

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11432184																		
Catalog # :	06012ST3HIE404T-W22																		
Frame : 404/5T Output : 60 HP (45 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 575 V Rated current : 55.6 A L. R. Amperes : 361 A LRC : 6.5x(Code G) No load current : 18.4 A Rated speed : 1185 rpm Slip : 1.25 % Rated torque : 266 ft.lb Locked rotor torque : 200 % Breakdown torque : 229 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 36.9 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 : 68.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 1191 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	94.0 94.1 94.5 94.5																		
Power Factor	0.49 0.74 0.82 0.86																		
Foundation loads																			
Max. traction	: 1240 lb																		
Max. compression	: 2431 lb																		
	<table border="0" style="width: 100%;"> <tr> <td></td> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type</td> <td>: 6316 C3</td> <td>6314 C3</td> </tr> <tr> <td>Sealing</td> <td>: Inpro/Seal</td> <td>Inpro/Seal</td> </tr> <tr> <td>Lubrication interval</td> <td>: 16000 h</td> <td>17000 h</td> </tr> <tr> <td>Lubricant amount</td> <td>: 34 g</td> <td>27 g</td> </tr> <tr> <td>Lubricant type</td> <td colspan="2" style="text-align: center;">Mobil Polyrex EM</td> </tr> </table>		<u>Drive end</u>	<u>Non drive end</u>	Bearing type	: 6316 C3	6314 C3	Sealing	: Inpro/Seal	Inpro/Seal	Lubrication interval	: 16000 h	17000 h	Lubricant amount	: 34 g	27 g	Lubricant type	Mobil Polyrex EM	
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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.																			
Rev.	Changes Summary	Performed	Checked	Date															
Performed by																			
Checked by			Page	Revision															
Date	12/04/2022		1 / 6																

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



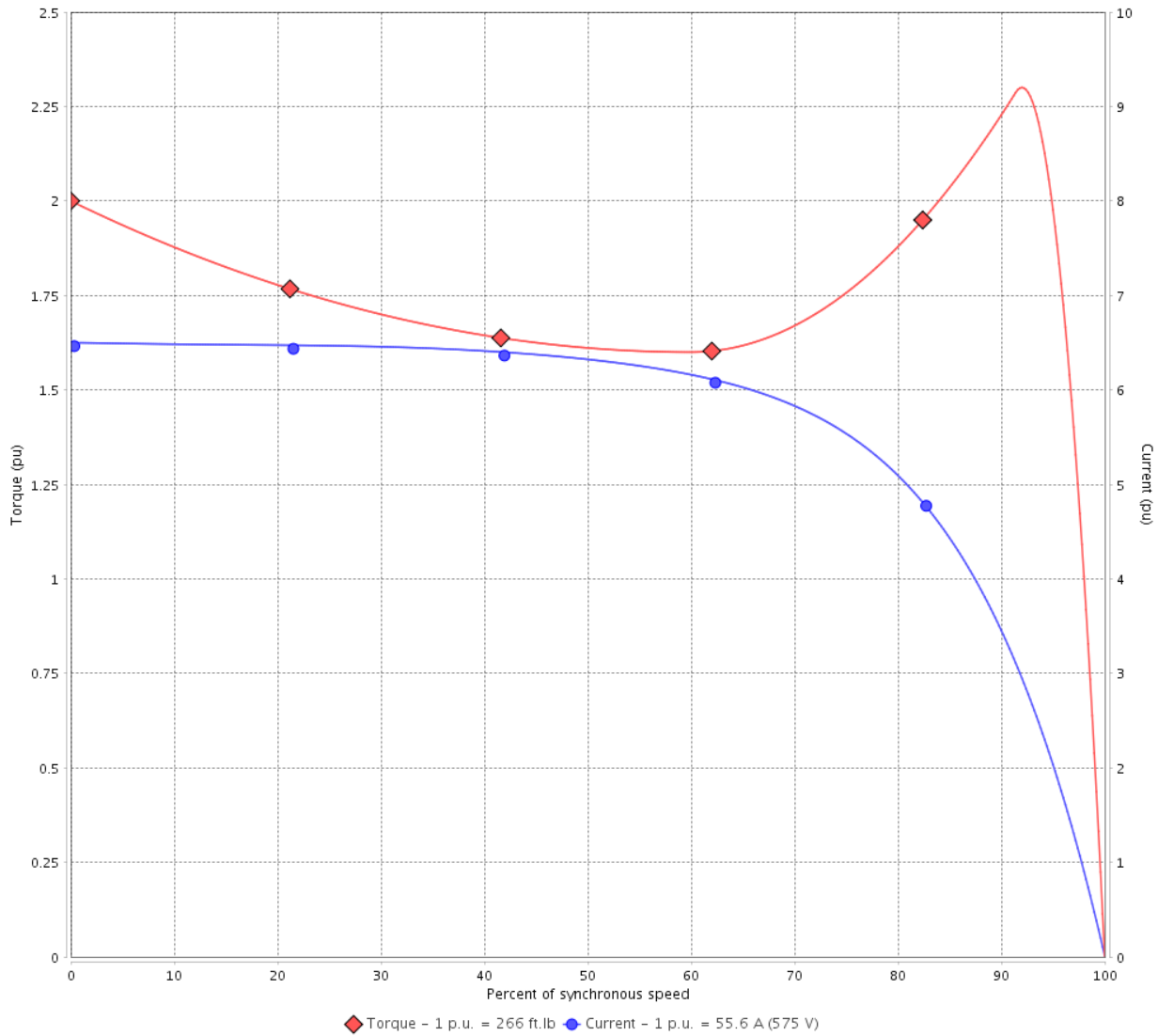
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

Rated current	: 55.6 A	Moment of inertia (J)	: 36.9 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 266 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1185 rpm	Design	: B

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

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Performed by			Page 2 / 6	Revision
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Date	12/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

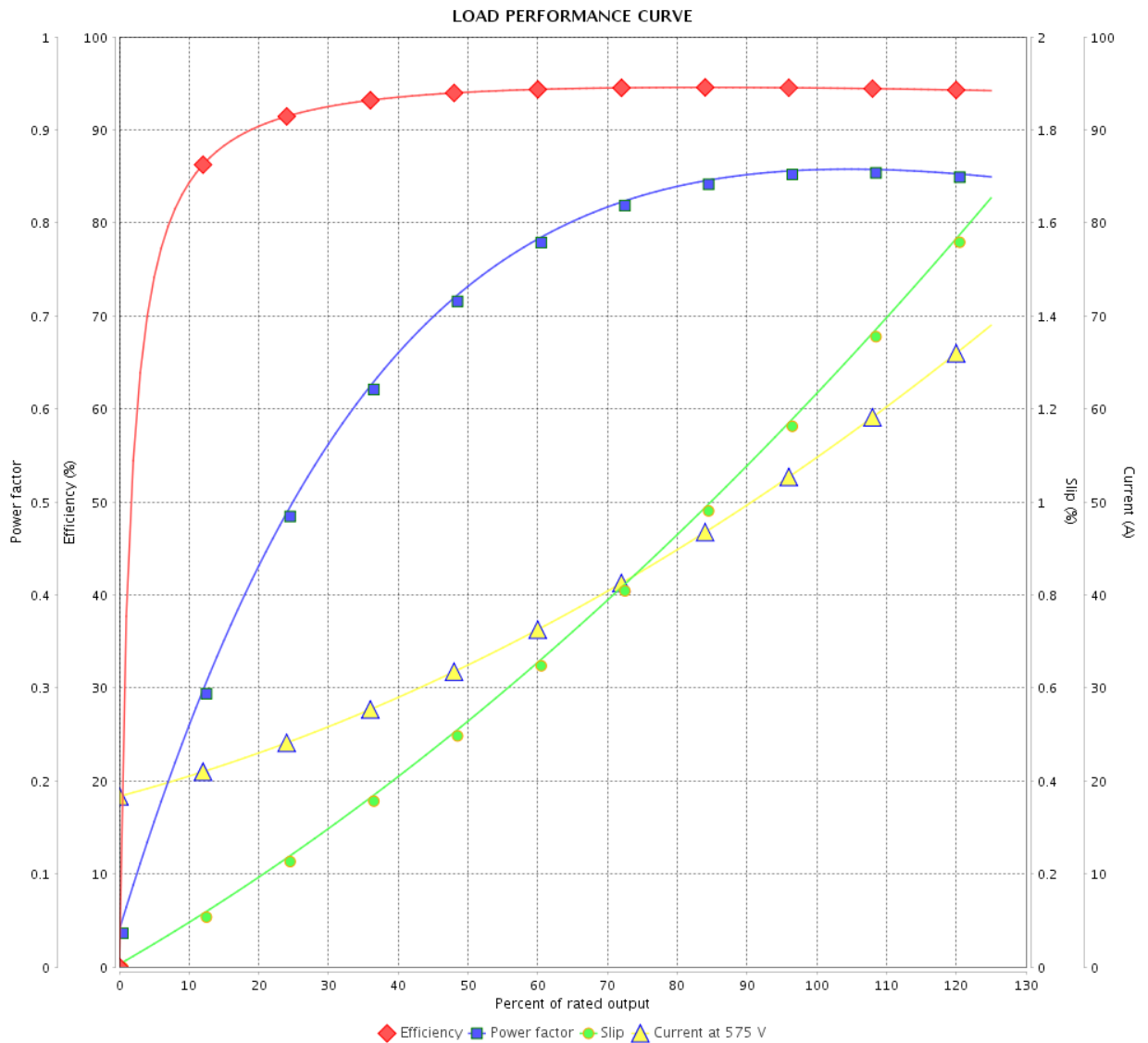


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

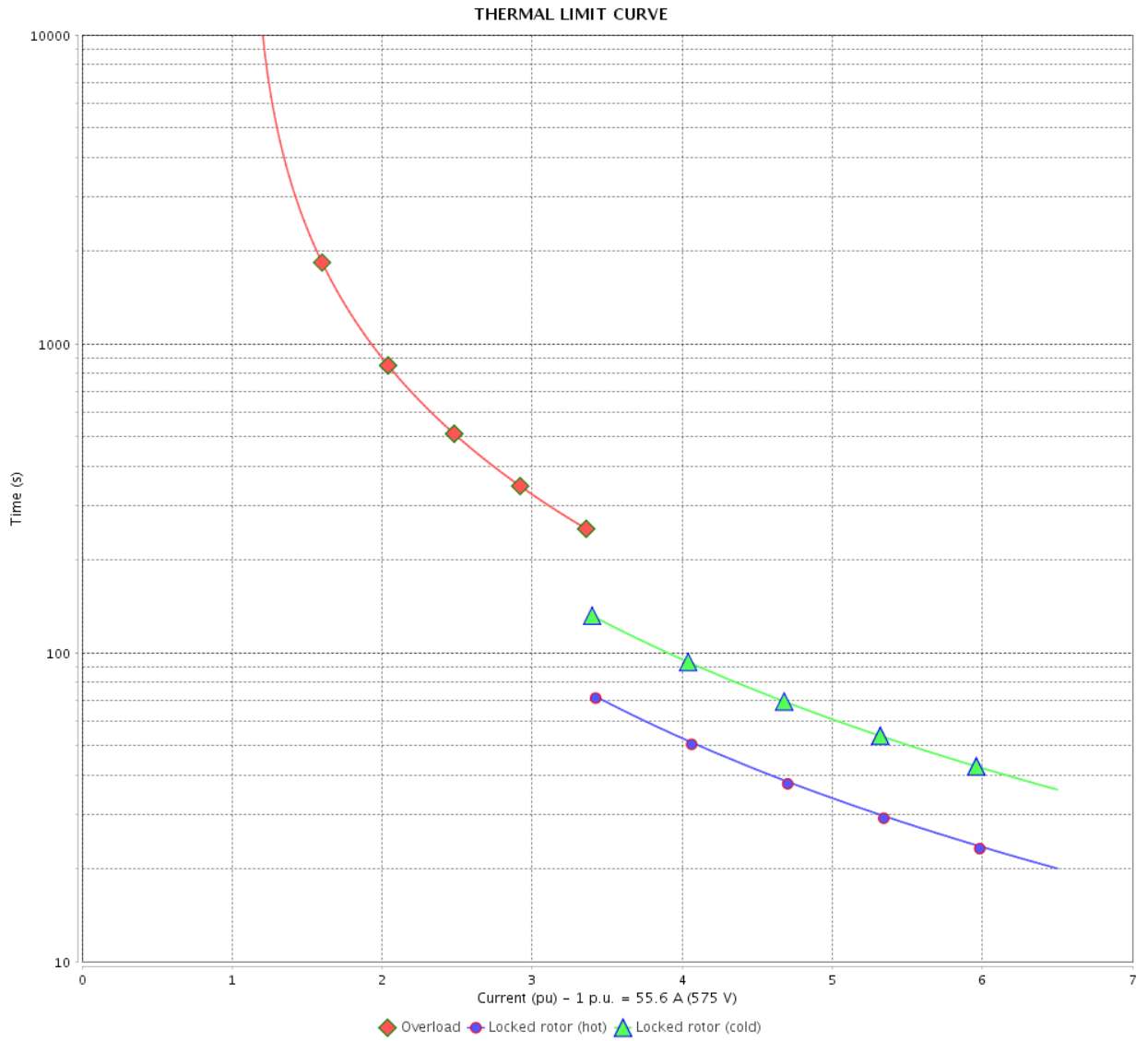
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

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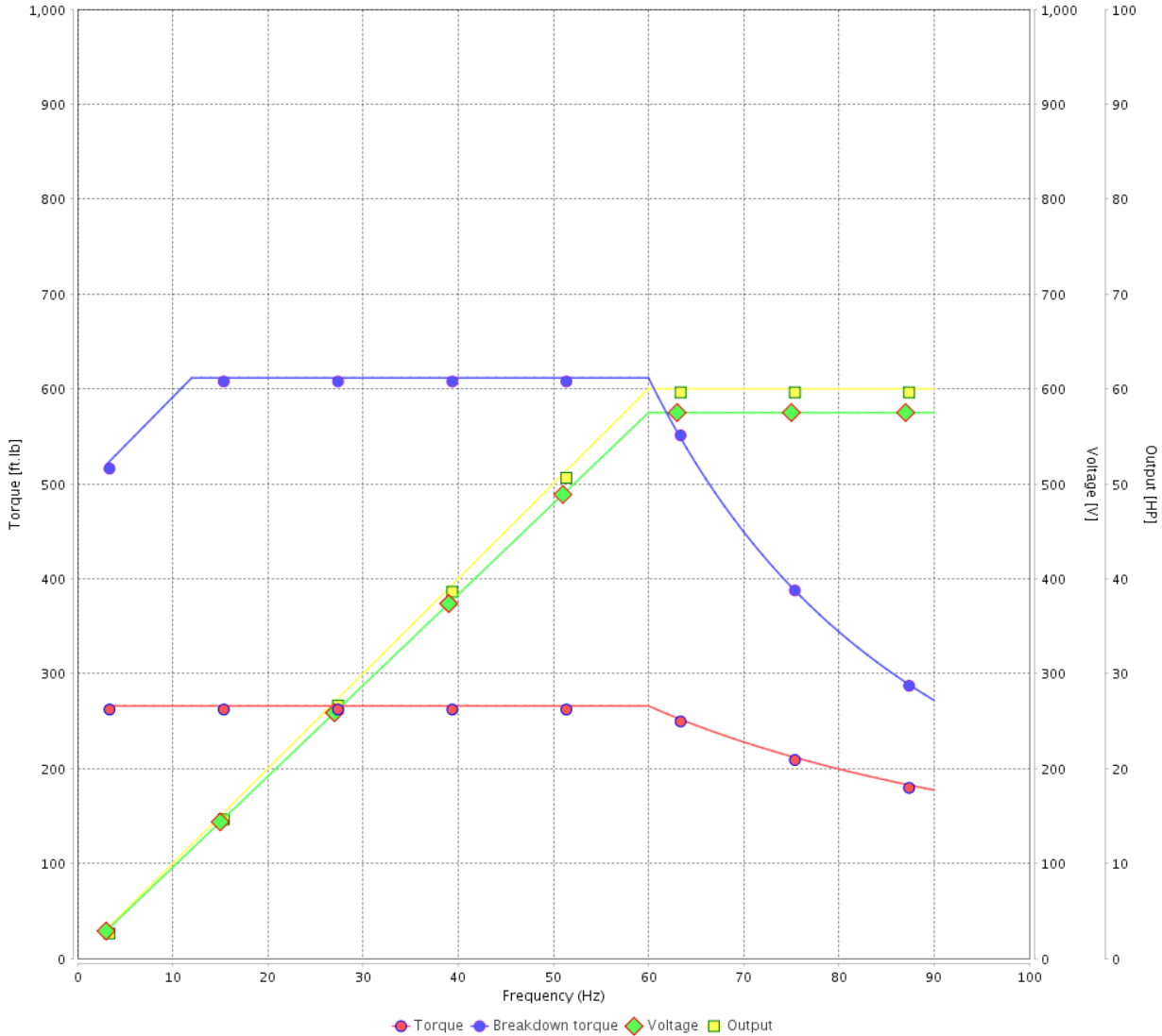
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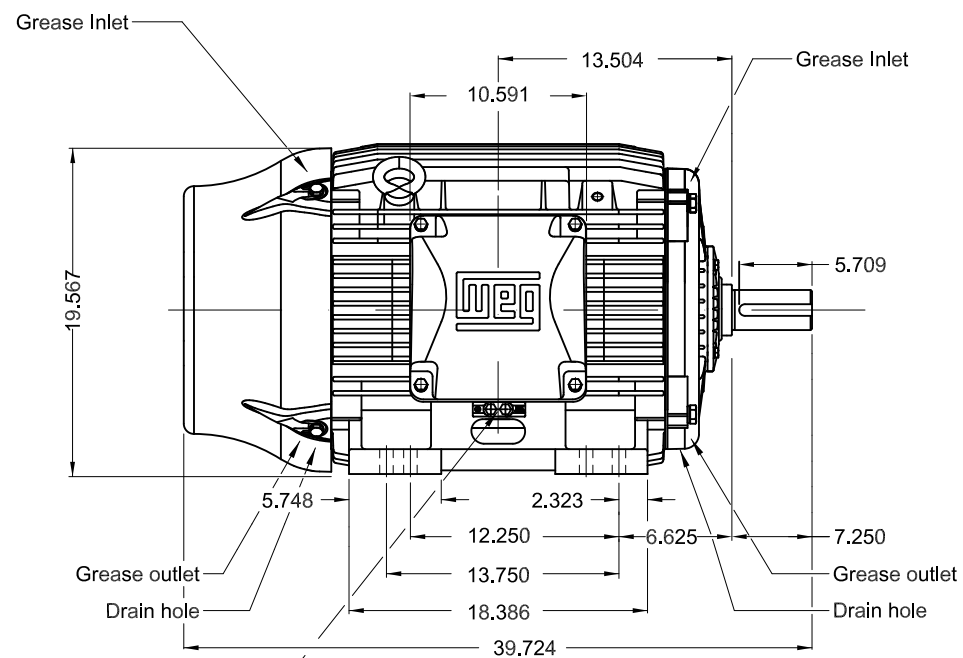
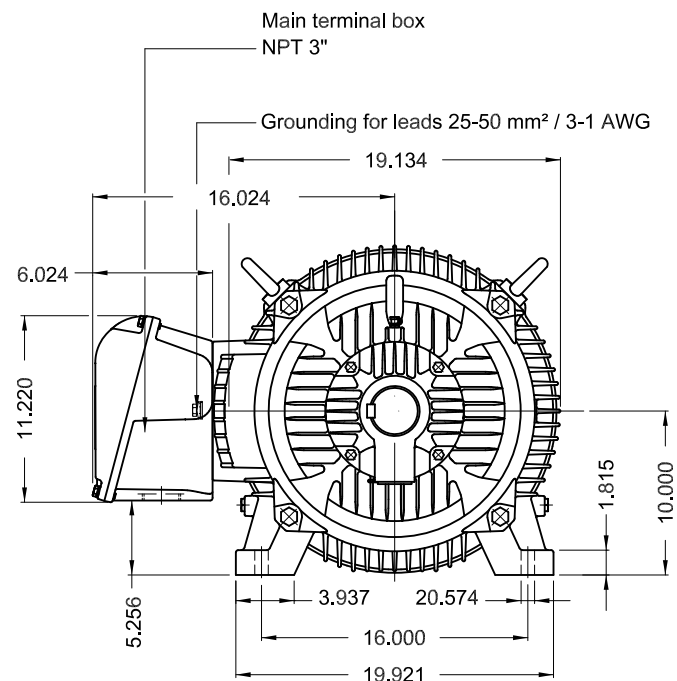
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1 2 3 4 5 6

A

B

C

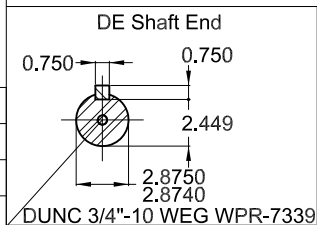


Grounding for leads 25-185 mm² / 3AWG-350MCM

D

E

Without vertical jackscrews
 Color RAL 5009
 Painting plan 202E
 Mounting B3R(D)



60 HP 06 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF.					
CHECKED		FRAME 404/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
 WDD



Dimensions in inches XME A3

MADE IN BRAZIL
11432184



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 - T4
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 20:1, 1.00SF - T3A

IE060506W22BBIS

Inverter Duty Motor
Severe Duty



PH3 60Hz Fr. 404/5T 1000m.a.s.l. IP55 TEFC 1192lb

V 575

A 55.6

HP 60

kW 45

SF 1.25

SFA 69.5

RPM 1185

PF 0.86

AMB 40°C

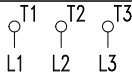
INS cl. F DT80K

NEMA NOM EFF 94.5%

DUTY CONT.

DES B Code G

GUARANT. EFF 93.6%



575V



→ 6316-C3 (34g) 80BC03X30

→ 6314-C3 (27g) 70BC03X30



MOBIL POLYREX EM (16000h)

