

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	14407017		
		Catalog # :	01518XT3H254T		
Frame	: 254T	Locked rotor time	: 46s (cold) 26s (hot)		
Output	: 15 HP (11 kW)	Temperature rise	: 80 K		
Poles	: 4	Duty cycle	: Cont.(S1)		
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C		
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.		
Rated current	: 14.7 A	Protection degree	: IP55		
L. R. Amperes	: 107 A	Cooling method	: IC411 - TEFC		
LRC	: 7.3x(Code J)	Mounting	: F-1		
No load current	: 6.88 A	Rotation ¹	: Both (CW and CCW)		
Rated speed	: 1770 rpm	Noise level ²	: 69.0 dB(A)		
Slip	: 1.67 %	Starting method	: Direct On Line		
Rated torque	: 44.5 ft.lb	Approx. weight ³	: 327 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				
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 : 477 lb					
Max. compression : 804 lb					
		<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			
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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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



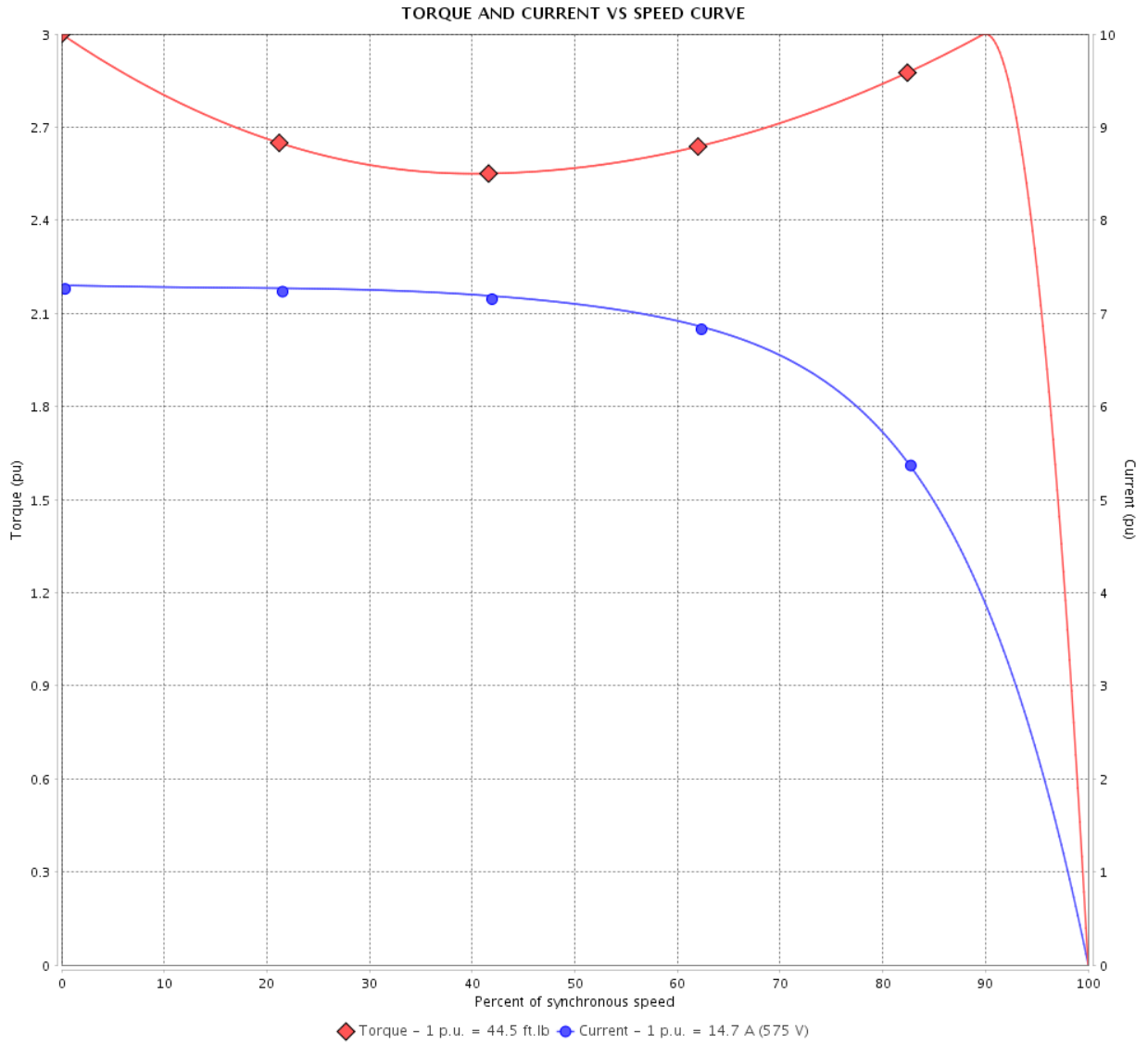
Three Phase Induction Motor - Squirrel Cage

Customer :

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Product code : 14407017

Catalog # : 01518XT3H254T



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



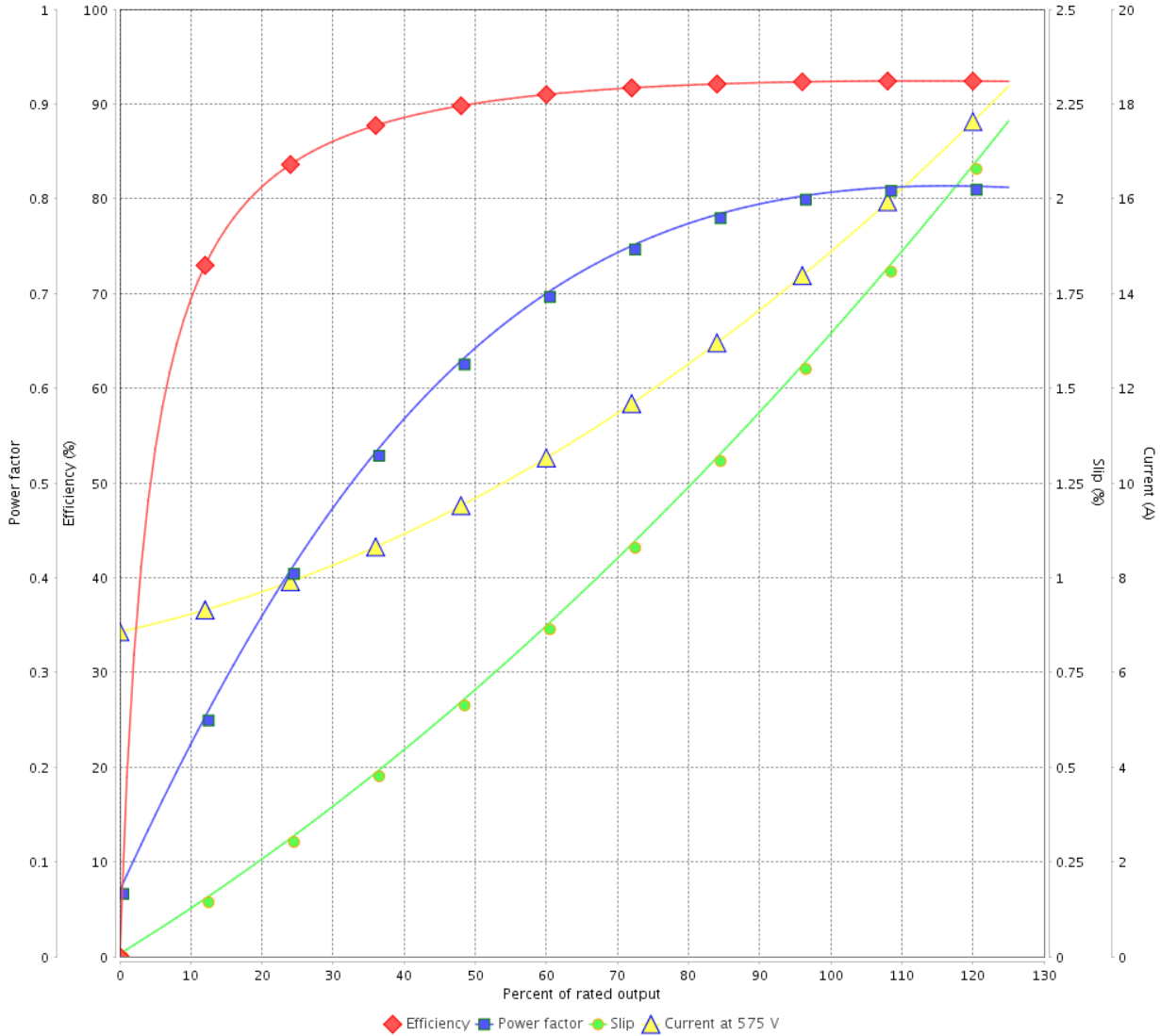
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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

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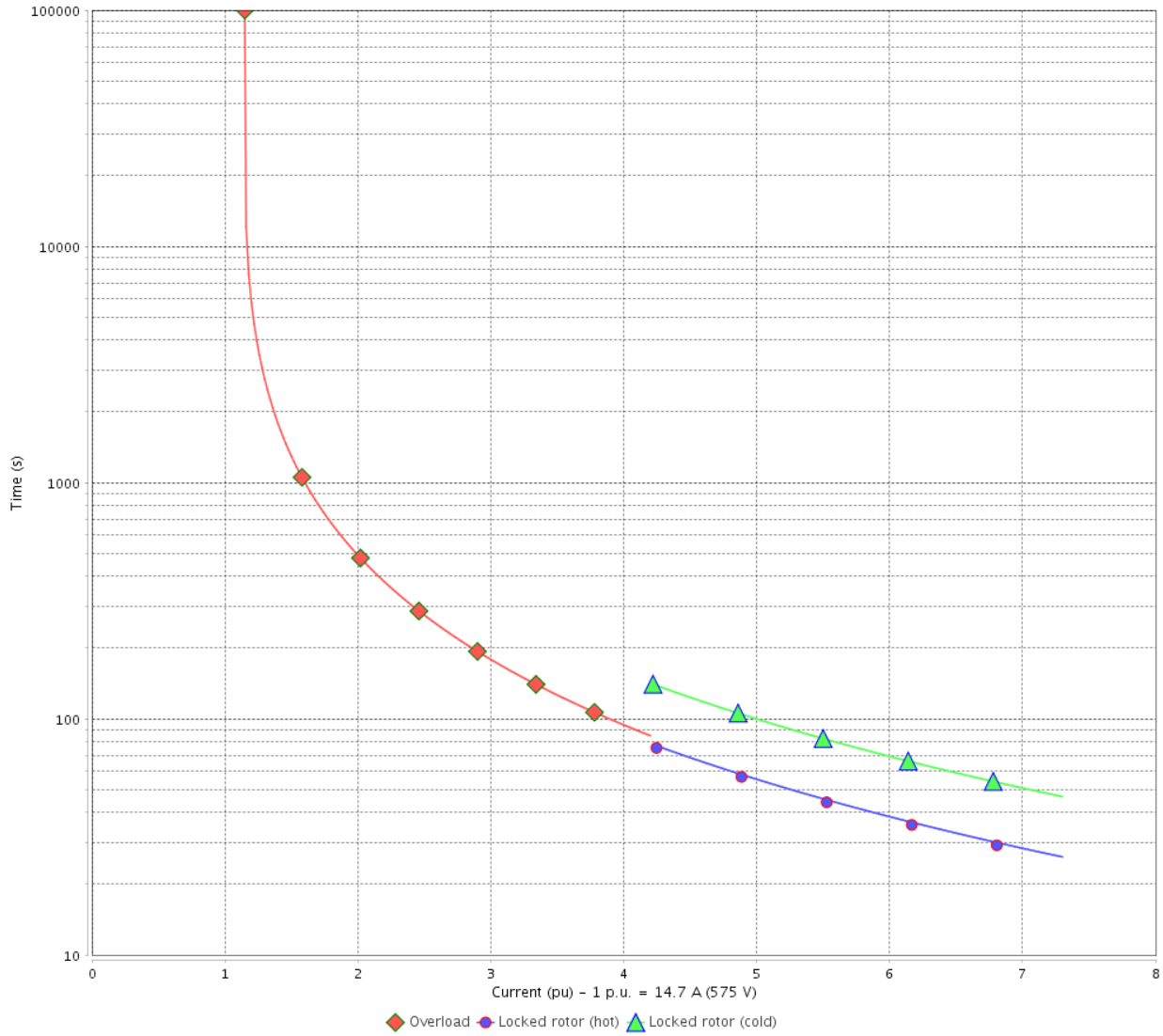
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

THERMAL LIMIT CURVE



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

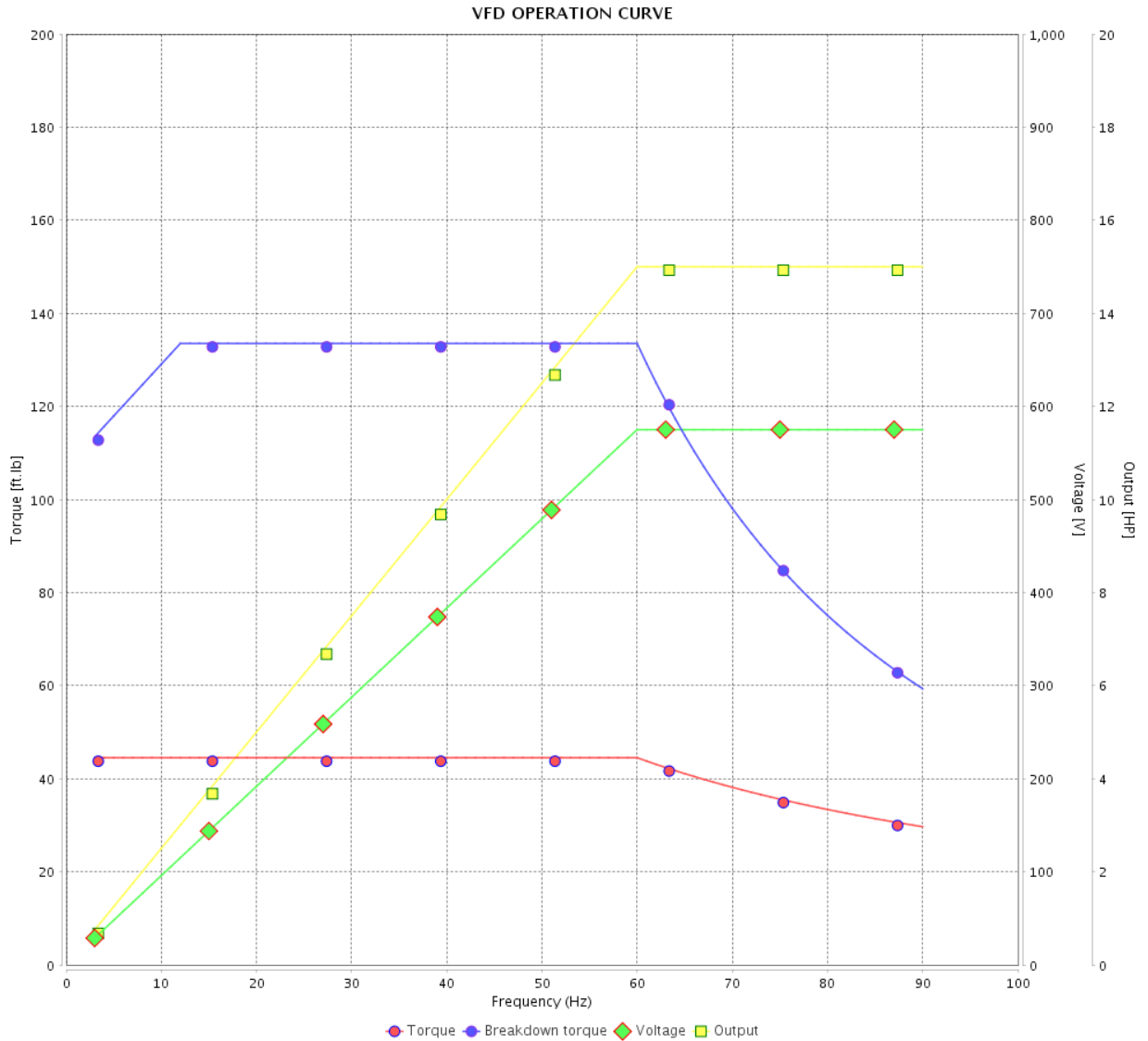


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 Rated torque : 44.5 ft.lb
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Moment of inertia (J) : 2.31 sq.ft.lb
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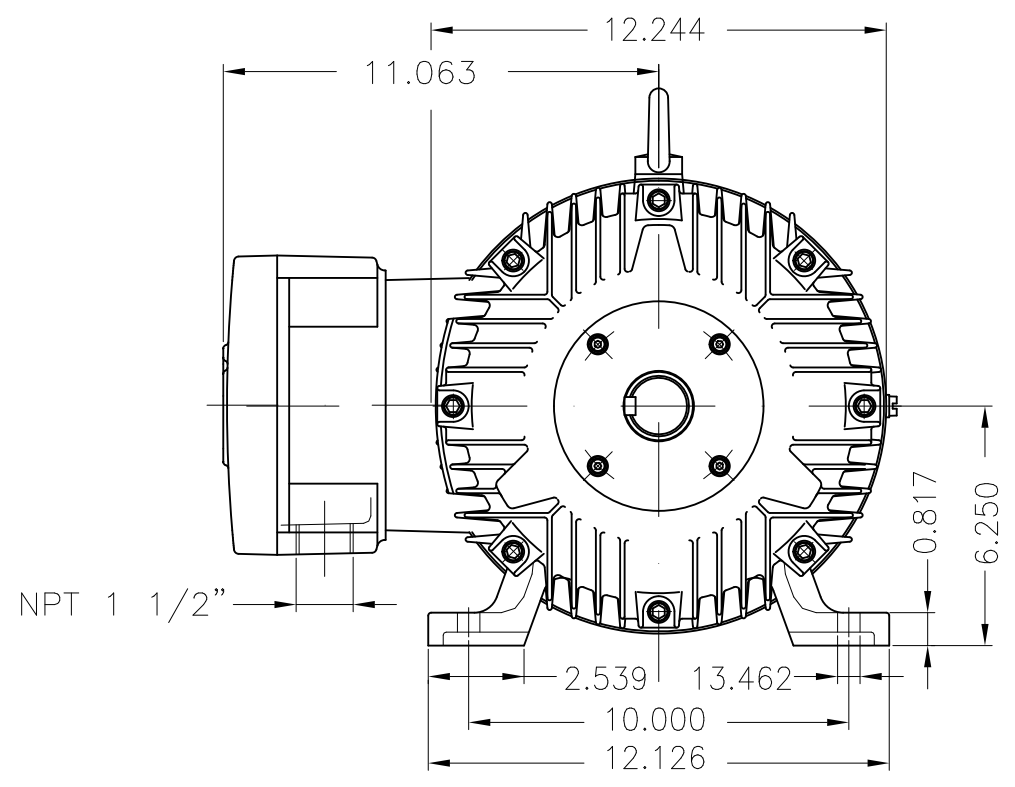
A

B

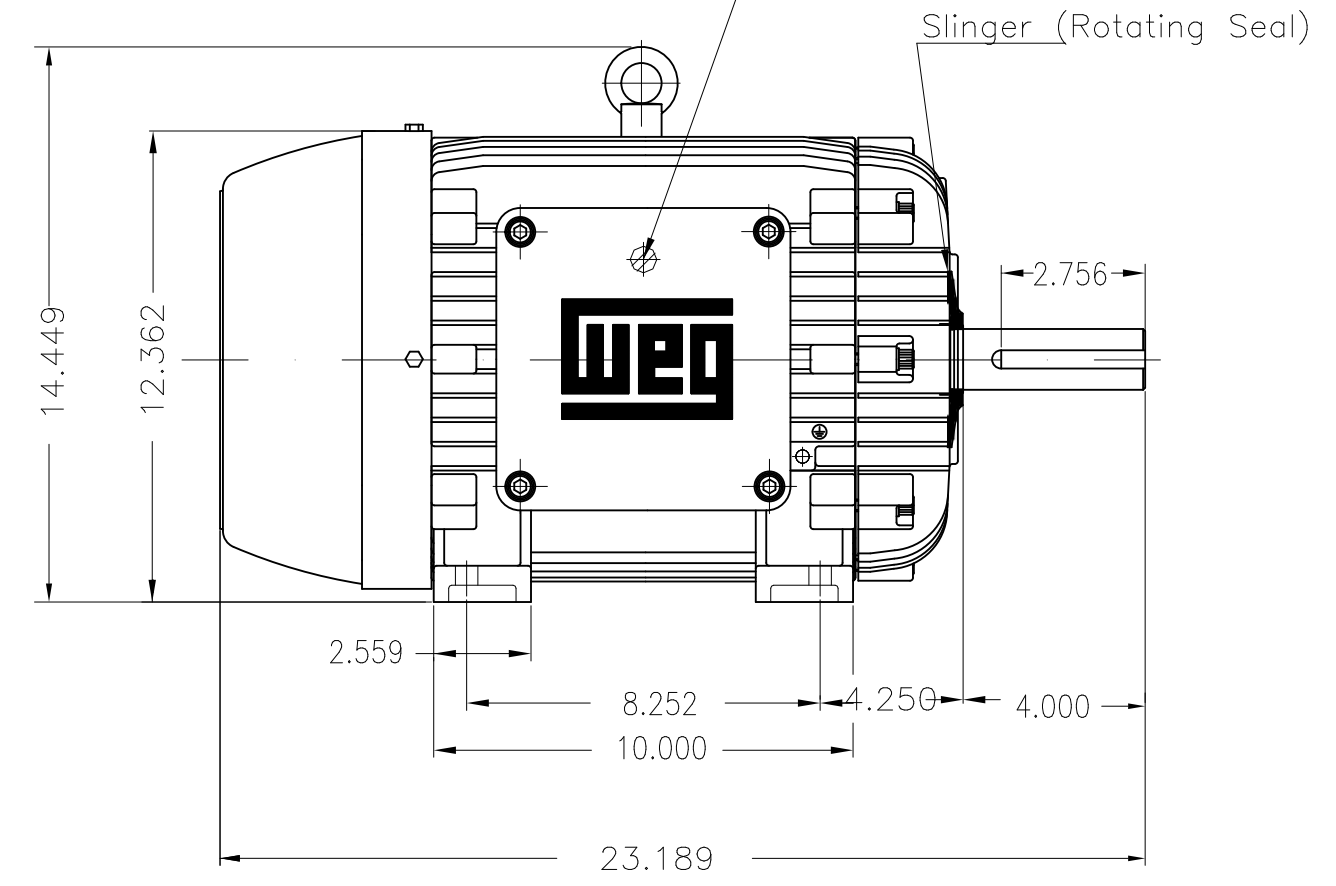
C

D

E

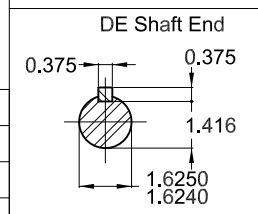


Grounding for leads 5.2–25 mm² / 10–4 AWG



15 HP 04 Poles 60 Hz A

Color RAL 5009
 Painting plan 202P
 Mounting NEMA F-1
 Mounting B3R(D)



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF.					
CHECKED		FRAME 254T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
 WDD



MADE IN BRAZIL

**W21X NEMA**
Premium

14407017



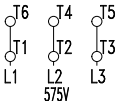
LISTED

CC029A

Inverter Duty Motor
Severe Duty

MODEL 01518XT3H254T

PH 3	FR 254T		
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

328 Lbs

C US
Energy Verified

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.