

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 11724525

Frame	: 444/5T	Locked rotor time	: 88s (cold) 49s (hot)
Output	: 100 HP (75 kW)	Temperature rise	: 80 K
Poles	: 6	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	: 96.7 A	Protection degree	: IP55
L. R. Amperes	: 658 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code G)	Mounting	: F-1
No load current	: 39.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1190 rpm	Noise level ²	: 70.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 61.2 kgfm	Approx. weight ³	: 947 kg
Locked rotor torque	: 229 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 3.68 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	94.1	95.0	95.0	Max. traction	: 910 kgf
Power Factor	0.66	0.76	0.82	Max. compression	: 1864 kgf

	Drive end	Non drive end
Bearing type	: 6219 C3	6316 C3
Sealing	: Oil Seal	Lip Seal
Lubrication interval	: 12202 h	12823 h
Lubricant amount	: 28 g	34 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
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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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Performed by				Page 2 / 3Revision	
Checked by					
Date	30/10/2024				

LOAD PERFORMANCE CURVE

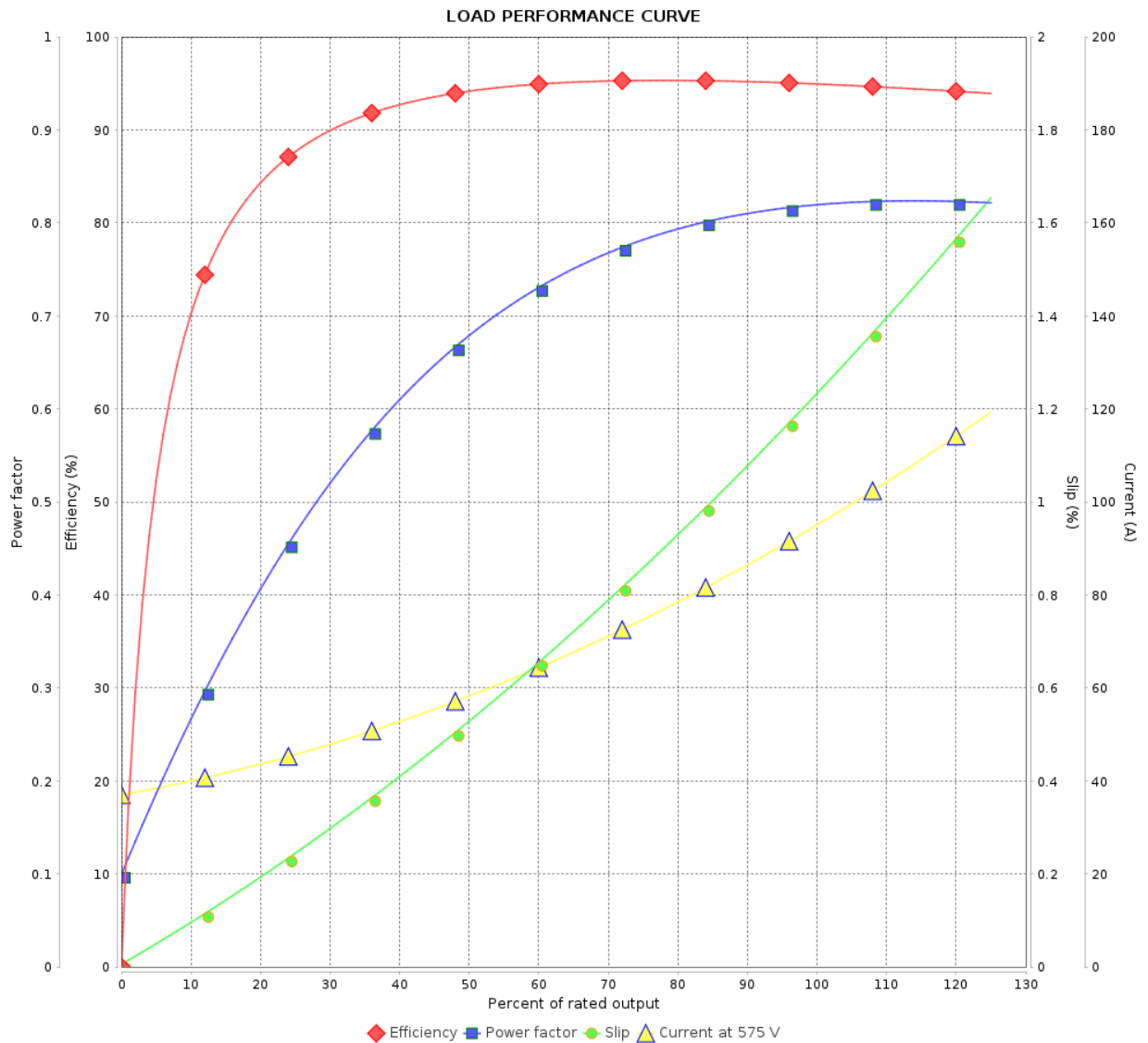
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA
Premium Efficiency Three-Phase

Product code : 11724525

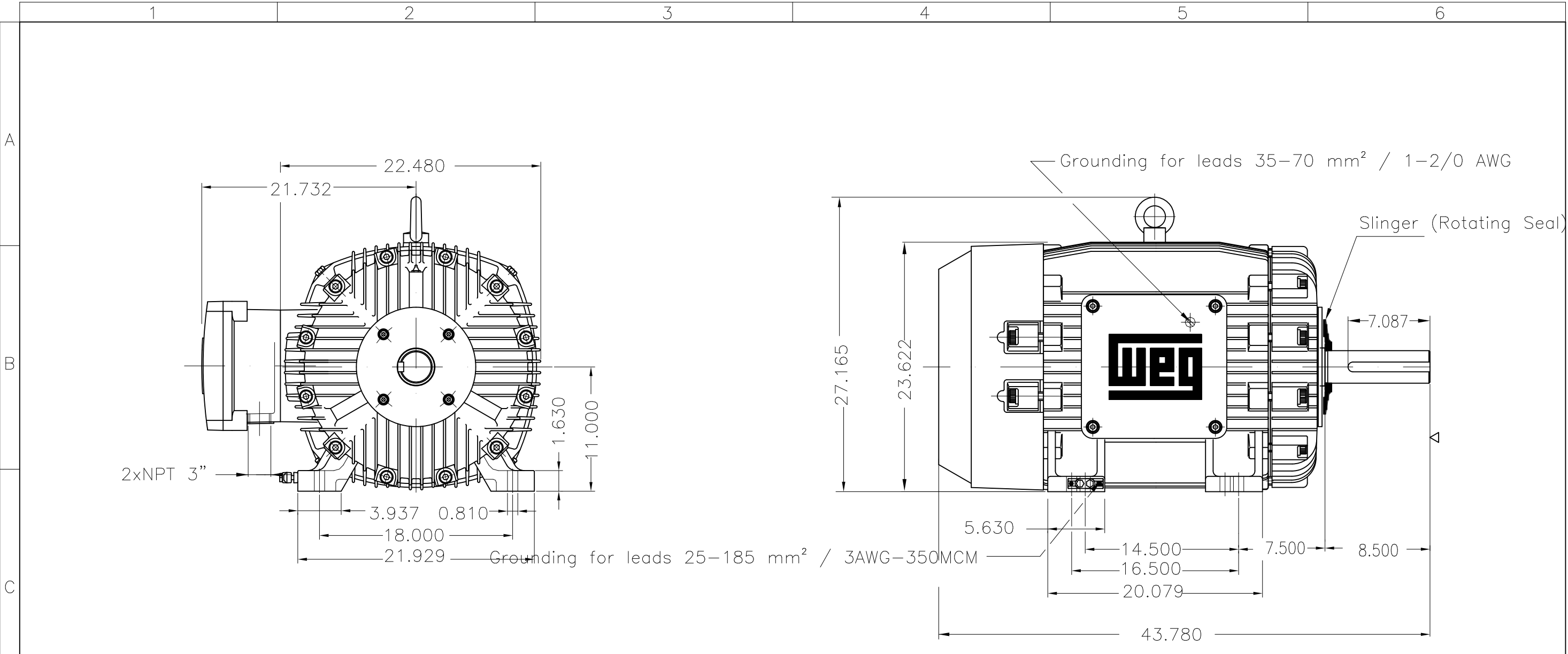


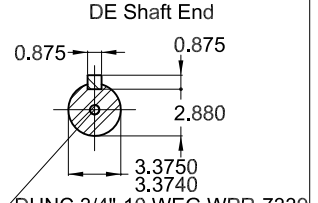
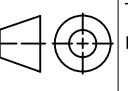
Performance : 575 V 60 Hz 6P

Rated current : 96.7 A
LRC : 6.8
Rated torque : 61.2 kgfm
Locked rotor torque : 229 %
Breakdown torque : 260 %
Rated speed : 1190 rpm

Moment of inertia (J) : 3.68 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
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Color RAL 5009 Painting plan 222P Mounting B3R(D)		 <p>DE Shaft End</p> <p>0.875 0.875 2.880 3.3750 3.3740</p> <p>DUNC 3/4"-10 WEG WPR-7339</p>		100 HP 06 Poles 60 Hz										A
				ECM	LOC	SUMMARY OF MODIFICATIONS				HYBRISUSER				00
				EXECUTED	HYBRISUSER	 <p>THREE PH. MOTOR EXPLOSION PROOF NEMA PREM. EFF. FRAME 444/5T IP55 TEFC</p>				EXECUTED	CHECKED	RELEASED	DATE	VER
				CHECKED						PREVIEW				
				RELEASED						WDD	00			
				REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1	/	1		