

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12373688																		
Catalog # :	00156ST3HIE143T-W22																		
Frame : 143/5T Output : 1.5 HP (1.1 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 1.57 A L. R. Amperes : 14.0 A LRC : 8.9x(Code L) No load current : 0.664 A Rated speed : 3480 rpm Slip : 3.33 % Rated torque : 2.26 ft.lb Locked rotor torque : 310 % Breakdown torque : 370 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.0470 sq.ft.lb Design : B	Locked rotor time : 37s (cold) 21s (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 : 68.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 51.4 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	81.1 81.5 84.0 84.0																		
Power Factor	0.43 0.68 0.78 0.84																		
Foundation loads																			
Max. traction : 47 lb																			
Max. compression : 98 lb																			
	<table border="0" style="width:100%;"> <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															
Performed by																			
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



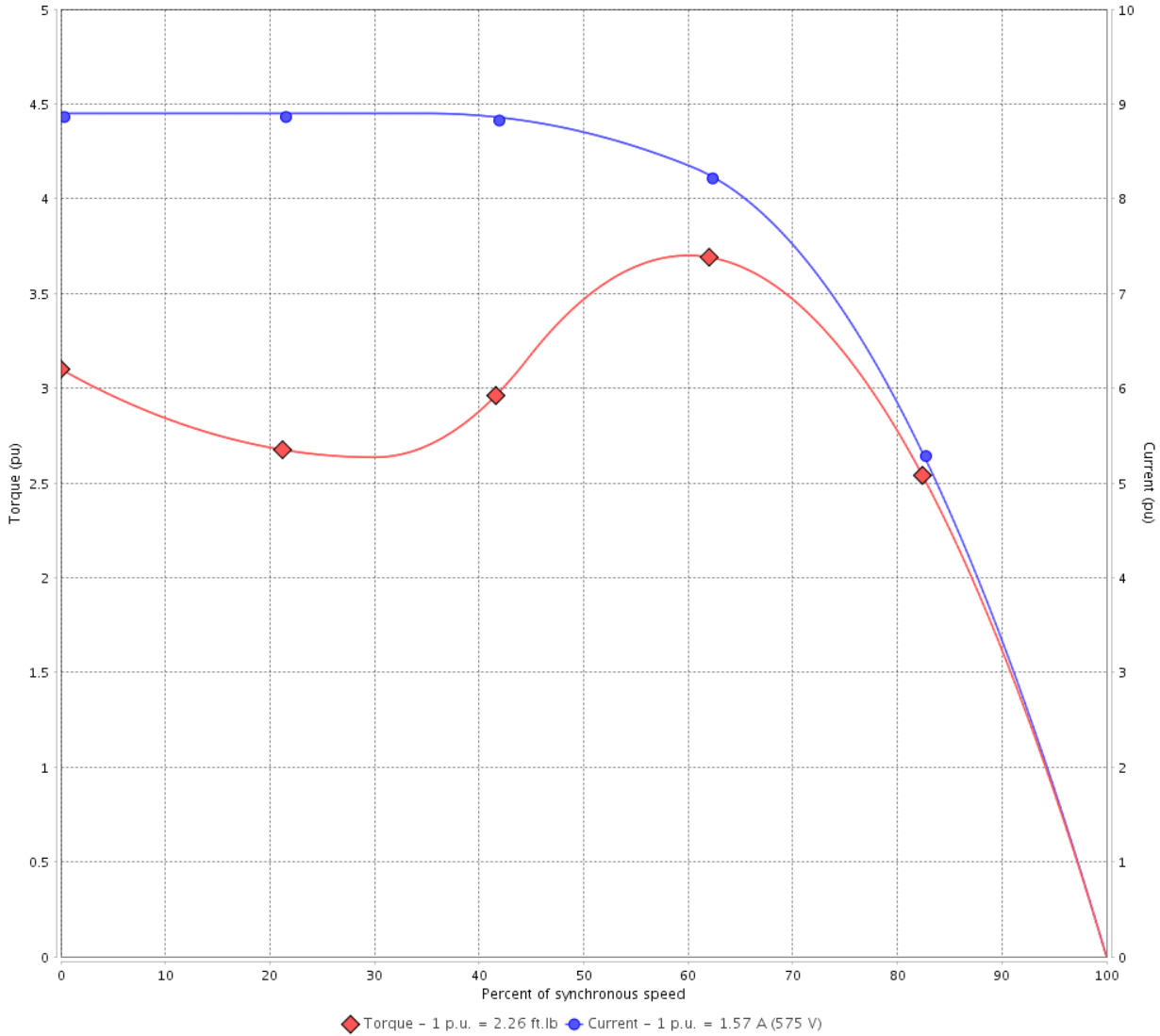
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 1.57 A	Moment of inertia (J)	: 0.0470 sq.ft.lb
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.26 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.25
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 3480 rpm	Design	: B

Locked rotor time : 37s (cold) 21s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

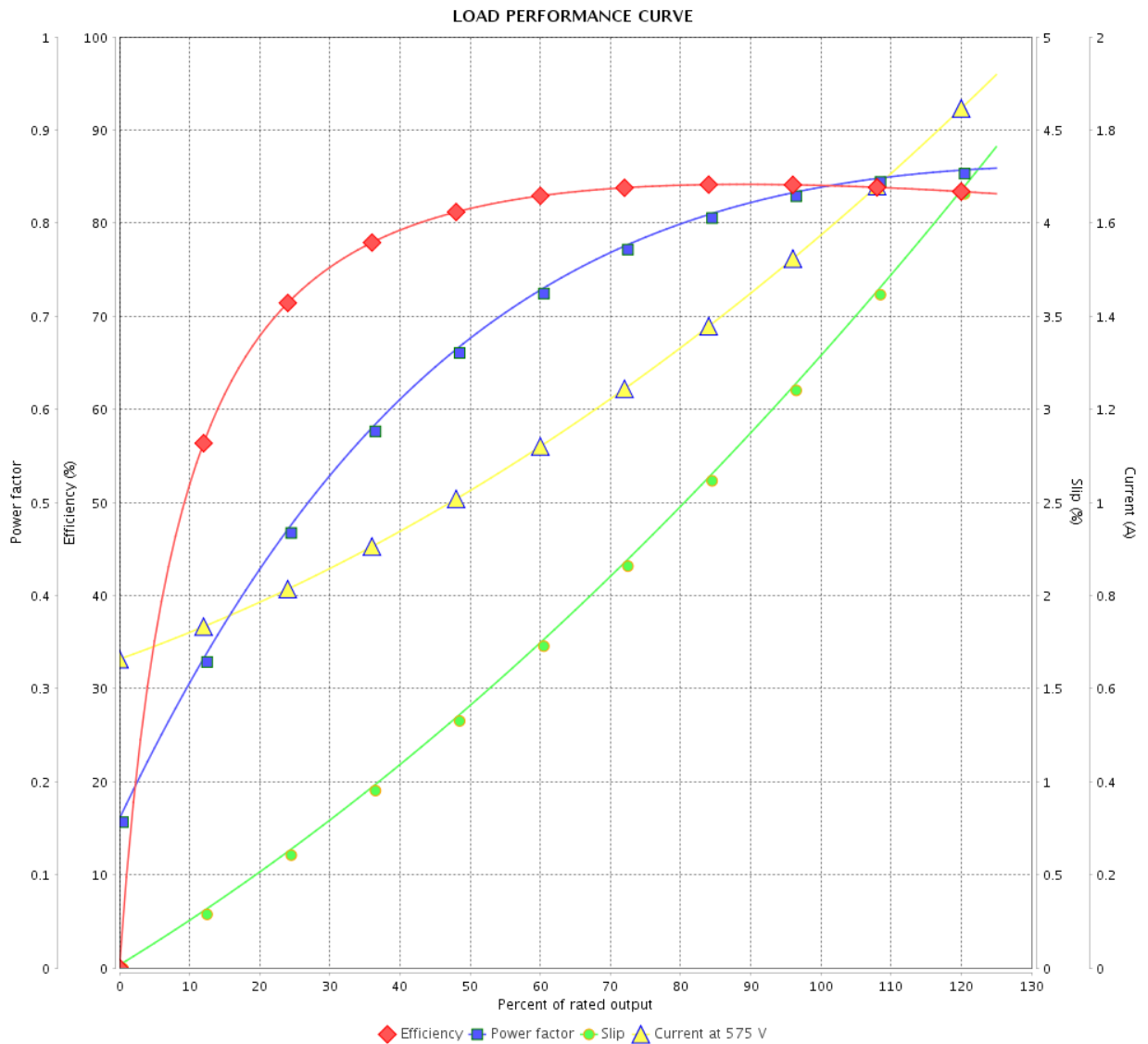


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

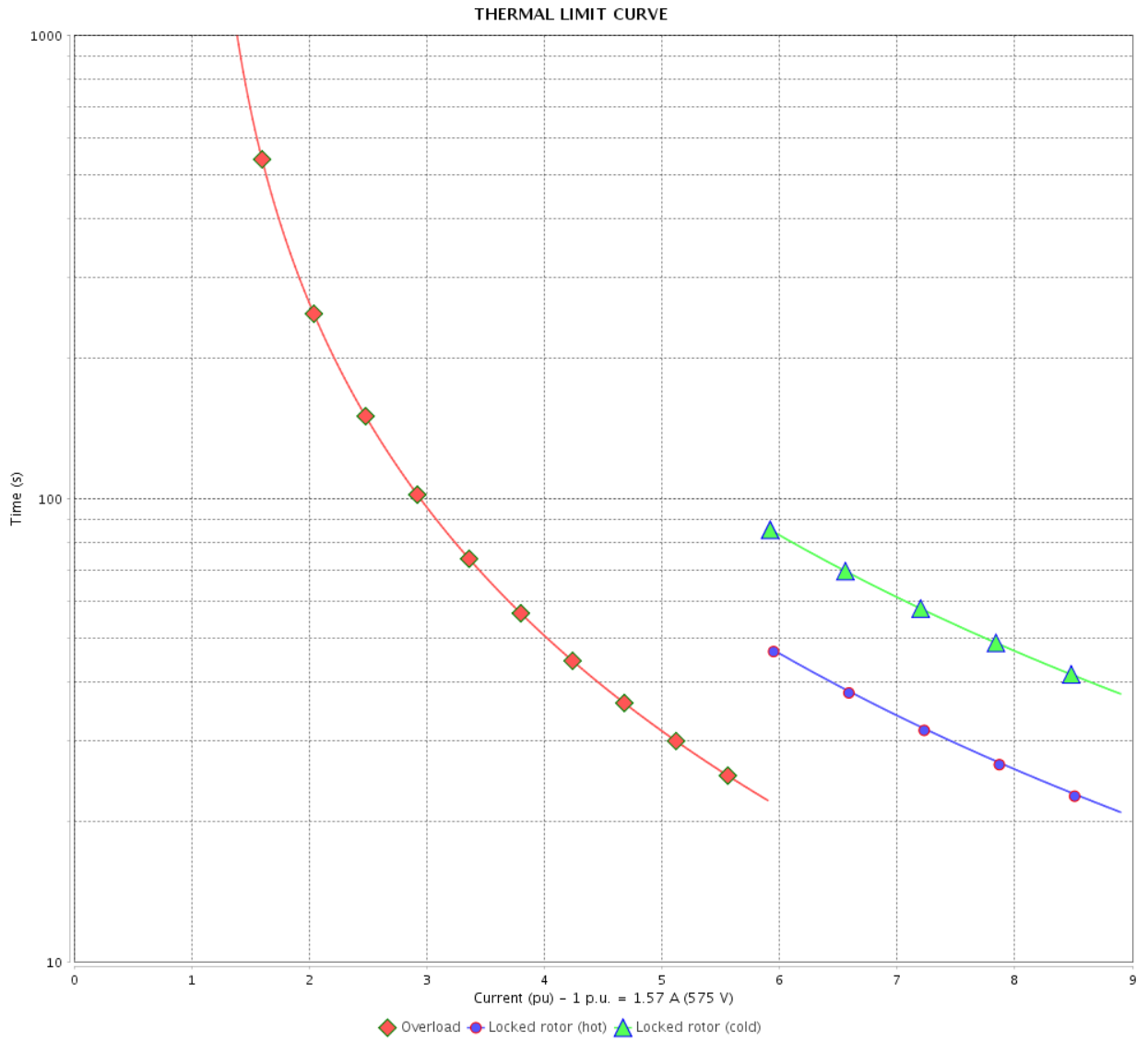
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

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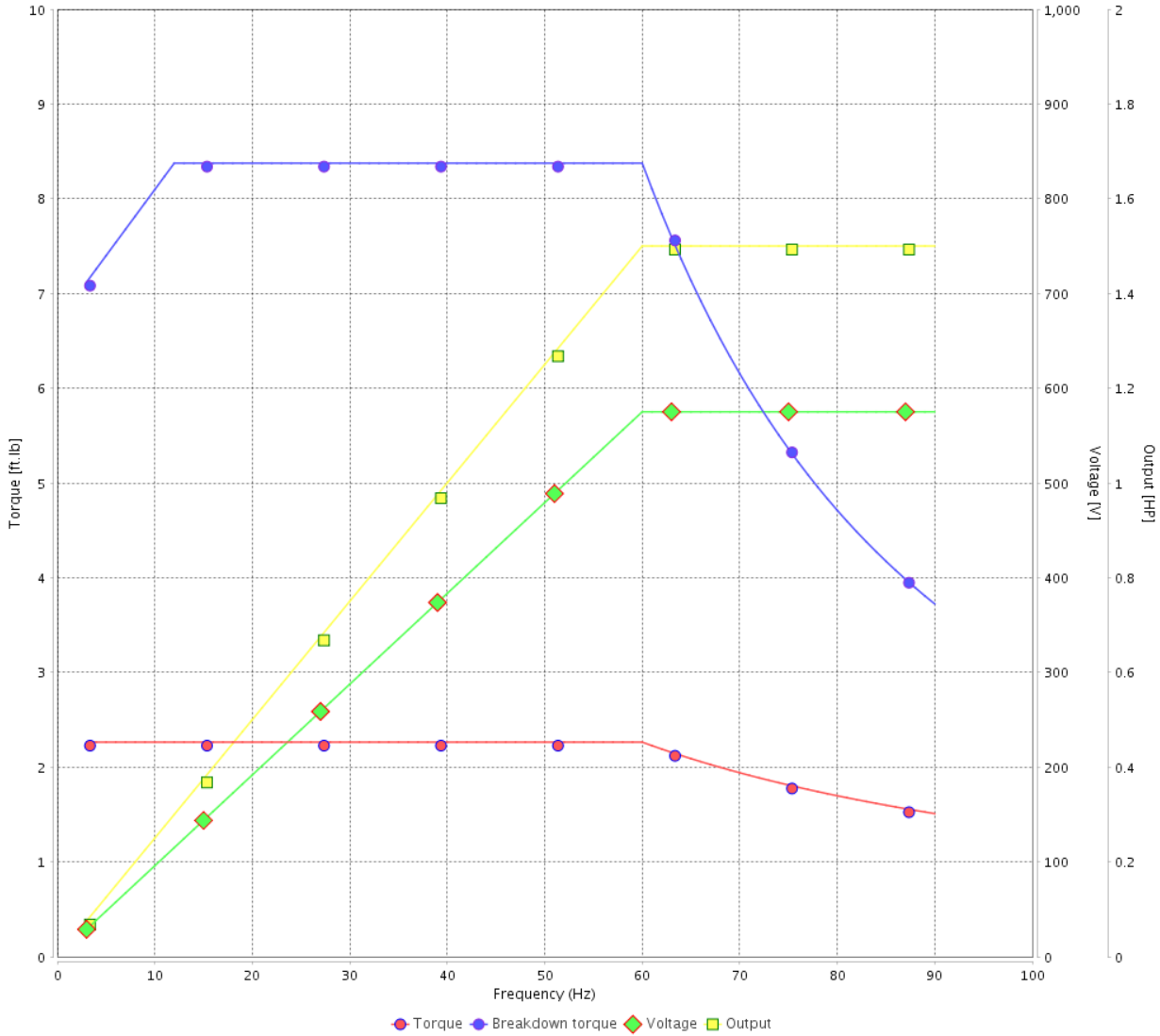
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VFD OPERATION CURVE

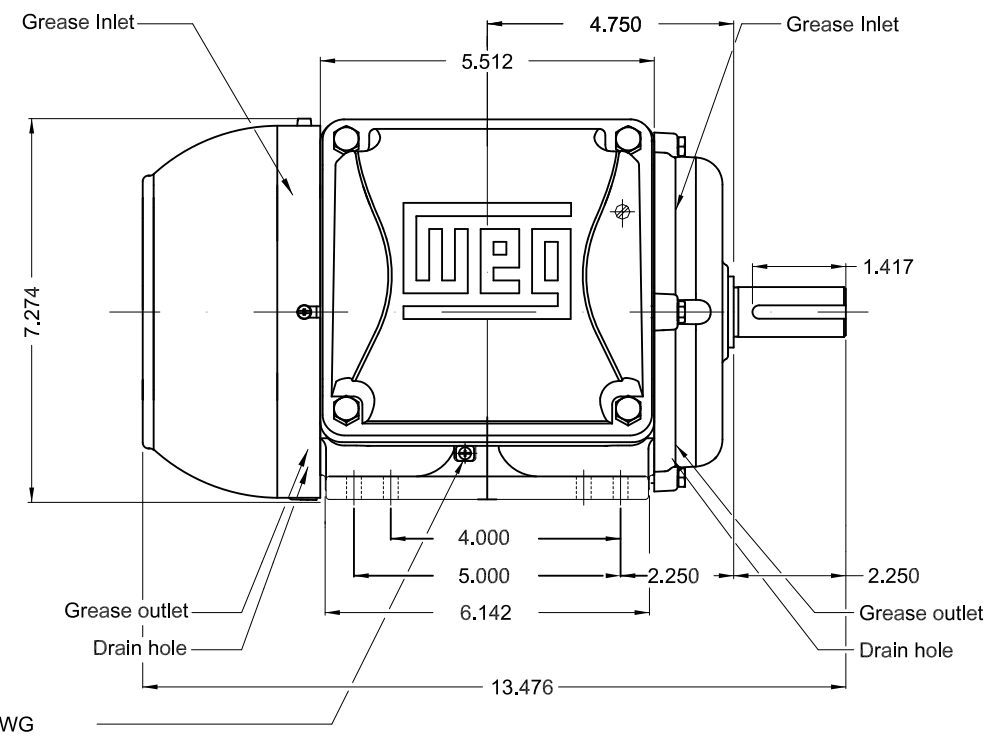
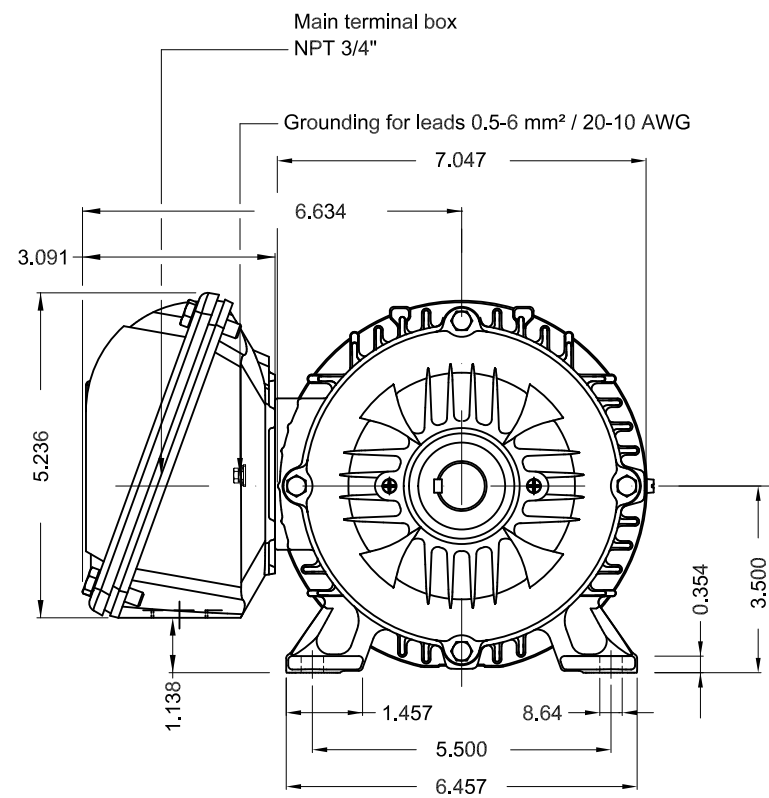


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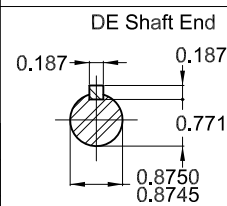
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Grounding for leads 0.5-6 mm² / 20-10 AWG

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



1.5 HP 02 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 143/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



SHEET 1 / 1

Dimensions in inches

XME A3

MADE IN BRAZIL
12373688



NEMA
Premium

W22

IE001502W22IS

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. 143/5T 1000m.a.s.l. IP55 TEFC 56lb

V 575

A 1.57

HP 1.5

kW 1.1

SF 1.25

SFA 1.96

RPM 3480

PF 0.84

AMB 40°C

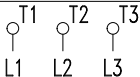
INS cl. F DT80K

NEMA NOM EFF 84.0%

DUTY CONT.

DES B Code L

GUARANT. EFF 81.5%



→ 6205-C3 (4g) 25BC02X30

→ 6204-C3 (4g) 20BC02X30

MOBIL POLYREX EM (20000h)

