

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Brake Motor NEMA Premium Product code : 14138271
Efficiency Three-Phase

Frame	: 254/6TC	Locked rotor time	: 54s (cold) 30s (hot)
Output	: 20 HP (15 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	: 19.3 A	Protection degree	: IP55
L. R. Amperes	: 133 A	Cooling method	: IC411 - TEFC
LRC	: 6.9x(Code G)	Mounting	: F-1
No load current	: 7.68 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1770 rpm	Noise level ²	: 64.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 8.20 kgfm	Approx. weight ³	: 176 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1305 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.7	92.4	93.0	Max. traction	: 247 kgf
Power Factor	0.68	0.79	0.84	Max. compression	: 423 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)
7.5	6.4	5.8	3.6	2.5	1.6	1.1

	Drive end	Non drive end
Bearing type	: 6309 C3	6209 C3
Sealing	: V'Ring	Lip Seal
Lubrication interval	: 20000 h	20000 h
Lubricant amount	: 13 g	9 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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Customer :

Brake information

Voltage: 525-575 V
Brake Torque: 15.3 kgfm

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Date	27/10/2024				

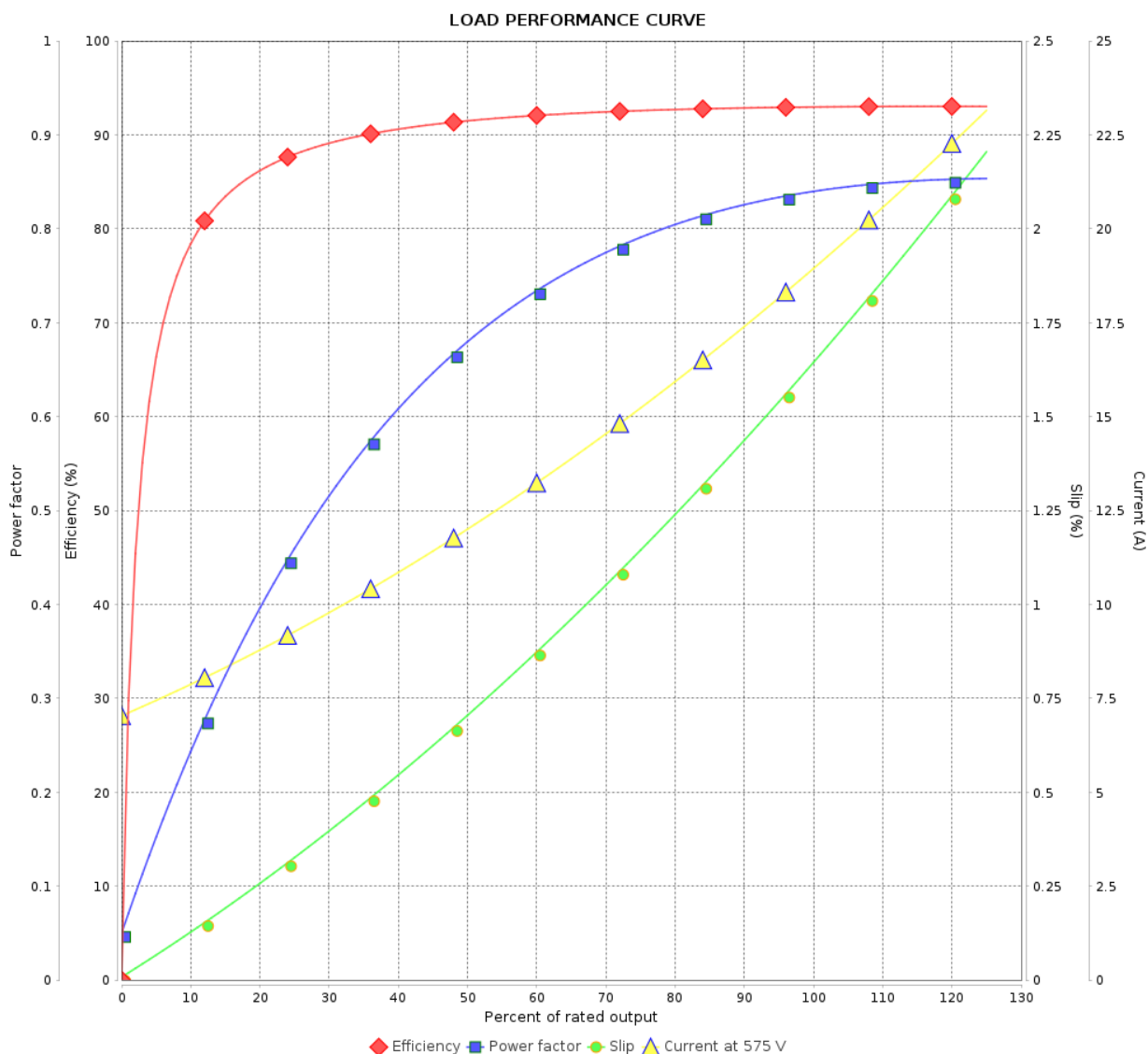
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

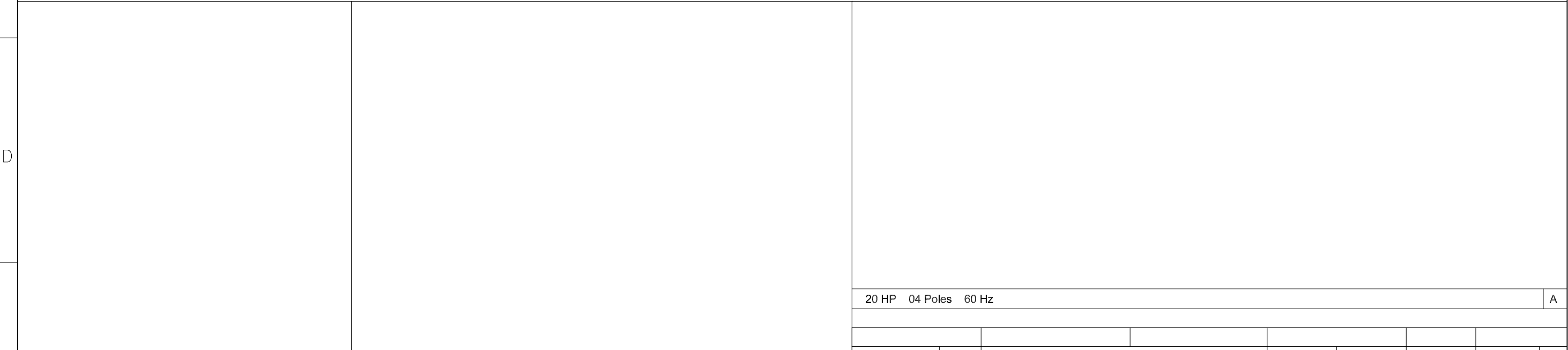
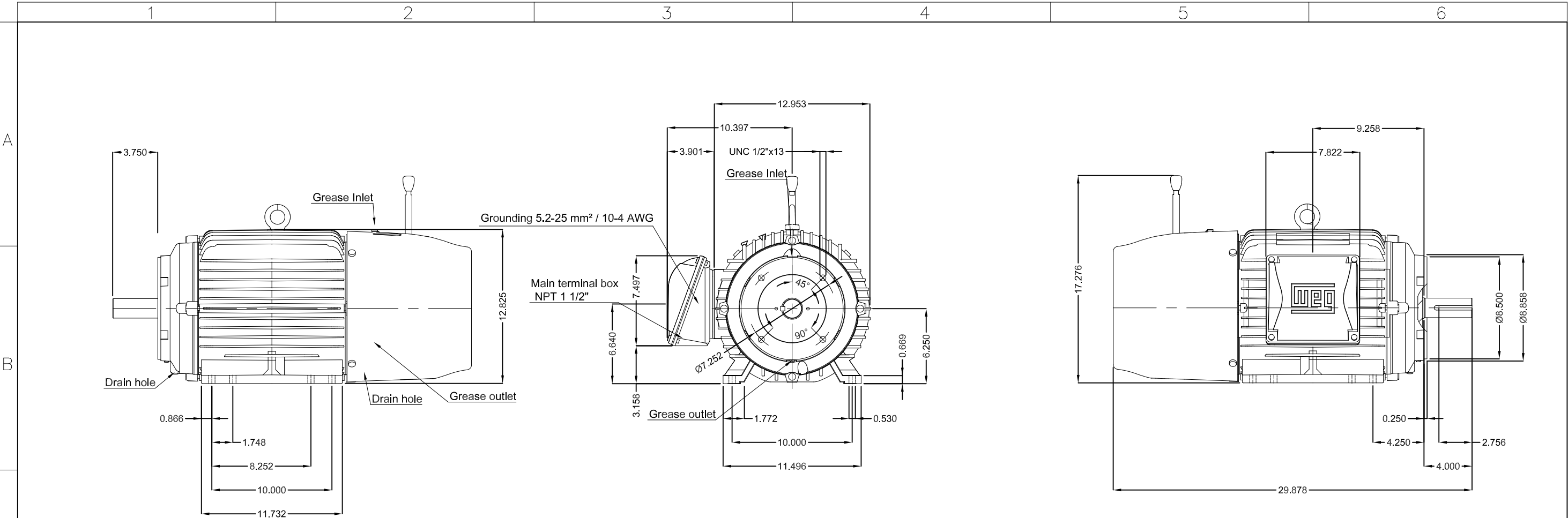
Product line : W22 Brake Motor NEMA Premium Product code : 14138271
Efficiency Three-Phase



Performance : 575 V 60 Hz 4P

Rated current	: 19.3 A	Moment of inertia (J)	: 0.1305 kgm ²
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 8.20 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

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20 HP 04 Poles 60 Hz		A	
EXECUTED		HYBRISUSER	
CHECKED		00	
RELEASED			
REL. DATE			
ECM		LOC	
EXECUTED		SUMMARY OF MODIFICATIONS	
CHECKED		EXECUTED	
RELEASED		CHECKED	
REL. DATE		RELEASED	
		DATE	
		VER	
THREE PH. MOTOR W22 BRAKE MOTOR NEMA PREM. EFF.		PREVIEW	
FRAME 254/6TC IP55 TEFC		WDD 00	
		SHEET /	
		WEQ	

Brake voltage 525-575 V
Without vertical jackscrews
Break size 18 (150 Nm)
Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B34R(D)

