

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	13500588																		
Catalog # :	15009ET3GKD447T-W22																		
Frame : 445/7T Output : 150 HP (110 kW) Poles : 8 Frequency : 60 Hz Rated voltage : 460 V Rated current : 187 A L. R. Amperes : 1216 A LRC : 6.5x(Code H) No load current : 85.0 A Rated speed : 890 rpm Slip : 1.11 % Rated torque : 885 ft.lb Locked rotor torque : 200 % Breakdown torque : 229 % Insulation class : F Service factor : 1.15 Design : A	Locked rotor time : 27s (cold) 15s (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 <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 63.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 2287 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	0.000 94.5 94.5 94.5																		
Power Factor	0.00 0.64 0.73 0.78																		
Foundation loads																			
Max. traction	: 4283 lb																		
Max. compression	: 6570 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>NU-319 C3</td> <td>6316 C3</td> </tr> <tr> <td>Sealing :</td> <td>WSeal</td> <td>WSeal</td> </tr> <tr> <td>Lubrication interval :</td> <td>15000 h</td> <td>20000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td>45 g</td> <td>34 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 :	NU-319 C3	6316 C3	Sealing :	WSeal	WSeal	Lubrication interval :	15000 h	20000 h	Lubricant amount :	45 g	34 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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Customer : \_\_\_\_\_

### Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

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# TORQUE AND CURRENT VS SPEED CURVE



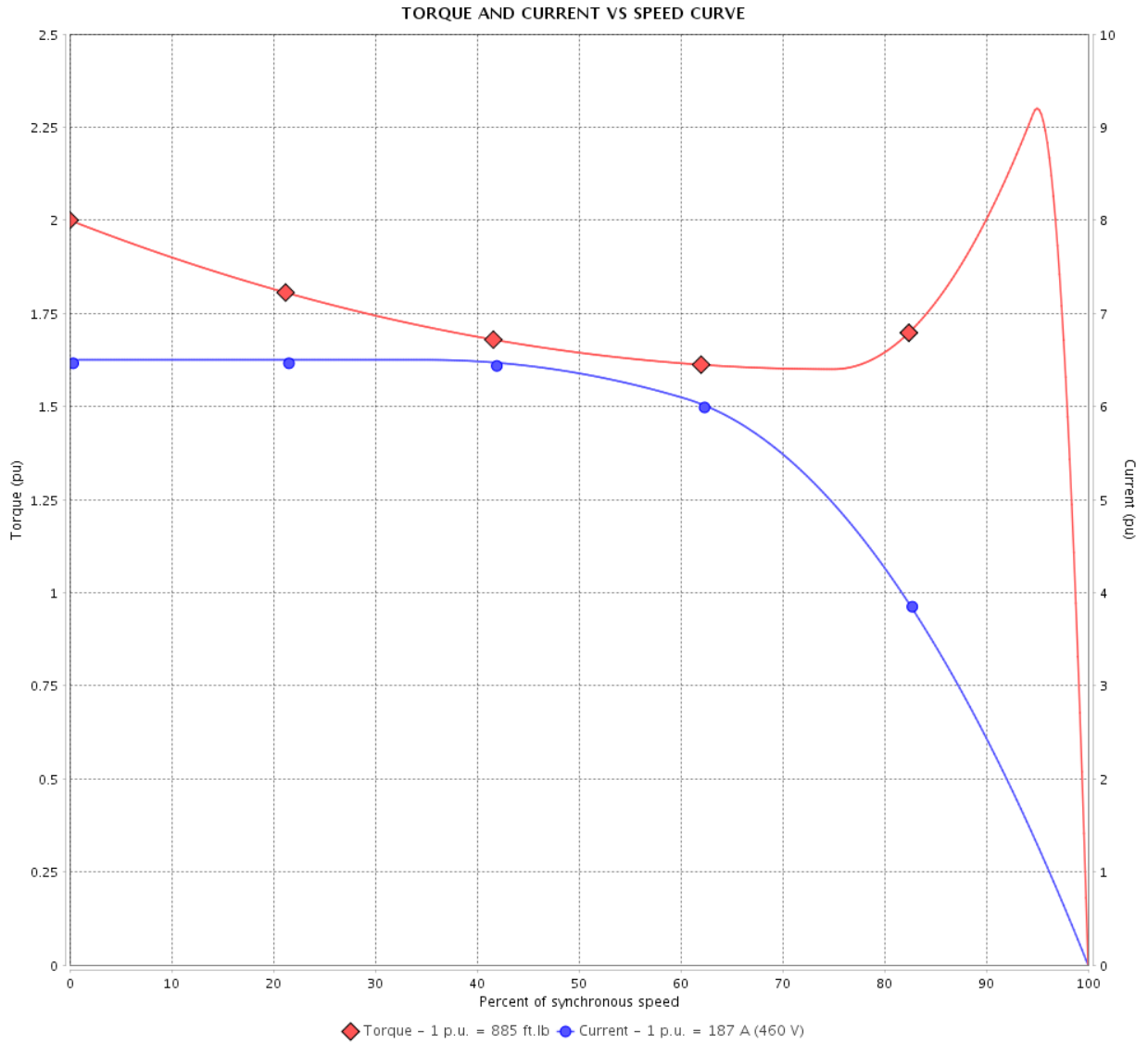
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500588

Catalog # : 15009ET3GKD447T-W22



Performance : 460 V 60 Hz 8P

Rated current	: 187 A	Moment of inertia (J)	
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 885 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 890 rpm	Design	: A

Locked rotor time : 27s (cold) 15s (hot)

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



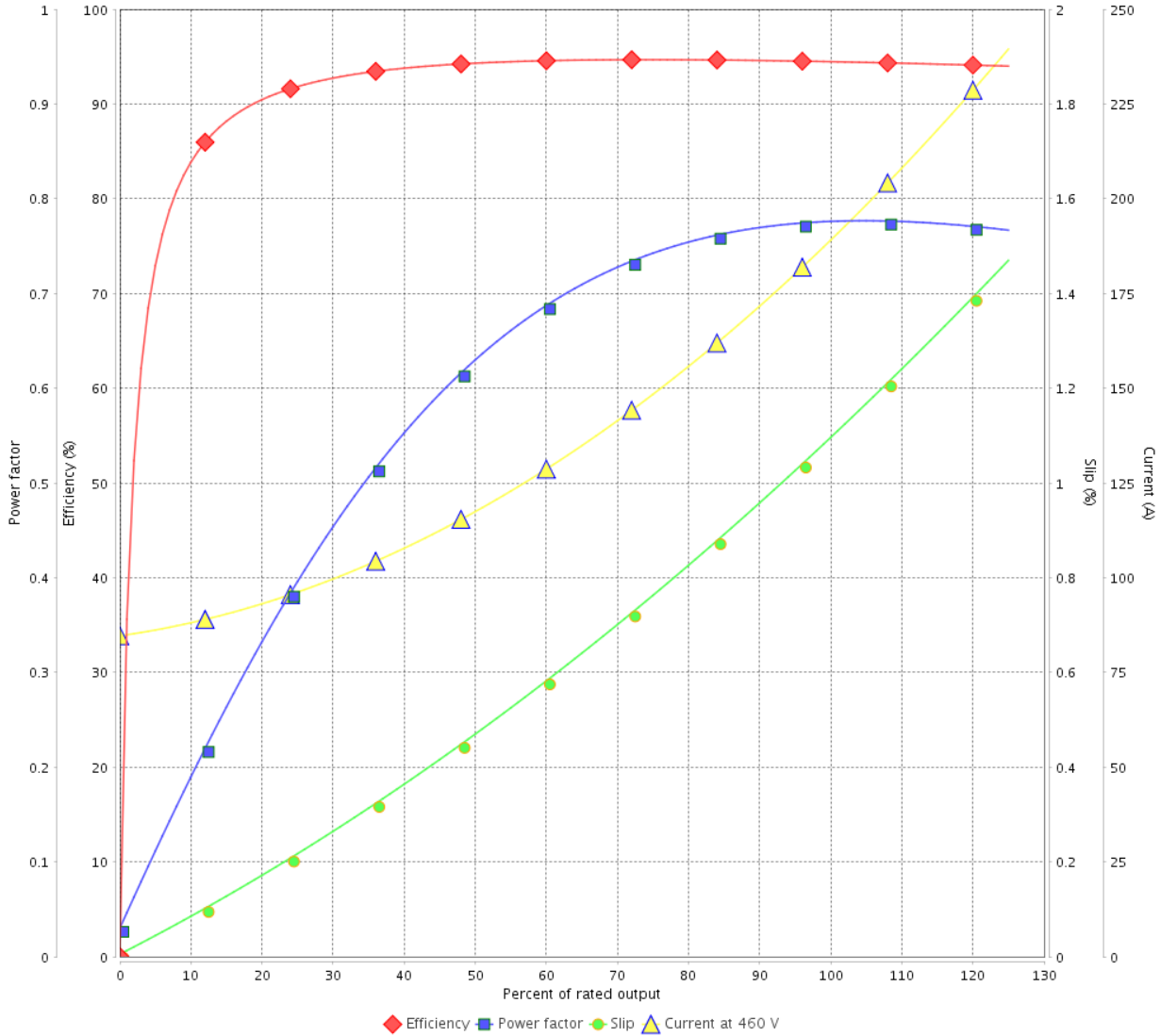
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500588

Catalog # : 15009ET3GKD447T-W22

LOAD PERFORMANCE CURVE



Performance : 460 V 60 Hz 8P

Rated current : 187 A  
 LRC : 6.5  
 Rated torque : 885 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 229 %  
 Rated speed : 890 rpm

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

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

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Product code : 13500588  
Catalog # : 15009ET3GKD447T-W22

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Locked rotor torque : 200 %	Service factor : 1.15
Breakdown torque : 229 %	Temperature rise : 105 K
Rated speed : 890 rpm	Design : A

Heating constant

Cooling constant

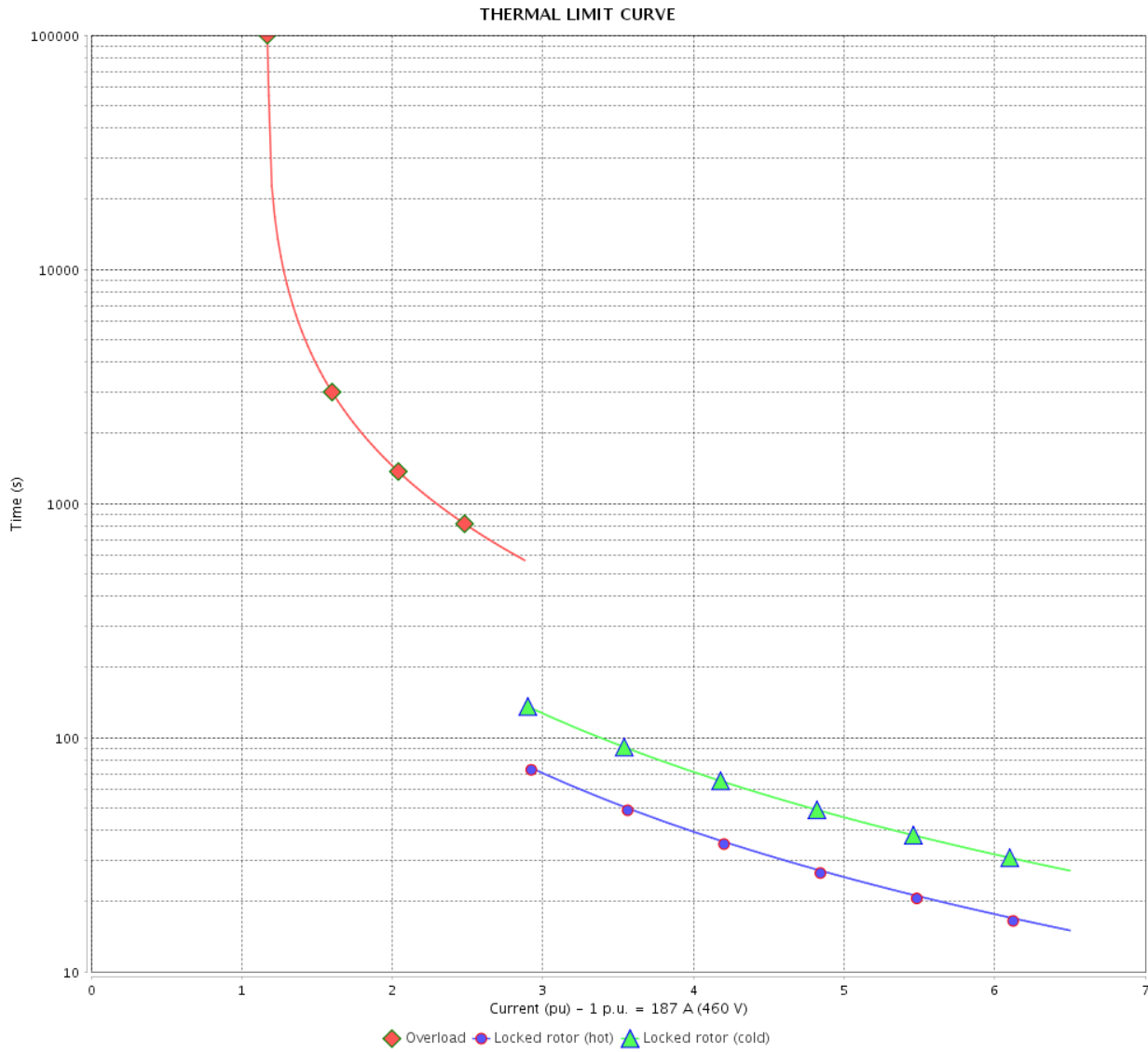
Rev.	Changes Summary	Performed	Checked	Date
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Performed by		Page 6 / 7		Revision
Checked by				
Date				

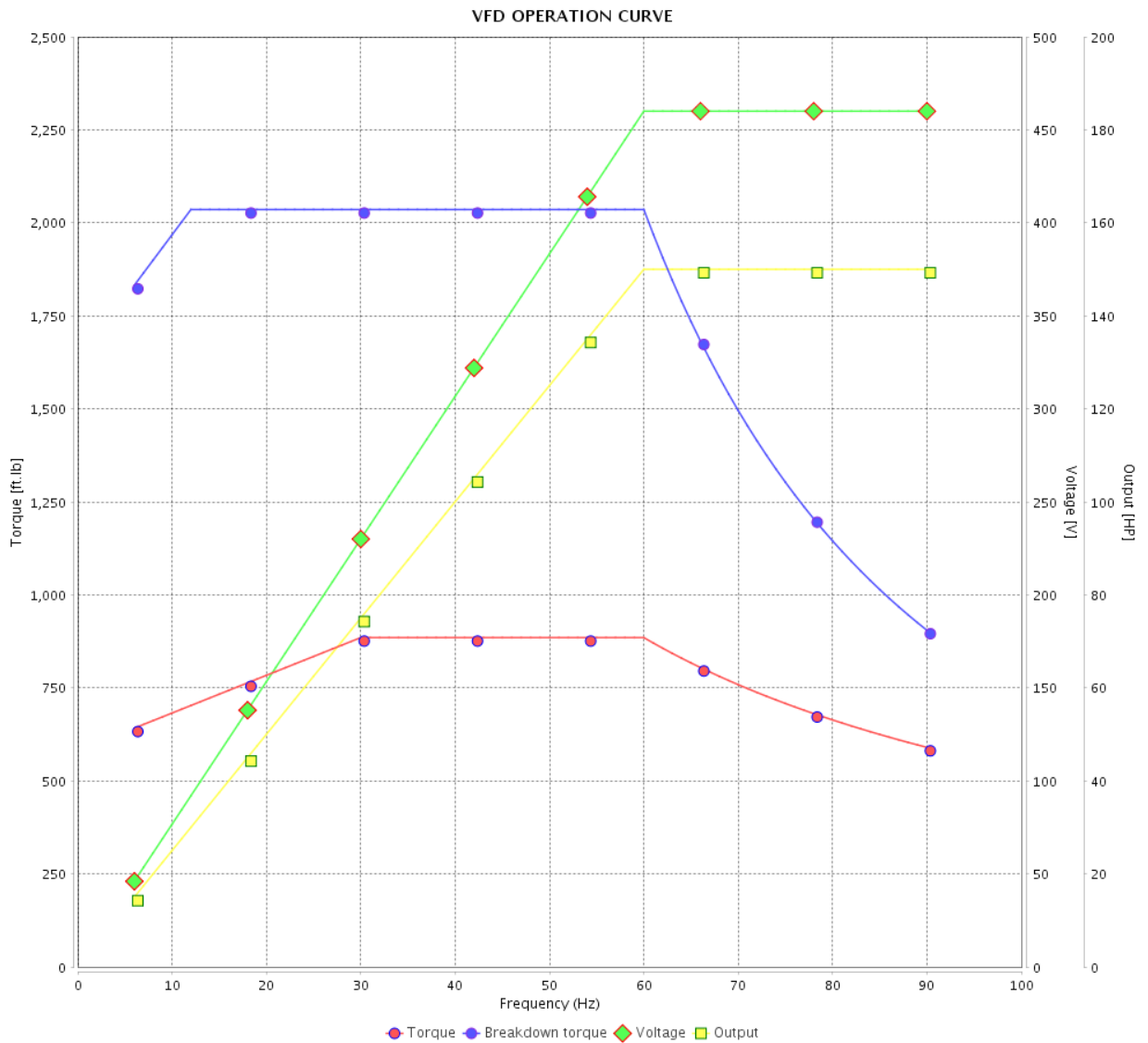
# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 13500588  
 Catalog # : 15009ET3GKD447T-W22



Performance : 460 V 60 Hz 8P

Rated current : 187 A	Moment of inertia (J)
LRC : 6.5	Duty cycle : Cont.(S1)
Rated torque : 885 ft.lb	Insulation class : F
Locked rotor torque : 200 %	Service factor : 1.15
Breakdown torque : 229 %	Temperature rise : 105 K
Rated speed : 890 rpm	Design : A

Rev.	Changes Summary	Performed	Checked	Date
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Date		13/04/2022		

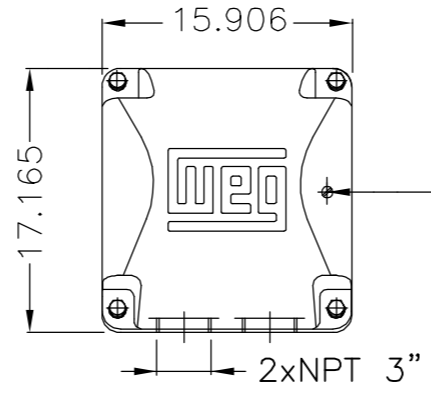
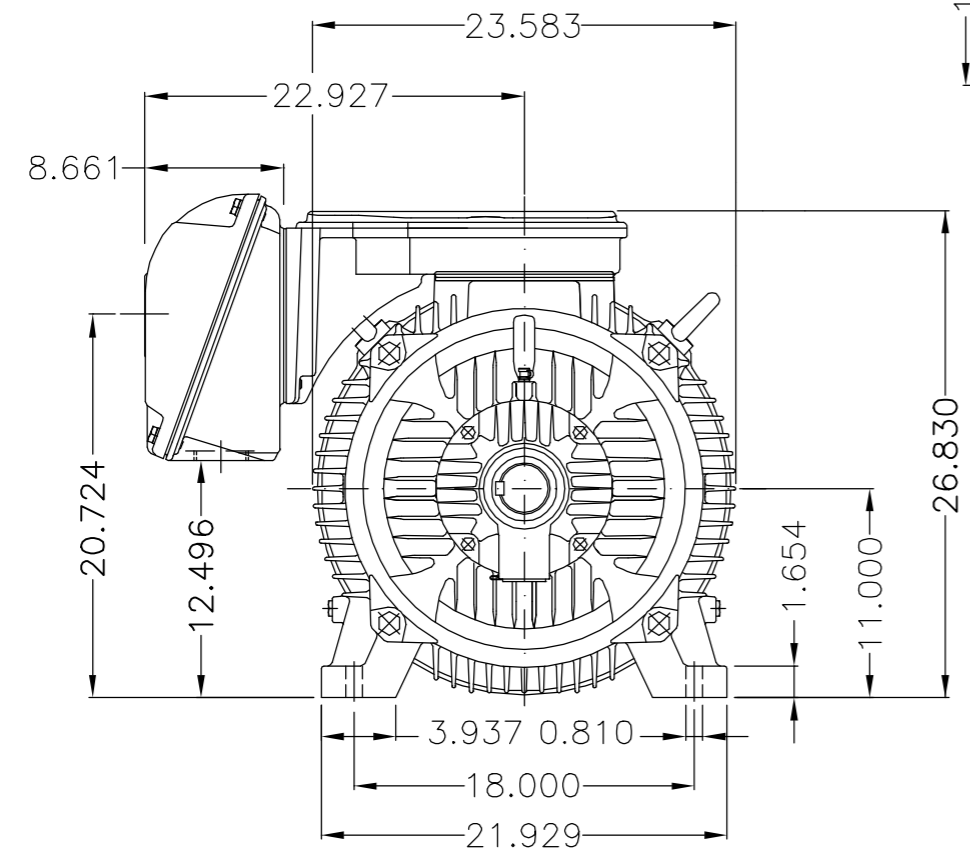
EIXO/SHAFT	
PADRÃO/STANDARD	X
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	

Dimensões em polegada  
Dimensions in inches

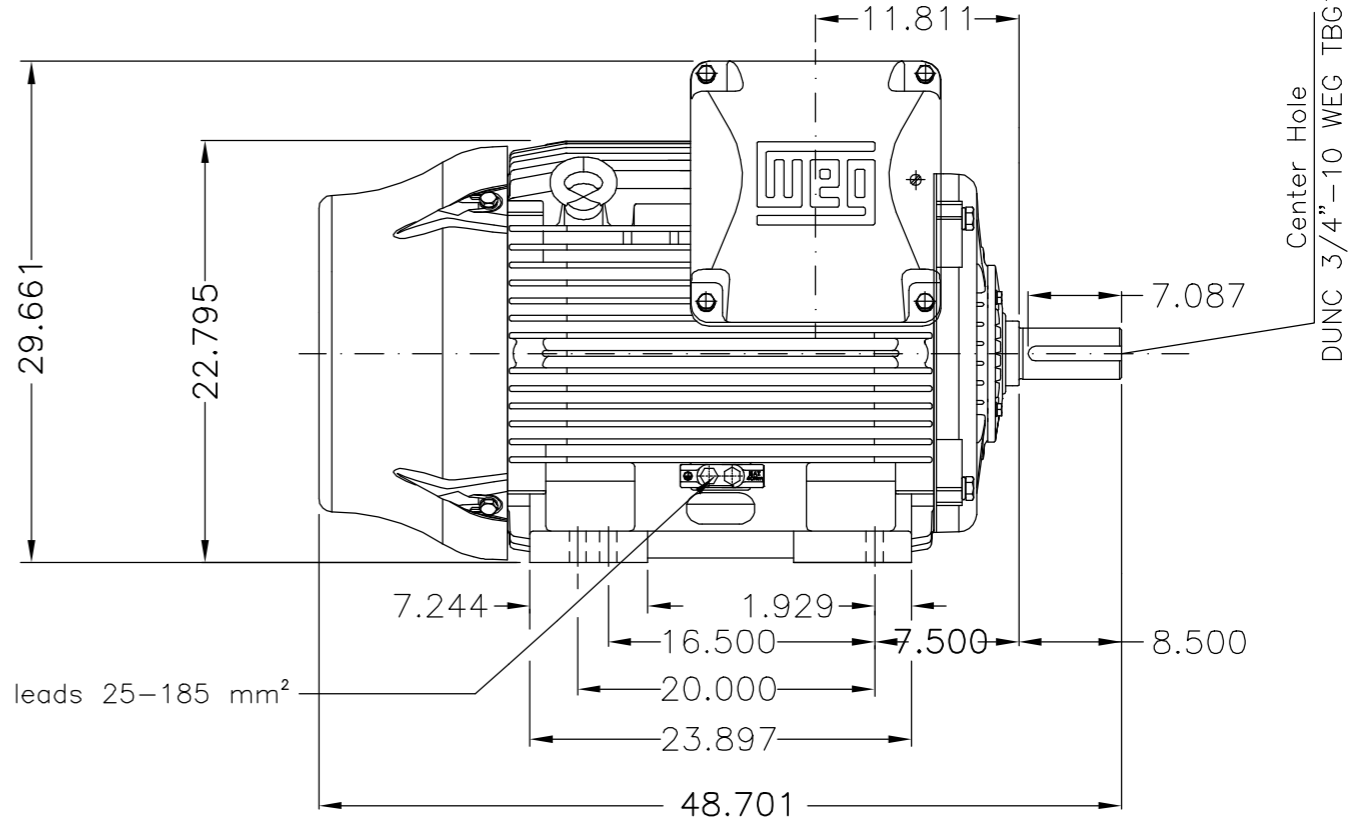
**CERTIFIED WEG MOTORES**  
Certified document.  
Not subject to changes.

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

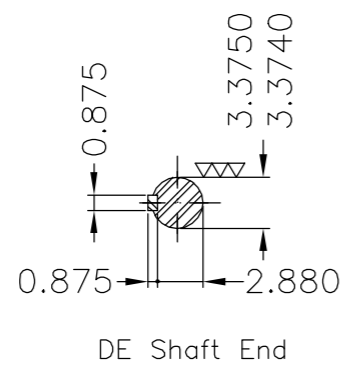
A  
B  
C  
D  
E



Main terminal box



Grounding for leads 25-185 mm<sup>2</sup>



DE Shaft End

Caixa de ligação da carcaça IEC 355 // NEMA 586/7T / Terminal box from frame IEC 355 // NEMA 586/7T						
Base intermediária / Intermediate base						
Categoria A / Design A						
Proteção térmica desligamento - termistor 155°C / Thermistors 155°C To trip						
Linha do motor: Crusher Duty / Motor purpose: Crusher Duty						
Rolamento dianteiro de rolos / DE roller bearing						
Dispositivo de travamento de eixo / Shaft locking device						
Placa de bornes com 12 pinos / Terminal block with 12 terminals						
Cor RAL 5009 / Color RAL 5009						
Plano de pintura 203A / Painting plan 203A						
Forma construtiva NEMA F-1 / Mounting NEMA F-1						
Forma construtiva B3D / Mounting B3R(D)						
<b>WEG ELECTRIC CORPORATION - WEG</b>						

500001349543		RETIRADO DETALHE DE CONDUITE	MENSOR	JMANENTE	18.08.2017	04
500001331189		ADIC.NOTA CONDUITE/ADD NOTE CONDUIT	MENSOR	EANJOS	05.07.2017	03
ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE VER
EXECUTED	DVEGINI	THREE PHASE W22 MOTOR - NEMA PREMIUM EFF FRAME 445/7T IP55	10004040047			
CHECKED			000	04		
RELEASED	CVITORINO					
REL DT	25.01.2016	WMO Jaraguá do Sul	Product Engineering	SHEET	1 / 1	

150 HP 08 Poles 60Hz 414149563/0 MEC

A

UNCONTROLLED COPY RELEASED ZME A3



MADE IN BRAZIL  
13500588



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

MODEL 15009ET3GKD447T-W22

Electric Motor  
Severe Duty

PH3 60Hz Fr. 445/7T 1000m.a.s.l. IP55 TEFC 2265lb

V 460

A 187

HP 150

kW 110

SF 1.15

SFA 215

RPM 890

PF 0.78

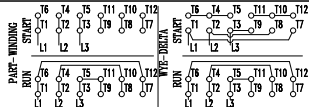
AMB 40°C

INS cl. F

NEMA NOM EFF 94.5%

DUTY CONT.

DES A Code H



→ NU-319-C3 (45g)

→ 6316-C3 (34g)



MOBIL POLYREX EM (15000h)

