

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line		: NEMA Premium Efficiency Three-Phase		Product code :	12447100	
				Catalog # :	02518ET3H284T-W22	
Frame	: 284/6T		Locked rotor time	: 43s (cold) 24s (hot)		
Output	: 25 HP (18.5 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	: 23.6 A		Protection degree	: IP55		
L. R. Amperes	: 146 A		Cooling method	: IC411 - TEFC		
LRC	: 6.2x(Code G)		Mounting	: F-1		
No load current	: 8.40 A		Rotation ¹	: Both (CW and CCW)		
Rated speed	: 1765 rpm		Noise level ²	: 63.0 dB(A)		
Slip	: 1.94 %		Starting method	: Direct On Line		
Rated torque	: 74.4 ft.lb		Approx. weight ³	: 427 lb		
Locked rotor torque	: 240 %					
Breakdown torque	: 270 %					
Insulation class	: F					
Service factor	: 1.25					
Moment of inertia (J)	: 5.11 sq.ft.lb					
Design	: B					
Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	91.7	92.4	93.0	93.6	Max. traction : 662 lb	
Power Factor	0.46	0.70	0.80	0.84	Max. compression : 1089 lb	
		<u>Drive end</u>		<u>Non drive end</u>		
Bearing type	:	6311 C3		6211 C3		
Sealing	:	V'Ring		V'Ring		
Lubrication interval	:	20000 h		20000 h		
Lubricant amount	:	18 g		11 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



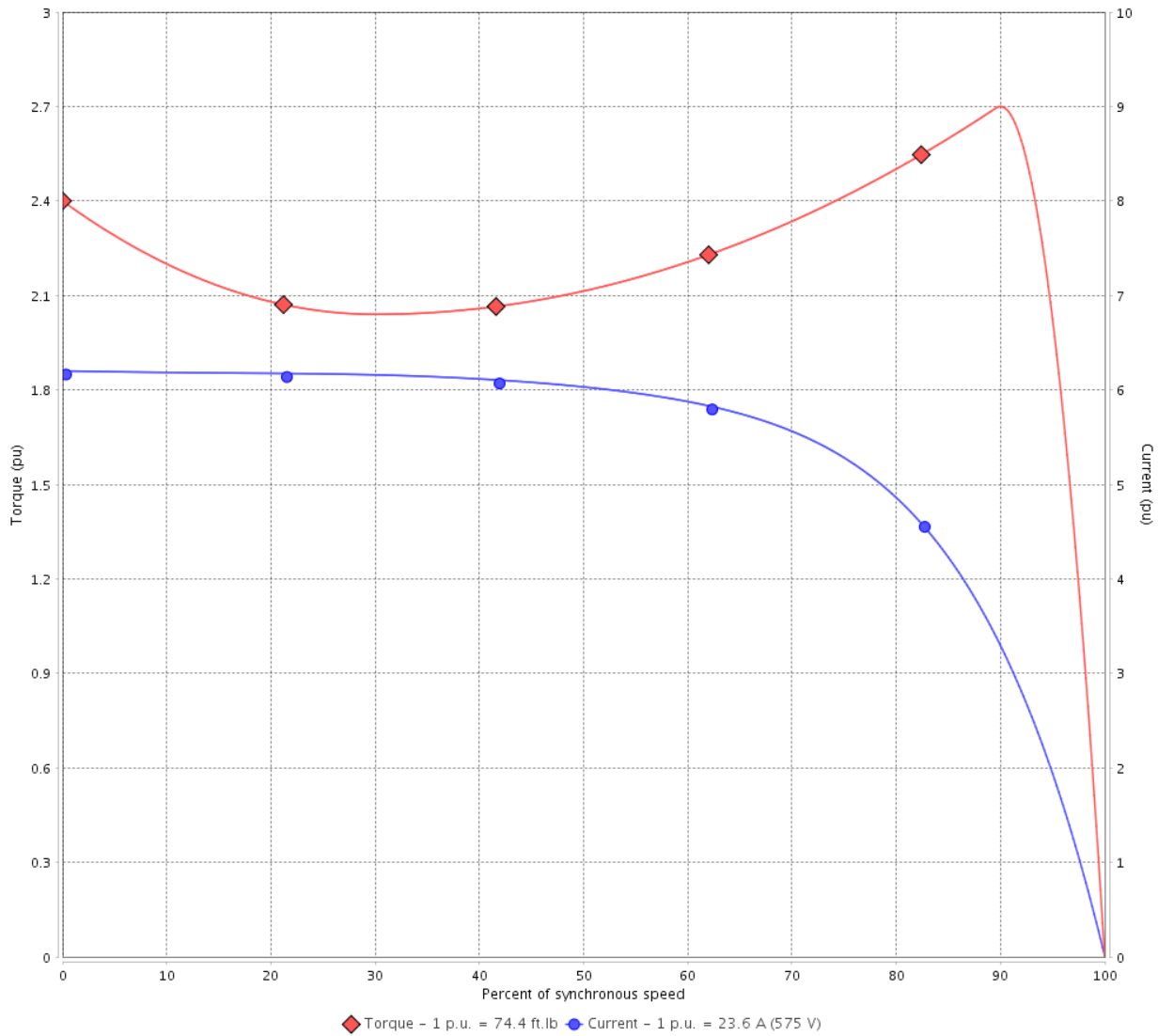
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447100

Catalog # : 02518ET3H284T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 23.6 A	Moment of inertia (J)	: 5.11 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 74.4 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

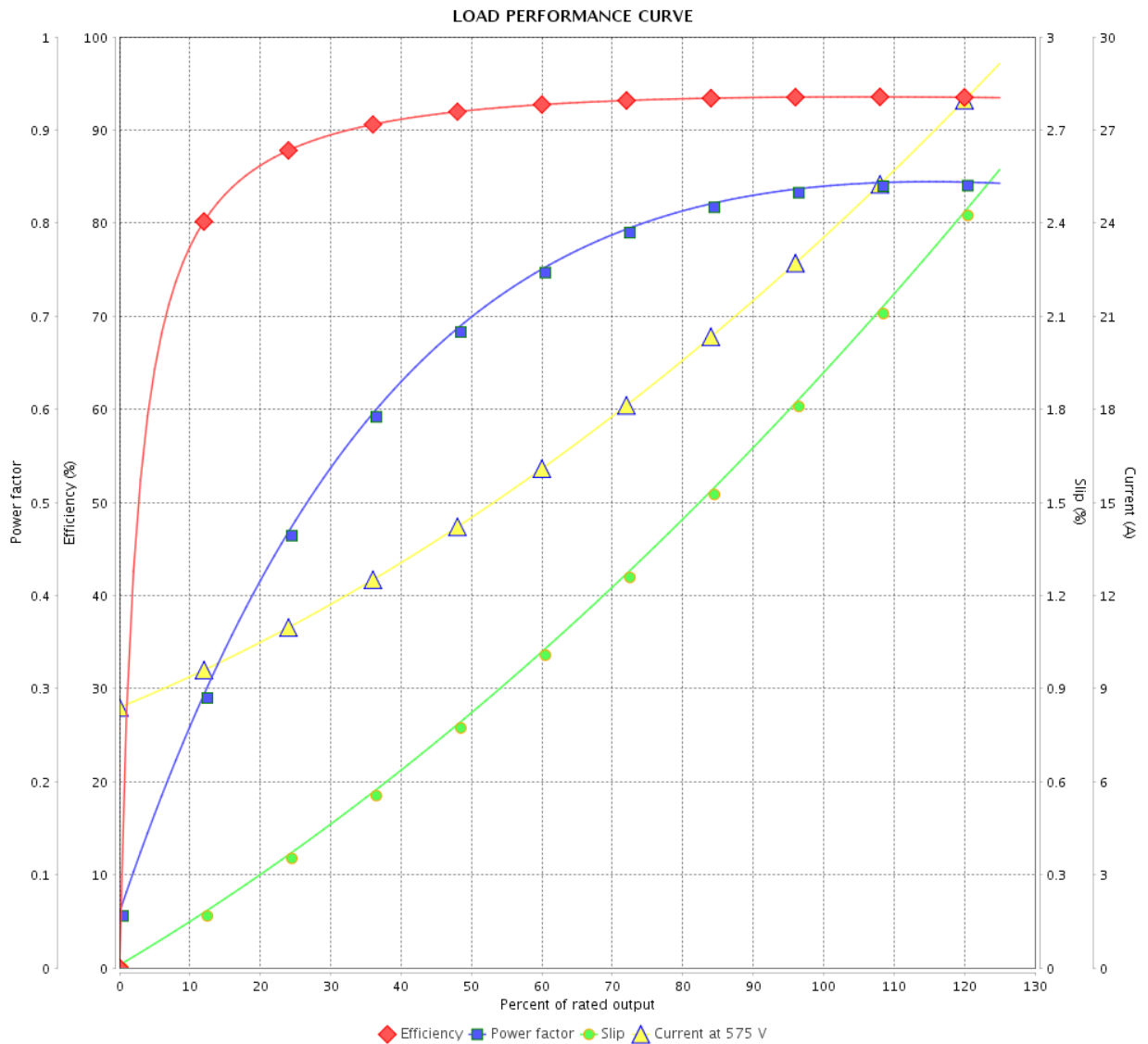


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Performance : 575 V 60 Hz 4P

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 Breakdown torque : 270 %
 Rated speed : 1765 rpm

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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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Rated torque	: 74.4 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Heating constant

Cooling constant

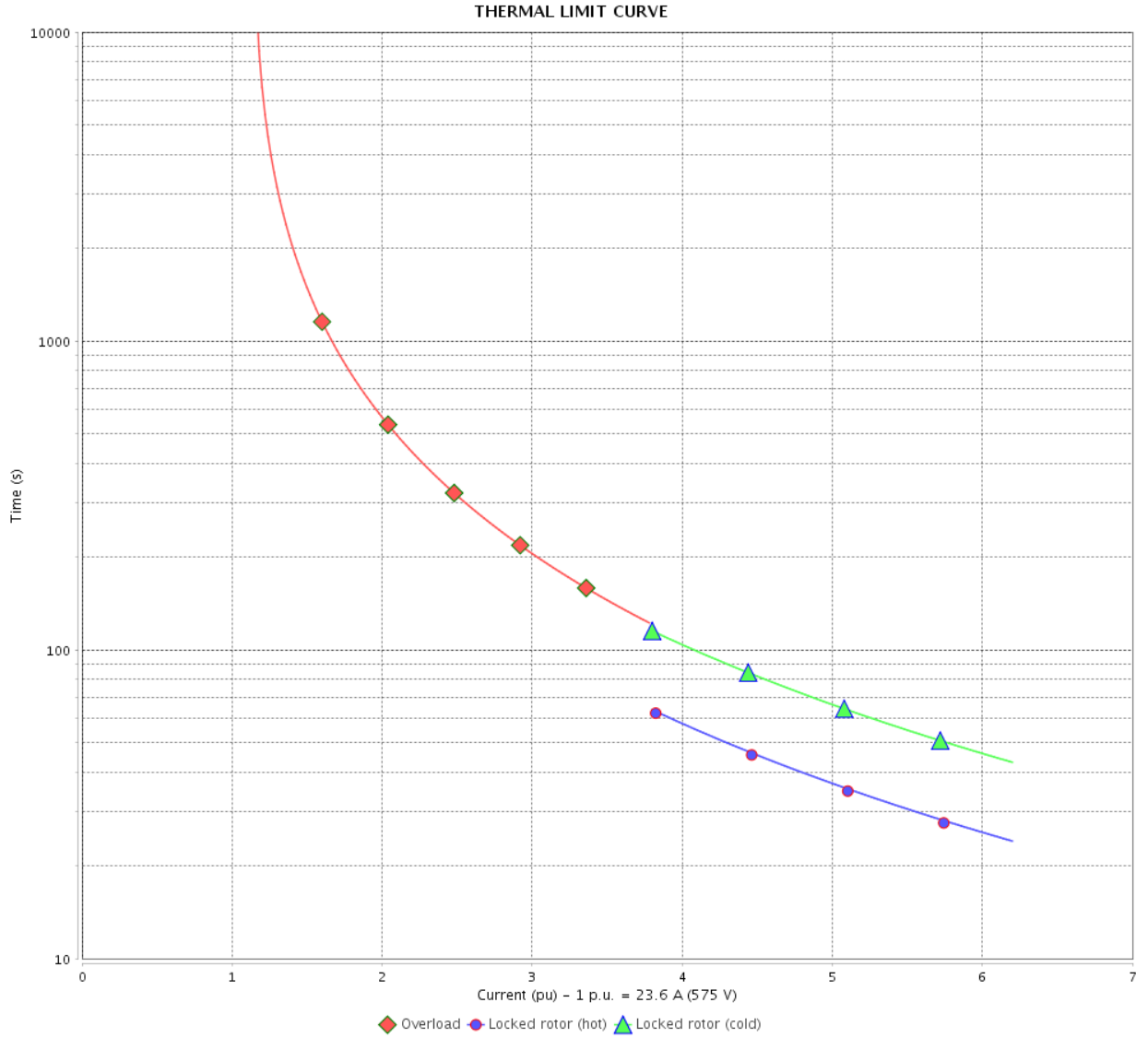
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

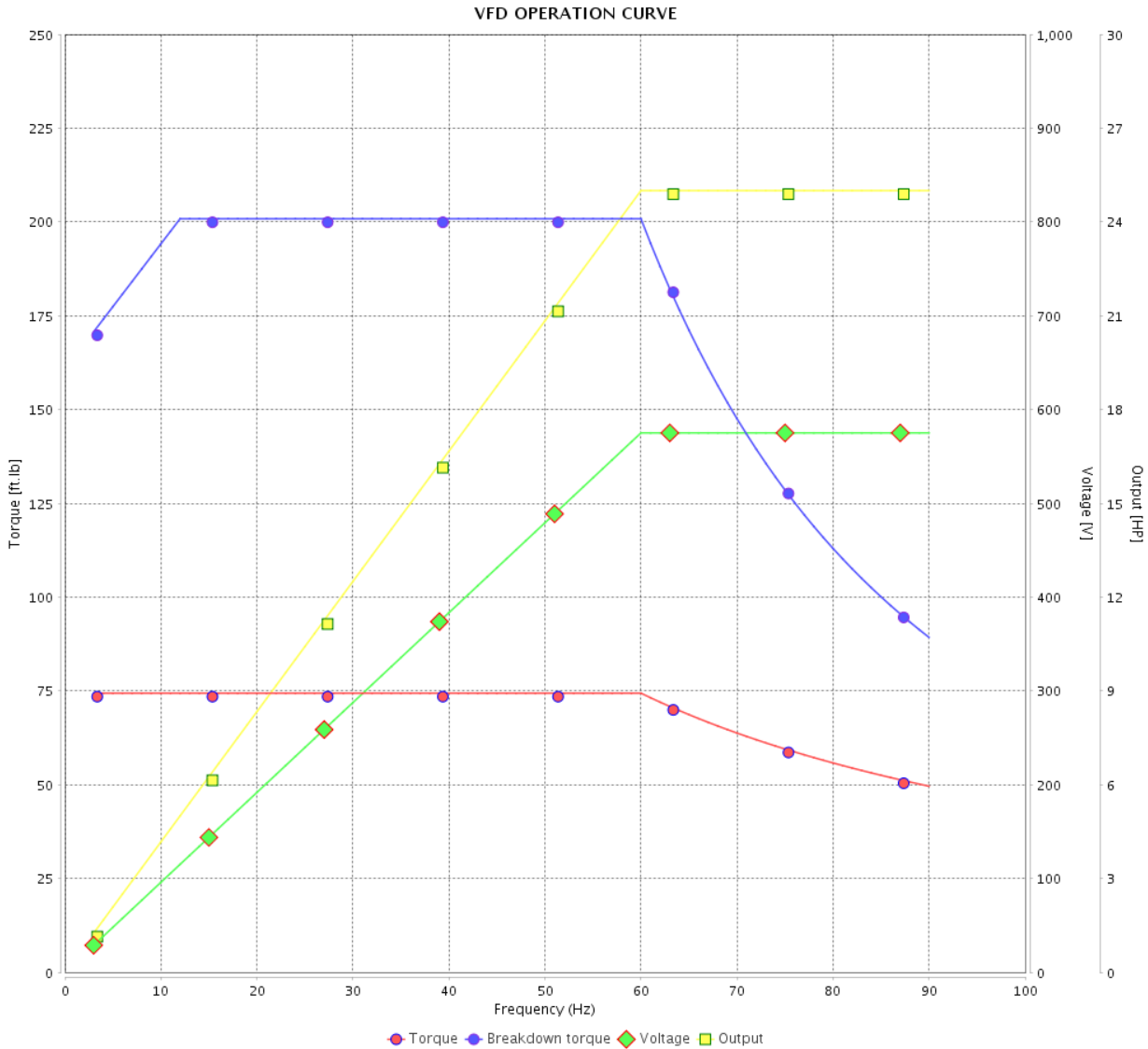


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 Service factor : 1.25
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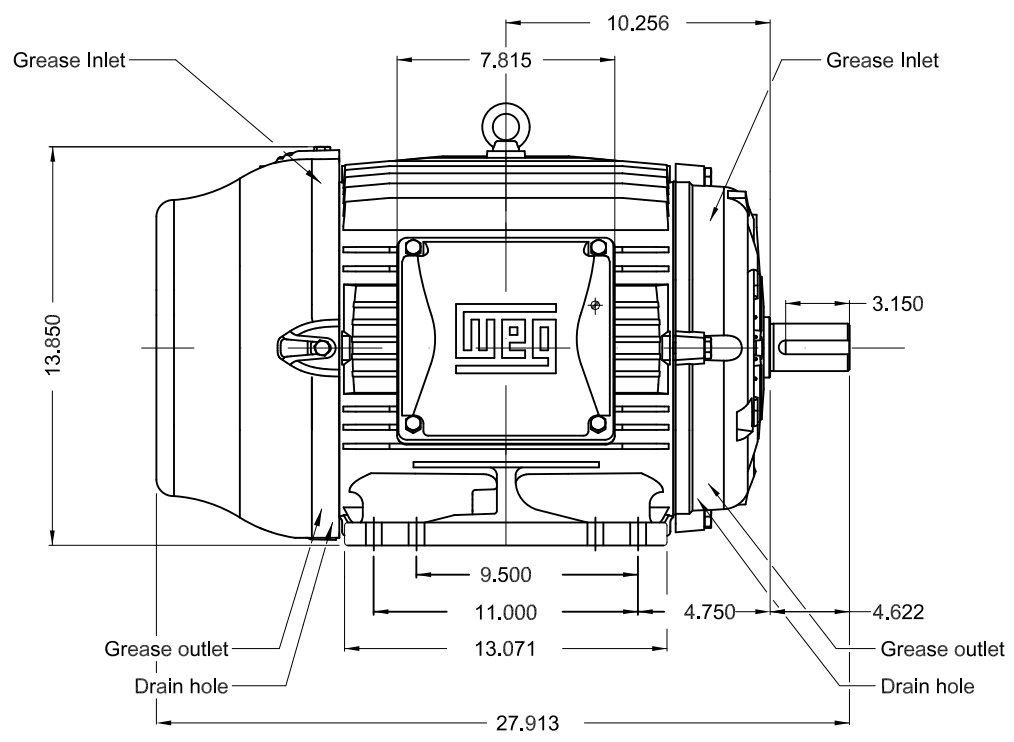
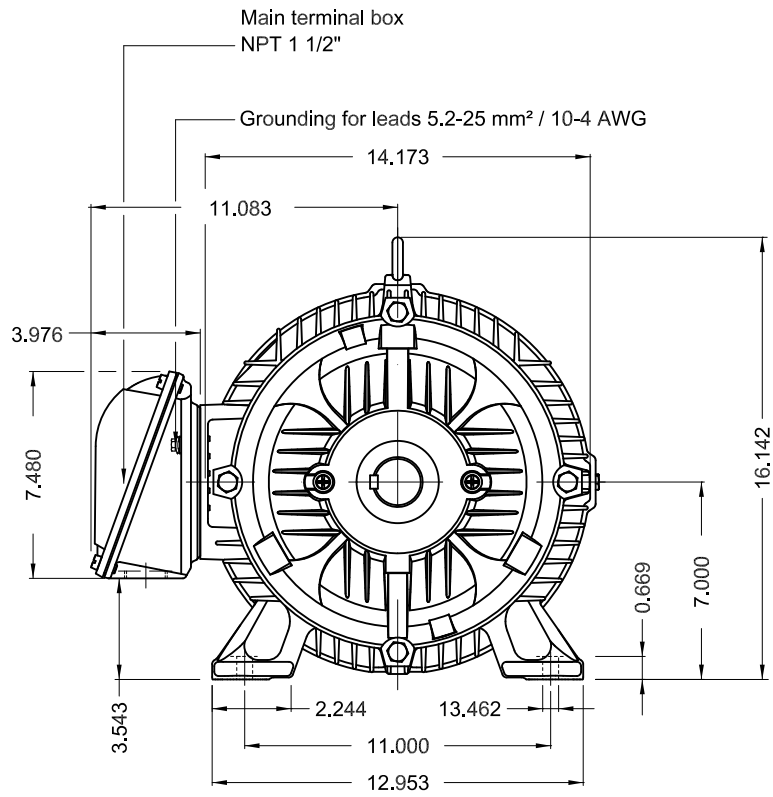
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1 2 3 4 5 6

A

B

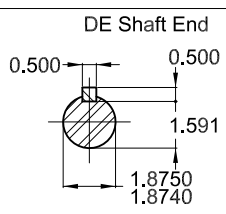
C



D

E

Color RAL 5009
 Painting plan 203A
 Mounting B3R(D)



25 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 284/6T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
 WDD

