

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11679187																		
Catalog # :	45036ET3G449TS-W22																		
Frame : L447/9TS Output : 450 HP (330 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 460 V Rated current : 475 A L. R. Amperes : 3420 A LRC : 7.2x(Code G) No load current : 115 A Rated speed : 3575 rpm Slip : 0.69 % Rated torque : 661 ft.lb Locked rotor torque : 240 % Breakdown torque : 260 % Insulation class : F Service factor : 1.15 Design : B	Locked rotor time : 46s (cold) 26s (hot) Temperature rise : 105 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 : 88.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 3332 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	0.000 95.4 95.8 95.8																		
Power Factor	0.00 0.84 0.89 0.91																		
Foundation loads																			
Max. traction	: 2916 lb																		
Max. compression	: 6247 lb																		
	<table border="0"> <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>6314 C4</td> <td>6314 C4</td> </tr> <tr> <td>Sealing :</td> <td>WSeal</td> <td>WSeal</td> </tr> <tr> <td>Lubrication interval :</td> <td>4000 h</td> <td>4000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td>27 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 :	6314 C4	6314 C4	Sealing :	WSeal	WSeal	Lubrication interval :	4000 h	4000 h	Lubricant amount :	27 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															
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



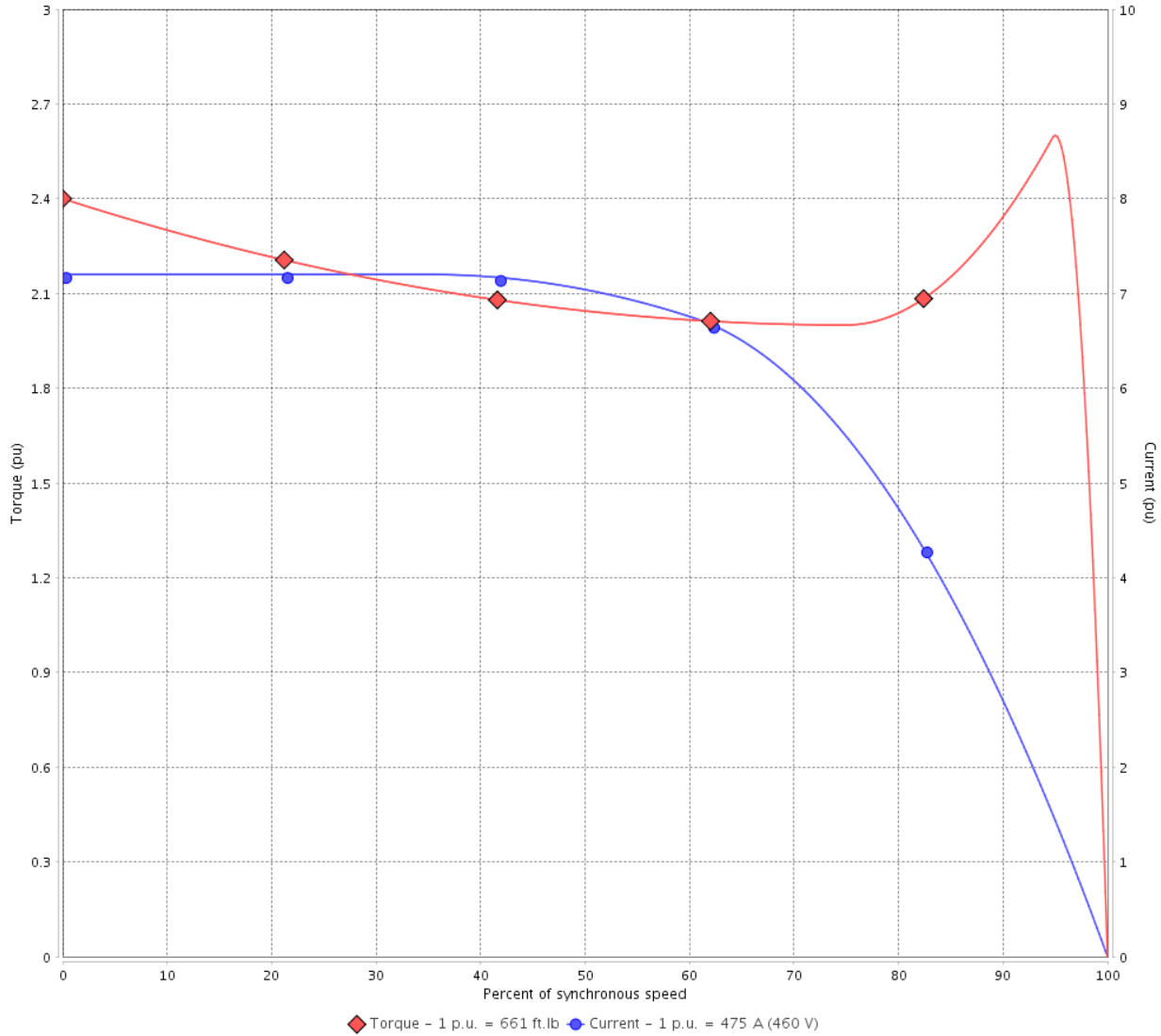
Customer :

Product line : NEMA Premium Efficiency Three-Phase

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TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 2P

Rated current	: 475 A	Moment of inertia (J)	
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 661 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 3575 rpm	Design	: B

Locked rotor time : 46s (cold) 26s (hot)

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Checked by				
Date	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

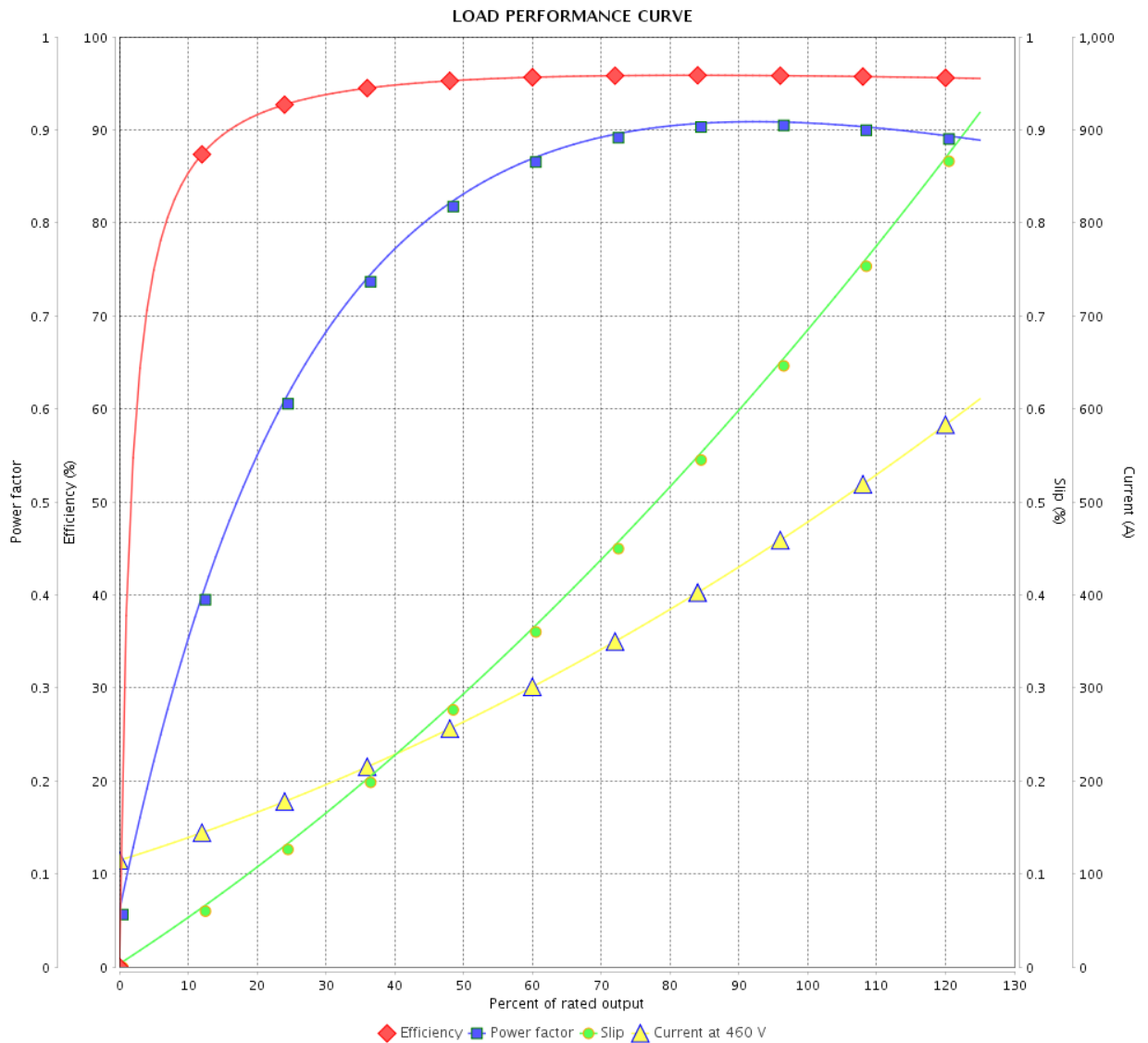


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Performance : 460 V 60 Hz 2P

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 Locked rotor torque : 240 %
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 Rated speed : 3575 rpm

Moment of inertia (J)
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

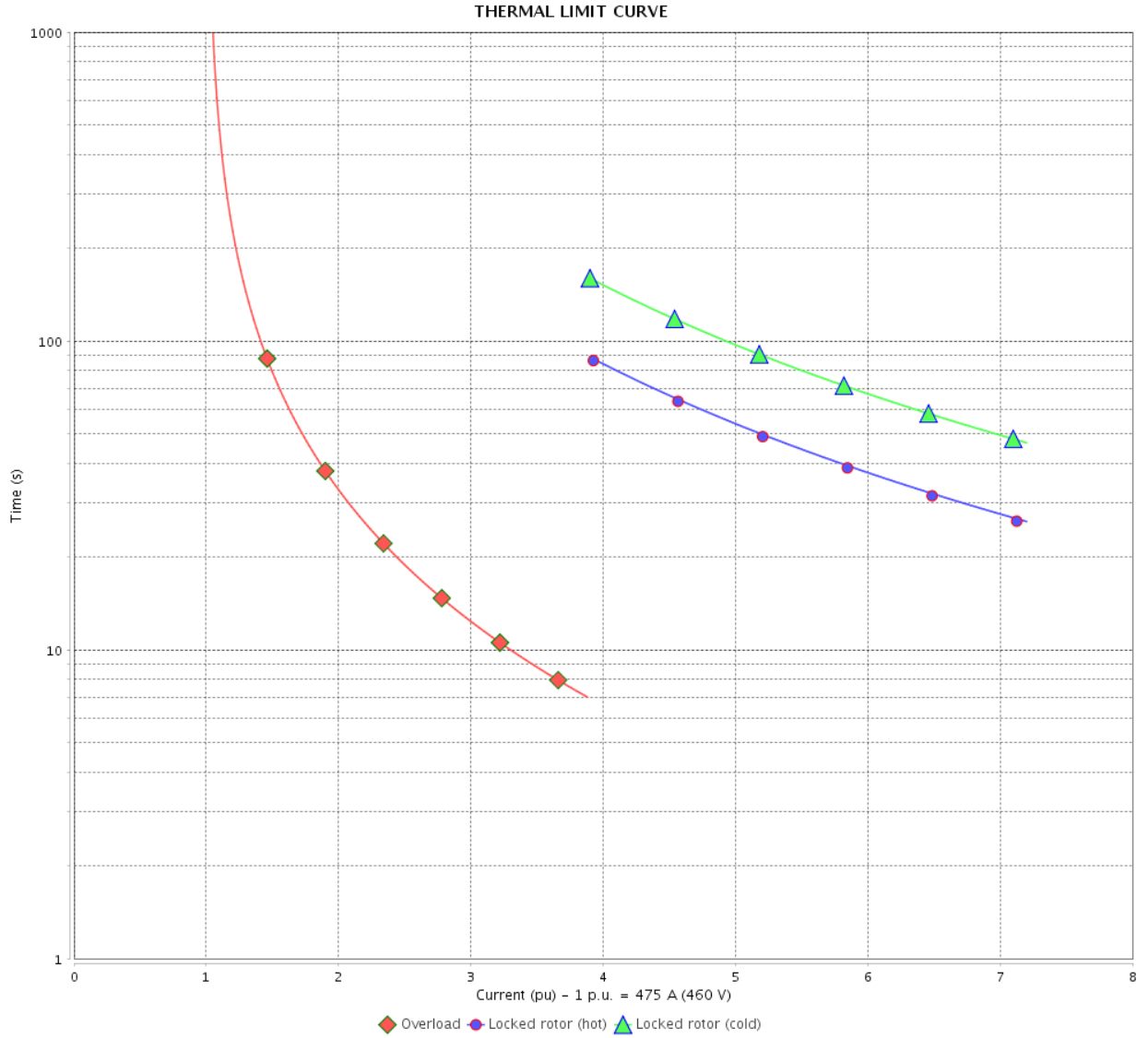
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



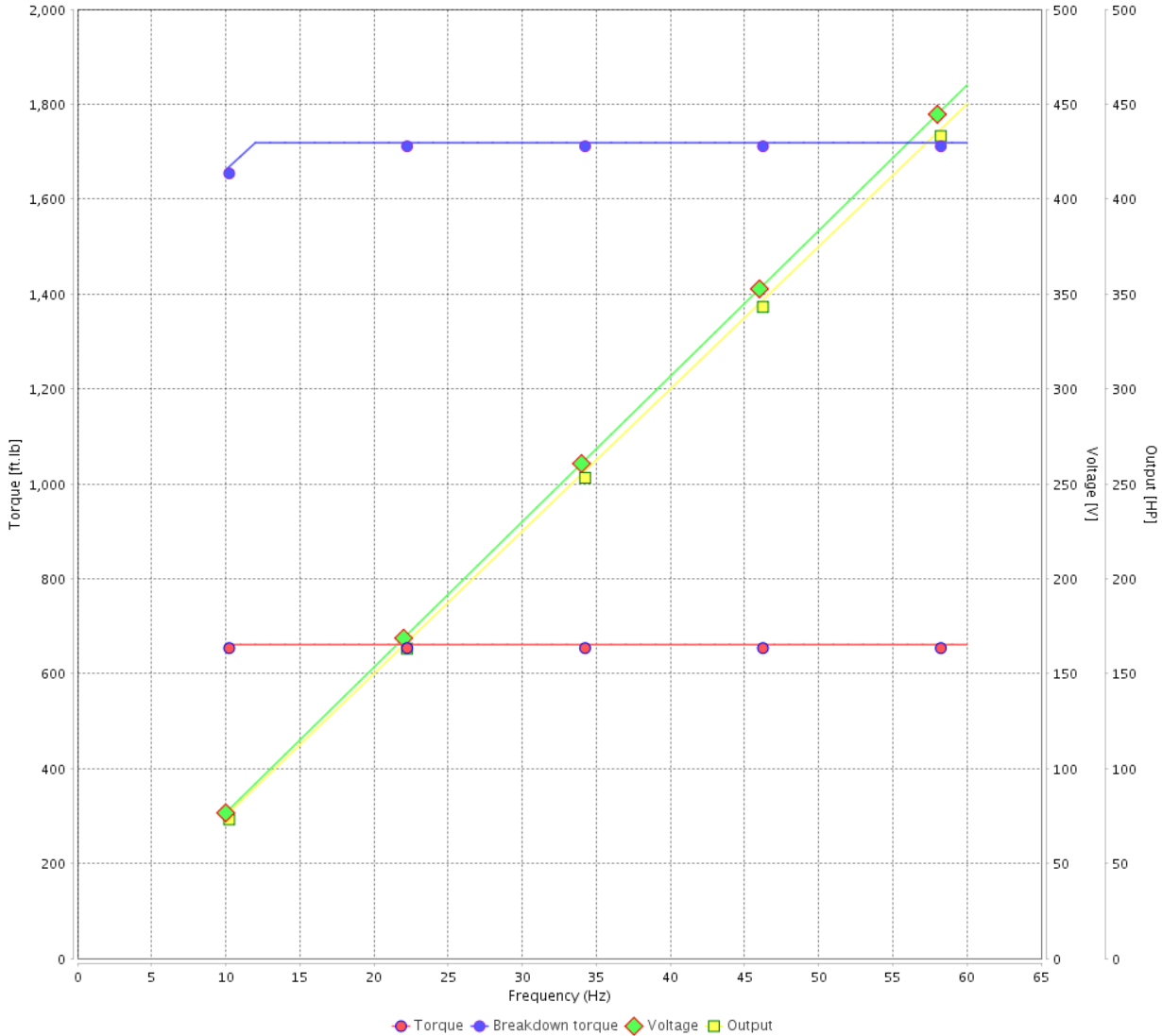
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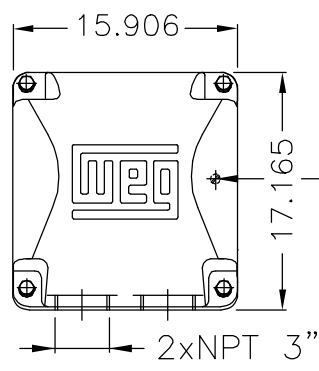
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Rev.	Changes Summary	Performed	Checked	Date
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EIXO/SHAFT	
PADRÃO/STANDARD	X
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	

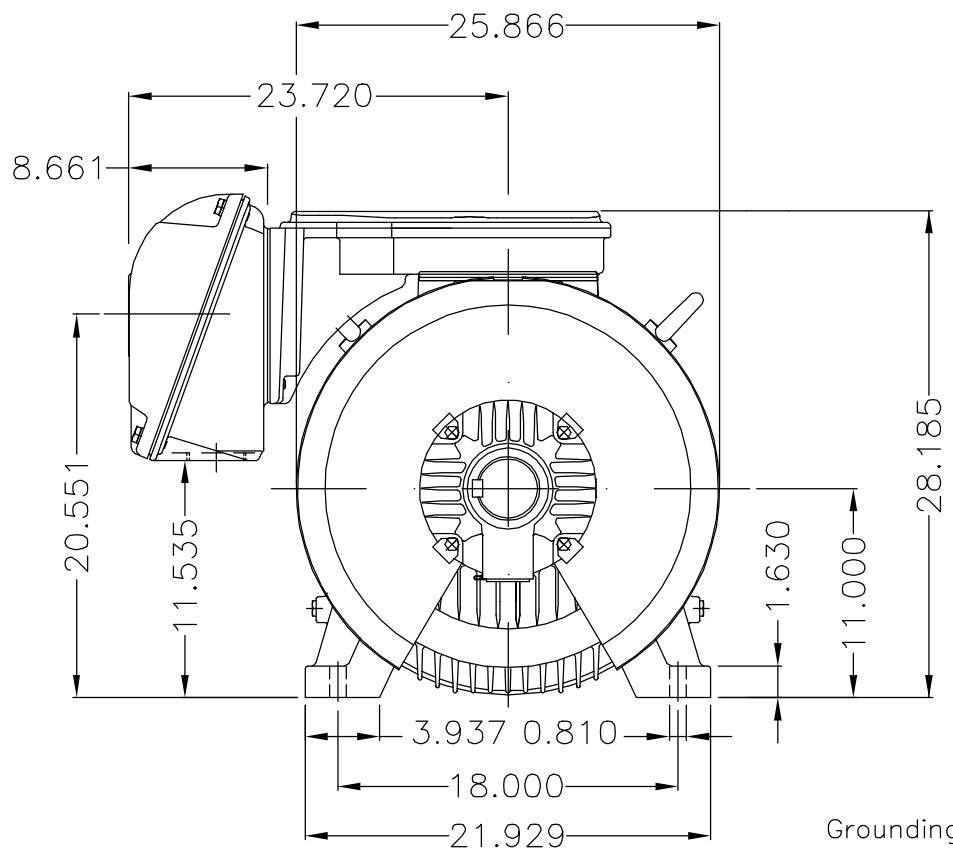
Dimensões em polegada
Dimensions in inches

THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

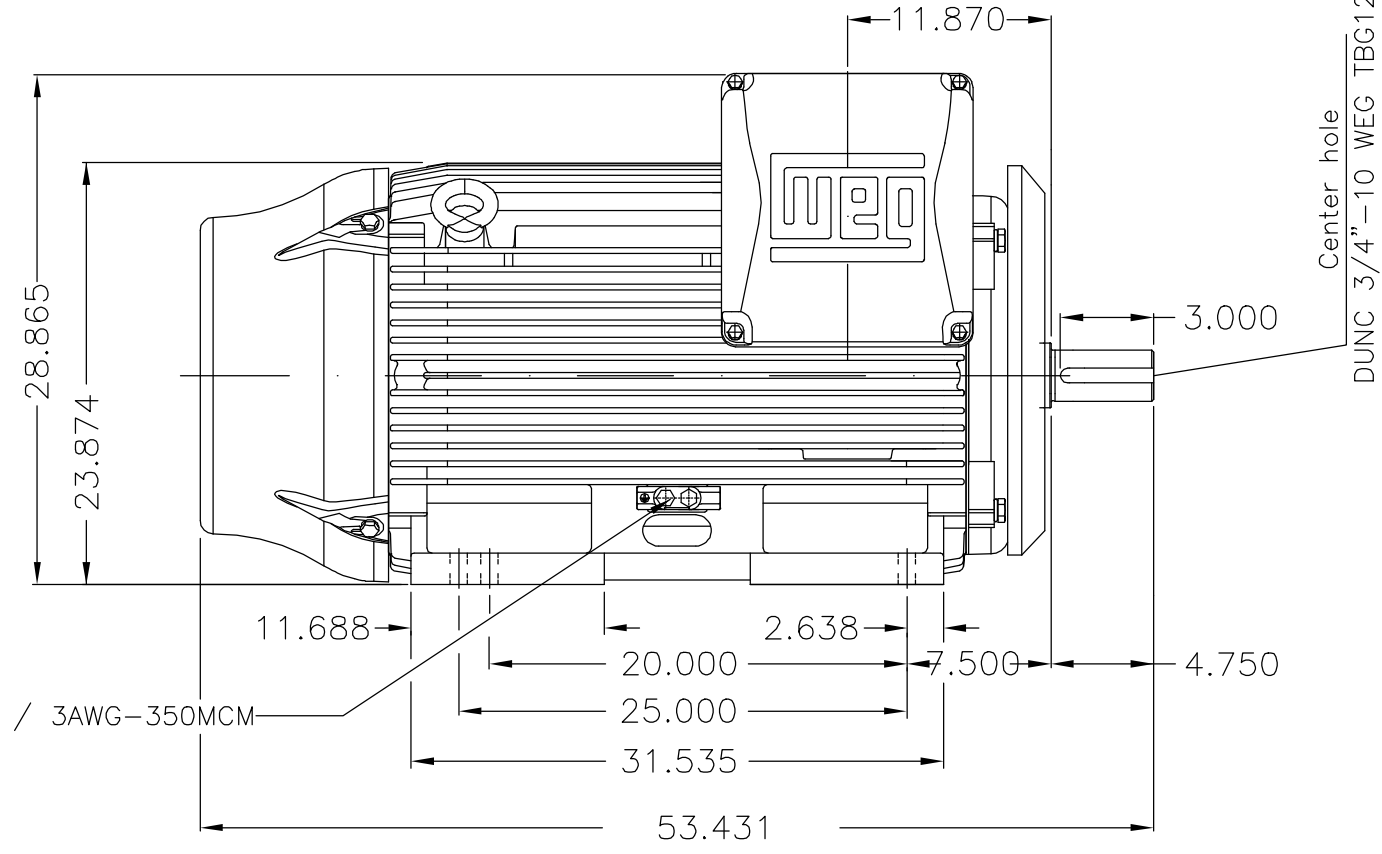


Grounding for leads 35-70 mm² / 1-2/0 AWG

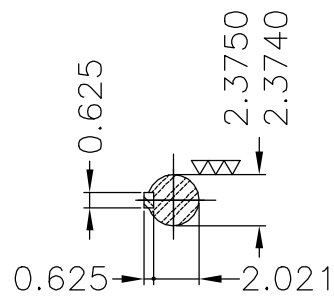
Main terminal box



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



Center hole
DUNC 3/4"-10 WEG TBG12



DE Shaft End

- Rolamento traseiro de esferas 6314 C4 / 6314 C4 NDE ball bearing
- Medida de prensagem especial do rotor / Special pressing dimension for rotor
- Ventilador especial (código WEG 11026504) / Special fan (WEG code 11026504)
- Desenho de prensagem do estator bobinado especial / Special wound stator pressing drawing
- Tampa traseira com mancal eletricamente isolado
- NDE endshield with electrically insulated bearing hub
- Cor RAL 5009 / Color RAL 5009
- Plano de pintura 203A / Painting plan 203A
- Forma construtiva B3D / Mounting B3R(D)

WEG ELECTRIC CORPORATION - WEC

OV: 4785250

500001443966	DOCUMENTO NOVO	FRANCINES	PKREYSSIG	PKREYSSIG	24.04.2018	00
ECM	LOC	EXECUTADO	VERIFICADO	LIBERADO	DATA	VER
ECM	LOC	EXECUTED	CHECKED	RELEASED	DATE	VER
EXEC. /EXECUTED	FRANCINES	THREE PHASE W22 MOTOR - NEMA PREMIUM EFF		10005699557		
VERIF. /CHECKED		FRAME L447/9TS IP55 TEFC		000 00		
LIBER. /RELEASED	PKREYSSIG			000 00		
DATA LB /REL DT	24.04.2018	WMO	Jaraguá do Sul	Product Engineering	FOLHA/SHEET	1 / 1

450 HP 02 Poles 60Hz



UNCONTROLLED COPY RELEASED ZME A3



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 and D,
VT 1000:1, CT 6:1, 1.00SF - T2B

MODEL 45036ET3G449TS-W22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. L447/9TS 1000m.a.s.l. IP55 TEFC 3347lb

V 460

A 475

HP 450

kW 330

SF 1.15

SFA 546

RPM 3575

PF 0.91

AMB 40°C

INS cl. F

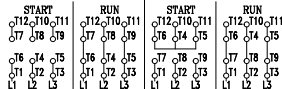
NEMA NOM EFF 95.8%

DUTY CONT.

DES B Code G

PART-WINDING

WYE-DELTA

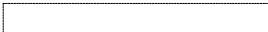


→ 6314-C4 (27g)

→ 6314-C4 (27g)



MOBIL POLYREX EM (4000h)



MADE IN BRAZIL
11679187