

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase
Product code : 11165648
Catalog # : HT050406NPW22

Frame	: 364/5T	Locked rotor time	: 32s (cold) 18s (hot)
Output	: 50 HP (37 kW)	Temperature rise	: 80 K
Poles	: 6	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	: 115/57.4 A	Protection degree	: IP55
L. R. Amperes	: 735/367 A	Cooling method	: IC411 - TEFC
LRC	: 6.4x(Code G)	Mounting	: F-1
No load current	: 40.0/20.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1183 rpm	Noise level ²	: 66.0 dB(A)
Slip	: 1.42 %	Starting method	: Direct On Line
Rated torque	: 222 ft.lb	Approx. weight ³	: 869 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 32.4 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	93.6	94.1	94.1	Max. traction	: 1679 lb
Power Factor	0.74	0.83	0.86	Max. compression	: 2539 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)
6.2	5.2	4.6	2.8	1.9	1.2	0.8

	Drive end	Non drive end
Bearing type	: 6314 C3	: 6314 C3
Sealing	: WSeal	: WSeal
Lubrication interval	: 17000 h	: 17000 h
Lubricant amount	: 27 g	: 27 g
Lubricant type	: Mobil Polyrex EM	

Notes

USABLE @208V 127A SF 1.10 SFA 140A

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				
Checked by				
Date	06/08/2026			

Page 1 / 6
Revision

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

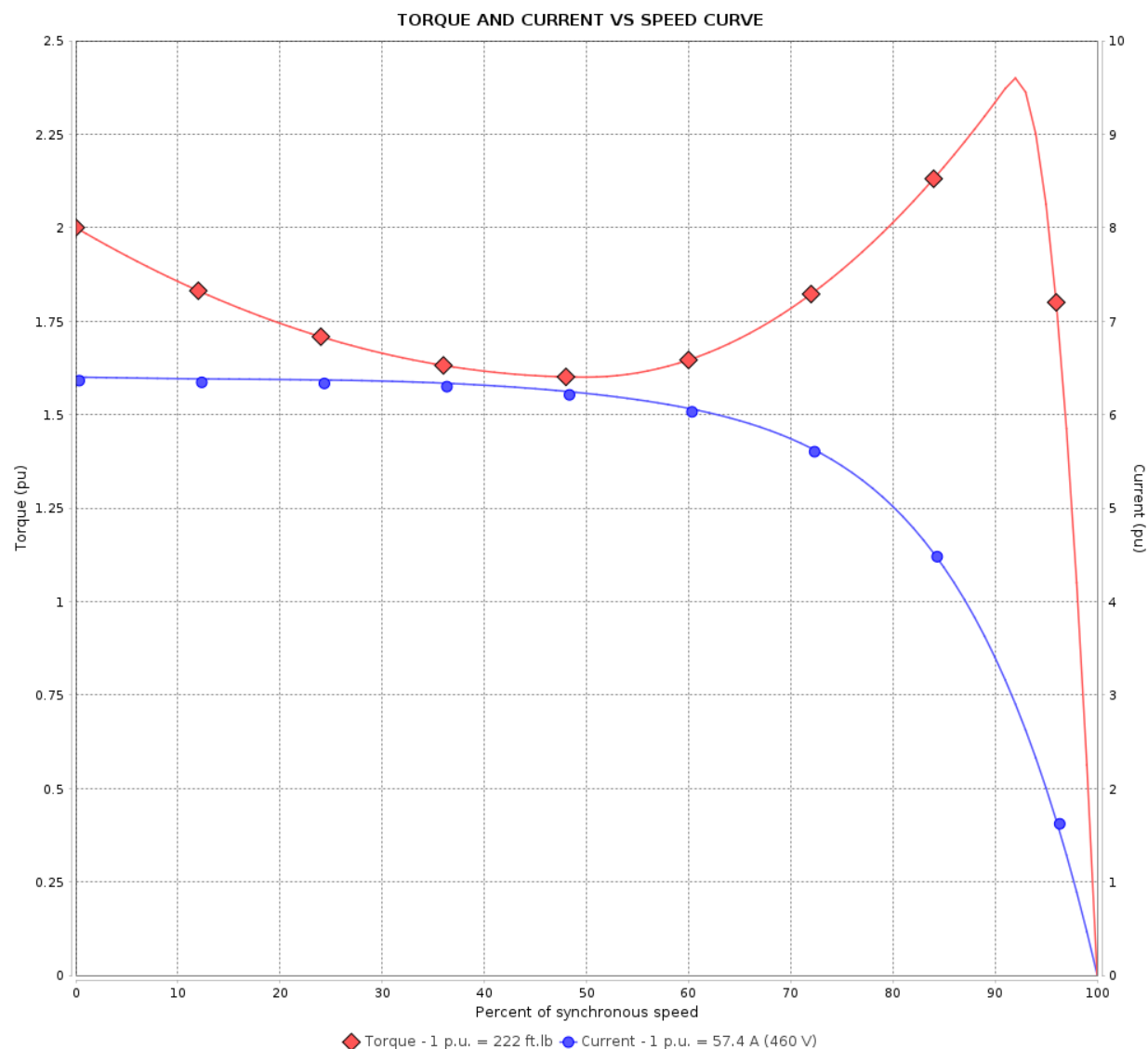


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Rated speed : 1183 rpm

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Design : B

Locked rotor time : 32s (cold) 18s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 2 / 6 Revision		
Checked by				
Date	06/08/2026			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

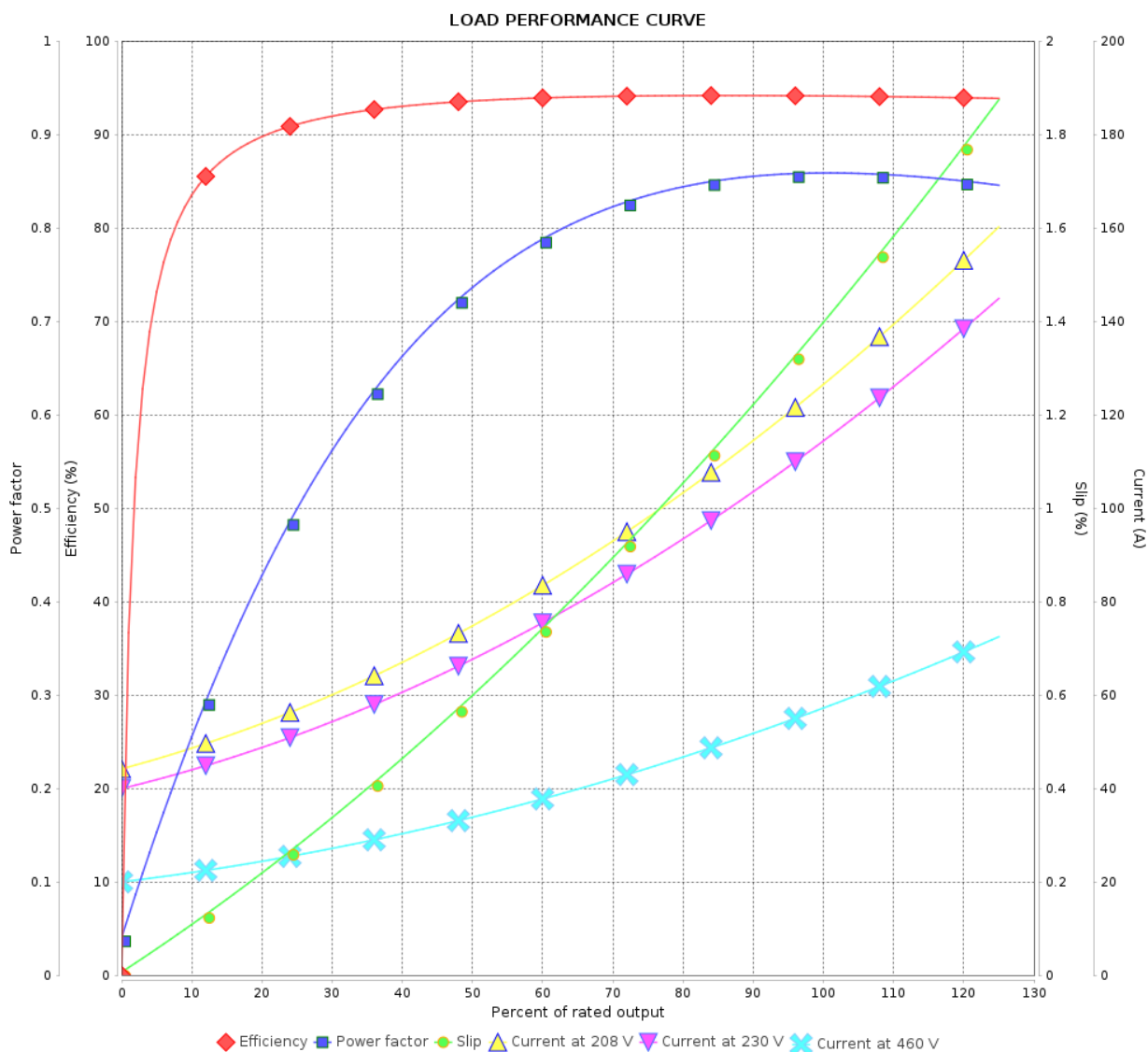


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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 6Revision		
Checked by				
Date	06/08/2026			

THERMAL LIMIT CURVE

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Heating constant

Cooling constant

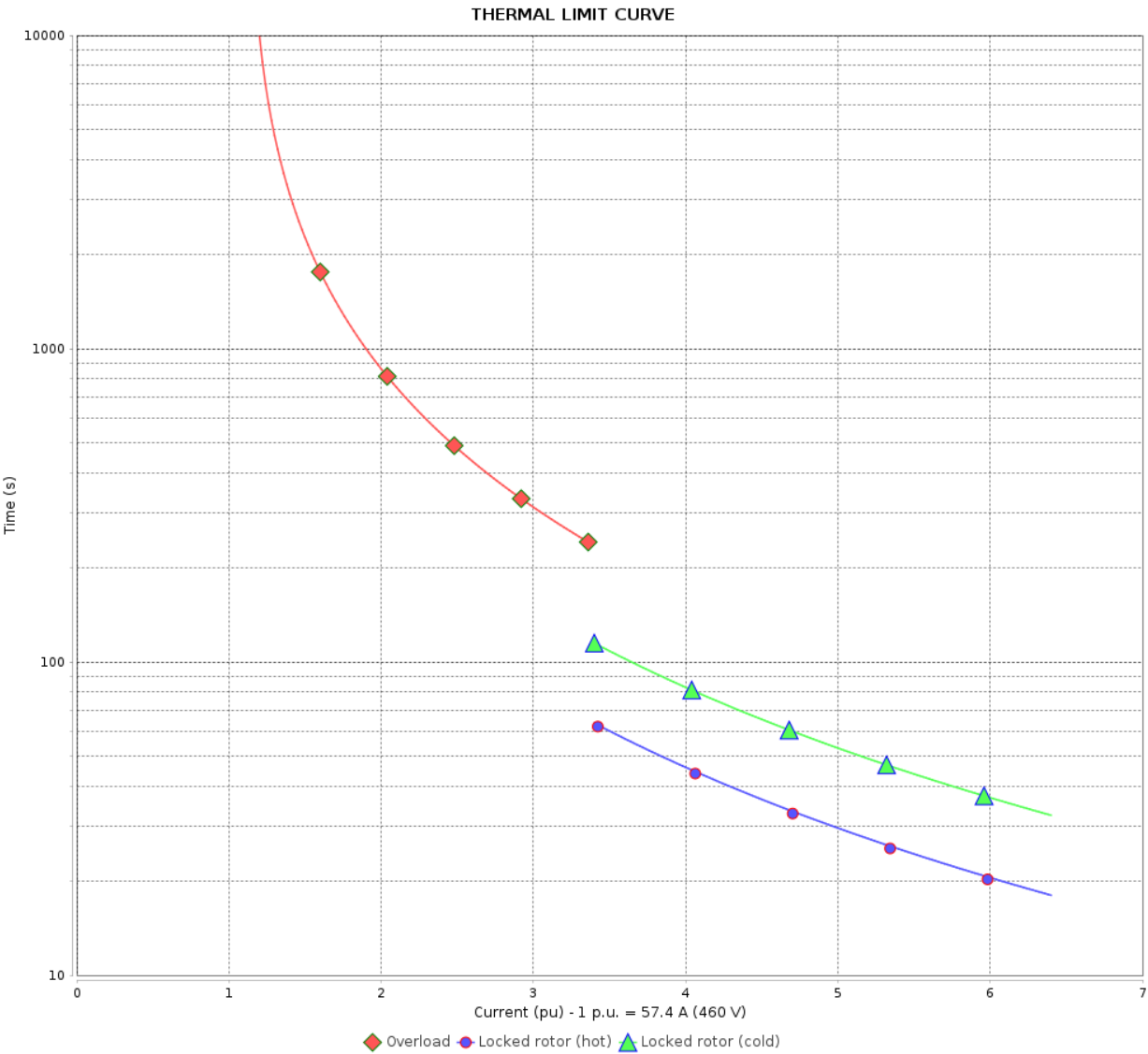
Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page 4 / 6		Revision
Checked by					
Date	06/08/2026				

THERMAL LIMIT CURVE

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Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by					
Date	06/08/2026				
				Page 5 / 6	Revision

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

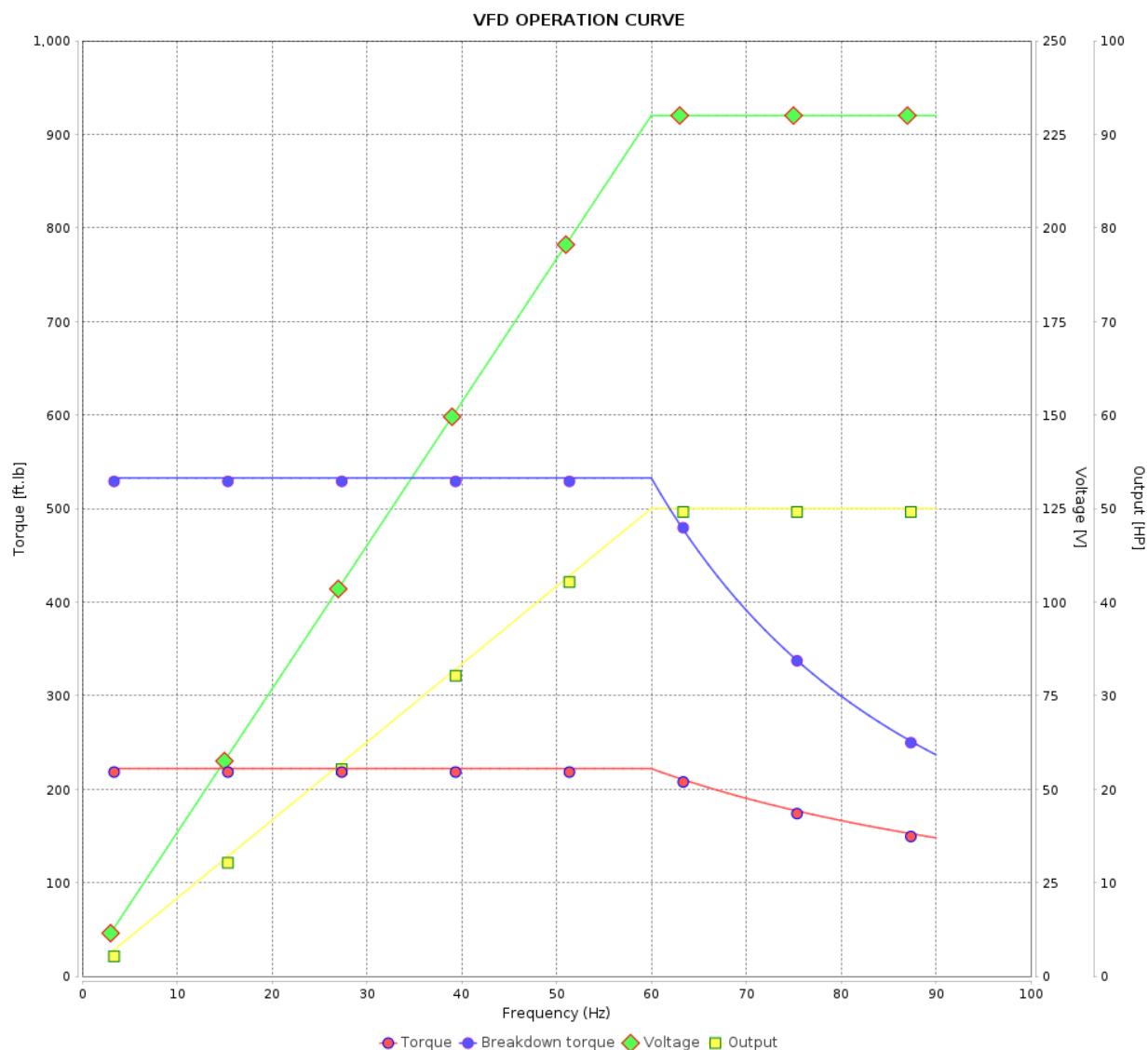


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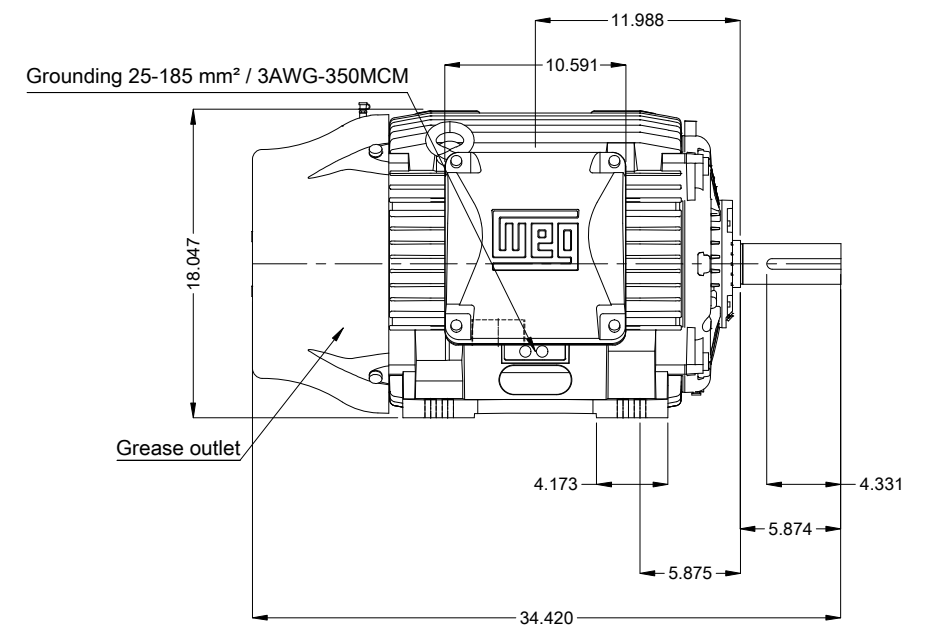
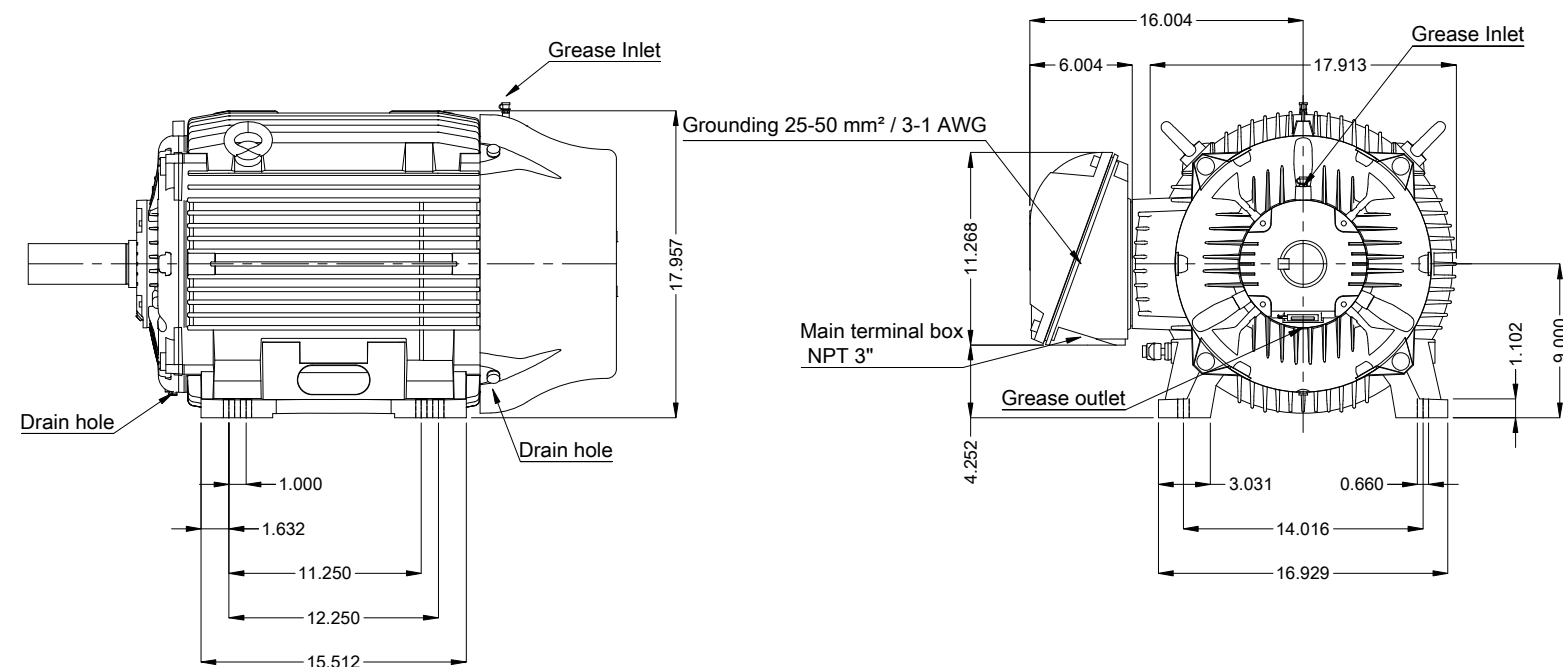


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Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 6 / 6
Checked by				
Date				
	06/08/2026			Revision



50 HP 06 Poles 60 Hz										A	
						Scale				1 : 11	
						HYBRISUSER				00	
ECM		LOC		SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR W22 NEMA PREM. EFF. FRAME 364/5T IP55 TEFC				PREVIEW WDD 00				
CHECKED											
RELEASED											
REL. DATE											
						SHEET		1 / 1			