

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer		: ASTRAPROM			
Product line		: W22 IE3 Three-Phase		Product code : 12868146	
Frame	: 90S	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: B5T		
Duty cycle	: S1	Rotation ¹	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight ³	: 20.5 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0055 kgm ²		
Design	: N				
Output [kW]	1.1	1.1	1.1	1.1	1.1
Poles	4	4	4	4	4
Frequency [Hz]	50	50	50	50	60
Rated voltage [V]	220/380	230/400	240/415	460	
Rated current [A]	4.18/2.42	4.16/2.39	4.08/2.36	2.07	
L. R. Amperes [A]	26.3/15.2	27.4/15.8	29.0/16.8	16.4	
LRC [A]	6.3	6.6	7.1	7.9	
No load current [A]	2.07/1.20	2.43/1.40	2.59/1.50	1.30	
Rated speed [RPM]	1435	1445	1450	1755	
Slip [%]	4.33	3.67	3.33	2.50	
Rated torque [Nm]	7.32	7.27	7.25	5.99	
Locked rotor torque [%]	210	229	250	270	
Breakdown torque [%]	240	270	300	340	
Service factor	1.00	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	30s (cold) 17s (hot)	28s (cold) 16s (hot)	27s (cold) 15s (hot)	28s (cold) 16s (hot)	
Noise level ²	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	51.0 dB(A)	
Efficiency (%)	25%				
	50%	84.0	83.0	82.0	80.0
	75%	84.1	84.1	84.1	84.0
	100%	84.1	84.1	84.1	86.5
Power Factor	25%				
	50%	0.64	0.59	0.55	0.57
	75%	0.76	0.72	0.69	0.70
	100%	0.82	0.79	0.77	0.77
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	19.1	19.1	19.1	15.8
	P2 (0,5;1,0)	18.5	18.5	18.5	15.3
	P3 (0,25;1,0)	17.2	17.2	17.2	14.2
	P4 (0,9;0,5)	8.8	8.8	8.8	7.3
	P5 (0,5;0,5)	6.9	6.9	6.9	5.7
	P6 (0,5;0,25)	4.7	4.7	4.7	3.9
	P7 (0,25;0,25)	3.7	3.7	3.7	3.0
Bearing type	: Drive end : 6205 ZZ	Non drive end : 6204 ZZ	Foundation loads		
Sealing	: Oil Seal	Lip Seal	Max. traction : 480 N		
Lubrication interval	: -	-	Max. compression : 682 N		
Lubricant amount	: -	-			
Lubricant type	: 00088				
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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