

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: JM Pump NEMA Premium Efficiency Three-Phase																		
Product code :	13289045																		
Catalog # :	02018ET3H256JM-S																		
Frame : 254/6JM Output : 20 HP (15 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 19.8 A L. R. Amperes : 132 A LRC : 6.7x(Code H) No load current : 8.89 A Rated speed : 1765 rpm Slip : 1.94 % Rated torque : 59.5 ft.lb Locked rotor torque : 270 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 2.64 sq.ft.lb Design : B	Locked rotor time : 28s (cold) 16s (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 : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 68.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 256 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	91.0 91.7 92.4 93.0																		
Power Factor	0.40 0.66 0.77 0.82																		
Foundation loads																			
Max. traction	: 728 lb																		
Max. compression	: 984 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;">6309 Z C3</td> <td style="text-align: center;">6208 Z C3</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;">20000 h</td> <td style="text-align: center;">20000 h</td> </tr> <tr> <td>Lubricant amount</td> <td style="text-align: center;">13 g</td> <td style="text-align: center;">8 g</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	6309 Z C3	6208 Z C3	Sealing	V'Ring	V'Ring	Lubrication interval	20000 h	20000 h	Lubricant amount	13 g	8 g	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



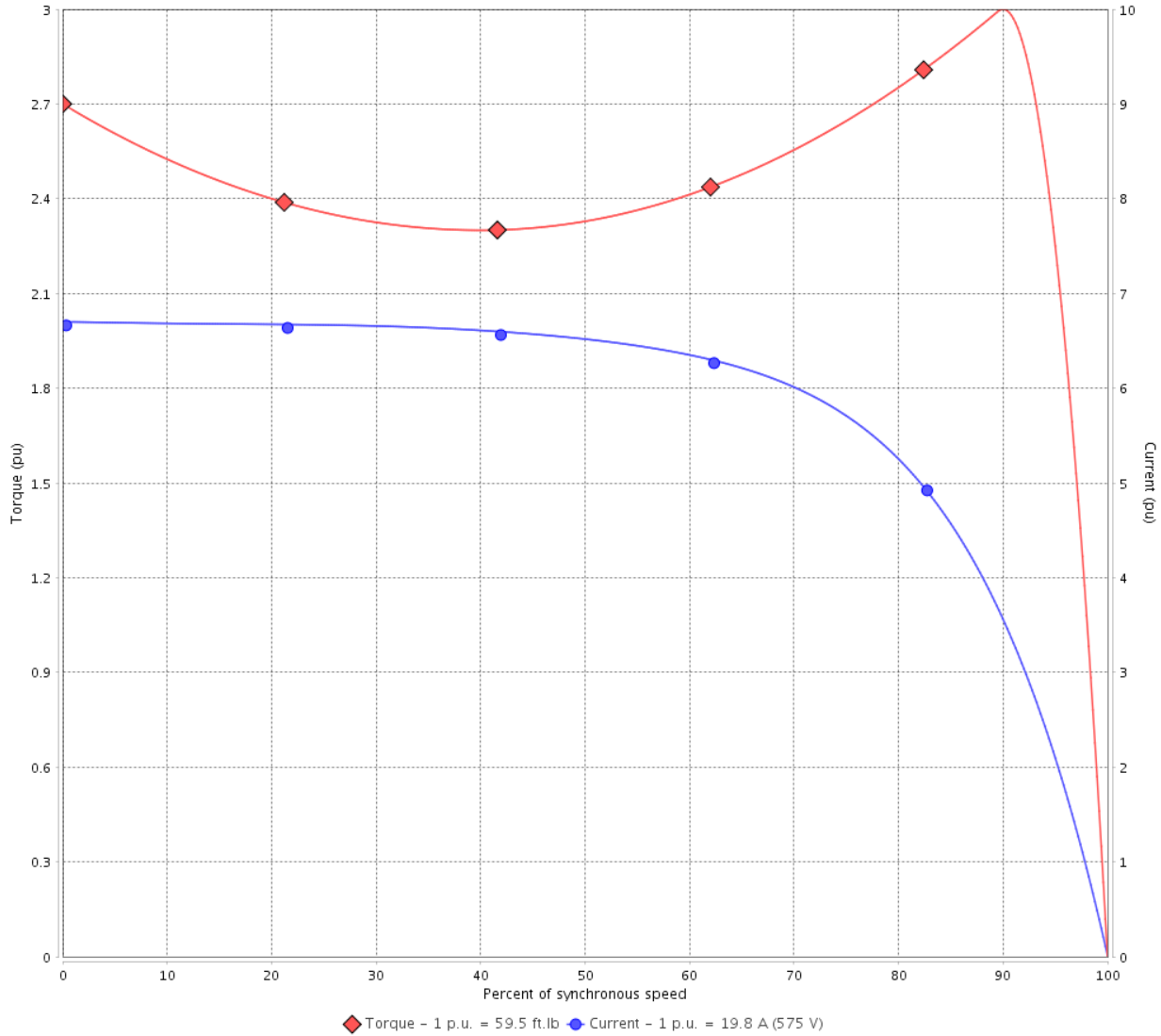
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13289045

Catalog # : 02018ET3H256JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 19.8 A	Moment of inertia (J)	: 2.64 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 59.5 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Locked rotor time : 28s (cold) 16s (hot)

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Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

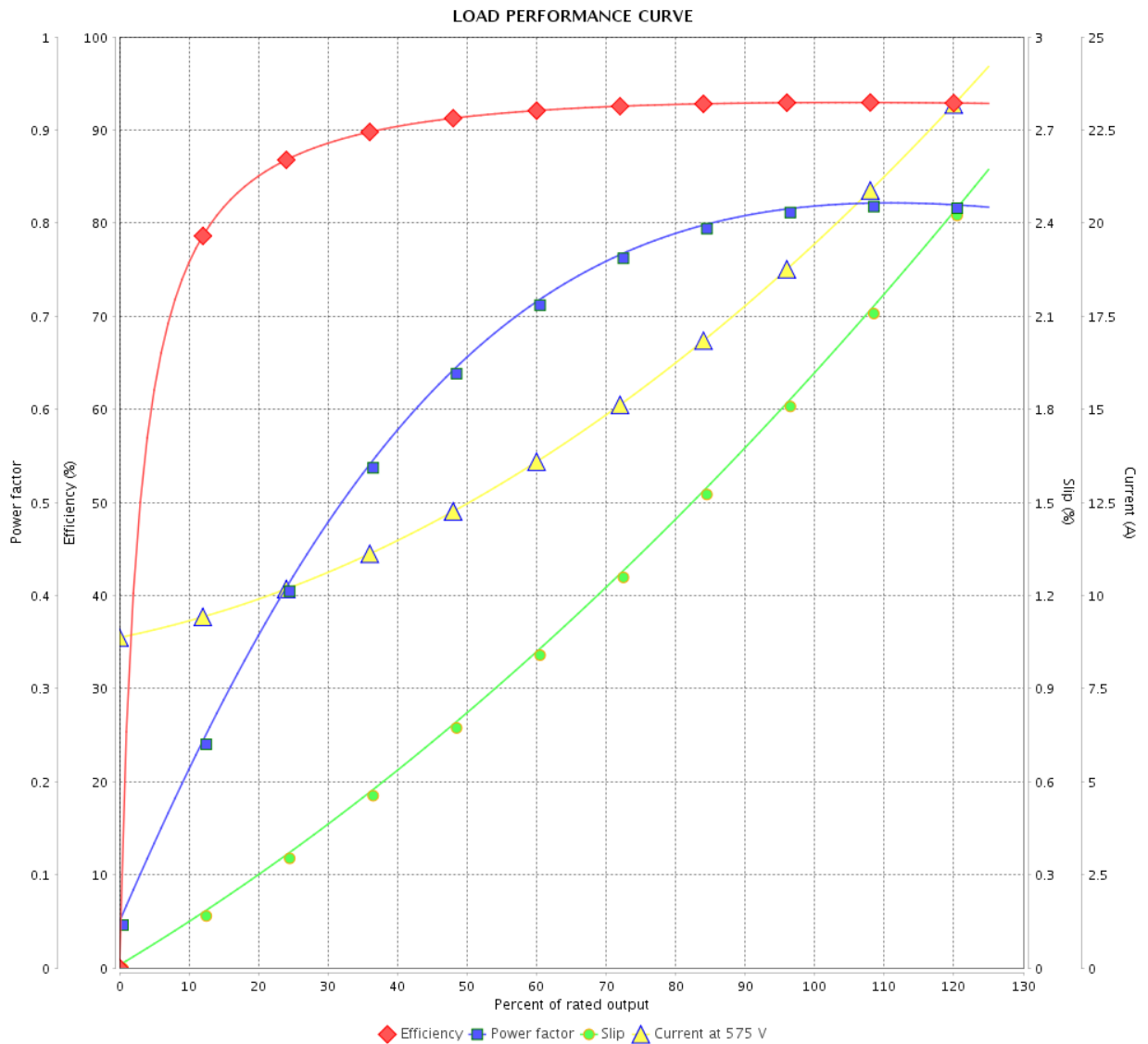


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 Duty cycle : Cont.(S1)
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 Service factor : 1.15
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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

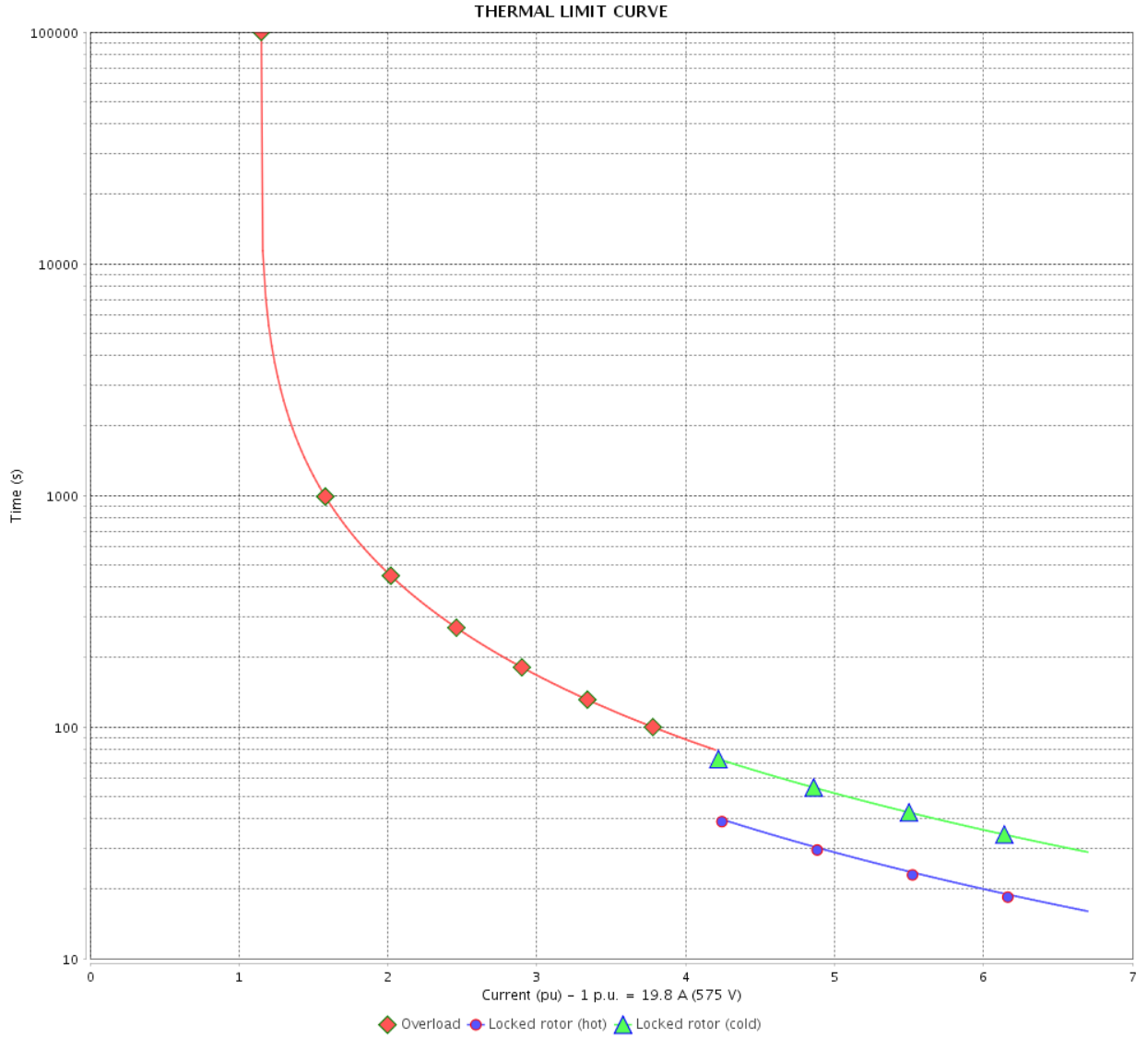
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

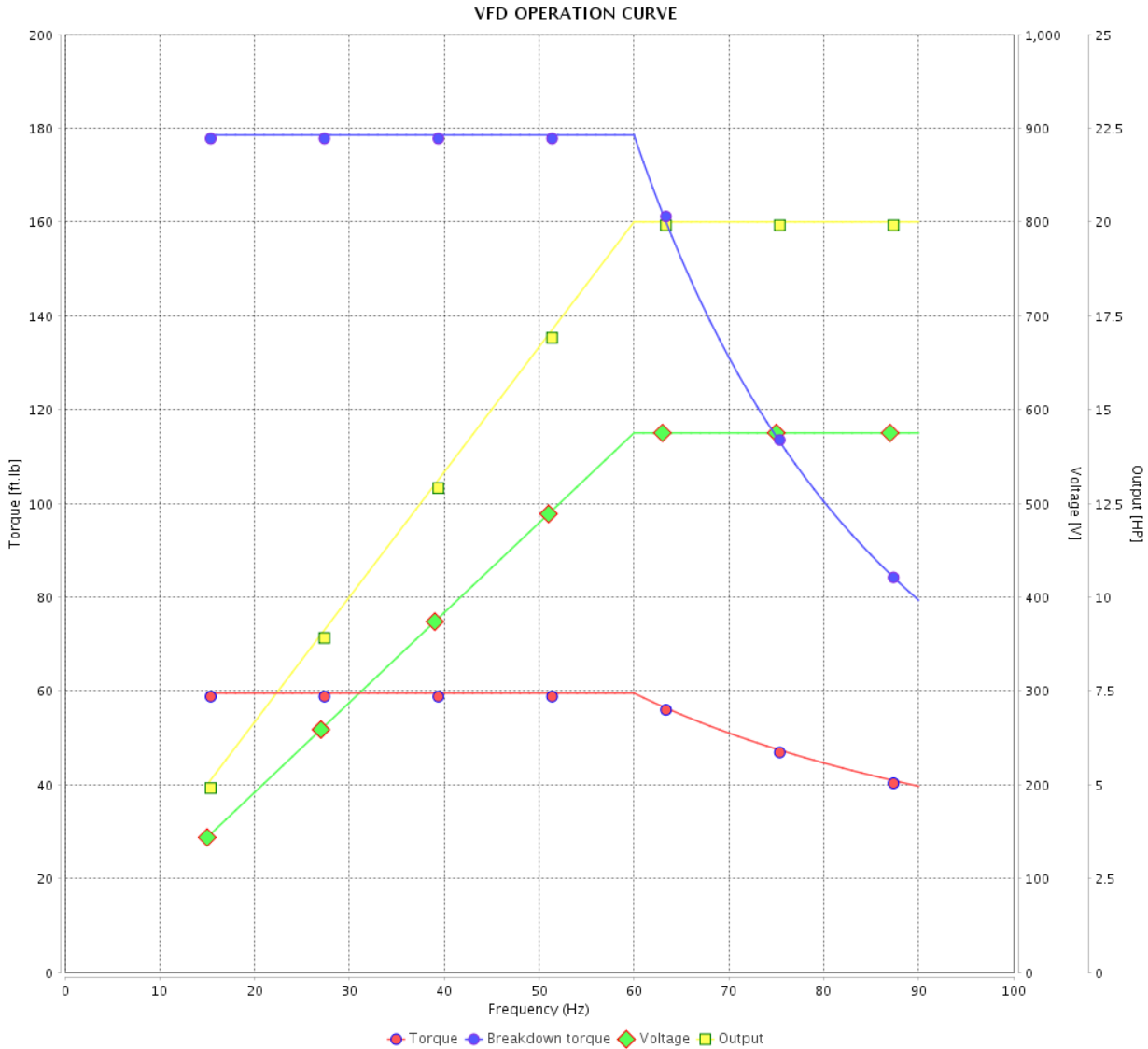


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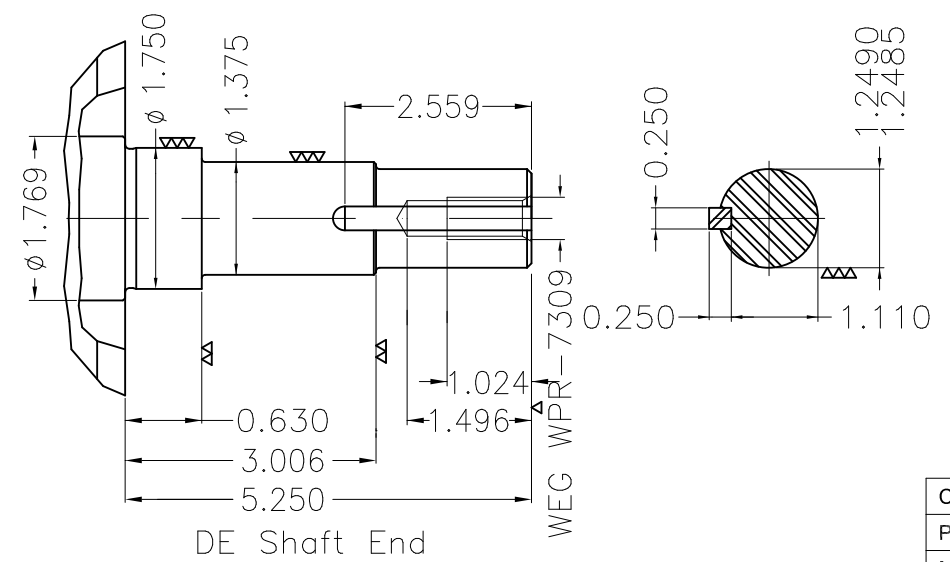
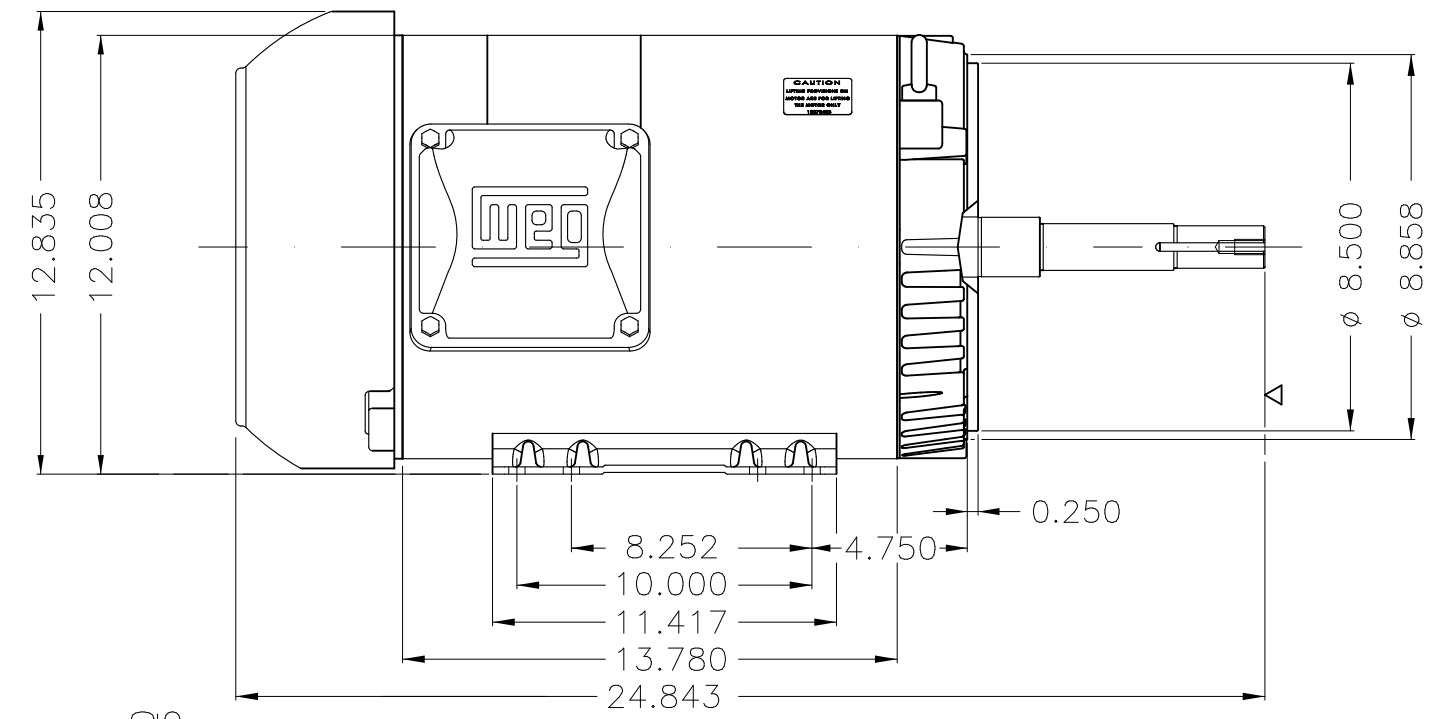
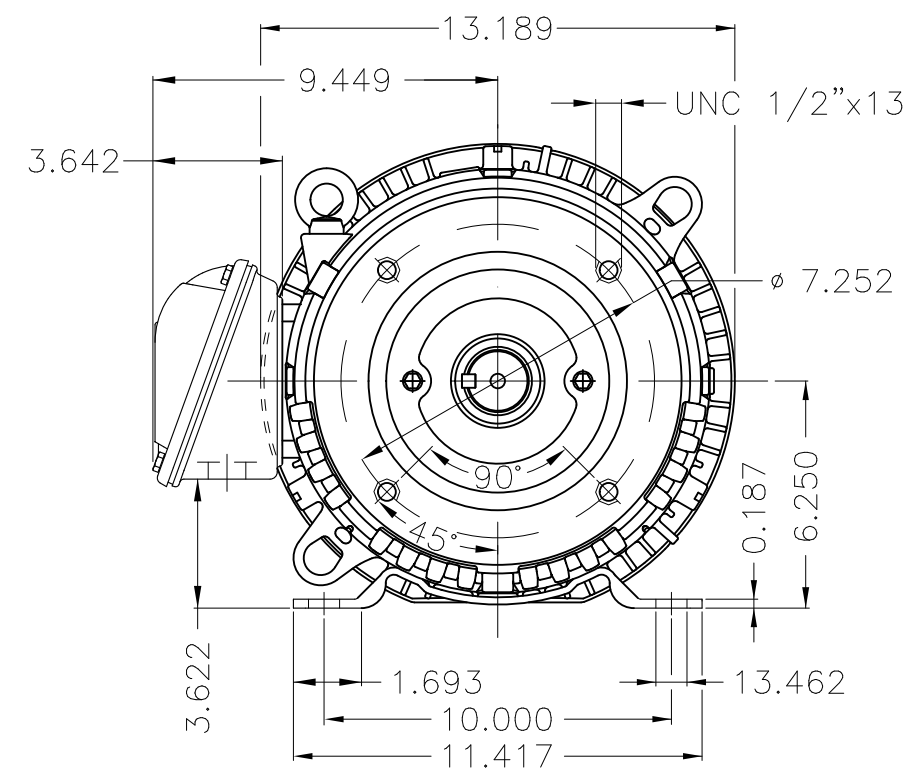
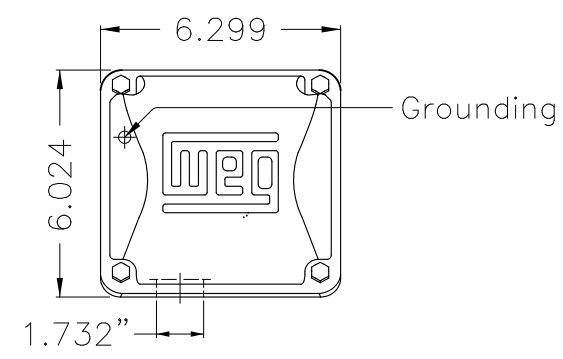
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1 2 3 4 5 6

A
B
C
D
E



EUNC 1/2"-13 WEG WPR-7309

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 JM TYPE PSE 1/2"			PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 254/6JM IP55 TEFC							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

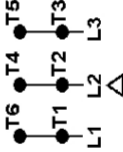
20 HP 04 Poles 60 Hz

**NEMA**
Premium

MADE IN MEXICO

MAT: 13289045 CC029A**W01.TE0IC0X0N****MODEL 02018ET3H256JM-S****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**

PH 3	Hz 60	HP 20
FR 254/6JM		KW 15
DUTY CONT.		V 575
ALT 1000 m.a.s.l.		A 19.8
INS CL F AT 80K	IP55	SFA 22.8
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE H	PF 0.82
		RPM 1765
		NEMA
		NOM. EFF 93.0%

For safe area-Inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT**DE 6309-Z-C3 ODE 6208-Z-C3 MOBIL POLYREX EM 20000h**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.

