

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer	:		
Product line	: JP Pump NEMA Premium Efficiency Three-Phase	Product code :	12682722
		Catalog # :	00218OT3E145JP-S
Frame	: 143/5JP	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	: 42.3 lb
Design	: B	Moment of inertia (J)	: 0.1168 sq.ft.lb
Output [HP]	2	2	2
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	5.38/2.69	6.52/3.26	5.90/3.13
L. R. Amperes [A]	41.4/20.7	36.5/18.3	36.6/19.4
LRC [A]	7.7x(Code K)	5.6x(Code G)	6.2x(Code H)
No load current [A]	2.75/1.38	2.70/1.35	2.82/1.49
Rated speed [RPM]	1740	1410	1420
Slip [%]	3.33	6.00	5.33
Rated torque [ft.lb]	6.04	7.45	7.40
Locked rotor torque [%]	260	200	220
Breakdown torque [%]	320	229	260
Service factor		1.00	1.00
Temperature rise	80 K	105 K	80 K
Locked rotor time	30s (cold) 17s (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%	85.2	86.4
	50%	85.5	85.2
	75%	86.5	85.2
	100%	86.5	83.4
Power Factor	25%	0.36	0.38
	50%	0.61	0.64
	75%	0.74	0.77
	100%	0.81	0.83
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads	
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 146 lb
		Max. compression	: 188 lb
Lubrication interval	: - -		
Lubricant amount	: - -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 5.95A SF 1.00 SFA 5.95A			
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



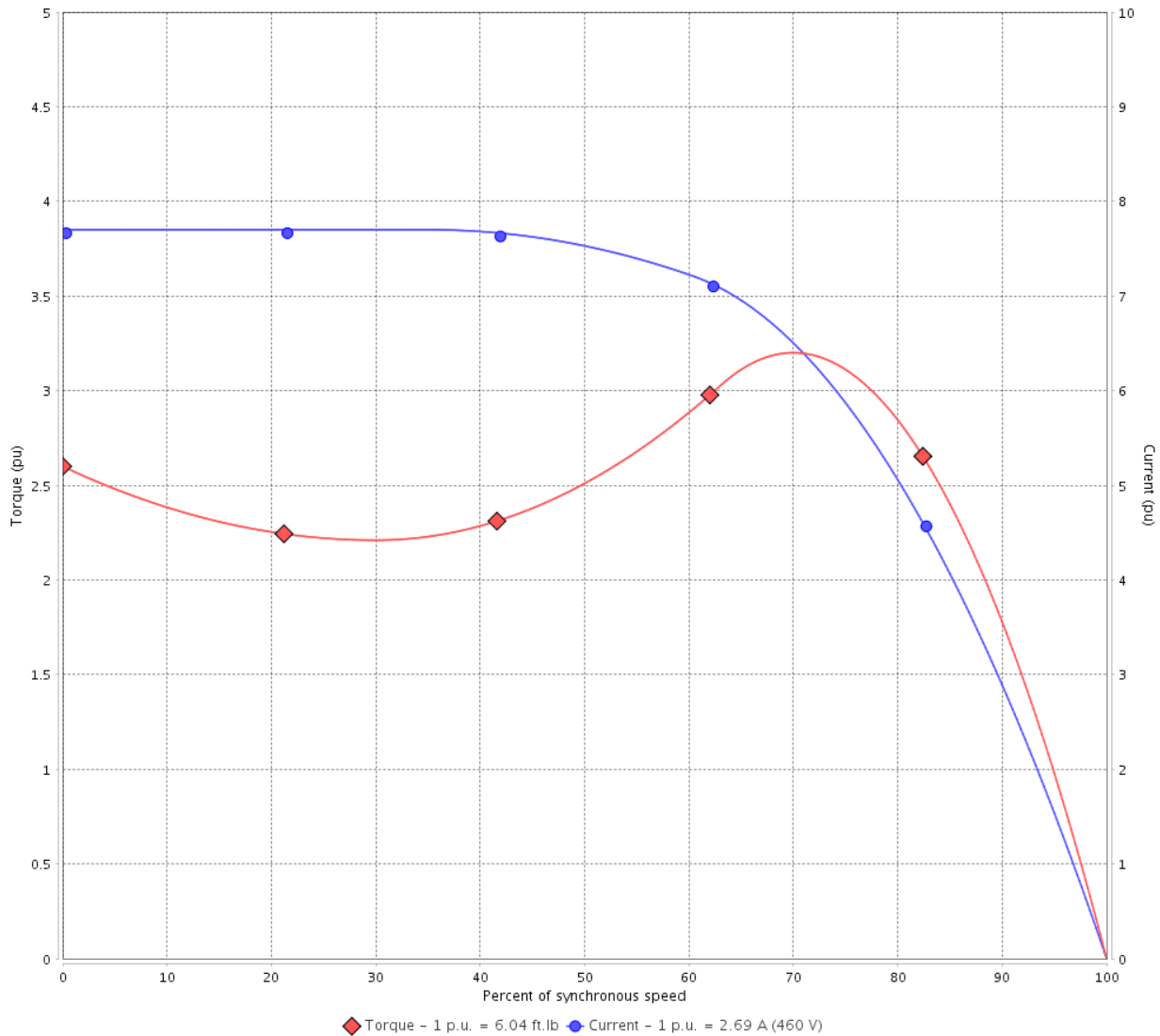
Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 12682722

Catalog # : 00218OT3E145JP-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 5.38/2.69 A	Moment of inertia (J)	: 0.1168 sq.ft.lb
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 6.04 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	:
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1740 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



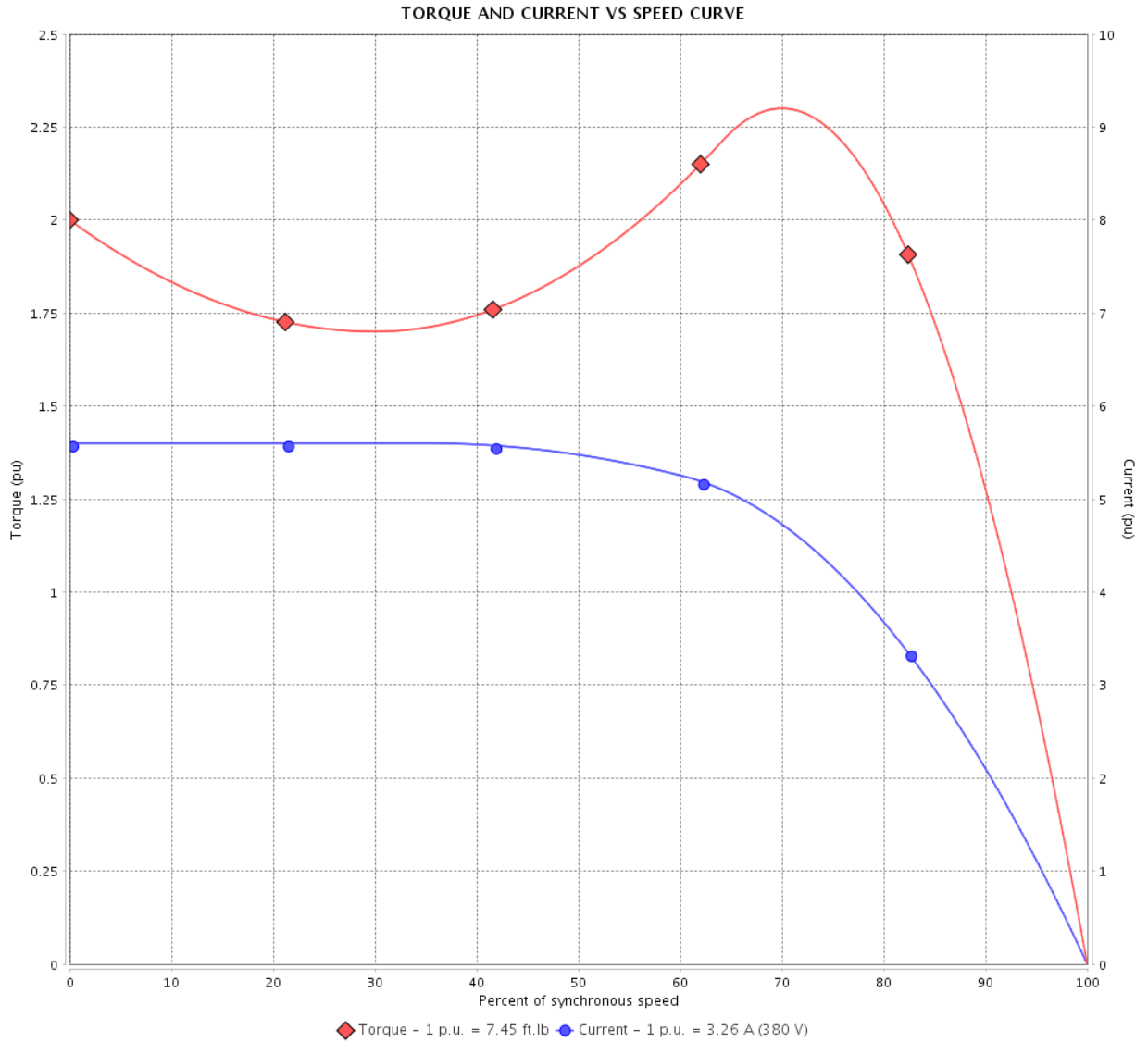
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 12682722

Catalog # : 00218OT3E145JP-S



Performance : 190/380 V 50 Hz 4P

Rated current : 6.52/3.26 A
 LRC : 5.6
 Rated torque : 7.45 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 229 %
 Rated speed : 1410 rpm

Moment of inertia (J) : 0.1168 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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

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TORQUE AND CURRENT VS SPEED CURVE

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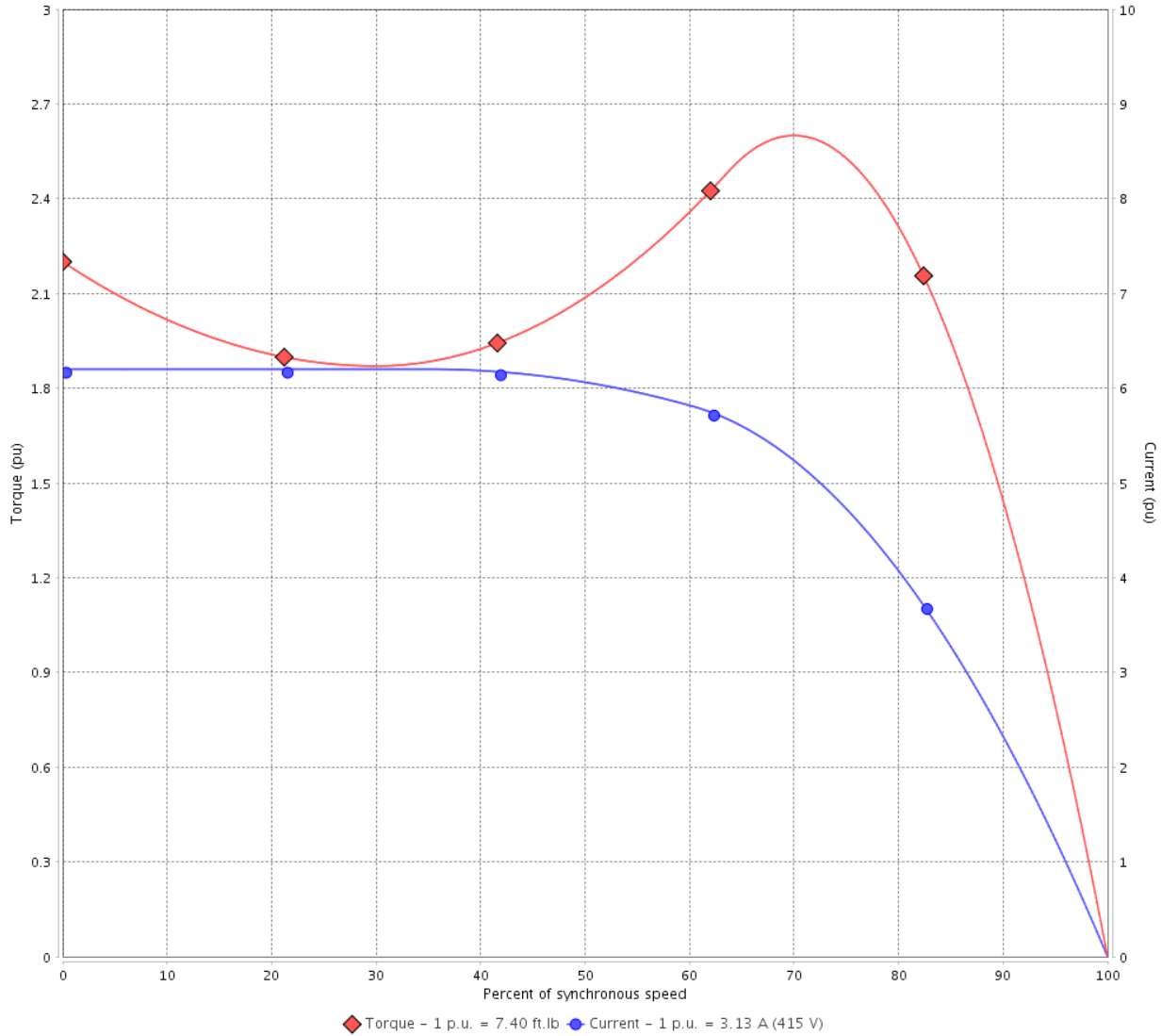
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Product code : 12682722

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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current : 5.90/3.13 A
LRC : 6.2
Rated torque : 7.40 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 1420 rpm

Moment of inertia (J) : 0.1168 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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

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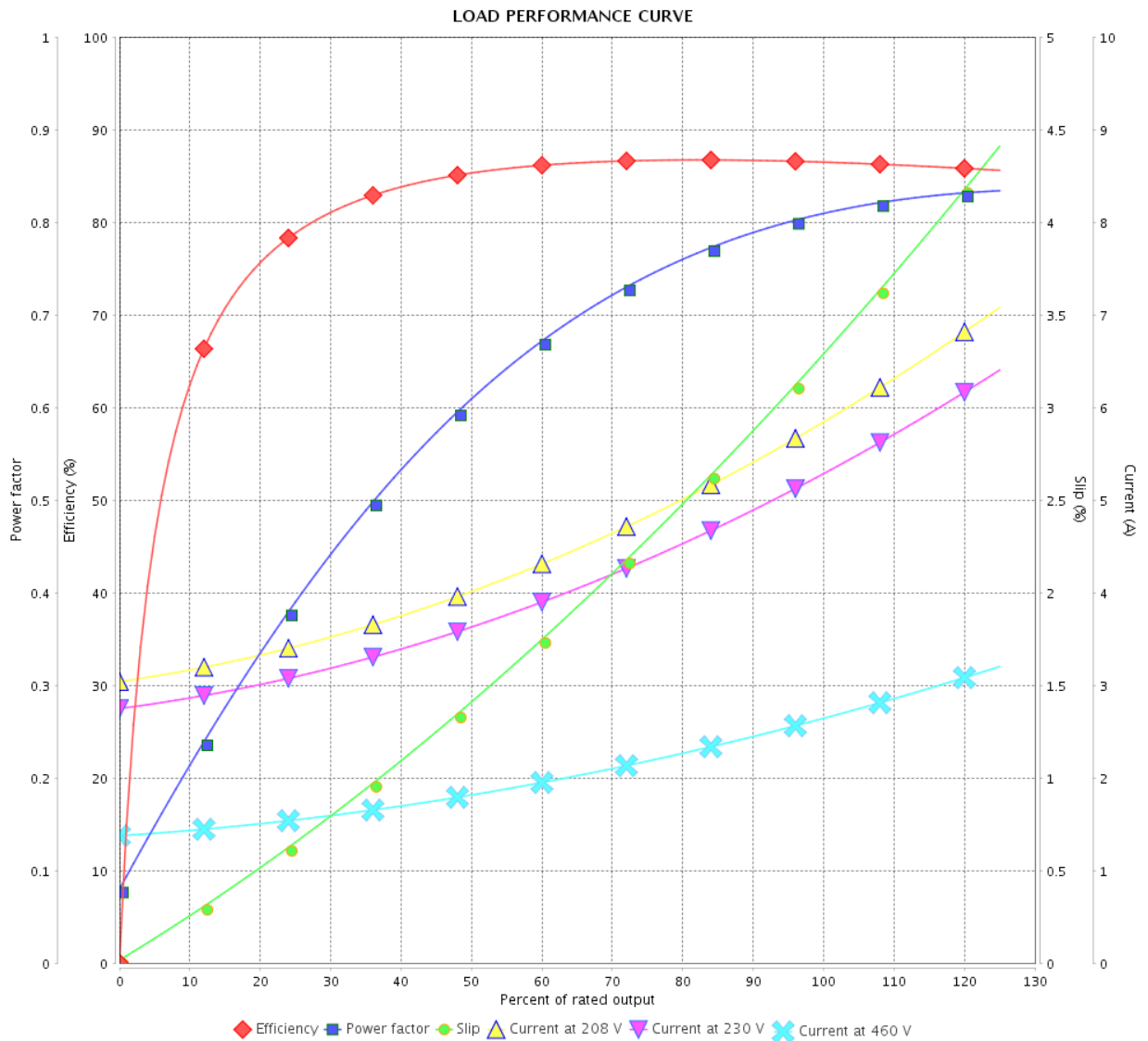


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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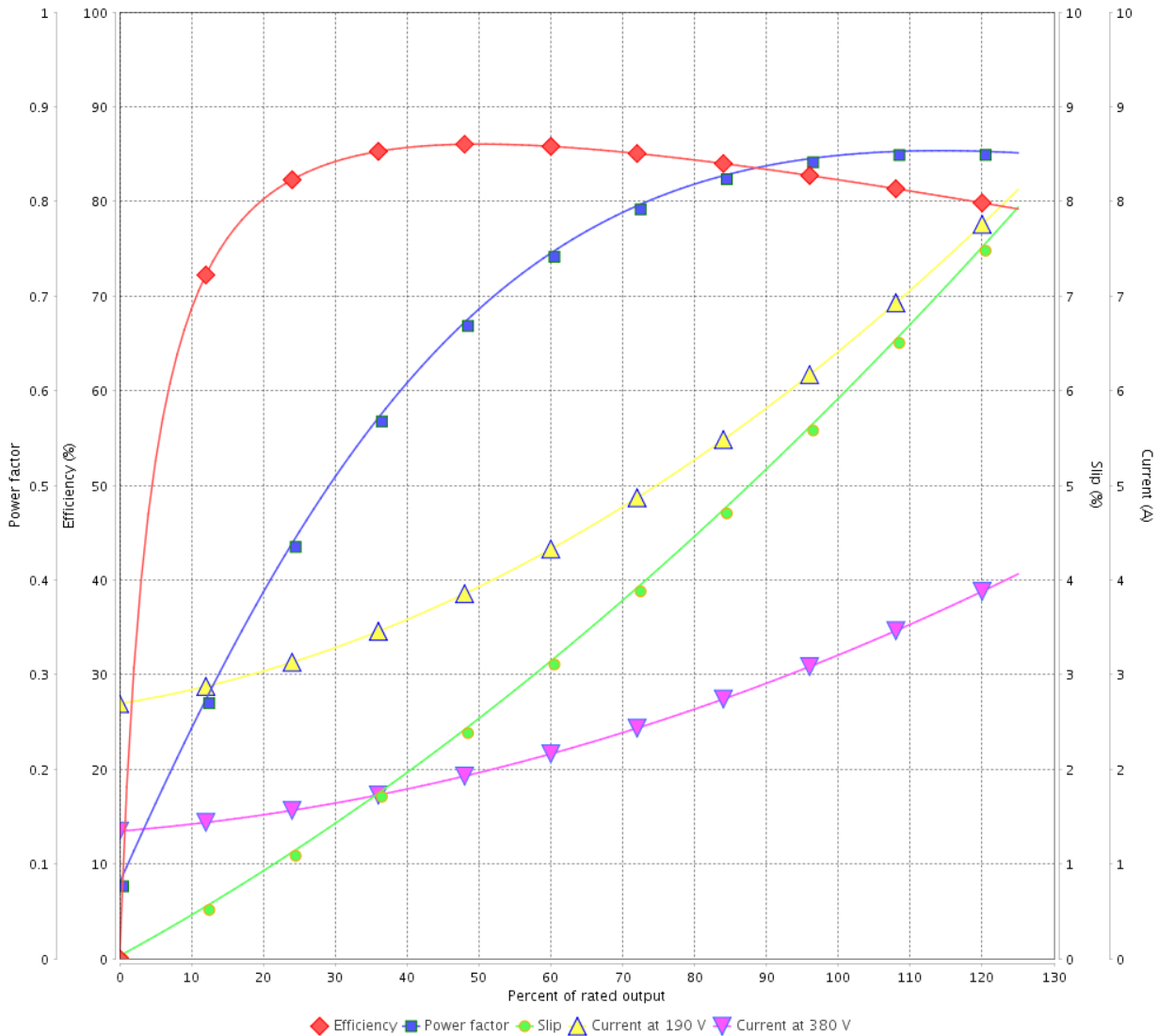
Customer :

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Catalog # : 002180T3E145JP-S

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Locked rotor torque : 200 %
Breakdown torque : 229 %
Rated speed : 1410 rpm

Moment of inertia (J) : 0.1168 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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Three Phase Induction Motor - Squirrel Cage

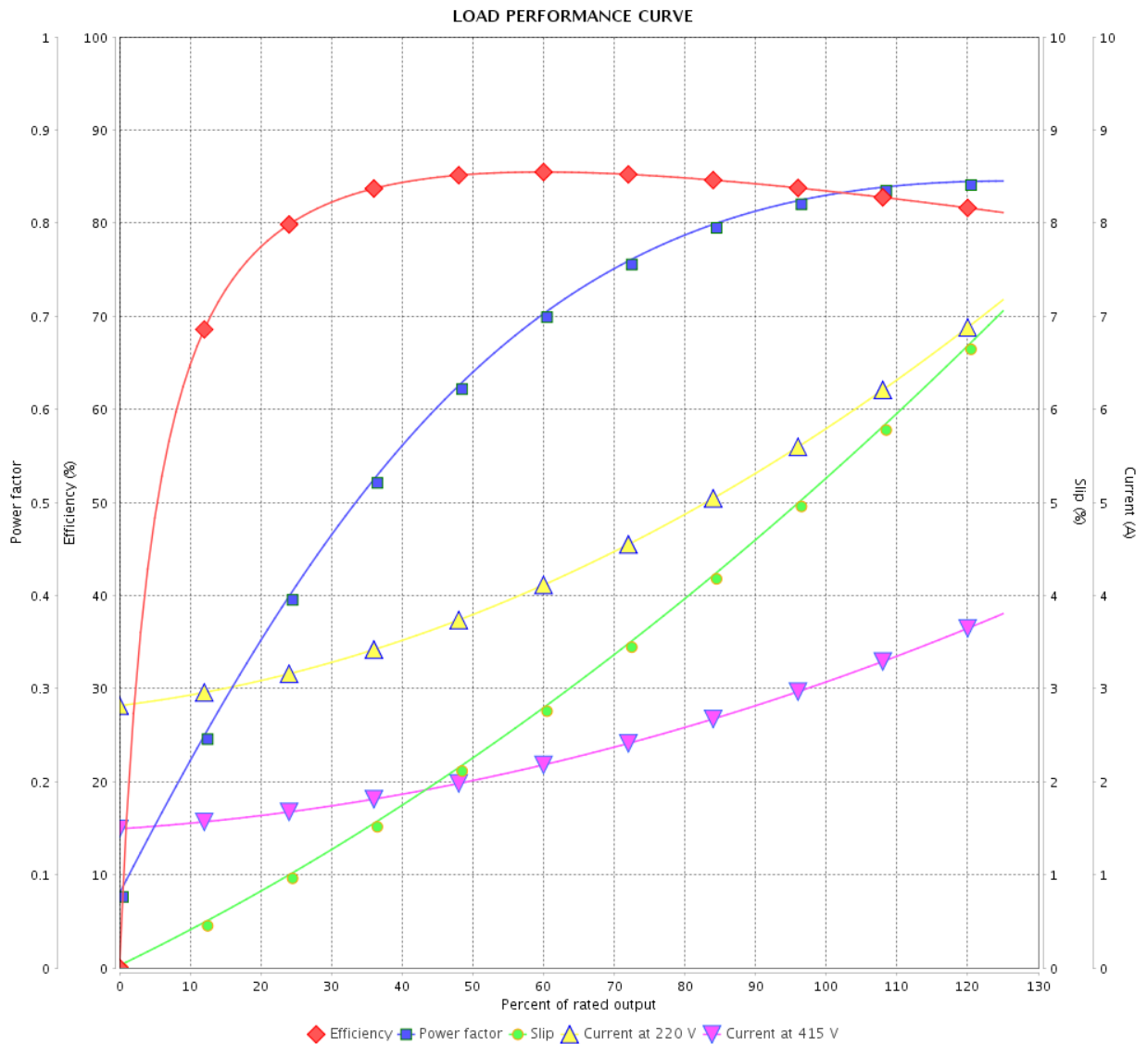


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THERMAL LIMIT CURVE



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Insulation class : F
Service factor :
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

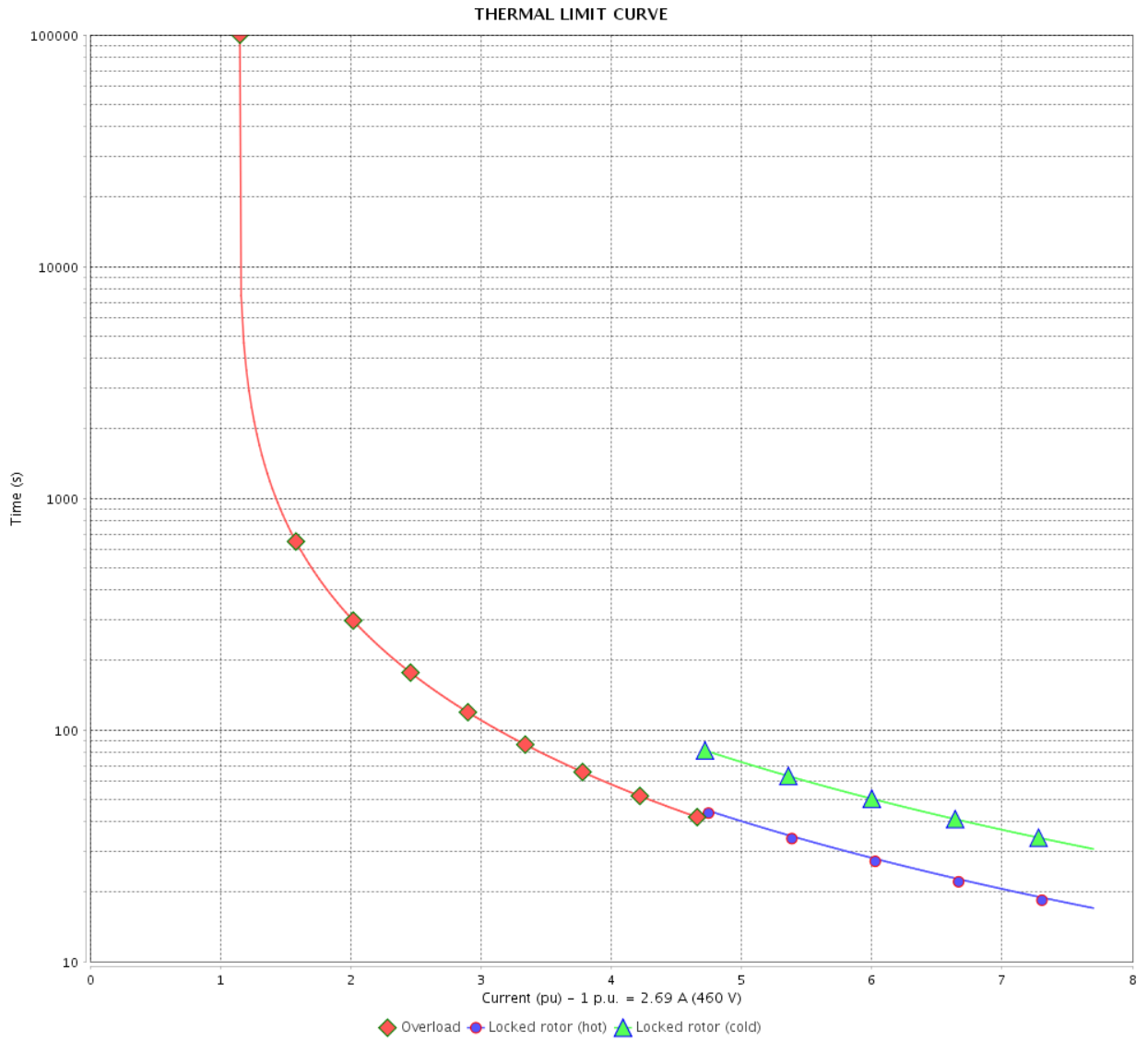
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Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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Cooling constant

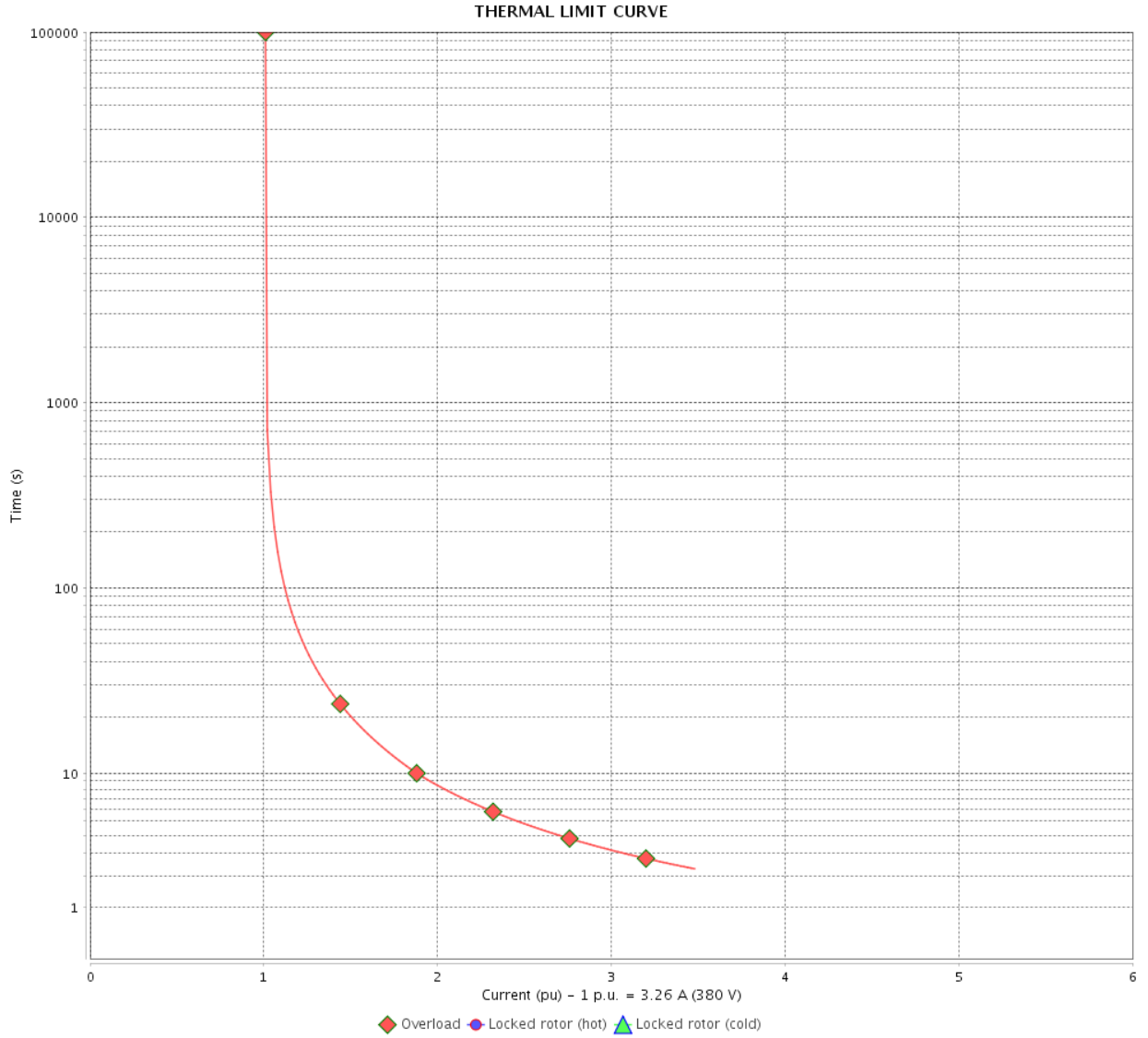
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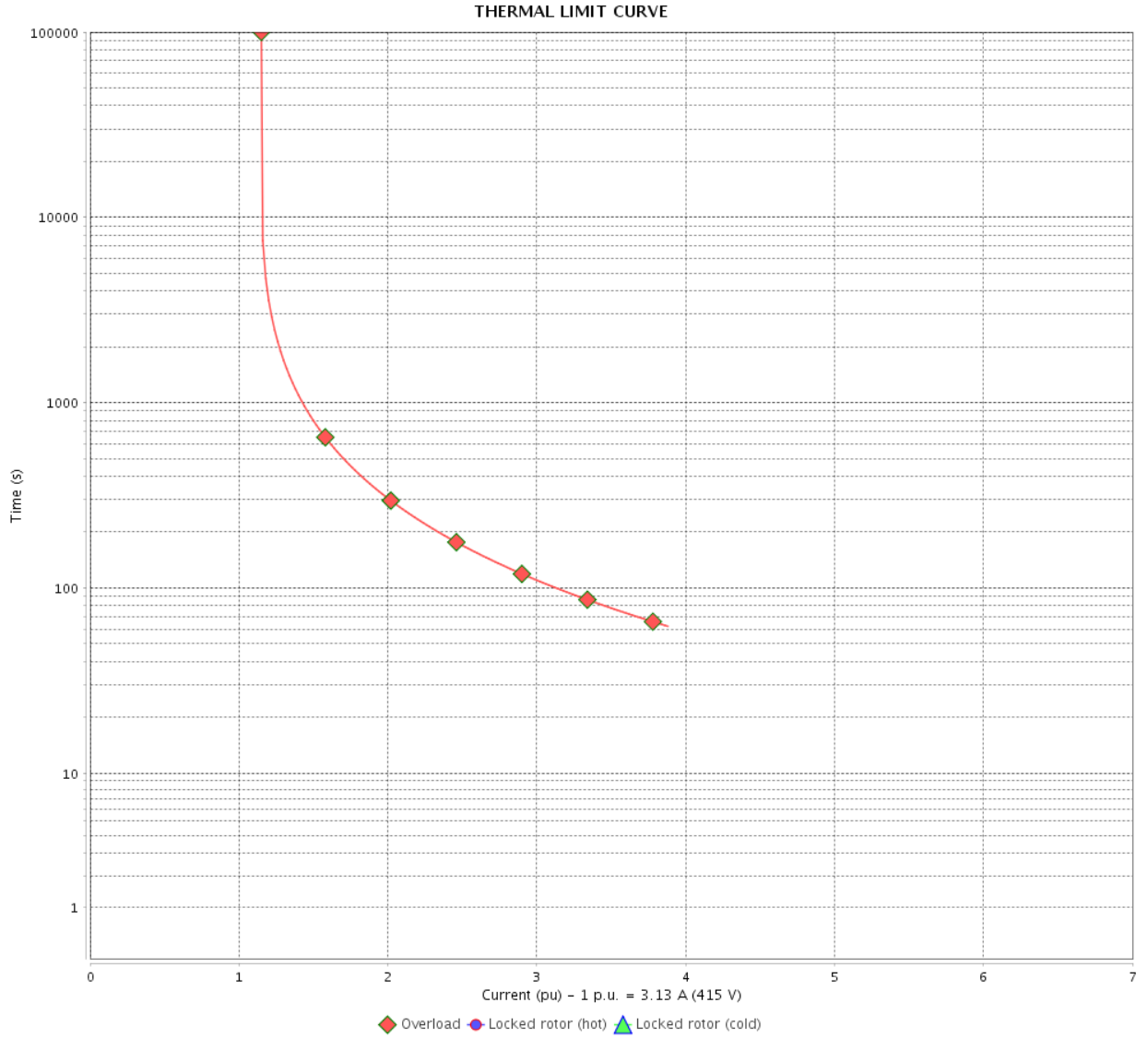
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

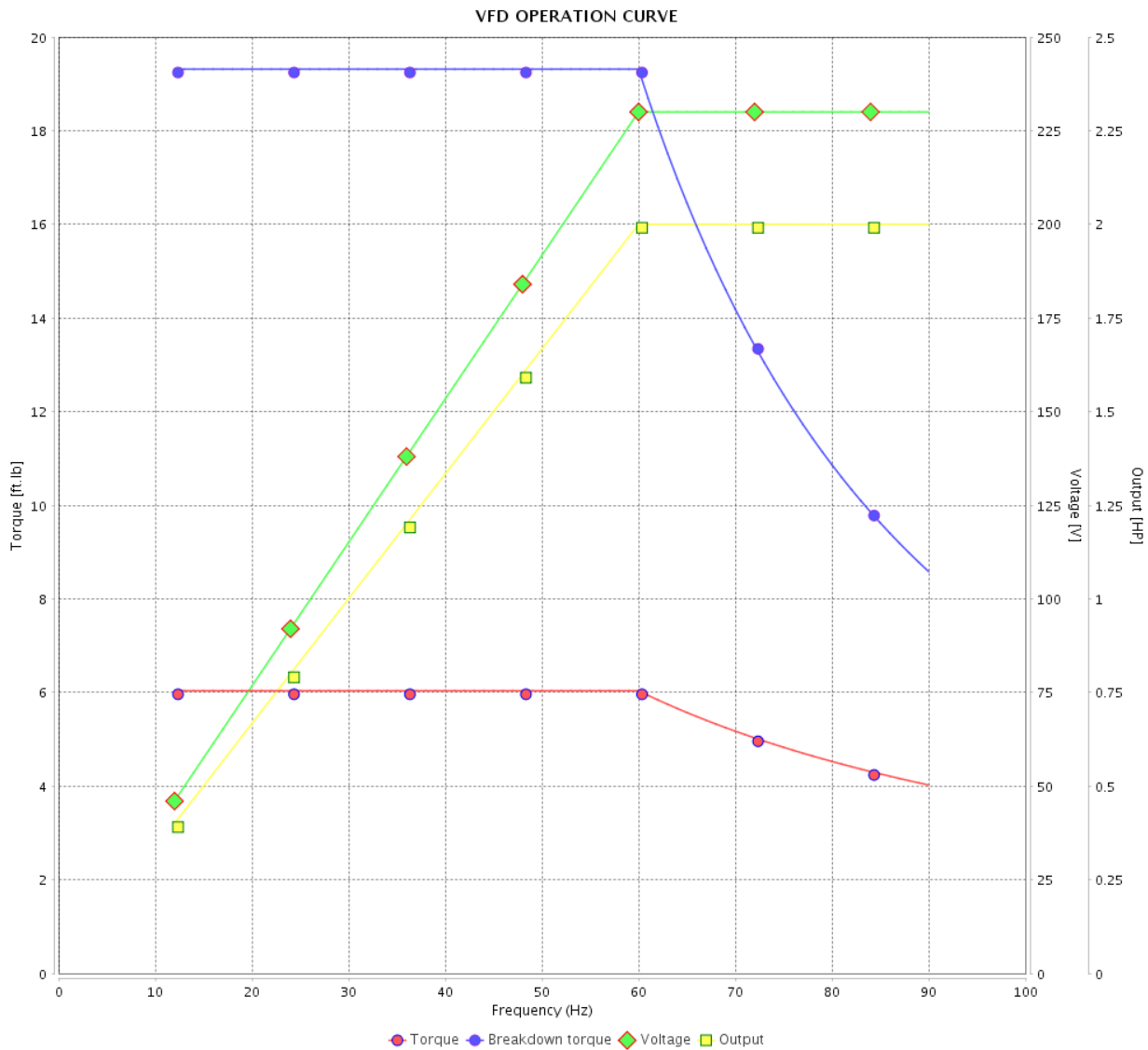


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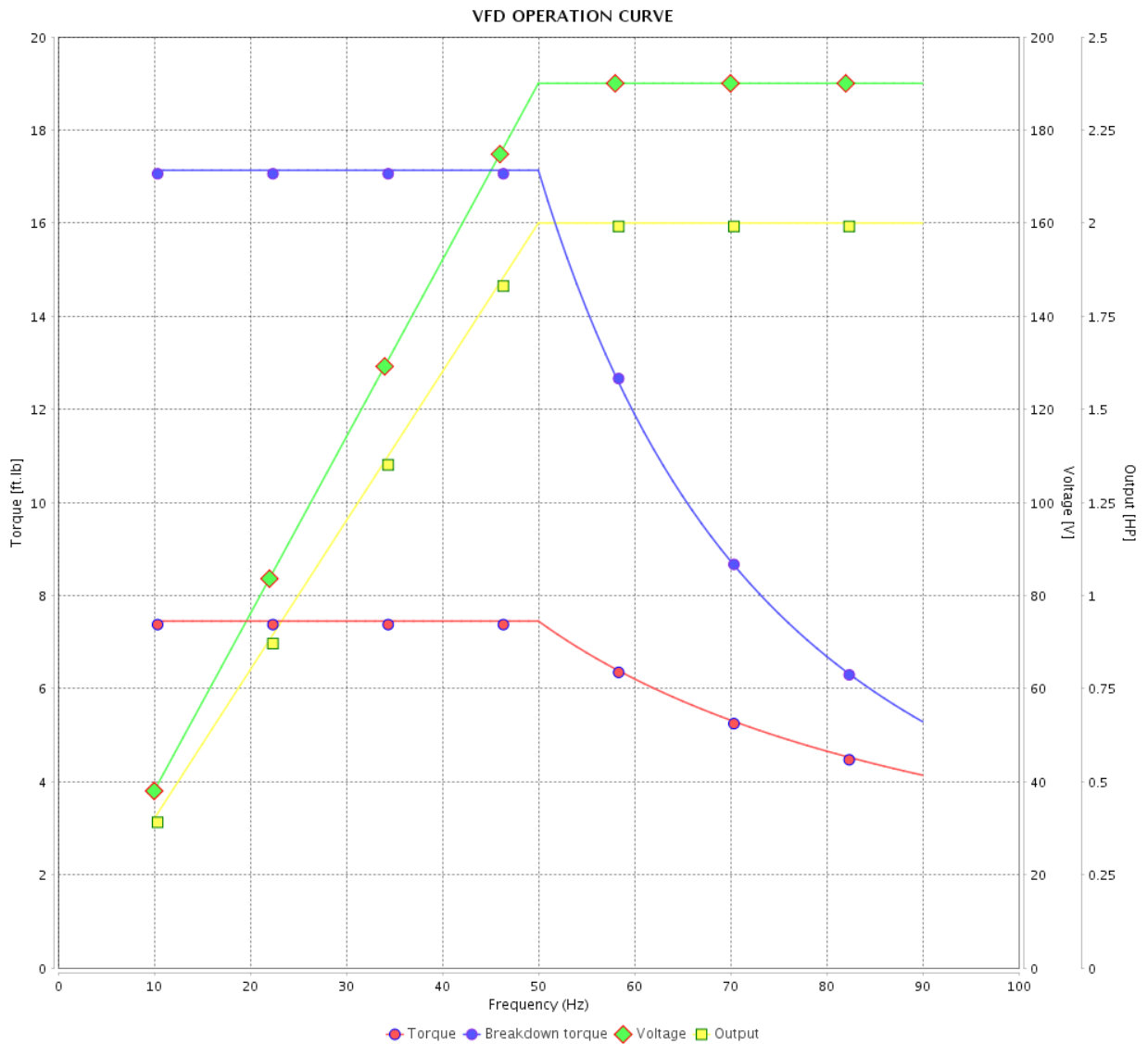


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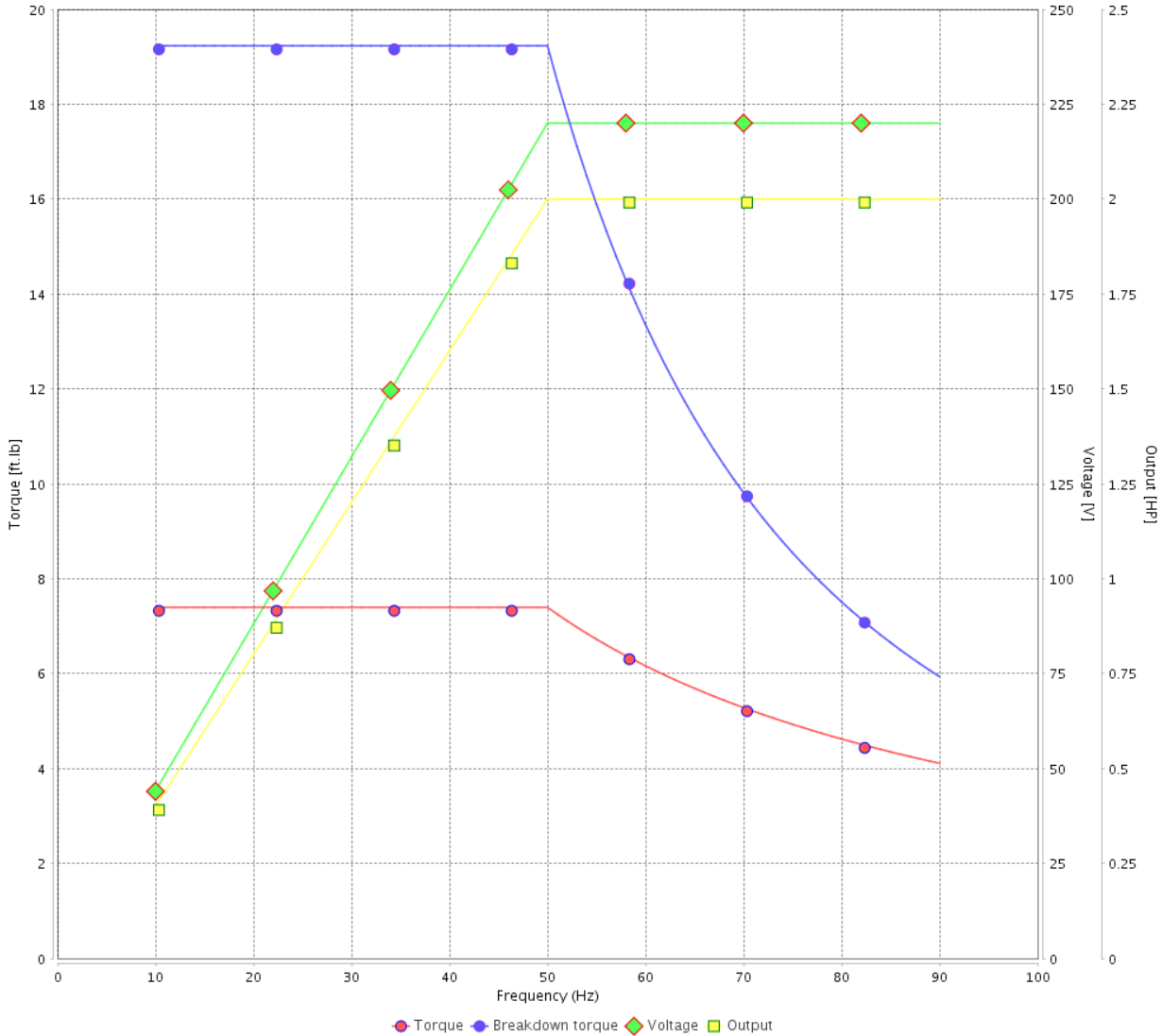
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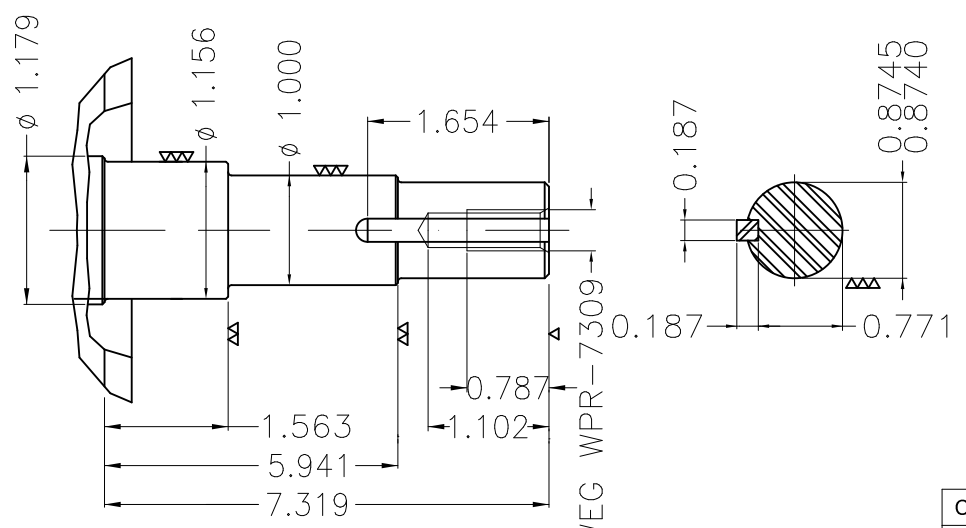
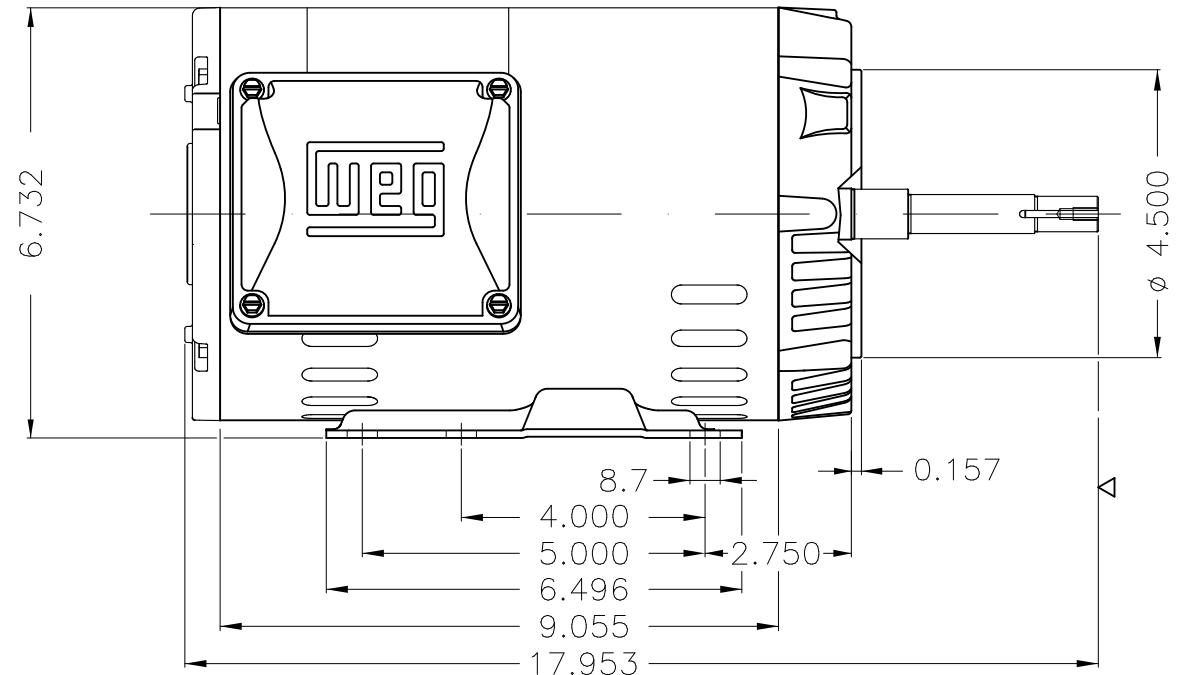
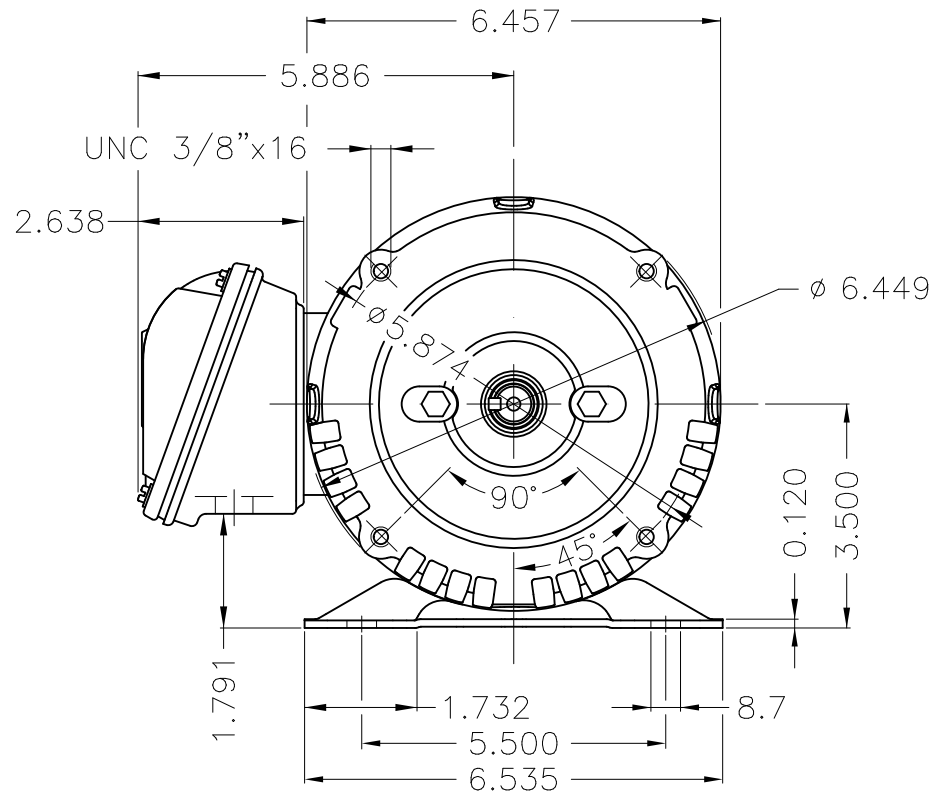
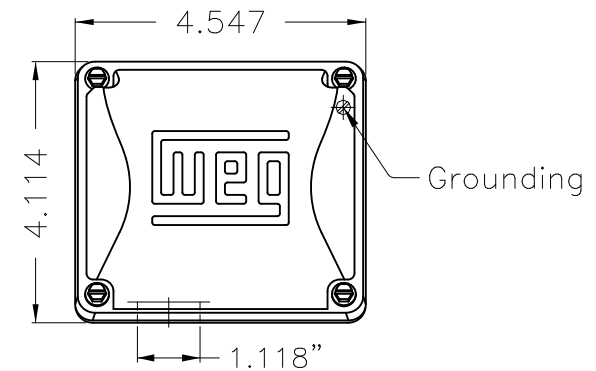
A

B

C

D

E



EUNC 3/8"-16 WEG WPR-7309-

DE Shaft End

Color Munsell N 1 matte black									
Painting plan 207N									
Mounting F-1/B34R(D)									
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JP 3/4 DE PREL ETX							
CHECKED		FRAME 143/5JP IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

2 HP 04 Poles 60 Hz

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



Dimensions in inches XME A3

WEG
NEMA
Premium3PT9
C US LISTED

Energy Verified

MADE IN MEXICO

MAT: 12682722 CC029A

W01.T00IC0X0N

MODEL 002180T3E145JP-S
29MAR2019

PH 3 FR 143/5JP HP(KW) 2.0(1.5) Hz 60

V 230/460 RPM 1740

A 5.38/2.69 DUTY CONT.

SFA 6.19/3.09 CODE K DES B

SF 1.15 INS CL F AT 80K AMB 40°C ENCL ODP

PF 0.81 NEMA NOM.EFF. 86.5%

ALT 1000 m.a.s.l. USABLE @ 208V 5.95A SF1.00

ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.00
6.52-5.79/3.26-3.07A 1410RPM EFF 82.2% (IE1) IEC 60034-1T1-BLU T2-WHT
T3-ORG T4-YEL
T5-BLK T6-GRY
T7-PNK T8-RED
T9-RED BRK

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

Inverter duty For 60Hz use on VPWM 1000:1 VT, 5:1 CT

DE: 6206-ZZ ODE: 6203-ZZ MOBIL POLYREX EM

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.

