

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11164522
Catalog # : HT075504NPW22

Frame	: 364/5T	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 75 HP (55 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	: 69.8 A	Protection degree	: IP55
L. R. Amperes	: 446 A	Cooling method	: IC411 - TEFC
LRC	: 6.4x(Code G)	Mounting	: F-1
No load current	: 26.4 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level ²	: 67.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 221 ft.lb	Approx. weight ³	: 919 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 23.3 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	94.5	95.0	95.4	Max. traction	: 1526 lb
Power Factor	0.00	0.68	0.78	0.83	Max. compression	: 2412 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)
4.7	3.8	3.5	2.4	1.6	1.1	0.7

	Drive end	Non drive end
Bearing type	: 6314 C3	: 6314 C3
Sealing	: WSeal	: WSeal
Lubrication interval	: 12000 h	: 12000 h
Lubricant amount	: 27 g	: 27 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

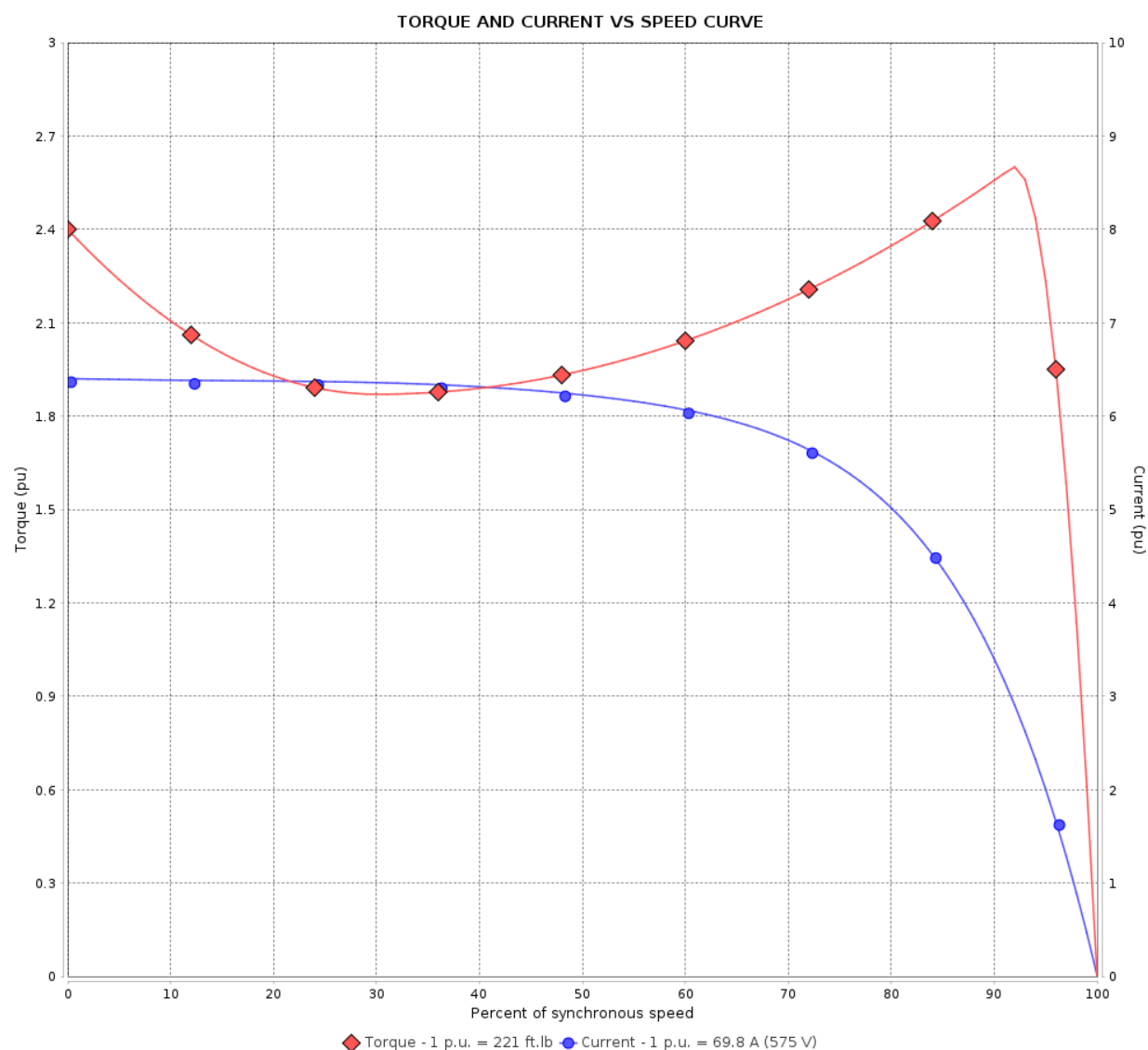


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Performance : 575 V 60 Hz 4P

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LRC : 6.4
Rated torque : 221 ft.lb
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Breakdown torque : 260 %
Rated speed : 1780 rpm

Moment of inertia (J) : 23.3 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
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Temperature rise : 80 K
Design : B

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

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Checked by				
Date	02/07/2026			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

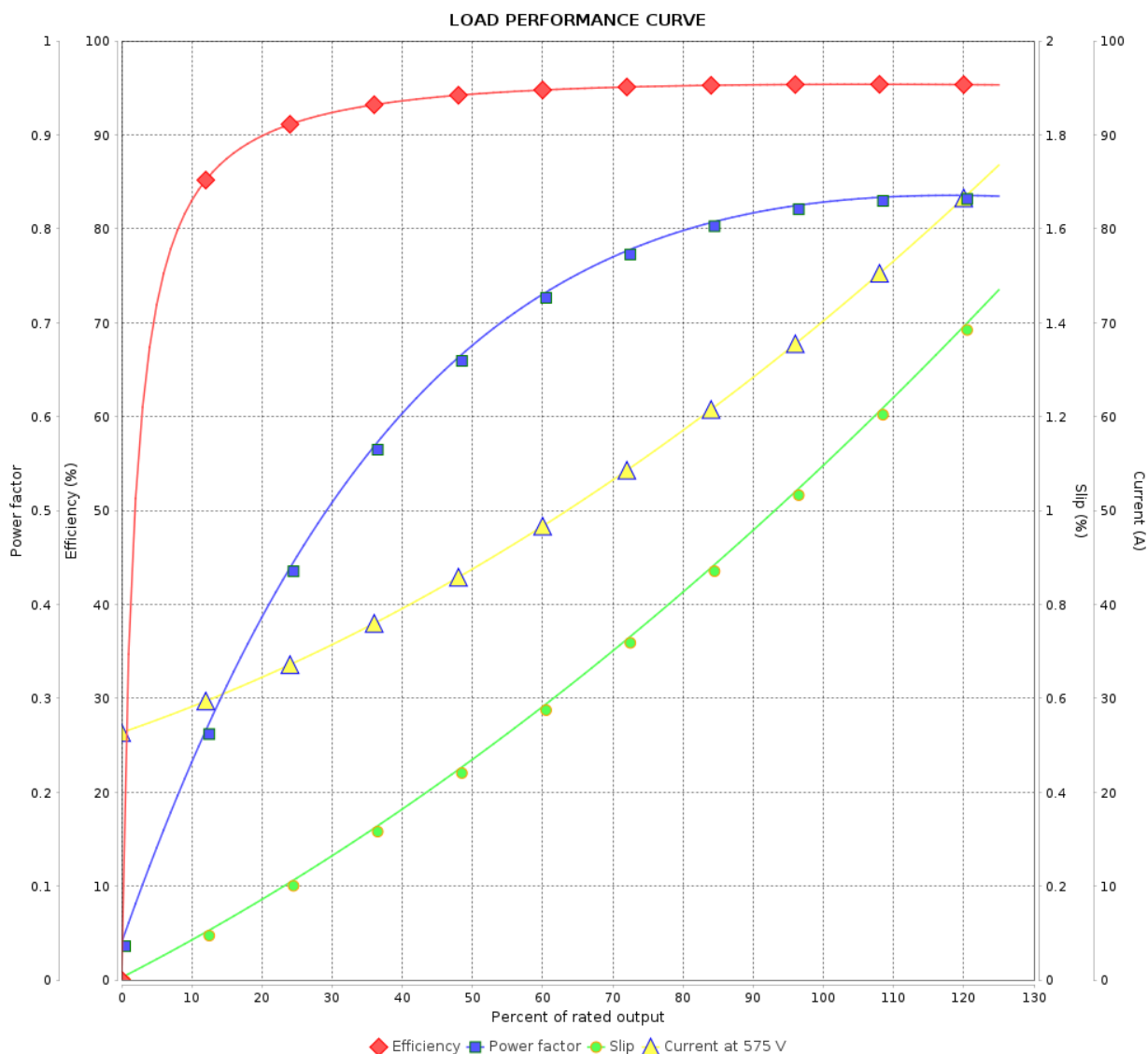


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THERMAL LIMIT CURVE

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Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

Heating constant

Cooling constant

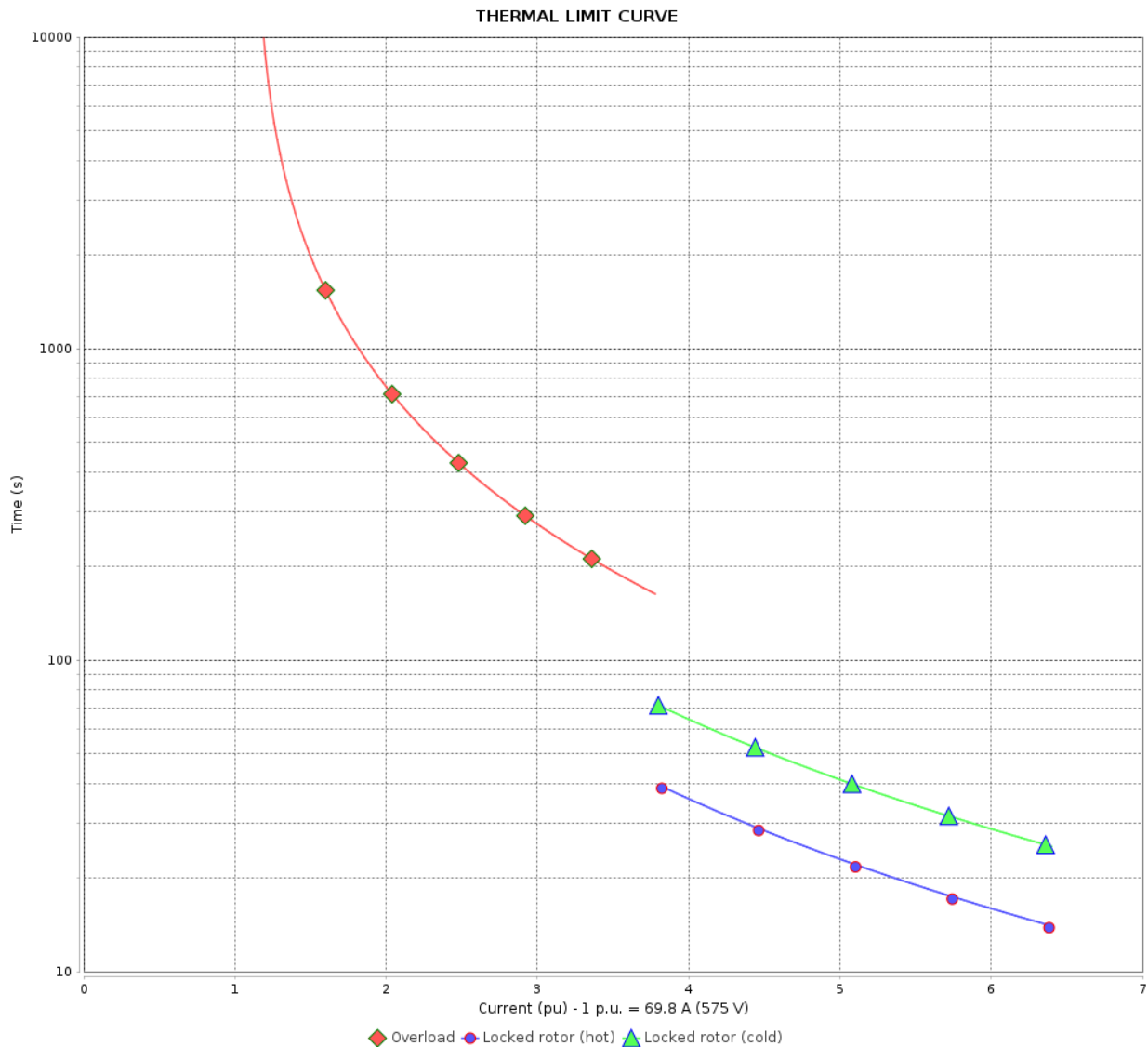
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THERMAL LIMIT CURVE

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

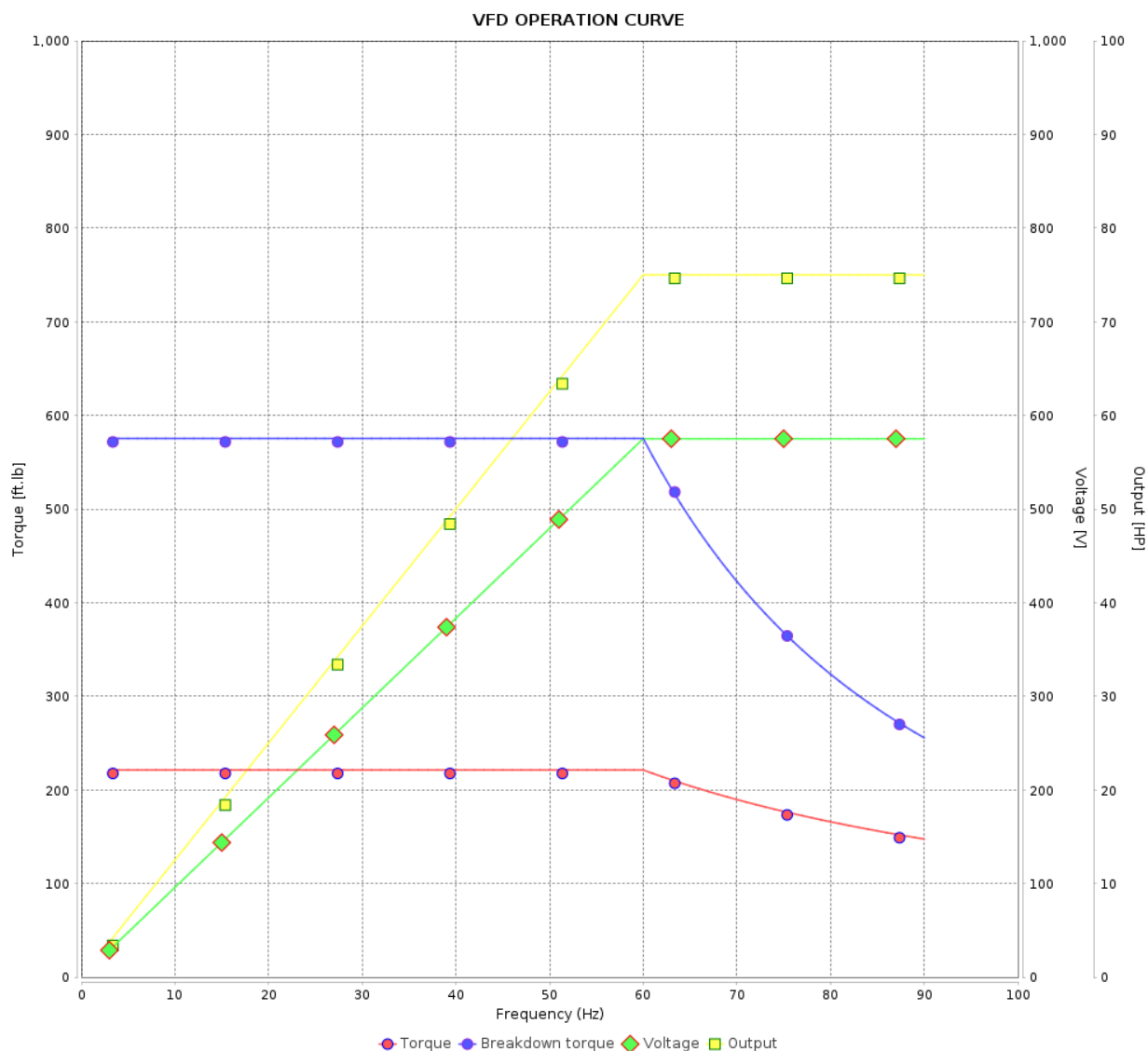


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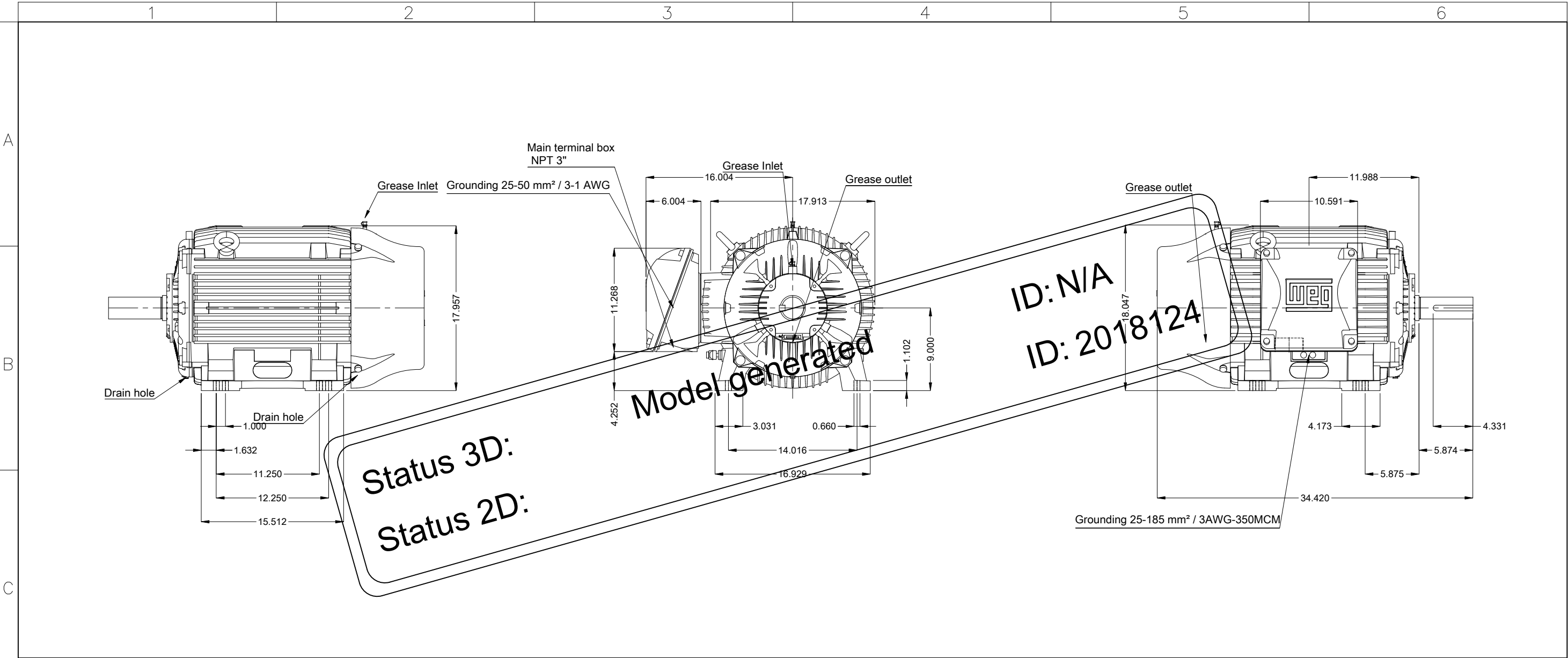


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D					75 HP 04 Poles 60 Hz										A
					Scale 1 : 11										
E					DE Shaft End										
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