

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12373789																		
Catalog # :	00152ST3HIE182T-W22																		
Frame : 182/4T Output : 1.5 HP (1.1 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 575 V Rated current : 2.03 A L. R. Amperes : 15.8 A LRC : 7.8x(Code M) No load current : 1.30 A Rated speed : 1170 rpm Slip : 2.50 % Rated torque : 6.73 ft.lb Locked rotor torque : 320 % Breakdown torque : 400 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.4879 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 ¹ : Both (CW and CCW) Noise level ² : 52.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 102 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	82.8 84.0 86.5 87.5																		
Power Factor	0.25 0.45 0.54 0.62																		
Foundation loads																			
Max. traction : 121 lb																			
Max. compression : 223 lb																			
	<table border="0"> <tr> <td></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;">6207 C3</td> <td style="text-align: center;">6206 C3</td> </tr> <tr> <td>Sealing :</td> <td style="text-align: center;">Inpro/Seal</td> <td style="text-align: center;">Inpro/Seal</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align: center;">20000 h</td> <td style="text-align: center;">20000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">7 g</td> <td style="text-align: center;">5 g</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 :	6207 C3	6206 C3	Sealing :	Inpro/Seal	Inpro/Seal	Lubrication interval :	20000 h	20000 h	Lubricant amount :	7 g	5 g	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



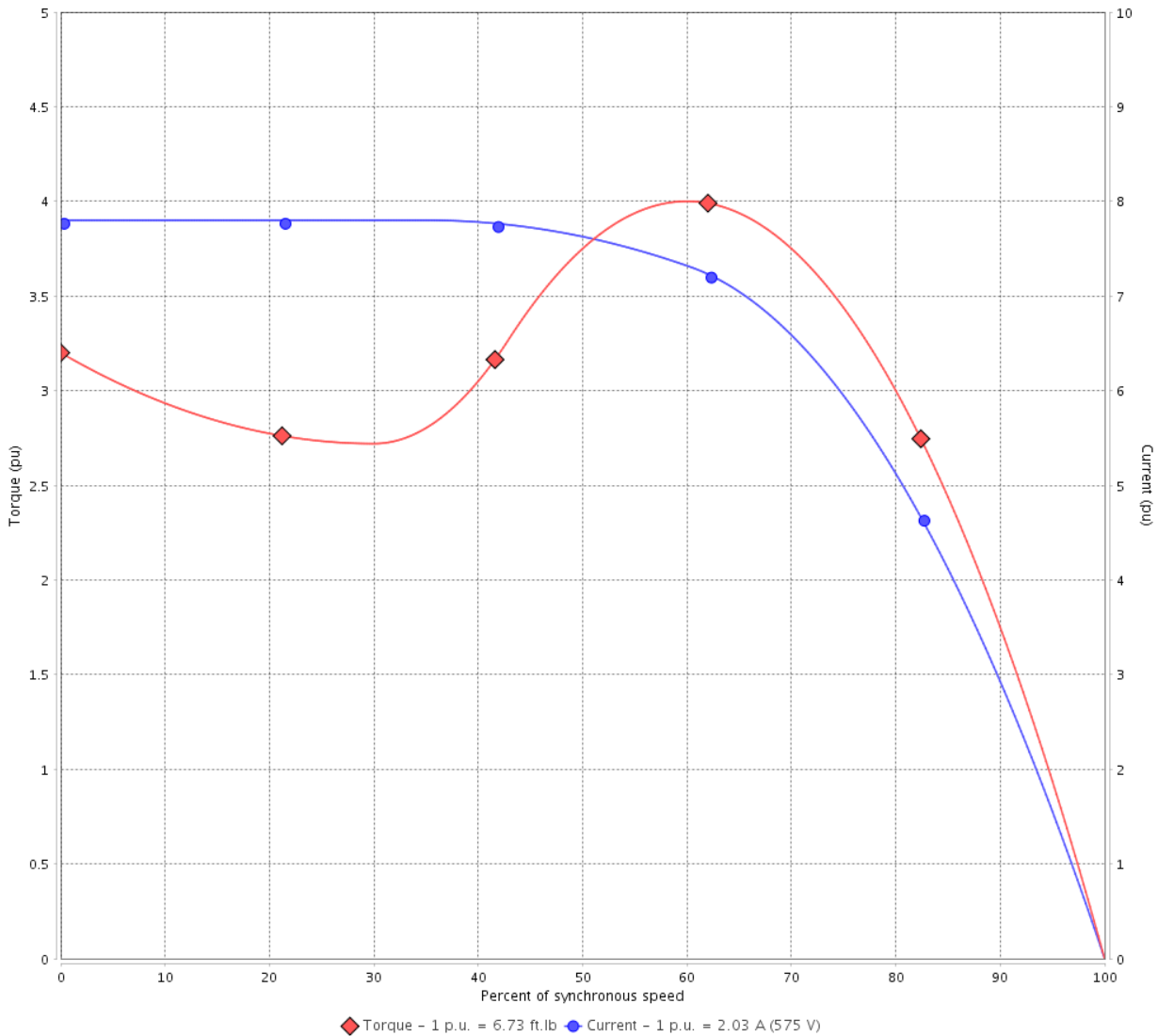
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

Rated current	: 2.03 A	Moment of inertia (J)	: 0.4879 sq.ft.lb
LRC	: 7.8	Duty cycle	: Cont.(S1)
Rated torque	: 6.73 ft.lb	Insulation class	: F
Locked rotor torque	: 320 %	Service factor	: 1.25
Breakdown torque	: 400 %	Temperature rise	: 80 K
Rated speed	: 1170 rpm	Design	: B

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

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

LOAD PERFORMANCE CURVE

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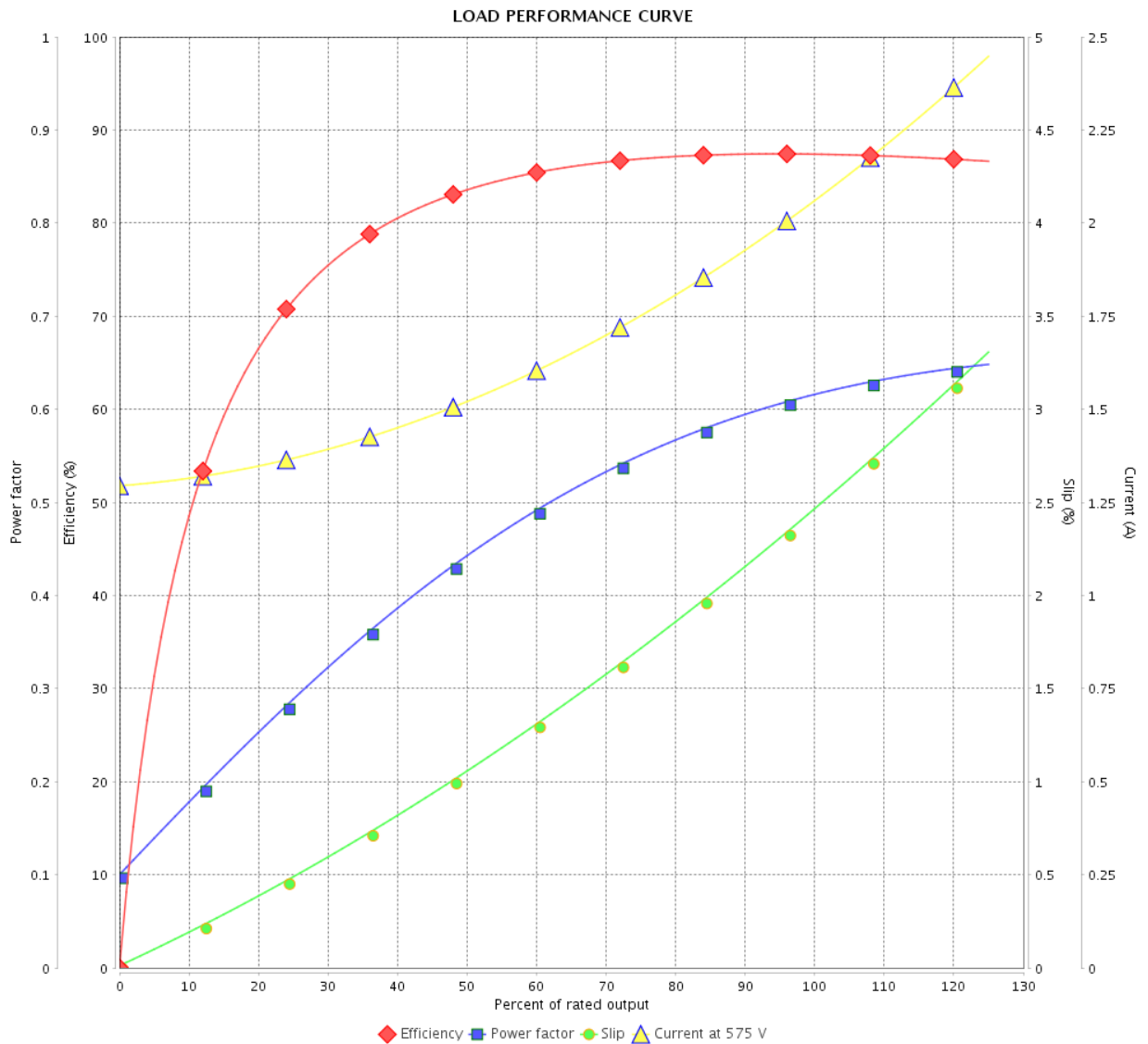


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 Design : B

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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

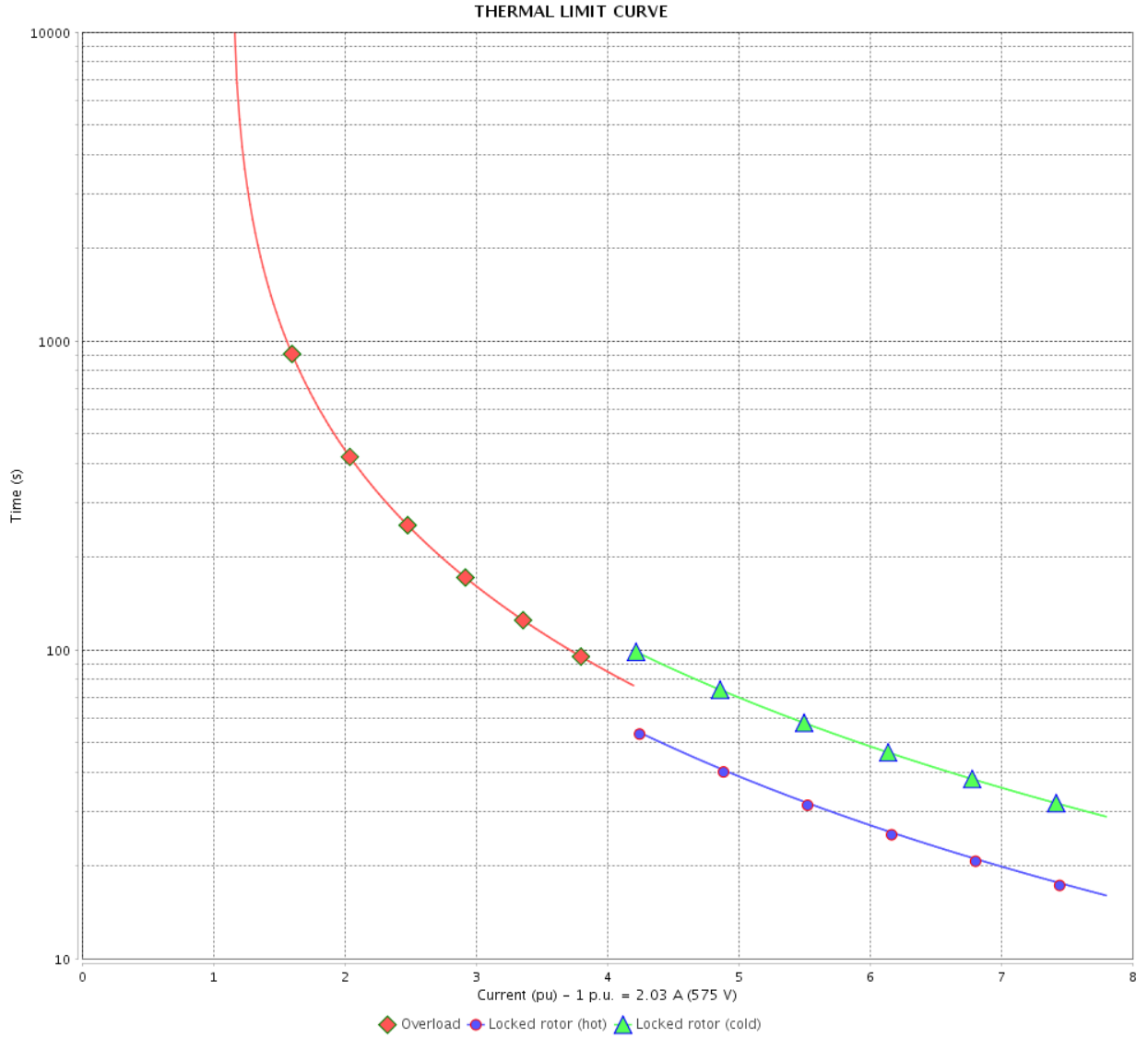
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Date				

VFD OPERATION CURVE

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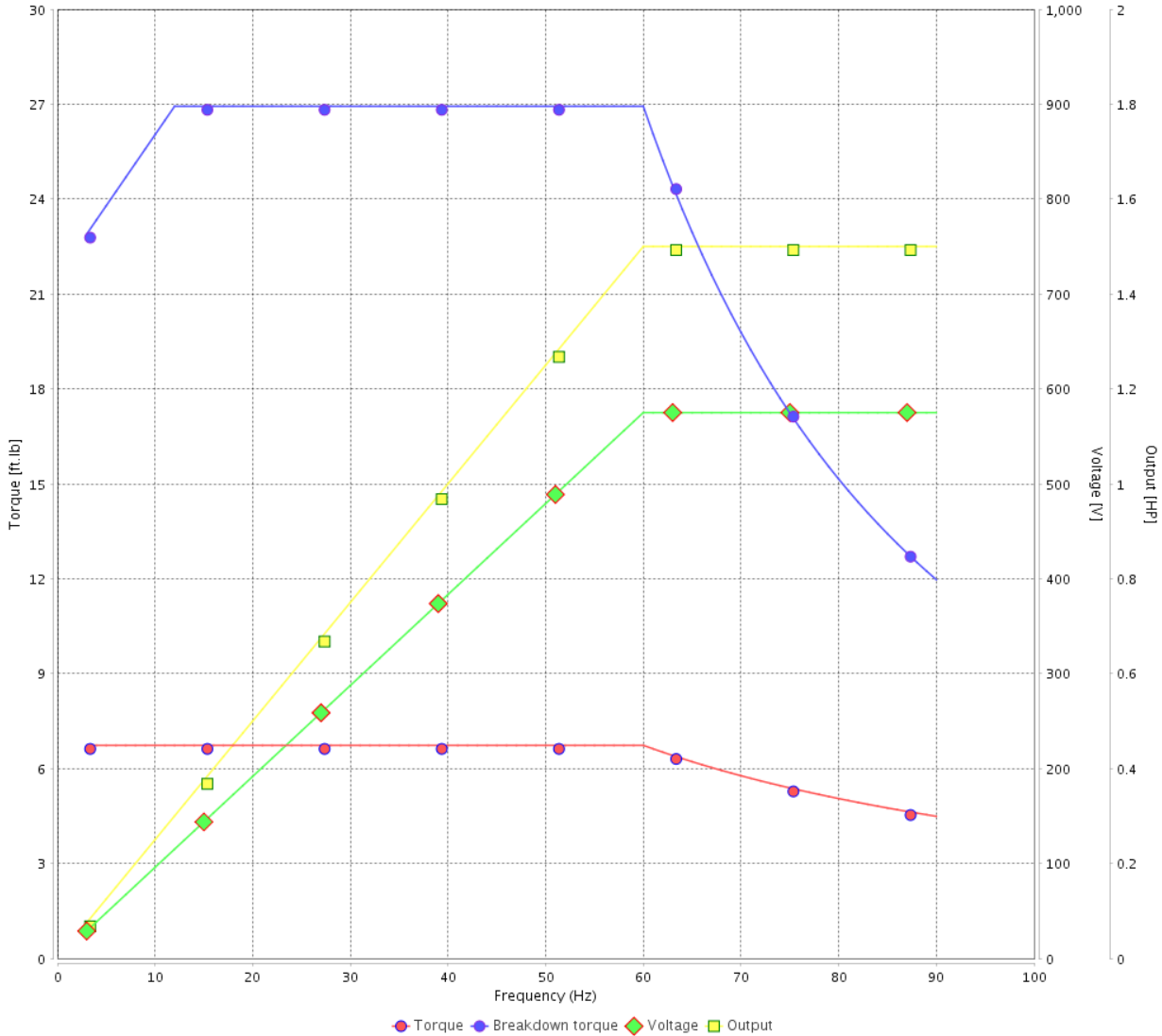
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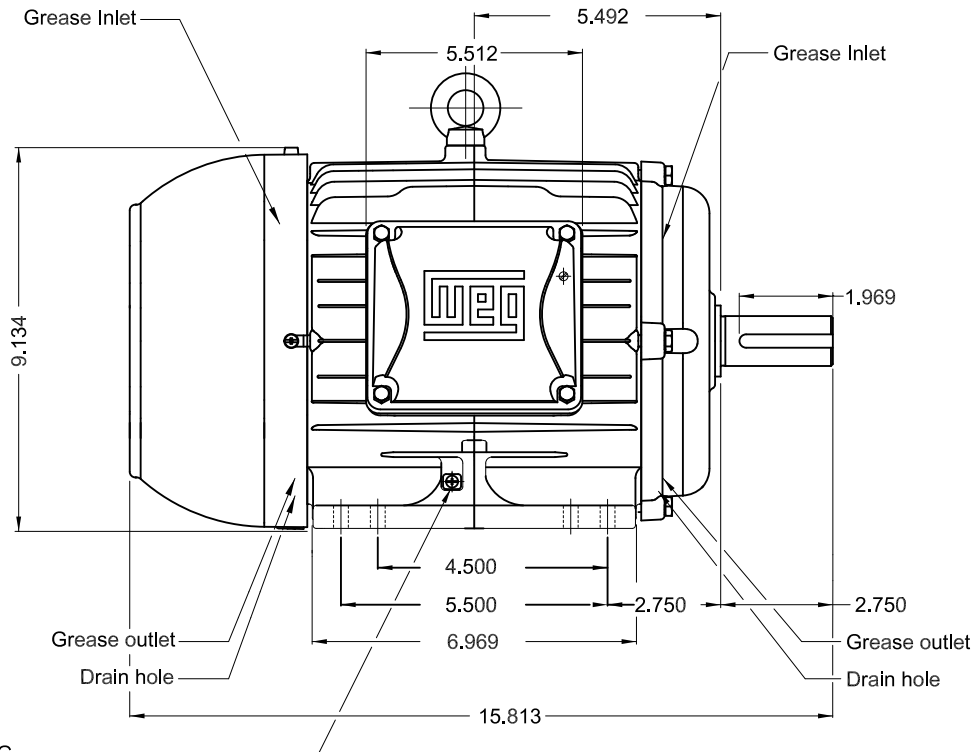
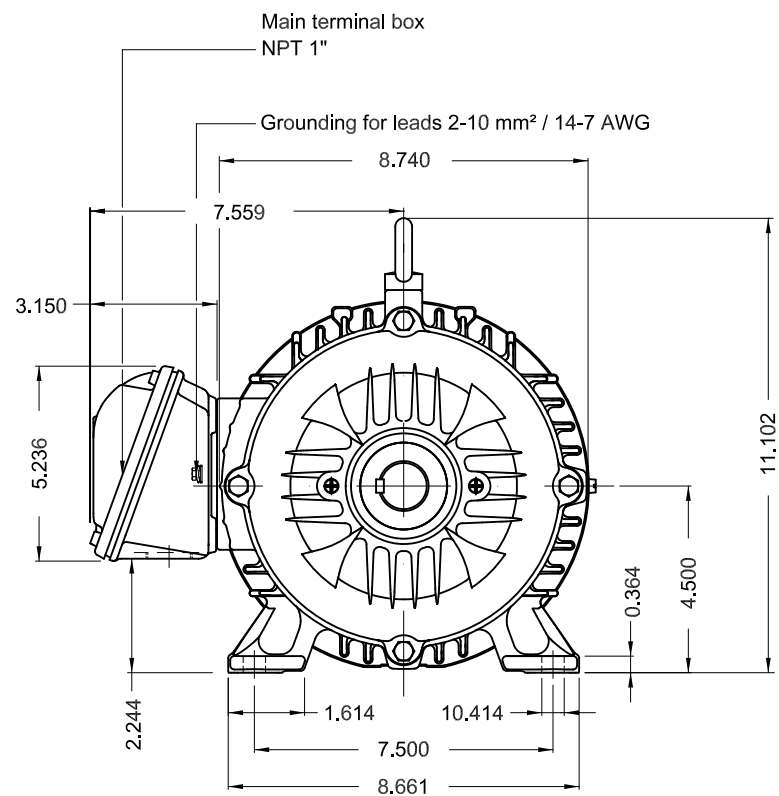
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Date	12/04/2022			

1 2 3 4 5 6

A

B

C

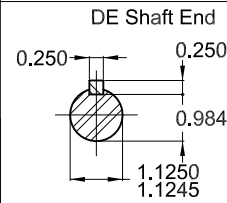


Grounding for leads 2-10 mm² / 14-7 AWG

D

E

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



1.5 HP 06 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
12373789



MODEL 00152ST3HIE182T-W22

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 111lb

V 575

A 2.03

HP 1.5

kW 1.1

SF 1.25

SFA 2.54

RPM 1170

PF 0.62

AMB 40°C

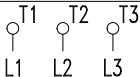
INS cl. F DT80K

NEMA NOM EFF 87.5%

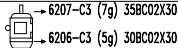
DUTY CONT.

DES B Code M

GUARANT. EFF 85.5%



575V



MOBIL POLYREX EM (20000h)

