

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	14406911																		
Catalog # :	01518XT3H254TC																		
Frame : 254TC Output : 15 HP (11 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 14.7 A L. R. Amperes : 107 A LRC : 7.3x(Code J) No load current : 6.88 A Rated speed : 1770 rpm Slip : 1.67 % Rated torque : 44.5 ft.lb Locked rotor torque : 300 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 2.31 sq.ft.lb Design : B	Locked rotor time : 46s (cold) 26s (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 : 69.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 329 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	89.4 90.2 91.7 92.4																		
Power Factor	0.39 0.65 0.75 0.81																		
Foundation loads																			
Max. traction : 476 lb																			
Max. compression : 805 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;">6309 C3</td> <td style="text-align: center;">6209 C3</td> </tr> <tr> <td>Sealing :</td> <td style="text-align: center;">Oil Seal</td> <td style="text-align: center;">Lip 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;">13 g</td> <td style="text-align: center;">9 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 :	6309 C3	6209 C3	Sealing :	Oil Seal	Lip Seal	Lubrication interval :	20000 h	20000 h	Lubricant amount :	13 g	9 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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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



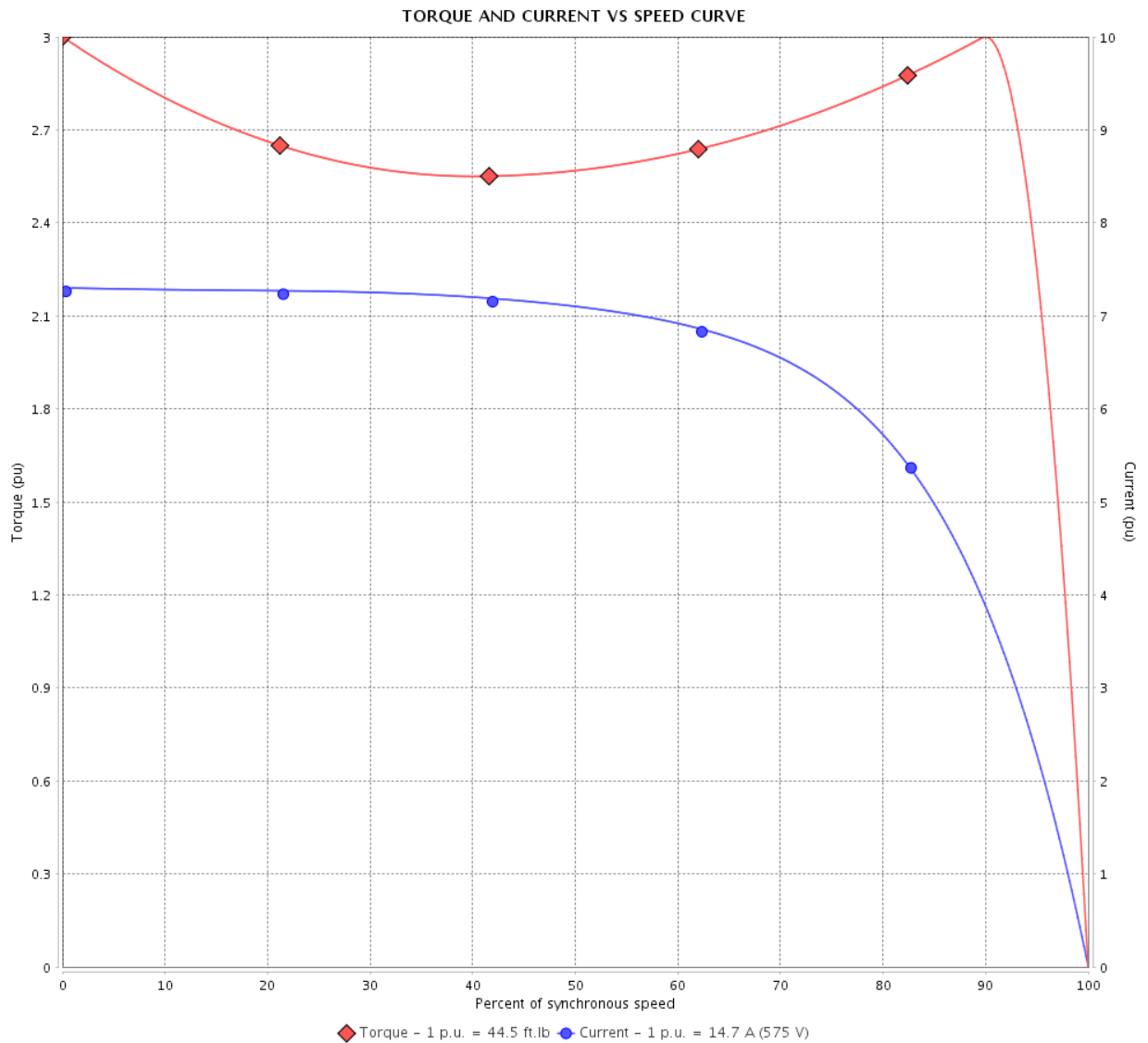
Three Phase Induction Motor - Squirrel Cage

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Catalog # : 01518XT3H254TC



Performance : 575 V 60 Hz 4P

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LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 44.5 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Locked rotor time : 46s (cold) 26s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

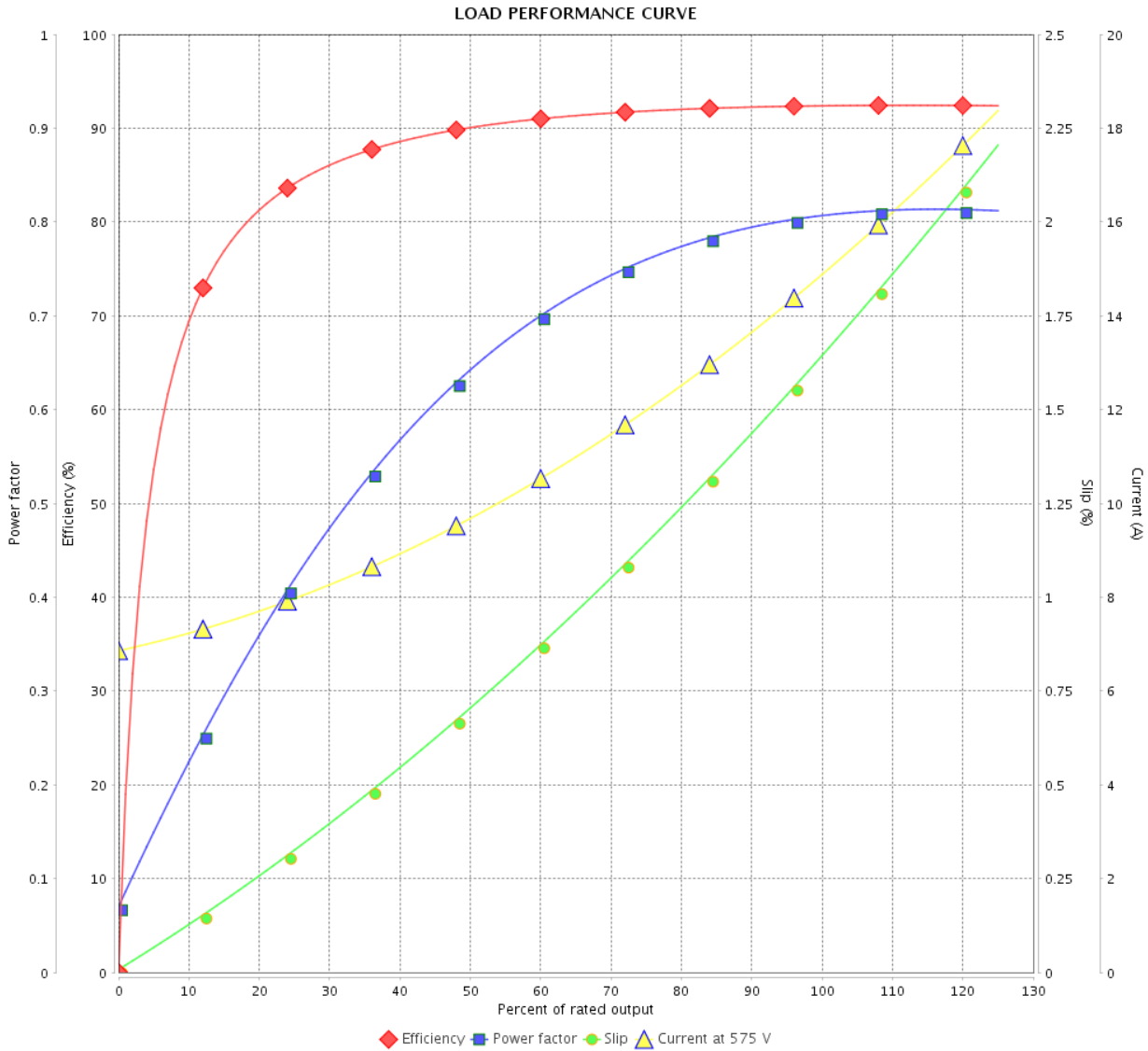


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Catalog # : 01518XT3H254TC



Performance : 575 V 60 Hz 4P

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 Design : B

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THERMAL LIMIT CURVE

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Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Heating constant
Cooling constant

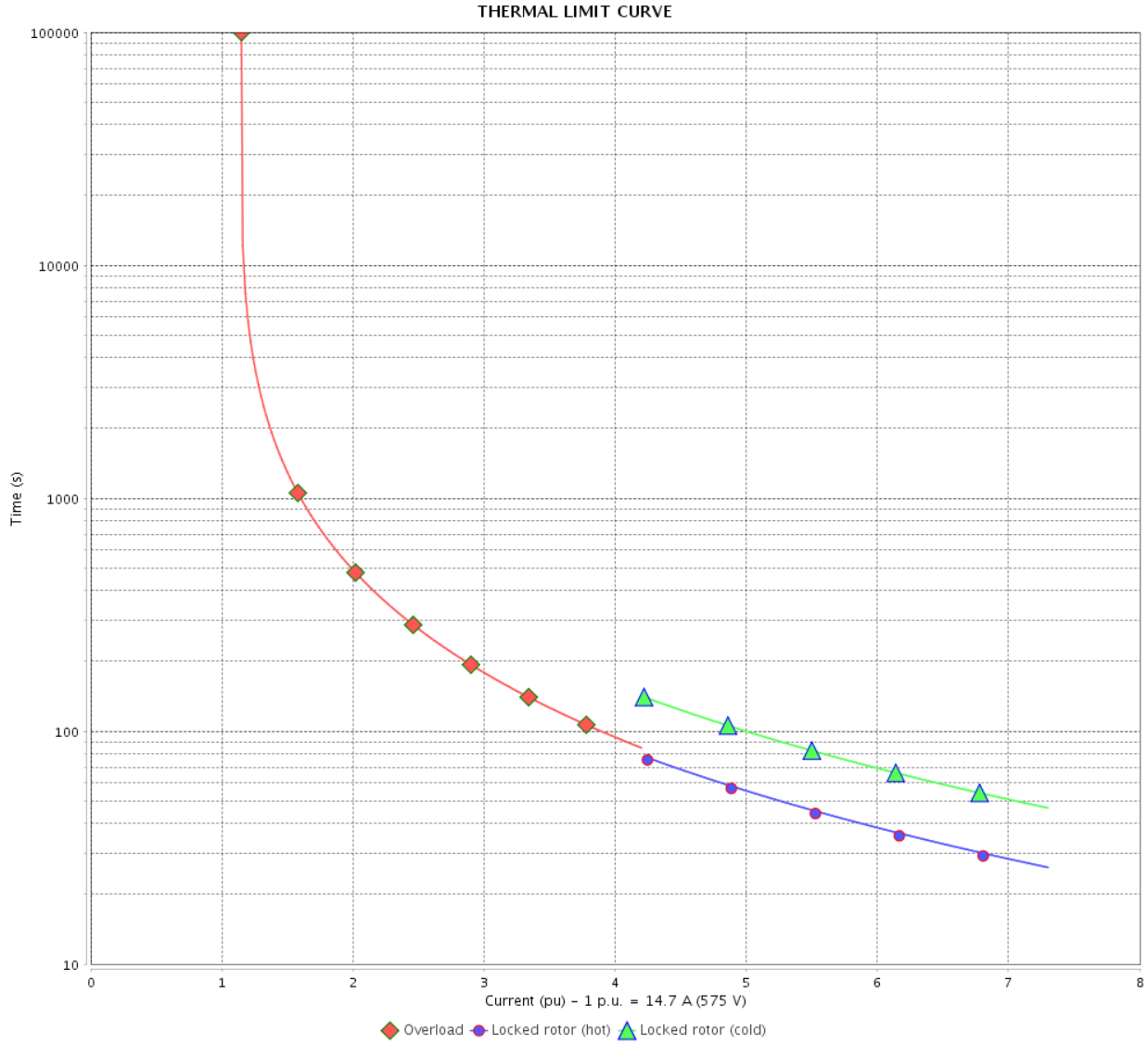
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

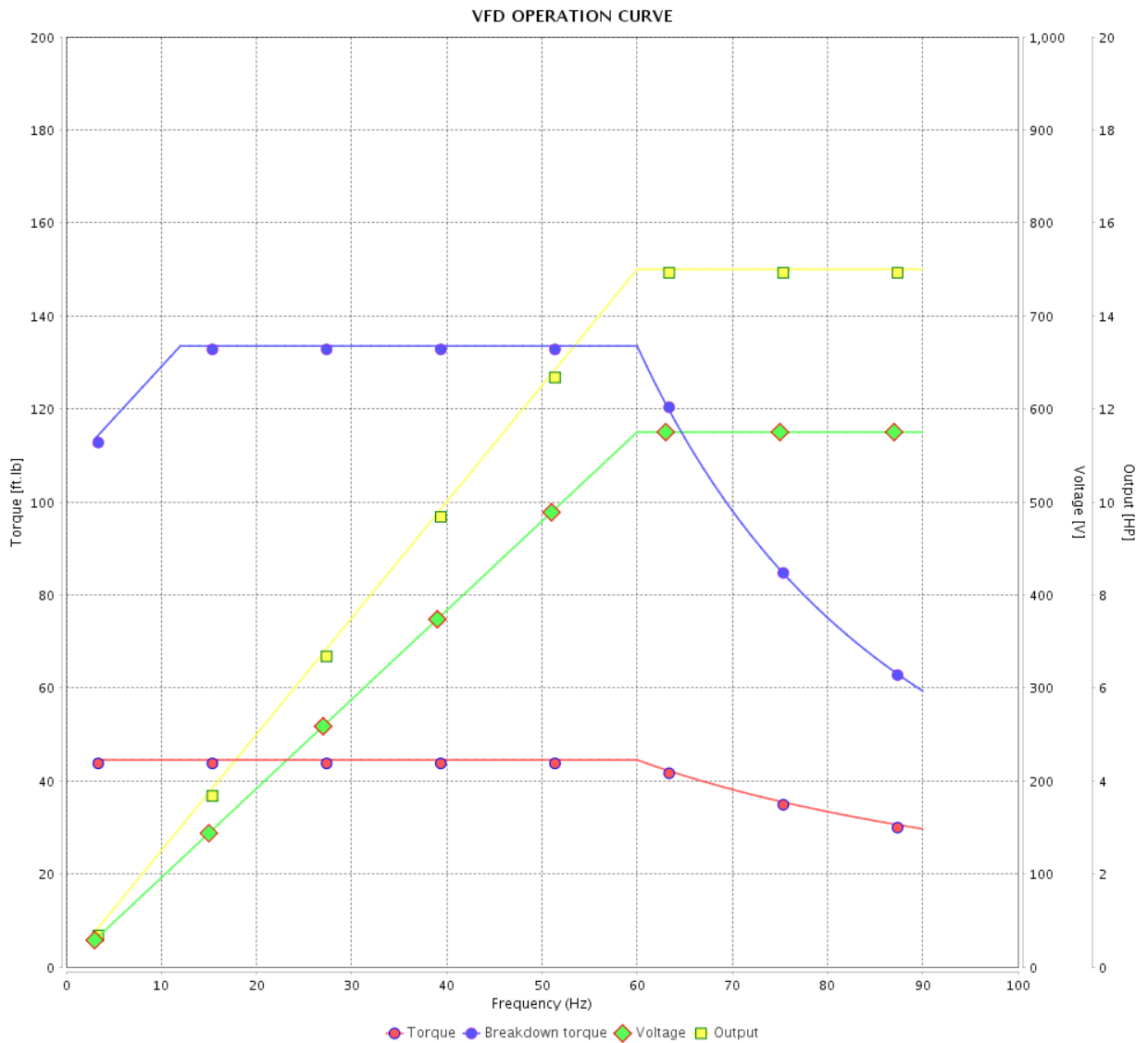


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1 2 3 4 5 6

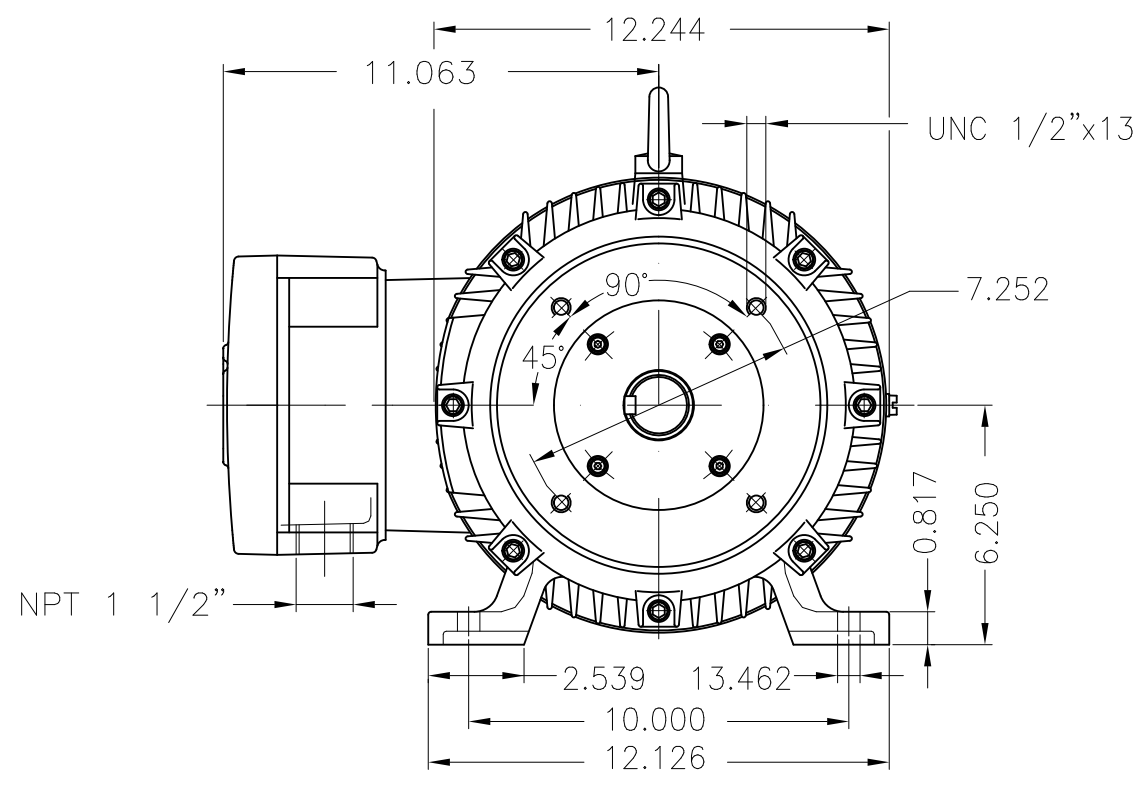
A

B

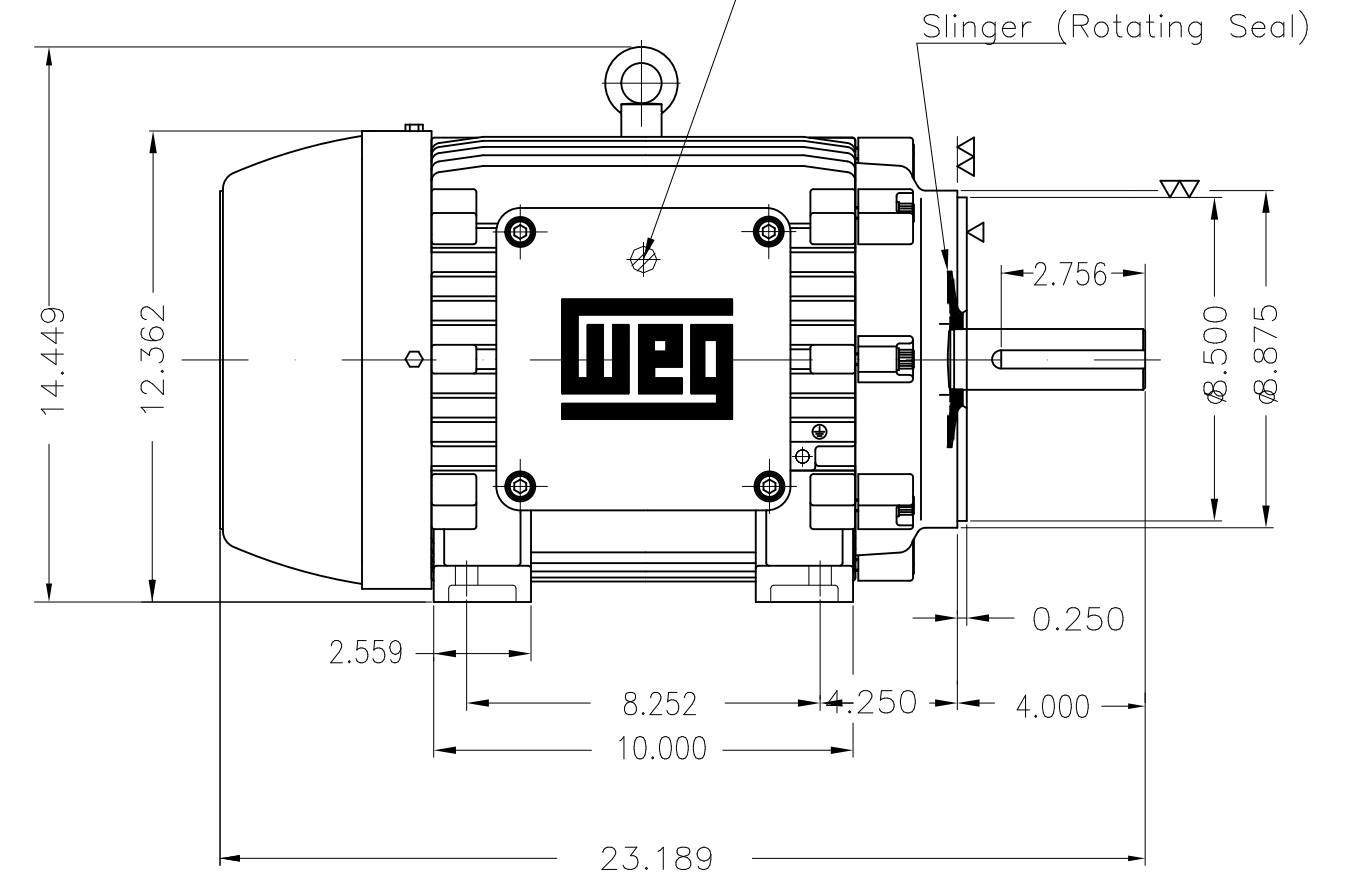
C

D

E

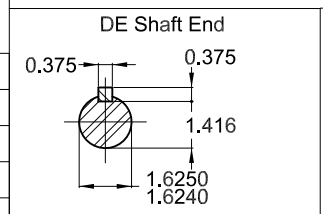


Grounding for leads 5.2–25 mm² / 10–4 AWG



15 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 254TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	PREVIEW	WDD		



MADE IN BRAZIL

**W21X NEMA**
Premium

14406911



LISTED

CC029A

Inverter Duty Motor
Severe Duty

MODEL 01518XT3H254TC

PH 3 | FR 254TC

HP(kW) 15(11)

HZ 60

IP55

V 575

A 14.7

RPM 1770

NEMA NOM EFF 92.4%

PF 0.81

SFA 16.9

DES B

INS CL F Δ T 80 K | SF 1.15

ENCL TEFC

DUTY CONT.

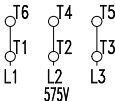
CODE J

ALT 1000

m.a.s.l.

AMB 40°C

AMB 55°C SF1.0



→ 6309-C3 MOBIL POLYREX EM

→ 6209-C3 13 g 20000 h

331 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.