

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer							
Product line	: NEMA Premium Efficiency Three-Phase	Product code	: 12438231				
		Catalog #	: 00156ET3E143T-W22				
Frame	: 143/5T	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>	: 44.4 lb				
Protection degree	: IP55	Moment of inertia (J)	: 0.0470 sq.ft.lb				
Design	: B						
Output [HP]	1.5	1	1	1	1.5	1.5	1.5
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]	3.92/1.96	1.69	1.66	1.65	2.36	2.24	2.21
L. R. Amperes [A]	34.9/17.4	15.5	16.1	16.8	15.8	16.6	17.5
LRC [A]	8.9x(Code L)	9.2x(Code M)	9.7x(Code M)	10.2x(Code N)	6.7x(Code H)	7.4x(Code J)	7.9x(Code K)
No load current [A]	1.66/0.830	0.780	0.840	0.900	0.780	0.840	0.900
Rated speed [RPM]	3480	2905	2915	2920	2835	2860	2870
Slip [%]	3.33	3.17	2.83	2.67	5.50	4.67	4.33
Rated torque [ft.lb]	2.26	1.81	1.80	1.80	2.78	2.75	2.74
Locked rotor torque [%]	310	340	380	420	220	260	280
Breakdown torque [%]	370	390	440	480	260	290	310
Service factor	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	37s (cold) 21s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level <sup>2</sup>	68.0 dB(A)						
Efficiency (%)	25%						
	50%	81.5	80.5	79.3	78.9	81.0	82.0
	75%	84.0	83.2	82.8	82.7	81.5	82.5
	100%	84.0	83.4	83.4	83.4	81.5	82.5
Power Factor	25%						
	50%	0.68	0.63	0.58	0.55	0.75	0.70
	75%	0.78	0.74	0.71	0.68	0.84	0.80
	100%	0.84	0.81	0.78	0.76	0.87	0.86
Bearing type	: Drive end : 6205 ZZ	Non drive end : 6204 ZZ	Foundation loads				
Sealing	: V'Ring	V'Ring	Max. traction : 52 lb				
Lubrication interval	: -	-	Max. compression : 96 lb				
Lubricant amount	: -	-					
Lubricant type	: Mobil Polyrex EM						
Notes							
USABLE @208V 4.20A SF 1.15 SFA 4.83A							
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



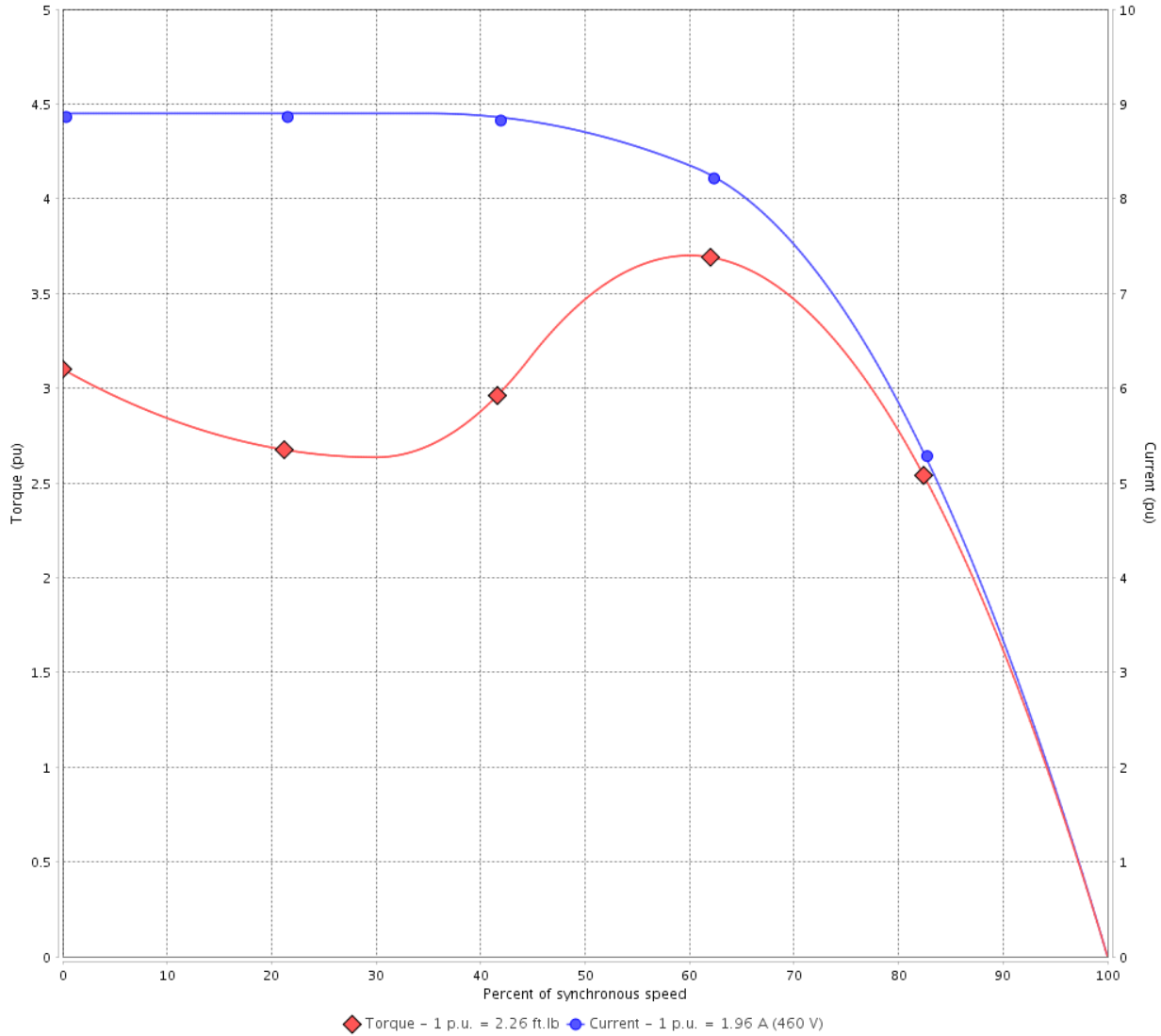
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 3.92/1.96 A	Moment of inertia (J)	: 0.0470 sq.ft.lb
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.26 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.25
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 3480 rpm	Design	: B

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

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# TORQUE AND CURRENT VS SPEED CURVE



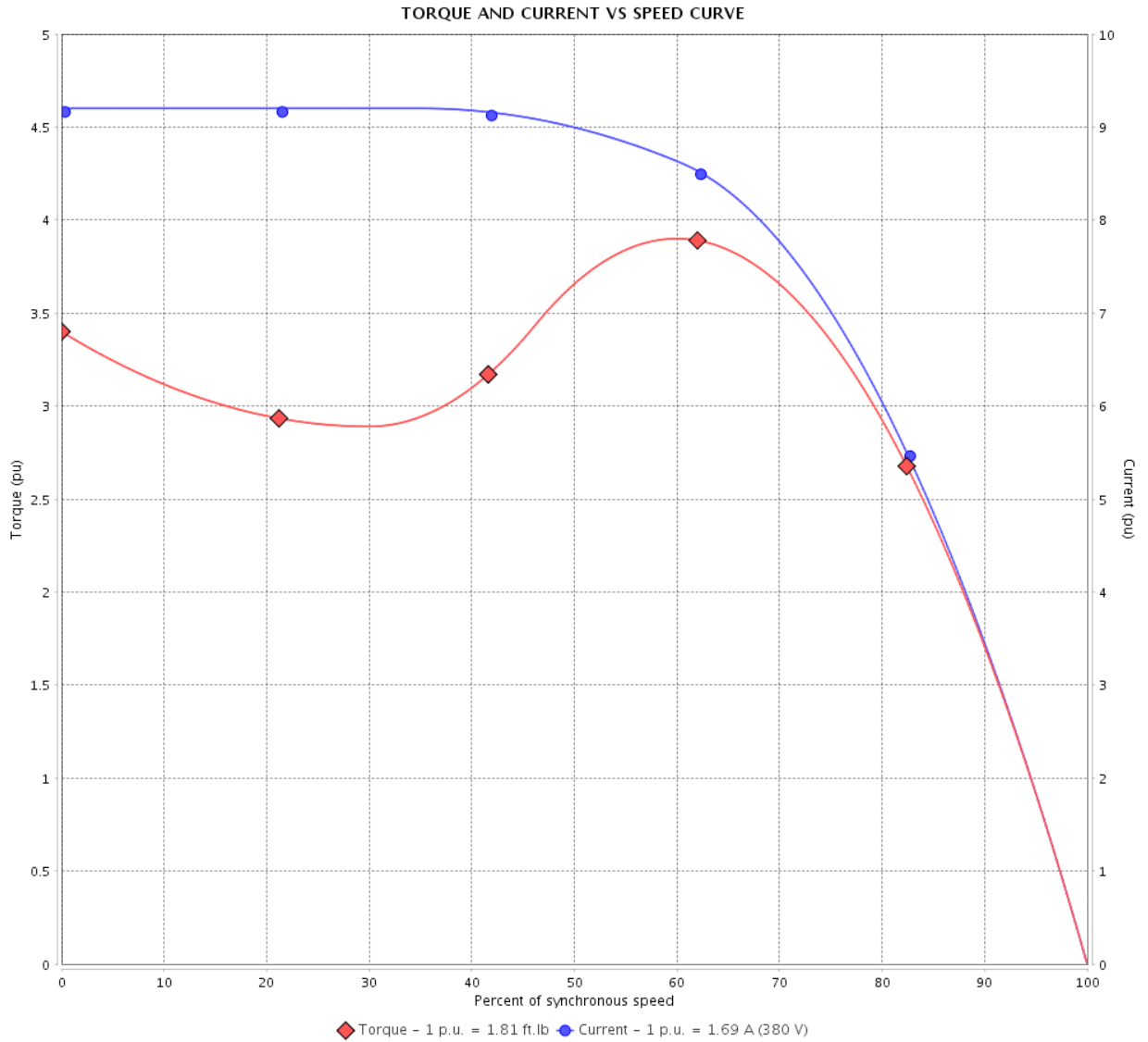
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22



Performance : 380 V 50 Hz 2P IE3

Rated current	: 1.69 A	Moment of inertia (J)	: 0.0470 sq.ft.lb
LRC	: 9.2	Duty cycle	: Cont.(S1)
Rated torque	: 1.81 ft.lb	Insulation class	: F
Locked rotor torque	: 340 %	Service factor	: 1.25
Breakdown torque	: 390 %	Temperature rise	: 80 K
Rated speed	: 2905 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



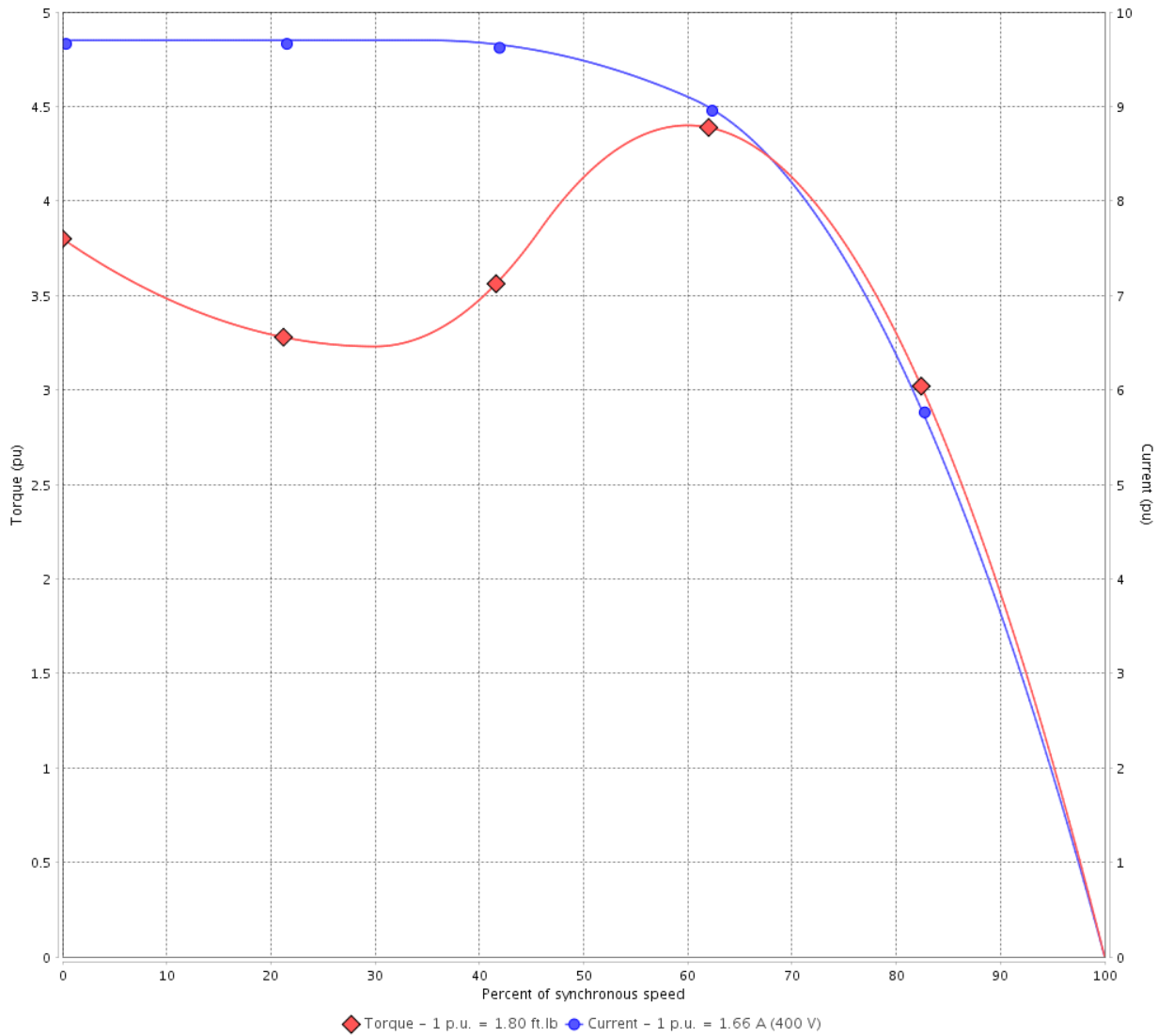
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current	: 1.66 A	Moment of inertia (J)	: 0.0470 sq.ft.lb
LRC	: 9.7	Duty cycle	: Cont.(S1)
Rated torque	: 1.80 ft.lb	Insulation class	: F
Locked rotor torque	: 380 %	Service factor	: 1.25
Breakdown torque	: 440 %	Temperature rise	: 80 K
Rated speed	: 2915 rpm	Design	: B

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

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# TORQUE AND CURRENT VS SPEED CURVE



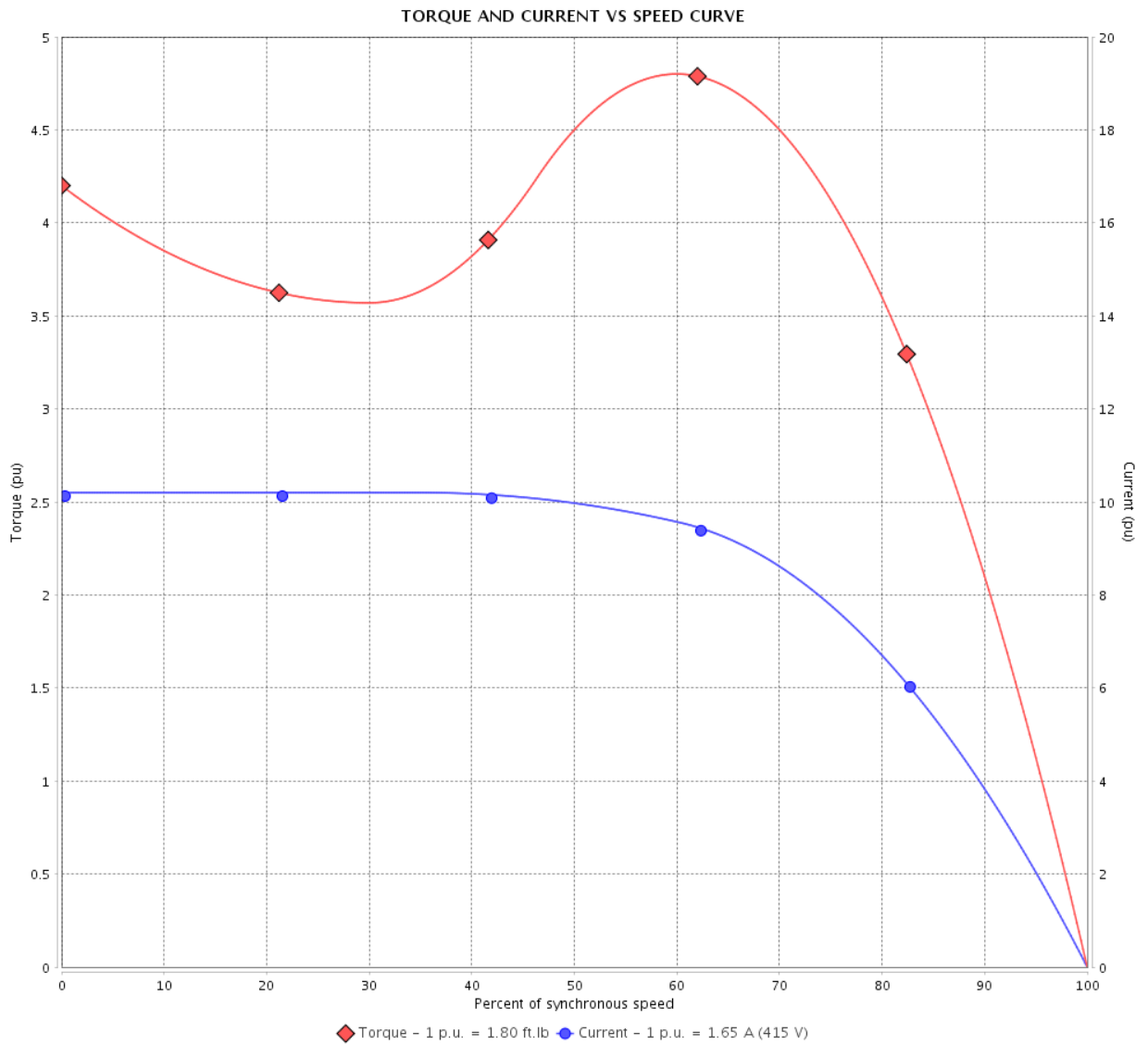
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22



Performance : 415 V 50 Hz 2P IE3

Rated current : 1.65 A  
 LRC : 10.2  
 Rated torque : 1.80 ft.lb  
 Locked rotor torque : 420 %  
 Breakdown torque : 480 %  
 Rated speed : 2920 rpm

Moment of inertia (J) : 0.0470 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 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



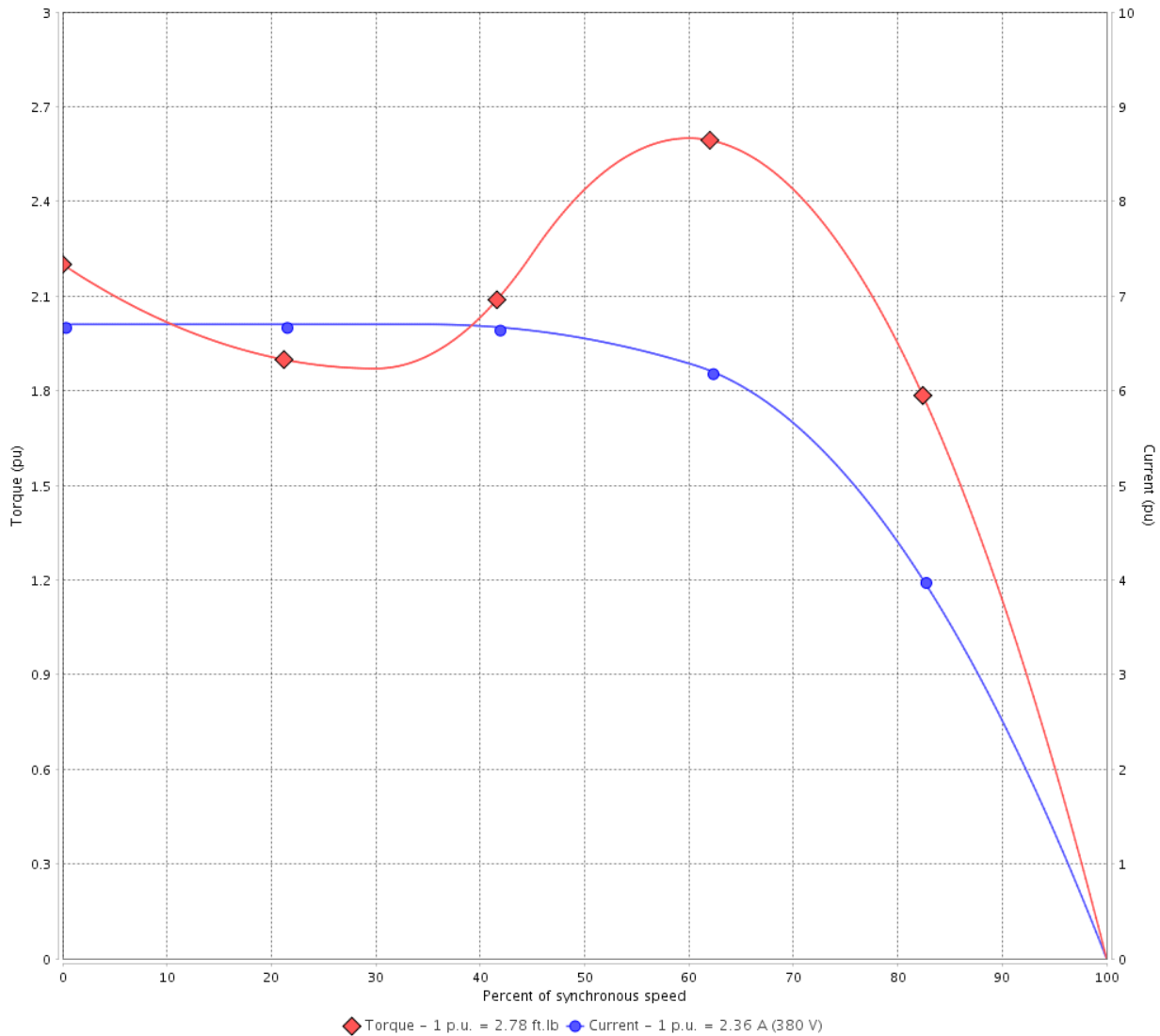
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 2P IE2

Rated current	: 2.36 A	Moment of inertia (J)	: 0.0470 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 2.78 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2835 rpm	Design	: B

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

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# TORQUE AND CURRENT VS SPEED CURVE



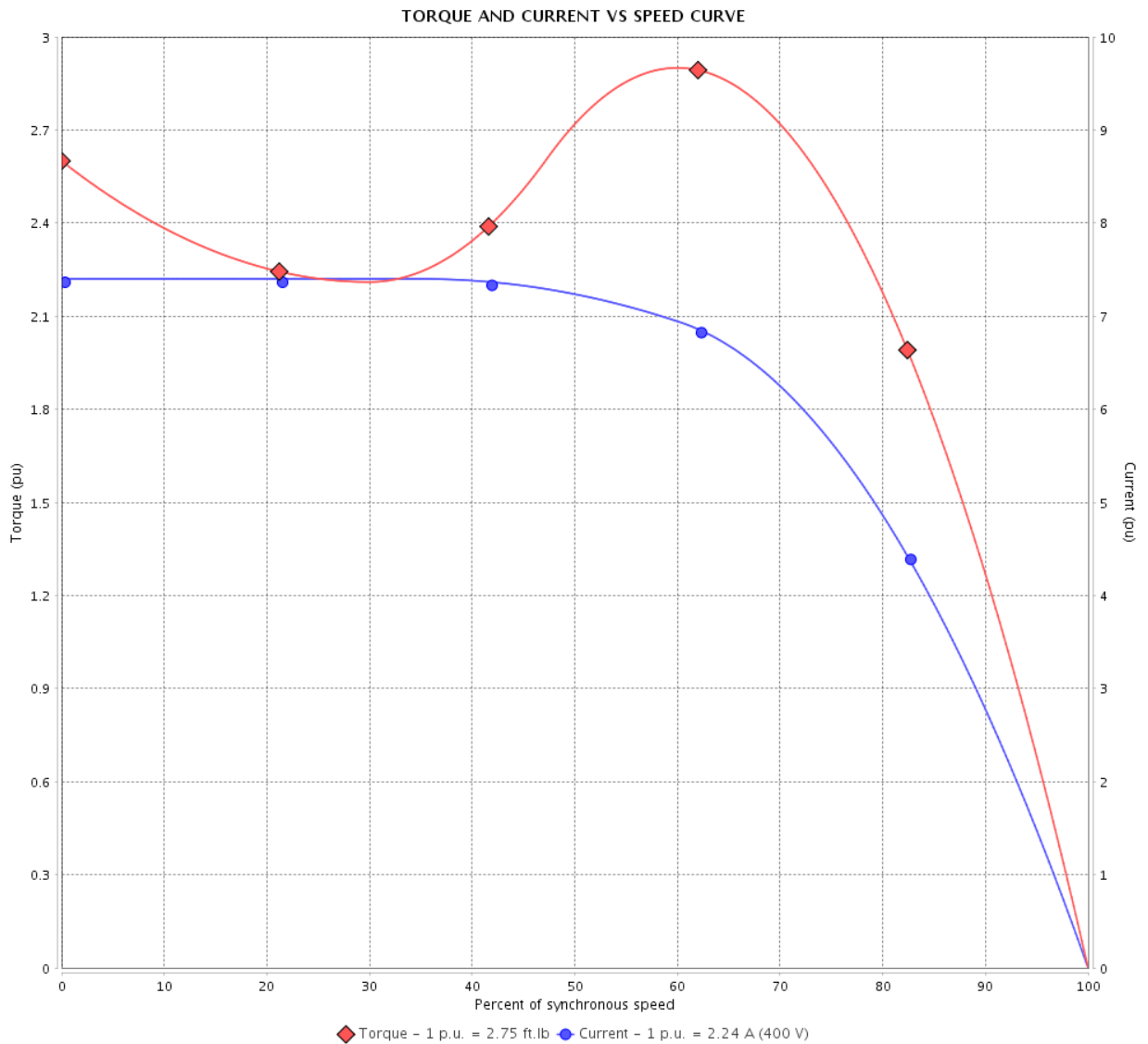
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22



Performance : 400 V 50 Hz 2P IE2

Rated current : 2.24 A  
 LRC : 7.4  
 Rated torque : 2.75 ft.lb  
 Locked rotor torque : 260 %  
 Breakdown torque : 290 %  
 Rated speed : 2860 rpm

Moment of inertia (J) : 0.0470 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 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



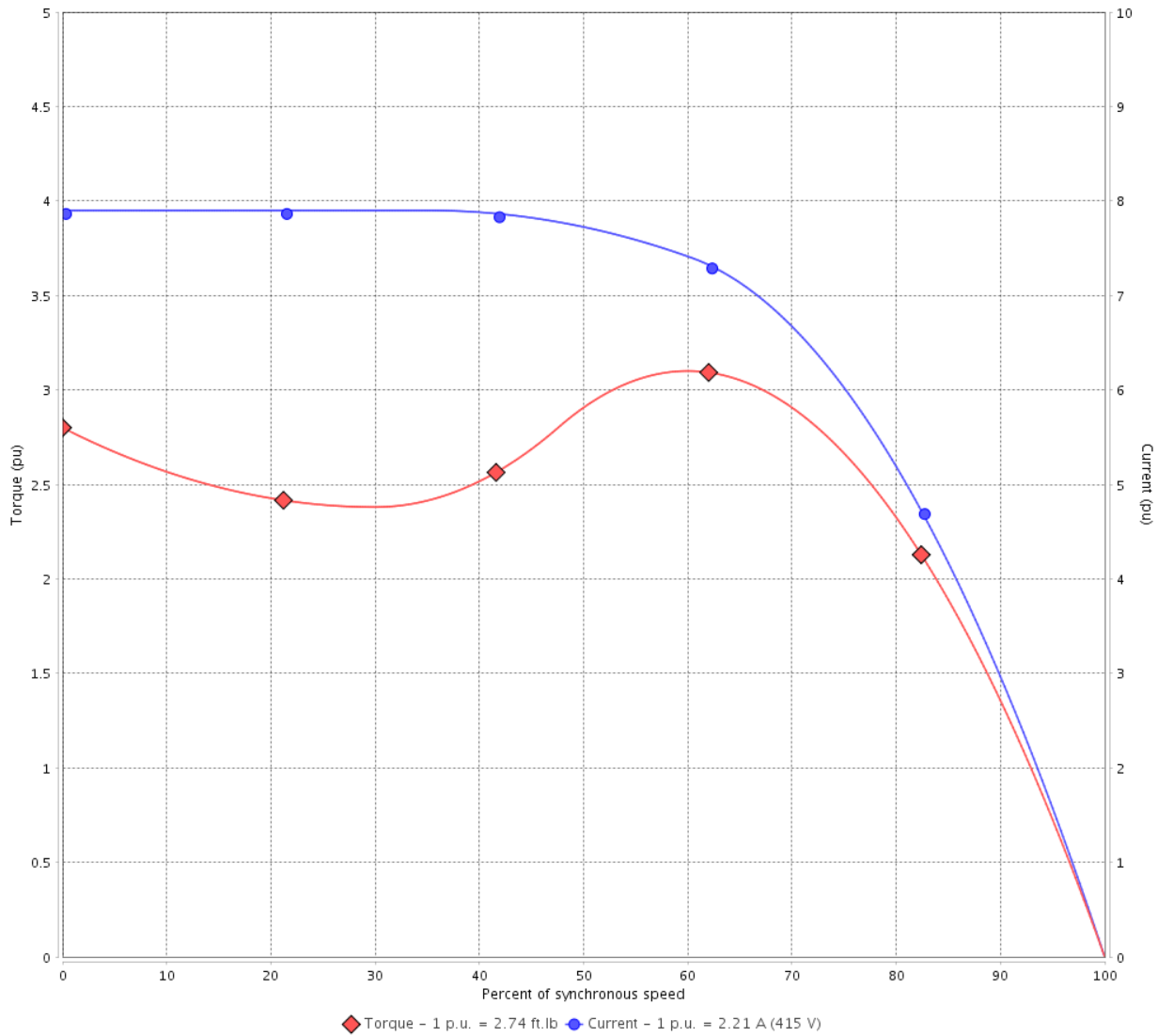
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 2P IE2

Rated current	: 2.21 A	Moment of inertia (J)	: 0.0470 sq.ft.lb
LRC	: 7.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.74 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2870 rpm	Design	: B

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

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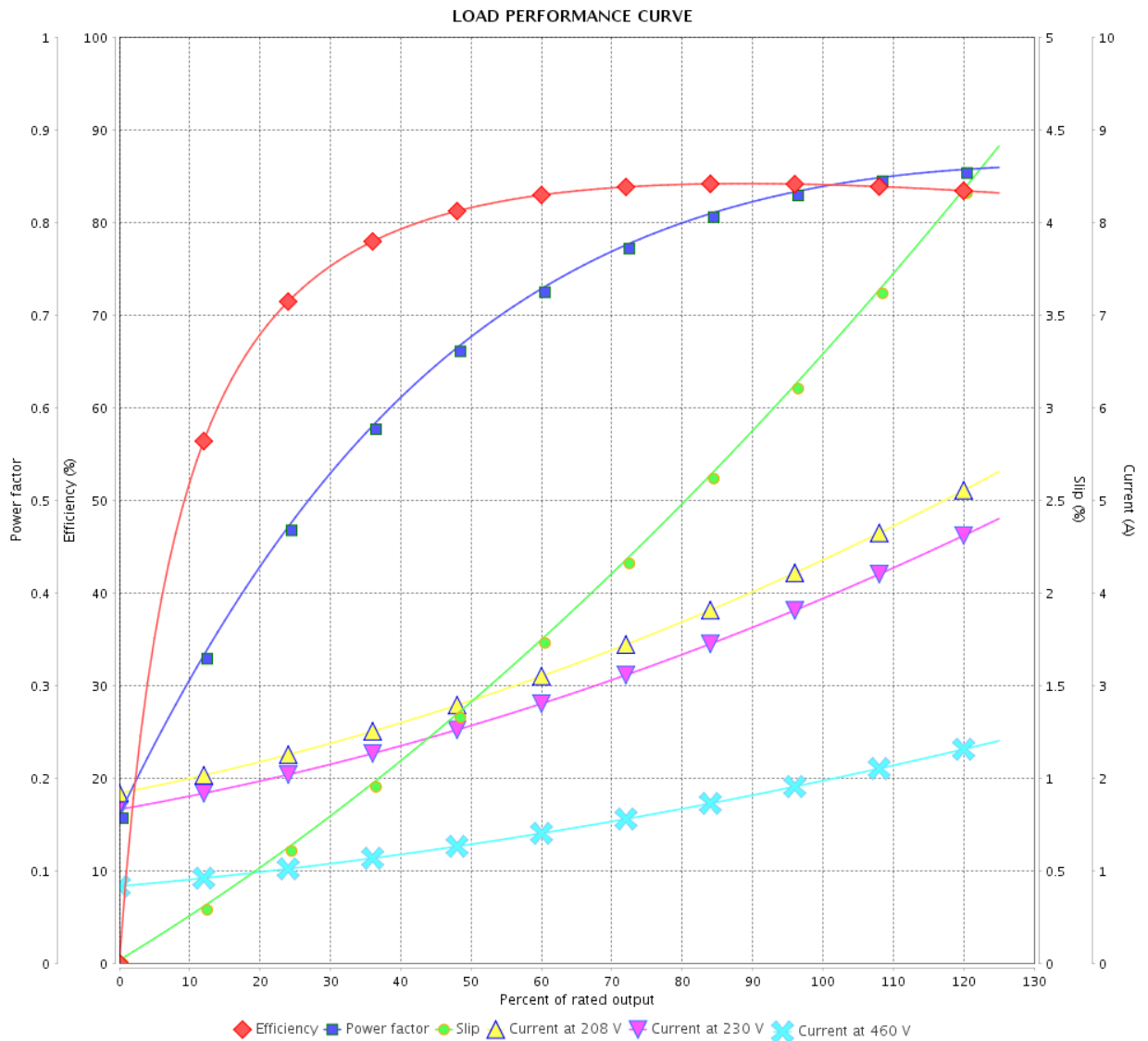
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 12438231  
 Catalog # : 00156ET3E143T-W22



Performance : 230/460 V 60 Hz 2P

Rated current : 3.92/1.96 A  
 LRC : 8.9  
 Rated torque : 2.26 ft.lb  
 Locked rotor torque : 310 %  
 Breakdown torque : 370 %  
 Rated speed : 3480 rpm

Moment of inertia (J) : 0.0470 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



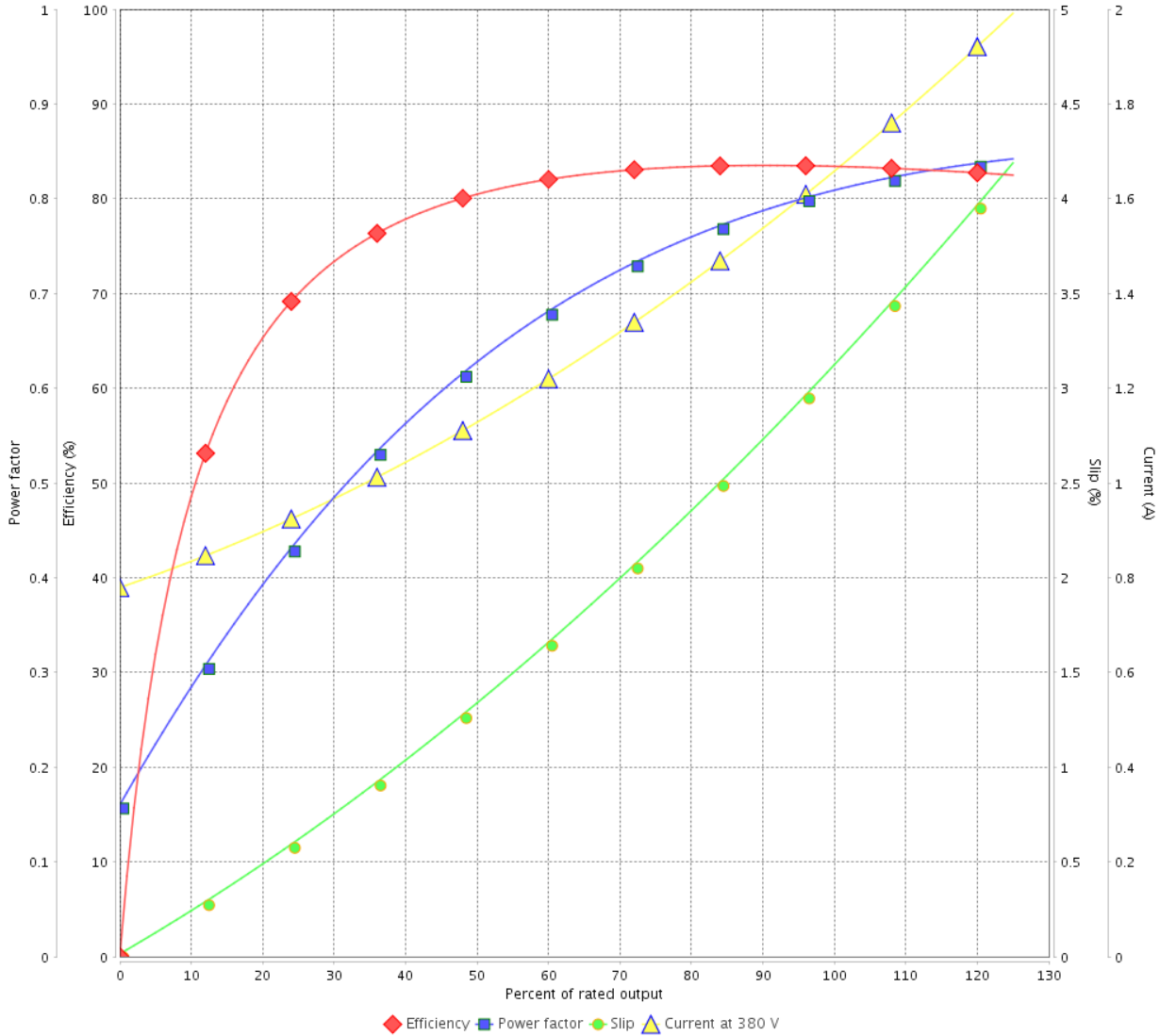
Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 2P IE3

Rated current : 1.69 A  
 LRC : 9.2  
 Rated torque : 1.81 ft.lb  
 Locked rotor torque : 340 %  
 Breakdown torque : 390 %  
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.0470 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

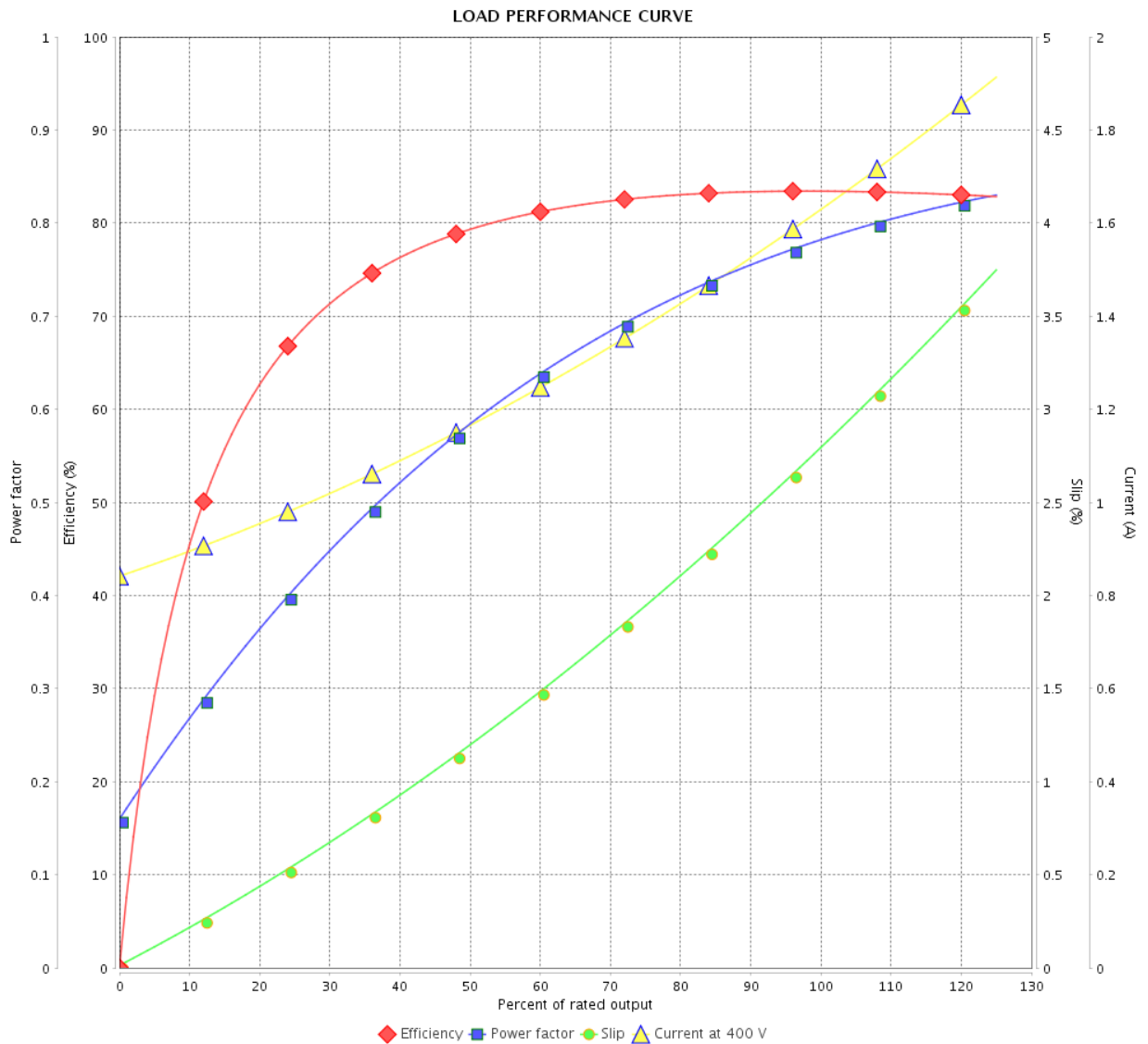


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22



Performance : 400 V 50 Hz 2P IE3

Rated current : 1.66 A  
 LRC : 9.7  
 Rated torque : 1.80 ft.lb  
 Locked rotor torque : 380 %  
 Breakdown torque : 440 %  
 Rated speed : 2915 rpm

Moment of inertia (J) : 0.0470 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



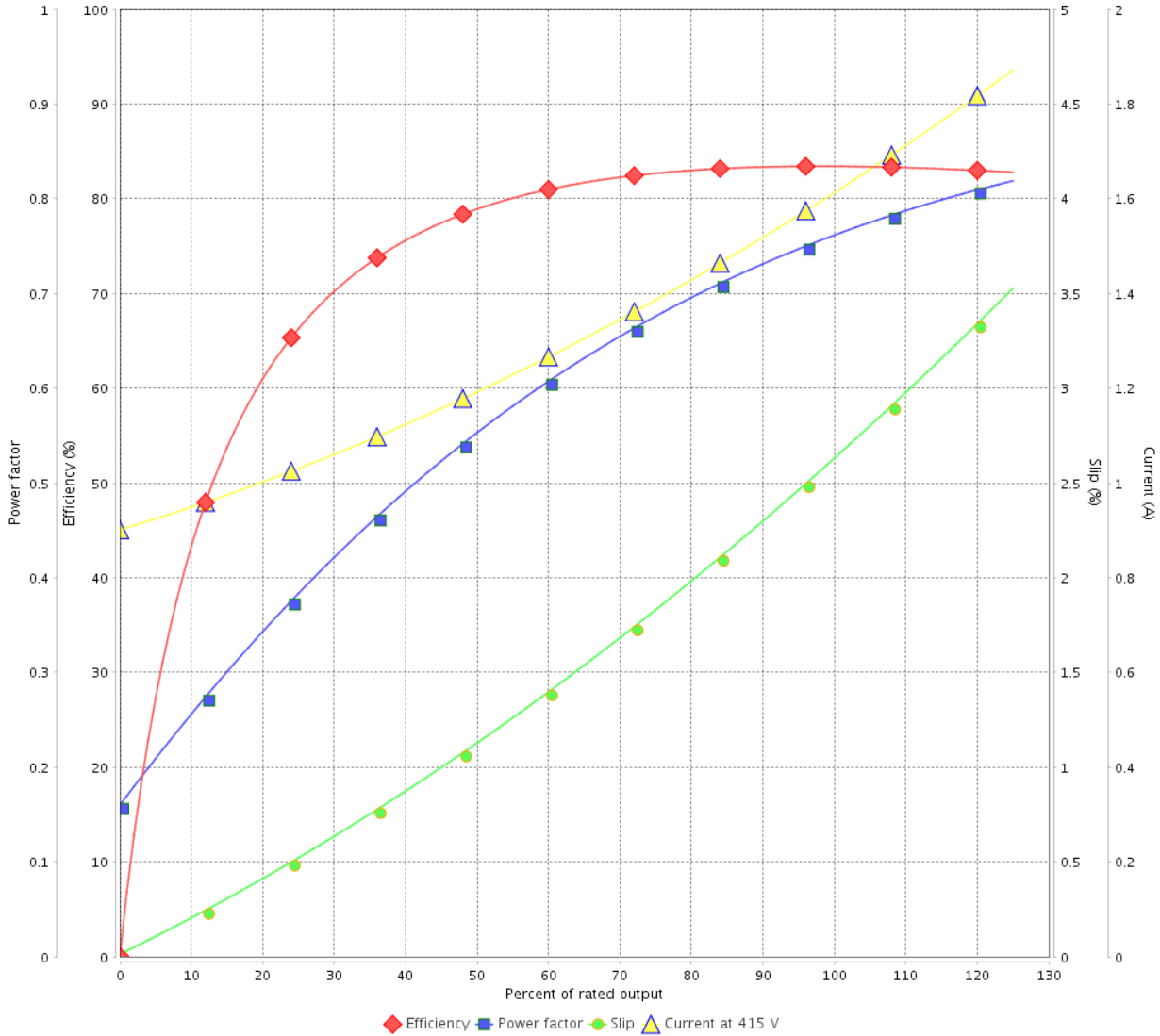
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 2P IE3

Rated current : 1.65 A  
 LRC : 10.2  
 Rated torque : 1.80 ft.lb  
 Locked rotor torque : 420 %  
 Breakdown torque : 480 %  
 Rated speed : 2920 rpm

Moment of inertia (J) : 0.0470 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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## Three Phase Induction Motor - Squirrel Cage

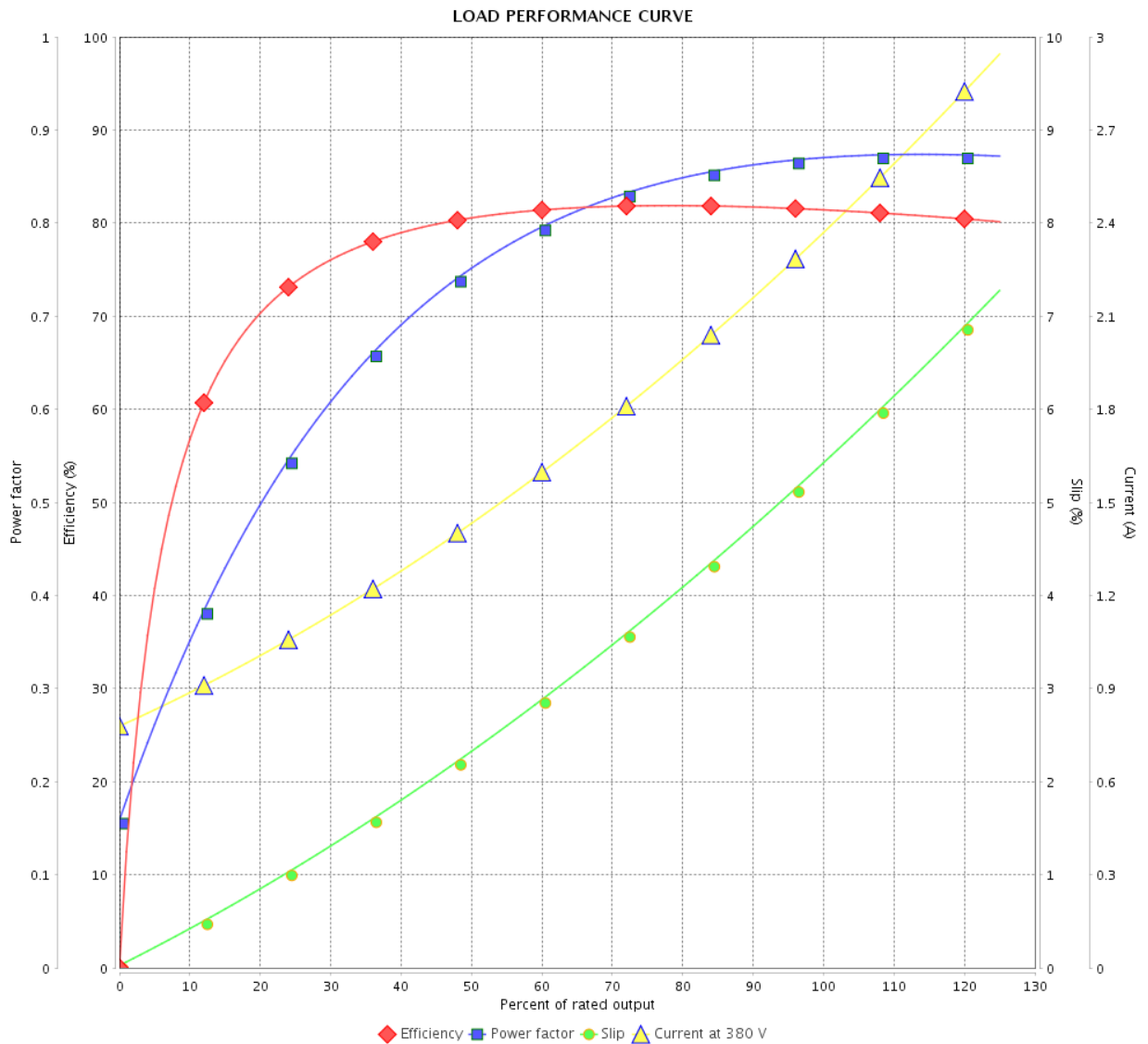


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22



Performance : 380 V 50 Hz 2P IE2

Rated current : 2.36 A  
 LRC : 6.7  
 Rated torque : 2.78 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 2835 rpm

Moment of inertia (J) : 0.0470 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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Three Phase Induction Motor - Squirrel Cage



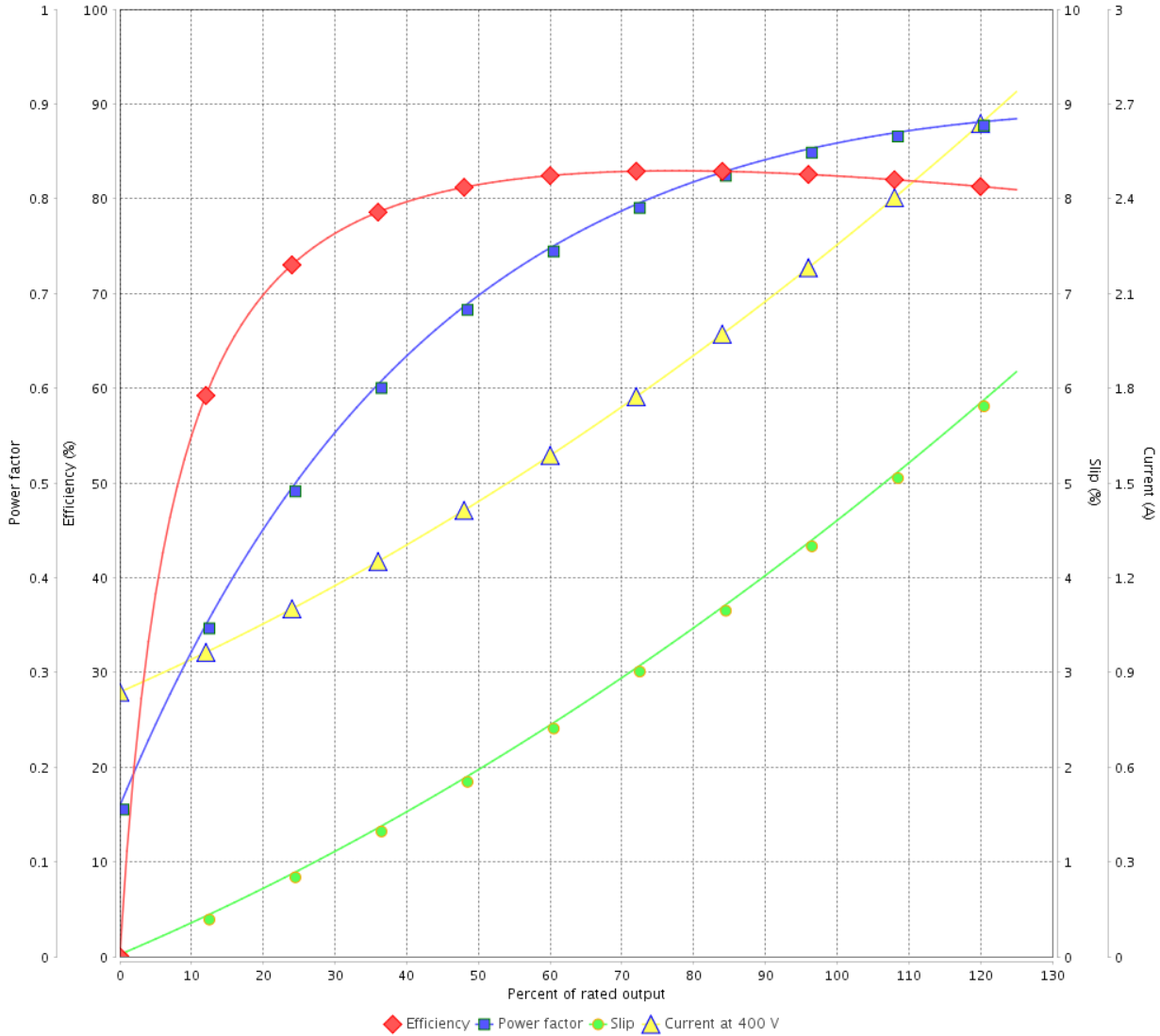
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 2P IE2

Rated current : 2.24 A  
 LRC : 7.4  
 Rated torque : 2.75 ft.lb  
 Locked rotor torque : 260 %  
 Breakdown torque : 290 %  
 Rated speed : 2860 rpm

Moment of inertia (J) : 0.0470 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

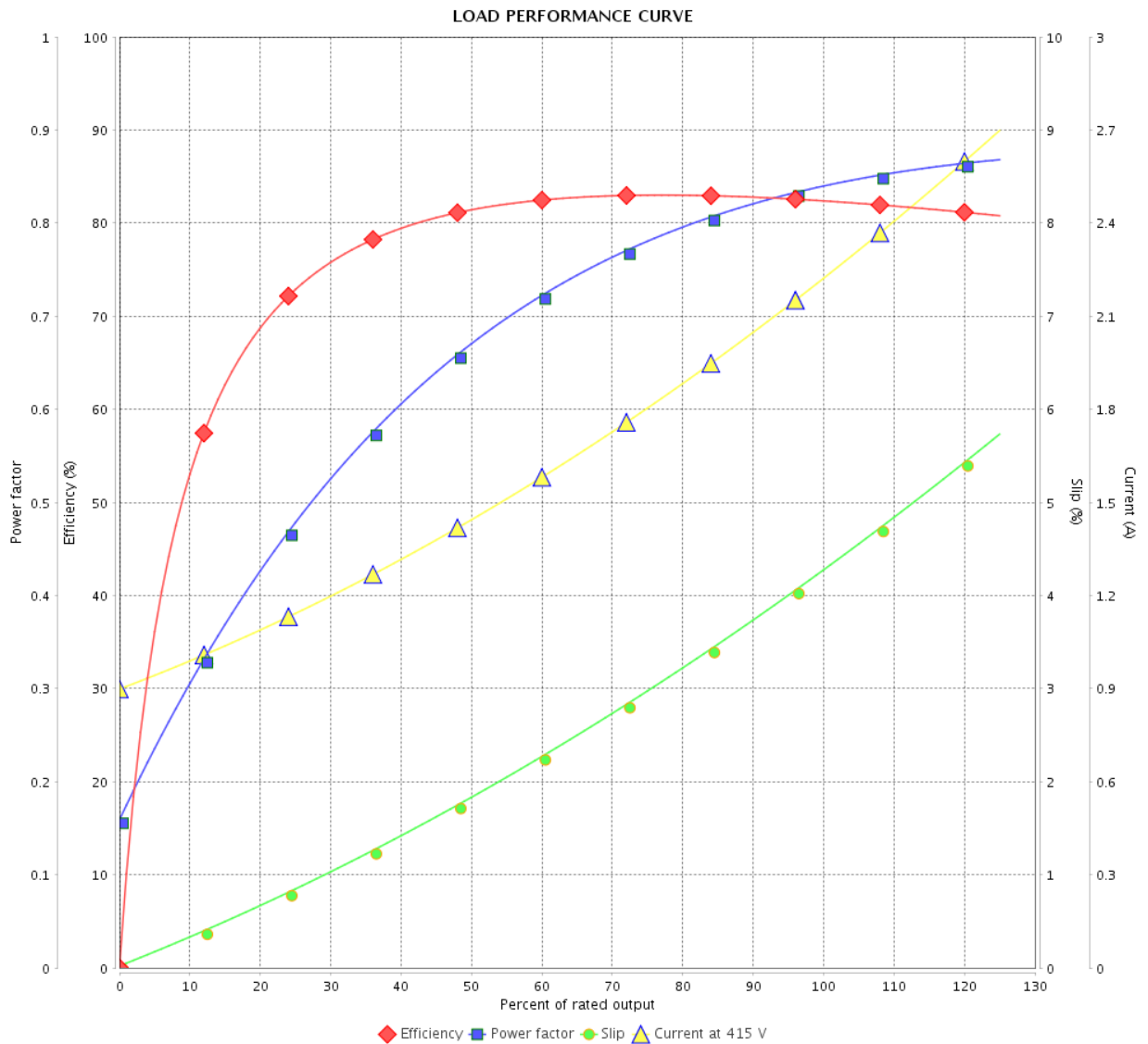


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22



Performance : 415 V 50 Hz 2P IE2

Rated current : 2.21 A  
 LRC : 7.9  
 Rated torque : 2.74 ft.lb  
 Locked rotor torque : 280 %  
 Breakdown torque : 310 %  
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.0470 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 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 : 12438231  
Catalog # : 00156ET3E143T-W22

Performance : 230/460 V 60 Hz 2P

Rated current : 3.92/1.96 A	Moment of inertia (J) : 0.0470 sq.ft.lb
LRC : 8.9	Duty cycle : Cont.(S1)
Rated torque : 2.26 ft.lb	Insulation class : F
Locked rotor torque : 310 %	Service factor : 1.25
Breakdown torque : 370 %	Temperature rise : 80 K
Rated speed : 3480 rpm	Design : B

Heating constant

Cooling constant

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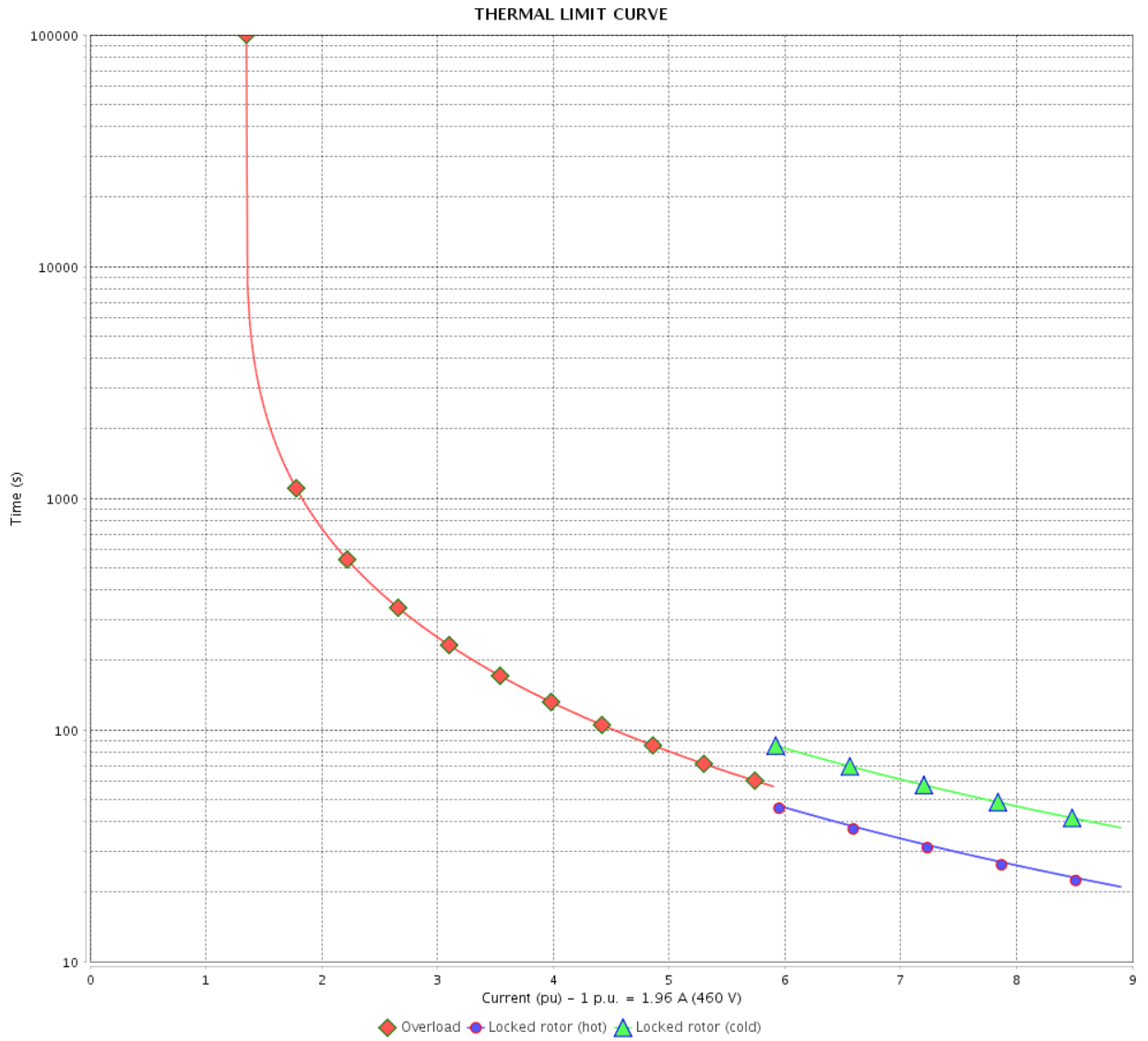


# THERMAL LIMIT CURVE

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 : 12438231  
Catalog # : 00156ET3E143T-W22

Performance : 380 V 50 Hz 2P IE3

Rated current	: 1.69 A	Moment of inertia (J)	: 0.0470 sq.ft.lb
LRC	: 9.2	Duty cycle	: Cont.(S1)
Rated torque	: 1.81 ft.lb	Insulation class	: F
Locked rotor torque	: 340 %	Service factor	: 1.25
Breakdown torque	: 390 %	Temperature rise	: 80 K
Rated speed	: 2905 rpm	Design	: B

Heating constant

Cooling constant

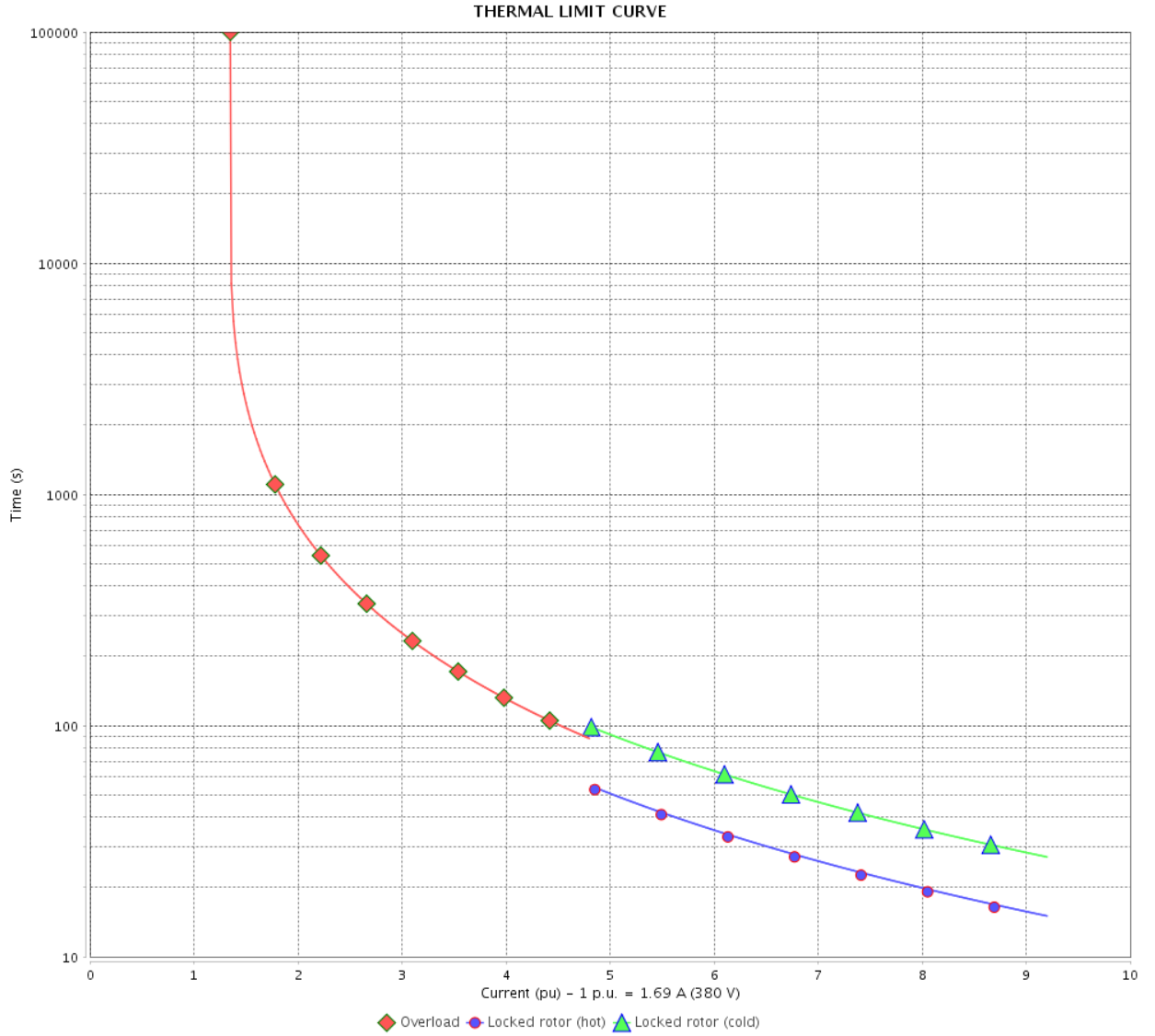
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# THERMAL LIMIT CURVE

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 : 12438231  
 Catalog # : 00156ET3E143T-W22

Performance : 400 V 50 Hz 2P IE3

Rated current : 1.66 A	Moment of inertia (J) : 0.0470 sq.ft.lb
LRC : 9.7	Duty cycle : Cont.(S1)
Rated torque : 1.80 ft.lb	Insulation class : F
Locked rotor torque : 380 %	Service factor : 1.25
Breakdown torque : 440 %	Temperature rise : 80 K
Rated speed : 2915 rpm	Design : B

Heating constant

Cooling constant

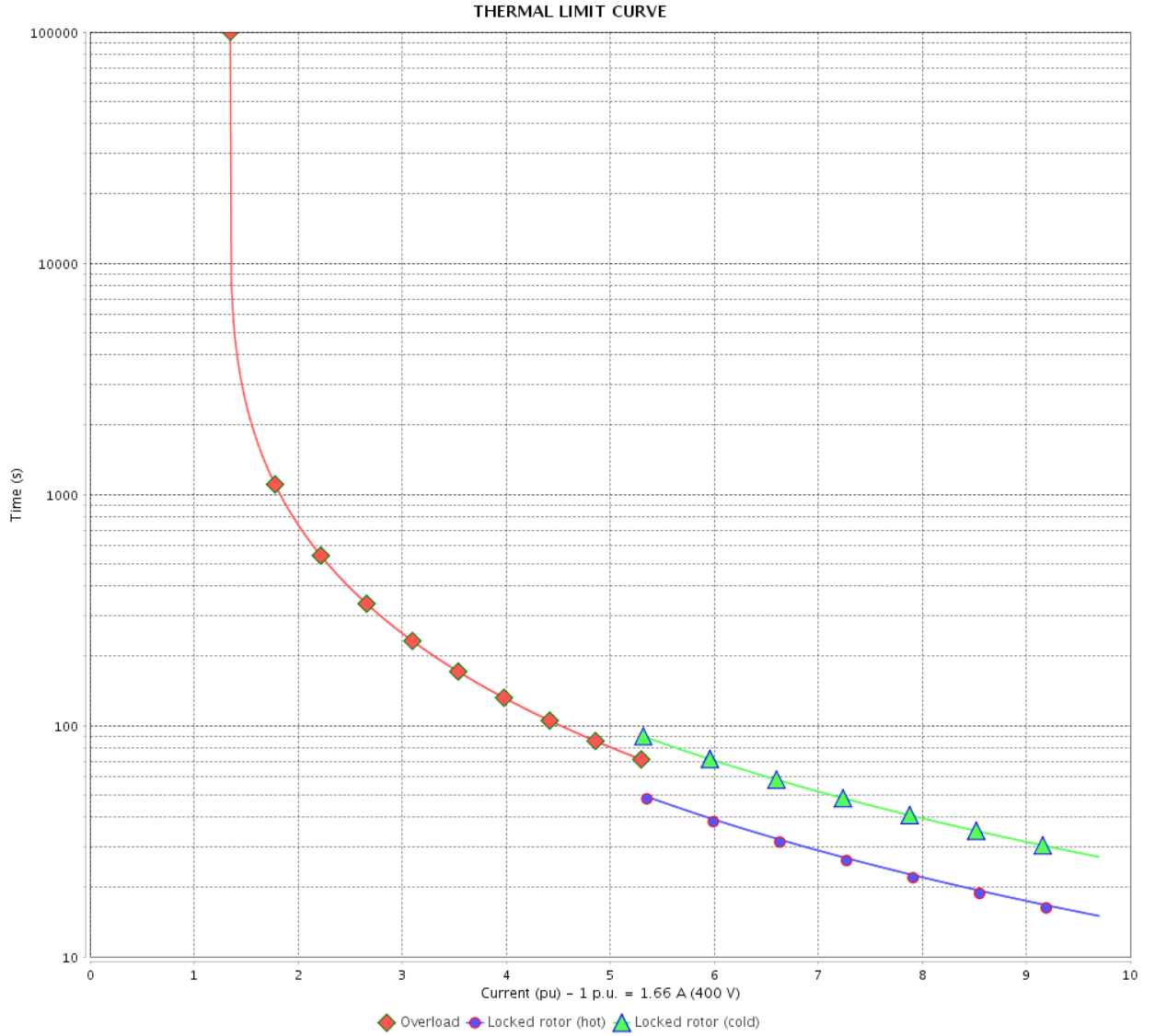
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# THERMAL LIMIT CURVE

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 : 12438231  
 Catalog # : 00156ET3E143T-W22

Performance : 415 V 50 Hz 2P IE3

Rated current : 1.65 A	Moment of inertia (J) : 0.0470 sq.ft.lb
LRC : 10.2	Duty cycle : Cont.(S1)
Rated torque : 1.80 ft.lb	Insulation class : F
Locked rotor torque : 420 %	Service factor : 1.25
Breakdown torque : 480 %	Temperature rise : 80 K
Rated speed : 2920 rpm	Design : B

Heating constant

Cooling constant

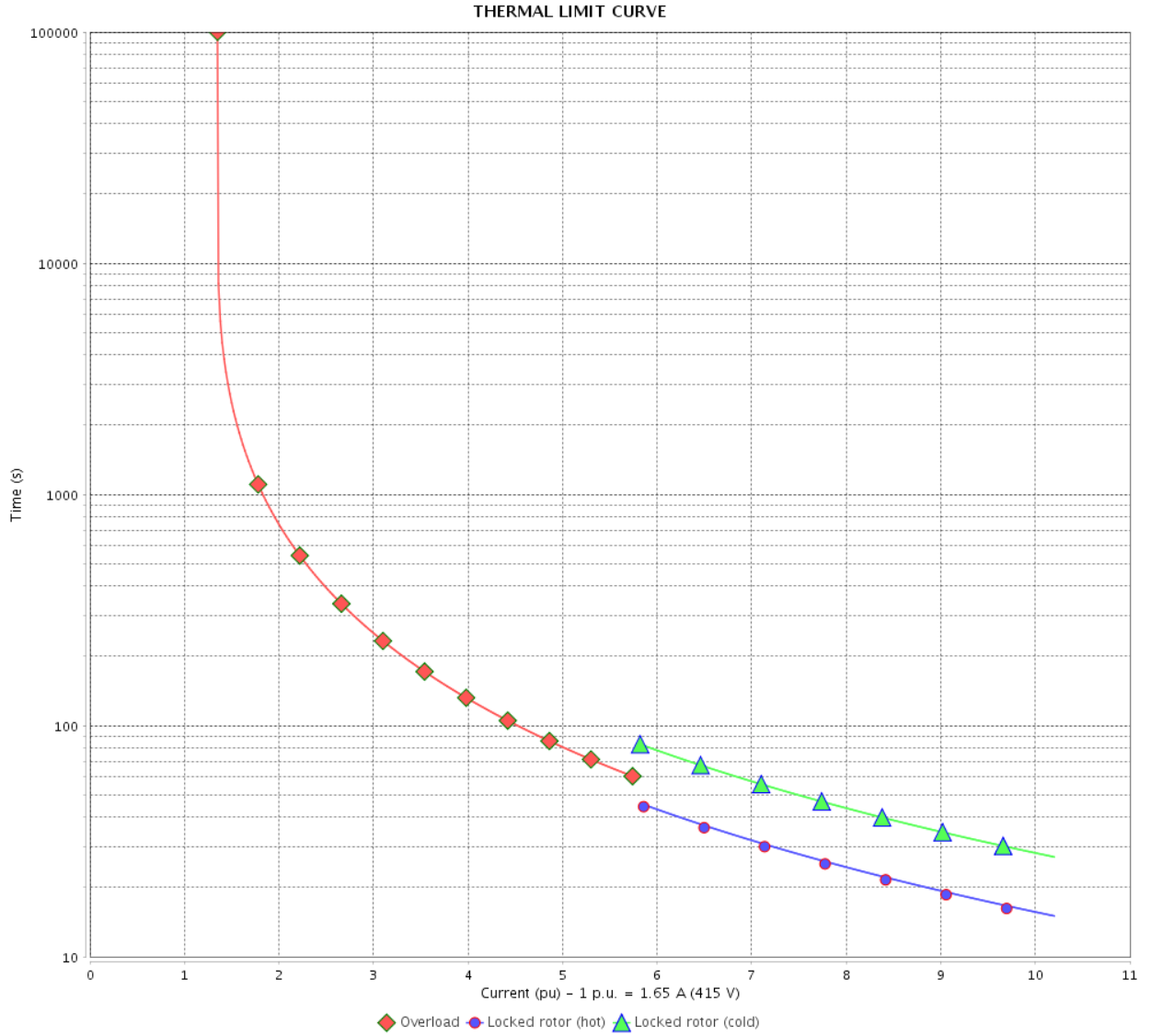
Rev.	Changes Summary	Performed	Checked	Date
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Three Phase Induction Motor - Squirrel Cage



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



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## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12438231  
Catalog # : 00156ET3E143T-W22

Performance : 380 V 50 Hz 2P IE2

Rated current	: 2.36 A	Moment of inertia (J)	: 0.0470 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 2.78 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2835 rpm	Design	: B

Heating constant

Cooling constant

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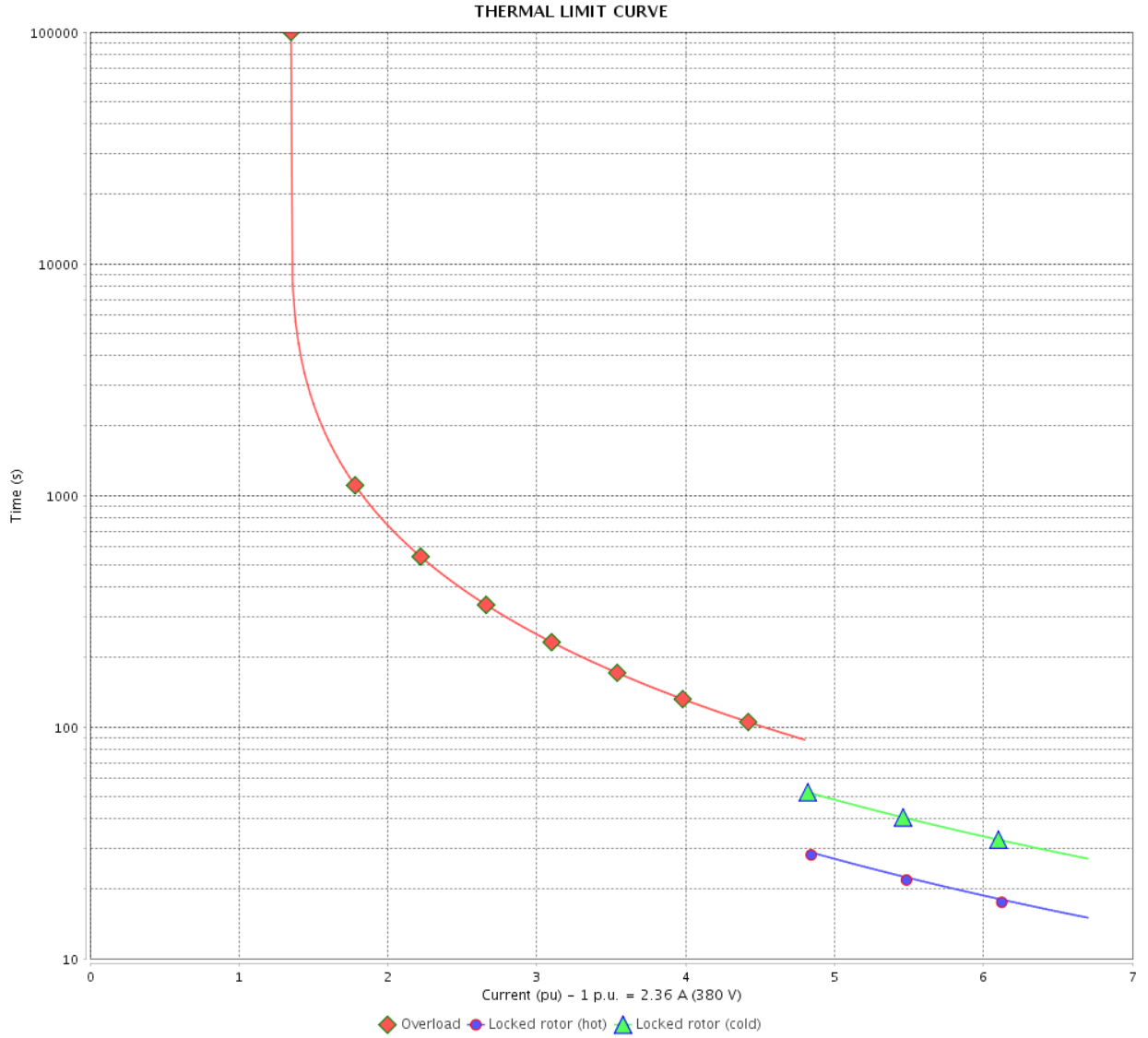


# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



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



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# THERMAL LIMIT CURVE



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Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 12438231  
 Catalog # : 00156ET3E143T-W22

Performance : 400 V 50 Hz 2P IE2

Rated current : 2.24 A	Moment of inertia (J) : 0.0470 sq.ft.lb
LRC : 7.4	Duty cycle : Cont.(S1)
Rated torque : 2.75 ft.lb	Insulation class : F
Locked rotor torque : 260 %	Service factor : 1.25
Breakdown torque : 290 %	Temperature rise : 80 K
Rated speed : 2860 rpm	Design : B

Heating constant

Cooling constant

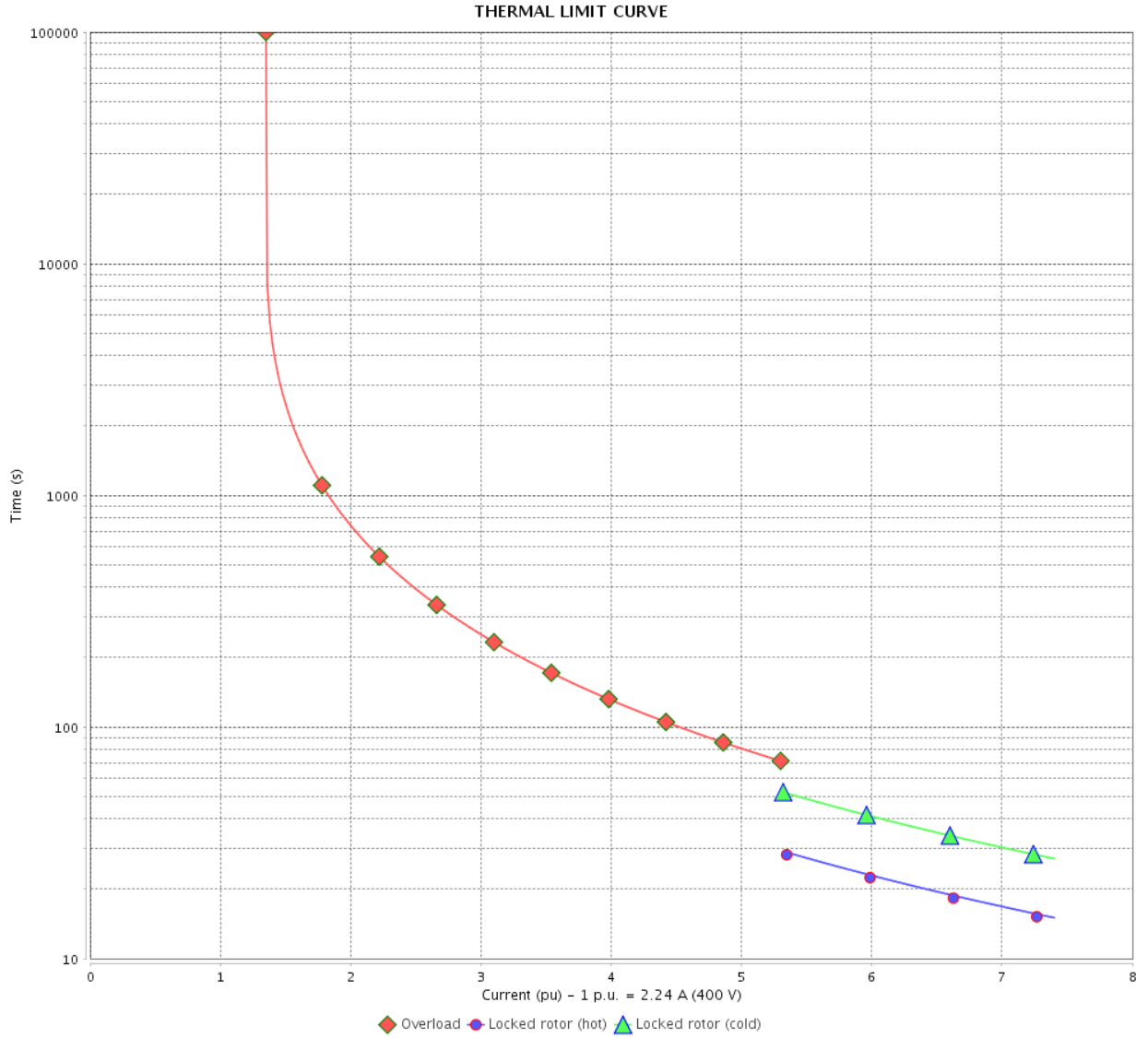
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 26 / 36	Revision
Checked by				
Date	12/04/2022			

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Performed by		Page		Revision
Checked by		27 / 36		
Date		12/04/2022		

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12438231  
Catalog # : 00156ET3E143T-W22

Performance : 415 V 50 Hz 2P IE2

Rated current	: 2.21 A	Moment of inertia (J)	: 0.0470 sq.ft.lb
LRC	: 7.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.74 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2870 rpm	Design	: B

Heating constant

Cooling constant

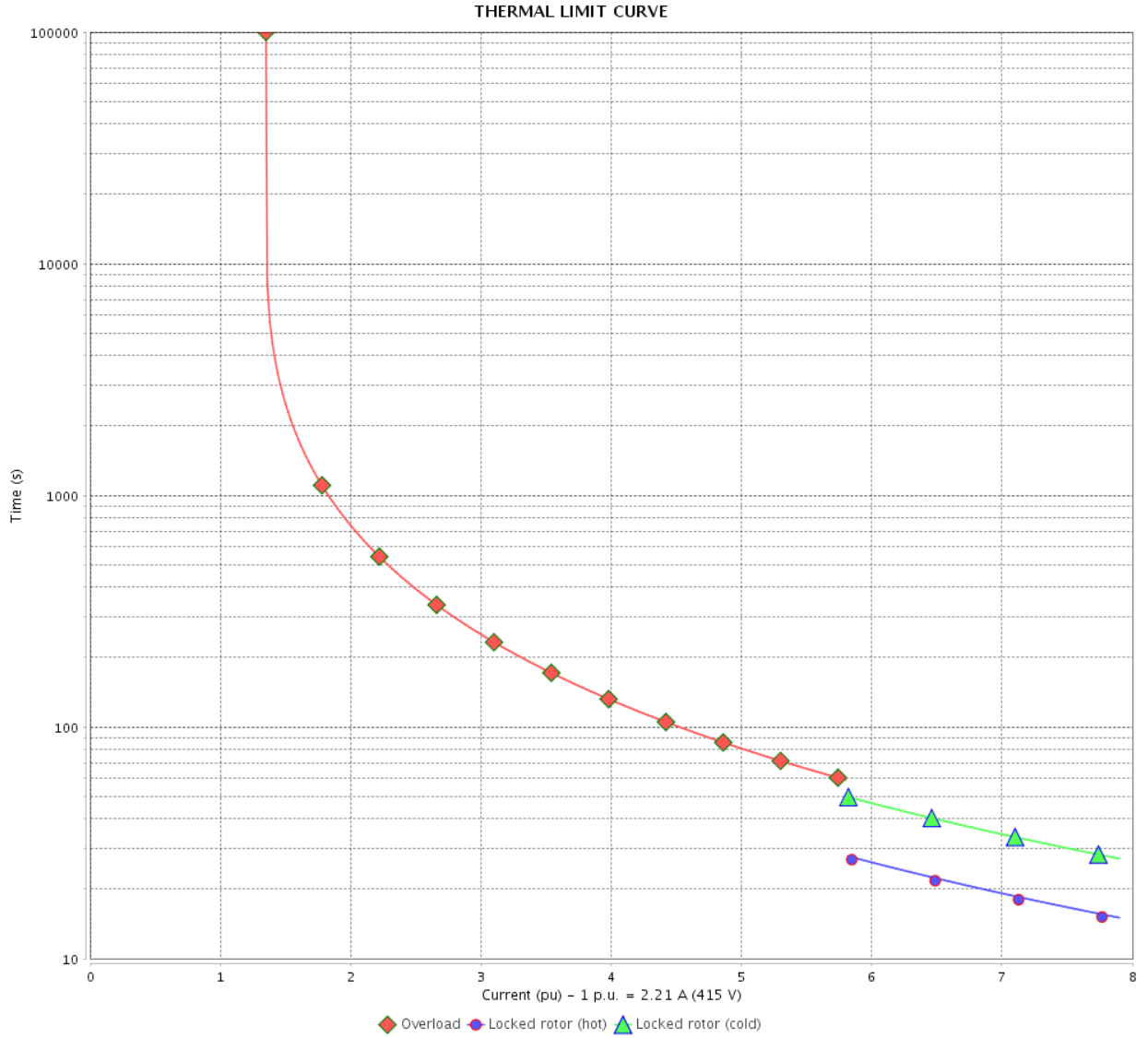
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	12/04/2022		28 / 36	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Performed by		Page 29 / 36		Revision
Checked by				
Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



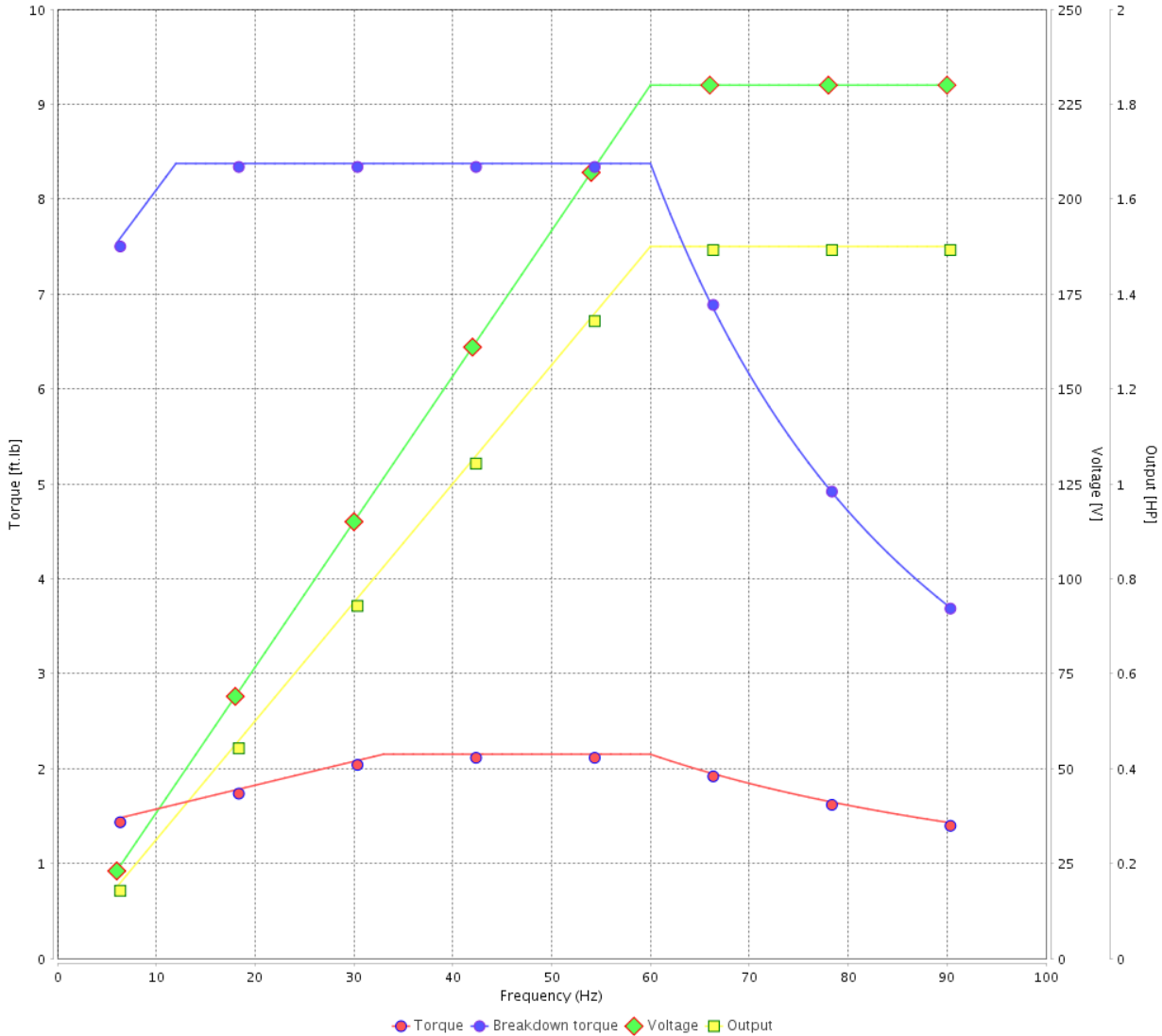
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 3.92/1.96 A  
 LRC : 8.9  
 Rated torque : 2.26 ft.lb  
 Locked rotor torque : 310 %  
 Breakdown torque : 370 %  
 Rated speed : 3480 rpm

Moment of inertia (J) : 0.0470 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
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Date	12/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

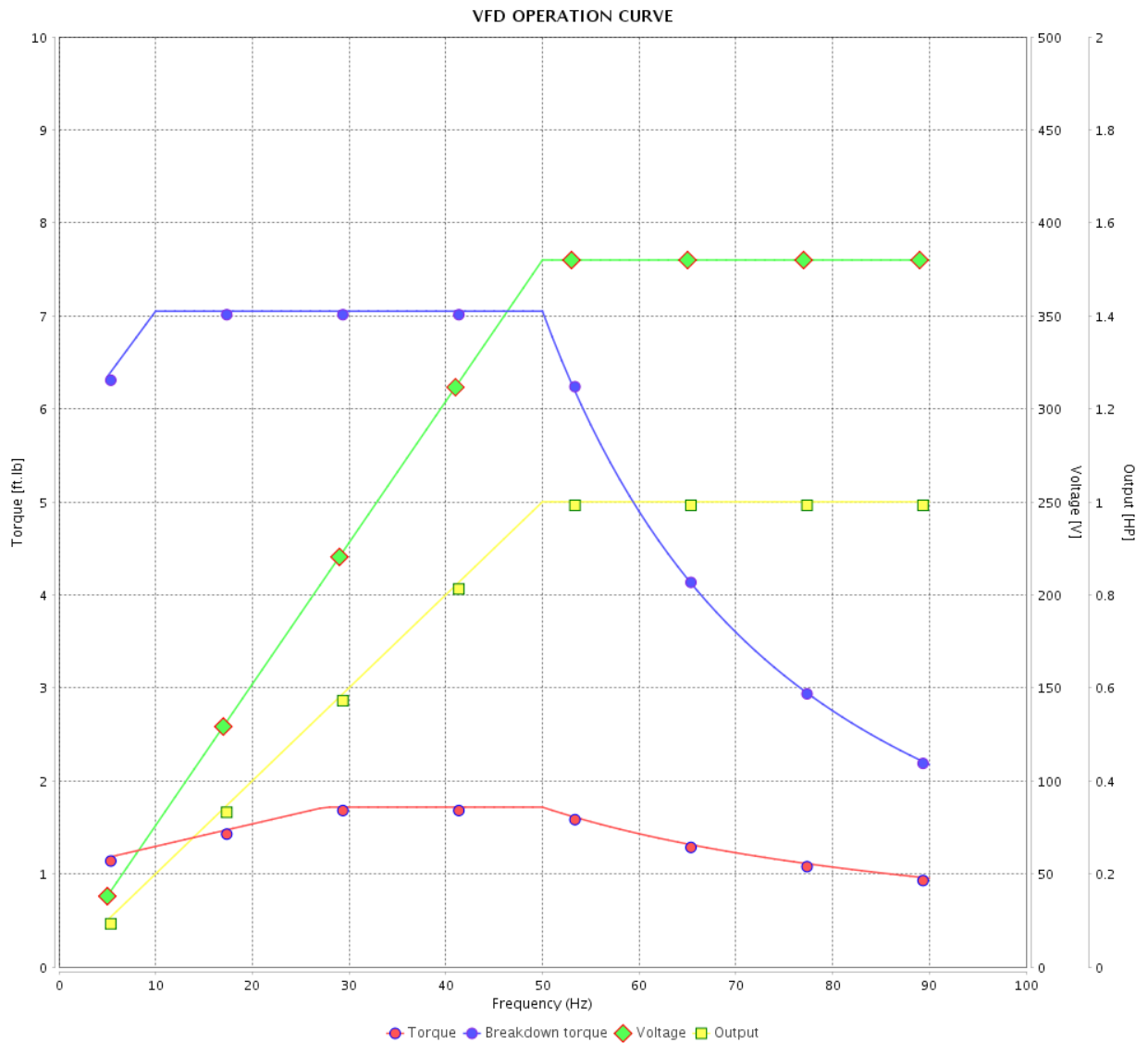


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22



Performance : 380 V 50 Hz 2P IE3

Rated current : 1.69 A  
 LRC : 9.2  
 Rated torque : 1.81 ft.lb  
 Locked rotor torque : 340 %  
 Breakdown torque : 390 %  
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.0470 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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Performed by				Page 31 / 36
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Date	12/04/2022			
				Revision

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



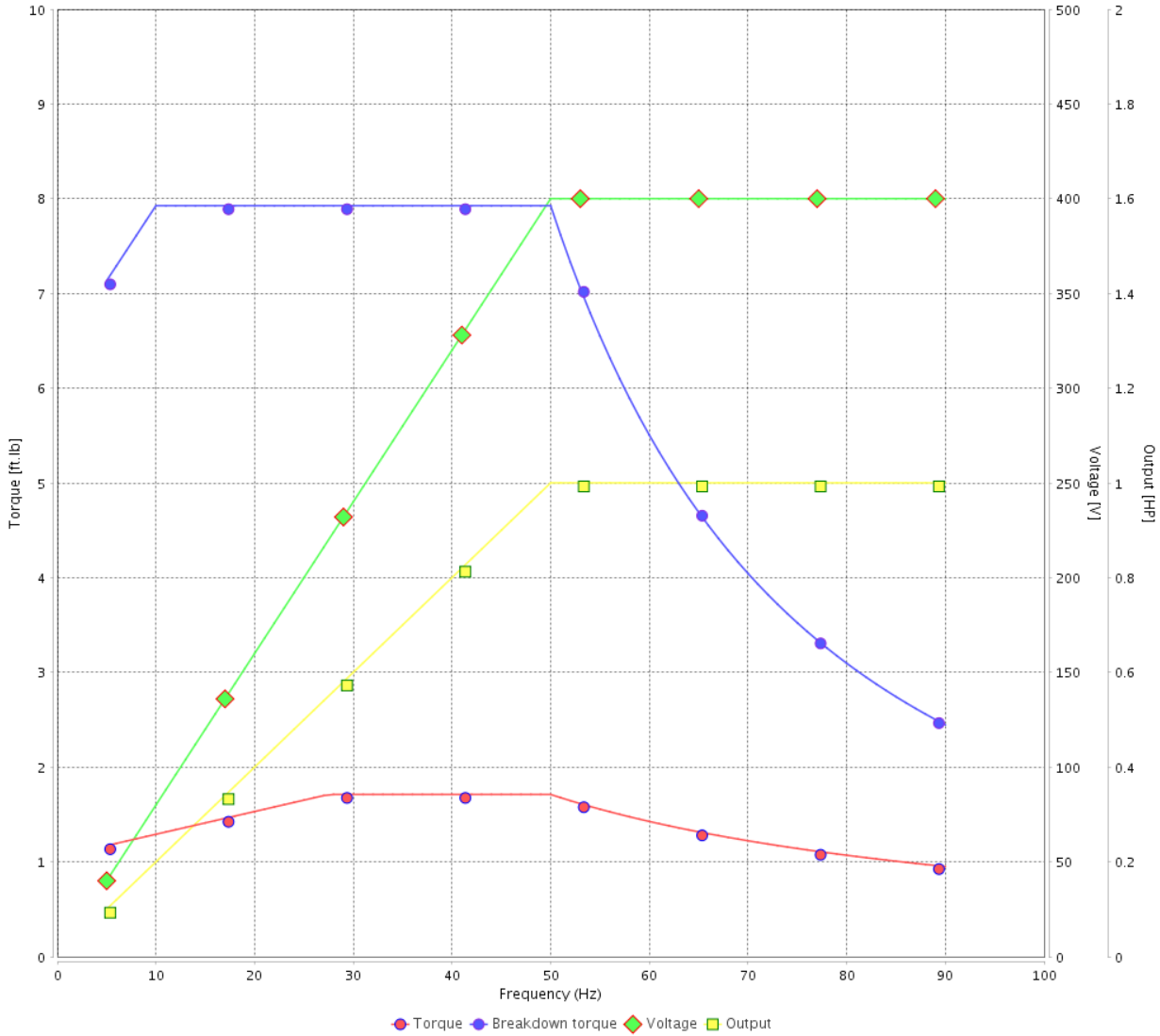
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

VFD OPERATION CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current : 1.66 A  
 LRC : 9.7  
 Rated torque : 1.80 ft.lb  
 Locked rotor torque : 380 %  
 Breakdown torque : 440 %  
 Rated speed : 2915 rpm

Moment of inertia (J) : 0.0470 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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Checked by				
Date	12/04/2022			



# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

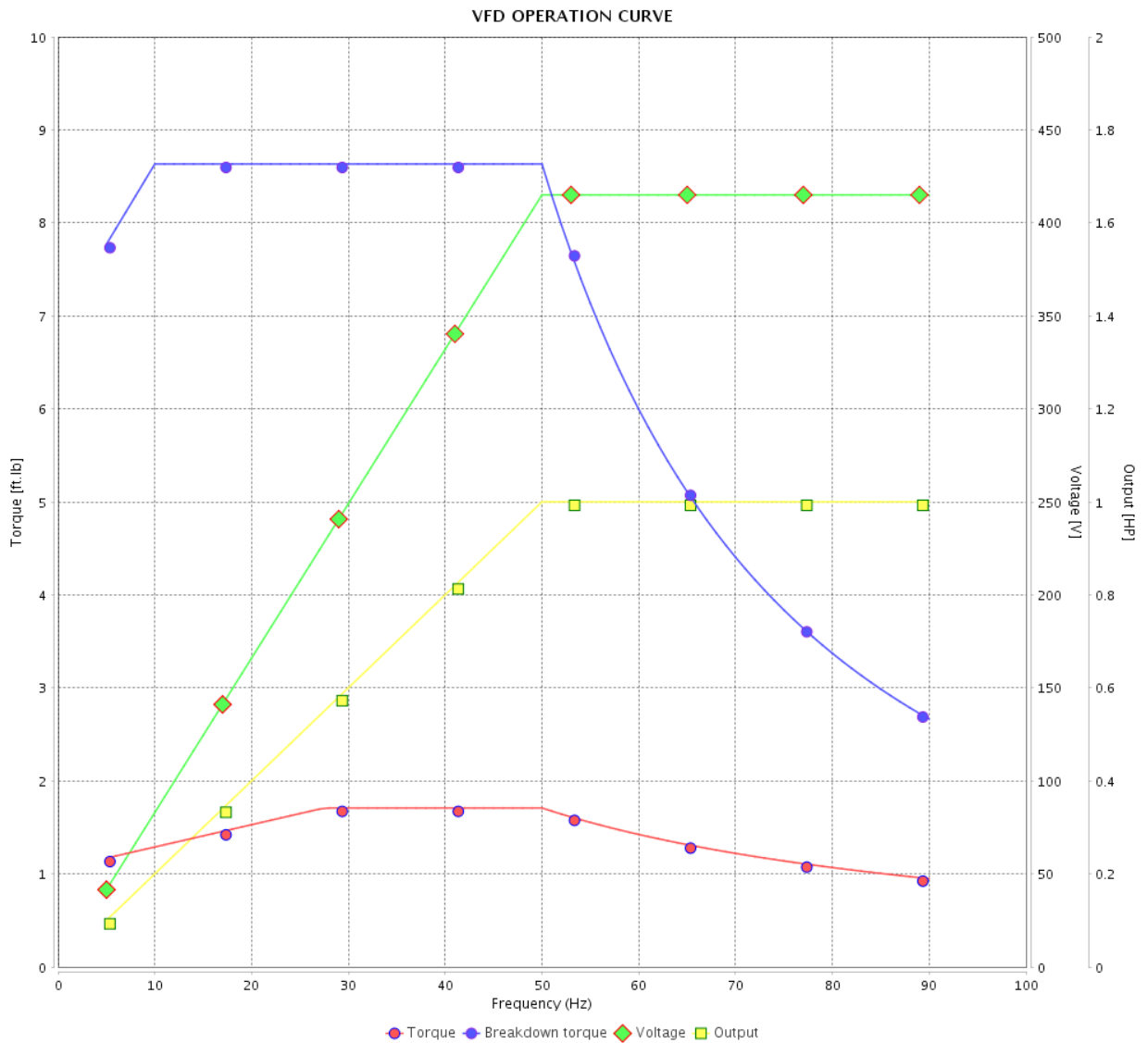


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22



Performance : 415 V 50 Hz 2P IE3

Rated current : 1.65 A  
 LRC : 10.2  
 Rated torque : 1.80 ft.lb  
 Locked rotor torque : 420 %  
 Breakdown torque : 480 %  
 Rated speed : 2920 rpm

Moment of inertia (J) : 0.0470 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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Checked by				
Date				
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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



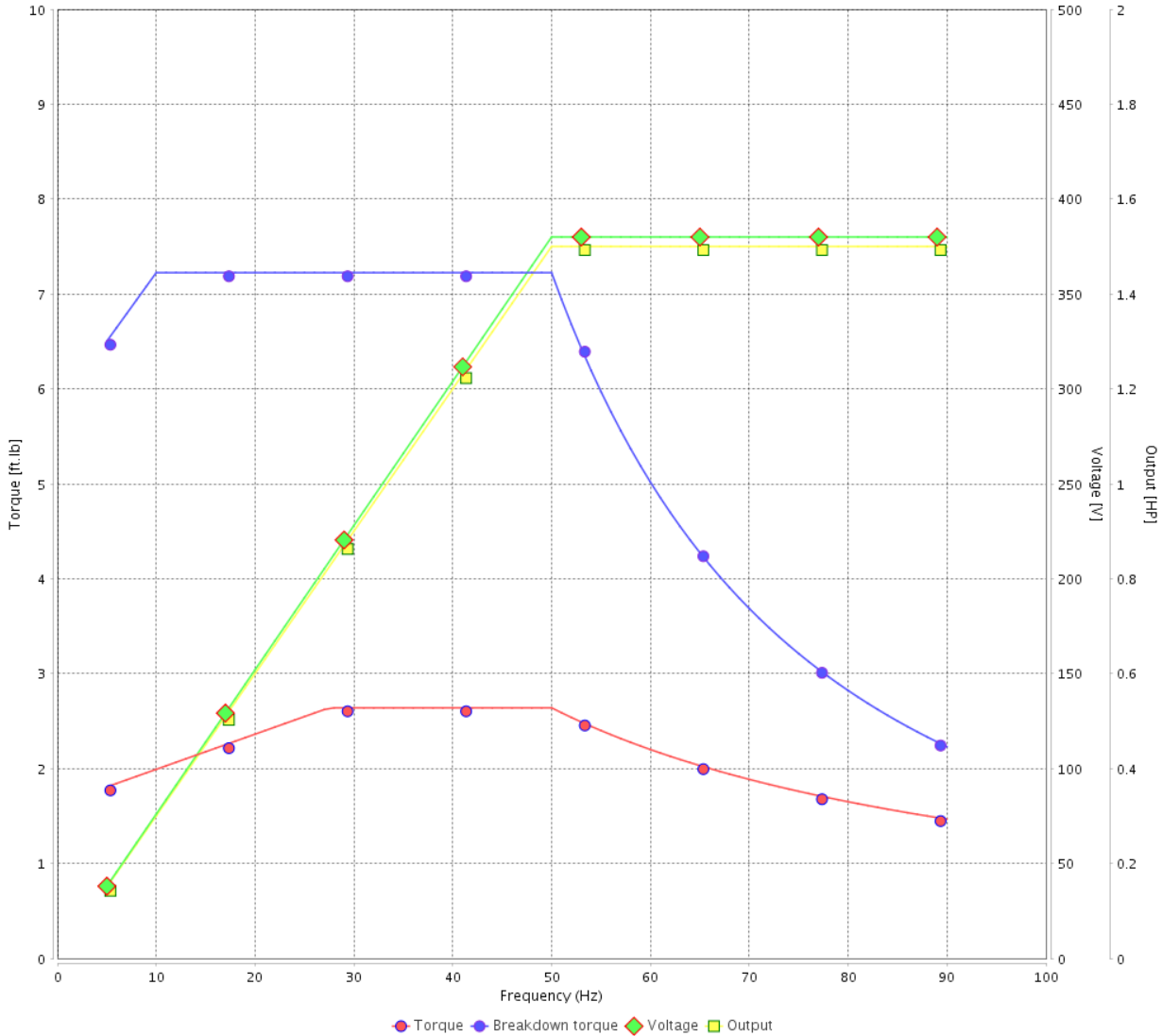
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

VFD OPERATION CURVE



Performance : 380 V 50 Hz 2P IE2

Rated current : 2.36 A  
 LRC : 6.7  
 Rated torque : 2.78 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 2835 rpm

Moment of inertia (J) : 0.0470 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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Performed by			Page 34 / 36	Revision
Checked by				
Date	12/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

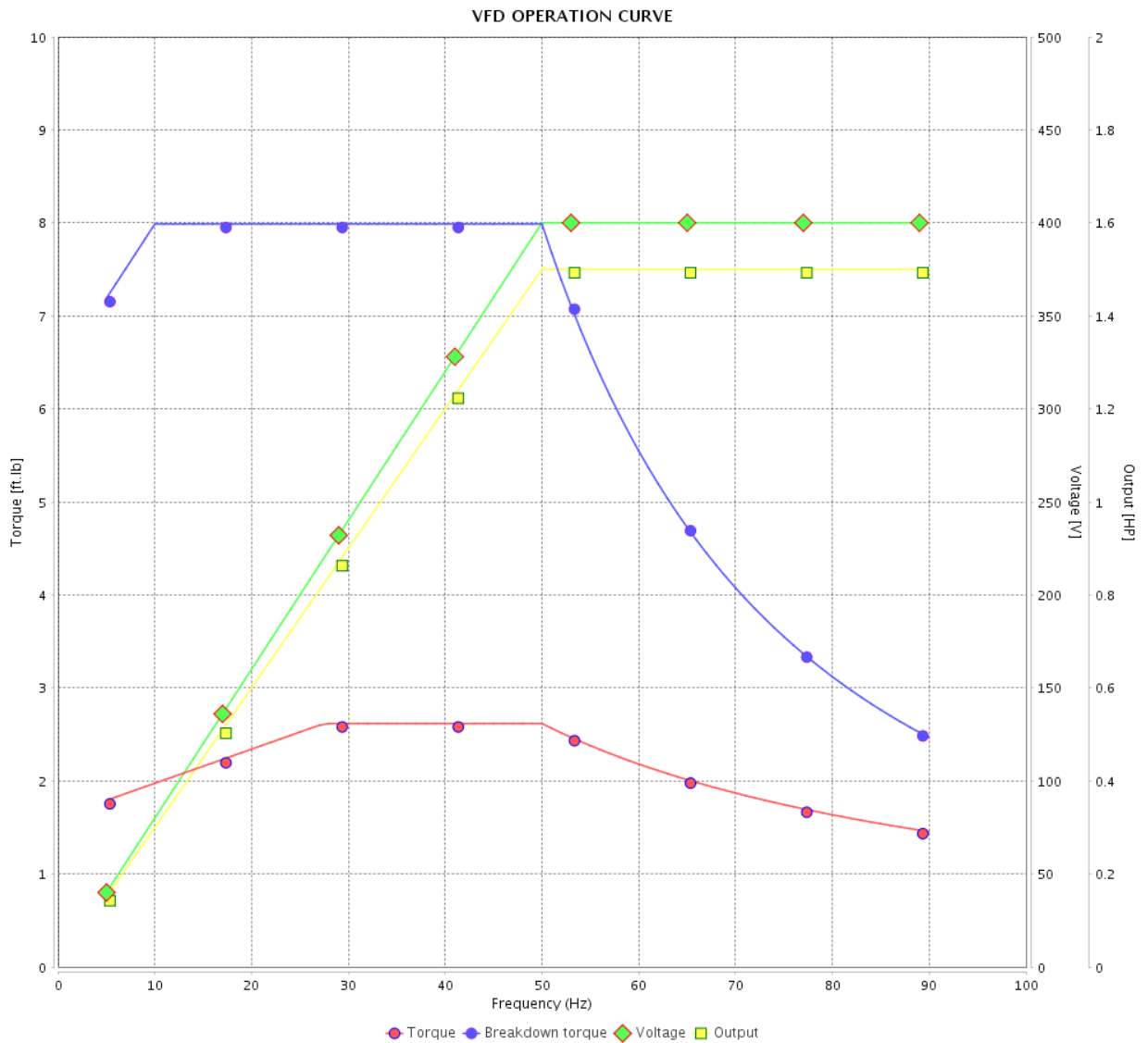


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22



Performance : 400 V 50 Hz 2P IE2

Rated current : 2.24 A  
 LRC : 7.4  
 Rated torque : 2.75 ft.lb  
 Locked rotor torque : 260 %  
 Breakdown torque : 290 %  
 Rated speed : 2860 rpm

Moment of inertia (J) : 0.0470 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 35 / 36
Checked by				
Date	12/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



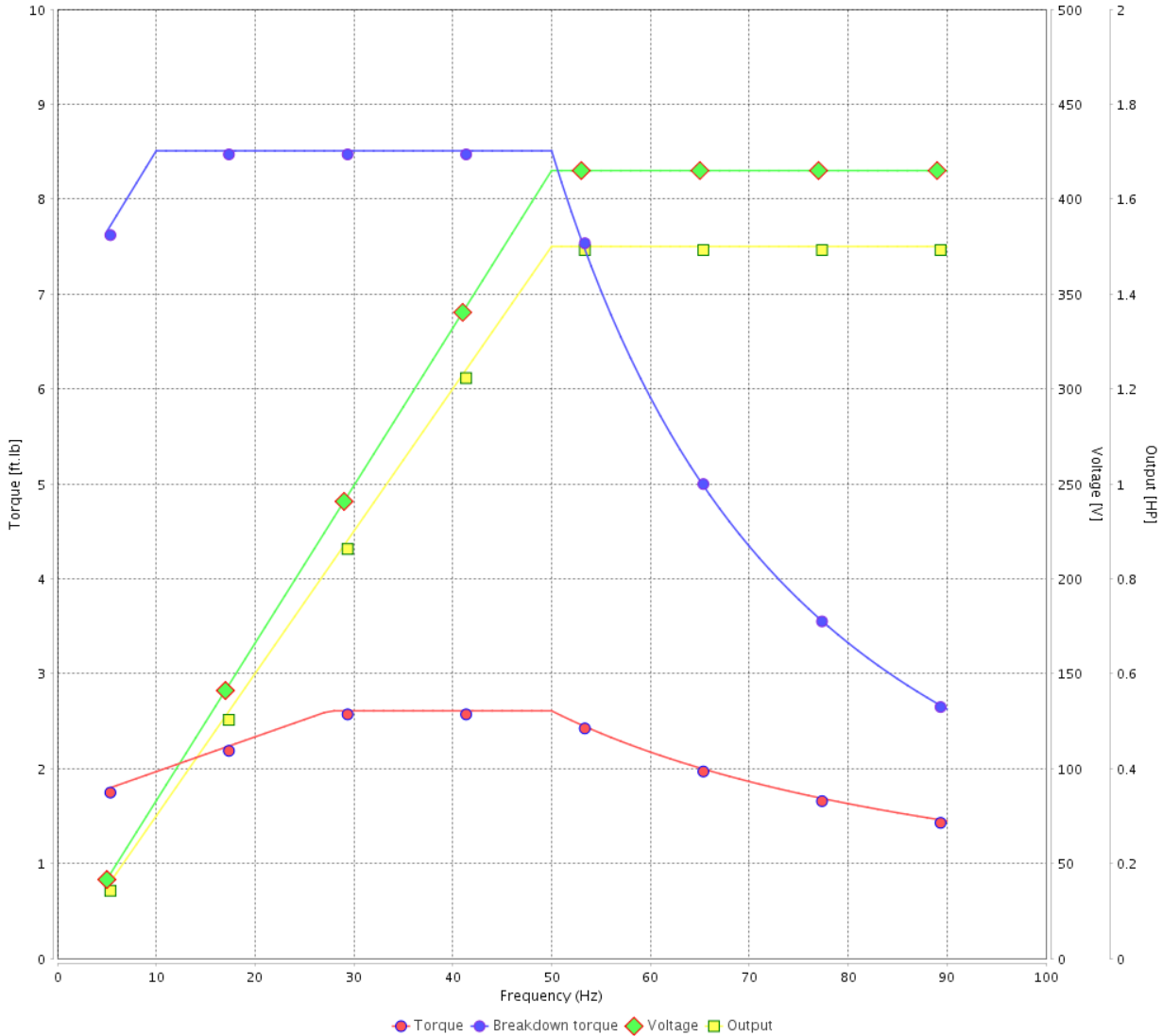
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

VFD OPERATION CURVE

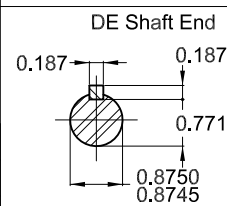
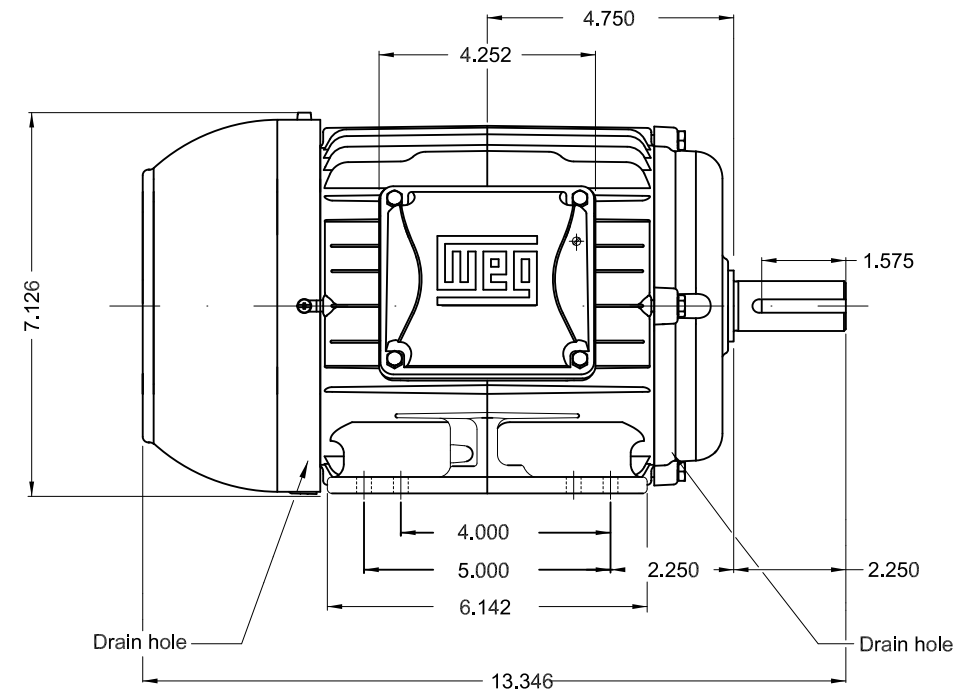
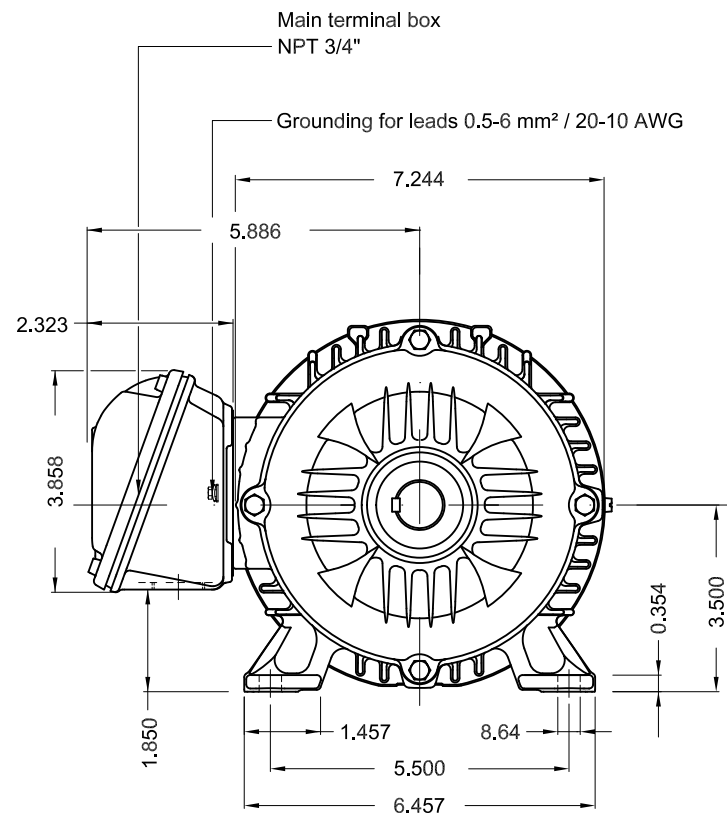


Performance : 415 V 50 Hz 2P IE2

Rated current : 2.21 A  
 LRC : 7.9  
 Rated torque : 2.74 ft.lb  
 Locked rotor torque : 280 %  
 Breakdown torque : 310 %  
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.0470 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
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Color RAL 5009  
Painting plan 207A  
Mounting B3R(D)

1.5 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 143/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW  
WDD



SHEET 1 / 1

Dimensions in inches

XME A3

MADE IN BRAZIL  
12438231



MODEL 00156ET3E143T-W22

Inverter Duty Motor  
Severe Duty



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



FOR SAFE AREA  
Mod. TE1BFOXON  
CC029A

PH3 60Hz Fr. 143/5T 1000m.a.s.l. IP55 TEFC 44lb

V 230/460

A 3.92/1.96

HP 1.5

kW 1.1

SF 1.25

SFA 4.90/2.45

RPM 3480

PF 0.84

AMB 40°C

INS cl. F DT80K

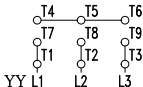
NEMA NOM EFF 84.0%

DUTY CONT.

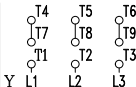
DES B Code L

USABLE @208V 4.20A SF 1.15 SFA 4.83

1.5HP 1.1kW 50Hz 380V 2.36A 2835RPM SF 1.25 SFA 2.95 EFF 81.5% (IE2)



208-230V



380//460V



MOBIL POLYREX EM