

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																
Product line	: NEMA Premium Efficiency Three-Phase															
Product code :	11433808															
Catalog # :	00518ST3HIE184T-W22															
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 : 40.0 A LRC : 7.7x(Code J) No load current : 2.32 A Rated speed : 1750 rpm Slip : 2.78 % Rated torque : 15.0 ft.lb Locked rotor torque : 229 % Breakdown torque : 300 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.4003 sq.ft.lb Design : B	Locked rotor time : 50s (cold) 28s (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> : 109 lb															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Output</td> <td>25%</td> <td>50%</td> <td>75%</td> <td>100%</td> </tr> <tr> <td>Efficiency (%)</td> <td>88.2</td> <td>88.5</td> <td>89.5</td> <td>89.5</td> </tr> <tr> <td>Power Factor</td> <td>0.38</td> <td>0.62</td> <td>0.74</td> <td>0.80</td> </tr> </table>	Output	25%	50%	75%	100%	Efficiency (%)	88.2	88.5	89.5	89.5	Power Factor	0.38	0.62	0.74	0.80	Foundation loads Max. traction : 233 lb Max. compression : 342 lb
Output	25%	50%	75%	100%												
Efficiency (%)	88.2	88.5	89.5	89.5												
Power Factor	0.38	0.62	0.74	0.80												
Bearing type : Sealing : Lubrication interval : Lubricant amount : Lubricant type :	<table border="0" style="width:100%;"> <tr> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td style="text-align: center;">6207 C3</td> <td style="text-align: center;">6206 C3</td> </tr> <tr> <td style="text-align: center;">Inpro/Seal</td> <td style="text-align: center;">Inpro/Seal</td> </tr> <tr> <td style="text-align: center;">20000 h</td> <td style="text-align: center;">20000 h</td> </tr> <tr> <td style="text-align: center;">7 g</td> <td style="text-align: center;">5 g</td> </tr> <tr> <td colspan="2" style="text-align: center;">Mobil Polyrex EM</td> </tr> </table>	<u>Drive end</u>	<u>Non drive end</u>	6207 C3	6206 C3	Inpro/Seal	Inpro/Seal	20000 h	20000 h	7 g	5 g	Mobil Polyrex EM				
<u>Drive end</u>	<u>Non drive end</u>															
6207 C3	6206 C3															
Inpro/Seal	Inpro/Seal															
20000 h	20000 h															
7 g	5 g															
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.															
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



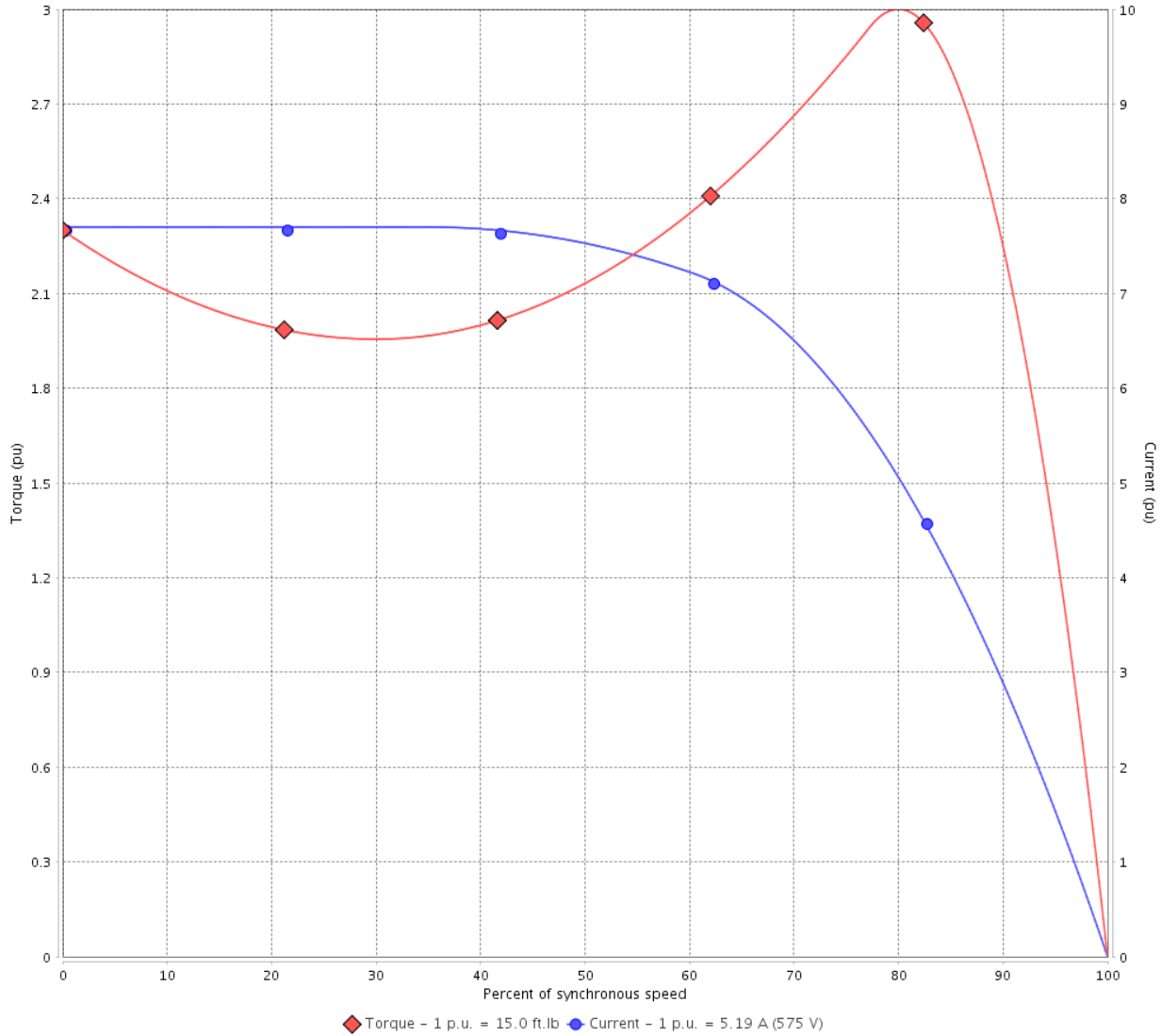
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11433808

Catalog # : 00518ST3HIE184T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 5.19 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1750 rpm	Design	: B

Locked rotor time : 50s (cold) 28s (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

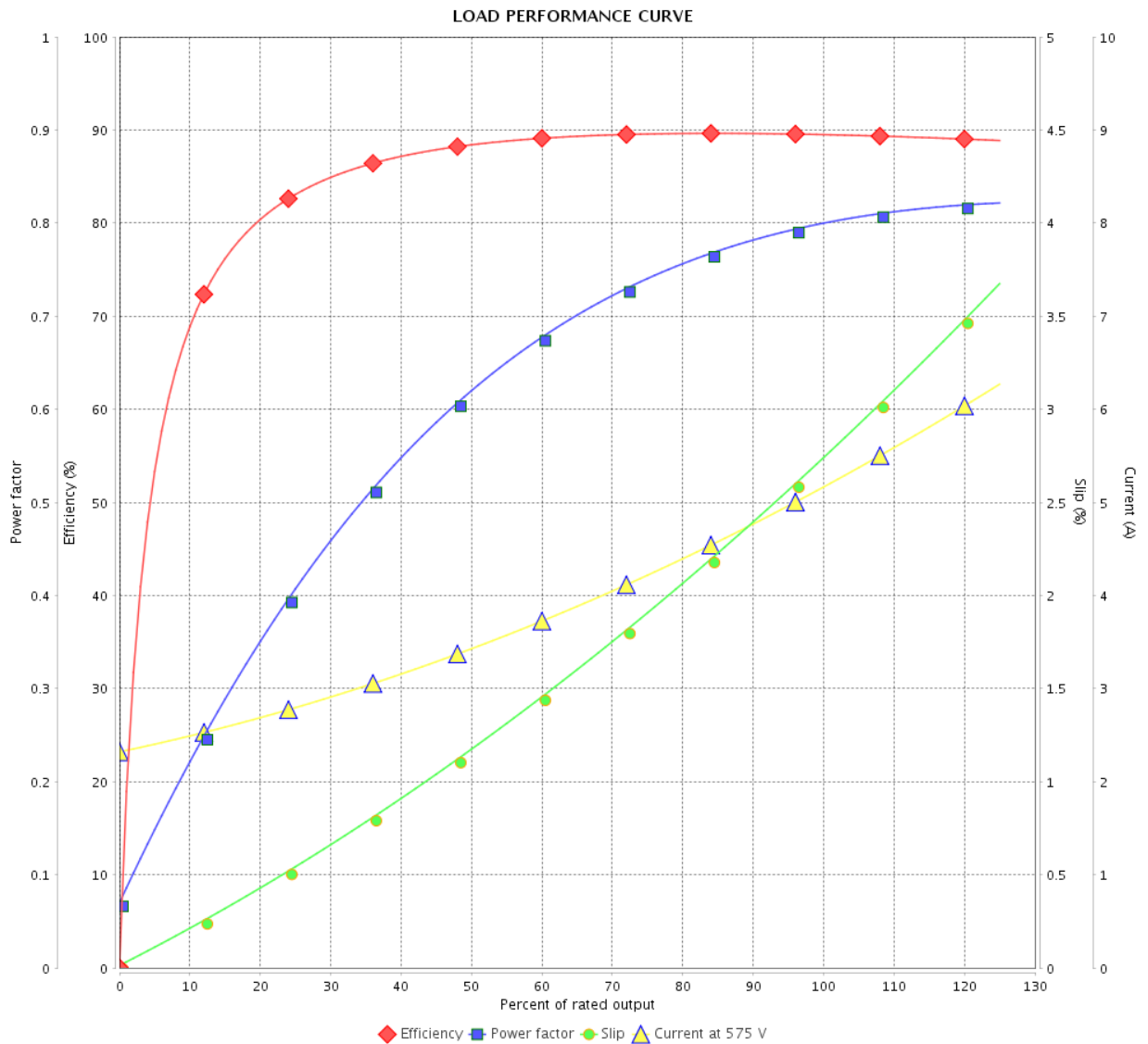


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11433808

Catalog # : 00518ST3HIE184T-W22



Performance : 575 V 60 Hz 4P

Rated current : 5.19 A  
 LRC : 7.7  
 Rated torque : 15.0 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 300 %  
 Rated speed : 1750 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

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

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 11433808  
 Catalog # : 00518ST3HIE184T-W22

Performance : 575 V 60 Hz 4P

Rated current : 5.19 A	Moment of inertia (J) : 0.4003 sq.ft.lb
LRC : 7.7	Duty cycle : Cont.(S1)
Rated torque : 15.0 ft.lb	Insulation class : F
Locked rotor torque : 229 %	Service factor : 1.25
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1750 rpm	Design : B

Heating constant

Cooling constant

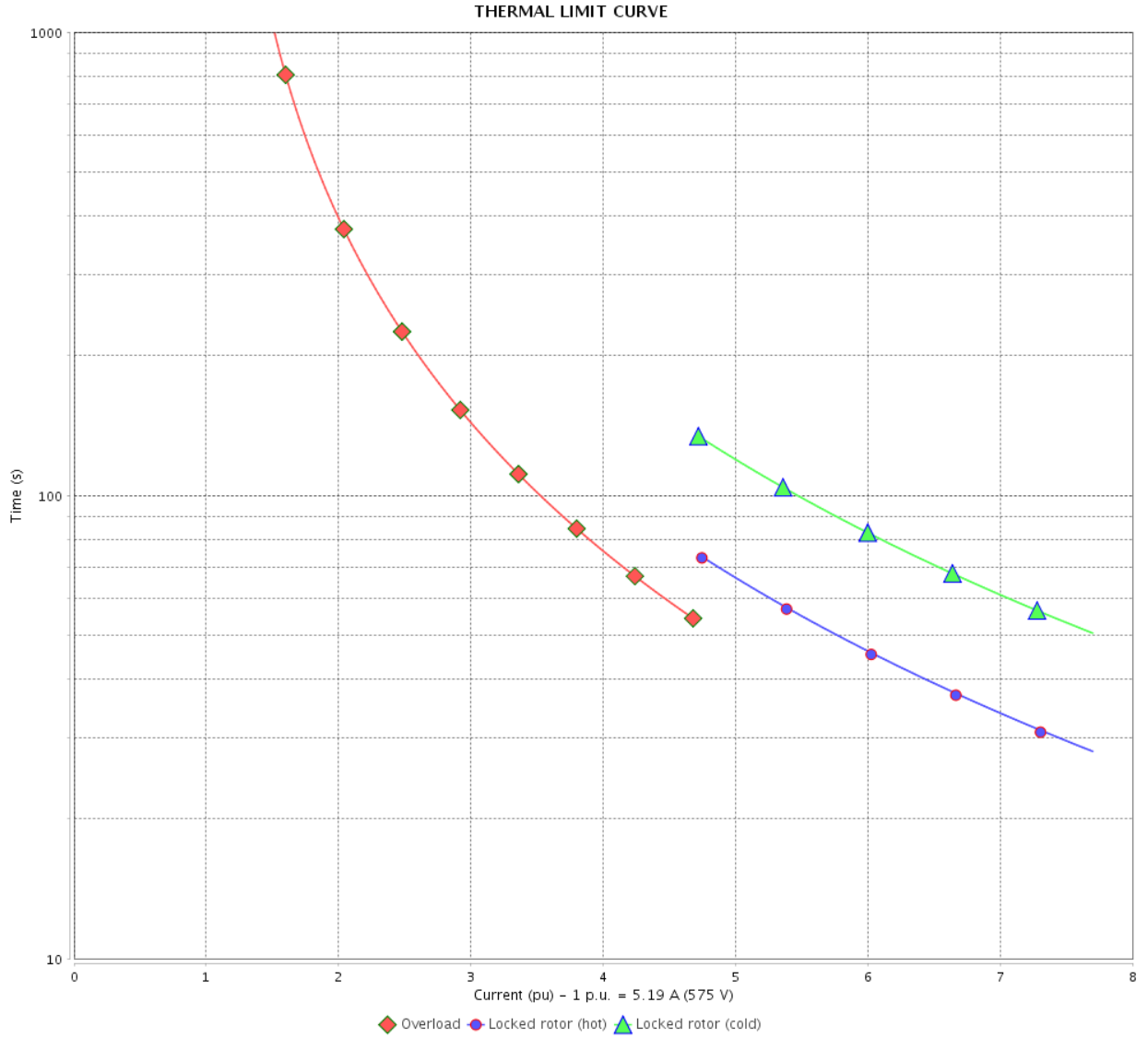
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date	12/04/2022			

# 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



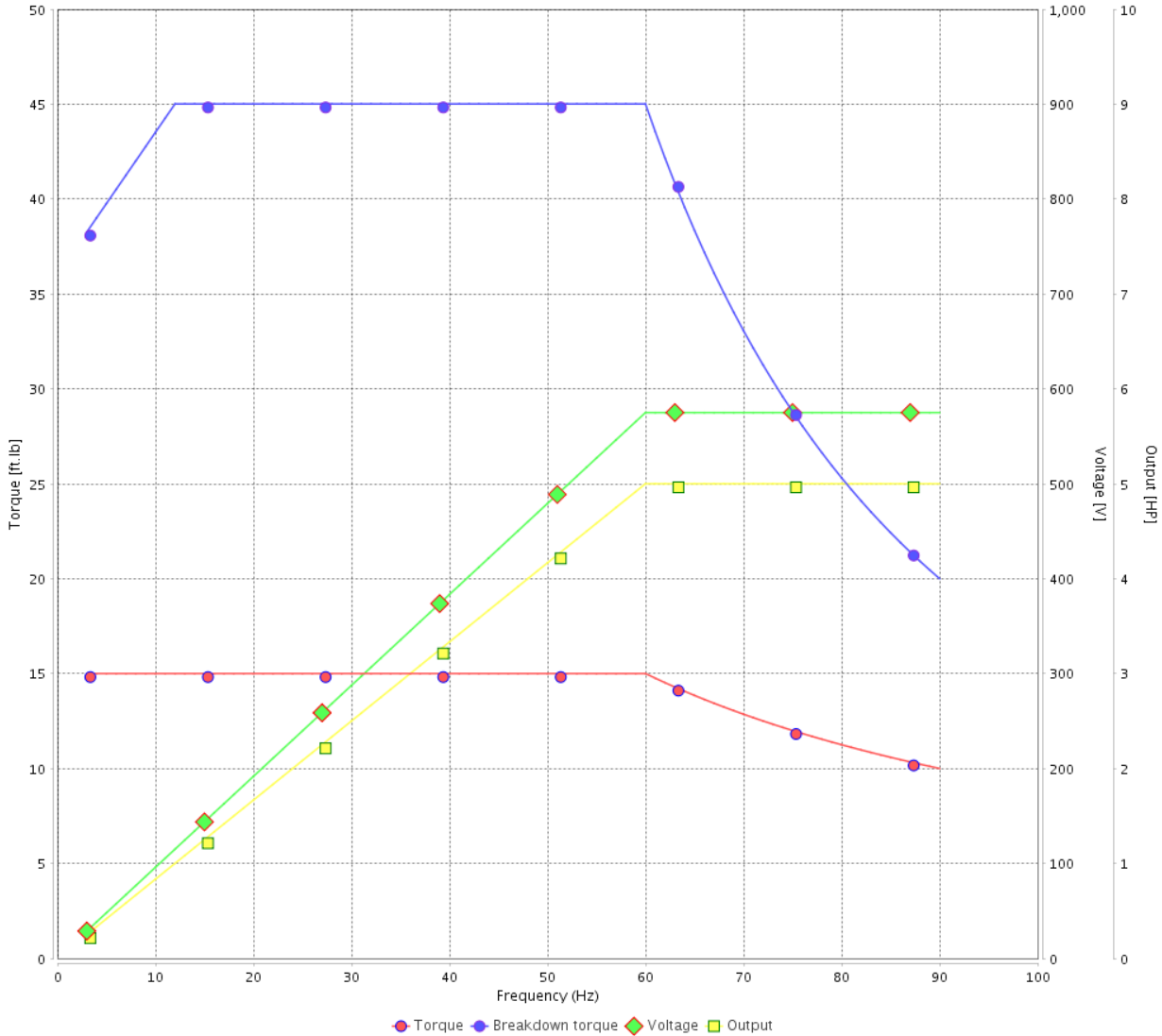
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11433808

Catalog # : 00518ST3HIE184T-W22

VFD OPERATION CURVE



Performance : 575 V 60 Hz 4P

Rated current : 5.19 A  
 LRC : 7.7  
 Rated torque : 15.0 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 300 %  
 Rated speed : 1750 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

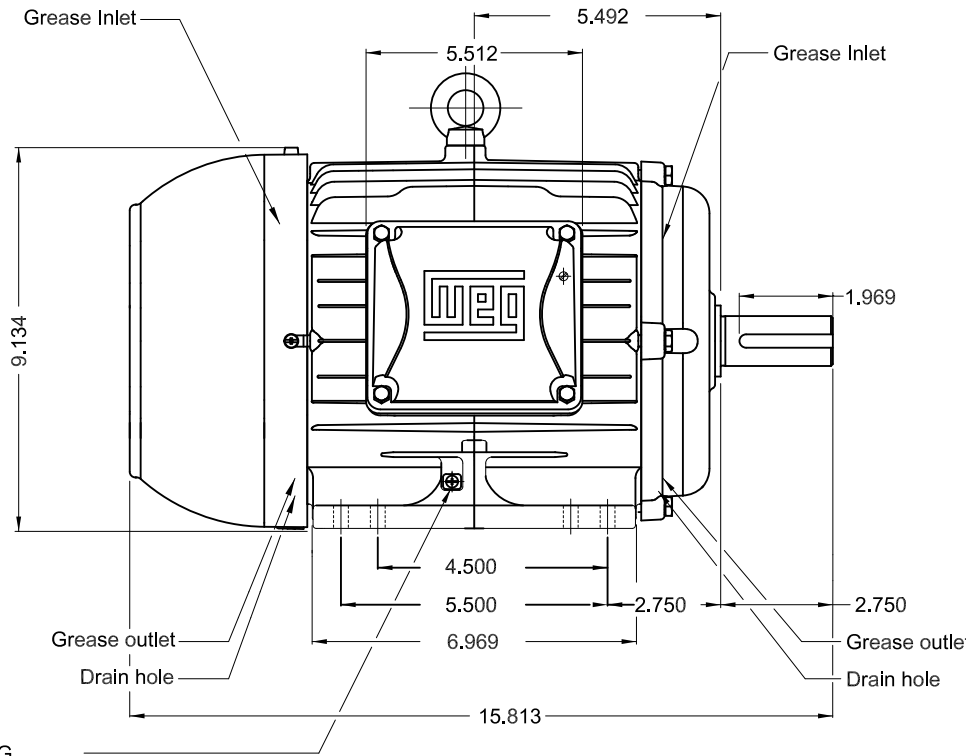
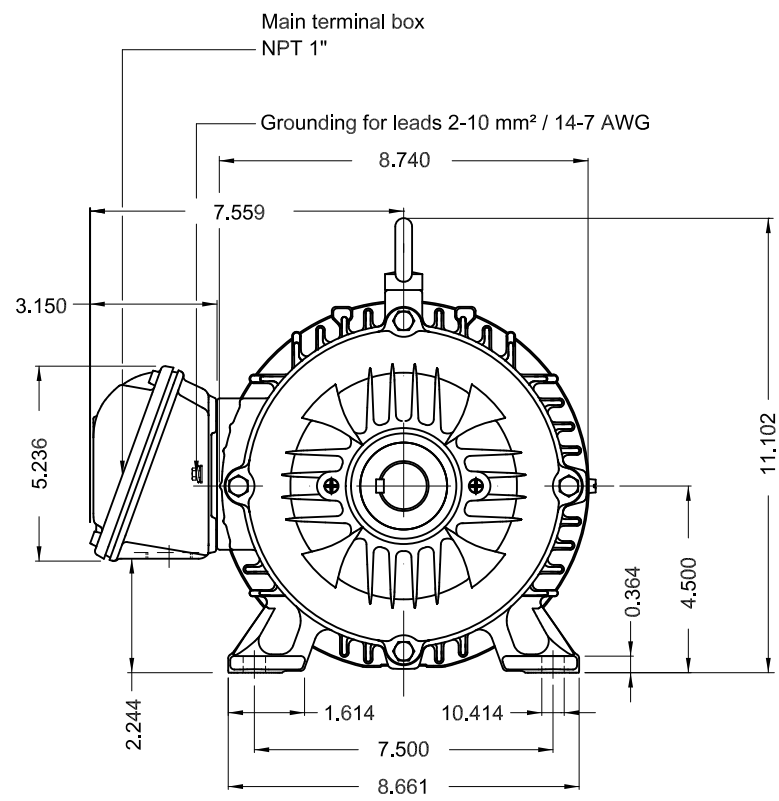
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	12/04/2022			

1 2 3 4 5 6

A

B

C

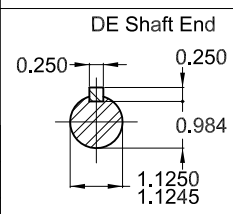


Grounding for leads 2-10 mm² / 14-7 AWG

D

E

Color RAL 5009  
 Painting plan 202E  
 Mounting B3R(D)



5 HP 04 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF.					
CHECKED		FRAME 182/4T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW  
 WDD



Dimensions in inches XME A3

MADE IN BRAZIL  
11433808



**NEMA**  
**Premium**

**W22**

IE005504W22IS

Inverter Duty Motor  
Severe Duty

**IEEE**  
**841-2009**



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,  
VT 1000:1, CT 20:1, 1.00SF - T4A



FOR SAFE AREA  
Mod. TE1BFOXON  
CC029A

PH3 60Hz Fr. 182/4T 1000m.a.s.l. IP55 TEFC 118lb

V 575

A 5.19

HP 5.0

kW 3.7

SF 1.25

SFA 6.49

RPM 1750

PF 0.80

AMB 40°C

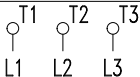
INS cl. F DT80K

NEMA NOM EFF 89.5%

DUTY CONT.

DES B Code J

GUARANT. EFF 87.5%



→ 6207-C3 (7g) 35BC02X30

→ 6206-C3 (5g) 30BC02X30

MOBIL POLYREX EM (20000h)

