

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11434626																		
Catalog # :	15012ST3HIE447T-W22																		
Frame : 445/7T Output : 150 HP (110 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 575 V Rated current : 141 A L. R. Amperes : 859 A LRC : 6.1x(Code G) No load current : 52.0 A Rated speed : 1185 rpm Slip : 1.25 % Rated torque : 665 ft.lb Locked rotor torque : 229 % Breakdown torque : 250 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 134 sq.ft.lb Design : B	Locked rotor time : 36s (cold) 20s (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 : 69.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 2336 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	94.5 95.0 95.4 95.8																		
Power Factor	0.44 0.67 0.78 0.82																		
Foundation loads																			
Max. traction	: 3262 lb																		
Max. compression	: 5598 lb																		
	<table border="0" style="width:100%;"> <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>: 6319 C3</td> <td>6316 C3</td> </tr> <tr> <td>Sealing</td> <td>: Inpro/Seal</td> <td>Inpro/Seal</td> </tr> <tr> <td>Lubrication interval</td> <td>: 13000 h</td> <td>16000 h</td> </tr> <tr> <td>Lubricant amount</td> <td>: 45 g</td> <td>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	: 13000 h	16000 h	Lubricant amount	: 45 g	34 g	Lubricant type	Mobil Polyrex EM	
	<u>Drive end</u>	<u>Non drive end</u>																	
Bearing type	: 6319 C3	6316 C3																	
Sealing	: Inpro/Seal	Inpro/Seal																	
Lubrication interval	: 13000 h	16000 h																	
Lubricant amount	: 45 g	34 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.																			
Rev.	Changes Summary	Performed	Checked	Date															
Performed by																			
Checked by			Page	Revision															
Date	13/04/2022		1 / 6																

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



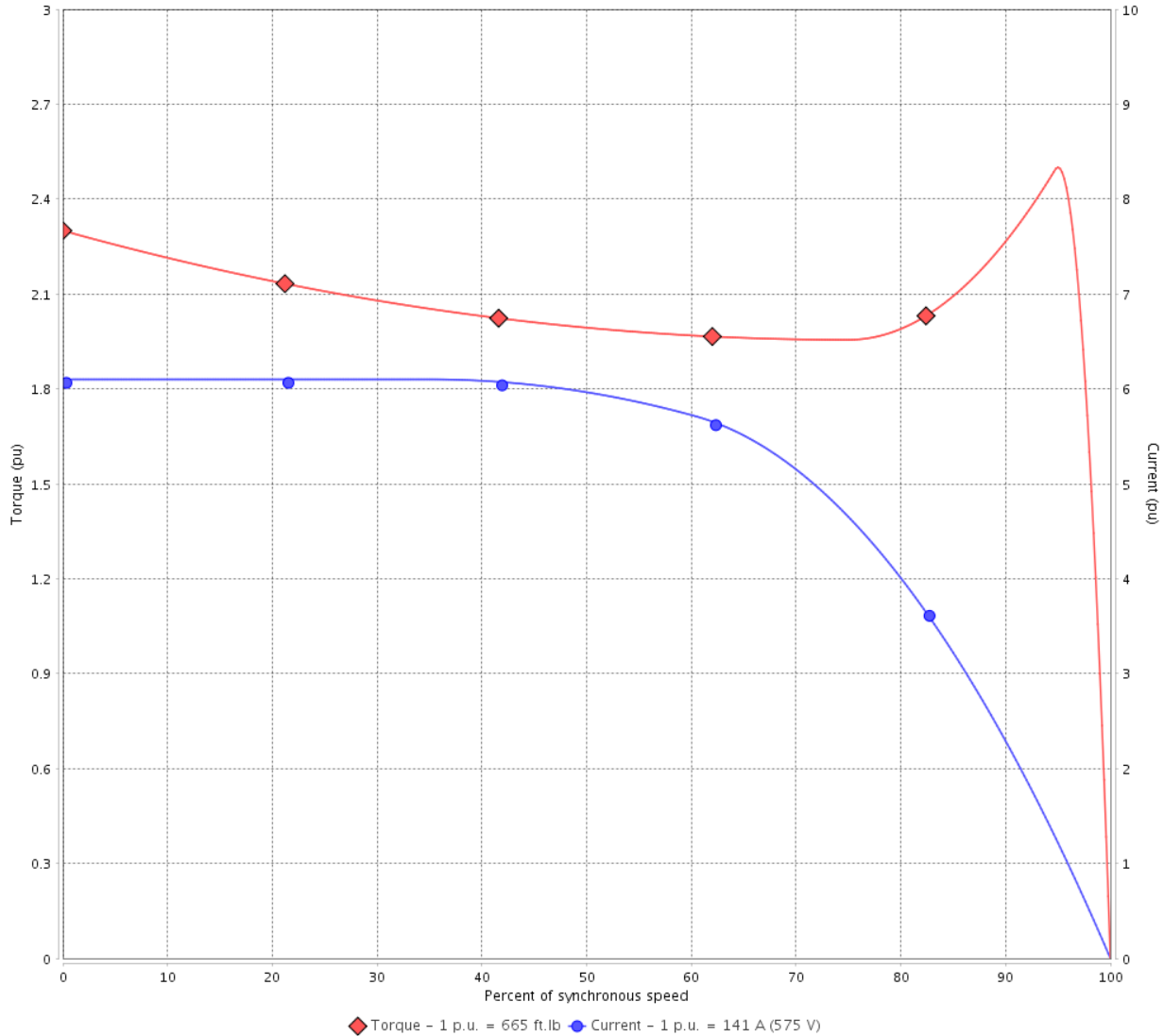
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11434626

Catalog # : 15012ST3HIE447T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

Rated current	: 141 A	Moment of inertia (J)	: 134 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 665 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1185 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

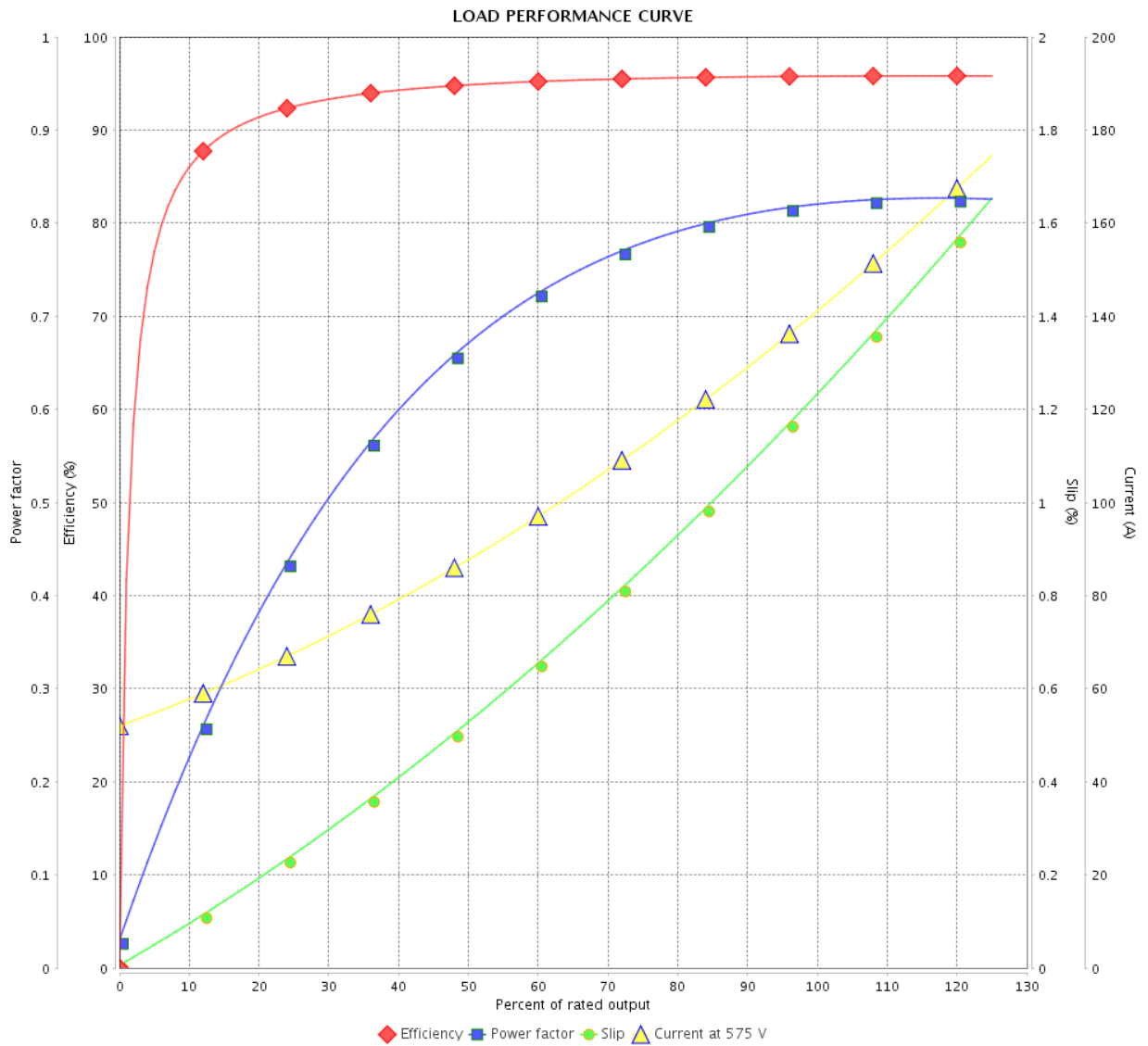


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11434626

Catalog # : 15012ST3HIE447T-W22



Performance : 575 V 60 Hz 6P

Rated current : 141 A
 LRC : 6.1
 Rated torque : 665 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 250 %
 Rated speed : 1185 rpm

Moment of inertia (J) : 134 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 6		
Date		13/04/2022		

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11434626

Catalog # : 15012ST3HIE447T-W22

Performance : 575 V 60 Hz 6P

Rated current	: 141 A	Moment of inertia (J)	: 134 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 665 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1185 rpm	Design	: B

Heating constant

Cooling constant

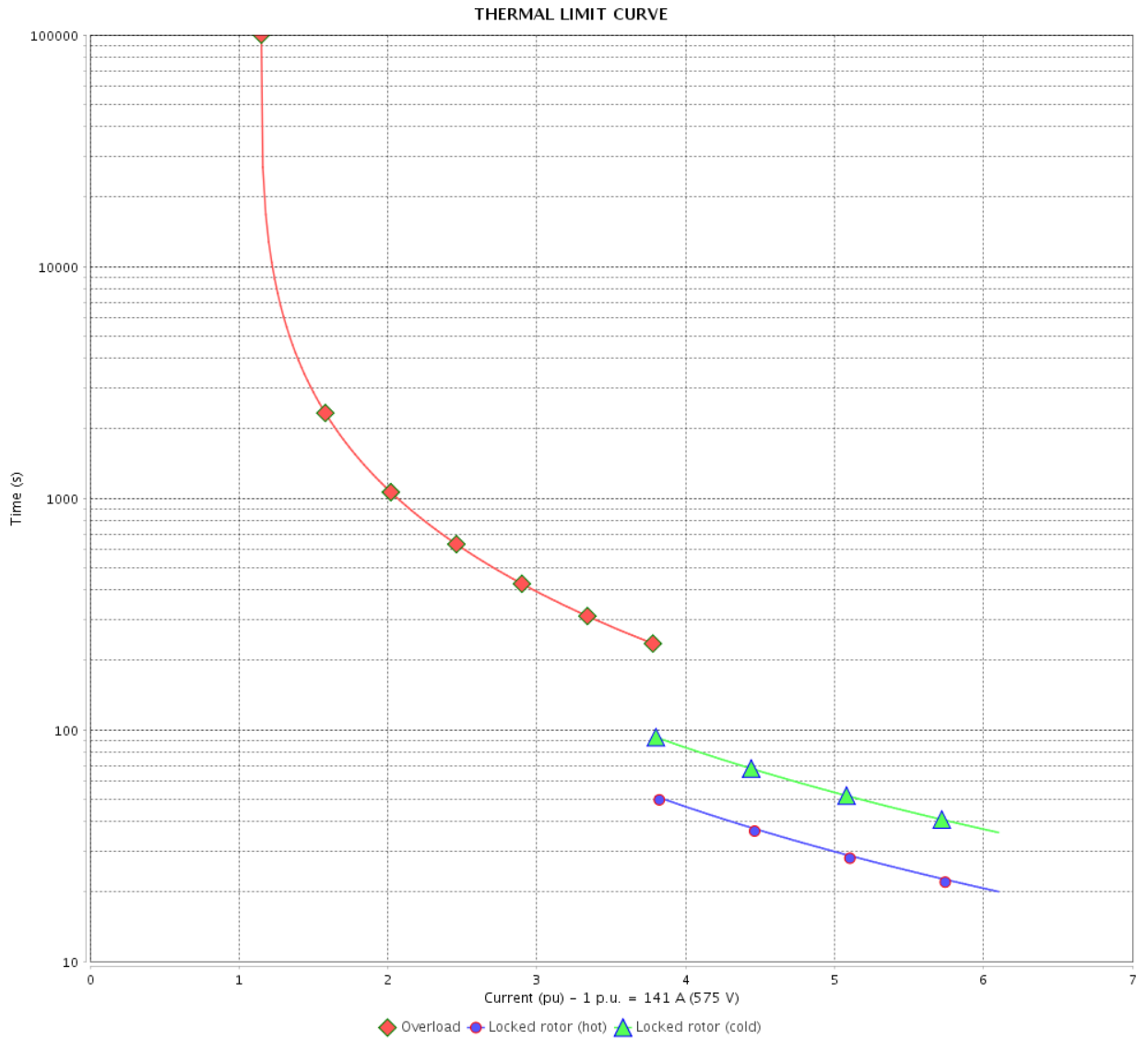
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		4 / 6	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6		Revision
Checked by				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



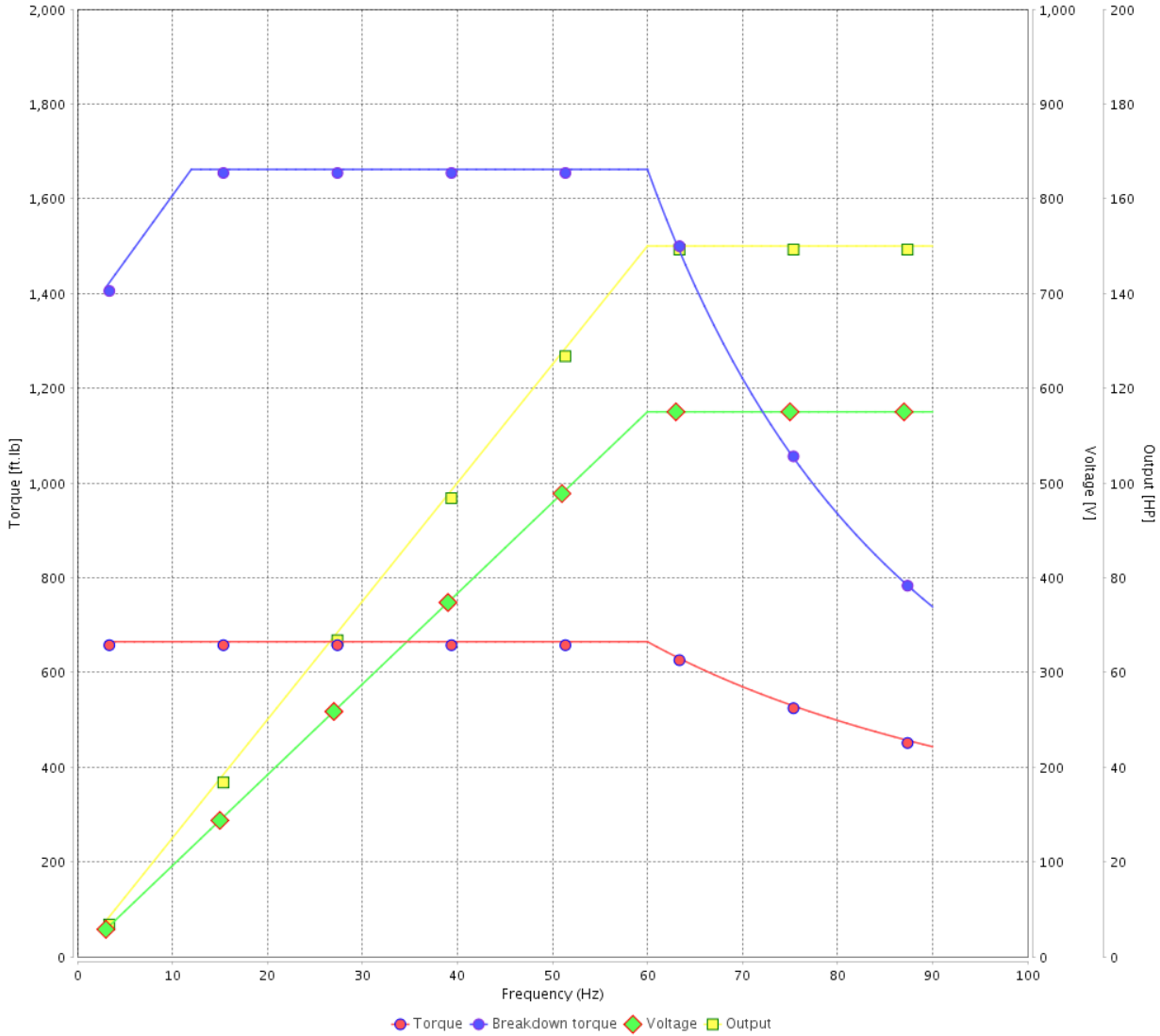
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11434626

Catalog # : 15012ST3HIE447T-W22

VFD OPERATION CURVE

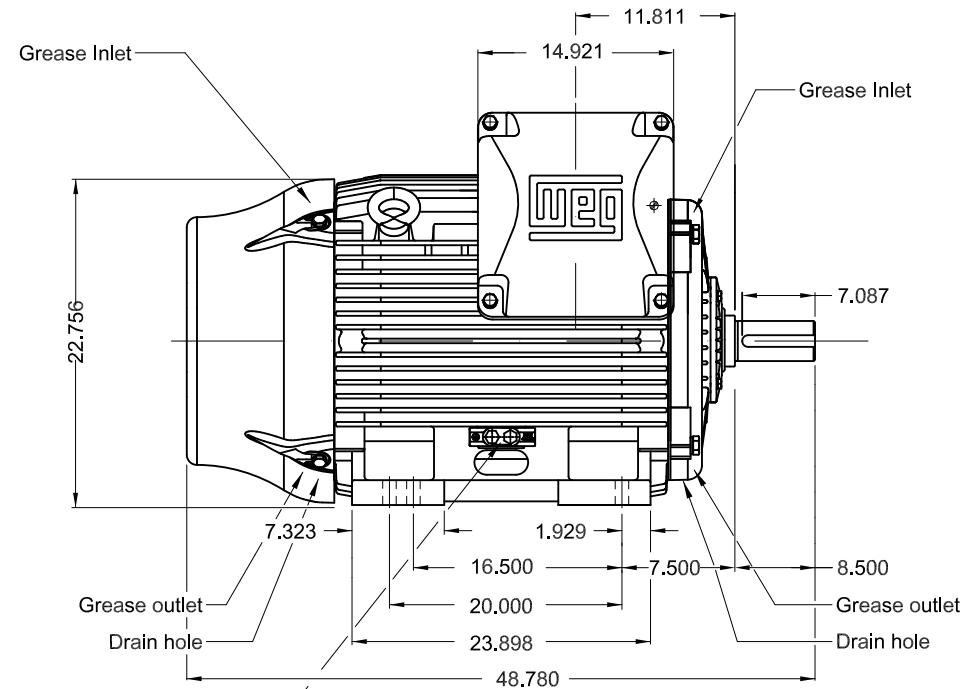
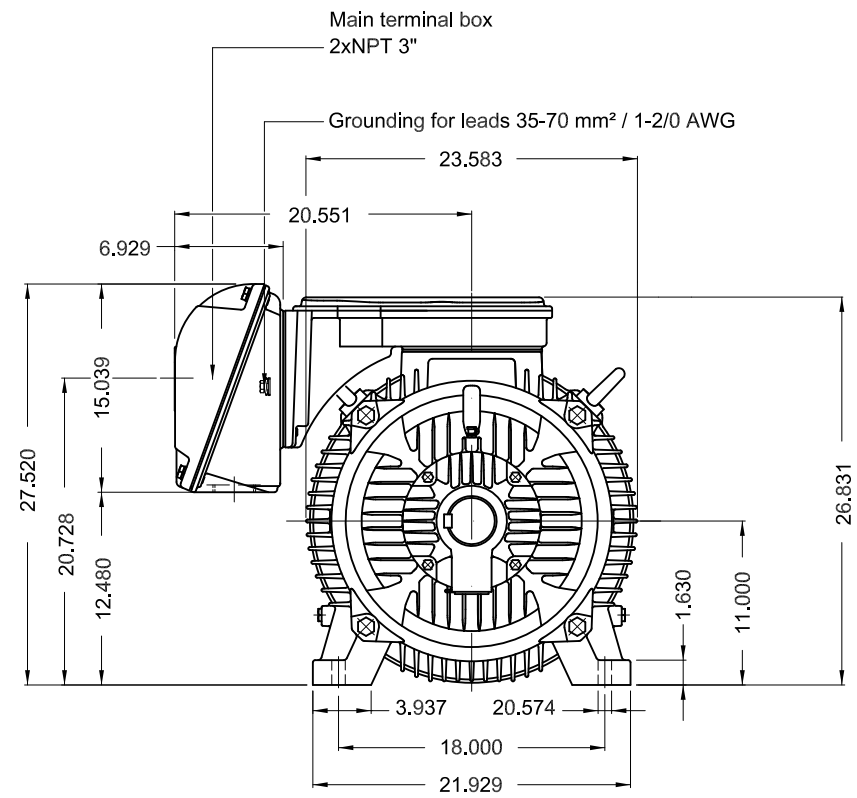


Performance : 575 V 60 Hz 6P

Rated current : 141 A
 LRC : 6.1
 Rated torque : 665 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 250 %
 Rated speed : 1185 rpm

Moment of inertia (J) : 134 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

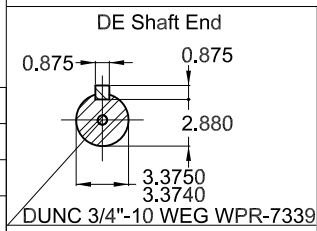


Grounding for leads 25-185 mm² / 3AWG-350MCM

150 HP 06 Poles 60 Hz

A

Without vertical jackscrews
 Color RAL 5009
 Painting plan 202E
 Mounting B3R(D)



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 15012ST3HIE447T-W22



Inverter Duty Motor
Severe Duty

MADE IN BRAZIL
11434626

PH3 60Hz Fr. 445/7T 1000m.a.s.l. IP55 TEFC 2337lb

V 575

A 141

HP 150

kW 110

SF 1.15

SFA 162

RPM 1185

PF 0.82

AMB 40°C

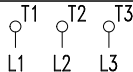
INS cl. F DT80K

NEMA NOM EFF 95.8%

DUTY CONT.

DES B Code G

GUARANT. EFF 95.0%



575V



→ 6319-C3 (45g) 95BC03X30

→ 6316-C3 (34g) 80BC03X30



MOBIL POLYREX EM (13000h)

