

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 11611524  
 Catalog # : 12518ET3H444T-W22

Frame : 444/5T Output : 125 HP Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 111 A L. R. Amperes : 723 A LRC : 6.5x(Code G) No load current : 32.0 A Rated speed : 1785 rpm Slip : 0.83 % Rated torque : 368 ft.lb Locked rotor torque : 200 % Breakdown torque : 229 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 57.2 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 <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 73.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 1641 lb
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Output	50%	75%	100%	Foundation loads
Efficiency (%)	95.0	95.4	95.4	Max. traction : 1434 lb
Power Factor	0.74	0.82	0.85	Max. compression : 3075 lb

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type	6319 C3	6316 C3
Sealing	WSeal	WSeal
Lubrication interval	8000 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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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



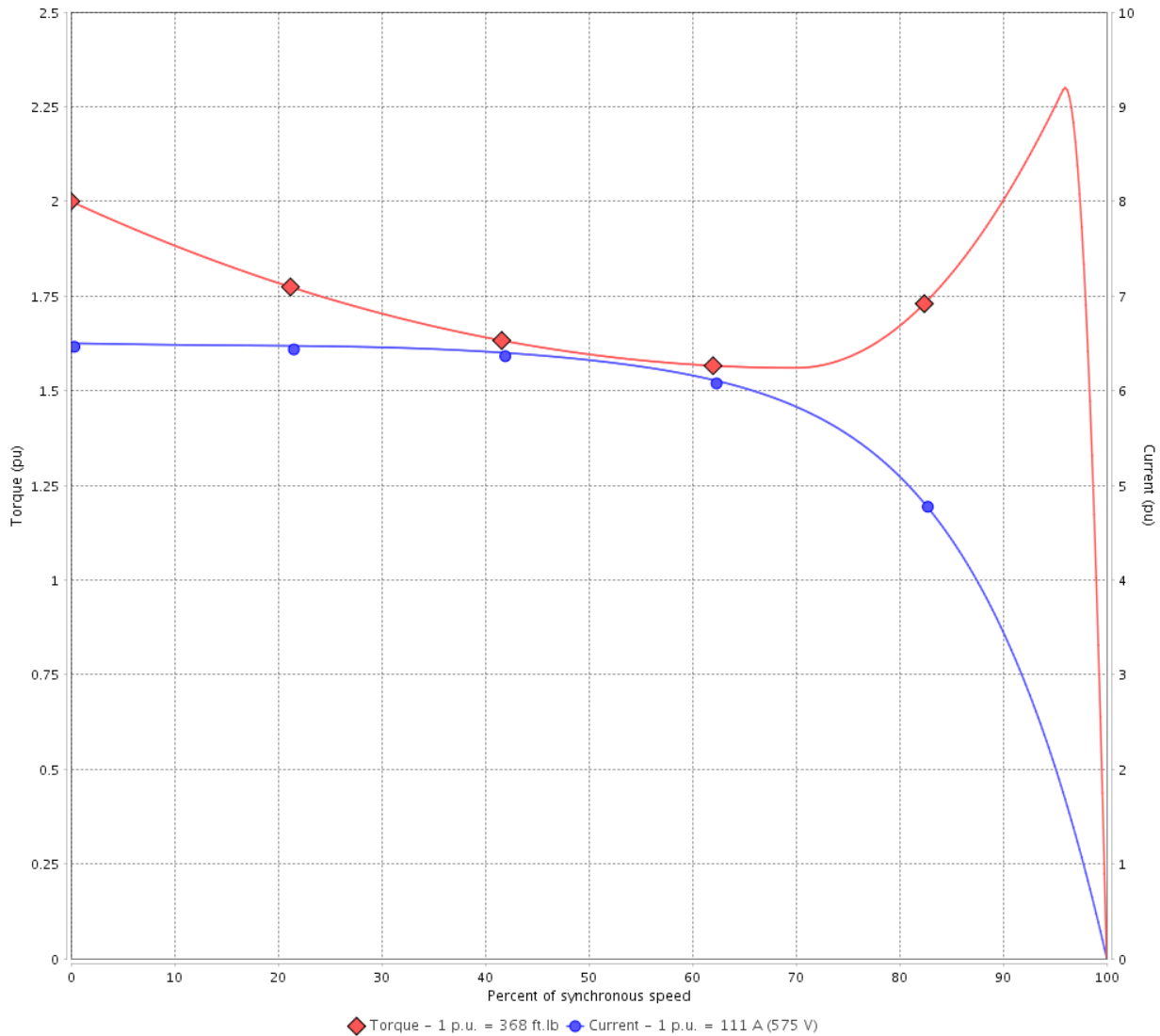
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 111 A	Moment of inertia (J)	: 57.2 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 368 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: B

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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

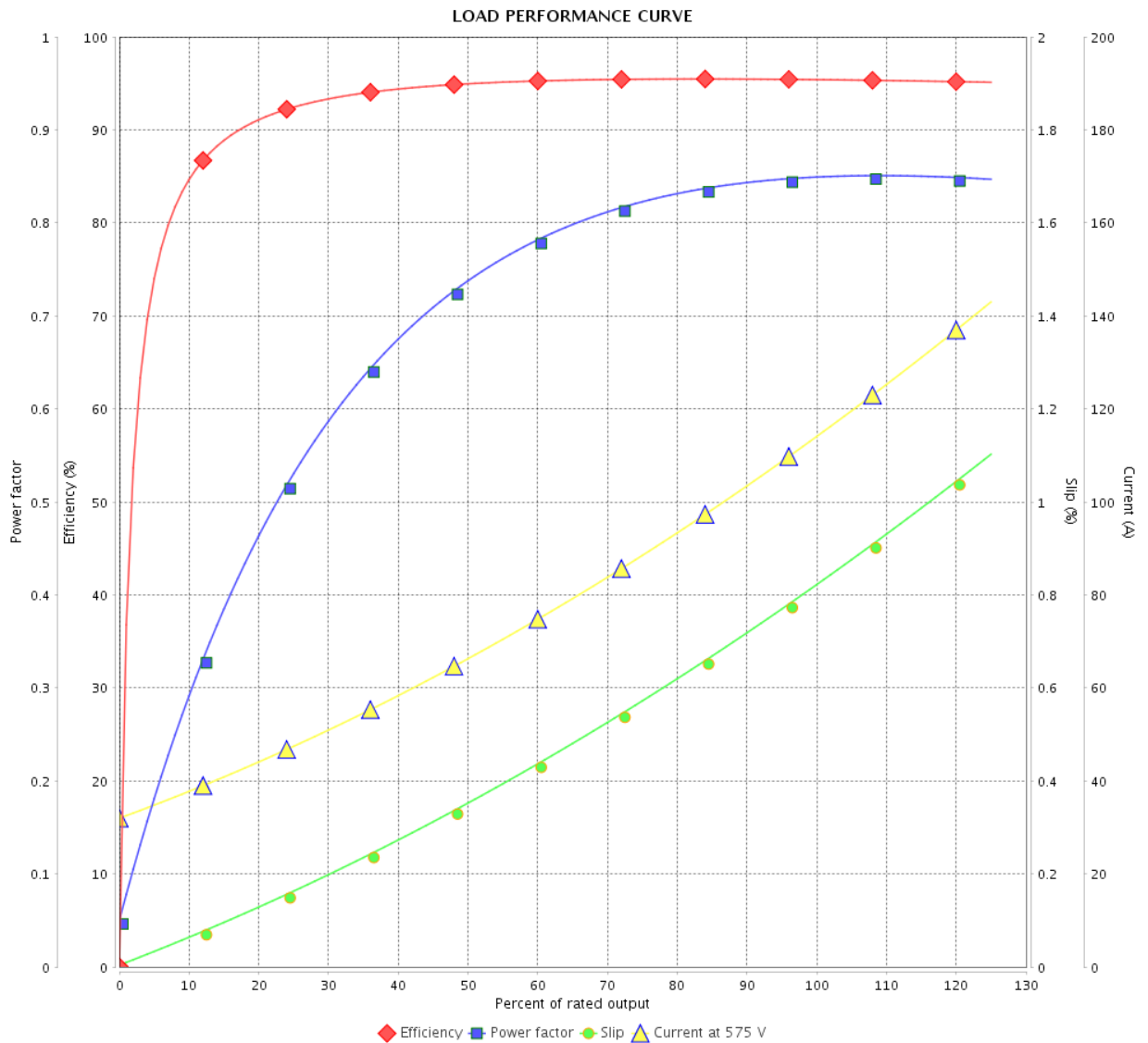


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Catalog # : 12518ET3H444T-W22



Performance : 575 V 60 Hz 4P

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 Breakdown torque : 229 %  
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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

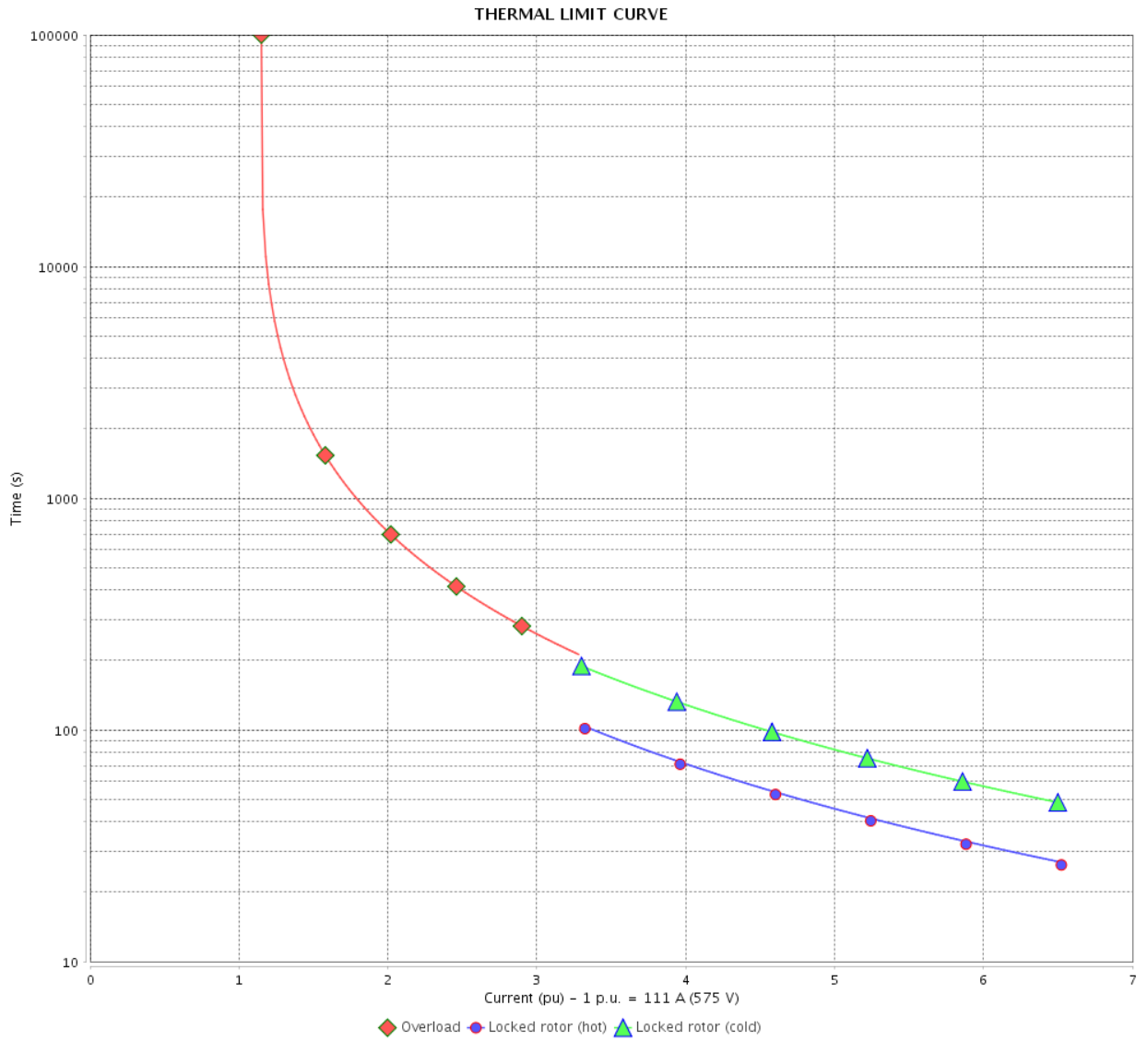
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



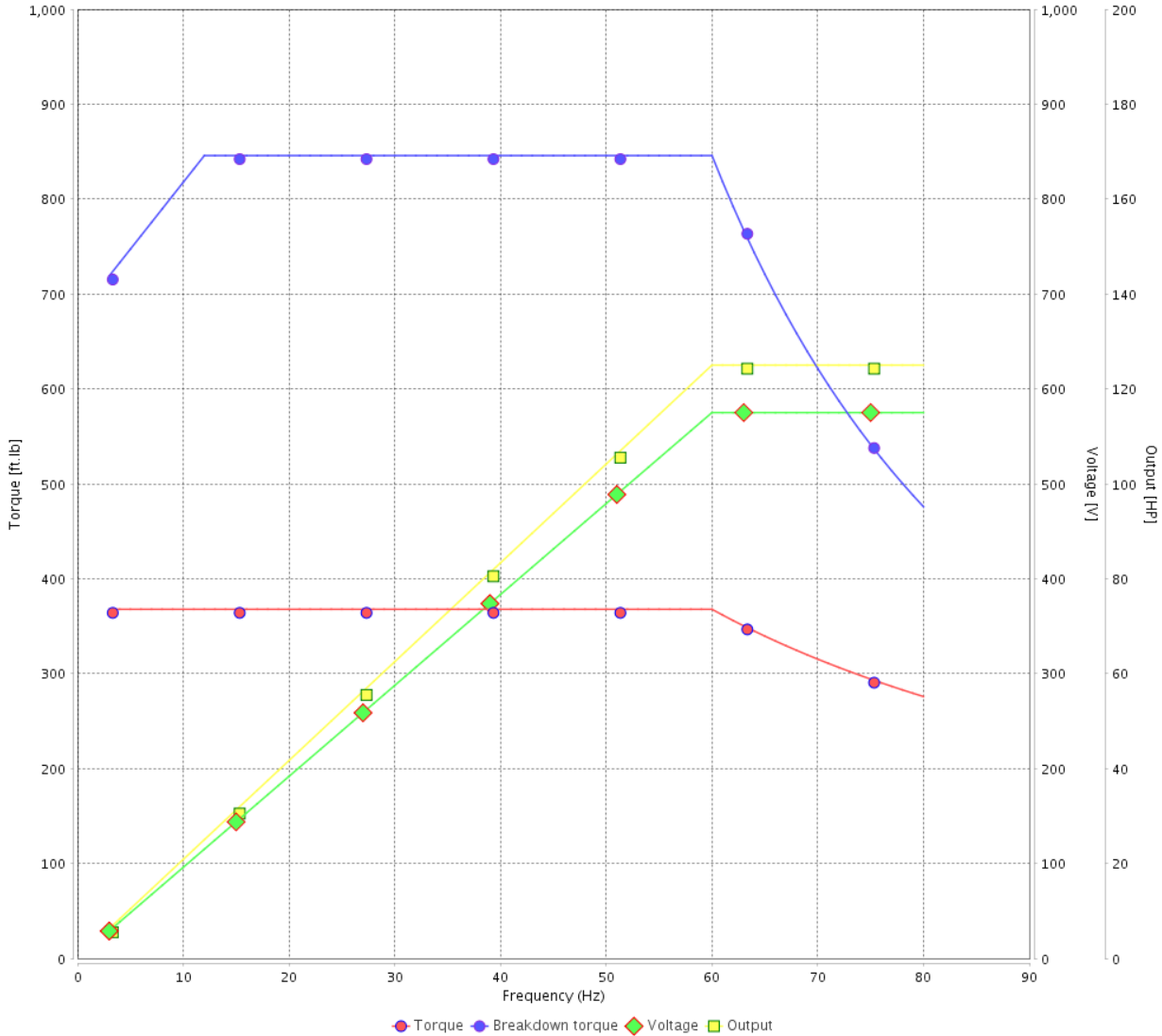
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VFD OPERATION CURVE



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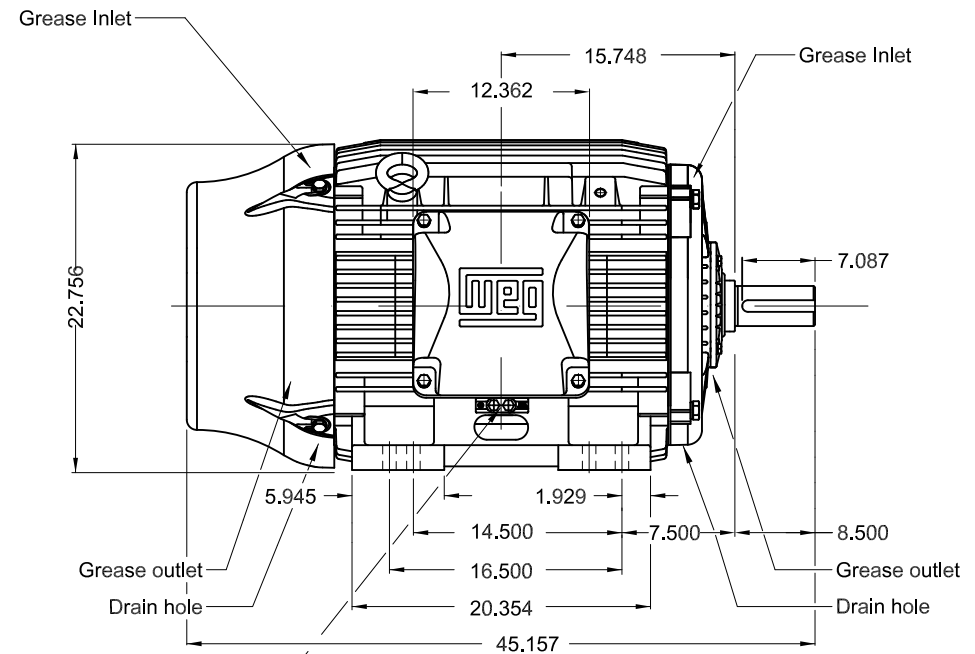
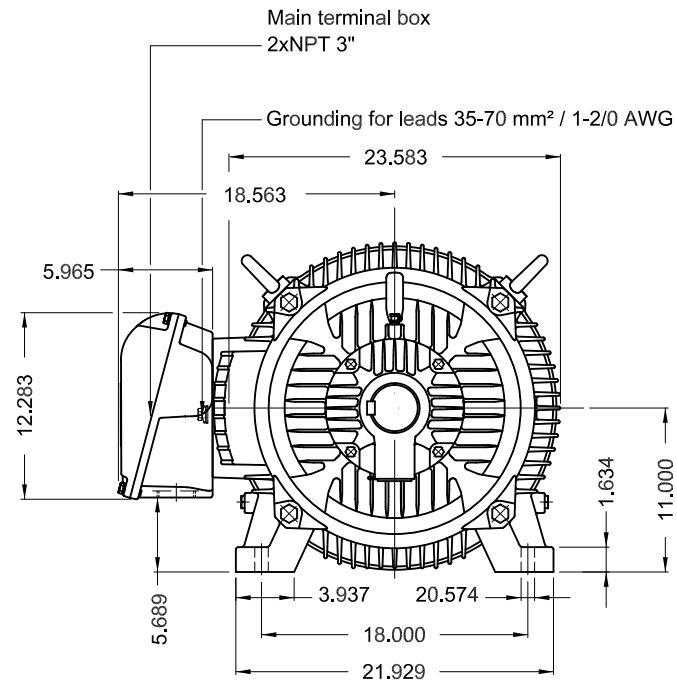
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1 2 3 4 5 6

A

B

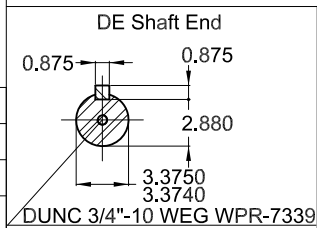
C



D

E

Without vertical jackscrews  
 Color RAL 5009  
 Painting plan 203A  
 Mounting B3R(D)



125 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

MODEL 12518ET3H444T-W22

Inverter Duty Motor  
Severe Duty

PH3 60Hz Fr. 444/5T 1000m.a.s.l. IP55 TEFC 1642lb

V 575

A 111

HP 125

kW 90

SF 1.15

SFA 128

RPM 1785

PF 0.85

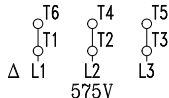
AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 95.4%

DUTY CONT.

DES B Code G



→ 6319-C3 (45g)

→ 6316-C3 (34g)



MOBIL POLYREX EM (8000h)



MADE IN BRAZIL  
11611524