

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12675404																		
Catalog # :	00518ET3H184T-S																		
Frame : 182/4T Output : 5 HP (3.7 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 5.19 A L. R. Amperes : 36.3 A LRC : 7.0x(Code J) No load current : 2.75 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> : 76.9 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 : 249 lb																			
Max. compression : 326 lb																			
<table style="width:100%; border:none;"> <tr> <td style="width:30%;"></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;">6206 ZZ</td> <td style="text-align:center;">6205 ZZ</td> </tr> <tr> <td>Sealing :</td> <td style="text-align:center;">V'Ring</td> <td style="text-align:center;">Without Bearing Seal</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 :	6206 ZZ	6205 ZZ	Sealing :	V'Ring	Without Bearing Seal	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



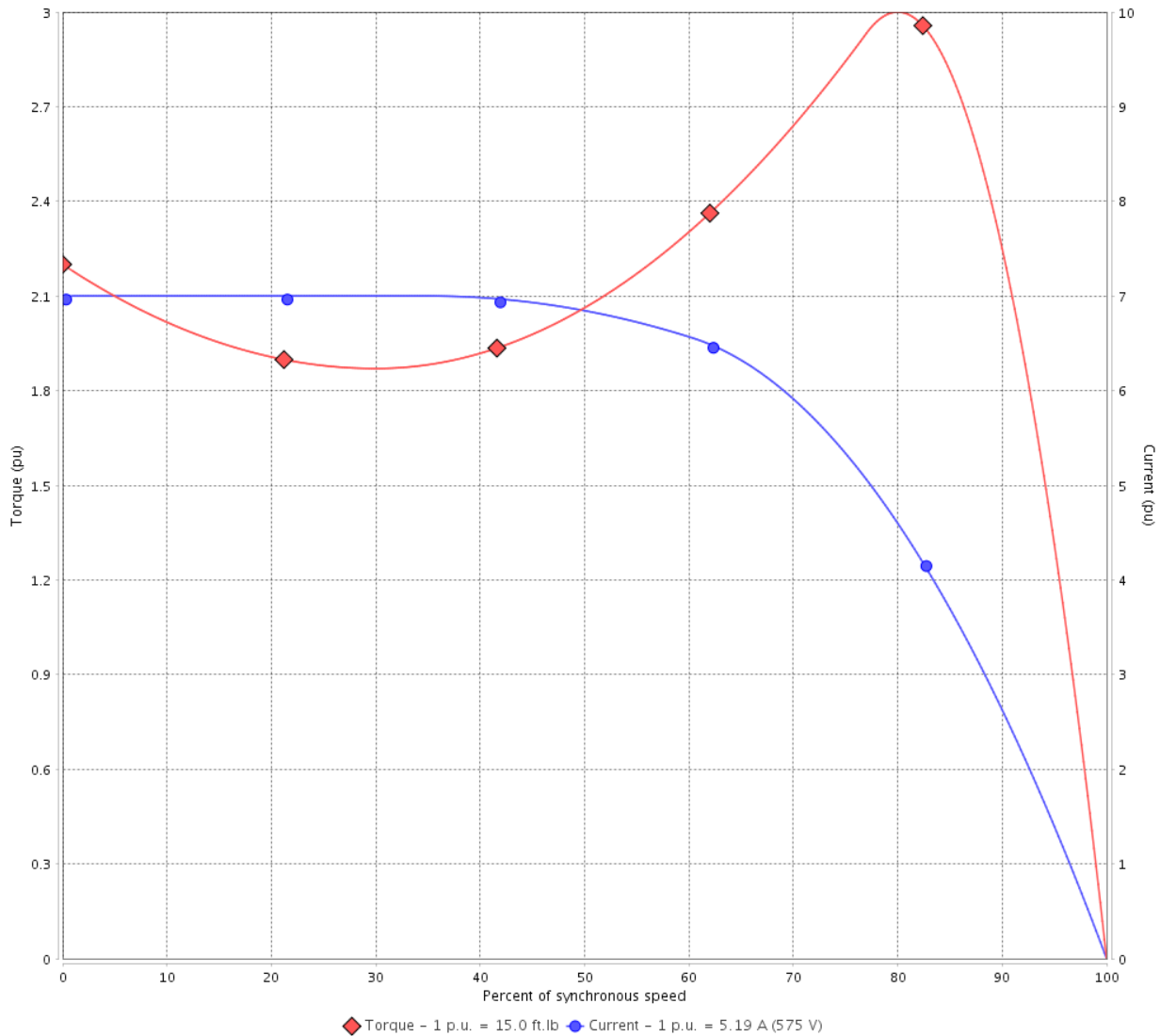
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12675404

Catalog # : 00518ET3H184T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 5.19 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)

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

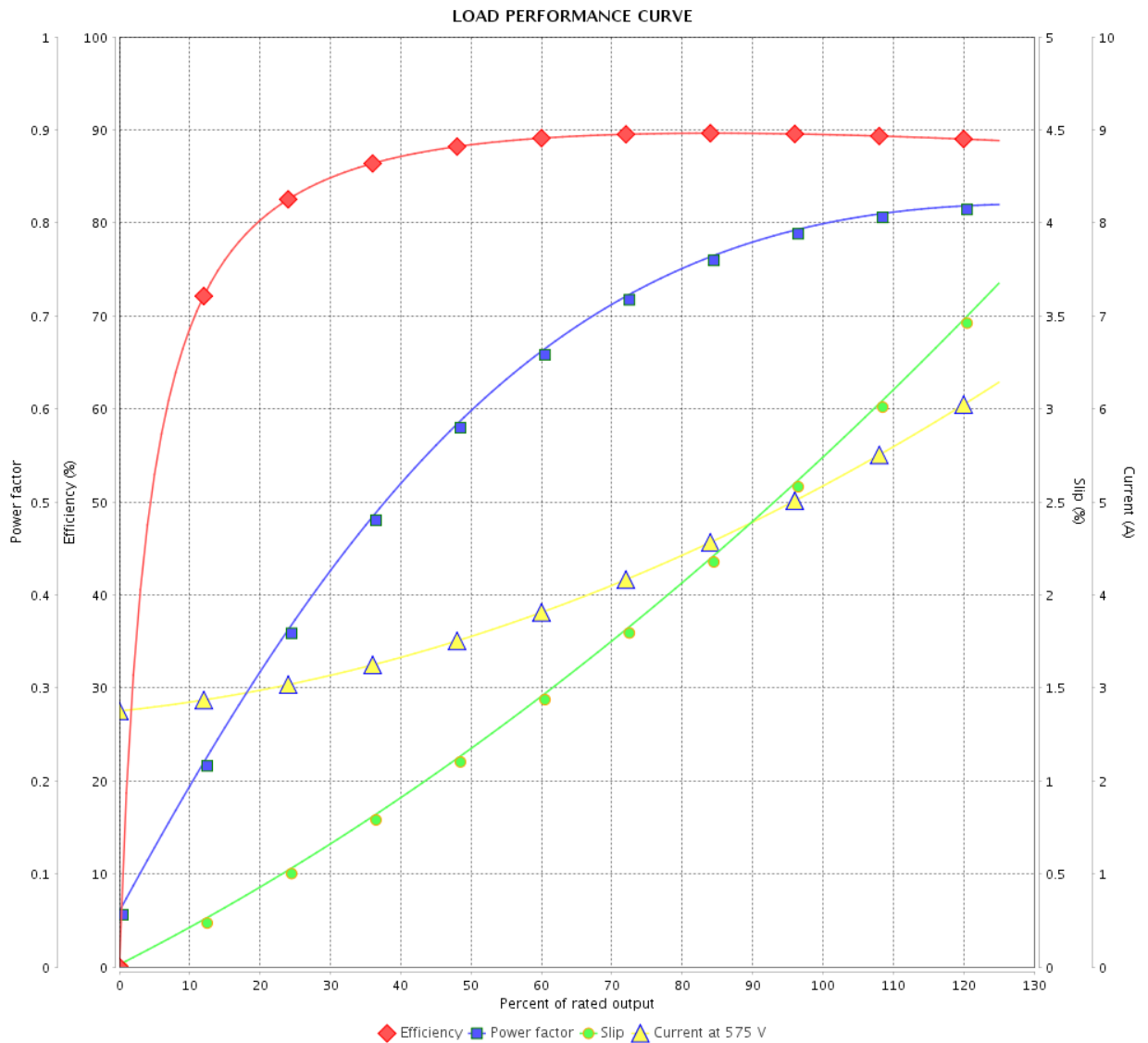


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12675404

Catalog # : 00518ET3H184T-S



Performance : 575 V 60 Hz 4P

Rated current : 5.19 A  
 LRC : 7.0  
 Rated torque : 15.0 ft.lb  
 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

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 6		
Date		12/04/2022		

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



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Product code : 12675404  
Catalog # : 00518ET3H184T-S

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Locked rotor torque : 220 %	Service factor : 1.15
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1750 rpm	Design : B

Heating constant

Cooling constant

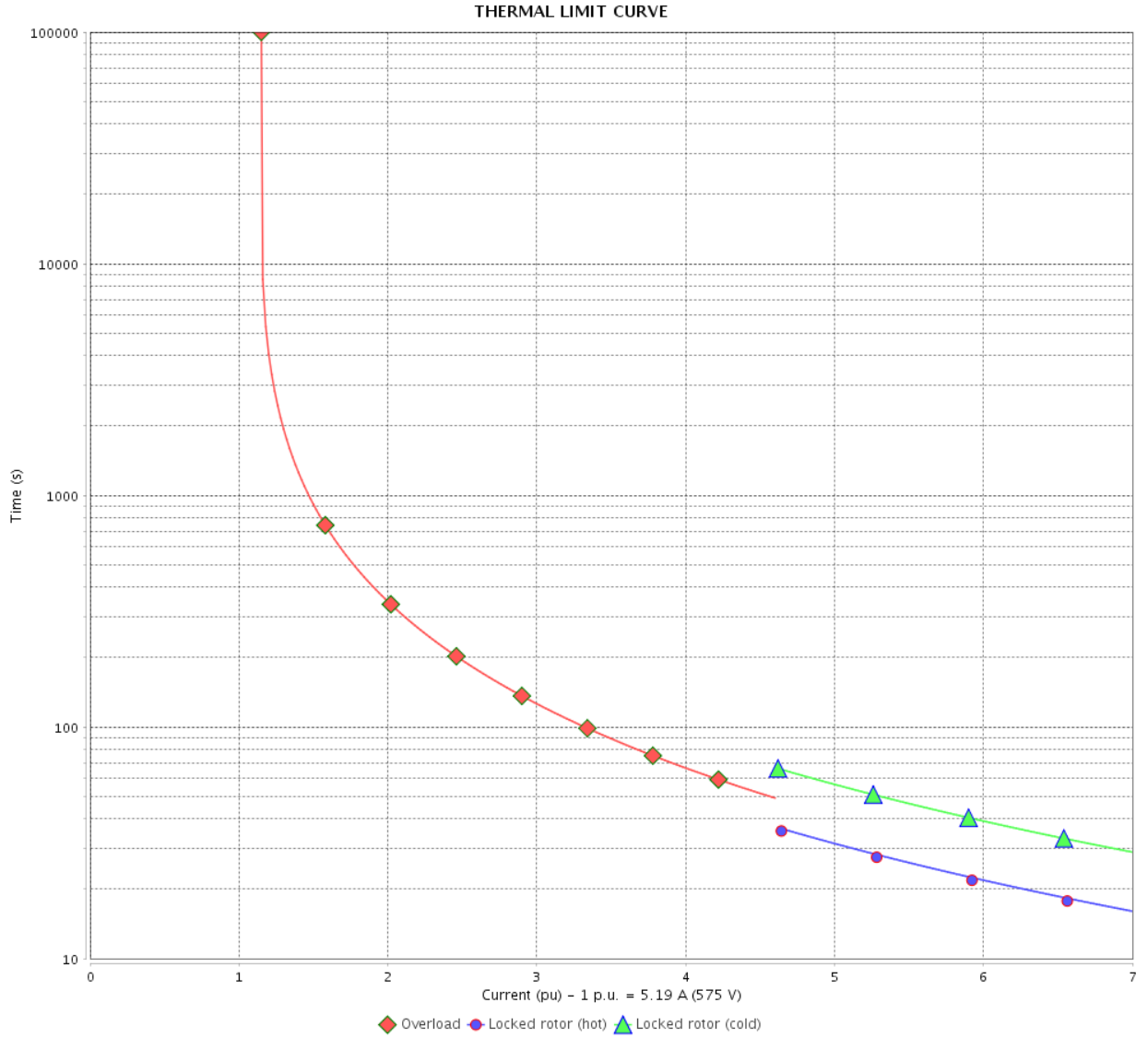
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	12/04/2022		4 / 6	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6		Revision
Checked by				
Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



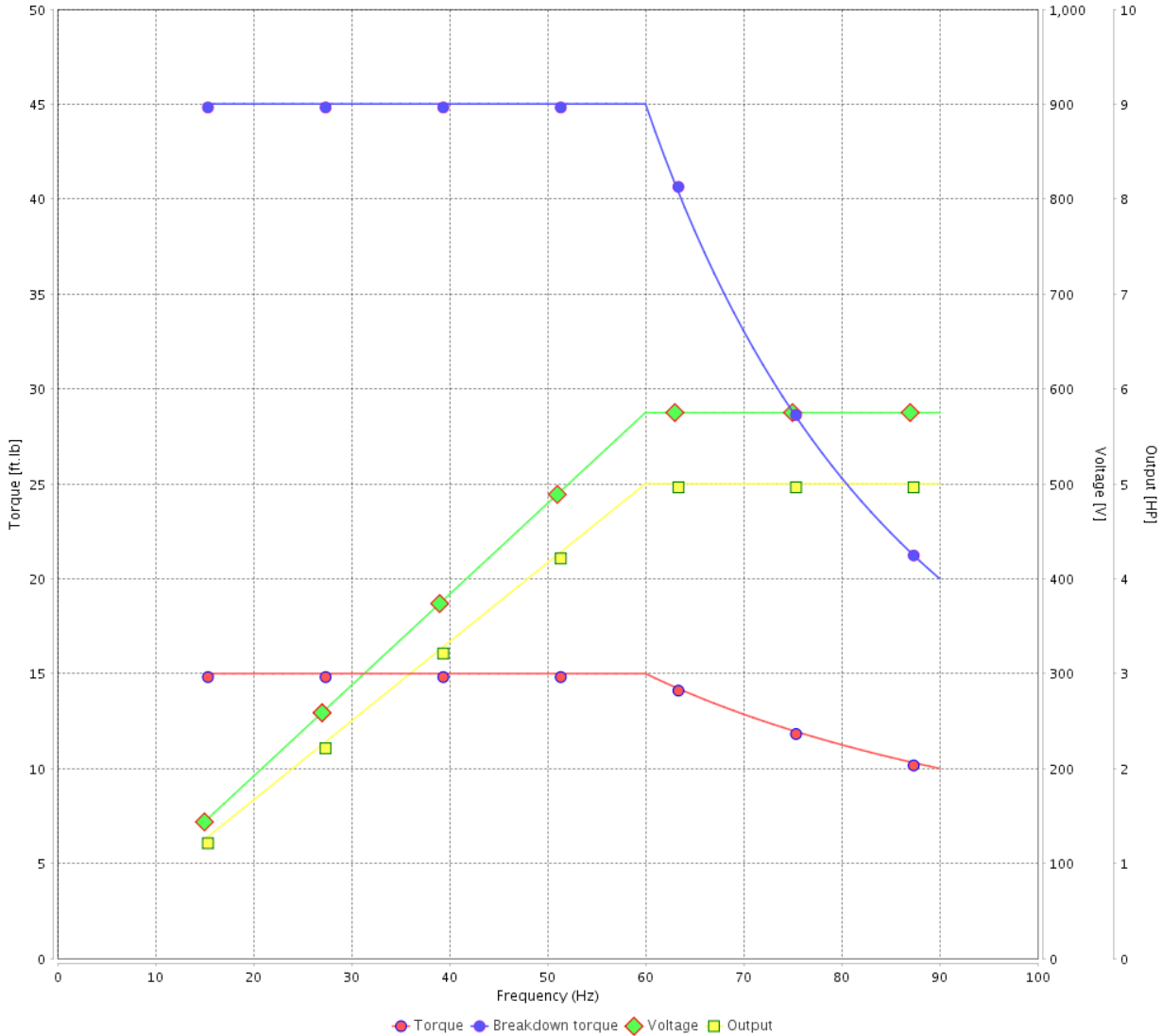
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VFD OPERATION CURVE



Performance : 575 V 60 Hz 4P

Rated current : 5.19 A  
 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

Rev.	Changes Summary	Performed	Checked	Date
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1 2 3 4 5 6

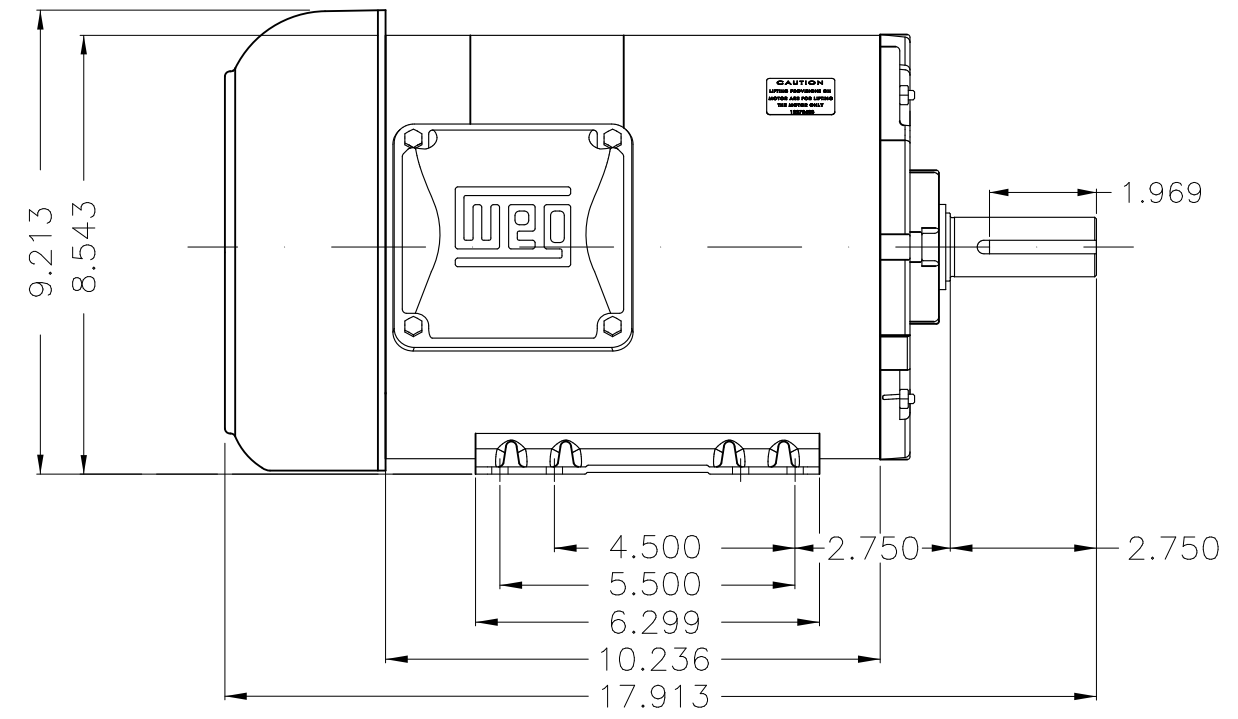
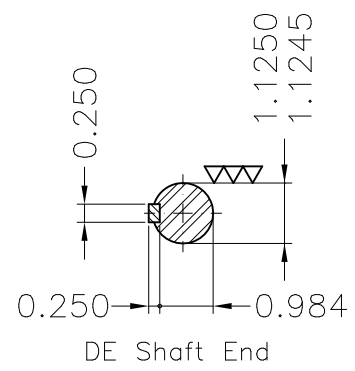
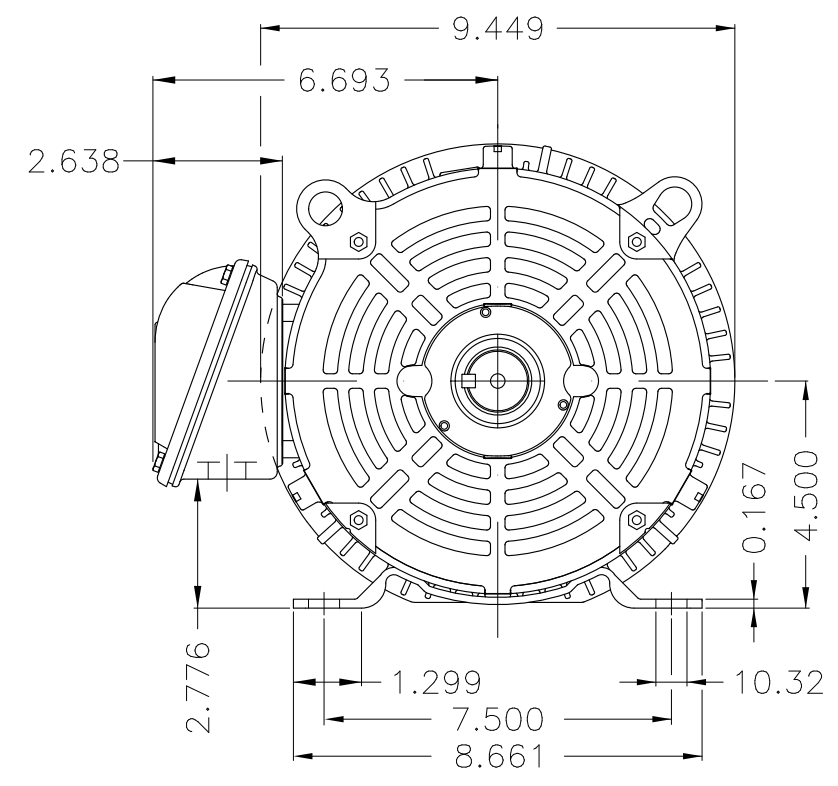
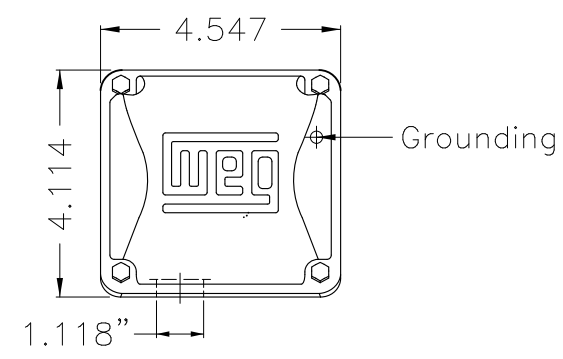
A

B

C

D

E



Color Munsell N 1 matte black  
 Painting plan 207N  
 Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 182/4T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

5 HP 04 Poles 60 Hz

A

PREVIEW  
WDD





**NEMA**  
**Premium**



MADE IN MEXICO

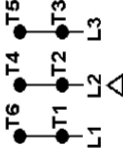
**MAT: 12675404 CC029A**  
**W01.TE0IC0X0N**  
**HT005504NPW01**  
**28FEB2022 S/N:**

**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 182/4T		KW 3.7
DUTY CONT.		V 575
ALT 1000 m.a.s.l.		A 5.19
INS CL F AT 80K	IP55	SFA 5.97
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 6206-ZZ ODE 6205-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.

