

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	15459767																		
Catalog # :	00118ST3HIER143TC-W2																		
Frame : 143TC Output : 1 HP (0.75 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 1.18 A L. R. Amperes : 10.1 A LRC : 8.6x(Code M) No load current : 0.752 A Rated speed : 1760 rpm Slip : 2.22 % Rated torque : 2.98 ft.lb Locked rotor torque : 290 % Breakdown torque : 350 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.1172 sq.ft.lb Design : B	Locked rotor time : 32s (cold) 18s (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 : W-6 Rotation ¹ : Both (CW and CCW) Noise level ² : 51.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 50.7 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	78.4 80.0 84.0 85.5																		
Power Factor	0.31 0.55 0.68 0.75																		
Foundation loads																			
Max. traction : 65 lb																			
Max. compression : 116 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;">6205 C3</td> <td style="text-align: center;">6204 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;">4 g</td> <td style="text-align: center;">4 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 :	6205 C3	6204 C3	Sealing :	Inpro/Seal	Inpro/Seal	Lubrication interval :	20000 h	20000 h	Lubricant amount :	4 g	4 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															
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



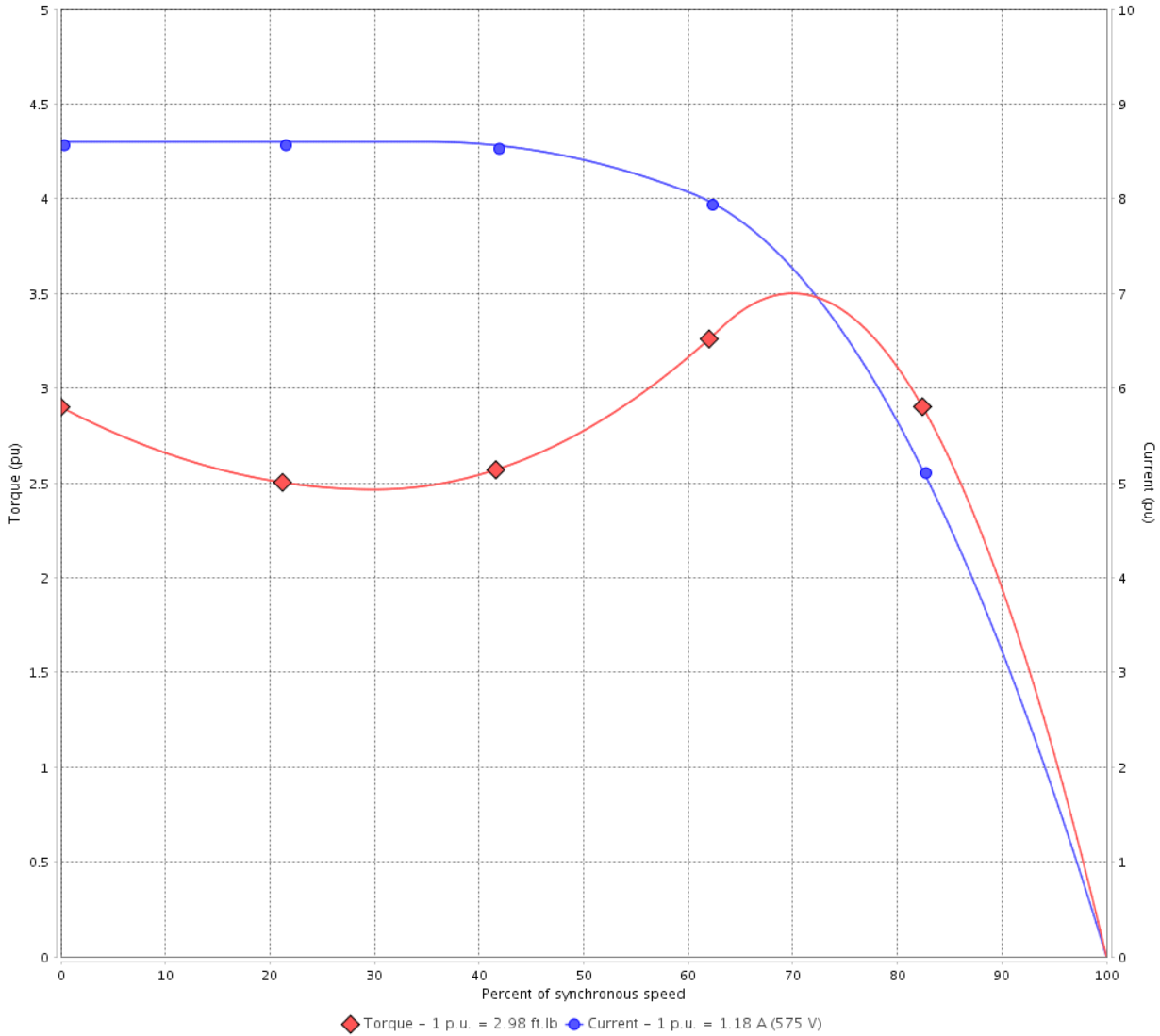
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 1.18 A	Moment of inertia (J)	: 0.1172 sq.ft.lb
LRC	: 8.6	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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LOAD PERFORMANCE CURVE

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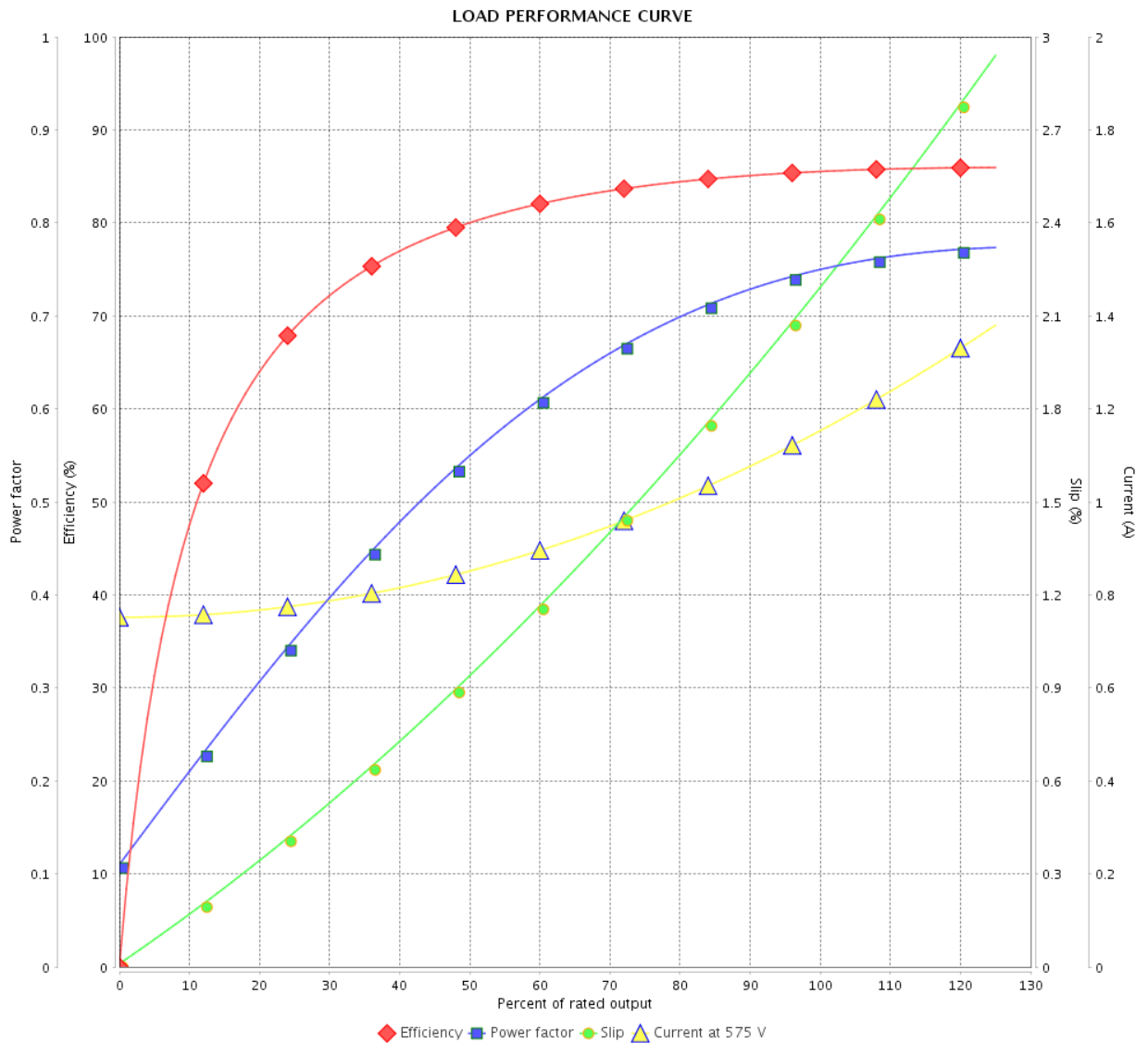


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

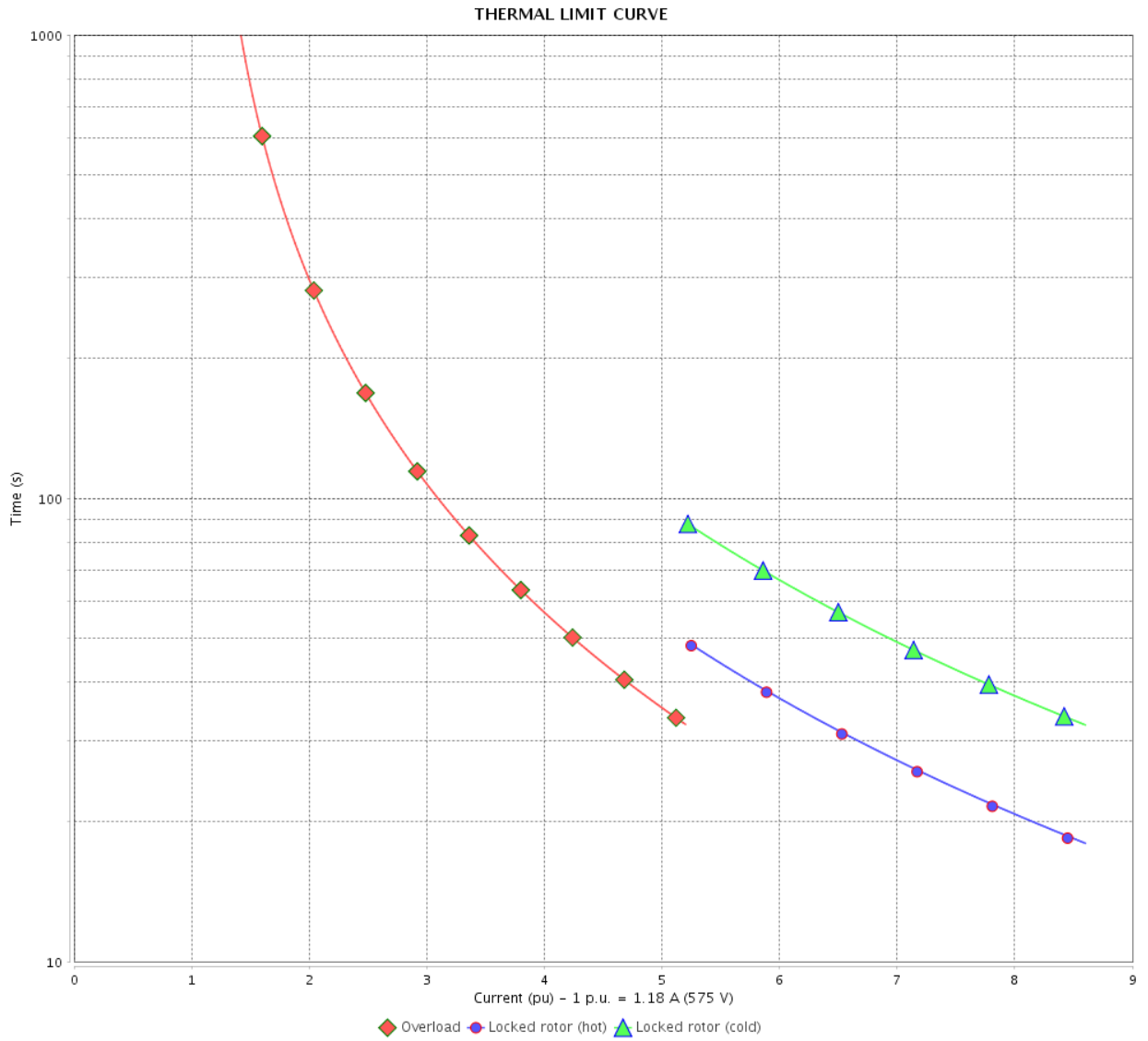
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

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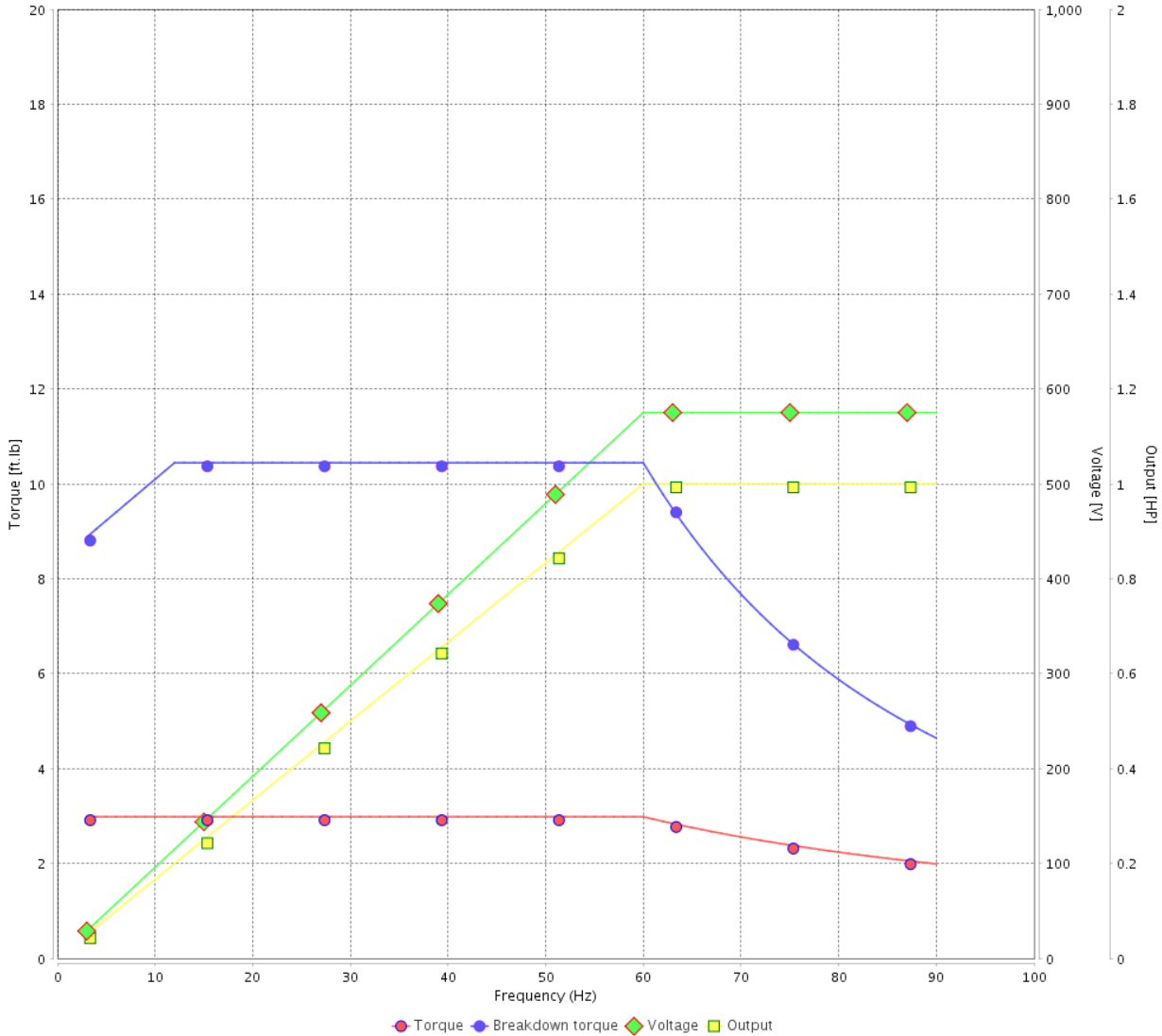
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VFD OPERATION CURVE

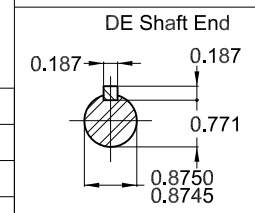
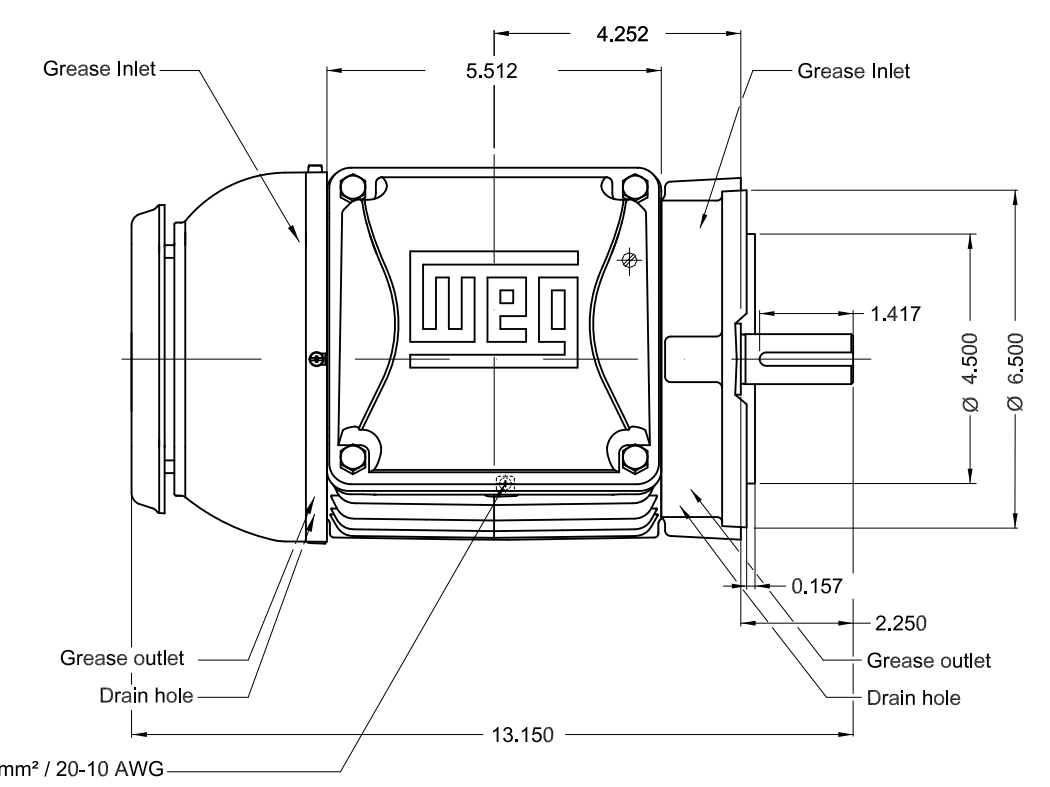
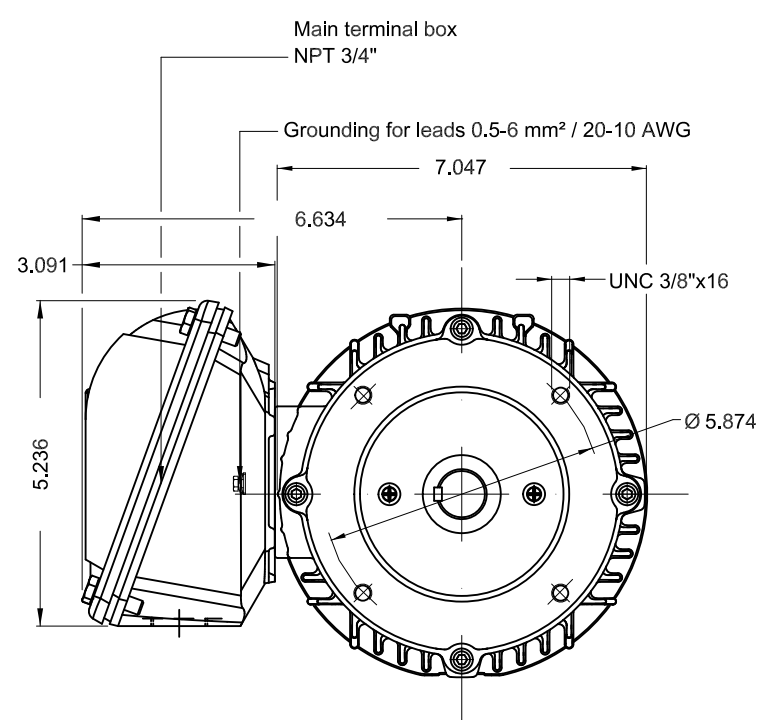


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Color RAL 5009
 Painting plan 202E
 Mounting NEMA W-6
 Mounting V18

1 HP 04 Poles 60 Hz										A	
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF. FRAME 143TC IP55 TEFC					PREVIEW		WEG		
CHECKED							WDD				
RELEASED							SHEET		1 / 1		
REL DT.		WMO	Jaragua do Sul	Product Engineering							



MODEL 00118ST3HIER143TC-W2

Inverter Duty Motor
Severe Duty



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. 143TC 1000m.a.s.l. IP55 TEFC 51lb

V 575

A 1.18

HP 1.0

kW 0.75

SF 1.25

SFA 1.47

RPM 1760

PF 0.75

AMB 40°C

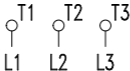
INS cl. F DT80K

NEMA NOM EFF 85.5%

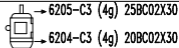
DUTY CONT.

DES B Code M

GUARANT. EFF 82.5%



575V



MOBIL POLYREX EM (20000h)



MADE IN BRAZIL
15459767