

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : _____																																		
Product line : NEMA Premium Efficiency Three-Phase		Product code : 15958316																																
		Catalog # : 00318ST3PIE182TC-W22																																
Frame : 182/4TC Output : 3 HP (2.2 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200 V Rated current : 8.99 A L. R. Amperes : 72.8 A LRC : 8.1x(Code K) No load current : 4.60 A Rated speed : 1760 rpm Slip : 2.22 % Rated torque : 8.95 ft.lb Locked rotor torque : 229 % Breakdown torque : 340 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.3401 sq.ft.lb Design : B		Locked rotor time : 41s (cold) 23s (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 : 56.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 2.2 lb																																
<table border="1"> <tr> <td>Output</td> <td>50%</td> <td>75%</td> <td>100%</td> <td>Foundation loads</td> </tr> <tr> <td>Efficiency (%)</td> <td>87.5</td> <td>88.5</td> <td>89.5</td> <td>Max. traction : 193 lb</td> </tr> <tr> <td>Power Factor</td> <td>0.61</td> <td>0.73</td> <td>0.79</td> <td>Max. compression : 195 lb</td> </tr> </table>		Output	50%	75%	100%	Foundation loads	Efficiency (%)	87.5	88.5	89.5	Max. traction : 193 lb	Power Factor	0.61	0.73	0.79	Max. compression : 195 lb																		
Output	50%	75%	100%	Foundation loads																														
Efficiency (%)	87.5	88.5	89.5	Max. traction : 193 lb																														
Power Factor	0.61	0.73	0.79	Max. compression : 195 lb																														
		<table border="1"> <tr> <td></td> <td colspan="2"><u>Drive end</u></td> <td colspan="2"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type</td> <td>:</td> <td>6207 C3</td> <td>:</td> <td>6206 C3</td> </tr> <tr> <td>Sealing</td> <td>:</td> <td>Inpro/Seal</td> <td>:</td> <td>Inpro/Seal</td> </tr> <tr> <td>Lubrication interval</td> <td>:</td> <td>20000 h</td> <td>:</td> <td>20000 h</td> </tr> <tr> <td>Lubricant amount</td> <td>:</td> <td>7 g</td> <td>:</td> <td>5 g</td> </tr> <tr> <td>Lubricant type</td> <td>:</td> <td colspan="3">Mobil Polyrex EM</td> </tr> </table>				<u>Drive end</u>		<u>Non drive end</u>		Bearing type	:	6207 C3	:	6206 C3	Sealing	:	Inpro/Seal	:	Inpro/Seal	Lubrication interval	:	20000 h	:	20000 h	Lubricant amount	:	7 g	:	5 g	Lubricant type	:	Mobil Polyrex EM		
	<u>Drive end</u>		<u>Non drive end</u>																															
Bearing type	:	6207 C3	:	6206 C3																														
Sealing	:	Inpro/Seal	:	Inpro/Seal																														
Lubrication interval	:	20000 h	:	20000 h																														
Lubricant amount	:	7 g	:	5 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																														
Performed by				Date																														
Checked by				Page																														
Date	01/06/2022			Revision																														
			1 / 6																															

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



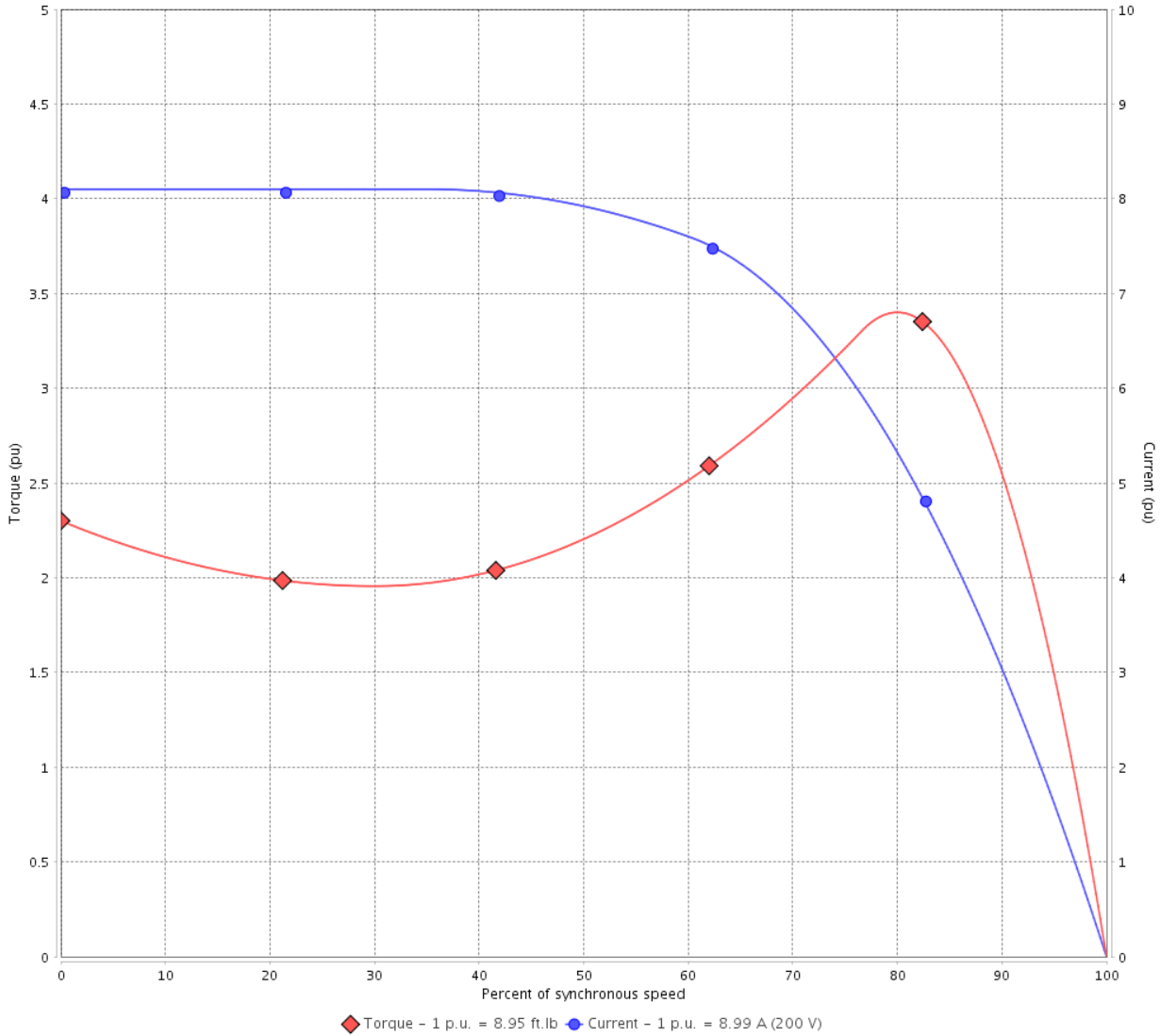
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 15958316

Catalog # : 00318ST3PIE182TC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200 V 60 Hz 4P

Rated current	: 8.99 A	Moment of inertia (J)	: 0.3401 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 8.95 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 41s (cold) 23s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	01/06/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

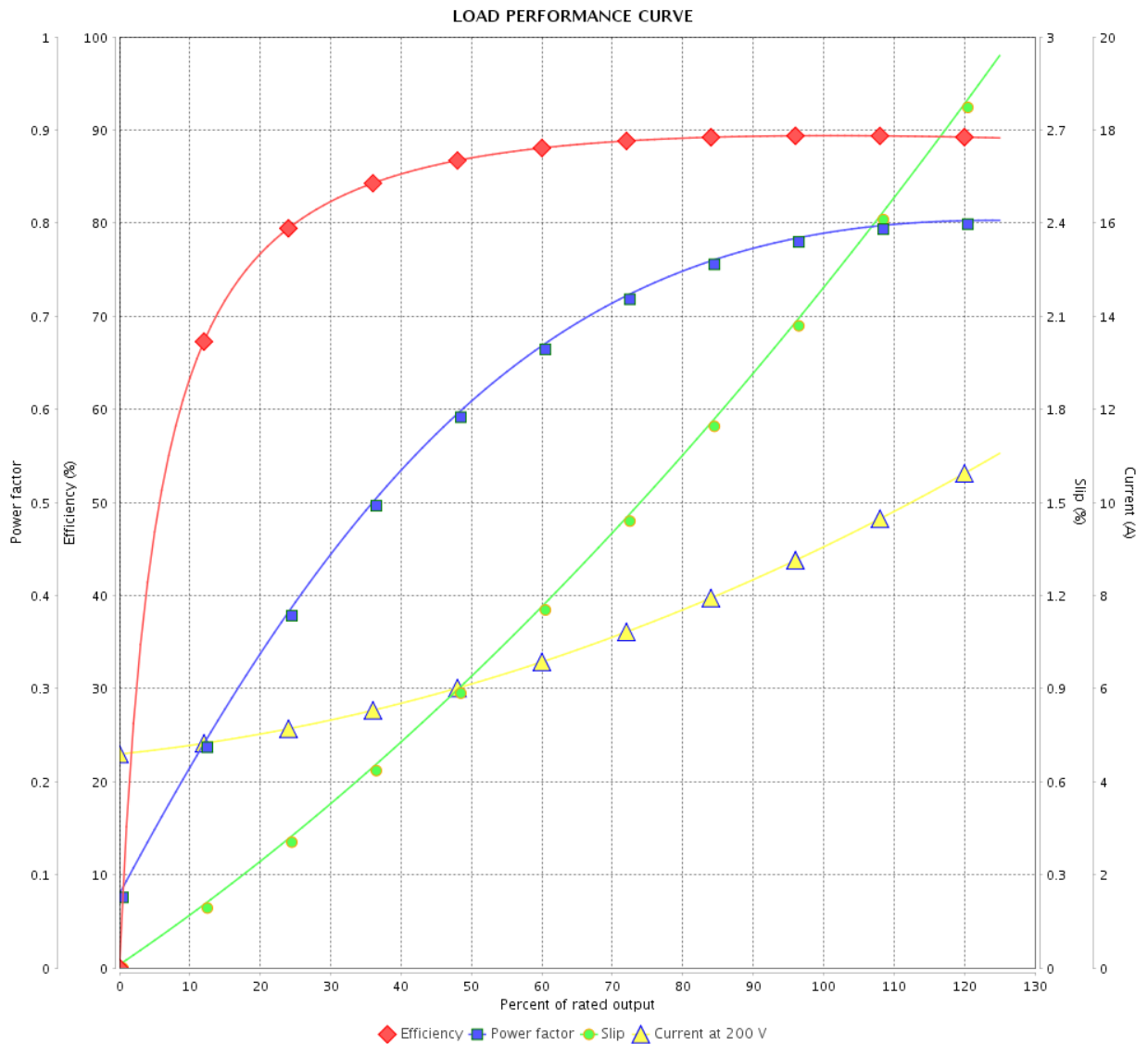


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 15958316

Catalog # : 00318ST3PIE182TC-W22



Performance : 200 V 60 Hz 4P

Rated current : 8.99 A
 LRC : 8.1
 Rated torque : 8.95 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 340 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.3401 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 15958316
Catalog # : 00318ST3PIE182TC-W22

Performance : 200 V 60 Hz 4P

Rated current	: 8.99 A	Moment of inertia (J)	: 0.3401 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 8.95 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Heating constant

Cooling constant

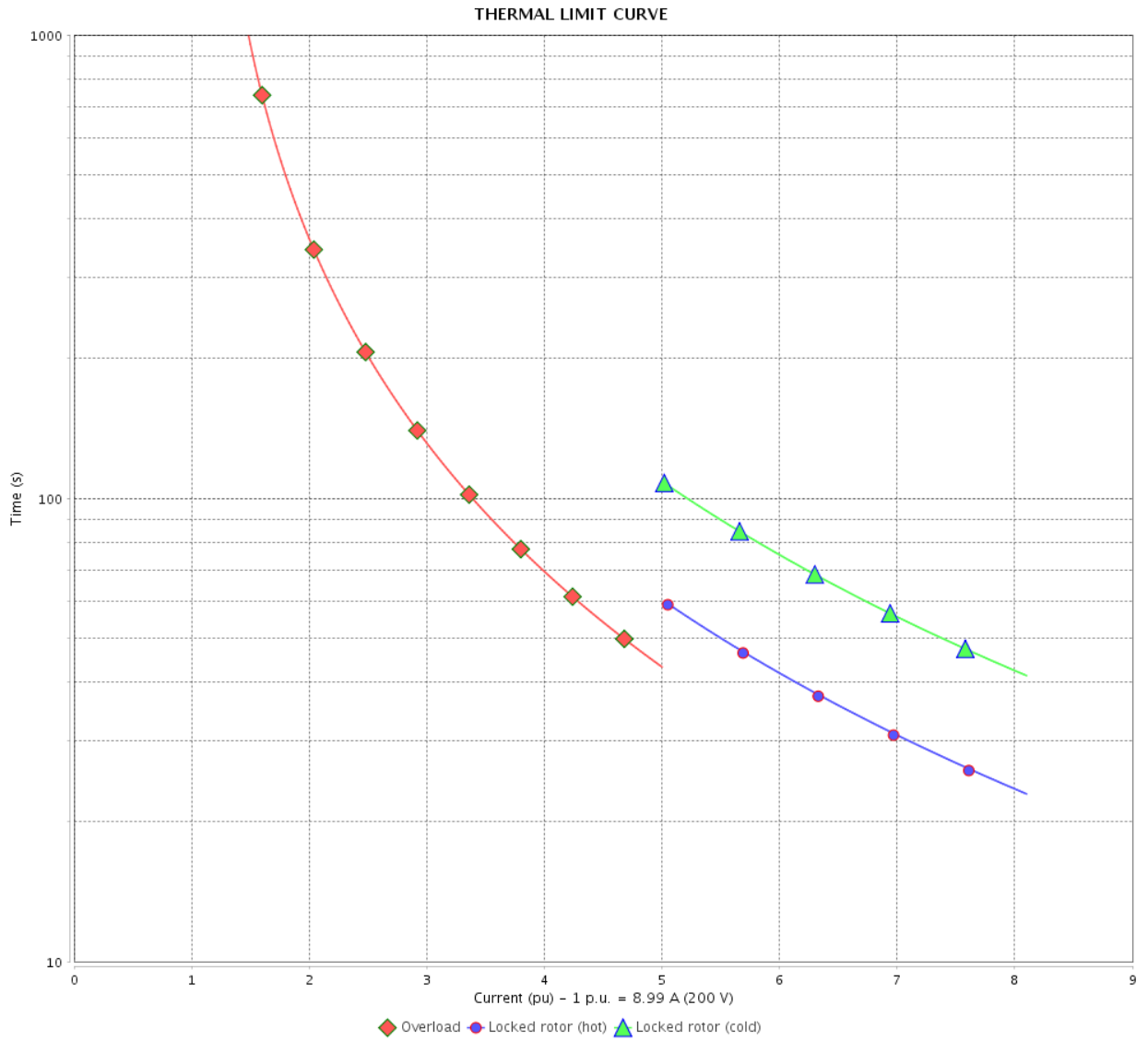
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	01/06/2022		4 / 6	

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

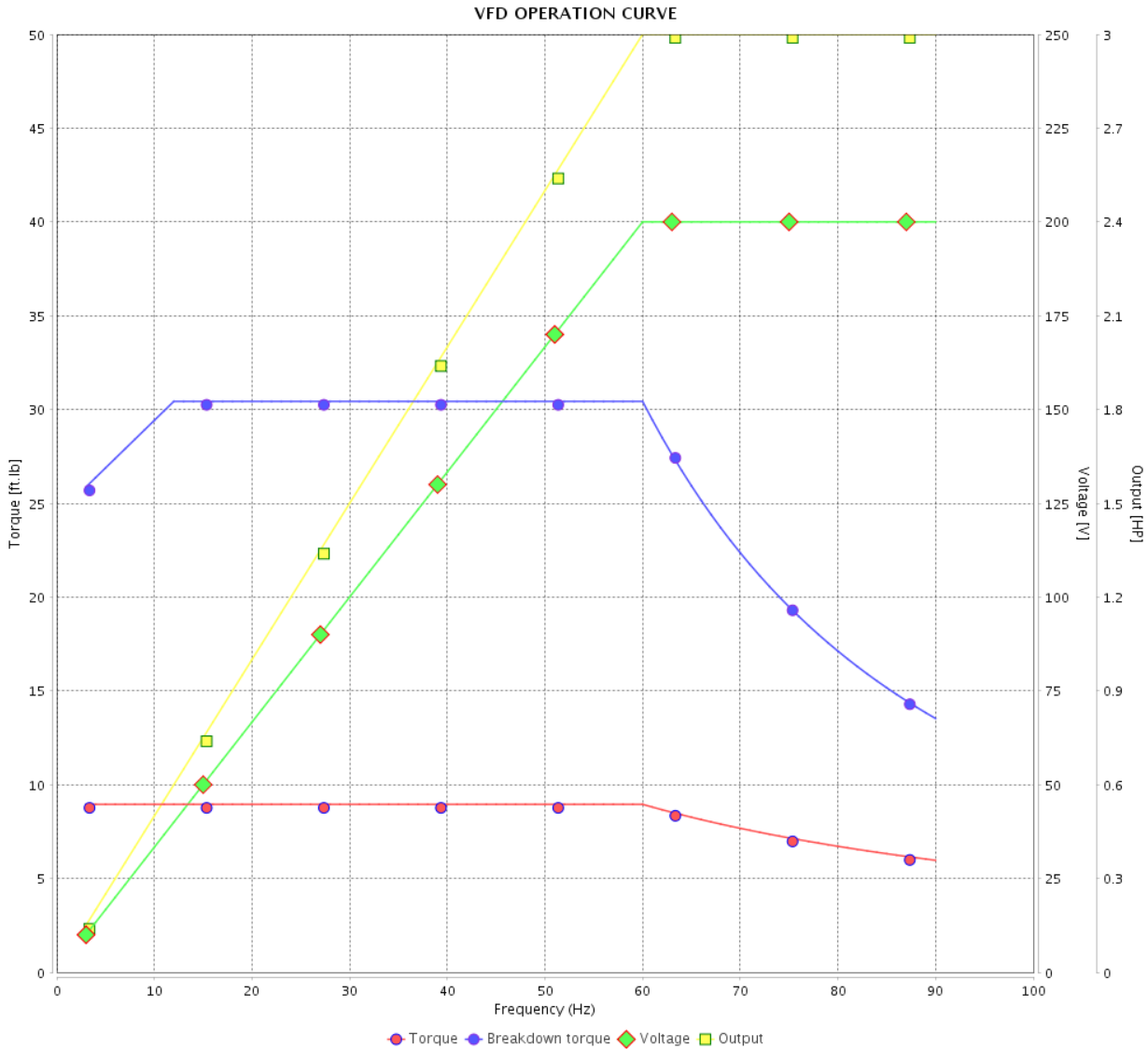


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 15958316

Catalog # : 00318ST3PIE182TC-W22



Performance : 200 V 60 Hz 4P

Rated current : 8.99 A
 LRC : 8.1
 Rated torque : 8.95 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 340 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.3401 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

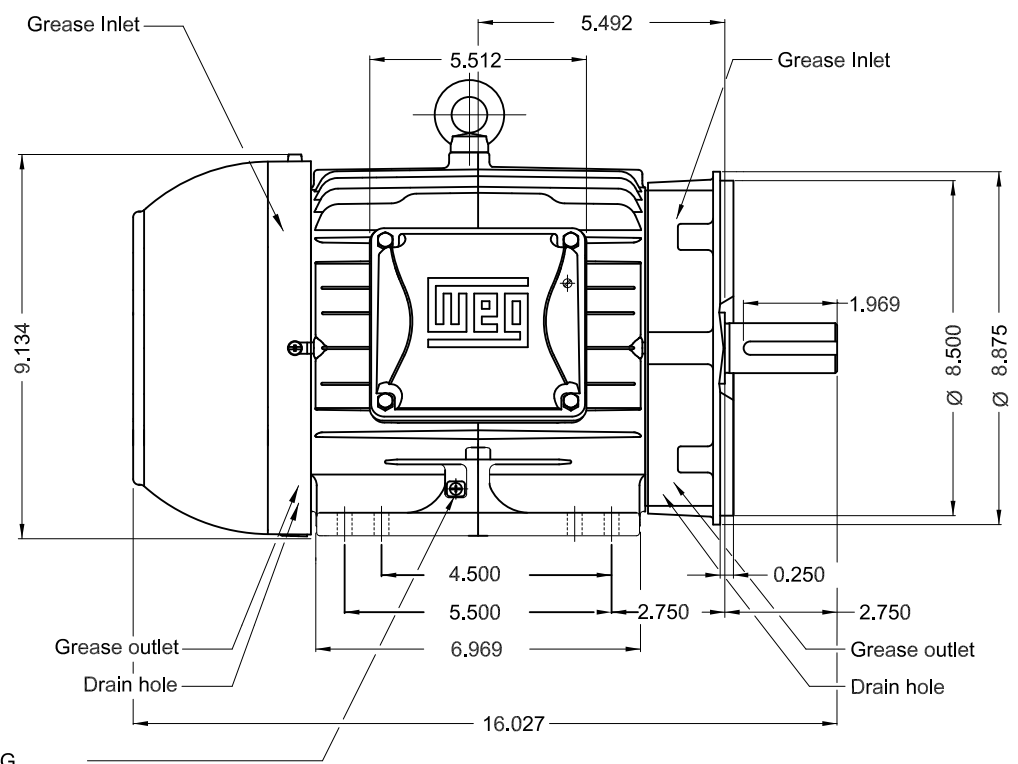
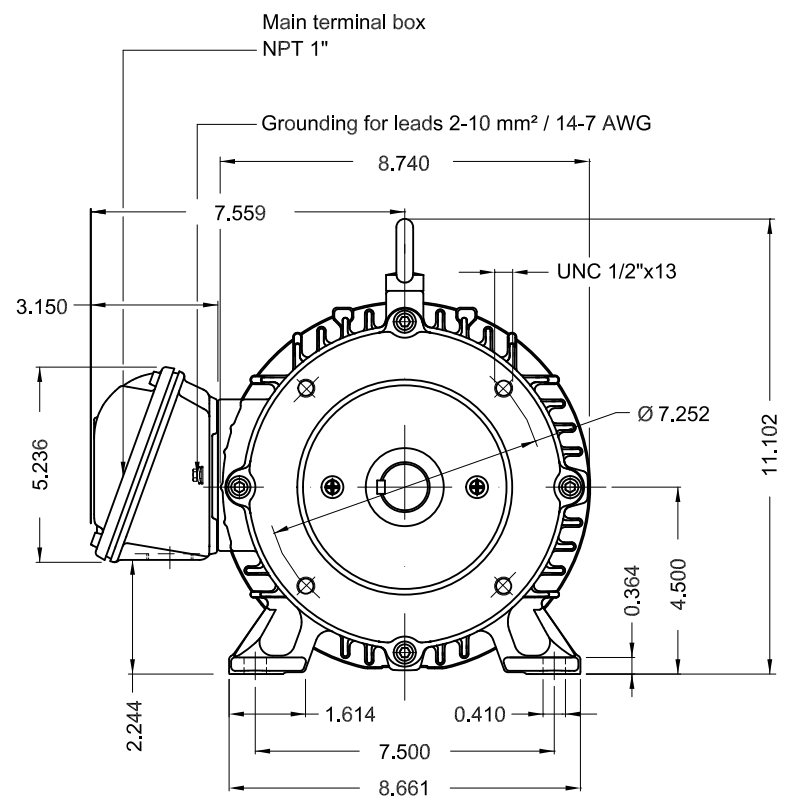
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	01/06/2022			

1 2 3 4 5 6

A

B

C

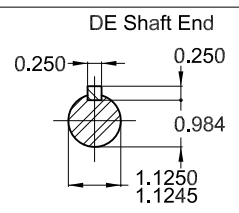


Grounding for leads 2-10 mm² / 14-7 AWG

D

E

Color RAL 5009
 Painting plan 202E
 Mounting NEMA F-1
 Mounting B34R(D)



3 HP 04 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF.					
CHECKED		FRAME 182/4TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



SHEET 1 / 1

MADE IN BRAZIL
15958316



NEMA
Premium



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 - T5
For use on PWM: Gr. A, B, C, D, F and G,
VT 1000:1, CT 20:1, 1.00SF - T4A

MODEL 00318ST3PIE182TC-W22

Inverter Duty Motor
Severe Duty

IEEE
841-2009



FOR SAFE AREA
Mod. TE1BFOXON
CC029A

PH3 60Hz Fr. 182/4TC 1000m.a.s.l. IP55 TEFC 109lb

V 200

A 8.99

HP 3.0

kW 2.2

SF 1.25

SFA 11.2

RPM 1760

PF 0.79

AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 89.5%

DUTY CONT.

DES B Code K

GUARANT. EFF 87.5%

