

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :						
Product line : W22 NEMA Premium Efficiency Three-Phase			Product code :		12468851	
Frame	: 404/5TS			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>	: 520 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 (%)	94.6	95.0	95.0	95.4	Max. traction	: 784 kgf
Power Factor	0.51	0.77	0.84	0.87	Max. compression	: 1304 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	:	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.		
Rev.	Changes Summary			Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	13/01/2024				1 / 2	

# LOAD PERFORMANCE CURVE

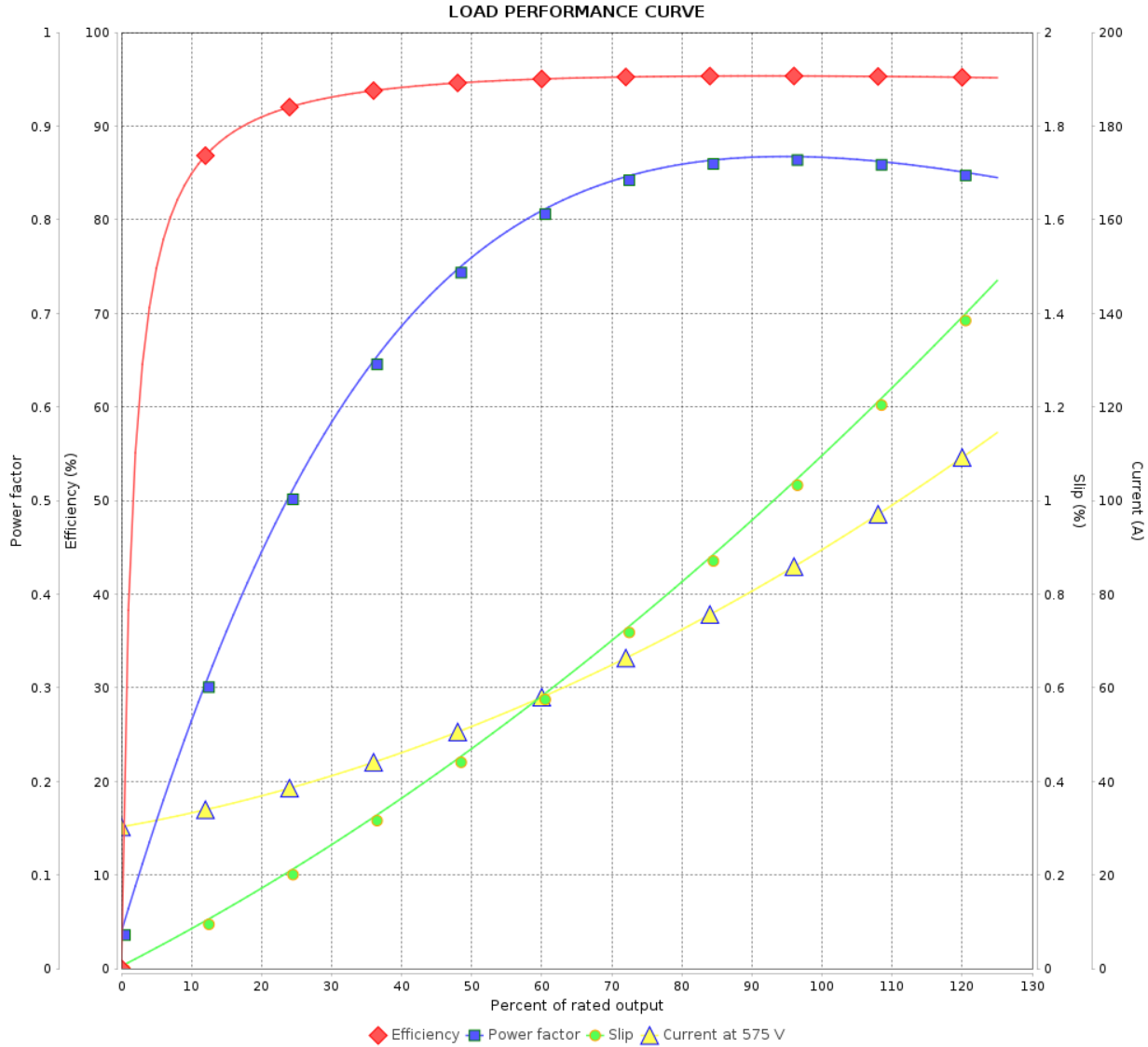
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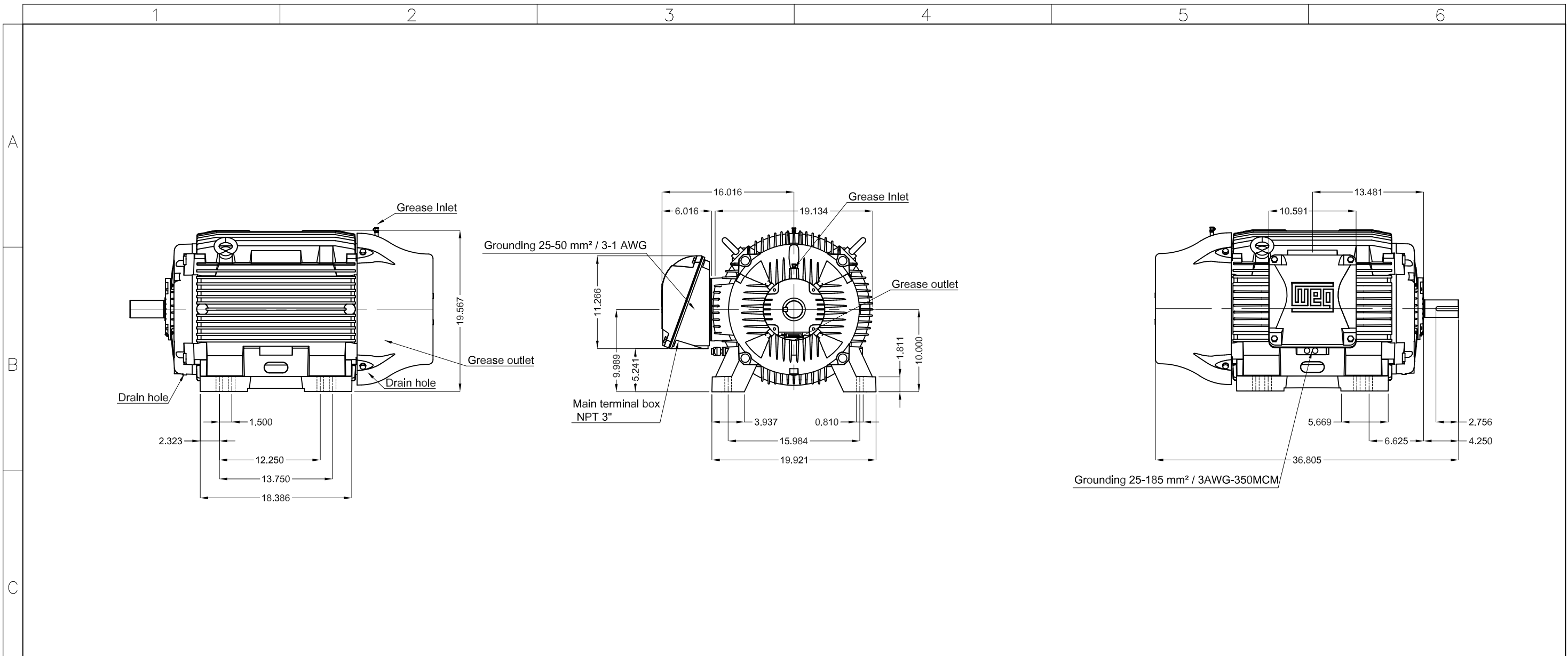


Performance : 575 V 60 Hz 4P

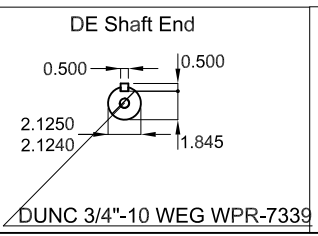
Rated current : 90.4 A  
 LRC : 7.3  
 Rated torque : 40.8 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 260 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 1.26 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
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 Service factor : 1.25  
 Temperature rise : 80 K  
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 2	Revision
Checked by				
Date	13/01/2024			



100 HP 04 Poles 60 Hz										A	
HYBRISUSER										00	
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR W22 NEMA PREM. EFF.					EXECUTED	CHECKED	RELEASED	DATE	VER
CHECKED		FRAME 404/5TS IP55 TEFC					EXECUTED	CHECKED	RELEASED	DATE	VER
RELEASED							EXECUTED	CHECKED	RELEASED	DATE	VER
REL. DATE							EXECUTED	CHECKED	RELEASED	DATE	VER



TS shaft end  
 Color RAL 5009  
 Painting plan 203A  
 Mounting B3R(D)

**PREVIEW**  
 WDD 00  
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