

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	12735930			
Catalog # :	00712ET3H254T-S			
Frame : 254/6T Output : 7.5 HP (5.5 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 575 V Rated current : 7.98 A L. R. Amperes : 43.1 A LRC : 5.4x(Code G) No load current : 4.02 A Rated speed : 1175 rpm Slip : 2.08 % Rated torque : 33.5 ft.lb Locked rotor torque : 200 % Breakdown torque : 229 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 2.34 sq.ft.lb Design : B	Locked rotor time : 75s (cold) 42s (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> : 59.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 208 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	88.1    89.5    89.5    91.0			
Power Factor	0.35    0.58    0.70    0.76			
Foundation loads				
Max. traction	: 265 lb			
Max. compression	: 474 lb			
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3			
Sealing	: V'Ring    Without Bearing Seal			
Lubrication interval	: 20000 h    20000 h			
Lubricant amount	: 13 g    8 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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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



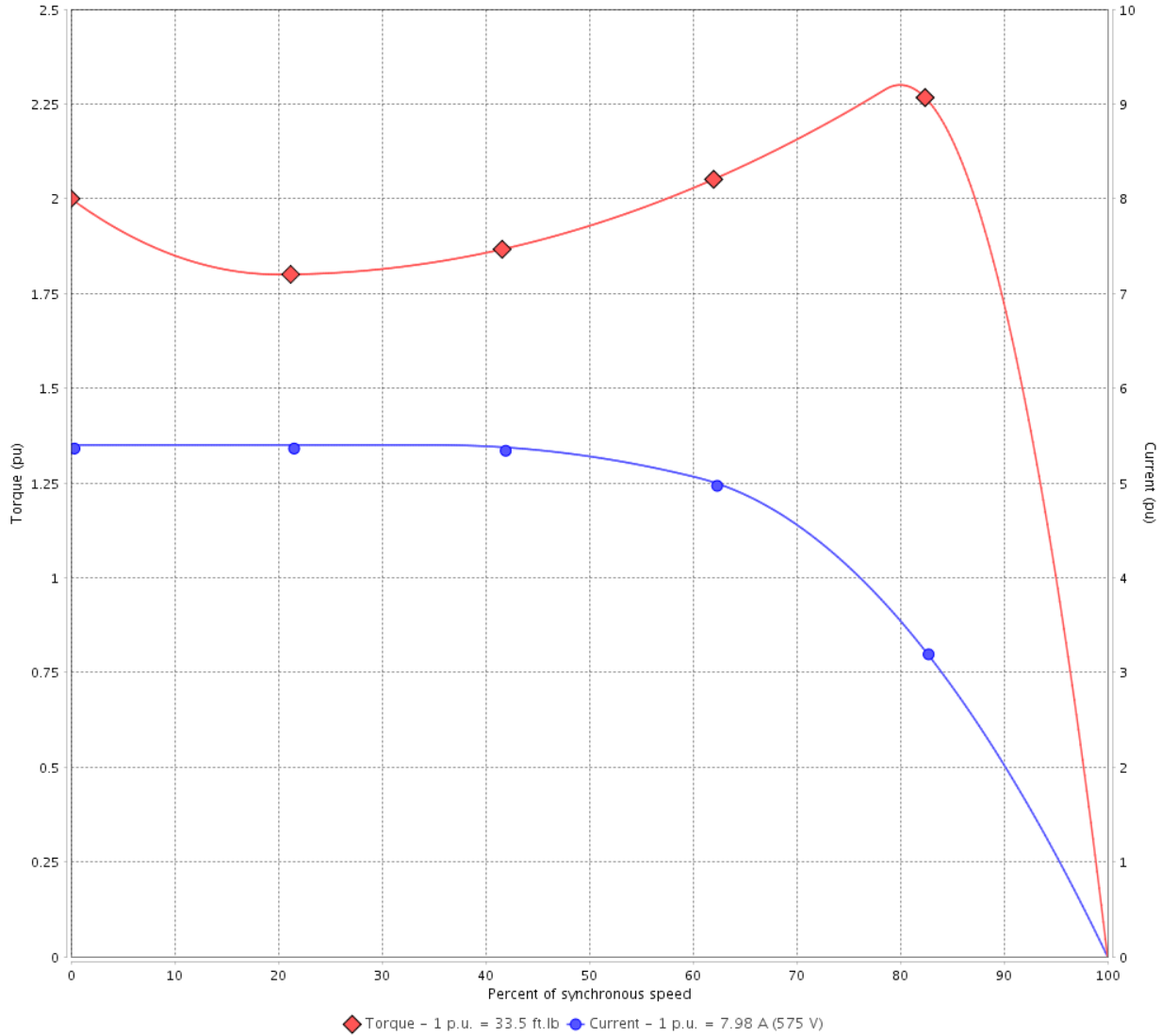
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12735930

Catalog # : 00712ET3H254T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

Rated current	: 7.98 A	Moment of inertia (J)	: 2.34 sq.ft.lb
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 33.5 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

Locked rotor time : 75s (cold) 42s (hot)

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Date	13/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

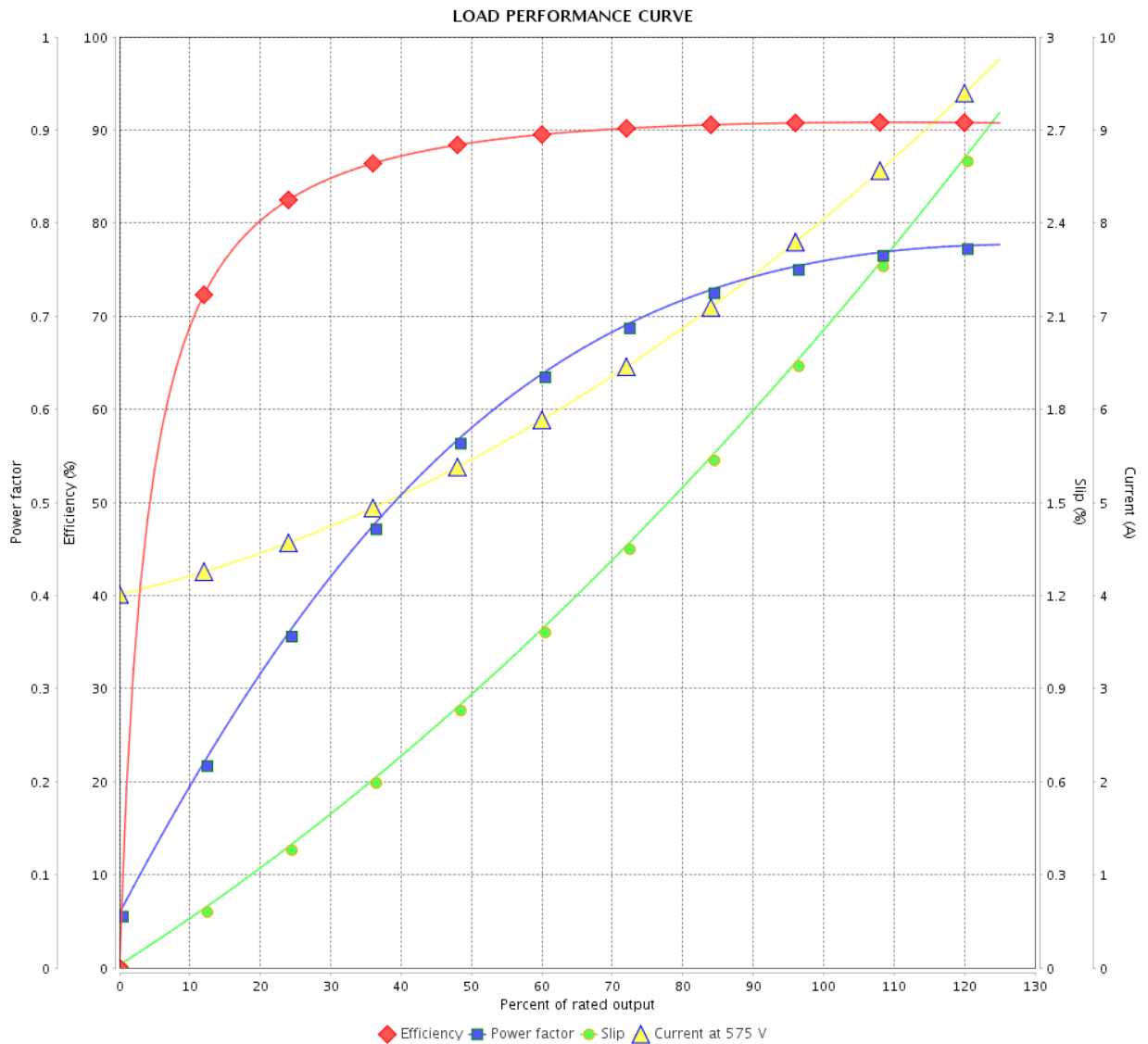


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12735930

Catalog # : 00712ET3H254T-S



Performance : 575 V 60 Hz 6P

Rated current : 7.98 A  
 LRC : 5.4  
 Rated torque : 33.5 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 229 %  
 Rated speed : 1175 rpm

Moment of inertia (J) : 2.34 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12735930  
Catalog # : 00712ET3H254T-S

Performance : 575 V 60 Hz 6P

Rated current	: 7.98 A	Moment of inertia (J)	: 2.34 sq.ft.lb
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 33.5 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

Heating constant

Cooling constant

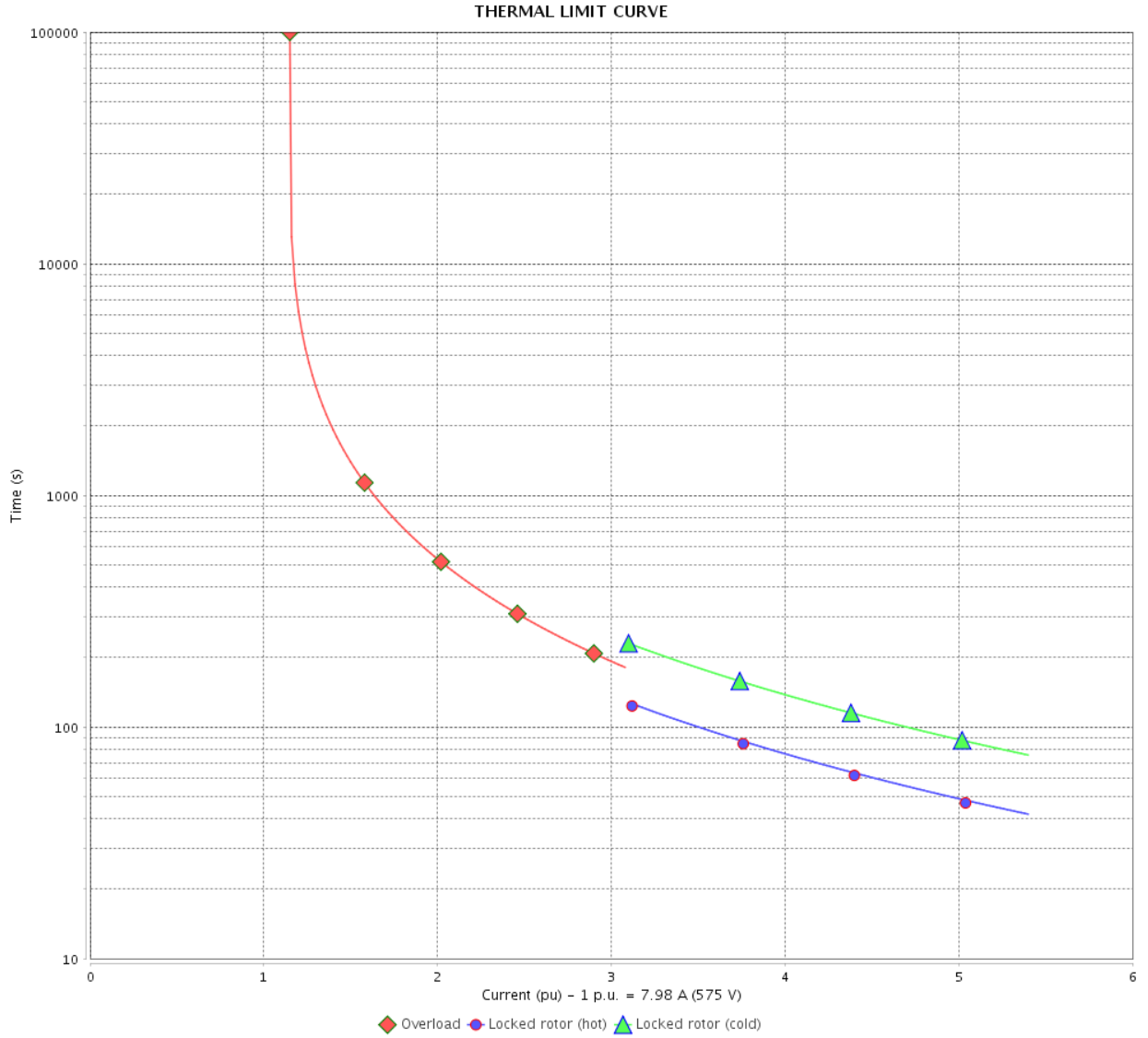
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



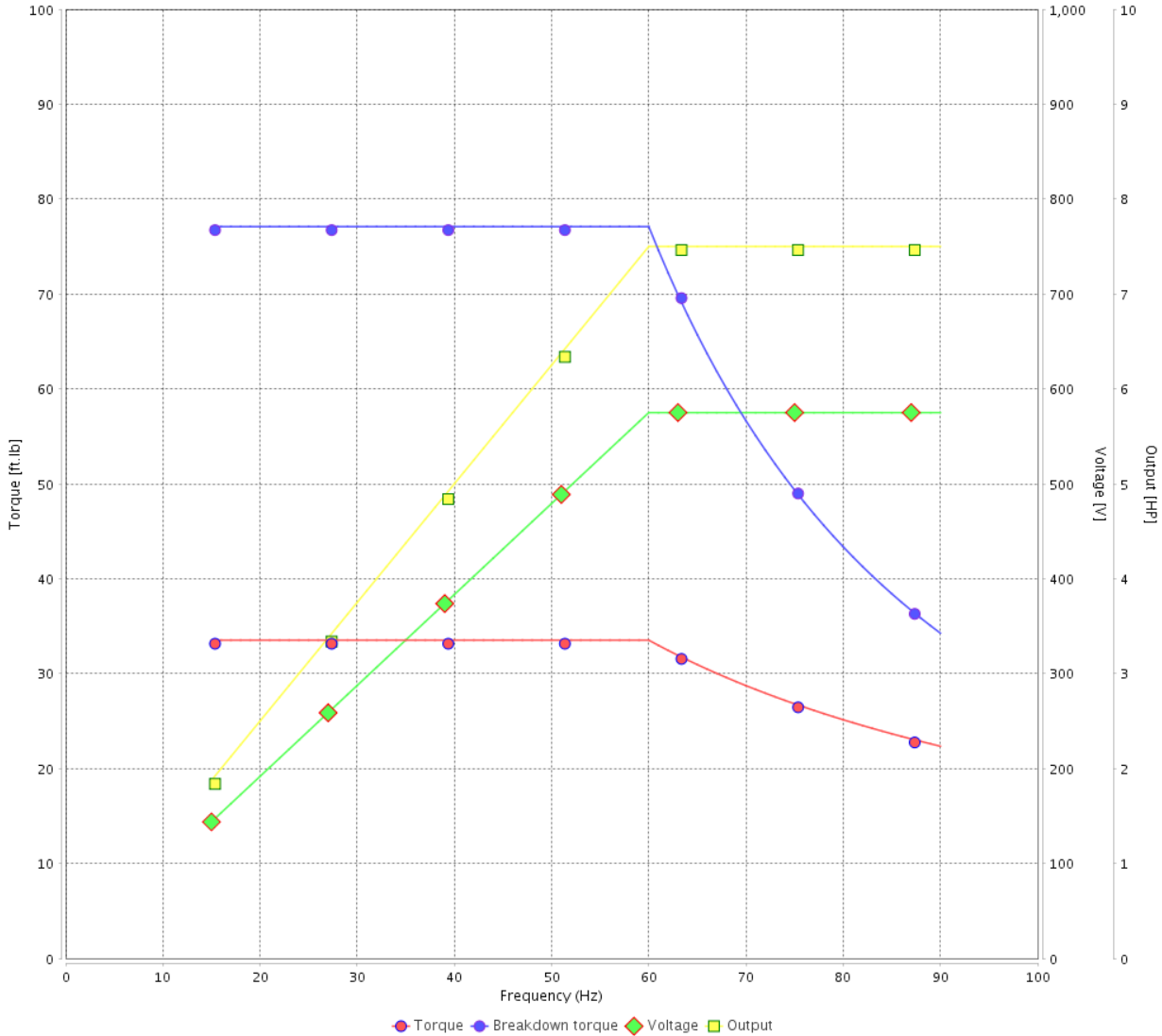
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12735930

Catalog # : 00712ET3H254T-S

VFD OPERATION CURVE



Performance : 575 V 60 Hz 6P

Rated current : 7.98 A  
 LRC : 5.4  
 Rated torque : 33.5 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 229 %  
 Rated speed : 1175 rpm

Moment of inertia (J) : 2.34 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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Date	13/04/2022			

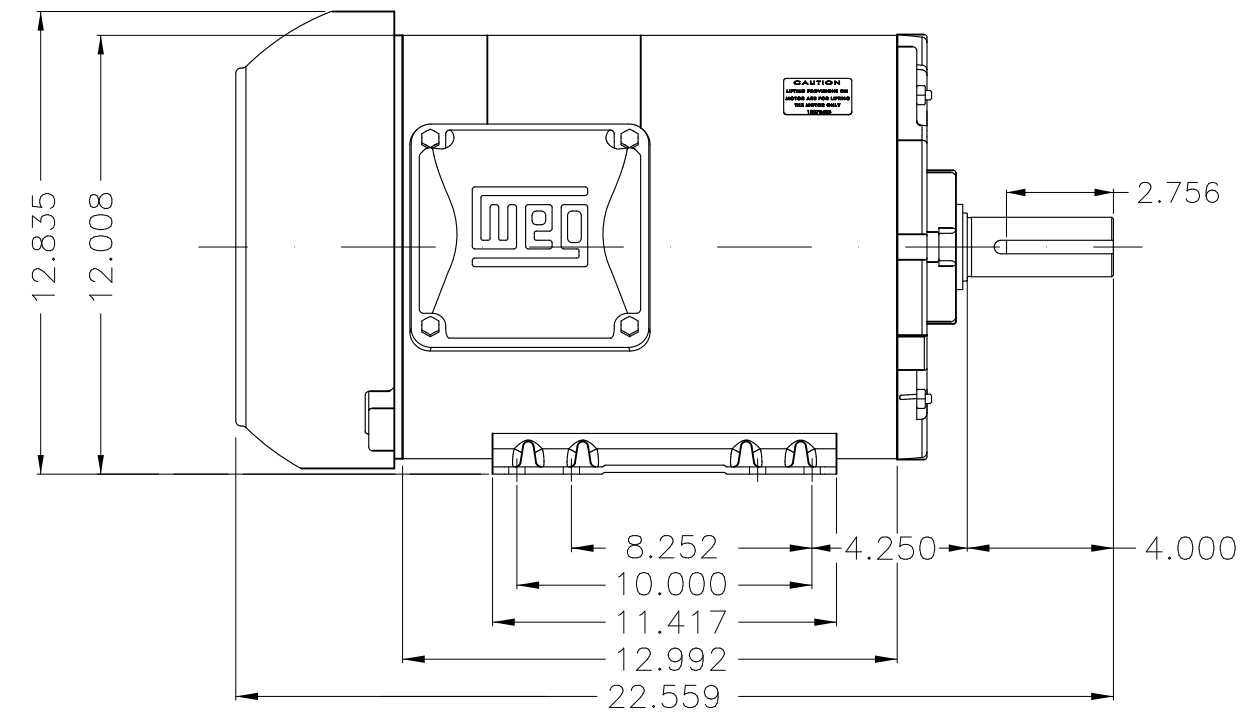
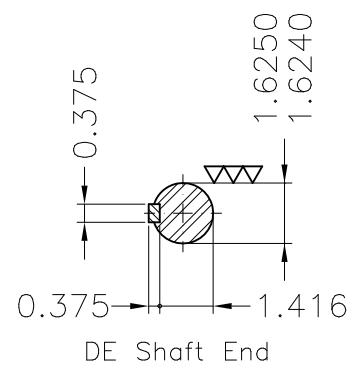
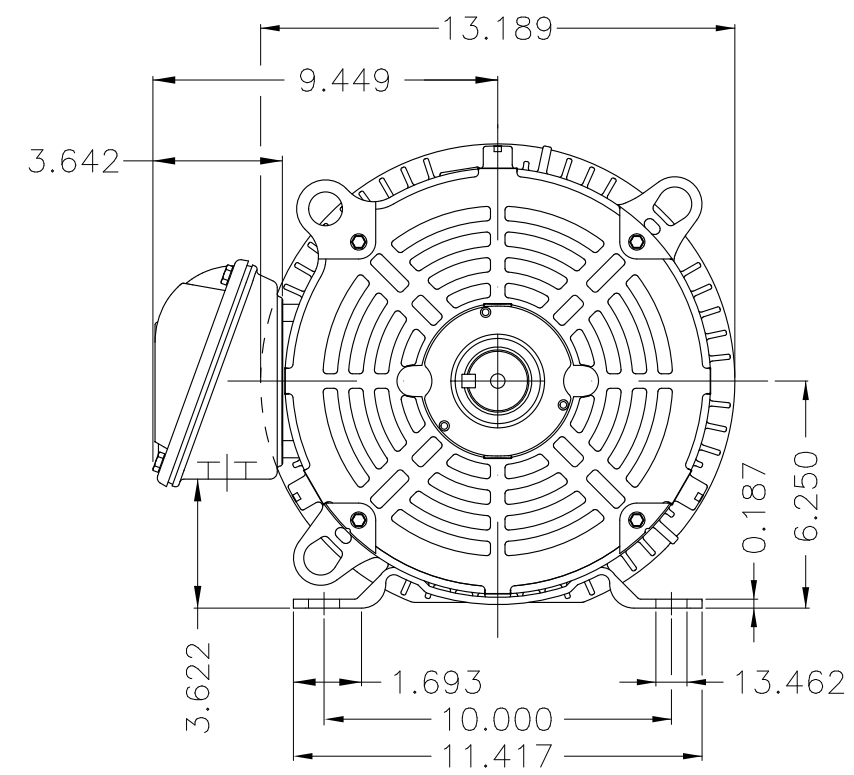
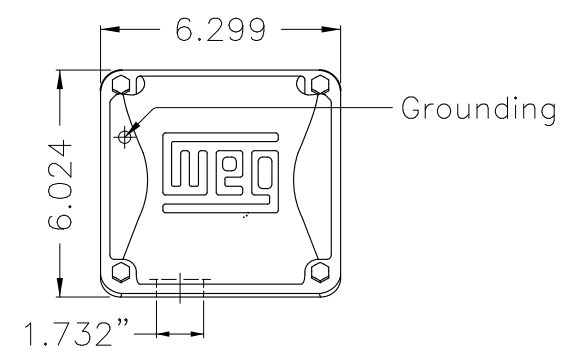
A

B

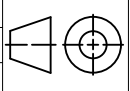
C

D

E



Color Munsell N 1 matte black  
 Painting plan 207N  
 Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 254/6T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

7.5 HP 06 Poles 60 Hz

A

PREVIEW  
WDD





**NEMA**  
**Premium**



MADE IN MEXICO

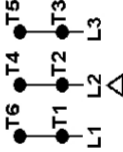
**MAT: 12735930 CC029A**  
**W01.TE0IC0X0N**  
**MODEL 00712ET3H254T-S**  
**25FEV2021 S/N:**

**For 60Hz: Class I, Zone 2, IIC**  
**Class I, Div.2, Gr. A,B,C,D - T3**  
**Div 2 Inverter Duty (SF1.00)**  
**CT 2:1/VT 1000:1**

PH 3	Hz 60	HP 7.5
FR 254/6T		KW 5.5
DUTY CONT.		V 575
ALT 1000 m.a.s.l.		A 7.98
INS CL F AT 80K	IP55	SFA 9.18
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE G	PF 0.76
		RPM 1175
		NEMA NOM. EFF 91.0%

**For safe area-Inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT**

DE 6309-Z-C3	ODE 6208-Z-C3	MOBIL POLYREX EM	20000h
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T1-BLU  
T2-WHT  
T3-ORG  
T4-YEL  
T5-BLK  
T6-GRY

**INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION**



**WARNING:** Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.



**AVERTISSEMENT:** Le moteur doit être mis à la terre

conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

