

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 15459788
Catalog # : 00158ST3HIER145TC-W2

Frame	: 145TC	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 1.5 HP (1.1 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 1.62 A	Protection degree	: IP55
L. R. Amperes	: 13.6 A	Cooling method	: IC411 - TEFC
LRC	: 8.4x(Code L)	Mounting	: W-6
No load current	: 0.880 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1755 rpm	Noise level ²	: 51.0 dB(A)
Slip	: 2.50 %	Starting method	: Direct On Line
Rated torque	: 4.49 ft.lb	Approx. weight ³	: 58.3 lb
Locked rotor torque	: 290 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1431 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	81.3	82.5	85.5	86.5	Max. traction	: 107 lb
Power Factor	0.35	0.60	0.70	0.79	Max. compression	: 166 lb

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type	: 6205 C3	: 6204 C3
Sealing	: Inpro/Seal	: Inpro/Seal
Lubrication interval	: 20000 h	: 20000 h
Lubricant amount	: 4 g	: 4 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



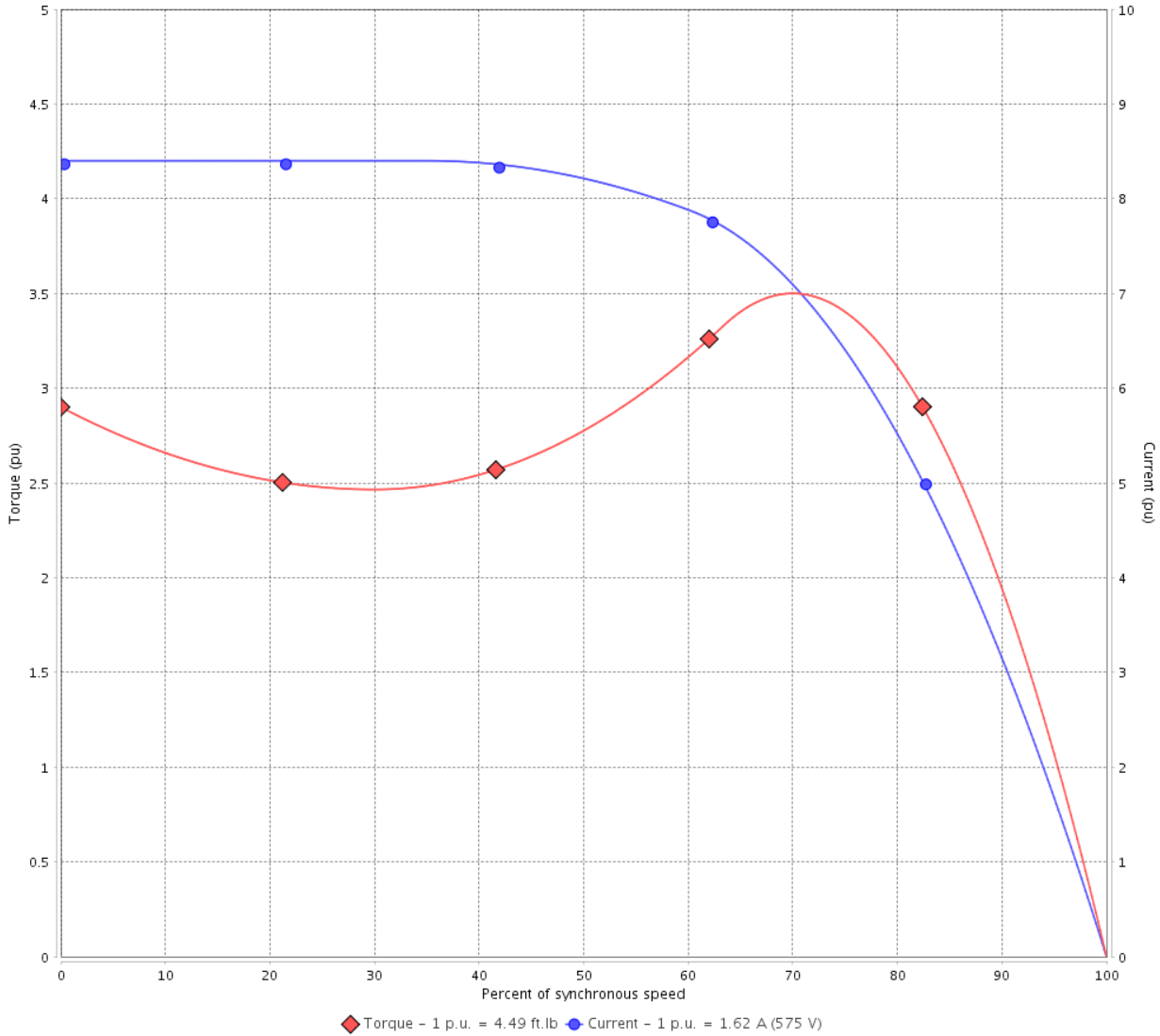
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 1.62 A	Moment of inertia (J)	: 0.1431 sq.ft.lb
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 4.49 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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LOAD PERFORMANCE CURVE

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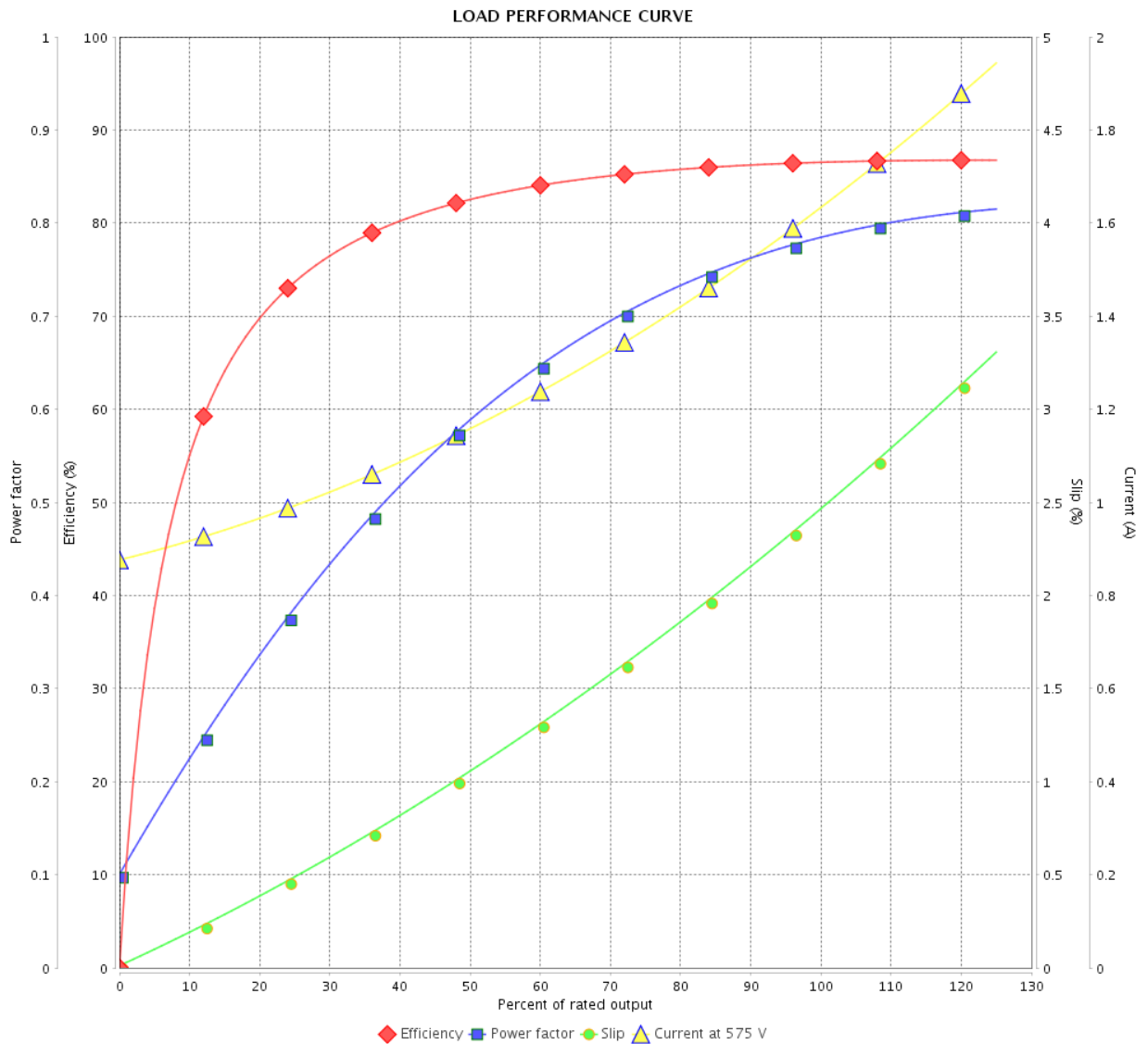


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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

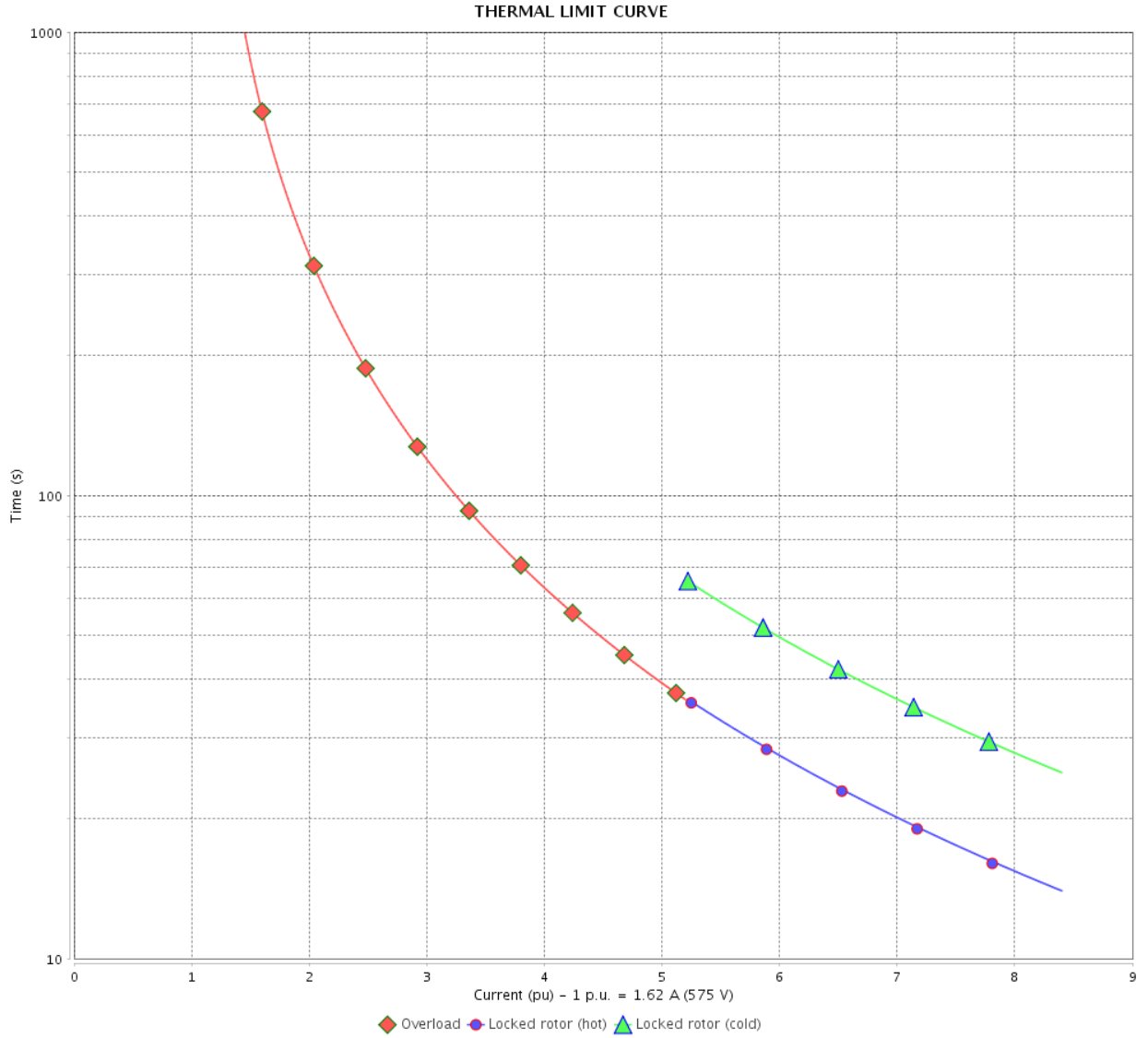
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

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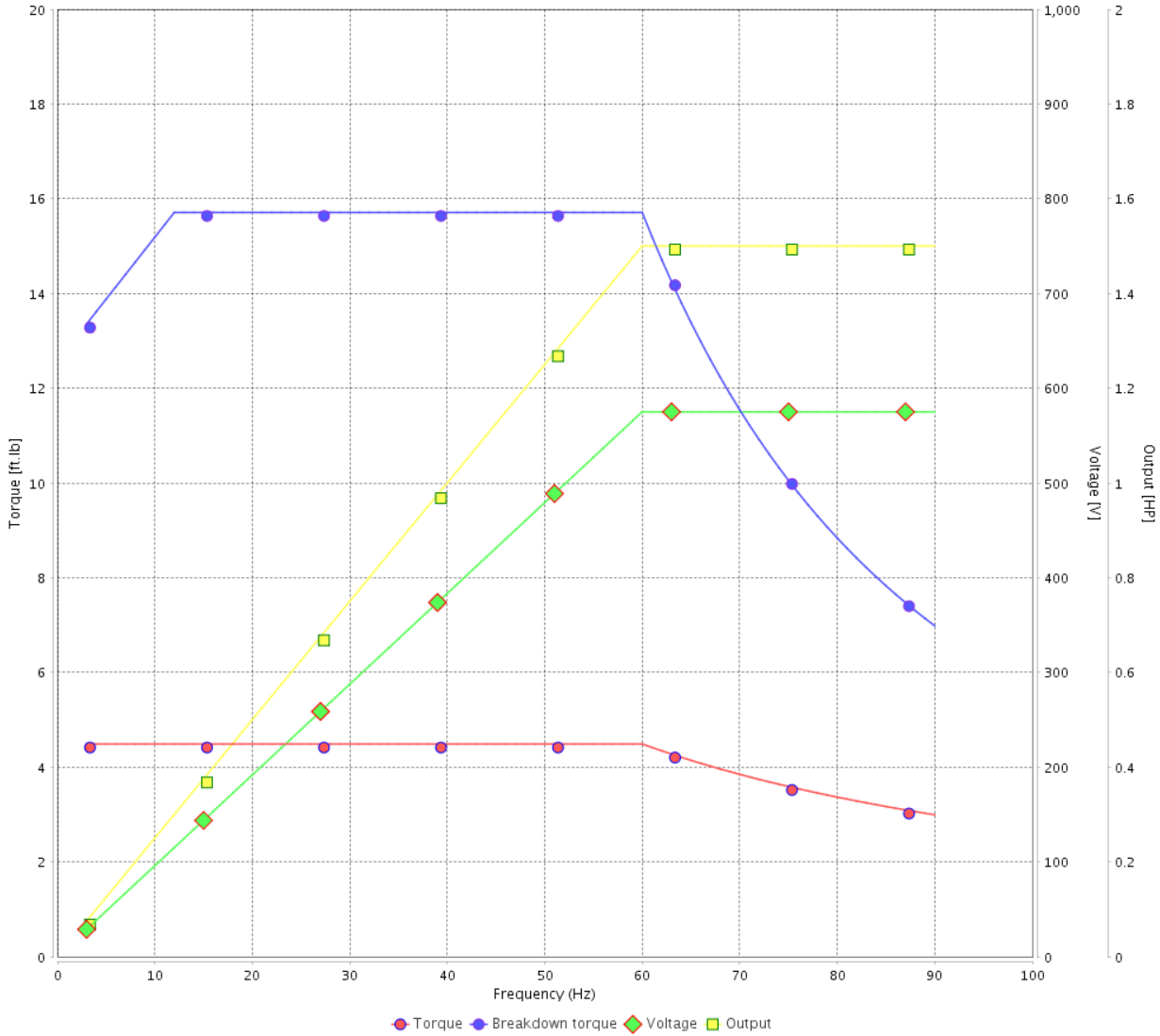
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VFD OPERATION CURVE

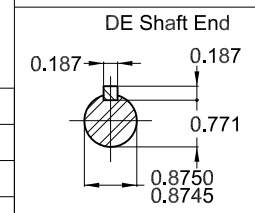
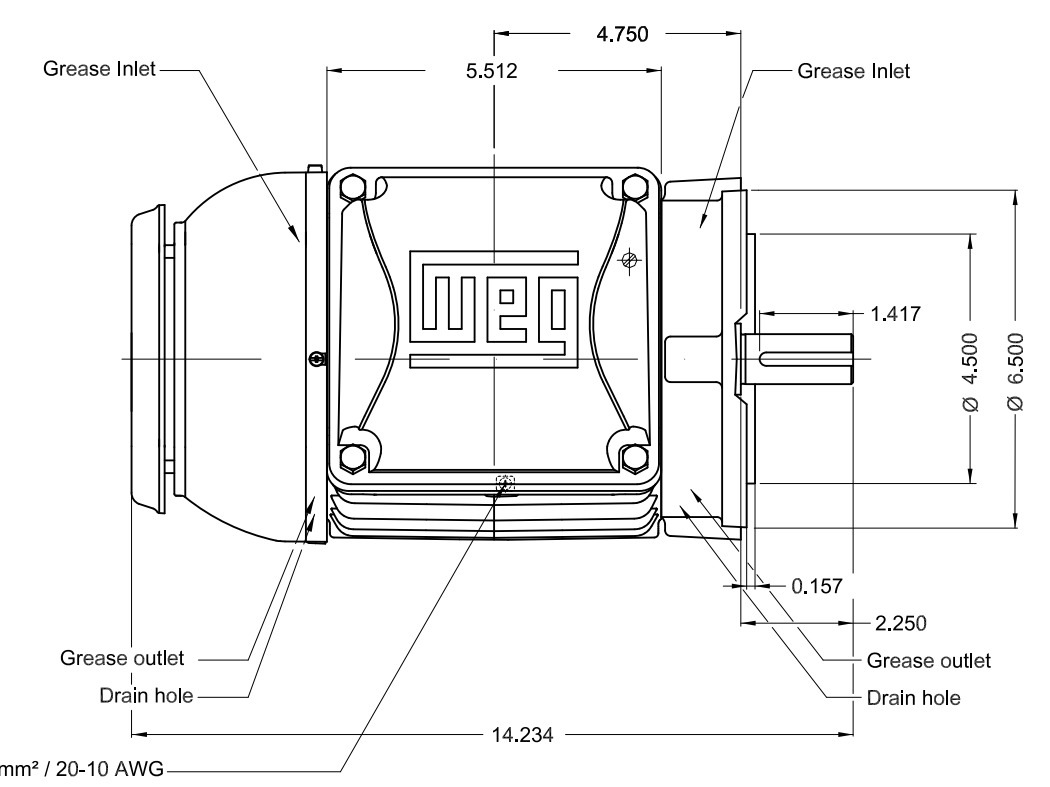
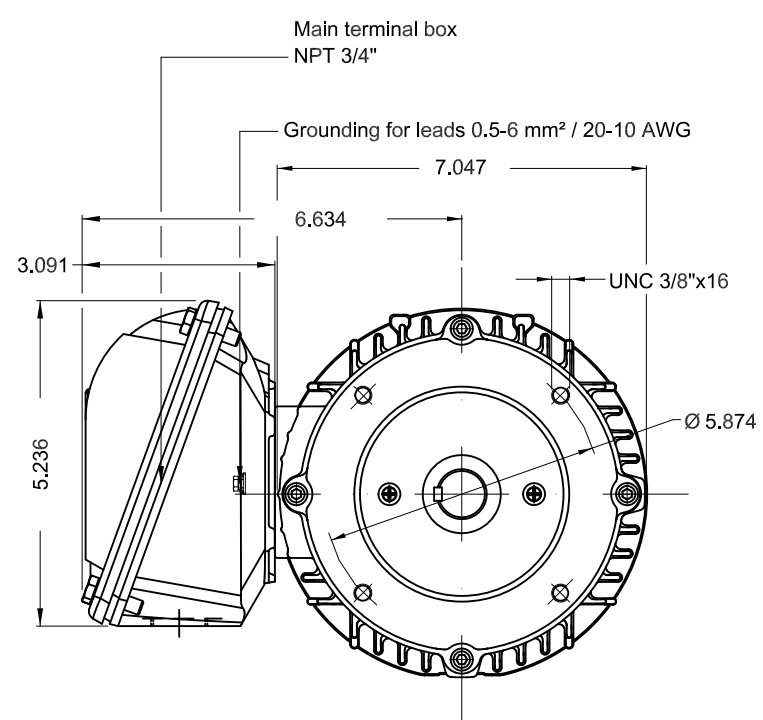


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Color RAL 5009
 Painting plan 202E
 Mounting NEMA W-6
 Mounting V18

1.5 HP 04 Poles 60 Hz										A						
ECM										LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR IEEE 841 W22 PREM. EFF.		PREVIEW											
CHECKED			FRAME 145TC IP55 TEFC		WDD											
RELEASED					SHEET											
REL DT.			WMO Jaragua do Sul		Product Engineering		1 / 1									