

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	13503286																		
Catalog # :	12509ET3GKD447T-W22																		
Frame : 445/7T Output : 125 HP Poles : 8 Frequency : 60 Hz Rated voltage : 460 V Rated current : 155 A L. R. Amperes : 992 A LRC : 6.4x(Code H) No load current : 75.0 A Rated speed : 890 rpm Slip : 1.11 % Rated torque : 738 ft.lb Locked rotor torque : 200 % Breakdown torque : 229 % Insulation class : F Service factor : 1.15 Design : A	Locked rotor time : 30s (cold) 17s (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 : 63.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 1464 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	0.000 94.5 94.5 94.5																		
Power Factor	0.00 0.62 0.72 0.77																		
Foundation loads																			
Max. traction	: 3790 lb																		
Max. compression	: 5254 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															
Date	13/04/2022		1 / 6																

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



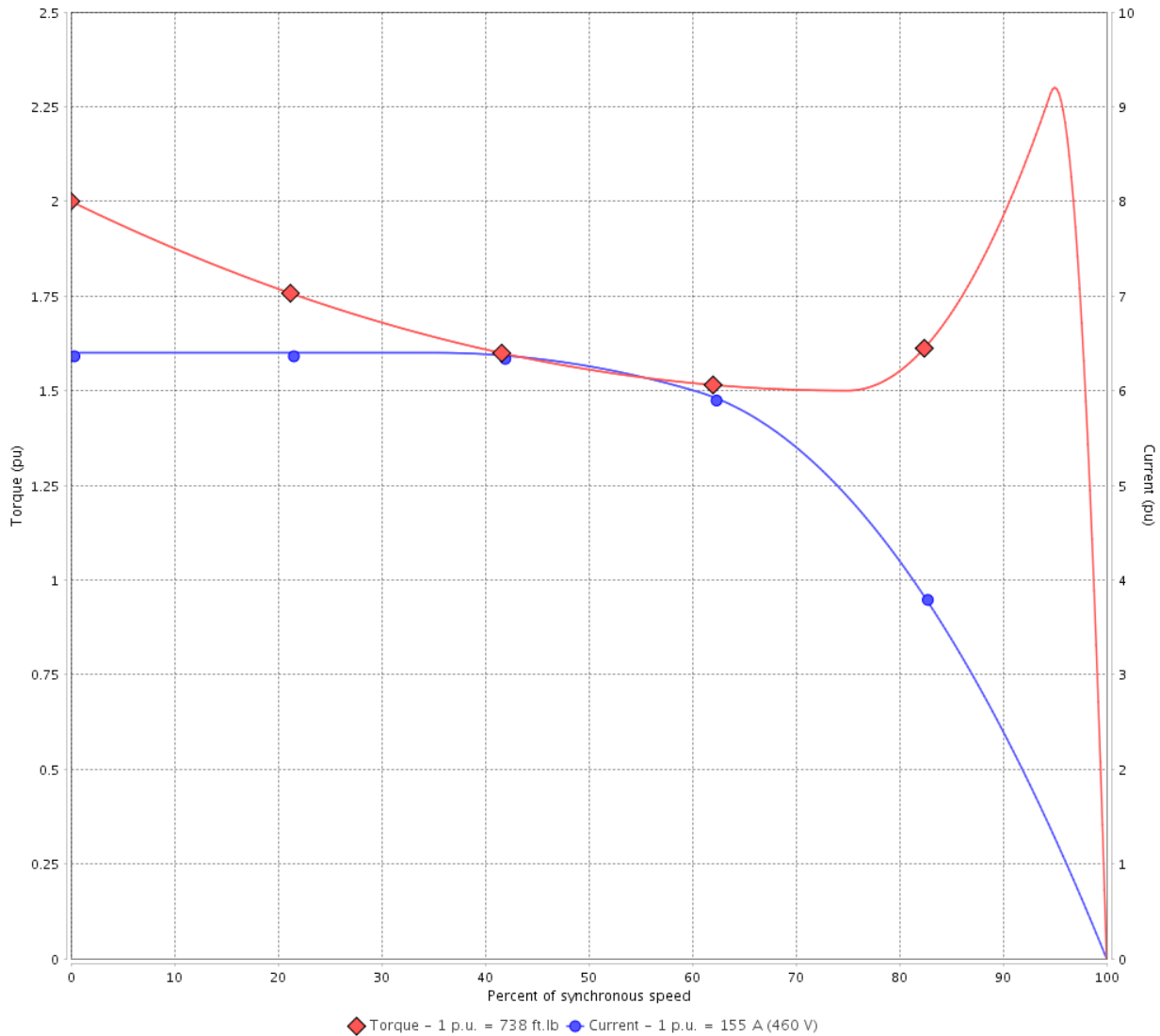
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13503286

Catalog # : 12509ET3GKD447T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 8P

Rated current	: 155 A	Moment of inertia (J)	
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 738 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 890 rpm	Design	: A

Locked rotor time : 30s (cold) 17s (hot)

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Performed by			Page 2 / 6	Revision
Checked by				
Date	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

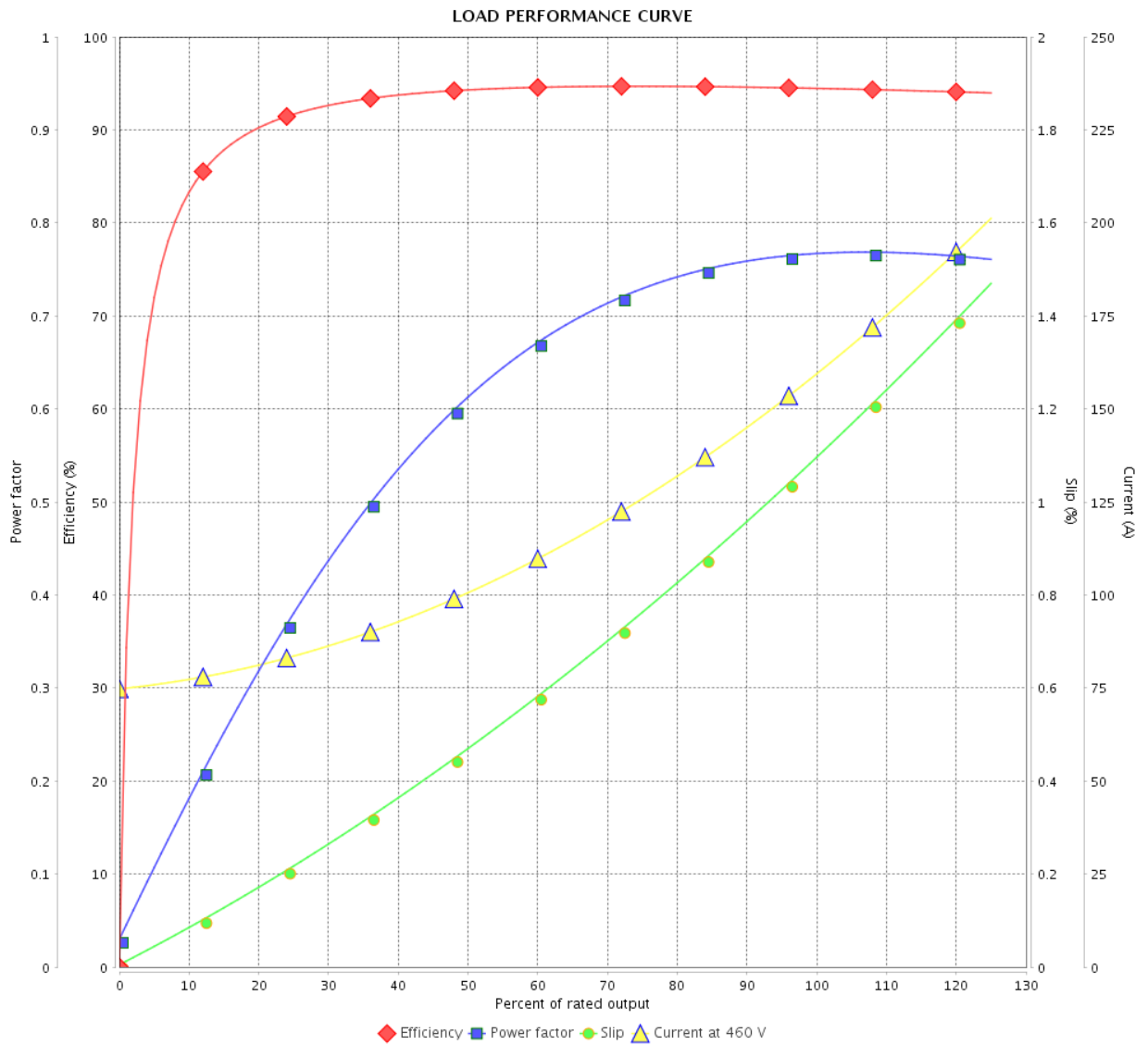


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

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THERMAL LIMIT CURVE

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Rated speed : 890 rpm	Design : A

Heating constant

Cooling constant

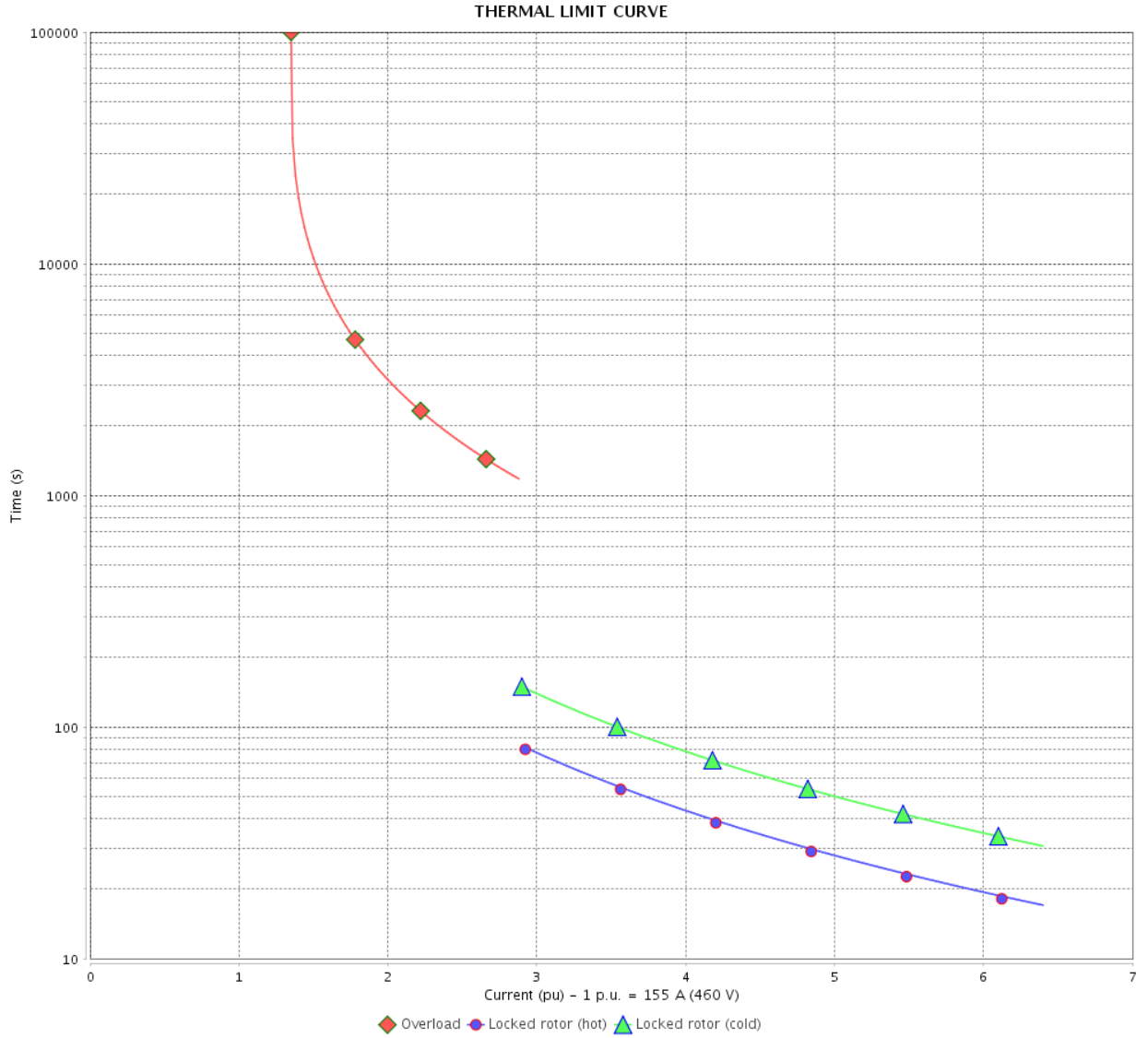
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

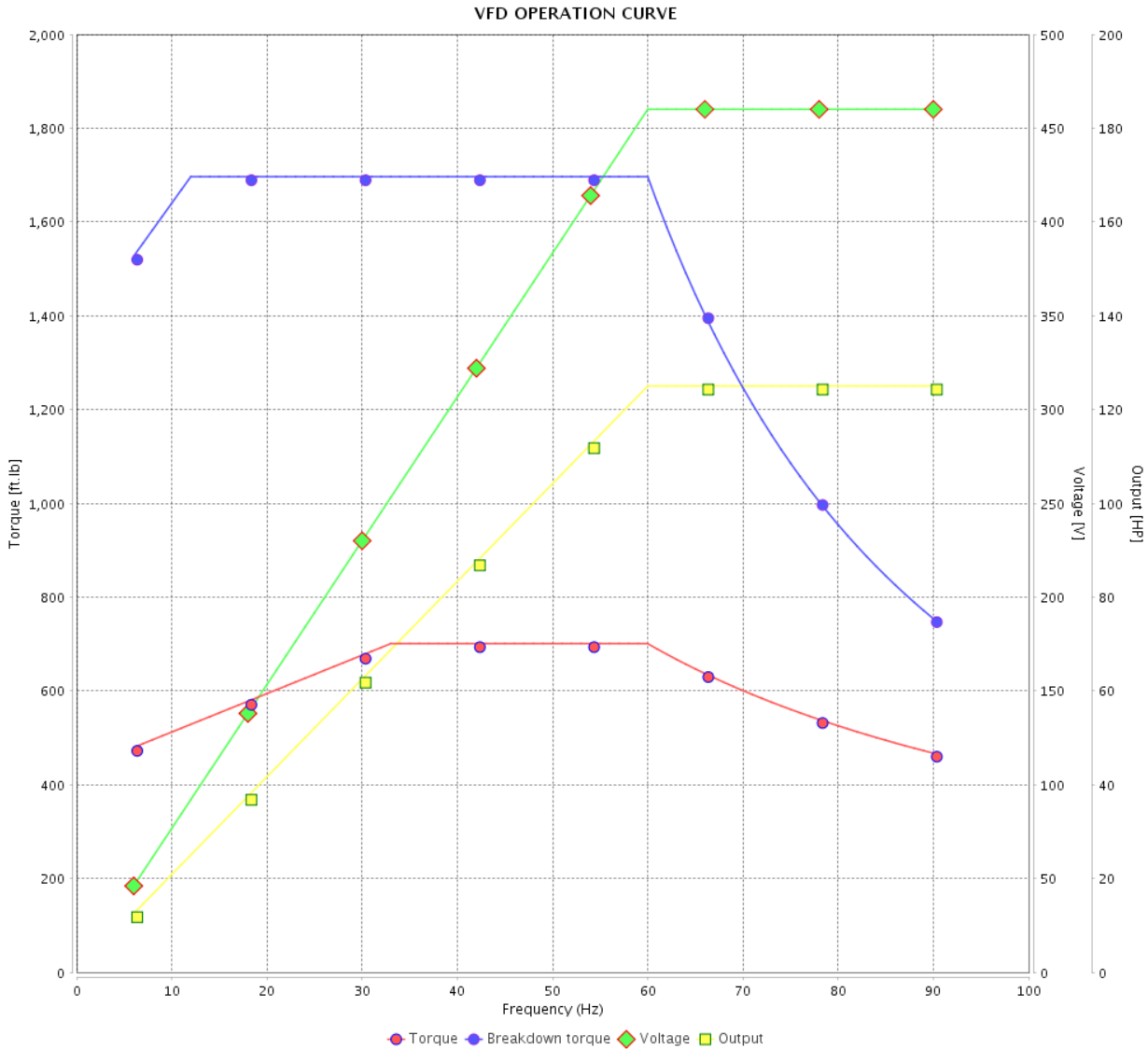


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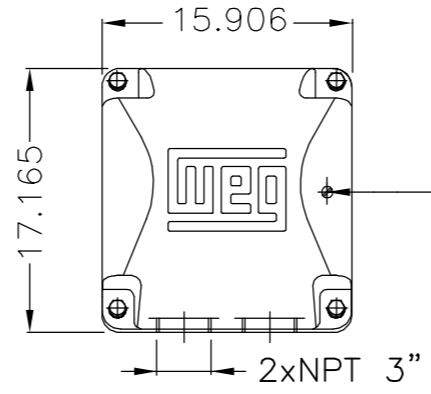
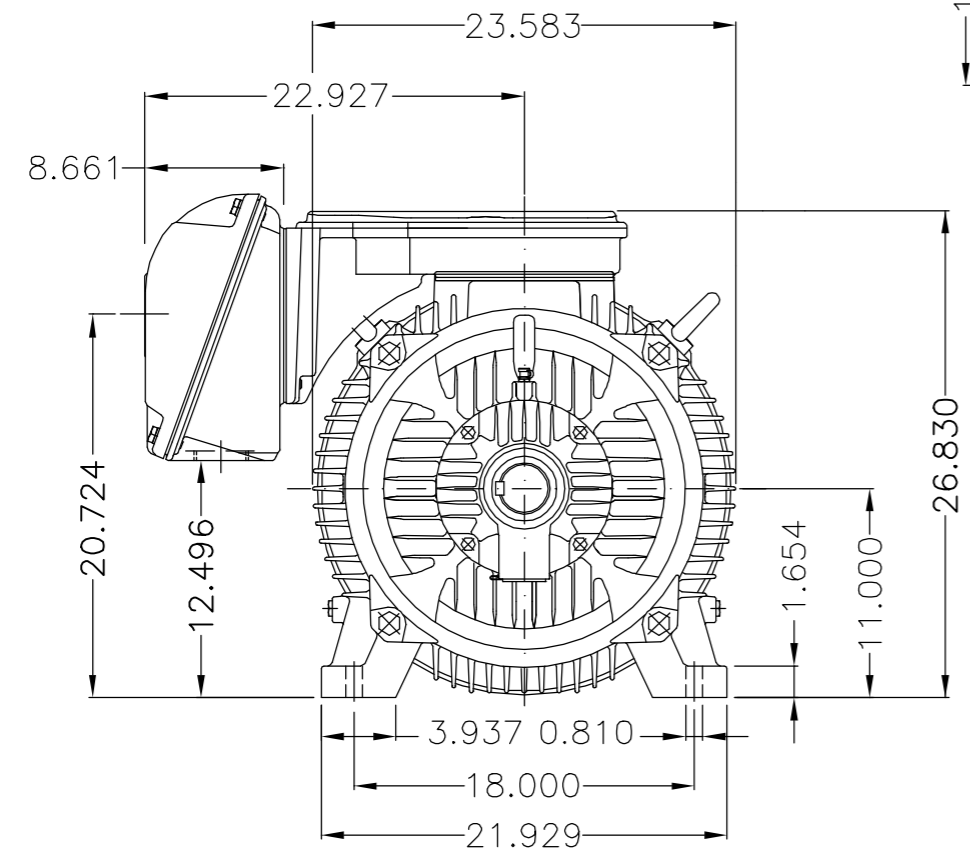
EIXO/SHAFT	
PADRÃO/STANDARD	X
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	

Dimensões em polegada
Dimensions in inches

CERTIFIED WEG MOTORES
Certified document.
Not subject to changes.

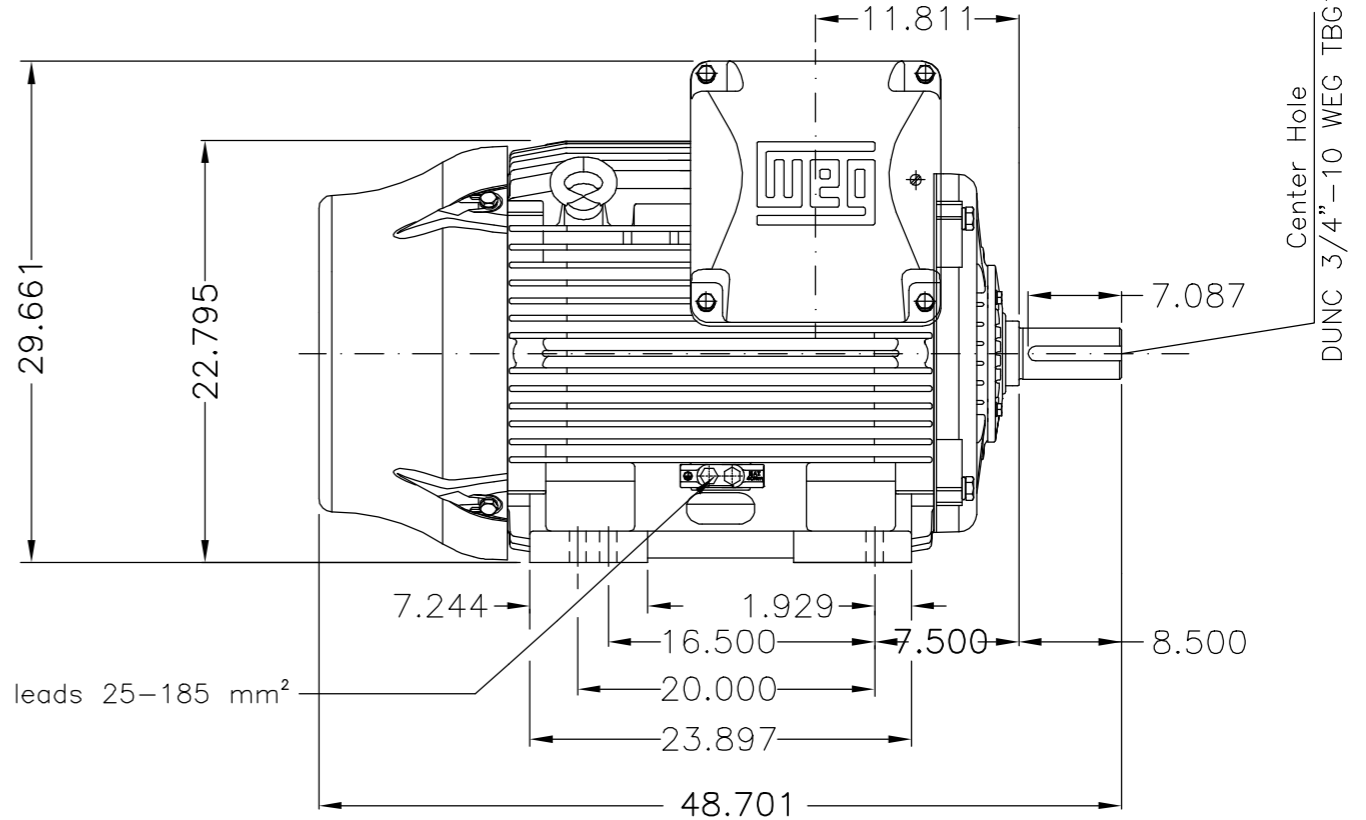
THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

A
B
C
D
E

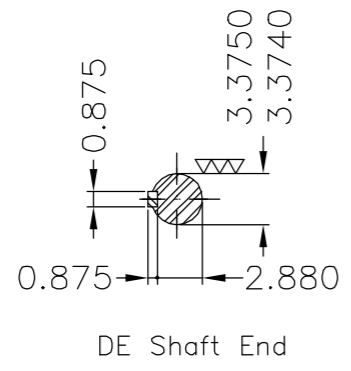


Main terminal box

Grounding for leads 35-120 mm²



Grounding for leads 25-185 mm²



DE Shaft End

Caixa de ligação da carcaça IEC 355 // NEMA 586/7T / Terminal box from frame IEC 355 // NEMA 586/7T						
Base intermediaria / Intermediate base						
Categoria A / Design A						
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)						
WEG ELECTRIC CORPORATION - WEG						

500001349543		RETIRADO REPR. DO CONDUÍTE	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	10004044850			
CHECKED			000	04		
RELEASED	ADRIANAP					
REL DT	27.01.2016	WMO Jaraguá do Sul	Product Engineering	SHEET	1 / 1	

125 HP 08 Poles 60Hz 414154629/0 MEC

A

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RELEASED

ZME A3

MADE IN BRAZIL
13503286



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 12509ET3GKD447T-W22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 445/7T 1000m.a.s.l. IP55 TEFC 2099lb

V 460

A 155

HP 125

kW 90

SF 1.15

SFA 178

RPM 890

PF 0.77

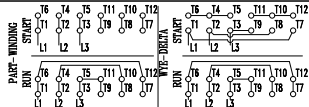
AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 94.5%

DUTY CONT.

DES A Code H



→ NU-319-C3 (45g)

→ 6316-C3 (34g)



MOBIL POLYREX EM (15000h)

