

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	12445727			
Catalog # :	00318ET3H182TC-W22			
Frame : 182/4TC Output : 3 HP (2.2 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 3.13 A L. R. Amperes : 25.3 A LRC : 8.1x(Code K) No load current : 1.60 A Rated speed : 1760 rpm Slip : 2.22 % Rated torque : 8.95 ft.lb Locked rotor torque : 229 % Breakdown torque : 340 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.3401 sq.ft.lb Design : B	Locked rotor time : 41s (cold) 23s (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> : 56.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 94.5 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	86.4    87.5    88.5    89.5			
Power Factor	0.36    0.61    0.73    0.79			
Foundation loads				
Max. traction : 147 lb				
Max. compression : 241 lb				
Bearing type	: <u>Drive end</u> 6207 ZZ <u>Non drive end</u> 6206 ZZ			
Sealing	: V'Ring    V'Ring			
Lubrication interval	: -    -			
Lubricant amount	: -    -			
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



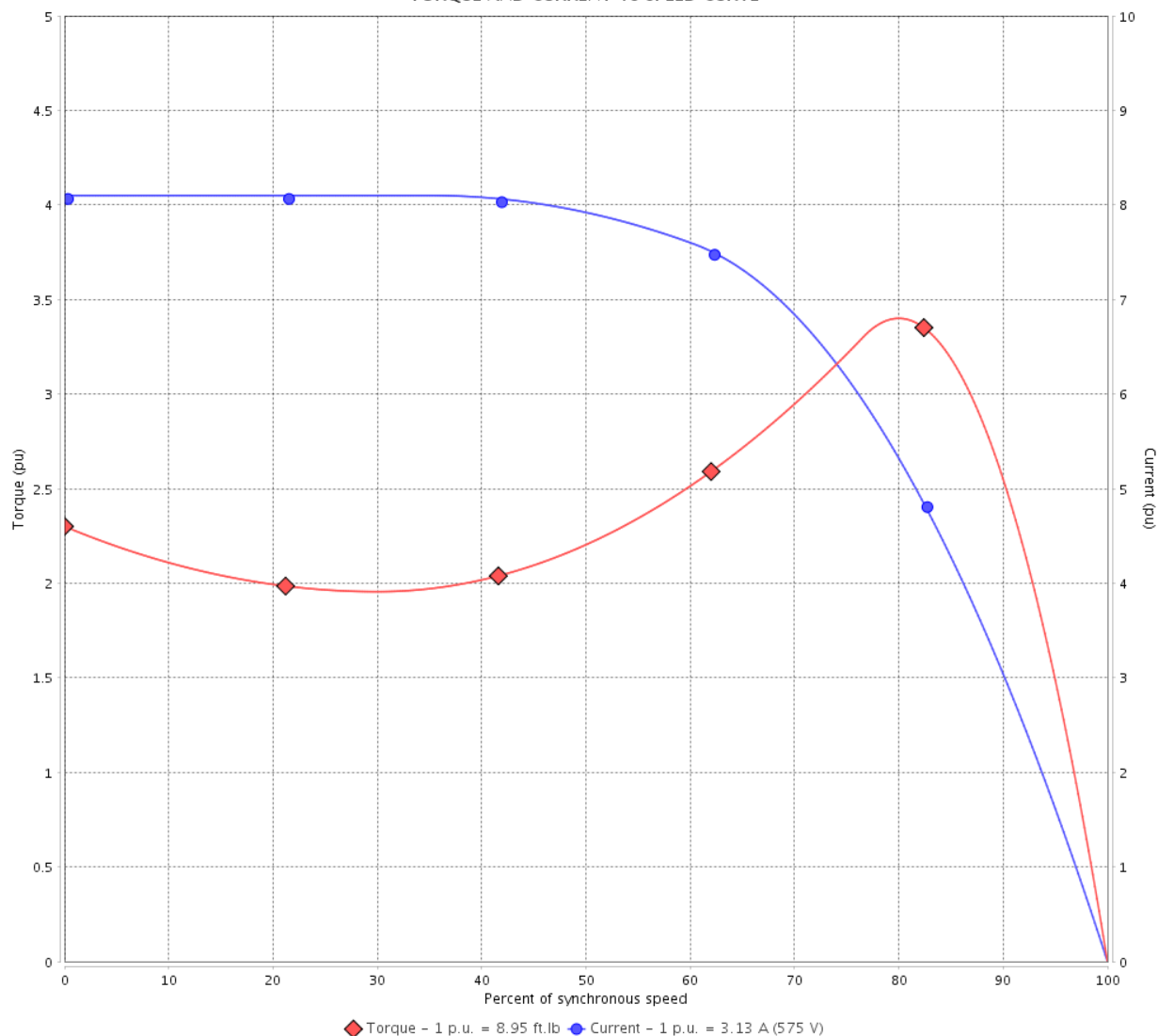
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12445727

Catalog # : 00318ET3H182TC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 3.13 A	Moment of inertia (J)	: 0.3401 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 8.95 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 41s (cold) 23s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

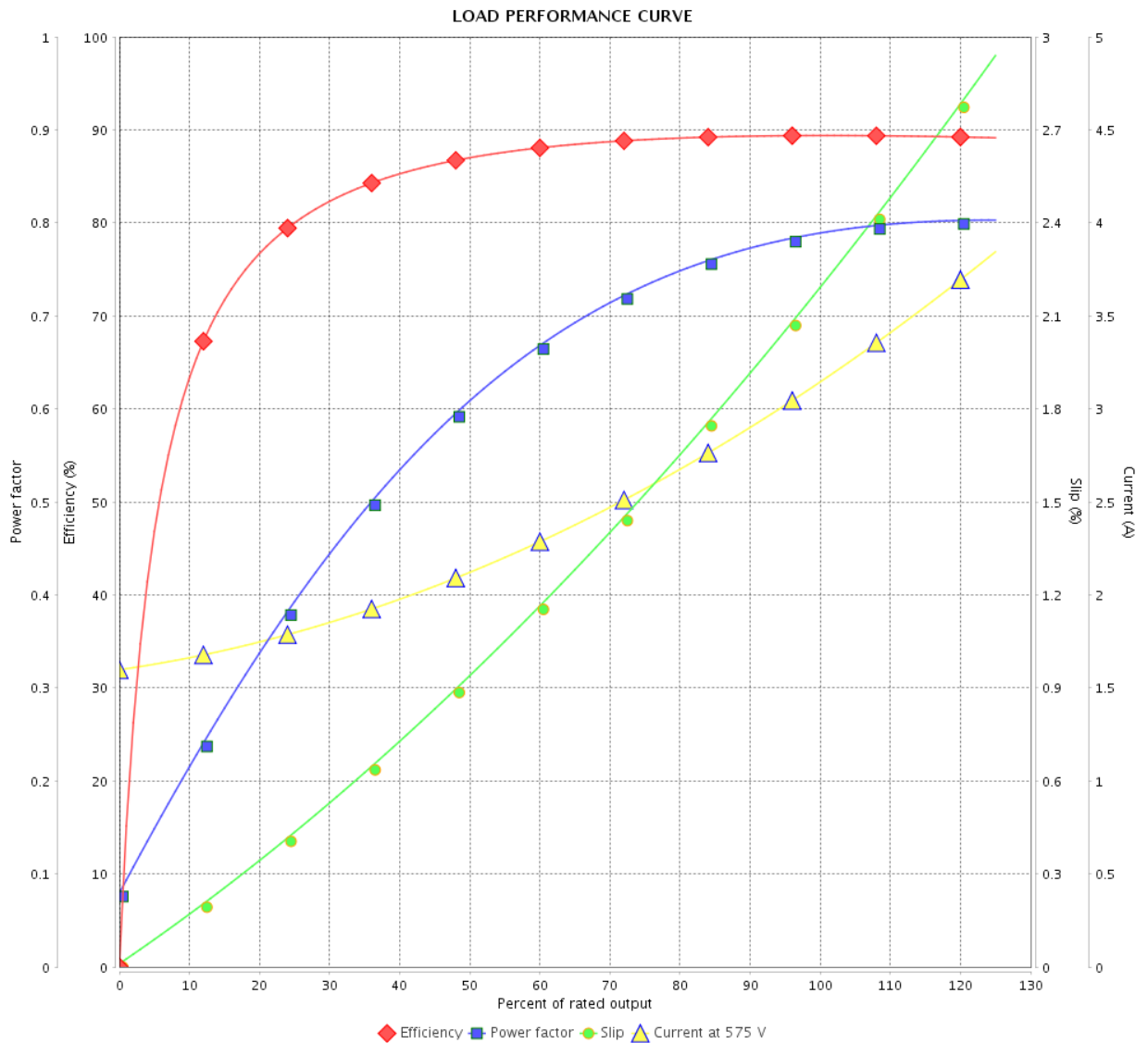


Customer :

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Product code : 12445727

Catalog # : 00318ET3H182TC-W22



Performance : 575 V 60 Hz 4P

Rated current : 3.13 A  
 LRC : 8.1  
 Rated torque : 8.95 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 340 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.3401 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



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Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Heating constant

Cooling constant

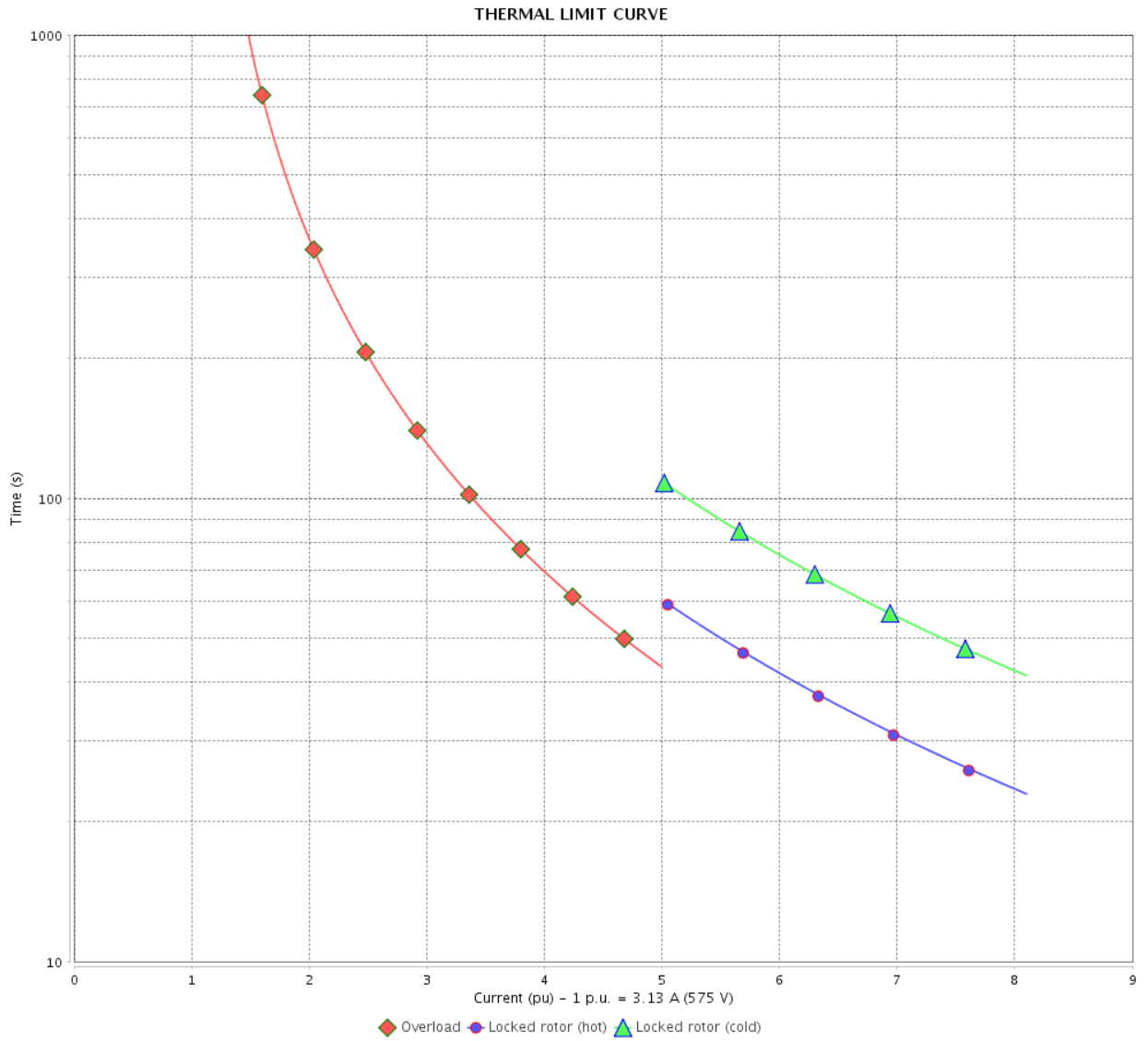
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

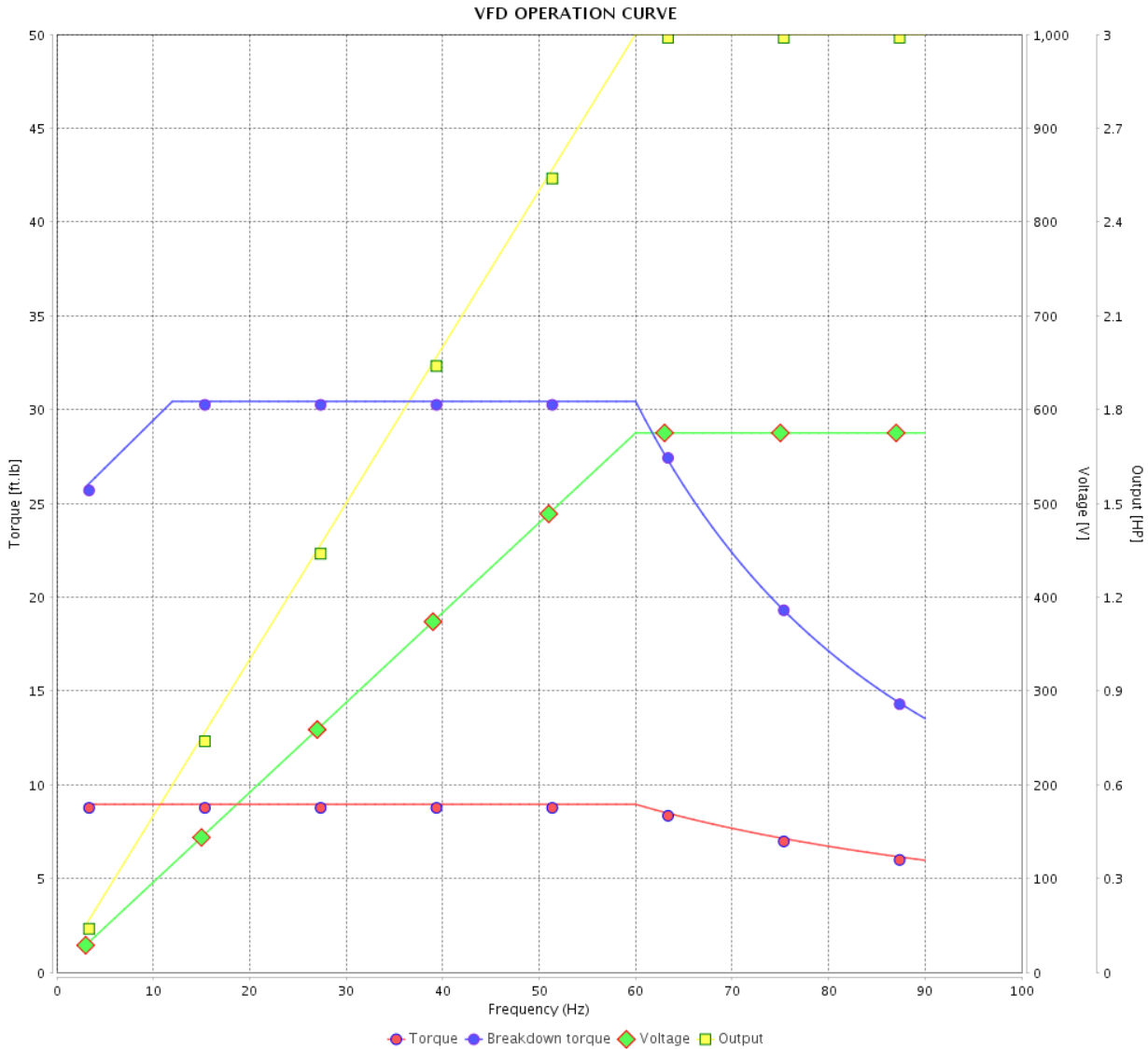


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12445727

Catalog # : 00318ET3H182TC-W22



Performance : 575 V 60 Hz 4P

Rated current : 3.13 A  
 LRC : 8.1  
 Rated torque : 8.95 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 340 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.3401 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

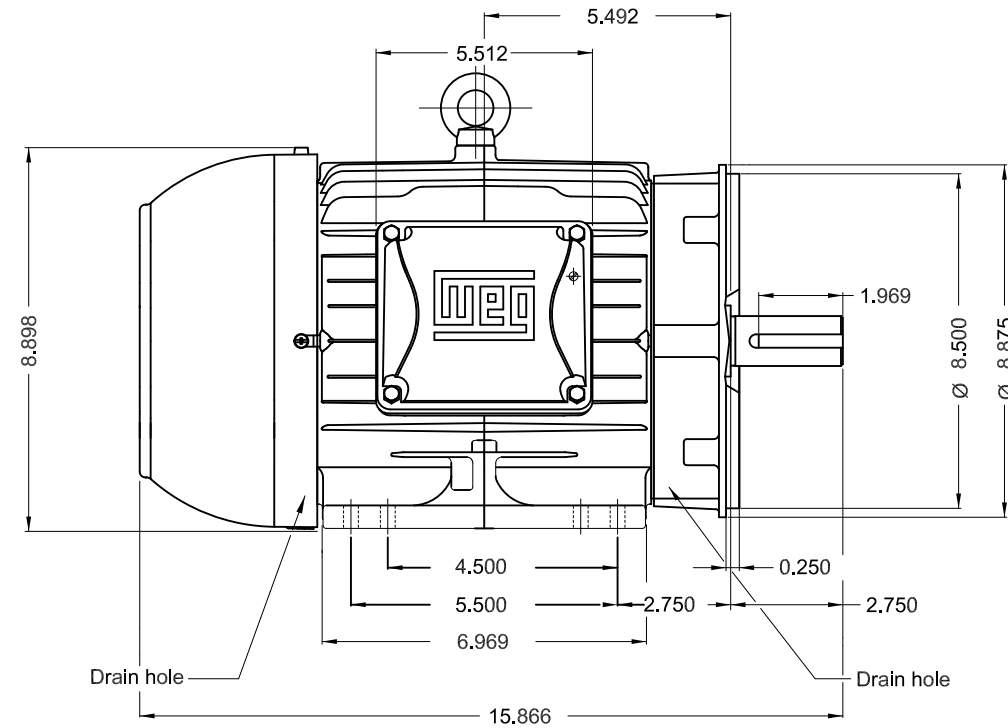
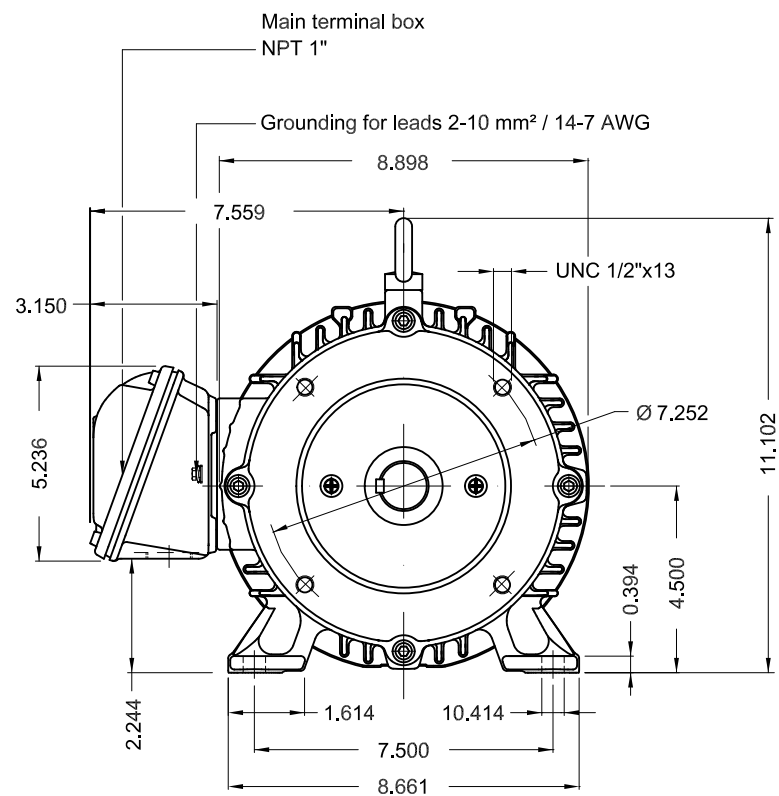
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1 2 3 4 5 6

A

B

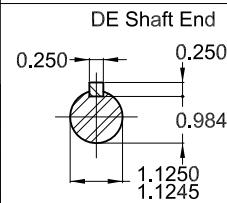
C



D

E

Bearing cap  
Color RAL 5009  
Painting plan 207A  
Mounting B34R(D)



3 HP 04 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 182/4TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

**PREVIEW**  
WDD



MADE IN BRAZIL  
12445727



MODEL 00318ET3H182TC-W22

Inverter Duty Motor  
Severe Duty



Class I, Div 2, Gr A, B, C and D - T3  
Class I, Zone 2, IIC - T3  
Class II, Div 2, Gr F and G - T5  
For use on PWM: Gr. A, B, C, D, F and G,  
VT 1000:1, CT 20:1, 1.00SF - T4A



FOR SAFE AREA  
Mod. TE1BFOXON  
CC029A

PH3 60Hz Fr. 182/4TC 1000m.a.s.l. IP55 TEFC 93lb

V 575

HP 3.0

SF 1.25

RPM 1760

AMB 40°C

DUTY CONT.

A 3.13

kW 2.2

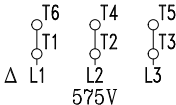
SFA 3.91

PF 0.79

INS cl. F DT80K

DES B Code K

NEMA NOM EFF 89.5%



MOBIL POLYREX EM

