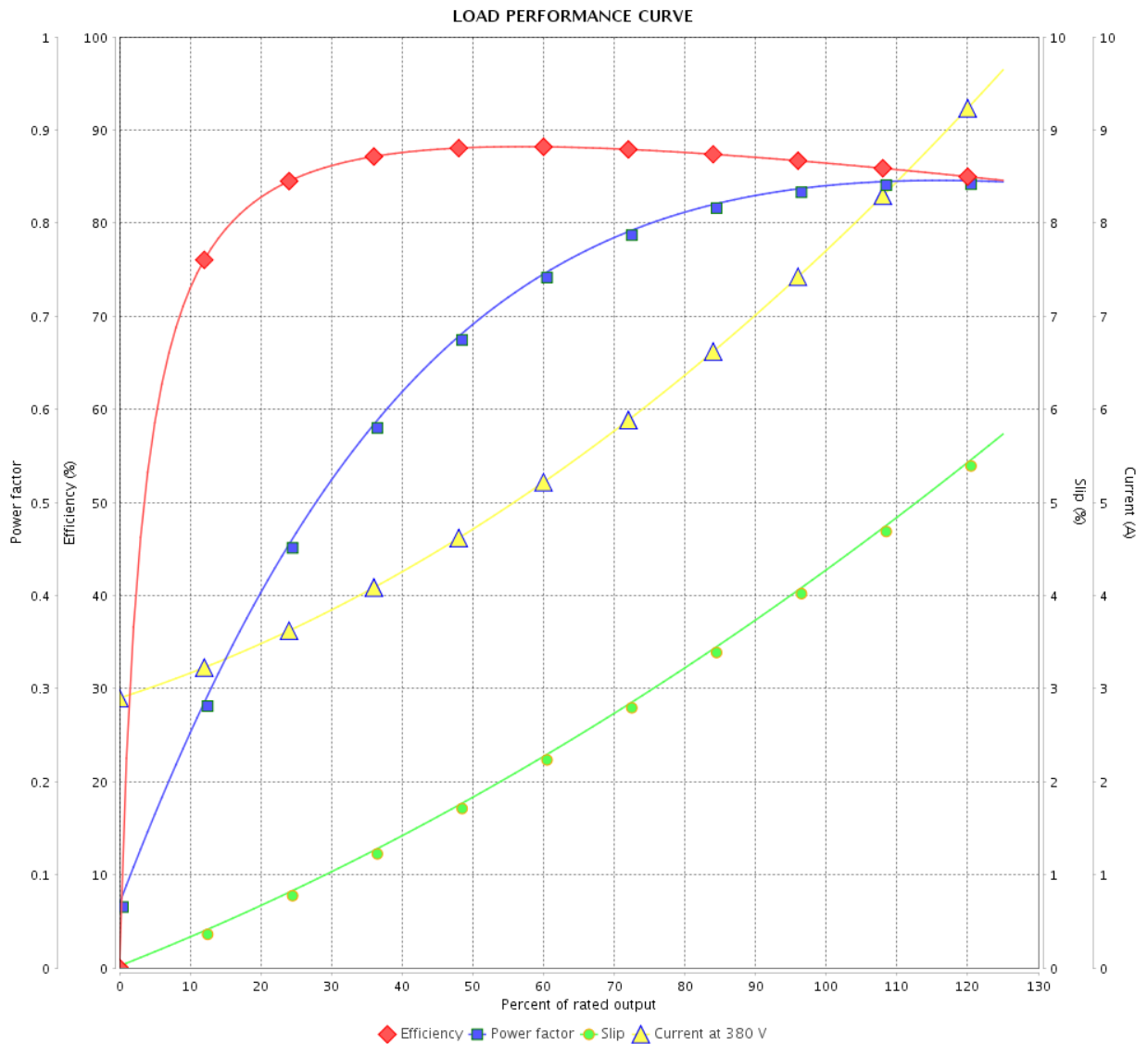


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2



Performance : 380 V 50 Hz 4P IE2

Rated current : 7.74 A  
 LRC : 5.8  
 Rated torque : 18.3 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 240 %  
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.4003 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



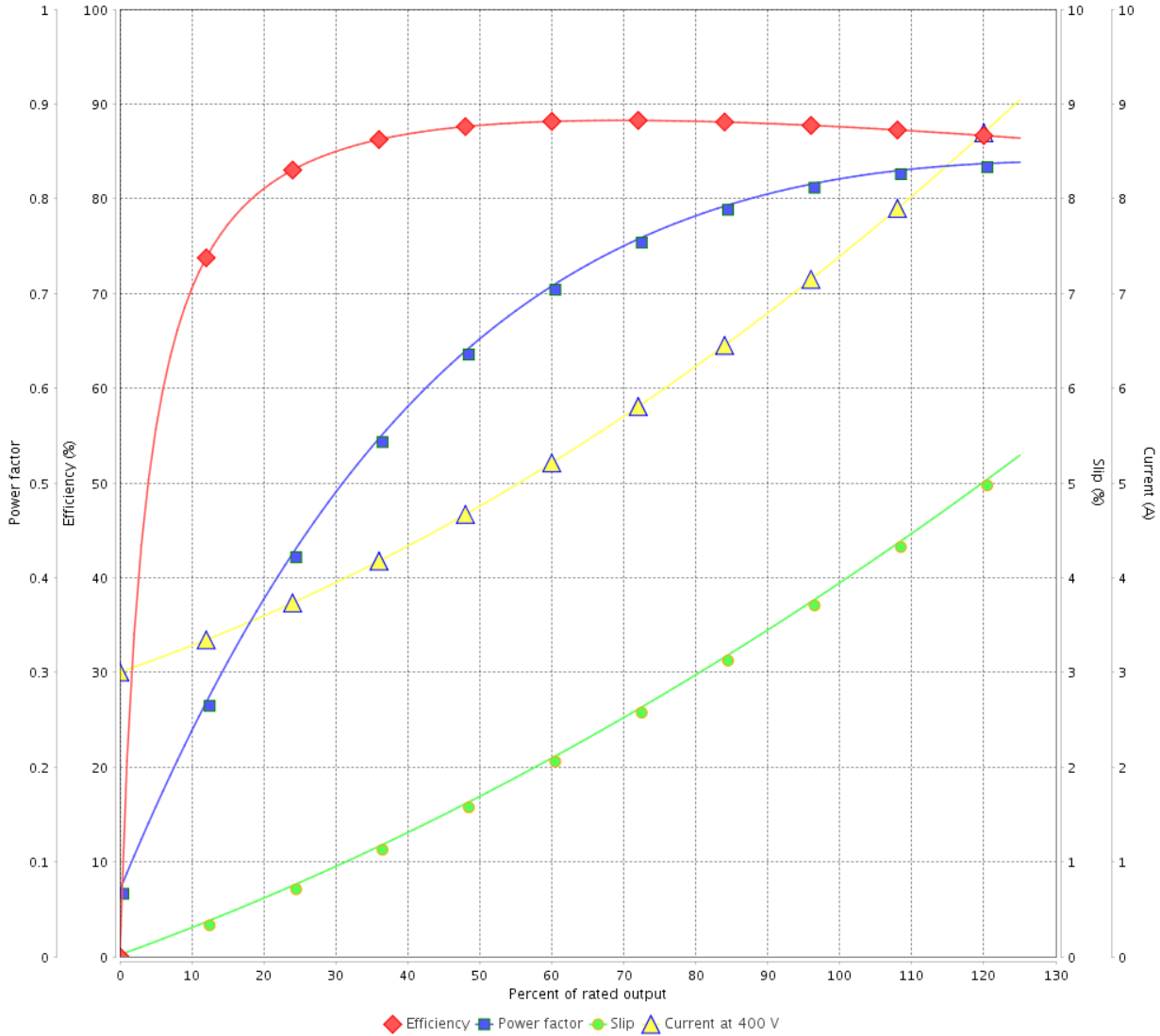
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QUIER184TC-W2

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 4P IE2

Rated current : 7.44 A  
 LRC : 6.4  
 Rated torque : 18.2 ft.lb  
 Locked rotor torque : 210 %  
 Breakdown torque : 280 %  
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.4003 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

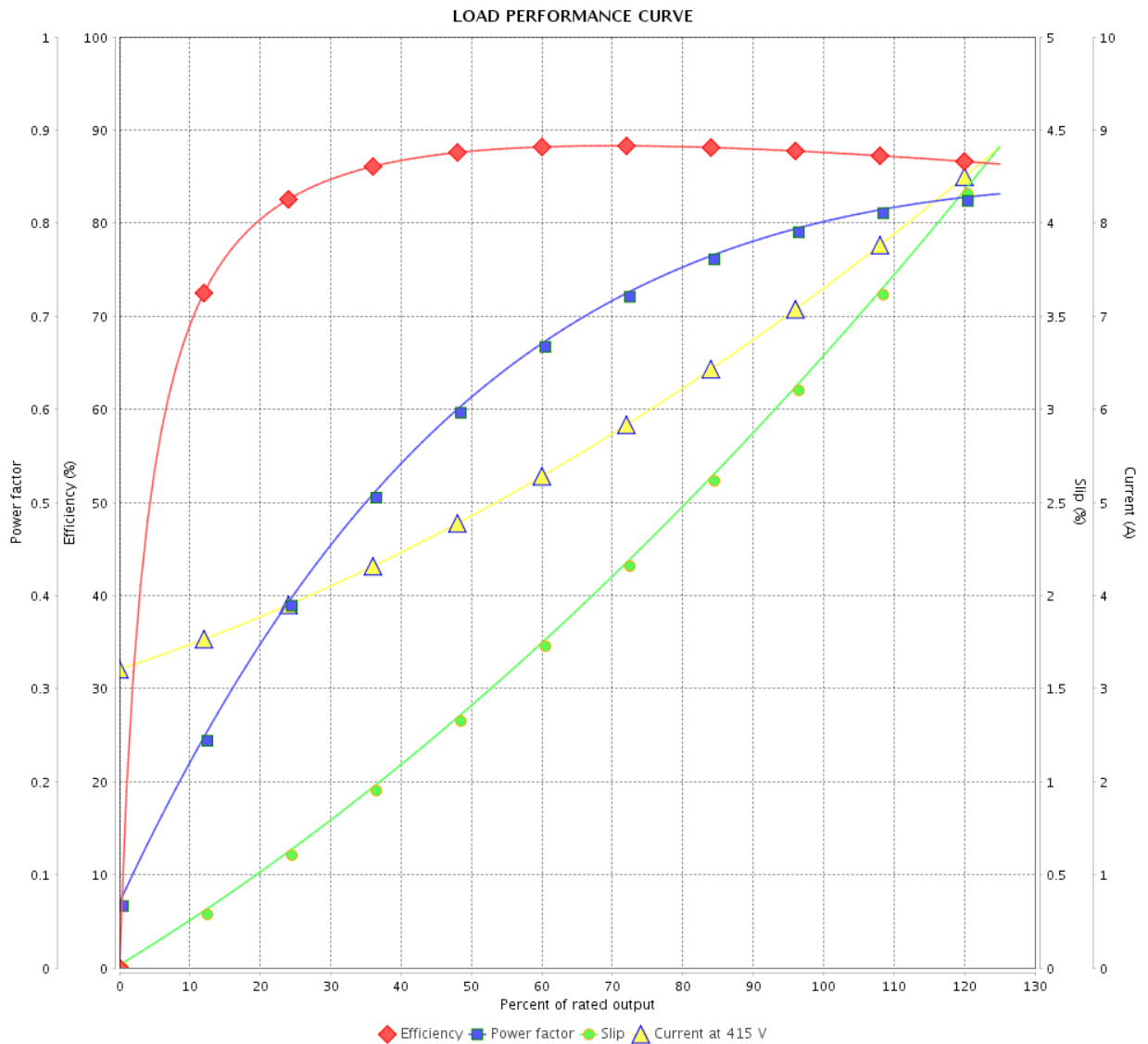


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2



Performance : 415 V 50 Hz 4P IE2

Rated current : 7.35 A  
 LRC : 6.9  
 Rated torque : 18.1 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 300 %  
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 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 : 12822416  
Catalog # : 00518ST3QUIER184TC-W2

Performance : 460 V 60 Hz 4P

Rated current	: 6.45 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

Heating constant

Cooling constant

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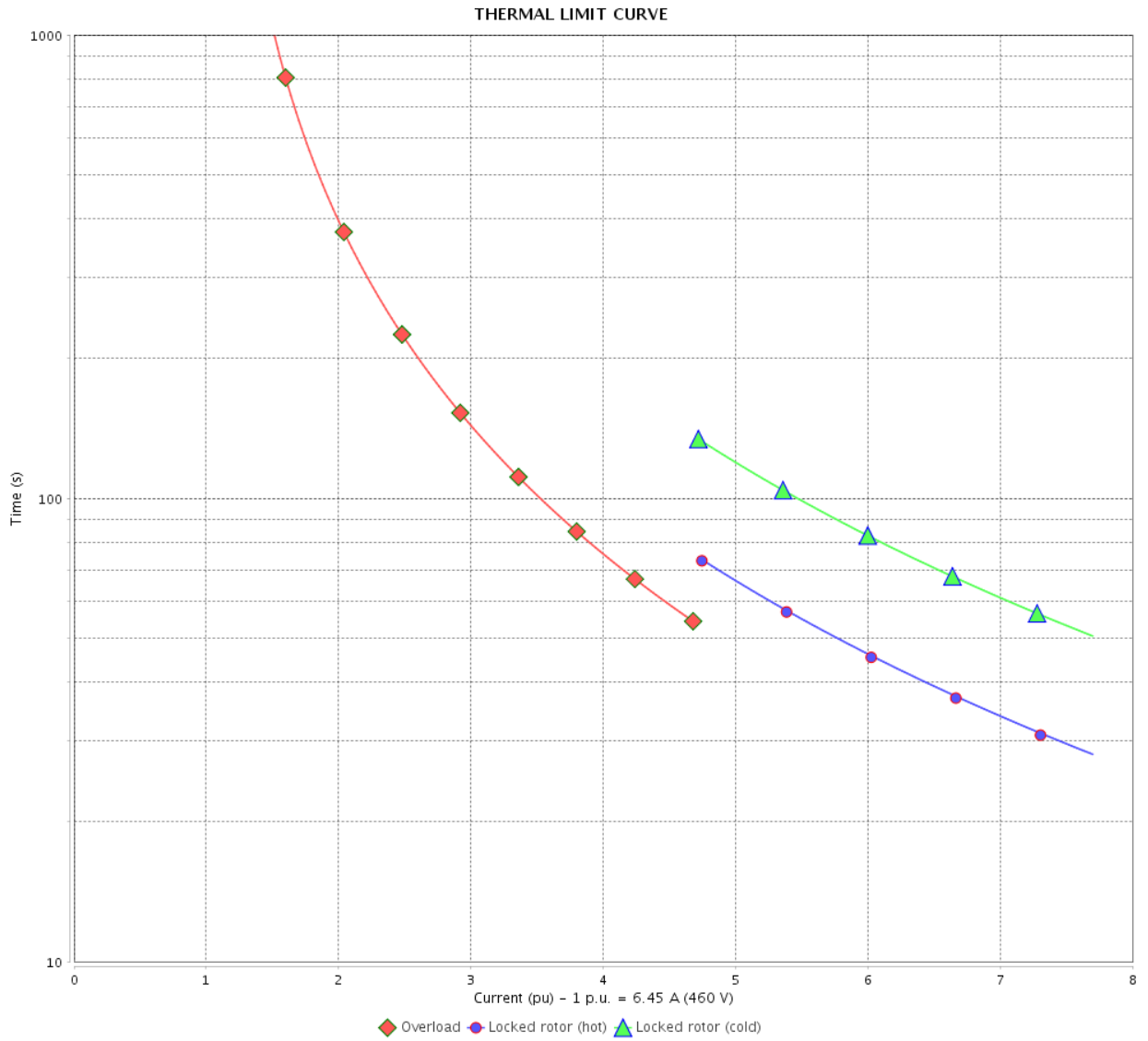


# THERMAL LIMIT CURVE

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 : 12822416  
Catalog # : 00518ST3QUIER184TC-W2

Performance : 380 V 50 Hz 4P IE3

Rated current	: 6.42 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 14.4 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Heating constant

Cooling constant

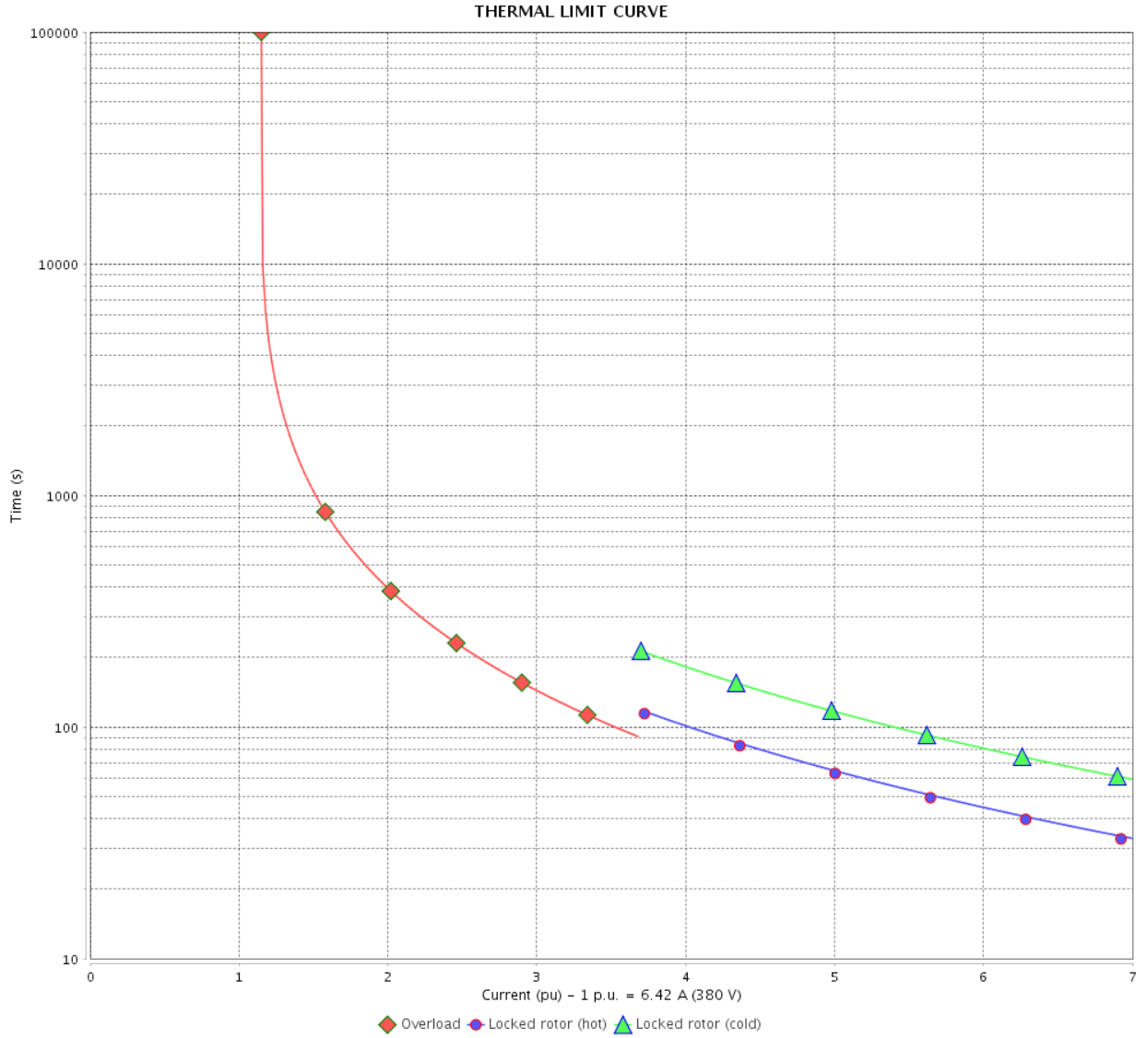
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# THERMAL LIMIT CURVE

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 : 12822416

Catalog # : 00518ST3QUIER184TC-W2

Performance : 400 V 50 Hz 4P IE3

Rated current : 6.13 A  
LRC : 7.7  
Rated torque : 14.4 ft.lb  
Locked rotor torque : 260 %  
Breakdown torque : 350 %  
Rated speed : 1455 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

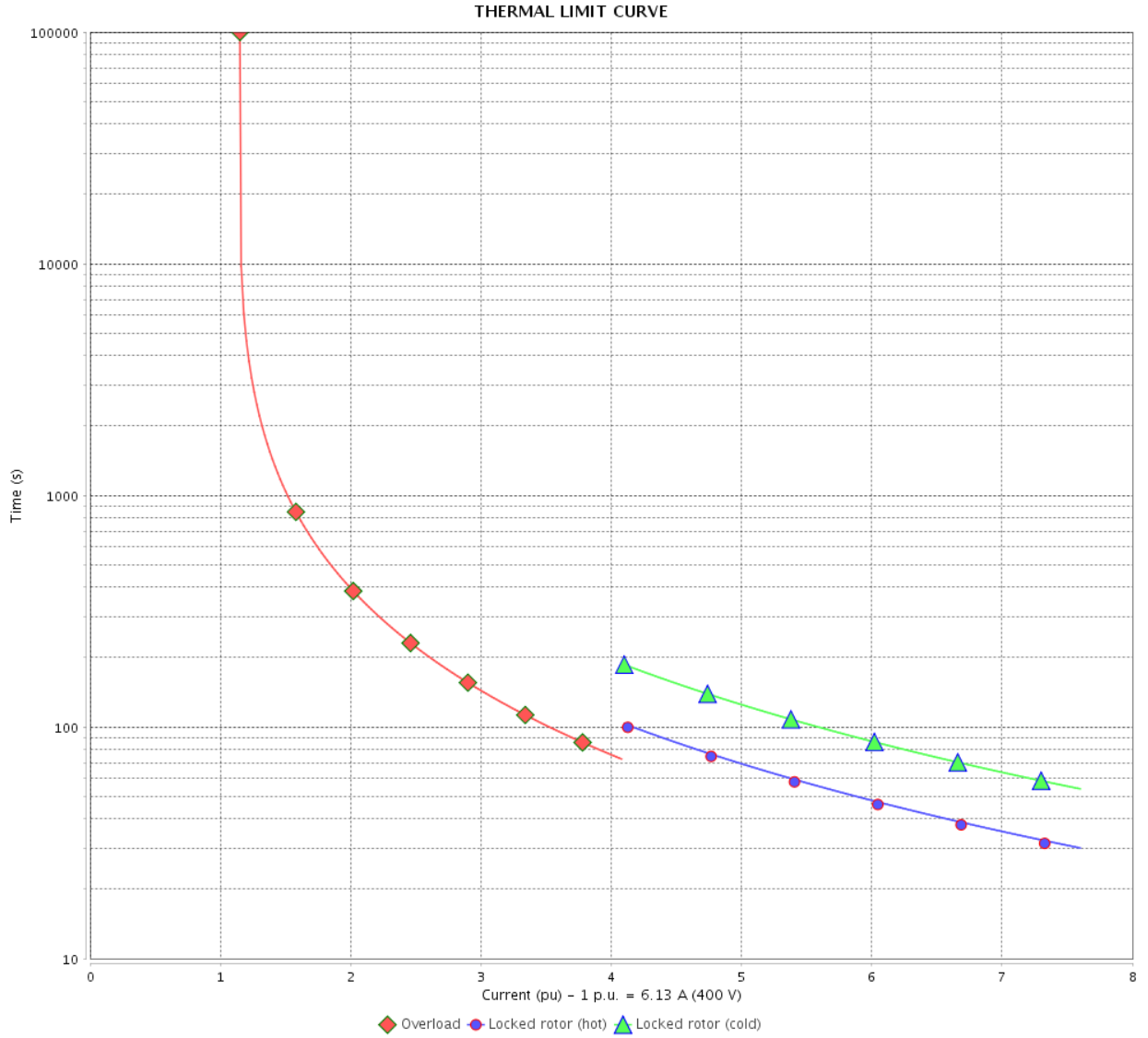
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# THERMAL LIMIT CURVE

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 : 12822416  
Catalog # : 00518ST3QUIER184TC-W2

Performance : 415 V 50 Hz 4P IE3

Rated current	: 6.14 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 14.4 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.15
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: B

Heating constant

Cooling constant

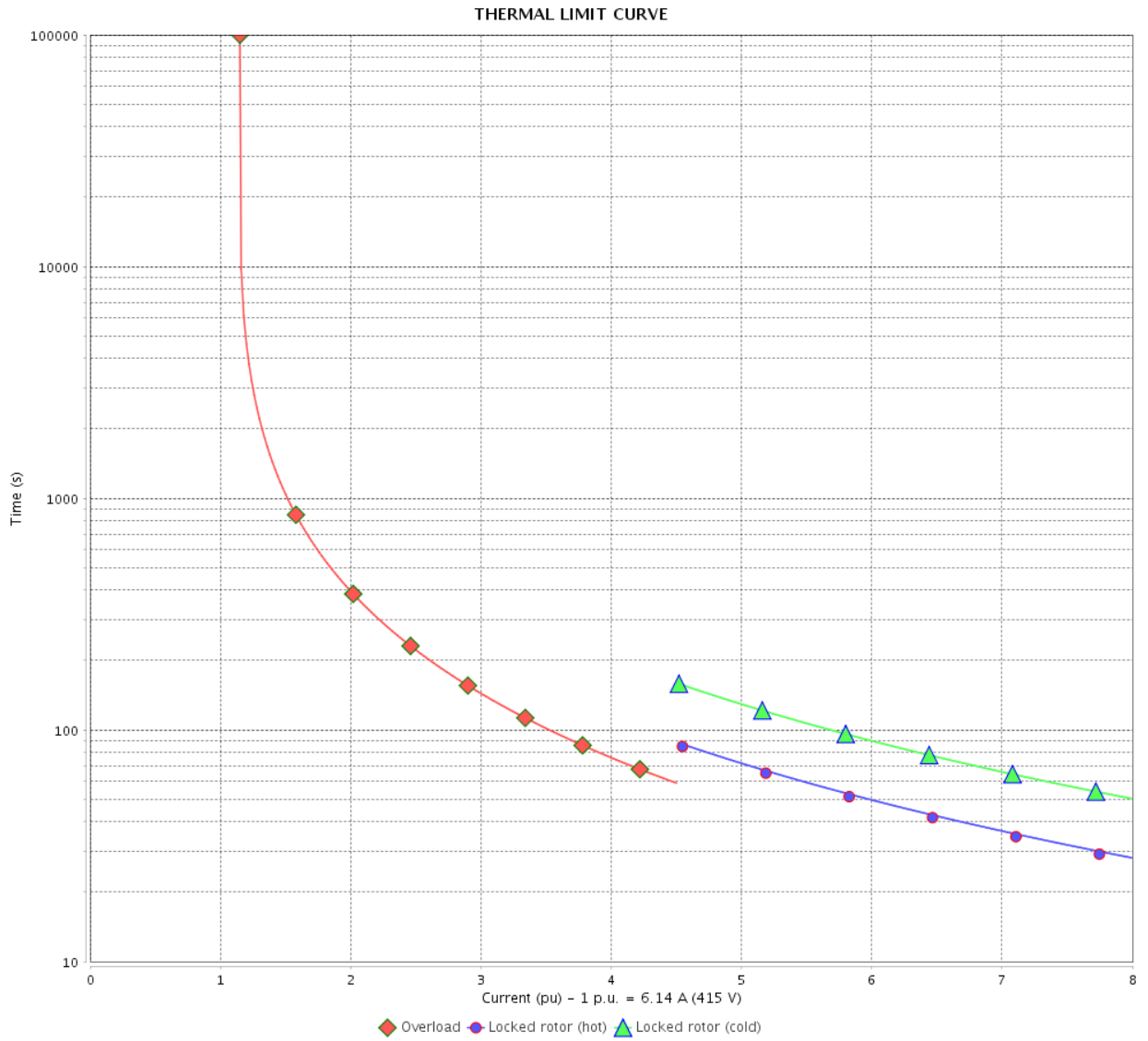
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Three Phase Induction Motor - Squirrel Cage



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## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12822416  
Catalog # : 00518ST3QUIER184TC-W2

Performance : 380 V 50 Hz 4P IE2

Rated current	: 7.74 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 18.3 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1440 rpm	Design	: B

Heating constant

Cooling constant

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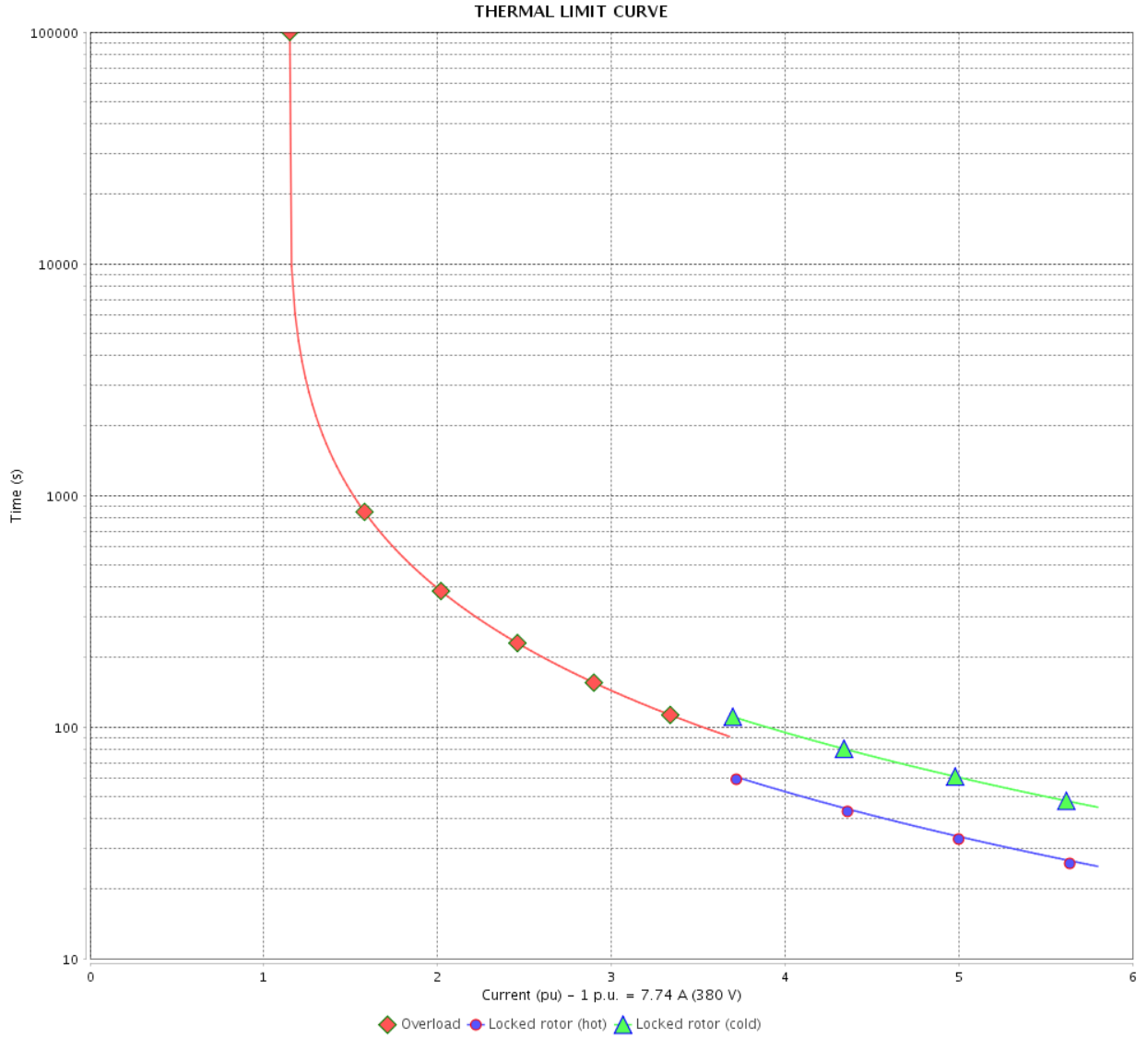


# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Performed by		Page 25 / 36		Revision
Checked by				
Date				

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12822416  
Catalog # : 00518ST3QUIER184TC-W2

Performance : 400 V 50 Hz 4P IE2

Rated current	: 7.44 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 18.2 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1445 rpm	Design	: B

Heating constant

Cooling constant

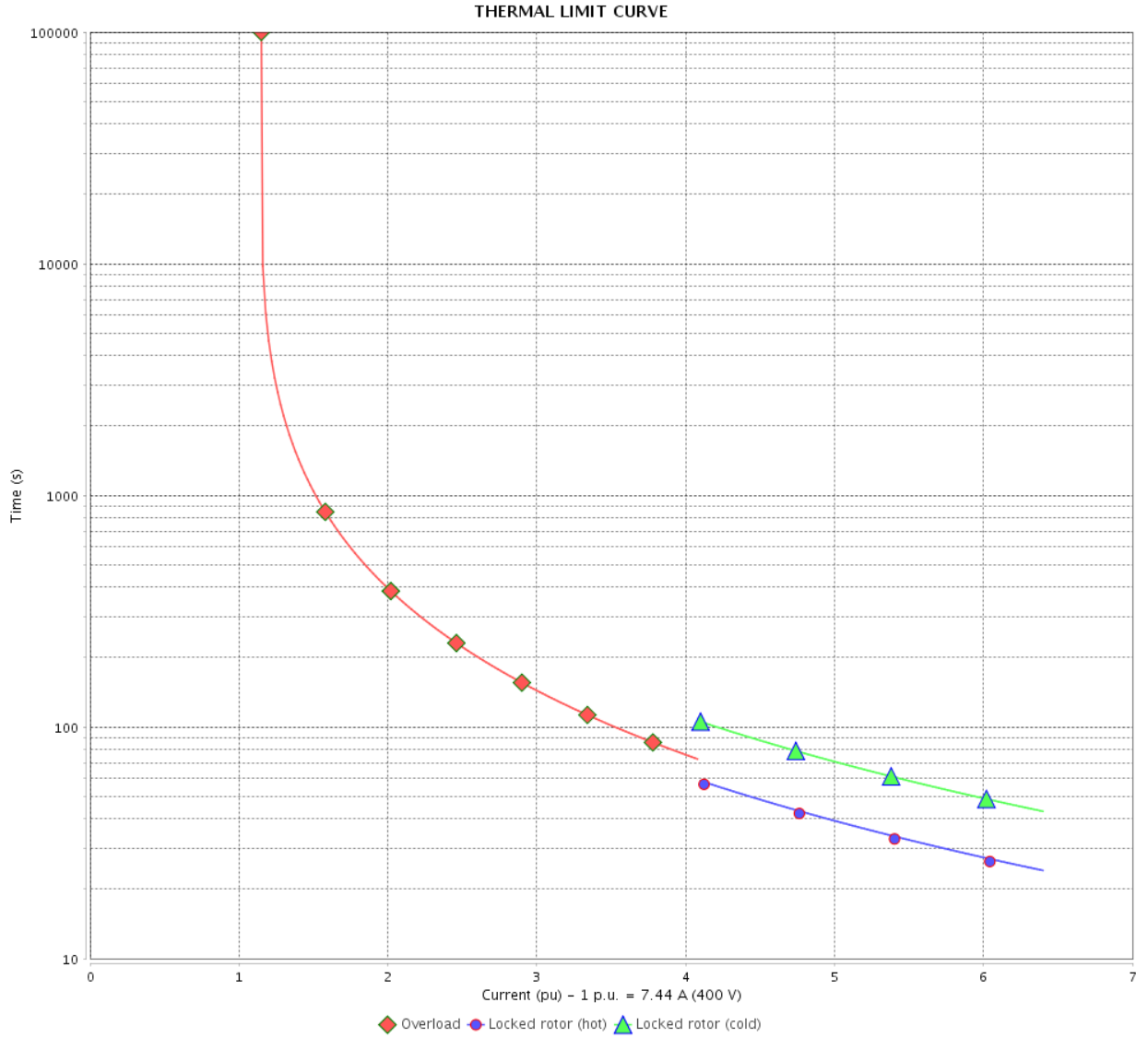
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Performed by		Page		Revision
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Date		13/04/2022		

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12822416  
Catalog # : 00518ST3QUIER184TC-W2

Performance : 415 V 50 Hz 4P IE2

Rated current	: 7.35 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 18.1 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

Heating constant

Cooling constant

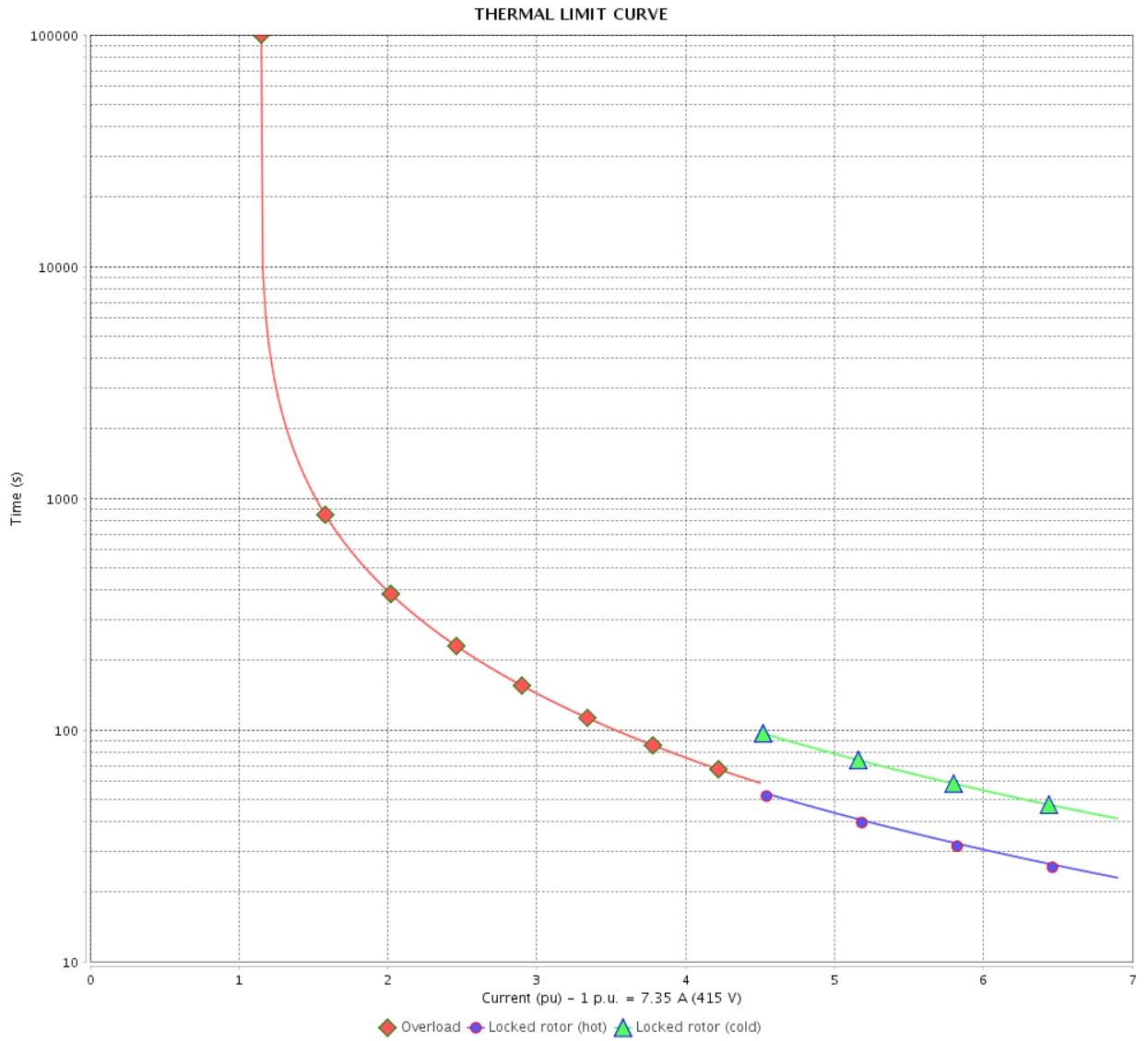
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		28 / 36	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Checked by				
Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



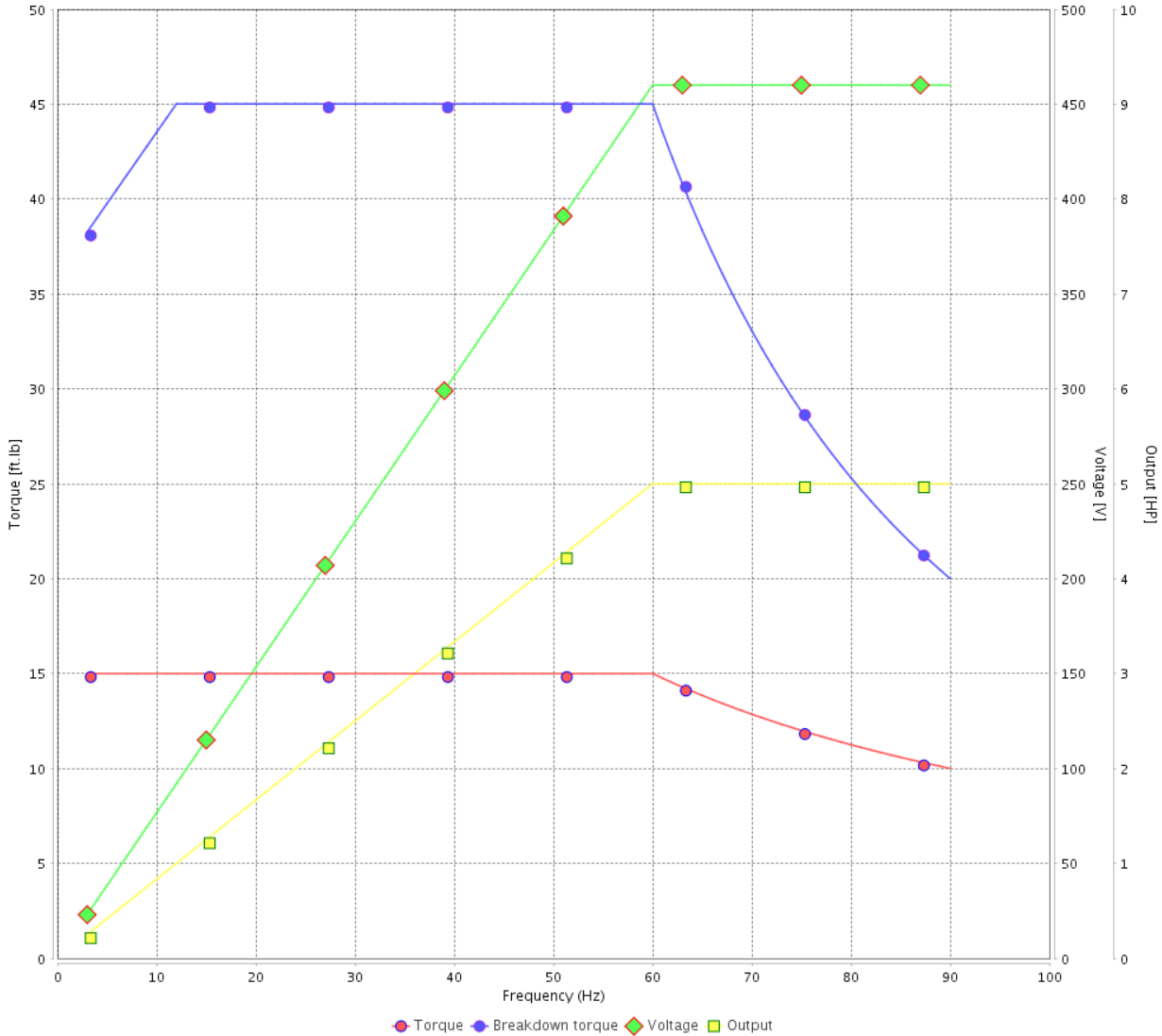
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QUIER184TC-W2

VFD OPERATION CURVE



Performance : 460 V 60 Hz 4P

Rated current : 6.45 A  
 LRC : 7.5  
 Rated torque : 15.0 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 320 %  
 Rated speed : 1755 rpm

Moment of inertia (J) : 0.4003 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	13/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

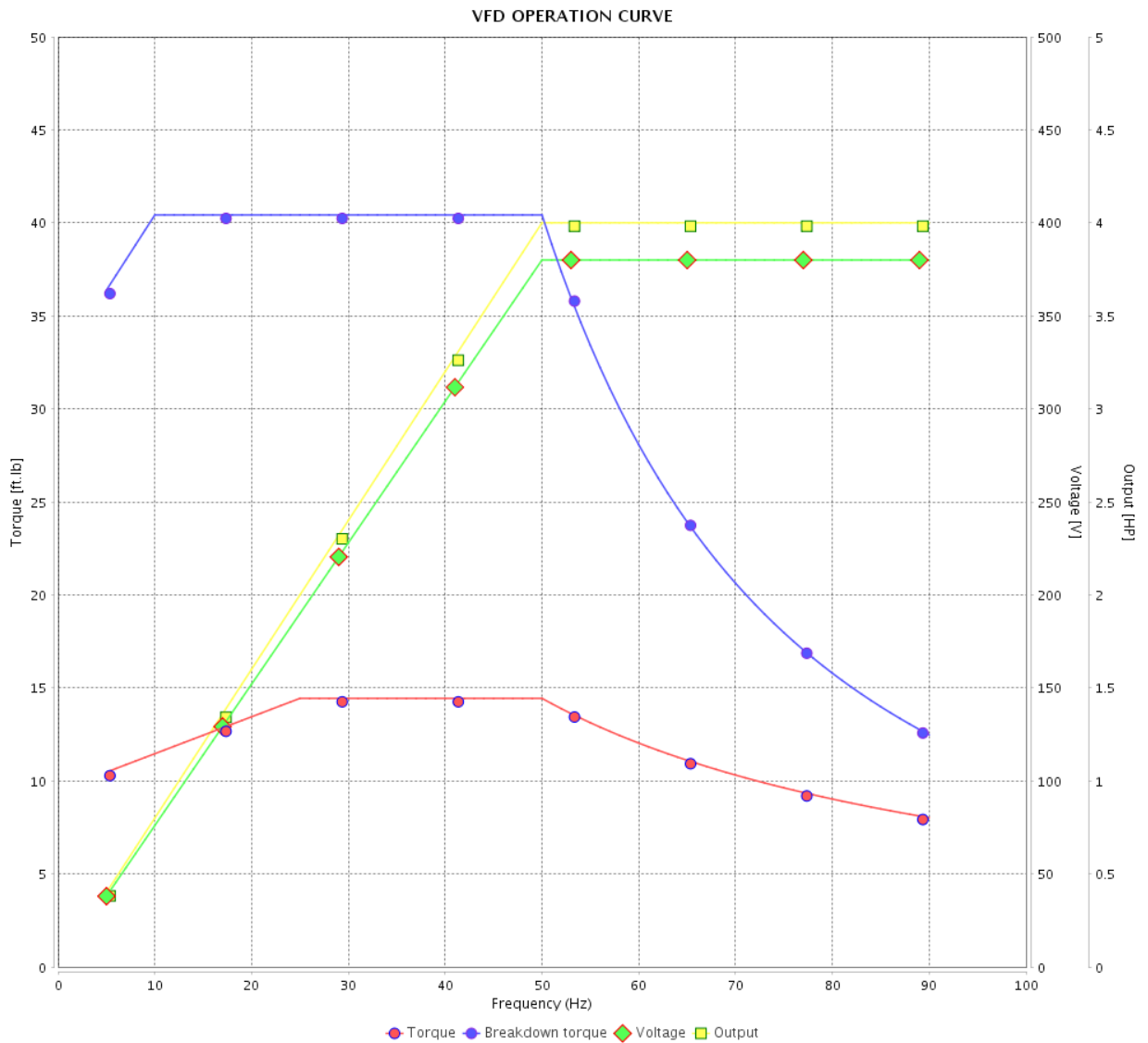


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2



Performance : 380 V 50 Hz 4P IE3

Rated current : 6.42 A  
 LRC : 7.0  
 Rated torque : 14.4 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 300 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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Performed by				Page 31 / 36
Checked by				
Date	13/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

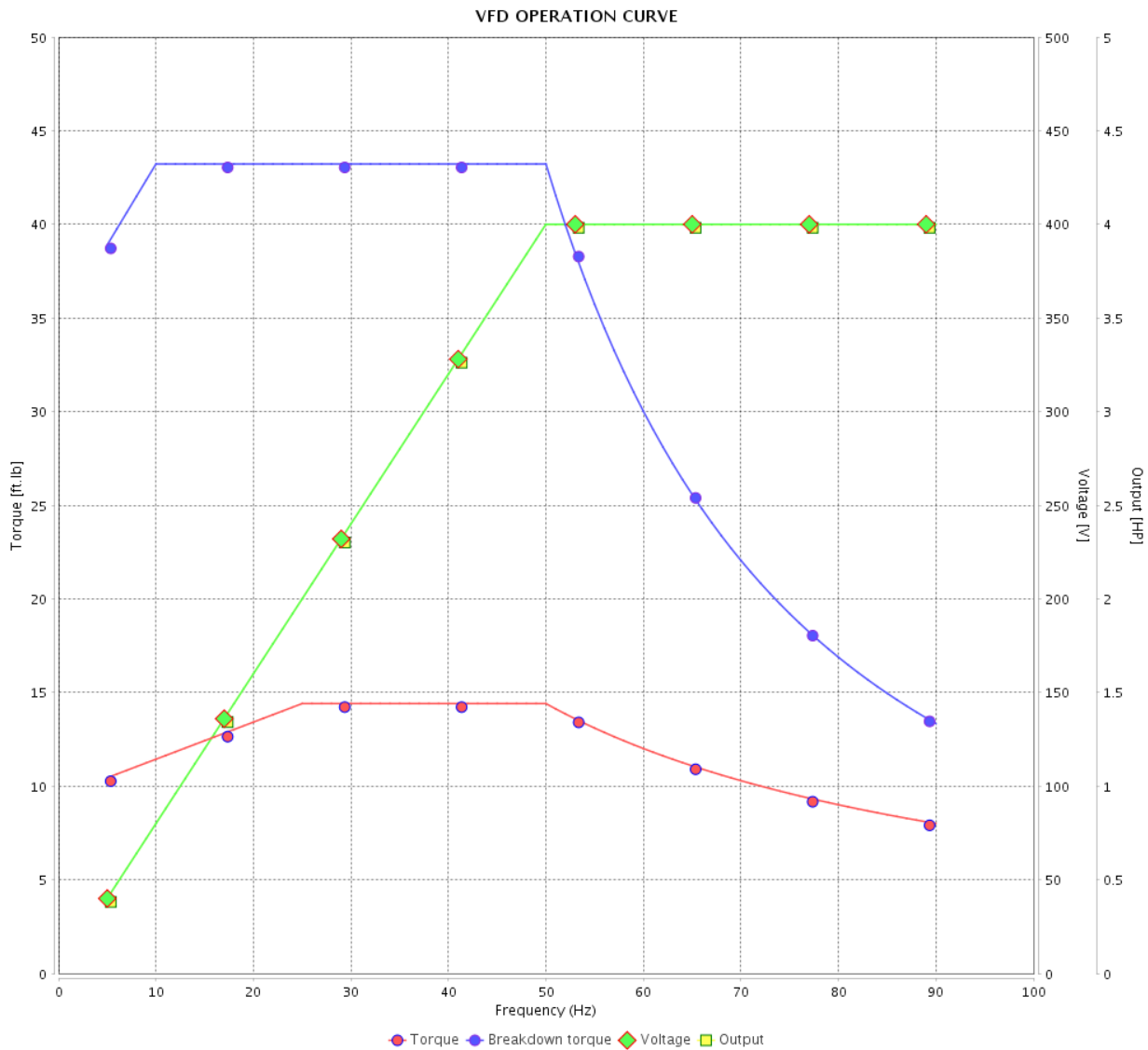


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QUIER184TC-W2



Performance : 400 V 50 Hz 4P IE3

Rated current : 6.13 A  
 LRC : 7.7  
 Rated torque : 14.4 ft.lb  
 Locked rotor torque : 260 %  
 Breakdown torque : 350 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.4003 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	13/04/2022			



# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

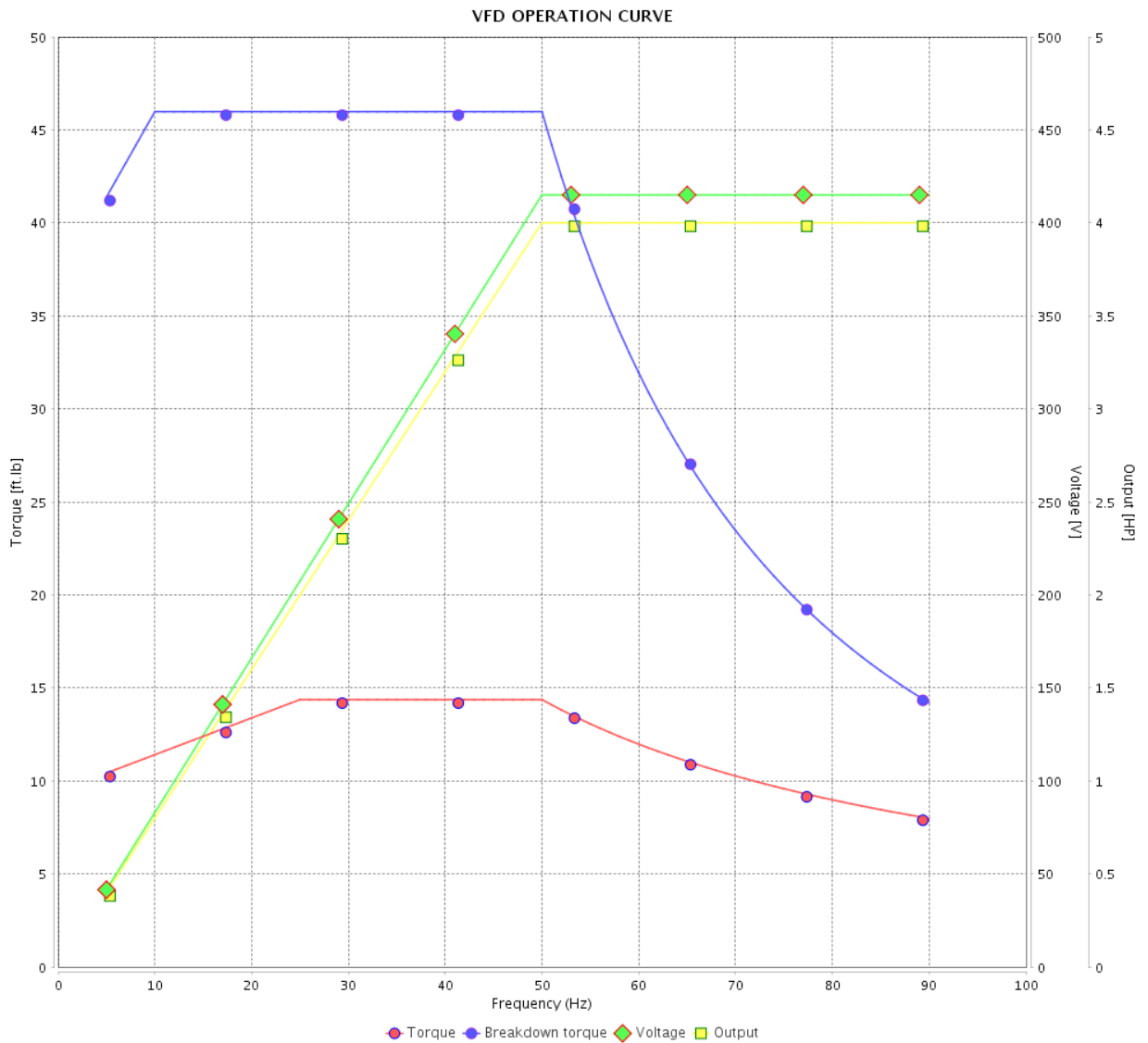


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2



Performance : 415 V 50 Hz 4P IE3

Rated current : 6.14 A  
 LRC : 8.2  
 Rated torque : 14.4 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 380 %  
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.4003 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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Date		13/04/2022		

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



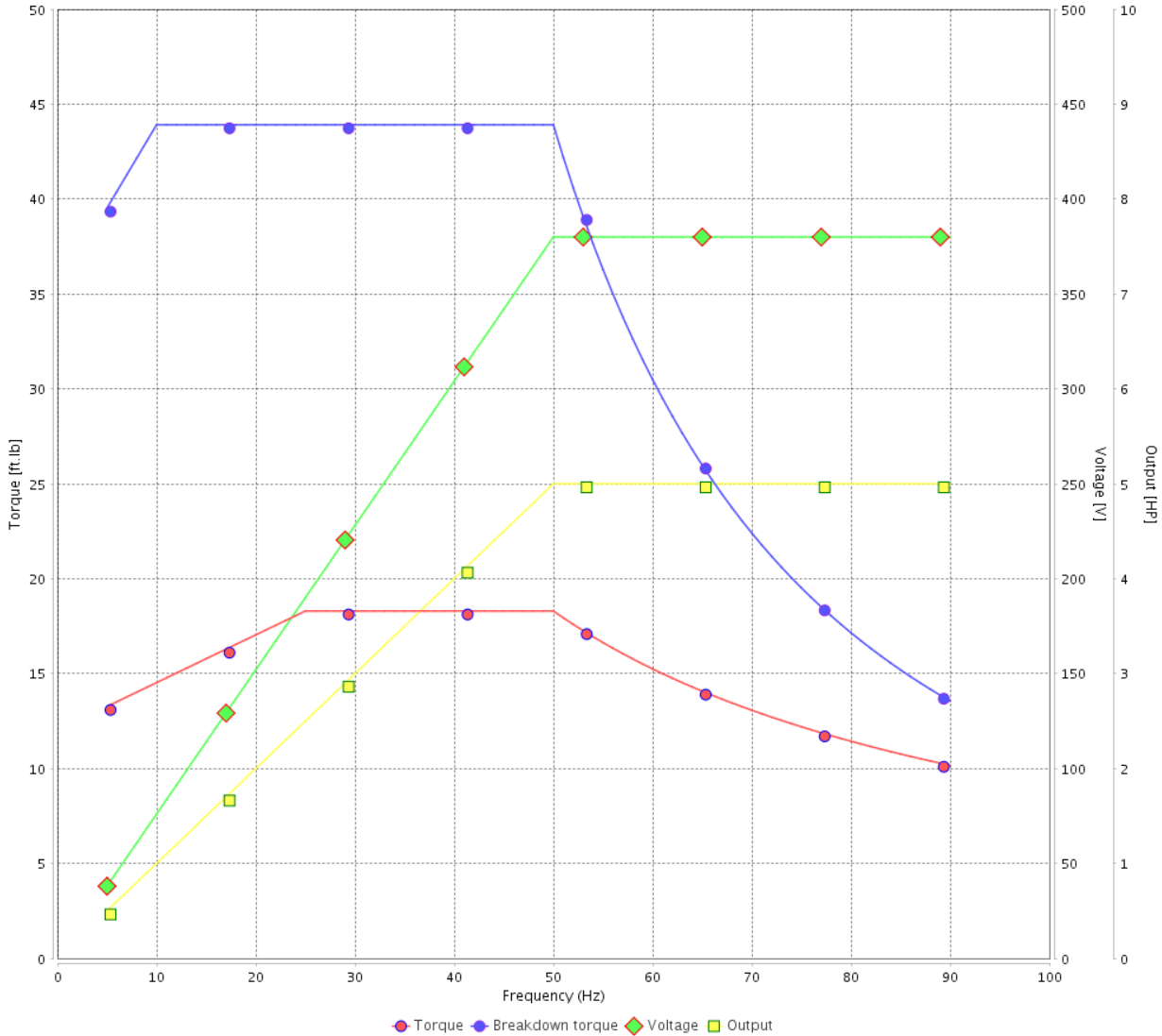
Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QUIER184TC-W2

VFD OPERATION CURVE



Performance : 380 V 50 Hz 4P IE2

Rated current : 7.74 A  
 LRC : 5.8  
 Rated torque : 18.3 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 240 %  
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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

# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

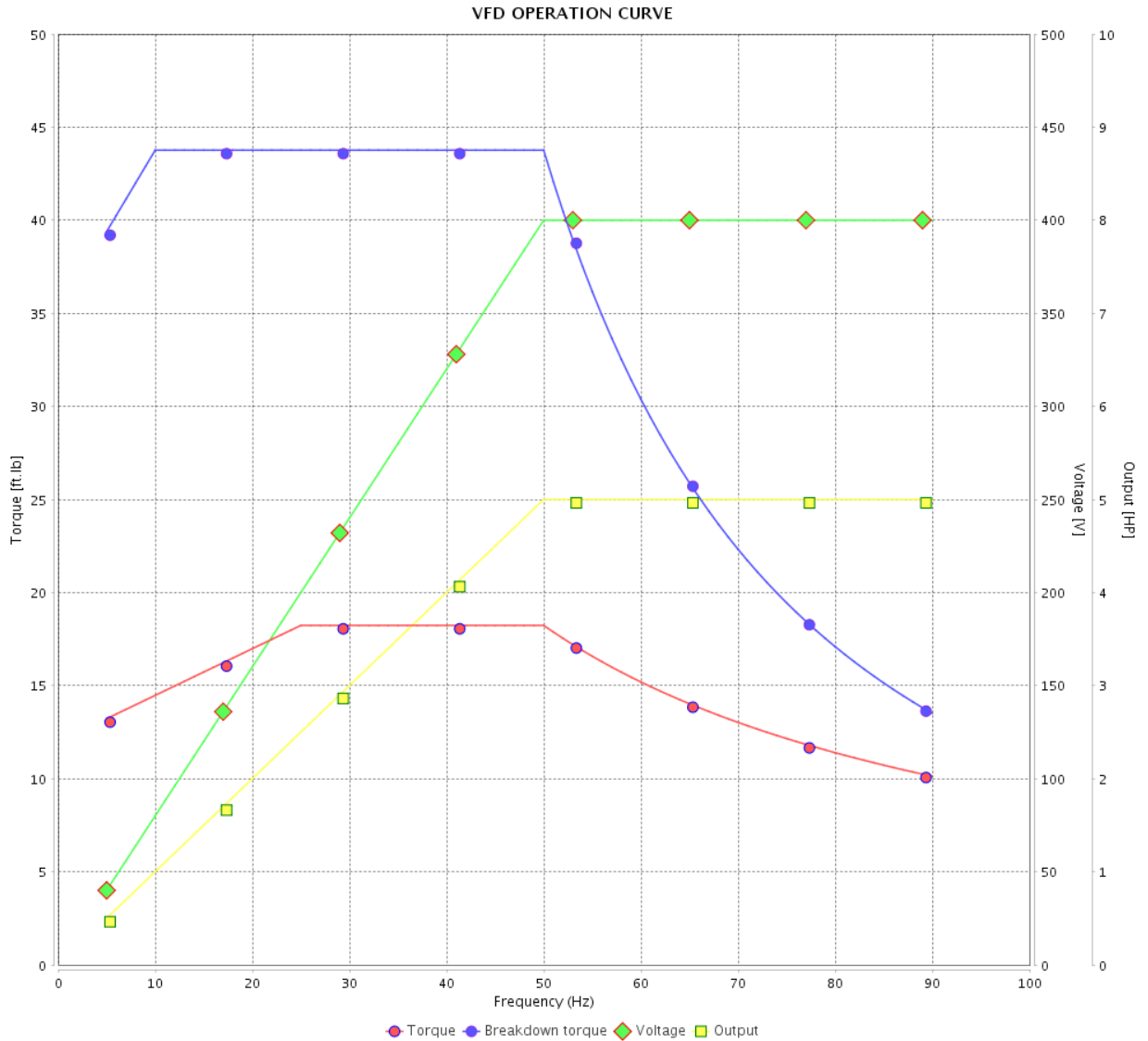


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QIER184TC-W2



Performance : 400 V 50 Hz 4P IE2

Rated current : 7.44 A  
 LRC : 6.4  
 Rated torque : 18.2 ft.lb  
 Locked rotor torque : 210 %  
 Breakdown torque : 280 %  
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.4003 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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Date		13/04/2022		

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

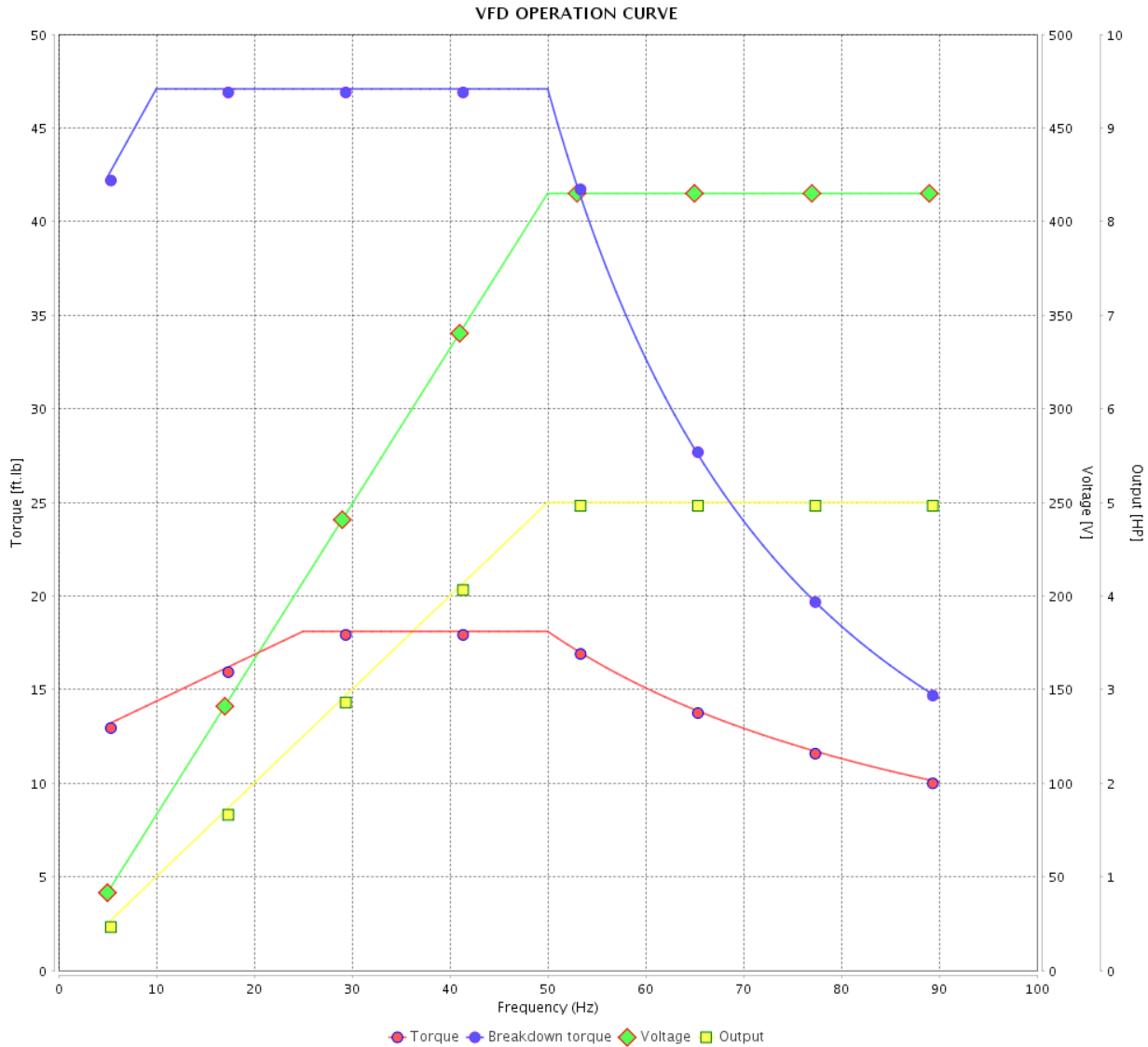


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12822416

Catalog # : 00518ST3QUIER184TC-W2



Performance : 415 V 50 Hz 4P IE2

Rated current : 7.35 A  
 LRC : 6.9  
 Rated torque : 18.1 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 300 %  
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

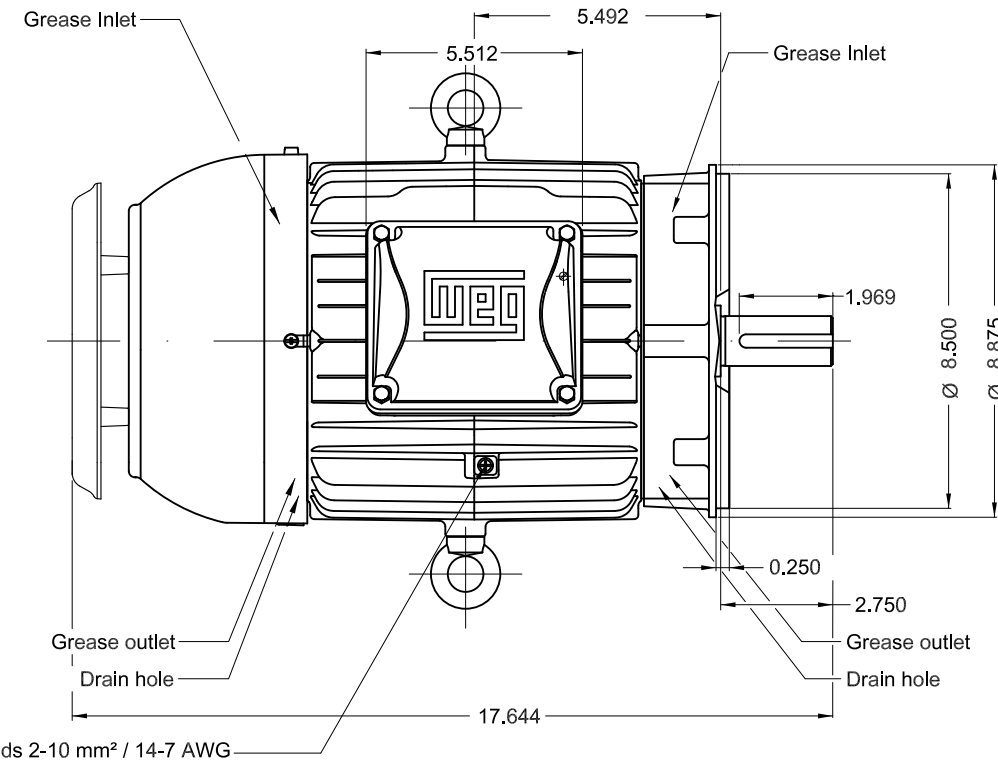
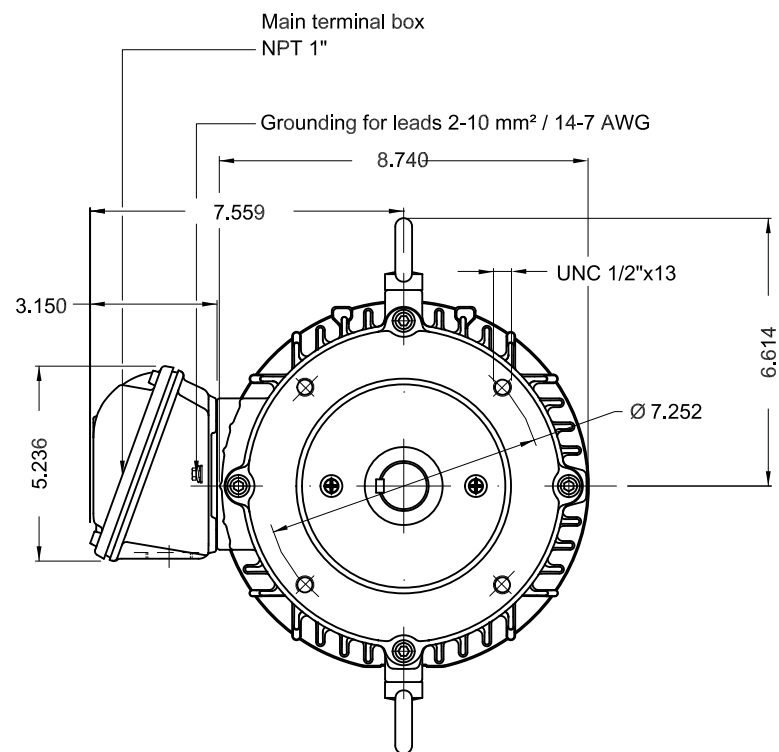
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 36 / 36	Revision
Checked by				
Date 13/04/2022				

1 2 3 4 5 6

A

B

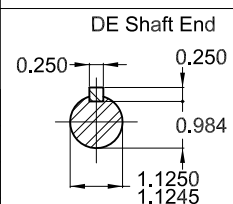
C



D

E

Color RAL 5009  
 Painting plan 202E  
 Mounting NEMA W-6  
 Mounting V18



5 HP 04 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 184TC IP55 TEFC					
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

**PREVIEW**  
 WDD



MADE IN BRAZIL  
12822416



**NEMA**  
Premium



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 - T5  
For use on PWM: Gr. A, B, C, D, F and G,  
VT 1000:1, CT 20:1, 1.00SF - T4A

MODEL 00518ST3QIER184TC-W2

Inverter Duty Motor  
Severe Duty

**IEEE**  
841-2009



FOR SAFE AREA  
Mod. TE1BFOXON  
CC029A

PH3 60Hz Fr. 184TC 1000m.a.s.l. IP55 TEFC 118lb

V 460

A 6.49

HP 5.0

kW 3.7

SF 1.25

SFA 8.11

RPM 1750

PF 0.80

AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 89.5%

DUTY CONT.

DES B Code J

GUARANT. EFF 87.5%

