

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line : W22 IE3 Three-Phase	Product code : 13030432			
Frame : 160M Insulation class : F Duty cycle : S1 Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : N	Cooling method : IC411 - TEFC Mounting : B5T Rotation ¹ : Both (CW and CCW) Starting method : Direct On Line Approx. weight ² : 130 kg Moment of inertia (J) : 0.0482 kgm ²			
Output [kW]	11	11	11	11
Poles	2	2	2	2
Frequency [Hz]	50	50	50	60
Rated voltage [V]	220/380	230/400	240/415	460
Rated current [A]	37.2/21.6	36.5/21.0	35.8/20.7	19.0
L. R. Amperes [A]	294/170	310/178	326/189	184
LRC [A]	7.9	8.5	9.1	9.7
No load current [A]	15.7/9.10	17.6/10.1	19.0/11.0	9.50
Rated speed [RPM]	2955	2960	2960	3565
Slip [%]	1.50	1.33	1.33	0.97
Rated torque [Nm]	35.6	35.5	35.5	29.5
Locked rotor torque [%]	270	310	330	380
Breakdown torque [%]	350	380	420	470
Service factor	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	16s (cold) 9s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	18s (cold) 10s (hot)
Noise level ²	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	72.0 dB(A)
Efficiency (%)	25%			
	50%	90.0	89.0	88.0
	75%	91.2	91.0	90.0
	100%	91.2	91.2	91.0
Power Factor	25%			
	50%	0.69	0.65	0.60
	75%	0.80	0.76	0.73
	100%	0.85	0.83	0.81
Losses at normative operating points (speed;torque), in percentage of rated output power				
Losses (%)	P1 (0,9;1,0)	9.3	9.3	9.3
	P2 (0,5;1,0)	7.7	7.7	7.7
	P3 (0,25;1,0)	7.1	7.1	7.1
	P4 (0,9;0,5)	5.1	5.1	5.1
	P5 (0,5;0,5)	3.4	3.4	3.4
	P6 (0,5;0,25)	2.4	2.4	2.4
	P7 (0,25;0,25)	1.7	1.7	1.7
Bearing type : Drive end 6309 ZZ C3 Non drive end 6209 ZZ C3 Sealing : Oil Seal Lip Seal Lubrication interval : - - Lubricant amount : - - Lubricant type : Mobil Polyrex EM	Foundation loads Max. traction : 1544 N Max. compression : 2819 N			
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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Thermal protection

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

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