

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	13500622			
Catalog # :	30012ET3GKD449T-W22			
Frame : 447/9T Output : 300 HP (220 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 460 V Rated current : 356 A L. R. Amperes : 2741 A LRC : 7.7x(Code J) No load current : 170 A Rated speed : 1189 rpm Slip : 0.92 % Rated torque : 1320 ft.lb Locked rotor torque : 270 % Breakdown torque : 300 % Insulation class : F Service factor : 1.00 Design : A	Locked rotor time : 18s (cold) 10s (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> : 3113 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	0.000 95.4 95.8 95.8			
Power Factor	0.00 0.63 0.75 0.81			
Foundation loads				
Max. traction	: 9040 lb			
Max. compression	: 12154 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.				
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		1 / 6	

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



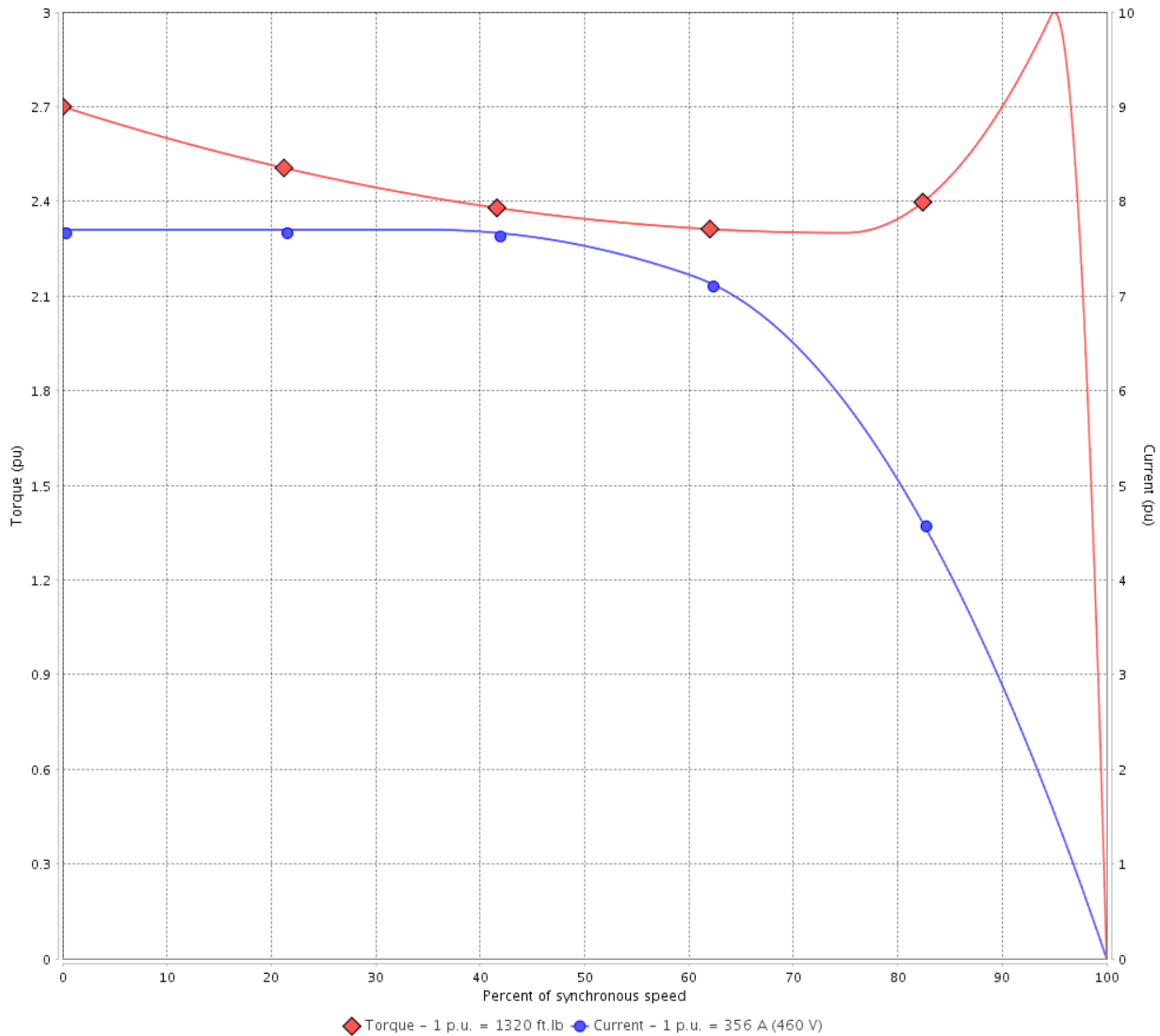
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500622

Catalog # : 30012ET3GKD449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 6P

Rated current	: 356 A	Moment of inertia (J)	
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 1320 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1189 rpm	Design	: A

Locked rotor time : 18s (cold) 10s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		2 / 6		
Date	13/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

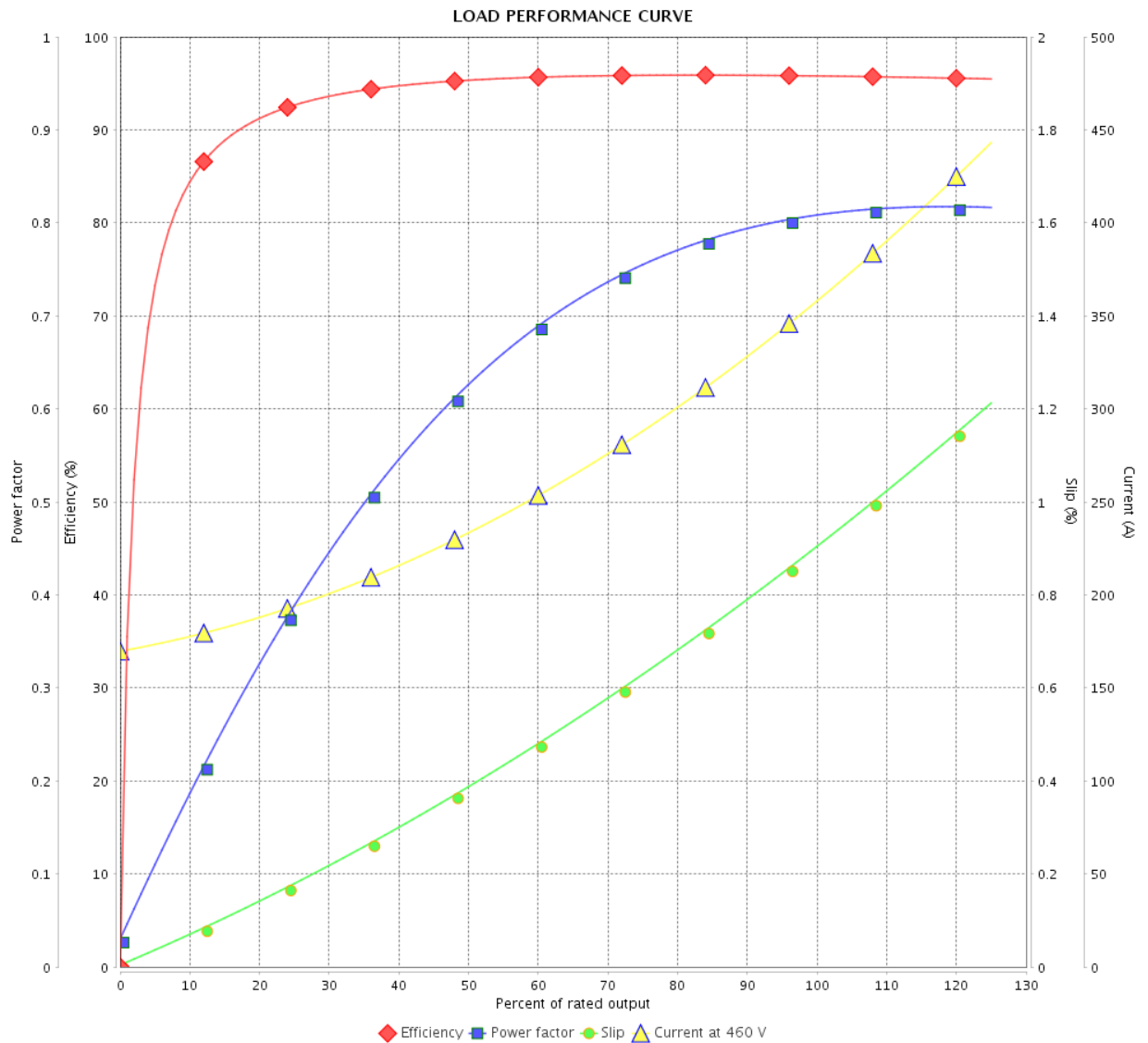


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500622

Catalog # : 30012ET3GKD449T-W22



Performance : 460 V 60 Hz 6P

Rated current : 356 A  
 LRC : 7.7  
 Rated torque : 1320 ft.lb  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1189 rpm

Moment of inertia (J)  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				
			3 / 6	

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 13500622  
Catalog # : 30012ET3GKD449T-W22

Performance : 460 V 60 Hz 6P

Rated current : 356 A	Moment of inertia (J)
LRC : 7.7	Duty cycle : Cont.(S1)
Rated torque : 1320 ft.lb	Insulation class : F
Locked rotor torque : 270 %	Service factor : 1.00
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1189 rpm	Design : A

Heating constant

Cooling constant

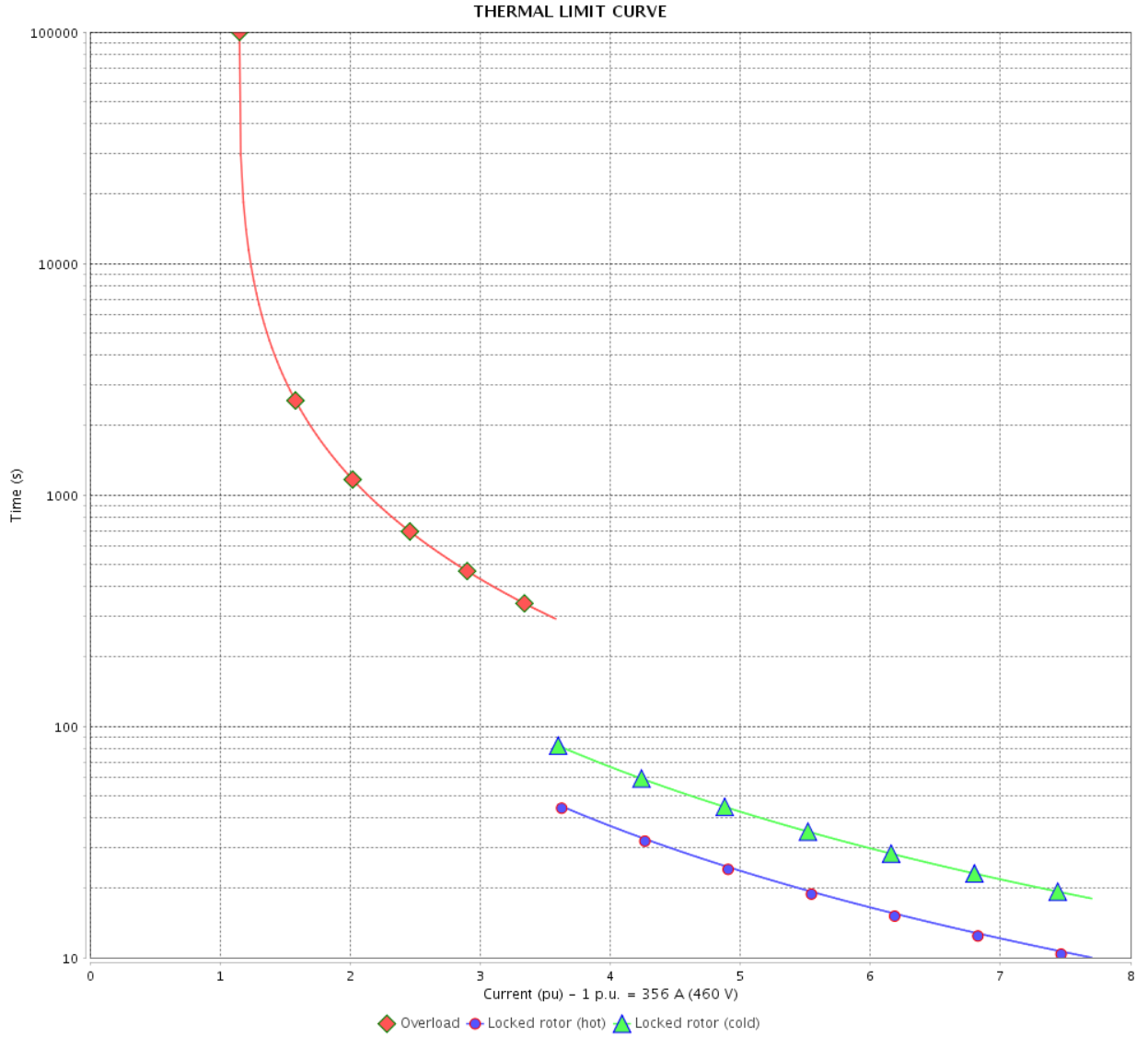
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		4 / 6	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by				
Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

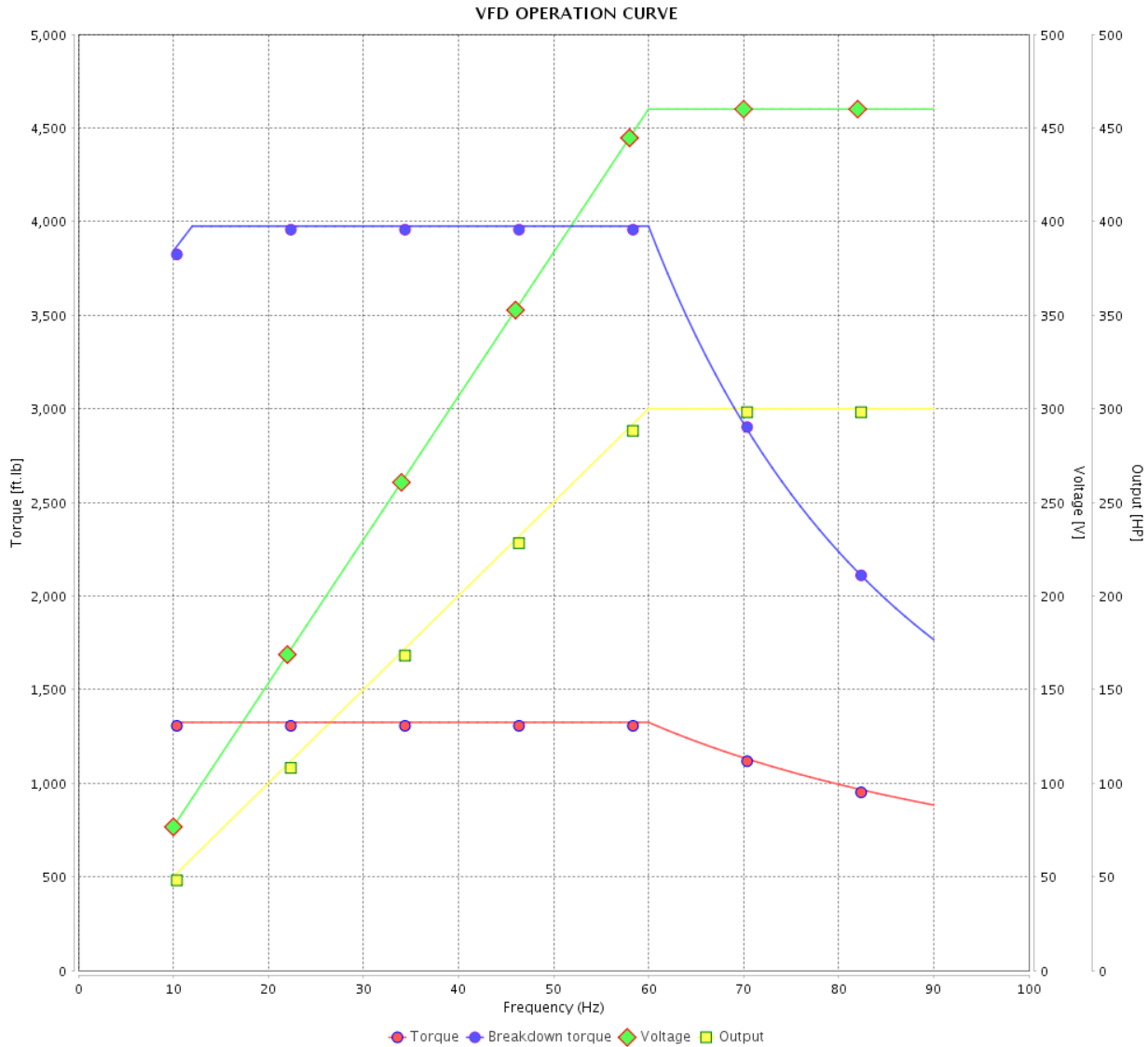


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500622

Catalog # : 30012ET3GKD449T-W22



Performance : 460 V 60 Hz 6P

Rated current : 356 A  
 LRC : 7.7  
 Rated torque : 1320 ft.lb  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1189 rpm

Moment of inertia (J)  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : A

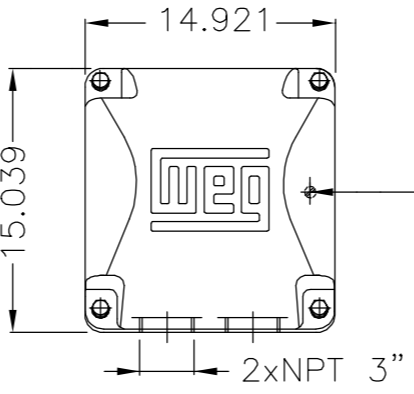
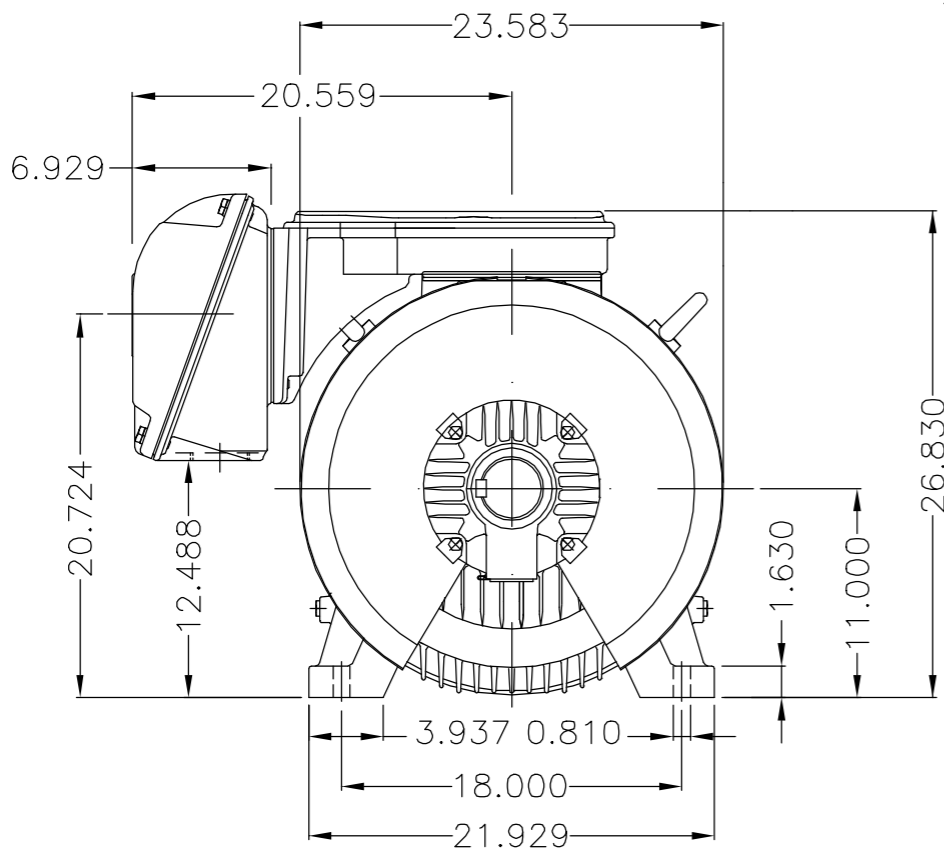
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	13/04/2022			

EIXO/SHAFT	
PADRÃO/STANDARD	X
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	

Dimensões em polegada  
Dimensions in inches

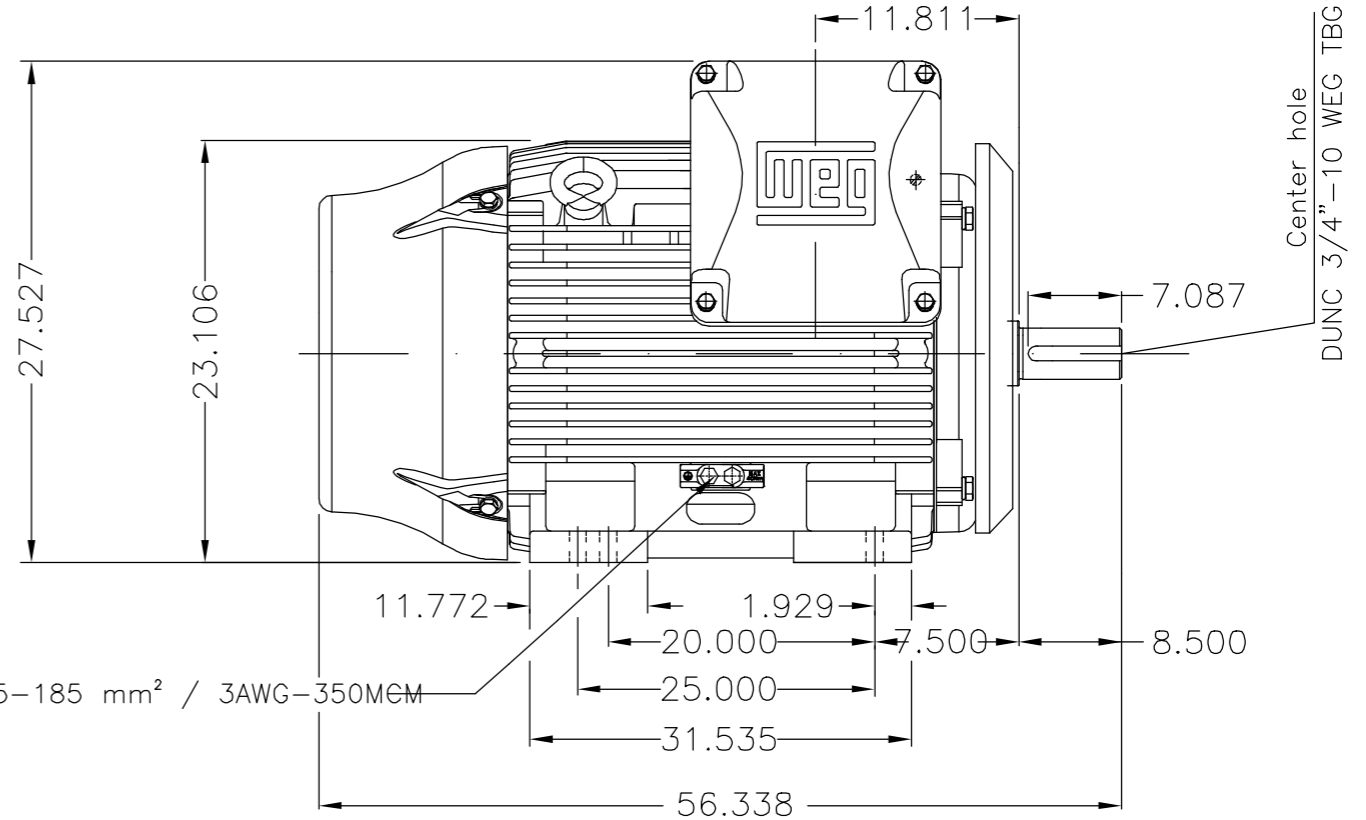
THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

A  
B  
C  
D  
E



Main terminal box

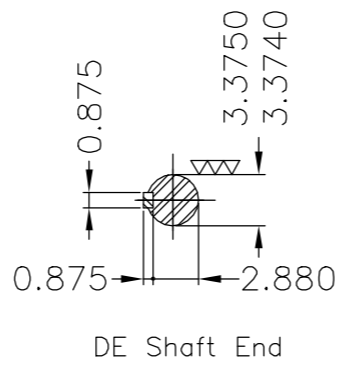
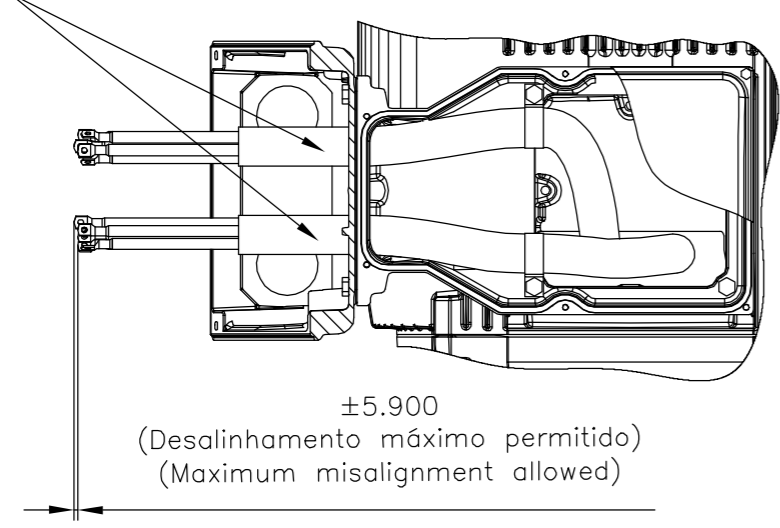
Grounding for leads 35-70 mm<sup>2</sup> / 1-2/0 AWG



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)	
<b>WEG EQUIPAMENTOS ELÉTRICOS S/A</b>	

E	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

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



UNCONTROLLED COPY  
RELEASED  
ZME A3



**NEMA**  
Premium  
W22



FOR SAFE AREA  
Mod.TE1BFOXON  
CC029A



Class I, Div 2, Gr A, B, C and D - T3B  
Class I, Zone 2, IIC - T3B  
Class II, Div 2, Gr F and G - T4  
For use on PWM: Gr. A, B, C, D and F,  
VT 1000:1, CT 6:1, 1.00SF - T3

MODEL 30012ET3GKD449T-W22

Inverter Duty Motor  
Severe Duty

PH3 60Hz Fr. 447/9T 1000m.a.s.l. IP55 TEFC 3075lb

V 460

A 356

HP 300

kW 220

SF 1.00

SFA -

RPM 1189

PF 0.81

AMB 40°C

INS cl. F DT80K

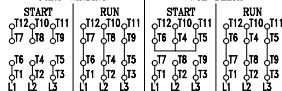
NEMA NOM EFF 95.8%

DUTY CONT.

DES A Code J

PART-WINDING

WYE-DELTA

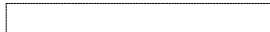


→ NU-322-C3 (60g)

→ 6319-C3 (45g)



MOBIL POLYREX EM (7000h)



MADE IN BRAZIL  
13500622