

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12445703		
		Catalog # :	00152ET3E182T-W22		
Frame	: 182/4T	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(S1)	Rotation ¹	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight ²	: 91.7 lb		
Protection degree	: IP55	Moment of inertia (J)	: 0.4879 sq.ft.lb		
Design	: B				
Output [HP]	1.5	1.5	1.5	1.5	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	5.08/2.54	2.68	2.62	2.64	
L. R. Amperes [A]	39.6/19.8	16.9	18.1	19.5	
LRC [A]	7.8x(Code M)	6.3x(Code J)	6.9x(Code K)	7.4x(Code L)	
No load current [A]	3.25/1.63	1.60	1.71	1.80	
Rated speed [RPM]	1170	955	960	965	
Slip [%]	2.50	4.50	4.00	3.50	
Rated torque [ft.lb]	6.73	8.25	8.21	8.16	
Locked rotor torque [%]	320	250	300	330	
Breakdown torque [%]	400	290	330	370	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	28s (cold) 16s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%				
	50%	84.0	85.5	84.5	84.0
	75%	86.5	86.5	86.5	85.5
	100%	87.5	85.5	86.5	86.5
Power Factor	25%				
	50%	0.45	0.52	0.48	0.45
	75%	0.54	0.63	0.60	0.57
	100%	0.62	0.73	0.70	0.67
Bearing type	: <u>Drive end</u> 6207 ZZ <u>Non drive end</u> 6206 ZZ	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction	: 147 lb		
Lubrication interval	: - -	Max. compression	: 239 lb		
Lubricant amount	: - -				
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 5.62A SF 1.15 SFA 6.46A					
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



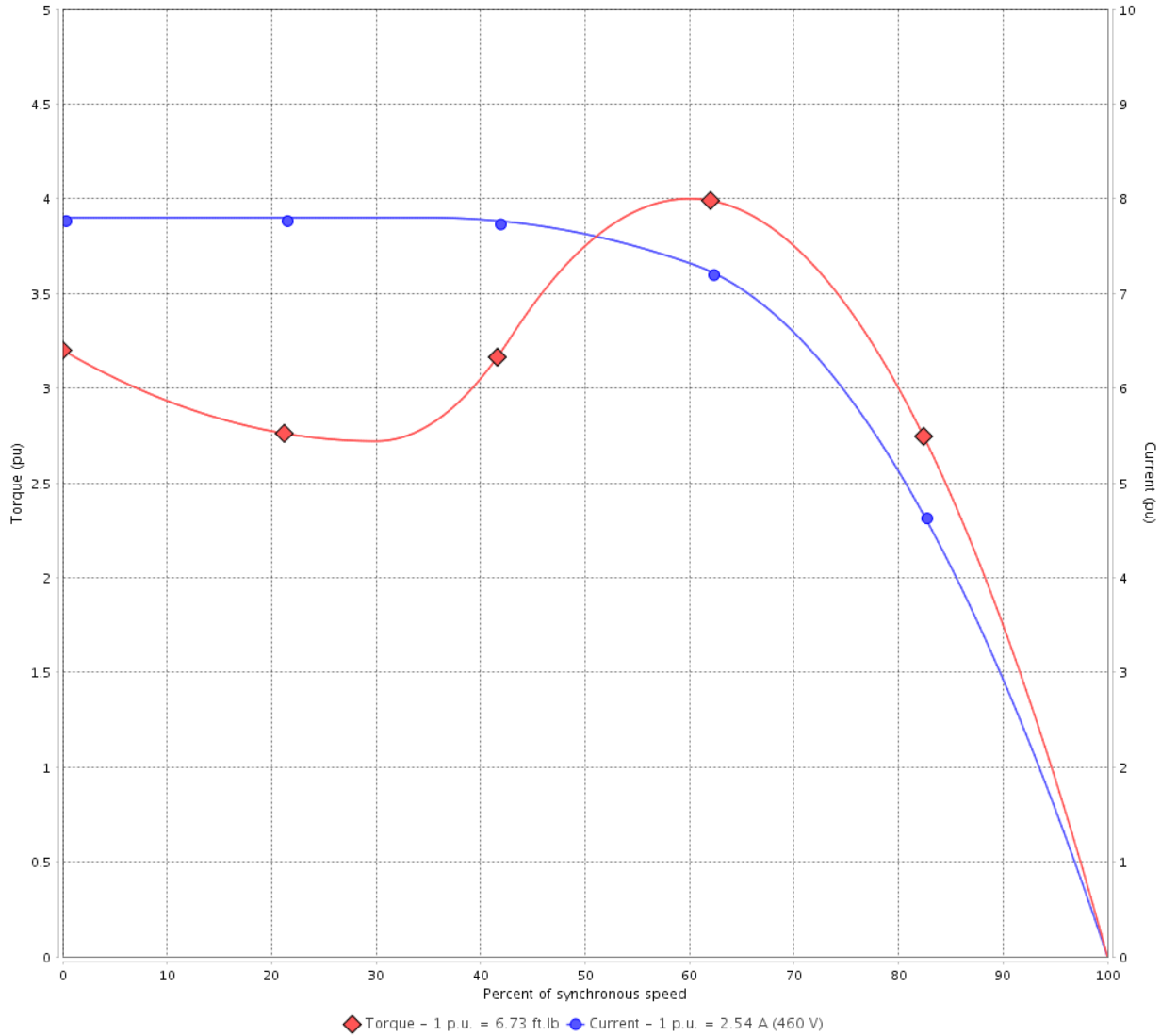
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12445703

Catalog # : 00152ET3E182T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 5.08/2.54 A
 LRC : 7.8
 Rated torque : 6.73 ft.lb
 Locked rotor torque : 320 %
 Breakdown torque : 400 %
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.4879 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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

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TORQUE AND CURRENT VS SPEED CURVE



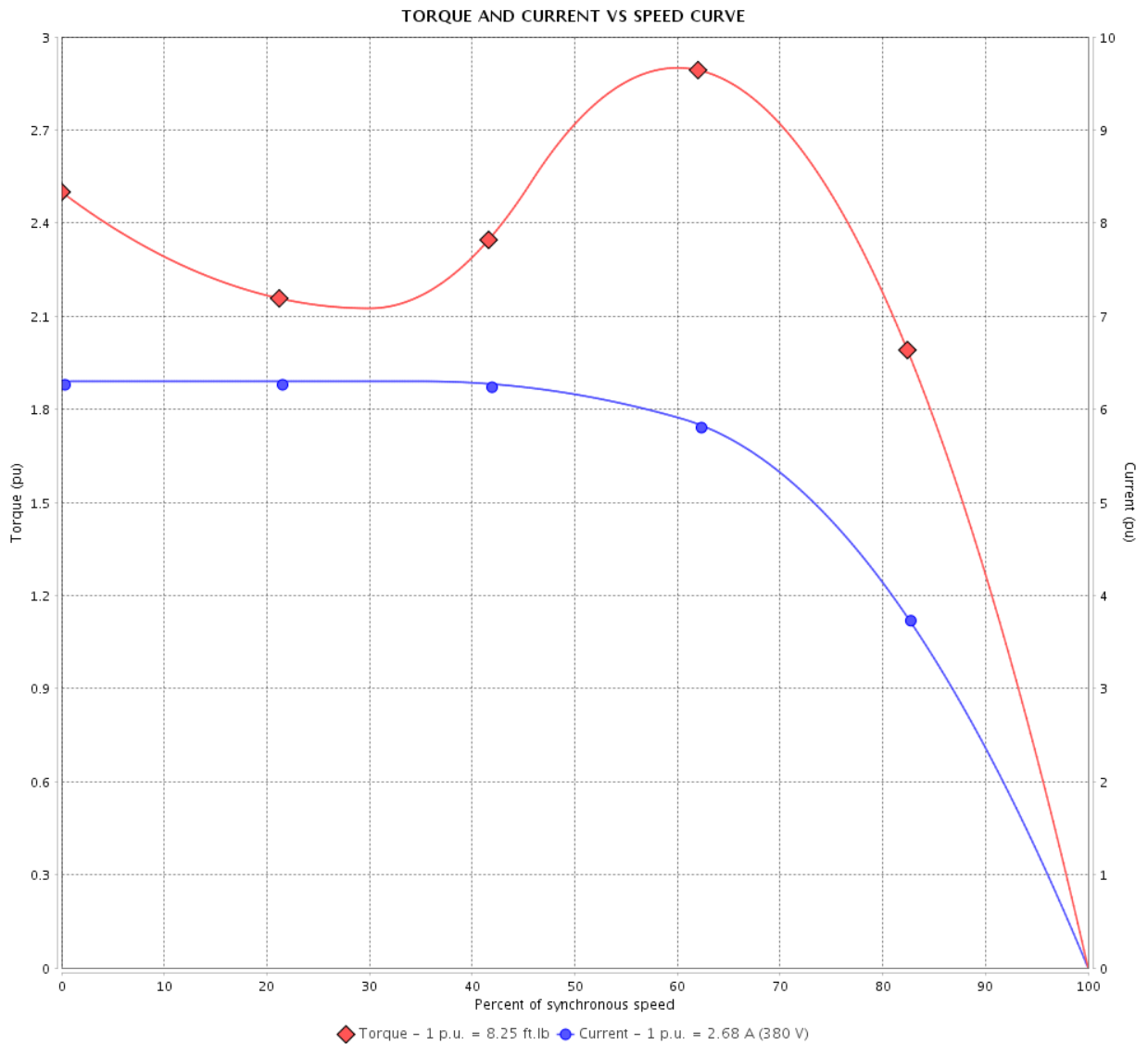
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12445703

Catalog # : 00152ET3E182T-W22



Performance : 380 V 50 Hz 6P IE4

Rated current	: 2.68 A	Moment of inertia (J)	: 0.4879 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 8.25 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 955 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



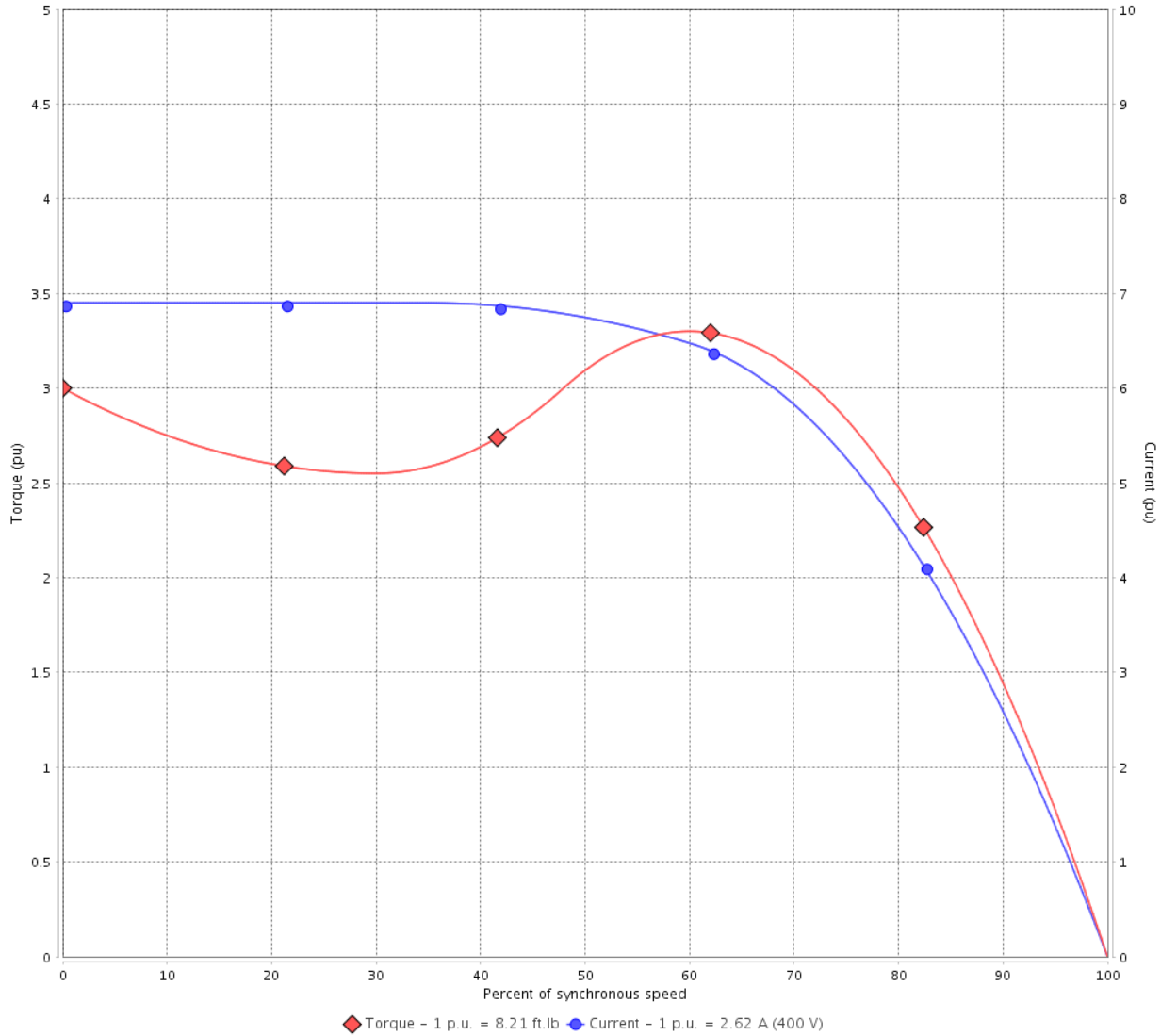
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12445703

Catalog # : 00152ET3E182T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 6P IE4

Rated current	: 2.62 A	Moment of inertia (J)	: 0.4879 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 8.21 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



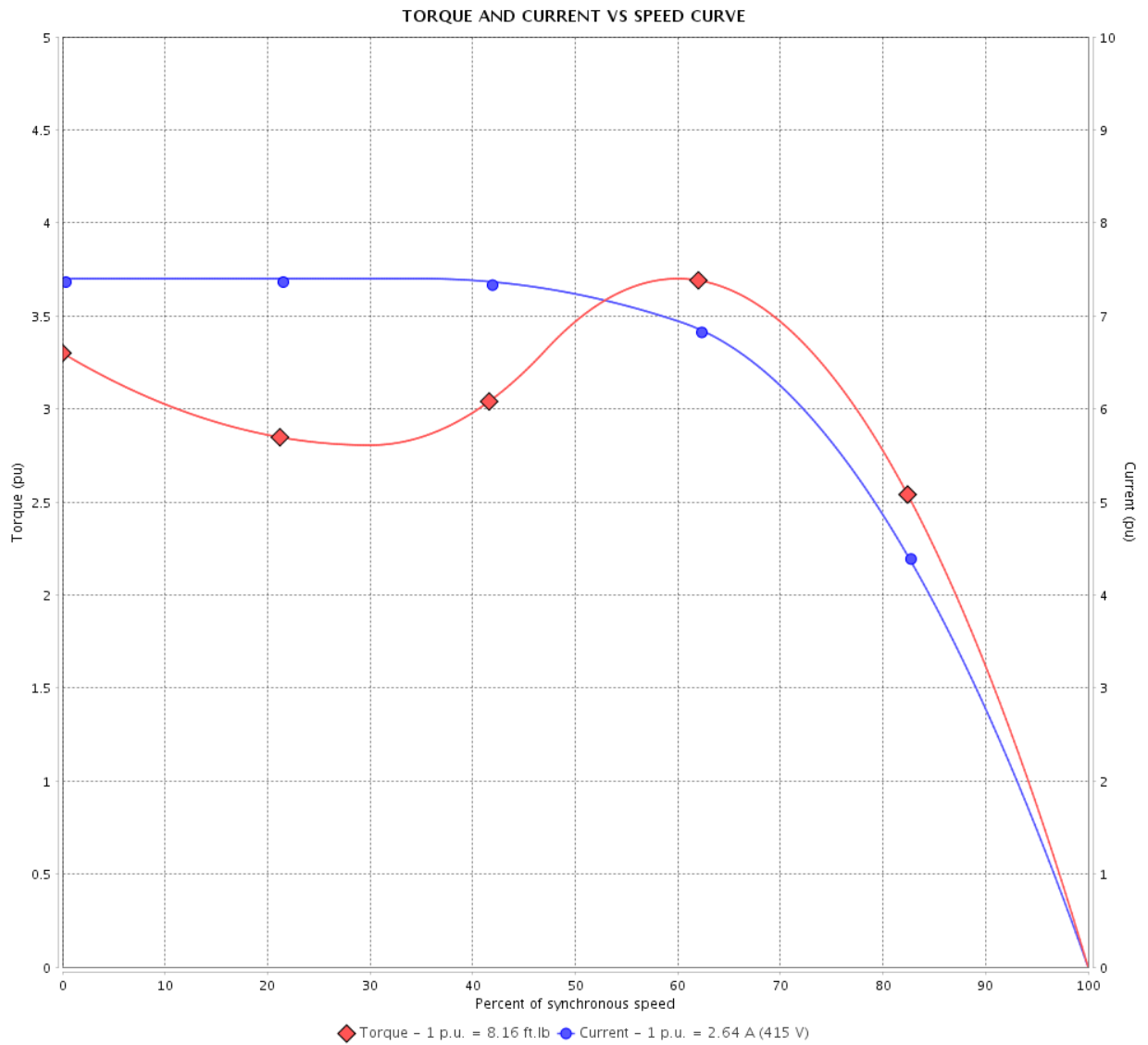
Three Phase Induction Motor - Squirrel Cage

Customer :

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Product code : 12445703

Catalog # : 00152ET3E182T-W22



Performance : 415 V 50 Hz 6P IE4

Rated current : 2.64 A
 LRC : 7.4
 Rated torque : 8.16 ft.lb
 Locked rotor torque : 330 %
 Breakdown torque : 370 %
 Rated speed : 965 rpm

Moment of inertia (J) : 0.4879 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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LOAD PERFORMANCE CURVE

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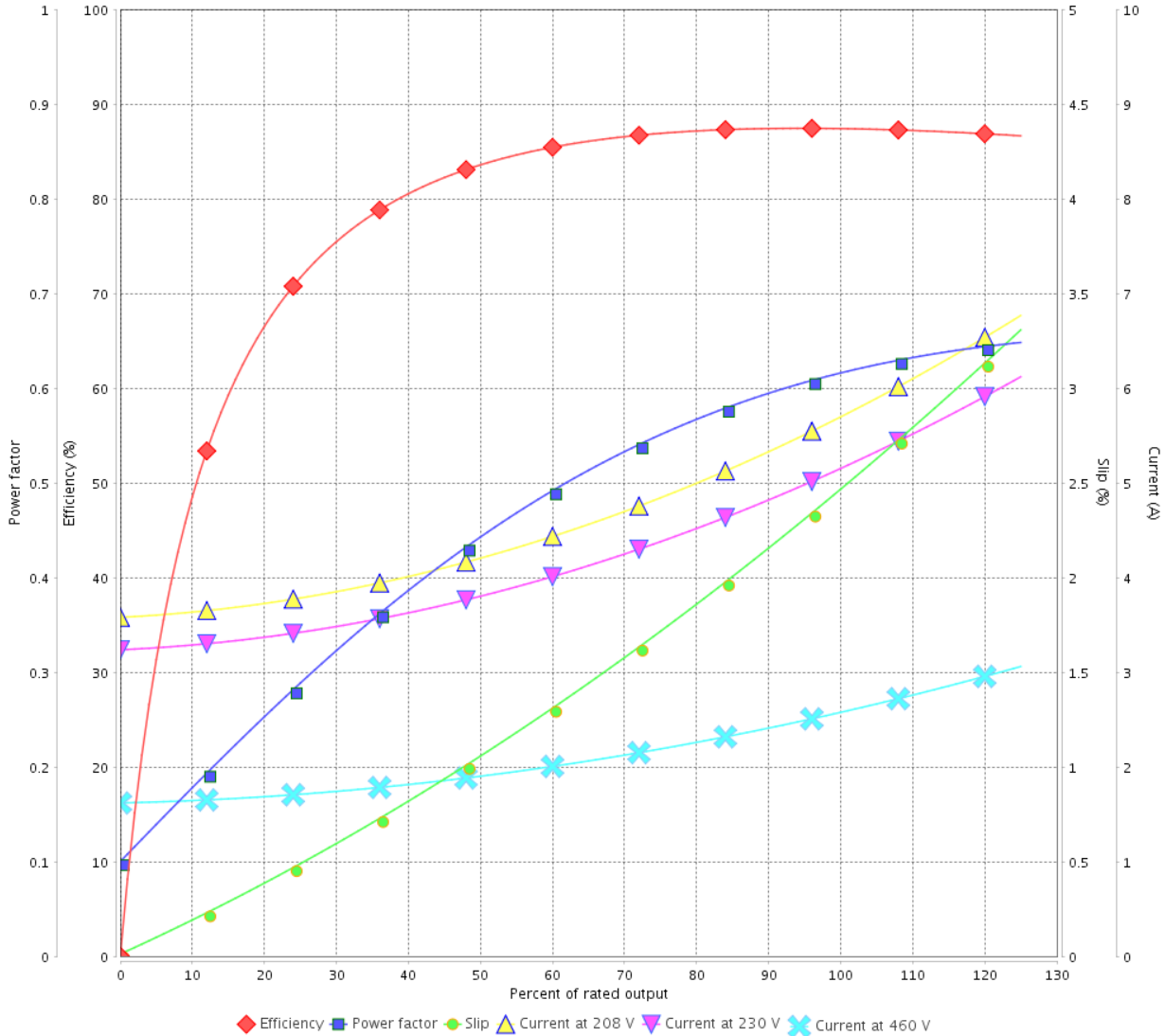
Customer :

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LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 5.08/2.54 A
 LRC : 7.8
 Rated torque : 6.73 ft.lb
 Locked rotor torque : 320 %
 Breakdown torque : 400 %
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.4879 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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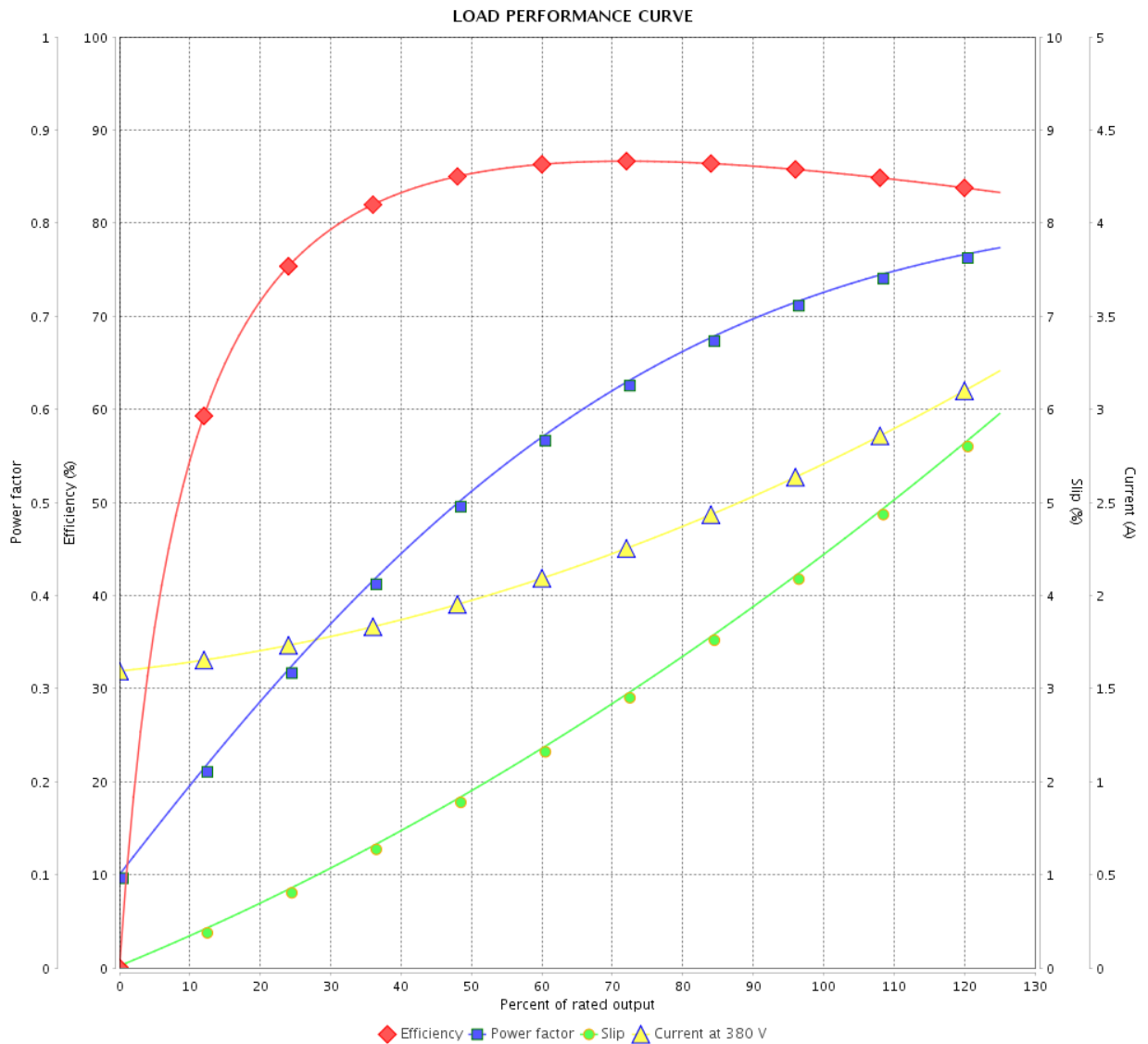


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Product line : NEMA Premium Efficiency Three-Phase

Product code : 12445703

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Performance : 380 V 50 Hz 6P IE4

Rated current : 2.68 A
 LRC : 6.3
 Rated torque : 8.25 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 290 %
 Rated speed : 955 rpm

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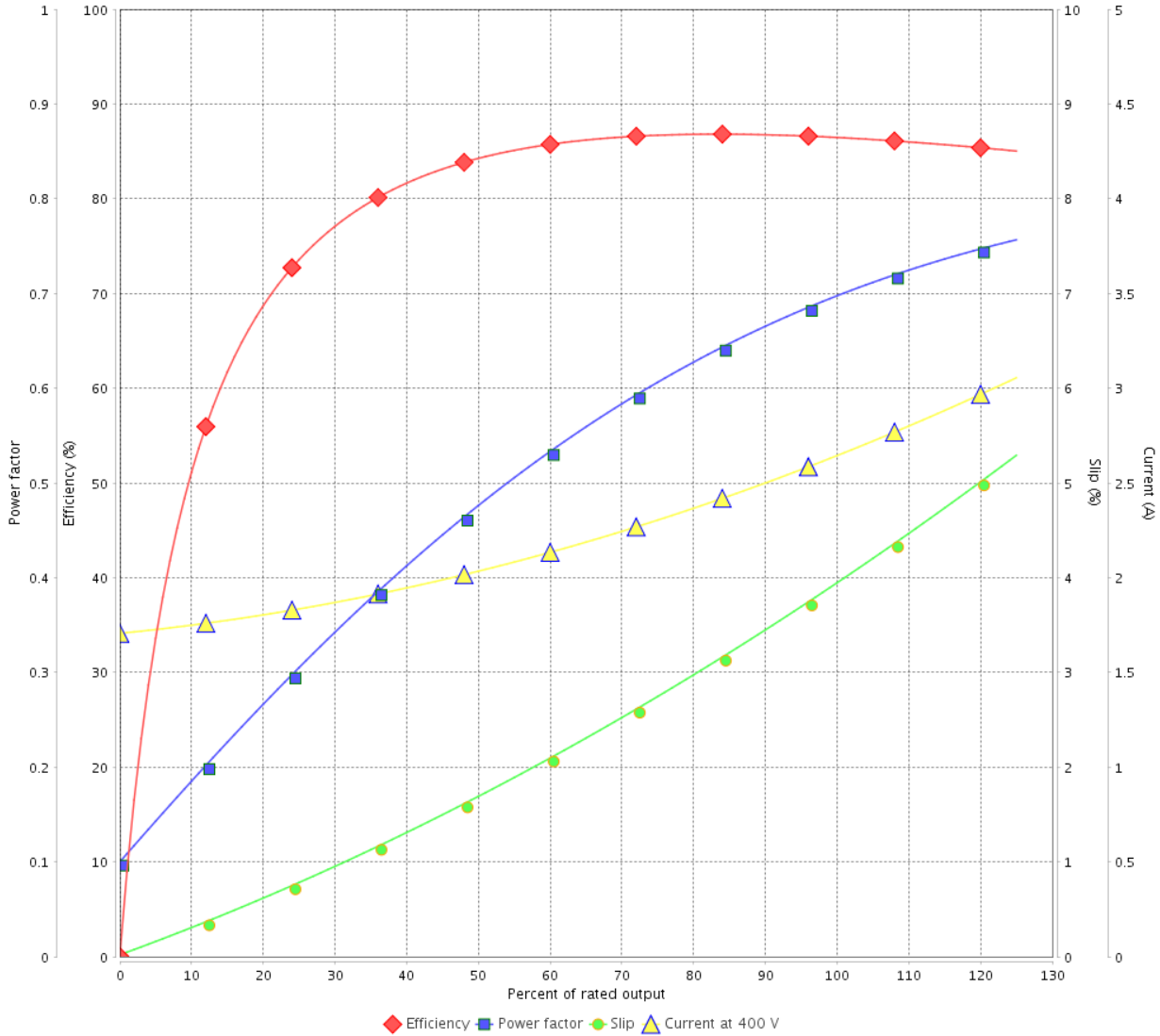
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Catalog # : 00152ET3E182T-W22

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 6P IE4

Rated current : 2.62 A
 LRC : 6.9
 Rated torque : 8.21 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 330 %
 Rated speed : 960 rpm

Moment of inertia (J) : 0.4879 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

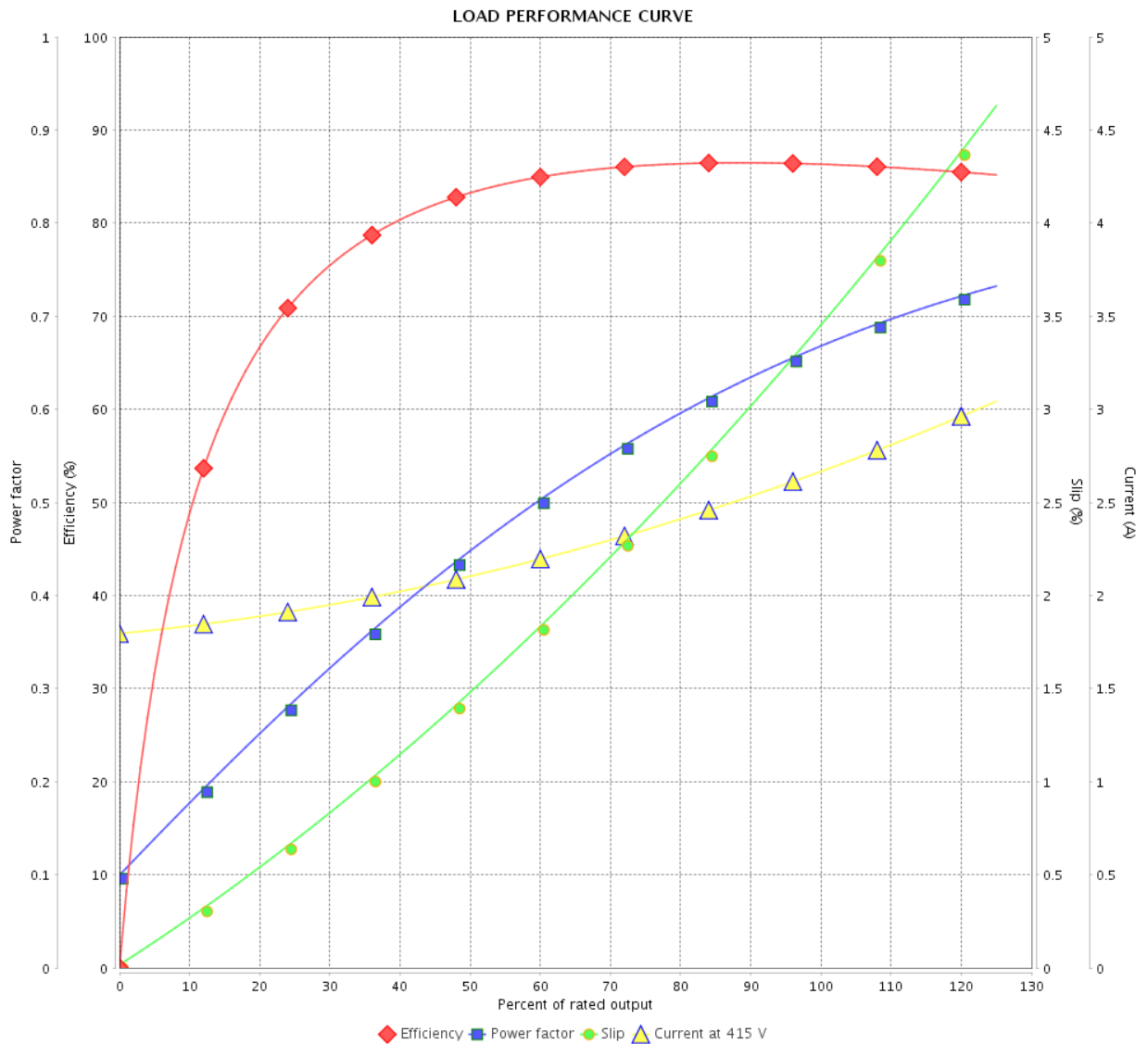


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE

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Rated torque : 6.73 ft.lb	Insulation class : F
Locked rotor torque : 320 %	Service factor : 1.25
Breakdown torque : 400 %	Temperature rise : 80 K
Rated speed : 1170 rpm	Design : B

Heating constant

Cooling constant

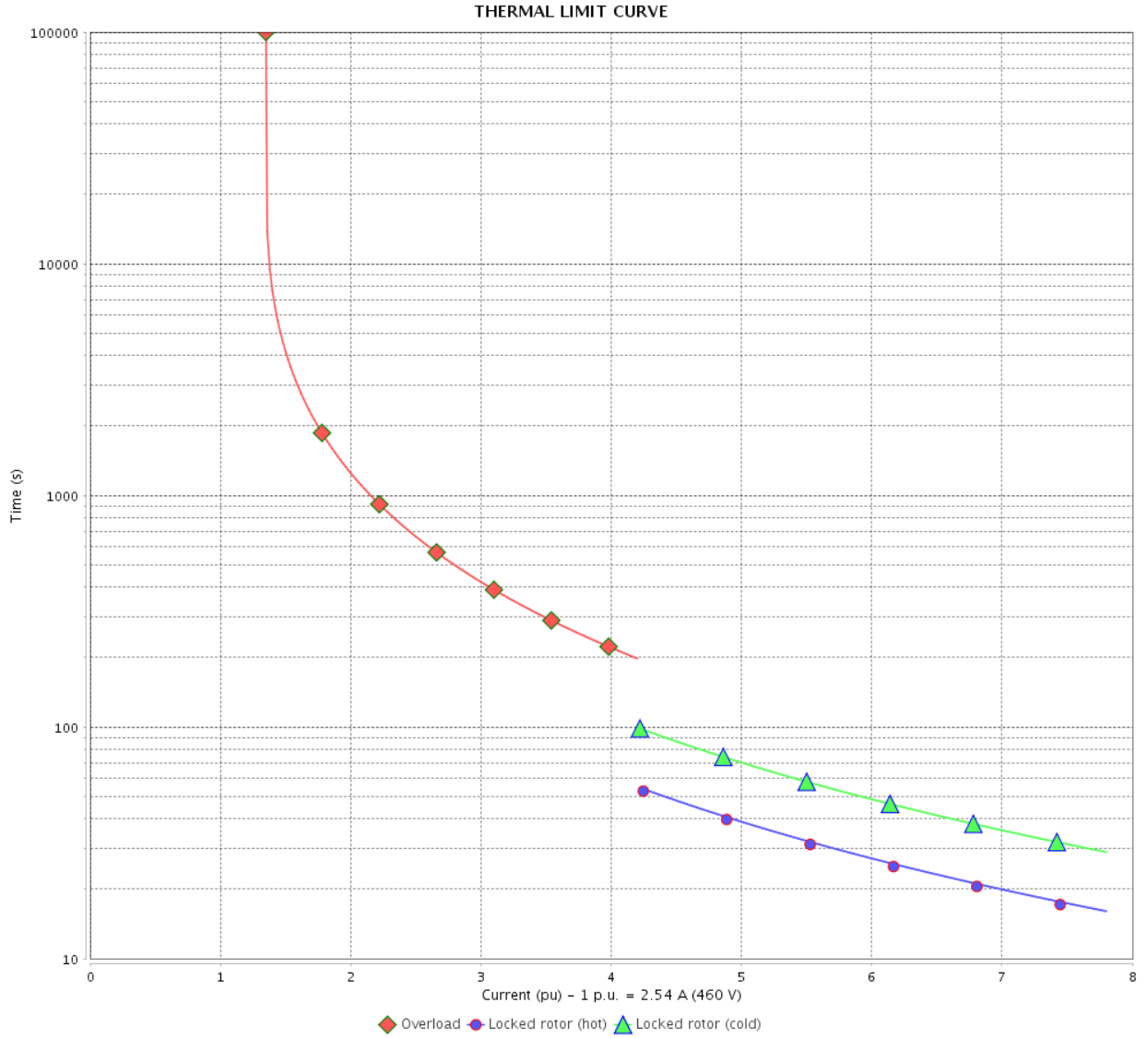
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LRC : 6.3	Duty cycle : Cont.(S1)
Rated torque : 8.25 ft.lb	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.00
Breakdown torque : 290 %	Temperature rise : 80 K
Rated speed : 955 rpm	Design : B

Heating constant

Cooling constant

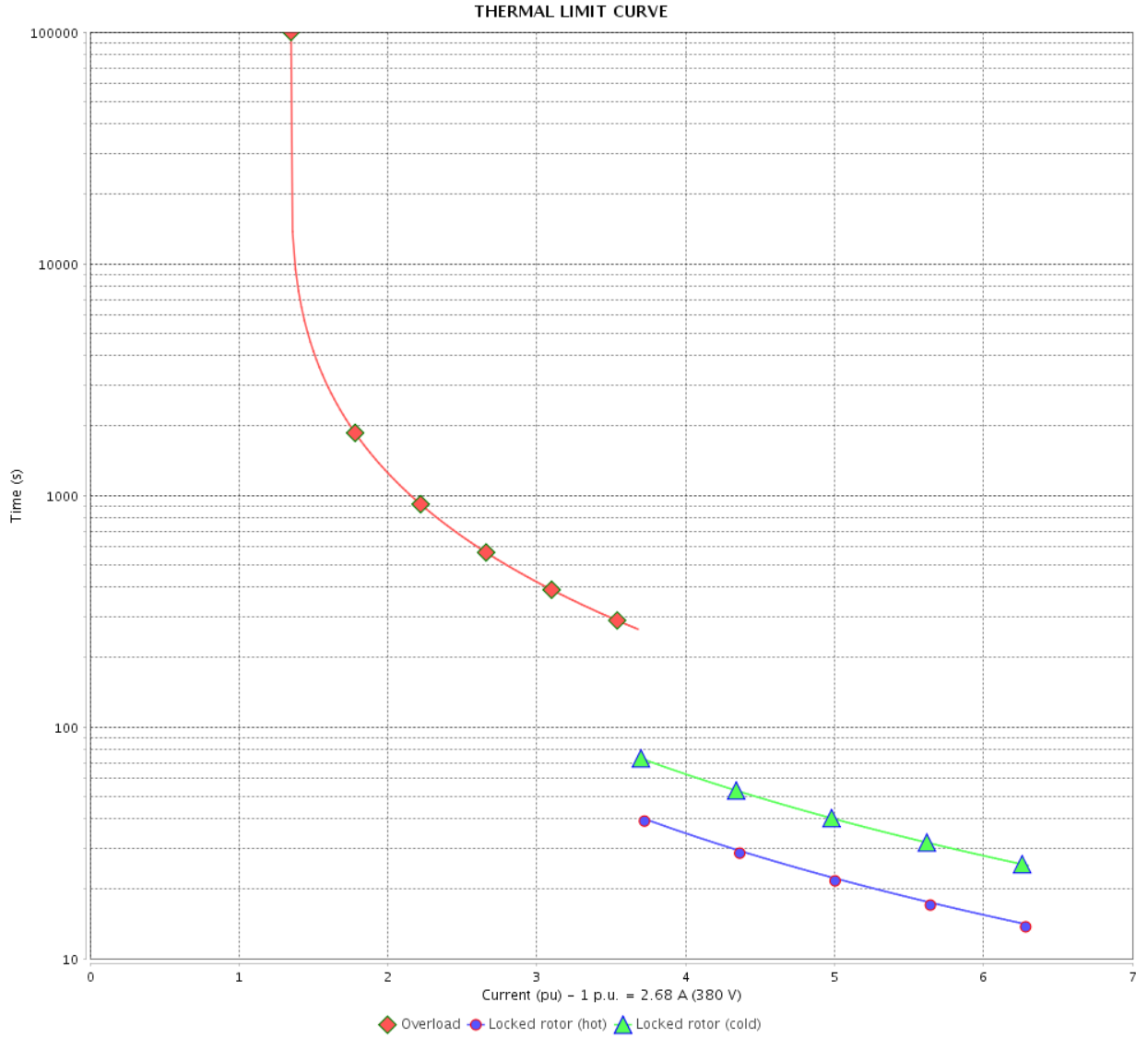
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Performance : 400 V 50 Hz 6P IE4

Rated current : 2.62 A	Moment of inertia (J) : 0.4879 sq.ft.lb
LRC : 6.9	Duty cycle : Cont.(S1)
Rated torque : 8.21 ft.lb	Insulation class : F
Locked rotor torque : 300 %	Service factor : 1.00
Breakdown torque : 330 %	Temperature rise : 80 K
Rated speed : 960 rpm	Design : B

Heating constant

Cooling constant

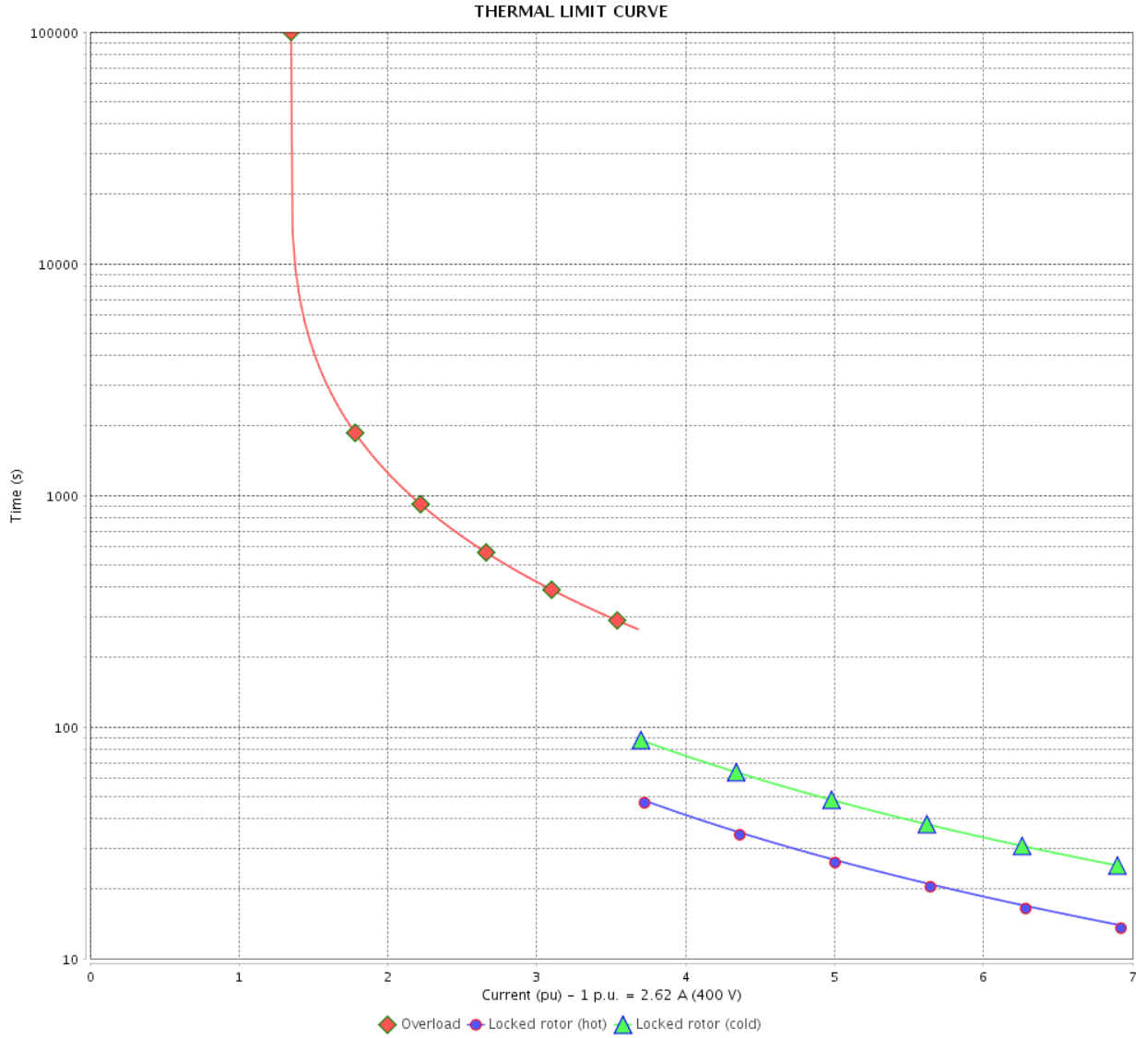
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THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12445703
Catalog # : 00152ET3E182T-W22

Performance : 415 V 50 Hz 6P IE4

Rated current	: 2.64 A	Moment of inertia (J)	: 0.4879 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 8.16 ft.lb	Insulation class	: F
Locked rotor torque	: 330 %	Service factor	: 1.00
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B

Heating constant

Cooling constant

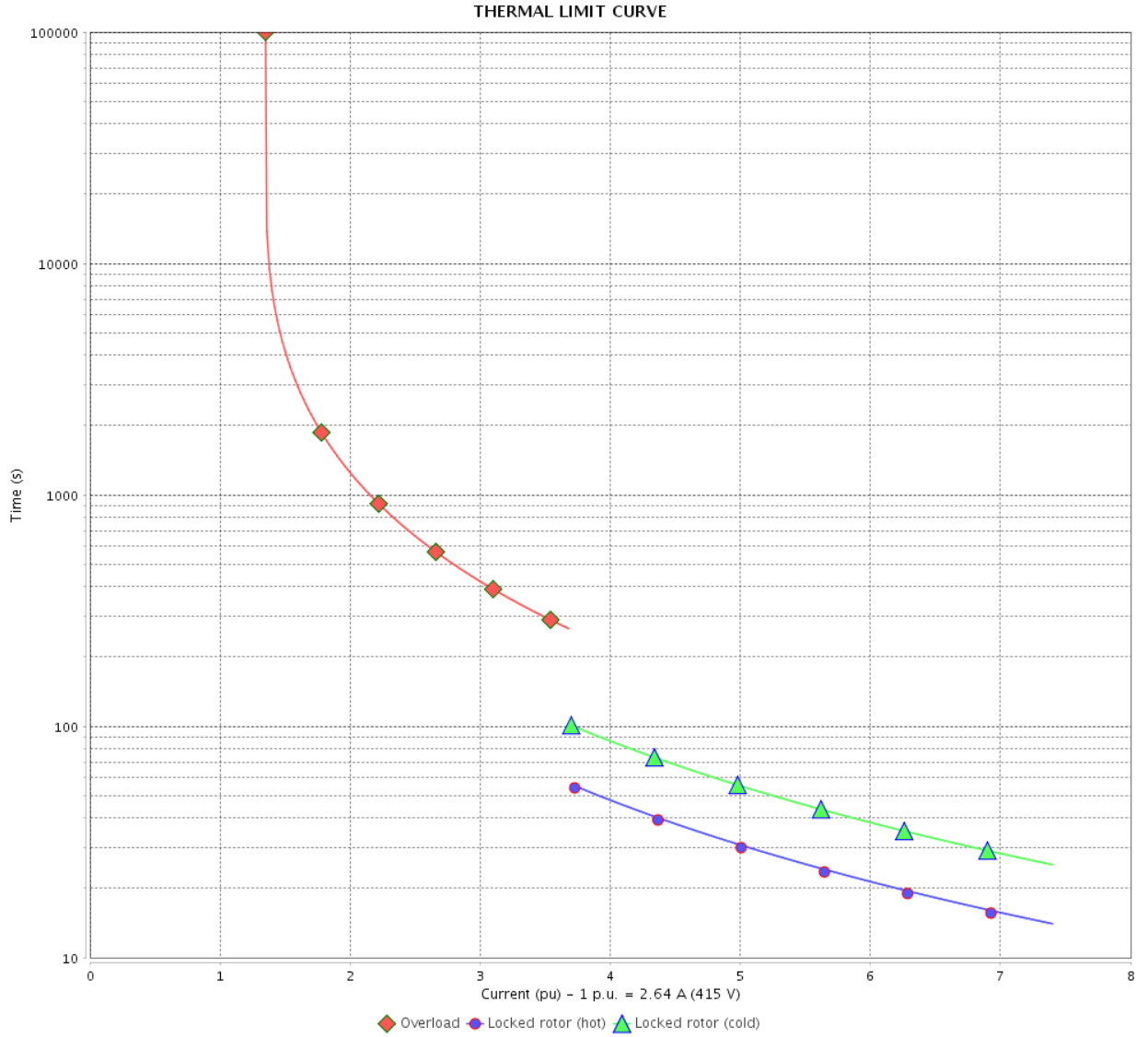
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

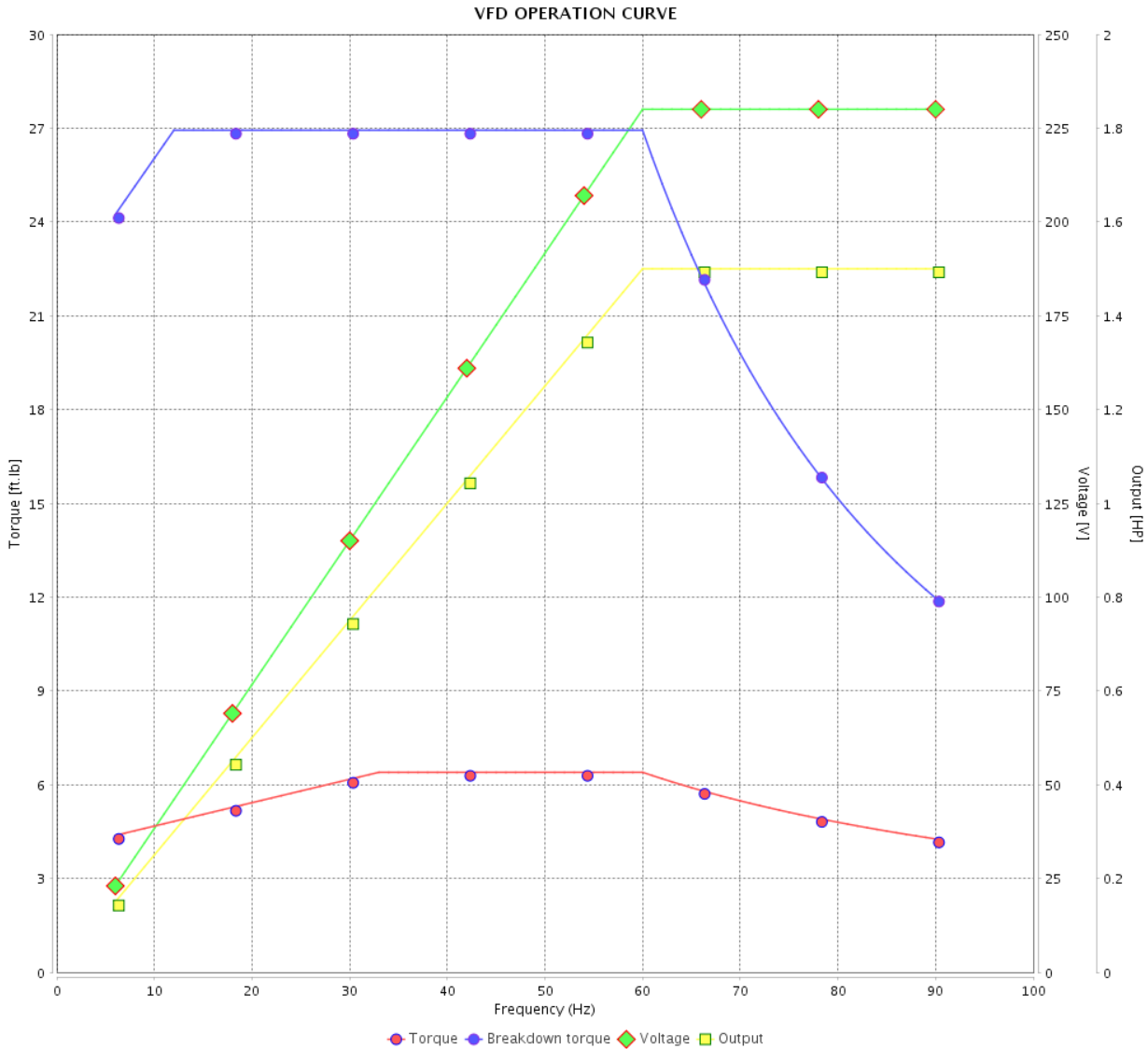


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12445703

Catalog # : 00152ET3E182T-W22



Performance : 230/460 V 60 Hz 6P

Rated current : 5.08/2.54 A
 LRC : 7.8
 Rated torque : 6.73 ft.lb
 Locked rotor torque : 320 %
 Breakdown torque : 400 %
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.4879 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

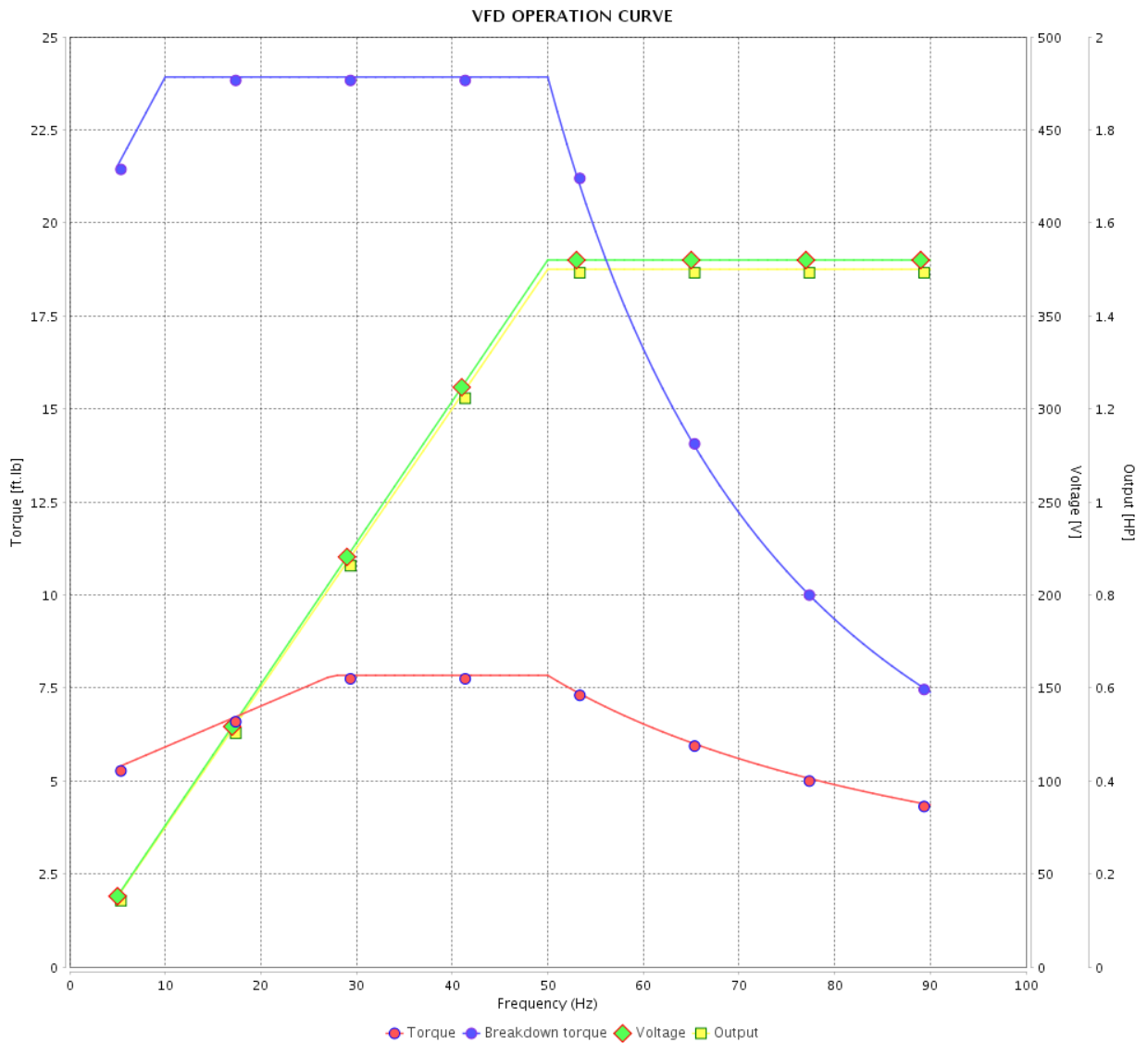


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12445703

Catalog # : 00152ET3E182T-W22



Performance : 380 V 50 Hz 6P IE4

Rated current : 2.68 A
 LRC : 6.3
 Rated torque : 8.25 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 290 %
 Rated speed : 955 rpm

Moment of inertia (J) : 0.4879 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



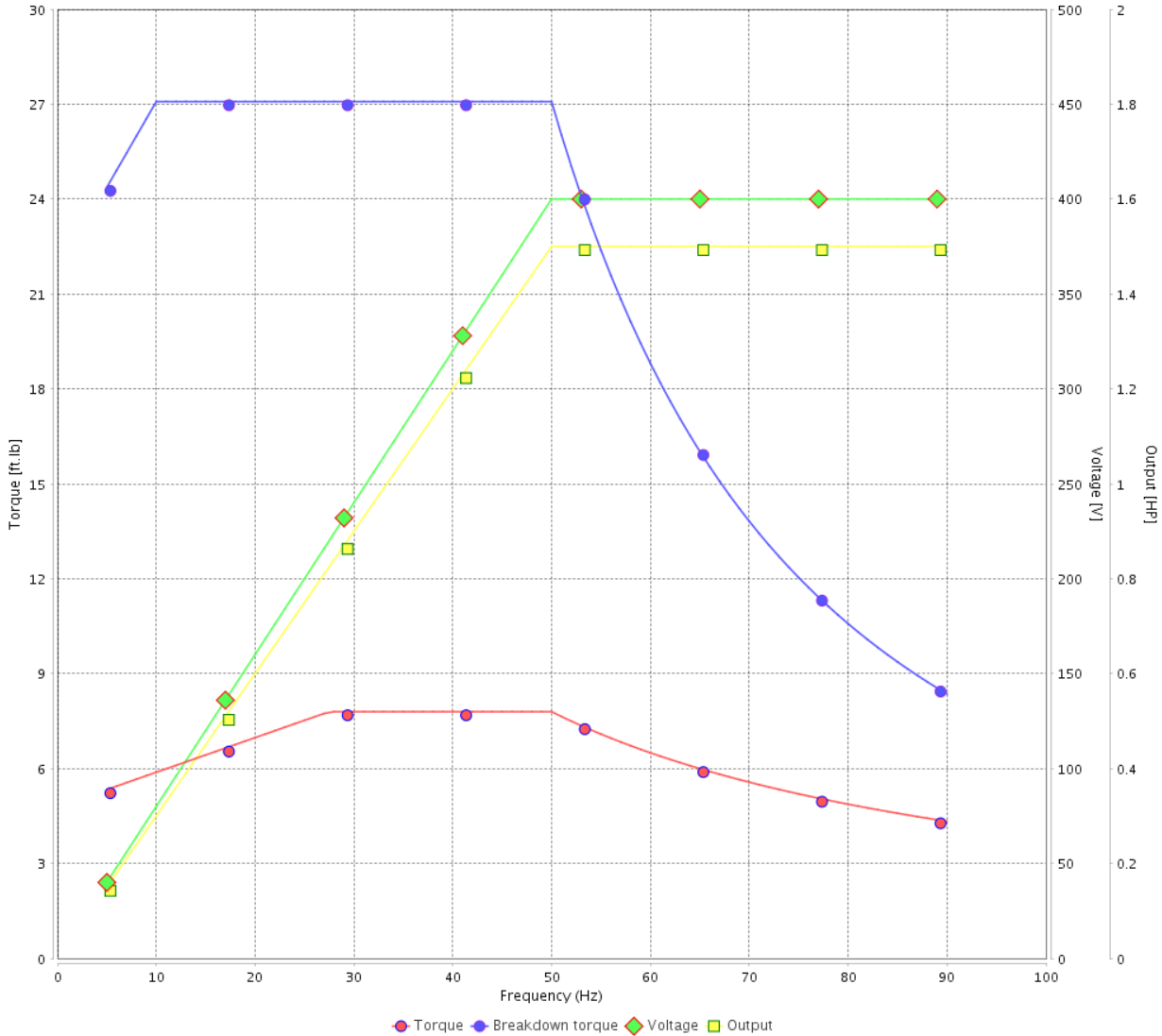
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12445703

Catalog # : 00152ET3E182T-W22

VFD OPERATION CURVE



Performance : 400 V 50 Hz 6P IE4

Rated current : 2.62 A
 LRC : 6.9
 Rated torque : 8.21 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 330 %
 Rated speed : 960 rpm

Moment of inertia (J) : 0.4879 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
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

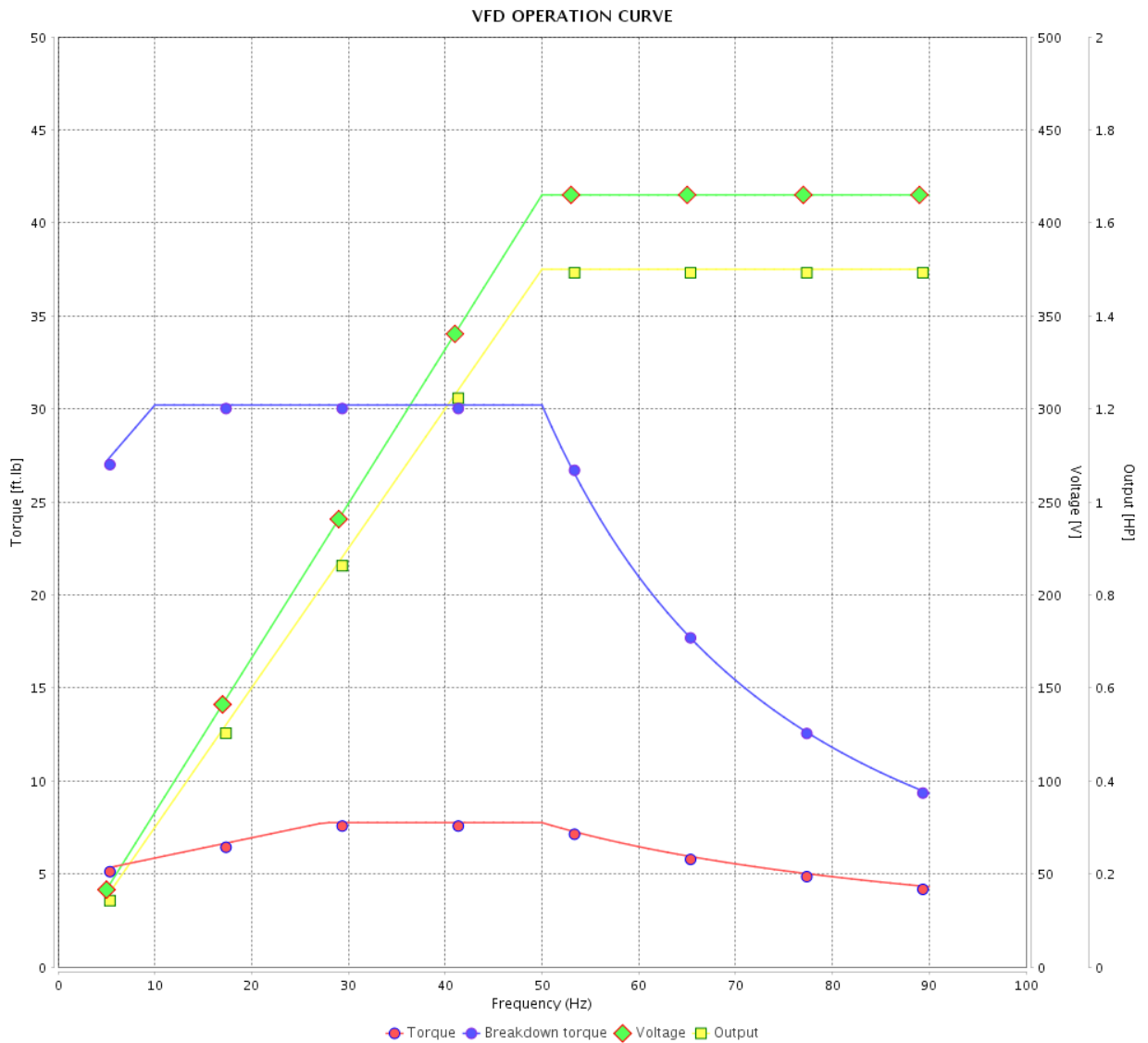


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Performance : 415 V 50 Hz 6P IE4

Rated current : 2.64 A
 LRC : 7.4
 Rated torque : 8.16 ft.lb
 Locked rotor torque : 330 %
 Breakdown torque : 370 %
 Rated speed : 965 rpm

Moment of inertia (J) : 0.4879 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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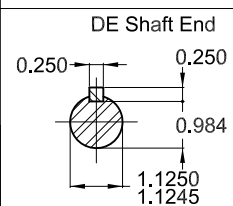
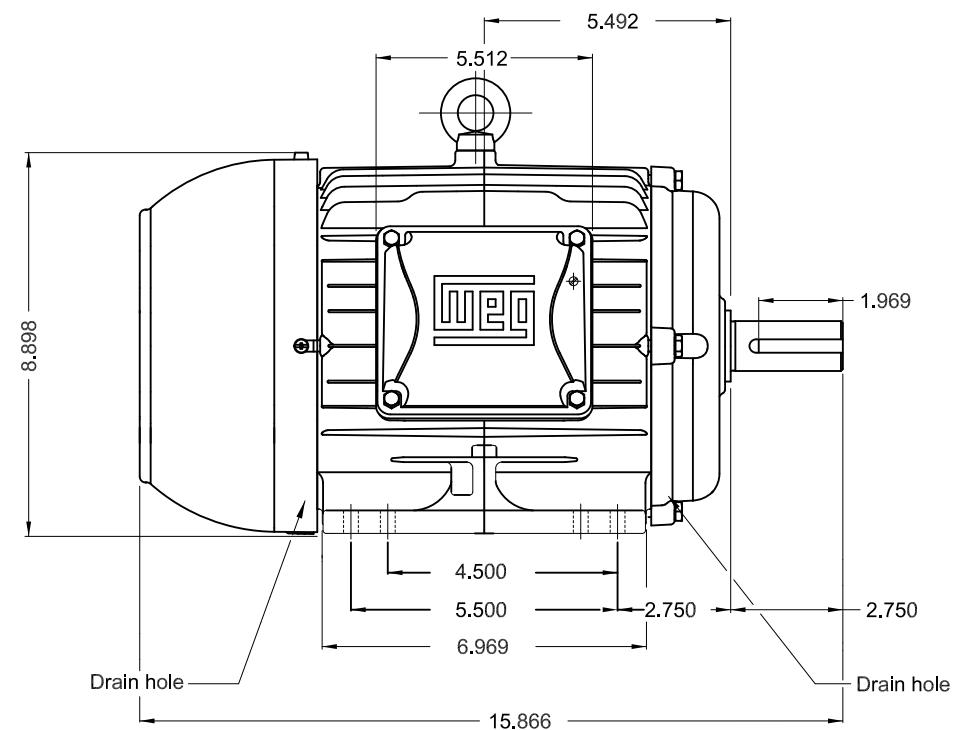
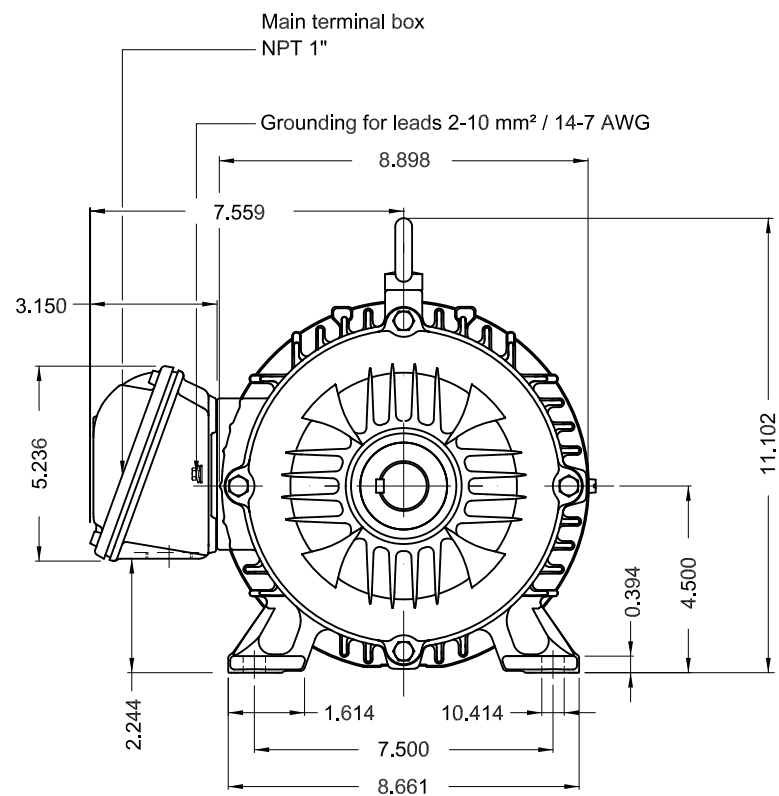
A

B

C

D

E



Color RAL 5009
 Painting plan 207A
 Mounting B3R(D)

1.5 HP 06 Poles 60 Hz

A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 182/4T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



SHEET 1 / 1

Dimensions in inches XME A3

MADE IN BRAZIL
12445703



W22

MODEL 00152ET3E182T-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. 182/4T 1000m.a.s.l. IP55 TEFC 92lb

V 230/460

A 5.08/2.54

HP 1.5

kW 1.1

SF 1.25

SFA 6.35/3.17

RPM 1170

PF 0.62

AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 87.5%

DUTY CONT.

DES B Code M

USABLE @208V 5.62A SF 1.15 SFA 6.46

1.5HP 1.1kW 50Hz 380V 2.68A 955RPM SF 1.00 EFF 85.5% (IE4)

