

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	14281753			
Catalog # :	00112XT3E145TC			
Frame : 143/5TC Output : 1 HP (0.75 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 208-230/460 V Rated current : 3.60-3.26/1.63 A L. R. Amperes : 22.3-20.2/10.1 A LRC : 6.2x(Code K) No load current : 1.75-2.04/1.02 A Rated speed : 1145 rpm Slip : 4.58 % Rated torque : 4.59 ft.lb Locked rotor torque : 260 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Design : B	Locked rotor time : 50s (cold) 28s (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 <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 50.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 77.2 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	0.000 77.0 82.0 82.5			
Power Factor	0.00 0.51 0.63 0.70			
Foundation loads				
Max. traction	: 81 lb			
Max. compression	: 158 lb			
Bearing type	: <u>Drive end</u> 6205 2RS <u>Non drive end</u> 6204 2RS			
Sealing	: Oil Seal Lip Seal			
Lubrication interval	: 0 h 0 h			
Lubricant amount	: 0 g 0 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.				
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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



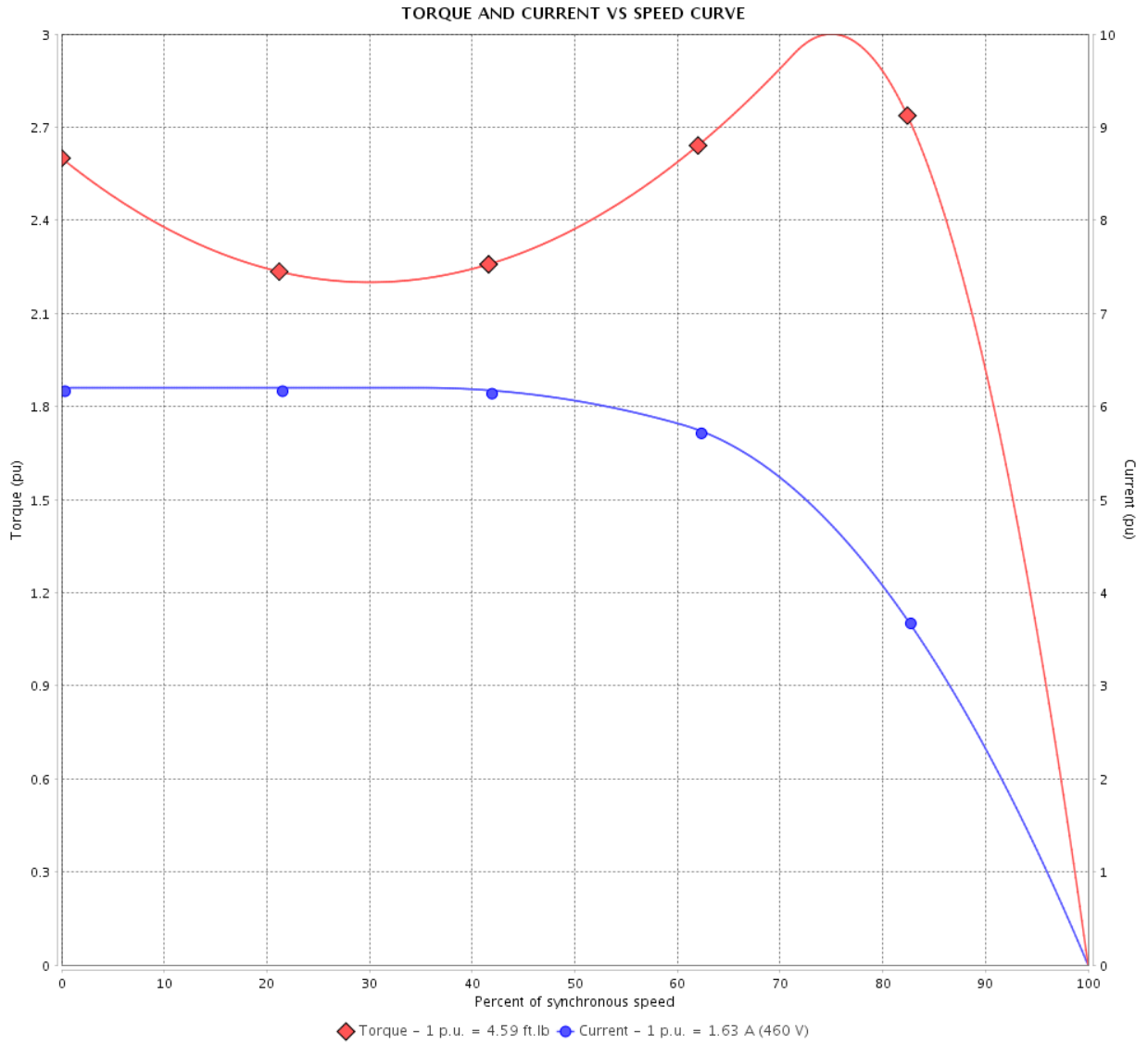
## Three Phase Induction Motor - Squirrel Cage

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Product code : 14281753

Catalog # : 00112XT3E145TC



Performance : 208-230/460 V 60 Hz 6P

Rated current : 3.60-3.26/1.63 A  
 LRC : 6.2  
 Rated torque : 4.59 ft.lb  
 Locked rotor torque : 260 %  
 Breakdown torque : 300 %  
 Rated speed : 1145 rpm

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

Locked rotor time : 50s (cold) 28s (hot)

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



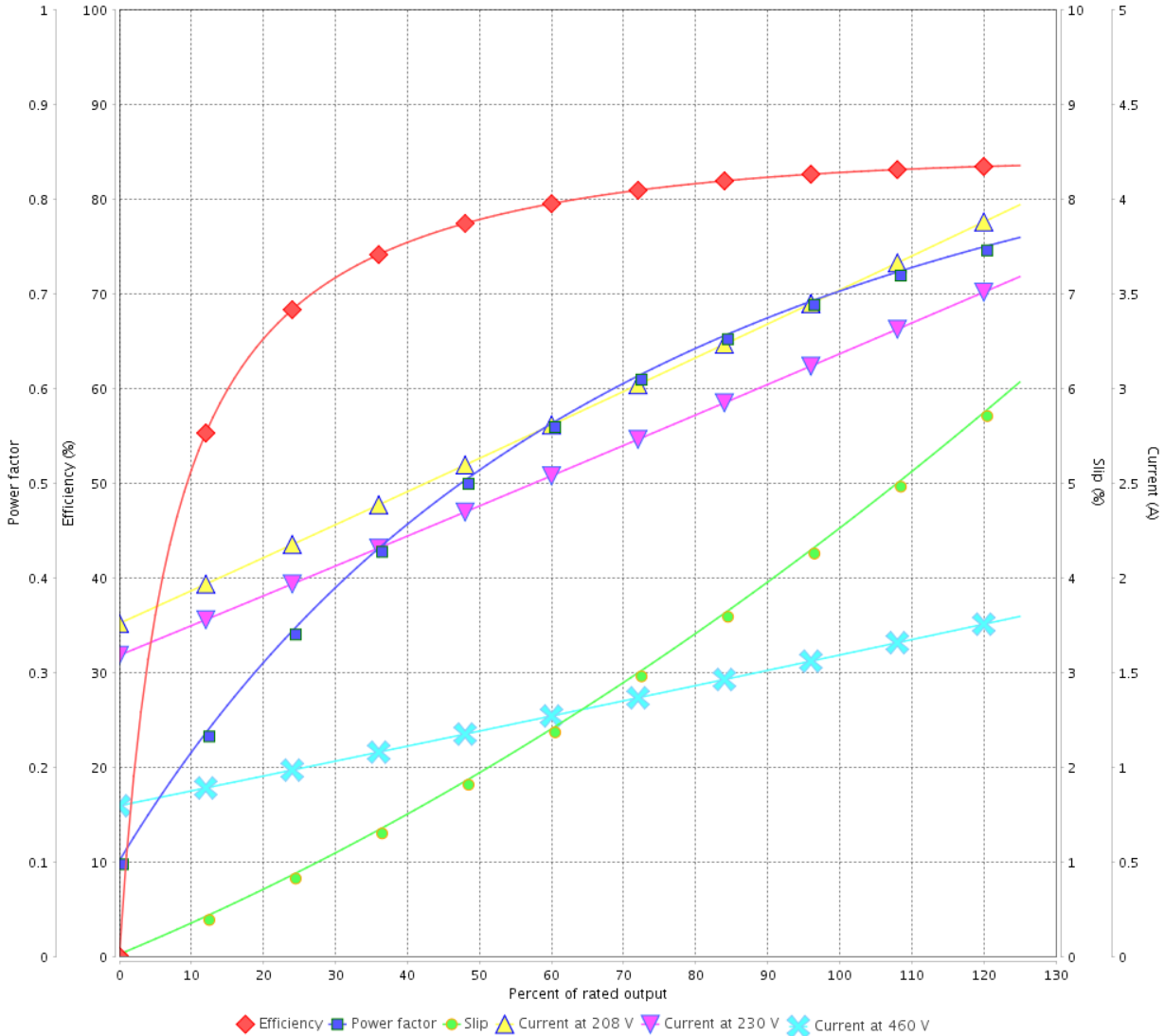
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LOAD PERFORMANCE CURVE



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# THERMAL LIMIT CURVE



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 Catalog # : 00112XT3E145TC

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LRC : 6.2	Duty cycle : Cont.(S1)
Rated torque : 4.59 ft.lb	Insulation class : F
Locked rotor torque : 260 %	Service factor : 1.15
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1145 rpm	Design : B

Heating constant  
 Cooling constant

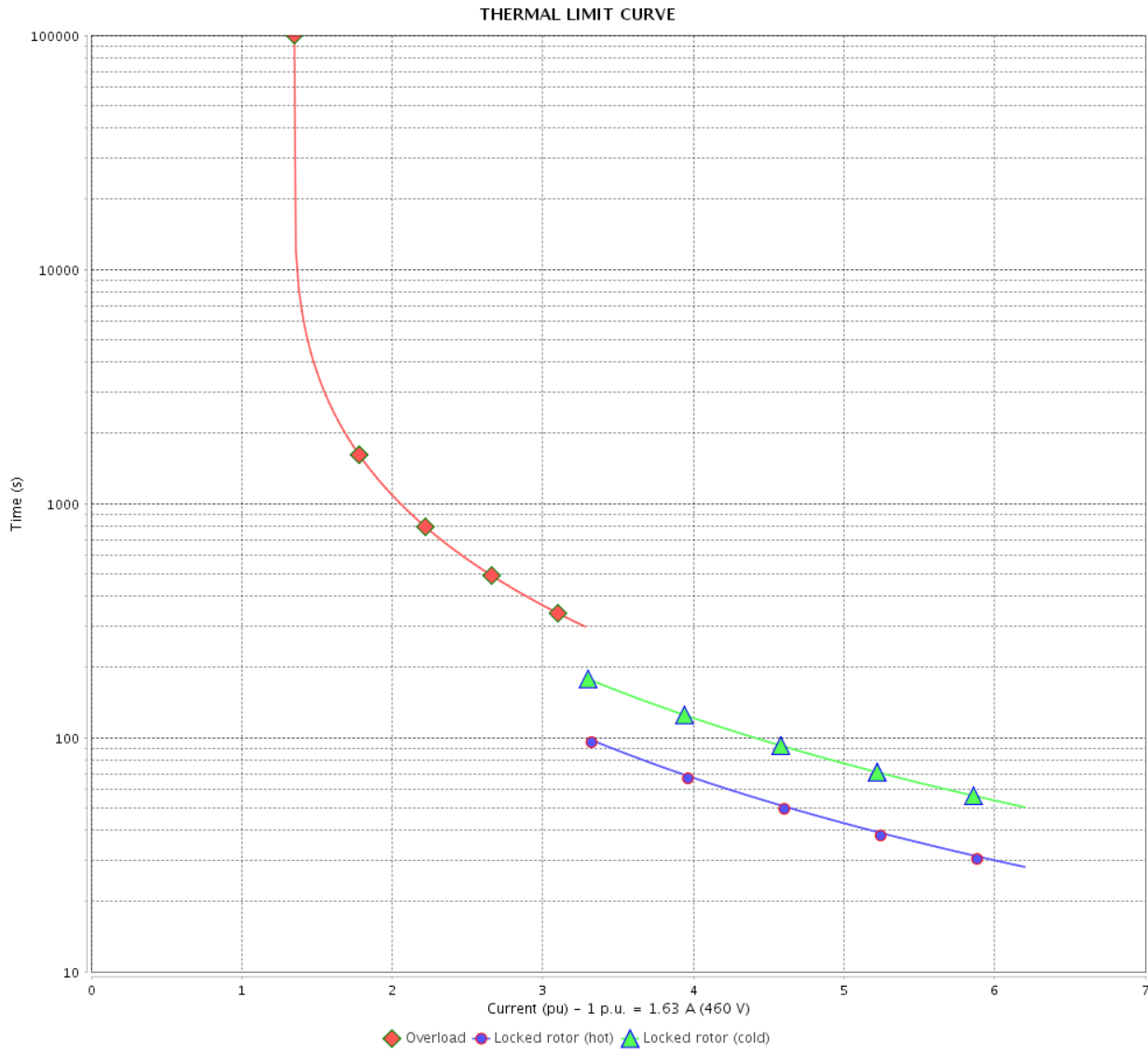
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

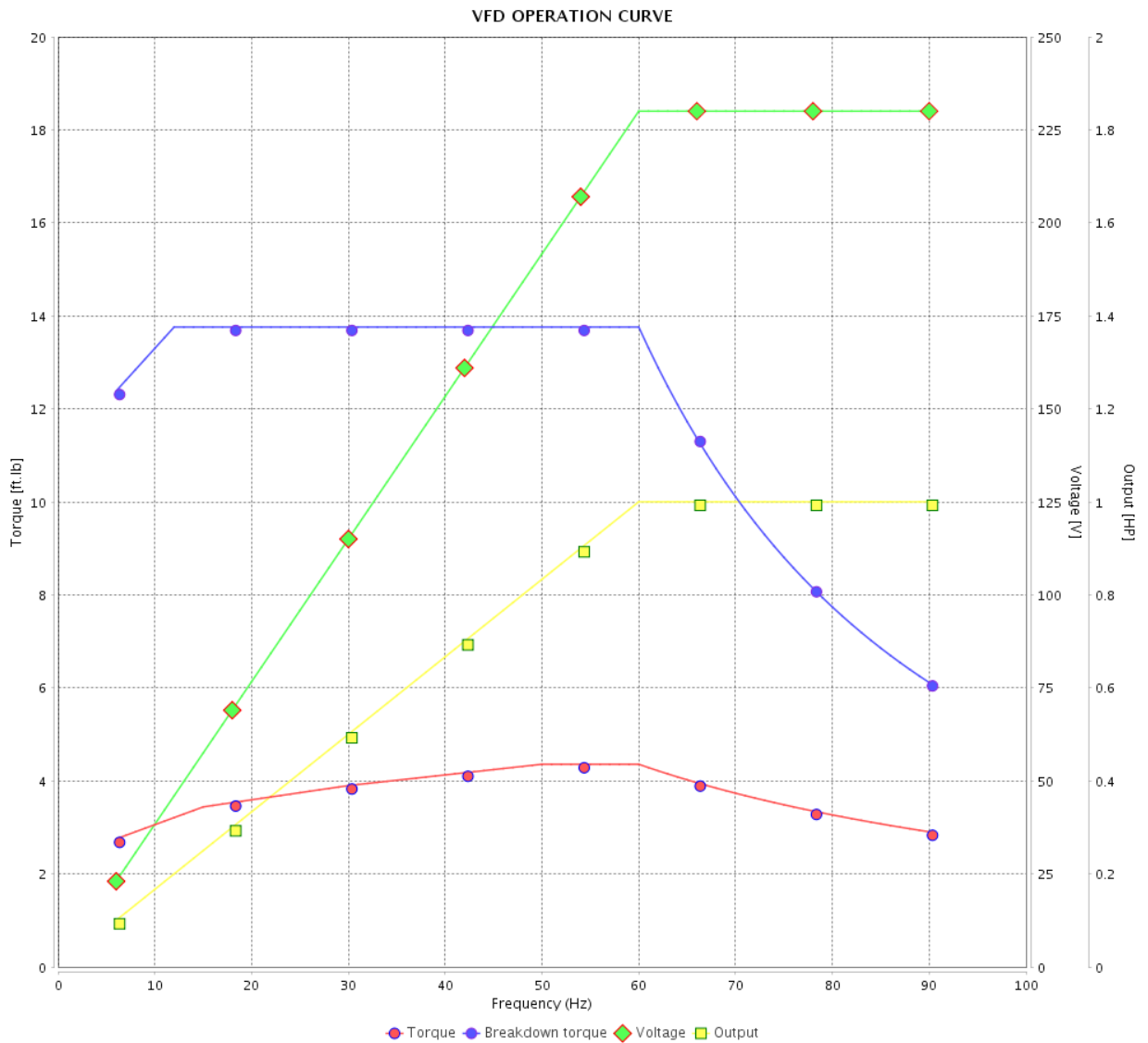


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Product line : NEMA Premium Efficiency Three-Phase

Product code : 14281753

Catalog # : 00112XT3E145TC

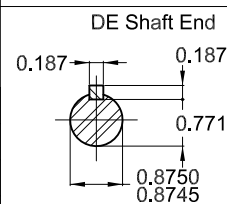
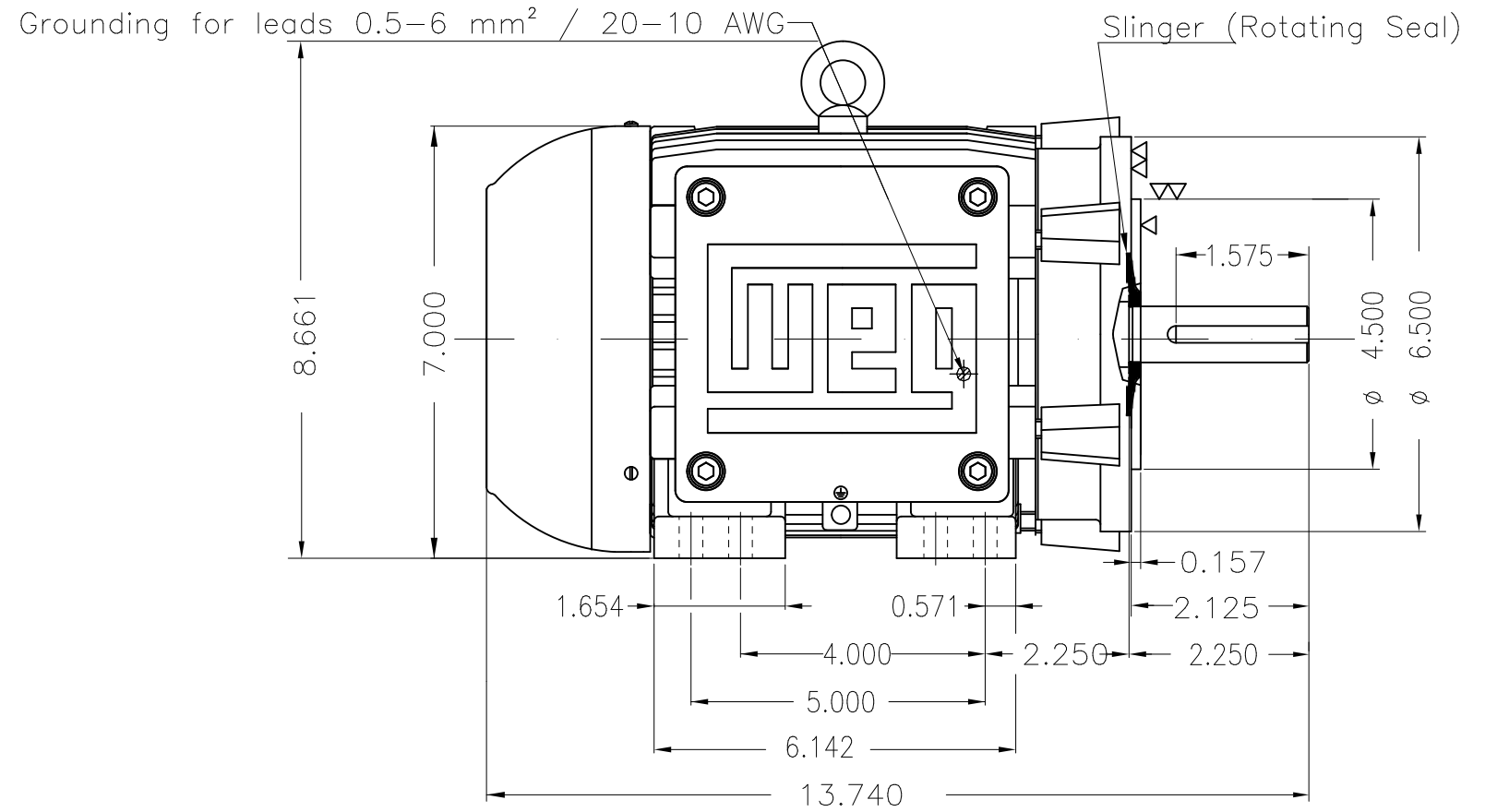
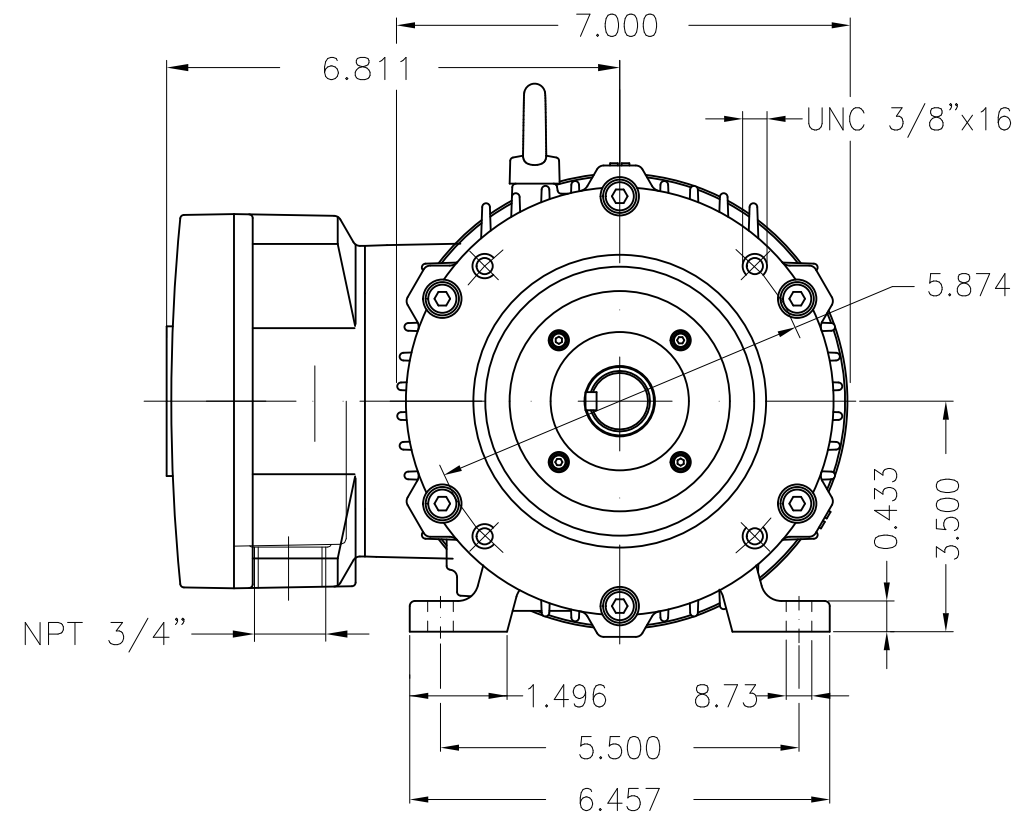


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 Breakdown torque : 300 %  
 Rated speed : 1145 rpm

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

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

1 HP 06 Poles 60 Hz

Dimensions in inches

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

**PREVIEW**  
 WDD



SHEET 1 / 1



MADE IN BRAZIL

**W21X NEMA**  
**Premium**

14281753

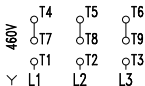
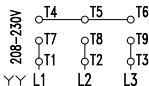
CC029A

*Inverter Duty Motor*  
*Severe Duty*

LISTED

MODEL 00112XT3E145TC

PH 3	FR 143/5TC		
HP(kW) 1.0(0.75)		HZ 60	IP55
V 230/460		A 3.26/1.63	
RPM 1145		NEMA NOM EFF 82.5%	
PF 0.70		SFA 3.75/1.87	DES B
INS CL F $\Delta$ T 80 K		SF 1.15	ENCL TEFC
DUTY CONT.		CODE K	ALT 1000 m.a.s.l.
AMB 40°C	USABLE @208V	3.60 A	SF 1.00



→ 6205-2RS MOBIL POLYREX EM  
→ 6204-2RS

79 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, 20:1CT, 1.0SF, T3C, AMB 40°C.