

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11973098

Frame	: 143TC	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 1 HP (0.75 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 2.96/1.48 A	Protection degree	: IP55
L. R. Amperes	: 20.7/10.4 A	Cooling method	: IC411 - TEFC
LRC	: 7.0x(Code K)	Mounting	: F-1
No load current	: 1.40/0.700 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3480 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 3.33 %	Starting method	: Direct On Line
Rated torque	: 1.51 ft.lb	Approx. weight ³	: 34.2 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0278 sq.ft.lb		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	72.0	75.5	75.5	Max. traction	: 21 lb
Power Factor	0.00	0.69	0.79	0.84	Max. compression	: 61 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
30.1	22.6	20.4	18.1	10.1	7.6	4.7

	Drive end	Non drive end
Bearing type	: 6205 ZZ	6204 ZZ
Sealing	: V'Ring	V'Ring
Lubrication interval	: -	-
Lubricant amount	: -	-
Lubricant type	Mobil Polyrex EM	

Notes

USABLE @208V 3.27A SF 1.15 SFA 3.76A

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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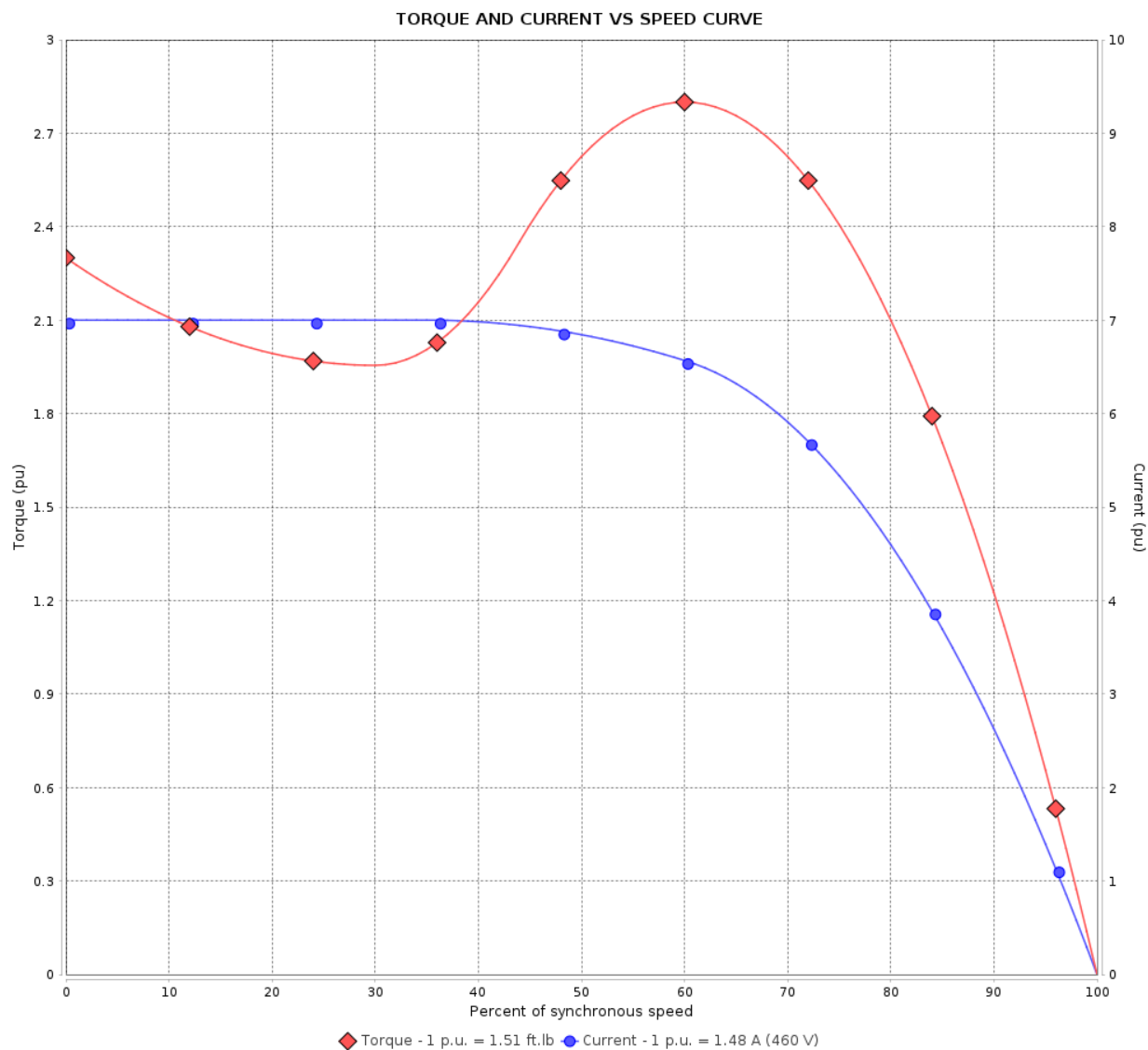
TORQUE AND CURRENT VS SPEED CURVE

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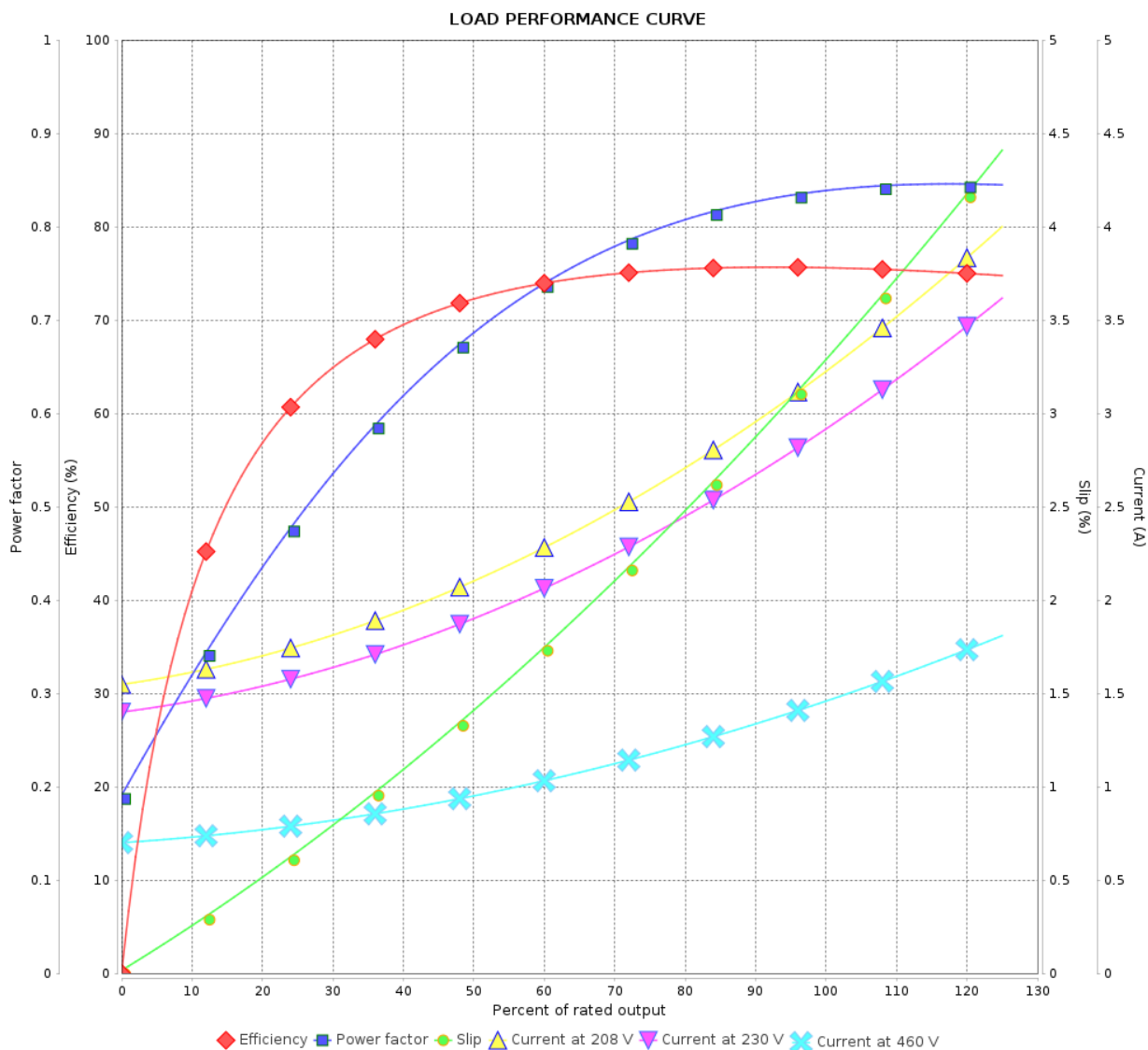
LOAD PERFORMANCE CURVE

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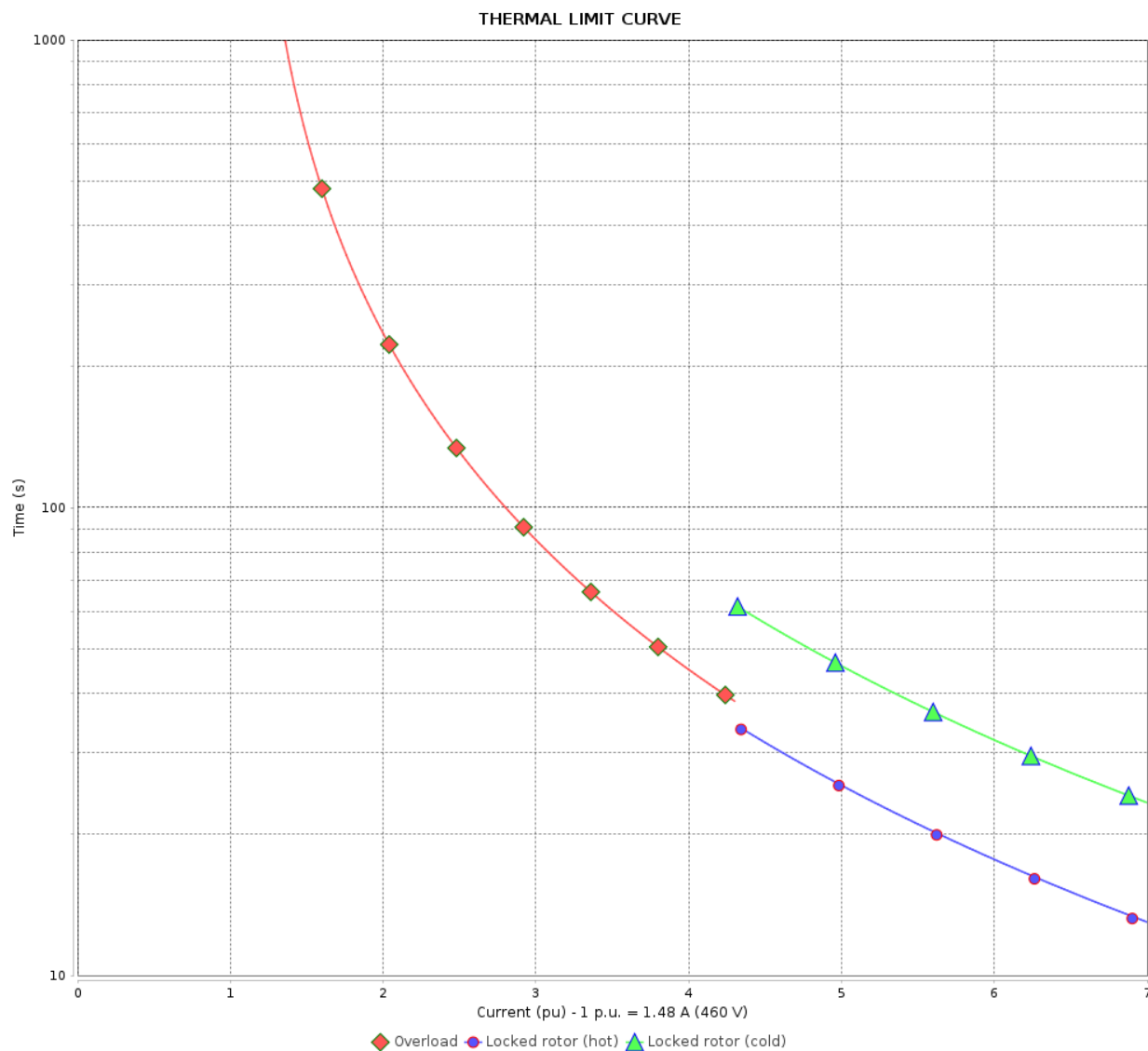
THERMAL LIMIT CURVE

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Heating constant

Cooling constant

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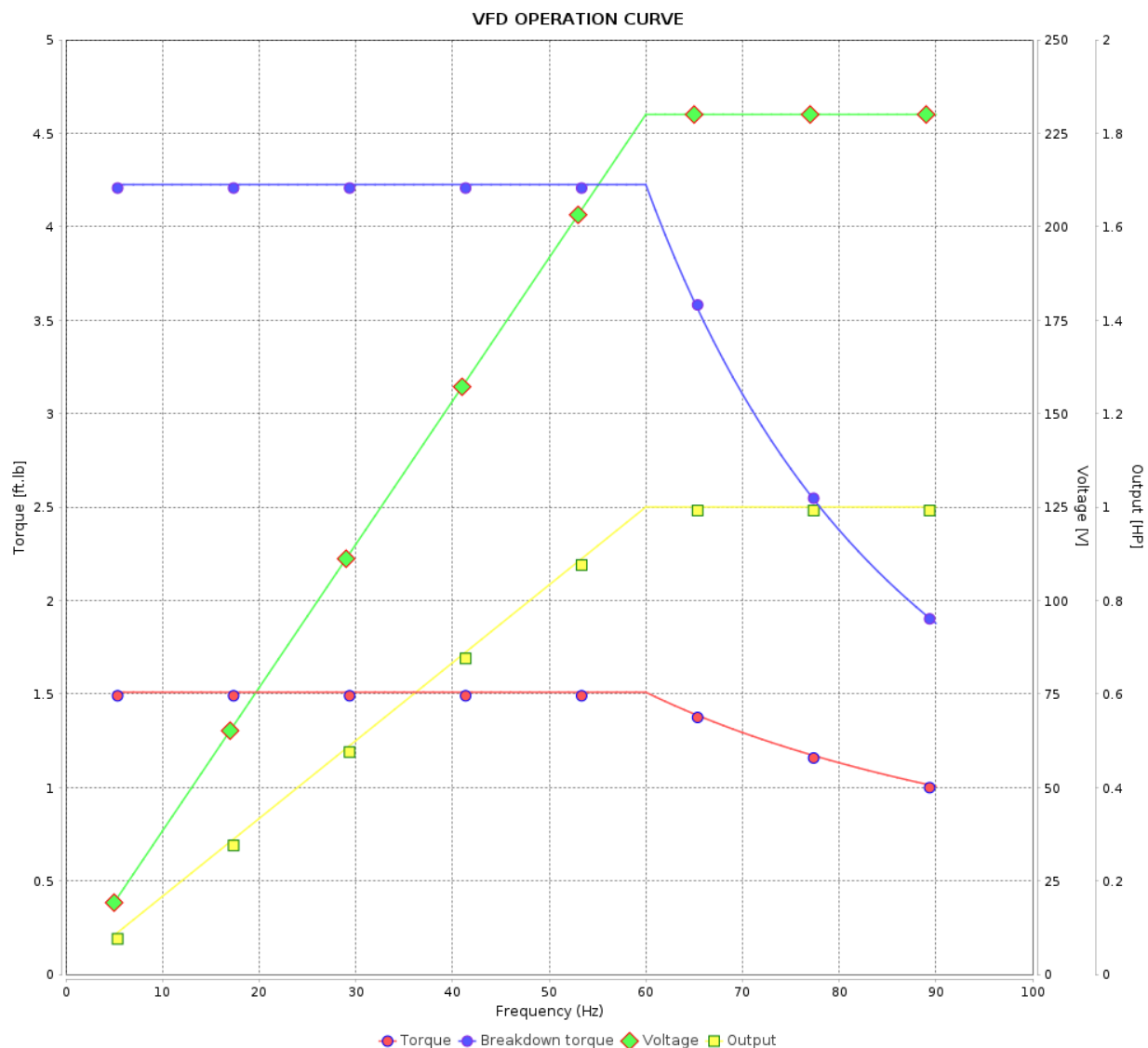
VFD OPERATION CURVE

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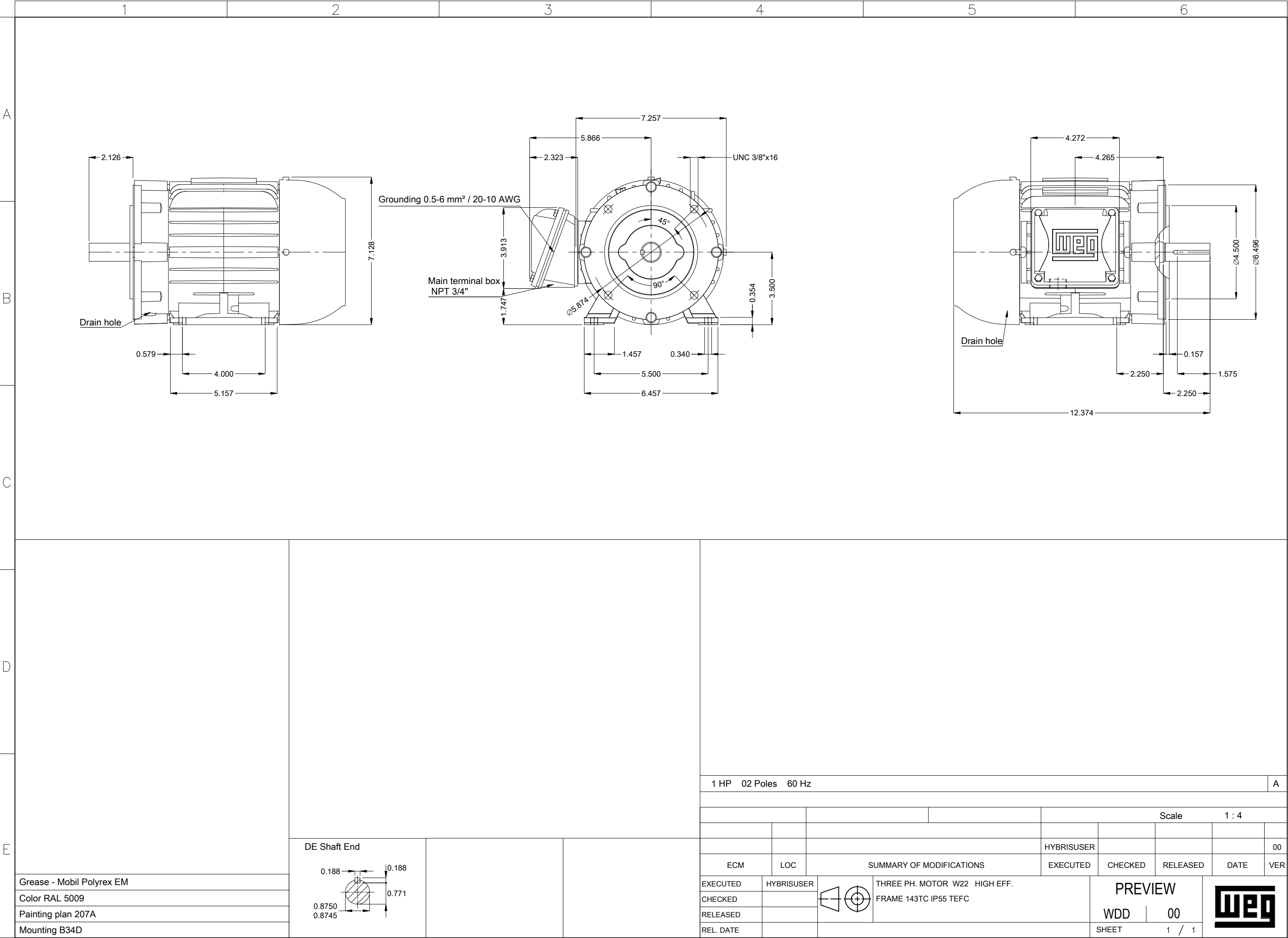


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Dimensions in inches

A3