

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 14385519
 Catalog # : 07512ET3H405T-W22G

Frame : 404/5T Output : 75 HP (55 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 575 V Rated current : 67.9 A L. R. Amperes : 435 A LRC : 6.4x(Code G) No load current : 24.0 A Rated speed : 1184 rpm Slip : 1.33 % Rated torque : 333 ft.lb Locked rotor torque : 229 % Breakdown torque : 229 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 40.2 sq.ft.lb Design : B	Locked rotor time : 30s (cold) 17s (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 : 68.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 1089 lb
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Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	94.0	94.1	94.5	94.5	Max. traction	: 1752 lb
Power Factor	0.49	0.74	0.83	0.86	Max. compression	: 2841 lb

		<u>Drive end</u>		<u>Non drive end</u>
Bearing type	:	6316 C3		6314 C3
Sealing	:	WSeal		WSeal
Lubrication interval	:	16000 h		17000 h
Lubricant amount	:	34 g		27 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



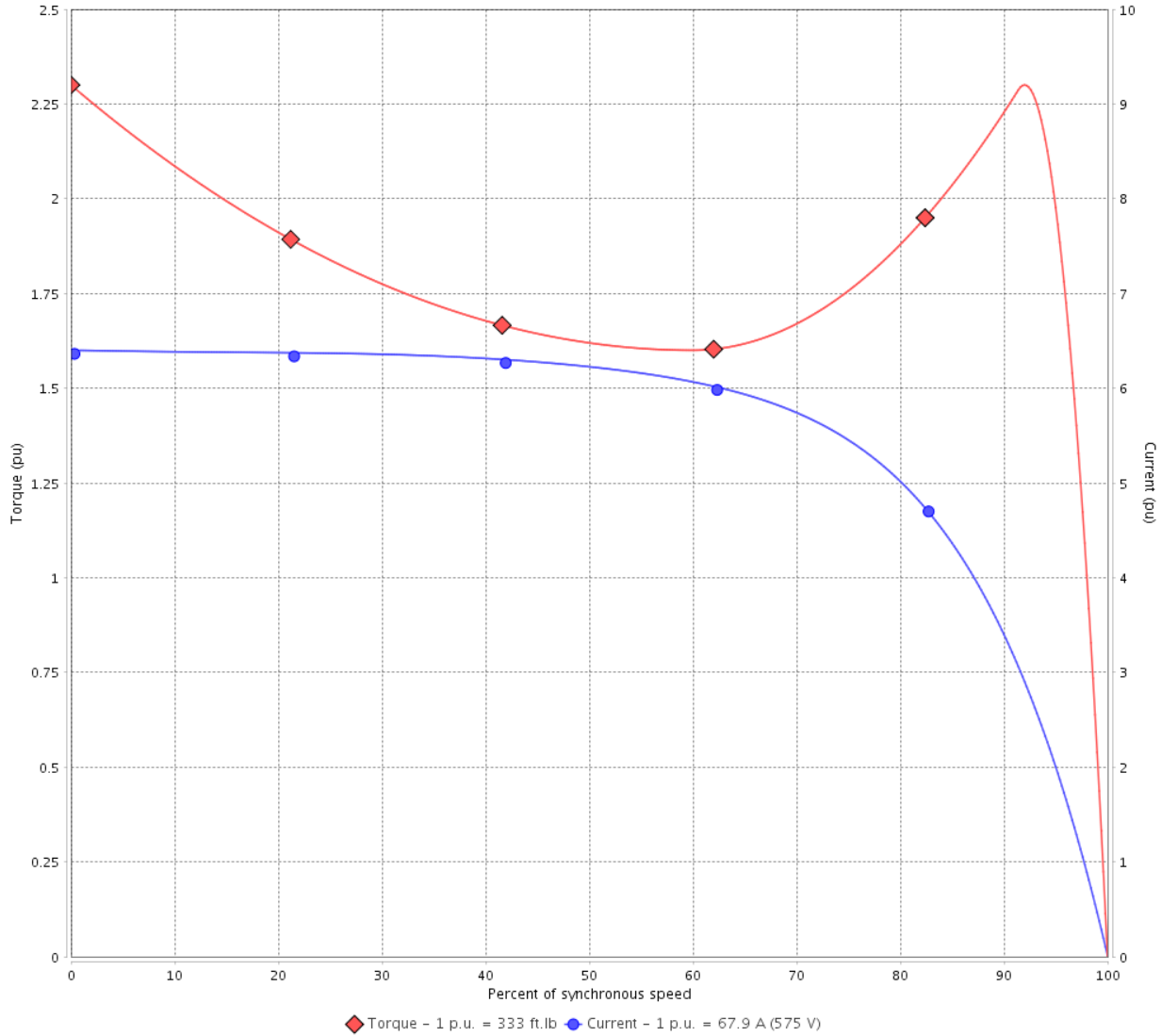
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

Rated current	: 67.9 A	Moment of inertia (J)	: 40.2 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 333 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1184 rpm	Design	: B

Locked rotor time : 30s (cold) 17s (hot)

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LOAD PERFORMANCE CURVE

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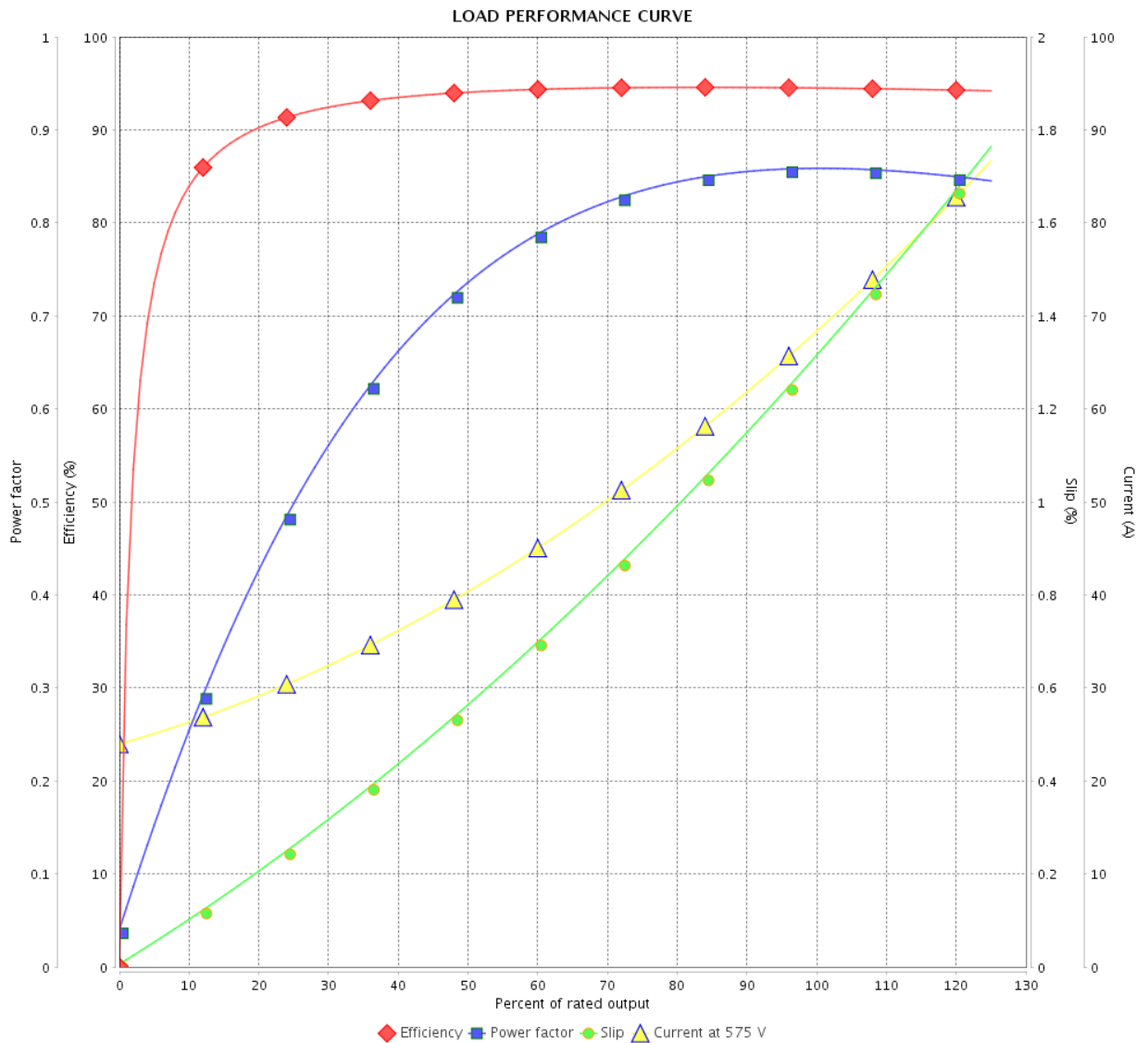


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

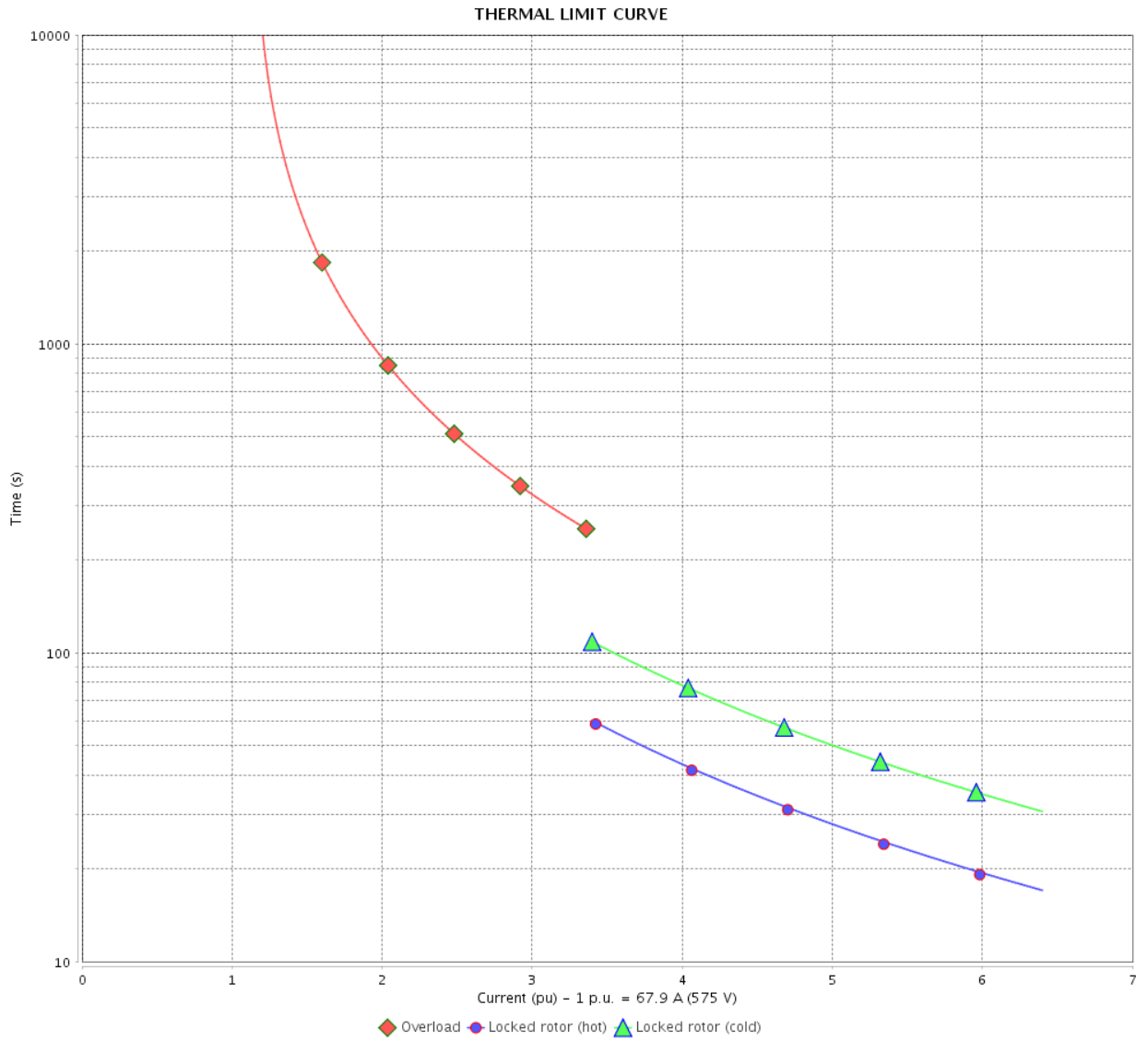
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

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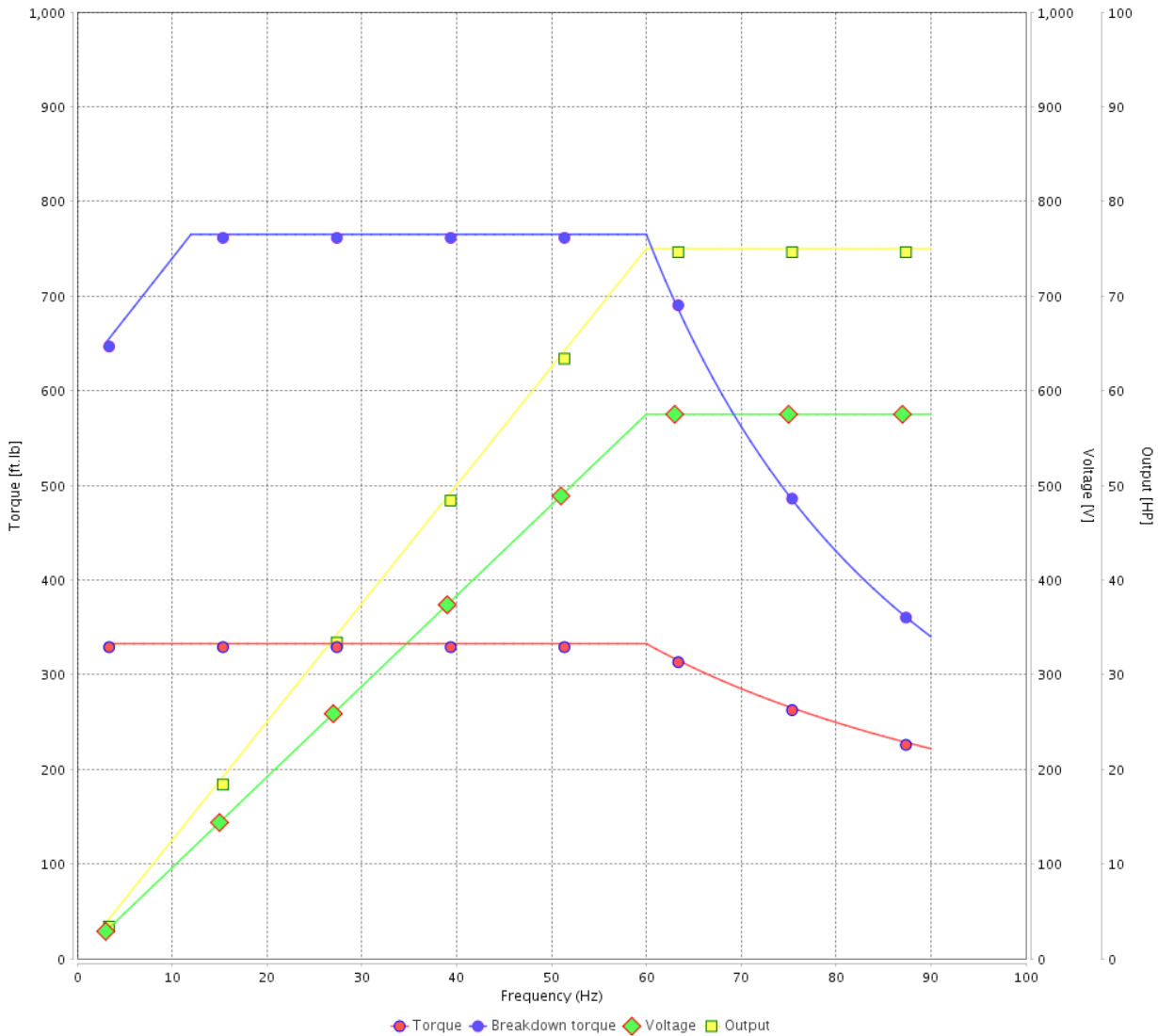
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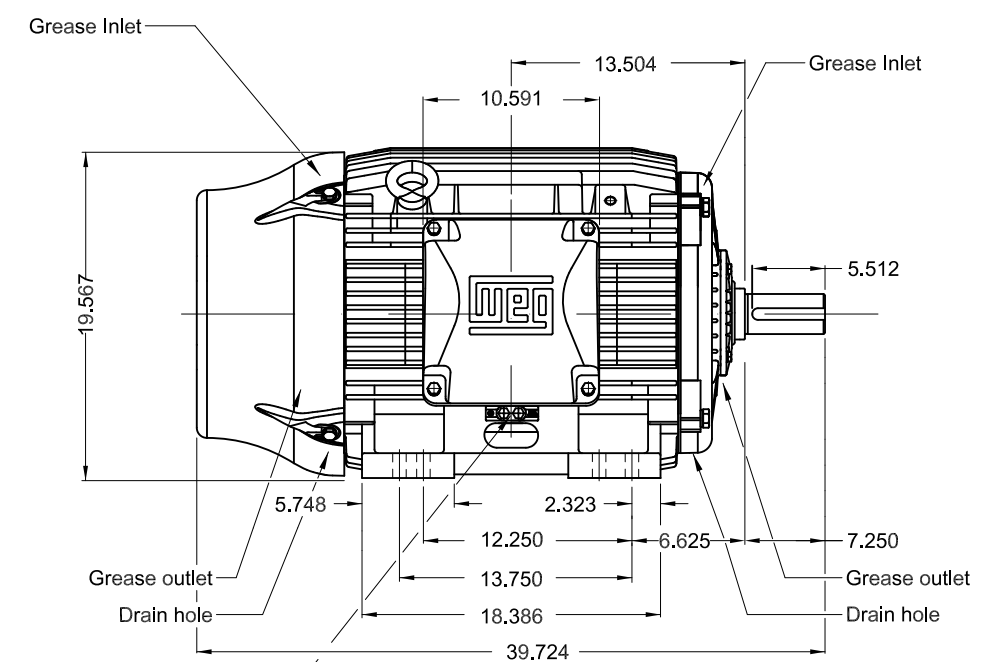
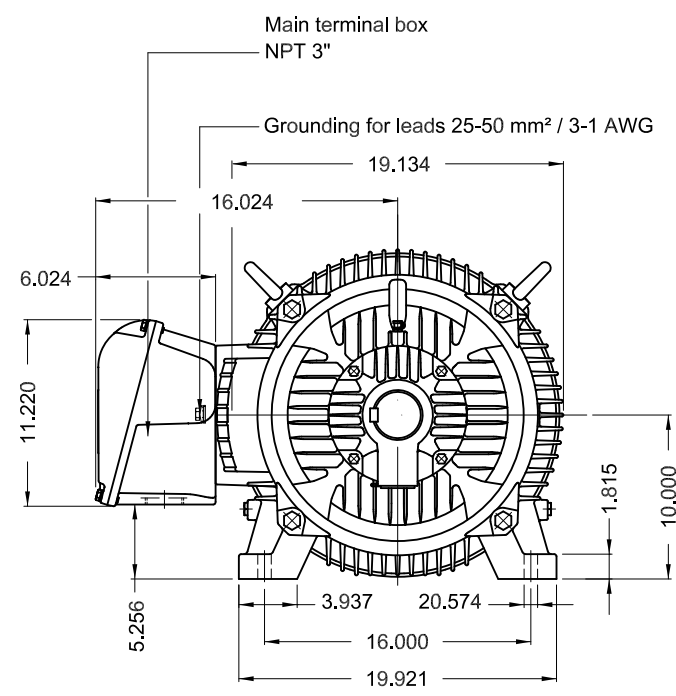
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1 2 3 4 5 6

A

B

C

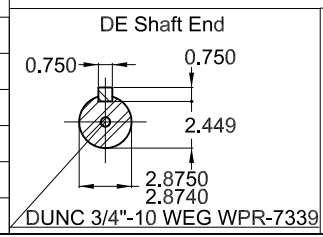


Grounding for leads 25-185 mm² / 3AWG-350MCM

D

E

- Without vertical jackscrews
- Internal AEGIS ground ring on the DE
- Color RAL 5009
- Painting plan 203A
- Mounting NEMA F-1
- Mounting B3R(D)



75 HP 06 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF. FRAME 404/5T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
WDD

