

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: JM Pump NEMA Premium Efficiency Three-Phase			
Product code :	13413890			
Catalog # :	00518ET3V184JM-S			
Frame : 182/4JM Output : 5 HP (3.7 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 14.9/7.46 A L. R. Amperes : 104/52.2 A LRC : 7.0x(Code J) No load current : 7.92/3.96 A Rated speed : 1750 rpm Slip : 2.78 % Rated torque : 15.0 ft.lb Locked rotor torque : 220 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.3080 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 <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 56.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 84.4 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	88.2    88.5    89.5    89.5			
Power Factor	0.35    0.60    0.73    0.80			
Foundation loads				
Max. traction : 245 lb				
Max. compression : 330 lb				
Bearing type	: <u>Drive end</u> 6207 ZZ <u>Non drive end</u> 6205 ZZ			
Sealing	: V'Ring      Without Bearing Seal			
Lubrication interval	: -      -			
Lubricant amount	: -      -			
Lubricant type	: Mobil Polyrex EM			
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.				
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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage

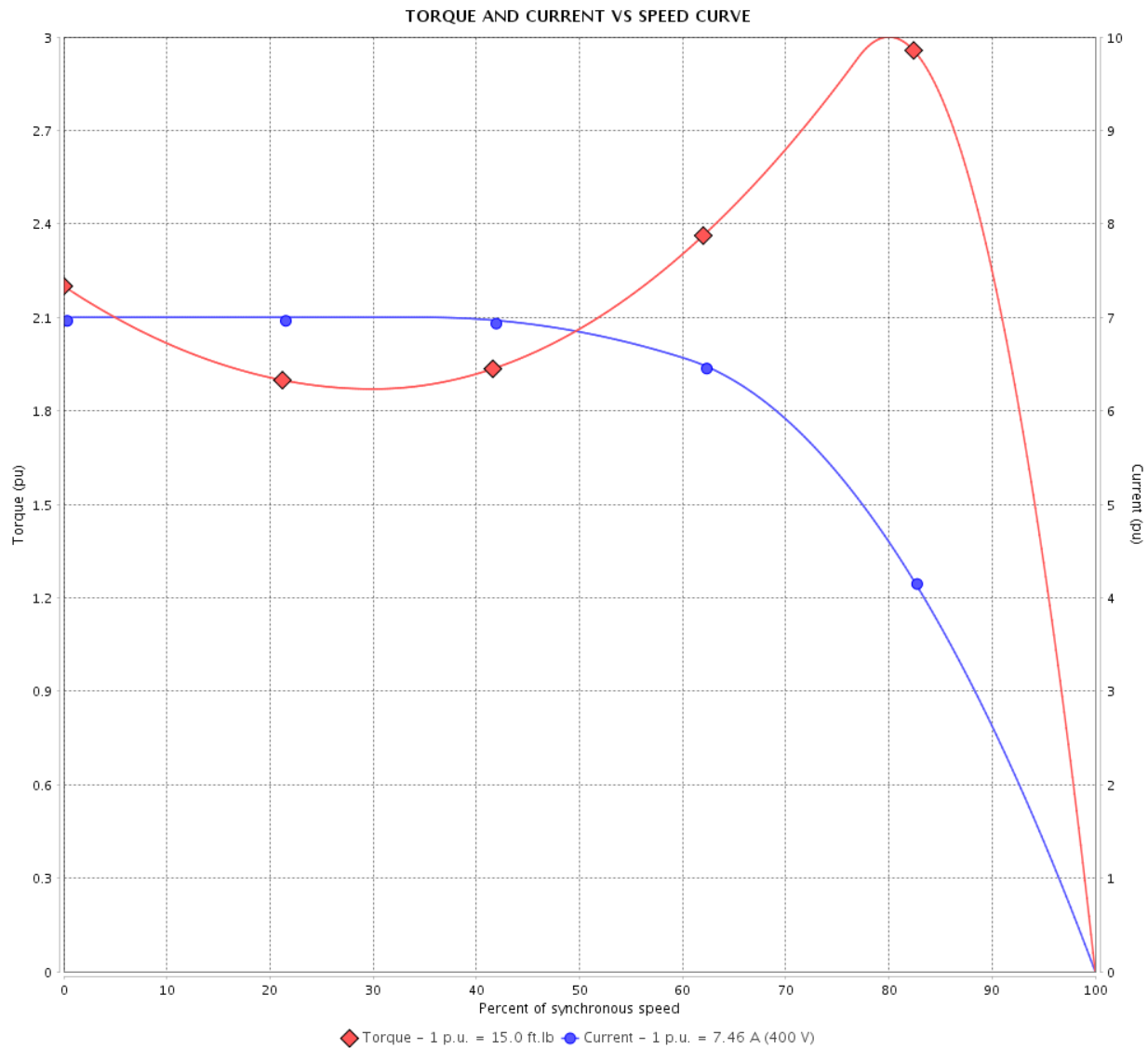


Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13413890

Catalog # : 00518ET3V184JM-S



Performance : 200/400 V 60 Hz 4P

Rated current	: 14.9/7.46 A	Moment of inertia (J)	: 0.3080 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1750 rpm	Design	: B

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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

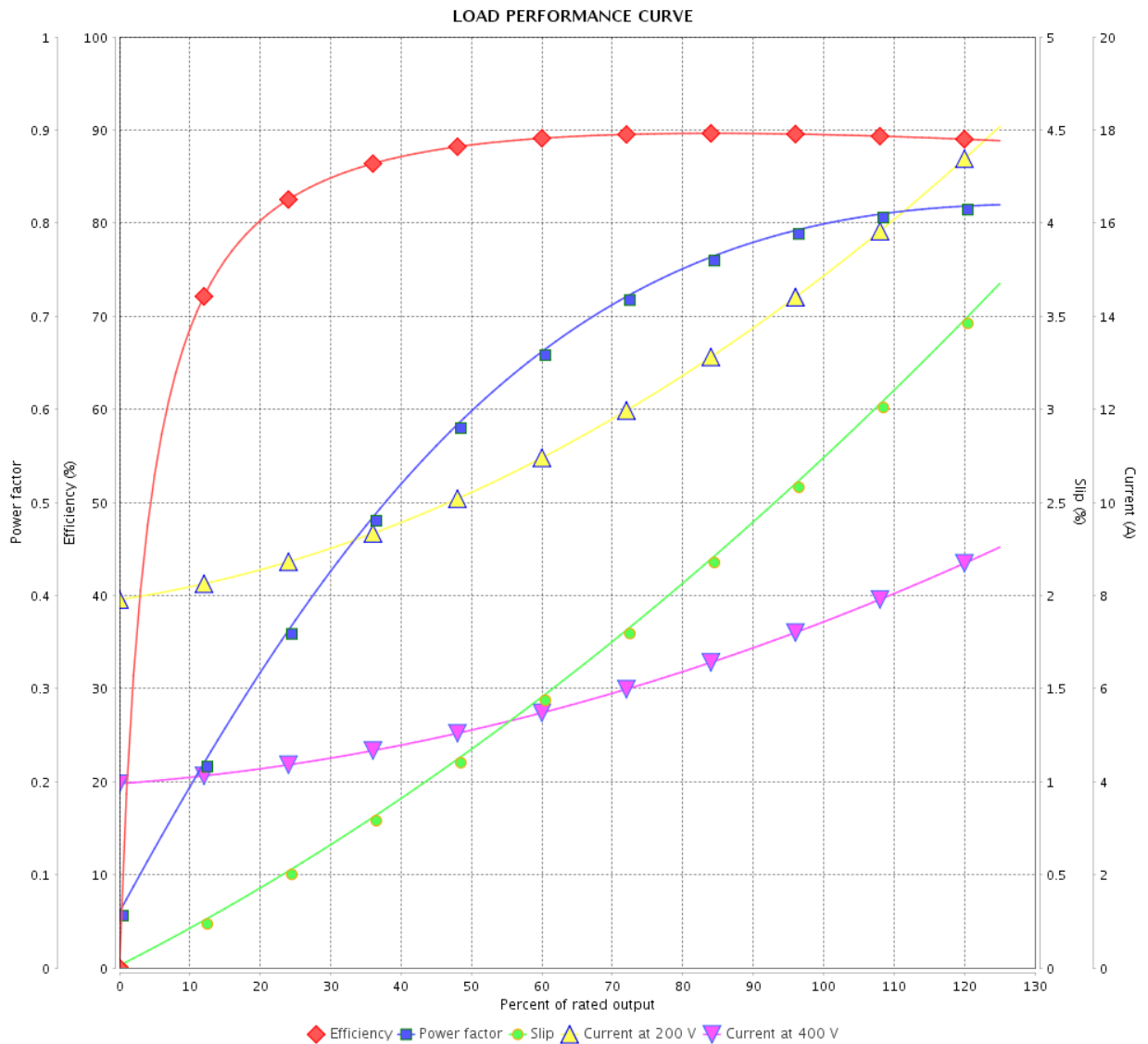


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Performance : 200/400 V 60 Hz 4P

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 LRC : 7.0  
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 Locked rotor torque : 220 %  
 Breakdown torque : 300 %  
 Rated speed : 1750 rpm

Moment of inertia (J) : 0.3080 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



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Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

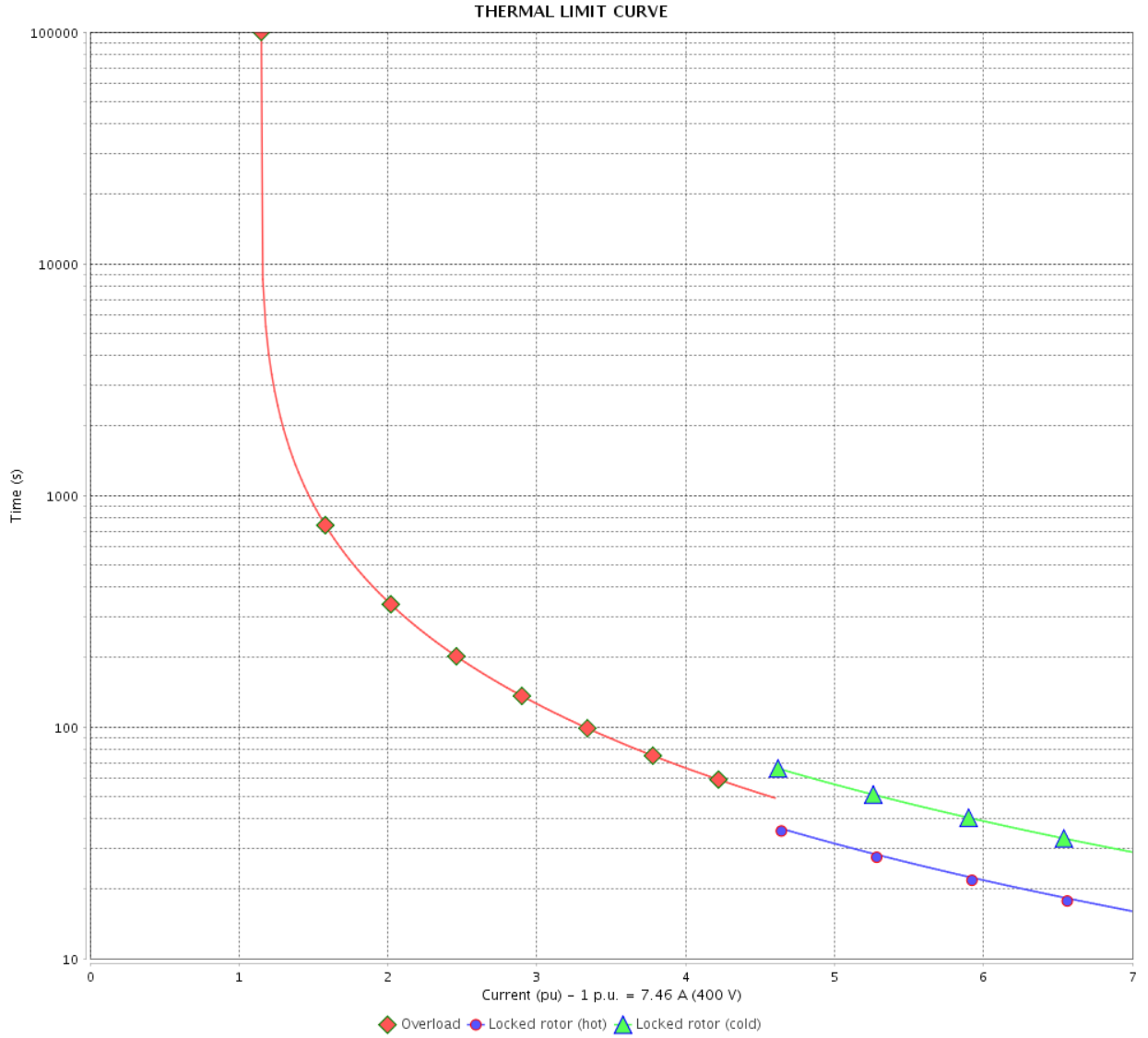
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



Rev.	Changes Summary	Performed	Checked	Date
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Checked by				
Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



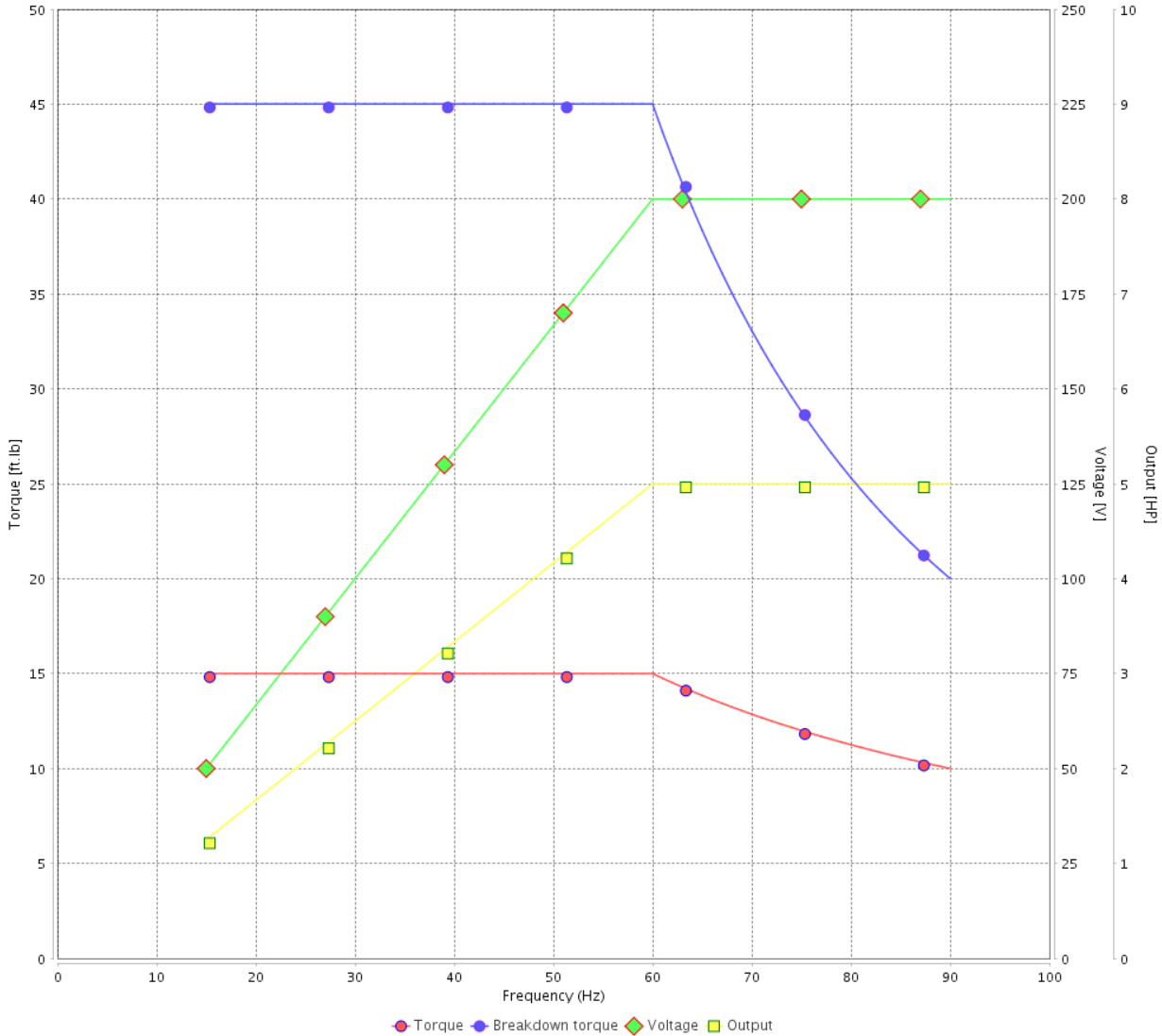
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Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13413890

Catalog # : 00518ET3V184JM-S

VFD OPERATION CURVE



Performance : 200/400 V 60 Hz 4P

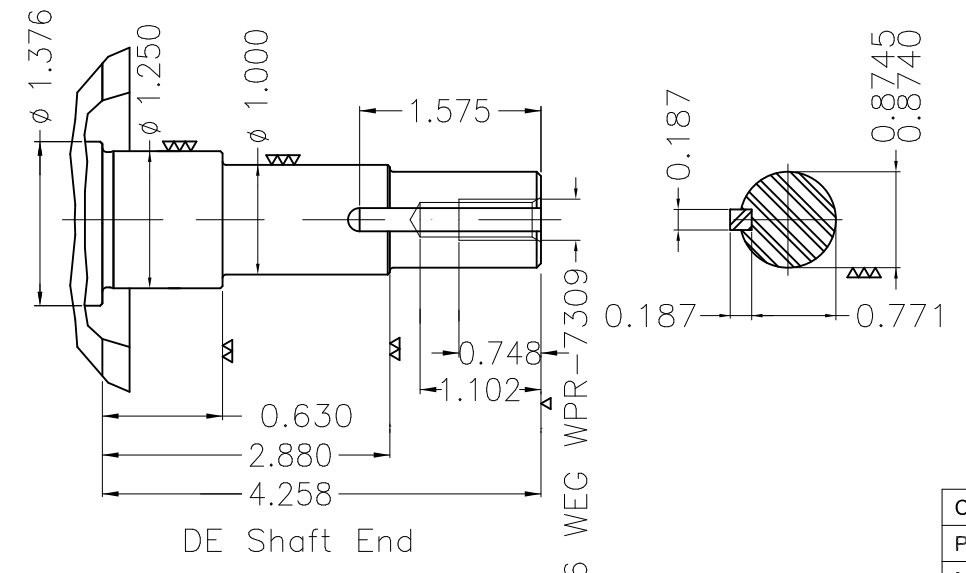
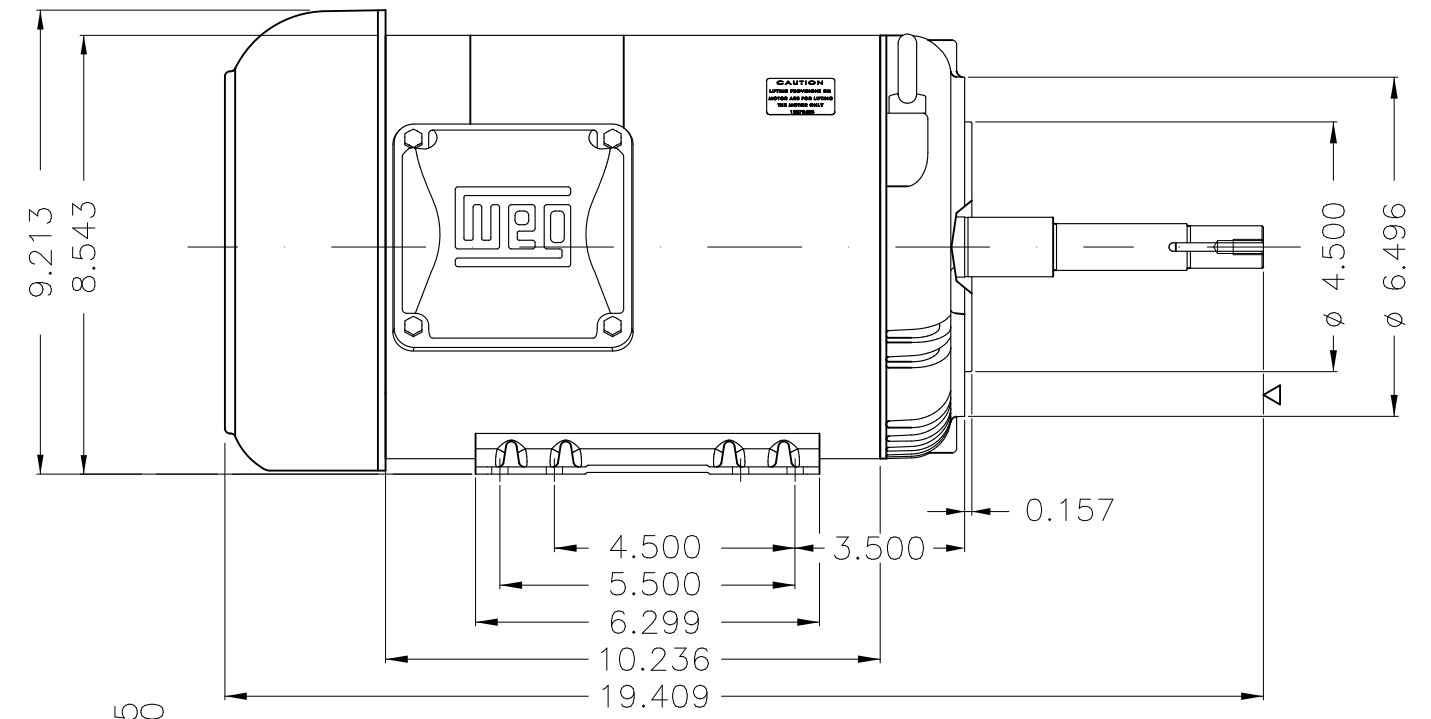
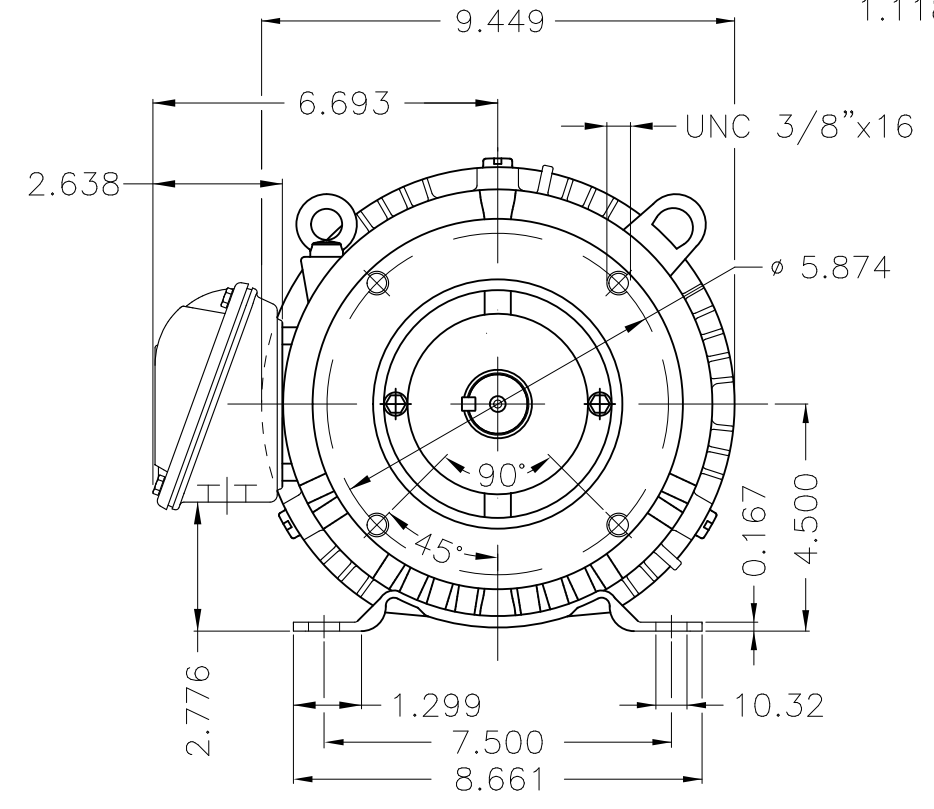
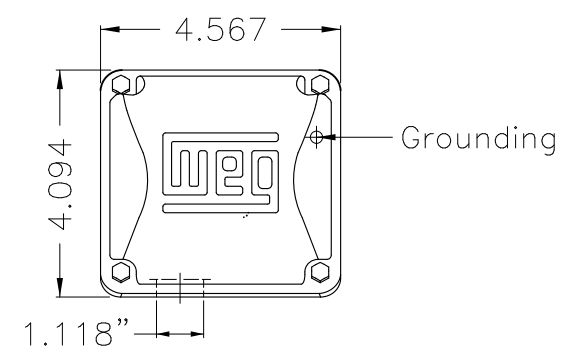
Rated current : 14.9/7.46 A  
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1 2 3 4 5 6

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	PIRWUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JM TYPE PSEF 107							
CHECKED		FRAME 182/4JM IP55 TEFC							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

5 HP 04 Poles 60 Hz

Dimensions in inches XME A3



**NEMA**  
**Premium**

®



3PT9  
UL US LISTED  
FOR SAFE AREA



Energy Verified

MADE IN MEXICO

**MAT: 13413890 CC029A**

**W01.TE0IC0X0N**

**MODEL 00518ET3V184JM-S**

**26JUL2021 S/N:**

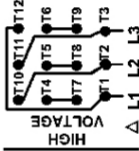
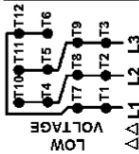
**For 60Hz: Class I, Zone 2, IIC**  
**Class I, Div.2, Gr. A,B,C,D - T3**

**DIV 2 Inverter Duty (SF1.00)**  
**CT 2:1/VT 1000:1**

PH 3	Hz 60	HP 5.0
FR 182/4JM		KW 3.7
DUTY CONT.		V 200/400
ALT 1000 m.a.s.l.		A 14.9/7.46
INS CL F AT 80K	IP55	SFA 17.1/8.58
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE J	PF 0.80
		RPM 1750
		NEMA
		NOM. EFF 89.5%

**For safe area-inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT**

DE 6207-ZZ ODE 6205-ZZ MOBIL POLYREX EM



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.

