

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12052653
Catalog # : 45012ET3G586/7-W22

Frame	: 586/7T	Locked rotor time	: 45s (cold) 25s (hot)
Output	: 450 HP (330 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	: 532 A	Protection degree	: IP55
L. R. Amperes	: 3245 A	Cooling method	: IC411 - TEFC
LRC	: 6.1x(Code G)	Mounting	: F-1
No load current	: 210 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1190 rpm	Noise level ²	: 77.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 1960 ft.lb	Approx. weight ³	: 4654 lb
Locked rotor torque	: 210 %		
Breakdown torque	: 210 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 368 sq.ft.lb		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	95.7	95.8	96.2	96.2	Max. traction	: 7854 lb
Power Factor	0.43	0.67	0.77	0.81	Max. compression	: 12509 lb

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6322 C3	6319 C3
Sealing	:	Taconite Labyrinth	Taconite Labyrinth
Lubrication interval	:	11000 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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Date	17/07/2018			

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Customer :

Space heater information

Voltage: 200 - 240 V

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

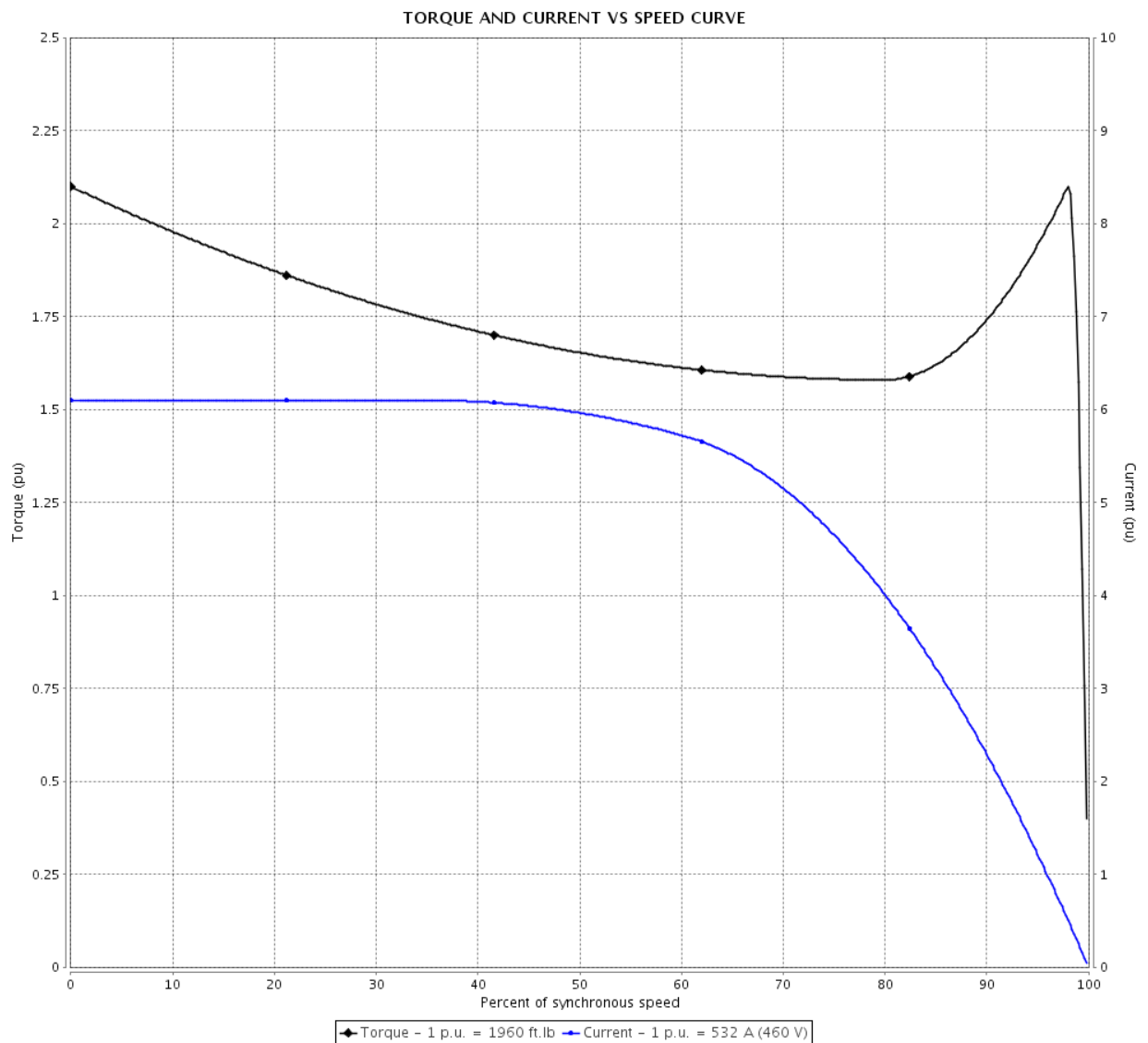


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12052653

Catalog # : 45012ET3G586/7-W22



Performance : 460 V 60 Hz 6P

Rated current	: 532 A	Moment of inertia (J)	: 368 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 1960 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 1190 rpm		

Locked rotor time : 45s (cold) 25s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

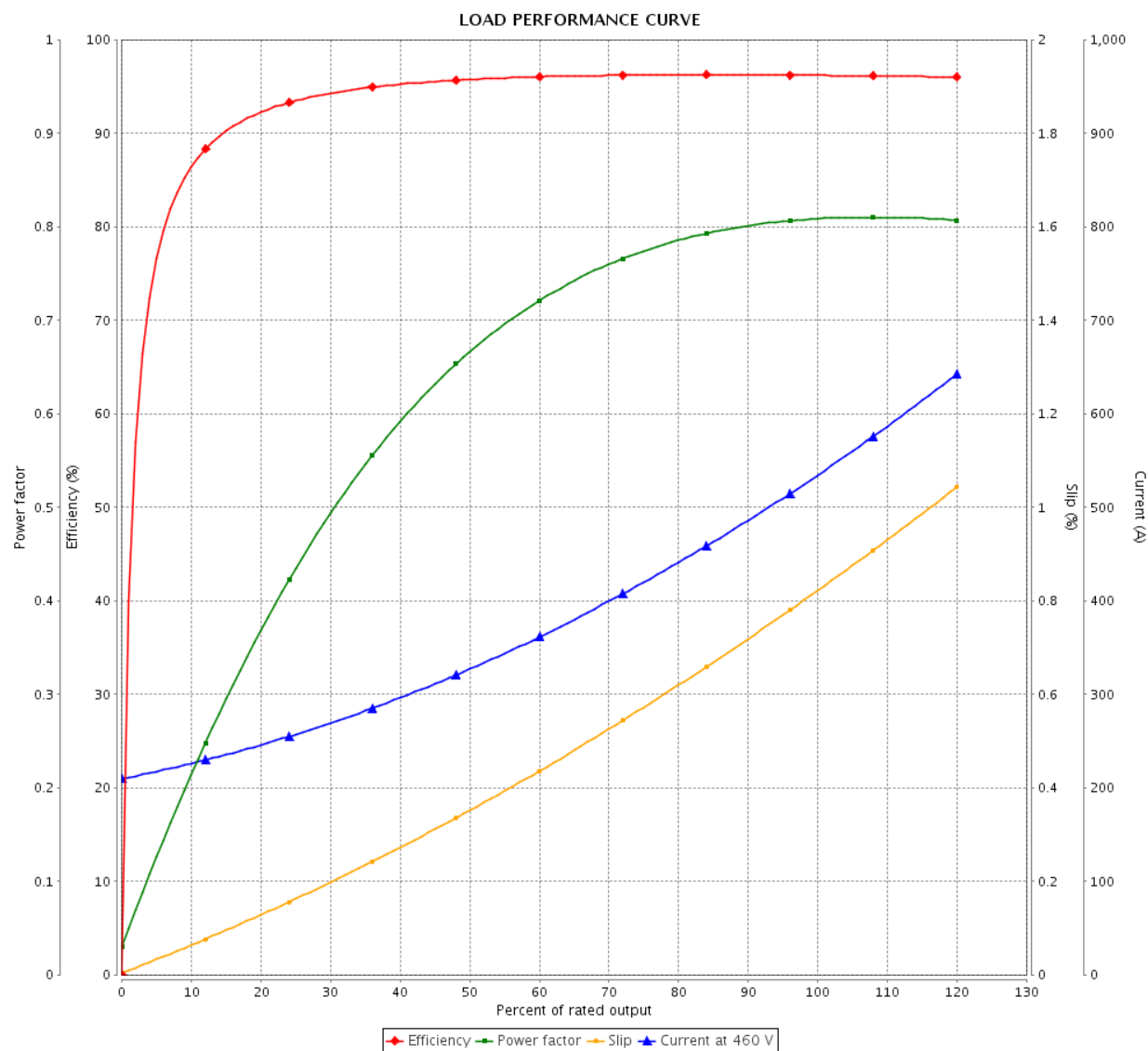


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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

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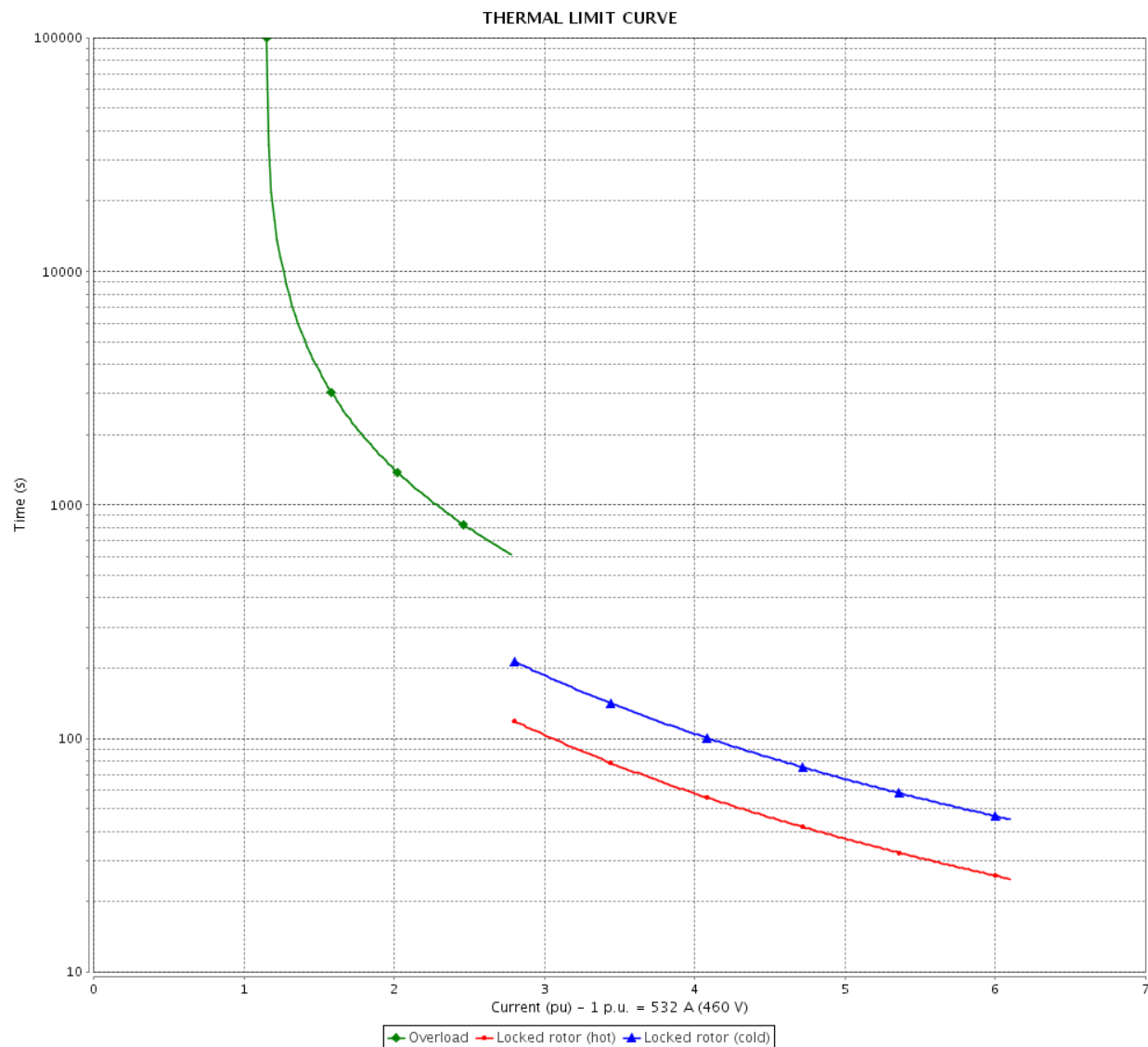
Subject to change without notice

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

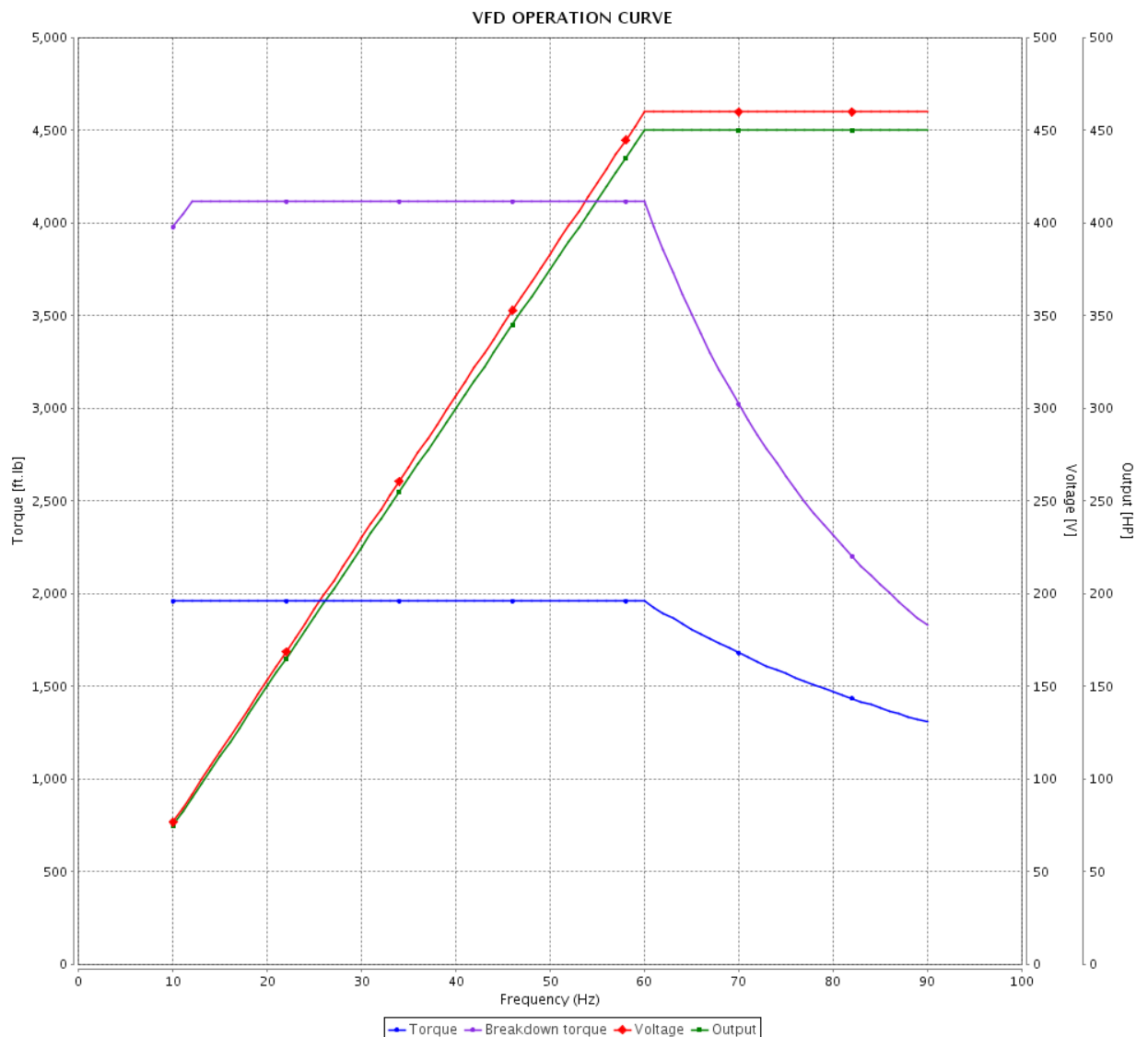


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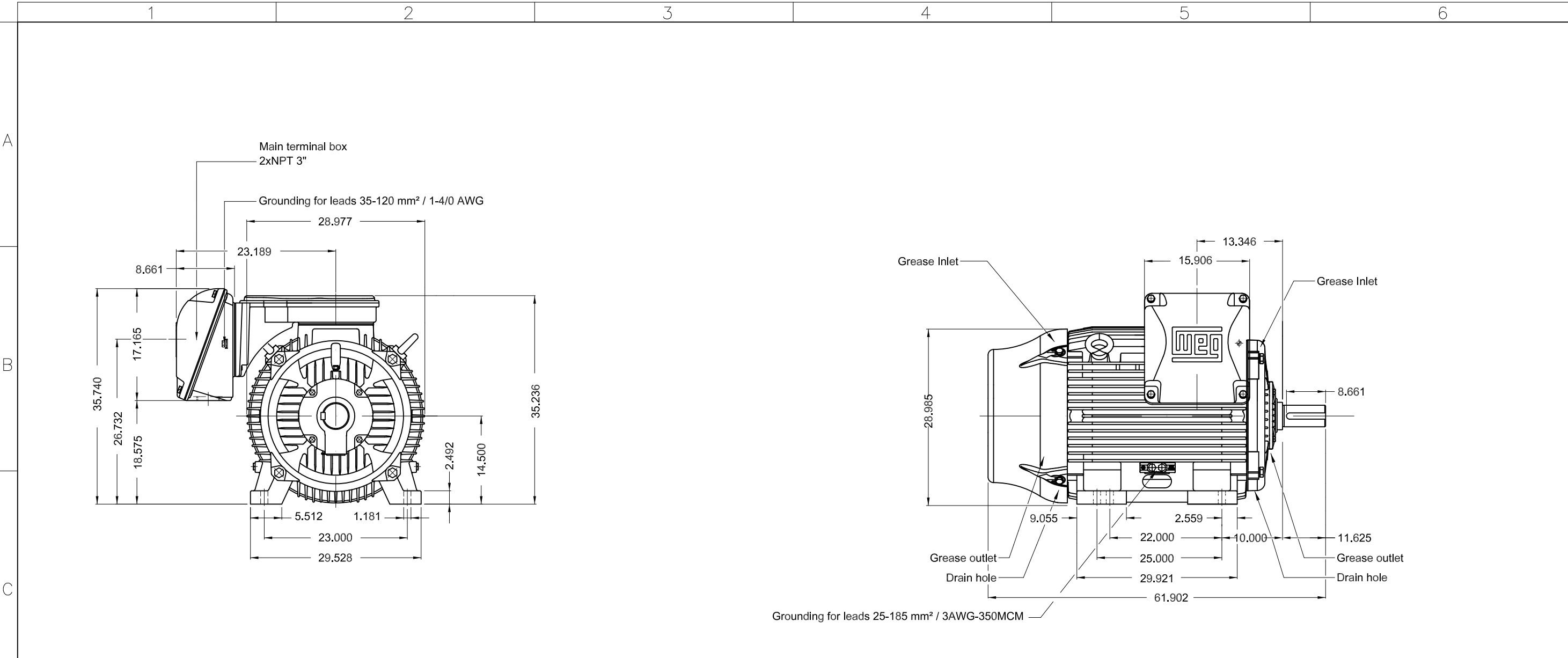


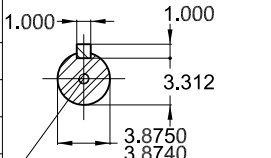
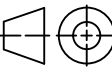

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D					450 HP 06 Poles 60Hz										A	
					ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER	
E	<div>DE Shaft End</div> <div></div> <div>DUNC 7/8"-9 WEG TBG12</div>			EXECUTED	USERADMIN		THREE PHASE W22 MOTOR - NEMA PREMIUM EFF FRAME 586/7T IP55 TEFC	PREVIEW WDD								
				CHECKED												
				RELEASED												
				REL DT		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1						