

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 Brake Motor NEMA Premium Efficiency Three-Phase      Product code : 16812341

Frame	: 143/5TC	Locked rotor time	: 21s (cold) 12s (hot)
Output	: 2 HP (1.5 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 2.15 A	Protection degree	: IP55
L. R. Amperes	: 19.2 A	Cooling method	: IC411 - TEFC
LRC	: 8.9x(Code L)	Mounting	: F-1
No load current	: 0.960 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3500 rpm	Noise level <sup>2</sup>	: 68.0 dB(A)
Slip	: 2.78 %	Starting method	: Direct On Line
Rated torque	: 0.415 kgfm	Approx. weight <sup>3</sup>	: 28.2 kg
Locked rotor torque	: 270 %		
Breakdown torque	: 380 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0026 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	82.5	85.5	85.5	Max. traction	: 30 kgf
Power Factor	0.64	0.76	0.82	Max. compression	: 59 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)
15.7	12.3	11.6	8.8	5.4	3.9	2.7

		<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.

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

### Brake information

Voltage: 525-575 V  
Brake Torque: 1.63 kgfm

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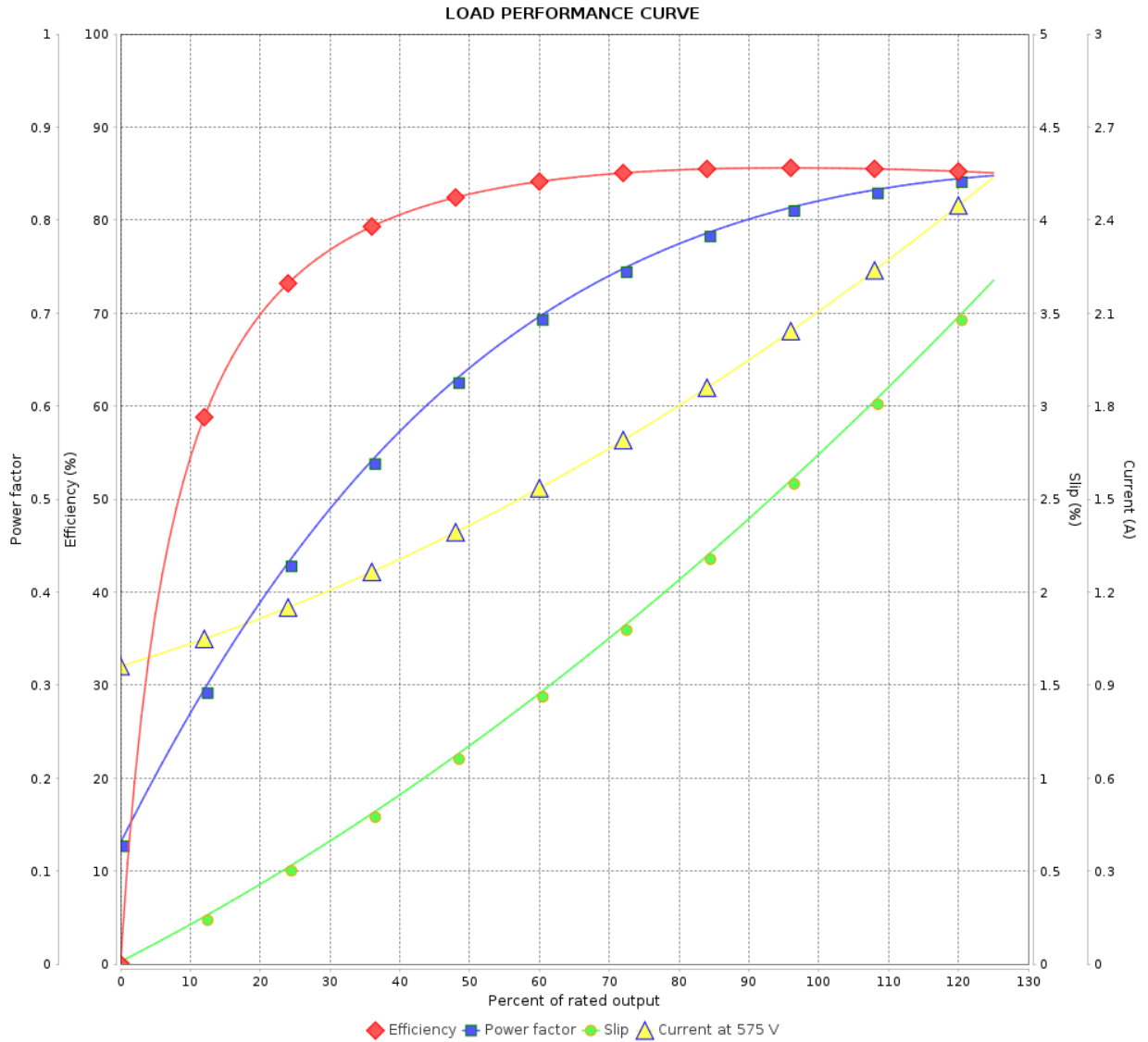
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Brake Motor NEMA Premium Efficiency Three-Phase      Product code : 16812341



Performance : 575 V 60 Hz 2P

Rated current	: 2.15 A	Moment of inertia (J)	: 0.0026 kgm <sup>2</sup>
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 0.415 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.25
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 3500 rpm	Design	: B

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