

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	14407761																		
Catalog # :	02518XT3H284TC																		
Frame : 284TC Output : 25 HP (18.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 23.9 A L. R. Amperes : 196 A LRC : 8.2x(Code G) No load current : 10.0 A Rated speed : 1770 rpm Slip : 1.67 % Rated torque : 74.2 ft.lb Locked rotor torque : 320 % Breakdown torque : 320 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 4.54 sq.ft.lb Design : B	Locked rotor time : 36s (cold) 20s (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 : 481 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	92.2 92.4 93.6 93.6																		
Power Factor	0.42 0.67 0.78 0.83																		
Foundation loads																			
Max. traction : 794 lb																			
Max. compression : 1276 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>6311 C3</td> <td>6211 C3</td> </tr> <tr> <td>Sealing :</td> <td>Oil Seal</td> <td>Lip Seal</td> </tr> <tr> <td>Lubrication interval :</td> <td>20000 h</td> <td>20000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td>18 g</td> <td>11 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 :	6311 C3	6211 C3	Sealing :	Oil Seal	Lip Seal	Lubrication interval :	20000 h	20000 h	Lubricant amount :	18 g	11 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.																			
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Customer : _____

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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TORQUE AND CURRENT VS SPEED CURVE



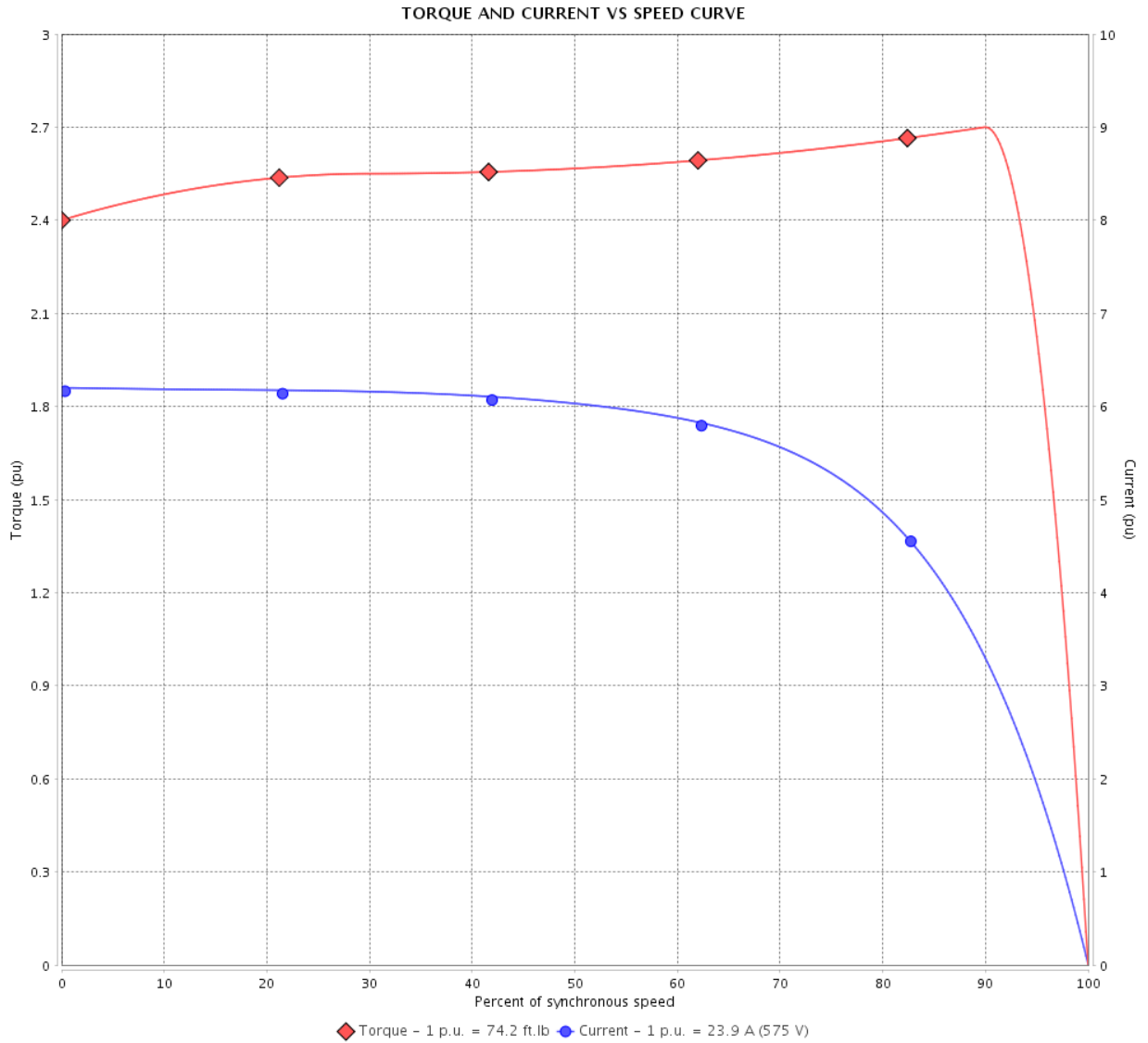
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14407761

Catalog # : 02518XT3H284TC



Performance : 575 V 60 Hz 4P

Rated current	: 23.9 A	Moment of inertia (J)	: 4.54 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 74.2 ft.lb	Insulation class	: F
Locked rotor torque	: 320 %	Service factor	: 1.15
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

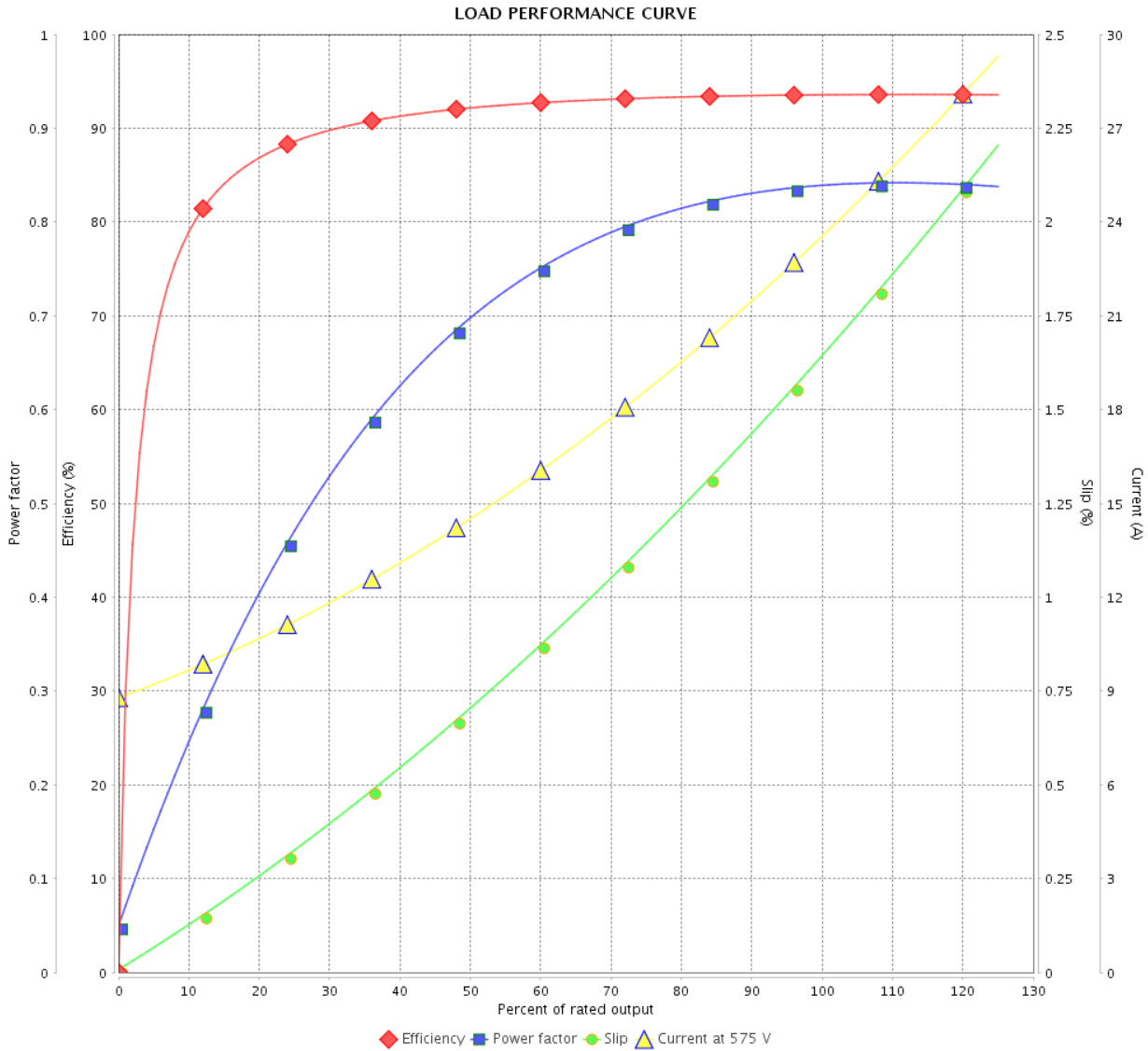


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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Breakdown torque : 320 %
Rated speed : 1770 rpm

Moment of inertia (J) : 4.54 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Heating constant
Cooling constant

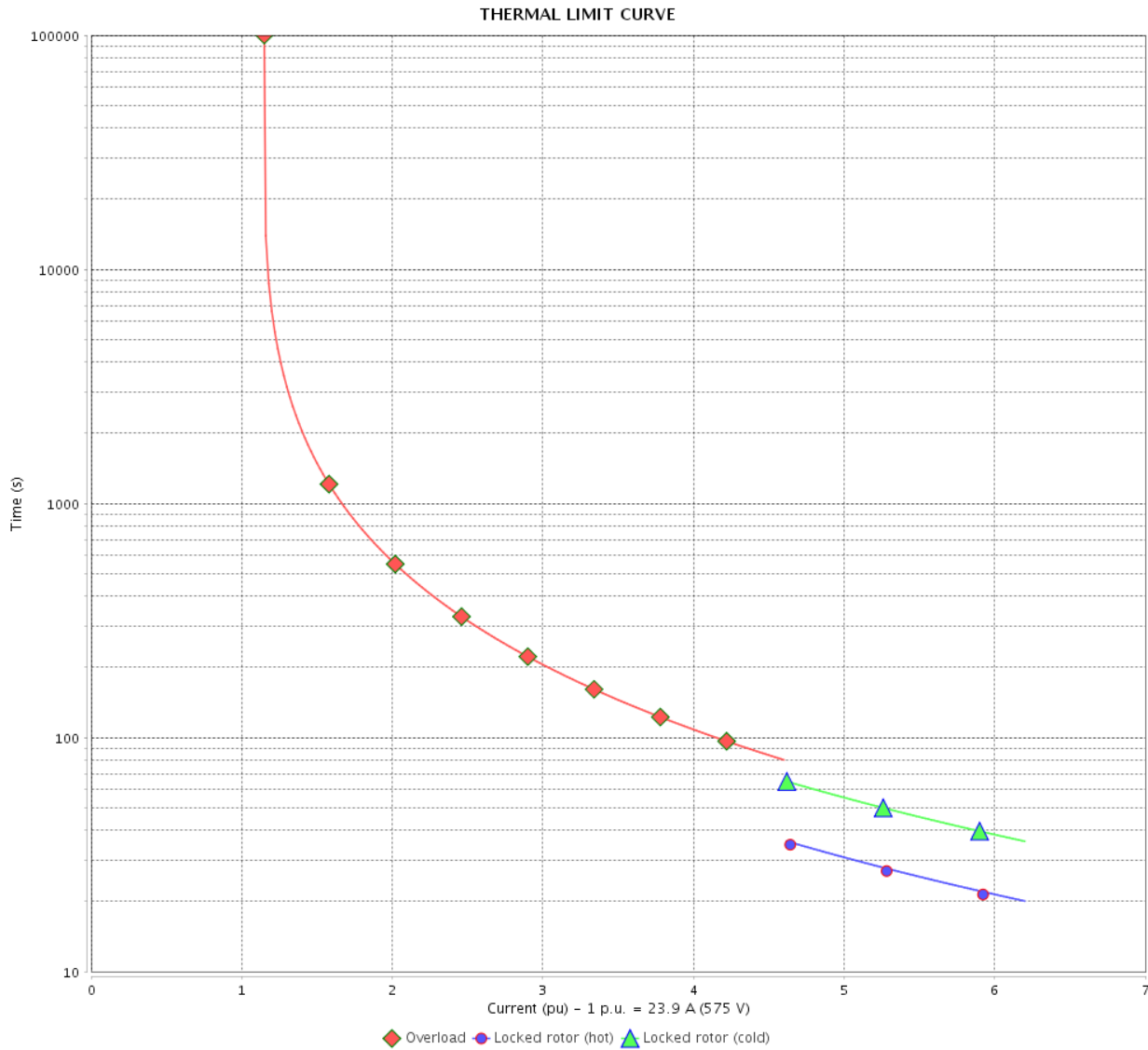
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

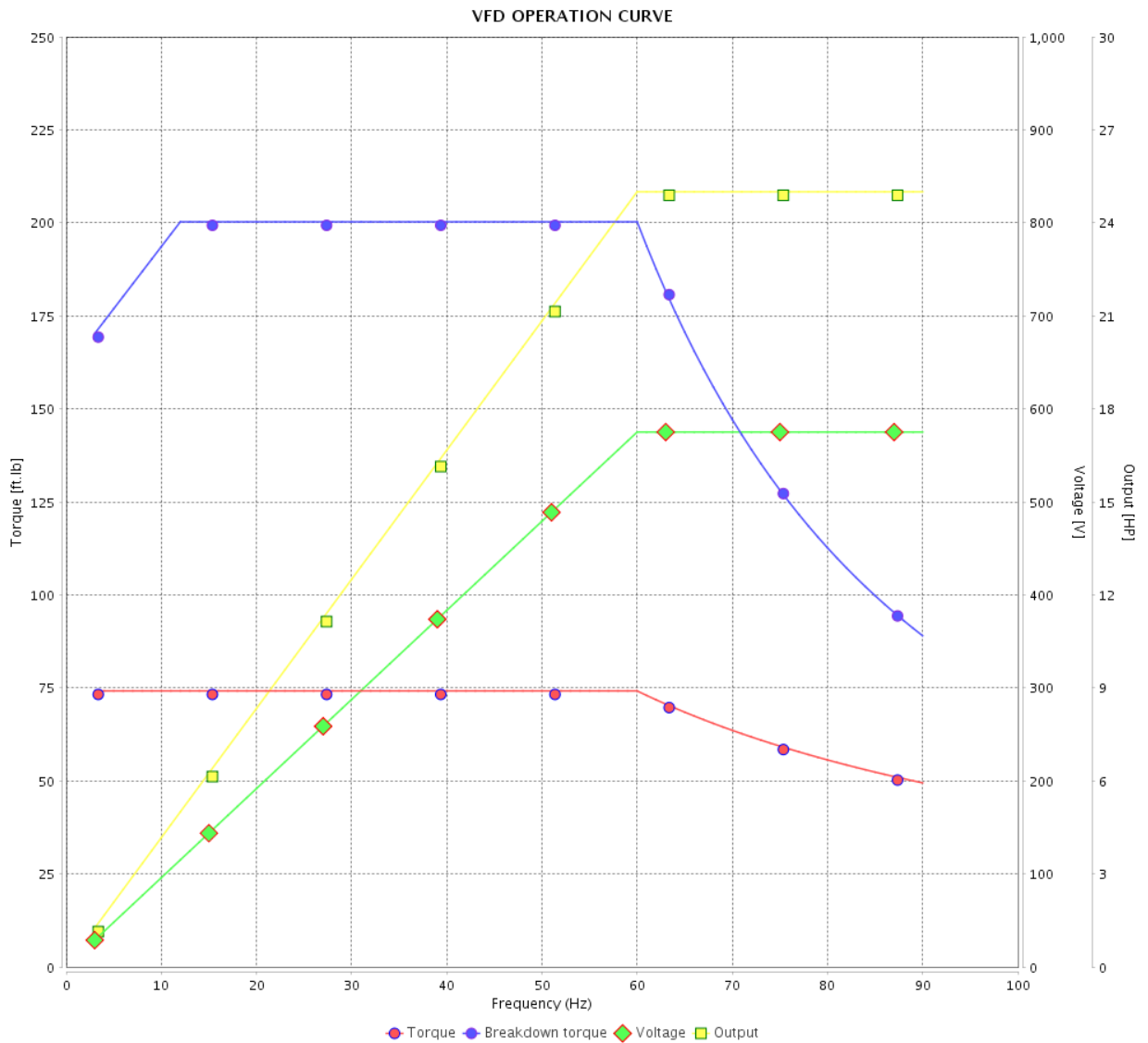


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 Service factor : 1.15
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 Design : B

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1 2 3 4 5 6

A

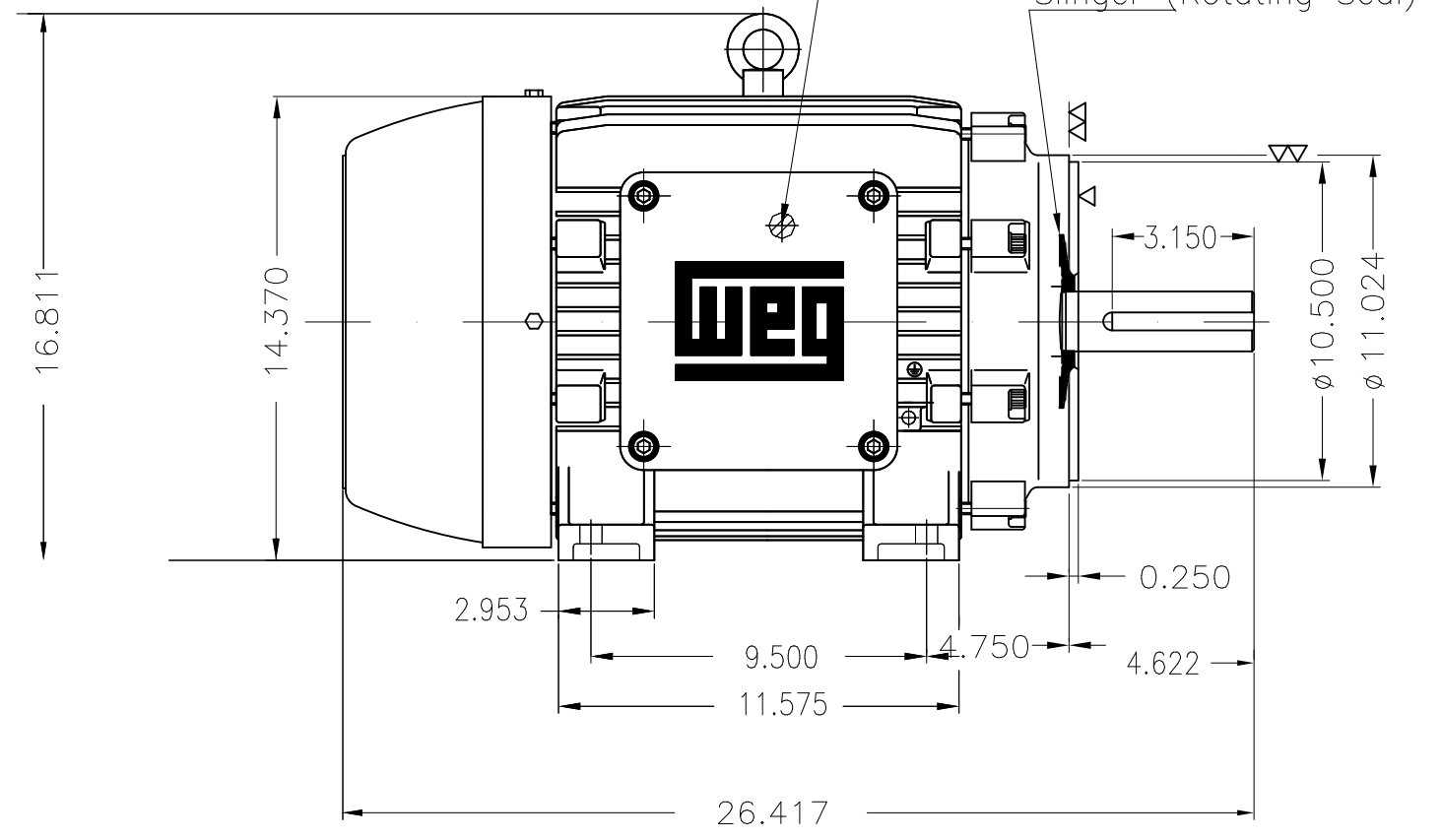
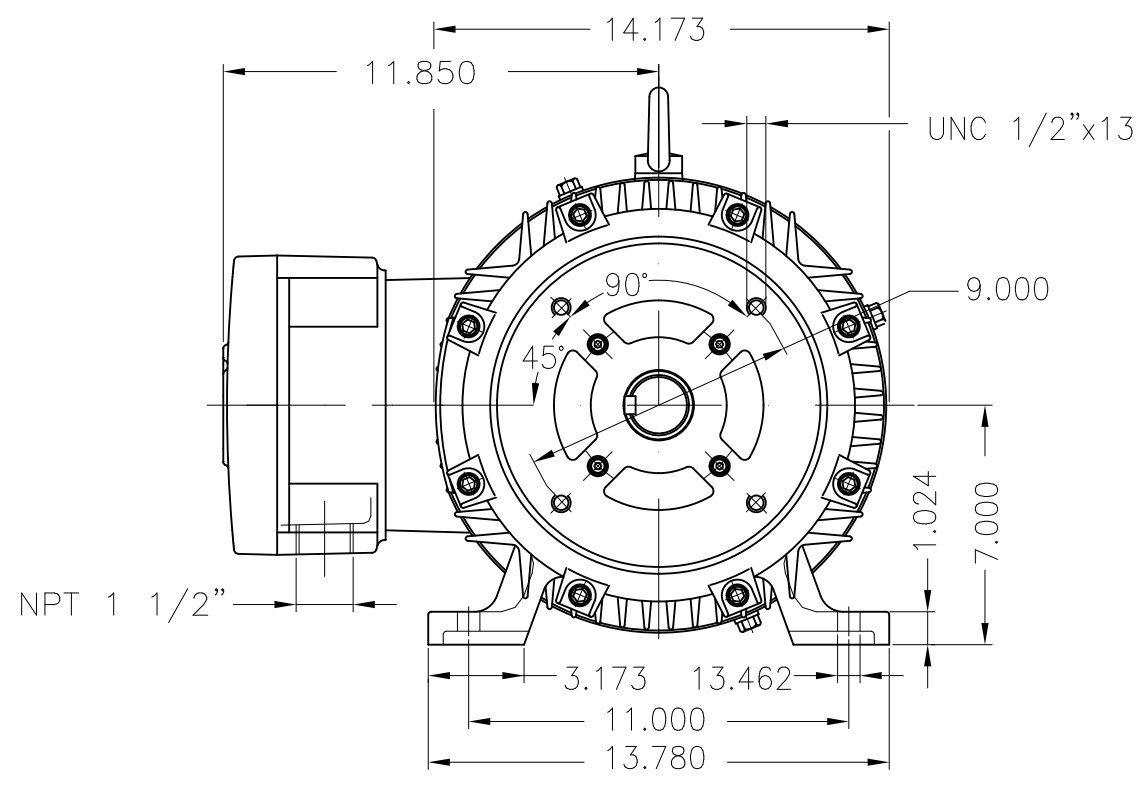
B

C

D

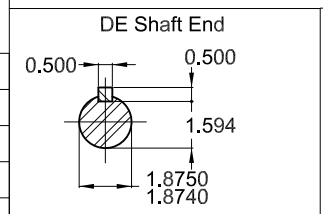
E

Grounding for leads 5.2–25 mm² / 10–4 AWG



25 HP 04 Poles 60 Hz A

With grease fitting
 Color RAL 5009
 Painting plan 202P
 Mounting NEMA F-1
 Mounting B34R(D)



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF.					
CHECKED		FRAME 284TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	PREVIEW	WDD		



MADE IN BRAZIL

**W21X NEMA**
Premium

14407761



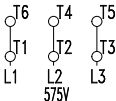
LISTED

CC029A

Inverter Duty Motor
Severe Duty

MODEL 02518XT3H284TC

PH 3	FR 284TC	
HP(kW) 25(18.5)	HZ 60	IP55
V 575	A 23.9	
RPM 1770	NEMA NOM EFF 93.6%	
PF 0.83	SFA 27.5	DES B
INS CL F Δ T 80 K	SF 1.15	ENCL TEFC
DUTY CONT.	CODE J	ALT 1000 m.a.s.l.
AMB 40°C		
AMB 55°C SF1.0		



→ 6311 - C3 MOBIL POLYREX EM
 → 6211 - C3 18 g 20000 h

481 Lbs



TEMP CODE T3C
 CSA/UL: Class I - Div. 1 - Groups C and D
 CSA: Class II - Div. 1 - Groups F and G
 CSA: Class I - Zone 1 - IIB

EXPLOSION PROOF MOTOR

FOR USE ON VPWM VFD 1000:1VT, 6:1CT, 1.0SF, T3C, AMB 40°C.