

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	13662713	
		Catalog # :	02536ET3E256T-S	
Frame	: 254/6T	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	: 230 lb	
Protection degree	: IP55	Moment of inertia (J)	: 1.31 sq.ft.lb	
Design	: A			
Output [HP]	25	20	20	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	57.0/28.5	55.8/27.9	50.4/26.7	
L. R. Amperes [A]	473/237	441/220	428/227	
LRC [A]	8.3x(Code J)	7.9x(Code J)	8.5x(Code J)	
No load current [A]	20.1/10.0	19.8/9.91	20.3/10.8	
Rated speed [RPM]	3530	2930	2940	
Slip [%]	1.94	2.33	2.00	
Rated torque [ft.lb]	37.2	35.8	35.7	
Locked rotor torque [%]	240	229	260	
Breakdown torque [%]	340	330	370	
Service factor	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	14s (cold) 8s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	
Noise level ²	75.0 dB(A)	72.0 dB(A)	72.0 dB(A)	
Efficiency (%)	25%	90.8	92.6	92.4
	50%	91.0	92.3	92.1
	75%	91.7	92.4	92.6
	100%	91.7	91.9	92.1
Power Factor	25%	0.50	0.50	0.45
	50%	0.77	0.77	0.73
	75%	0.85	0.86	0.83
	100%	0.89	0.89	0.88
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3	Foundation loads		
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 519 lb	
		Max. compression	: 749 lb	
Lubrication interval	: 15797 h 20000 h			
Lubricant amount	: 13 g 8 g			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 63.0A SF 1.00 SFA 63.0A				
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



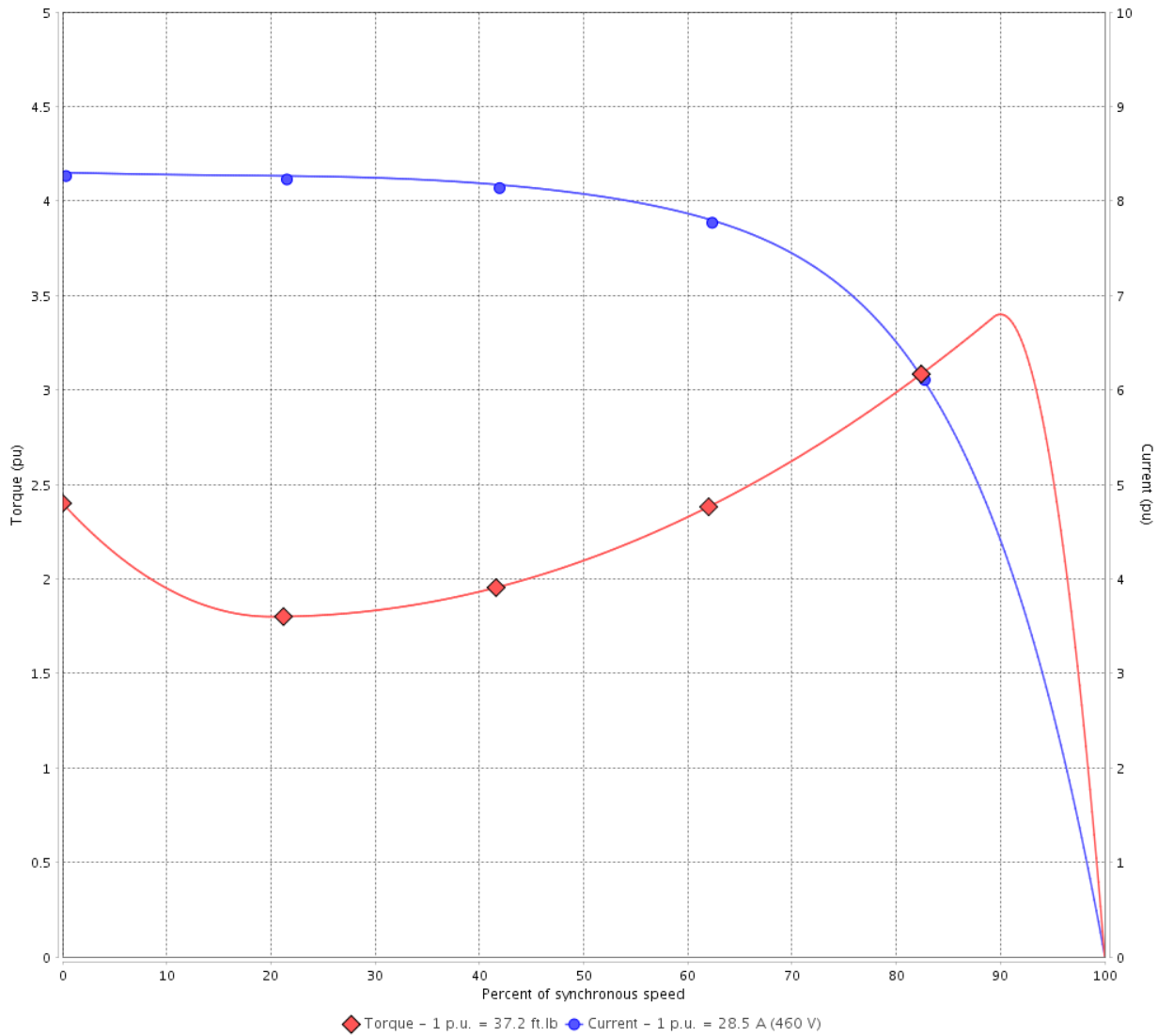
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13662713

Catalog # : 02536ET3E256T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 57.0/28.5 A	Moment of inertia (J)	: 1.31 sq.ft.lb
LRC	: 8.3	Duty cycle	: Cont.(S1)
Rated torque	: 37.2 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 3530 rpm	Design	: A

Locked rotor time : 14s (cold) 8s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



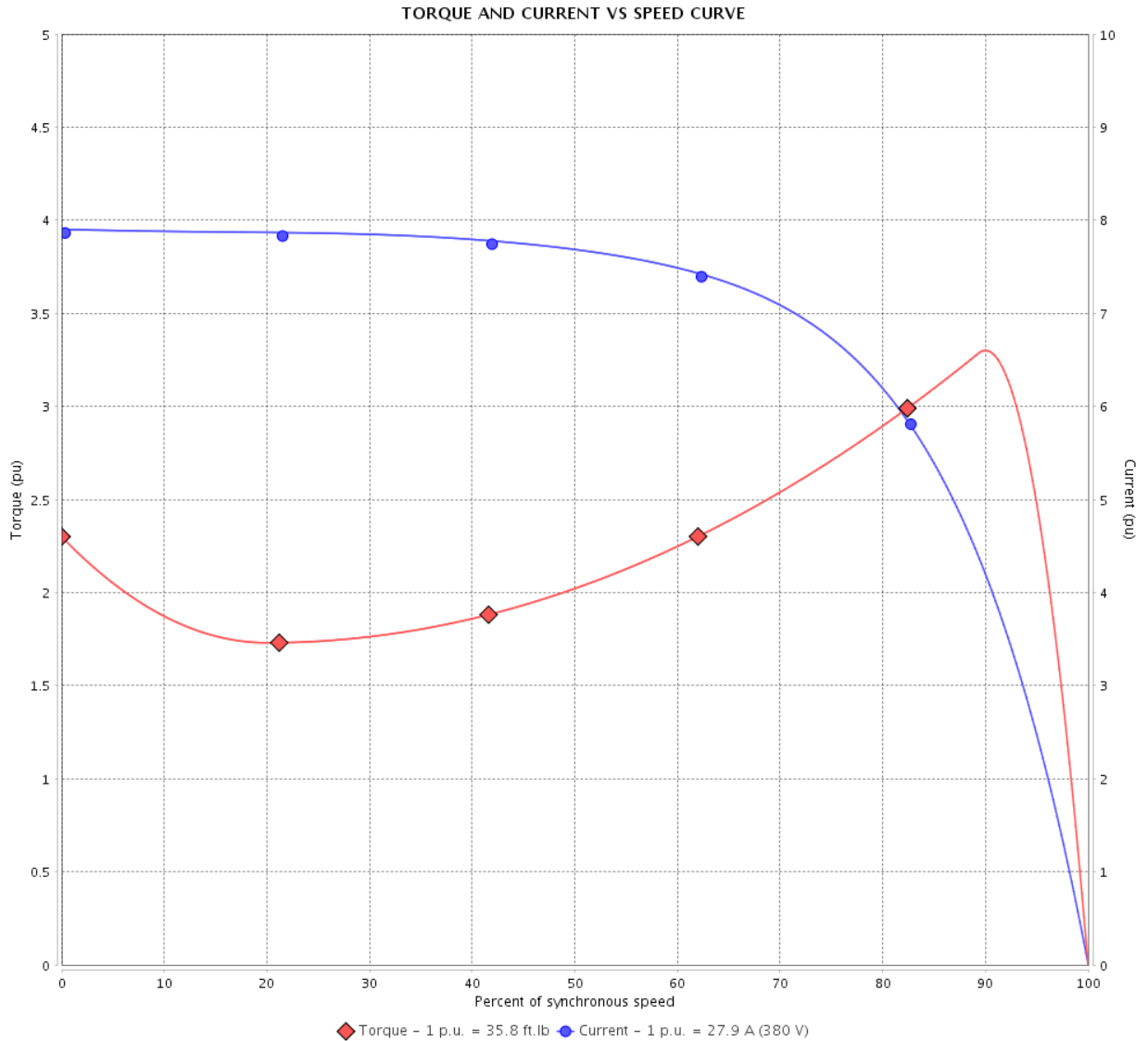
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13662713

Catalog # : 02536ET3E256T-S



Performance : 190/380 V 50 Hz 2P

Rated current : 55.8/27.9 A
 LRC : 7.9
 Rated torque : 35.8 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 330 %
 Rated speed : 2930 rpm

Moment of inertia (J) : 1.31 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

Locked rotor time : 14s (cold) 8s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

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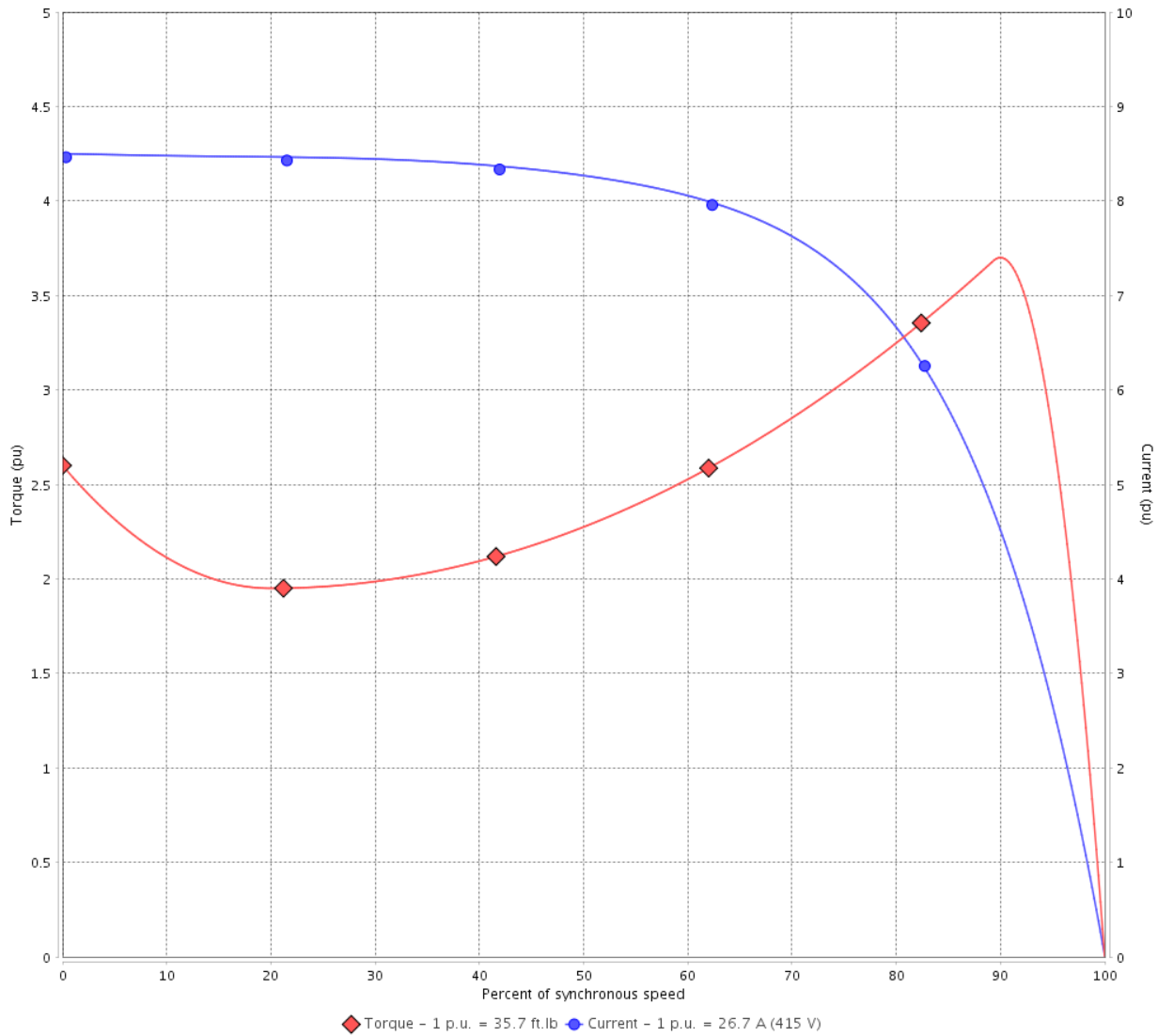
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Catalog # : 02536ET3E256T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 50.4/26.7 A	Moment of inertia (J)	: 1.31 sq.ft.lb
LRC	: 8.5	Duty cycle	: Cont.(S1)
Rated torque	: 35.7 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.15
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 2940 rpm	Design	: A

Locked rotor time : 14s (cold) 8s (hot)

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LOAD PERFORMANCE CURVE

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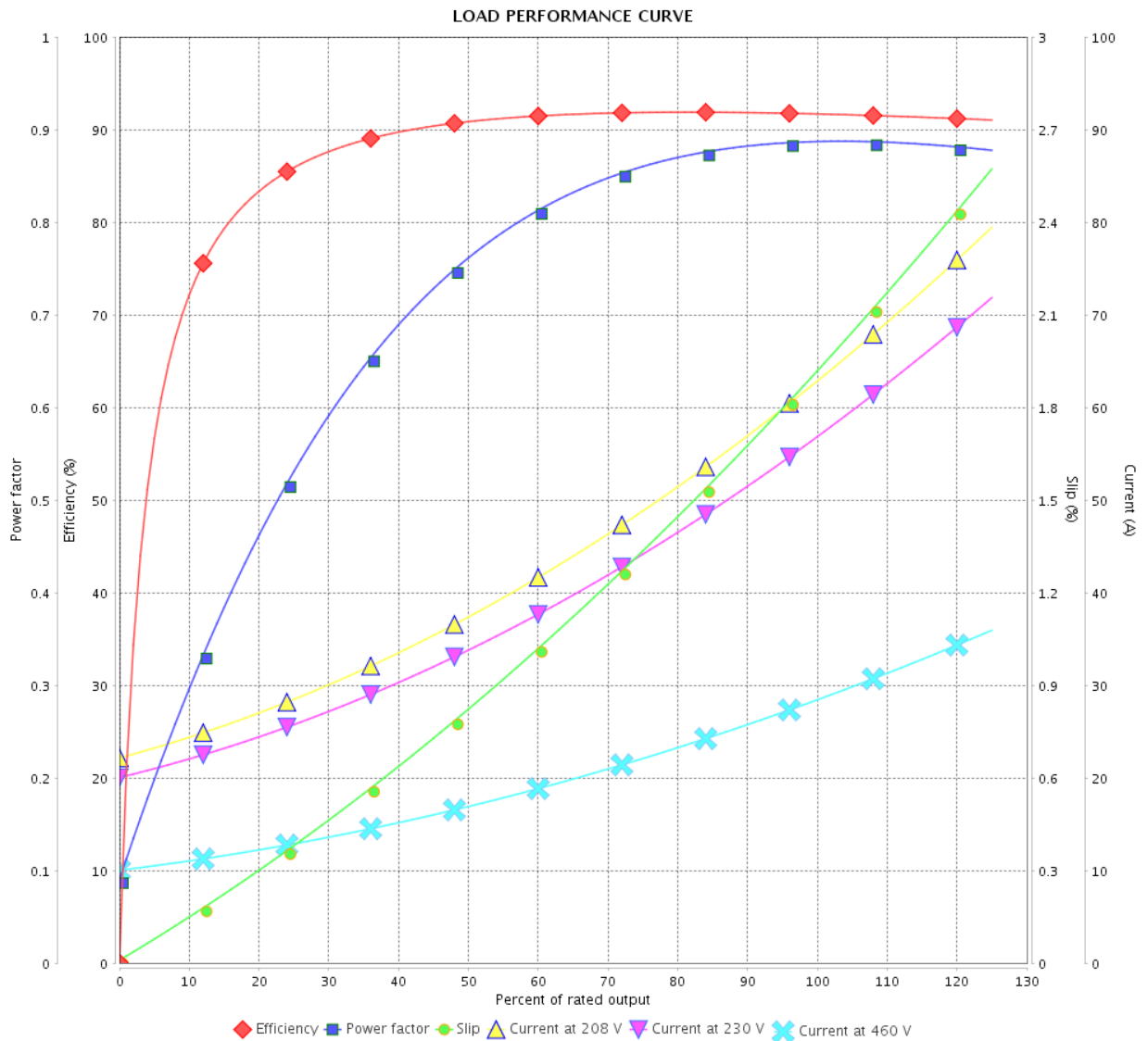


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 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

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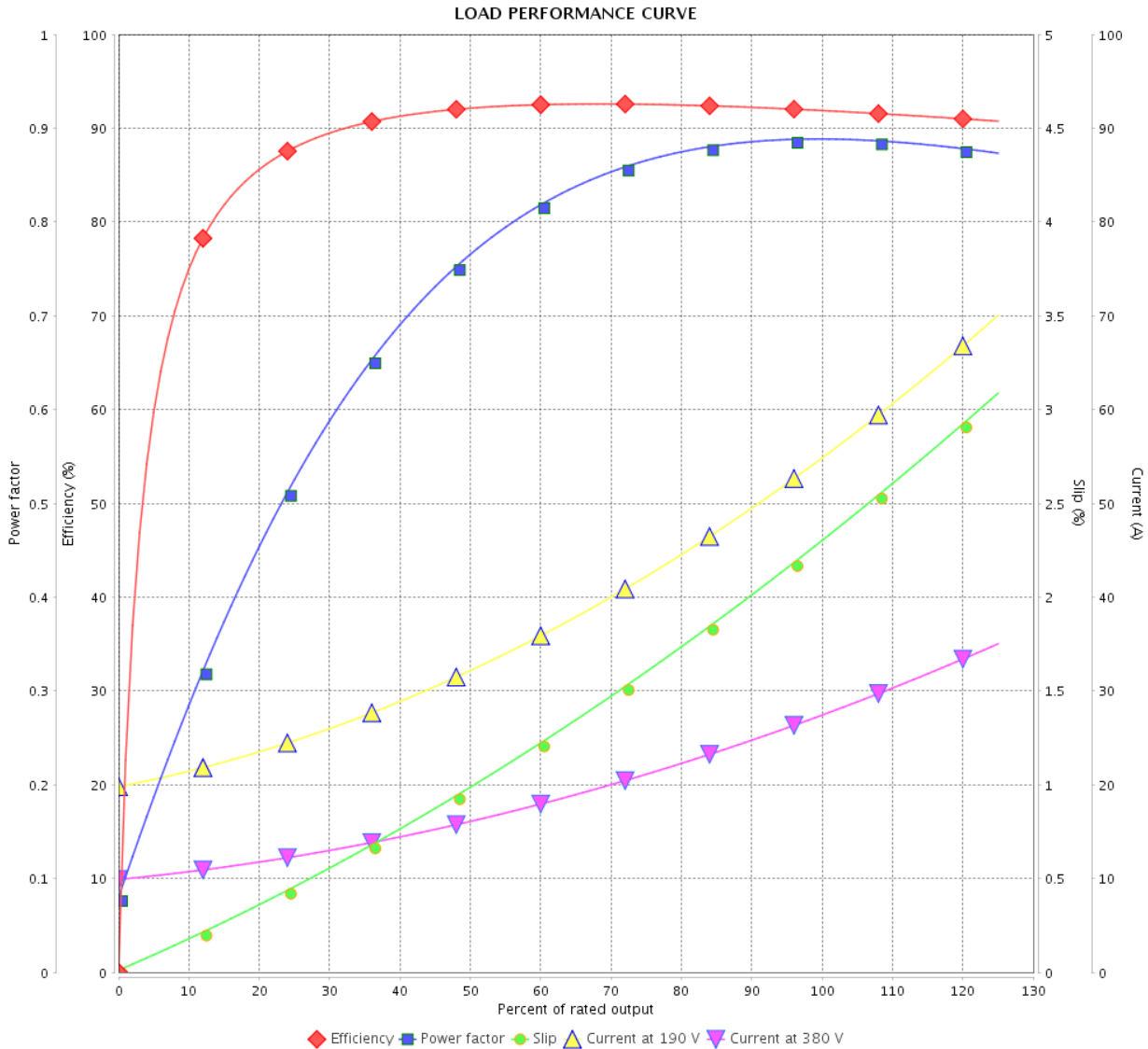


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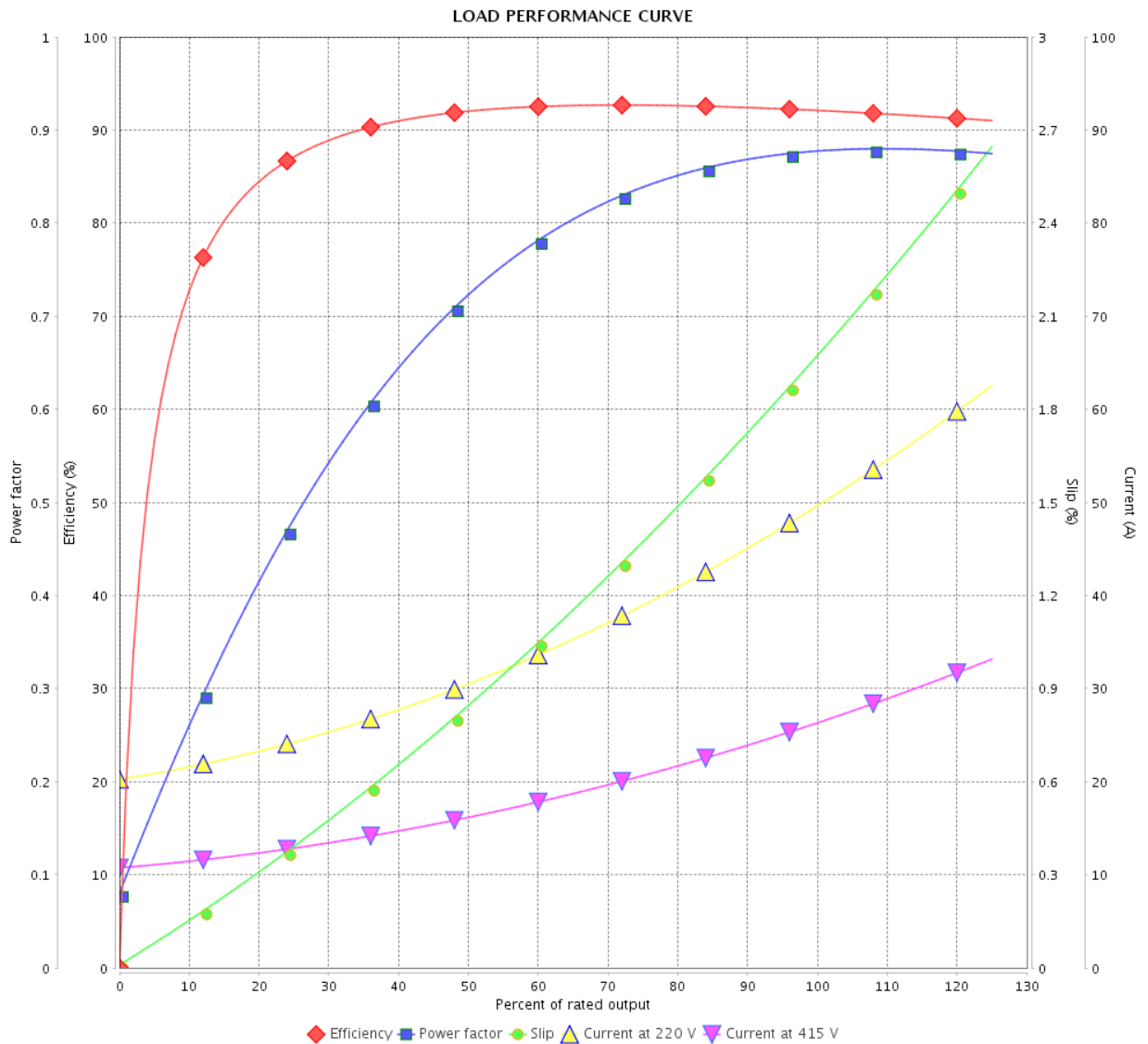


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THERMAL LIMIT CURVE



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Rated speed : 3530 rpm	Design : A

Heating constant

Cooling constant

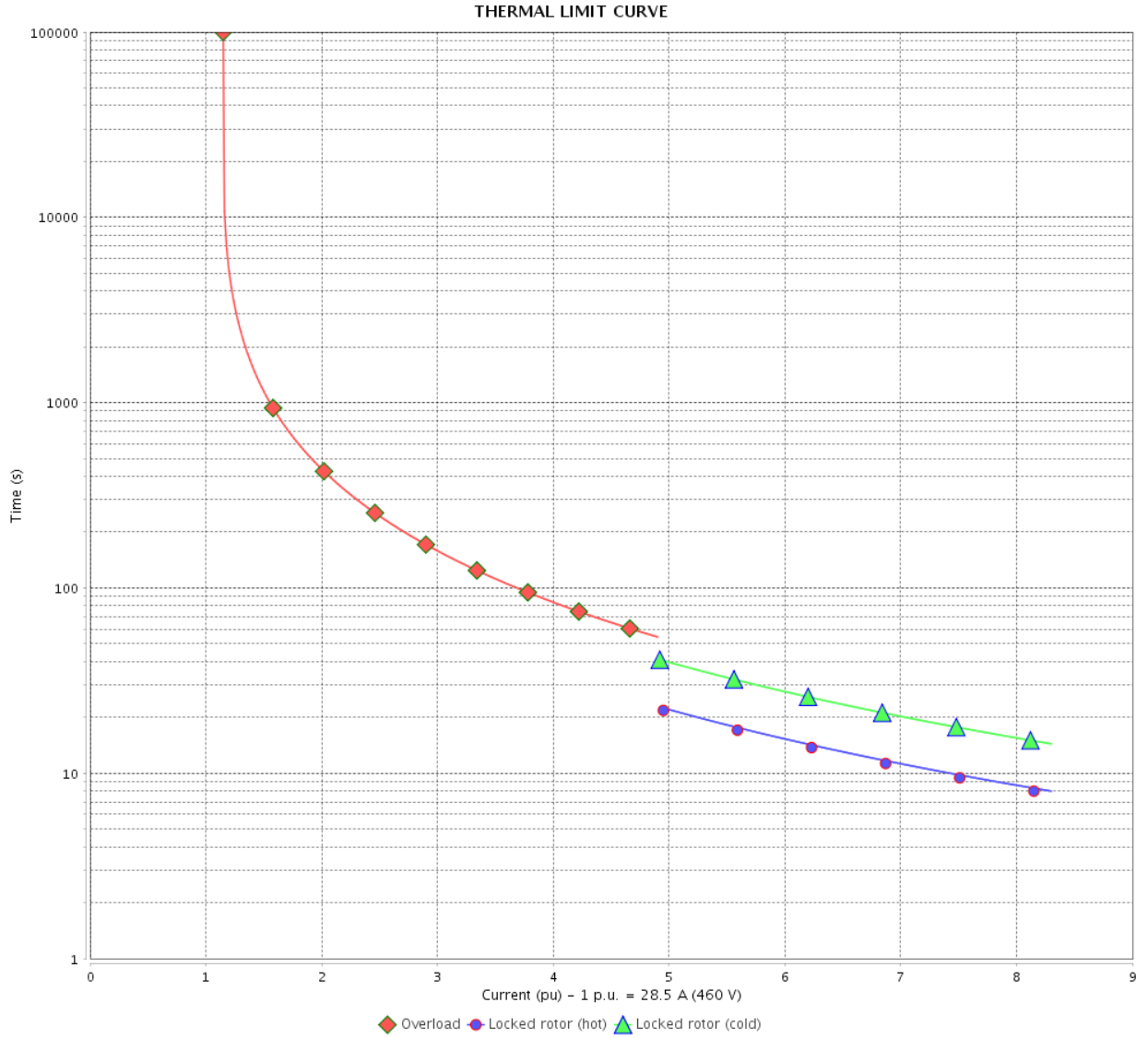
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Cooling constant

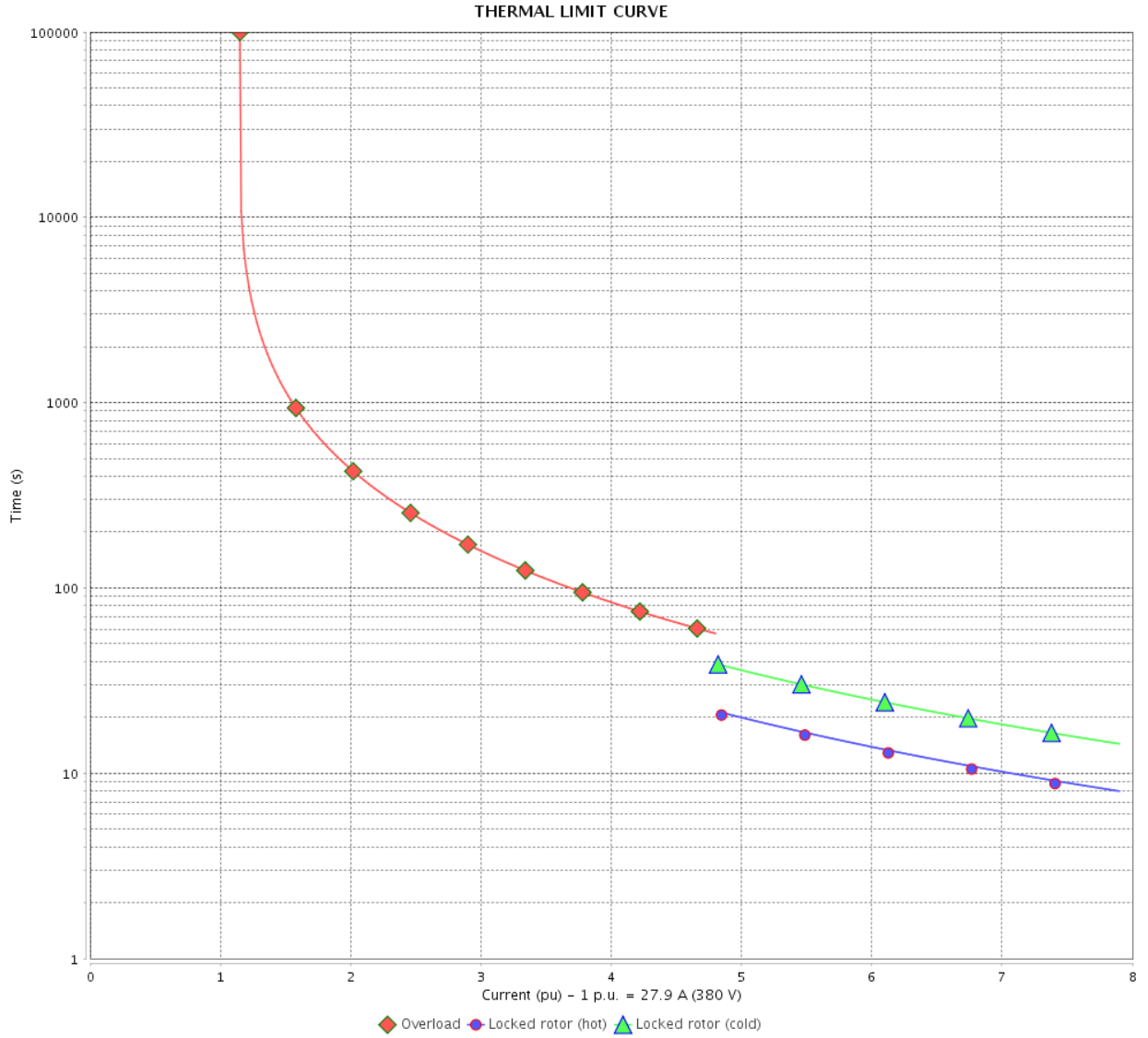
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Cooling constant

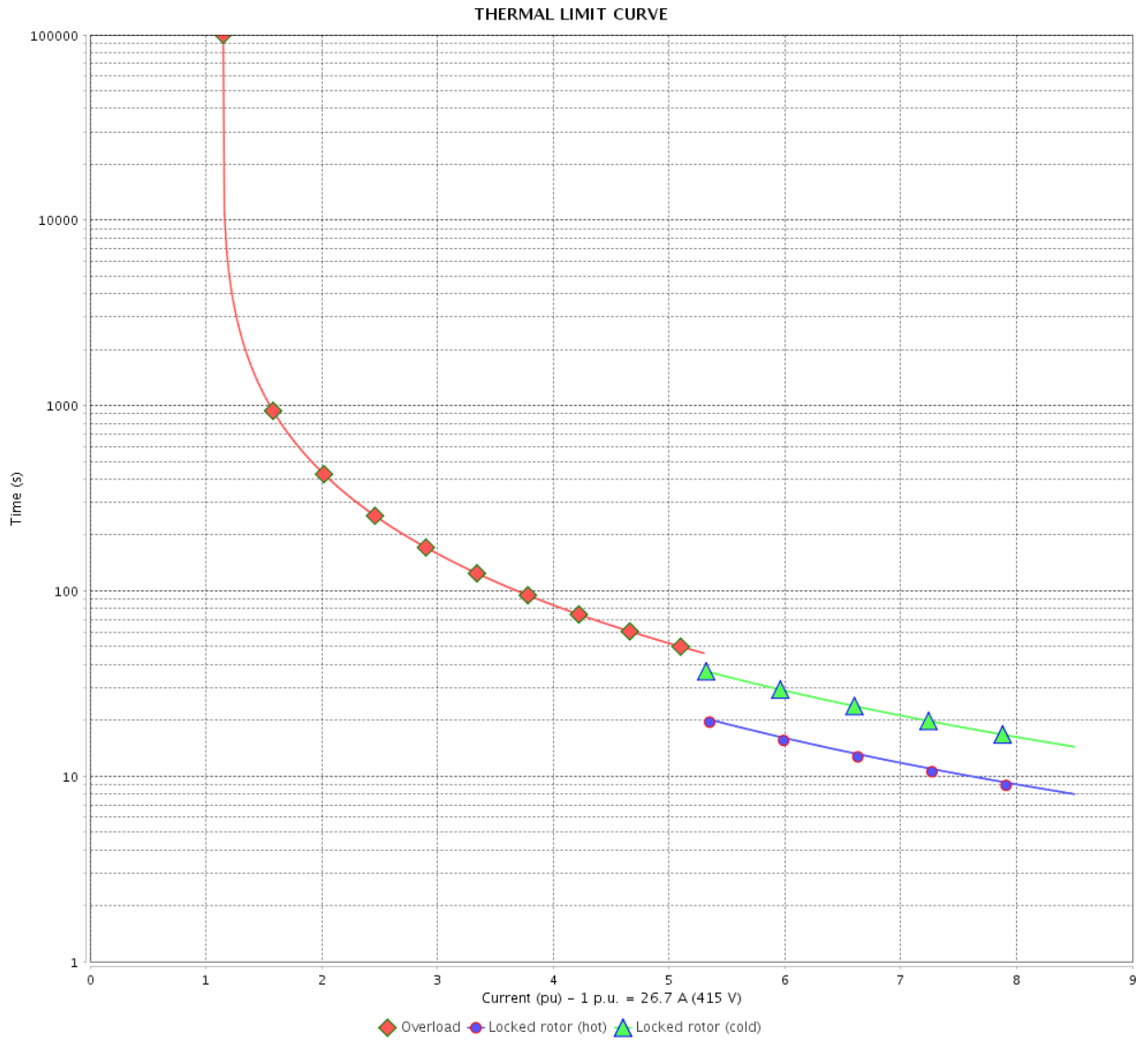
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

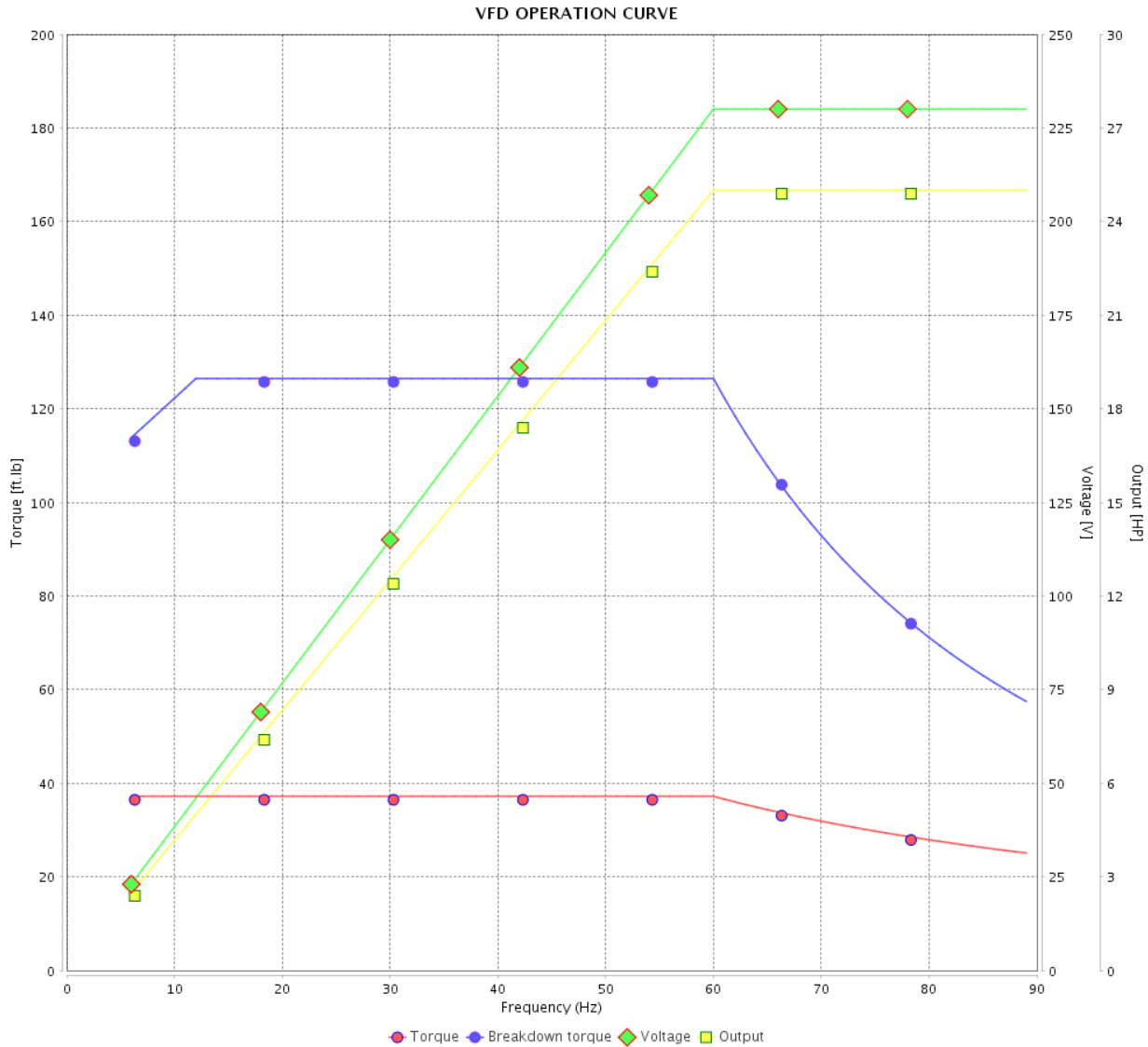


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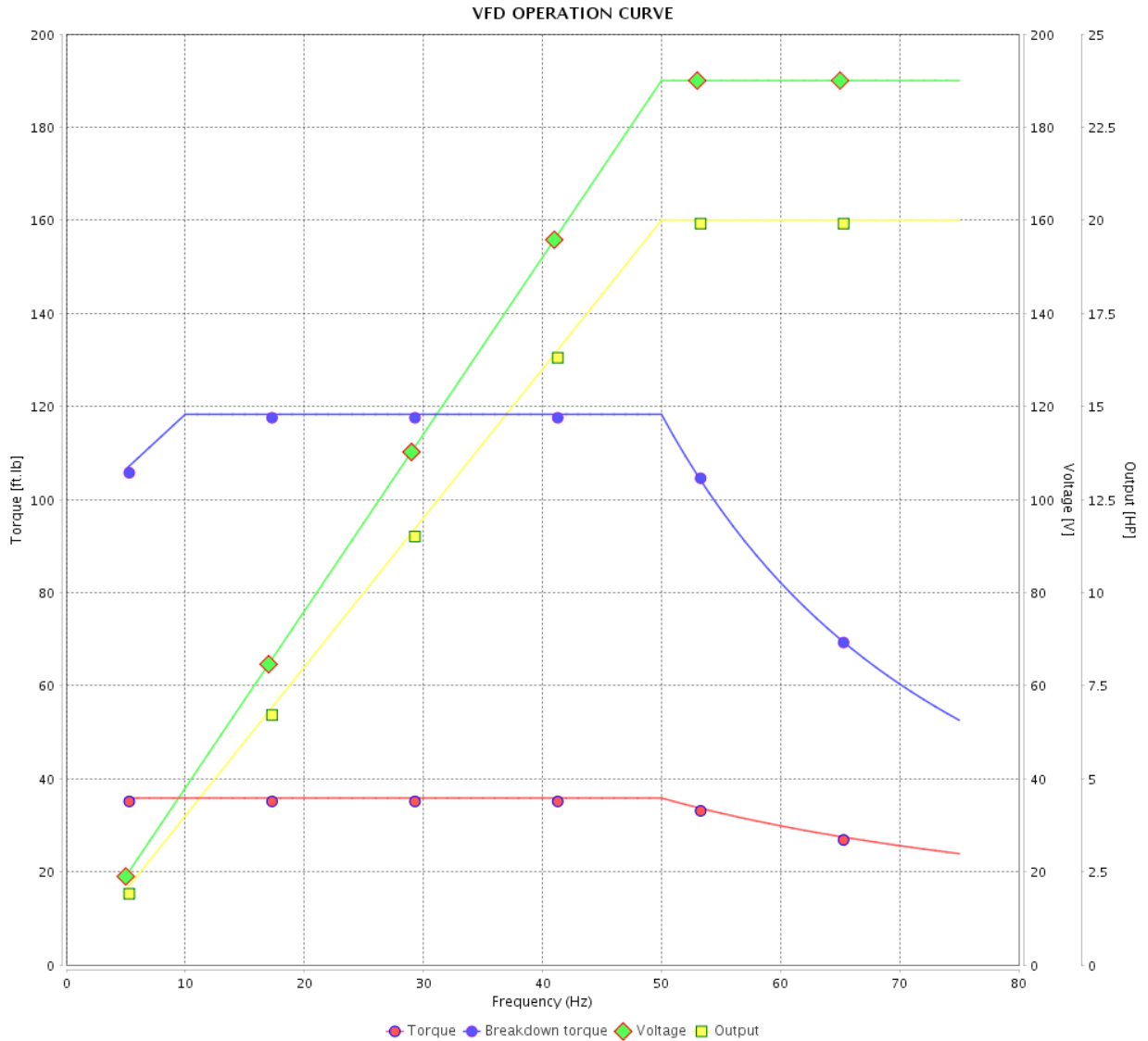


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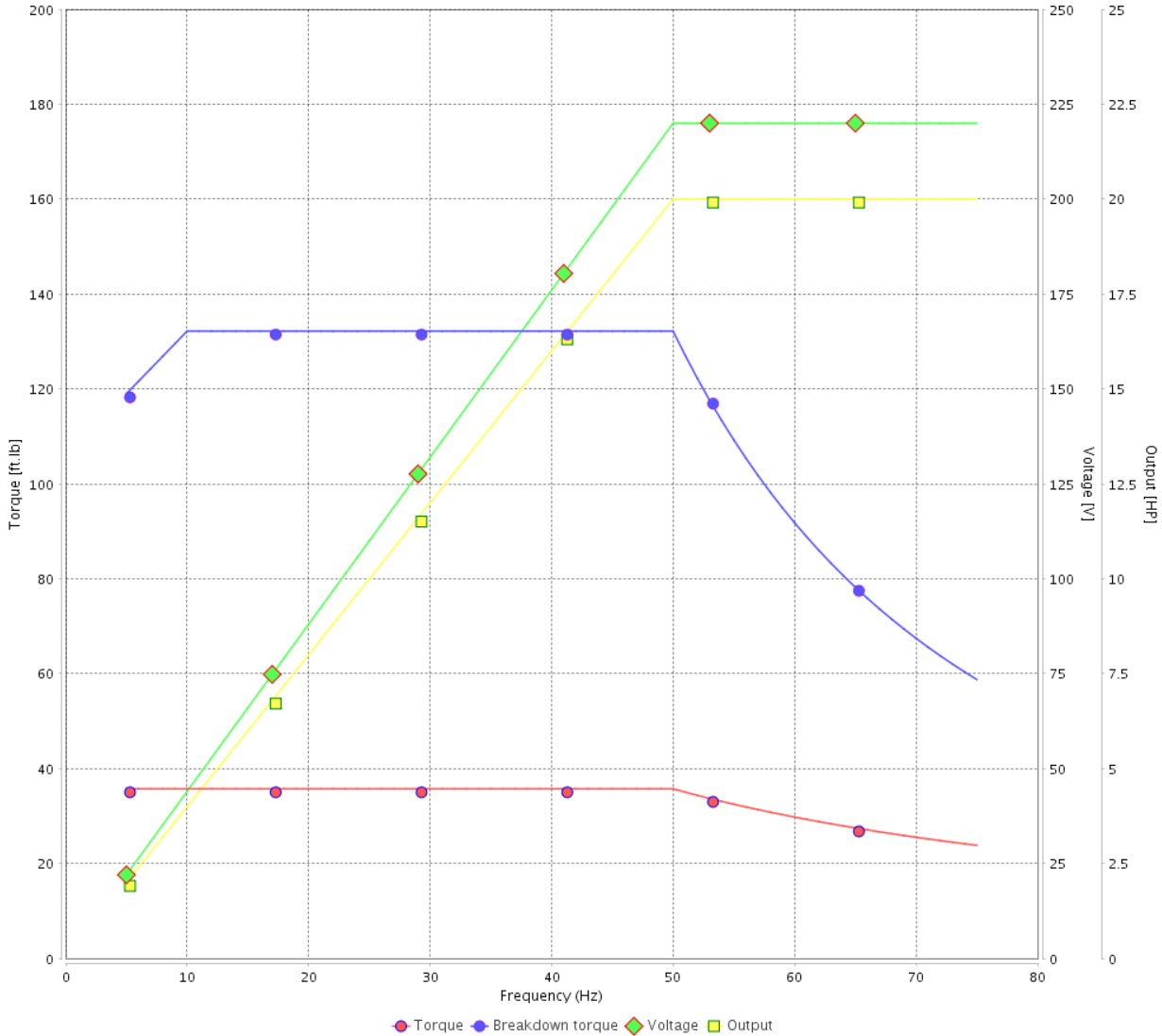
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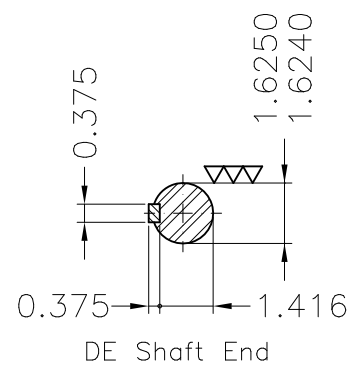
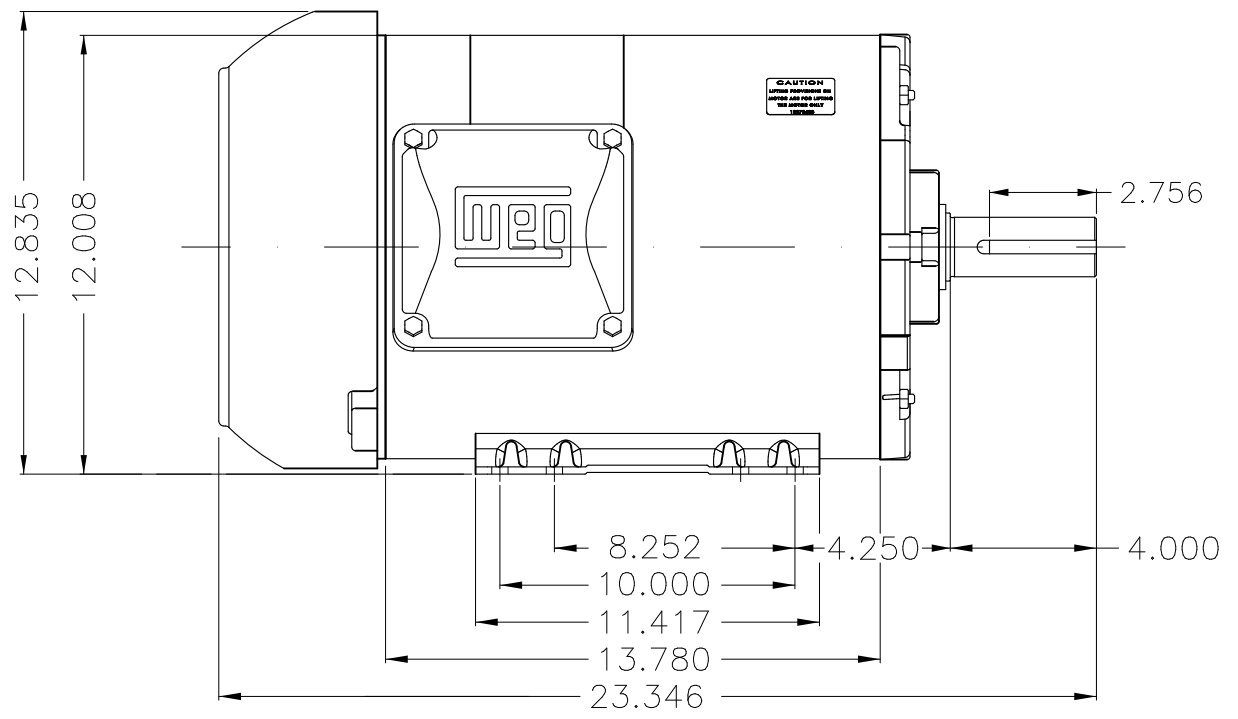
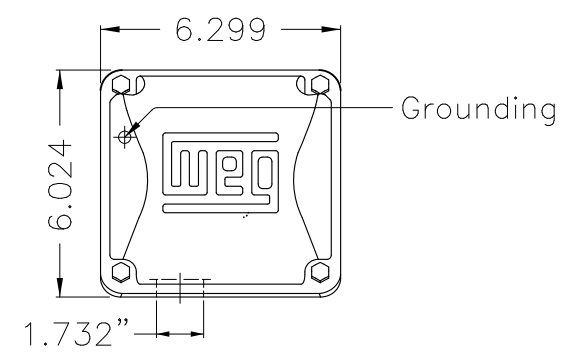
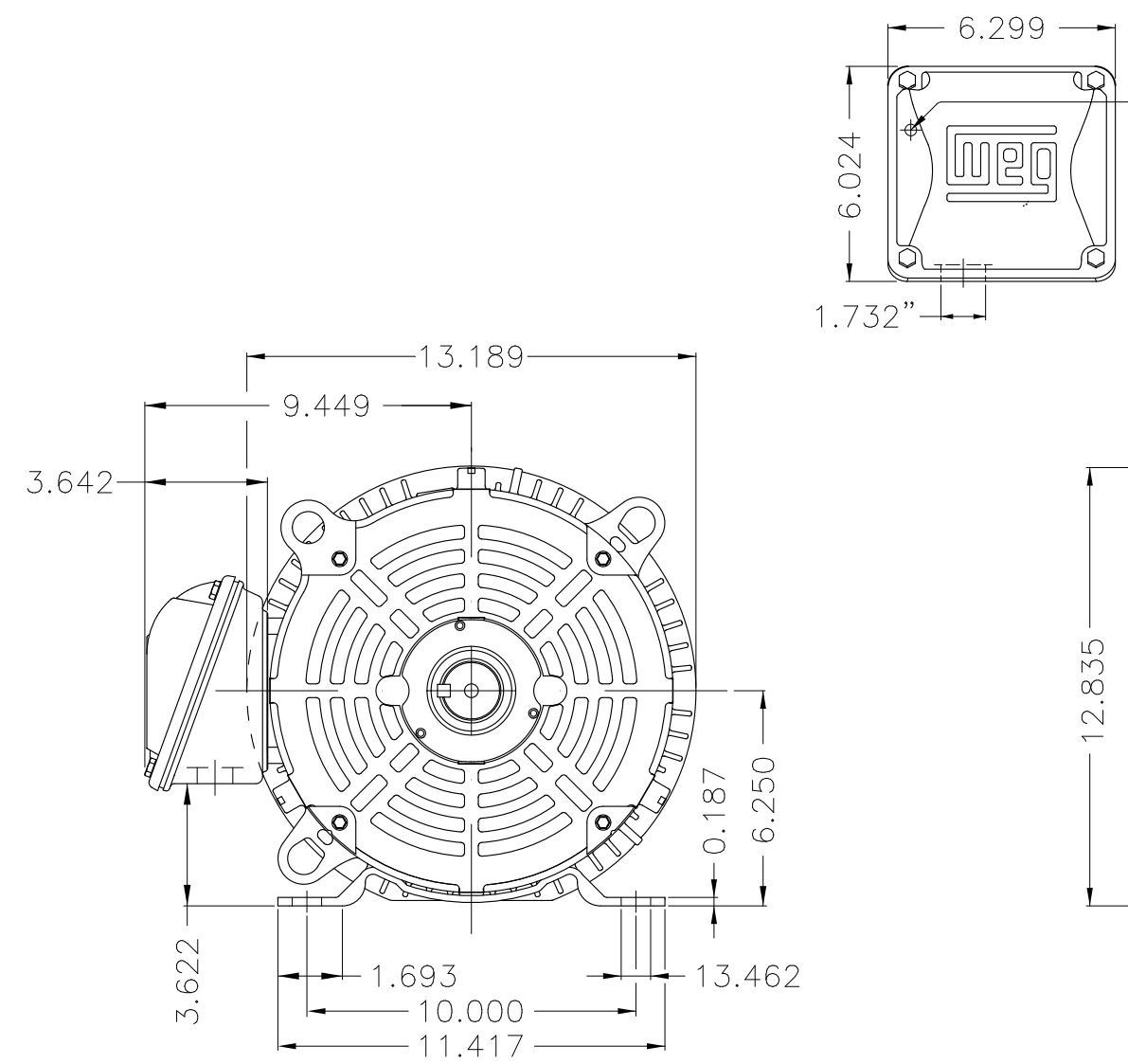
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A
B
C
D
E



Dimensions in inches

Design A
Color Munsell N 1 matte black
Painting plan 207N
Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 254/6T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.		WMO Jaragua do Sul					

25 HP 02 Poles 60 Hz

REL DT. WMO Jaragua do Sul Product Engineering SHEET 1 / 1

PREVIEW
WDD



NEMA
Premium



MADE IN MEXICO

MAT: 13662713 CC029A
W01.TE0IC0X0N
MODEL 02536ET3E256T-S
24NOV2021 S/N:

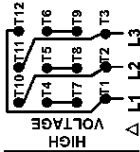
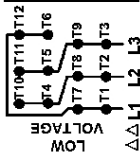
For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)
CT 2:1/VT 1000:1

PH 3	Hz 60	HP 25
FR 254/6T		KW 18.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 57.0/28.5
INS CL F AT 80K	IP55	SFA 65.5/32.8
AMB 40°C	DES A	SF 1.15
ENCL TEFC	CODE J	PF 0.89
USABLE @ 208V 63.0A		RPM 3530
SF1.00		NEMA NOM. EFF 91.7%

ALTERNATE RATING: 20HP 50Hz 190-220/380-415V SF1.15
55.8-49.6/27.9-26.3A 2930RPM EFF 91.9% (IE3) IEC 60034-1

For safe area-Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 10:1 CT

DE 6309-Z-C3 ODE 6208-Z-C3 MOBIL POLYREX EM 15797h



T1-BLU T2-WHT
T3-ORG T4-YEL
T5-BLK T6-GRY
T7-PNK T8-RED
T9-BRK RED
T10-CURRY
T11-GRN T12-VLT

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.



AVERTISSEMENT: Le moteur doit être mis à la terre conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

