

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11944372

Frame	: 404/5TC	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	: 92.8 A	Protection degree	: IP55
L. R. Amperes	: 575 A	Cooling method	: IC411 - TEFC
LRC	: 6.2x(Code G)	Mounting	: F-1
No load current	: 25.6 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1775 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 1.39 %	Starting method	: Direct On Line
Rated torque	: 40.9 kgfm	Approx. weight ³	: 567 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 220 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 1.26 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	95.0	95.0	95.4	Max. traction	: 602 kgf
Power Factor	0.77	0.84	0.85	Max. compression	: 1169 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)
4.6	3.8	3.7	2.0	1.4	0.8	0.5

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type	: 6316 C3	: 6314 C3
Sealing	: Taconite Labyrinth	: Taconite Labyrinth
Lubrication interval	: 10000 h	: 12000 h
Lubricant amount	: 34 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.

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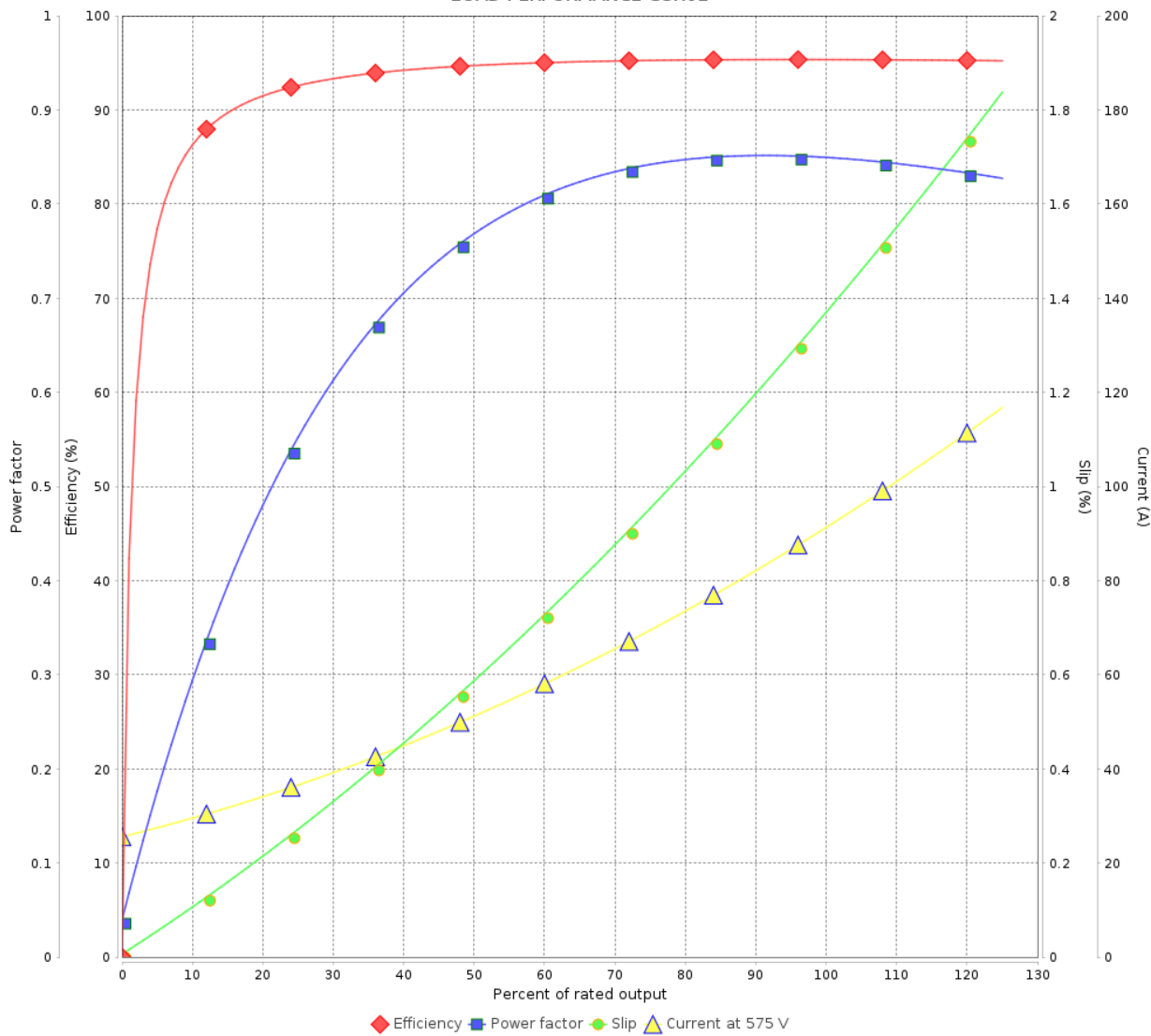
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Performance : 575 V 60 Hz 4P

Rated current	: 92.8 A	Moment of inertia (J)	: 1.26 kgm ²
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 40.9 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

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