

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12845388																		
Catalog # :	00218OT3V145TC-S																		
Frame : 143/5TC Output : 2 HP (1.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 6.19/3.09 A L. R. Amperes : 47.6/23.8 A LRC : 7.7x(Code K) No load current : 3.16/1.58 A Rated speed : 1740 rpm Slip : 3.33 % Rated torque : 6.04 ft.lb Locked rotor torque : 260 % Breakdown torque : 320 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1168 sq.ft.lb Design : B	Locked rotor time : 30s (cold) 17s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Cooling method : IC01 - ODP Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 52.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 40.2 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	85.2 85.5 86.5 86.5																		
Power Factor	0.36 0.61 0.74 0.81																		
Foundation loads																			
Max. traction	: 148 lb																		
Max. compression	: 188 lb																		
	<table border="0"> <tr> <td></td> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type</td> <td>: 6205 ZZ</td> <td>6203 ZZ</td> </tr> <tr> <td>Sealing</td> <td>: Without Bearing Seal</td> <td>Without Bearing Seal</td> </tr> <tr> <td>Lubrication interval</td> <td>: -</td> <td>-</td> </tr> <tr> <td>Lubricant amount</td> <td>: -</td> <td>-</td> </tr> <tr> <td>Lubricant type</td> <td colspan="2">: Mobil Polyrex EM</td> </tr> </table>		<u>Drive end</u>	<u>Non drive end</u>	Bearing type	: 6205 ZZ	6203 ZZ	Sealing	: Without Bearing Seal	Without Bearing Seal	Lubrication interval	: -	-	Lubricant amount	: -	-	Lubricant type	: Mobil Polyrex EM	
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Notes																			
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.																		
Rev.	Changes Summary	Performed	Checked	Date															
Performed by																			
Checked by			Page	Revision															
Date	14/04/2022		1 / 6																

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



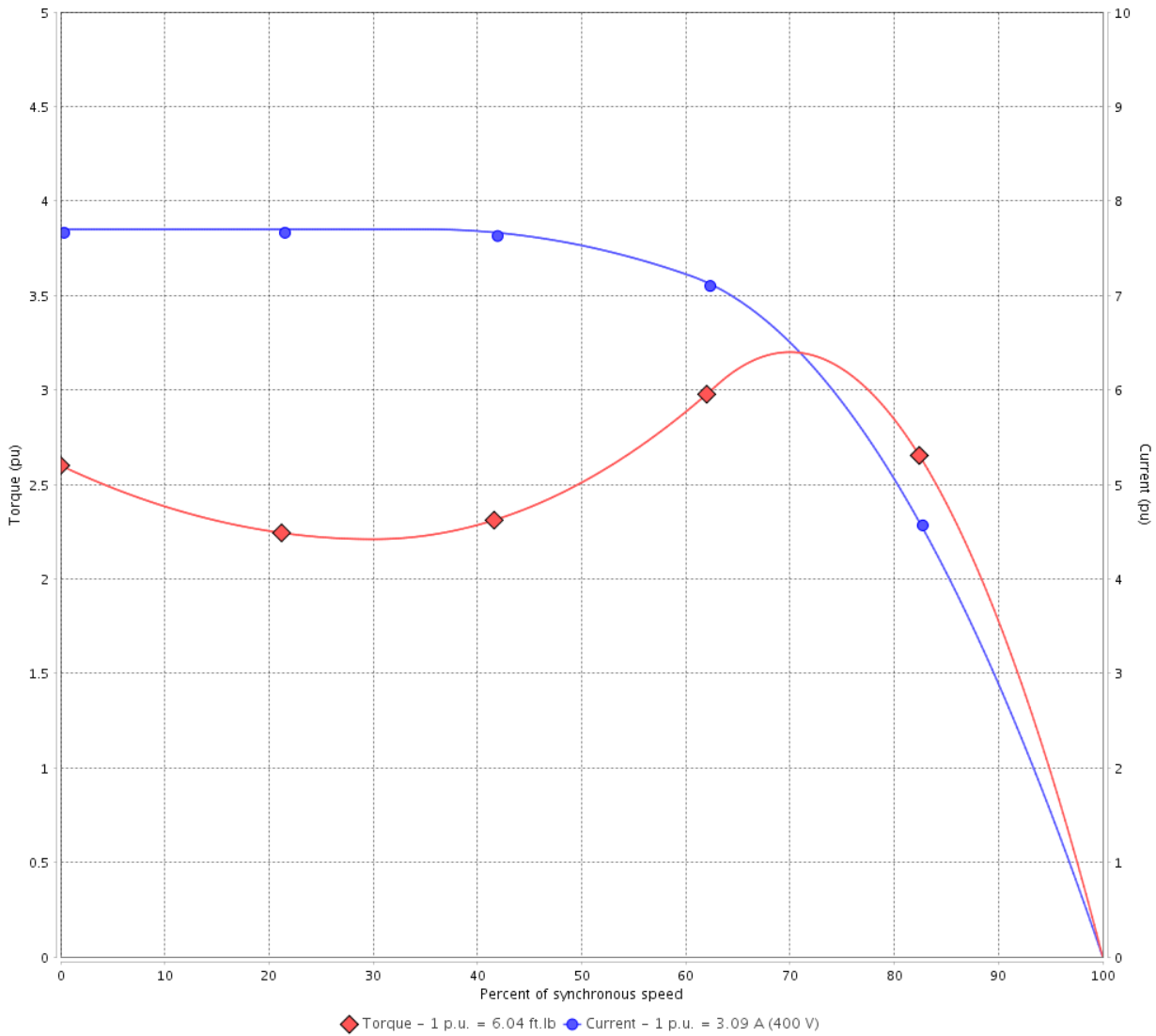
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12845388

Catalog # : 00218OT3V145TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

Rated current : 6.19/3.09 A
 LRC : 7.7
 Rated torque : 6.04 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 320 %
 Rated speed : 1740 rpm

Moment of inertia (J) : 0.1168 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

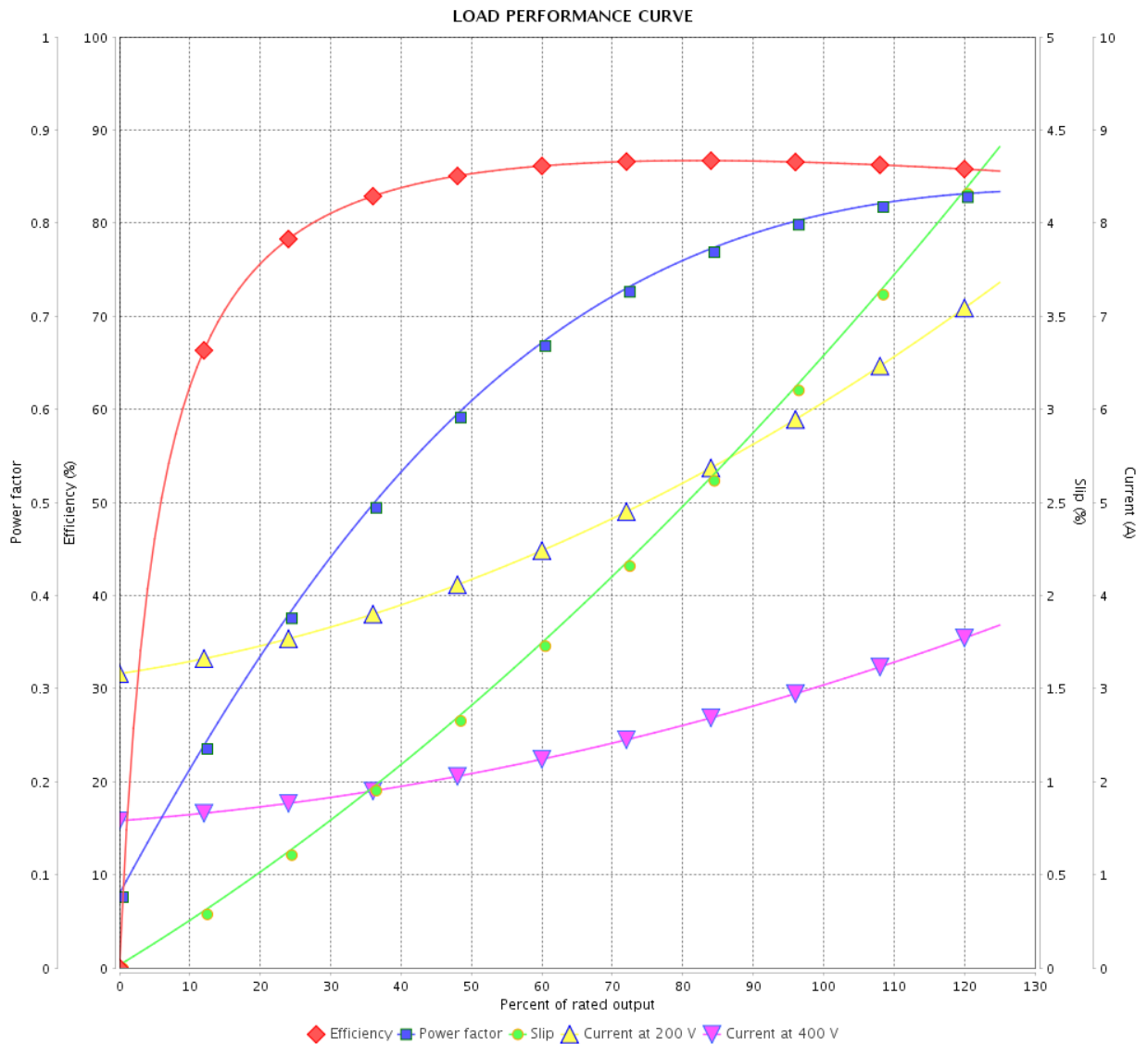


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THERMAL LIMIT CURVE



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Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1740 rpm	Design	: B

Heating constant

Cooling constant

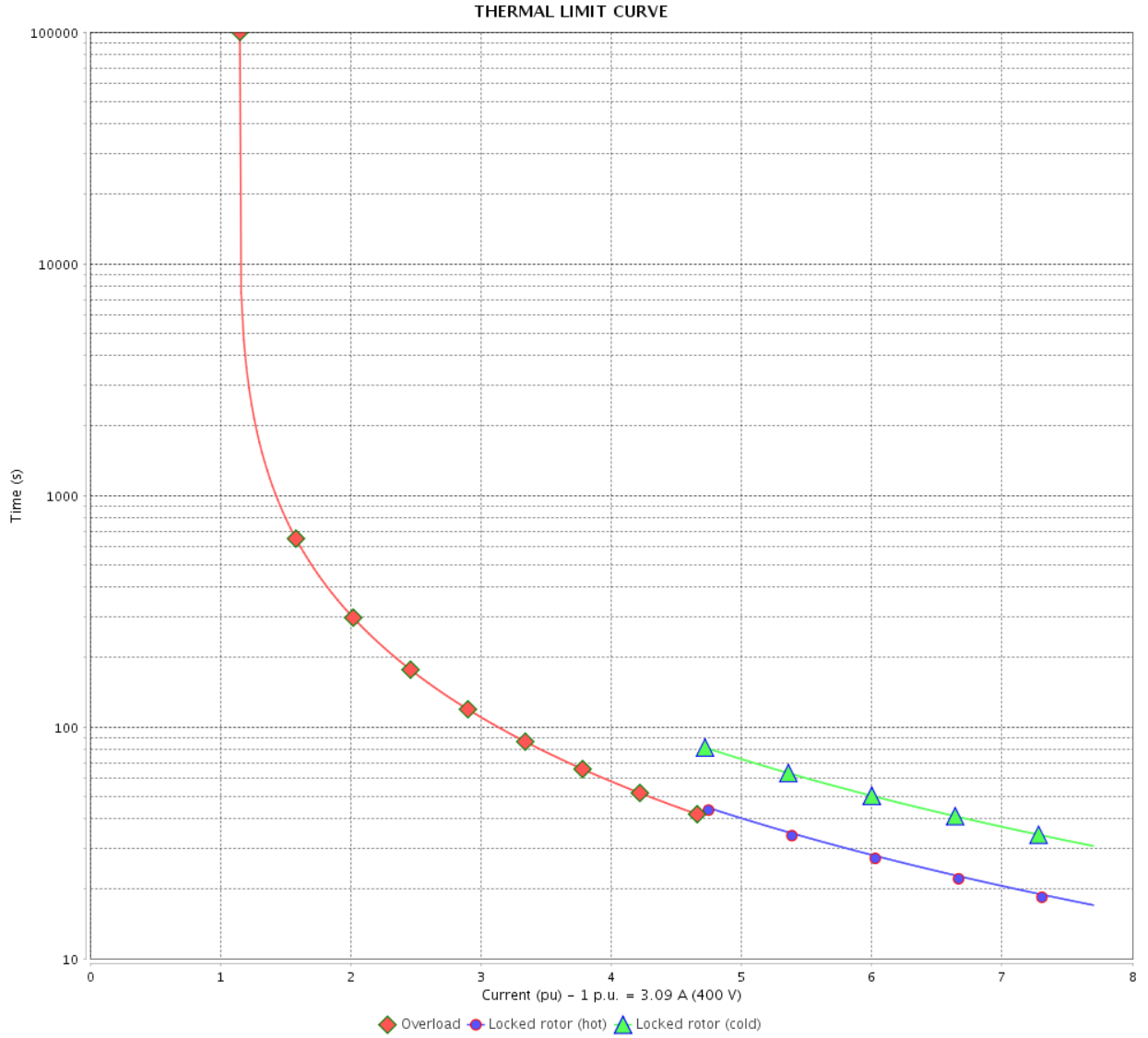
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

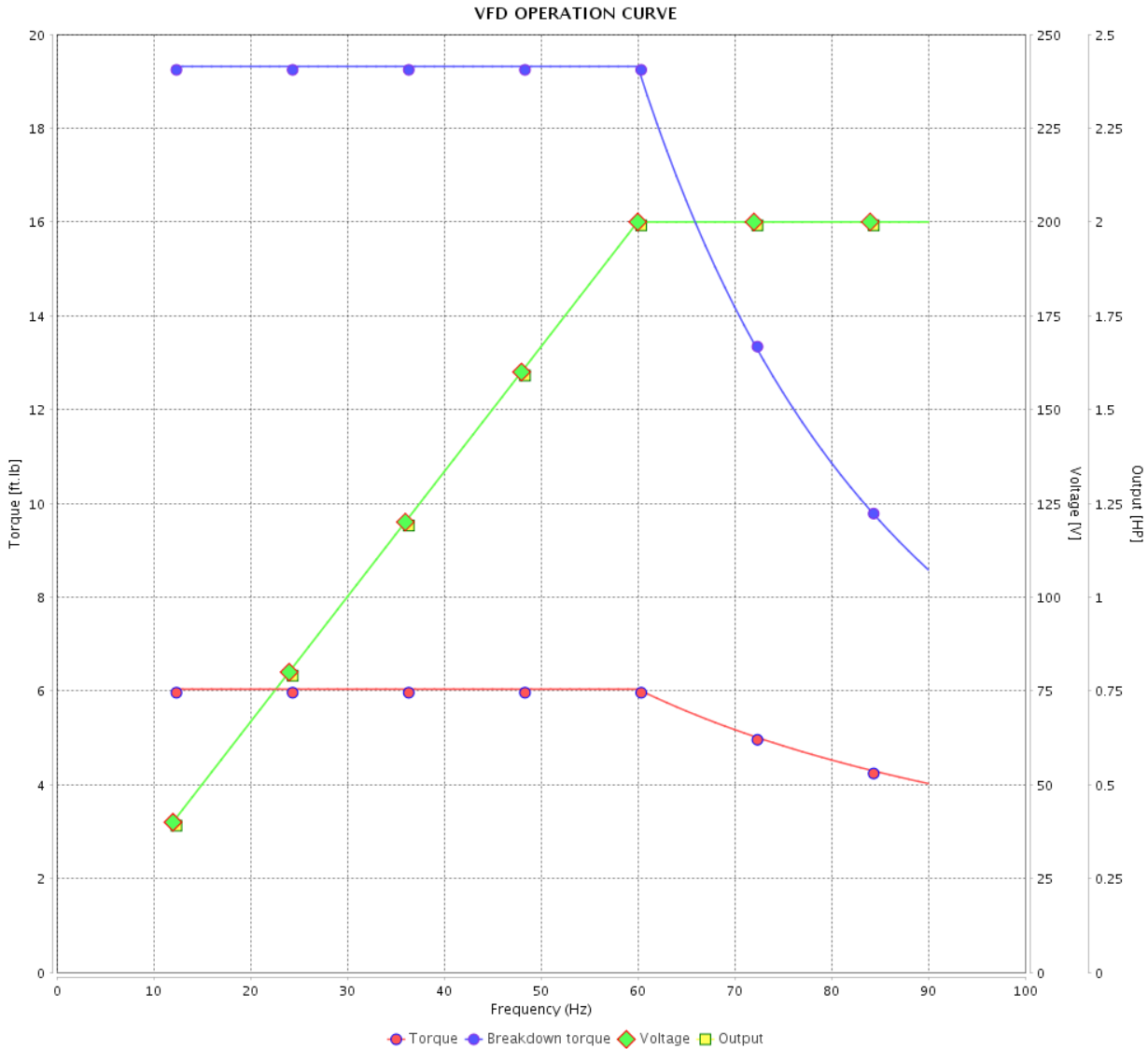


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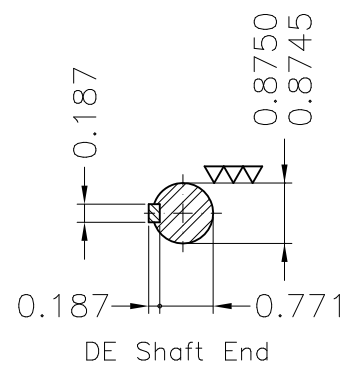
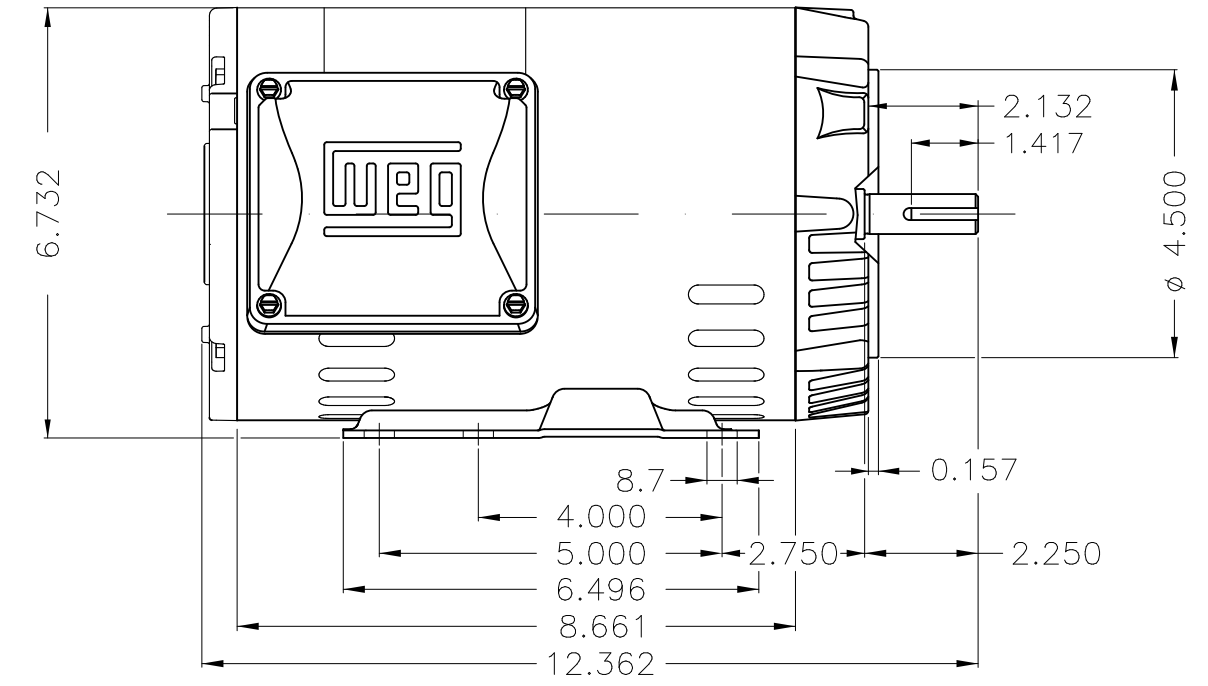
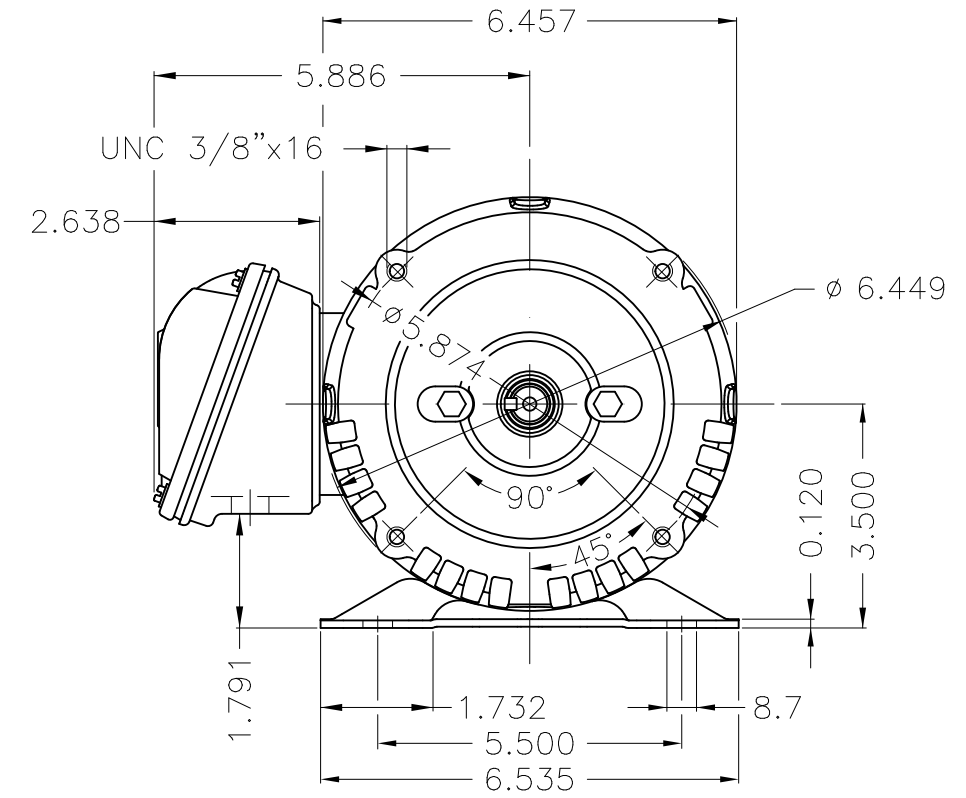
A

B

C

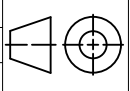
D

E



Dimensions in inches

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 PREM. EFF. FRAME 143/5TC IP21 ODP					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

2 HP 04 Poles 60 Hz

A

PREVIEW
WDD



XME A3

**NEMA
Premium**

MADE IN MEXICO

MAT: 12845388 CC029A

W01.T00IC0X0N

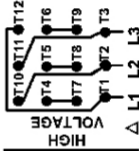
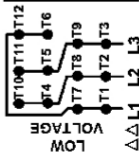
MODEL 002180T3V145TC-S

04FEB2022 B/N:

PH 3	Hz 60	HP 2.0
FR 143/5TC		KW 1.5
DUTY CONT.		V 200/400
ALT 1000 m.a.s.l.		A 6.19/3.09
INS CL F AT 80K		SFA 7.12/3.55
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE K	PF 0.81
		RPM 1740
		NEMA NOM. EFF 86.5%

Inverter duty motor For 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
 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.

