

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12603171																		
Catalog # :	00736ST3HIE213T-W22																		
Frame : 213/5T Output : 7.5 HP (5.5 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 7.01 A L. R. Amperes : 50.5 A LRC : 7.2x(Code H) No load current : 2.16 A Rated speed : 3520 rpm Slip : 2.22 % Rated torque : 11.2 ft.lb Locked rotor torque : 210 % Breakdown torque : 300 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.4665 sq.ft.lb Design : B	Locked rotor time : 39s (cold) 22s (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 : 68.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 156 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	87.2 87.5 89.5 89.5																		
Power Factor	0.52 0.75 0.84 0.88																		
Foundation loads																			
Max. traction	: 111 lb																		
Max. compression	: 267 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>: 6308 C3</td> <td>6207 C3</td> </tr> <tr> <td>Sealing</td> <td>: Inpro/Seal</td> <td>Inpro/Seal</td> </tr> <tr> <td>Lubrication interval</td> <td>: 20000 h</td> <td>20000 h</td> </tr> <tr> <td>Lubricant amount</td> <td>: 11 g</td> <td>7 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	: 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	
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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



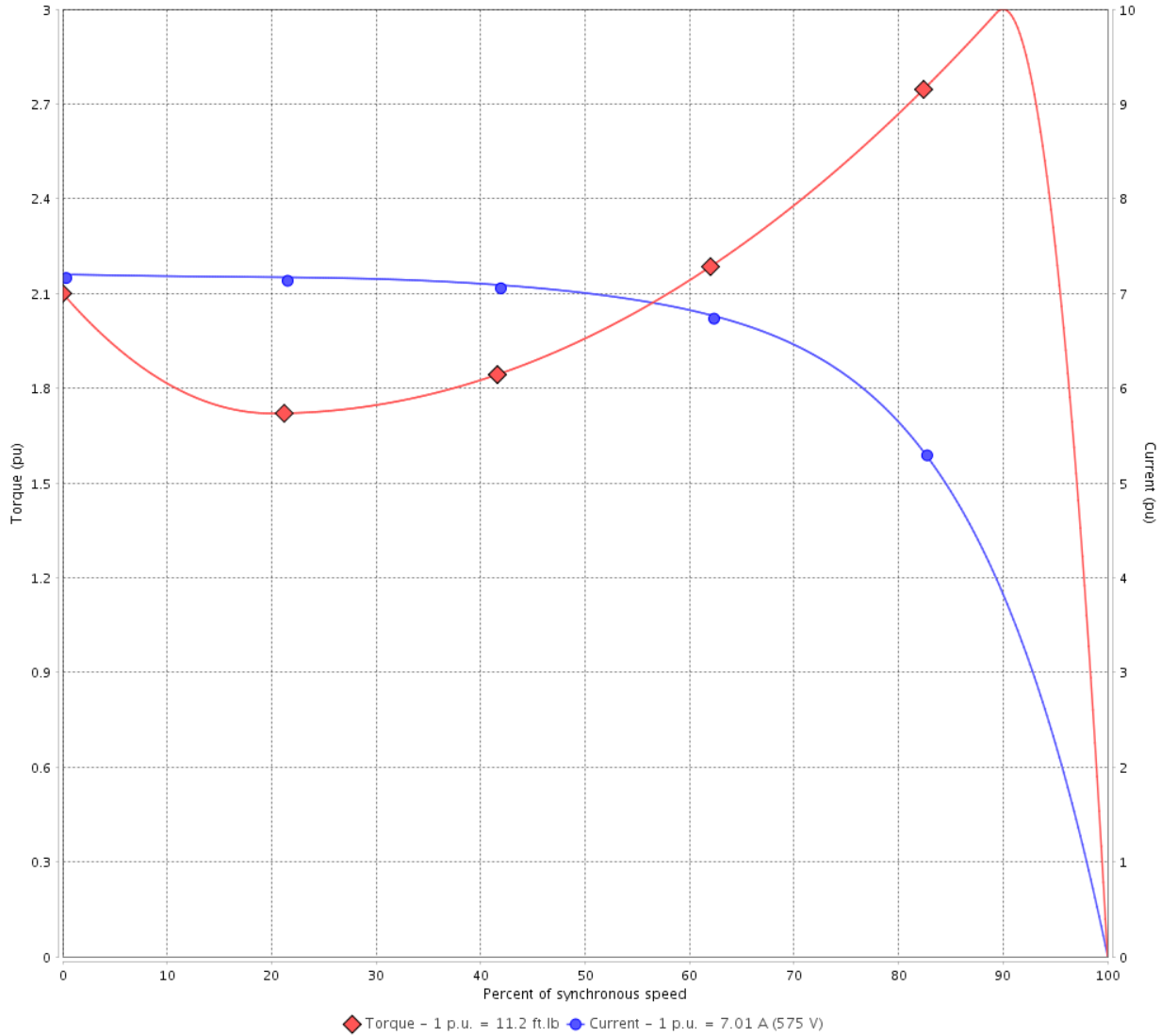
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 7.01 A	Moment of inertia (J)	: 0.4665 sq.ft.lb
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 11.2 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3520 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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Date	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

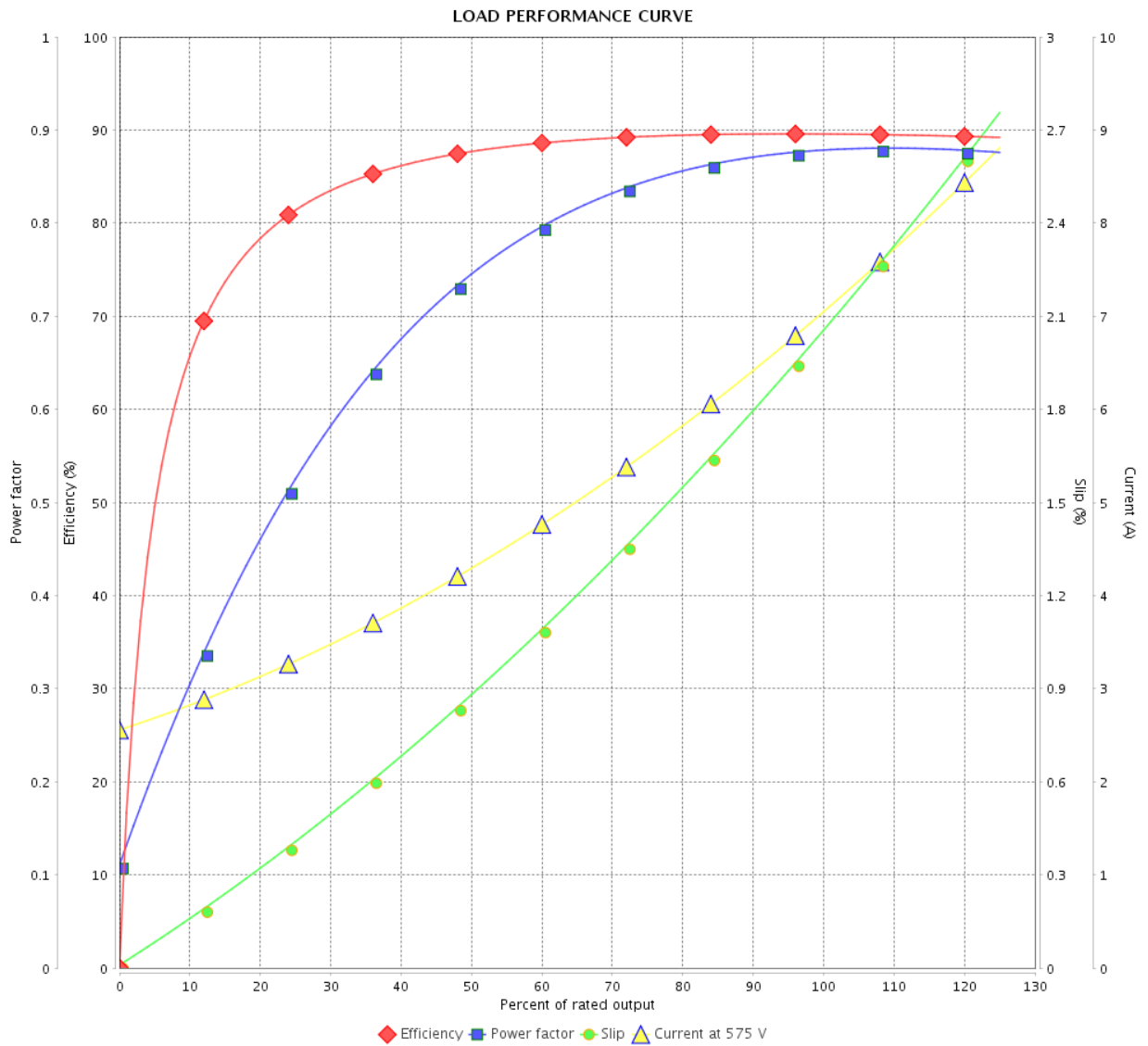


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THERMAL LIMIT CURVE

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Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

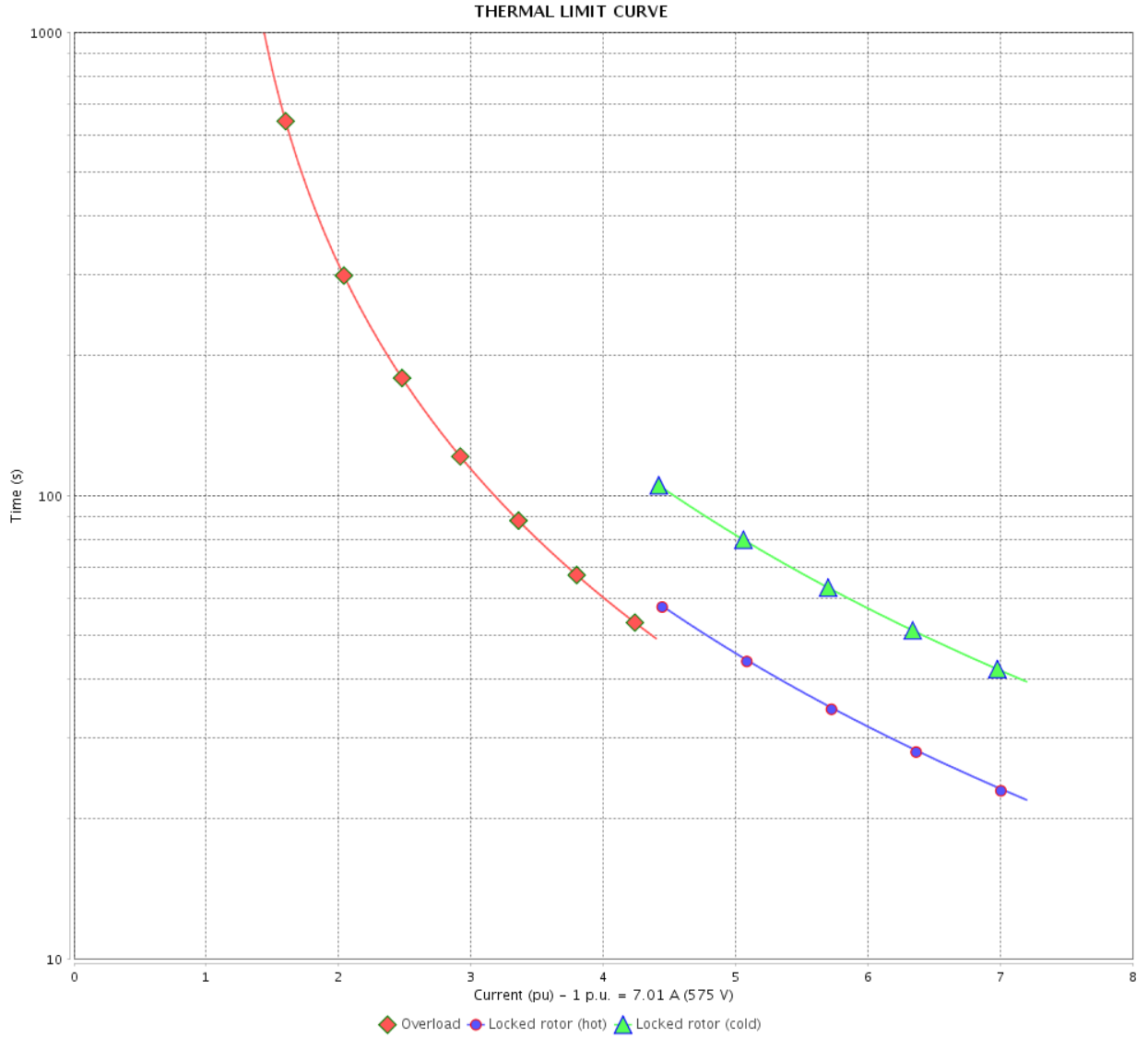
Rev.	Changes Summary	Performed	Checked	Date
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



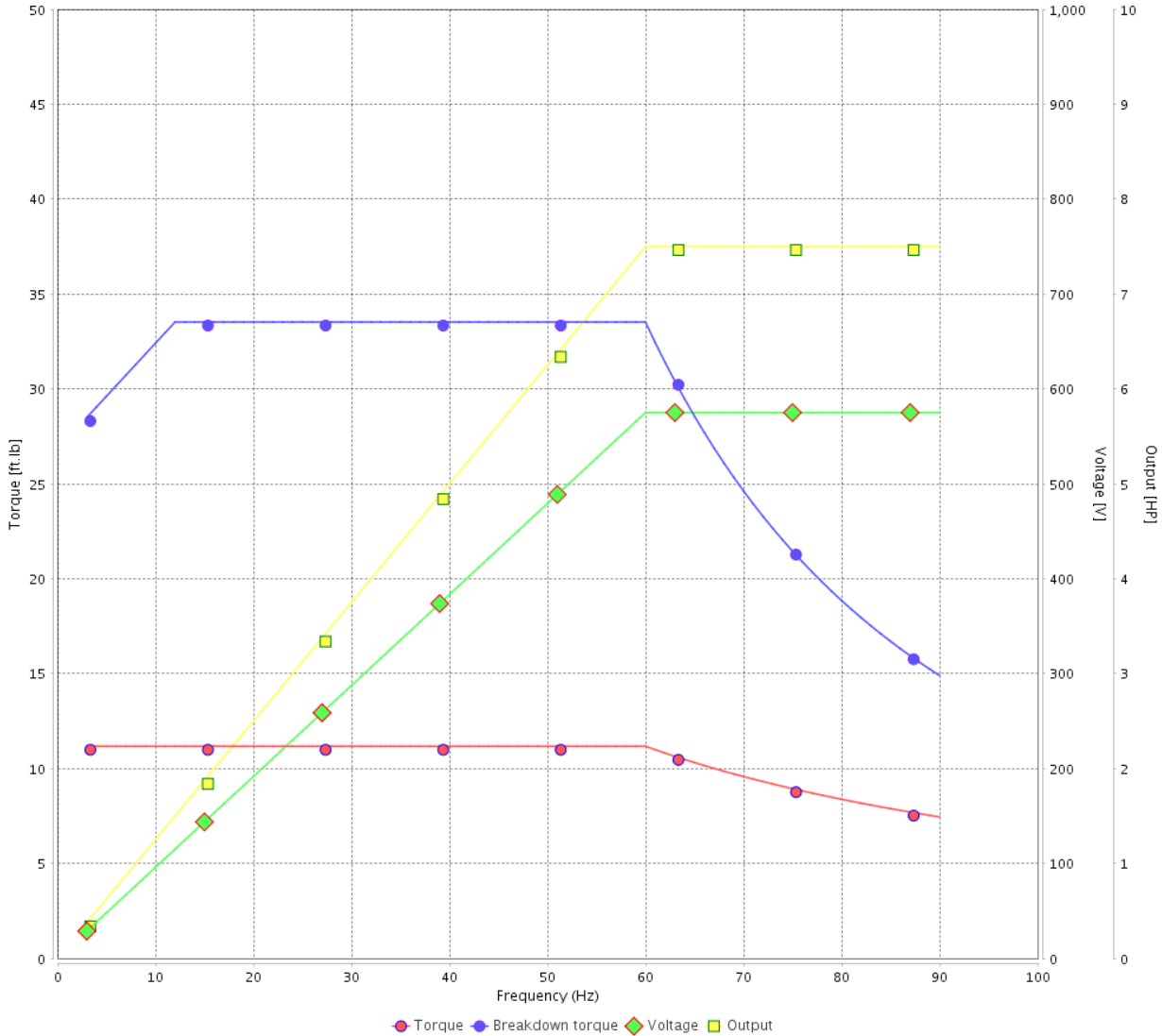
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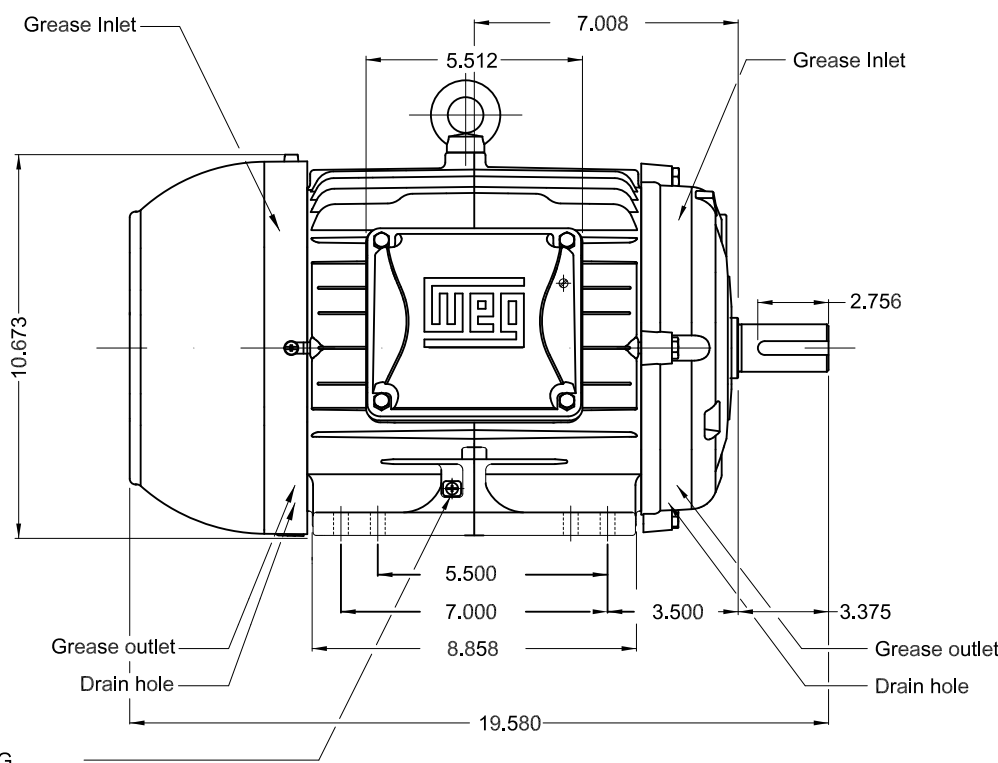
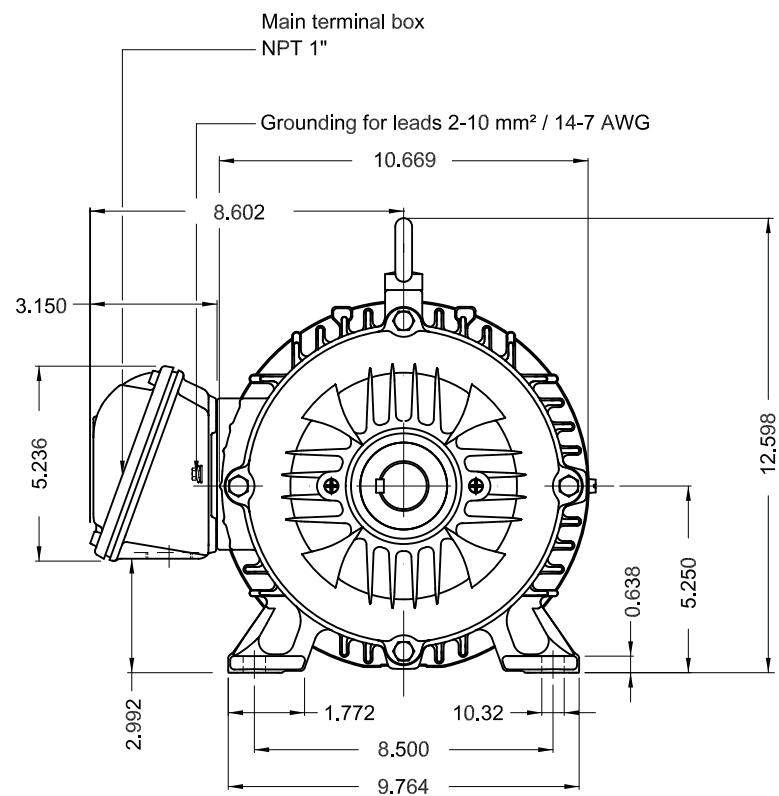
Rev.	Changes Summary	Performed	Checked	Date
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1 2 3 4 5 6

A

B

C

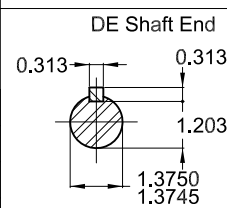


Grounding for leads 2-10 mm² / 14-7 AWG

D

E

Color RAL 5009
 Painting plan 202E
 Mounting NEMA F-1
 Mounting B3R(D)



7.5 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	SHEET	1 / 1		

PREVIEW
 WDD



MADE IN BRAZIL
12603171



NEMA
Premium

W22

IE007502W22IS

Inverter Duty Motor
Severe Duty

IEEE
841-2009



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

FOR SAFE AREA
Mod. TE1BFOXON
CC029A



PH3 60Hz Fr. 213/5T 1000m.a.s.l. IP55 TEFC 151lb

V 575

A 7.01

HP 7.5

kW 5.5

SF 1.25

SFA 8.76

RPM 3520

PF 0.88

AMB 40°C

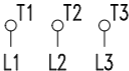
INS cl. F DT80K

NEMA NOM EFF 89.5%

DUTY CONT.

DES B Code H

GUARANT. EFF 87.5%



575V



→ 6308-C3 (11g) 40BC03X30

→ 6207-C3 (7g) 35BC02X30



MOBIL POLYREX EM (20000h)