

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	14802527																		
Catalog # :	00218ET3H145TC-S																		
Frame : 143/5TC Output : 2 HP (1.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 2.18 A L. R. Amperes : 17.8 A LRC : 8.2x(Code K) No load current : 1.12 A Rated speed : 1745 rpm Slip : 3.06 % Rated torque : 6.02 ft.lb Locked rotor torque : 270 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1296 sq.ft.lb Design : B	Locked rotor time : 27s (cold) 15s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : W-6 Rotation ¹ : Both (CW and CCW) Noise level ² : 52.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 43.7 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	86.0 85.5 87.5 86.5																		
Power Factor	0.35 0.60 0.73 0.80																		
Foundation loads																			
Max. traction	: 135 lb																		
Max. compression	: 179 lb																		
	<table border="0" style="width:100%;"> <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 style="text-align: center;">: 6205 ZZ</td> <td style="text-align: center;">: 6203 ZZ</td> </tr> <tr> <td>Sealing</td> <td style="text-align: center;">: V'Ring</td> <td style="text-align: center;">: V'Ring</td> </tr> <tr> <td>Lubrication interval</td> <td style="text-align: center;">: -</td> <td style="text-align: center;">: -</td> </tr> <tr> <td>Lubricant amount</td> <td style="text-align: center;">: -</td> <td style="text-align: center;">: -</td> </tr> <tr> <td>Lubricant type</td> <td colspan="2" style="text-align: center;">: Mobil Polyrex EM</td> </tr> </table>		<u>Drive end</u>	<u>Non drive end</u>	Bearing type	: 6205 ZZ	: 6203 ZZ	Sealing	: V'Ring	: V'Ring	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															
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



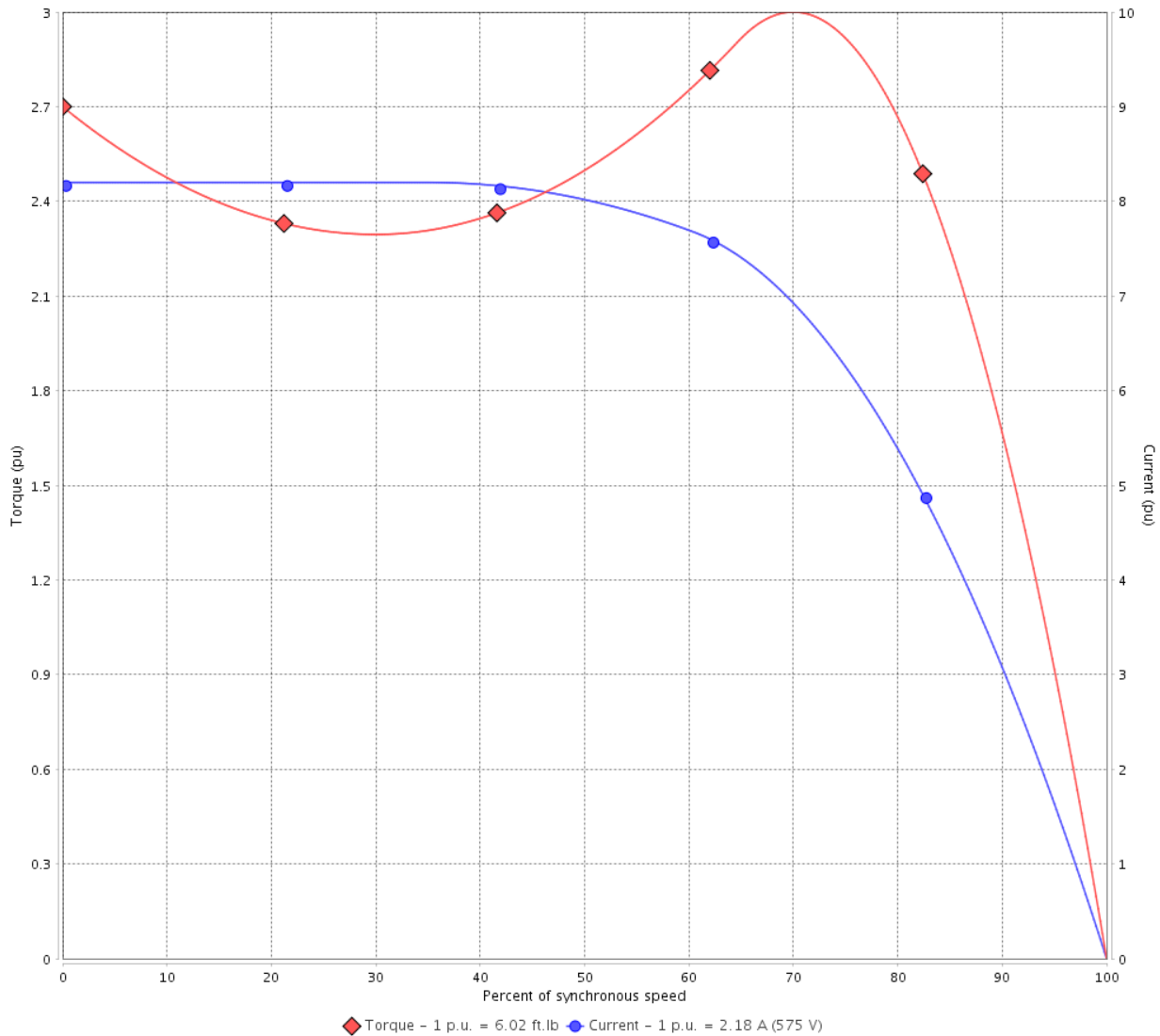
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 2.18 A	Moment of inertia (J)	: 0.1296 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 6.02 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1745 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

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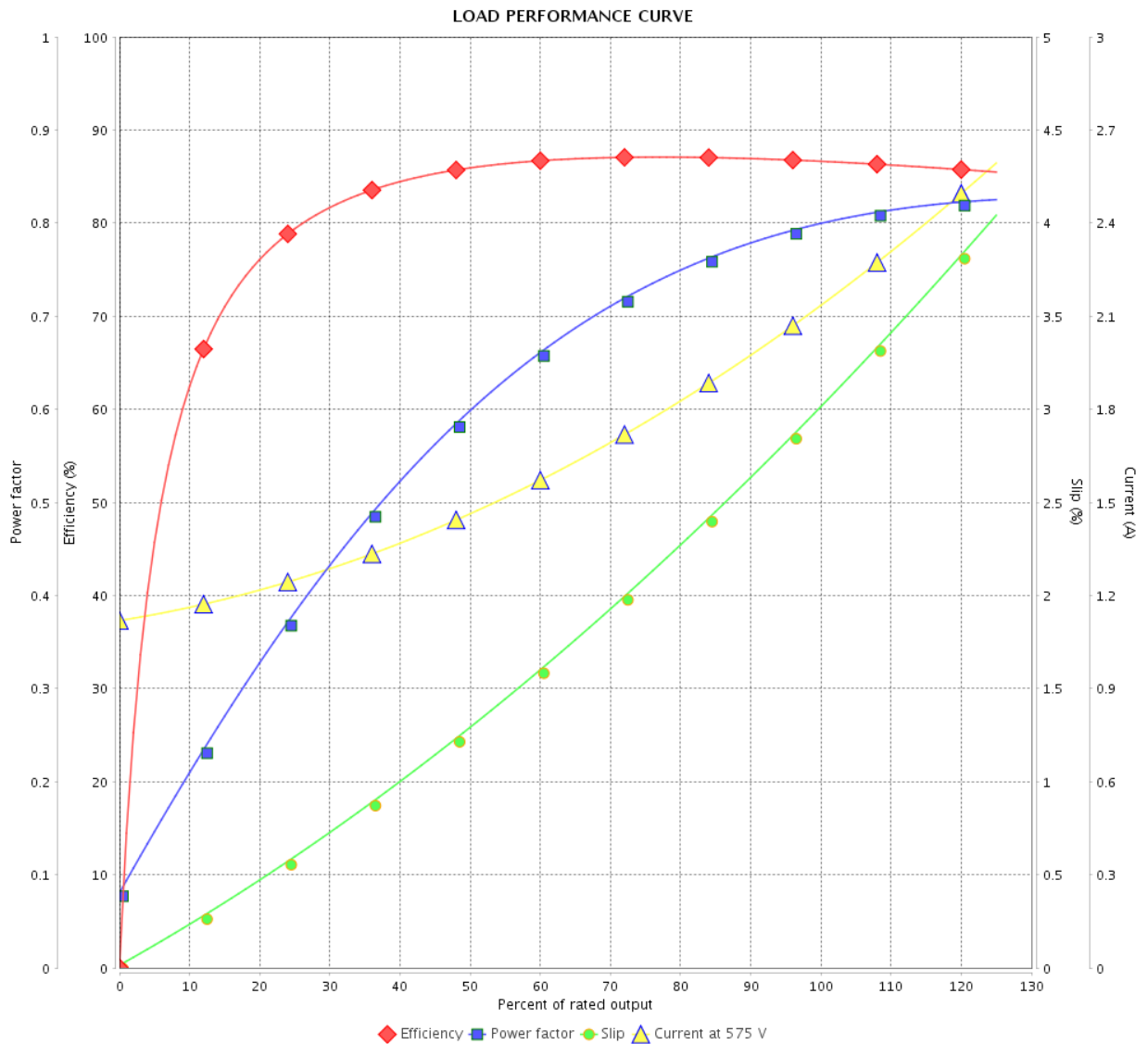


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Performance : 575 V 60 Hz 4P

Rated current : 2.18 A
 LRC : 8.2
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
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 Design : B

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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

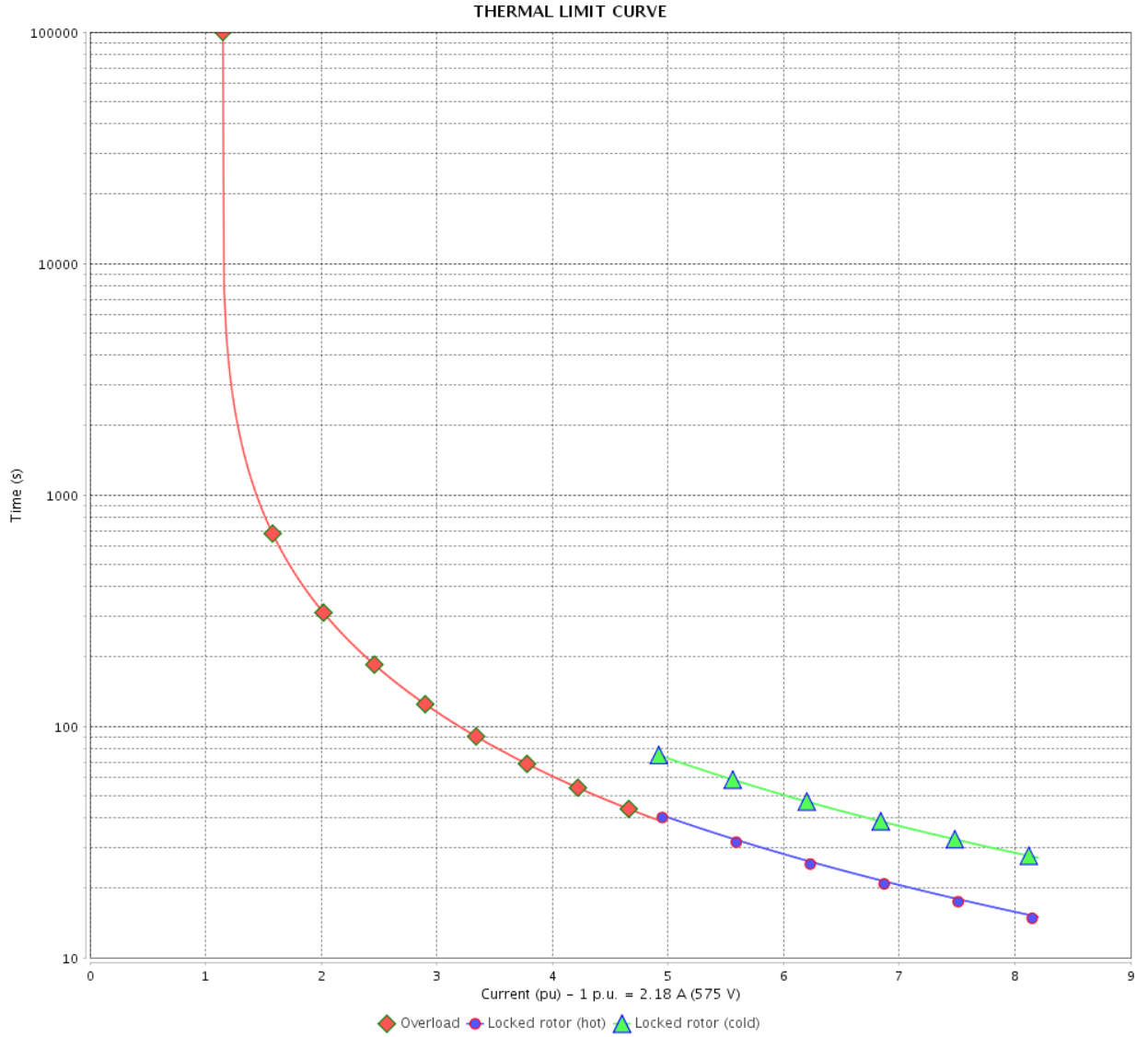
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Date				

VFD OPERATION CURVE

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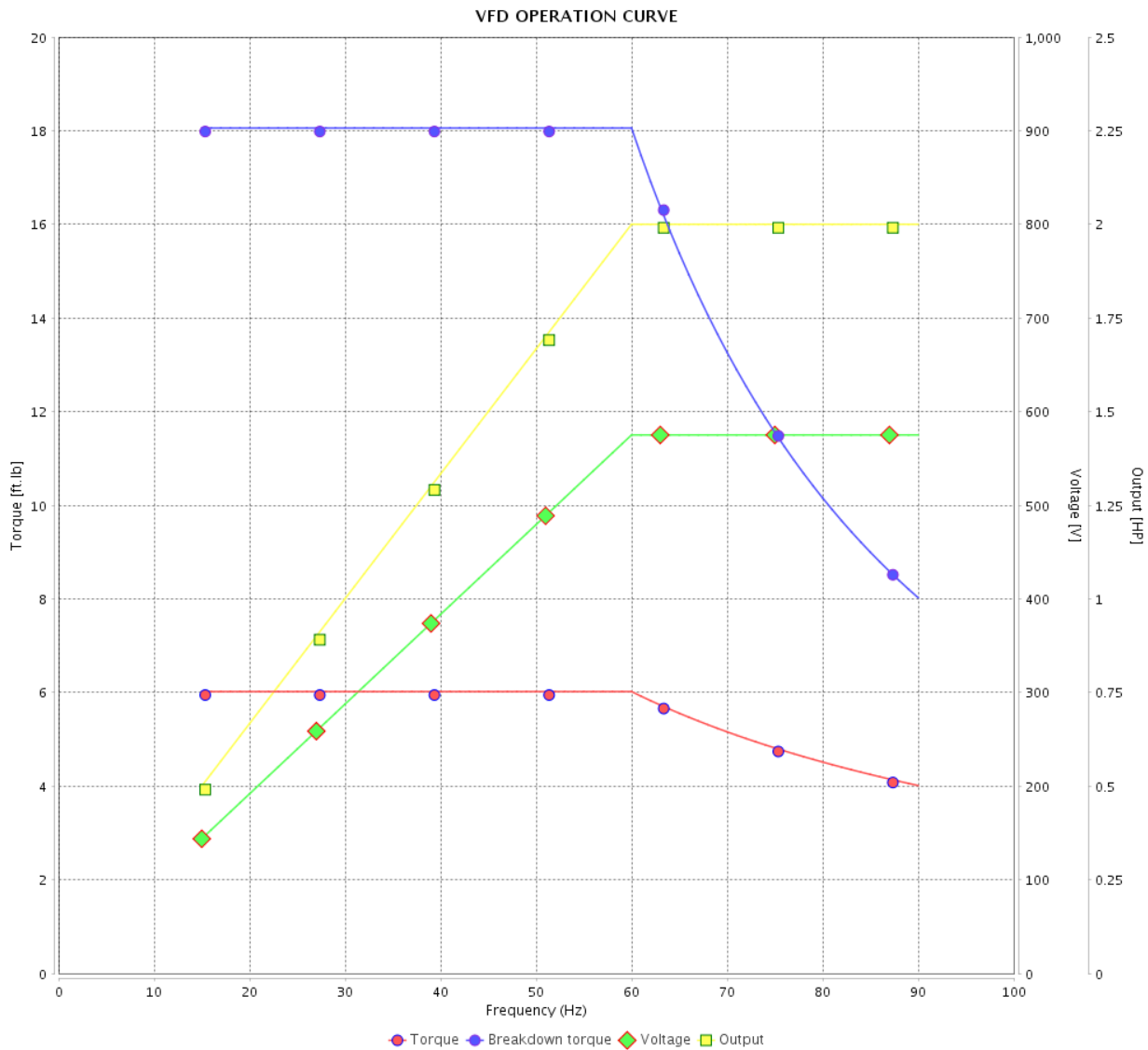


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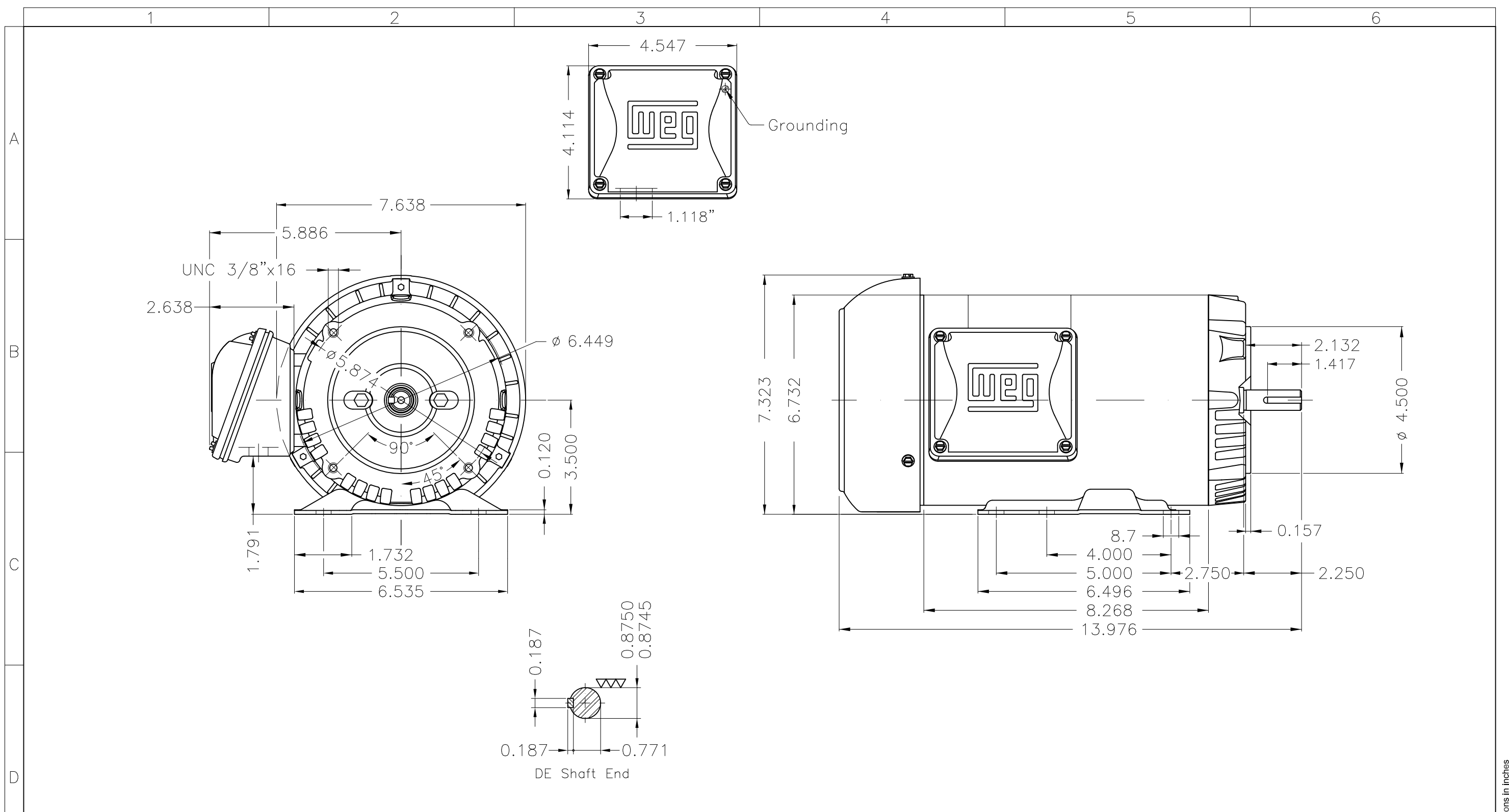


Performance : 575 V 60 Hz 4P

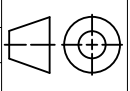
Rated current : 2.18 A
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 Breakdown torque : 300 %
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Moment of inertia (J) : 0.1296 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
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- Fan cover - steel plate
- NDE sealing - V ring
- Color Munsell N 1 matte black
- Painting plan 207N
- Mounting W-6/V17R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 143/5TC IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

2 HP 04 Poles 60 Hz

A

PREVIEW

WDD

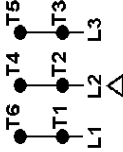


**NEMA
Premium**

MADE IN MEXICO

MAT: 14802527 CC029A**W01.TE0IC0X0N****MODEL 00218ET3H145TC-S****06APR2022 B/N:****For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3****Class II, Div.2, Gr. F,G - T4****Div 2 Inverter Duty (SF1.00)****CT 2:1/VT 1000:1**

PH 3	Hz 60	HP 2.0
FR 143/5TC		KW 1.5
DUTY CONT.		V 575
ALT 1000 m.a.s.l.		A 2.18
INS CL F AT 80K	IP55	SFA 2.51
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.80
		RPM 1745
		NEMA NOM. EFF 86.5%

For safe area-Inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT**DE 6205-ZZ ODE 6203-ZZ MOBIL POLYREX EM**

T1-BLU

T2-WHT

T3-ORG

T4-YEL

T5-BLK

T6-GRY

**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.**