

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11815945

Frame	: 143TC	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 1.5 HP (1.1 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 1.59 A	Protection degree	: IP55
L. R. Amperes	: 10.8 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code J)	Mounting	: F-1
No load current	: 0.640 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	: 2.26 ft.lb	Approx. weight ³	: 38.6 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0370 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	78.5	82.5	82.5	Max. traction	: 38 lb
Power Factor	0.68	0.78	0.84	Max. compression	: 80 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)
20.1	16.2	14.6	10.6	6.3	4.3	2.8

	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

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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page Revision 1 / 5		
Checked by				
Date	21/07/2026			

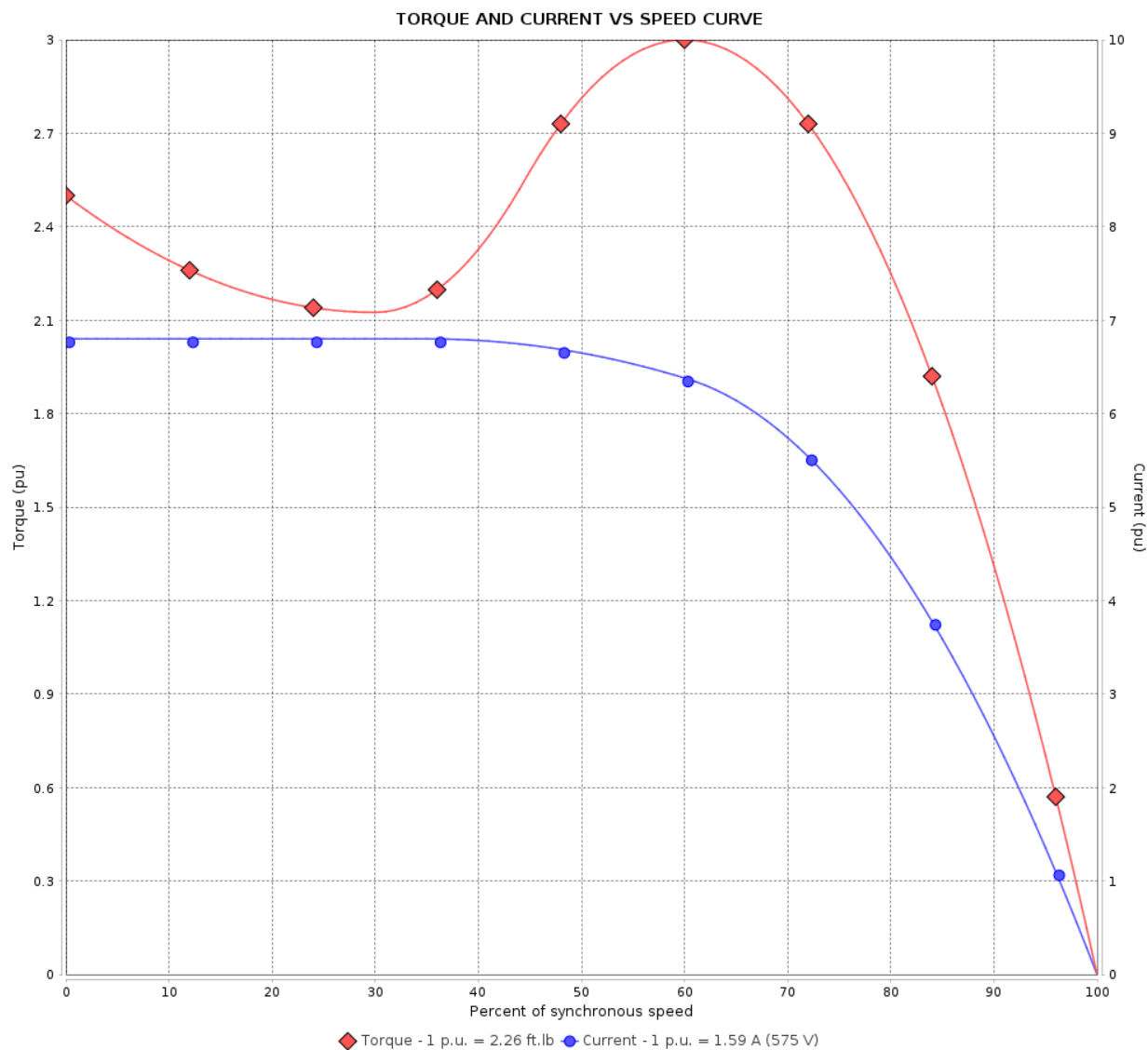
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11815945



Performance : 575 V 60 Hz 2P

Rated current	: 1.59 A	Moment of inertia (J)	: 0.0370 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 2.26 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3480 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

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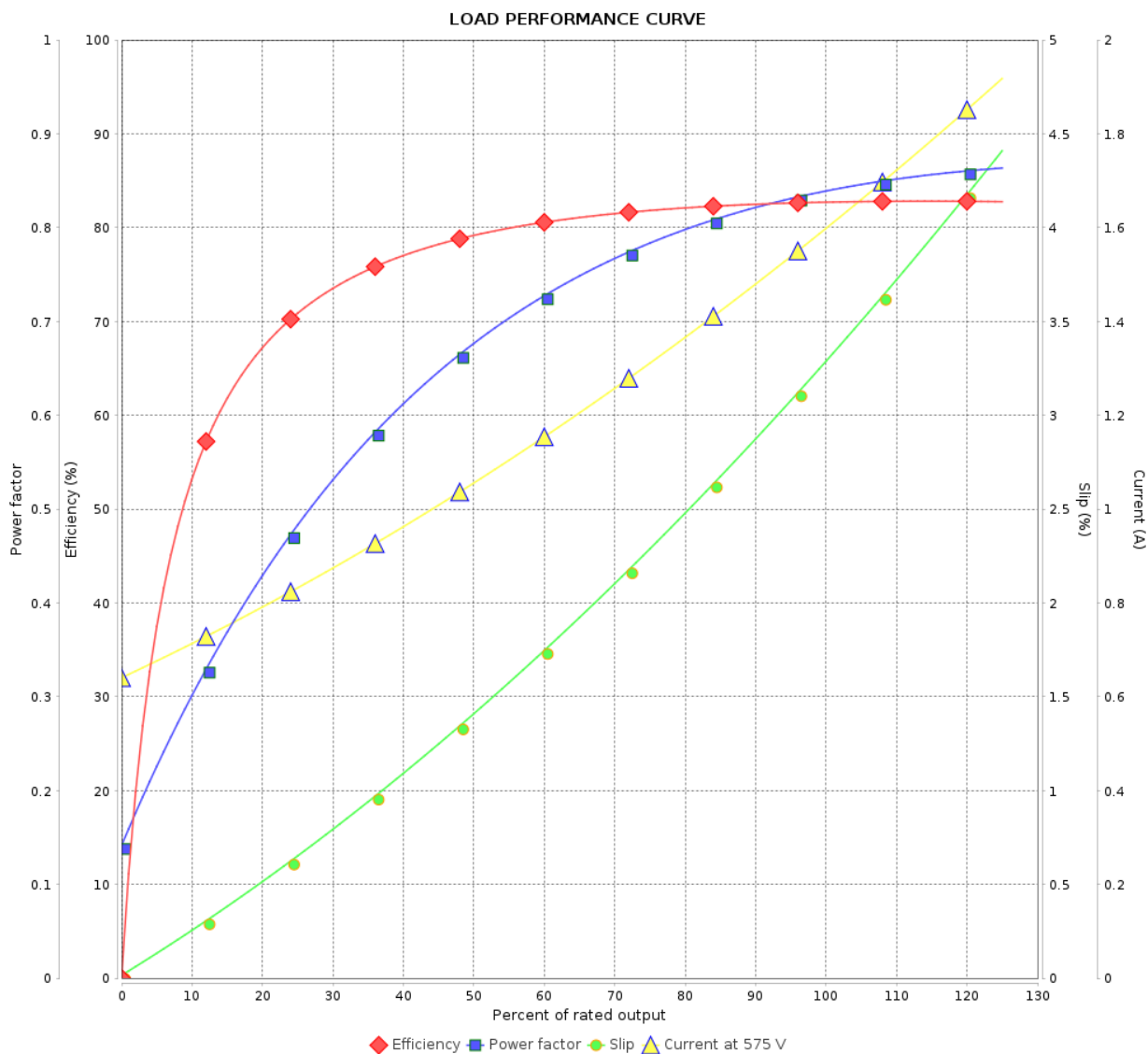
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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LRC : 6.8
Rated torque : 2.26 ft.lb
Locked rotor torque : 250 %
Breakdown torque : 300 %
Rated speed : 3480 rpm

Moment of inertia (J) : 0.0370 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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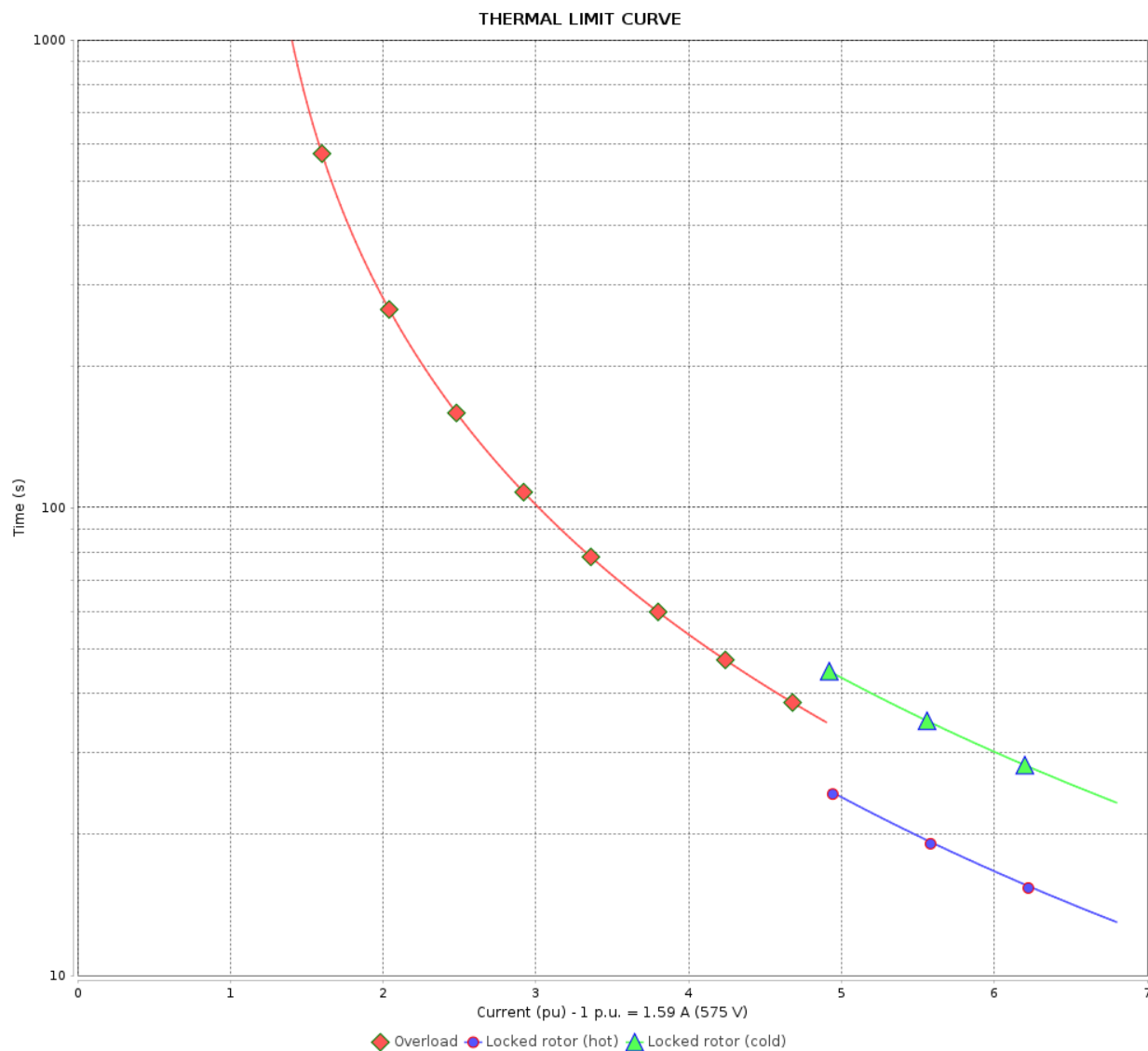
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 2.26 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3480 rpm	Design	: B

Heating constant

Cooling constant

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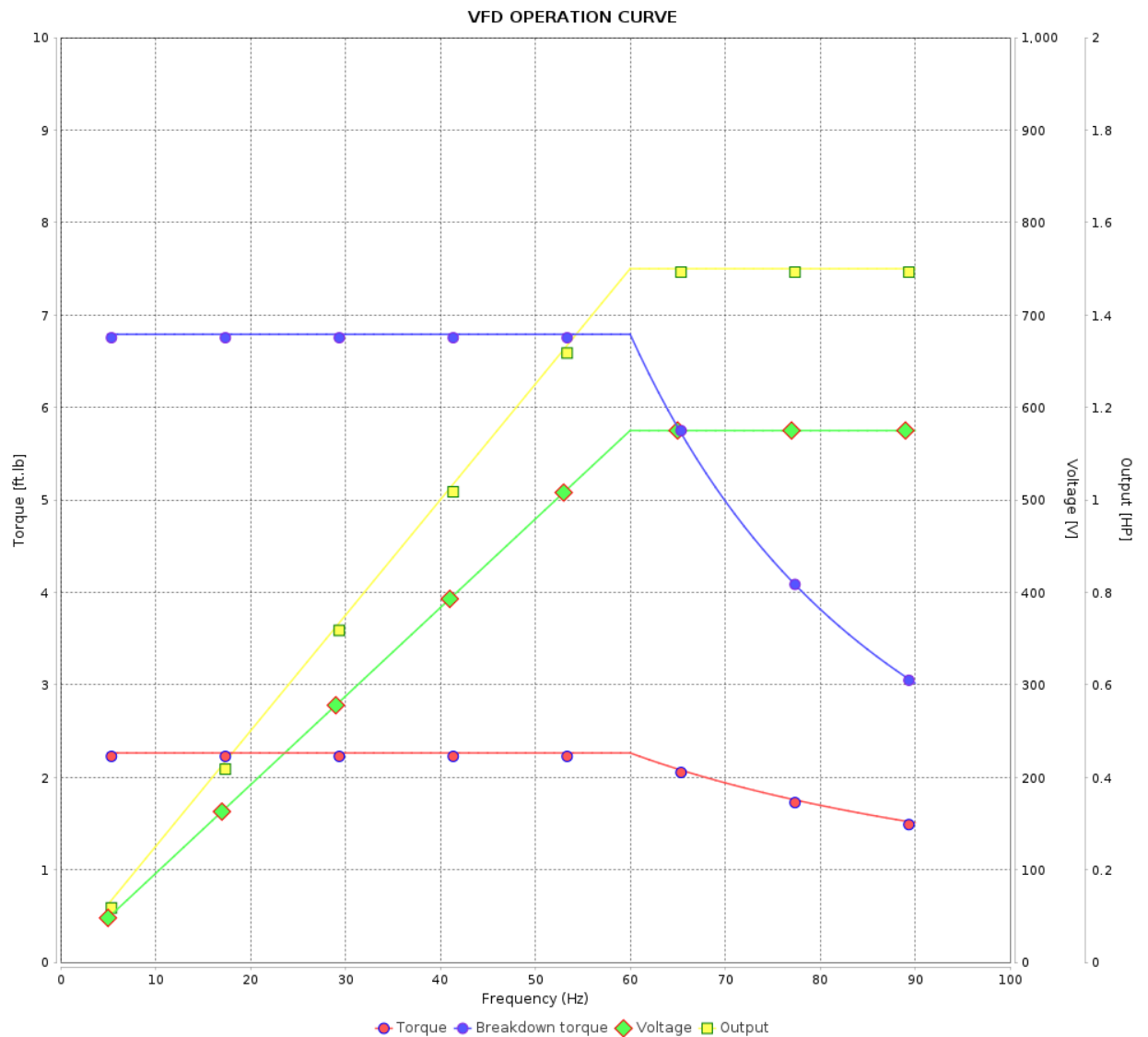
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

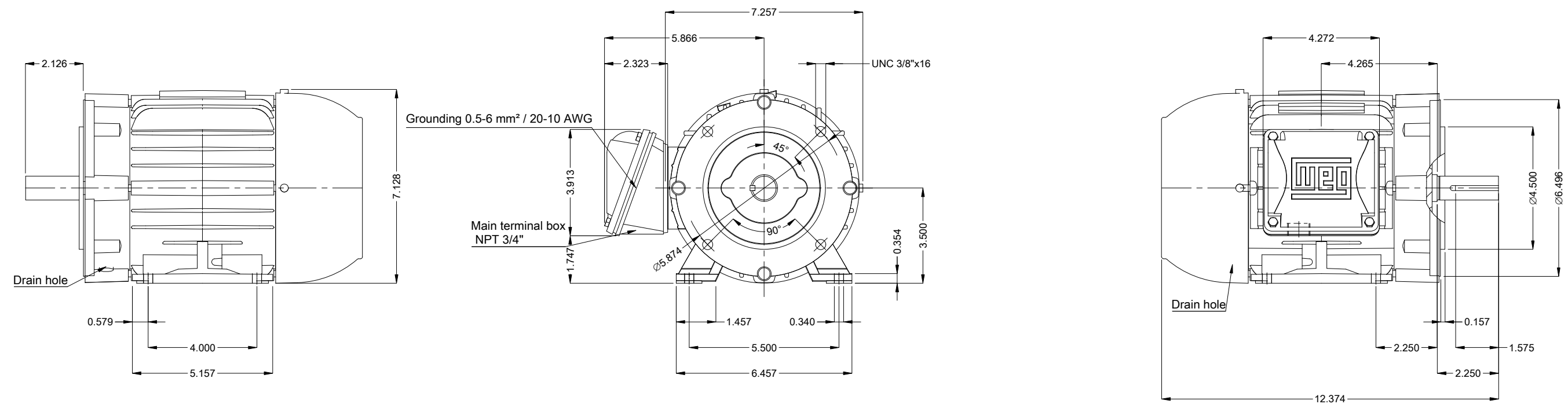
Product line : W22 High Efficiency Three-Phase Product code : 11815945



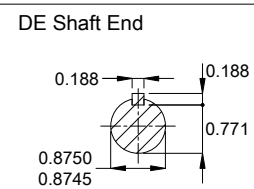
Performance : 575 V 60 Hz 2P

Rated current	: 1.59 A	Moment of inertia (J)	: 0.0370 sq.ft.lb
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Grease - Mobil Polyrex EM
Color RAL 5009
Painting plan 207A
Mounting B34D



1.5 HP 02 Poles 60 Hz										A	
						Scale 1 : 4					
						HYBRISUSER				00	
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER	
EXECUTED	HYBRISUSER		THREE PH. MOTOR W22 HIGH EFF. FRAME 143TC IP55 TEFC				PREVIEW				
CHECKED							WDD				00
RELEASED											
REL. DATE							SHEET				1 / 1