

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	13500596			
Catalog # :	25012ET3GKD449T-W22			
Frame : 447/9T Output : 250 HP (185 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 460 V Rated current : 292 A L. R. Amperes : 1781 A LRC : 6.1x(Code G) No load current : 120 A Rated speed : 1185 rpm Slip : 1.25 % Rated torque : 1110 ft.lb Locked rotor torque : 240 % Breakdown torque : 240 % Insulation class : F Service factor : 1.15 Design : A	Locked rotor time : 21s (cold) 12s (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 <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 70.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 3023 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	0.000 95.0 95.4 95.8			
Power Factor	0.00 0.68 0.79 0.83			
Foundation loads				
Max. traction	: 5577 lb			
Max. compression	: 8600 lb			
Bearing type	: <u>Drive end</u> NU-322 C3 <u>Non drive end</u> 6319 C3			
Sealing	: WSeal WSeal			
Lubrication interval	: 7000 h 13000 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



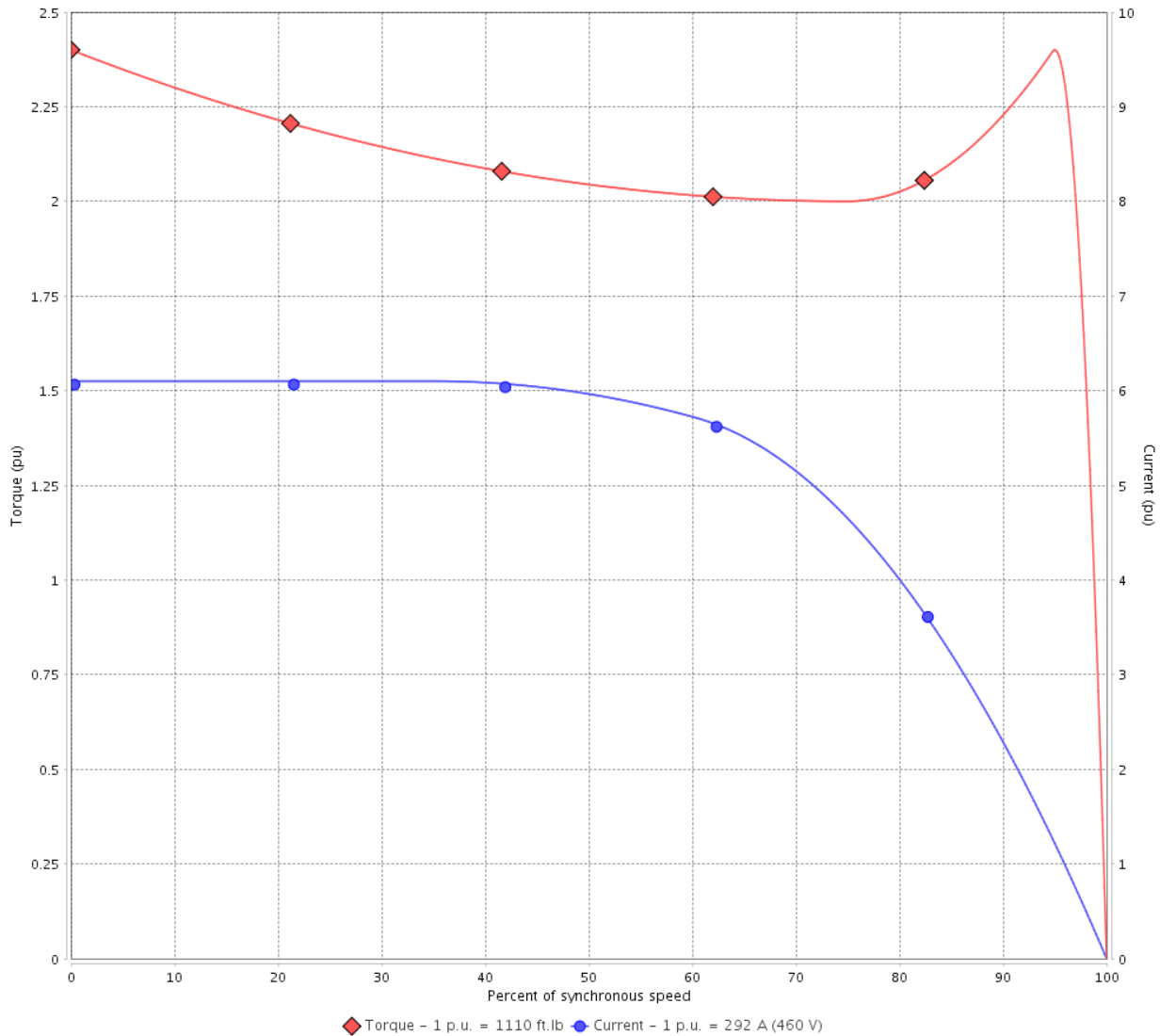
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500596

Catalog # : 25012ET3GKD449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 6P

Rated current	: 292 A	Moment of inertia (J)	
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 1110 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1185 rpm	Design	: A

Locked rotor time : 21s (cold) 12s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

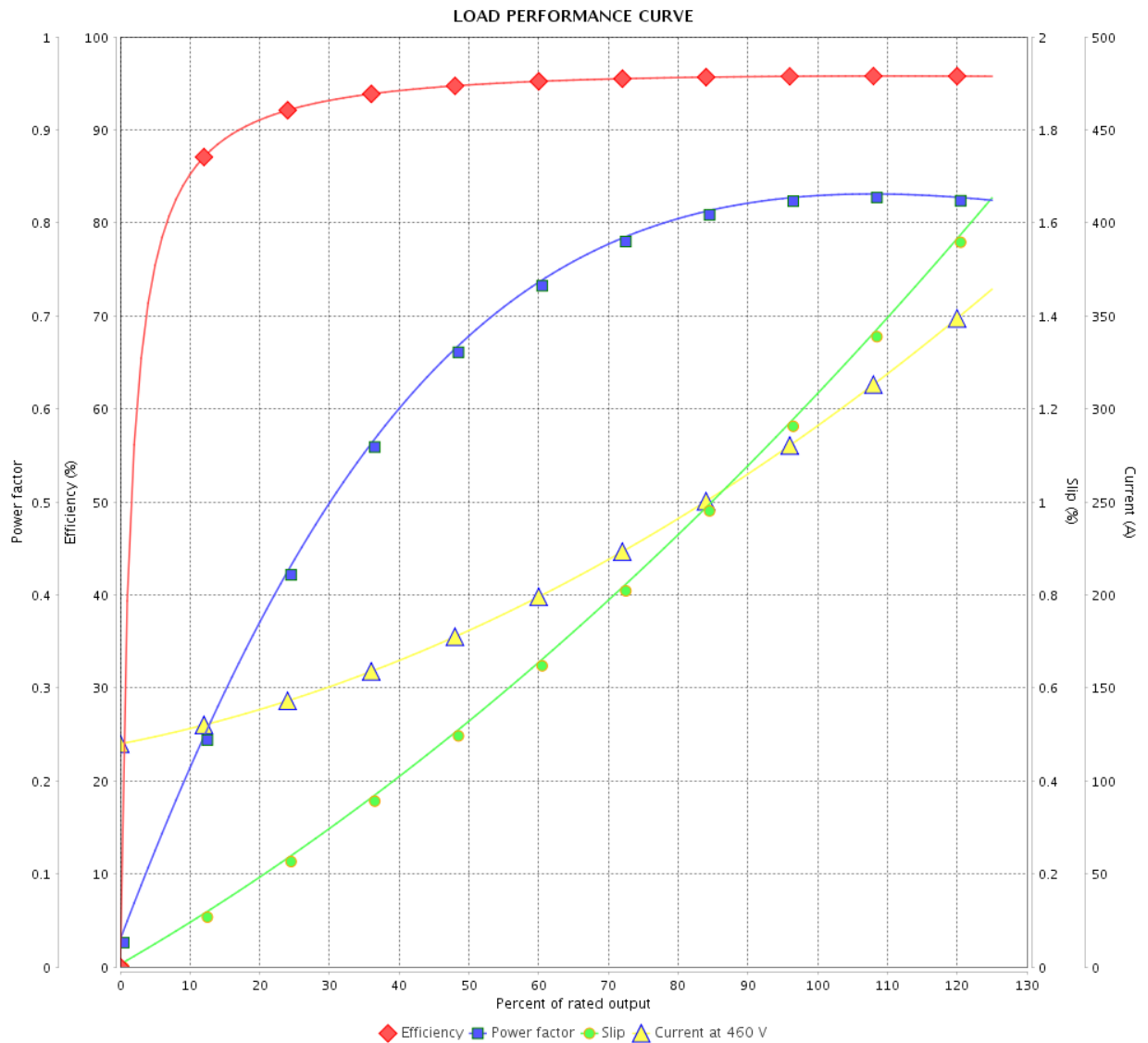


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500596

Catalog # : 25012ET3GKD449T-W22



Performance : 460 V 60 Hz 6P

Rated current : 292 A  
 LRC : 6.1  
 Rated torque : 1110 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 240 %  
 Rated speed : 1185 rpm

Moment of inertia (J)  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

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# THERMAL LIMIT CURVE



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Rated speed	: 1185 rpm	Design	: A

Heating constant

Cooling constant

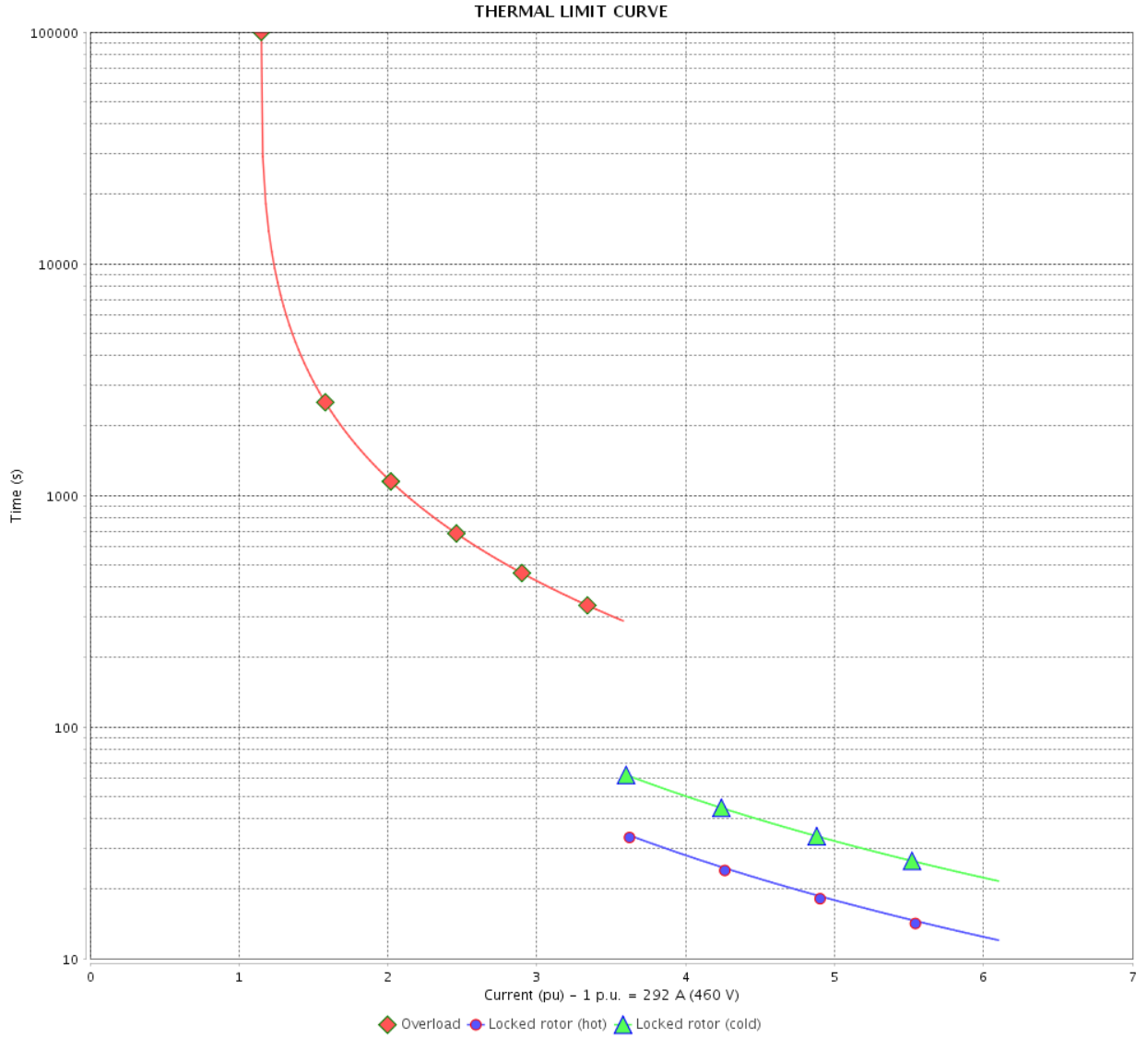
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

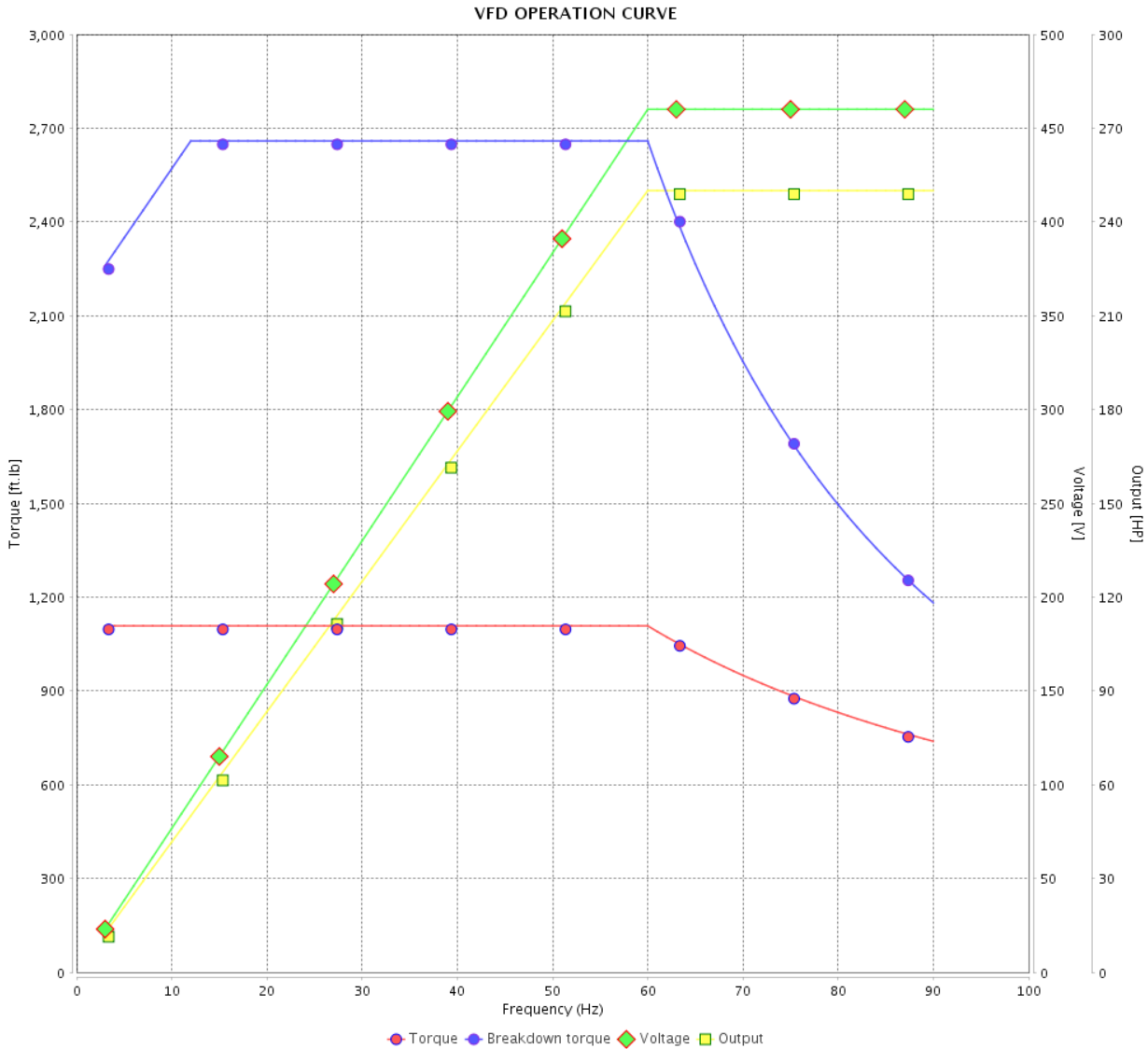


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500596

Catalog # : 25012ET3GKD449T-W22



Performance : 460 V 60 Hz 6P

Rated current : 292 A  
 LRC : 6.1  
 Rated torque : 1110 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 240 %  
 Rated speed : 1185 rpm

Moment of inertia (J)  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

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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.

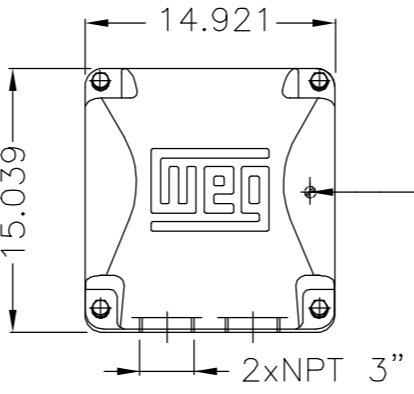
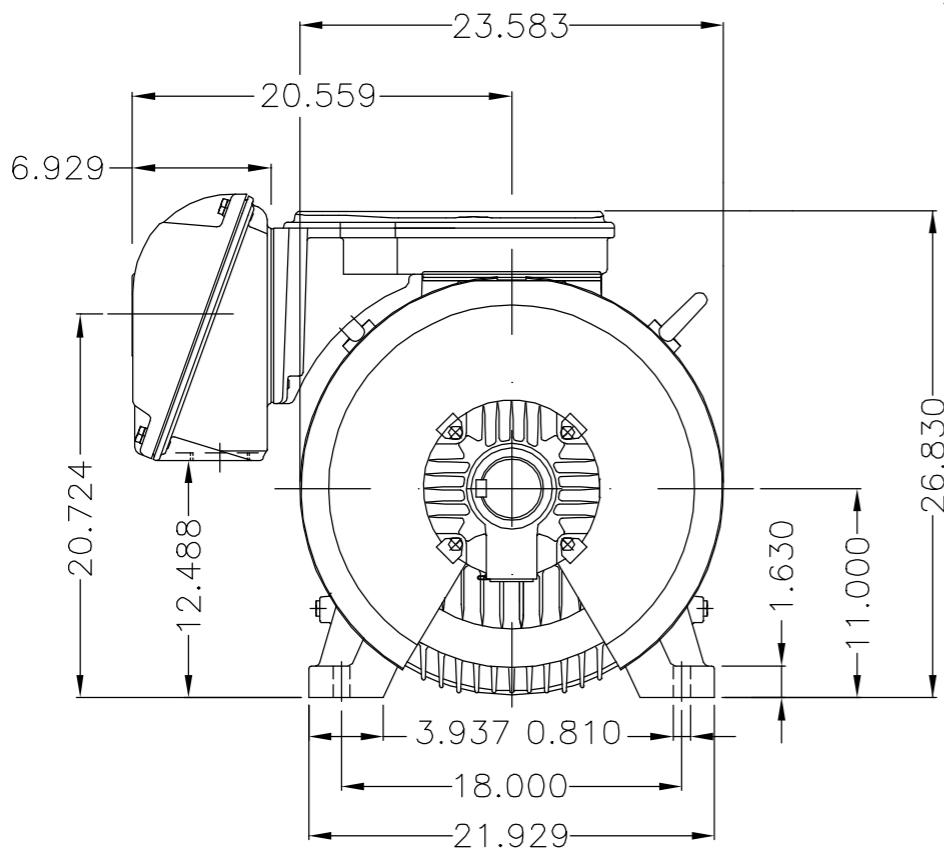
A

B

C

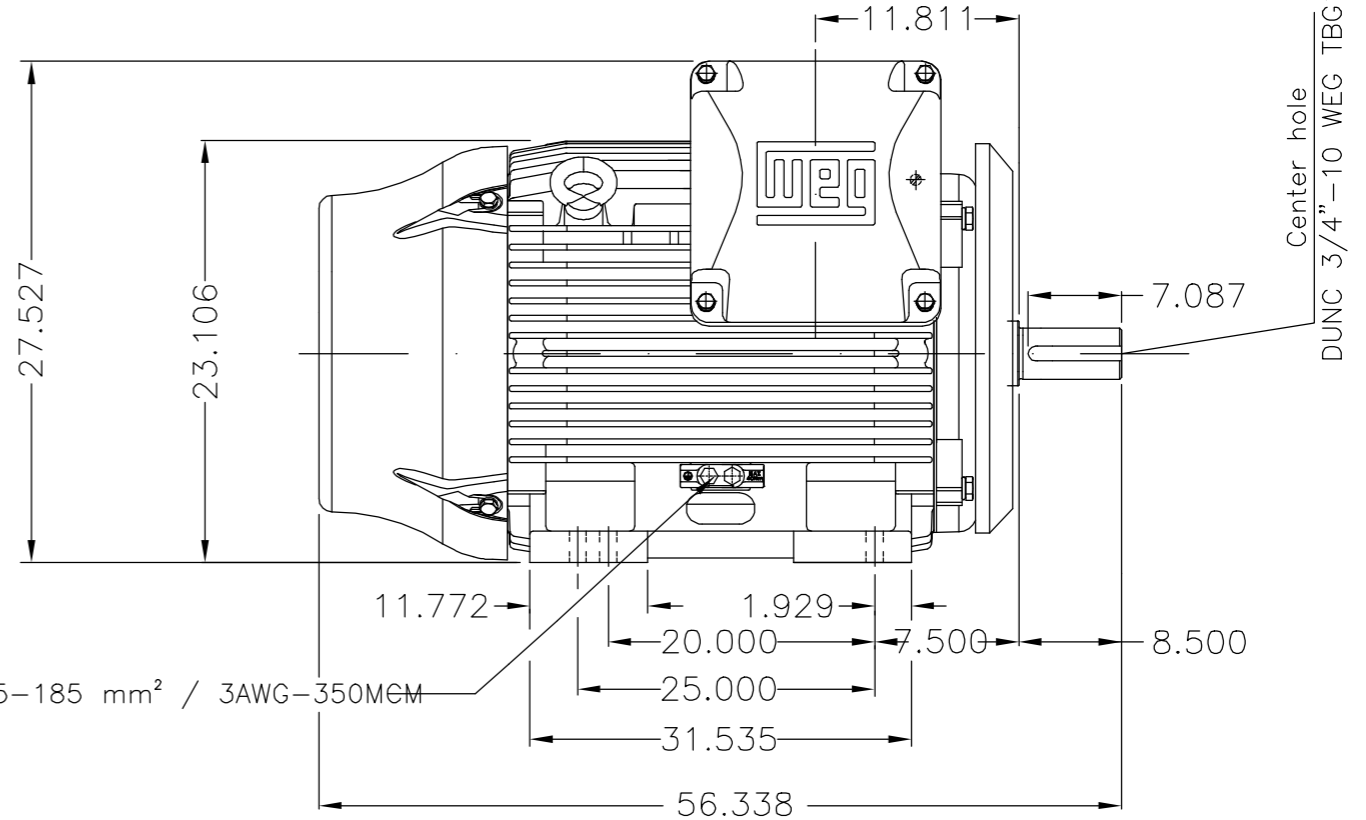
D

E



Main terminal box

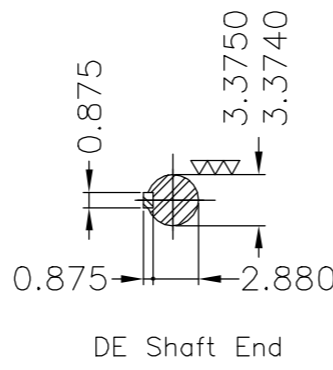
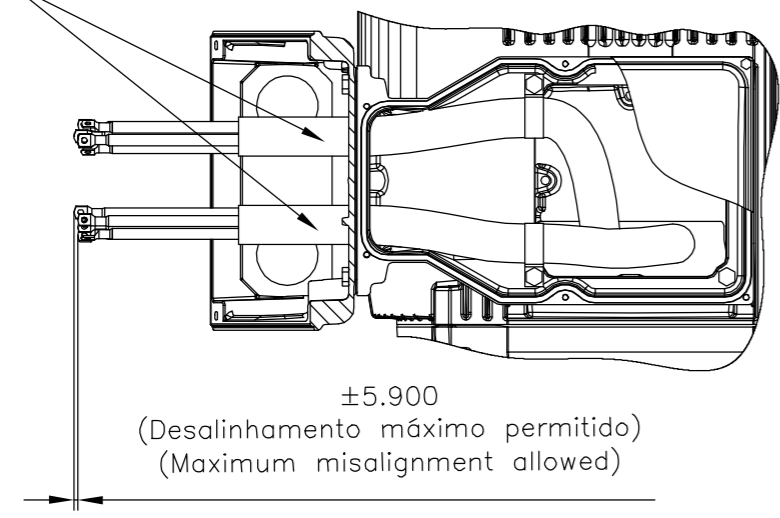
Grounding for leads 35-70 mm<sup>2</sup> / 1-2/0 AWG



Grounding for leads 25-185 mm<sup>2</sup> / 3AWG-350MEM

Center hole  
DUNC 3/4"-10 WEG TBG12

Fixar o conduíte no suporte com abraçadeiras.  
Fasten the conduit on support with cables ties.



DE Shaft End

Linha do motor: Crusher Duty / Motor purpose: Crusher Duty
Rolamento dianteiro de rolos / DE roller bearing
Conduíte para cabos no interior do suporte da caixa de ligação
Cables conduit inside terminal box support
Dispositivo de travamento de eixo / Shaft locking device
Cor RAL 5009 / Color RAL 5009
Plano de pintura 203A / Painting plan 203A
Forma construtiva B3D / Mounting B3R(D)

WEG EQUIPAMENTOS ELÉTRICOS S/A

E	500001474636	RET. LINHAS DE POTÊNCIA INCORRETAS	DCARDOSO	SAORIN	SAORIN	09.07.2018	05		
	500001331189	ADIC.NOTA CONDUITE/ADD NOTE CONDUIT	MENSOR	EANJOS	EANJOS	05.07.2017	04		
D	ECM	LOC	SUMMARY OF MODIFICATIONS		EXECUTED	CHECKED	RELEASED	DATE	VER
C	EXECUTED	GABRIELID	THREE PHASE W22 MOTOR		10004923929				
B	CHECKED	JMANENTE	FRAME 447/9T IP55 TEFC		000   05				
A	RELEASED	JMANENTE							
A	REL DT	09.05.2017	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

200 HP	08 Poles	60Hz	414658029
300 HP	06 Poles	60Hz	414658029
250 HP	06 Poles	60Hz	414658029
350 HP	04 Poles	60Hz	414658029
300 HP	04 Poles	60Hz	414658029

MADE IN BRAZIL  
13500596



**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 25012ET3GKD449T-W22

Inverter Duty Motor  
Severe Duty

PH3 60Hz Fr. 447/9T 1000m.a.s.l. IP55 TEFC 2982lb

V 460

A 292

HP 250

kW 185

SF 1.15

SFA 336

RPM 1185

PF 0.83

AMB 40°C

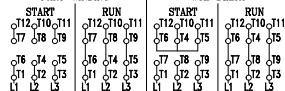
INS cl. F DT80K

NEMA NOM EFF 95.8%

DUTY CONT.

DES A Code G

PART-WINDING



→ NU-322-C3 (60g)

→ 6319-C3 (45g)



MOBIL POLYREX EM (7000h)

