



No.:

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor



Product line : Three-Phase: W22 Crusher Duty TEFC (IP55)

Catalog Number : 30012ET3GKD586/7-W22

List Price : \$44,301.00

Notes:

Performed by:

Checked:

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	13500625			
		Catalog # :	30012ET3GKD586/7-W22			
Frame	: 586/7T	Locked rotor time	: 54s (cold) 30s (hot)			
Output	: 300 HP (220 kW)	Temperature rise	: 80 K			
Poles	: 6	Duty cycle	: Cont.(S1)			
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C			
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.			
Rated current	: 356 A	Protection degree	: IP55			
L. R. Amperes	: 2136 A	Cooling method	: IC411 - TEFC			
LRC	: 6.0x(Code G)	Mounting	: F-1			
No load current	: 127 A	Rotation <sup>1</sup>	: Both (CW and CCW)			
Rated speed	: 1190 rpm	Noise level <sup>2</sup>	: 77.0 dB(A)			
Slip	: 0.83 %	Starting method	: Direct On Line			
Rated torque	: 181 kgfm	Approx. weight <sup>3</sup>	: 1712 kg			
Locked rotor torque	: 160 %					
Breakdown torque	: 190 %					
Insulation class	: F					
Service factor	: 1.15					
Moment of inertia (J)	: A					
Design						
Output	25%	50%	75%	100%		
Efficiency (%)	95.3	95.4	95.8	95.8		
Power Factor	0.45	0.69	0.78	0.81		
Foundation loads						
Max. traction : 1492 kgf						
Max. compression : 3204 kgf						
		<u>Drive end</u>	<u>Non drive end</u>			
Bearing type	:	NU-322 C3	6319 C3			
Sealing	:	Taconite Labyrinth	Taconite Labyrinth			
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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# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



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

### Space heater information

Voltage: 200 - 240 V

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# TORQUE AND CURRENT VS SPEED CURVE



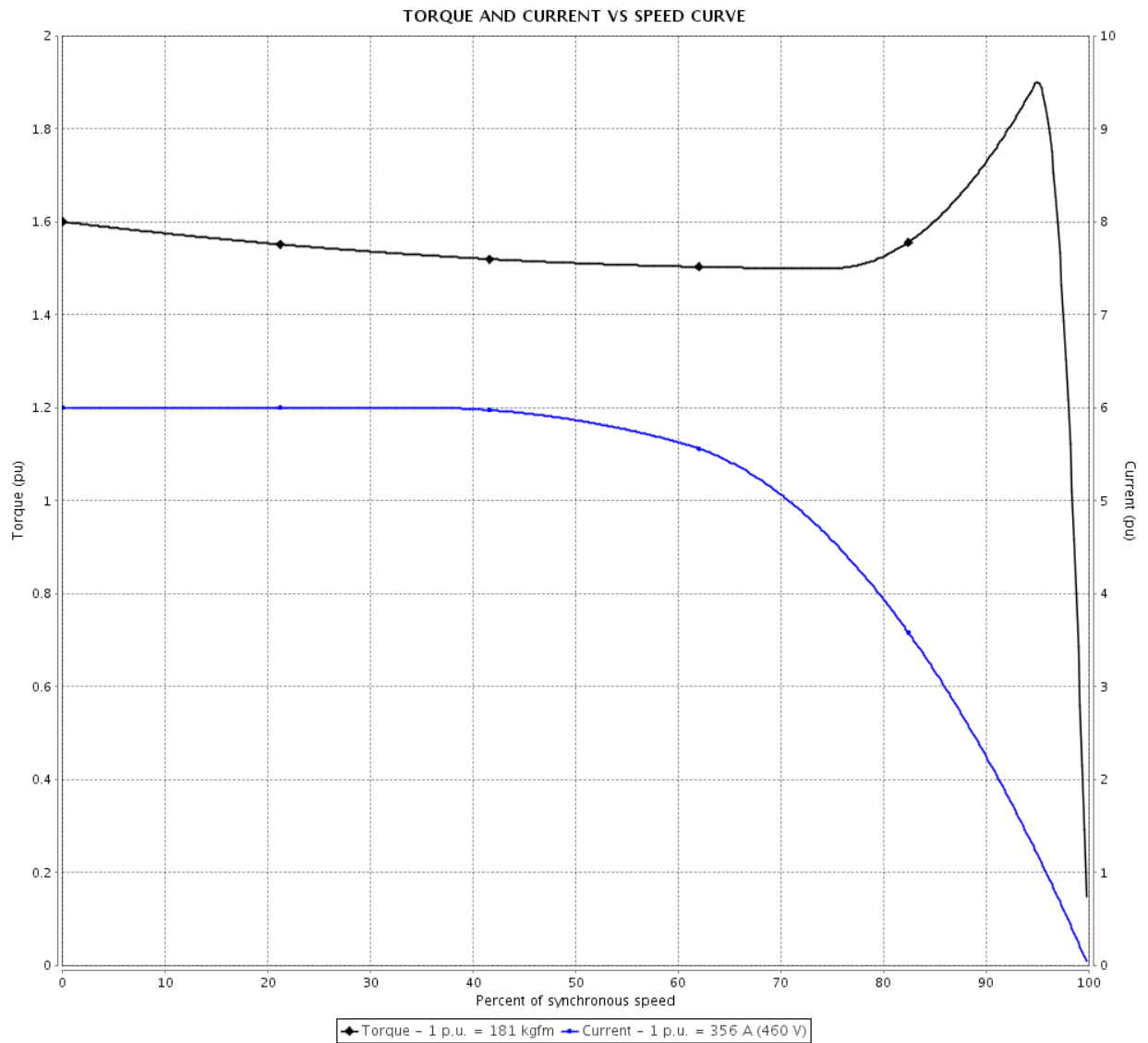
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 13500625

Catalog # : 30012ET3GKD586/7-W22



Performance : 460 V 60 Hz 6P

Rated current : 356 A  
 LRC : 6.0  
 Rated torque : 181 kgfm  
 Locked rotor torque : 160 %  
 Breakdown torque : 190 %  
 Rated speed : 1190 rpm

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

Locked rotor time : 54s (cold) 30s (hot)

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

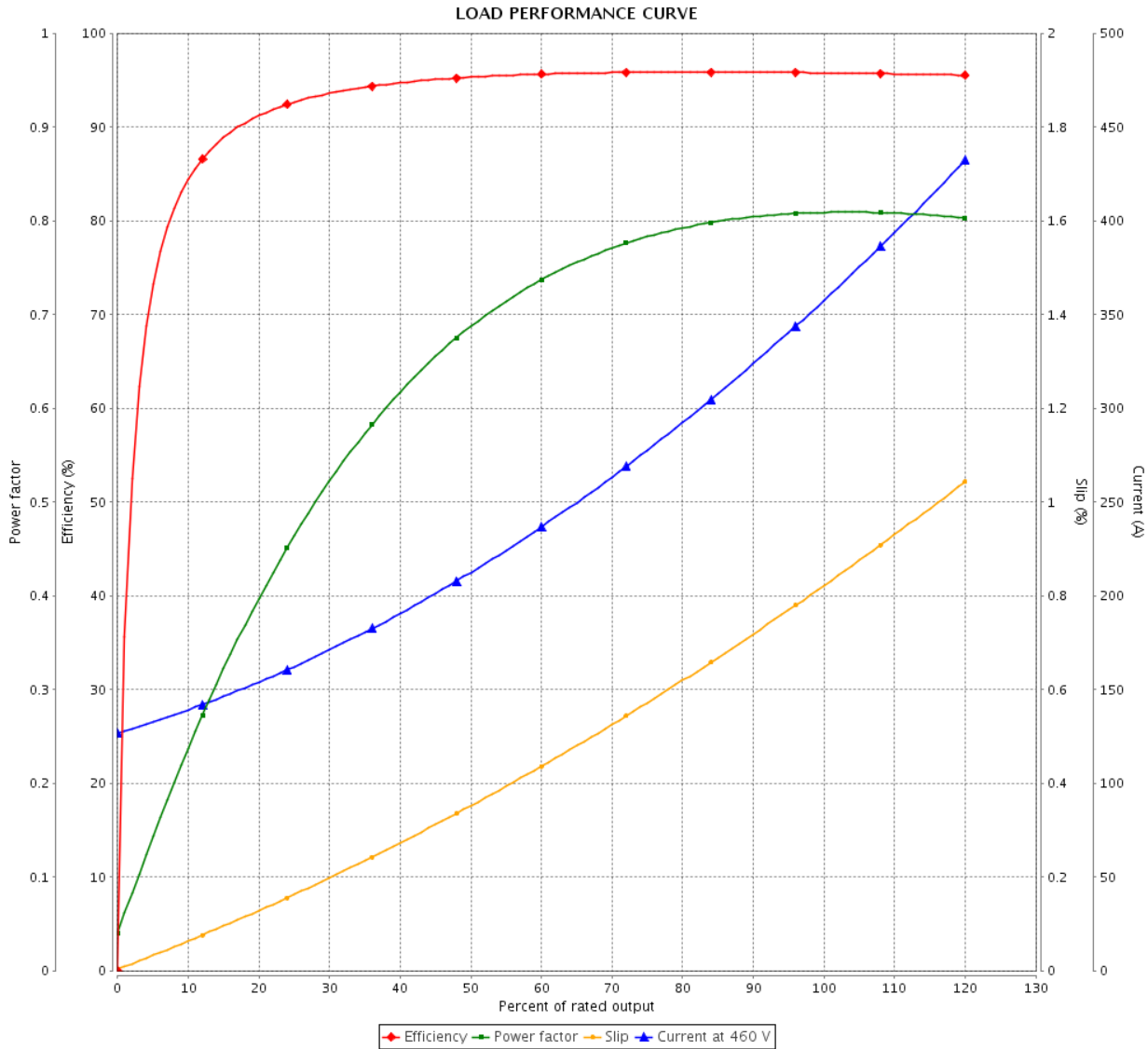


Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13500625

Catalog # : 30012ET3GKD586/7-W22



Performance : 460 V 60 Hz 6P

Rated current : 356 A  
 LRC : 6.0  
 Rated torque : 181 kgfm  
 Locked rotor torque : 160 %  
 Breakdown torque : 190 %  
 Rated speed : 1190 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



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase  
 Product code : 13500625  
 Catalog # : 30012ET3GKD586/7-W22

Performance : 460 V 60 Hz 6P

Rated current : 356 A	Moment of inertia (J)
LRC : 6.0	Duty cycle : Cont.(S1)
Rated torque : 181 kgfm	Insulation class : F
Locked rotor torque : 160 %	Service factor : 1.15
Breakdown torque : 190 %	Temperature rise : 80 K
Rated speed : 1190 rpm	Design : A

Heating constant

Cooling constant

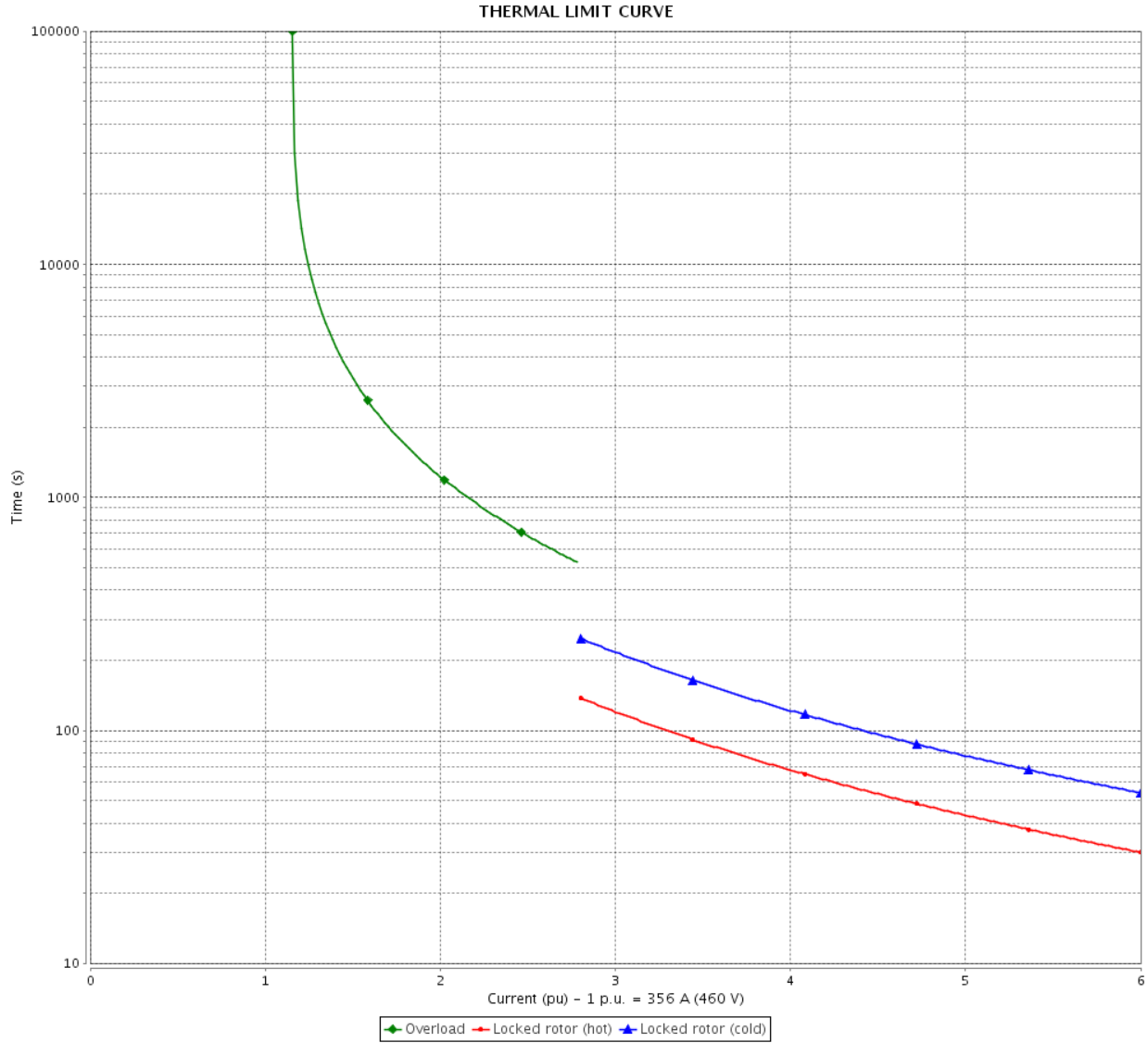
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

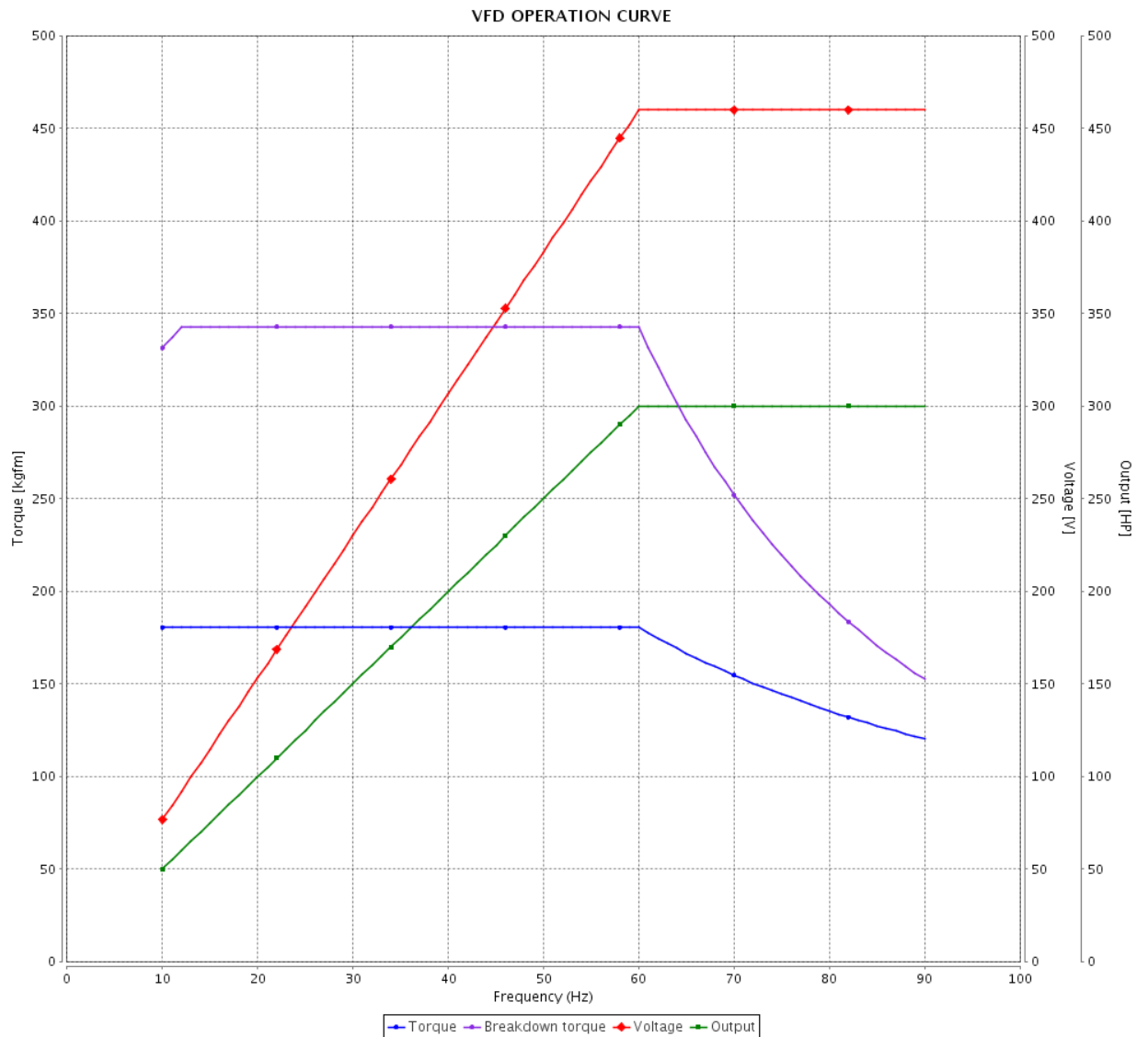


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 13500625

Catalog # : 30012ET3GKD586/7-W22



Performance : 460 V 60 Hz 6P

Rated current : 356 A  
LRC : 6.0  
Rated torque : 181 kgfm  
Locked rotor torque : 160 %  
Breakdown torque : 190 %  
Rated speed : 1190 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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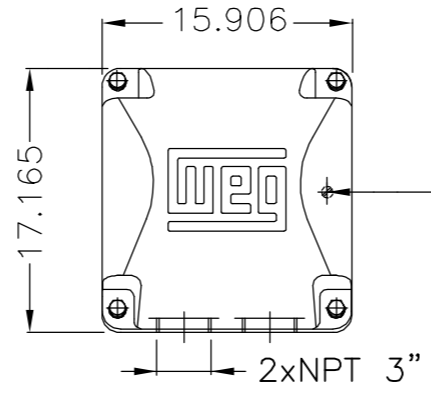
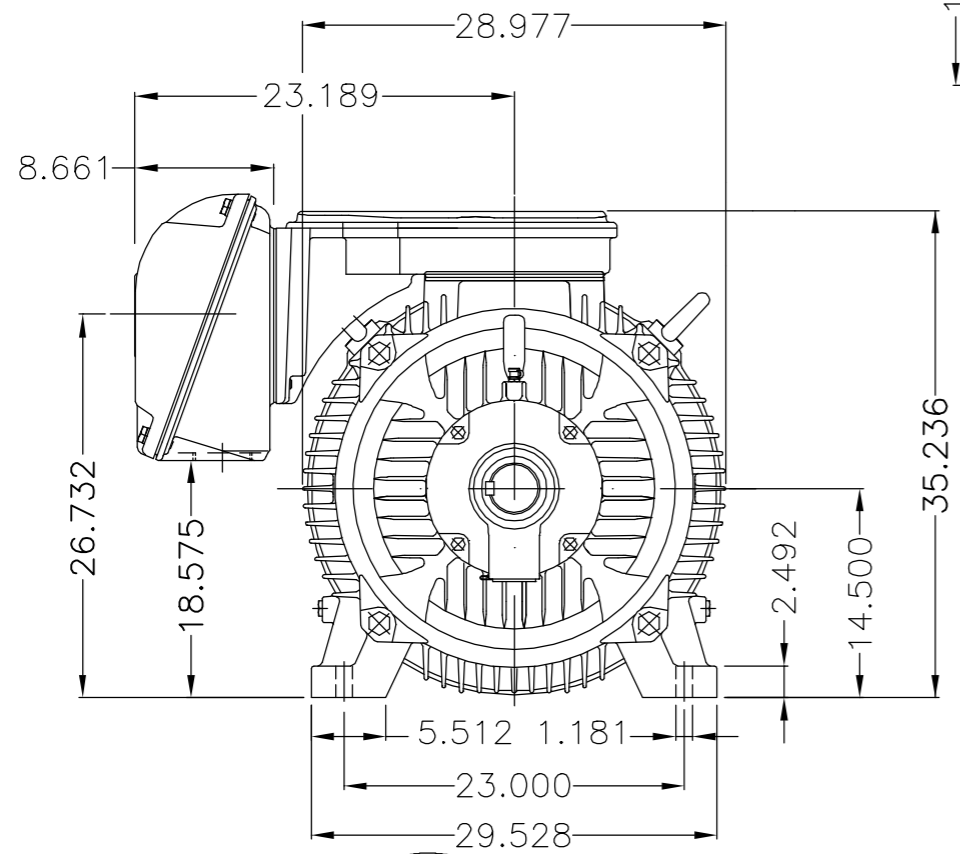


EIXO/SHAFT	
PADRÃO/STANDARD	X
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	

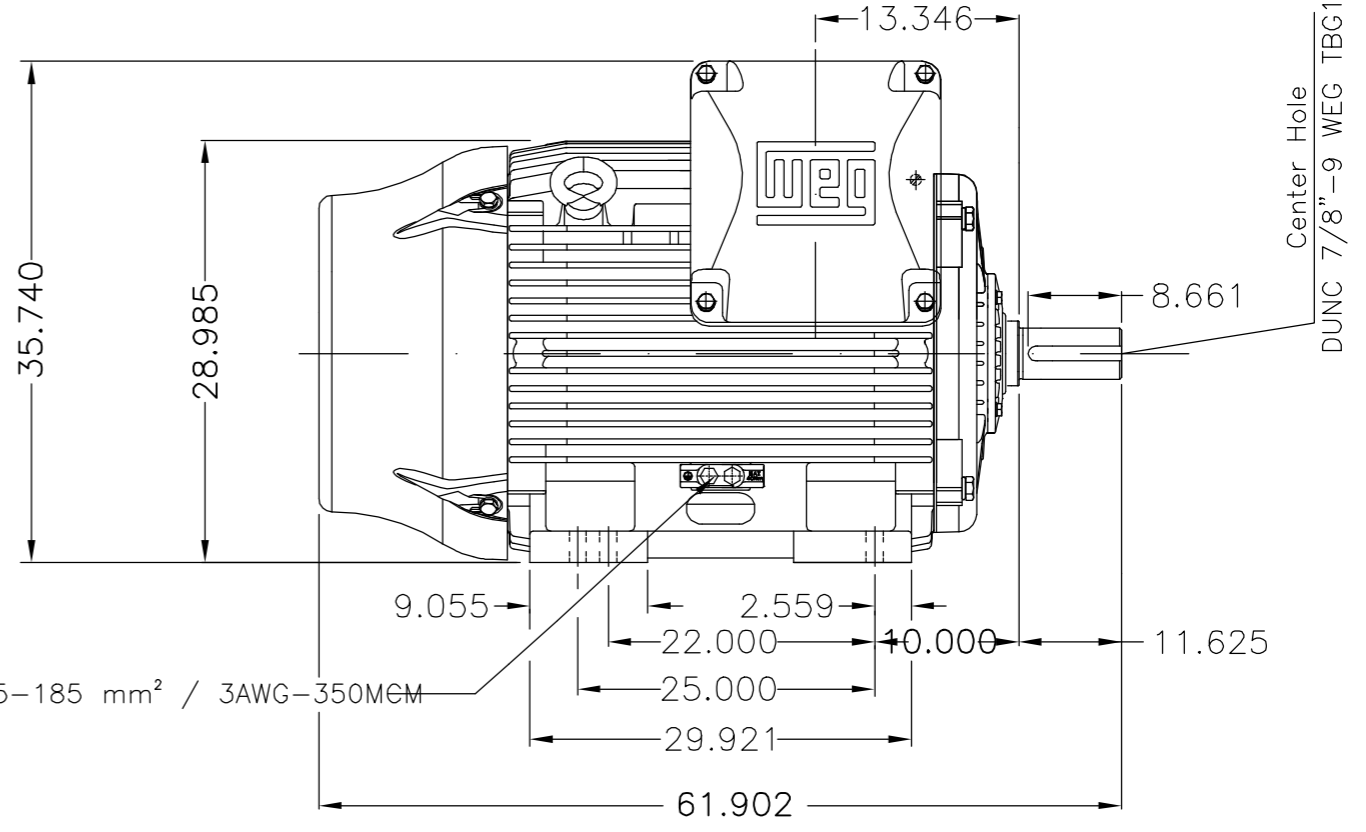
Dimensões em polegada  
Dimensions in inches

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

A  
B  
C  
D  
E

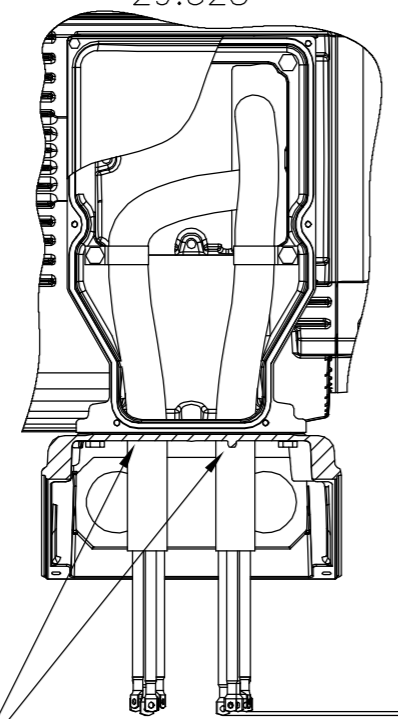


Main terminal box

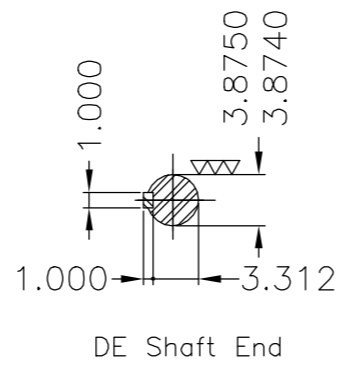


Grounding for leads 25-185 mm<sup>2</sup> / 3AWG-350MEM

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



±5.900  
(Desalinhamento máximo permitido)  
(Maximum misalignment allowed)



DE Shaft End

Conduite para cabos no interior do suporte da caixa de ligação Cables conduit inside terminal box support									
Rolamento dianteiro de rolos / DE roller bearing									
Dispositivo de travamento de eixo / Shaft locking device									
Linha do motor: Crusher Duty / Motor purpose: Crusher Duty									
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)									
<b>WEG EQUIPAMENTOS ELÉTRICOS S/A</b>									

E	300 HP	08 Poles	60Hz	414658029
	250 HP	08 Poles	60Hz	414668751
	400 HP	06 Poles	60Hz	414658029
	350 HP	06 Poles	60Hz	414658029
	300 HP	06 Poles	60Hz	414658029

E	500001331189	ADIC.NOTA CONDUITE/ADD NOTE CONDUIT	MENSOR	EANJOS	05.07.2017	04
D	500001323616	ALTERADO CONFORME CDP 414658625	MENSOR	JMANENTE	20.06.2017	03
C	EXECUTED	GABRIELID	SUMMARY OF MODIFICATIONS			
B	CHECKED		THREE PHASE W22 MOTOR			
A	RELEASED	JMANENTE	FRAME 586/7T IP55 TEFC			
	REL DT	09.05.2017	WMO	Jaragua do Sul	Product Engineering	

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