

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line		: NEMA Premium Efficiency Three-Phase		Product code : 12456521		
				Catalog # : 20009ST3QIE449T-W22		
Frame : L447/9T Output : 200 HP (150 kW) Poles : 8 Frequency : 60 Hz Rated voltage : 460 V Rated current : 242 A L. R. Amperes : 1476 A LRC : 6.1x(Code G) No load current : 90.0 A Rated speed : 891 rpm Slip : 1.00 % Rated torque : 1180 ft.lb Locked rotor torque : 190 % Breakdown torque : 210 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 255 sq.ft.lb Design : B			Locked rotor time : 45s (cold) 25s (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 : 64.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 3495 lb			
Output		25%	50%	75%	100%	
Efficiency (%)		94.5	94.6	95.0	95.0	
Power Factor		0.45	0.70	0.79	0.82	
Foundation loads						
Max. traction : 4851 lb						
Max. compression : 8347 lb						
		<u>Drive end</u>		<u>Non drive end</u>		
Bearing type		: 6322 C3		: 6319 C3		
Sealing		: Inpro/Seal		: Inpro/Seal		
Lubrication interval		: 14000 h		: 17000 h		
Lubricant amount		: 60 g		: 45 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



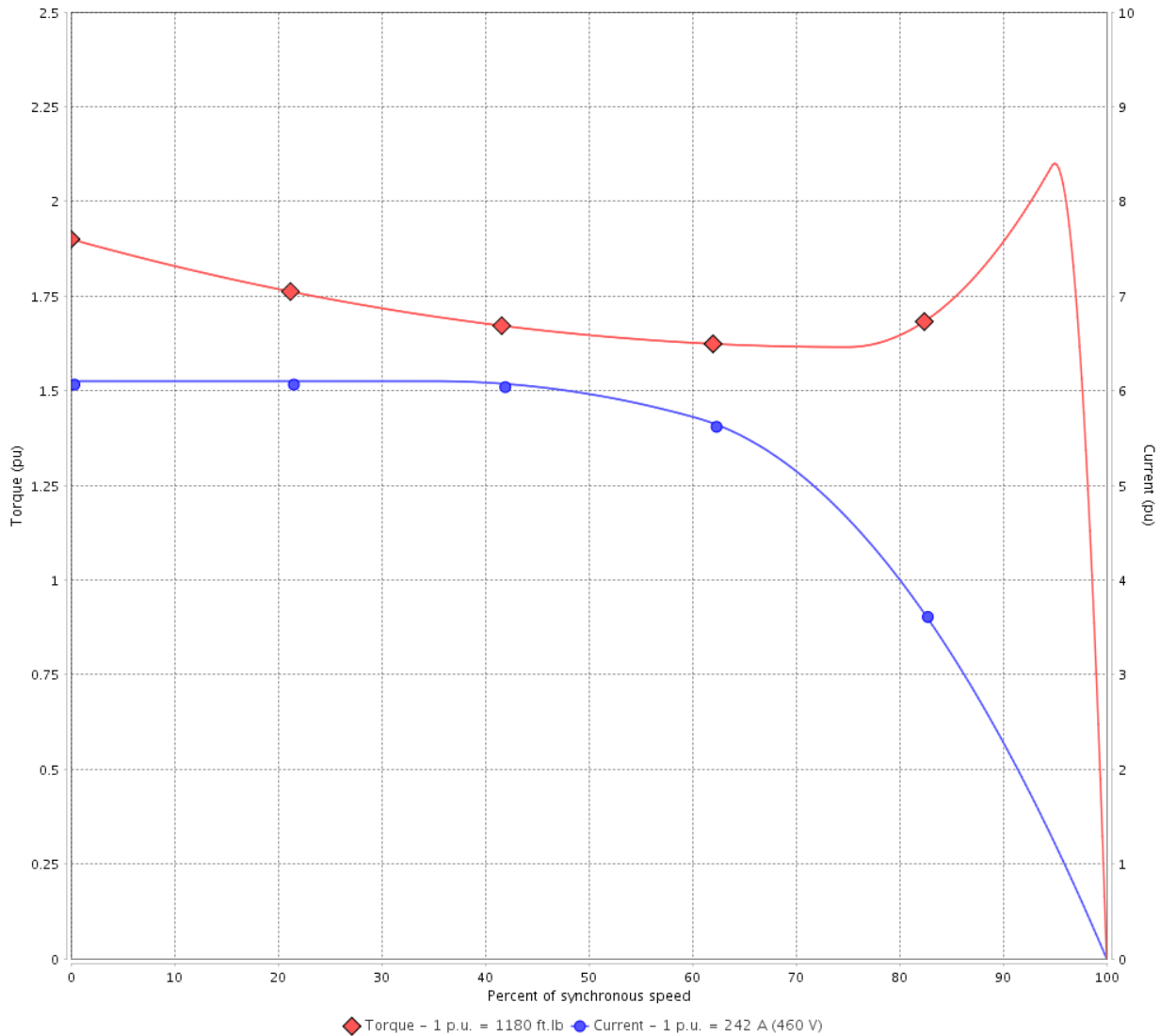
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 8P

Rated current	: 242 A	Moment of inertia (J)	: 255 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 1180 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 891 rpm	Design	: B

Locked rotor time : 45s (cold) 25s (hot)

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LOAD PERFORMANCE CURVE

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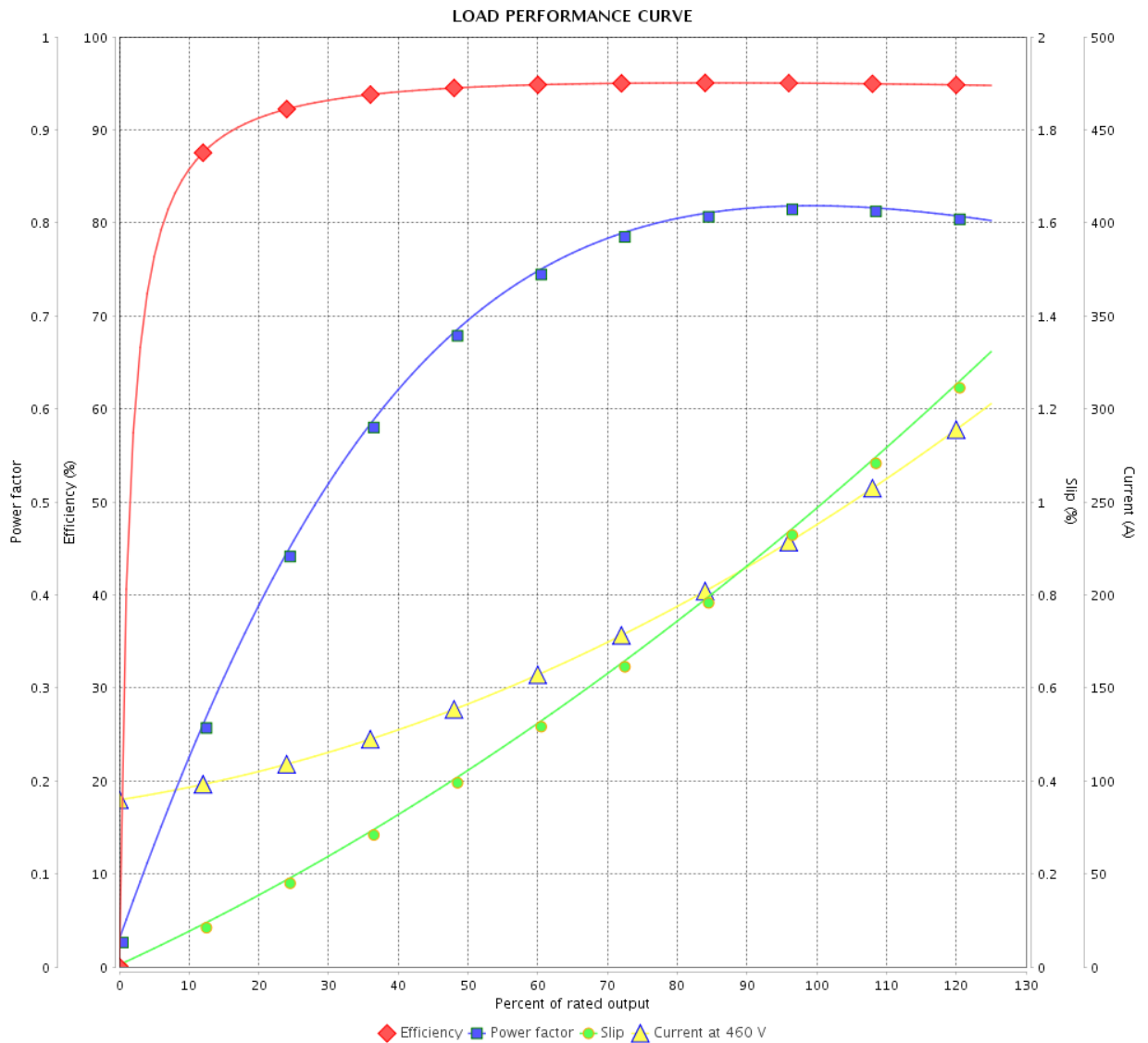


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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

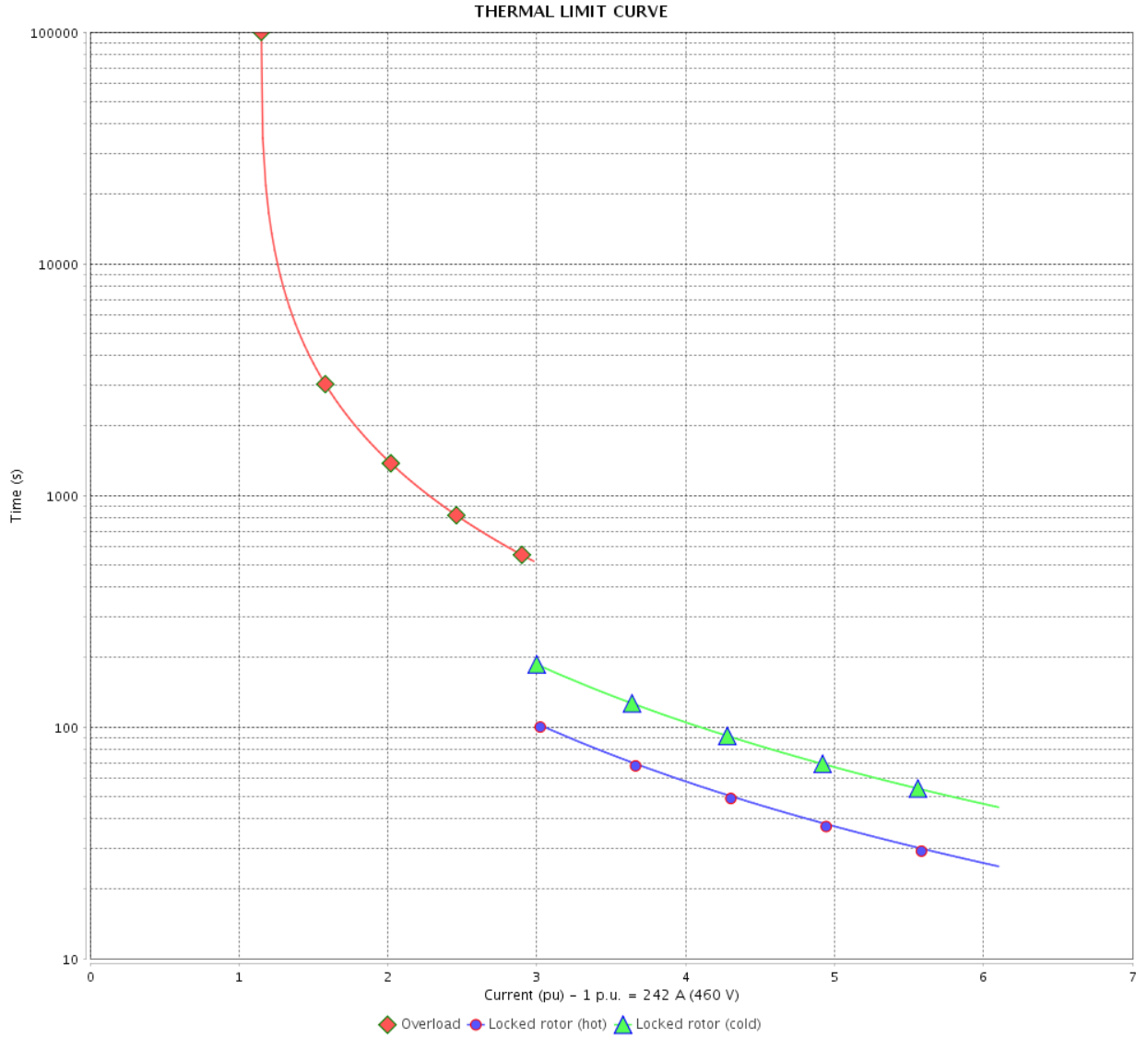
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

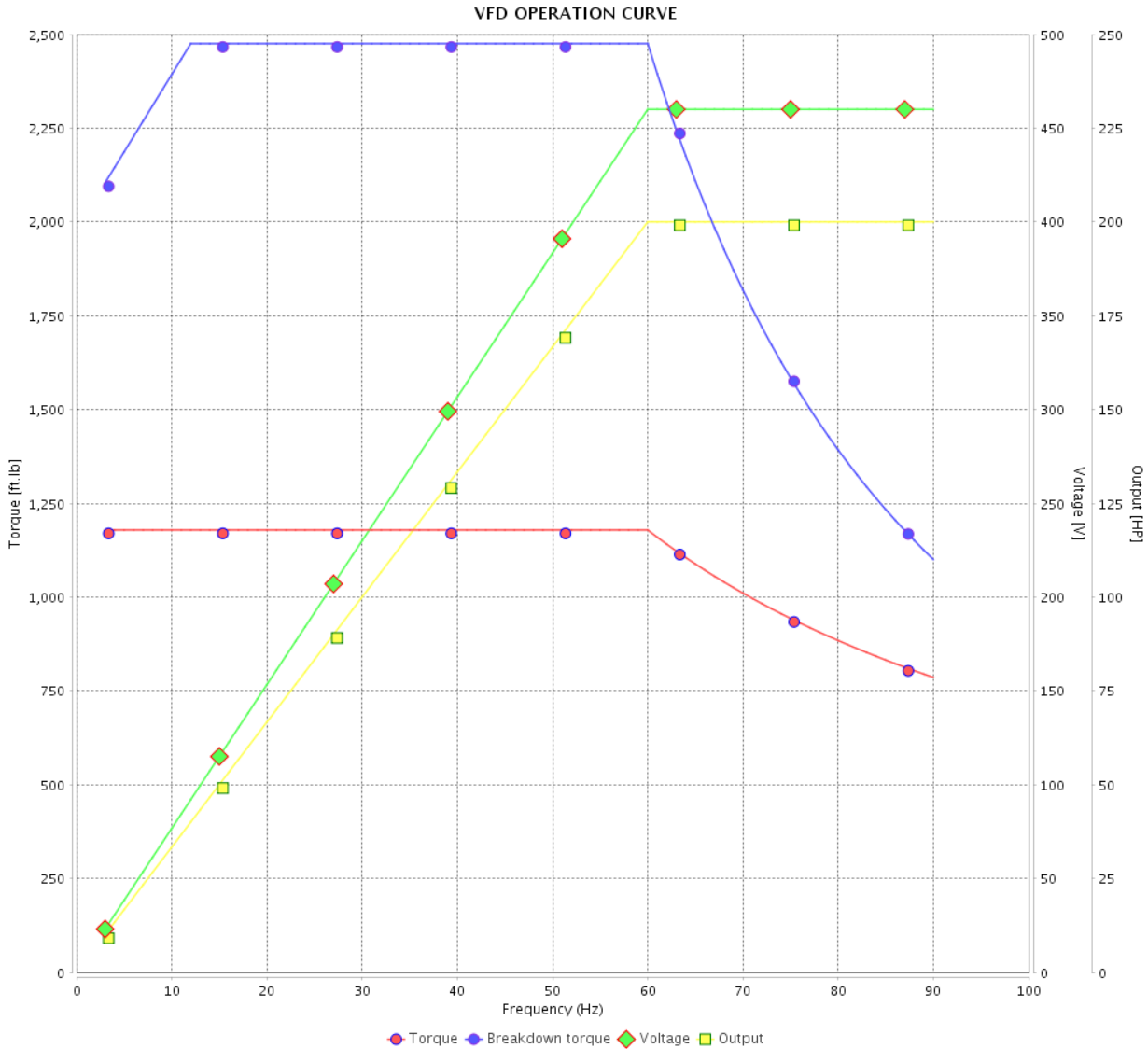


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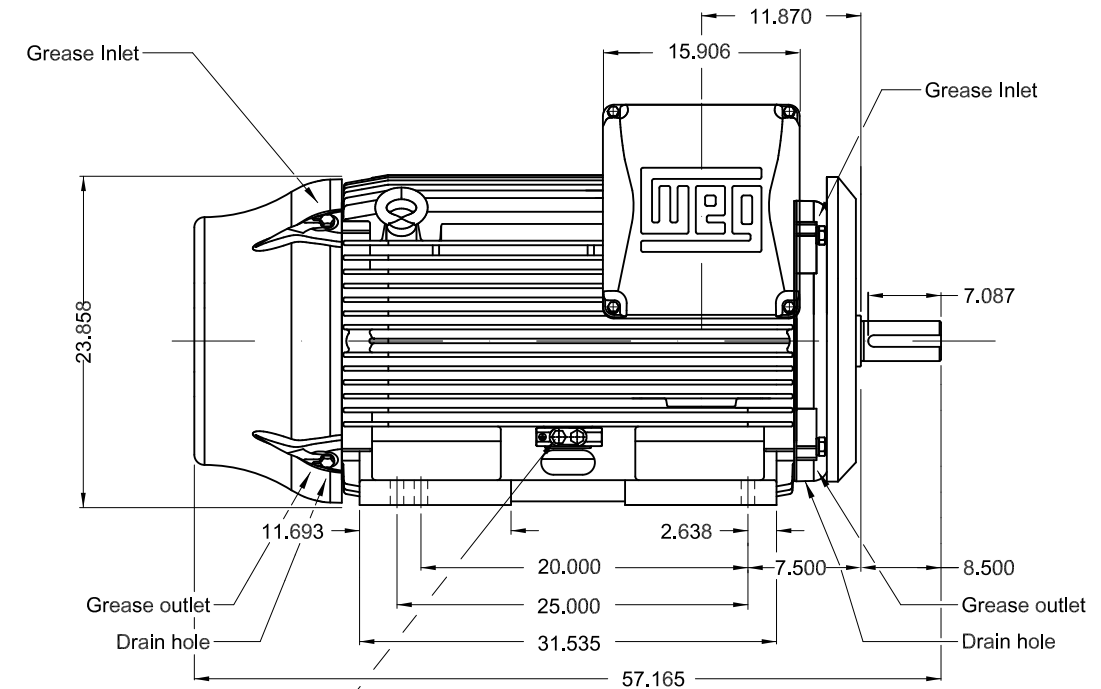
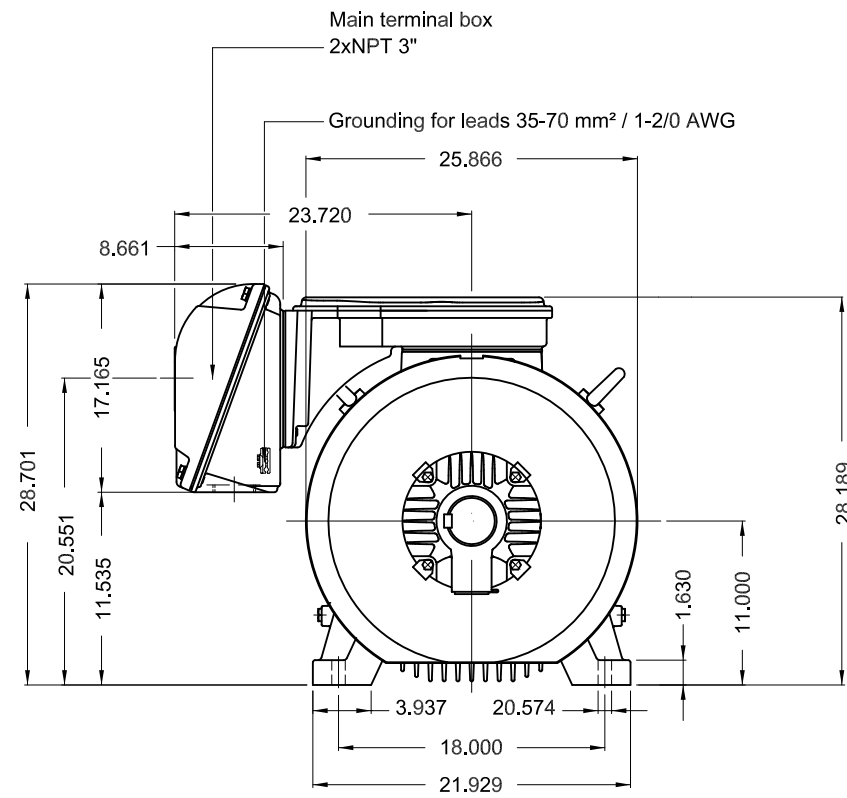


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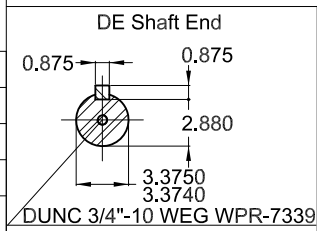


Grounding for leads 25-185 mm² / 3AWG-350MCM

200 HP 08 Poles 60 Hz

A

- NDE endshield with electrically insulated bearing hub
- Drive-End Air Deflector
- Color RAL 5009
- Painting plan 202E
- Mounting B3R(D)



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF.					
CHECKED		FRAME L447/9T 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 20009ST3QIE449T-W22



Inverter Duty Motor
Severe Duty

MADE IN BRAZIL
12456521

PH3 60Hz Fr. L447/9T 1000m.a.s.l. IP55 TEFC 3495lb

V 460

A 242

HP 200

kW 150

SF 1.15

SFA 278

RPM 891

PF 0.82

AMB 40°C

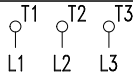
INS cl. F DT80K

NEMA NOM EFF 95.0%

DUTY CONT.

DES B Code G

GUARANT. EFF 94.1%



460V



→ 6322-C3 (60g) 110BC03X30

→ 6319-C3 (45g) 95BC03X30



MOBIL POLYREX EM (14000h)

