

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: Rolled Steel NEMA Premium Efficiency Three-Phase	Product code :	12674791
		Catalog # :	00158OT3E145T-S
Frame	: 143/5T	Cooling method	: IC01 - ODP
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	: 19.3 kg
Design	: B	Moment of inertia (J)	: 0.0060 kgm ²
Output [HP]	1.5	1.5	1.5
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	4.14/2.07	4.84/2.42	4.41/2.34
L. R. Amperes [A]	36.0/18.0	31.0/15.5	30.9/16.4
LRC [A]	8.7x(Code L)	6.4x(Code H)	7.0x(Code J)
No load current [A]	2.40/1.20	2.36/1.18	2.41/1.28
Rated speed [RPM]	1760	1440	1445
Slip [%]	2.22	4.00	3.67
Rated torque [kgfm]	0.619	0.756	0.753
Locked rotor torque [%]	280	190	220
Breakdown torque [%]	330	250	280
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%	83.6	84.0
	50%	84.0	83.6
	75%	86.5	84.8
	100%	86.5	83.9
Power Factor	25%	0.32	0.35
	50%	0.56	0.60
	75%	0.69	0.73
	100%	0.77	0.81
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads	
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 50 kgf
		Max. compression	: 70 kgf
Lubrication interval	: - -		
Lubricant amount	: - -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 4.58A SF 1.00 SFA 4.58A			
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

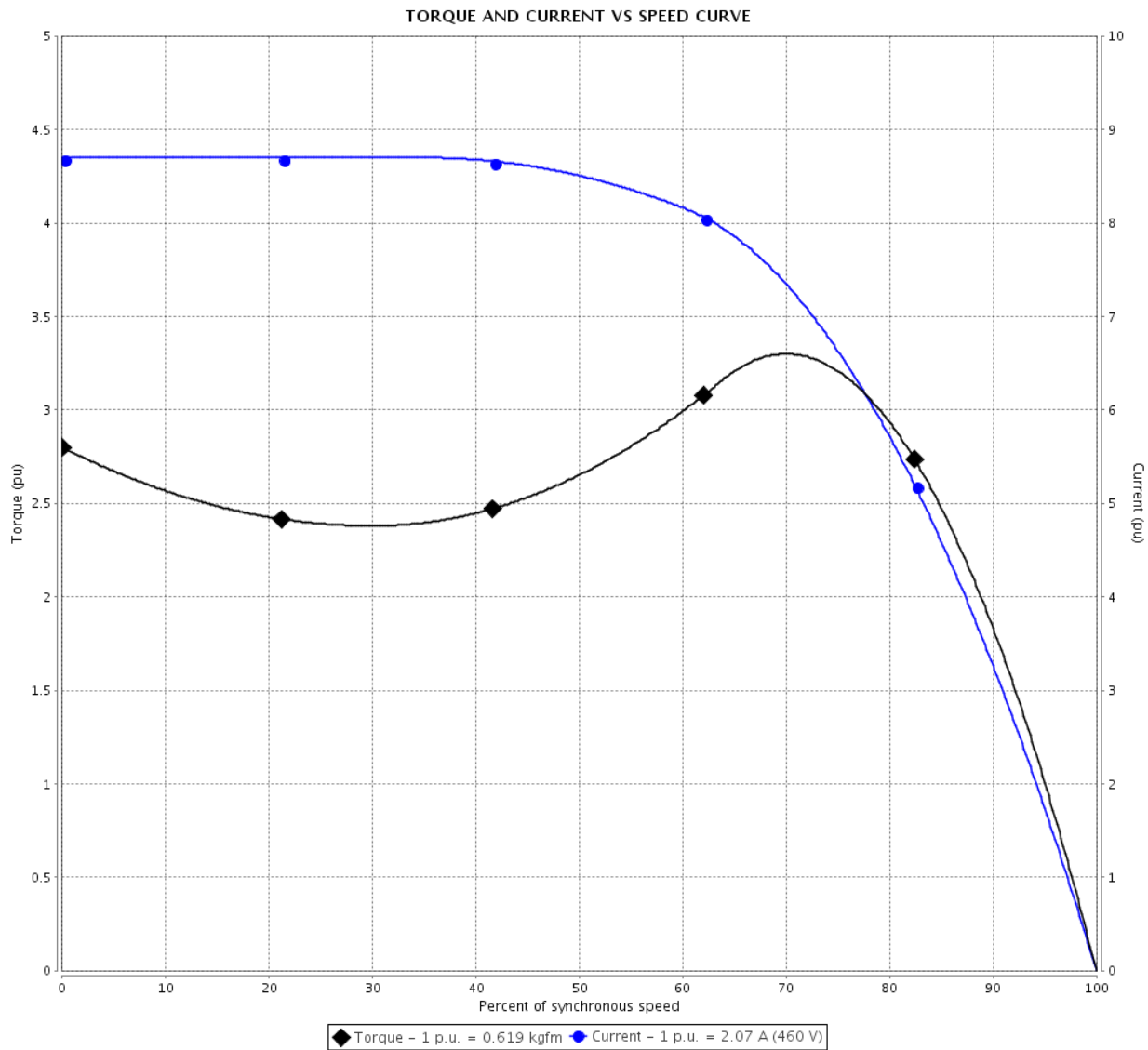


Customer :

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Product code : 12674791

Catalog # : 00158OT3E145T-S



Performance : 230/460 V 60 Hz 4P

Rated current	: 4.14/2.07 A	Moment of inertia (J)	: 0.0060 kgm ²
LRC	: 8.7	Duty cycle	: Cont.(S1)
Rated torque	: 0.619 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	:
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

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

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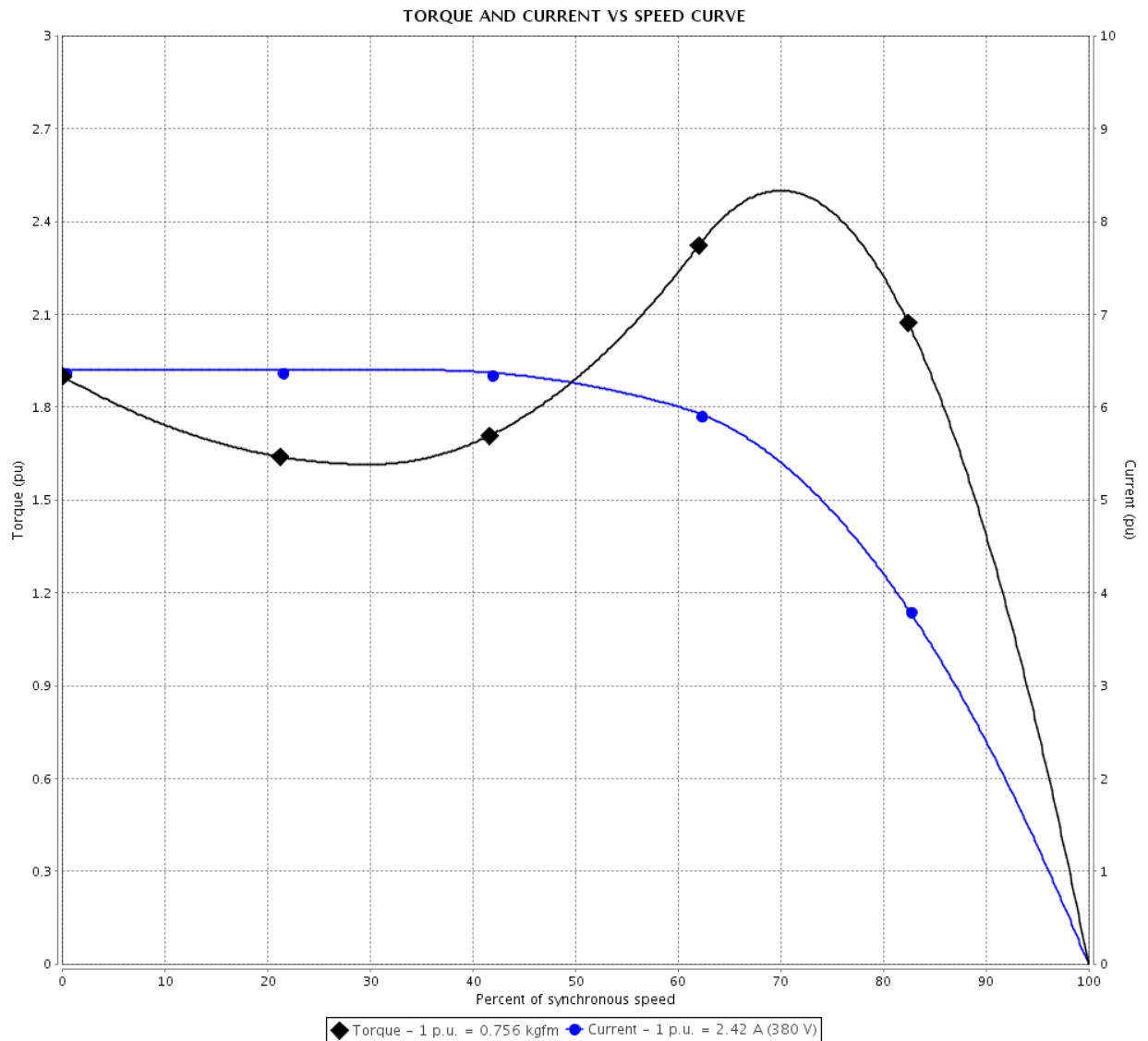


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Performance : 190/380 V 50 Hz 4P

Rated current : 4.84/2.42 A
 LRC : 6.4
 Rated torque : 0.756 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 250 %
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.0060 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 0s (cold) 0s (hot)

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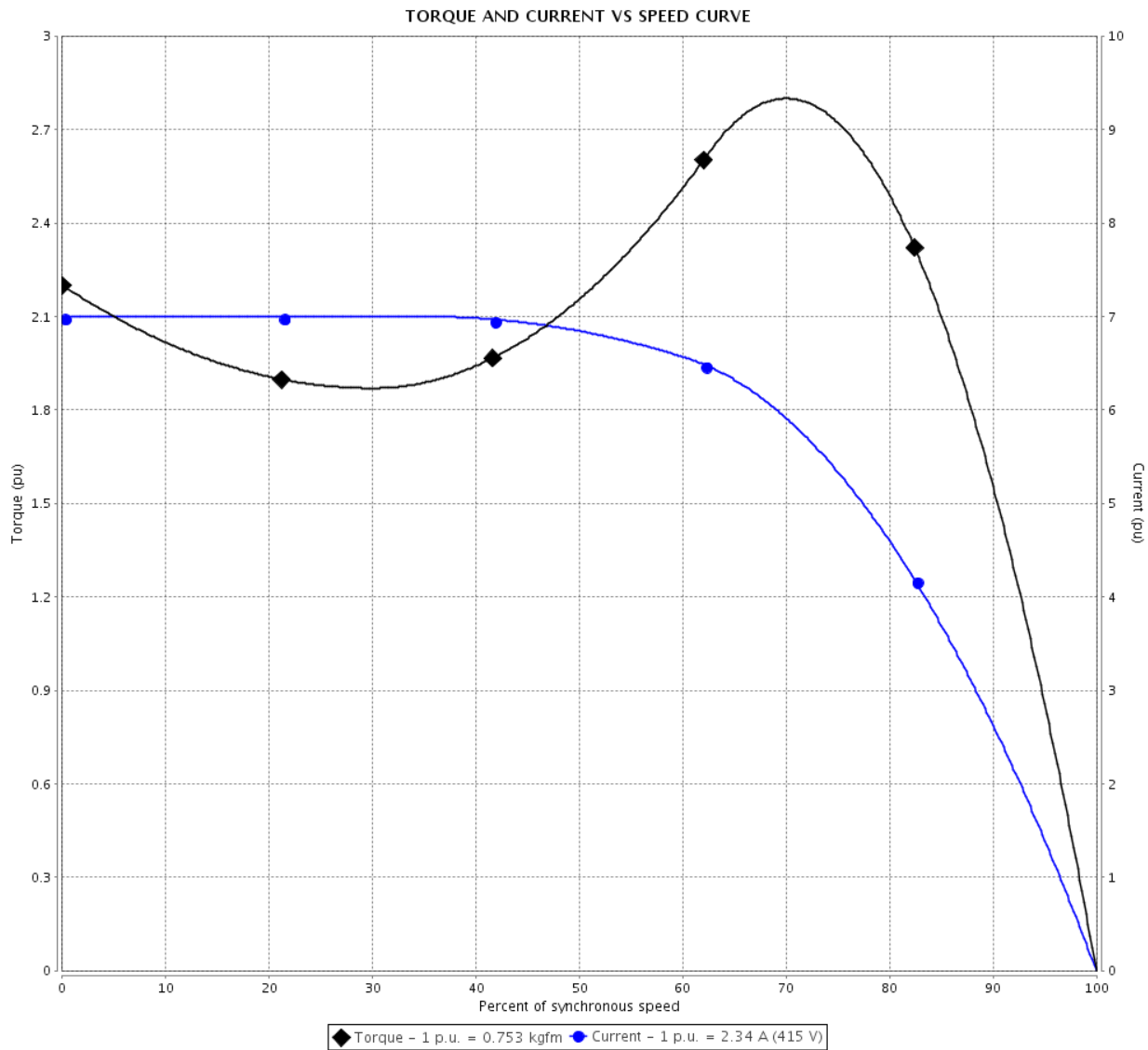


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Performance : 220/415 V 50 Hz 4P

Rated current	: 4.41/2.34 A	Moment of inertia (J)	: 0.0060 kgm ²
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 0.753 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1445 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

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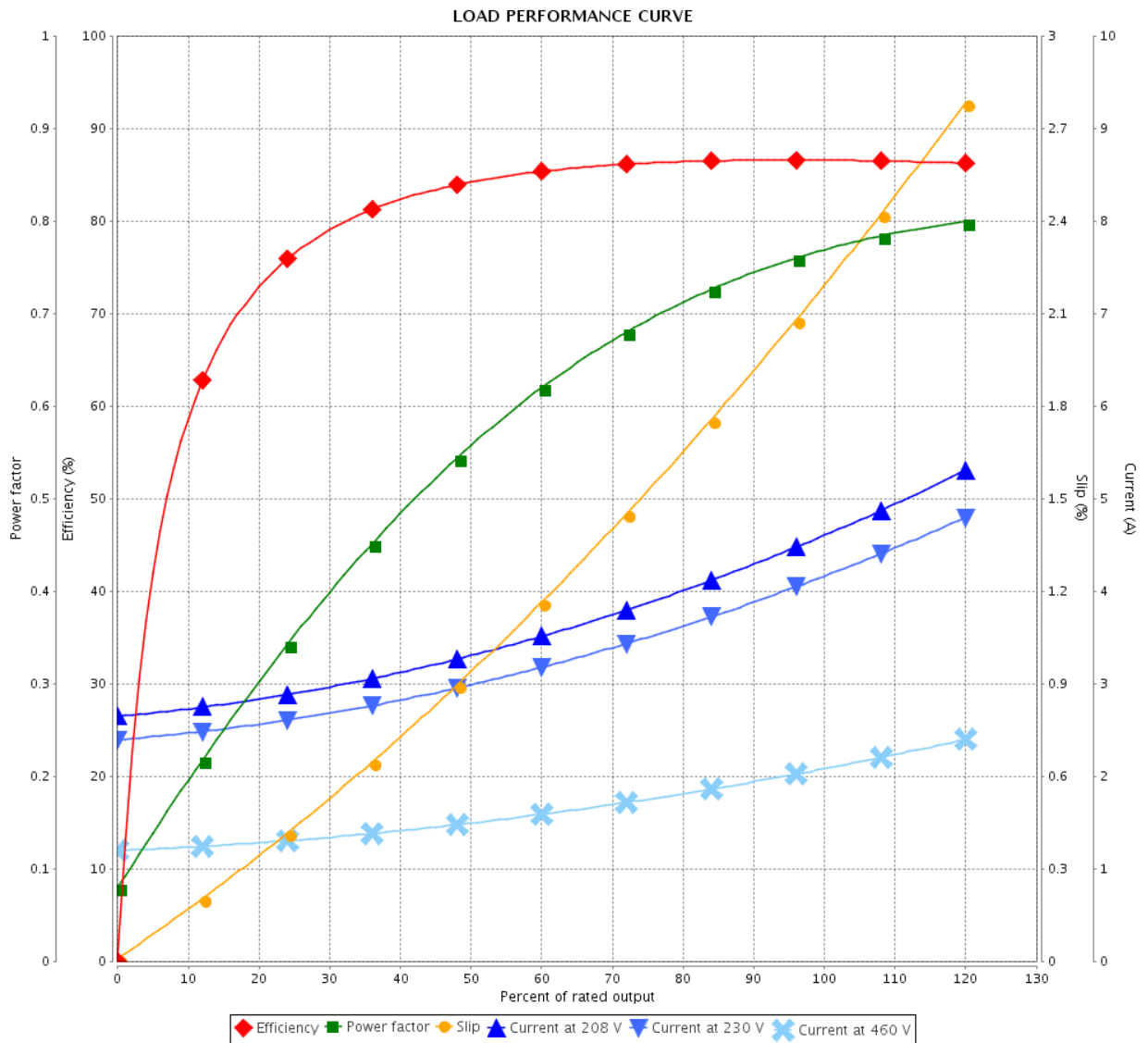


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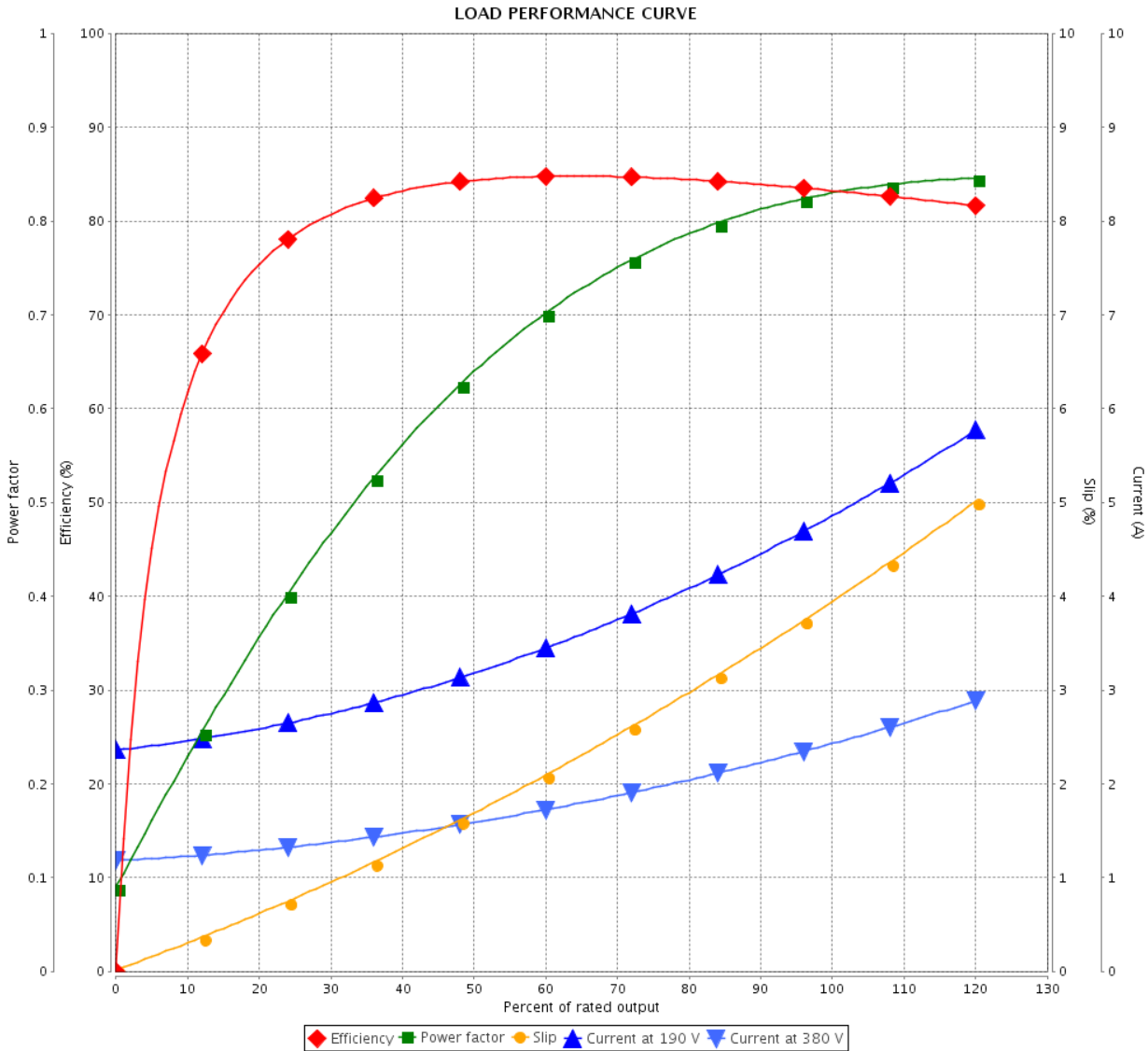


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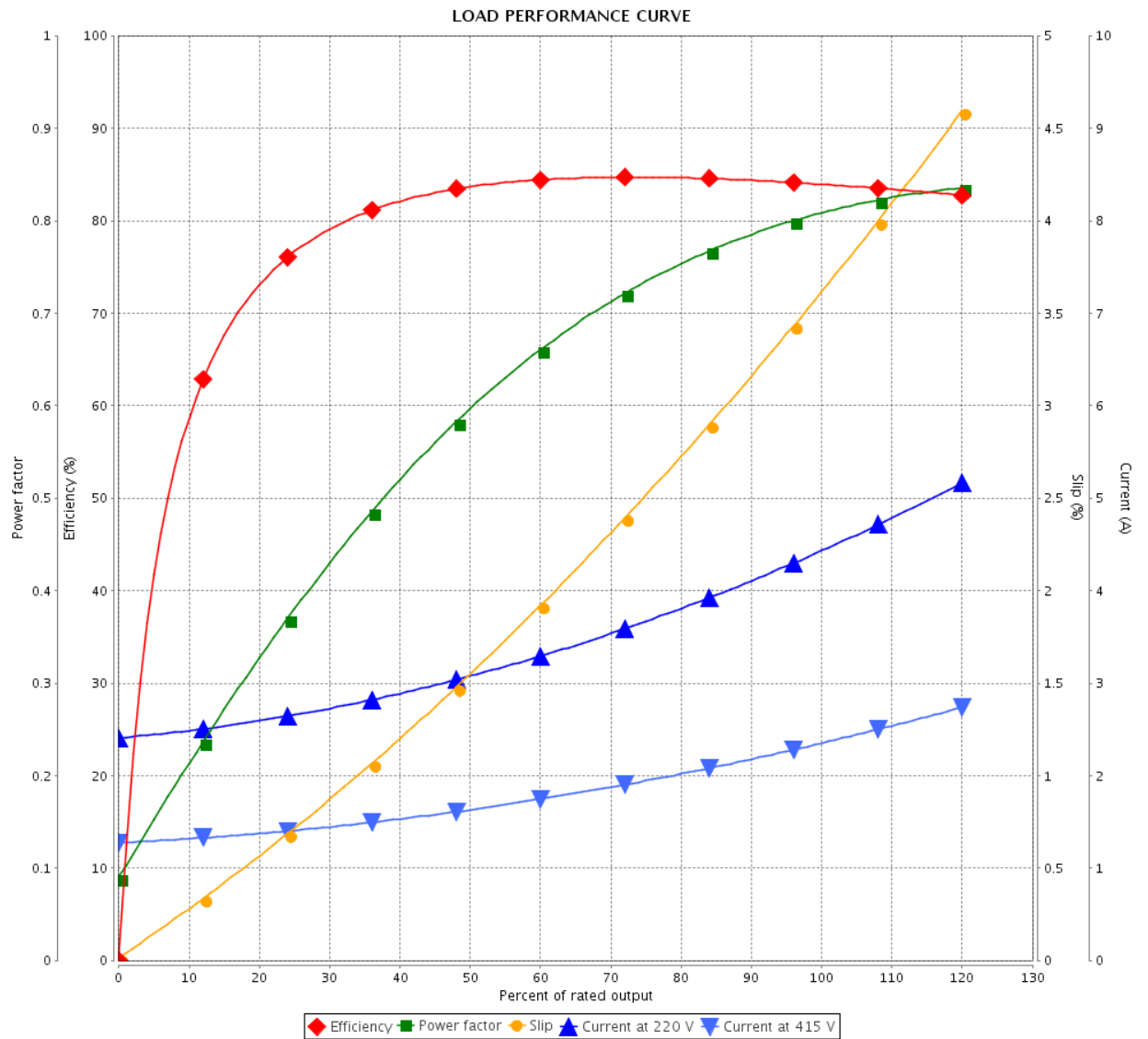


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

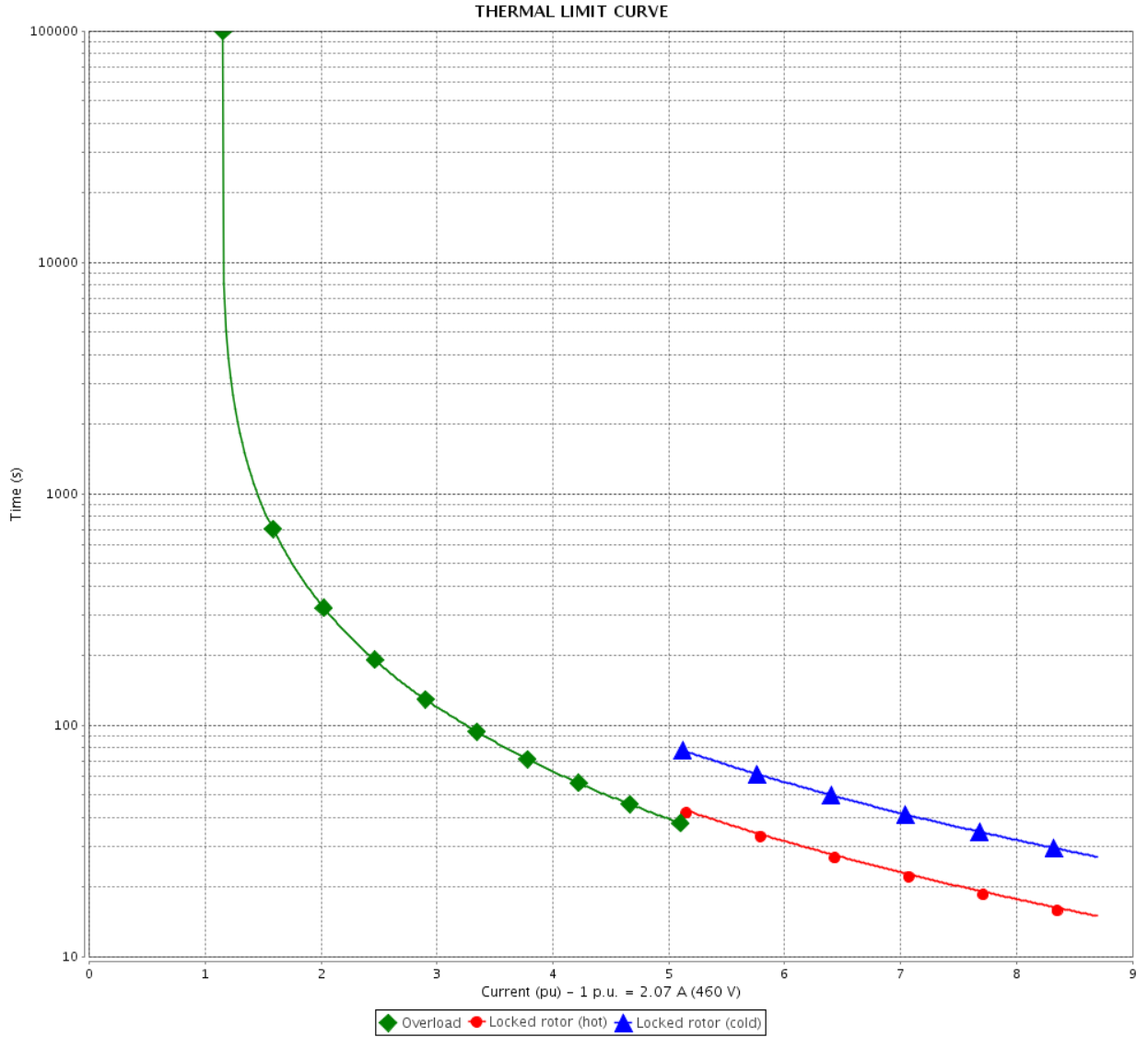
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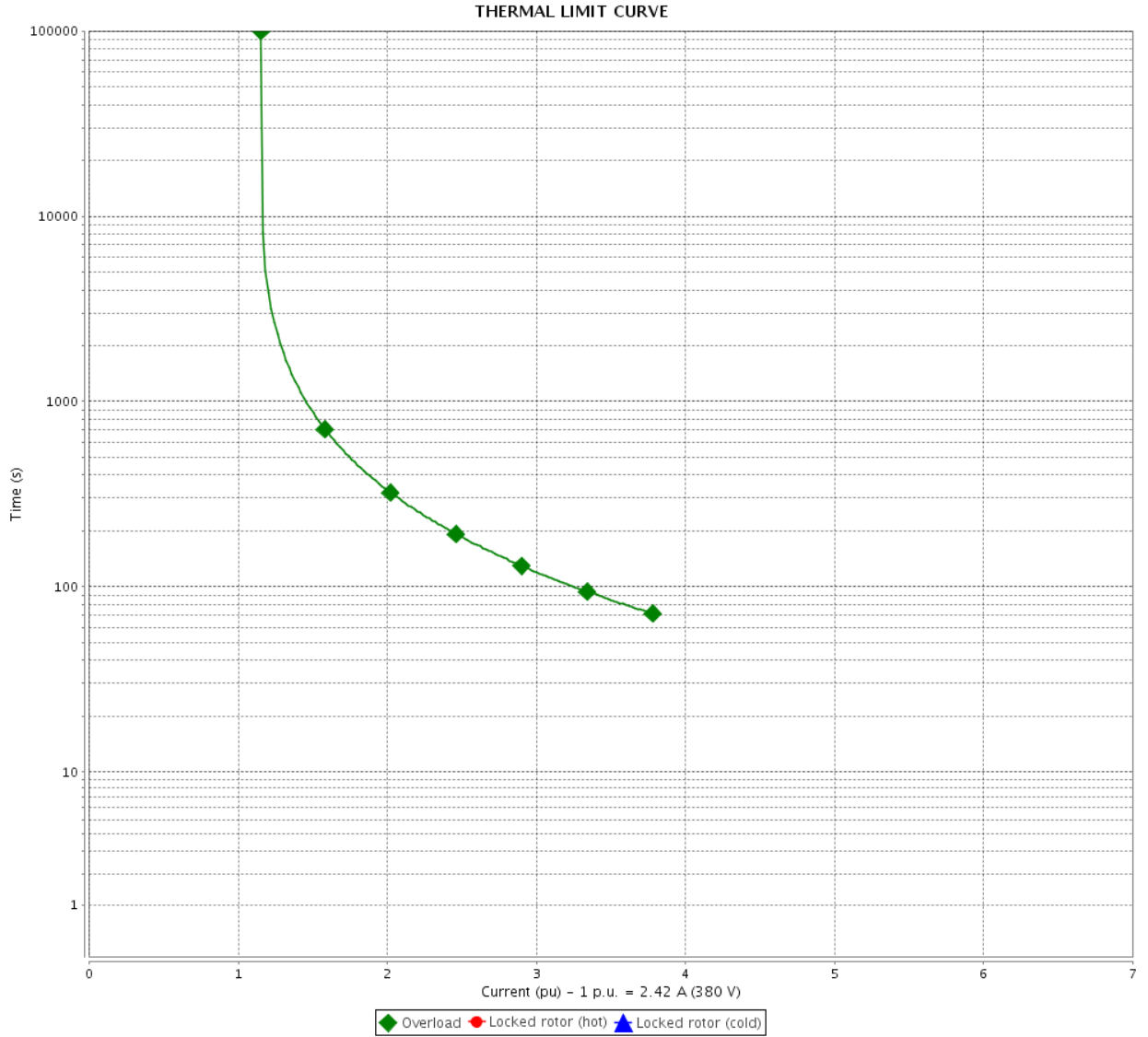
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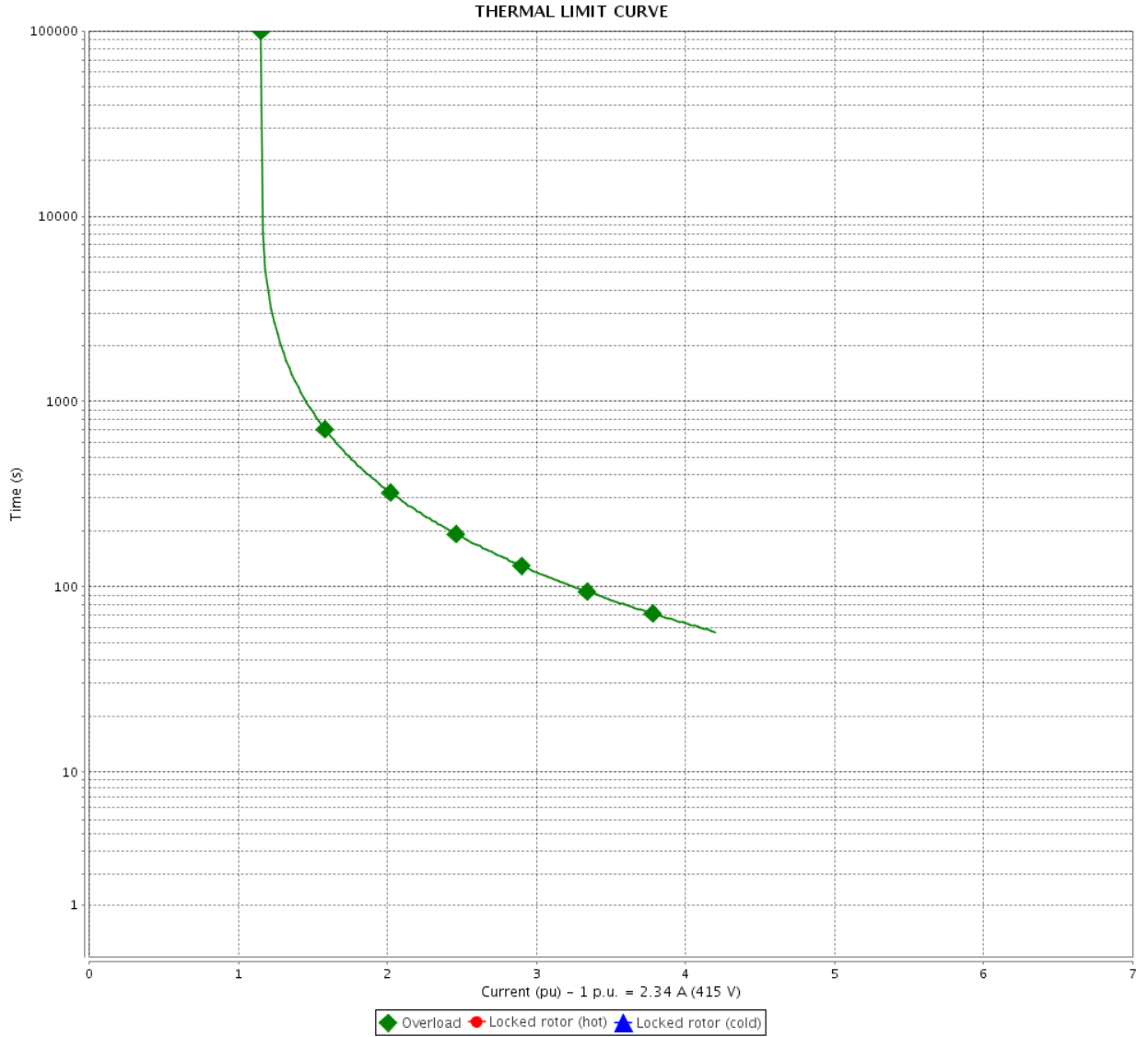
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

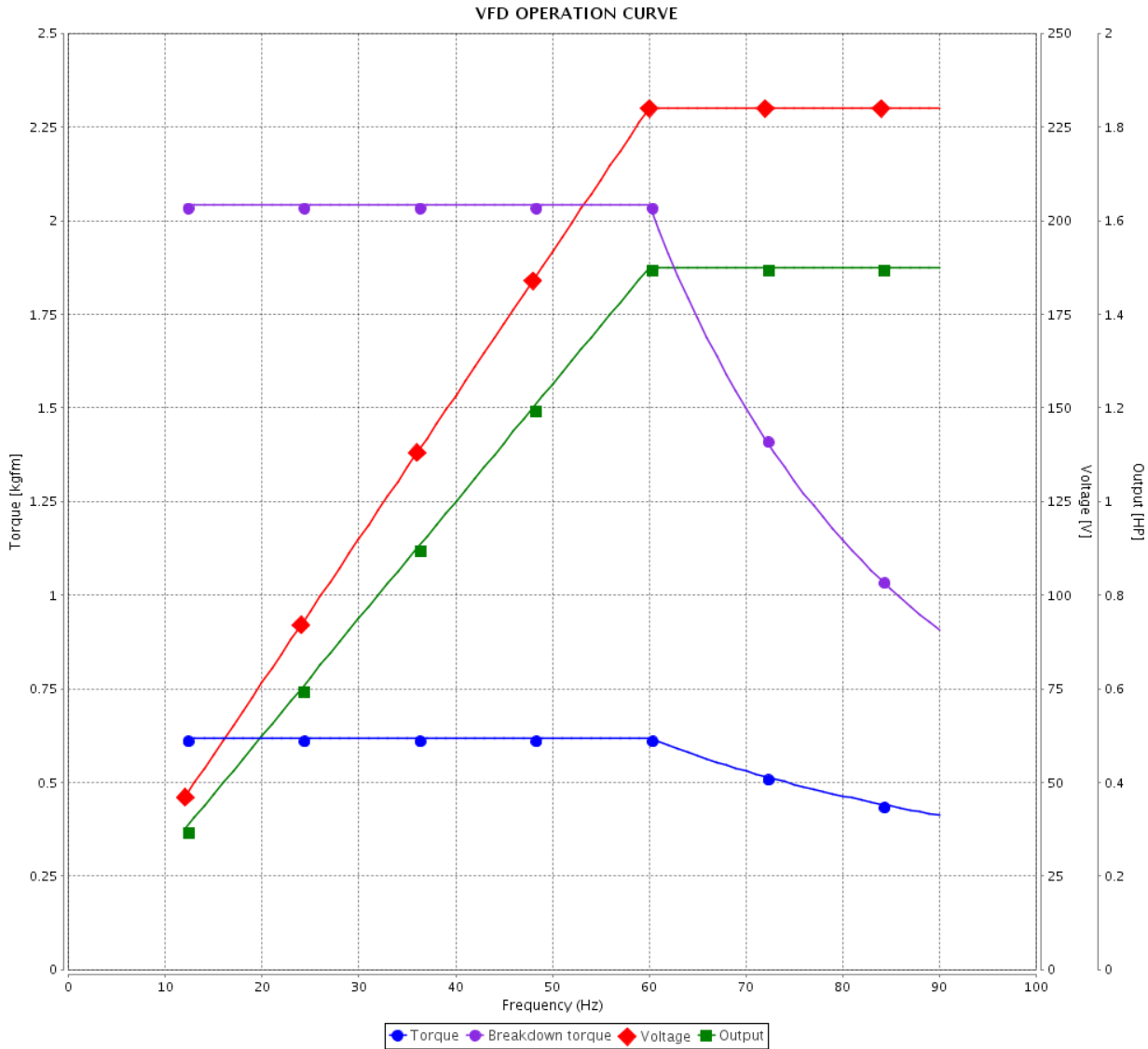


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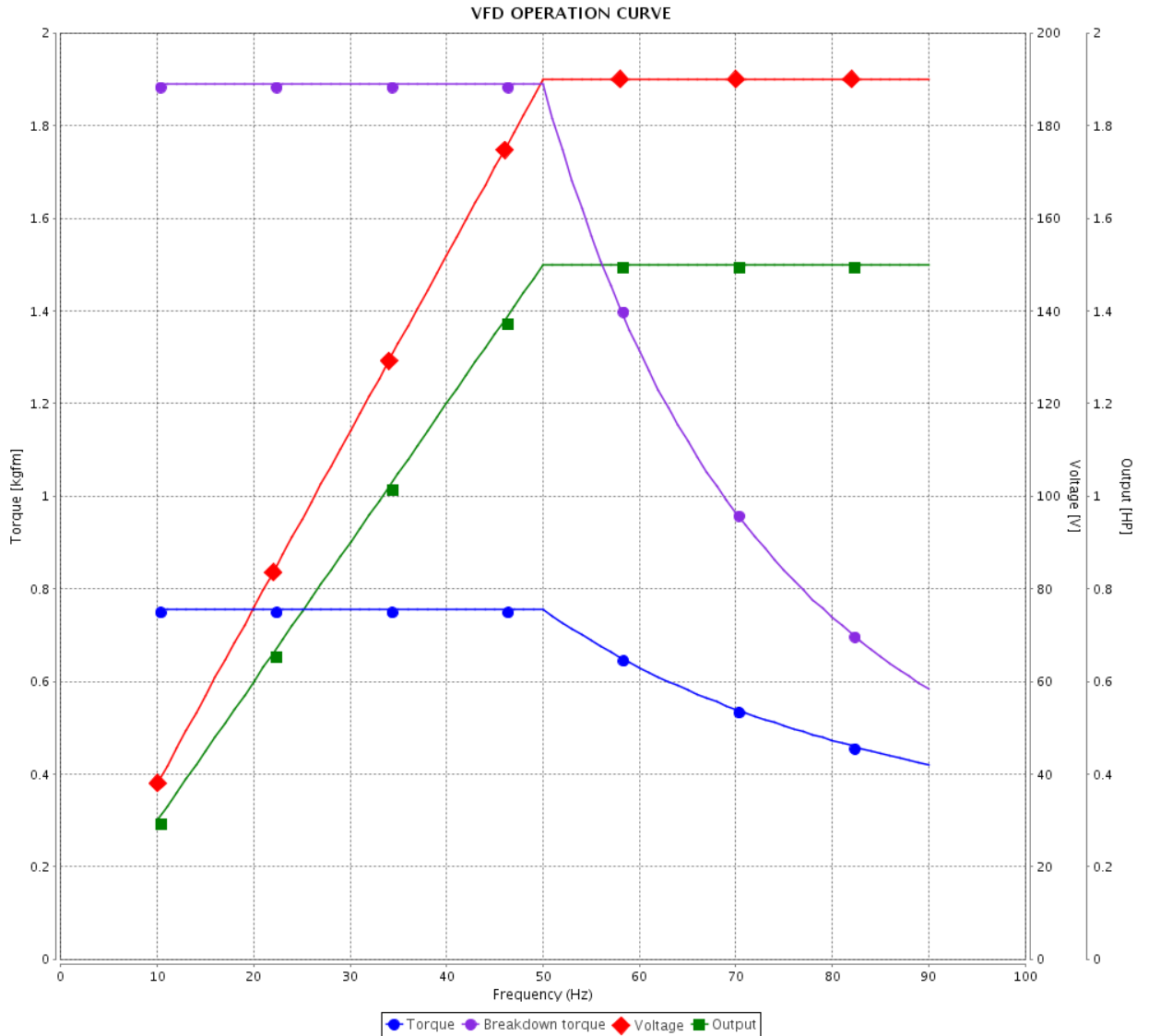


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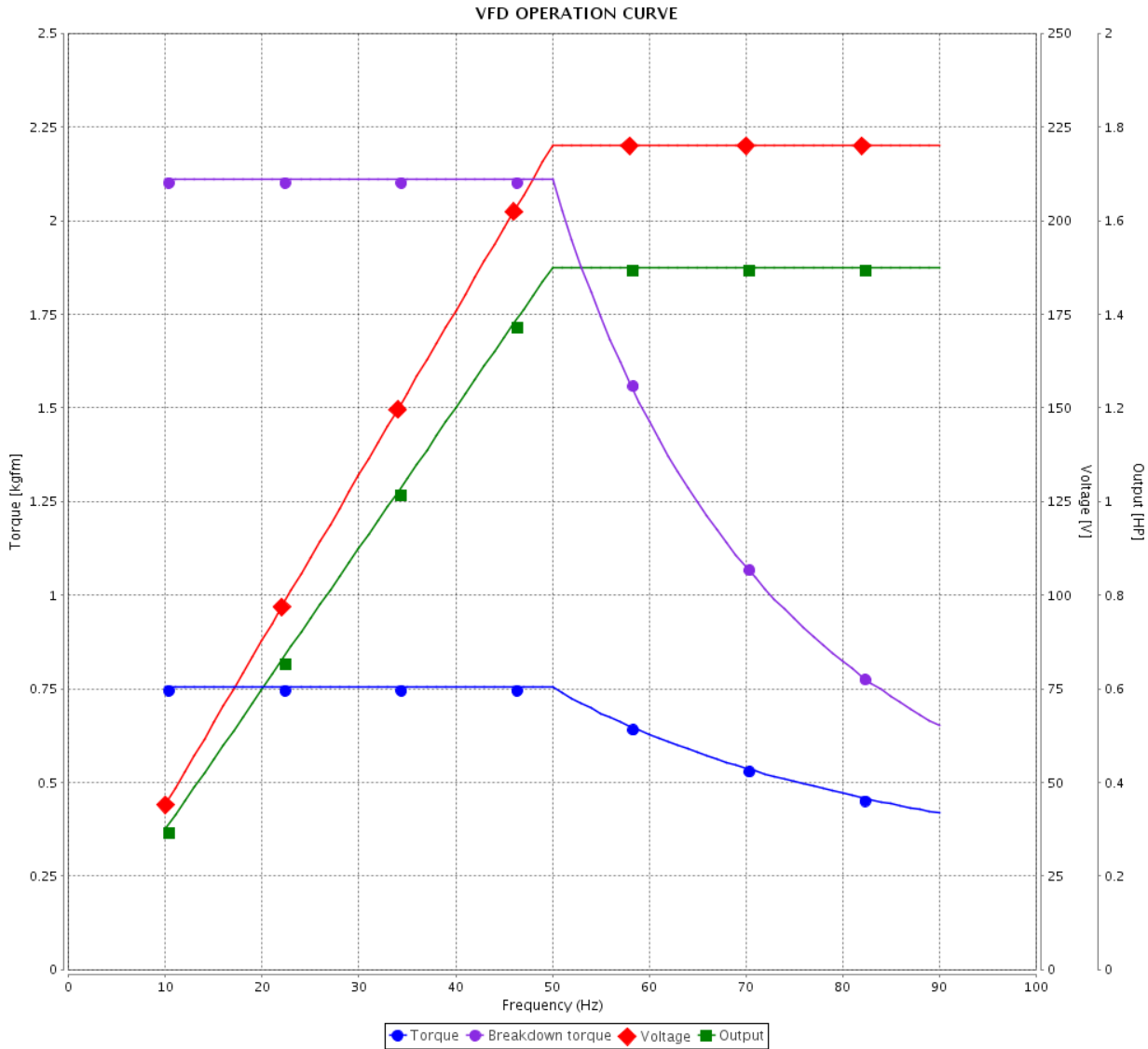


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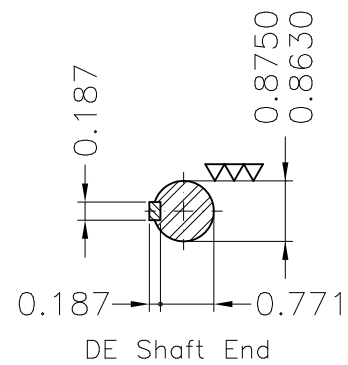
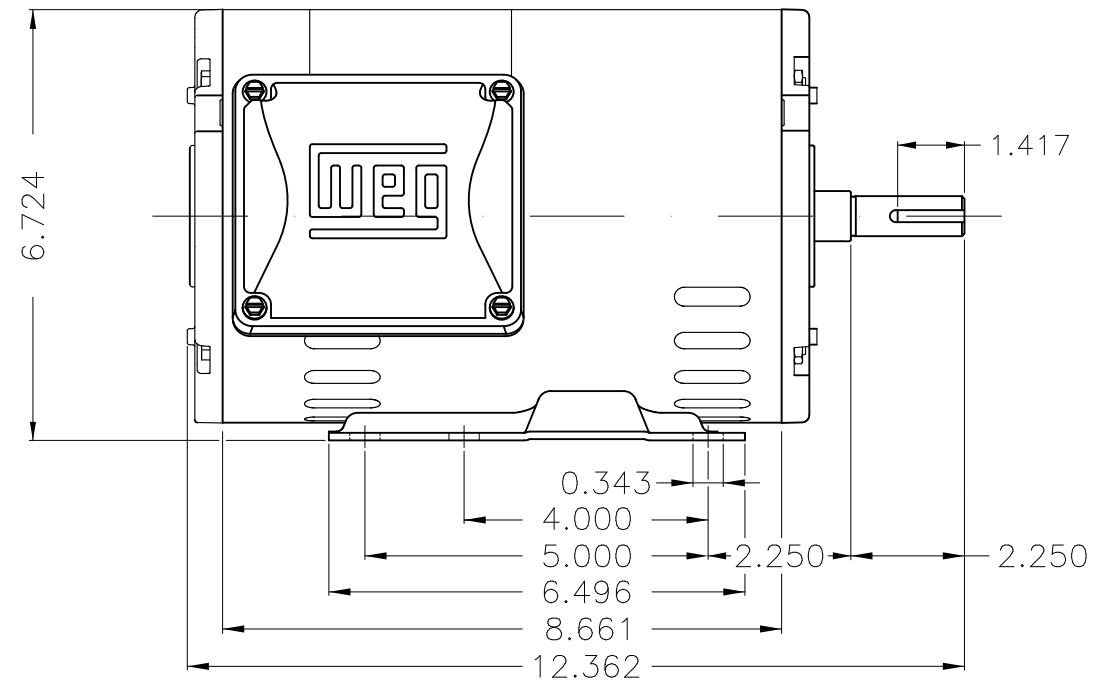
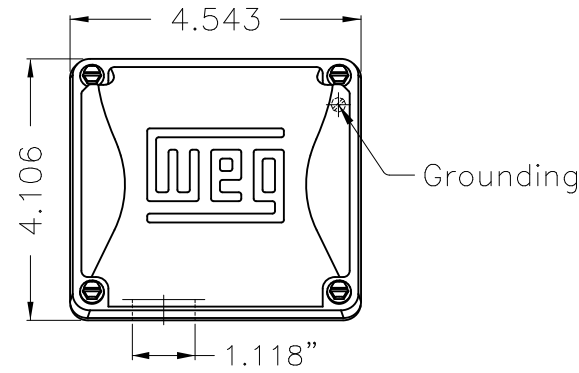
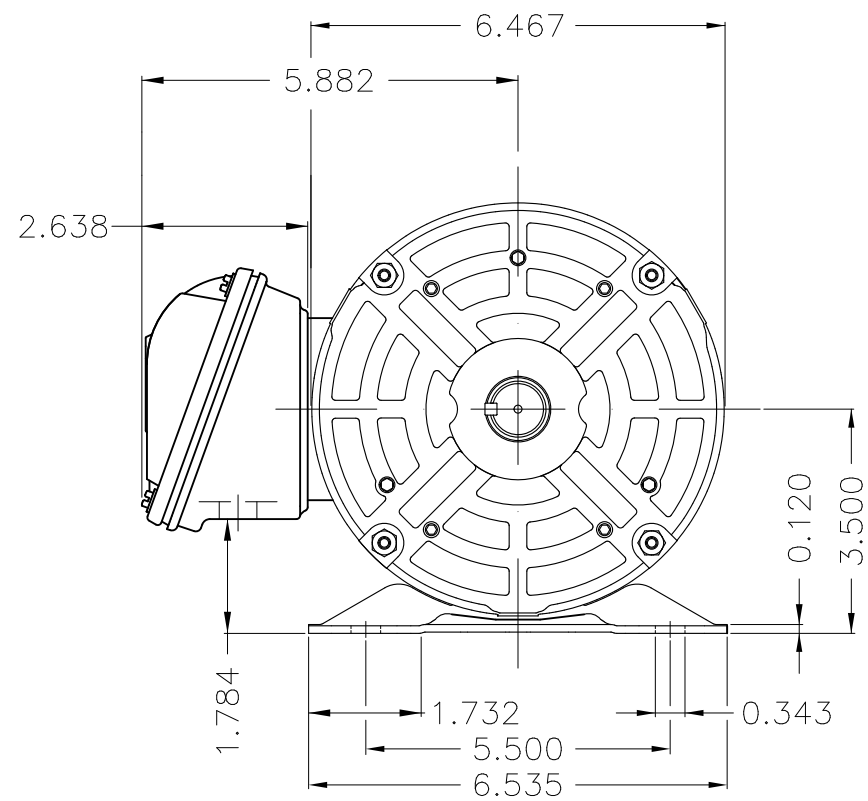
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EIXO
 PADRÃO
 OPCIONAL
 ESPECIAL

Dimensões em polegada
 Dimensions in inches

THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.



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	USERADMIN	THREE P. MOTOR OPEN ROLLED STEEL NEMA PREM					
CHECKED		FRAME 143/5T ODP					
RELEASED		WEG code: 12674791					
REL DT	22.03.2021	WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

1.5 HP 04 Poles 60Hz

A



ZME A3

**NEMA
Premium**

3PT9



Energy Verified

MADE IN MEXICO

MAT: 12674791 CC029A
W01.T00IC0X0N
MODEL 001580T3E145T-S
26MAR2021 B/N:

PH 3	Hz 60	HP 1.5
FR 143/5T		KW 1.1
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 4.14/2.07
INS CL F AT 80K		SFA 4.76/2.38
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE L	PF 0.77
USABLE @ 208V 4.58A		RPM 1760
SF1.00		NEMA NOM. EFF 86.5%

ALTERNATE RATING: 1.5HP 50Hz 190-220/380-415V SF1.15
4.84-4.34/2.42-2.30A 1440RPM EFF 83.2% (IE2) IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6205-ZZ	ODE 6203-ZZ	MOBIL POLYREX EM
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T1-BLU T2-WHT
 T3-ORG T4-YEL
 T5-BLK T6-GRY
 T7-PNK T8-RED
 T9-BRK RED

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.

