

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 11431996  
 Catalog # : 01036ST3HIE215T-W22

Frame	: 213/5T	Locked rotor time	: 43s (cold) 24s (hot)
Output	: 10 HP (7.5 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 9.28 A	Protection degree	: IP55
L. R. Amperes	: 66.8 A	Cooling method	: IC411 - TEFC
LRC	: 7.2x(Code H)	Mounting	: F-1
No load current	: 2.72 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3510 rpm	Noise level <sup>2</sup>	: 68.0 dB(A)
Slip	: 2.50 %	Starting method	: Direct On Line
Rated torque	: 15.0 ft.lb	Approx. weight <sup>3</sup>	: 177 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 290 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.6362 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	89.3	89.5	90.2	90.2	Max. traction	: 156 lb
Power Factor	0.54	0.79	0.87	0.90	Max. compression	: 333 lb

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6308 C3	6207 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	11 g	7 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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Checked by				
Date	12/04/2022			

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



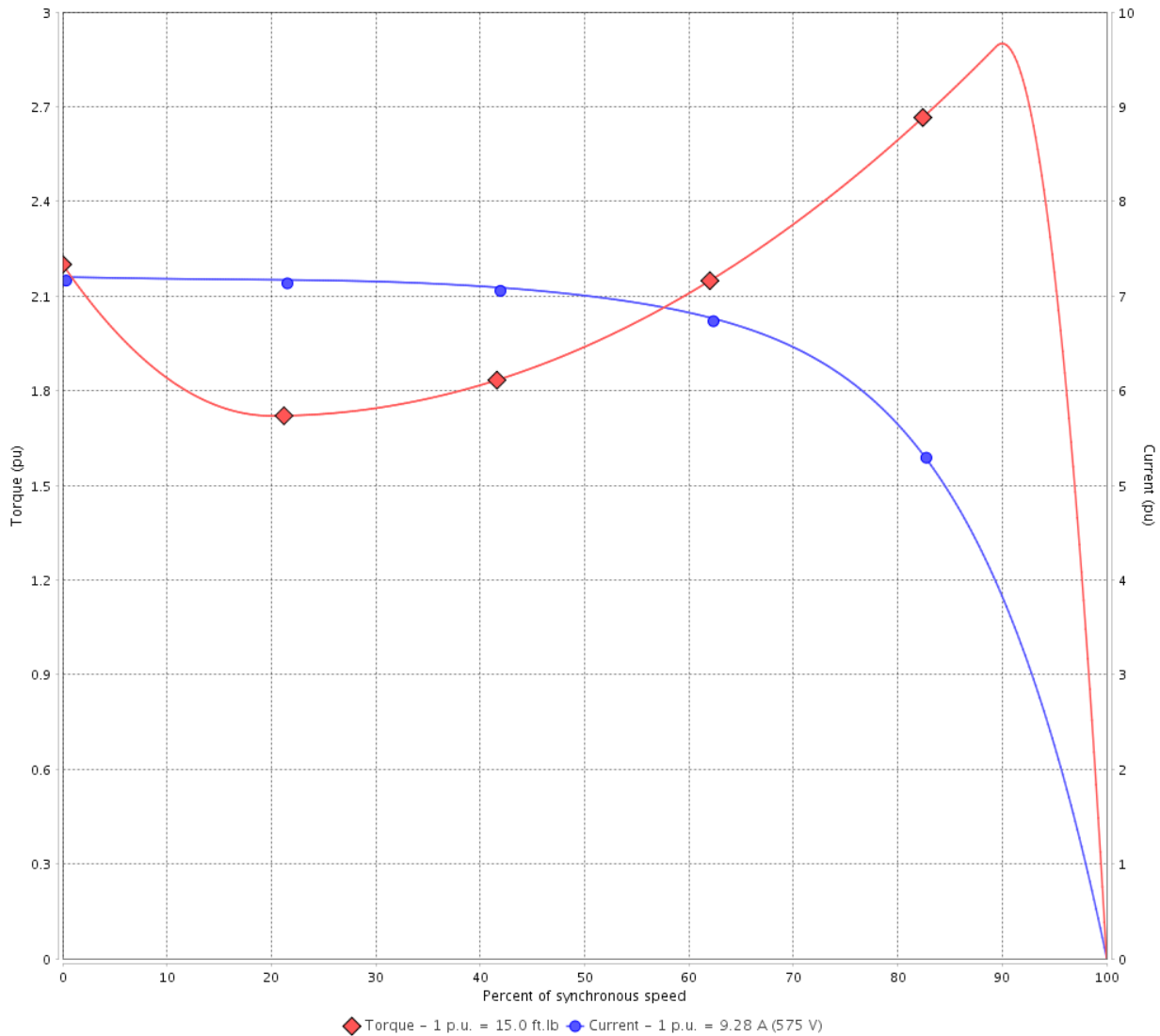
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431996

Catalog # : 01036ST3HIE215T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 9.28 A	Moment of inertia (J)	: 0.6362 sq.ft.lb
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3510 rpm	Design	: B

Locked rotor time : 43s (cold) 24s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

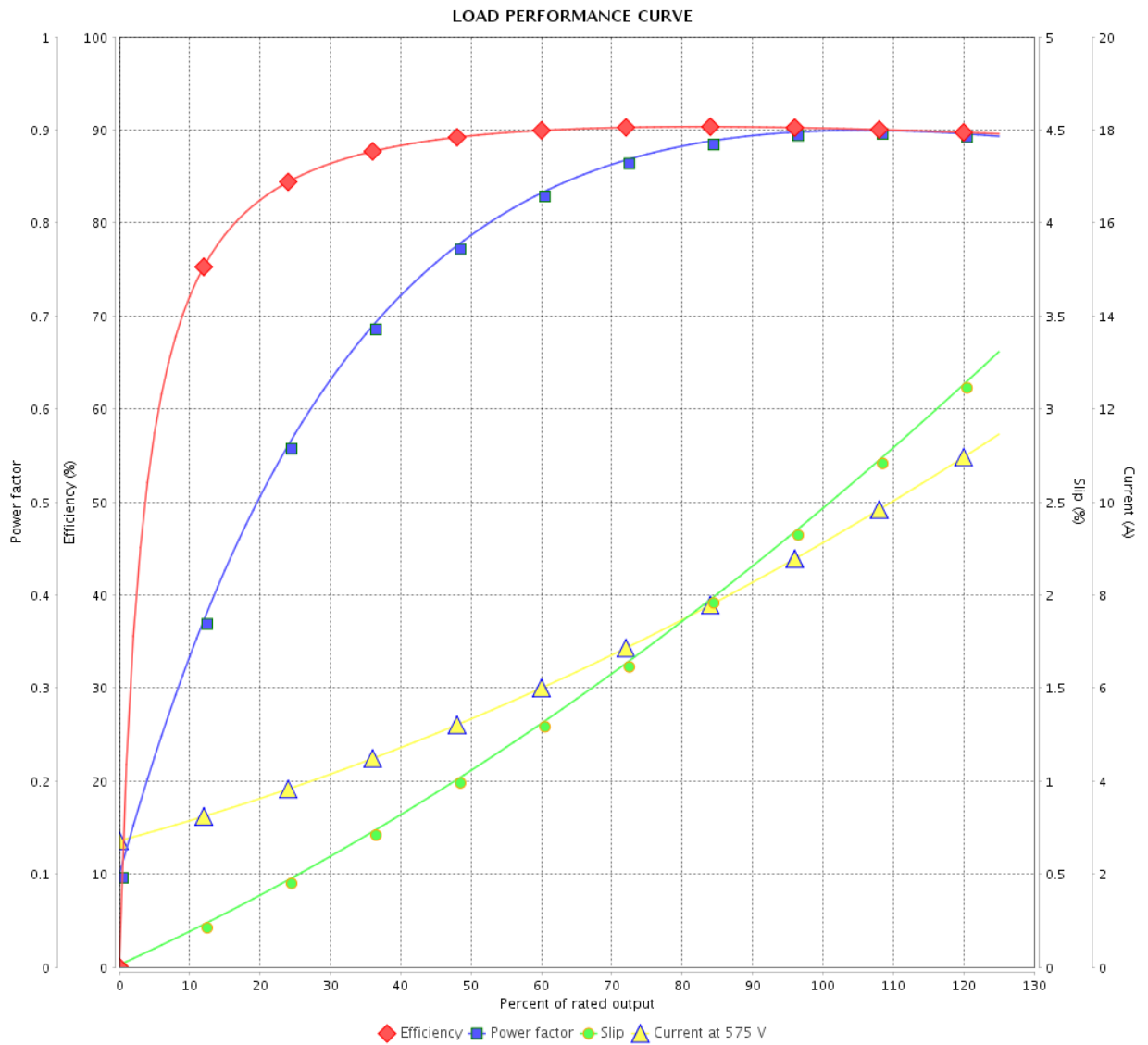


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Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431996

Catalog # : 01036ST3HIE215T-W22



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 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



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 Product code : 11431996  
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Performance : 575 V 60 Hz 2P

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LRC : 7.2	Duty cycle : Cont.(S1)
Rated torque : 15.0 ft.lb	Insulation class : F
Locked rotor torque : 220 %	Service factor : 1.25
Breakdown torque : 290 %	Temperature rise : 80 K
Rated speed : 3510 rpm	Design : B

Heating constant

Cooling constant

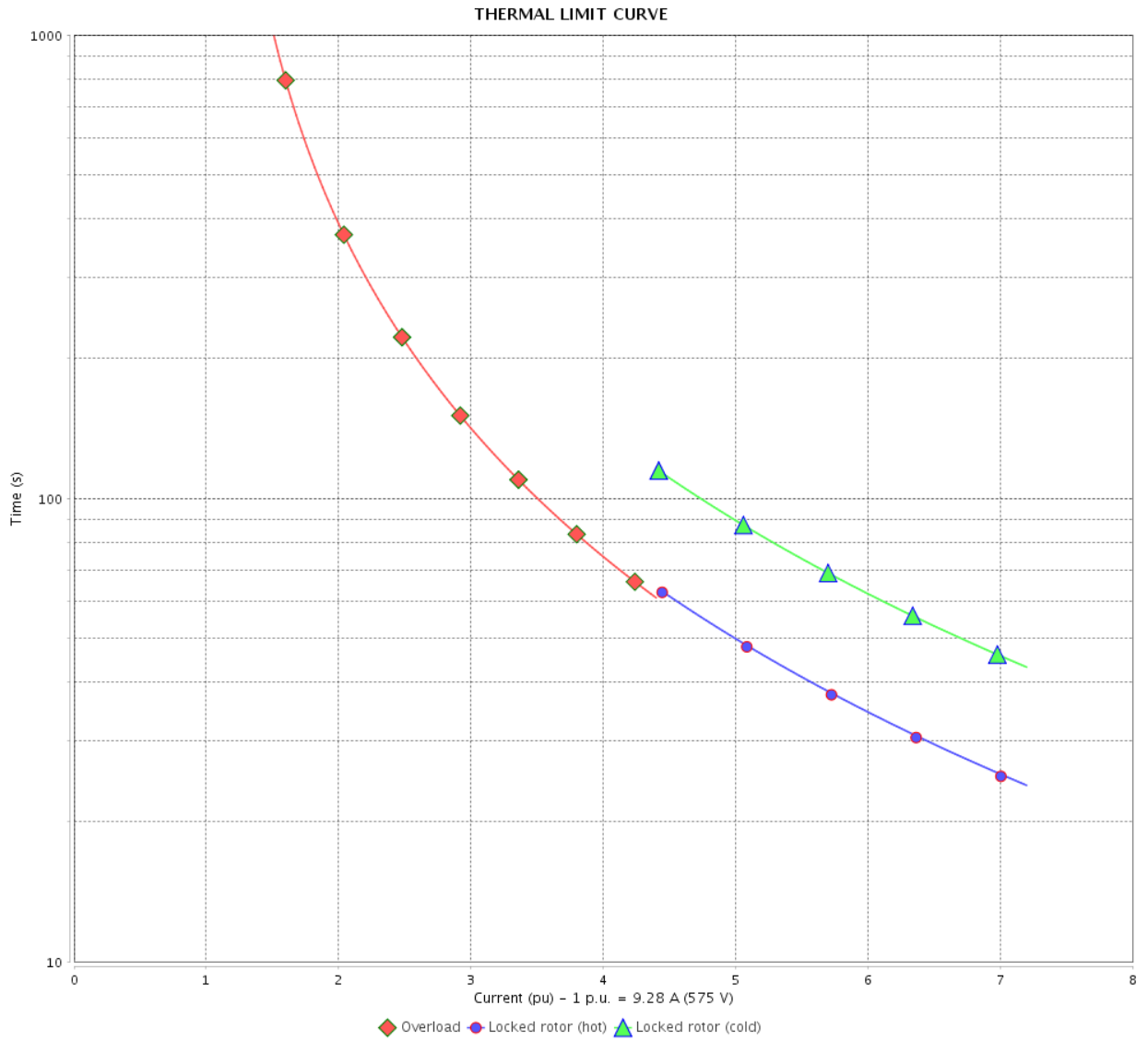
Rev.	Changes Summary	Performed	Checked	Date
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Rev.	Changes Summary	Performed	Checked	Date
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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



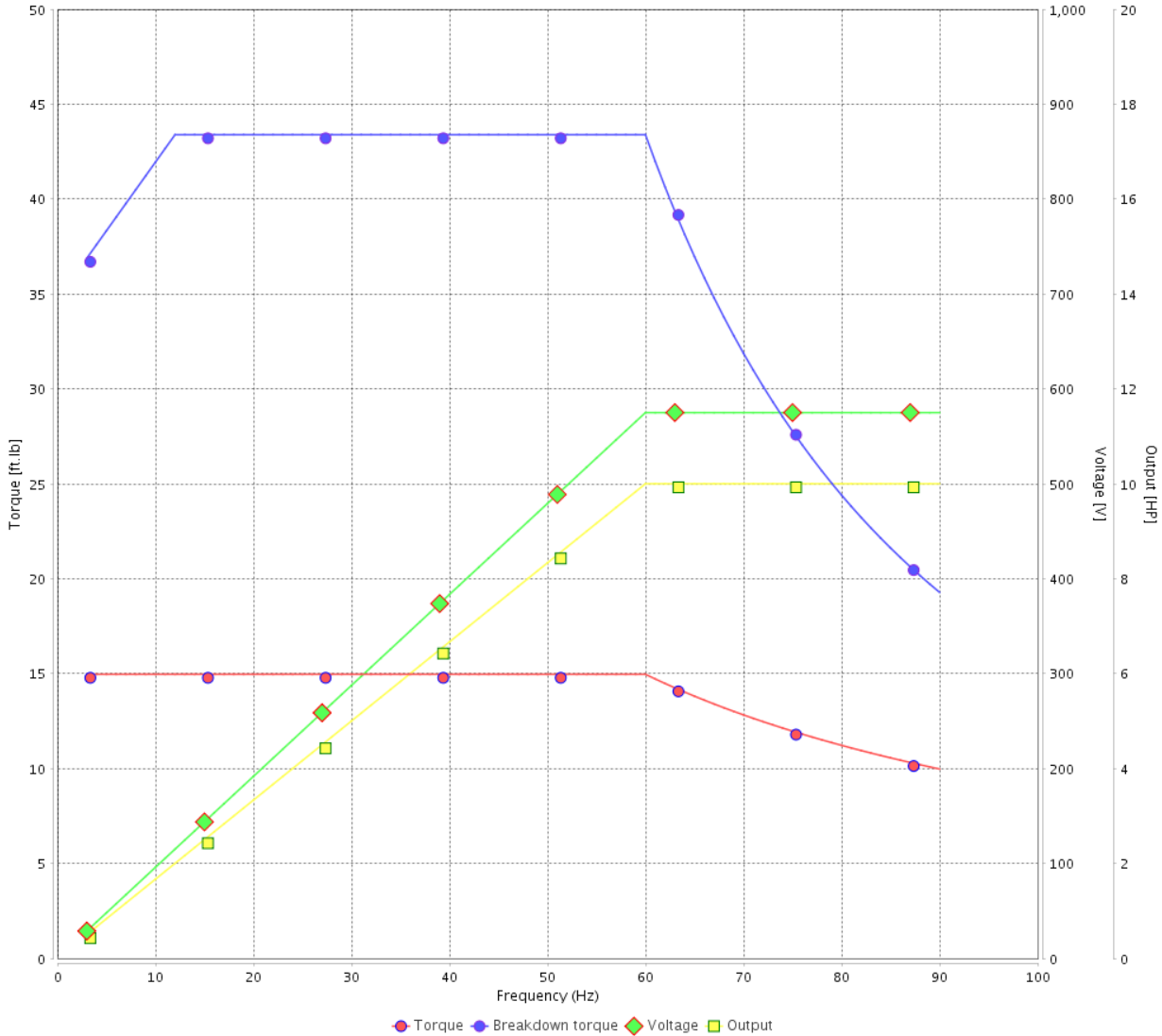
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Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431996

Catalog # : 01036ST3HIE215T-W22

VFD OPERATION CURVE



Performance : 575 V 60 Hz 2P

Rated current : 9.28 A  
 LRC : 7.2  
 Rated torque : 15.0 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 290 %  
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.6362 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
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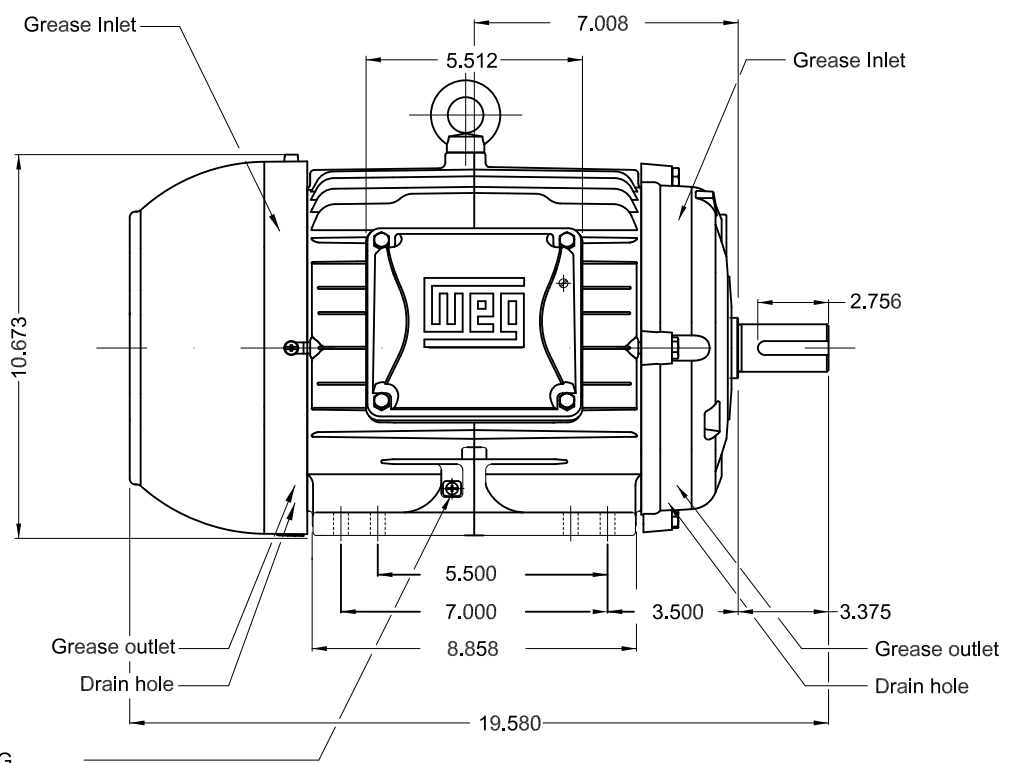
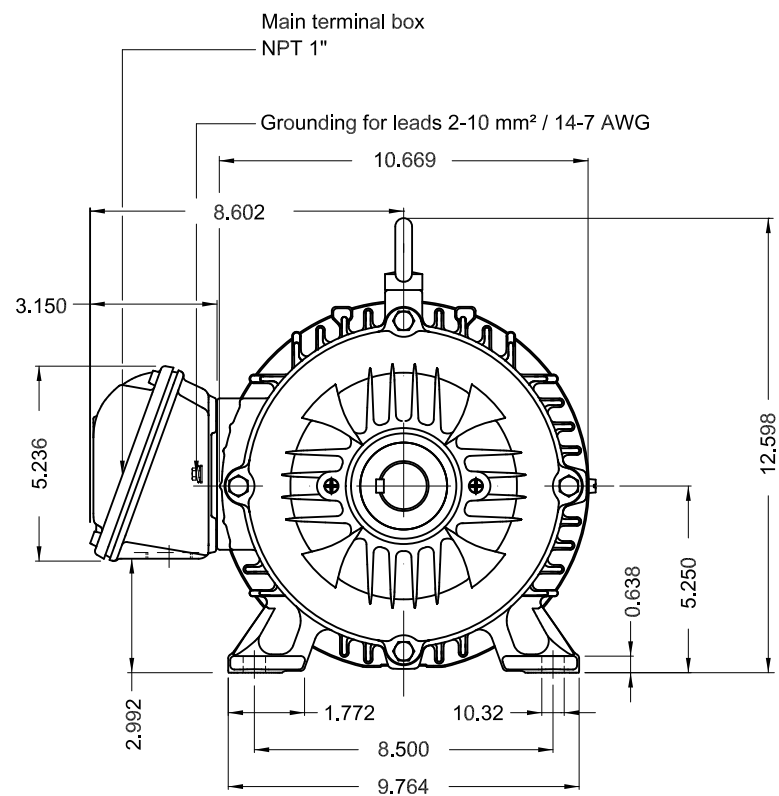
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1 2 3 4 5 6

A

B

C

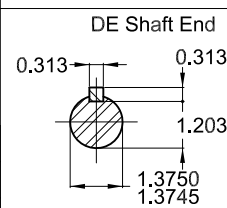


Grounding for leads 2-10 mm² / 14-7 AWG

D

E

Color RAL 5009  
 Painting plan 202E  
 Mounting B3R(D)



10 HP 02 Poles 60 Hz

A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF.					
CHECKED		FRAME 213/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW  
 WDD



SHEET 1 / 1

Dimensions in inches XME A3

MADE IN BRAZIL  
11431996



**NEMA**  
**Premium**



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 - T4  
For use on PWM: Gr. A, B, C, D and F,  
VT 1000:1, CT 20:1, 1.00SF - T3A

MODEL 01036ST3HIE215T-W22

Inverter Duty Motor  
Severe Duty

**IEEE**  
**841-2009**



3PT9  
**LISTED**

FOR SAFE AREA  
Mod. TE1BFOXON  
CC029A

PH3 60Hz Fr. 213/5T 1000m.a.s.l. IP55 TEFC 167lb

V 575

A 9.28

HP 10

kW 7.5

SF 1.25

SFA 11.6

RPM 3520

PF 0.90

AMB 40°C

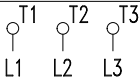
INS cl. F DT80K

NEMA NOM EFF 90.2%

DUTY CONT.

DES B Code H

GUARANT. EFF 88.5%



→ 6308-C3 (11g) 40BC03X30

→ 6207-C3 (7g) 35BC02X30

MOBIL POLYREX EM (20000h)

