

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: JM Pump NEMA Premium Efficiency Three-Phase			
Product code :	12770789			
Catalog # :	01518OT3H254JM-S			
Frame : 254/6JM Output : 15 HP (11 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 14.9 A L. R. Amperes : 100 A LRC : 6.7x(Code H) No load current : 7.60 A Rated speed : 1775 rpm Slip : 1.39 % Rated torque : 44.4 ft.lb Locked rotor torque : 240 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 1.82 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 <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 64.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 203 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	91.0    91.7    92.4    93.0			
Power Factor	0.36    0.62    0.73    0.80			
Foundation loads				
Max. traction	: 537 lb			
Max. compression	: 740 lb			
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3			
Sealing	: Without Bearing Seal      Without Bearing Seal			
Lubrication interval	: 20000 h      20000 h			
Lubricant amount	: 13 g      8 g			
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



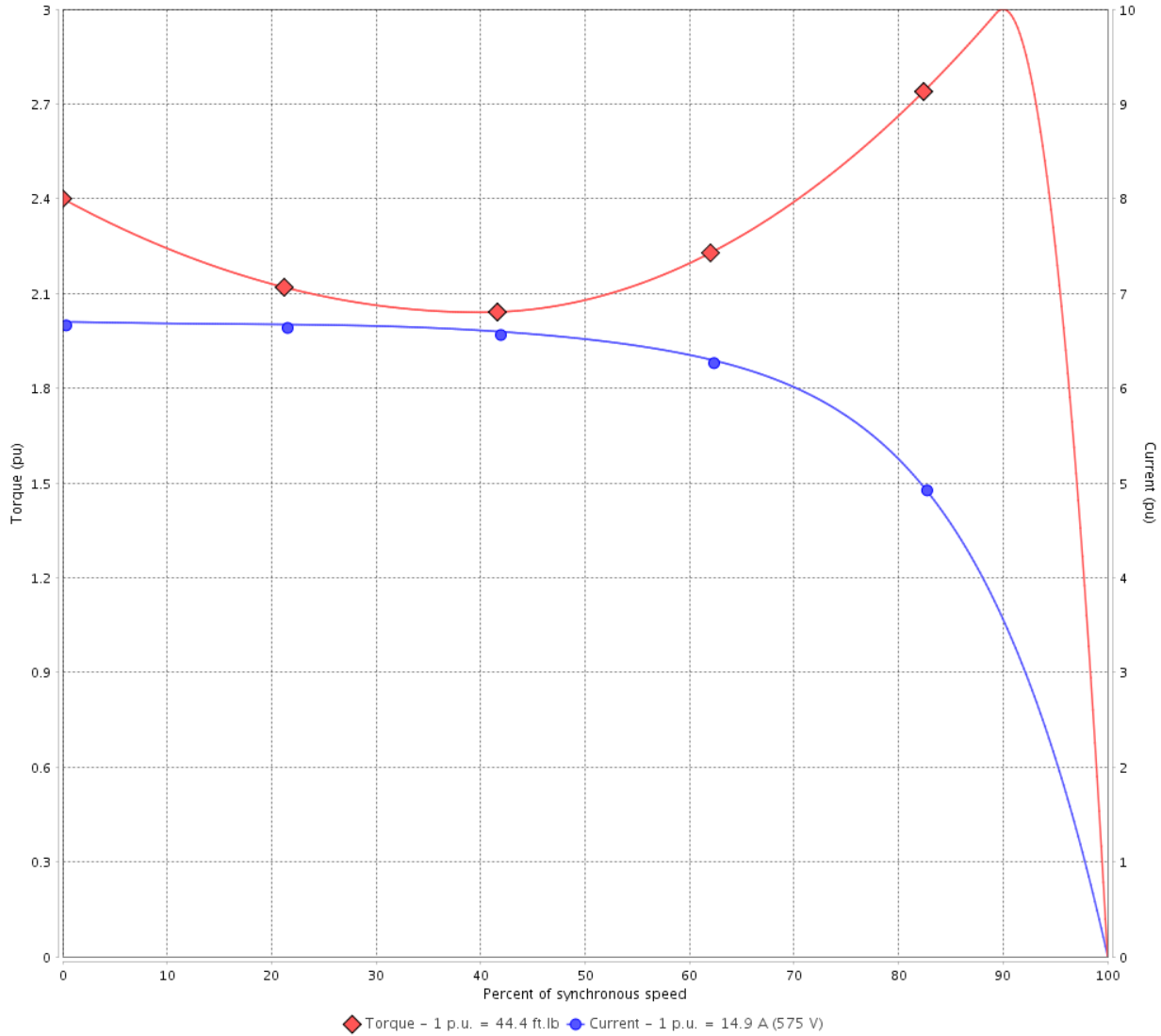
Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 12770789

Catalog # : 01518OT3H254JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 14.9 A	Moment of inertia (J)	: 1.82 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 44.4 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

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

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Date	13/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

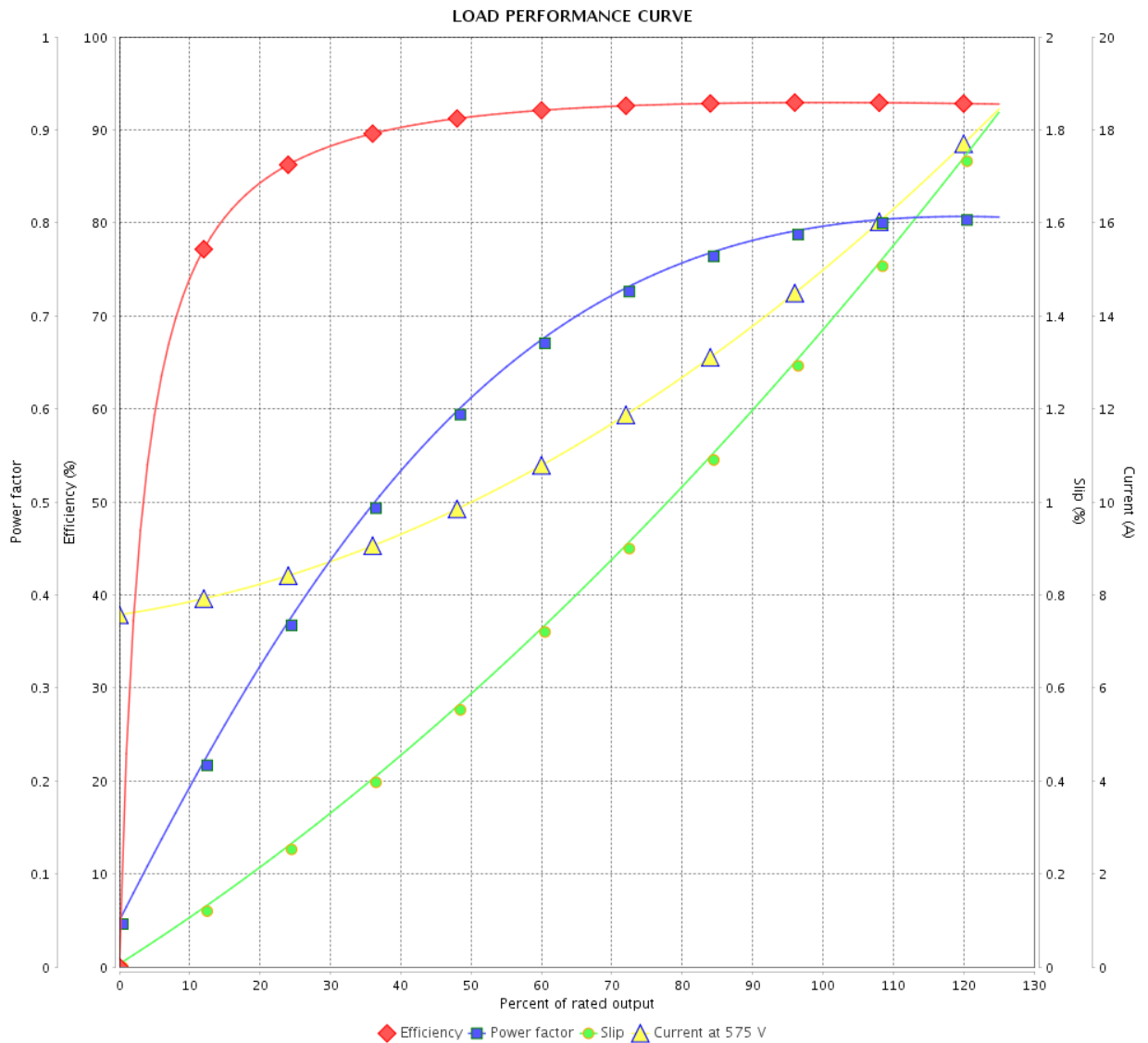


Customer :

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Product code : 12770789

Catalog # : 01518OT3H254JM-S



Performance : 575 V 60 Hz 4P

Rated current : 14.9 A  
 LRC : 6.7  
 Rated torque : 44.4 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 300 %  
 Rated speed : 1775 rpm

Moment of inertia (J) : 1.82 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

## Three Phase Induction Motor - Squirrel Cage



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LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 44.4 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Heating constant

Cooling constant

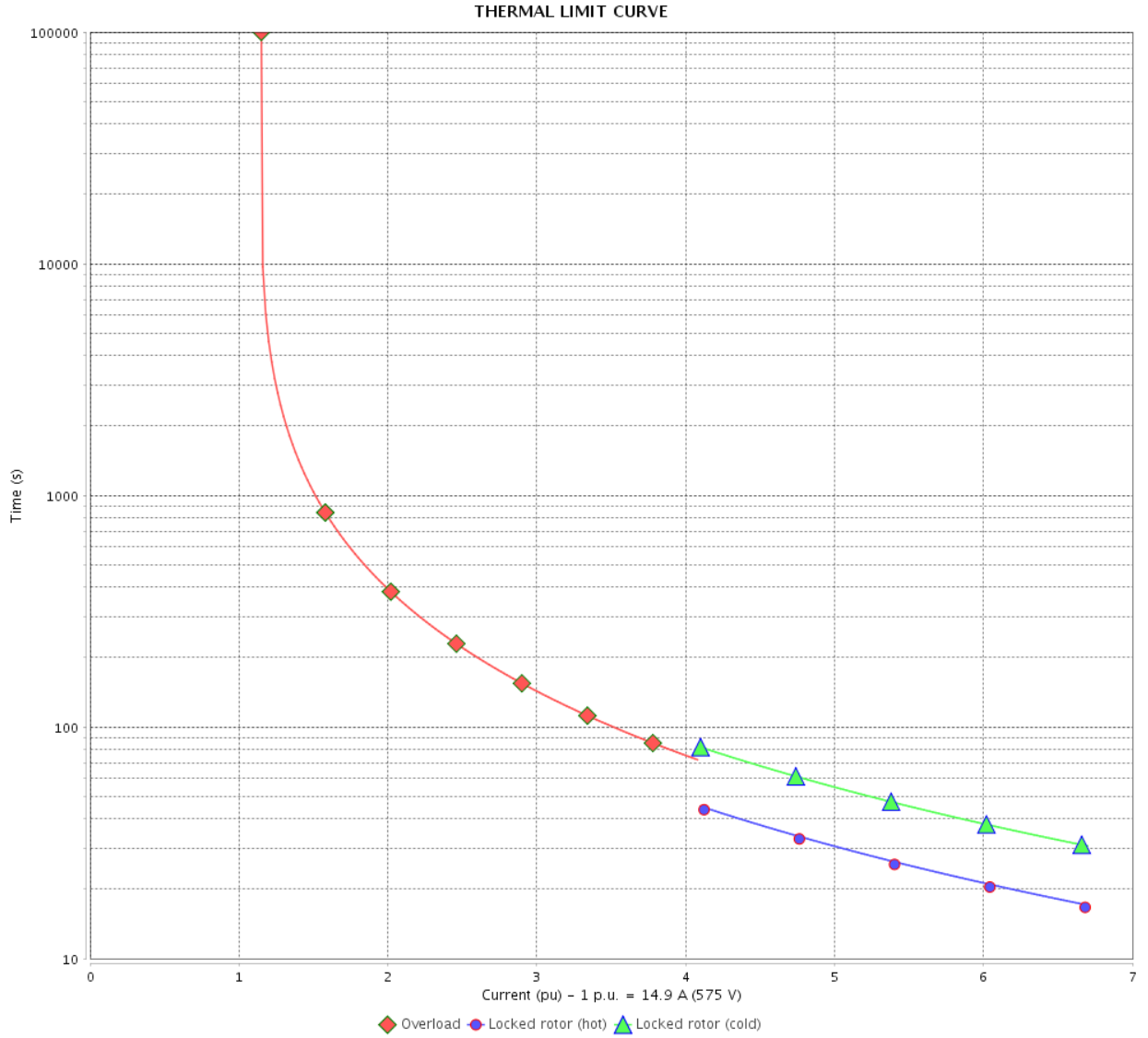
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



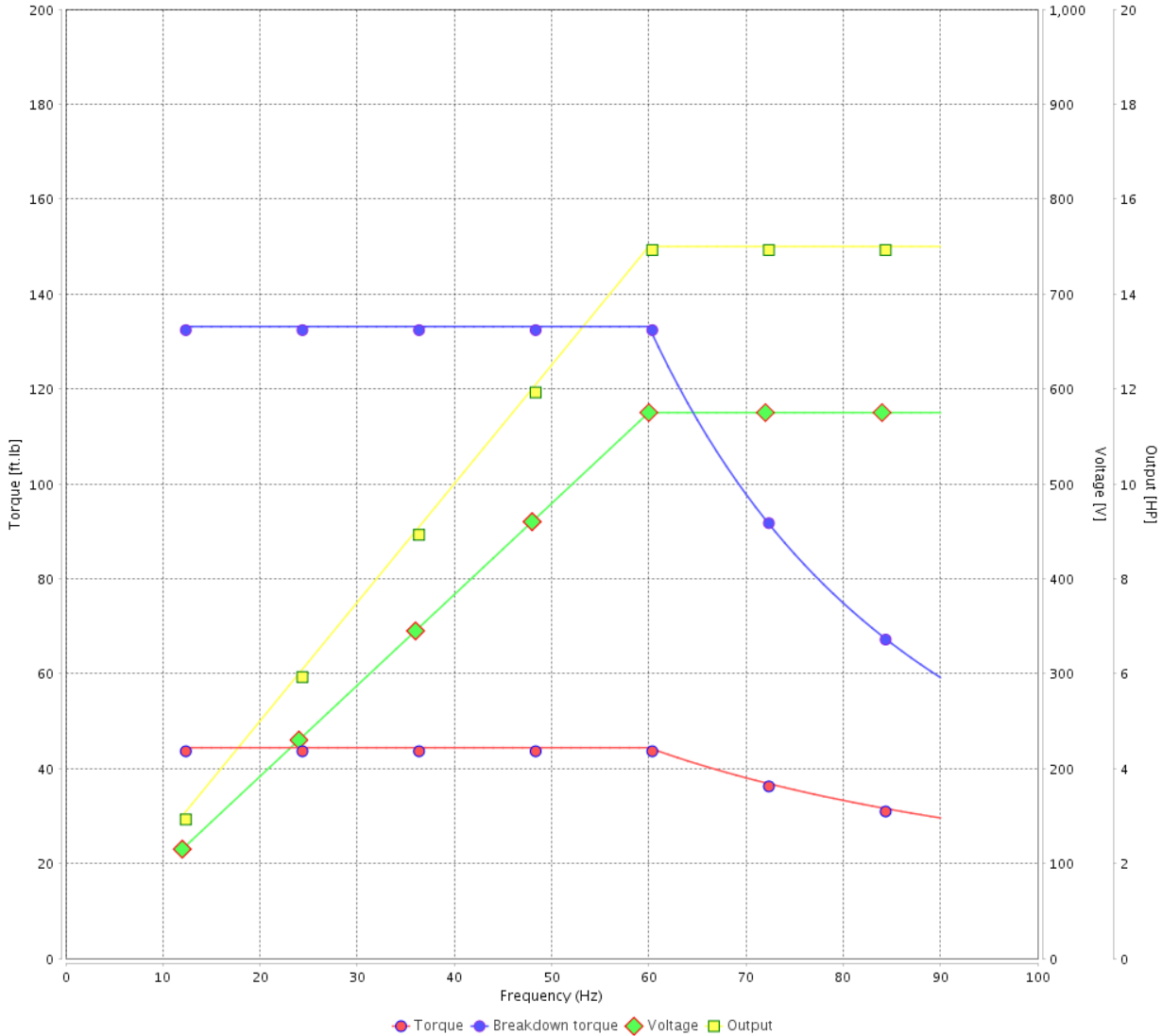
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 12770789

Catalog # : 01518OT3H254JM-S

VFD OPERATION CURVE



Performance : 575 V 60 Hz 4P

Rated current : 14.9 A  
 LRC : 6.7  
 Rated torque : 44.4 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 300 %  
 Rated speed : 1775 rpm

Moment of inertia (J) : 1.82 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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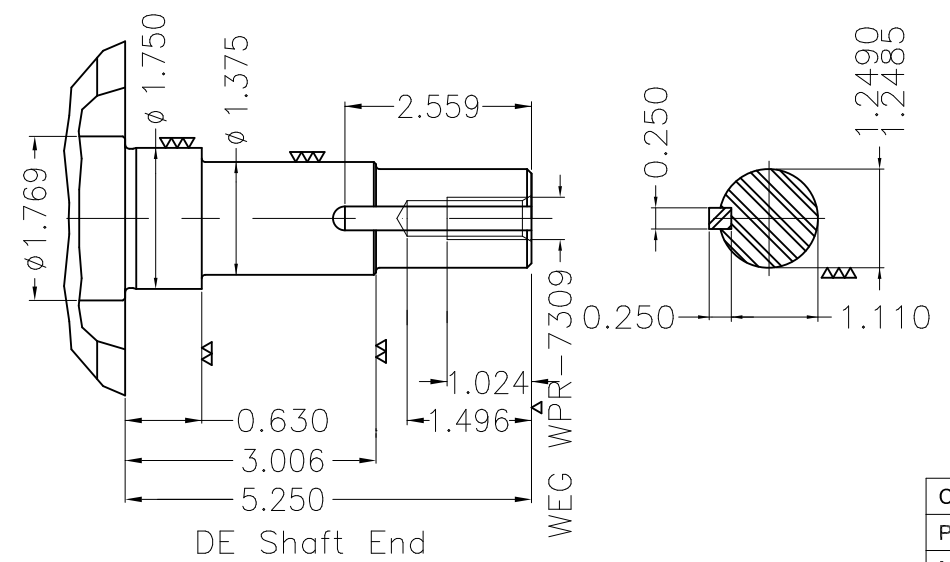
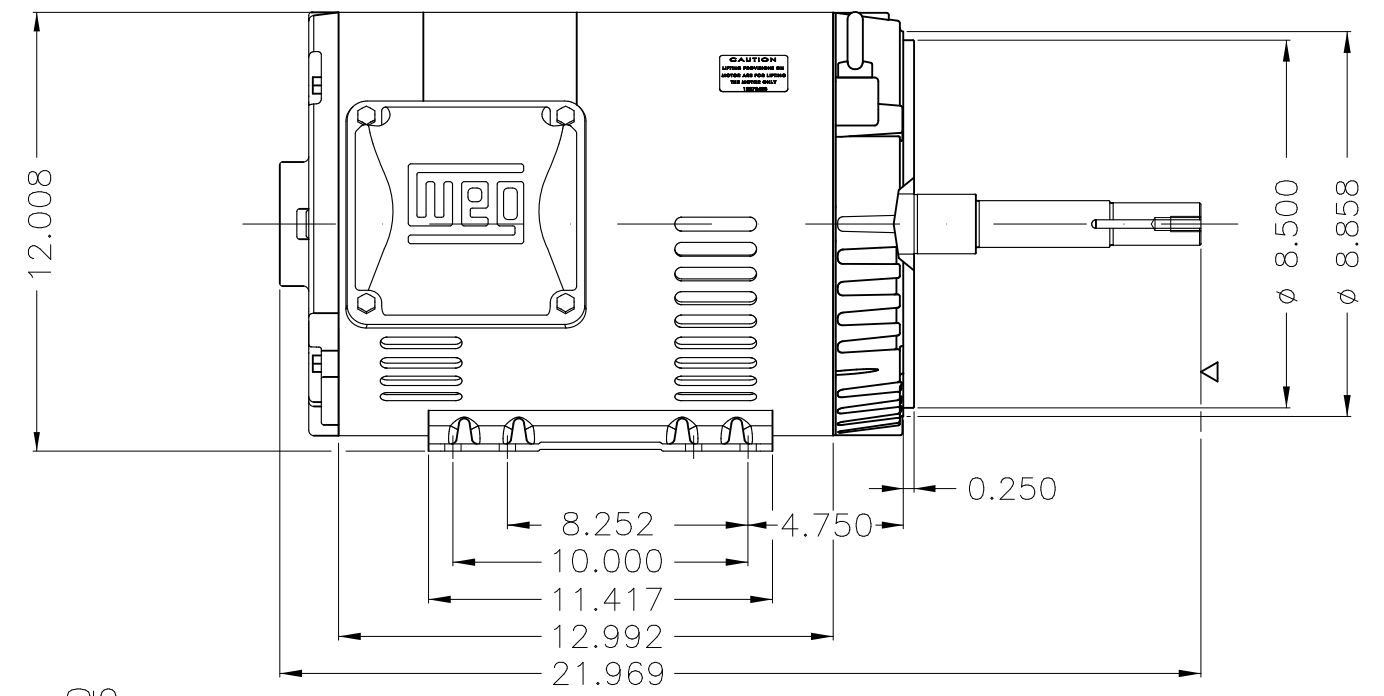
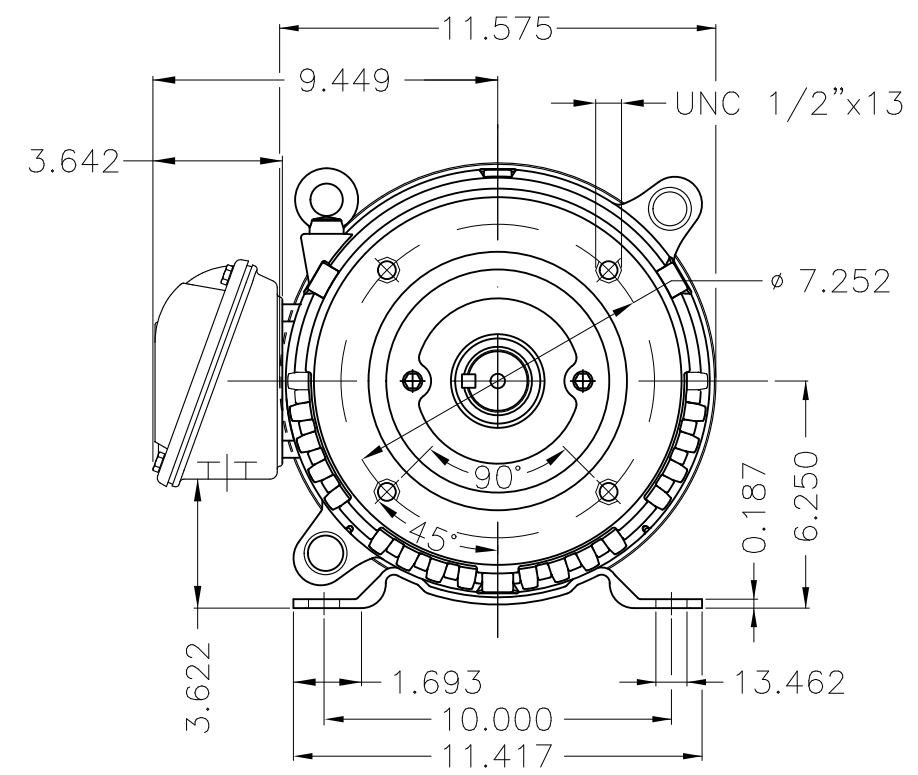
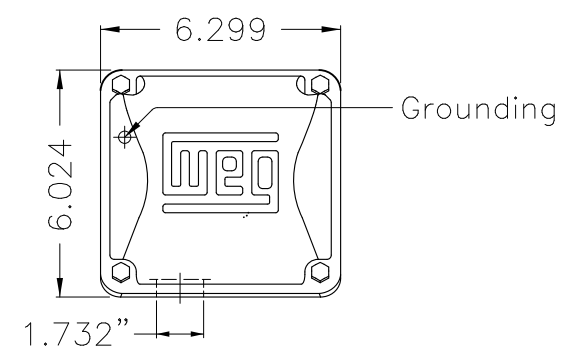
A

B

C

D

E



EUNC 1/2"-13 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	PIRBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 1/2"							
CHECKED		FRAME 254/6JM IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			

15 HP 04 Poles 60 Hz

**NEMA  
Premium**

MADE IN MEXICO

MAT: 12770789 CC029A

W01.T00IC0X0N

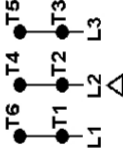
MODEL 01518OT3H254JM-S

26JAN2022 S/N:

PH 3	Hz 60	HP 15
FR 254/6JM		KW 11
DUTY CONT.		V 575
ALT 1000 m.a.s.l		A 14.9
INS CL F AT 80K		SFA 17.1
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE H	PF 0.80
		RPM 1775
		NEMA NOM. EFF 93.0%

Inverter duty motor For use on VPWM 1000:1 VT, 5:1 CT

DE 6309-Z-C3	ODE 6208-Z-C3	MOBIL POLYREX EM	20000h
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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.