

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



B&P Elektromotoren :

Product line : W22 IE4 Three-Phase Product code :

Frame	: 315S/M	Locked rotor time	: 82s (cold) 46s (hot)
Output	: 110 kW (150 HP)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 400/690 V	Altitude	: 1000 m.a.s.l.
Rated current	: 190/110 A	Protection degree	: IP55
L. R. Amperes	: 1521/882 A	Cooling method	: IC411 - TEFC
LRC	: 8.0	Mounting	
No load current	: 60.0/34.8 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 2980 rpm	Noise level ²	: 77.0 dB(A)
Slip	: 0.67 %	Starting method	: Direct On Line
Rated torque	: 353 Nm	Approx. weight ³	: 942 kg
Locked rotor torque	: 210 %		
Breakdown torque	: 290 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 2.34 kgm ²		
Design	: NE		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	94.0	95.5	96.0	Max. traction	: 3005 N
Power Factor	0.76	0.84	0.87	Max. compression	: 12242 N

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)
4.0	2.8	2.4	2.4	1.3	0.9	0.5

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	5000 h	5000 h
Lubricant amount	:	27 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 IEC 60034-1.

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Customer :

Thermal protection

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

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