

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Brake Motor NEMA Premium Product code : 14742134
Efficiency Three-Phase

Frame	: 143/5TC	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 1.5 HP (1.1 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	: 1.68 A	Protection degree	: IP55
L. R. Amperes	: 14.1 A	Cooling method	: IC411 - TEFC
LRC	: 8.4x(Code L)	Mounting	: F-1
No load current	: 0.960 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1755 rpm	Noise level ²	: 51.0 dB(A)
Slip	: 2.50 %	Starting method	: Direct On Line
Rated torque	: 0.620 kgfm	Approx. weight ³	: 27.6 kg
Locked rotor torque	: 290 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0060 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	82.5	85.5	86.5	Max. traction	: 48 kgf
Power Factor	0.54	0.67	0.76	Max. compression	: 75 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)
14.7	12.1	12.0	8.7	6.1	4.9	3.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6205 ZZ	6204 ZZ
Sealing	:	V'Ring	Lip Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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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Brake information

Voltage: 525-575 V

Brake Torque: 1.63 kgfm

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Date	14/07/2025				

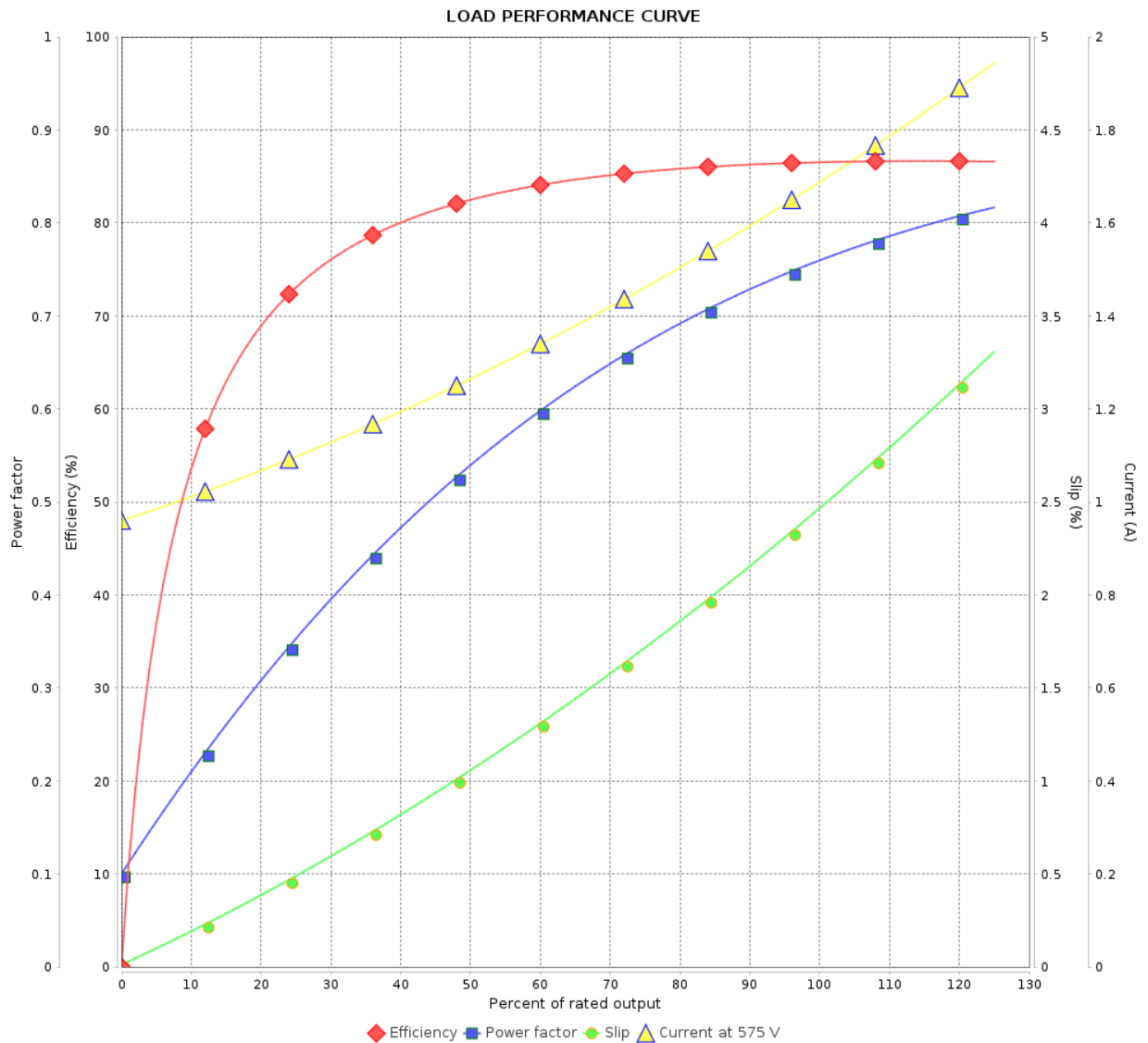
LOAD PERFORMANCE CURVE

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Customer :

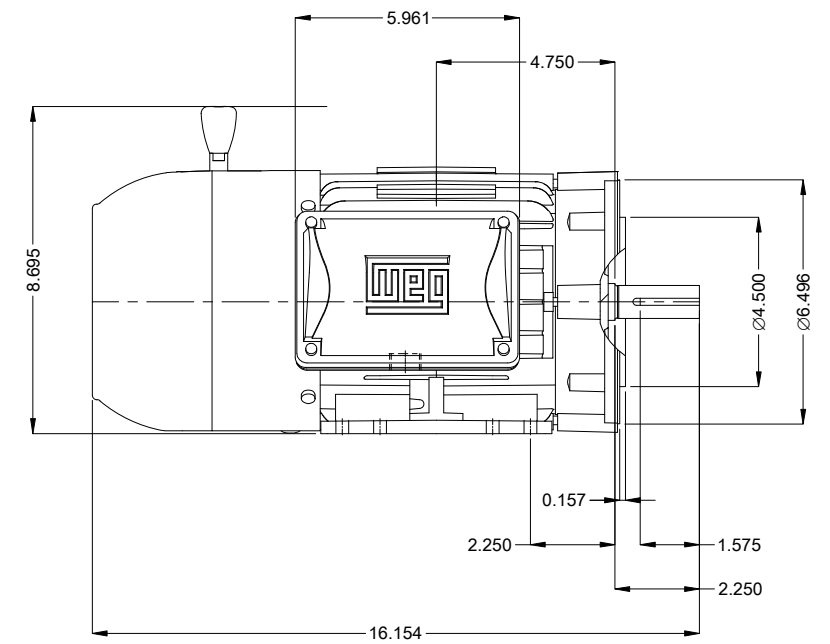
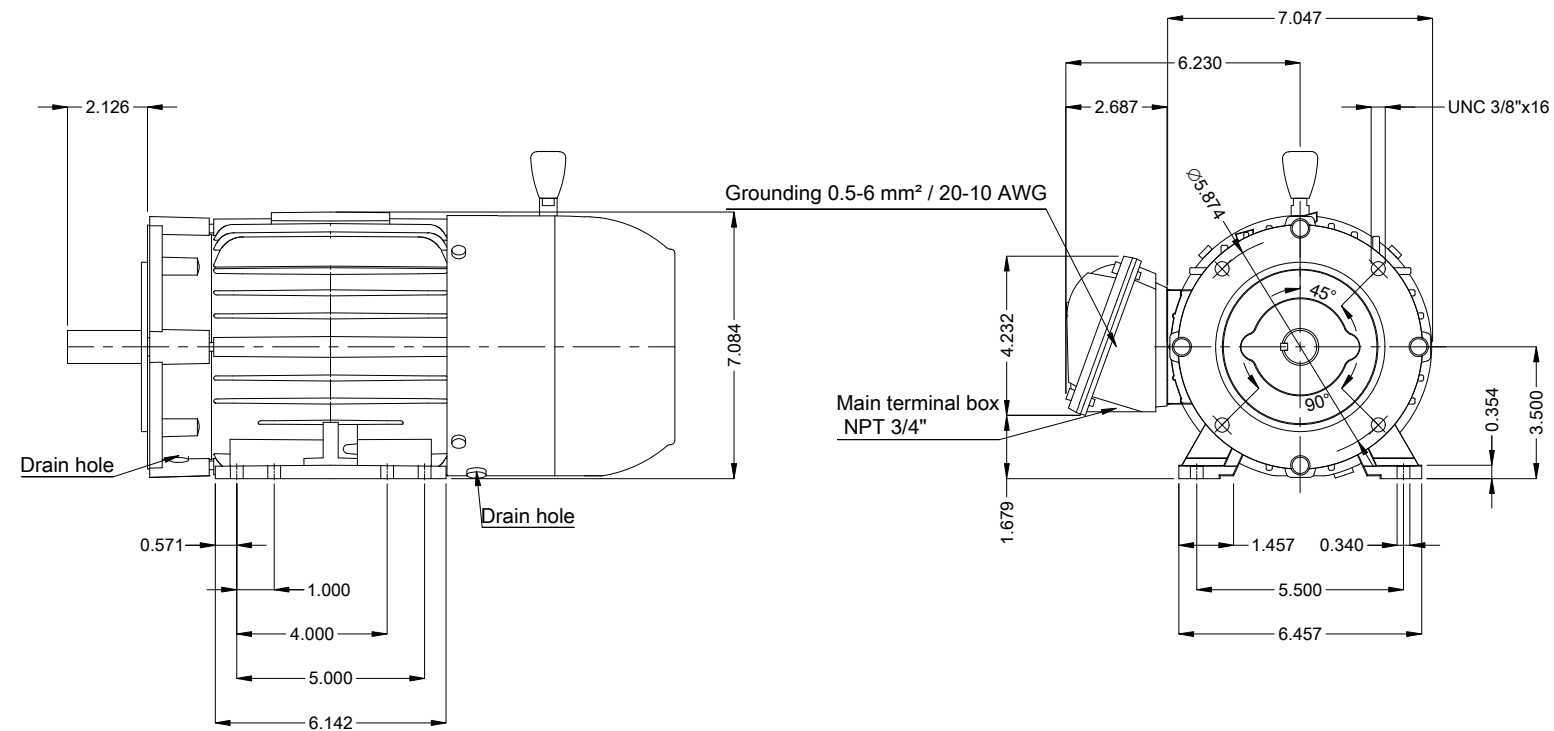
Product line : W22 Brake Motor NEMA Premium Product code : 14742134
Efficiency Three-Phase





Performance : 575 V 60 Hz 4P

Rated current	: 1.68 A	Moment of inertia (J)	: 0.0060 kgm ²
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.620 kgfm	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
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		Revision		



1.5 HP 04 Poles 60 Hz										A
						Scale 1 : 5				
						HYBRISUSER				00
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR W22 BRAKE MOTOR NEMA PREM. EFF. FRAME 143/5TC IP55 TEFC				<div> <div>PREVIEW</div> <div>WDD 00</div> </div>			
CHECKED										
RELEASED										
REL. DATE										
						SHEET		1 / 1		