

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :	
Product line	: NEMA Premium Efficiency Three-Phase
Product code :	11164580
Catalog # :	15018ET3HRB445T-W22
Frame : 444/5T Output : 150 HP (110 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 136 A L. R. Amperes : 898 A LRC : 6.6x(Code G) No load current : 46.4 A Rated speed : 1780 rpm Slip : 1.11 % Rated torque : 443 ft.lb Locked rotor torque : 200 % Breakdown torque : 250 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 66.7 sq.ft.lb Design : B	Locked rotor time : 48s (cold) 27s (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 : 1856 lb
Output	25% 50% 75% 100%
Efficiency (%)	95.3 95.4 95.8 95.8
Power Factor	0.49 0.74 0.82 0.85
Foundation loads	
Max. traction	: 2021 lb
Max. compression	: 3877 lb
Bearing type	: <u>Drive end</u> NU-319 C3 <u>Non drive end</u> 6316 C3
Sealing	: WSeal WSeal
Lubrication interval	: 5000 h 10000 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.	
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Performed by	Performed
Checked by	Checked
Date	Date
13/04/2022	
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



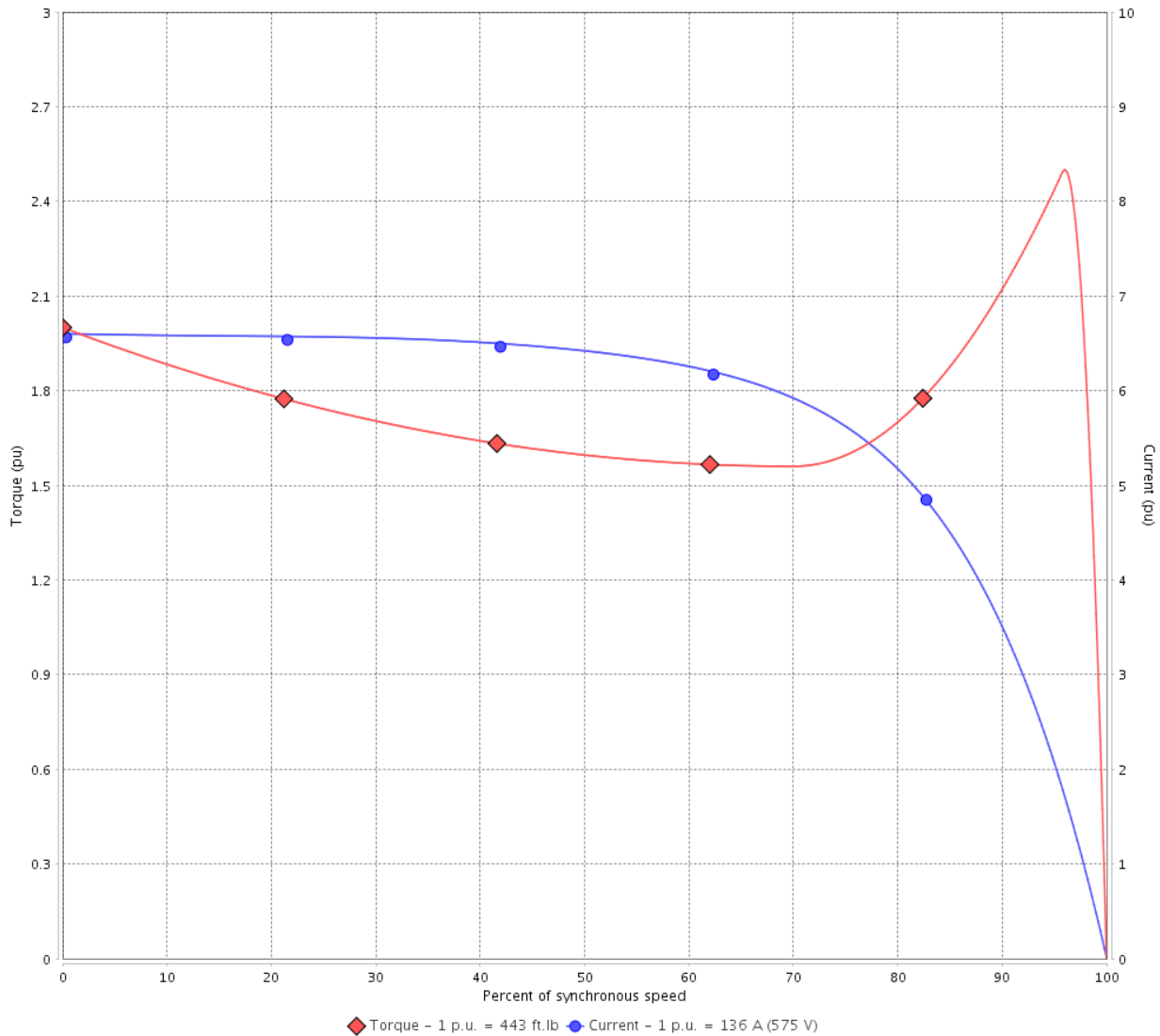
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11164580

Catalog # : 15018ET3HRB445T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 136 A	Moment of inertia (J)	: 66.7 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 443 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

Locked rotor time : 48s (cold) 27s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

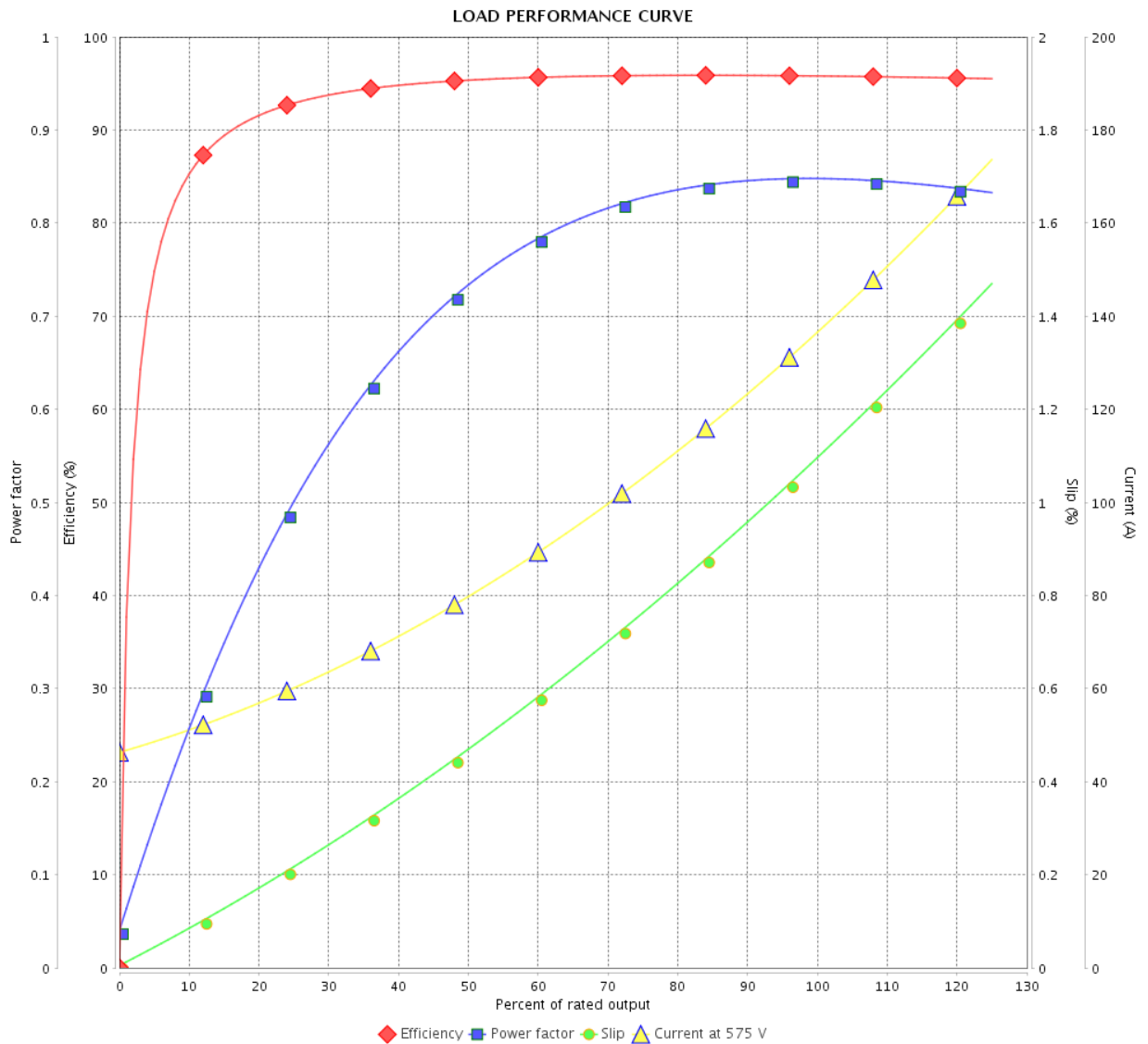


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

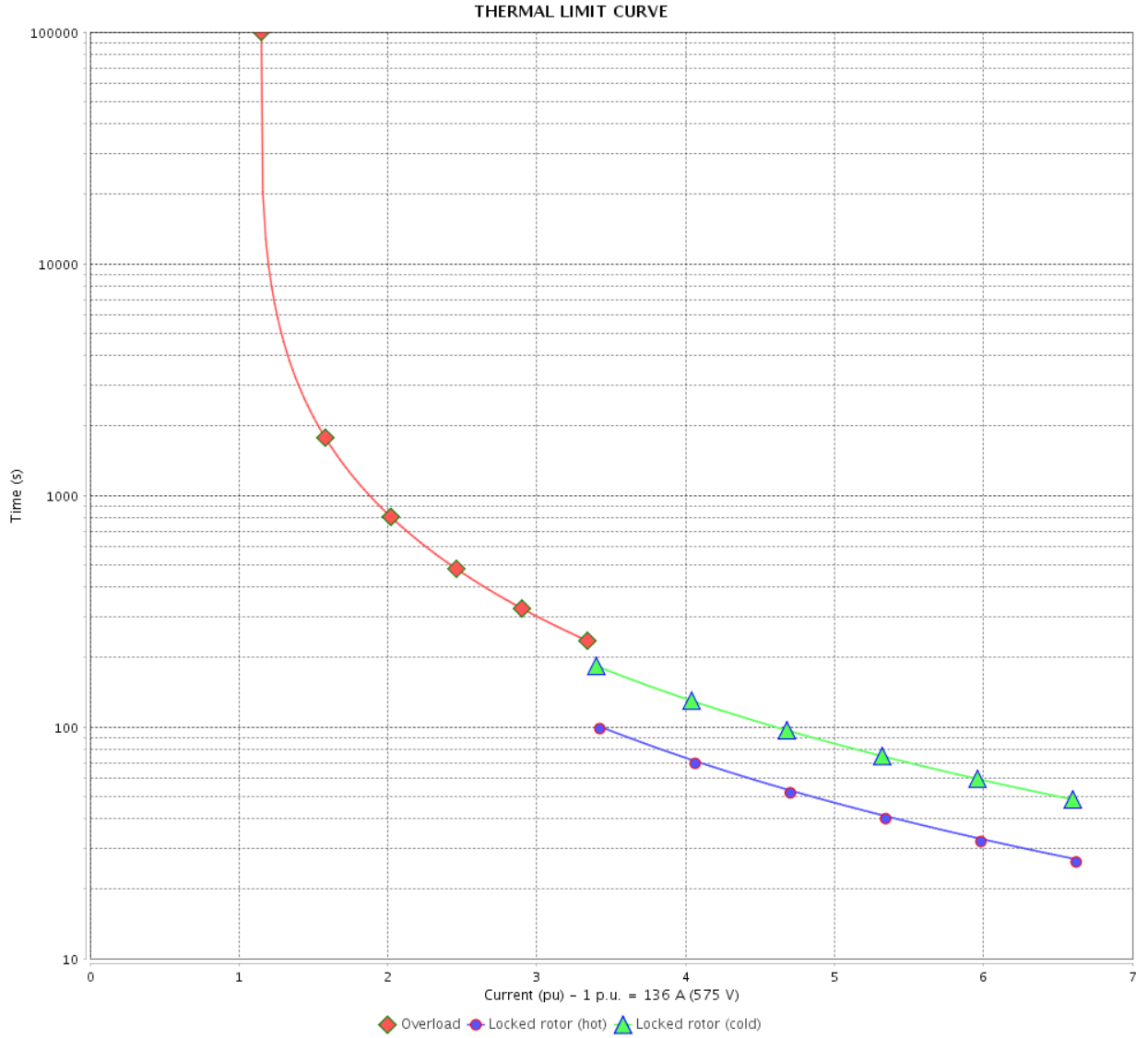
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Performed by		Page		Revision
Checked by				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



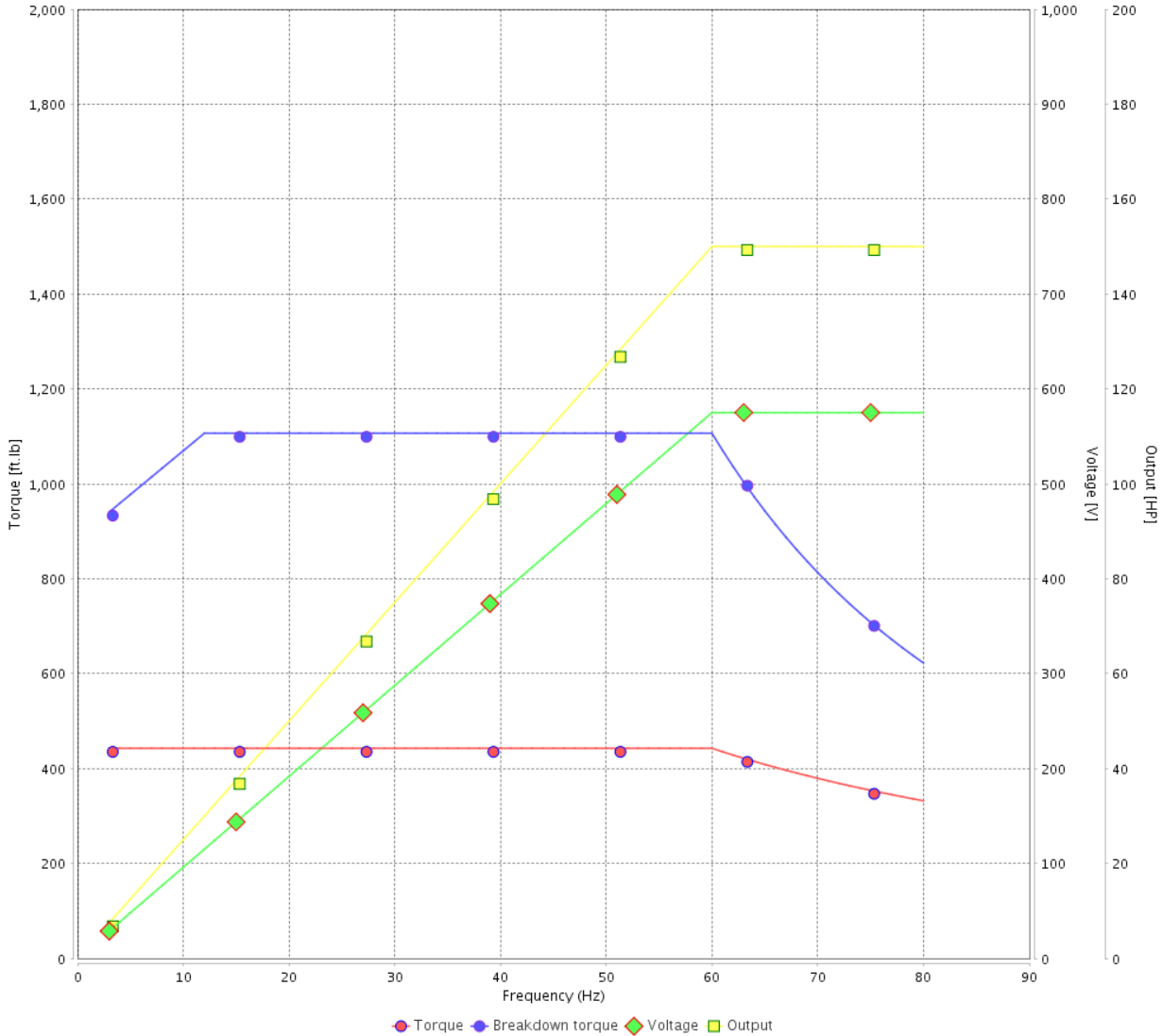
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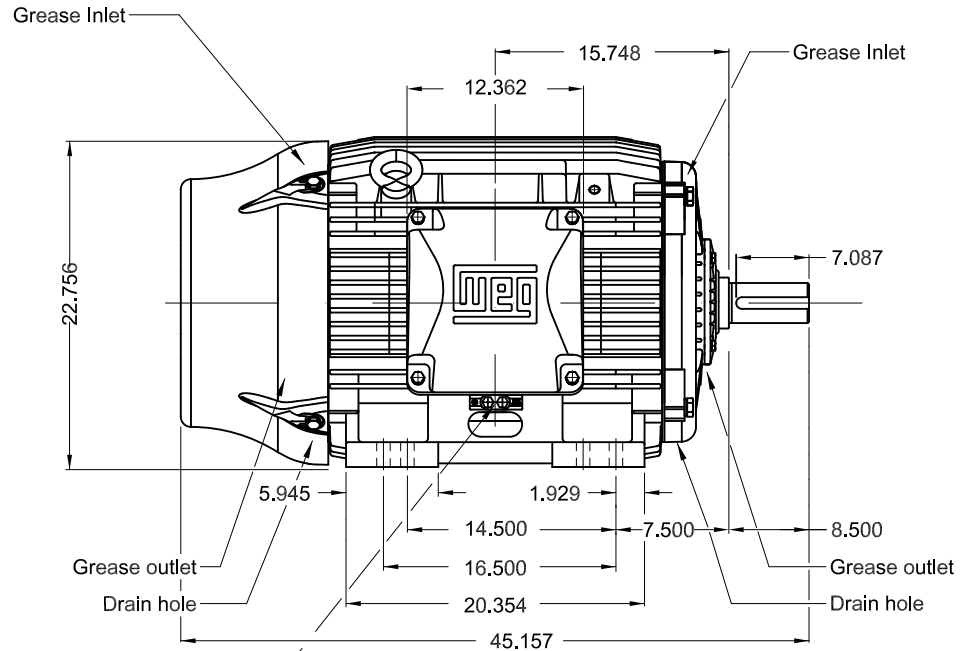
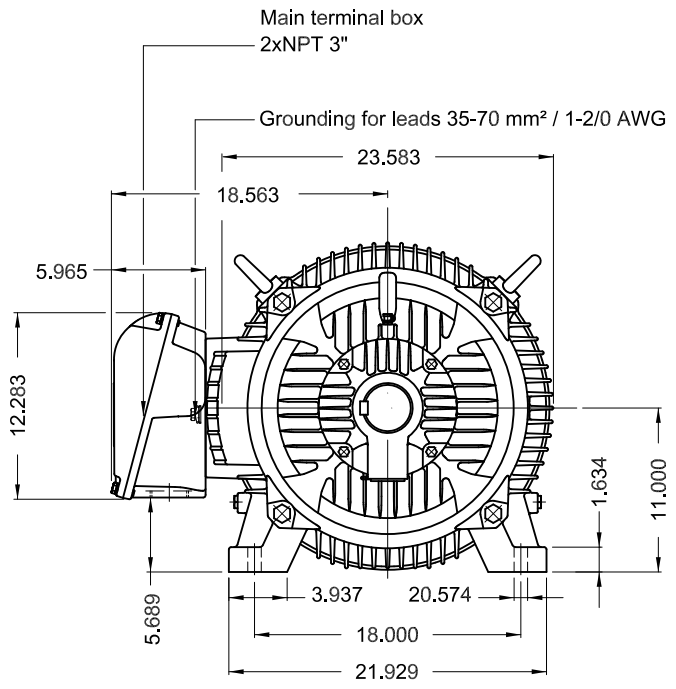
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Date	13/04/2022			

1 2 3 4 5 6

A

B

C

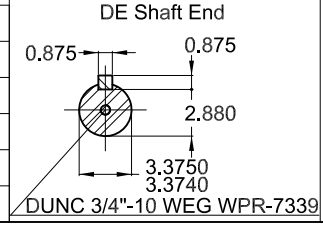


Grounding for leads 25-185 mm² / 3AWG-350MCM

D

E

- Without vertical jackscrews
- DE roller bearing
- Shaft locking device
- Color RAL 5009
- Painting plan 203A
- Mounting B3R(D)



150 HP 04 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 444/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
WDD





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 - T3A

VJP PART # HT150504NPRBW22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 444/5T 1000m.a.s.l. IP55 TEFC 1857lb

V 575

A 136

HP 150

kW 110

SF 1.15

SFA 156

RPM 1784

PF 0.85

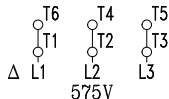
AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 95.8%

DUTY CONT.

DES B Code G

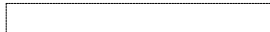


→ NU-319-C3 (45g)

→ 6316-C3 (34g)



MOBIL POLYREX EM (5000h)



MADE IN BRAZIL
11164580