

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: JP Pump NEMA Premium Efficiency Three-Phase	Product code :	14808609	
		Catalog # :	00236ET3E145JP-S	
Frame	: 143/5JP	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	: 43.7 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.1279 sq.ft.lb	
Design	: B			
Output [HP]	2	2	2	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	4.94/2.47	5.94/2.97	5.39/2.86	
L. R. Amperes [A]	48.9/24.5	44.0/22.0	44.2/23.5	
LRC [A]	9.9x(Code L)	7.4x(Code J)	8.2x(Code K)	
No load current [A]	2.13/1.06	2.10/1.05	2.14/1.13	
Rated speed [RPM]	3520	2875	2890	
Slip [%]	2.22	4.17	3.67	
Rated torque [ft.lb]	2.98	3.65	3.63	
Locked rotor torque [%]	250	229	260	
Breakdown torque [%]	300	280	310	
Service factor		1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	23s (cold) 13s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)	
Efficiency (%)	25%	82.1	84.0	
	50%	82.5	83.7	
	75%	85.5	84.9	
	100%	85.5	84.1	
Power Factor	25%	0.45	0.48	
	50%	0.73	0.76	
	75%	0.83	0.86	
	100%	0.89	0.90	
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads		
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 76 lb	
		Max. compression	: 120 lb	
Lubrication interval	: -			
Lubricant amount	: -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 5.46A SF 1.00 SFA 5.46A				
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

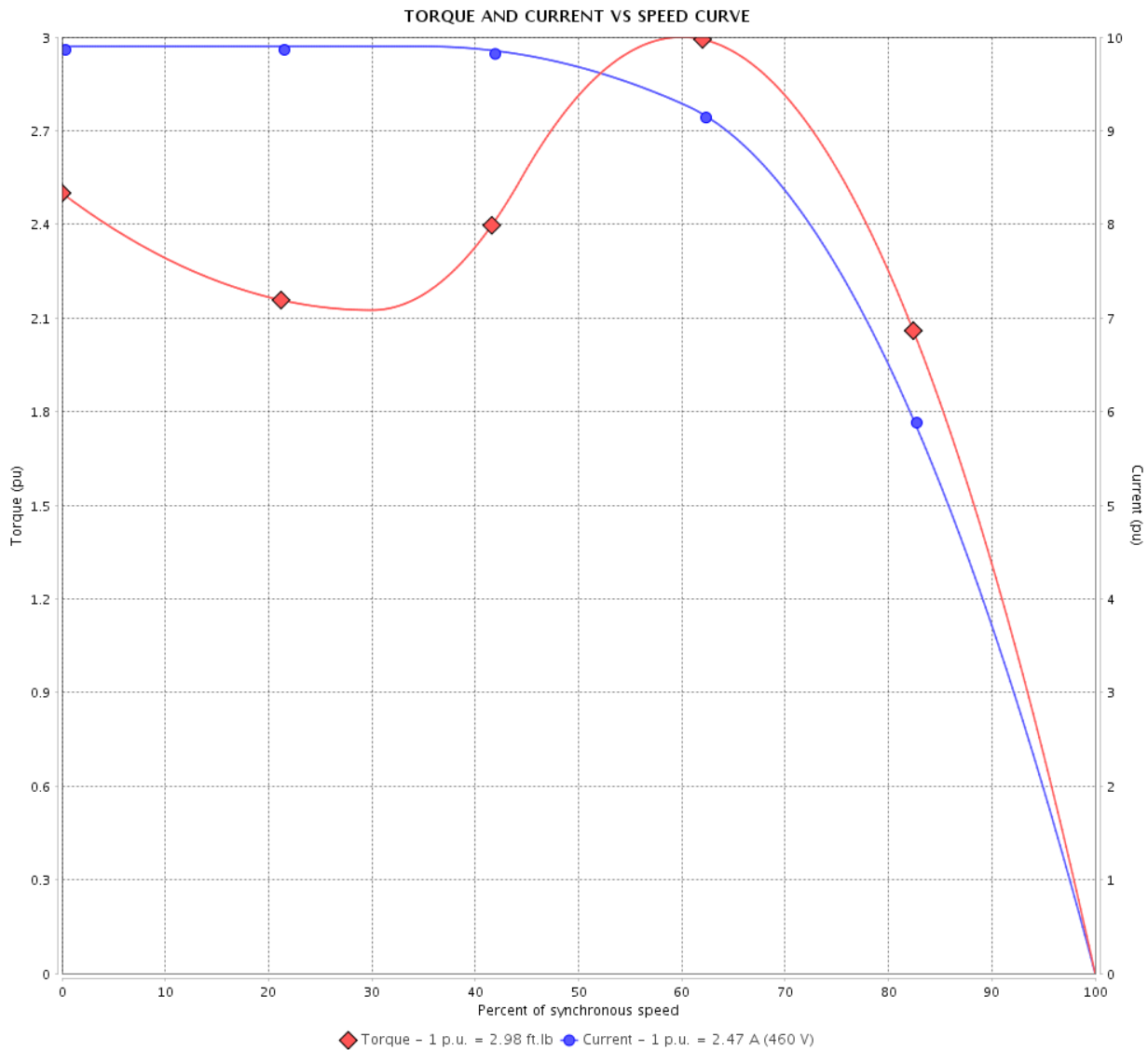


Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14808609

Catalog # : 00236ET3E145JP-S



Performance : 230/460 V 60 Hz 2P

Rated current	: 4.94/2.47 A	Moment of inertia (J)	: 0.1279 sq.ft.lb
LRC	: 9.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3520 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



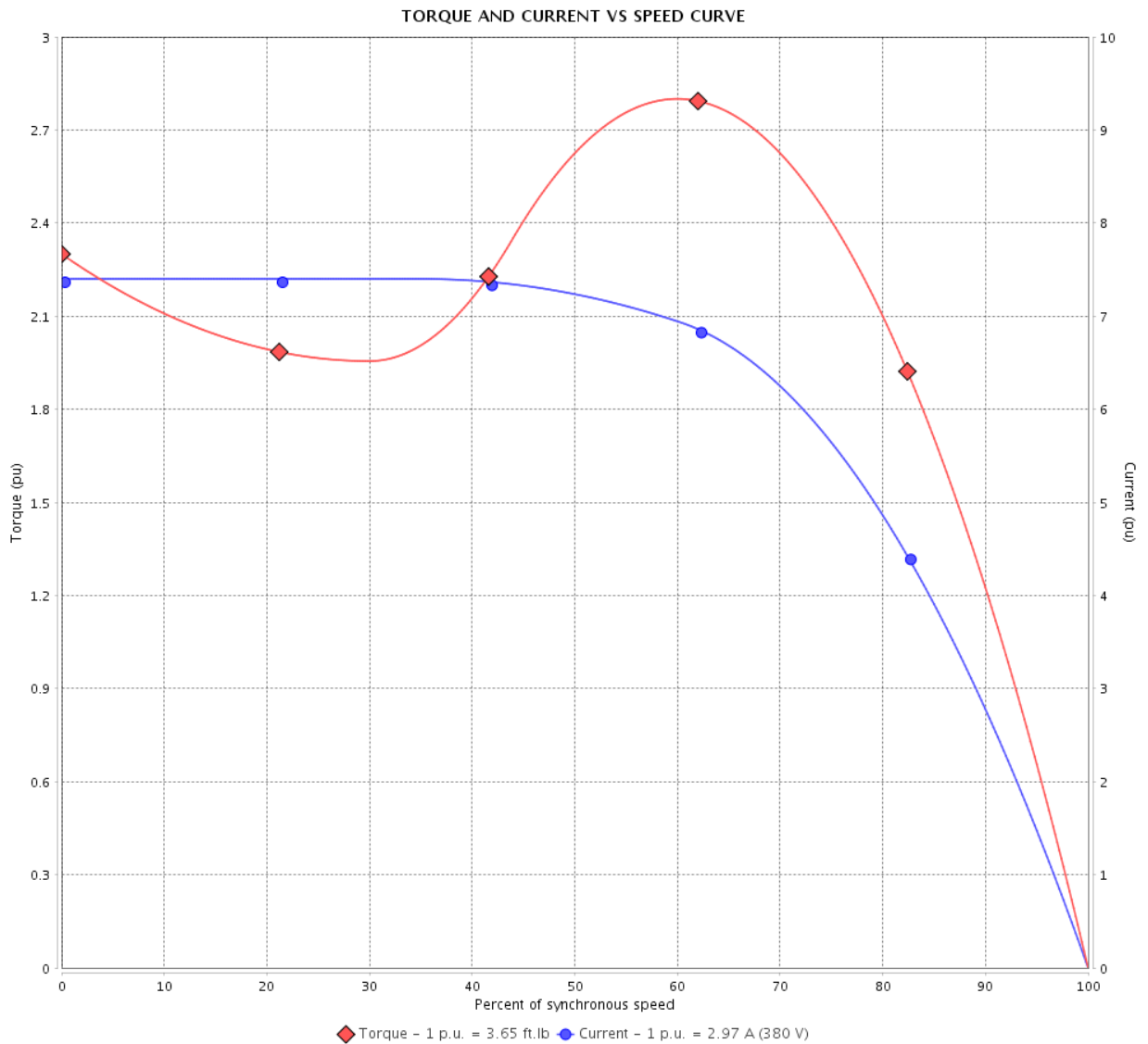
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14808609

Catalog # : 00236ET3E145JP-S



Performance : 190/380 V 50 Hz 2P

Rated current : 5.94/2.97 A
 LRC : 7.4
 Rated torque : 3.65 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 2875 rpm

Moment of inertia (J) : 0.1279 sq.ft.lb
 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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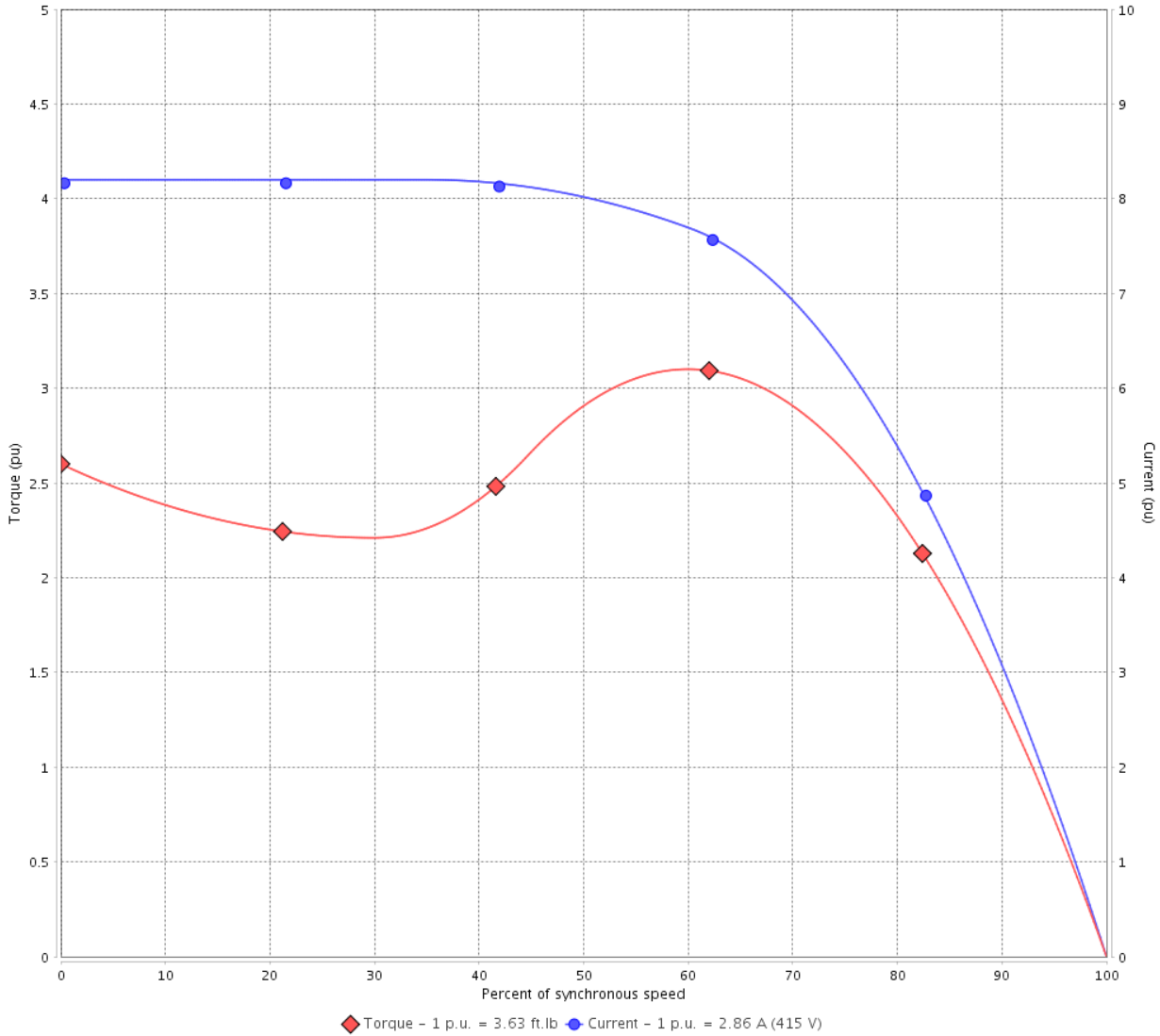
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 5.39/2.86 A	Moment of inertia (J)	: 0.1279 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 3.63 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.15
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2890 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

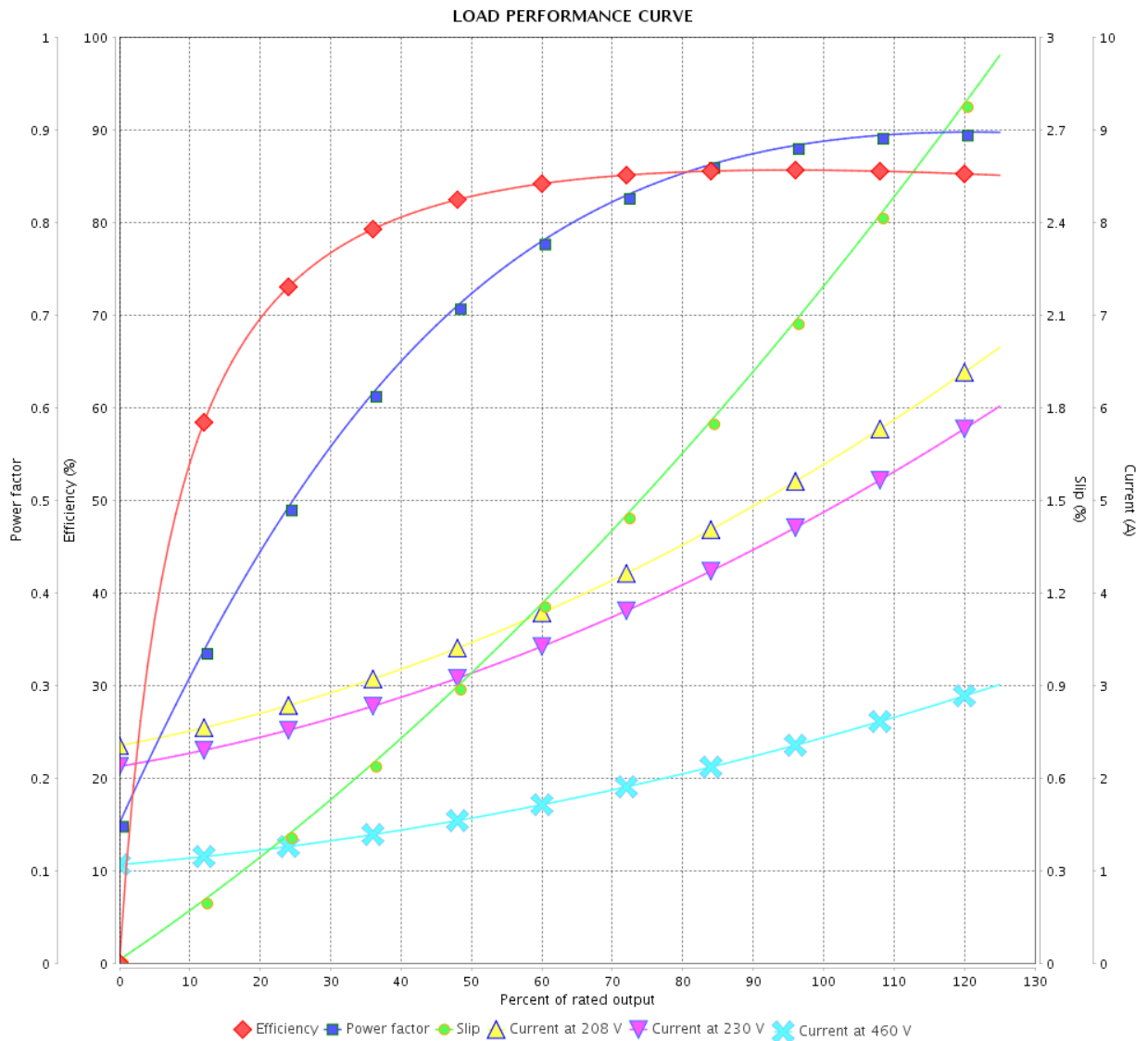


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Performance : 230/460 V 60 Hz 2P

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 LRC : 9.9
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 300 %
 Rated speed : 3520 rpm

Moment of inertia (J) : 0.1279 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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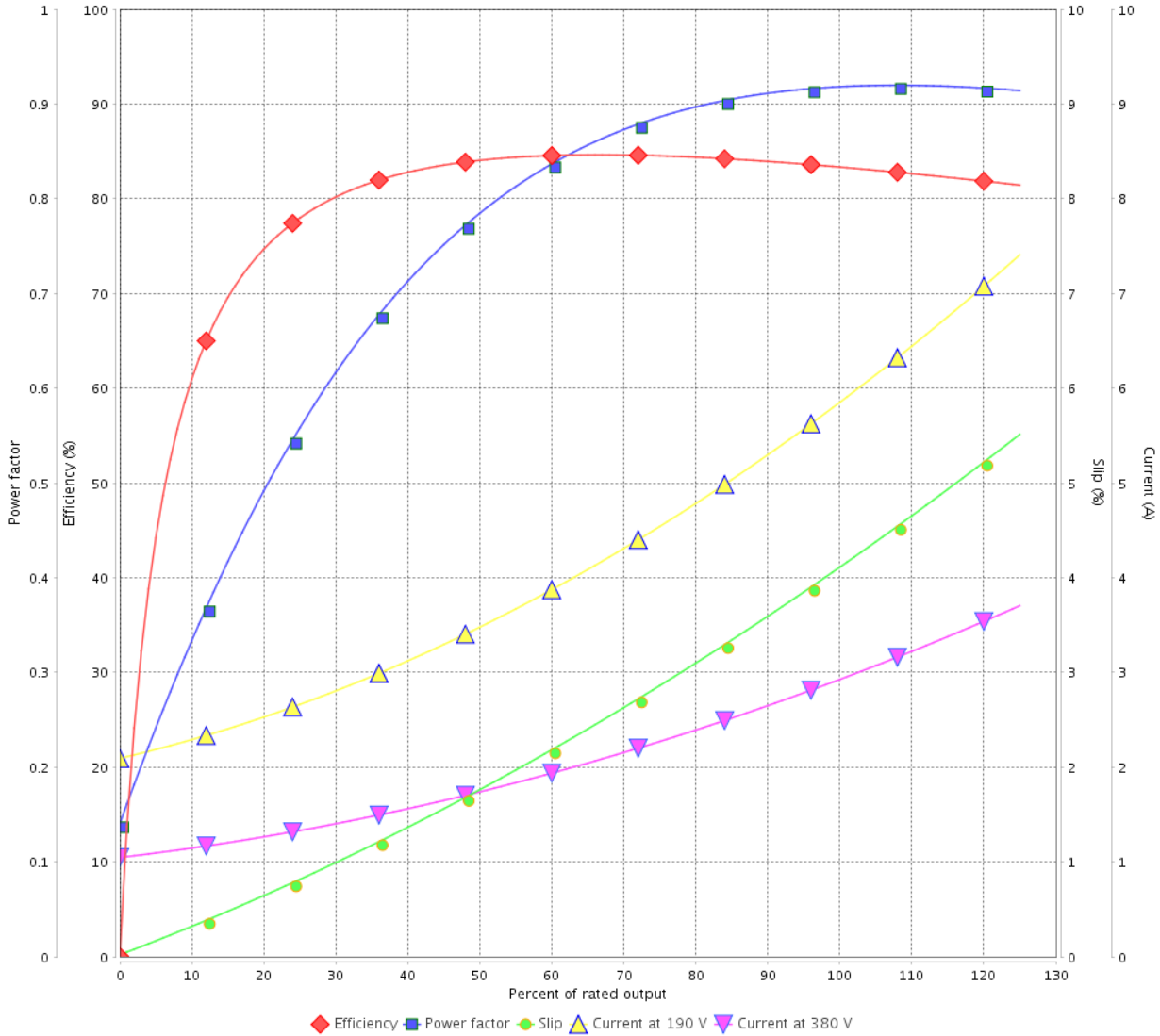
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Performance : 190/380 V 50 Hz 2P

Rated current : 5.94/2.97 A
 LRC : 7.4
 Rated torque : 3.65 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 2875 rpm

Moment of inertia (J) : 0.1279 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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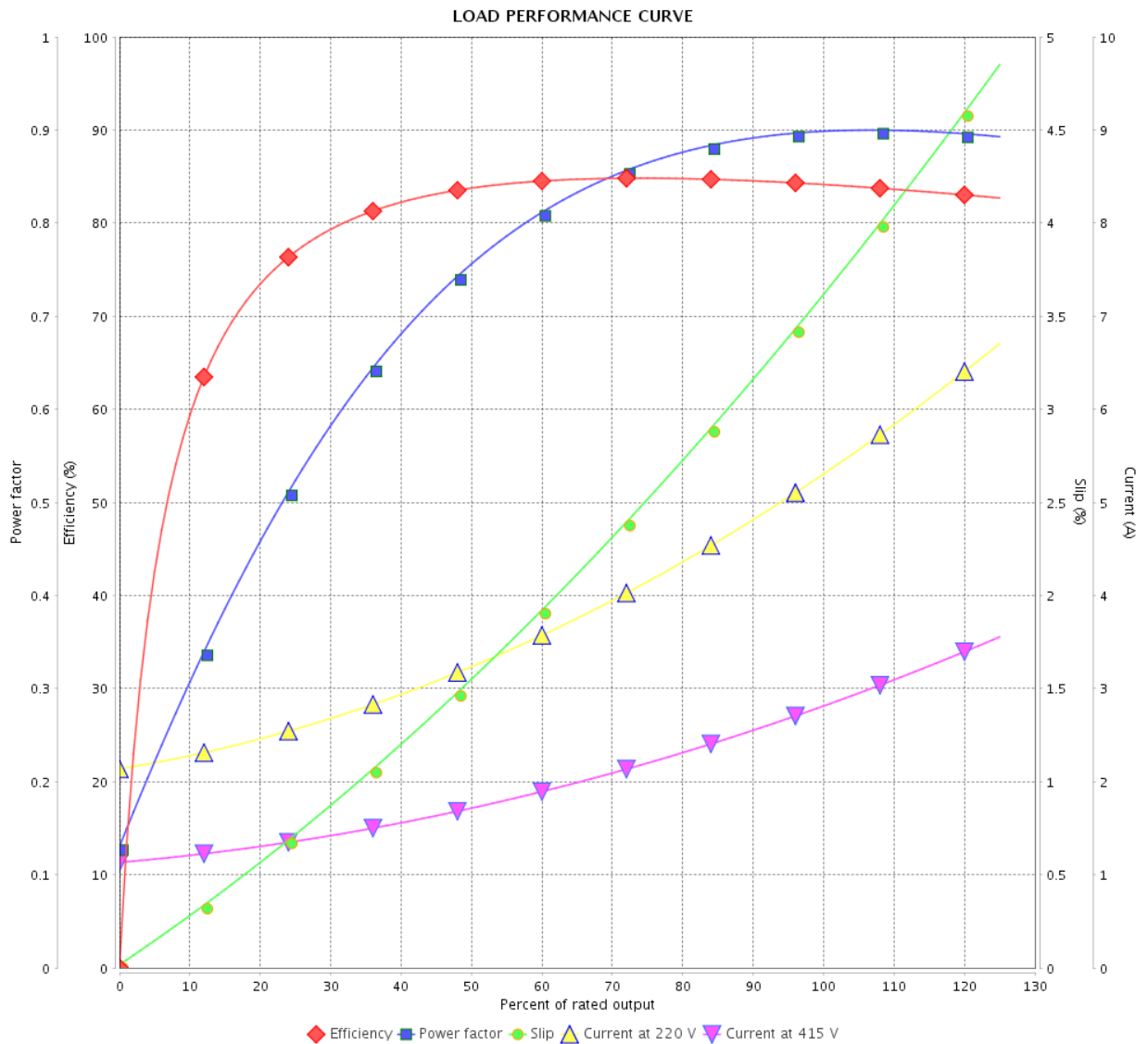


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THERMAL LIMIT CURVE



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Service factor :
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

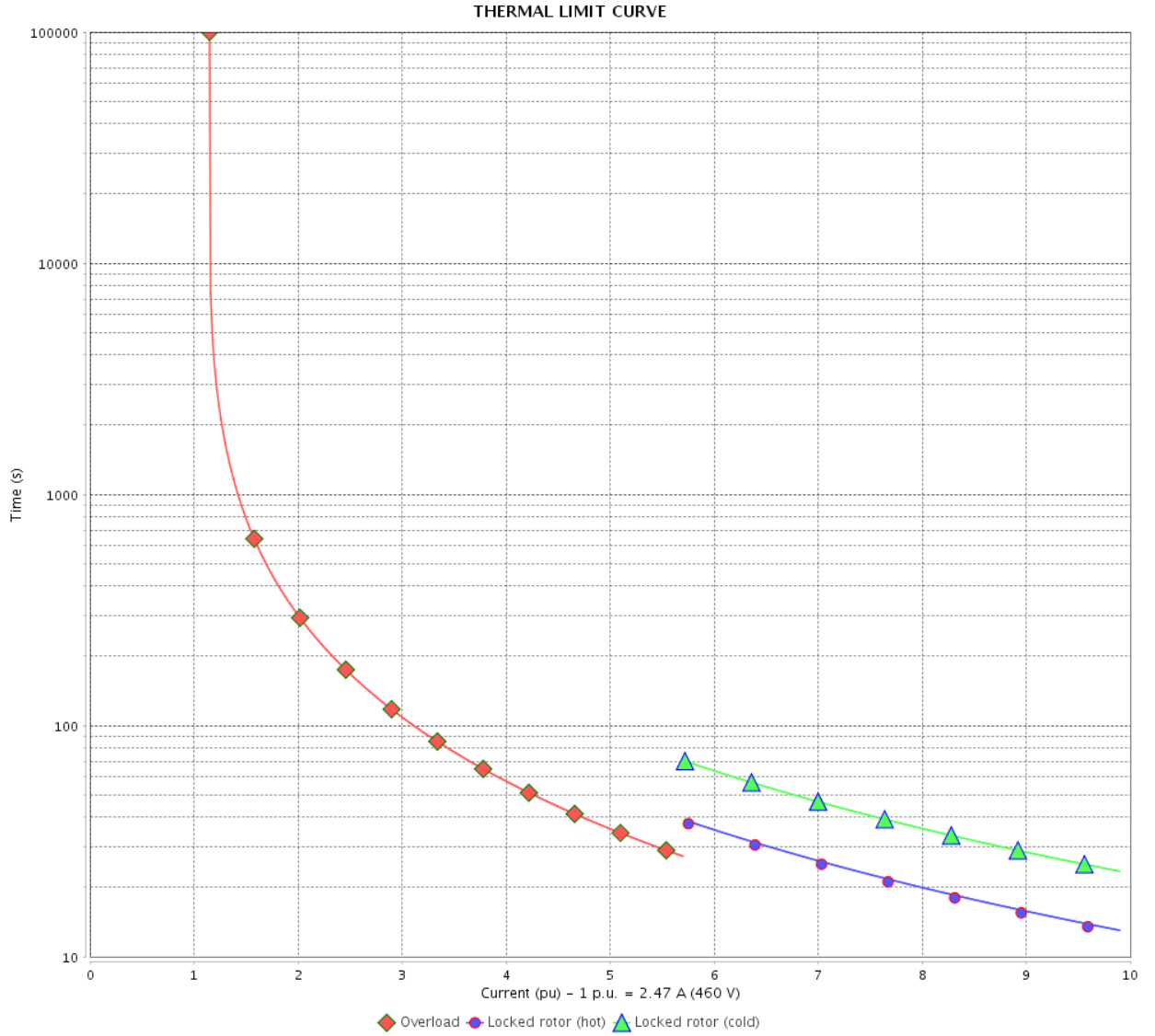
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Breakdown torque : 280 %
Rated speed : 2875 rpm

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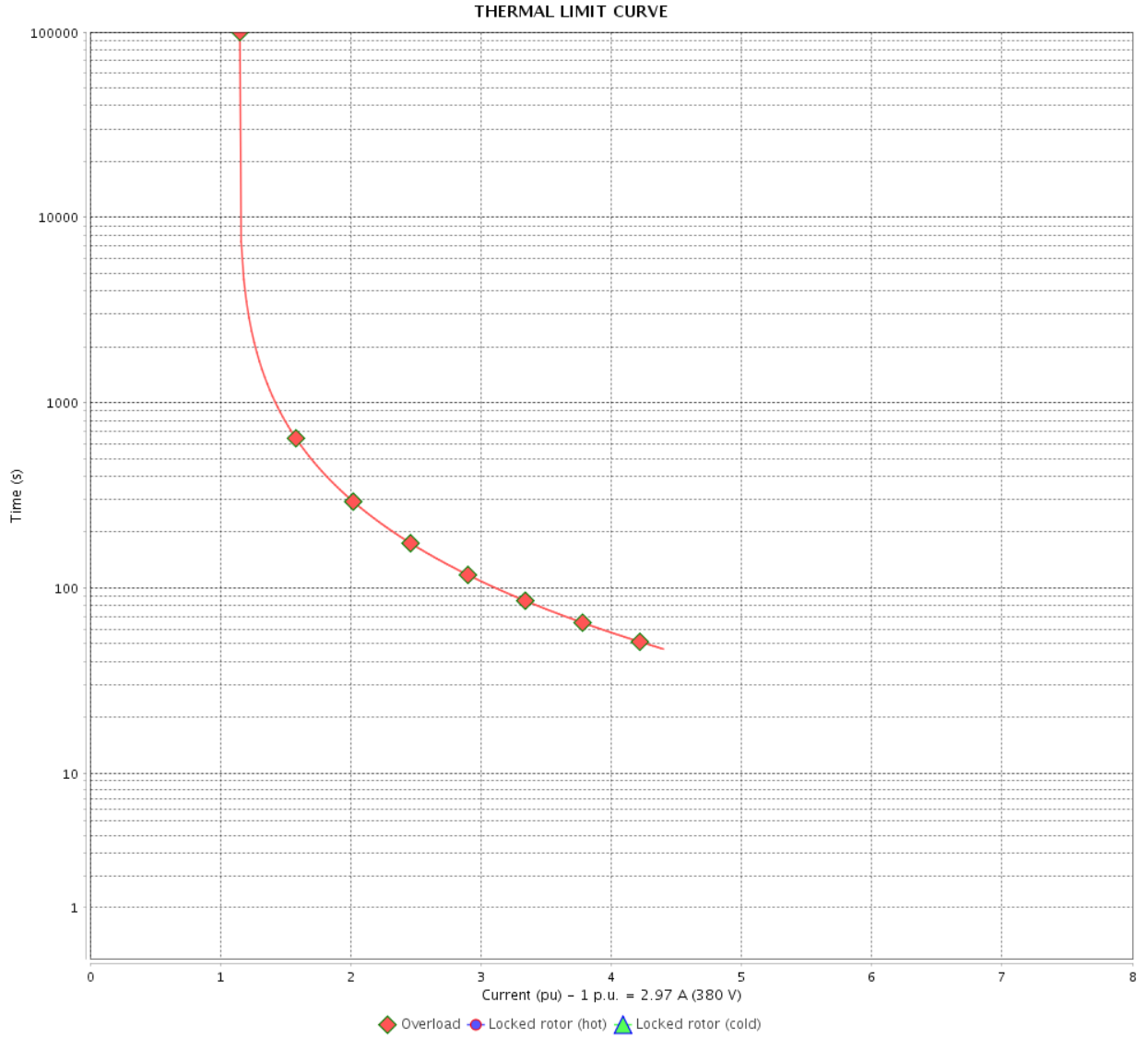
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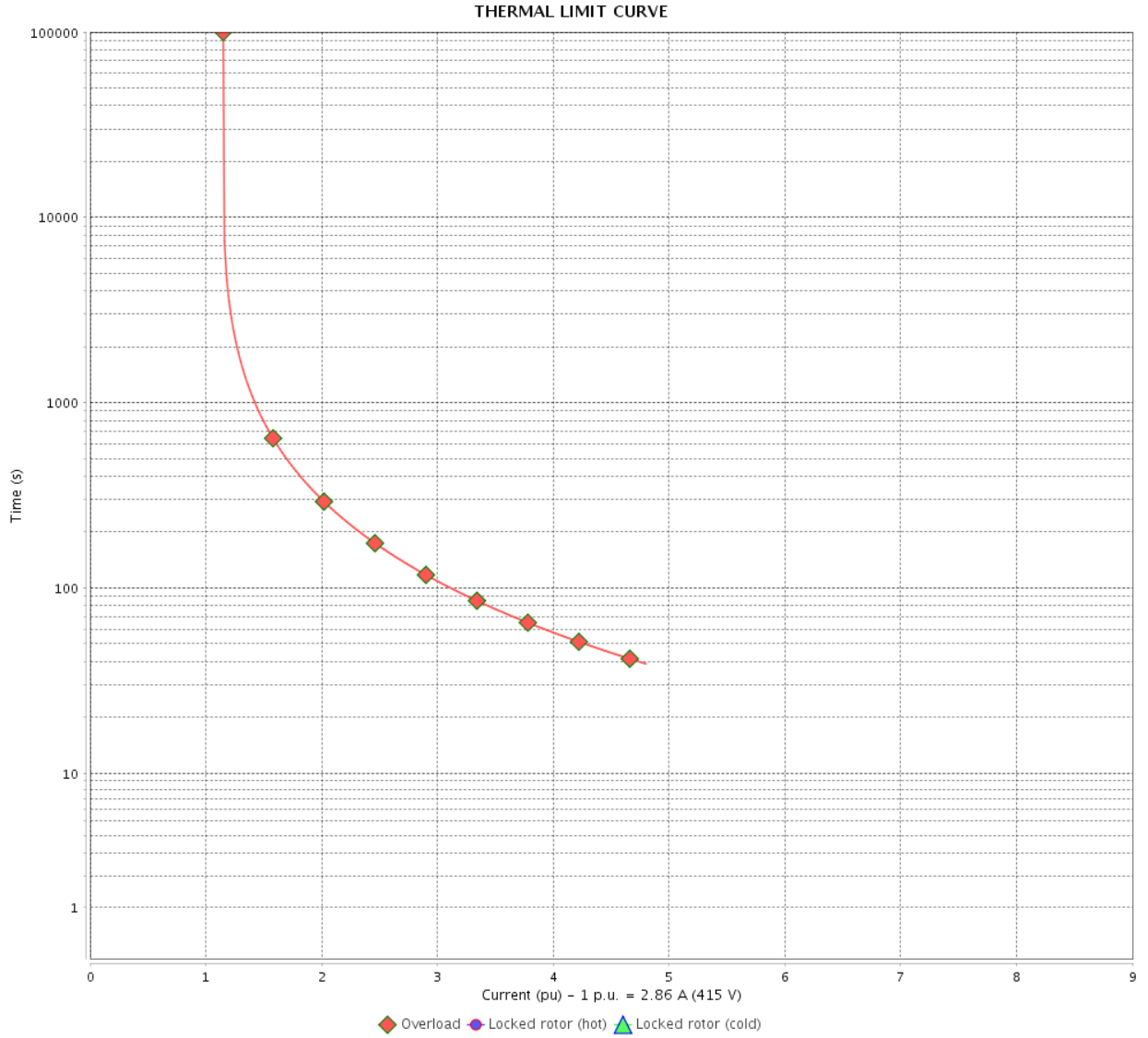
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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

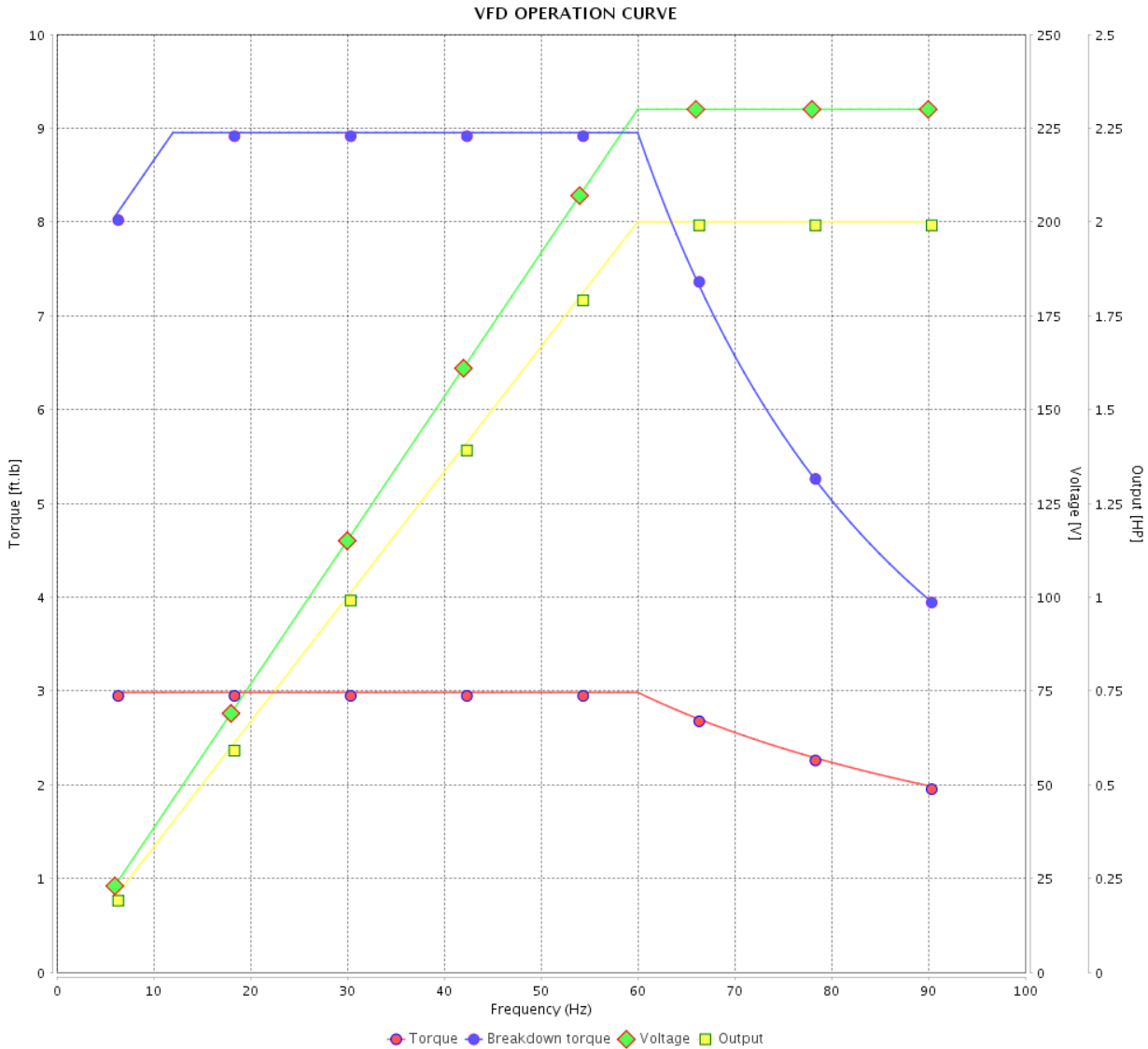


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 Service factor :
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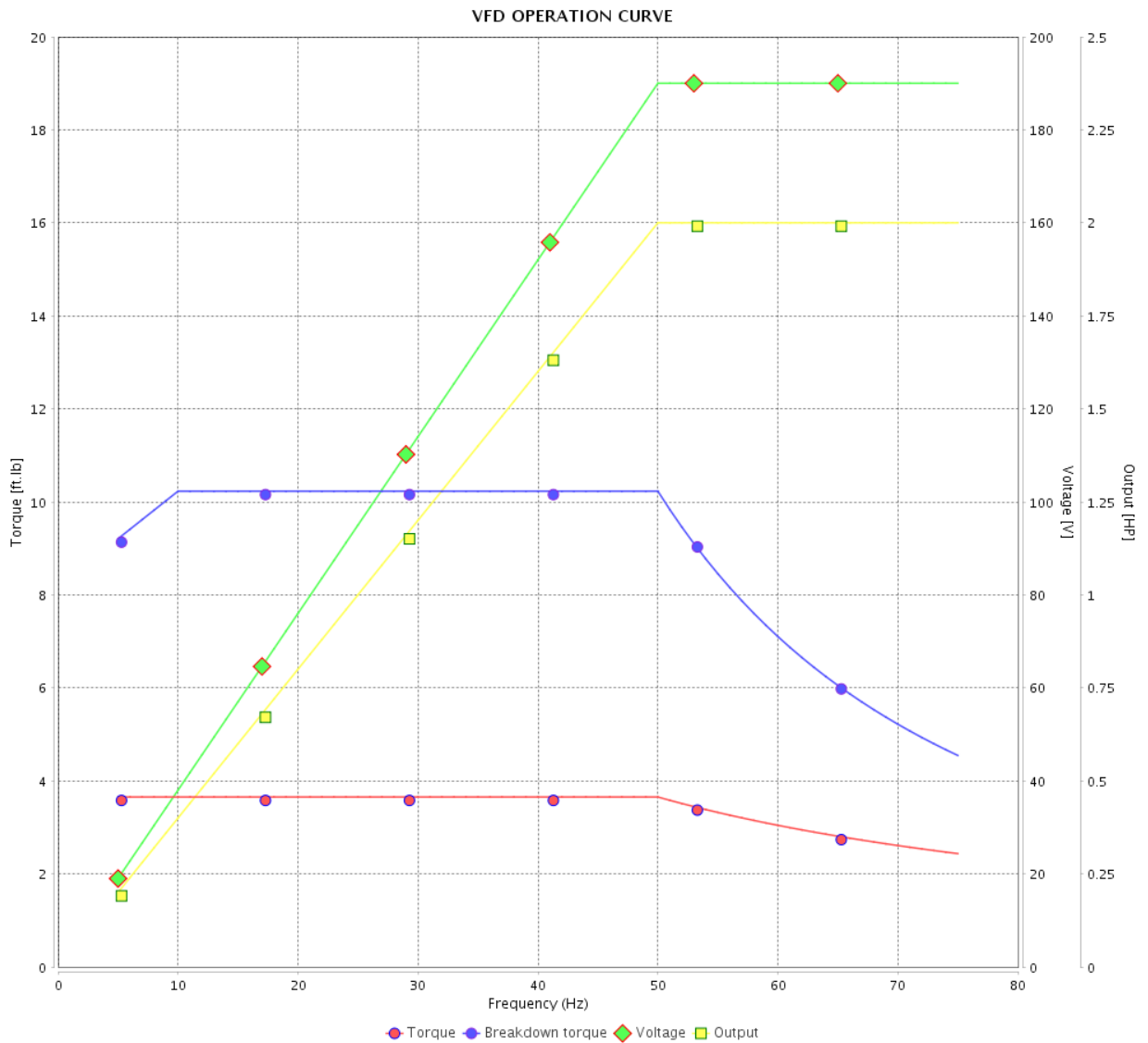


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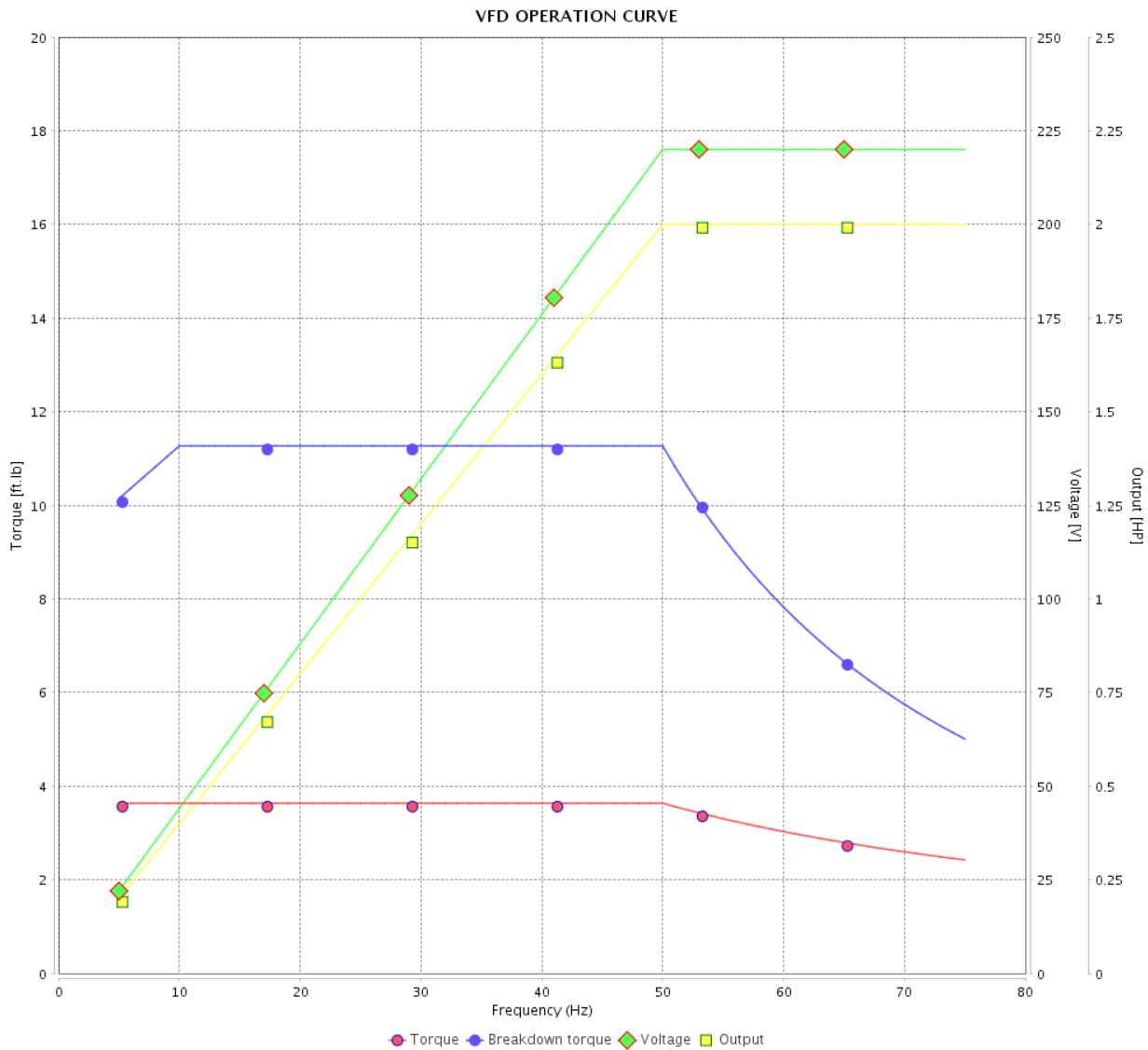


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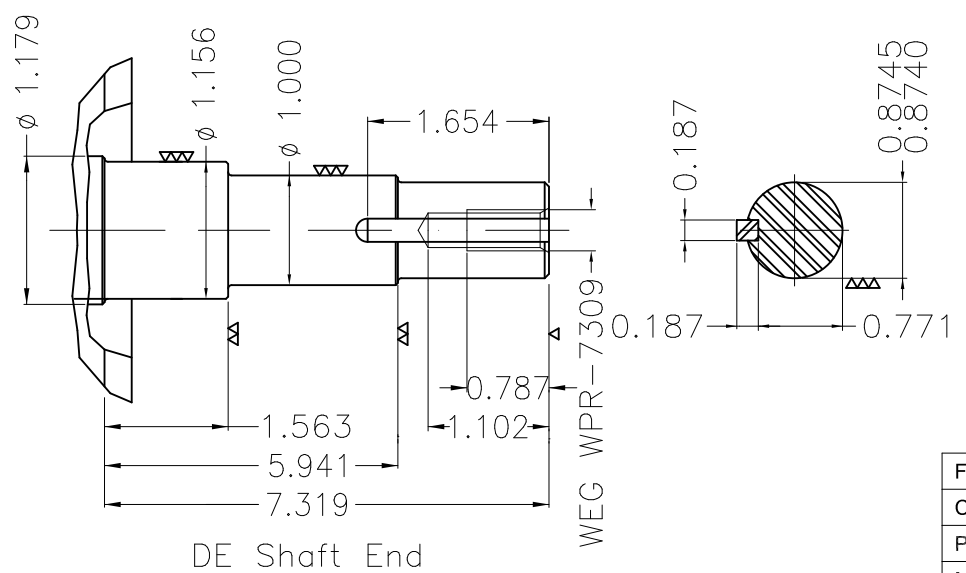
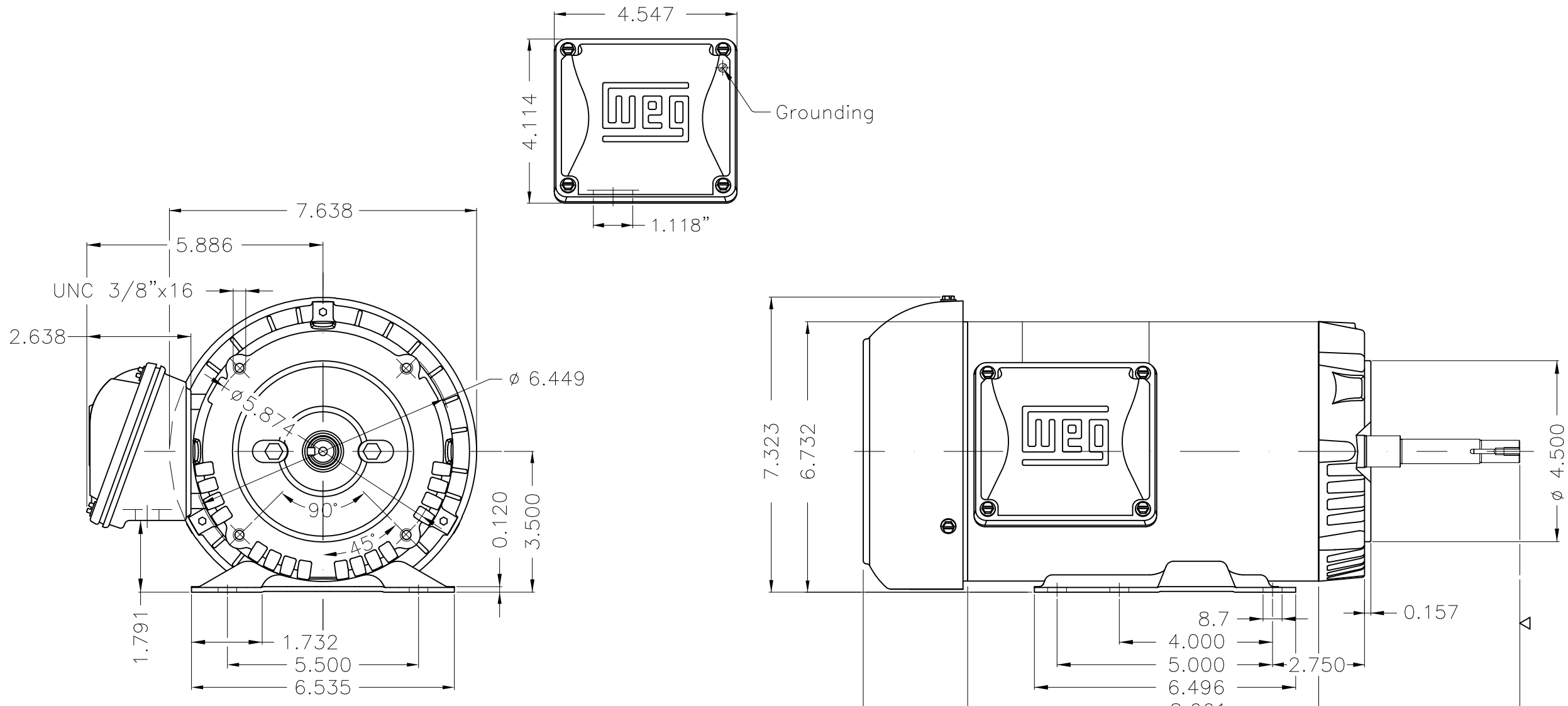
A

B

C

D

E



Fan cover - steel plate						
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	PIRBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JP 3/5 DE PRE-LETTA							
CHECKED		FRAME 143/5JP IP55 TEFC							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

PREVIEW
WDD



2 HP 02 Poles 60 Hz

Dimensions in inches XME A3

WEG
NEMA
Premium

MADE IN MEXICO

MAT: 14808609 CC029A
W01.TE0IC0X0N
MODEL 00236ET3H145JM-S
28ABR2020**PH 3 FR 143/5JP HP(KW) 2.0(1.5) Hz 60**
V 230/460 RPM 3520
A 4.94/2.47 DUTY CONT.**SFA 5.68/2.84 INS CL F AT 80K AMB 40°C CODE L DES B IP55**
SF 1.15 ENCL TEFC
PF 0.89 NEMA NOM.EFF. 85.5%**ALT 1000 m.a.s.l. USABLE @ 208V 5.46A SF1.00****ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.15**
5.94-5.23/2.97-2.77A 2875RPM EFF 83.3% (IE2) IEC 60034-1**T1-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****For safe area-Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 10:1 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.****UL**
C US LISTED
FOR SAFE AREA**SP**
C US

Energy Verified

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