

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11431382																		
Catalog # :	20018ST3HIE447T-W22																		
Frame : 445/7T Output : 200 HP (150 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 184 A L. R. Amperes : 1251 A LRC : 6.8x(Code G) No load current : 56.0 A Rated speed : 1785 rpm Slip : 0.83 % Rated torque : 588 ft.lb Locked rotor torque : 229 % Breakdown torque : 250 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 76.2 sq.ft.lb Design : B	Locked rotor time : 28s (cold) 16s (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 : 73.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 2313 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	95.7 95.8 96.2 96.2																		
Power Factor	0.50 0.73 0.82 0.85																		
Foundation loads																			
Max. traction : 2765 lb																			
Max. compression : 5078 lb																			
	<table border="0" style="width:100%;"> <tr> <td style="width: 50%;"></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 style="text-align: center;">6319 C3</td> <td style="text-align: center;">6316 C3</td> </tr> <tr> <td>Sealing :</td> <td style="text-align: center;">Inpro/Seal</td> <td style="text-align: center;">Inpro/Seal</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align: center;">8000 h</td> <td style="text-align: center;">10000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">45 g</td> <td style="text-align: center;">34 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 :	6319 C3	6316 C3	Sealing :	Inpro/Seal	Inpro/Seal	Lubrication interval :	8000 h	10000 h	Lubricant amount :	45 g	34 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															
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



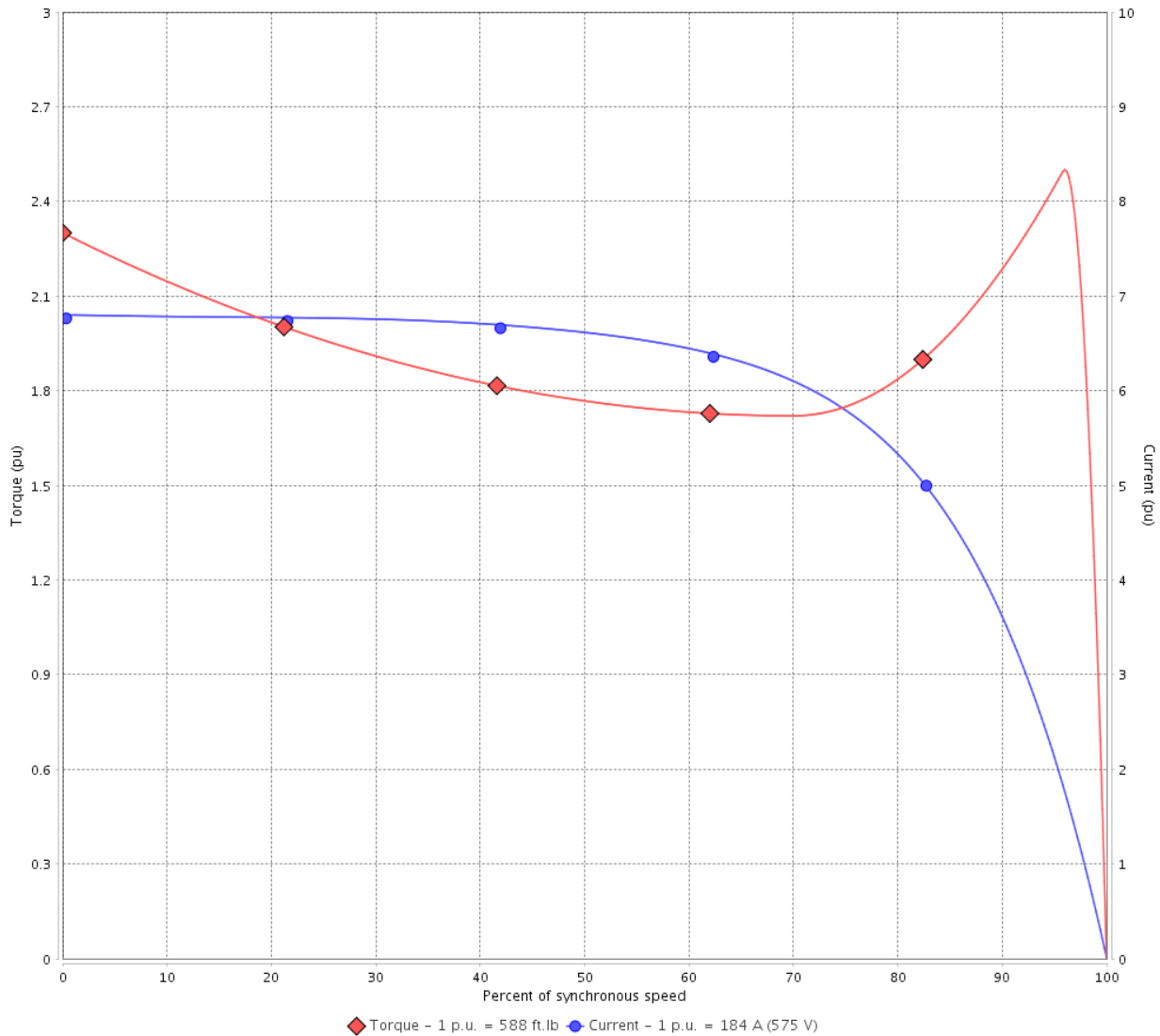
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 184 A	Moment of inertia (J)	: 76.2 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 588 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: B

Locked rotor time : 28s (cold) 16s (hot)

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LOAD PERFORMANCE CURVE

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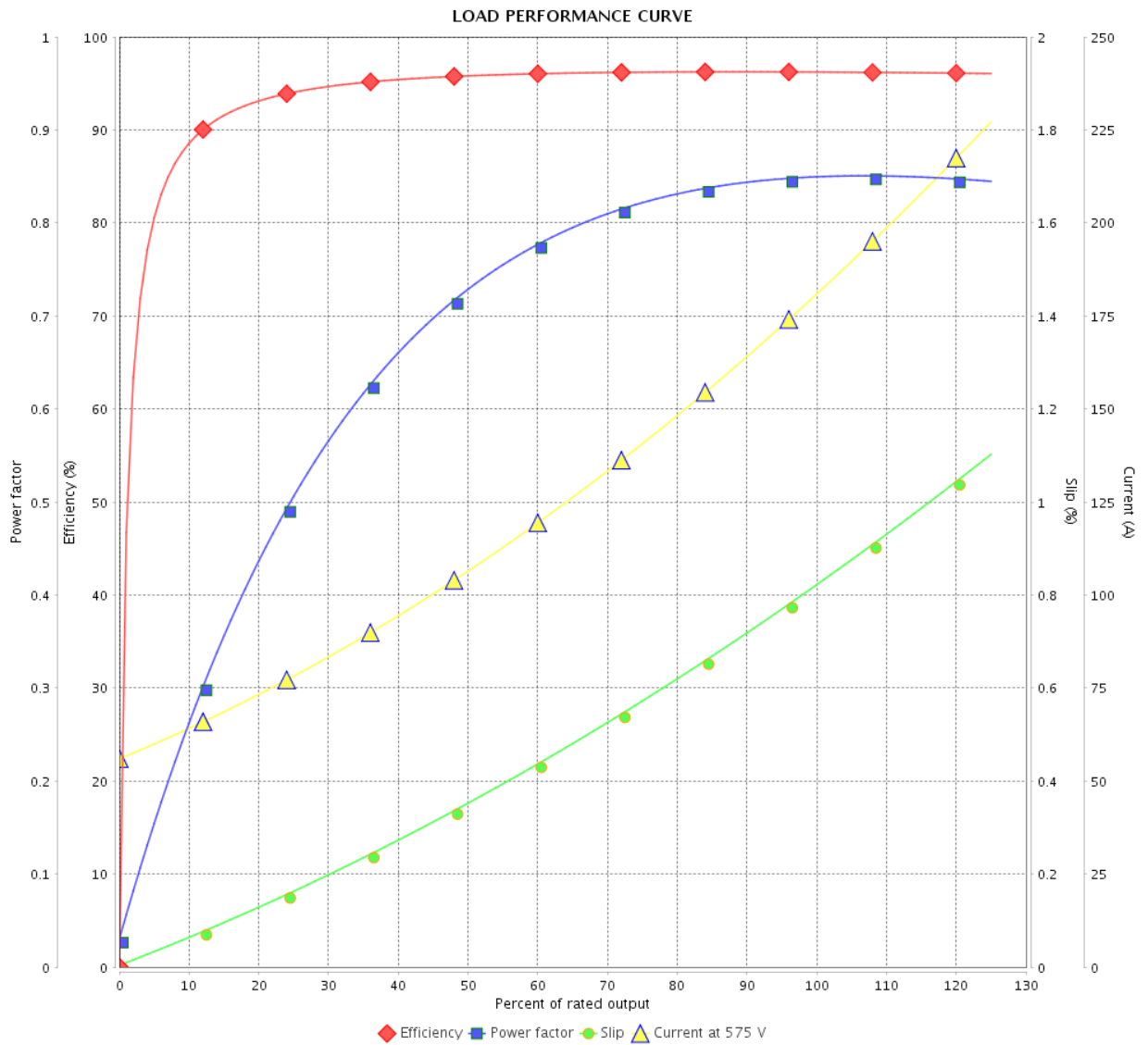


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Performance : 575 V 60 Hz 4P

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 Duty cycle : Cont.(S1)
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 Service factor : 1.15
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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

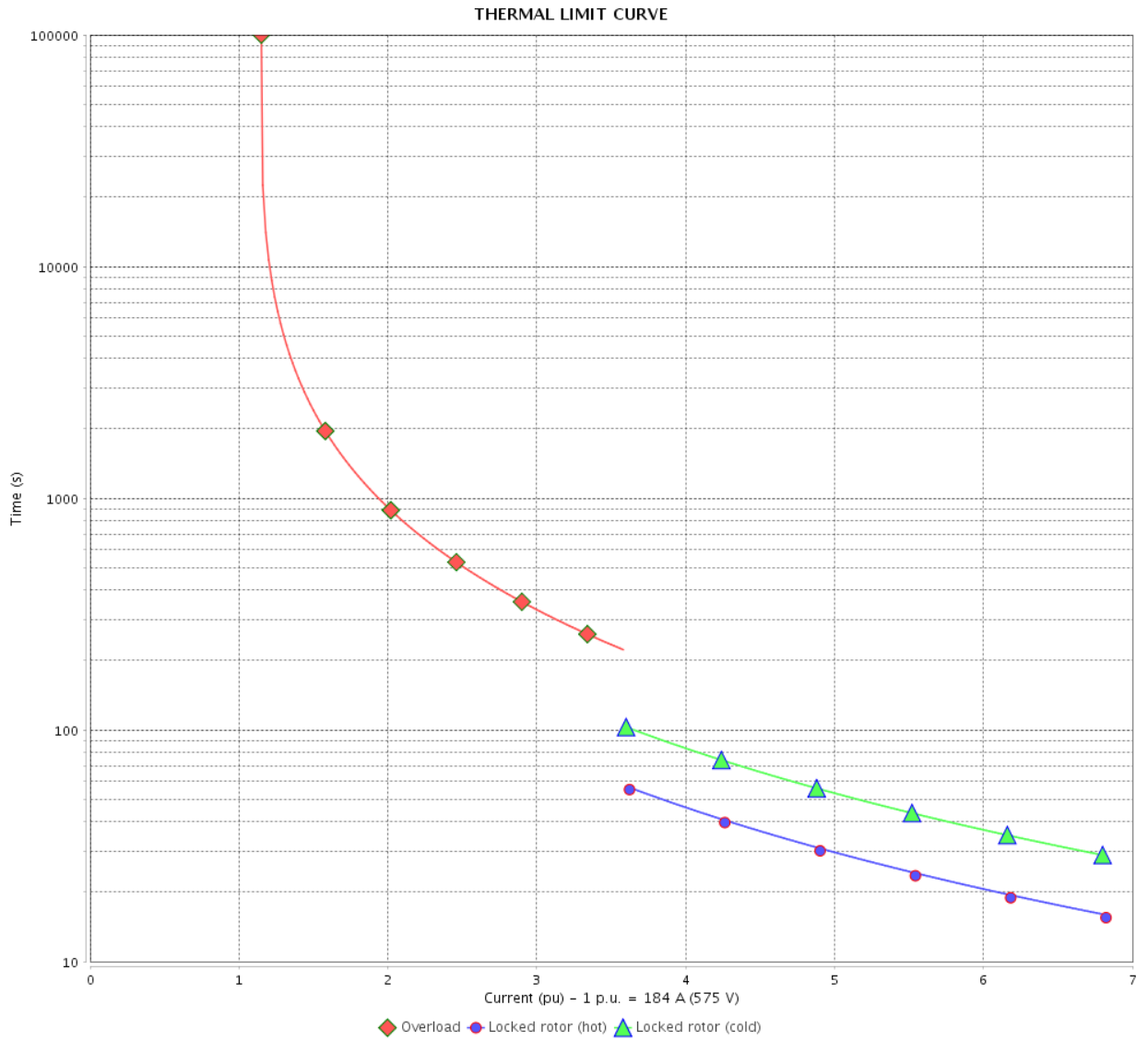
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

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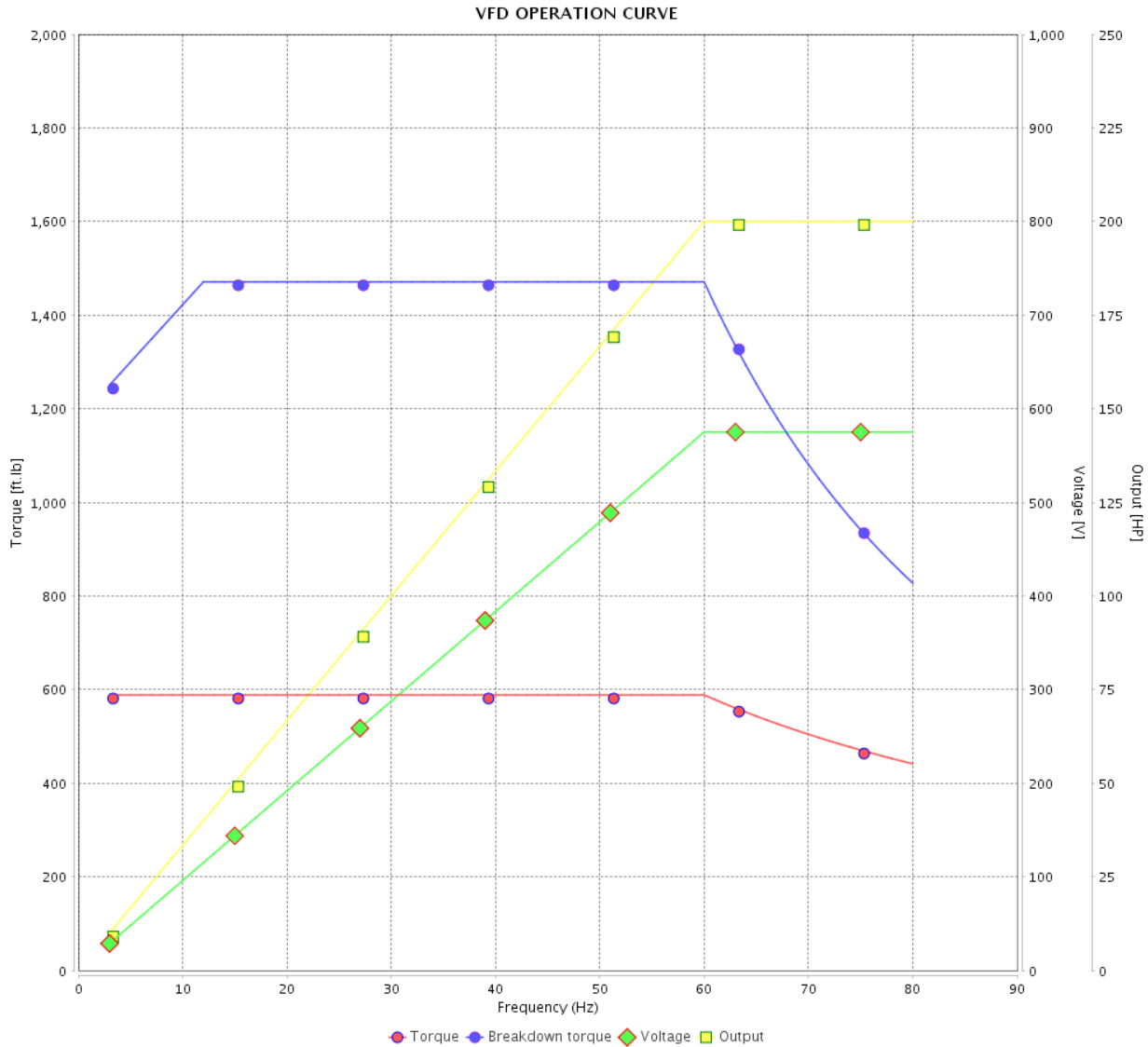


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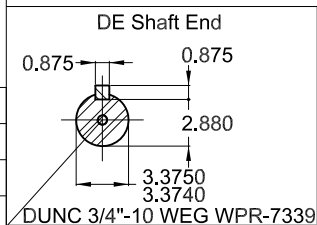
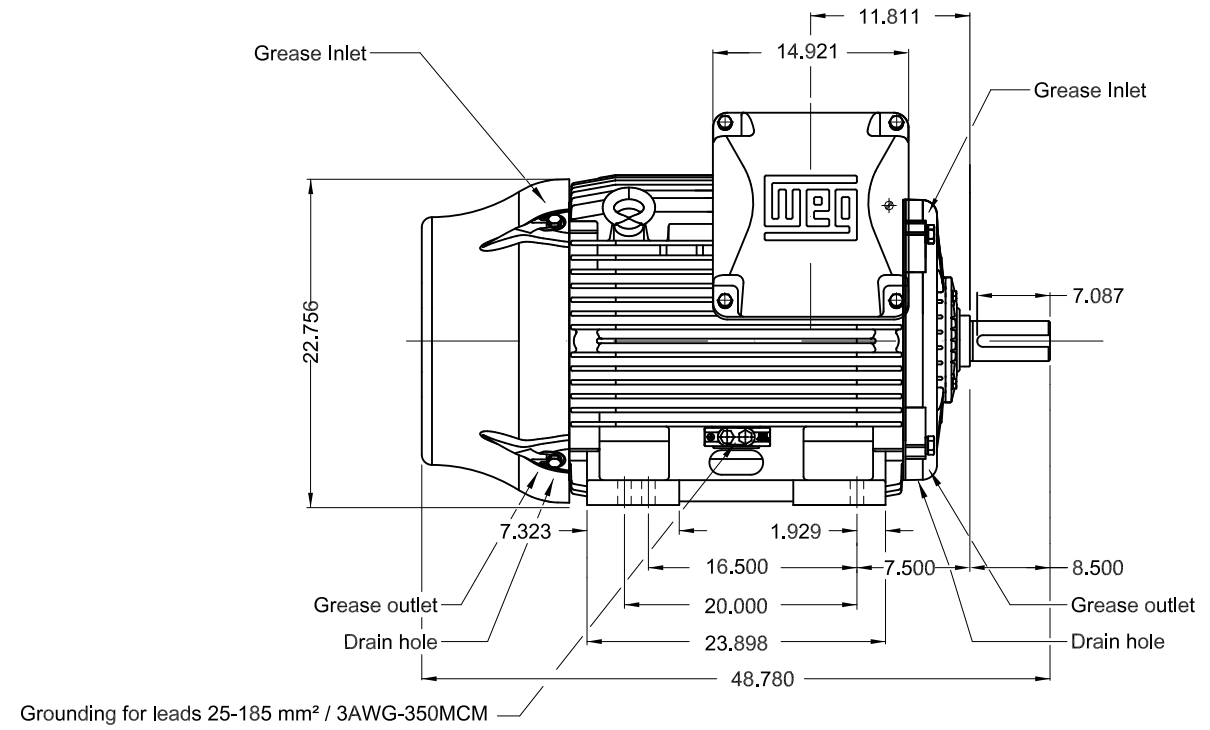
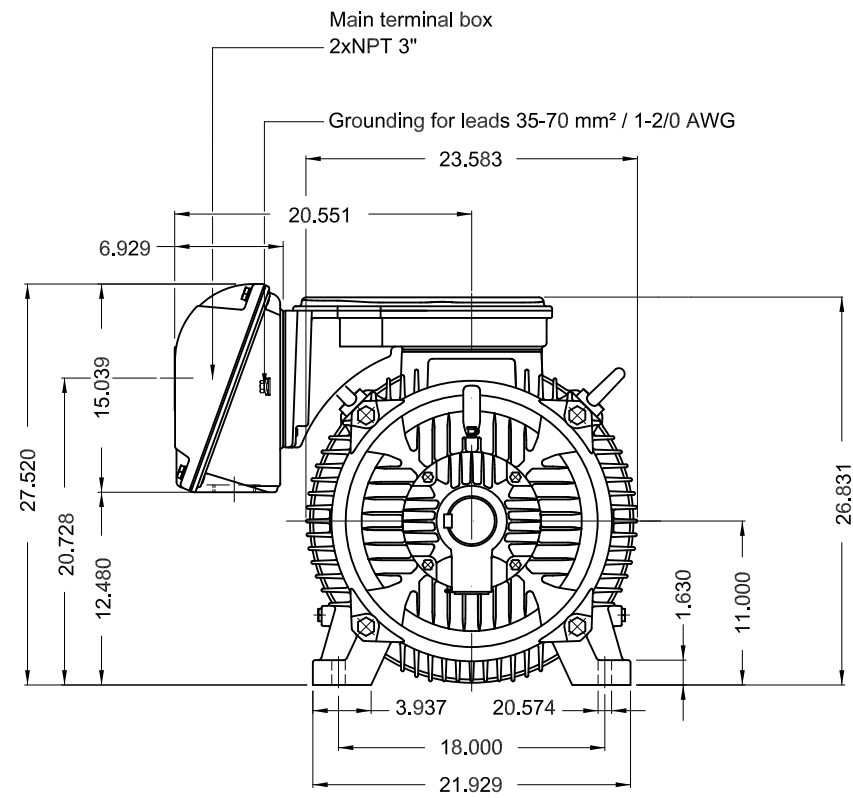
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Bronze fan
 Color RAL 5009
 Painting plan 202E
 Mounting B3R(D)

200 HP 04 Poles 60 Hz

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF.					
CHECKED		FRAME 445/7T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



SHEET 1 / 1

Dimensions in inches

XME A3



NEMA
Premium
W22



FOR SAFE AREA
Mod.TE1BFOXON
CC029A



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 - T3C
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 20:1, 1.00SF - T3

MODEL 20018ST3HIE447T-W22



Inverter Duty Motor
Severe Duty

MADE IN BRAZIL
11431382

PH3 60Hz Fr. 445/7T 1000m.a.s.l. IP55 TEFC 2313lb

V 575

A 184

HP 200

kW 150

SF 1.15

SFA 212

RPM 1785

PF 0.85

AMB 40°C

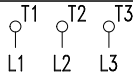
INS cl. F DT80K

NEMA NOM EFF 96.2%

DUTY CONT.

DES B Code G

GUARANT. EFF 95.4%



575V



→ 6319-C3 (45g) 95BC03X30

→ 6316-C3 (34g) 80BC03X30



MOBIL POLYREX EM (8000h)

