



No.:

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor



Product line : Three-Phase: W22 Crusher Duty TEFC (IP55)
Catalog Number : 50018ET3GKD580Z-W22
List Price : \$51,611.00

Notes:

Performed by:

Checked:

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	13500705		
		Catalog # :	50018ET3GKD580Z-W22		
Frame	: 586/7TZ	Locked rotor time	: 36s (cold) 20s (hot)		
Output	: 500 HP (370 kW)	Temperature rise	: 80 K		
Poles	: 4	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	: 575 A	Protection degree	: IP55		
L. R. Amperes	: 4428 A	Cooling method	: IC411 - TEFC		
LRC	: 7.7x(Code H)	Mounting	: F-1		
No load current	: 190 A	Rotation ¹	: Both (CW and CCW)		
Rated speed	: 1791 rpm	Noise level ²	: 78.0 dB(A)		
Slip	: 0.50 %	Starting method	: Direct On Line		
Rated torque	: 200 kgfm	Approx. weight ³	: 1923 kg		
Locked rotor torque	: 280 %				
Breakdown torque	: 250 %				
Insulation class	: F				
Service factor	: 1.00				
Moment of inertia (J)	: A				
Design					
Output	25%	50%	75%	100%	
Efficiency (%)	95.7	95.8	96.2	96.2	
Power Factor	0.48	0.72	0.80	0.84	
Foundation loads					
Max. traction				: 2460 kgf	
Max. compression				: 4383 kgf	
		<u>Drive end</u>	<u>Non drive end</u>		
Bearing type	:	NU-324 C3	6319 C3		
Sealing	:	Taconite Labyrinth	Taconite Labyrinth		
Lubrication interval	:	3000 h	8000 h		
Lubricant amount	:	72 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	24/04/2018			1 / 7	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Thermal protection

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

Space heater information

Voltage: 200 - 240 V

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	24/04/2018		2 / 7	

TORQUE AND CURRENT VS SPEED CURVE



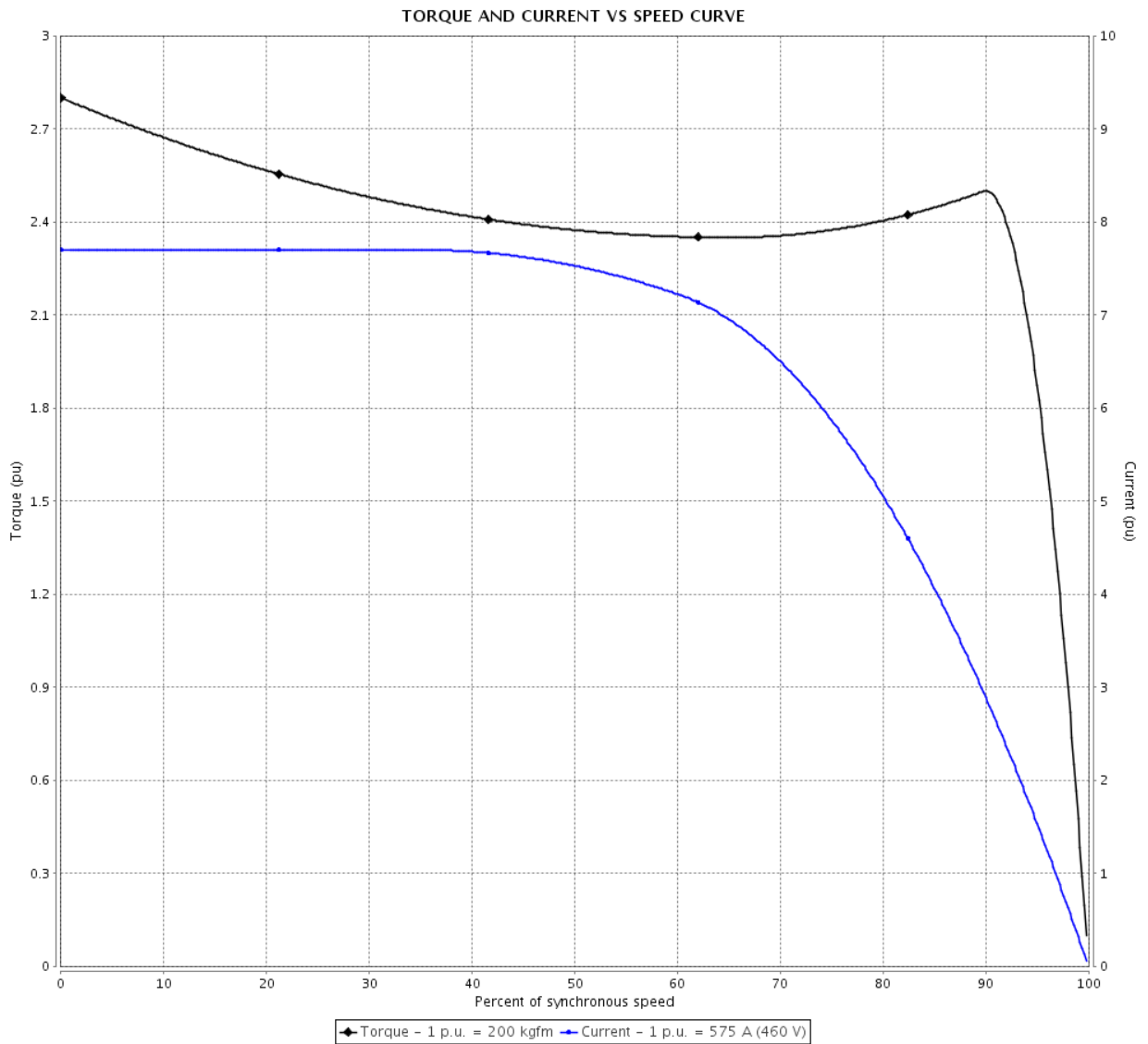
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13500705

Catalog # : 50018ET3GKD580Z-W22



Performance : 460 V 60 Hz 4P

Rated current : 575 A
 LRC : 7.7
 Rated torque : 200 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 250 %
 Rated speed : 1791 rpm

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

Locked rotor time : 36s (cold) 20s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 7	Revision
Checked by				
Date	24/04/2018			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

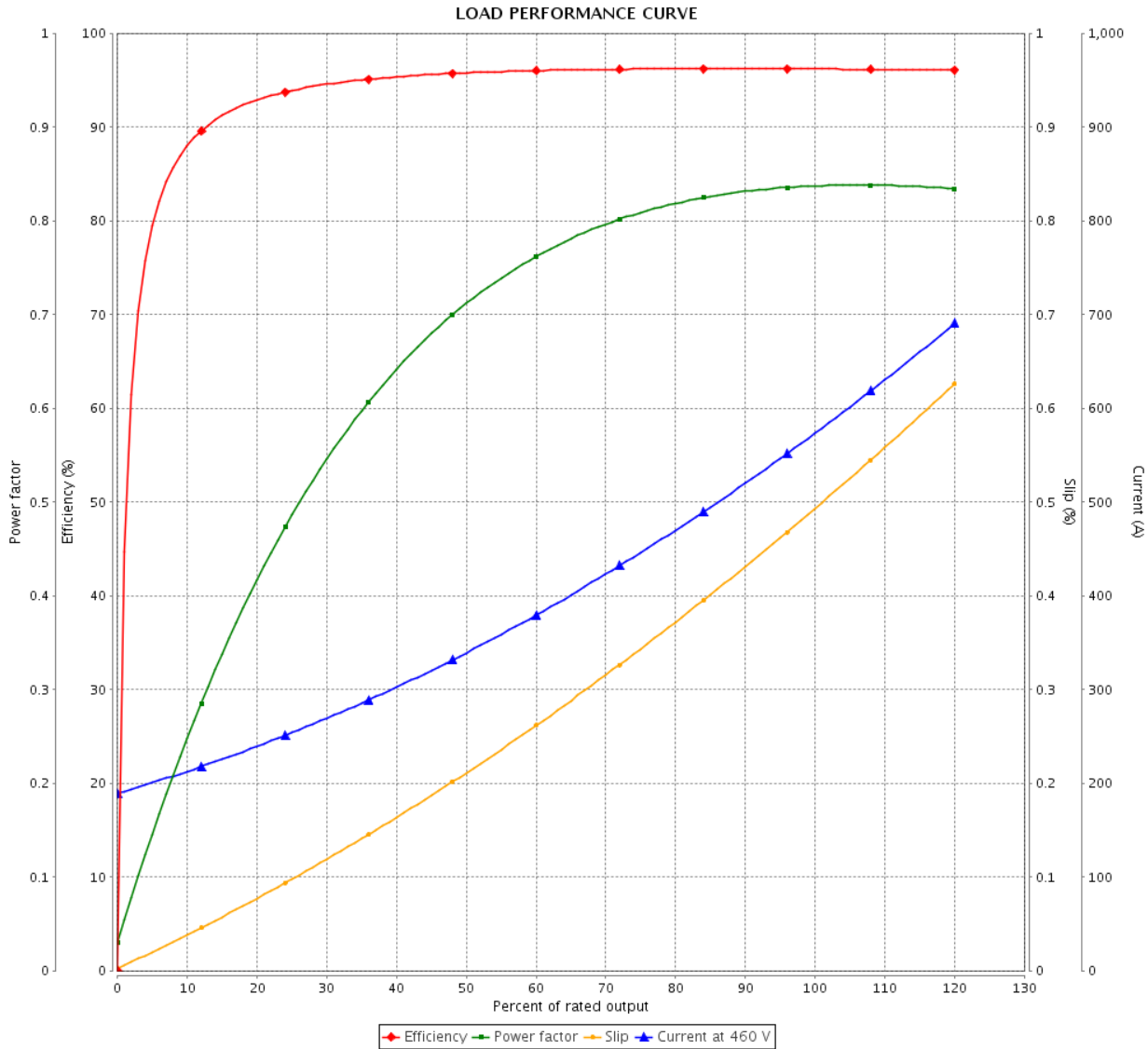


Customer : _____

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13500705

Catalog # : 50018ET3GKD580Z-W22



Performance : 460 V 60 Hz 4P

Rated current : 575 A
 LRC : 7.7
 Rated torque : 200 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 250 %
 Rated speed : 1791 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		4 / 7		
Date	24/04/2018			

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase
 Product code : 13500705
 Catalog # : 50018ET3GKD580Z-W22

Performance : 460 V 60 Hz 4P

Rated current : 575 A	Moment of inertia (J)
LRC : 7.7	Duty cycle : Cont.(S1)
Rated torque : 200 kgfm	Insulation class : F
Locked rotor torque : 280 %	Service factor : 1.00
Breakdown torque : 250 %	Temperature rise : 80 K
Rated speed : 1791 rpm	Design : A

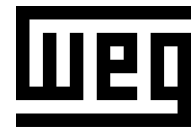
Heating constant

Cooling constant

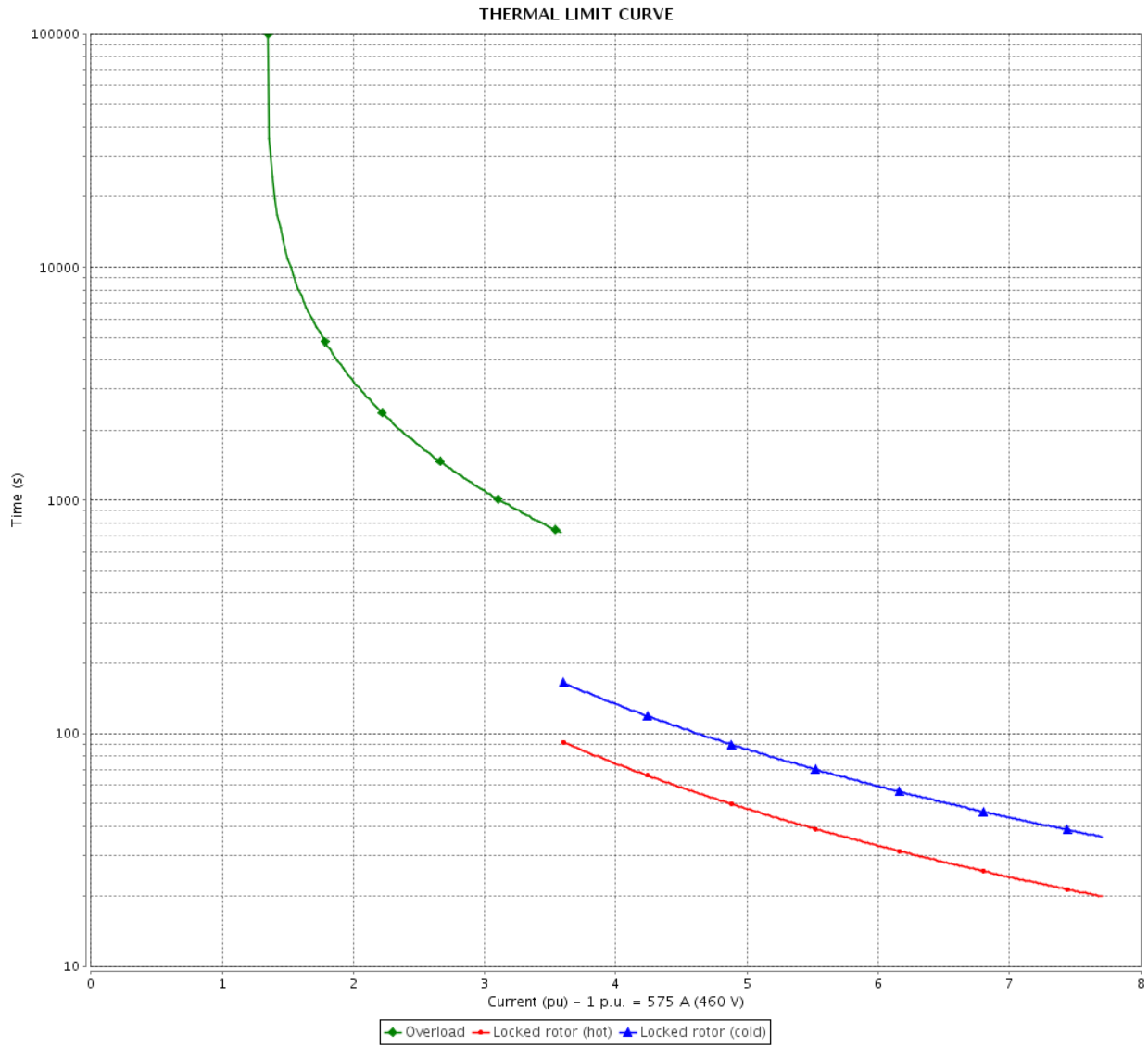
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date	24/04/2018			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 6 / 7		Revision
Checked by				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

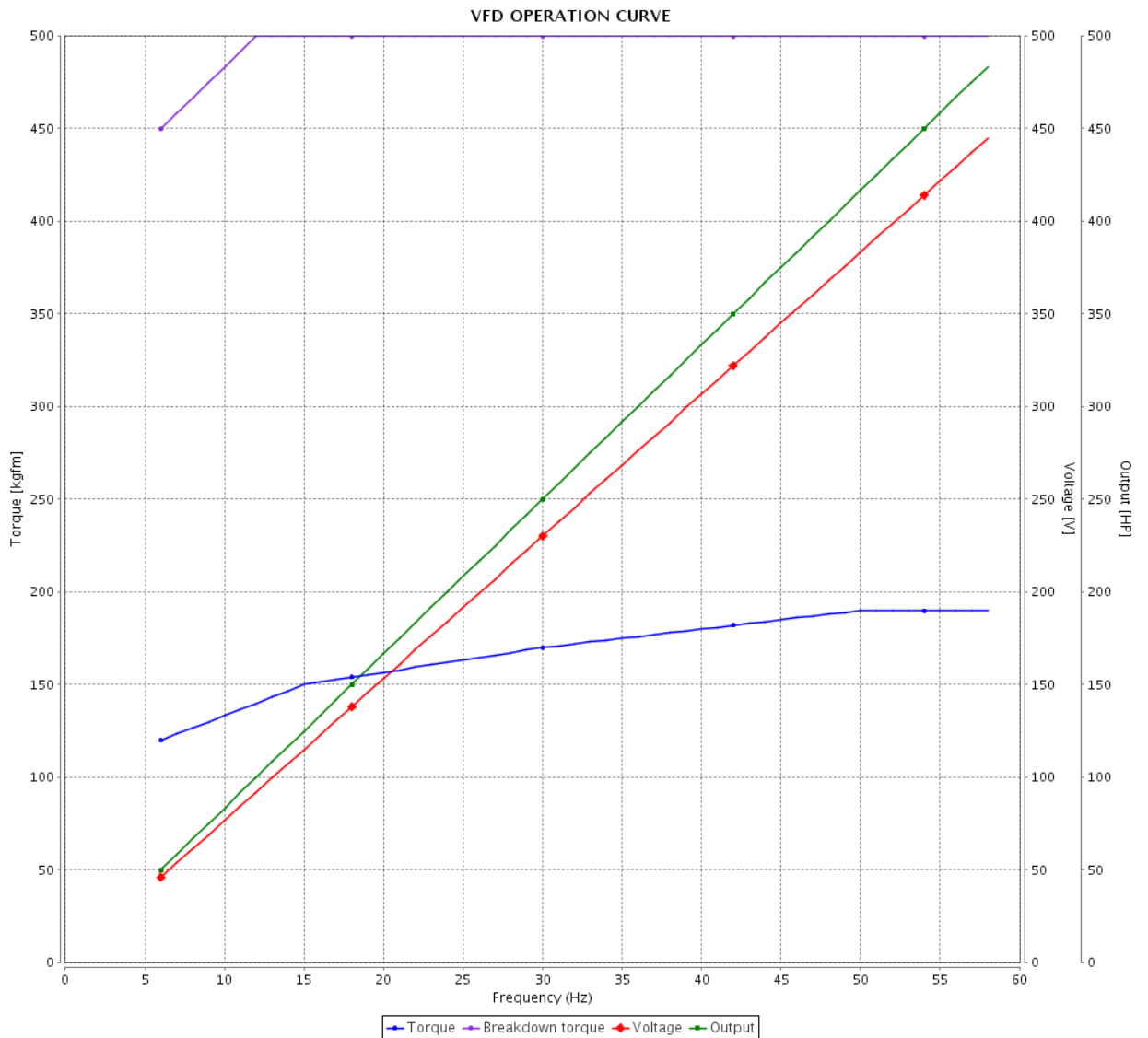


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13500705

Catalog # : 50018ET3GKD580Z-W22



Performance : 460 V 60 Hz 4P

Rated current : 575 A
LRC : 7.7
Rated torque : 200 kgfm
Locked rotor torque : 280 %
Breakdown torque : 250 %
Rated speed : 1791 rpm

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

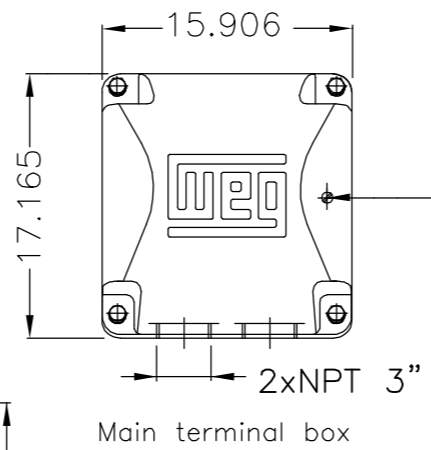
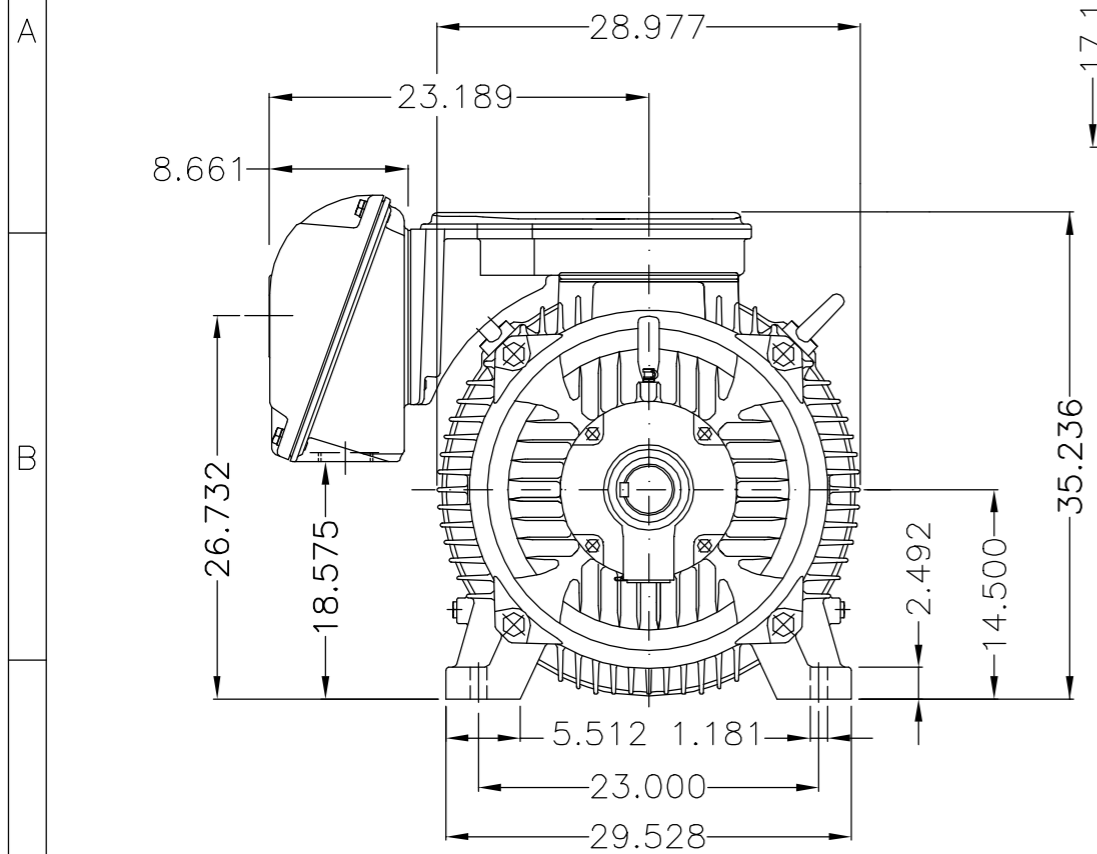
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

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

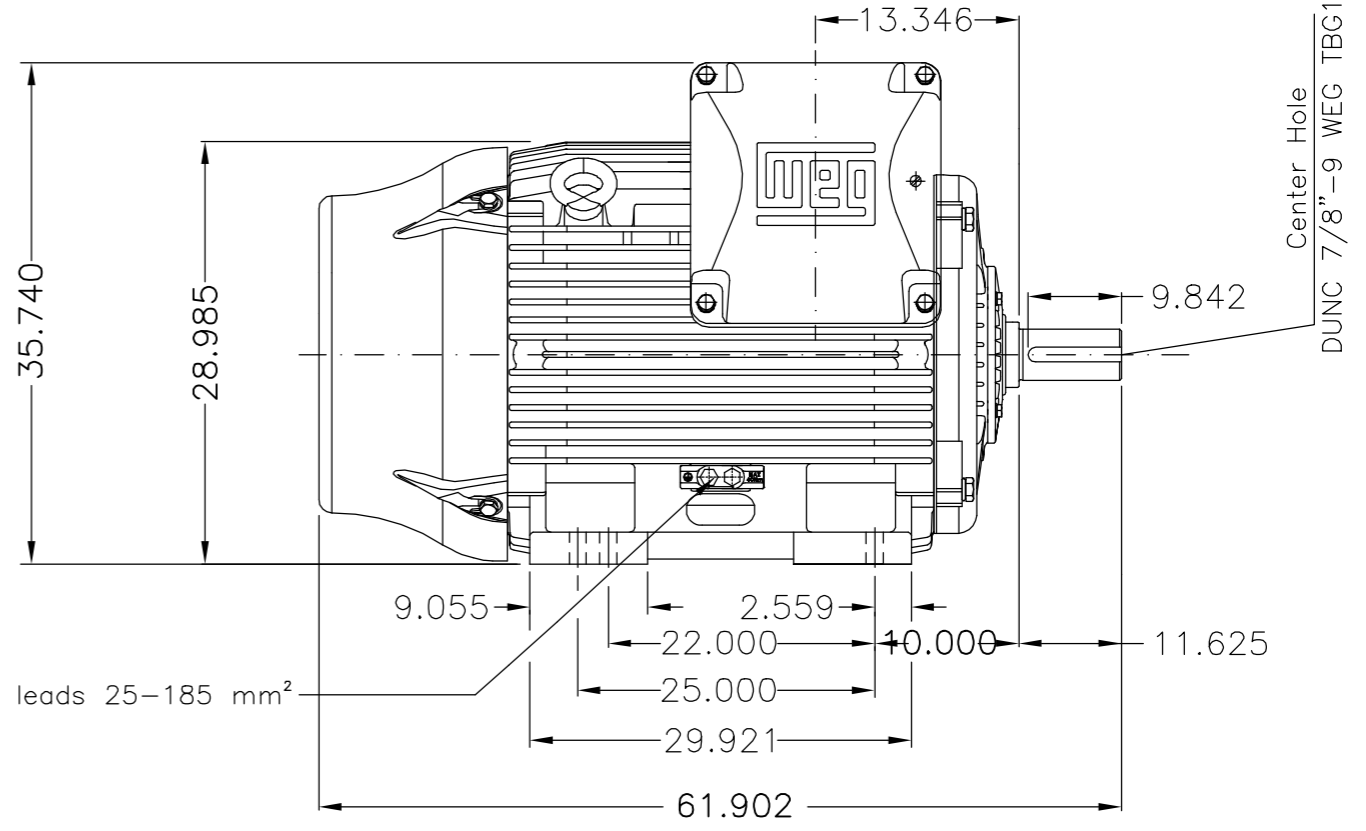
Dimensões em polegada
Dimensions in inches

CERTIFIED WEG MOTORES
Certified document.
Not subject to changes.

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

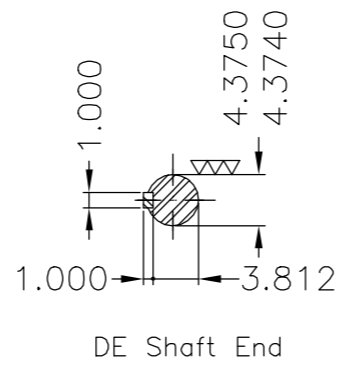
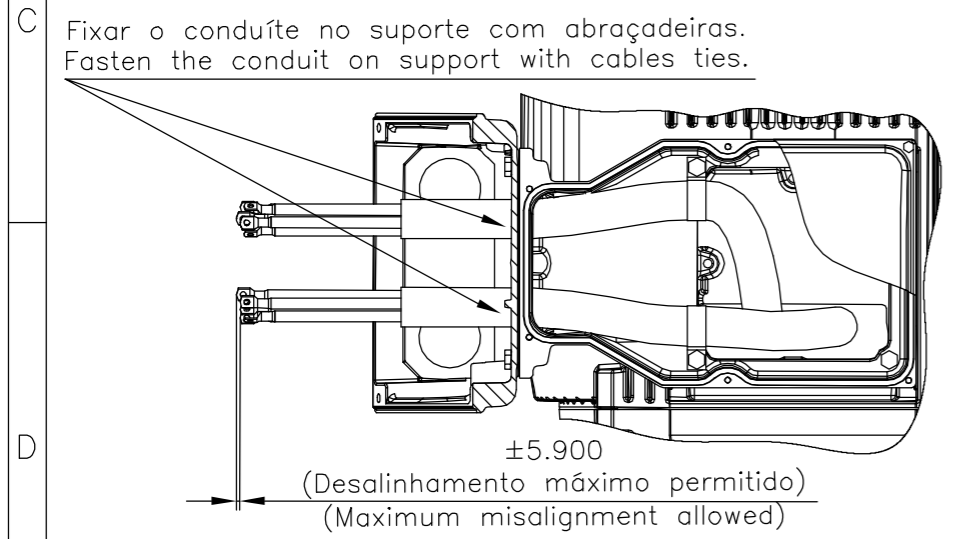


Grounding for leads 35-120 mm²



Grounding for leads 25-185 mm²

Center Hole
DUNC 7/8"-9 WEG TBG12



Categoria A / Design A
Proteção térmica desligamento - termostato 155°C / Thermostats 155°C to trip
Tampa dianteira especial / Special DE endshield
Conduite para cabos no interior do suporte da caixa de ligação Cables conduit inside terminal box support
Linha do motor: Crusher Duty / Motor purpose: Crusher Duty
Rolamento dianteiro de rolos / DE roller bearing
Rolamento dianteiro de rolos NU-324 / NU-324 DE roller bearing
Dispositivo de travamento de eixo / Shaft locking device
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 NEMA F-1 / Mounting NEMA F-1
Forma construtiva B3D / Mounting B3R(D)

WEG ELECTRIC CORPORATION - WEC

500 HP	04 Poles	60Hz	J
500 HP	06 Poles	60Hz	I
450 HP	04 Poles	60Hz	H
450 HP	06 Poles	60Hz	G
400 HP	04 Poles	60Hz	F
400 HP	06 Poles	60Hz	E
350 HP	04 Poles	60Hz	D
350 HP	06 Poles	60Hz	C
300 HP	04 Poles	60Hz	B
300 HP	06 Poles	60Hz	A

500001331189	ADIC.NOTA CONDUITE/ADD NOTE CONDUIT	MENSOR	EANJOS	05.07.2017	05			
500001331411	ADIC. NOTA CONDUITE / ADD NOTE CONDUIT	JOSIELS	JMANENTE	04.07.2017	04			
ECM	LOC	SUMMARY OF MODIFICATIONS		EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	DVEGINI	THREE PHASE W22 MOTOR - NEMA PREMIUM EFF FRAME 586/7TZ IP55	10004040391					
CHECKED			000	05				
RELEASED	NSCHMIDT							
REL DT	25.01.2016	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		