

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	13500703			
Catalog # :	45018ET3GKD580Z-W22			
Frame : 586/7TZ Output : 450 HP (330 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 460 V Rated current : 525 A L. R. Amperes : 4200 A LRC : 8.0x(Code J) No load current : 212 A Rated speed : 1793 rpm Slip : 0.39 % Rated torque : 1320 ft.lb Locked rotor torque : 240 % Breakdown torque : 280 % Insulation class : F Service factor : 1.15 Design : A	Locked rotor time : 36s (cold) 20s (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 : 78.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 3640 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	0.000 95.0 95.4 96.2			
Power Factor	0.00 0.65 0.77 0.82			
Foundation loads				
Max. traction	: 5879 lb			
Max. compression	: 9519 lb			
Bearing type	: <u>Drive end</u> NU-324 C3 <u>Non drive end</u> 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.				
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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

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TORQUE AND CURRENT VS SPEED CURVE



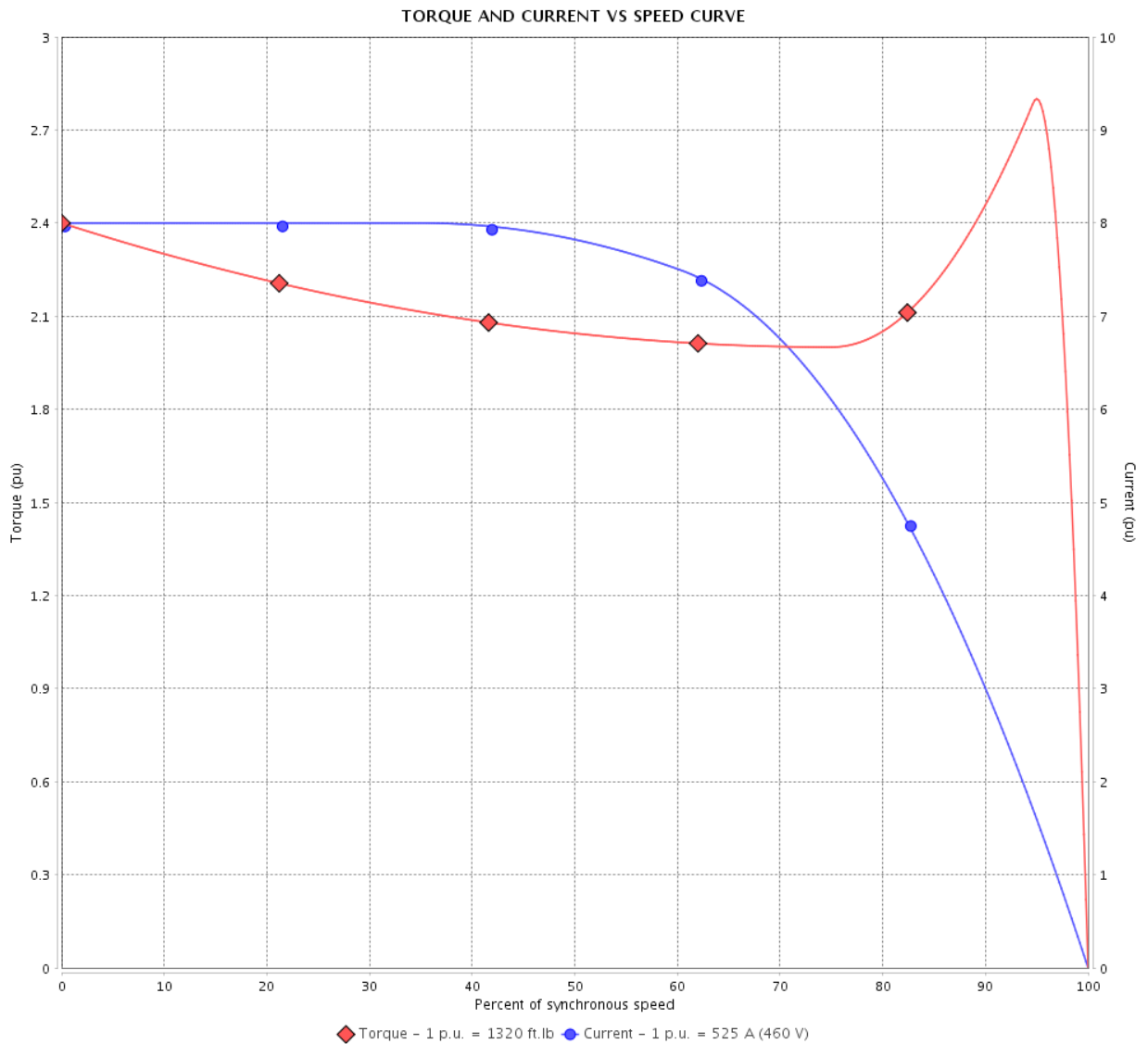
Three Phase Induction Motor - Squirrel Cage

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Product line : NEMA Premium Efficiency Three-Phase

Product code : 13500703

Catalog # : 45018ET3GKD580Z-W22



Performance : 460 V 60 Hz 4P

Rated current : 525 A
 LRC : 8.0
 Rated torque : 1320 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 1793 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 : 36s (cold) 20s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

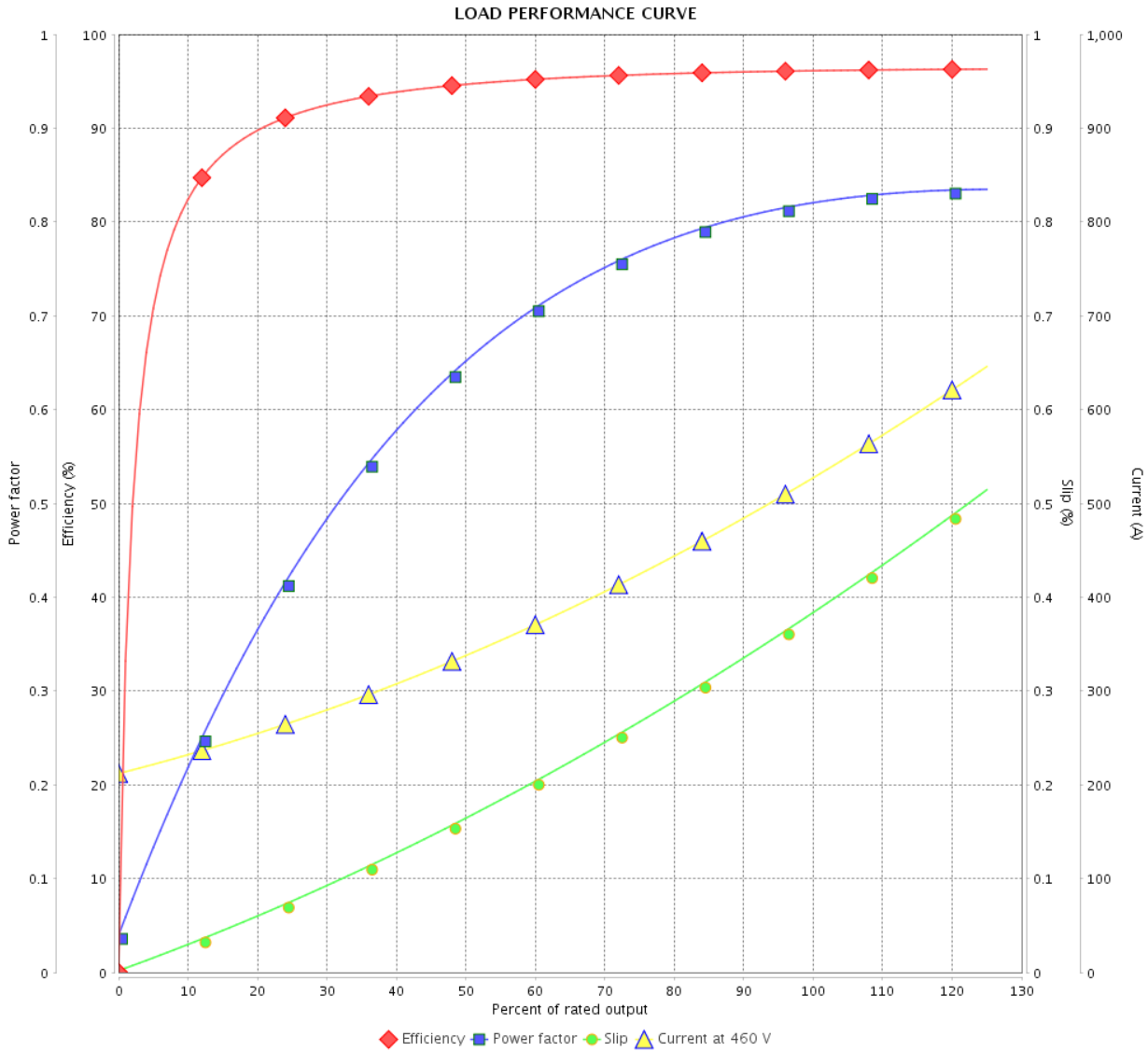


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THERMAL LIMIT CURVE

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Rated speed : 1793 rpm	Design : A

Heating constant

Cooling constant

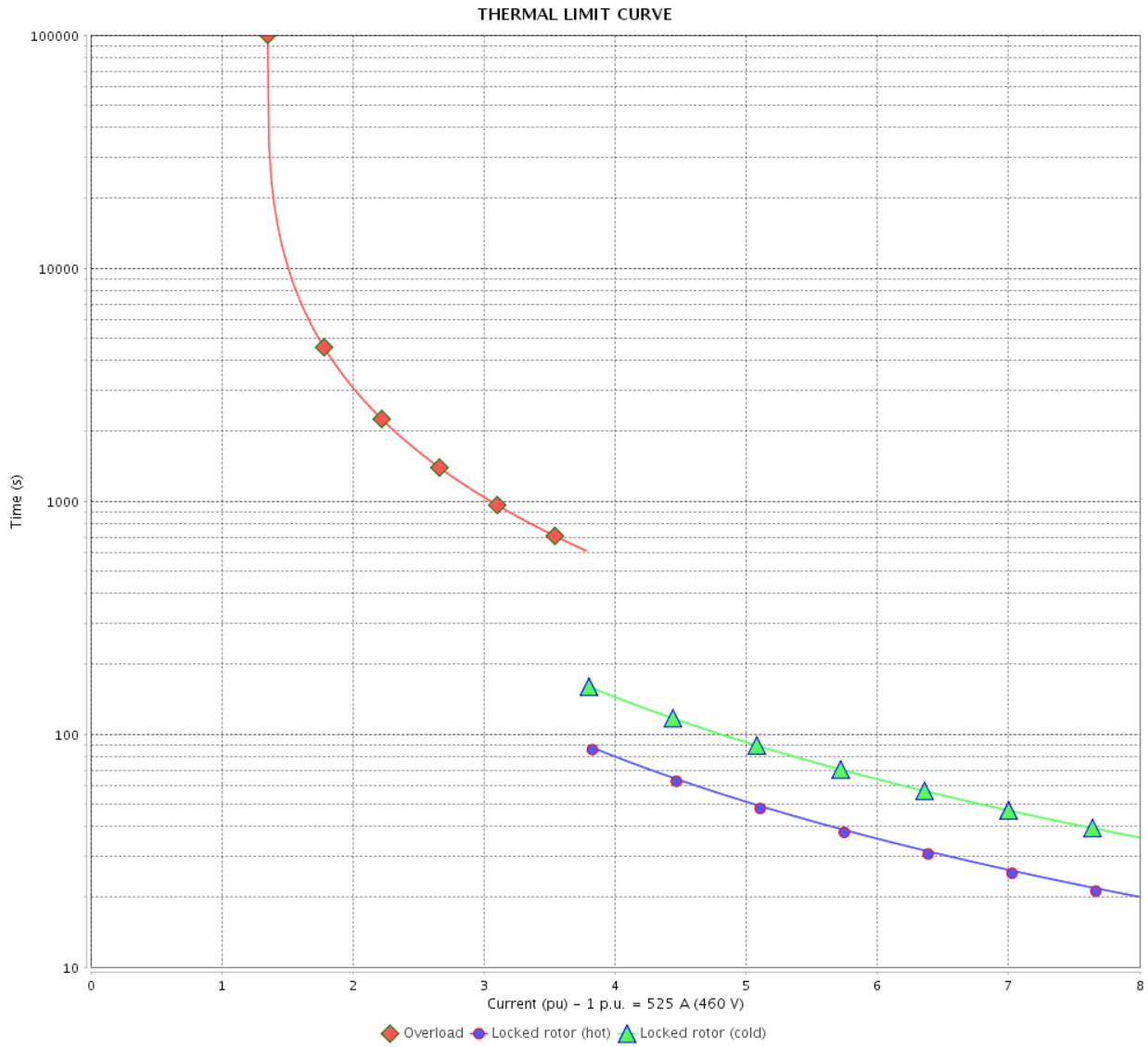
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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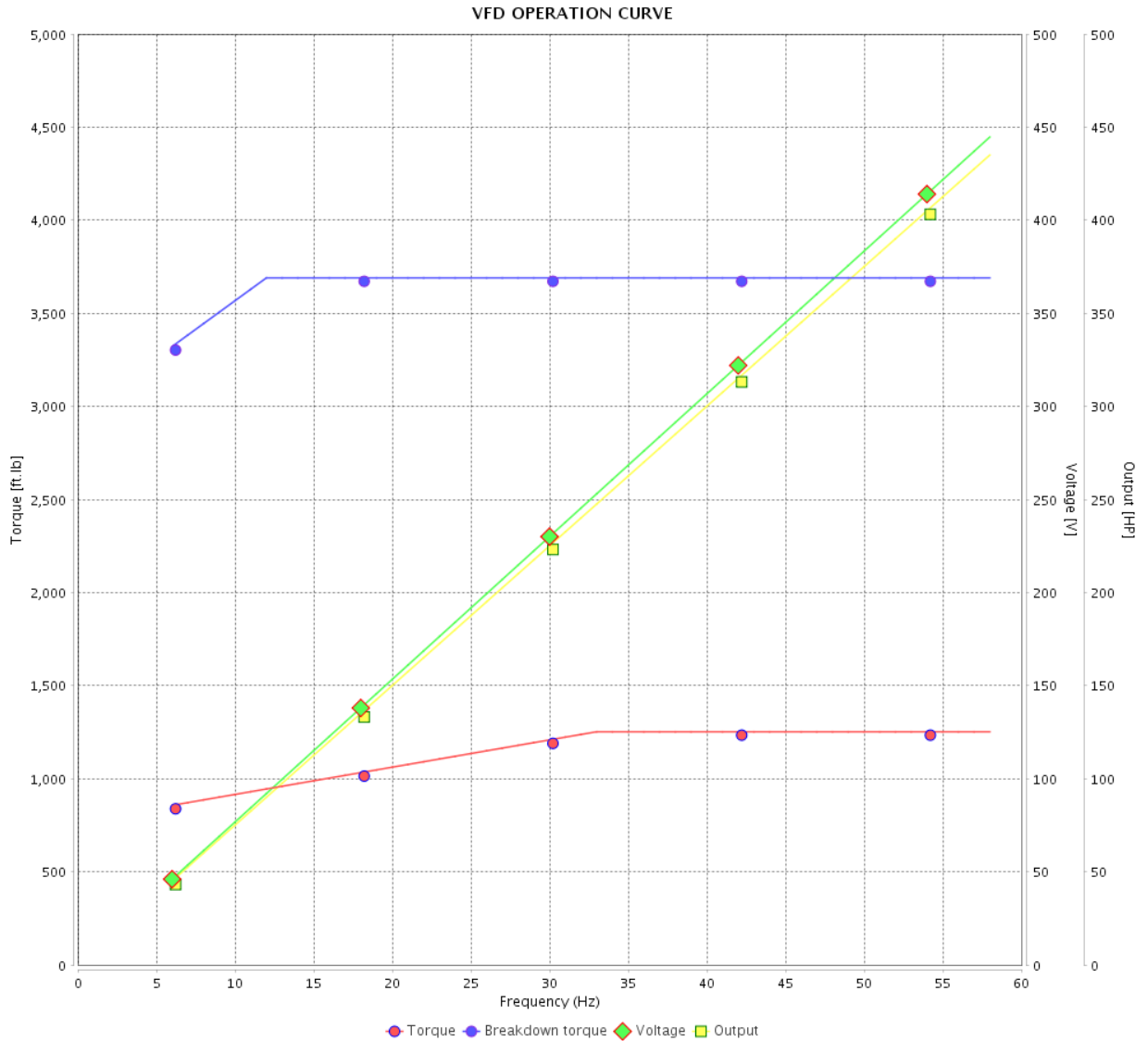
VFD OPERATION CURVE

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 Catalog # : 45018ET3GKD580Z-W22



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Rated current : 525 A	Moment of inertia (J)
LRC : 8.0	Duty cycle : Cont.(S1)
Rated torque : 1320 ft.lb	Insulation class : F
Locked rotor torque : 240 %	Service factor : 1.15
Breakdown torque : 280 %	Temperature rise : 80 K
Rated speed : 1793 rpm	Design : A

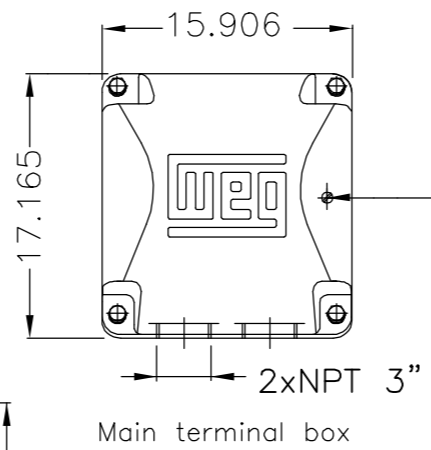
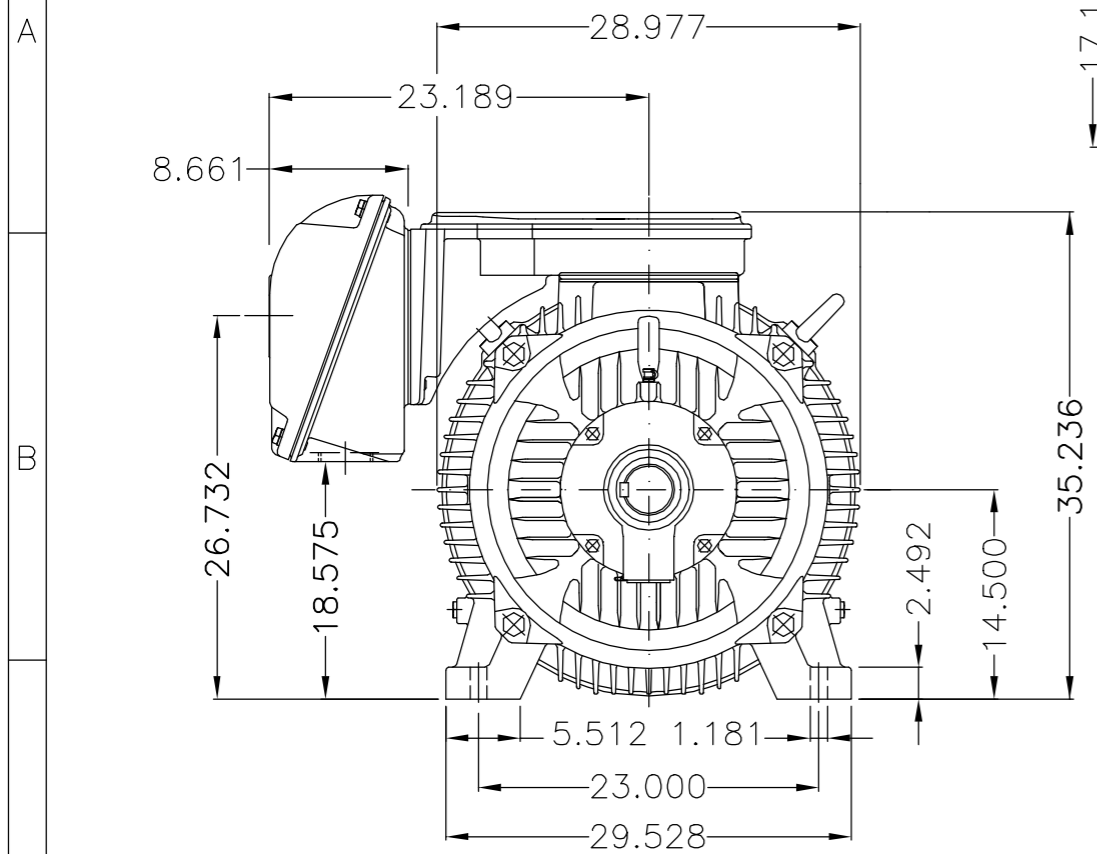
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EIXO/SHAFT	
PADRÃO/STANDARD	
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	X

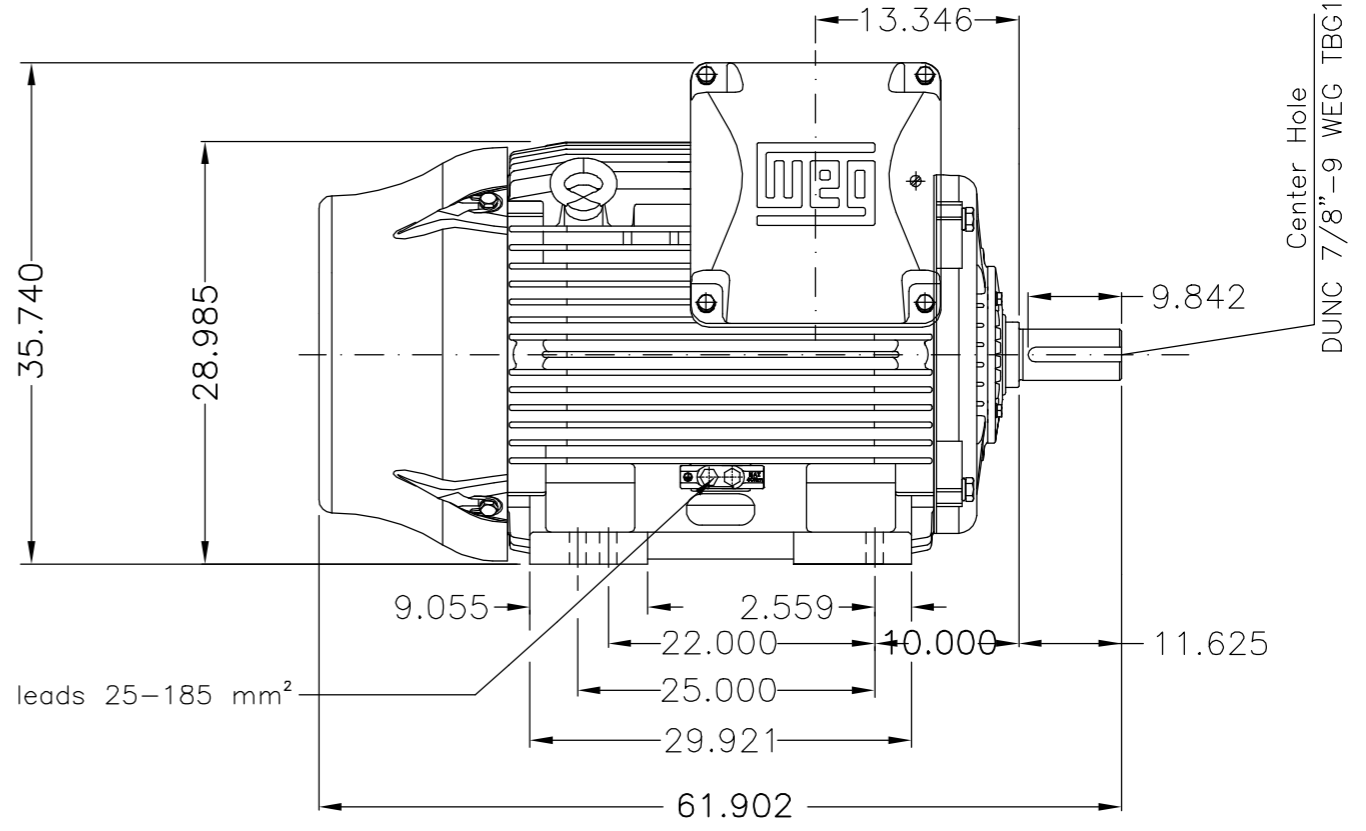
Dimensões em polegada
Dimensions in inches

CERTIFIED WEG MOTORES
Certified document.
Not subject to changes.

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

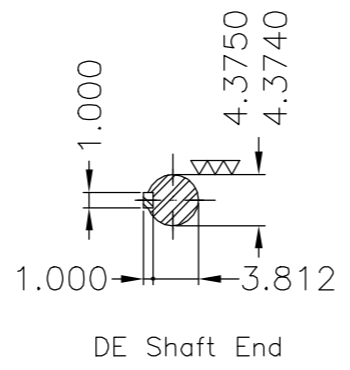
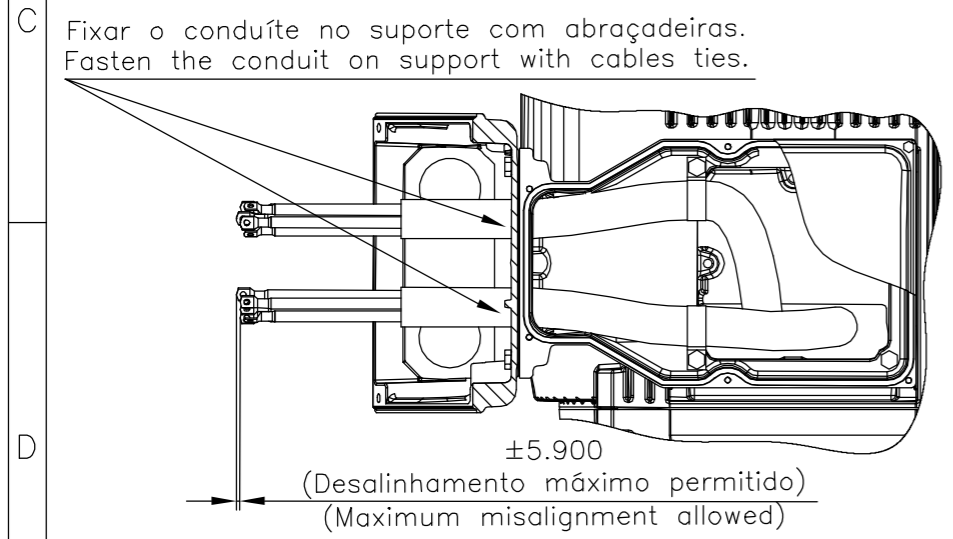


Grounding for leads 35-120 mm²



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		10004040391				
CHECKED		FRAME 586/7TZ IP55		000 05				
RELEASED	NSCHMIDT							
REL DT	25.01.2016	WMO	Jaraguá do Sul	Product Engineering	SHEET	1 / 1		

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RELEASED

ZME A3