

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11617785																		
Catalog # :	00236ET3H145TC-W22																		
Frame : 143/5TC Output : 2 HP (1.5 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 2.05 A L. R. Amperes : 18.2 A LRC : 8.9x(Code L) No load current : 0.720 A Rated speed : 3475 rpm Slip : 3.47 % Rated torque : 3.02 ft.lb Locked rotor torque : 350 % Breakdown torque : 380 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.0605 sq.ft.lb Design : B	Locked rotor time : 30s (cold) 17s (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 : 52.3 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	82.0 82.5 85.5 85.5																		
Power Factor	0.47 0.71 0.80 0.86																		
Foundation loads																			
Max. traction	: 74 lb																		
Max. compression	: 126 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>: 6205 ZZ</td> <td>6204 ZZ</td> </tr> <tr> <td>Sealing</td> <td>: V'Ring</td> <td>V'Ring</td> </tr> <tr> <td>Lubrication interval</td> <td>: -</td> <td>-</td> </tr> <tr> <td>Lubricant amount</td> <td>: -</td> <td>-</td> </tr> <tr> <td>Lubricant type</td> <td colspan="2">: Mobil Polyrex EM</td> </tr> </table>		<u>Drive end</u>	<u>Non drive end</u>	Bearing type	: 6205 ZZ	6204 ZZ	Sealing	: V'Ring	V'Ring	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																			
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



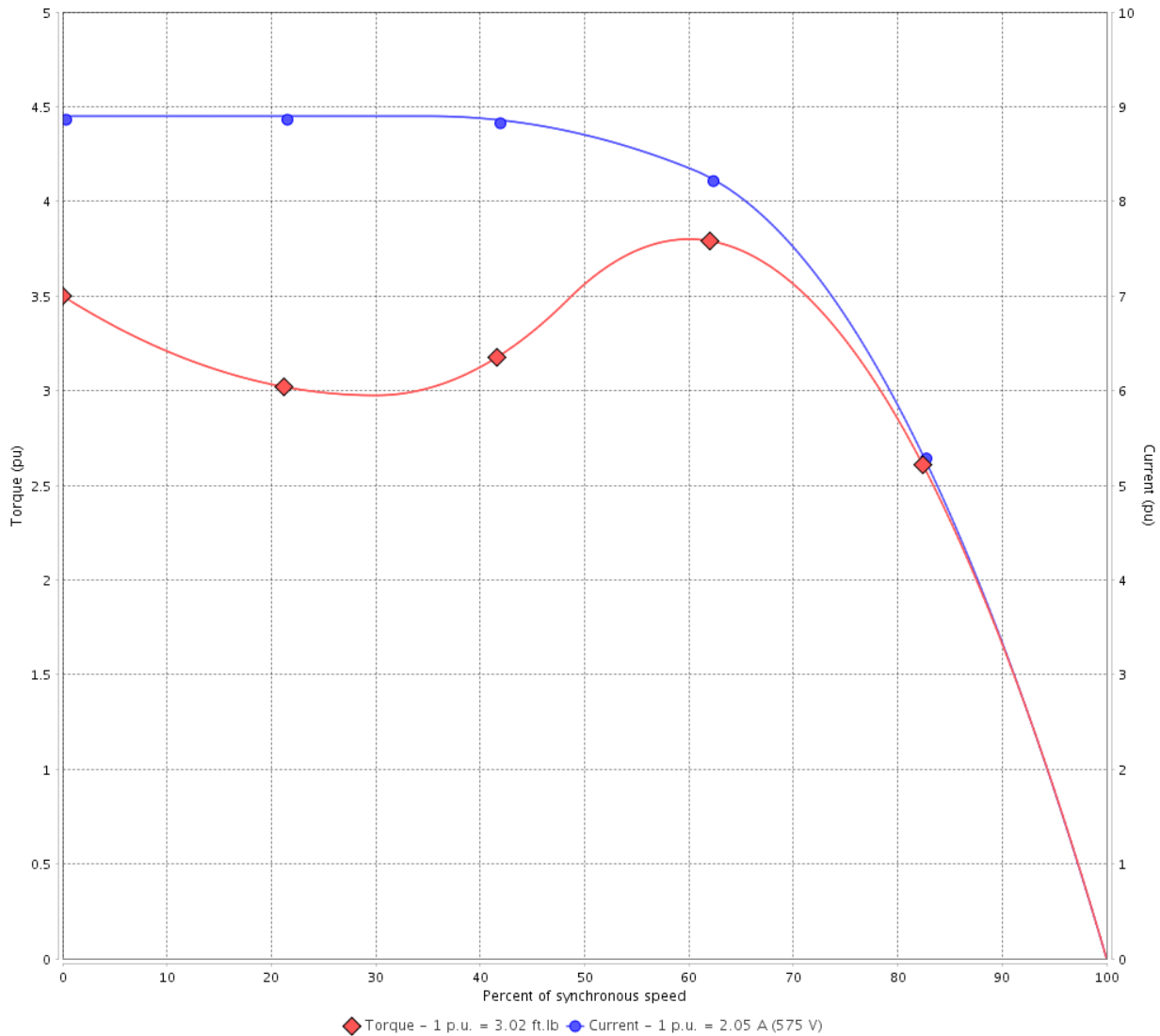
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 2.05 A	Moment of inertia (J)	: 0.0605 sq.ft.lb
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 3.02 ft.lb	Insulation class	: F
Locked rotor torque	: 350 %	Service factor	: 1.25
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 3475 rpm	Design	: B

Locked rotor time : 30s (cold) 17s (hot)

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LOAD PERFORMANCE CURVE

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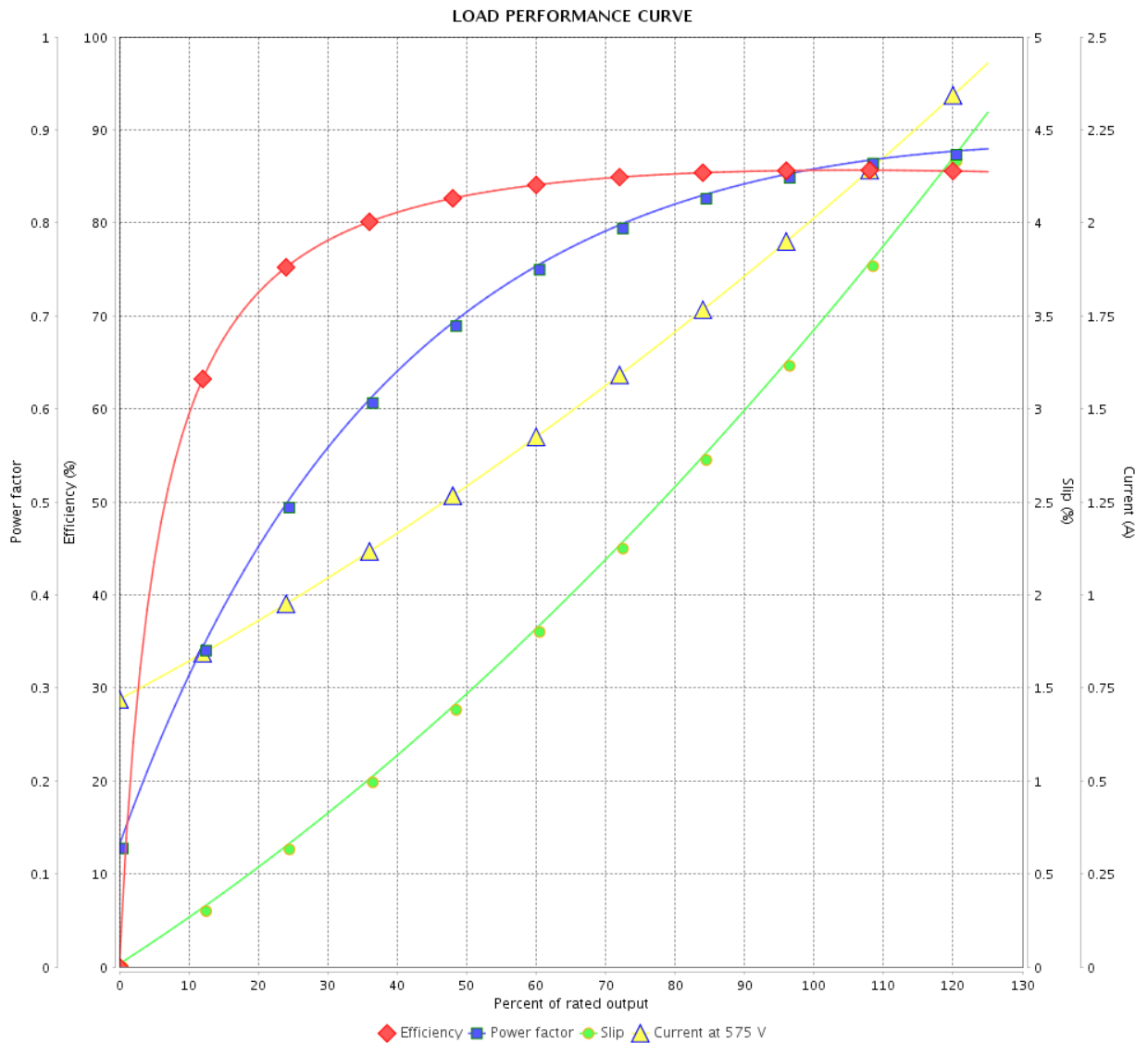


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

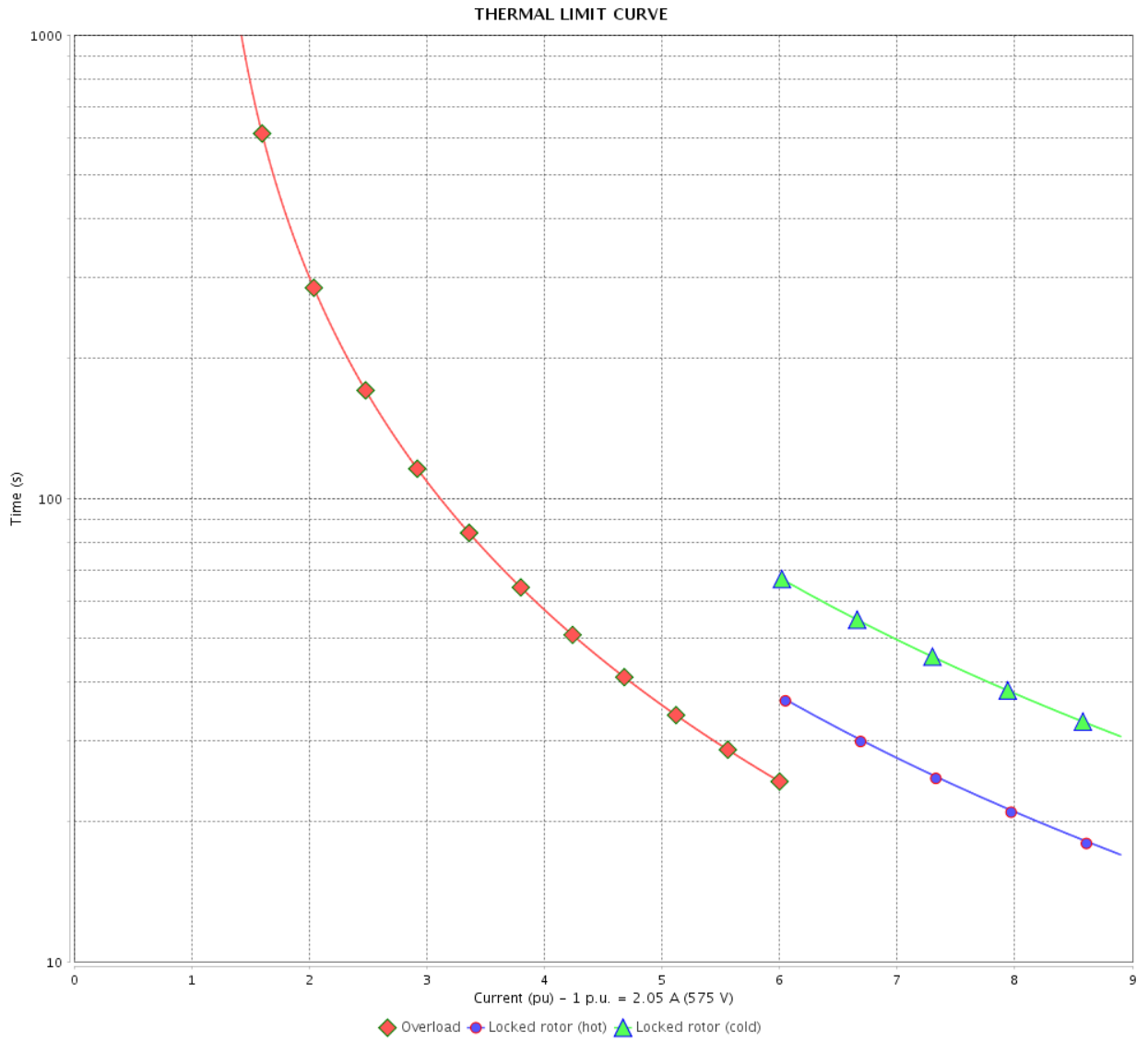
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THERMAL LIMIT CURVE

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VFD OPERATION CURVE

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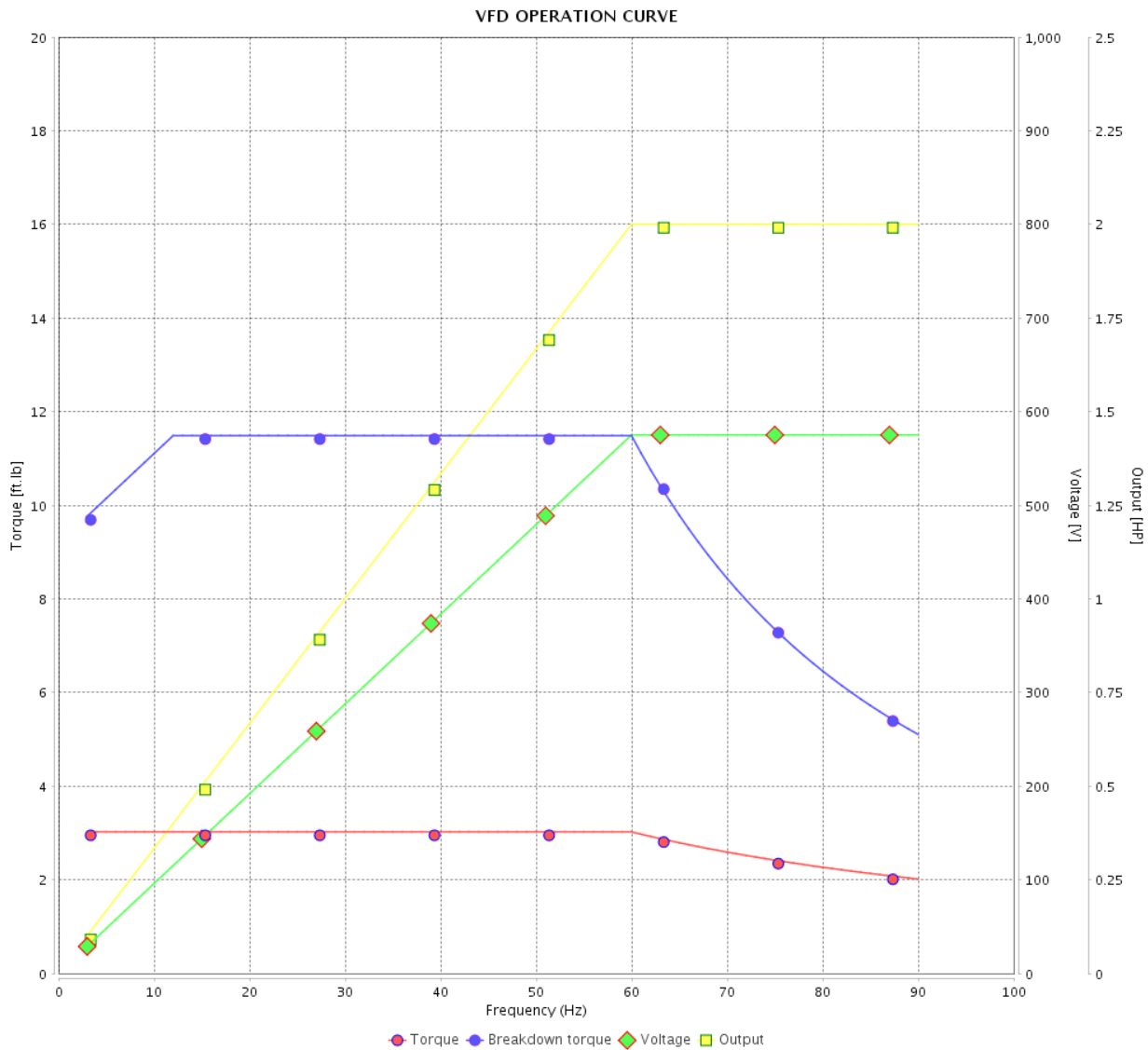


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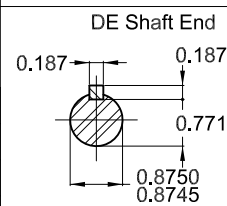
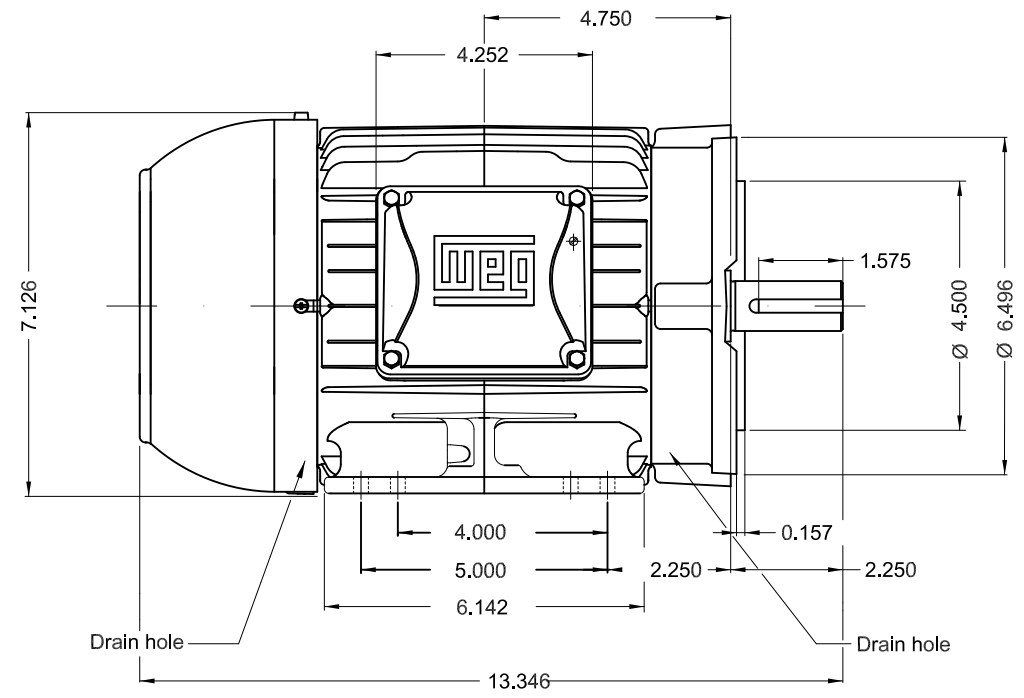
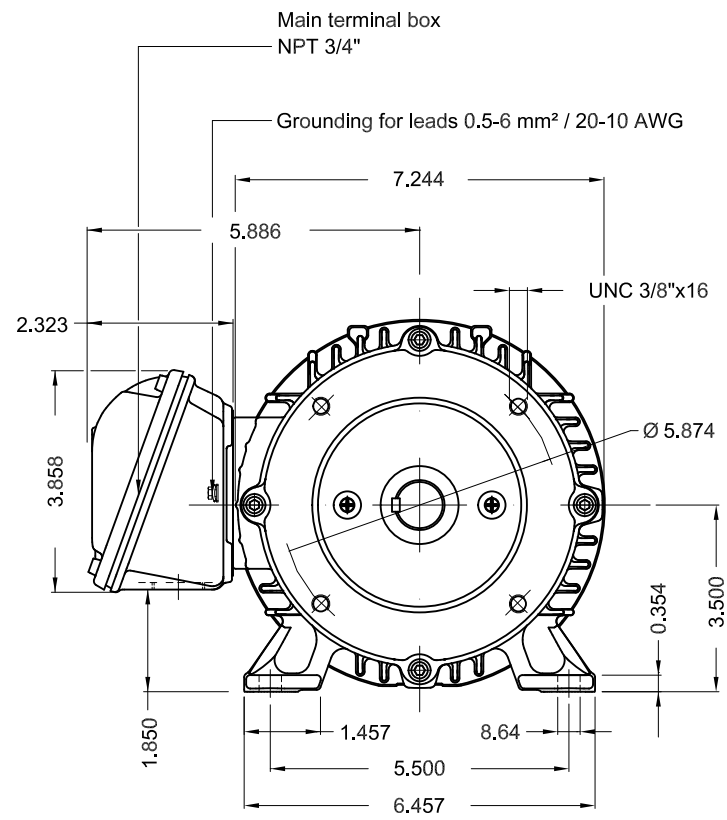


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Bearing cap
 Color RAL 5009
 Painting plan 207A
 Mounting B34R(D)

2 HP 02 Poles 60 Hz

A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 143/5TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
 WDD



MADE IN BRAZIL
11617785



MODEL 00236ET3H145TC-W22

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. 143/5TC 1000m.a.s.l. IP55 TEFC 52lb

V 575

A 2.05

HP 2.0

kW 1.5

SF 1.25

SFA 2.56

RPM 3475

PF 0.86

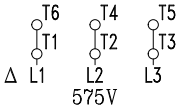
AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 85.5%

DUTY CONT.

DES B Code L



MOBIL POLYREX EM

