



No.:

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor



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

Catalog Number : 25009ET3GKD586/7-W22

List Price : \$56,168.00

Notes:

Performed by:

Checked:

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	13500595		
		Catalog # :	25009ET3GKD586/7-W22		
Frame	: 586/7T	Locked rotor time	: 72s (cold) 40s (hot)		
Output	: 250 HP (185 kW)	Temperature rise	: 80 K		
Poles	: 8	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	: 299 A	Protection degree	: IP55		
L. R. Amperes	: 1854 A	Cooling method	: IC411 - TEFC		
LRC	: 6.2x(Code G)	Mounting	: F-1		
No load current	: 120 A	Rotation <sup>1</sup>	: Both (CW and CCW)		
Rated speed	: 895 rpm	Noise level <sup>2</sup>	: 75.0 dB(A)		
Slip	: 0.56 %	Starting method	: Direct On Line		
Rated torque	: 200 kgfm	Approx. weight <sup>3</sup>	: 1901 kg		
Locked rotor torque	: 140 %				
Breakdown torque	: 210 %				
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	0.41	0.66	0.76	0.81	
Foundation loads					
Max. traction : 1925 kgf					
Max. compression : 3826 kgf					
		<u>Drive end</u>	<u>Non drive end</u>		
Bearing type	:	NU-322 C3	6319 C3		
Sealing	:	Taconite Labyrinth	Taconite Labyrinth		
Lubrication interval	:	13000 h	17000 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



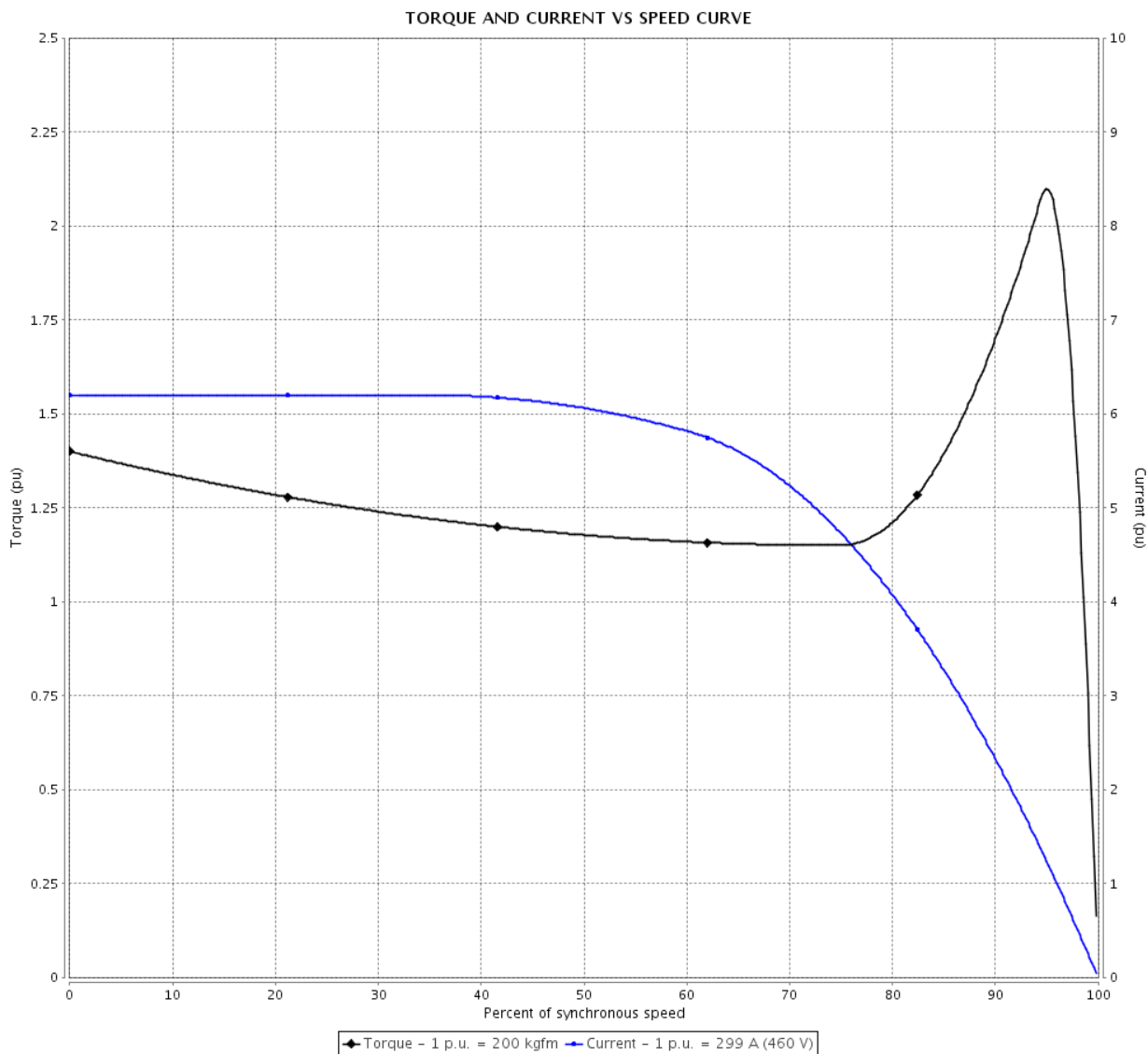
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 13500595

Catalog # : 25009ET3GKD586/7-W22



Performance : 460 V 60 Hz 8P

Rated current : 299 A  
 LRC : 6.2  
 Rated torque : 200 kgfm  
 Locked rotor torque : 140 %  
 Breakdown torque : 210 %  
 Rated speed : 895 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 : 72s (cold) 40s (hot)

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

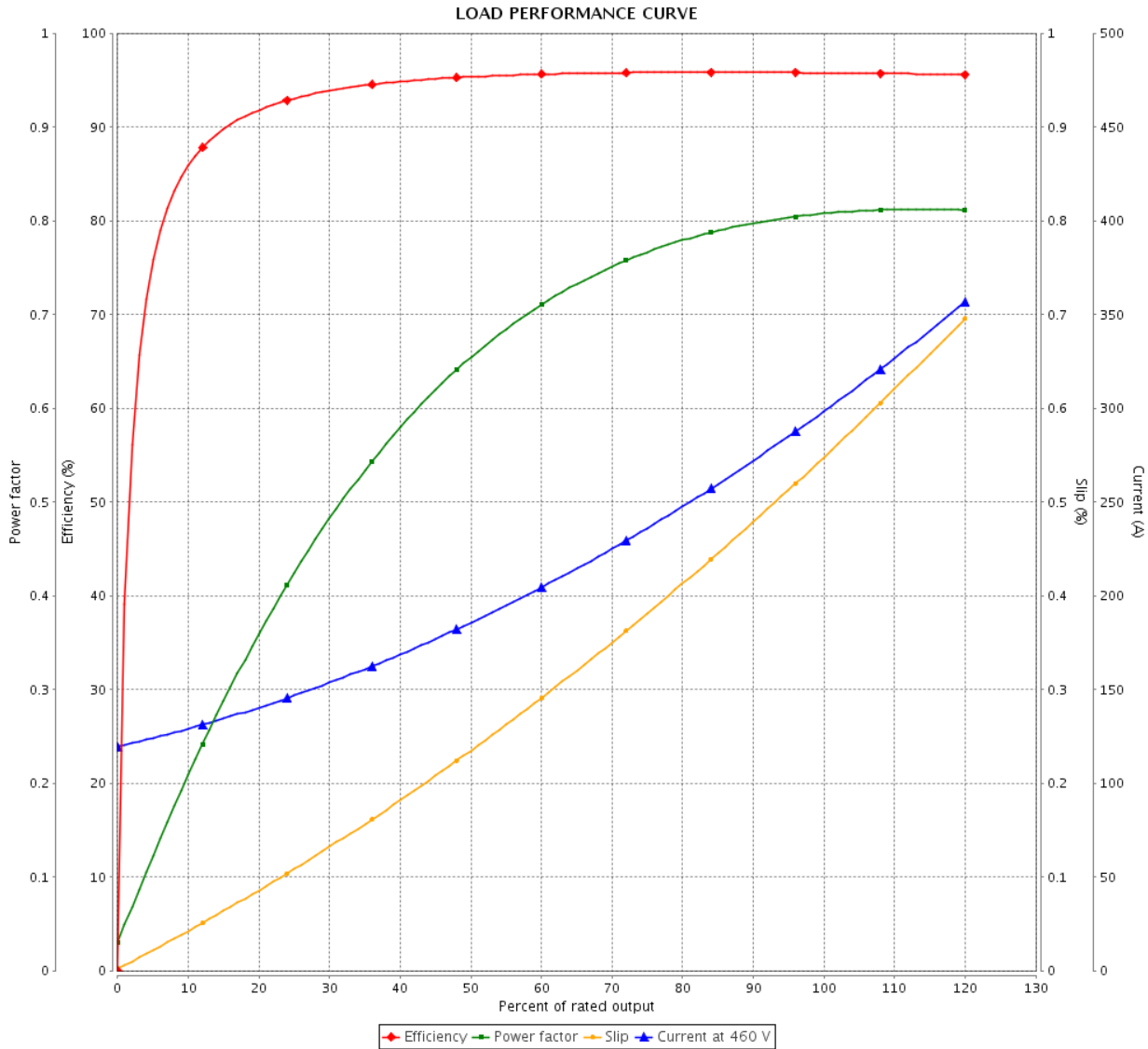


Customer : \_\_\_\_\_

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 13500595

Catalog # : 25009ET3GKD586/7-W22



Performance : 460 V 60 Hz 8P

Rated current : 299 A  
 LRC : 6.2  
 Rated torque : 200 kgfm  
 Locked rotor torque : 140 %  
 Breakdown torque : 210 %  
 Rated speed : 895 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



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Three-Phase

Product code : 13500595

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Performance : 460 V 60 Hz 8P

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

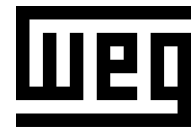
Heating constant

Cooling constant

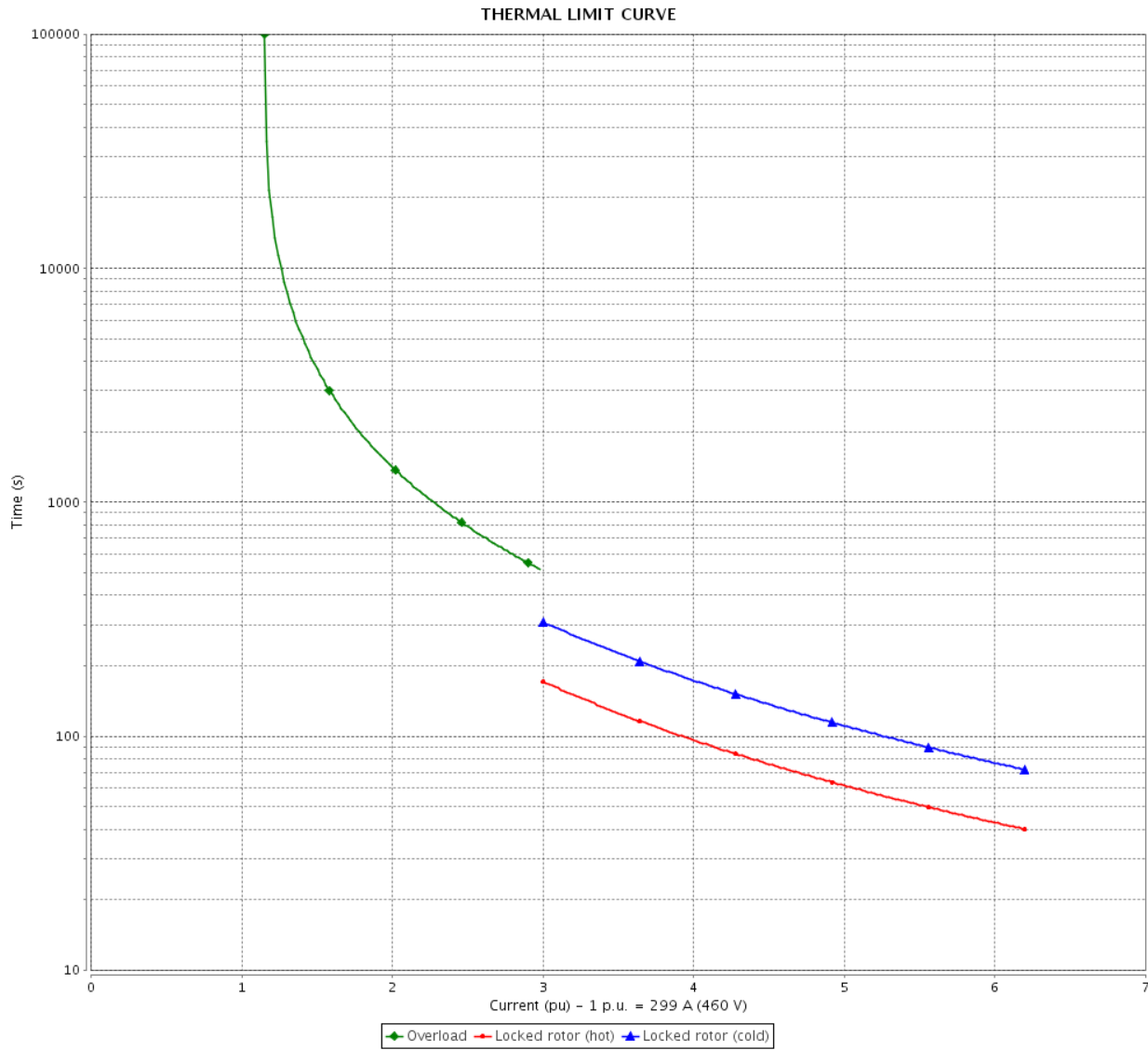
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

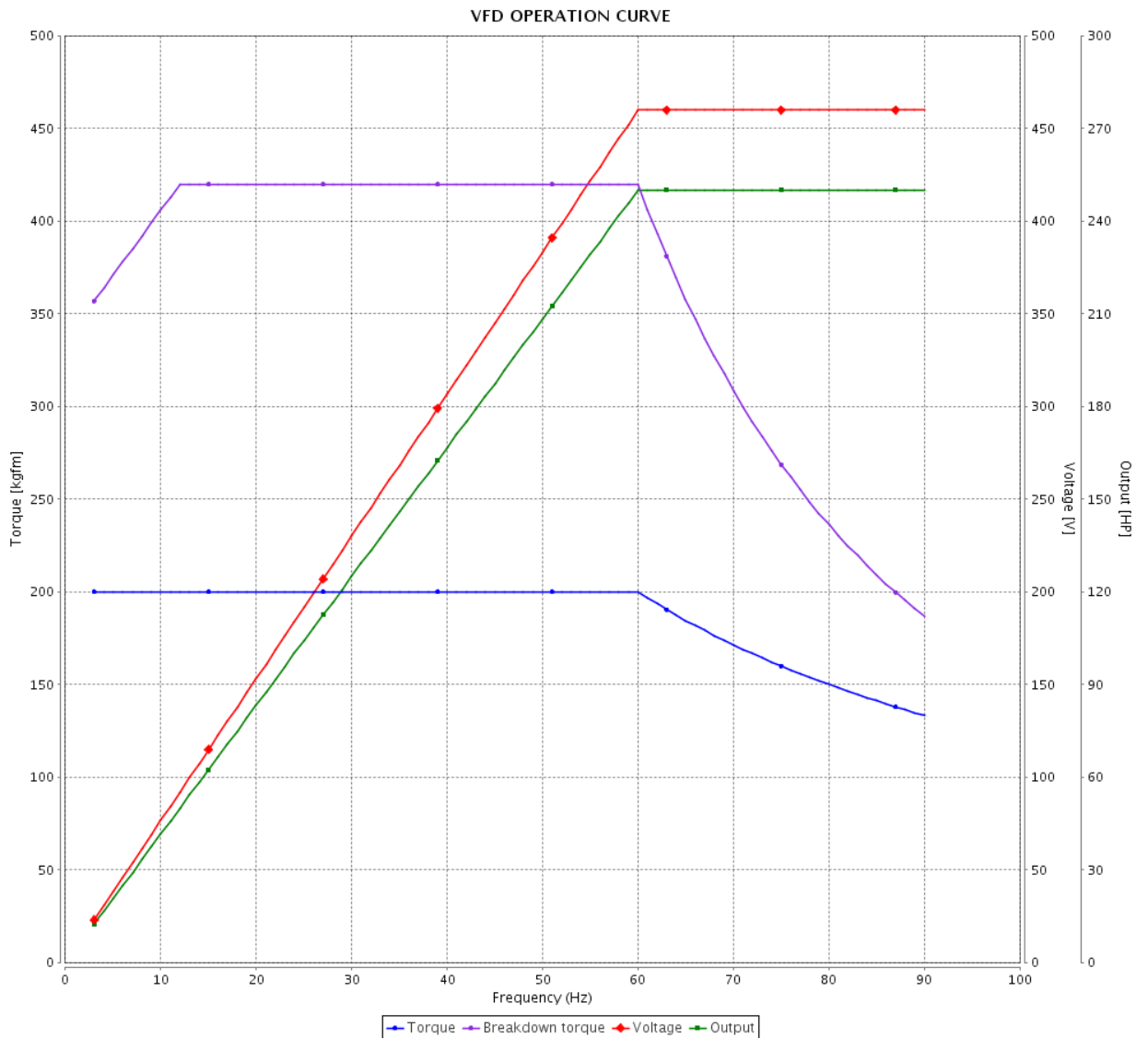


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 13500595

Catalog # : 25009ET3GKD586/7-W22



Performance : 460 V 60 Hz 8P

Rated current : 299 A  
LRC : 6.2  
Rated torque : 200 kgfm  
Locked rotor torque : 140 %  
Breakdown torque : 210 %  
Rated speed : 895 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.

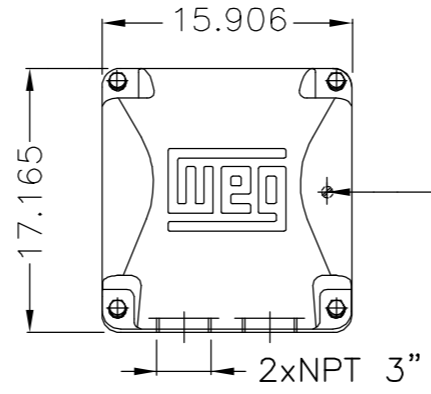
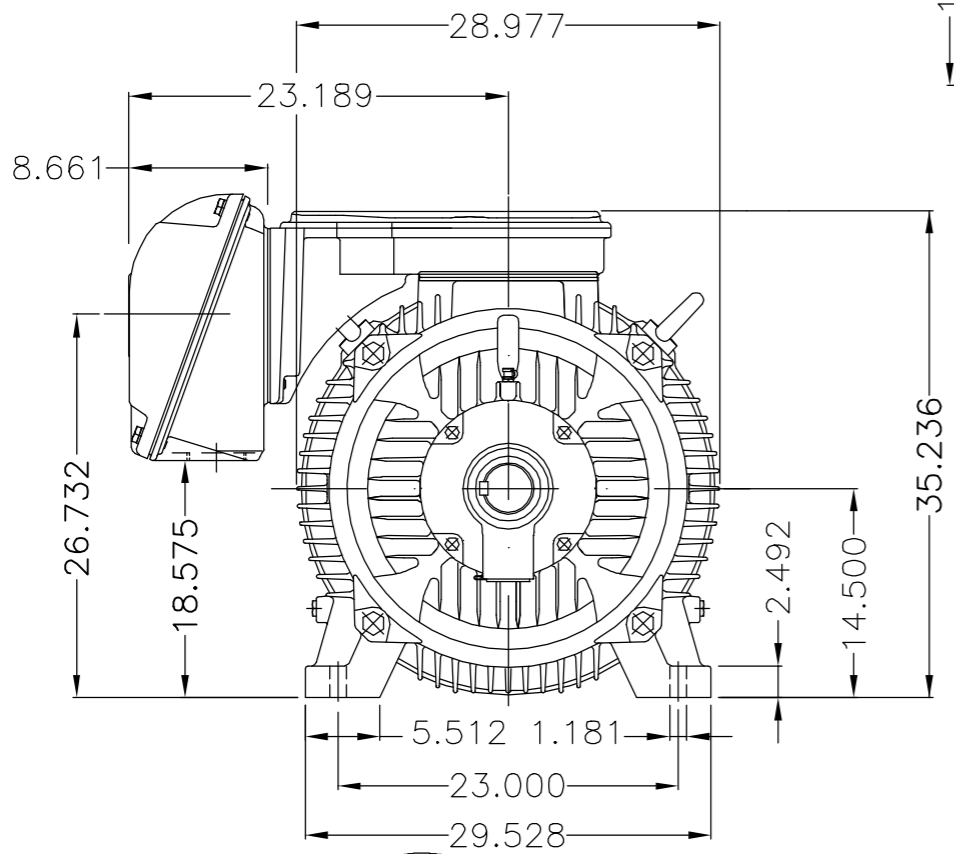
A

B

C

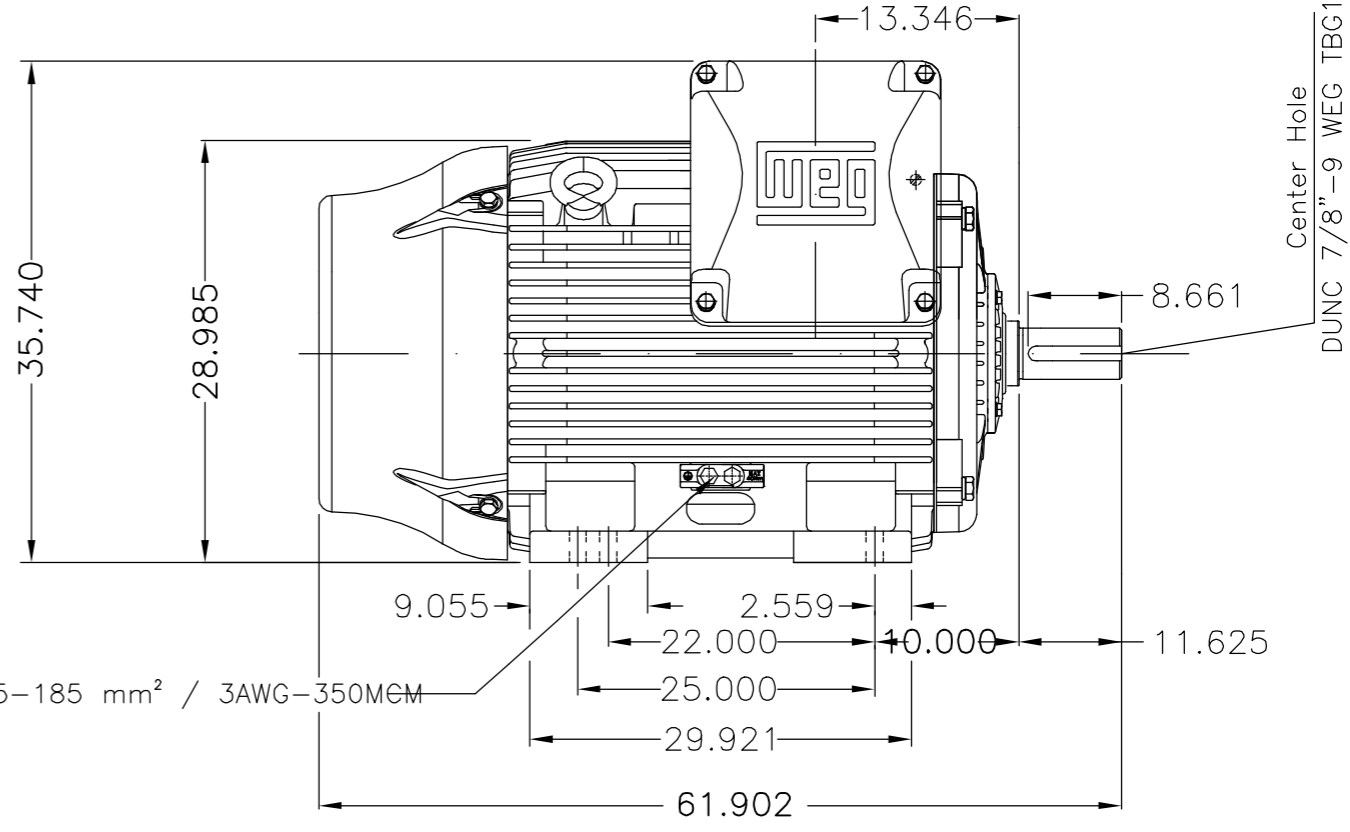
D

E



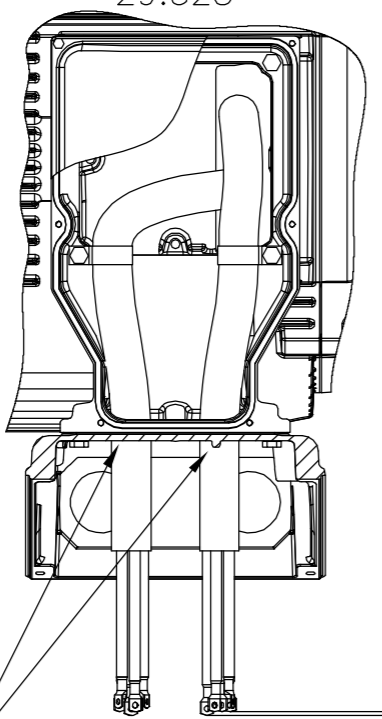
Main terminal box

Grounding for leads 35-120 mm<sup>2</sup> / 1-4/0 AWG

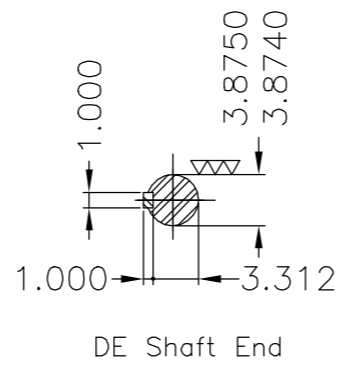


Grounding for leads 25-185 mm<sup>2</sup> / 3AWG-350MEM

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	500001331189	ADIC.NOTA CONDUITE/ADD NOTE CONDUIT	MENSOR		EANJOS	05.07.2017	04				
	500001323616	ALTERADO CONFORME CDP 414658625	MENSOR		JMANENTE	20.06.2017	03				
D	ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
C	EXECUTED	GABRIELID			THREE PHASE W22 MOTOR			10004924169			
B	CHECKED				FRAME 586/7T IP55 TEFC						
A	RELEASED	JMANENTE						000	04		
	REL DT	09.05.2017	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1				