

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	13469731																		
Catalog # :	00518ET3P184JM-W22																		
Frame : 182/4JM Output : 5 HP (3.7 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200 V Rated current : 14.8 A L. R. Amperes : 111 A LRC : 7.5x(Code J) No load current : 7.36 A Rated speed : 1755 rpm Slip : 2.50 % Rated torque : 15.0 ft.lb Locked rotor torque : 229 % Breakdown torque : 320 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.4003 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 : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 56.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 102 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	88.2 88.5 89.5 89.5																		
Power Factor	0.37 0.62 0.74 0.80																		
Foundation loads																			
Max. traction : 255 lb																			
Max. compression : 357 lb																			
	<table border="0" style="width:100%;"> <tr> <td style="width: 50%;"></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;">6307 ZZ</td> <td style="text-align: center;">6206 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 :	6307 ZZ	6206 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															
Date	12/04/2022		1 / 6																

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



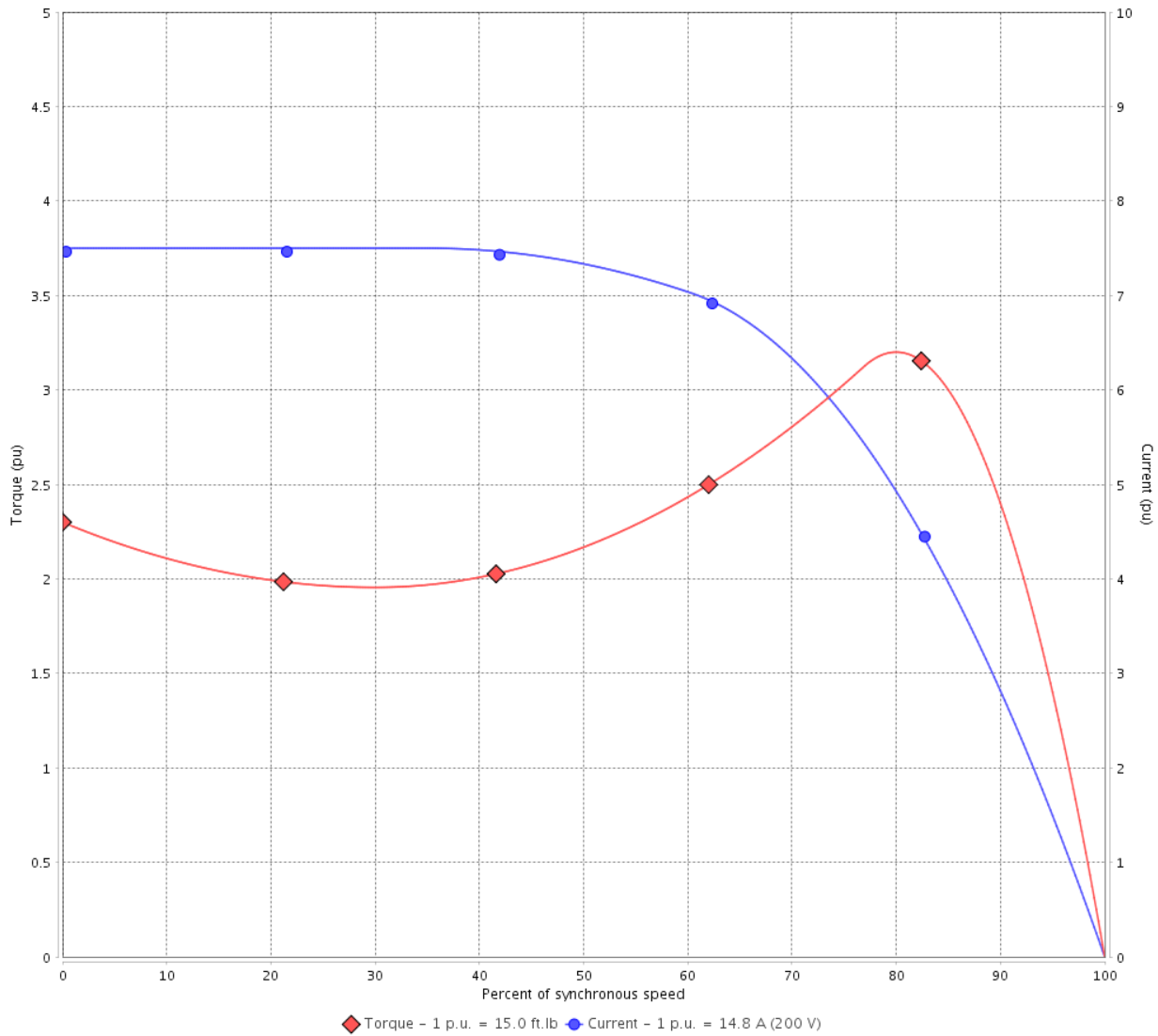
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13469731

Catalog # : 00518ET3P184JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200 V 60 Hz 4P

Rated current	: 14.8 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	12/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

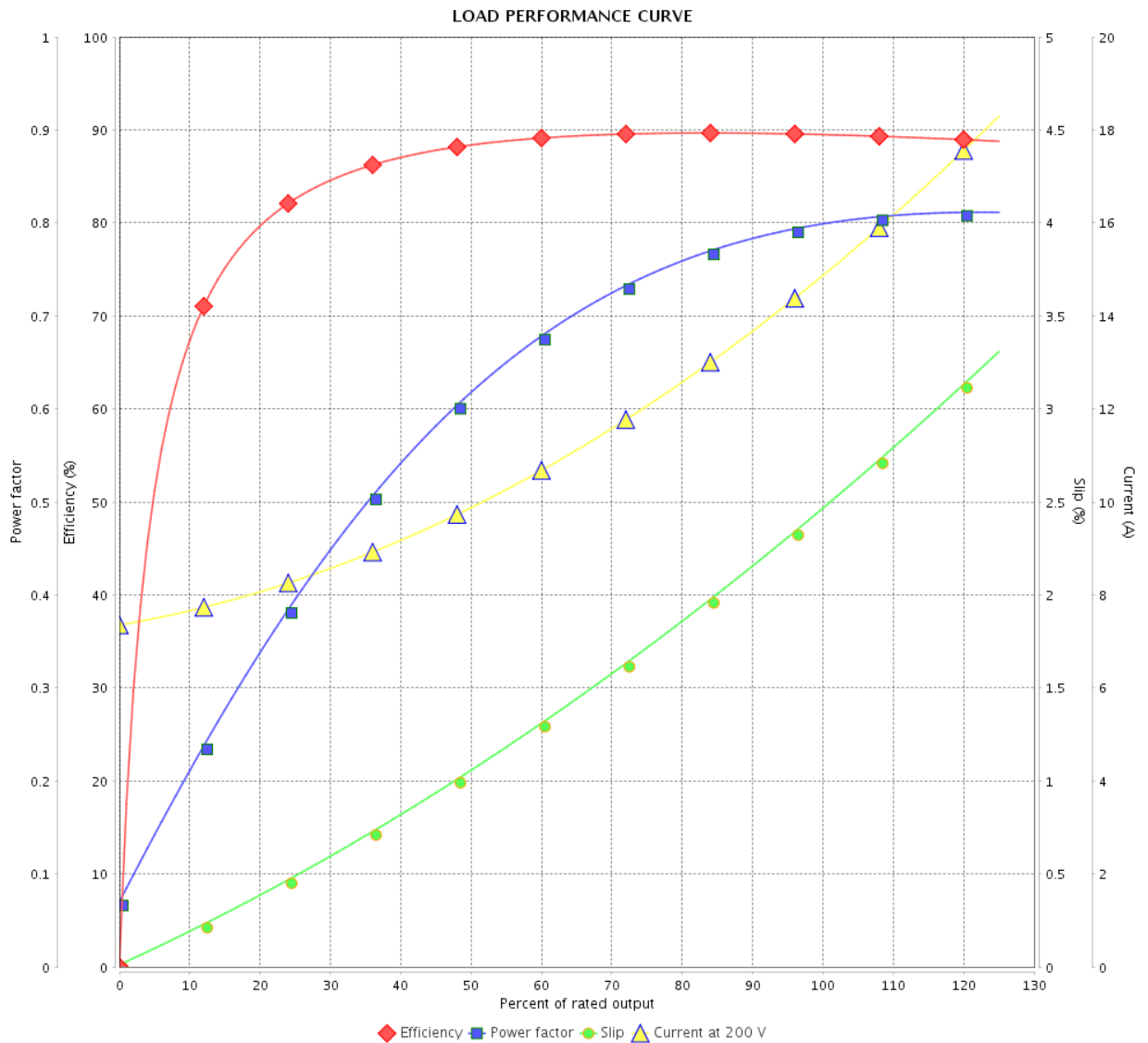


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13469731

Catalog # : 00518ET3P184JM-W22



Performance : 200 V 60 Hz 4P

Rated current : 14.8 A
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 Rated speed : 1755 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

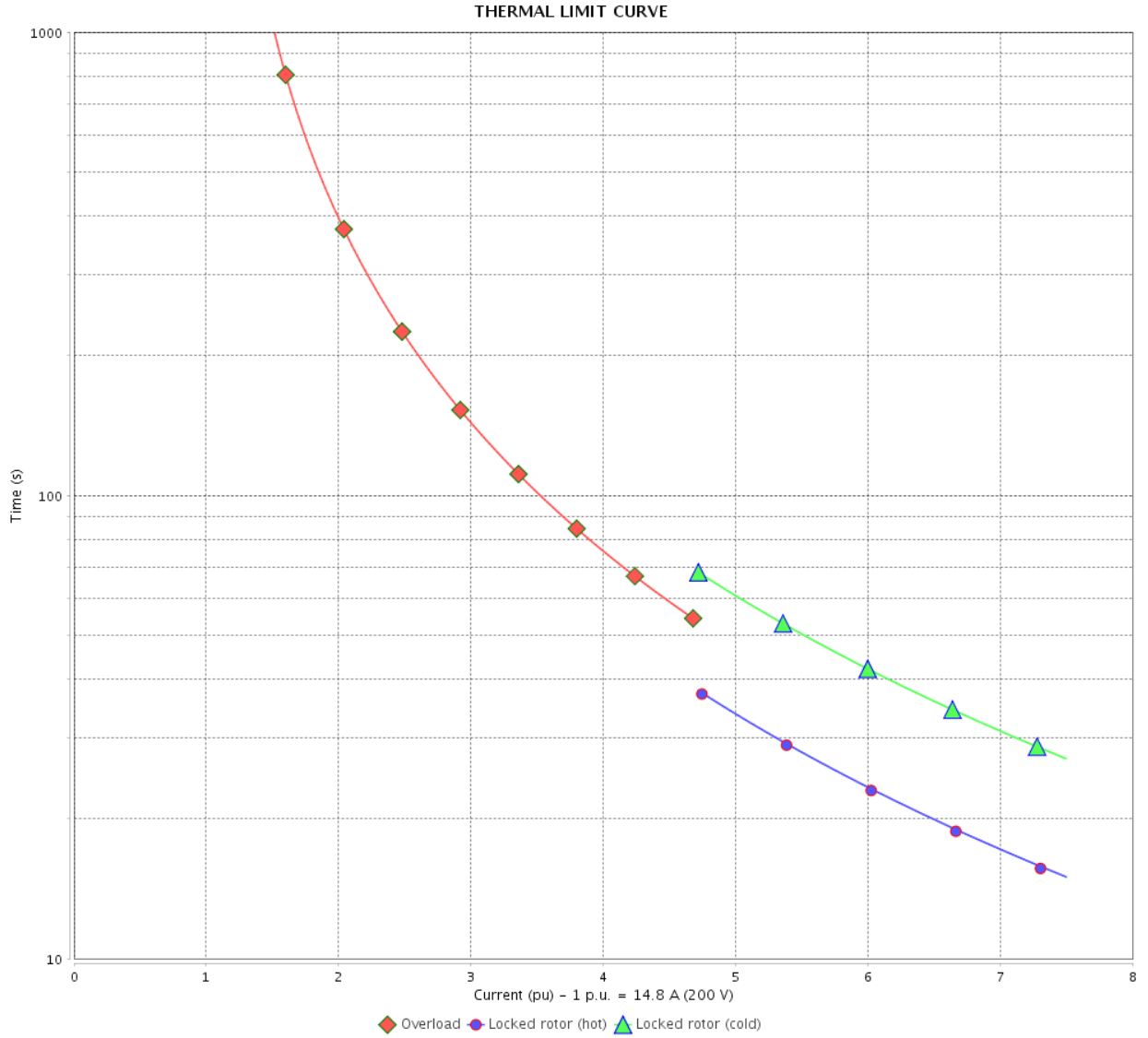
Rev.	Changes Summary	Performed	Checked	Date
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



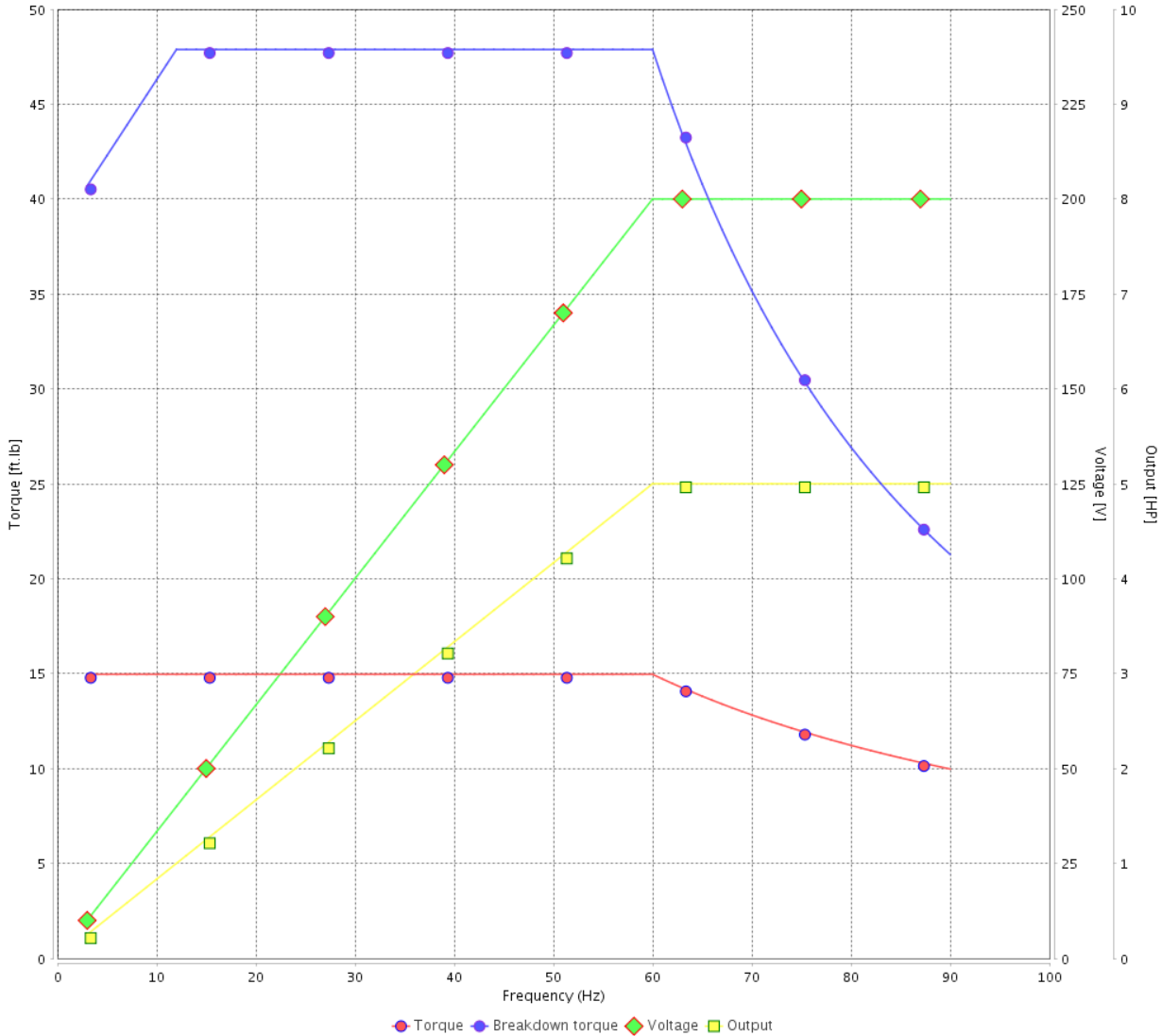
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VFD OPERATION CURVE



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 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

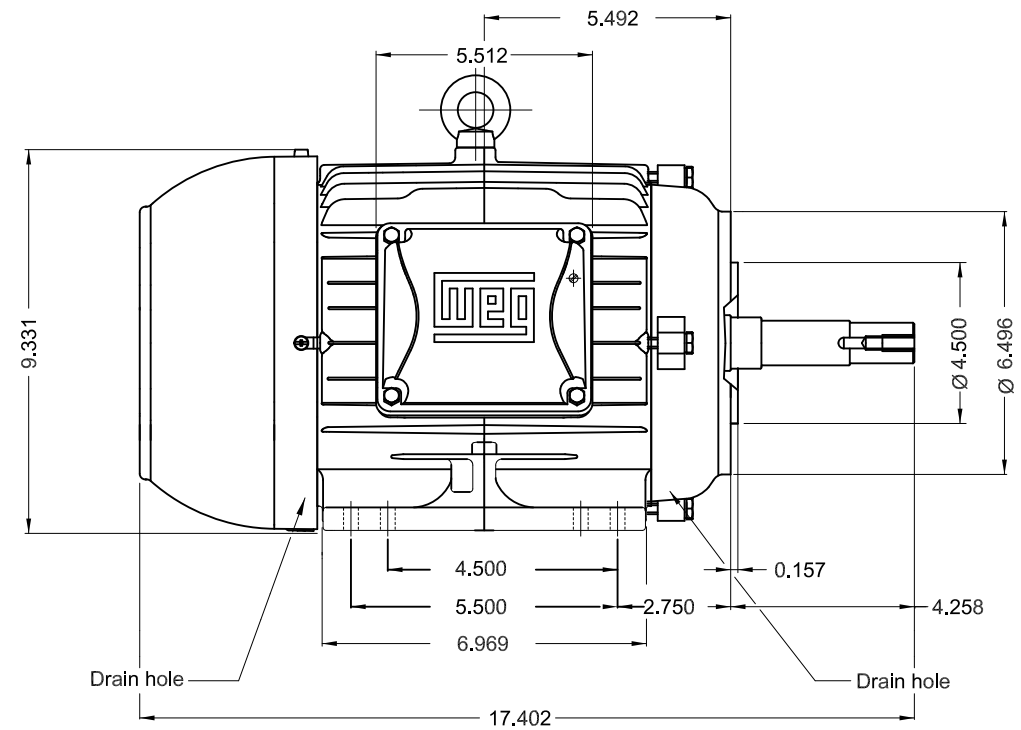
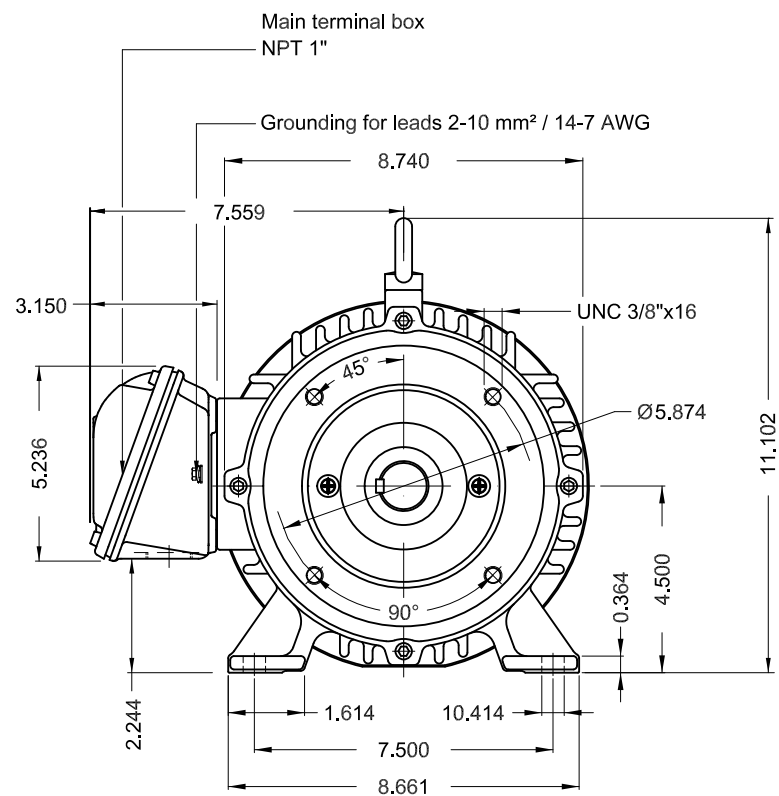
Rev.	Changes Summary	Performed	Checked	Date
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Date				

1 2 3 4 5 6

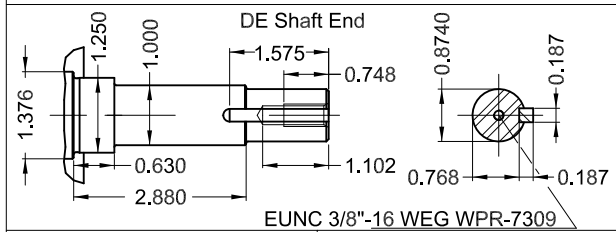
A

B

C



D

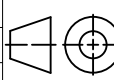


E

Color RAL 5009
 Painting plan 207A
 Mounting NEMA F-1
 Mounting B34R(D)

5 HP 04 Poles 60 Hz

A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PH. MOTOR JM/JP/JET PUMP W22 PREM. EFF. FRAME 182/4JM IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

PREVIEW
 WDD



**W22**

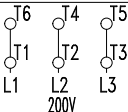
CC029A

® Inverter Duty Motor
Severe Duty

13469731

MADE IN BRAZIL MODEL 00518ET3P184JM-W22

PH 3	FR 182/4JM	HP(kW) 5.0(3.7)	Hz 60	SF 1.25	PF 0.8
V 200	A 14.8	RPM 1755	INS. CL.F Δ T 80 K		
NEMA NOM EFF 89.5 %				DES B DUTY CONT.	
ENCL TEFC			IP55		SFA 18.5
					ALT 1000 m.a.s.l.
					CODE J



MOBIL POLYREX EM

101 Lbs

Class I, Div 2, Gr. A, B, C and D - T3

Class I, Zone 2, IIC - T3

Class II, Div 2, Gr. F and G - T5

For use on PWM, Gr. A, B, C, D, F and G

VT1000:1, CT20:1, 1.0SF, T4A

FOR SAFE AREA
MOD.TE1BFOXON