

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line		: W22 NEMA Premium Efficiency Three-Phase	Product code :	11355339
			Catalog # :	10012ET3E444T-W22
Frame : 444/5T Output : 100 HP (75 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 208-230/460 V Rated current : 268-242/121 A L. R. Amperes : 1659-1500/750 A LRC : 6.2x(Code G) No load current : 86.2-100/50.0 A Rated speed : 1185 rpm Slip : 1.25 % Rated torque : 437 ft.lb Locked rotor torque : 220 % Breakdown torque : 260 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 87.3 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 : 1685 lb		
Output	50%	75%	100%	Foundation loads Max. traction : 2711 lb Max. compression : 4395 lb
Efficiency (%)	94.5	95.0	95.0	
Power Factor	0.68	0.78	0.82	
		<u>Drive end</u>	<u>Non drive end</u>	
Bearing type	:	6319 C3	6316 C3	
Sealing	:	WSeal	WSeal	
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.	
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Performed by			Page 1 / 6 Revision	
Checked by				
Date	22/04/2019			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

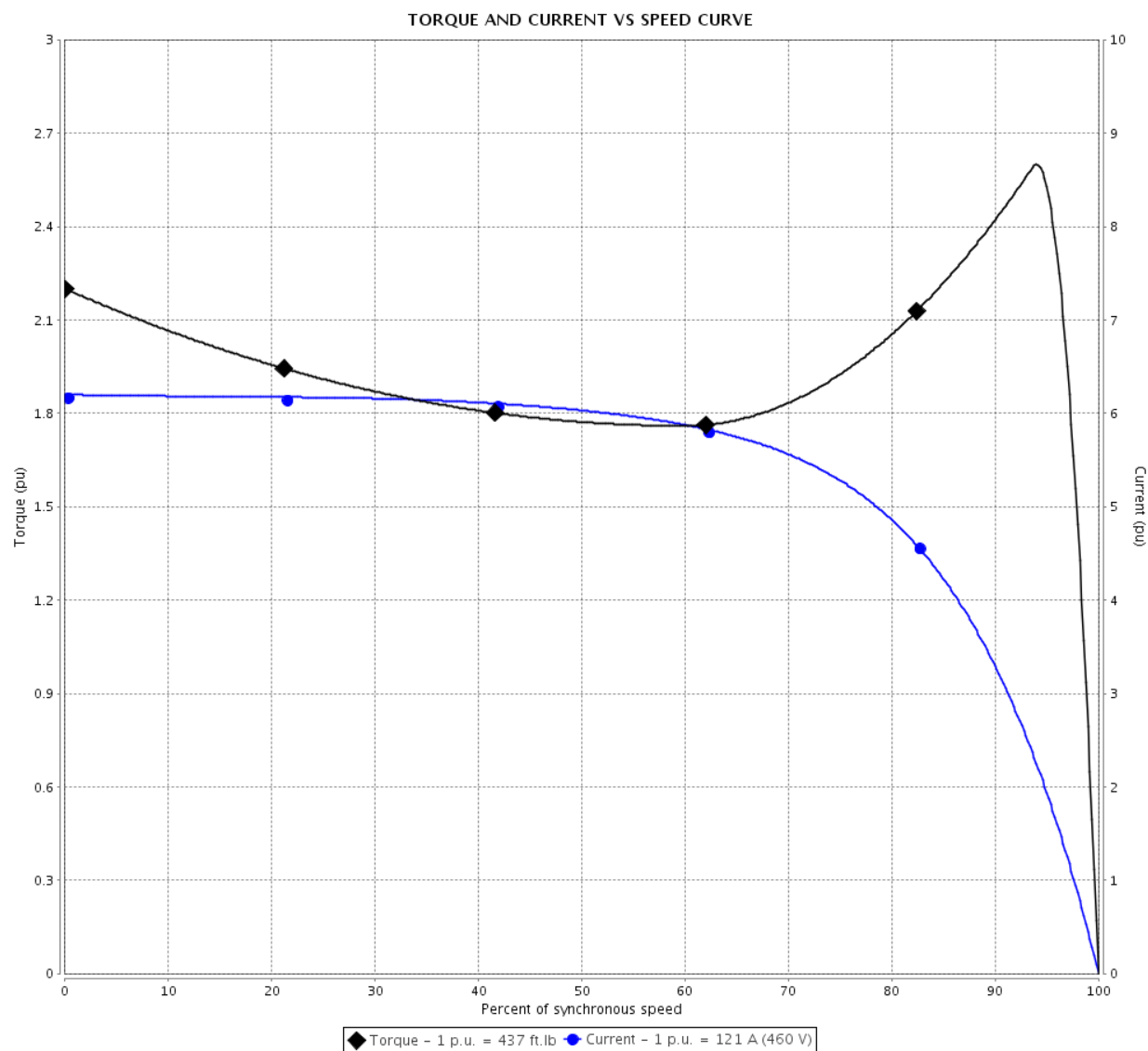


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LRC : 6.2
Rated torque : 437 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 1185 rpm

Moment of inertia (J) : 87.3 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
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Design : B

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

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LOAD PERFORMANCE CURVE

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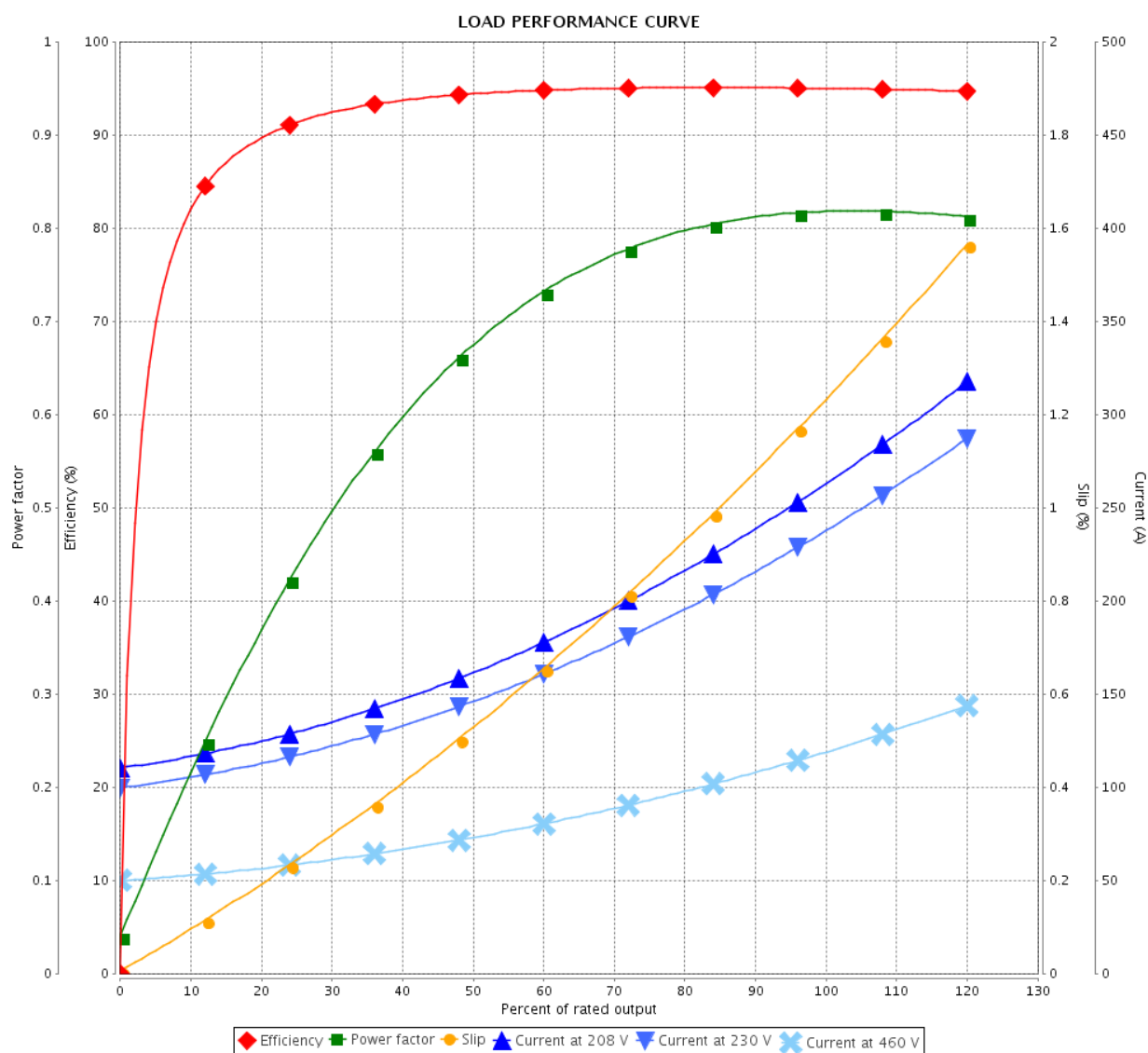


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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

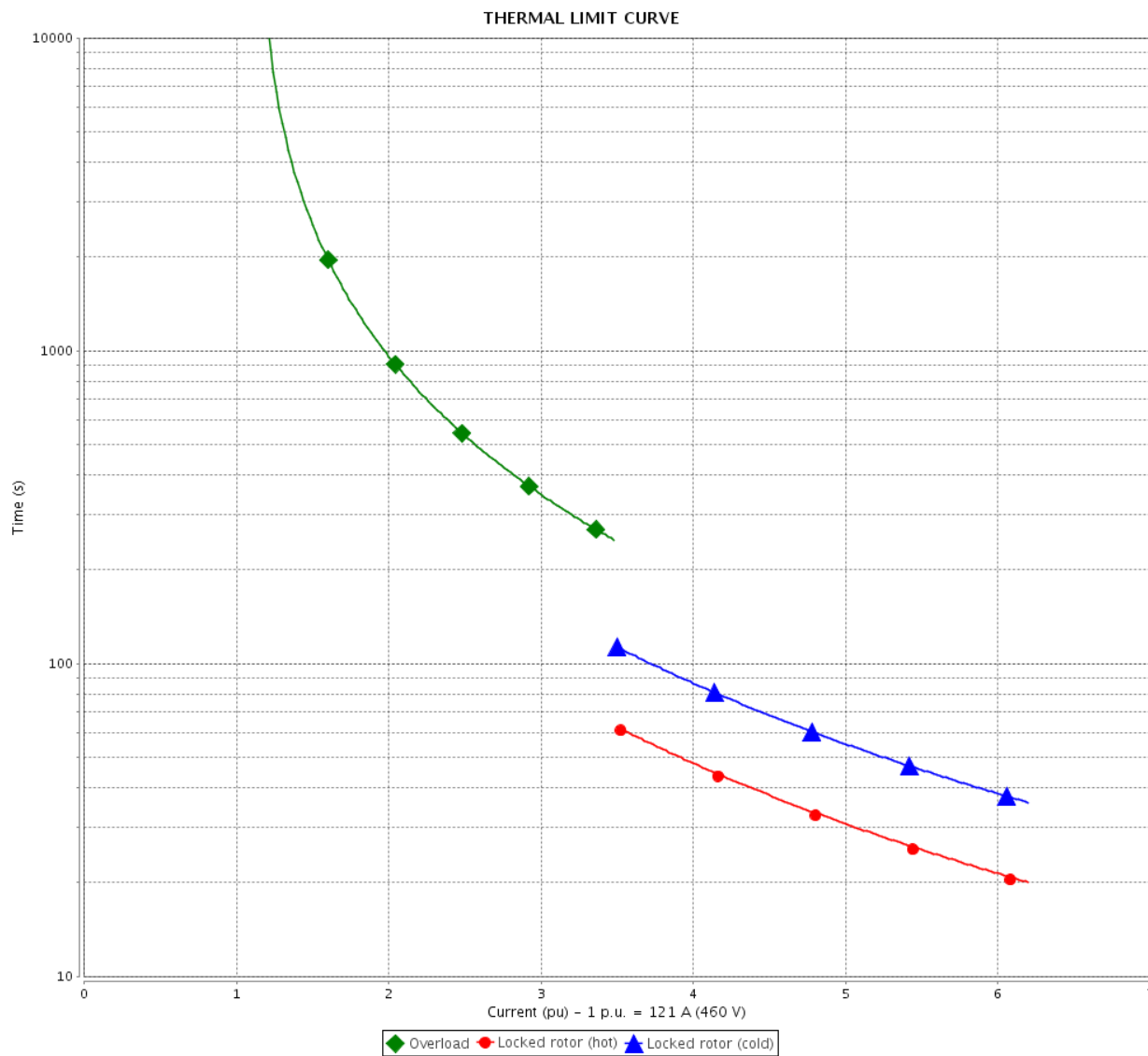
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

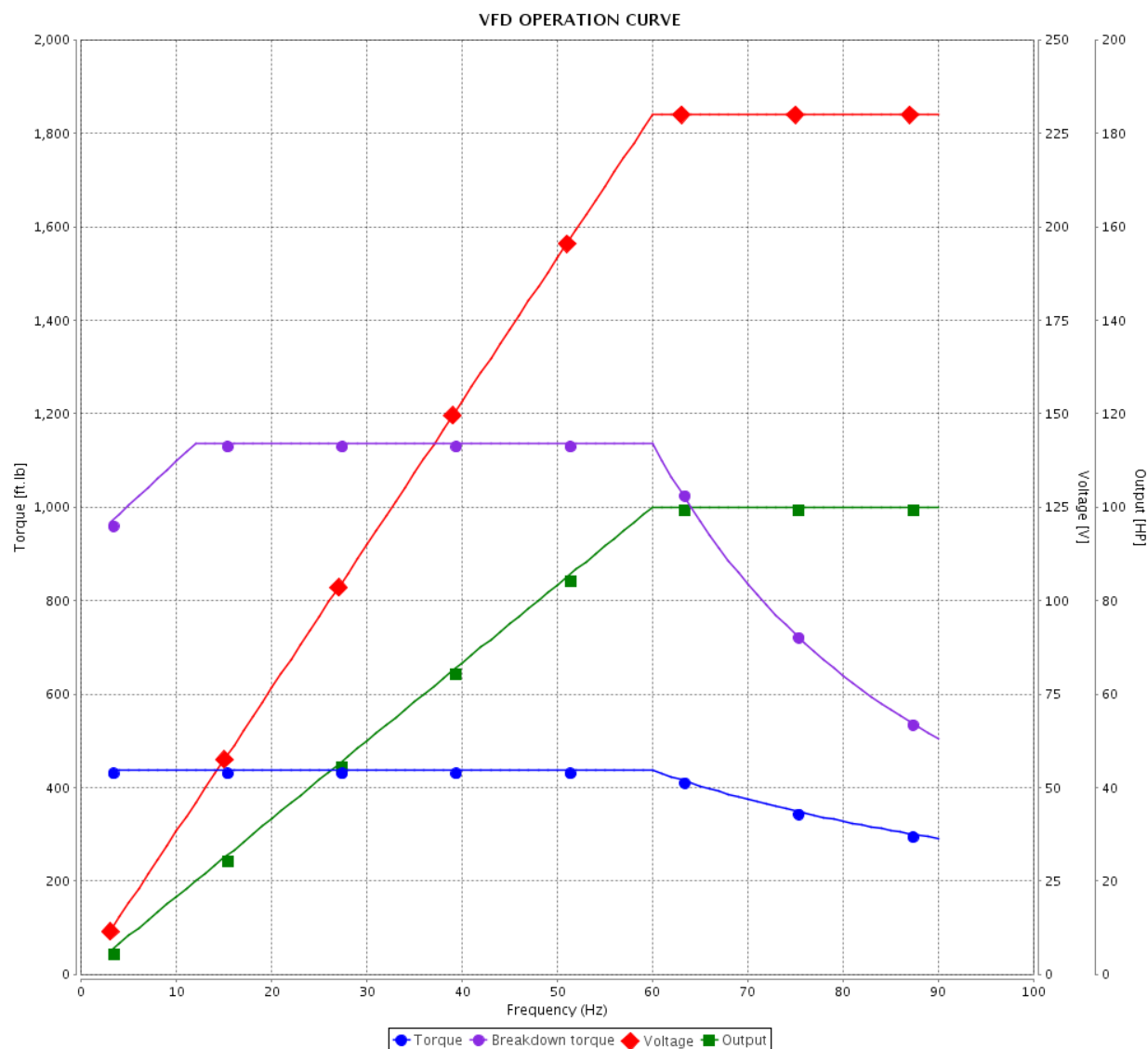


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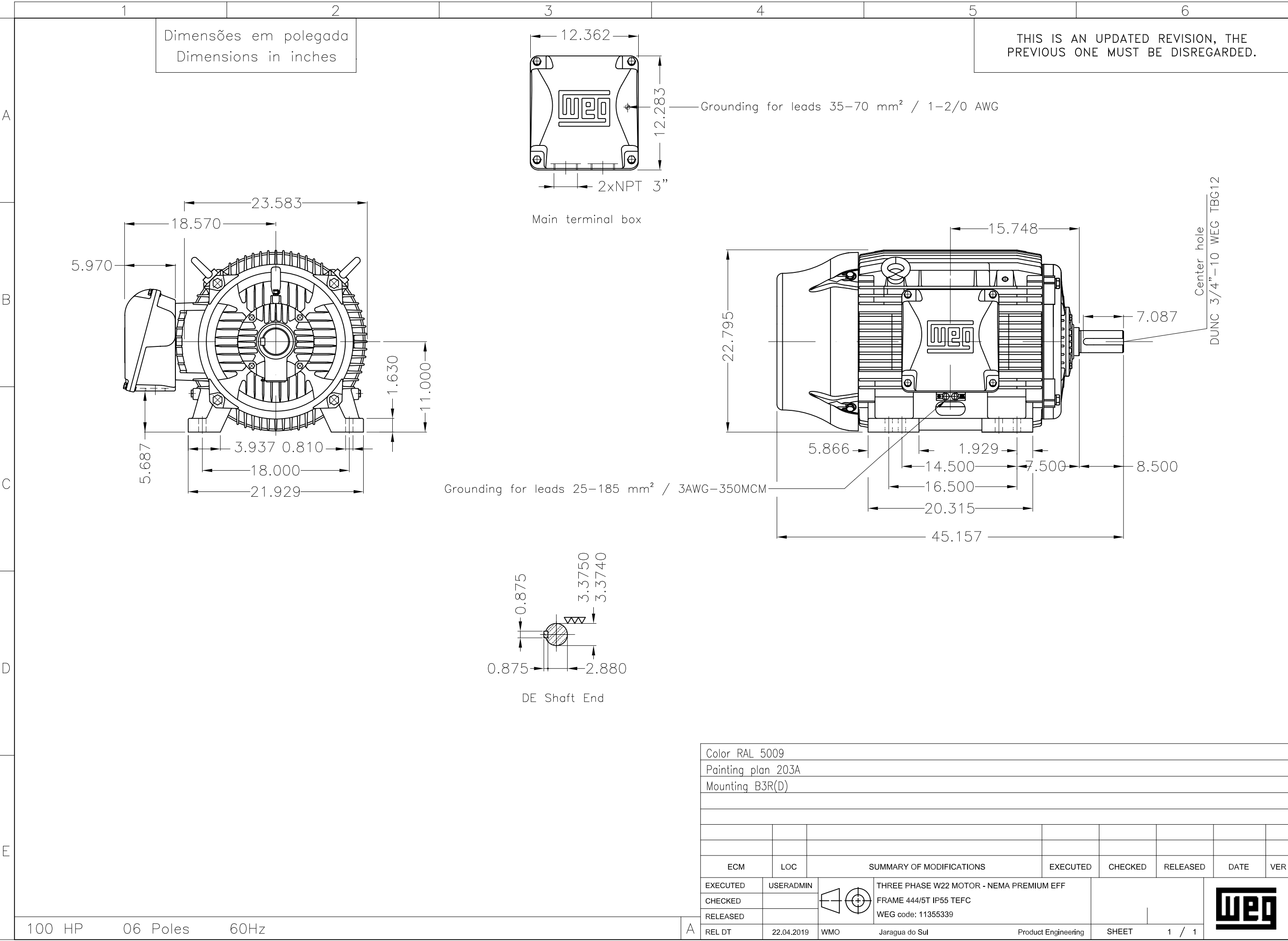


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MODEL 10012ET3E444T-W22

MADE IN MEXICO

11355339


W22 NEMA
CC029A Premium
*Inverter Duty Motor
Severe Duty*

**3PT9
LISTED**

 FOR SAFE AREA
 MOD.TE1BFOXON

C US
 Energy Verified

For 60Hz: 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 60Hz use on PWM, Gr. A, B, C, D and F,
 VT 1000:1, CT 20:1, 1.0SF, T3A

PH 3 FR 444/5T HP(kW) 100.0(75.0) Hz 60

V 230/460 A 242/121 RPM 1185 DES B

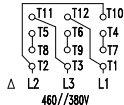
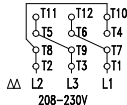
 NEMA NOM EFF 95.0 % INS. CL. F Δ T 80 K IP55

ENCL TEFC DUTY CONT. AMB. 40°C

CODE G PF 0.82 SF 1.25 SFA 303/151

USABLE @208V 268 A SF 1.10 SFA 295

100HP 75kW 50Hz 380V 145A 980RPM SF1.00 EFF 93.6% (IE1)



→ 6319-C3 (45g)

→ 6316-C3 (34g)

 MOBIL POLYREX EM
 13000 h

ALT 1000 m.a.s.l. 1676 Lbs