

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12712153																		
Catalog # :	02518ET3H284JM-W22																		
Frame : 284/6JM Output : 25 HP (18.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 23.6 A L. R. Amperes : 146 A LRC : 6.2x(Code G) No load current : 8.40 A Rated speed : 1765 rpm Slip : 1.94 % Rated torque : 74.4 ft.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	Locked rotor time : 43s (cold) 24s (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 ¹ : Both (CW and CCW) Noise level ² : 63.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 439 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	91.7 92.4 93.0 93.6																		
Power Factor	0.46 0.70 0.80 0.84																		
Foundation loads																			
Max. traction : 656 lb																			
Max. compression : 1095 lb																			
	<table border="0"> <tr> <td></td> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type :</td> <td>6311 C3</td> <td>6211 C3</td> </tr> <tr> <td>Sealing :</td> <td>V'Ring</td> <td>V'Ring</td> </tr> <tr> <td>Lubrication interval :</td> <td>20000 h</td> <td>20000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td>18 g</td> <td>11 g</td> </tr> <tr> <td>Lubricant type :</td> <td colspan="2" style="text-align: center;">Mobil Polyrex EM</td> </tr> </table>		<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	
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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.																			
Rev.	Changes Summary	Performed	Checked	Date															
Performed by																			
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



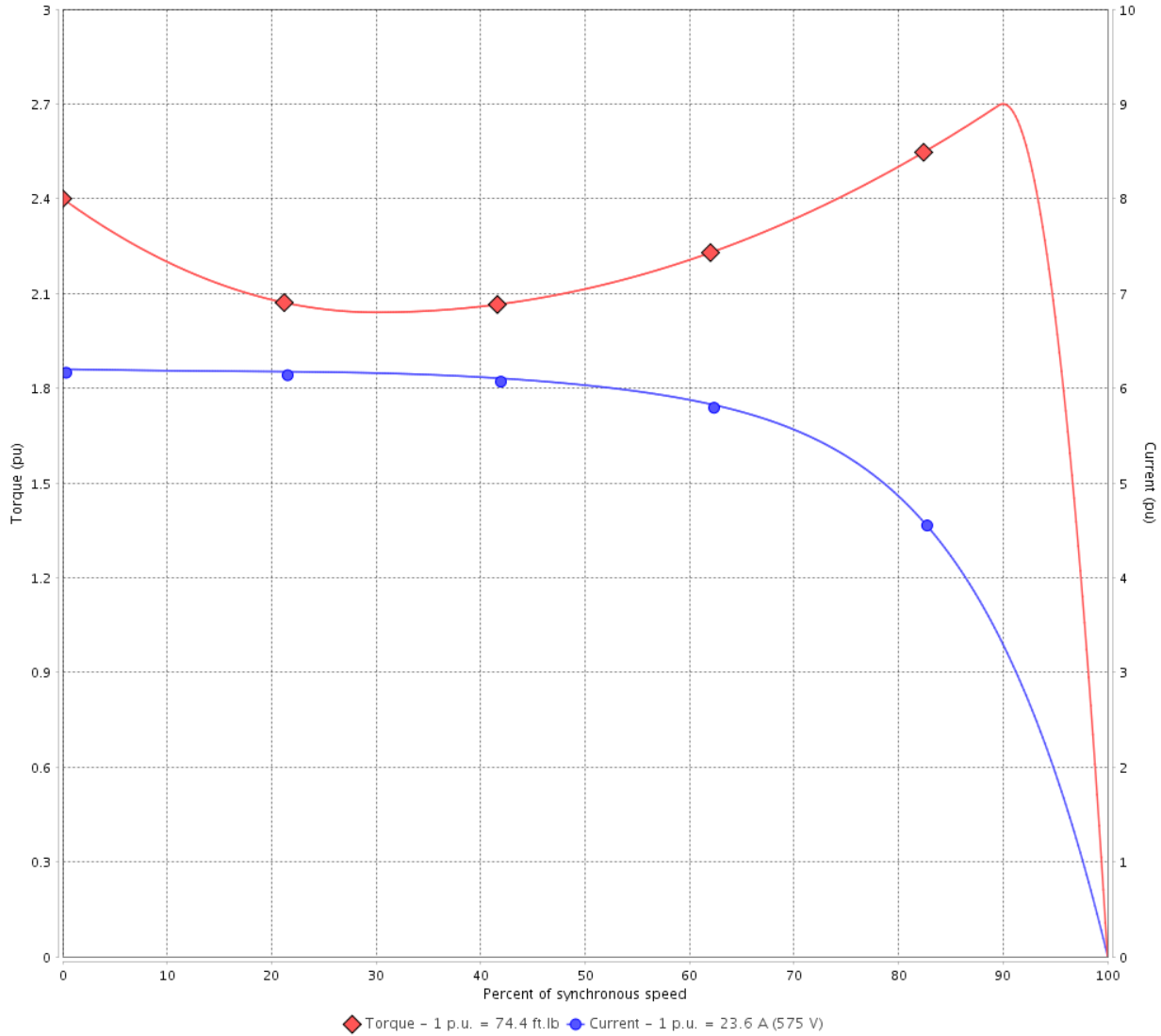
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12712153

Catalog # : 02518ET3H284JM-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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Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

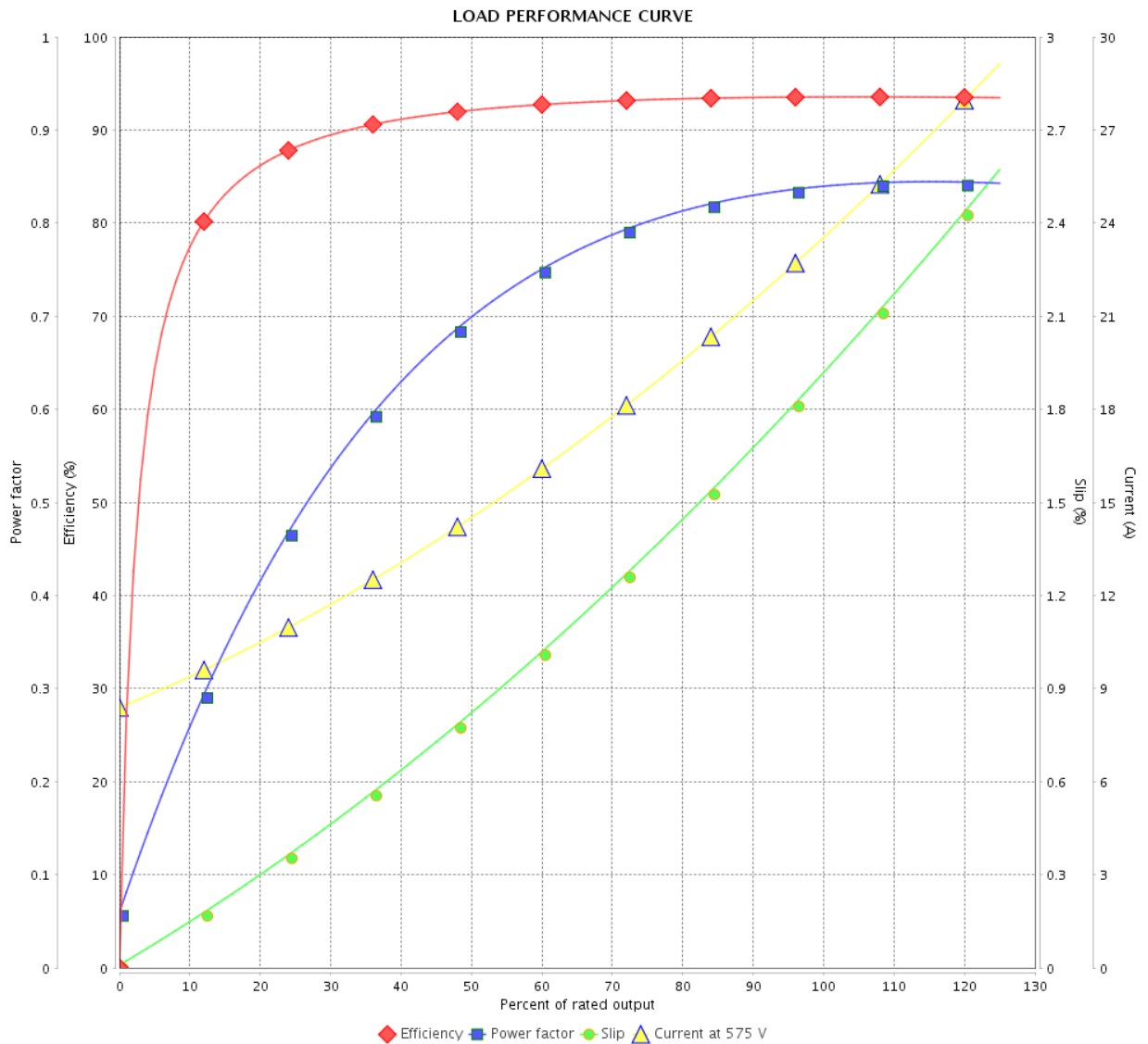


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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

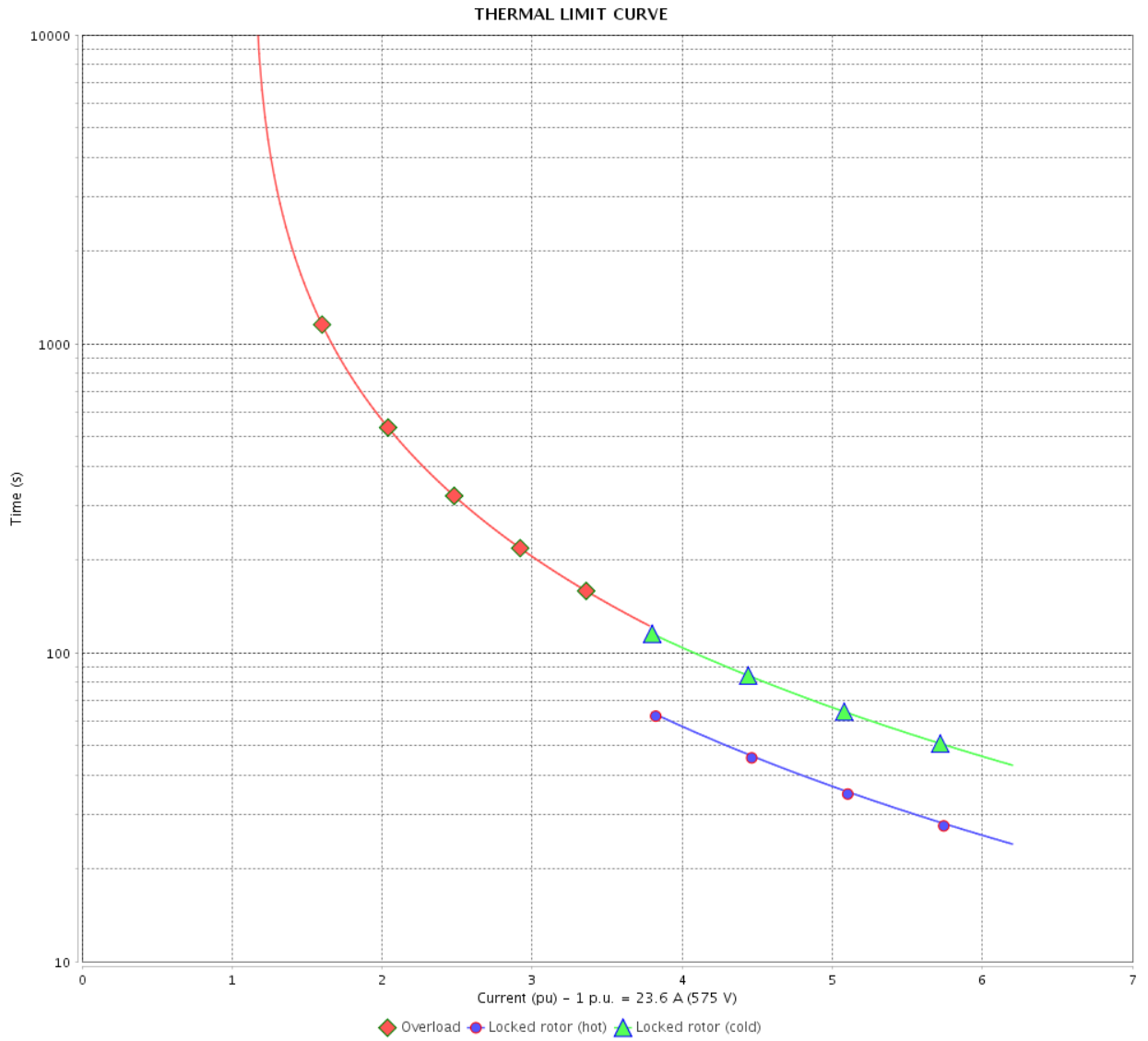
Rev.	Changes Summary	Performed	Checked	Date
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

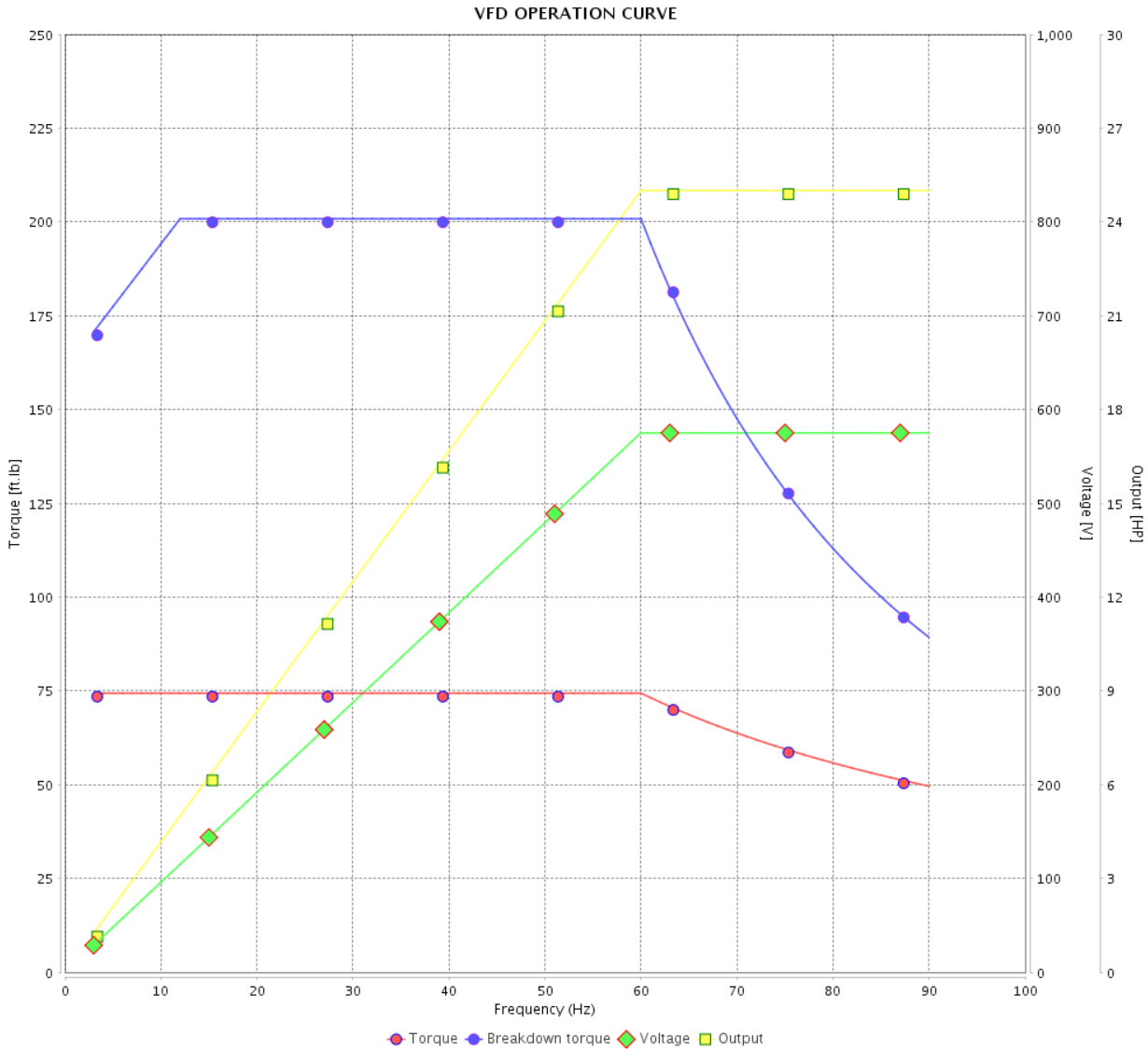


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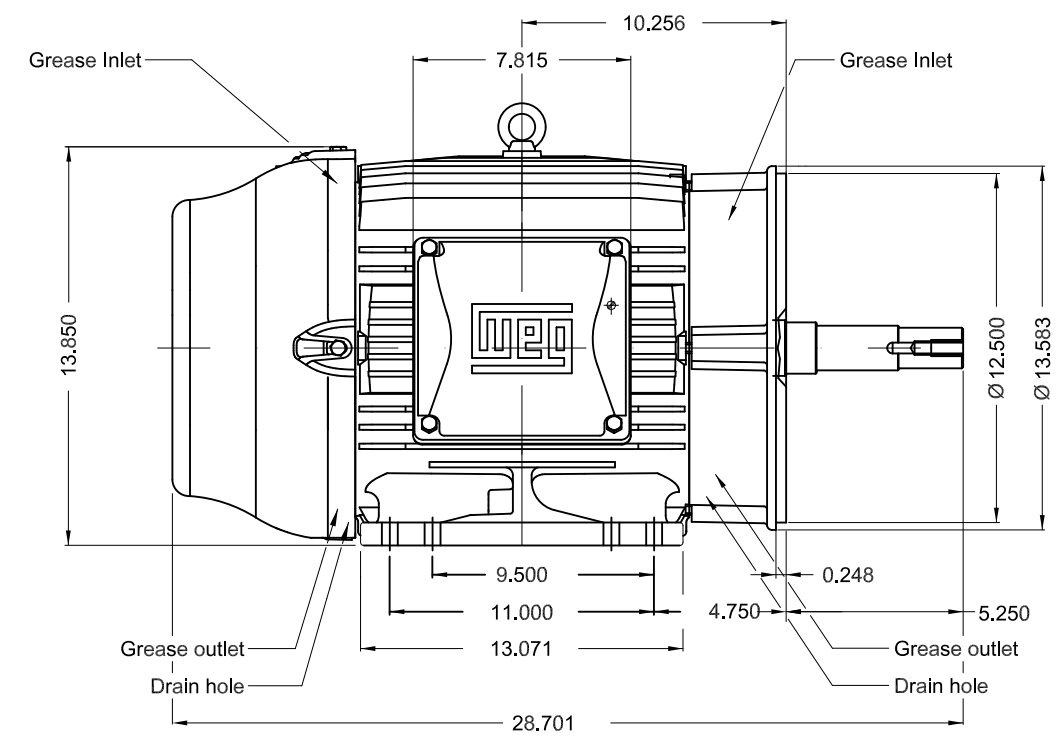
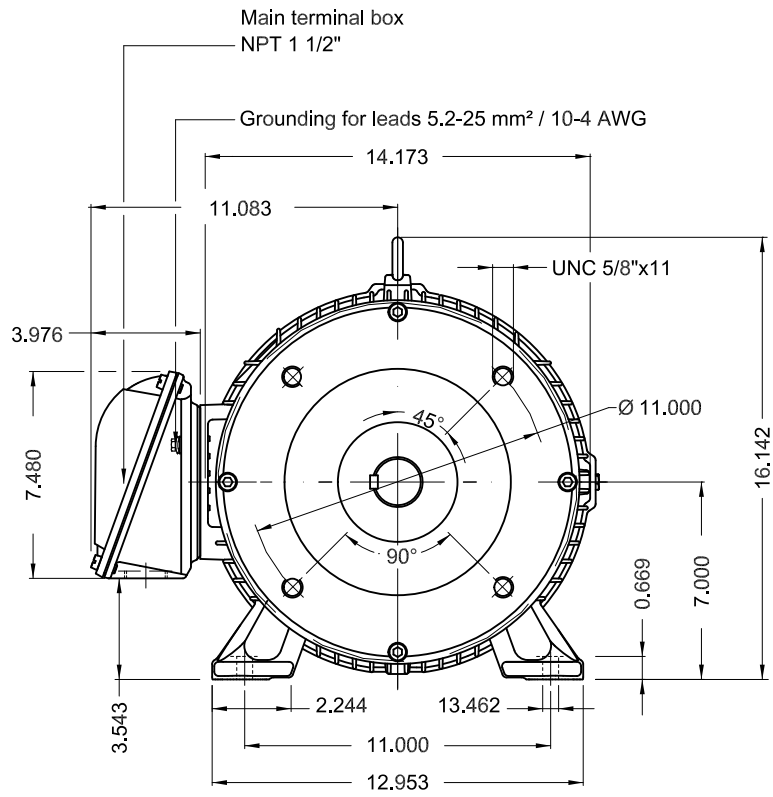
Rev.	Changes Summary	Performed	Checked	Date
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Date	14/04/2022			

1 2 3 4 5 6

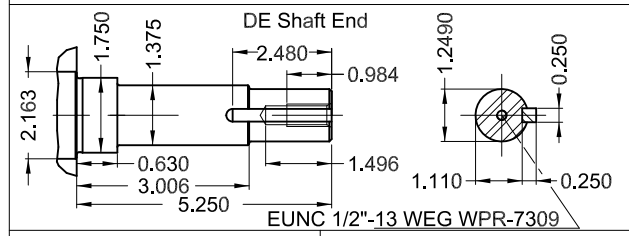
A

B

C



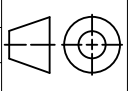
D



E

Color RAL 5009
 Painting plan 203A
 Mounting NEMA F-1
 Mounting B34R(D)

25 HP 04 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PH. MOTOR JM/JP/JET PUMP W22 PREM. EFF. FRAME 284/6JM IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

PREVIEW
 WDD





*Inverter Duty Motor
Severe Duty*



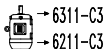
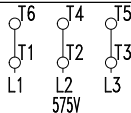
FOR SAFE AREA
MOD.TE1BFOXON



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, 1.0SF, T3A

JM025504NPW22
MADE IN BRAZIL
12712153

PH 3	FR 284/6JM	HP(kW) 25(18.5)		Hz 60
V 575		A 23.6		IP55
NEMA NOM EFF		93.6	%	RPM 1770
ENCL TEFC	DUTY CONT.		INS. CL. F ΔT 80 K	
PF 0.84		DES B	CODE G	AMB. 40°C
SF 1.25	SFA 29.5		ALT 1000 m.a.s.l.	



→ 6311-C3
→ 6211-C3

MOBIL POLYREX EM
18 g 20000 h

410 Lbs