

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12603920				
		Catalog # :	01518ET3E254JM-W22				
Frame	: 254/6JM	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>	: 295 lb				
Protection degree	: IP55	Moment of inertia (J)	: 2.62 sq.ft.lb				
Design	: B						
Output [HP]	15	10	10	10	15	15	15
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	36.0/18.0	15.2	14.8	14.5	21.5	20.5	20.0
L. R. Amperes [A]	230/115	109	115	120	105	111	118
LRC [A]	6.4x(Code G)	7.2x(Code J)	7.8x(Code J)	8.3x(Code K)	4.9x(Code E)	5.4x(Code F)	5.9x(Code G)
No load current [A]	14.4/7.20	6.70	7.10	7.40	7.10	7.60	7.40
Rated speed [RPM]	1770	1475	1480	1480	1455	1460	1465
Slip [%]	1.67	1.67	1.33	1.33	3.00	2.67	2.33
Rated torque [ft.lb]	44.5	35.6	35.5	35.5	54.1	54.0	53.8
Locked rotor torque [%]	220	250	280	310	160	200	210
Breakdown torque [%]	260	300	340	370	200	220	240
Service factor	1.25	1.25	1.25	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	30s (cold) 17s (hot)	45s (cold) 25s (hot)	39s (cold) 22s (hot)	36s (cold) 20s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level <sup>2</sup>	64.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%						
	50%	91.0	88.8	88.6	88.3	91.0	91.0
	75%	91.7	90.3	90.3	90.3	90.2	91.0
	100%	92.4	90.4	90.6	90.8	90.2	91.0
Power Factor	25%						
	50%	0.68	0.65	0.62	0.59	0.74	0.71
	75%	0.78	0.77	0.74	0.72	0.82	0.80
	100%	0.83	0.83	0.81	0.79	0.86	0.85
Bearing type	: Drive end : 6309 C3	Non drive end : 6209 C3	Foundation loads				
Sealing	: V'Ring	V'Ring	Max. traction	: 471 lb			
Lubrication interval	: 20000 h	20000 h	Max. compression	: 766 lb			
Lubricant amount	: 13 g	9 g					
Lubricant type	: Mobil Polyrex EM						
Notes USABLE @208V 39.8A SF 1.15 SFA 45.8A							
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



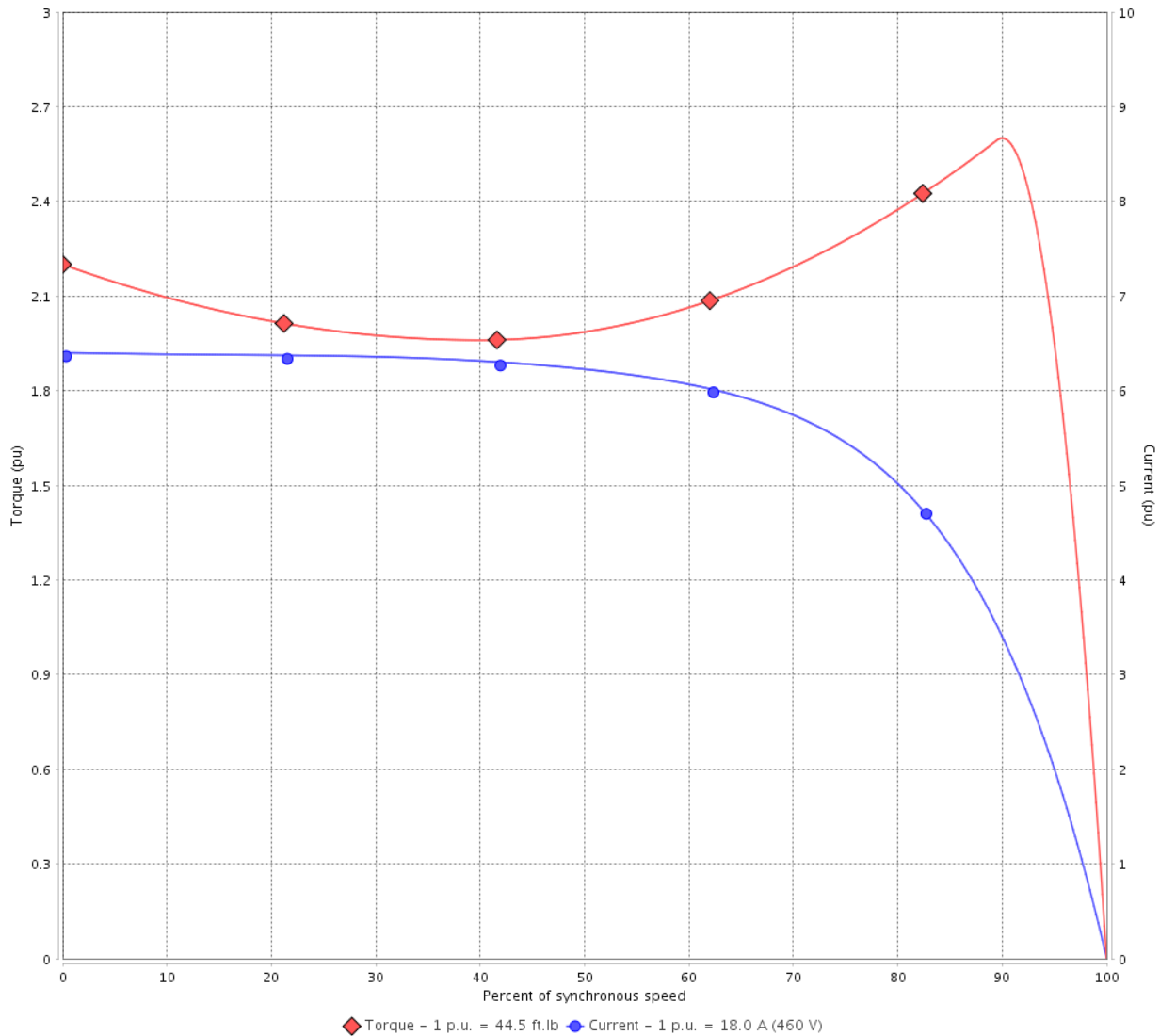
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 36.0/18.0 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 44.5 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

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

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# TORQUE AND CURRENT VS SPEED CURVE



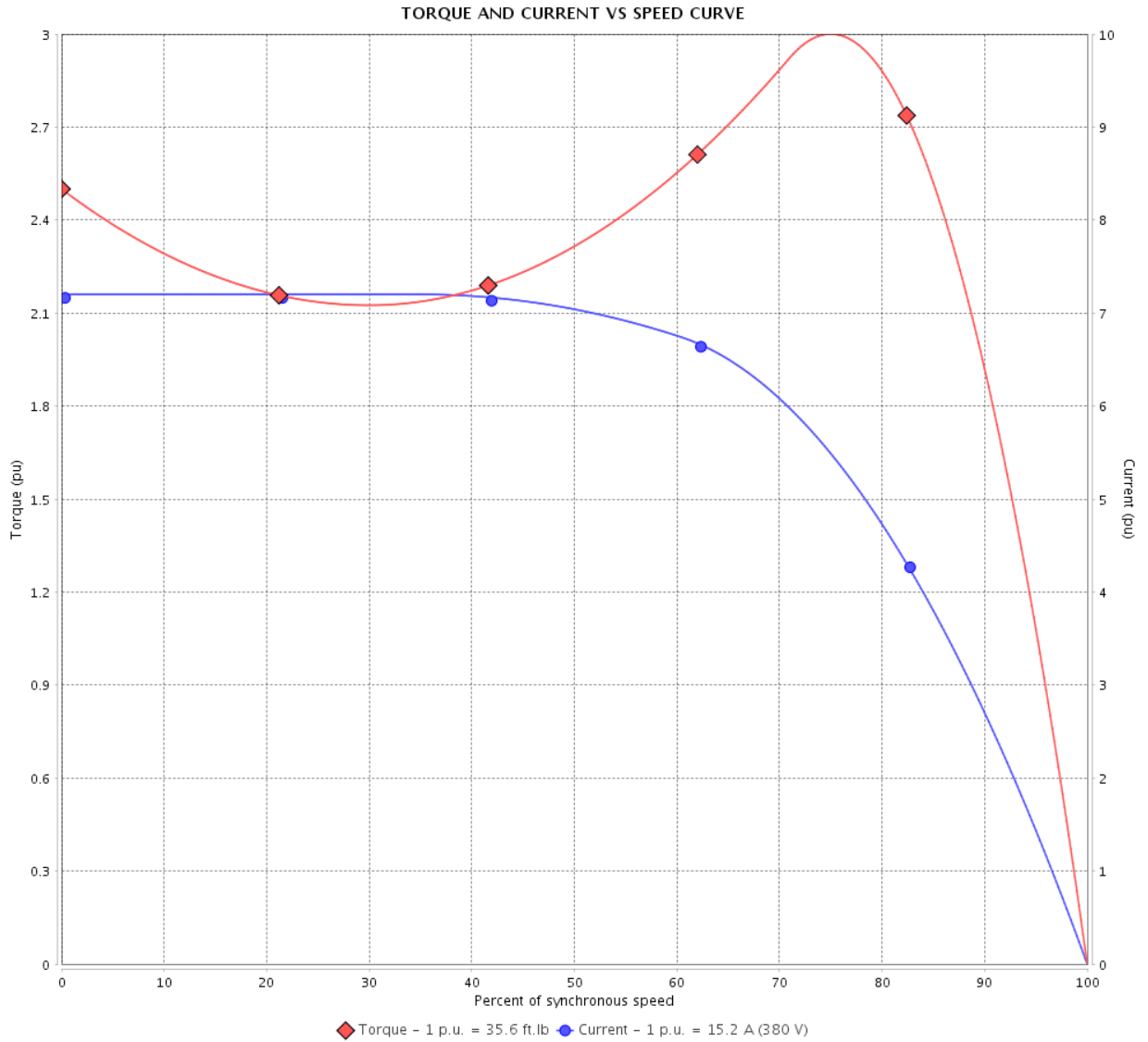
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22



Performance : 380 V 50 Hz 4P IE3

Rated current	: 15.2 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 35.6 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Locked rotor time : 45s (cold) 25s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



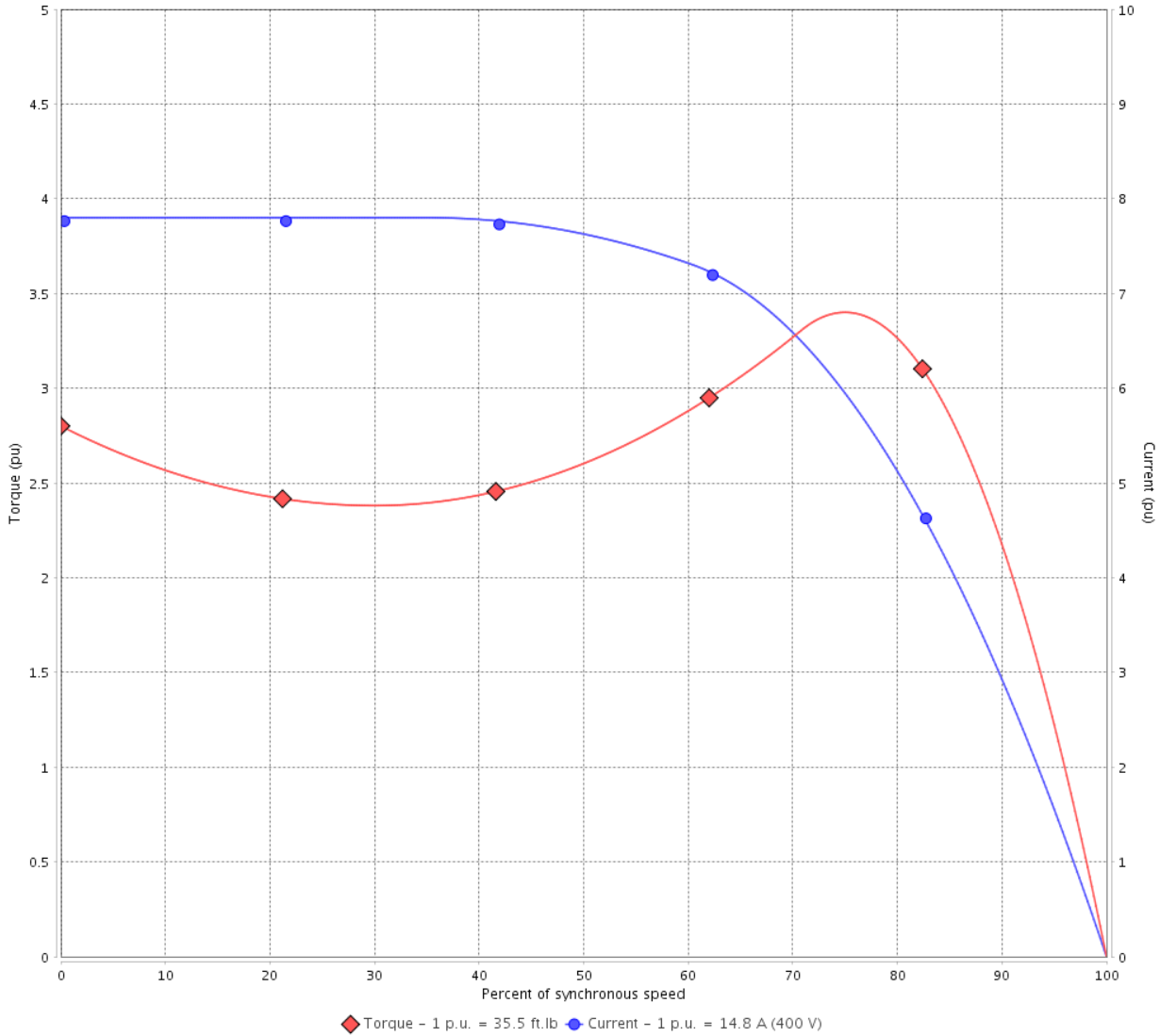
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 14.8 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 7.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.5 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



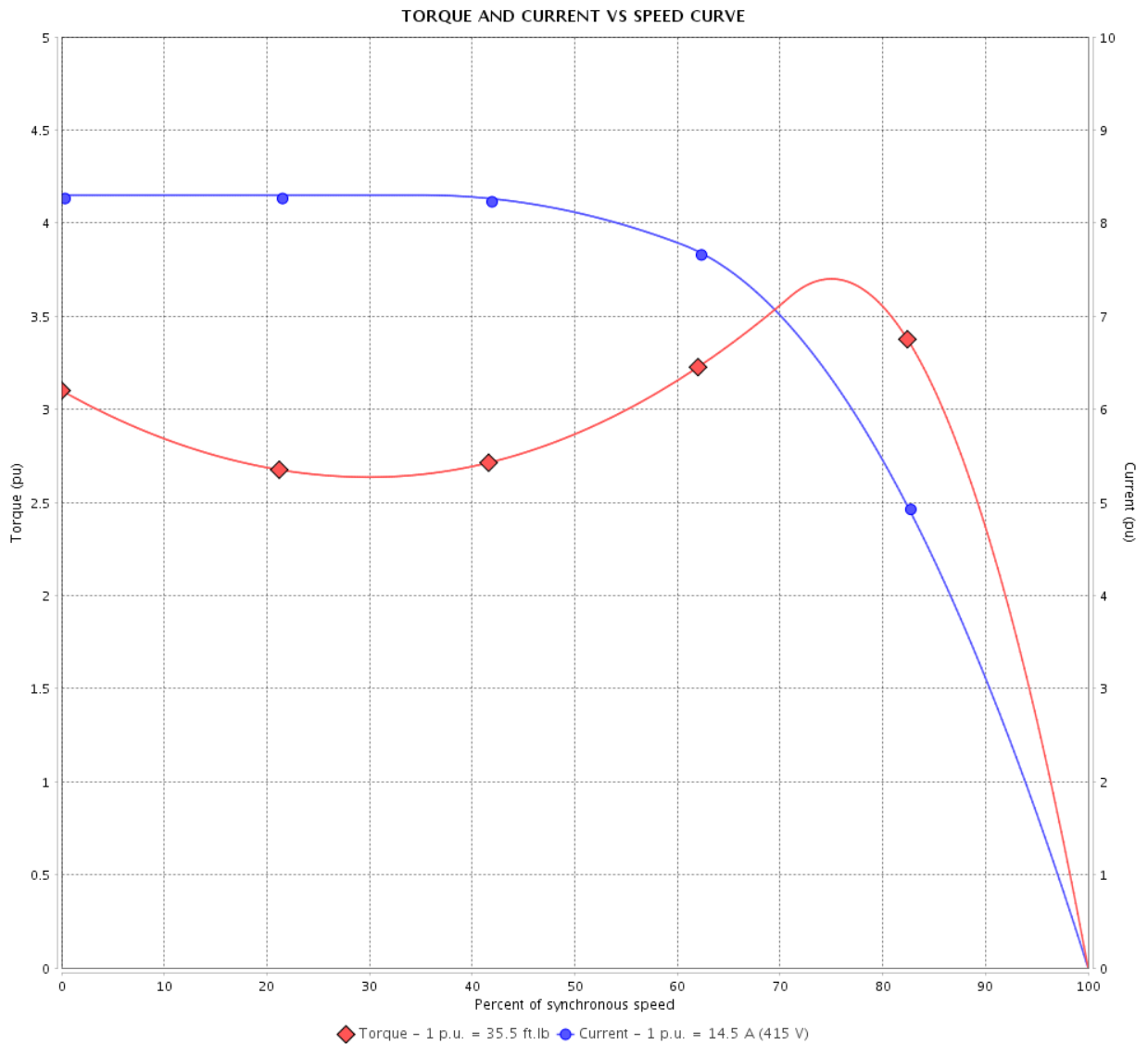
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22



Performance : 415 V 50 Hz 4P IE3

Rated current : 14.5 A  
 LRC : 8.3  
 Rated torque : 35.5 ft.lb  
 Locked rotor torque : 310 %  
 Breakdown torque : 370 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 2.62 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Locked rotor time : 36s (cold) 20s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



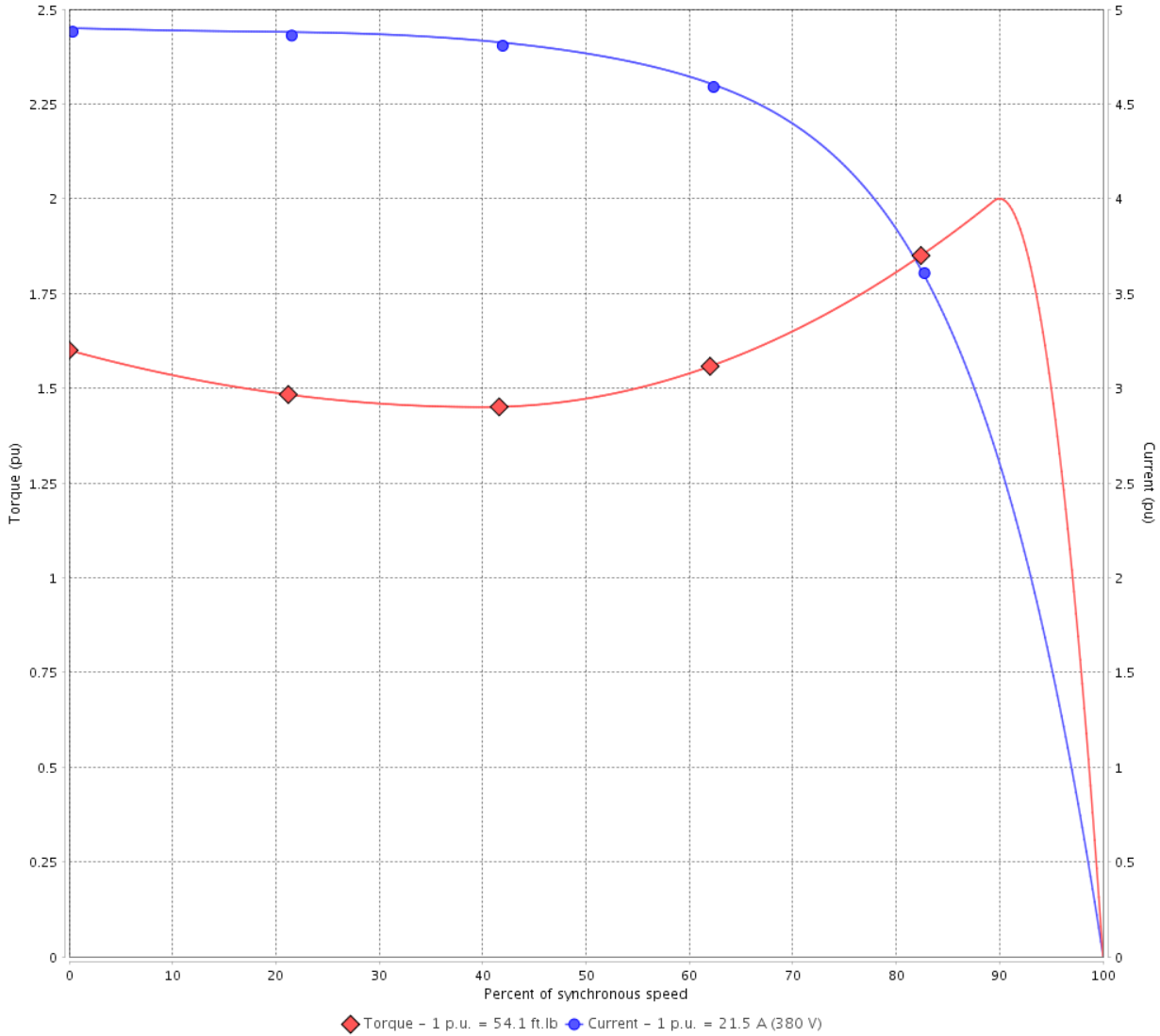
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 4P IE2

Rated current	: 21.5 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 4.9	Duty cycle	: Cont.(S1)
Rated torque	: 54.1 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

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

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# TORQUE AND CURRENT VS SPEED CURVE



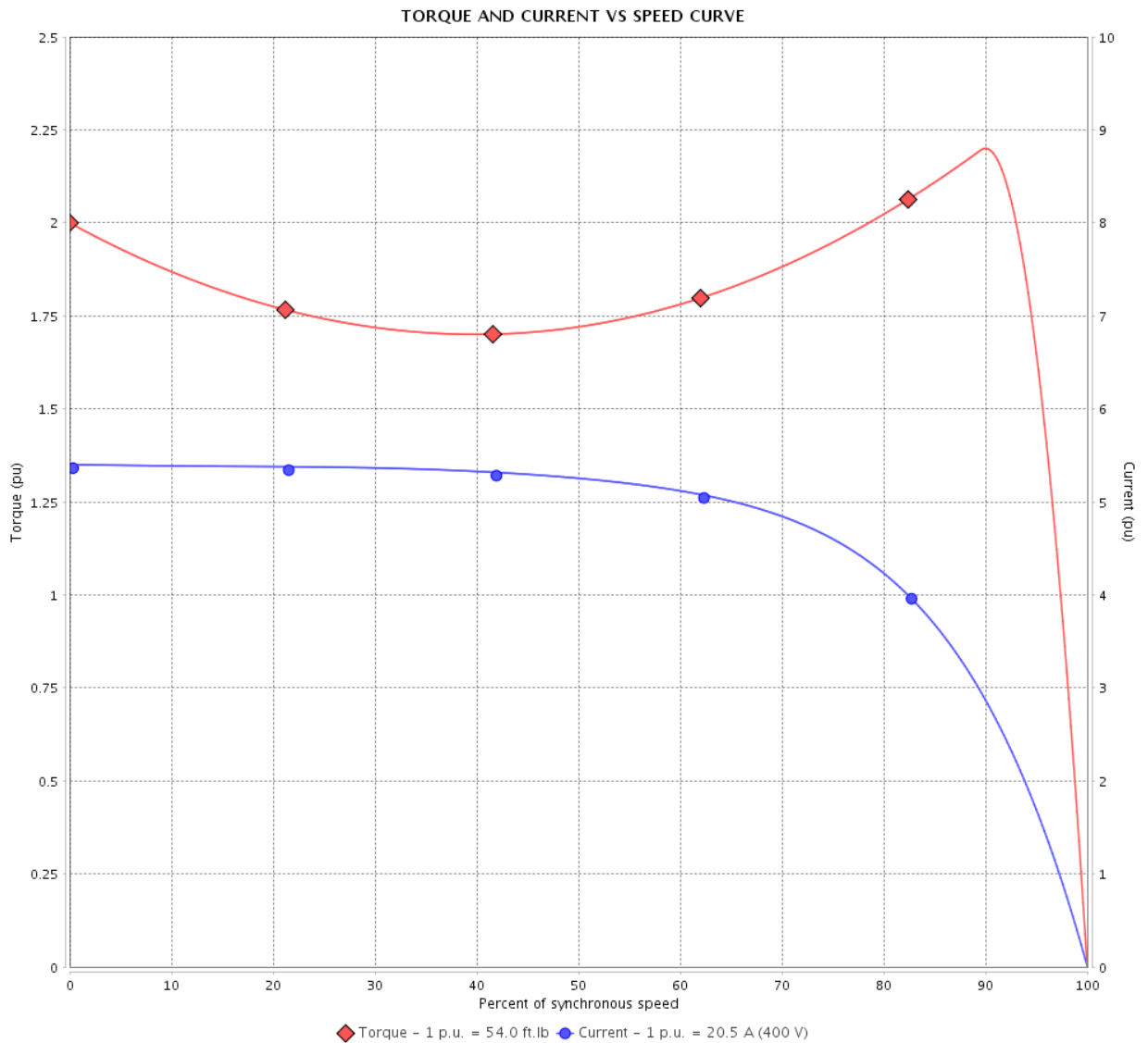
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22



Performance : 400 V 50 Hz 4P IE2

Rated current	: 20.5 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 54.0 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 1460 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



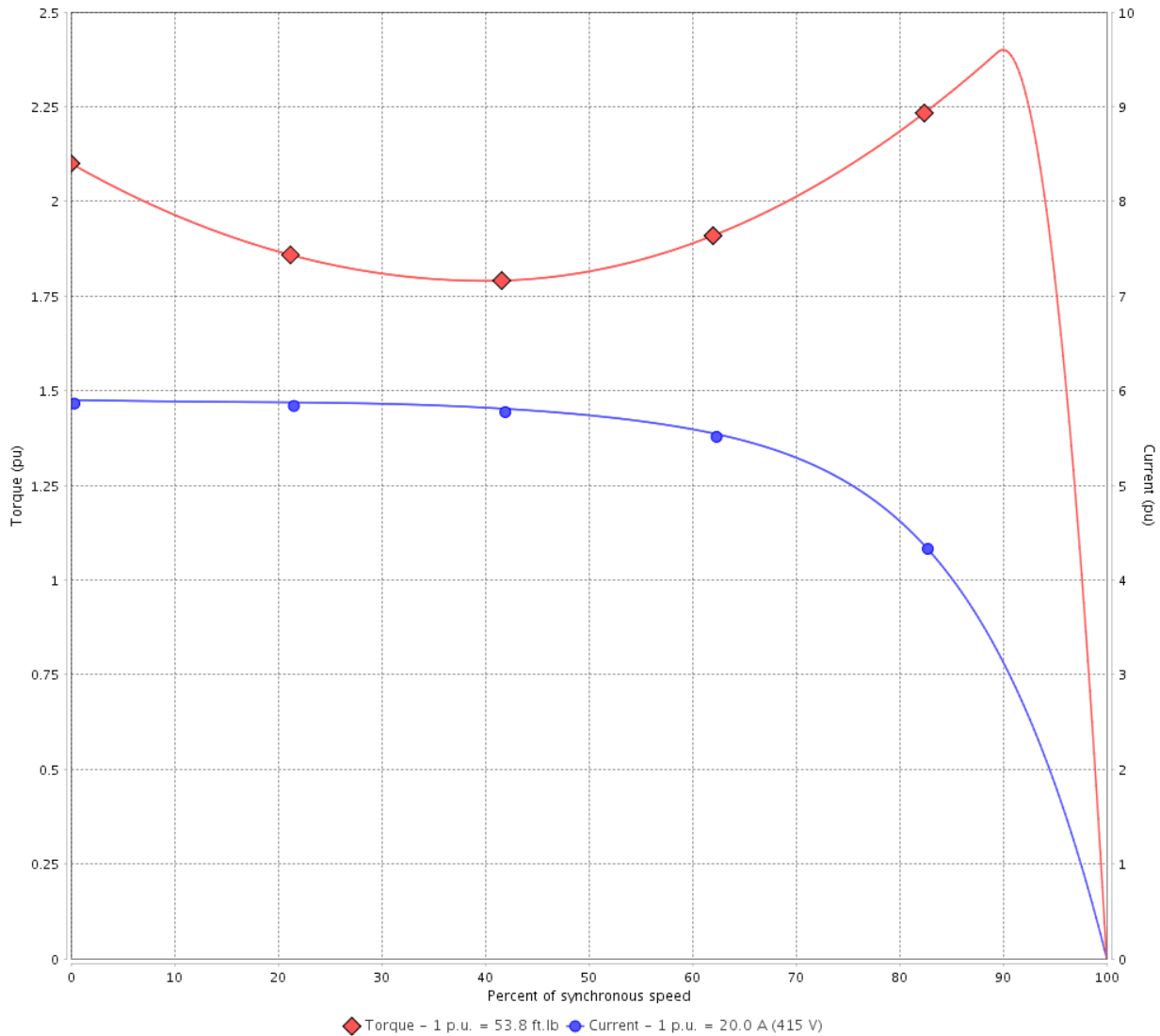
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 4P IE2

Rated current	: 20.0 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 53.8 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: B

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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

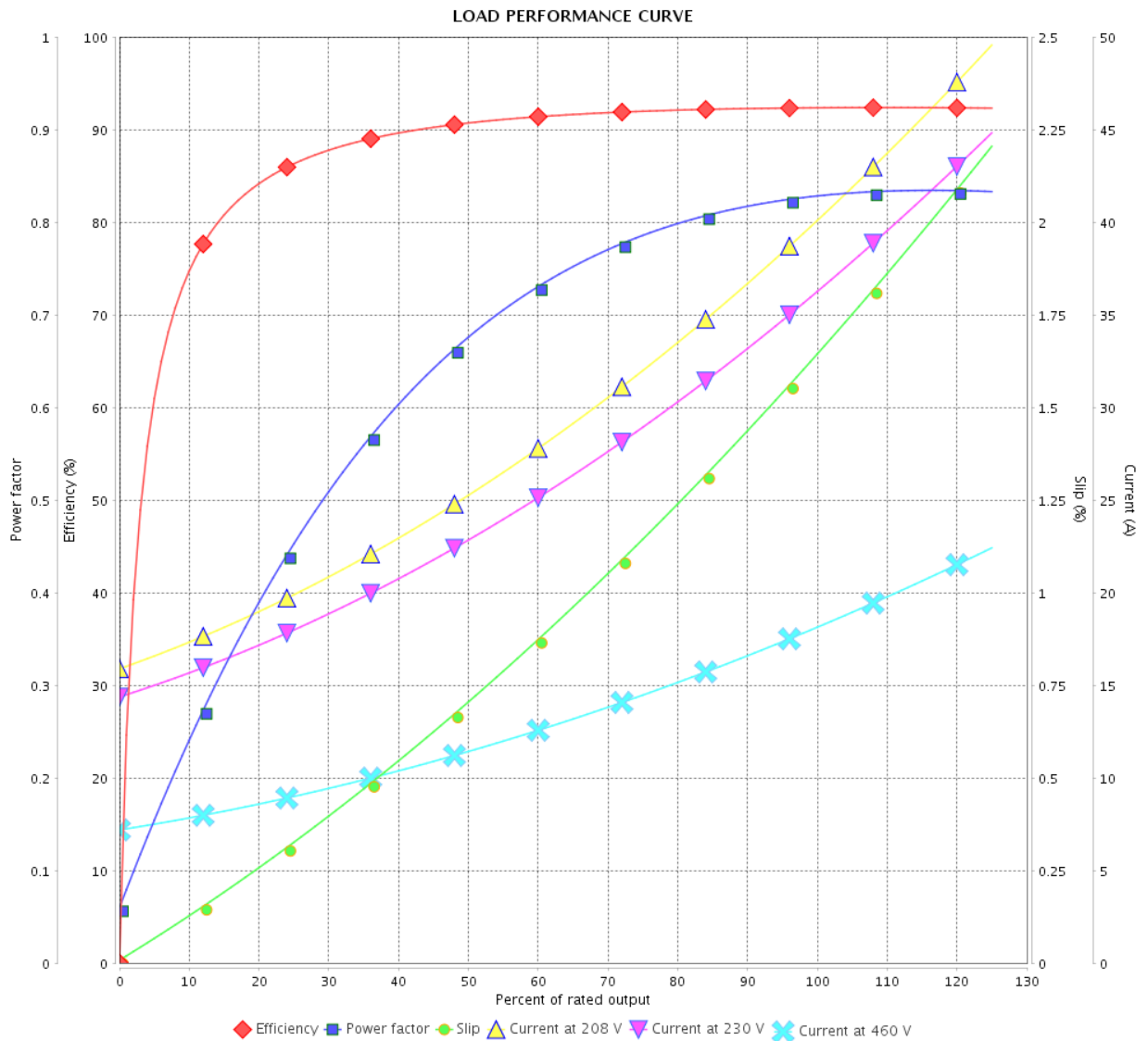


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22



Performance : 230/460 V 60 Hz 4P

Rated current : 36.0/18.0 A  
 LRC : 6.4  
 Rated torque : 44.5 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 2.62 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



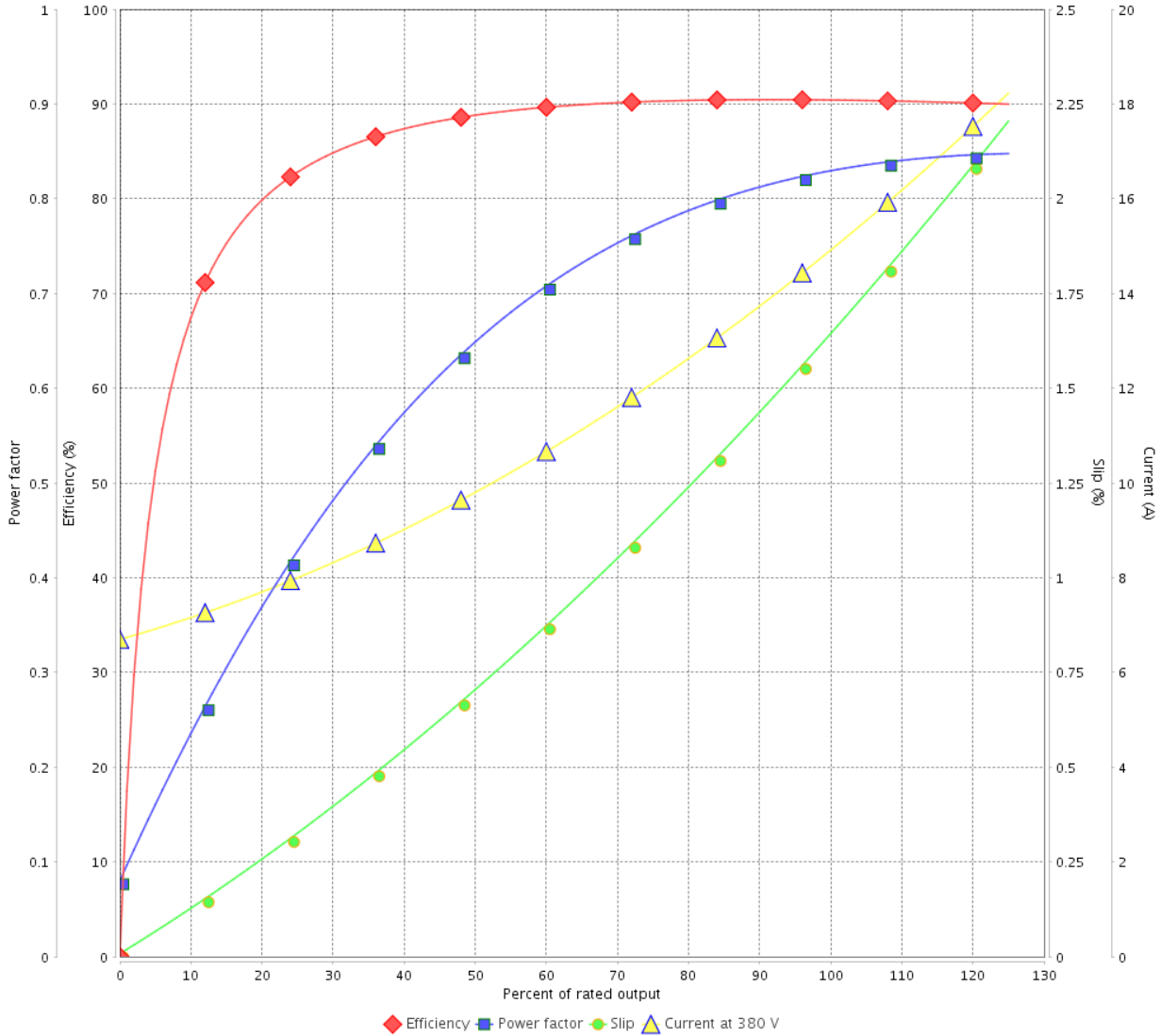
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 4P IE3

Rated current : 15.2 A  
 LRC : 7.2  
 Rated torque : 35.6 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 300 %  
 Rated speed : 1475 rpm

Moment of inertia (J) : 2.62 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

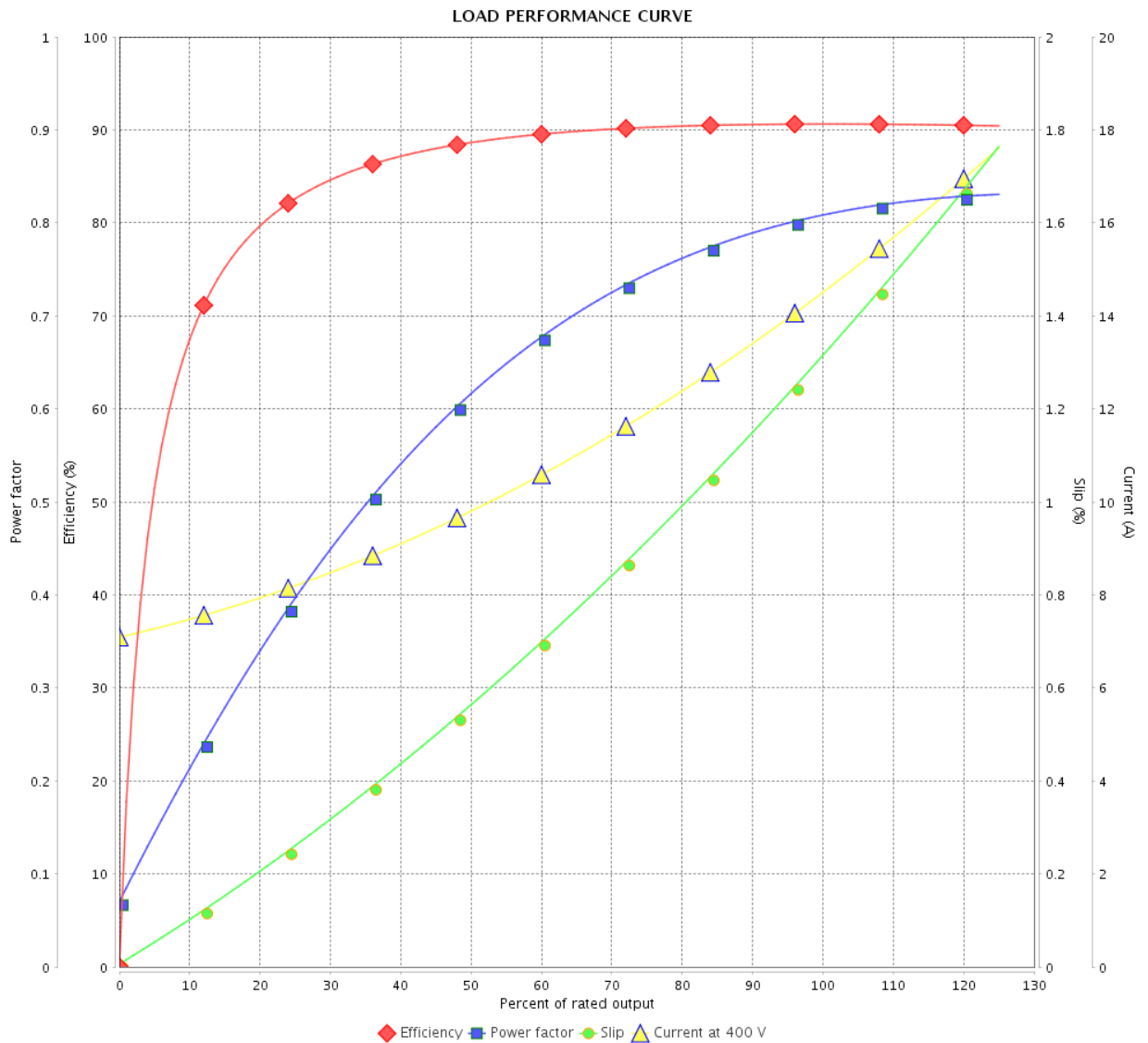


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22



Performance : 400 V 50 Hz 4P IE3

Rated current : 14.8 A  
 LRC : 7.8  
 Rated torque : 35.5 ft.lb  
 Locked rotor torque : 280 %  
 Breakdown torque : 340 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 2.62 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



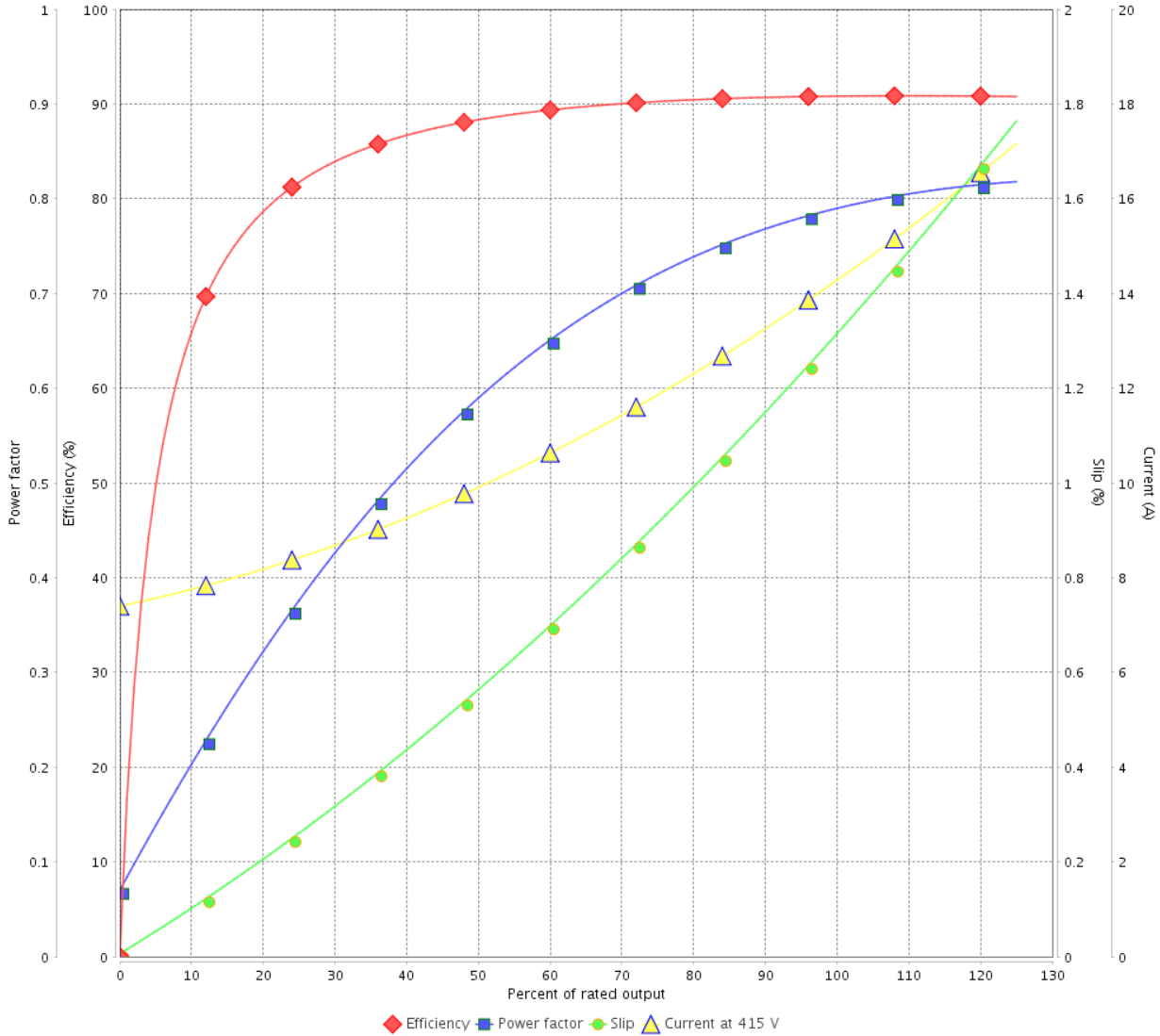
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 4P IE3

Rated current : 14.5 A  
 LRC : 8.3  
 Rated torque : 35.5 ft.lb  
 Locked rotor torque : 310 %  
 Breakdown torque : 370 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 2.62 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

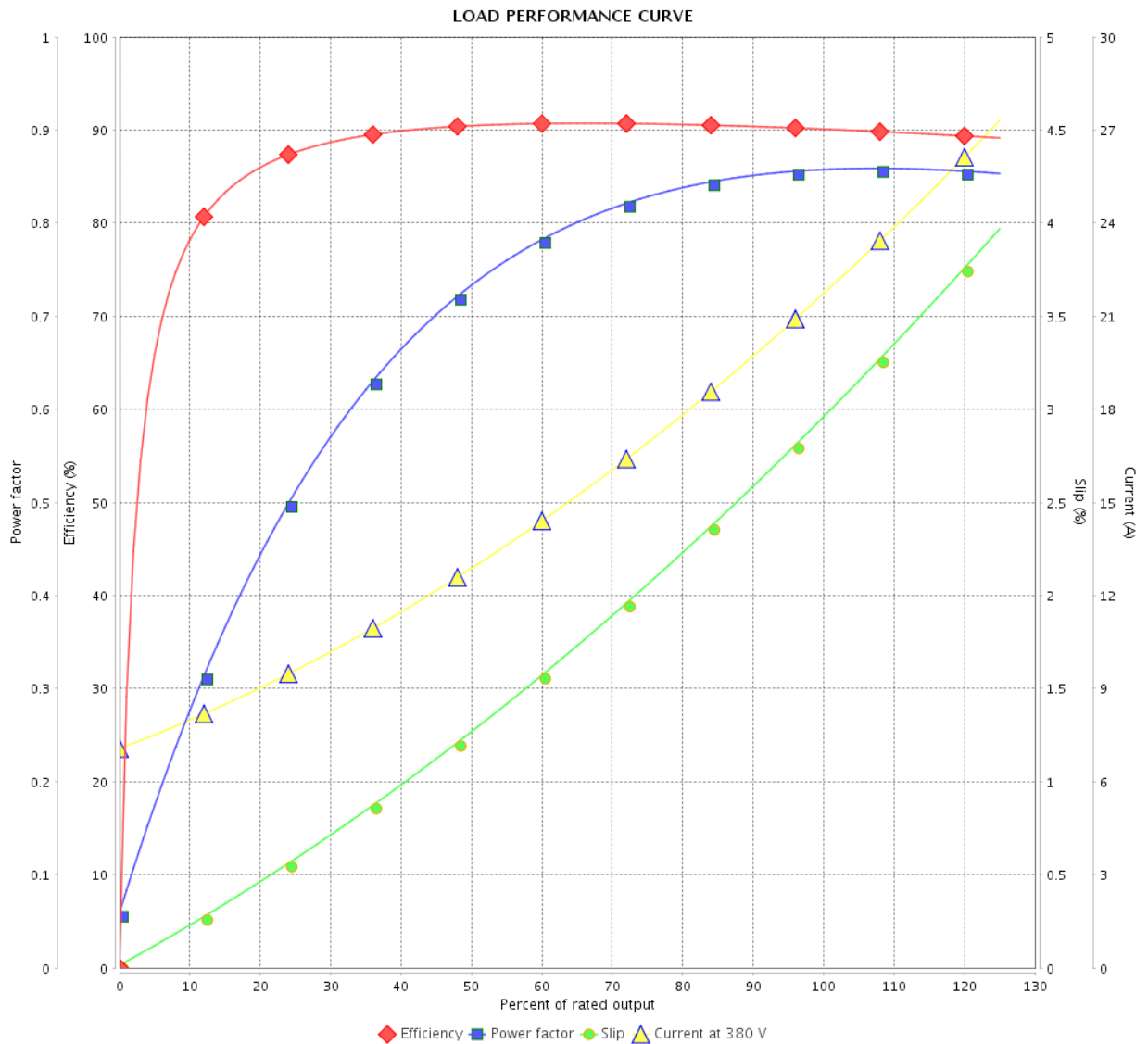


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22



Performance : 380 V 50 Hz 4P IE2

Rated current : 21.5 A  
 LRC : 4.9  
 Rated torque : 54.1 ft.lb  
 Locked rotor torque : 160 %  
 Breakdown torque : 200 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 2.62 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



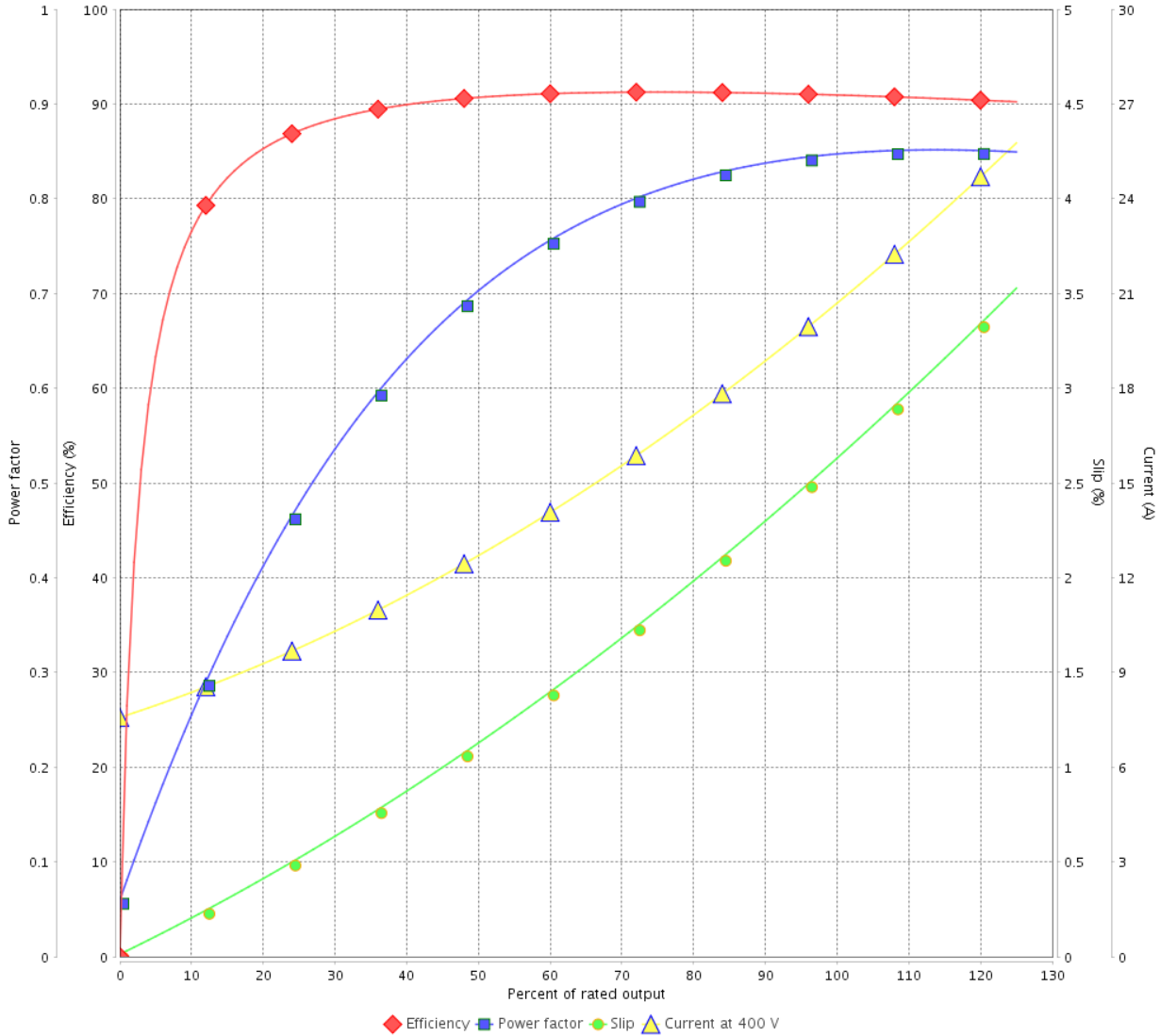
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 4P IE2

Rated current : 20.5 A  
 LRC : 5.4  
 Rated torque : 54.0 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 220 %  
 Rated speed : 1460 rpm

Moment of inertia (J) : 2.62 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

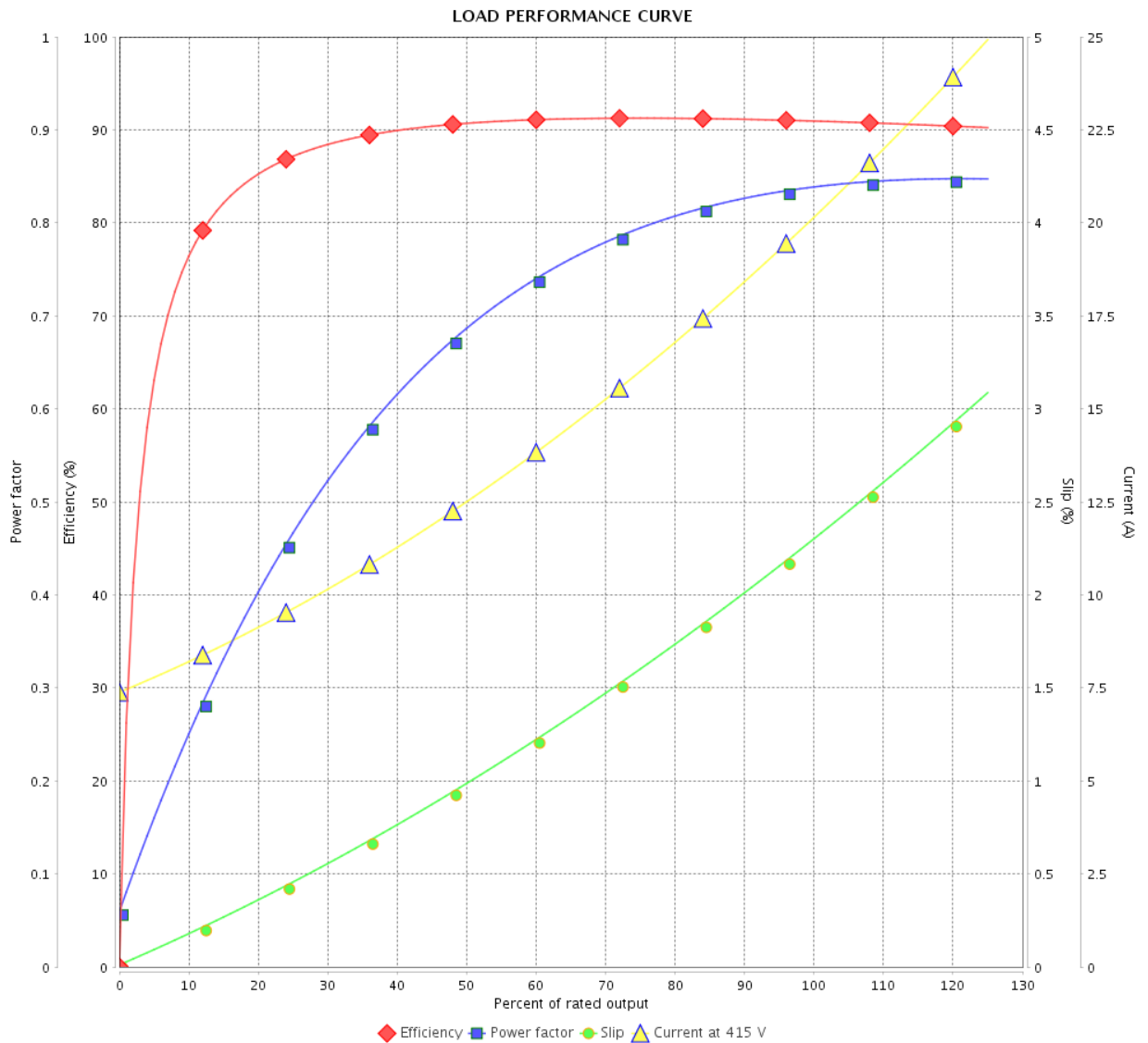


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22



Performance : 415 V 50 Hz 4P IE2

Rated current : 20.0 A  
 LRC : 5.9  
 Rated torque : 53.8 ft.lb  
 Locked rotor torque : 210 %  
 Breakdown torque : 240 %  
 Rated speed : 1465 rpm

Moment of inertia (J) : 2.62 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 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 : 12603920  
Catalog # : 01518ET3E254JM-W22

Performance : 230/460 V 60 Hz 4P

Rated current	: 36.0/18.0 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 44.5 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Heating constant

Cooling constant

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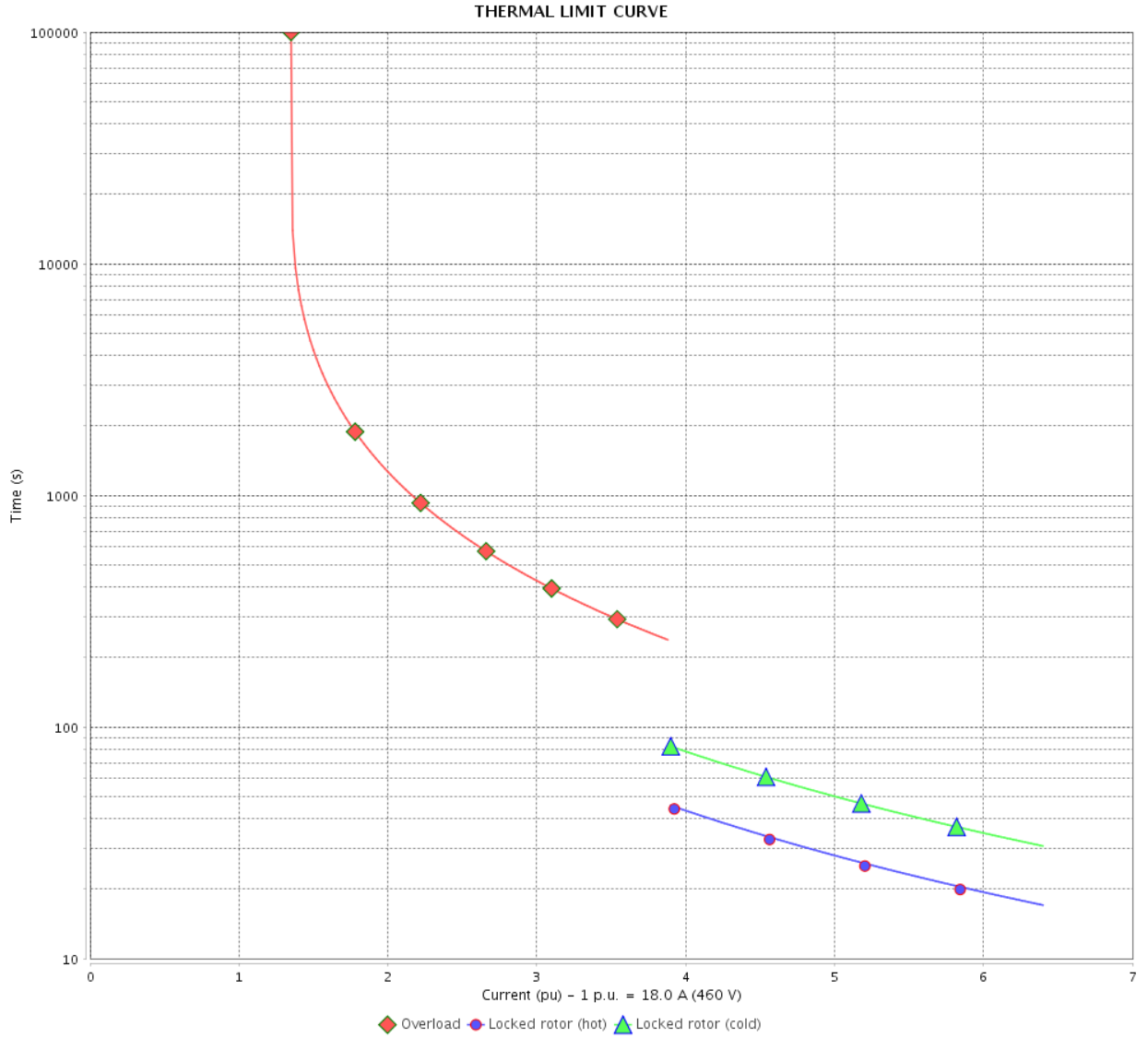


# THERMAL LIMIT CURVE

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 : 12603920  
Catalog # : 01518ET3E254JM-W22

Performance : 380 V 50 Hz 4P IE3

Rated current	: 15.2 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 35.6 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Heating constant

Cooling constant

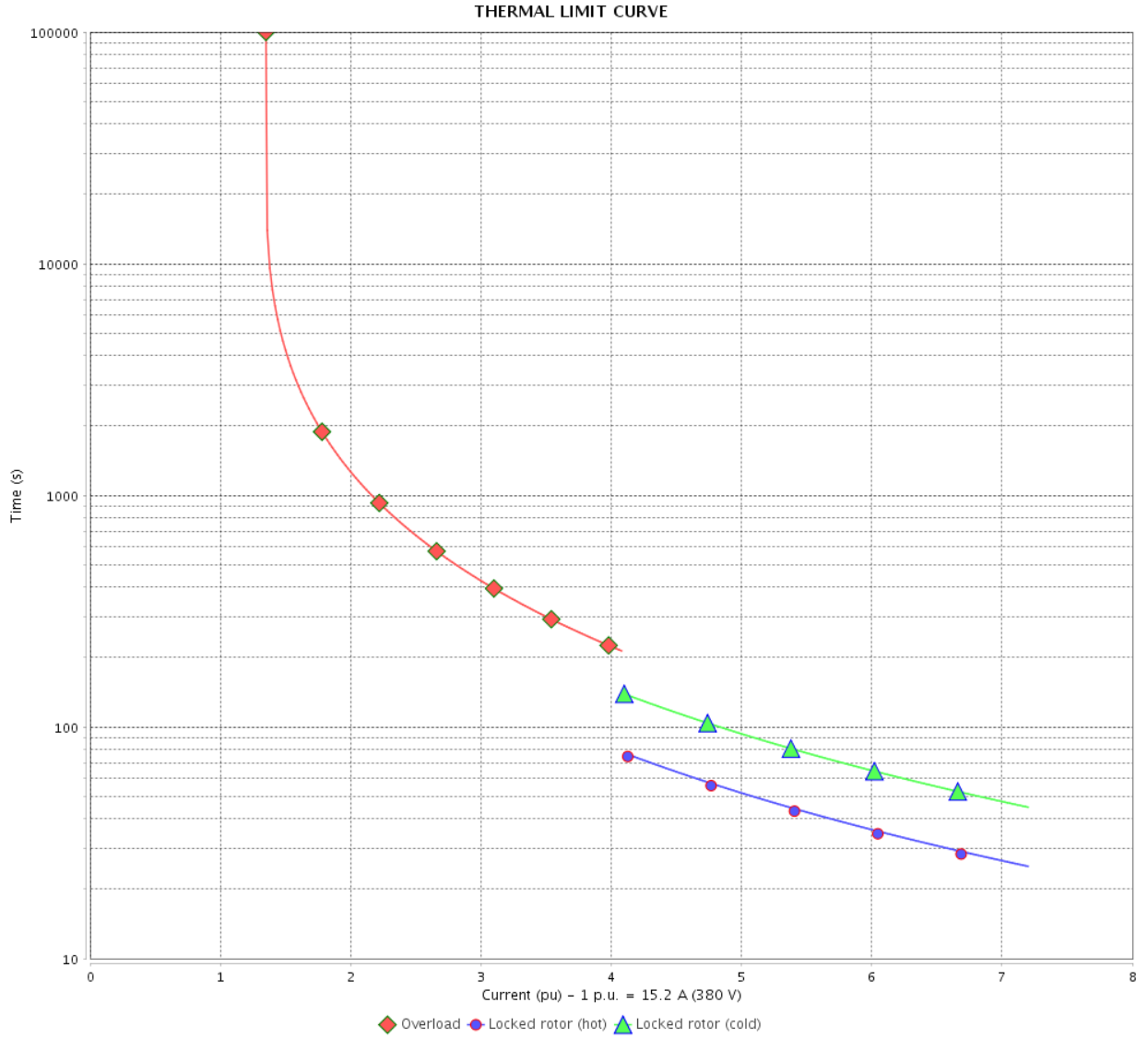
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# THERMAL LIMIT CURVE

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 : 12603920  
Catalog # : 01518ET3E254JM-W22

Performance : 400 V 50 Hz 4P IE3

Rated current	: 14.8 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 7.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.5 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

Heating constant

Cooling constant

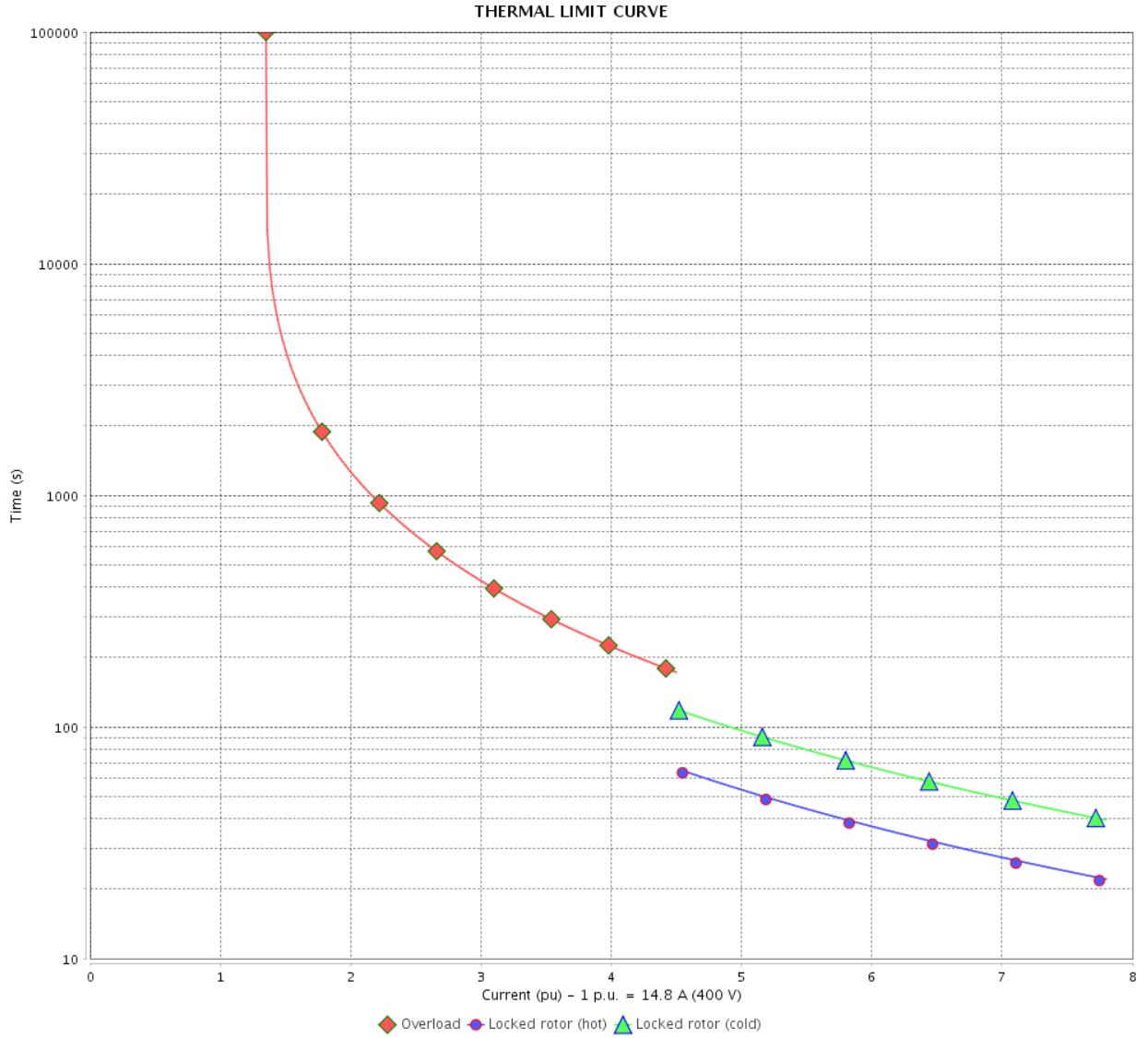
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# THERMAL LIMIT CURVE

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 : 12603920  
Catalog # : 01518ET3E254JM-W22

Performance : 415 V 50 Hz 4P IE3

Rated current	: 14.5 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 8.3	Duty cycle	: Cont.(S1)
Rated torque	: 35.5 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.25
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

Heating constant

Cooling constant

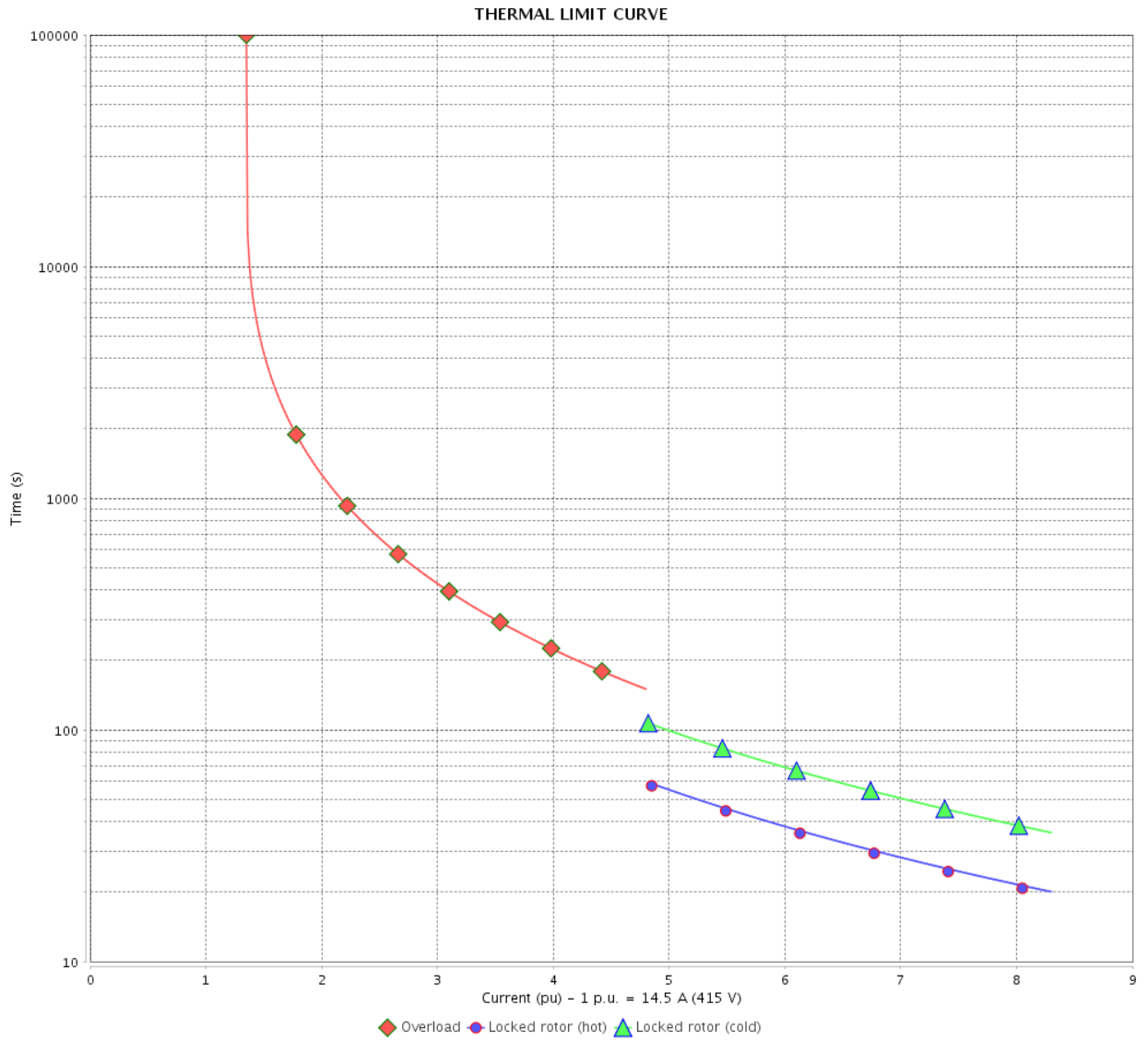
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Product code : 12603920  
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Performance : 380 V 50 Hz 4P IE2

Rated current	: 21.5 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 4.9	Duty cycle	: Cont.(S1)
Rated torque	: 54.1 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Heating constant

Cooling constant

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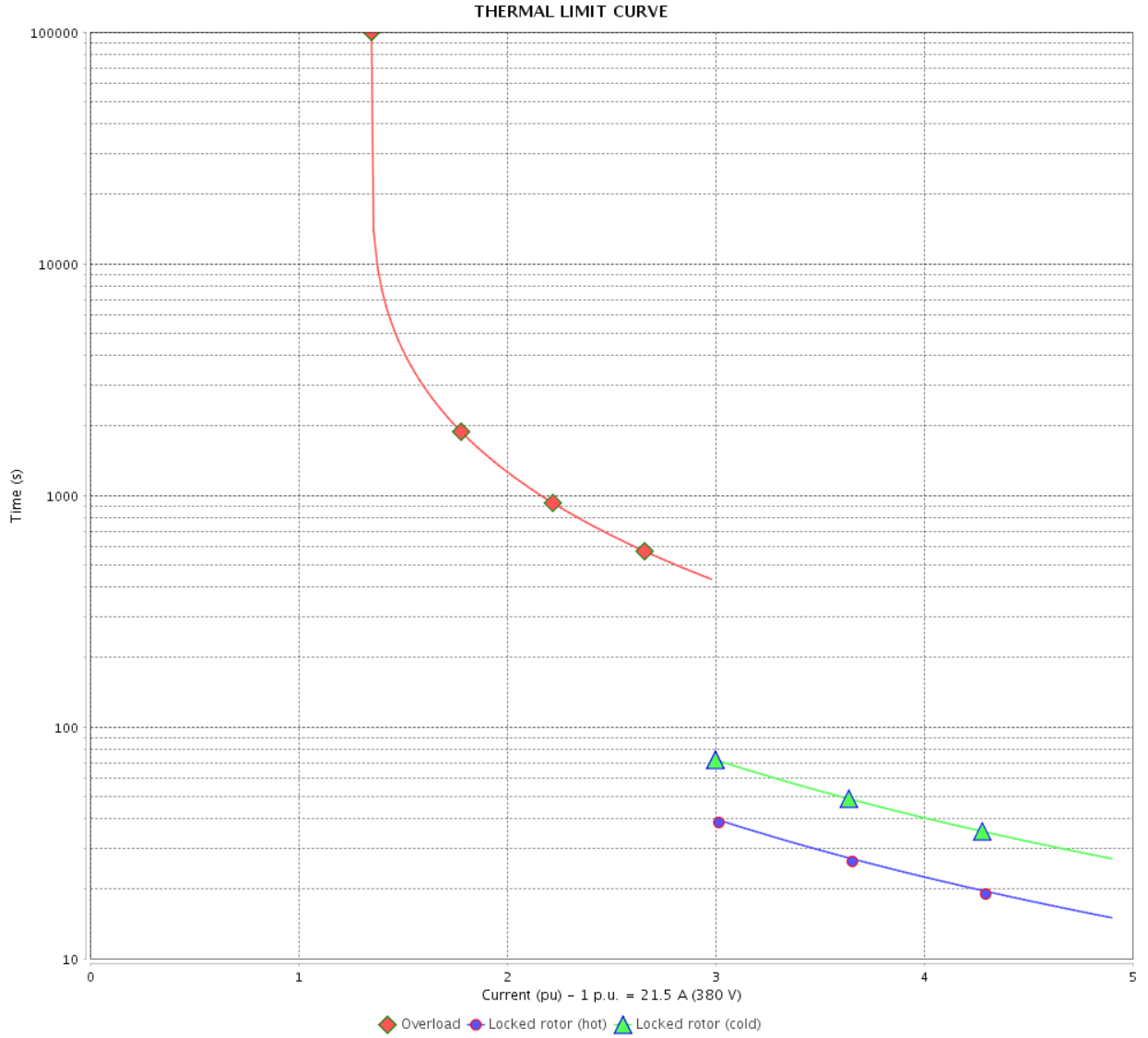


# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12603920  
Catalog # : 01518ET3E254JM-W22

Performance : 400 V 50 Hz 4P IE2

Rated current	: 20.5 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 54.0 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: B

Heating constant

Cooling constant

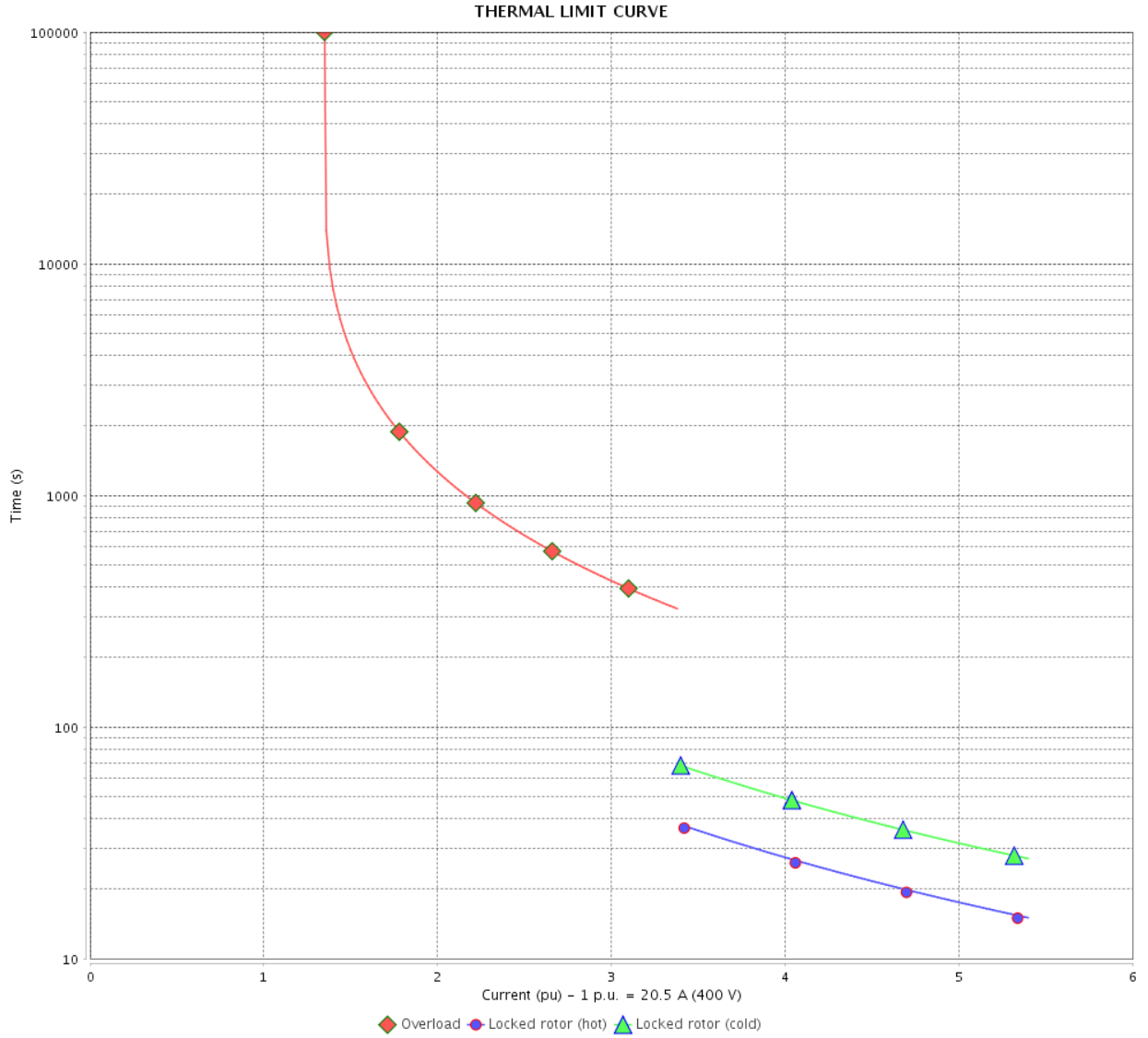
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		26 / 36	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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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 : 12603920  
Catalog # : 01518ET3E254JM-W22

Performance : 415 V 50 Hz 4P IE2

Rated current	: 20.0 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 53.8 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: B

Heating constant

Cooling constant

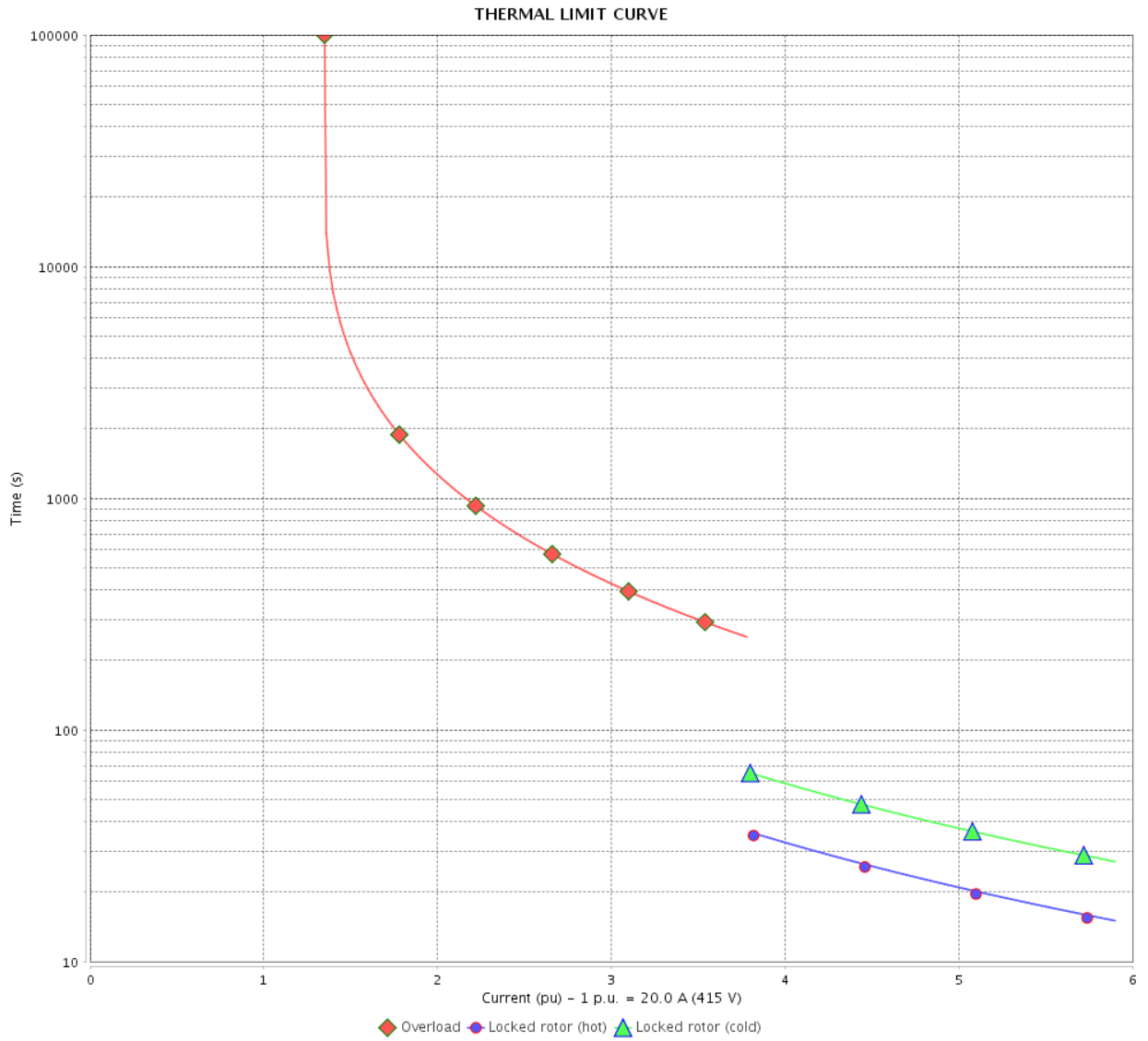
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		28 / 36	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

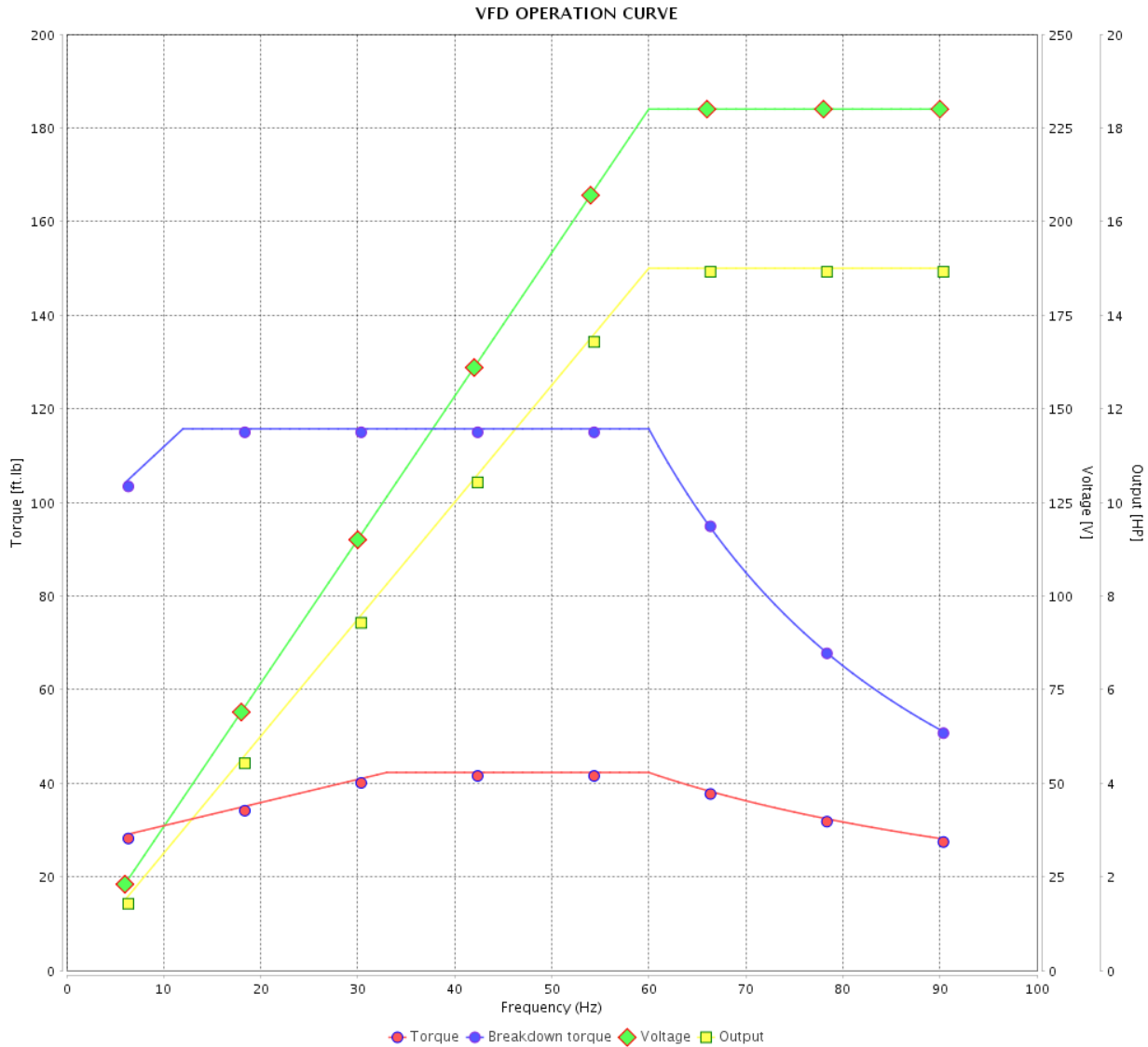


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22



Performance : 230/460 V 60 Hz 4P

Rated current : 36.0/18.0 A  
 LRC : 6.4  
 Rated torque : 44.5 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 2.62 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
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Date	13/04/2022			

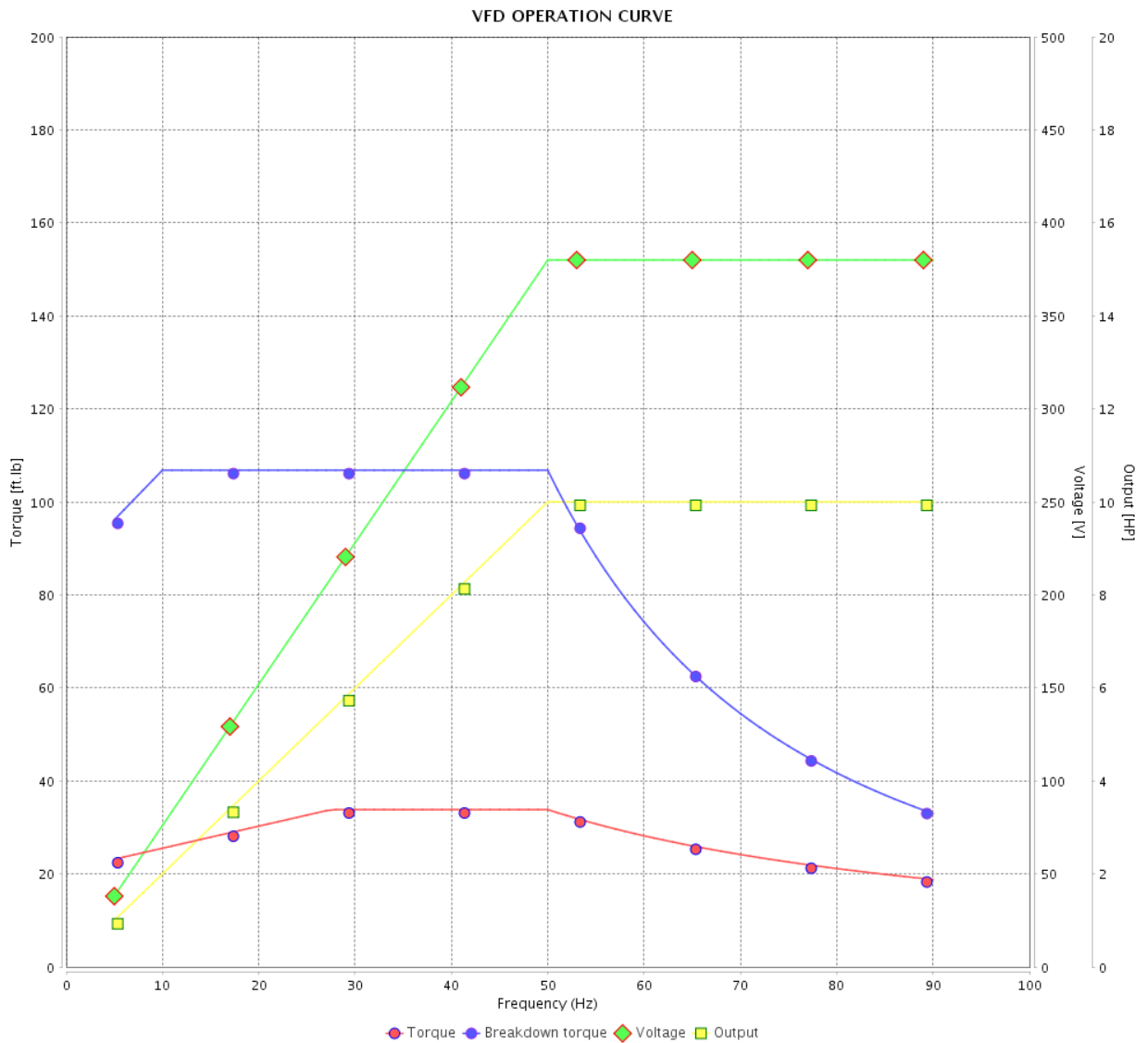
# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 12603920  
 Catalog # : 01518ET3E254JM-W22



Performance : 380 V 50 Hz 4P IE3

Rated current : 15.2 A	Moment of inertia (J) : 2.62 sq.ft.lb
LRC : 7.2	Duty cycle : Cont.(S1)
Rated torque : 35.6 ft.lb	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.25
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1475 rpm	Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 31 / 36	Revision
Checked by				
Date	13/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



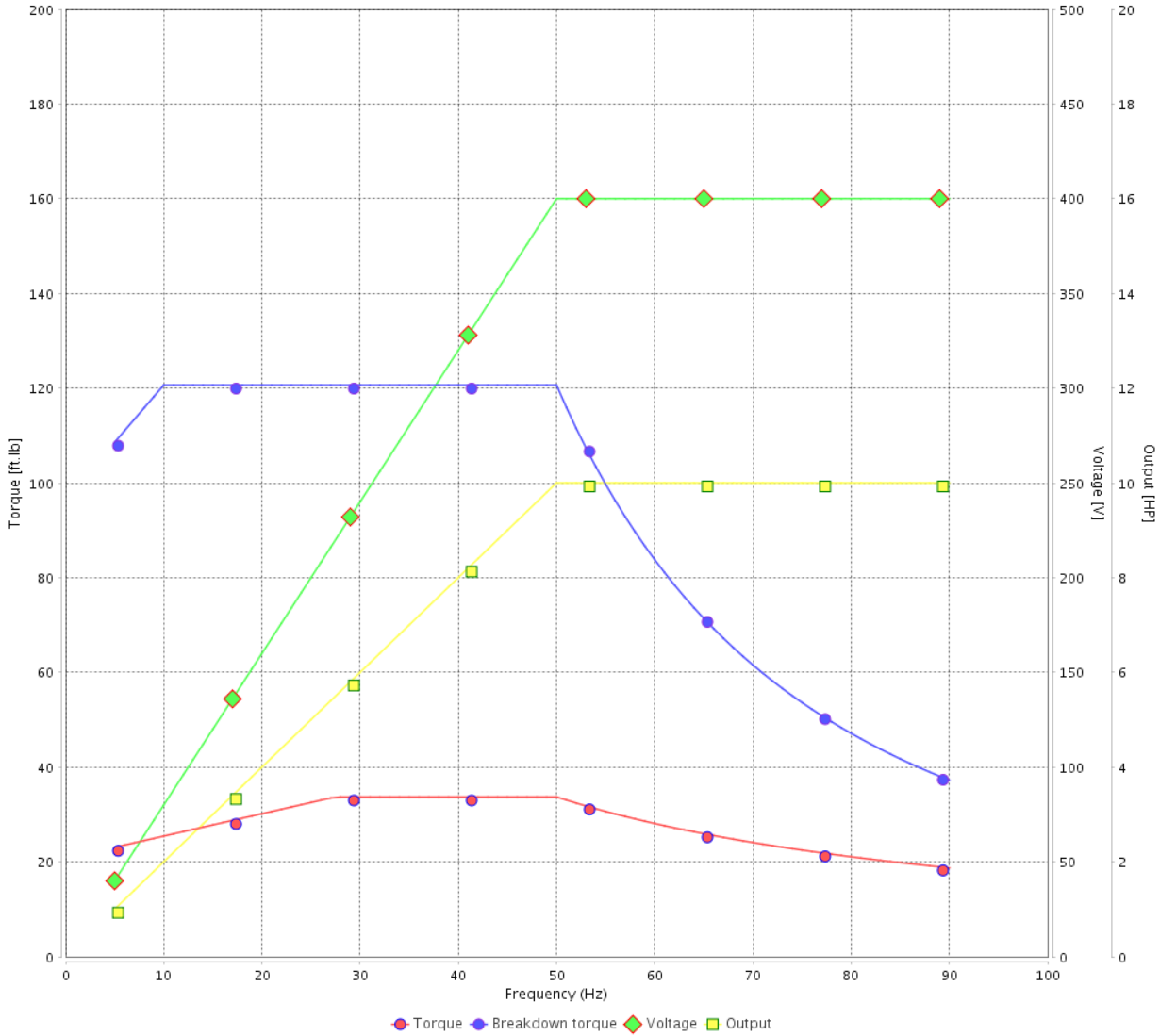
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22

VFD OPERATION CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current : 14.8 A  
 LRC : 7.8  
 Rated torque : 35.5 ft.lb  
 Locked rotor torque : 280 %  
 Breakdown torque : 340 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 2.62 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 32 / 36	Revision
Checked by				
Date	13/04/2022			



# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

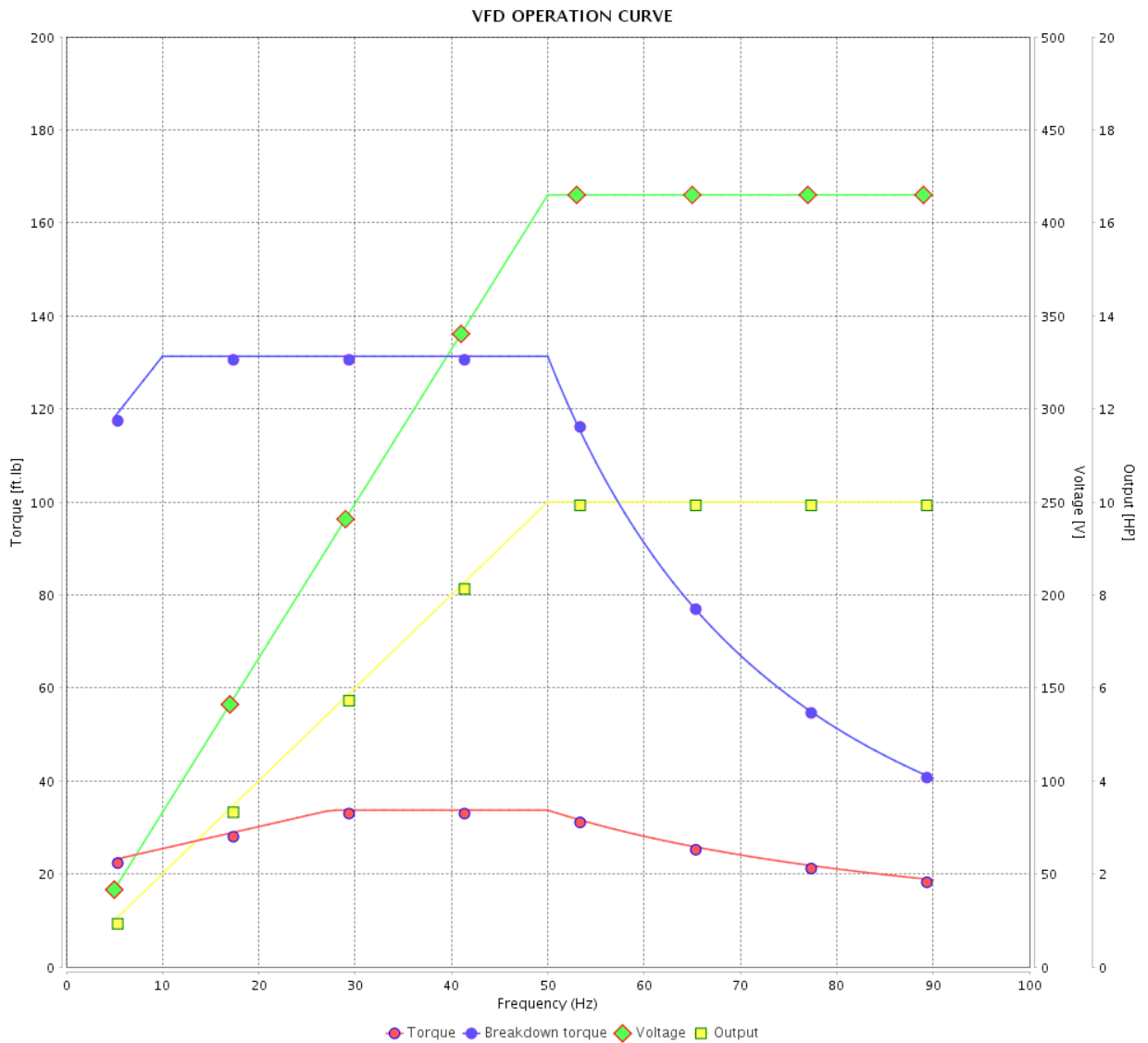


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22



Performance : 415 V 50 Hz 4P IE3

Rated current : 14.5 A  
 LRC : 8.3  
 Rated torque : 35.5 ft.lb  
 Locked rotor torque : 310 %  
 Breakdown torque : 370 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 2.62 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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Date	13/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



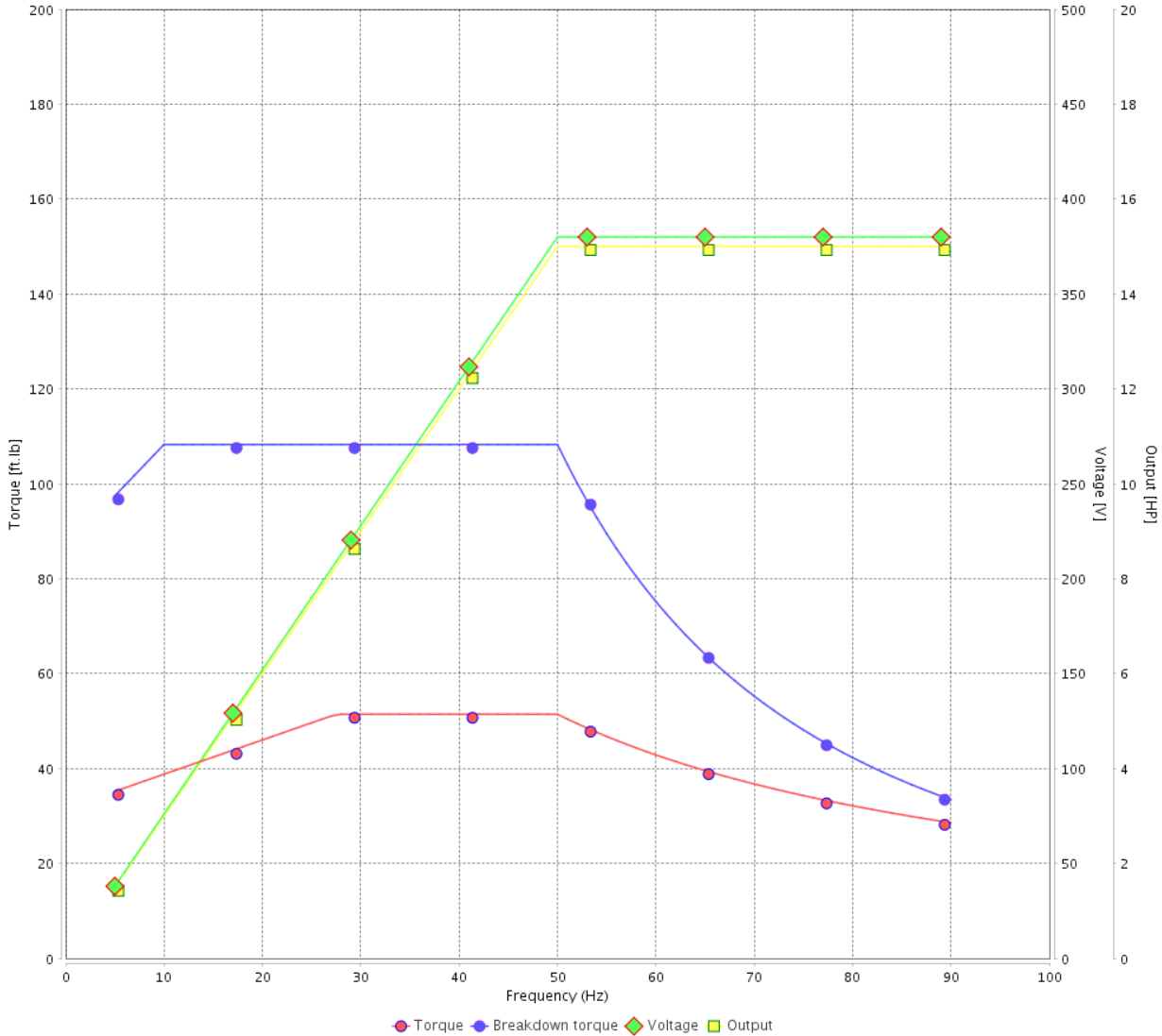
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22

VFD OPERATION CURVE



Performance : 380 V 50 Hz 4P IE2

Rated current : 21.5 A  
 LRC : 4.9  
 Rated torque : 54.1 ft.lb  
 Locked rotor torque : 160 %  
 Breakdown torque : 200 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 2.62 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 34 / 36	Revision
Checked by				
Date	13/04/2022			

# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

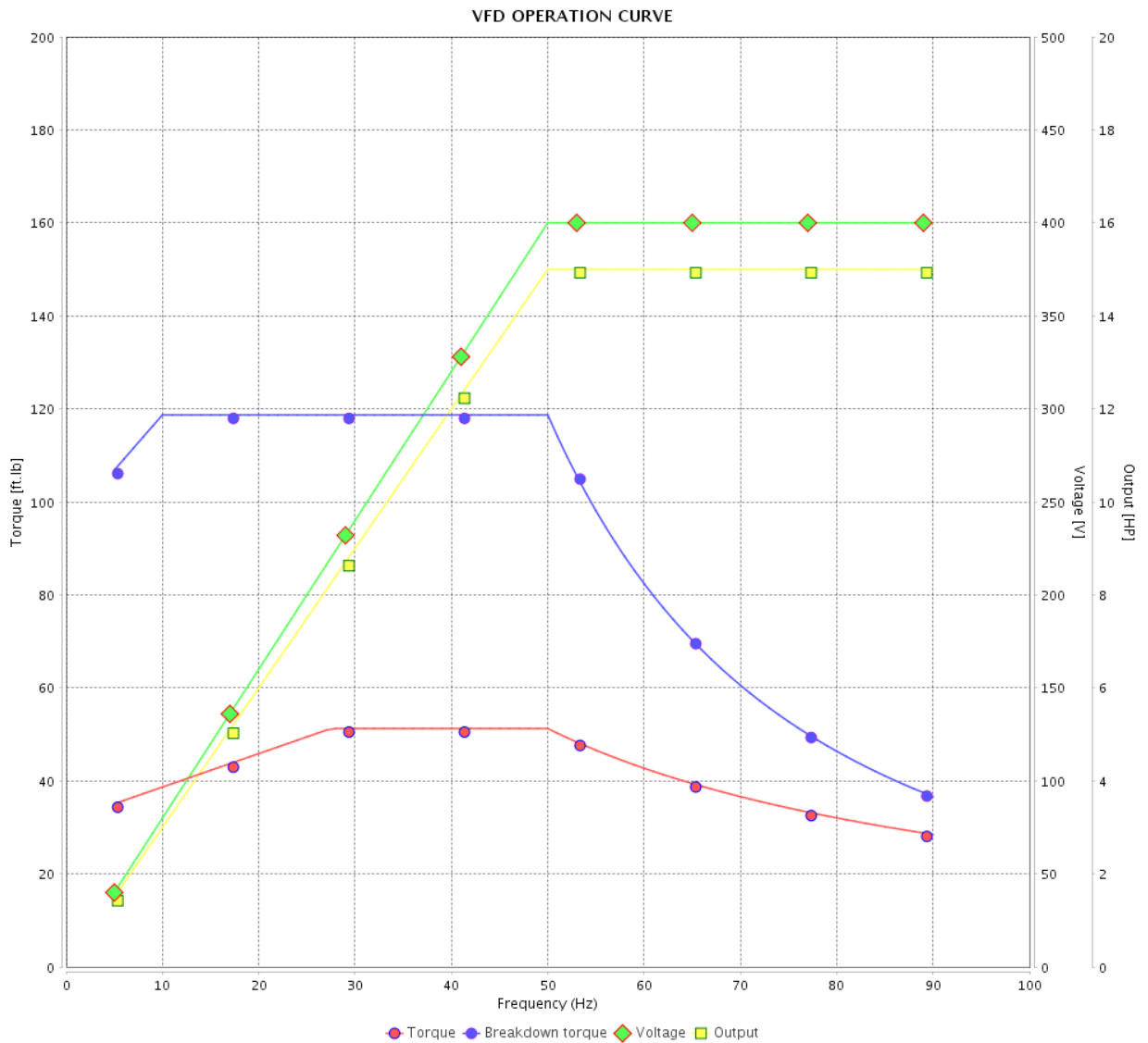


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22



Performance : 400 V 50 Hz 4P IE2

Rated current : 20.5 A  
 LRC : 5.4  
 Rated torque : 54.0 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 220 %  
 Rated speed : 1460 rpm

Moment of inertia (J) : 2.62 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 35 / 36	Revision
Checked by				
Date	13/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



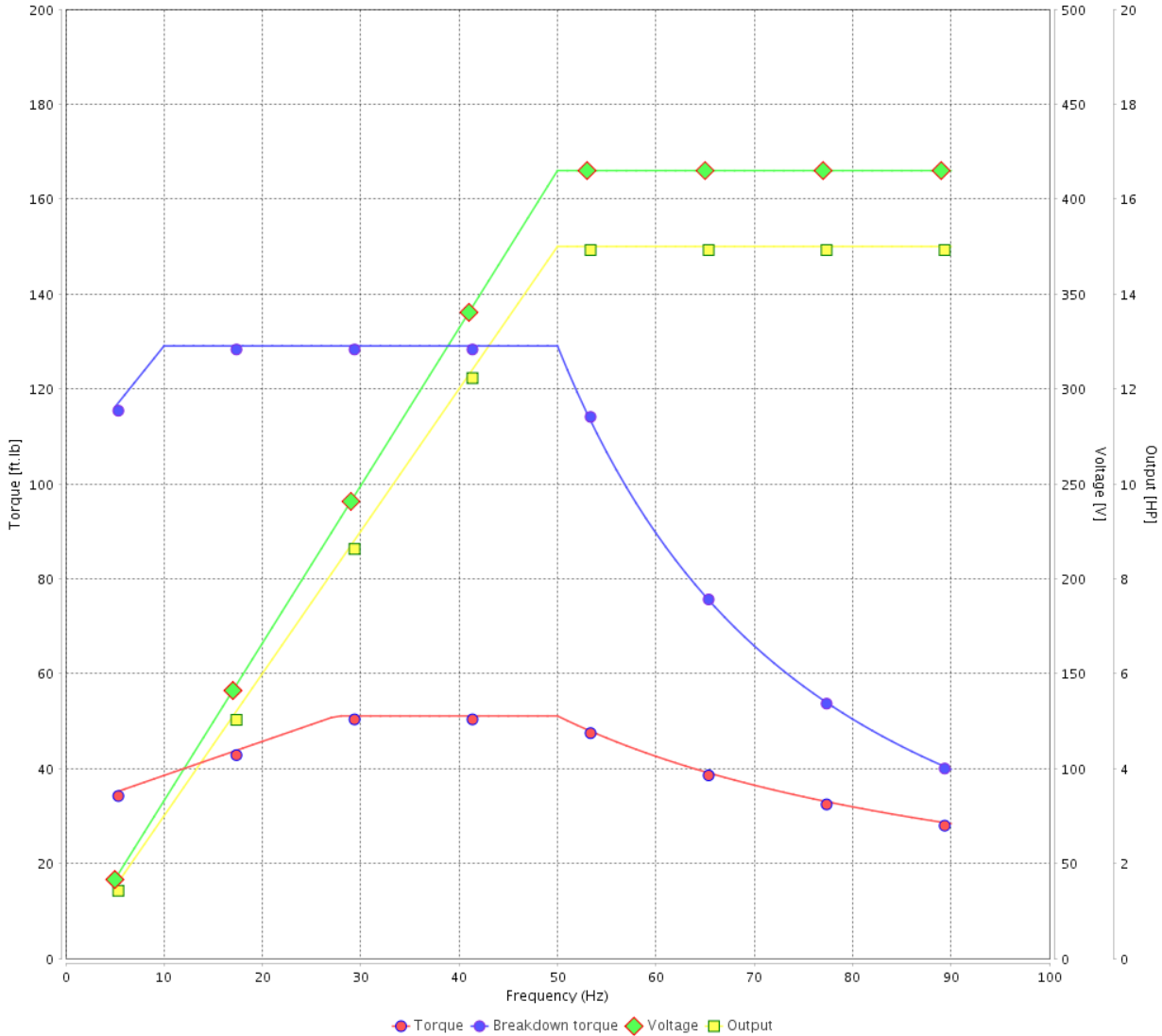
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12603920

Catalog # : 01518ET3E254JM-W22

VFD OPERATION CURVE



Performance : 415 V 50 Hz 4P IE2

Rated current	: 20.0 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 53.8 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: B

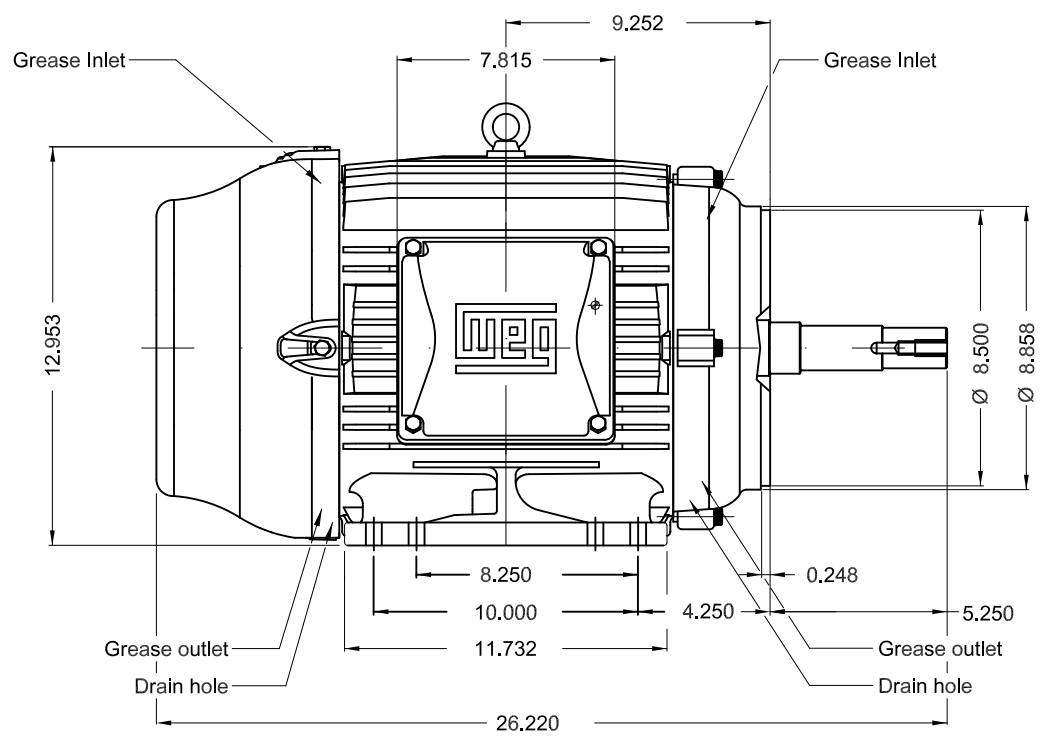
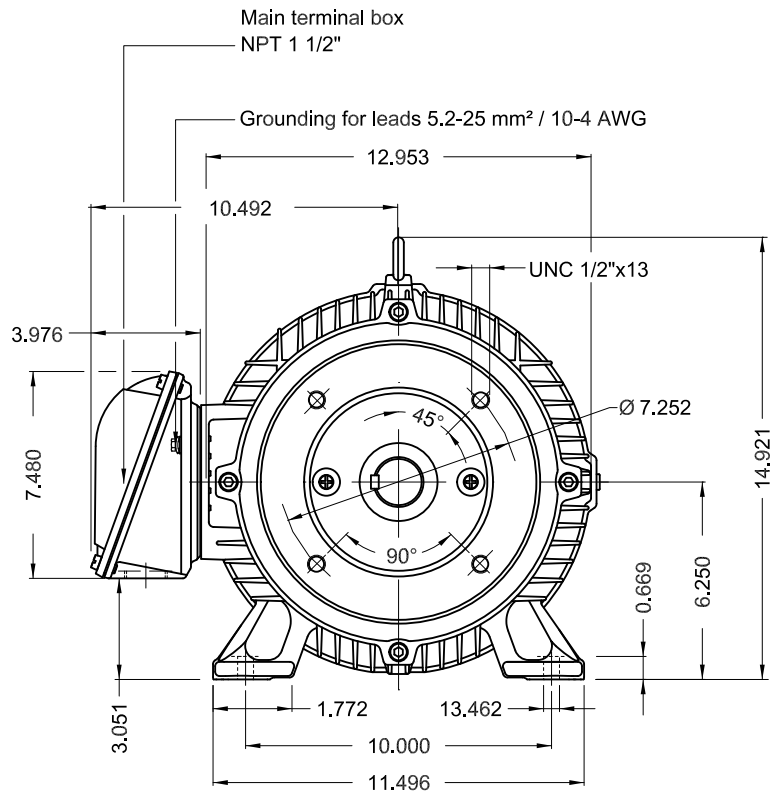
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 36 / 36	Revision
Checked by				
Date	13/04/2022			

1 2 3 4 5 6

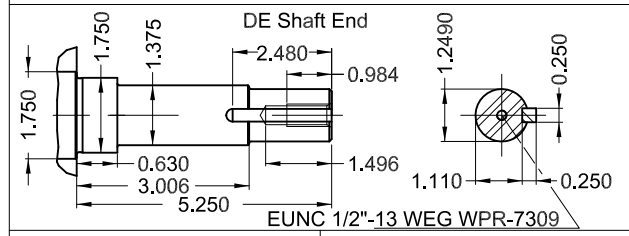
A

B

C



D



E

Color RAL 5009  
 Painting plan 203A  
 Mounting NEMA F-1  
 Mounting B34R(D)

15 HP 04 Poles 60 Hz A

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

**PREVIEW**  
 WDD





FOR SAFE AREA  
MOD.TE1BFOXON



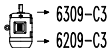
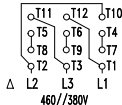
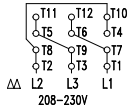
For 60Hz: Class I, Div 2, Gr. A, B, C and D - T3  
Class I, Zone 2, IIC - T3

Class II, Div 2, Gr. F and G - T4

For 60Hz use on PWM, Gr. A, B, C, D and F,  
VT 1000:1, CT 20:1, 1.0SF, T3A

MODEL 01518ET3E254JM-W22  
MADE IN MEXICO  
12603920

PH 3	FR 254/6JM	HP(kW) 15.0(11.0)	Hz 60
V 230/460	A 36.0/18.0	RPM 1770	DES B
NEMA NOM EFF 92.4 %	INS. CL. F $\Delta$ T 80 K	IP55	
ENCL TEFC	DUTY CONT.	AMB. 40°C	
CODE G	PF 0.83	SF 1.25	SFA 45.0/22.5
USABLE @208V 39.8 A	SF 1.15	SFA 45.8	
15HP 11kW 50Hz 380V 21.5A 1455RPM SF1.00 EFF 90.2% (IE2)	ALT 1000 m.a.s.l.	295 Lbs	



MOBIL POLYREX EM  
13 g 20000 h