

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase Product code : 14484569
Catalog # : 02036OT3V254JM-W40

Frame	: 254JM	Locked rotor time	: 21s (cold) 12s (hot)
Output	: 20 HP (15 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 200/400 V	Altitude	: 1000 m.a.s.l.
Rated current	: 55.9/27.9 A	Protection degree	: IP23
L. R. Amperes	: 352/176 A	Cooling method	: IC01 - ODP
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 19.3/9.66 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3535 rpm	Starting method	: Direct On Line
Slip	: 1.81 %	Approx. weight ³	: 213 lb
Rated torque	: 29.7 ft.lb		
Locked rotor torque	: 200 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.8718 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	90.0	90.2	91.0	91.0	Max. traction
Power Factor	0.48	0.72	0.82	0.85	Max. compression

	Drive end	Non drive end
Bearing type	: 6309 Z C3	: 6209 Z C3
Sealing	: Without Bearing Seal	: Without Bearing Seal
Lubrication interval	: 20000 h	: 20000 h
Lubricant amount	: 13 g	: 9 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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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



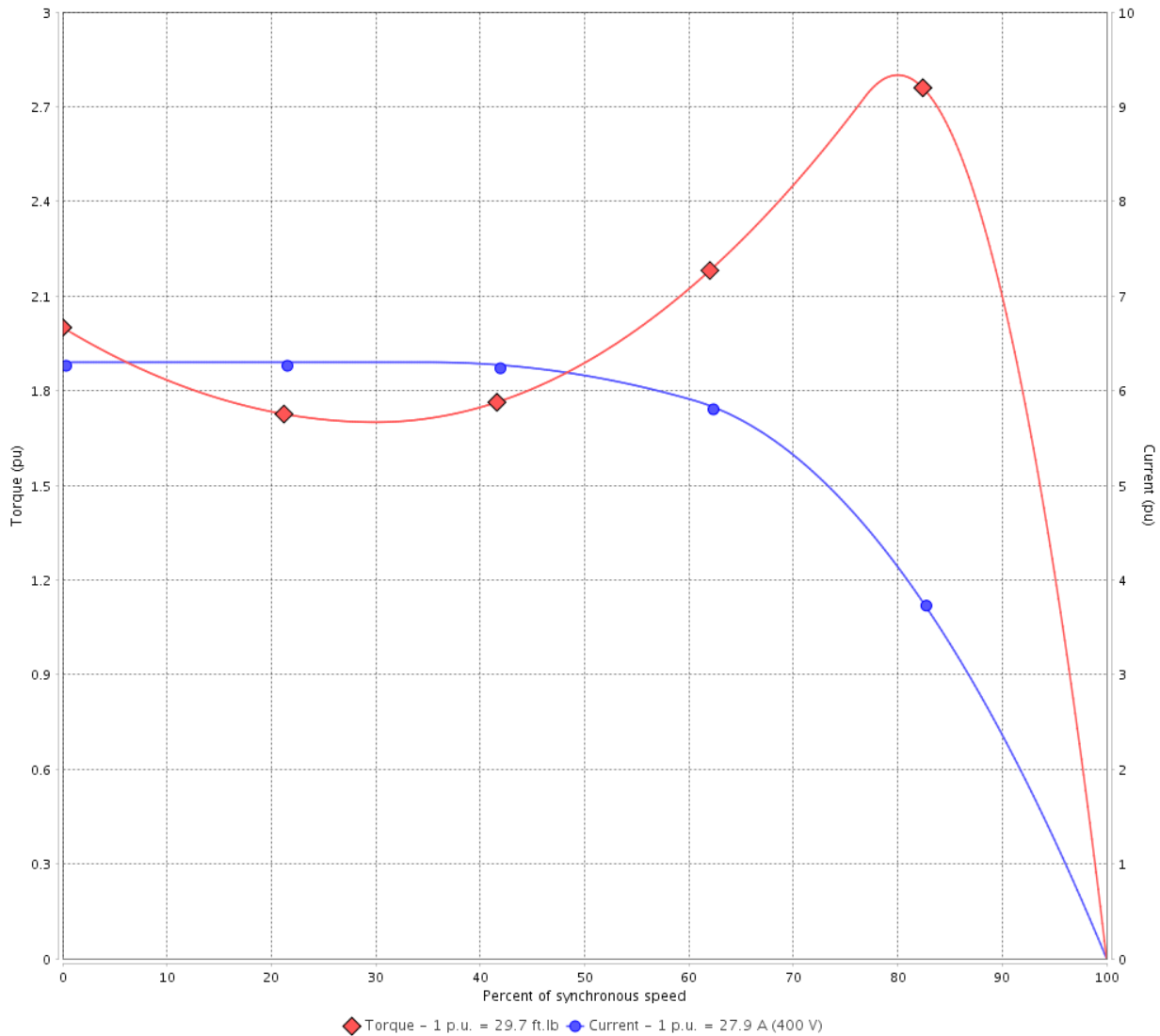
Customer :

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14484569

Catalog # : 02036OT3V254JM-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 2P

Rated current	: 55.9/27.9 A	Moment of inertia (J)	: 0.8718 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 29.7 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 3535 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

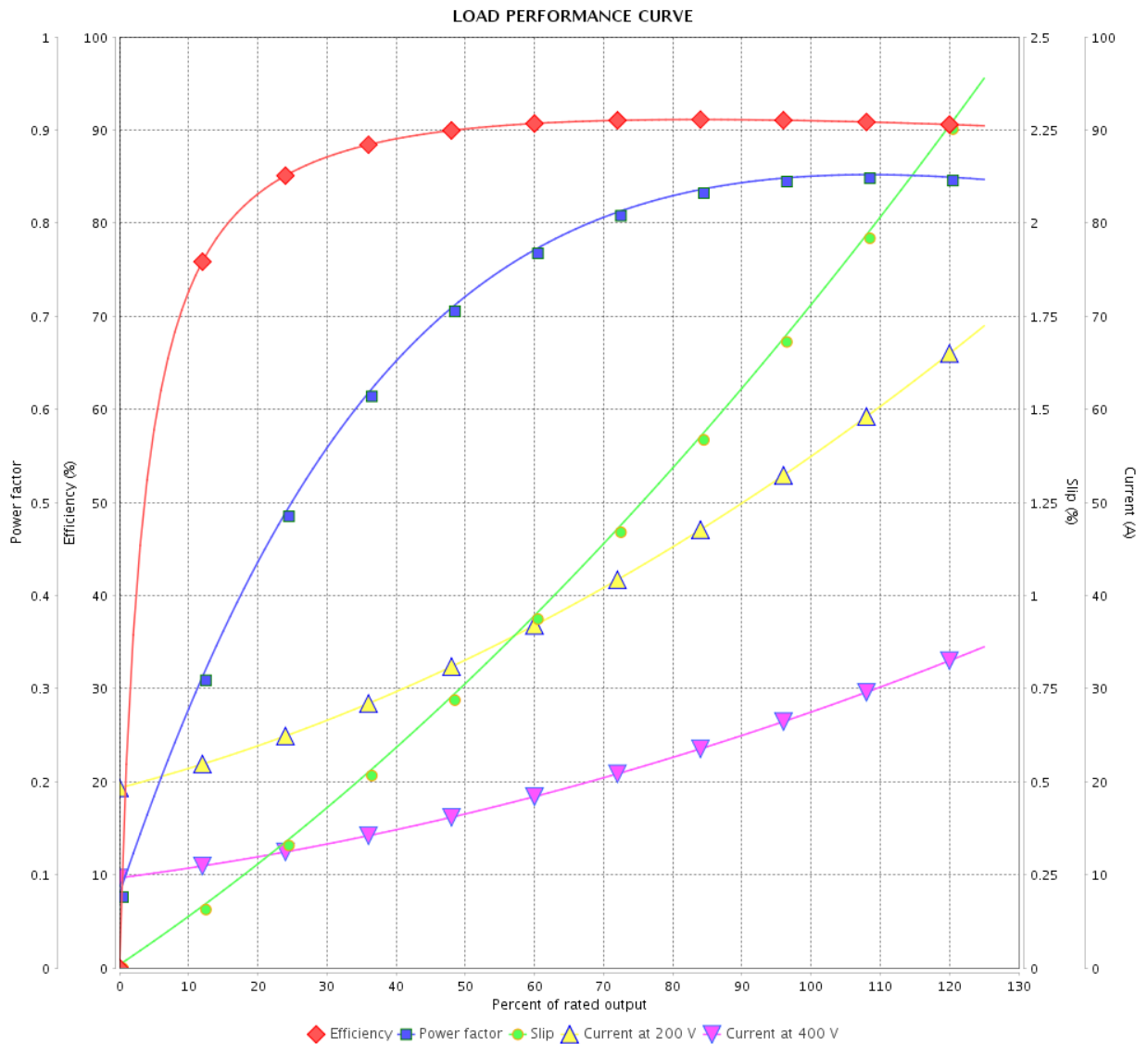


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

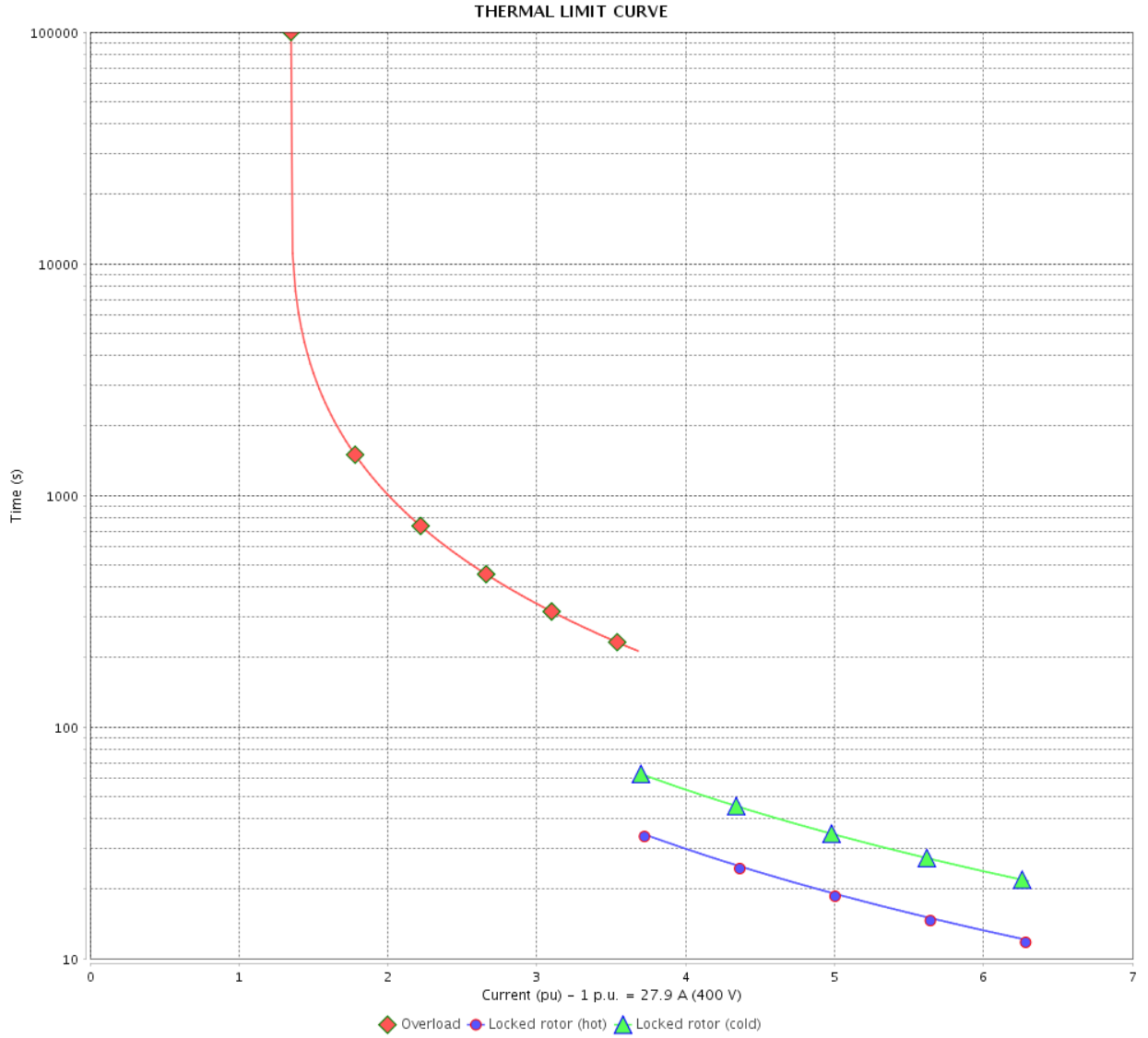
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

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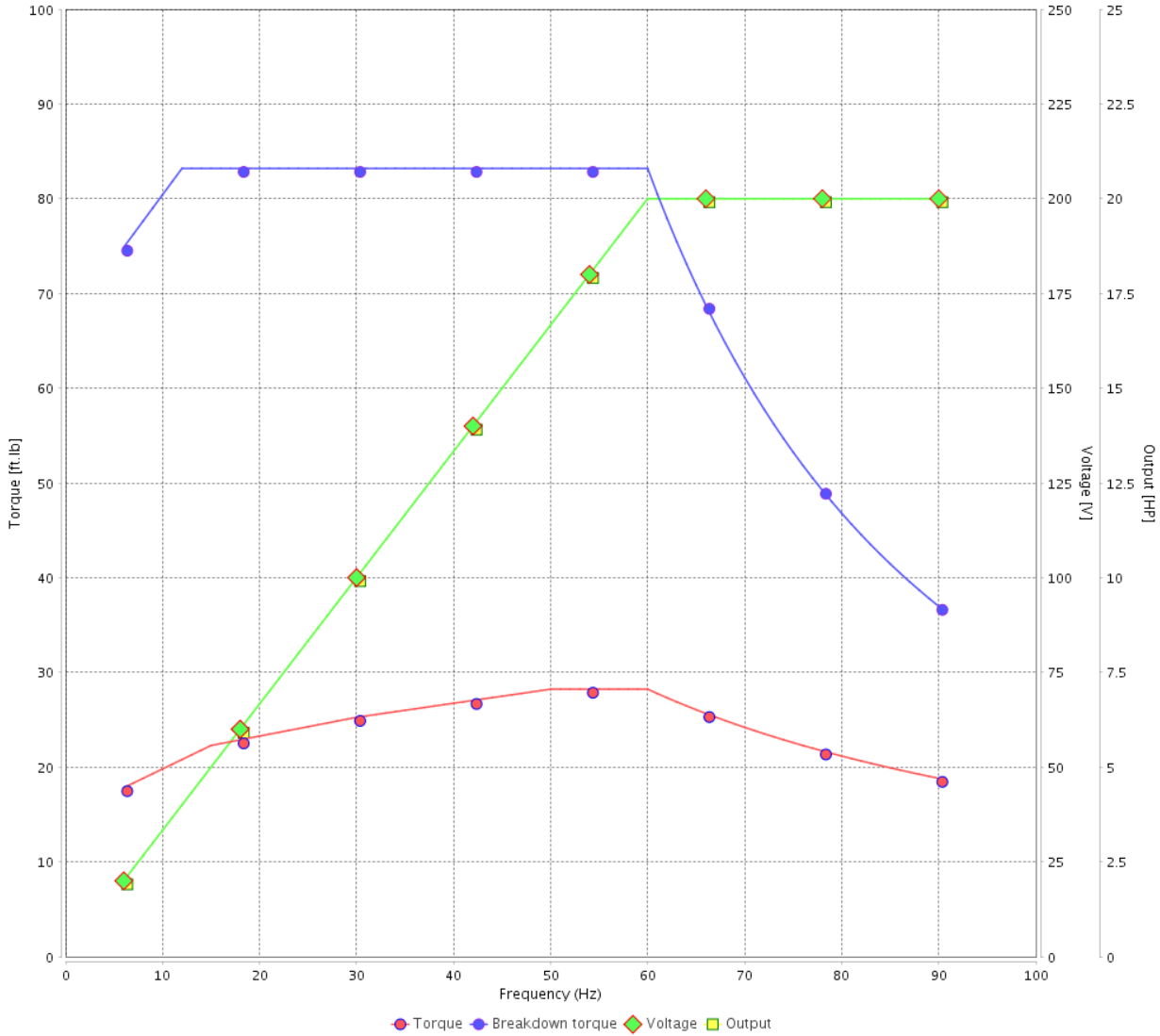
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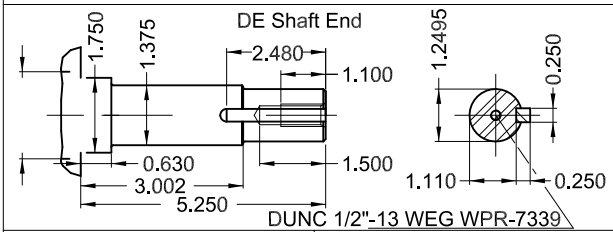
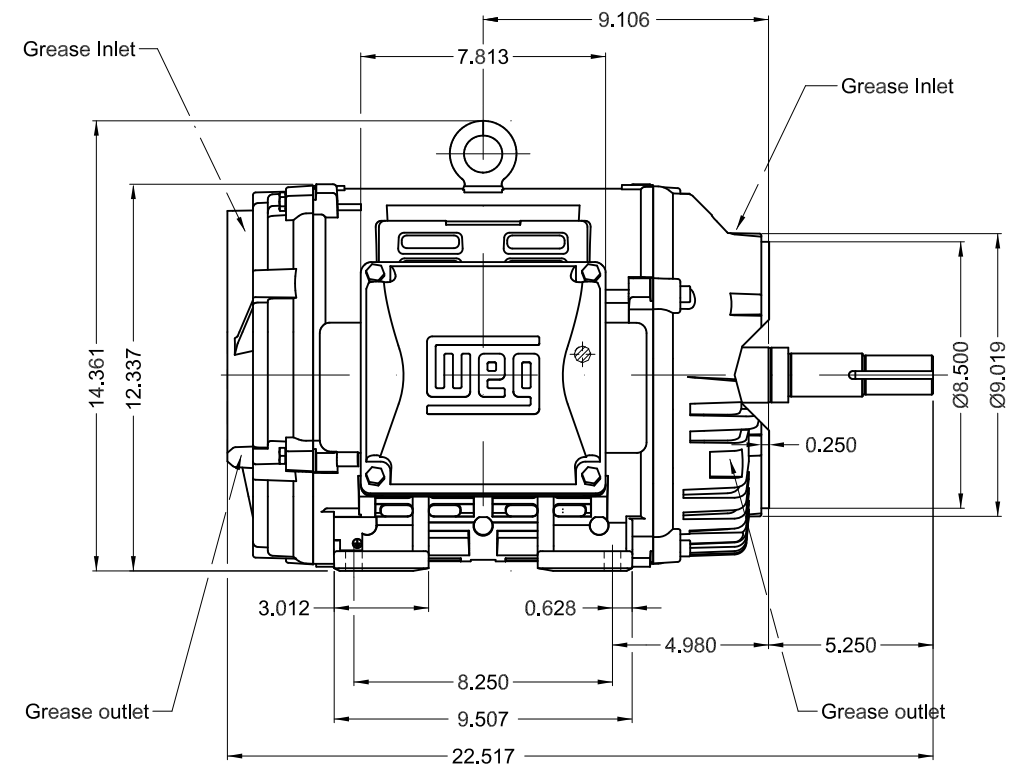
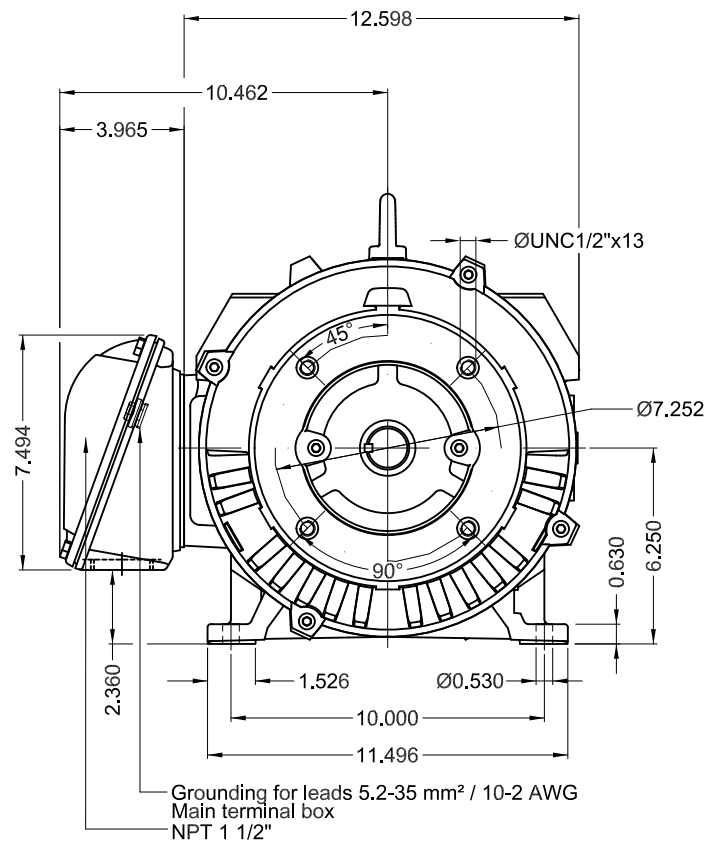


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20 HP 02 Poles 60 Hz

A

1:6

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JM TYPE PREM-EST.					
CHECKED		FRAME 254JM IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B34R(D)

PREVIEW
WDD

