

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11164525

Frame	: 404/5T	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 100 HP (75 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	: 90.4 A	Protection degree	: IP55
L. R. Amperes	: 660 A	Cooling method	: IC411 - TEFC
LRC	: 7.3x(Code H)	Mounting	: F-1
No load current	: 30.4 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level <sup>2</sup>	: 68.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 40.8 kgfm	Approx. weight <sup>3</sup>	: 531 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 1.26 kgm <sup>2</sup>		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	95.0	95.0	95.4	Max. traction	: 778 kgf
Power Factor	0.00	0.77	0.84	0.87	Max. compression	: 1310 kgf

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	3.7	2.2	1.5	0.9	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	NU-316 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	7000 h	12000 h
Lubricant amount	:	34 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	21/10/2024		1 / 2	

# LOAD PERFORMANCE CURVE

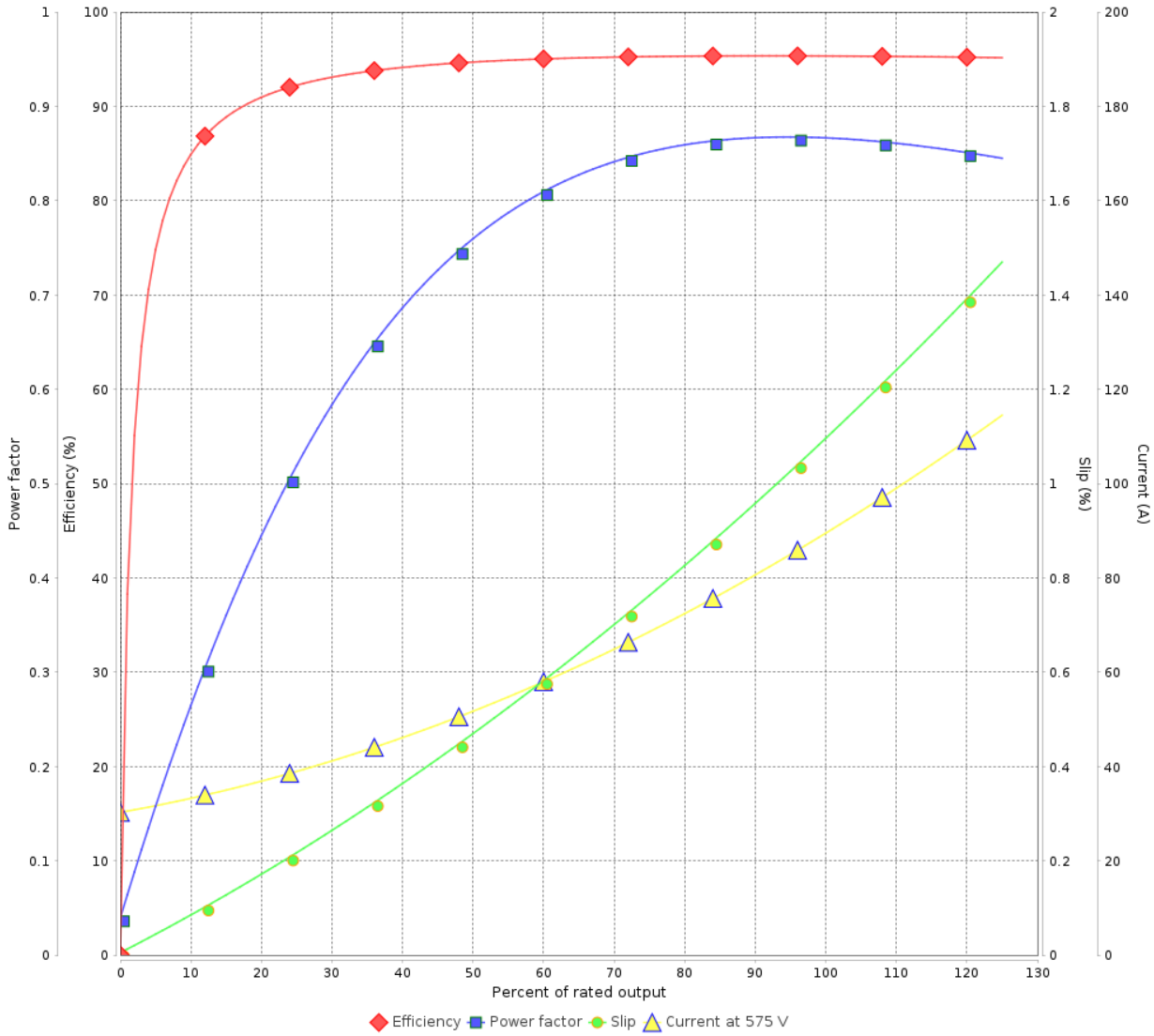
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11164525

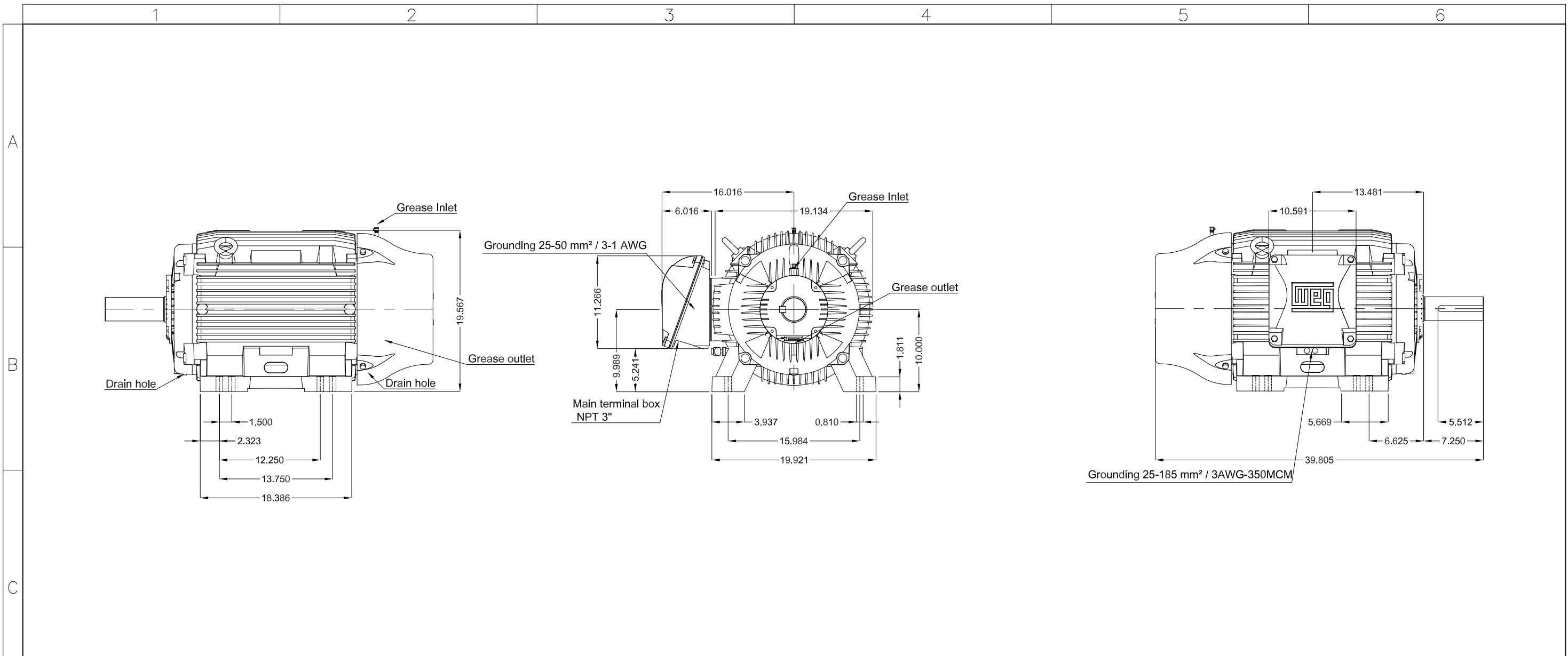
LOAD PERFORMANCE CURVE



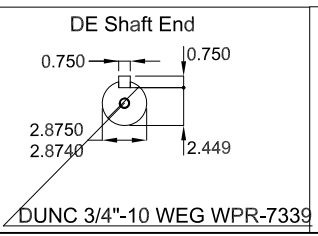
Performance : 575 V 60 Hz 4P

Rated current	: 90.4 A	Moment of inertia (J)	: 1.26 kgm <sup>2</sup>
LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 40.8 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 2	Revision
Checked by				
Date	21/10/2024			



Without vertical jackscrews				100 HP 04 Poles 60 Hz		A
DE roller bearing						
Shaft locking device						
Shaft material - AISI/SAE 4140						
Color RAL 5009						
Painting plan 203A						
Mounting B3R(D)						



ECM		LOC	SUMMARY OF MODIFICATIONS		HYBRISUSER	00
EXECUTED	HYBRISUSER		THREE PH. MOTOR W22 NEMA PREM. EFF.		EXECUTED	CHECKED
CHECKED			FRAME 404/5T IP55 TEFC		RELEASED	DATE
RELEASED					REL. DATE	VER
					PREVIEW	
					WDD 00	
					SHEET /	

Dimensions in inches

A3