

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 IE3 Three-Phase	Product code : 13120539				
Frame : 250S/M 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 : B3T Rotation ¹ : Both (CW and CCW) Starting method : Direct On Line Approx. weight ² : 472 kg Moment of inertia (J) : 0.3736 kgm ²				
Output [kW]	55	55	55	55	
Poles	2	2	2	2	
Frequency [Hz]	50	50	50	60	
Rated voltage [V]	380/660	400/690	415	460	
Rated current [A]	101/58.0	97.9/56.7	95.4	85.8	
L. R. Amperes [A]	755/435	783/454	811	763	
LRC [A]	7.5	8.0	8.5	8.9	
No load current [A]	32.0/18.4	35.0/20.3	37.0	32.0	
Rated speed [RPM]	2963	2968	2970	3572	
Slip [%]	1.23	1.07	1.00	0.78	
Rated torque [Nm]	177	177	177	147	
Locked rotor torque [%]	260	280	310	350	
Breakdown torque [%]	290	330	360	370	
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)	16s (cold) 9s (hot)	14s (cold) 8s (hot)	18s (cold) 10s (hot)	
Noise level ²	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	79.0 dB(A)	
Efficiency (%)	25%				
	50%	93.5	93.3	93.1	
	75%	94.0	94.0	94.0	
	100%	94.3	94.3	94.4	
Power Factor	25%				
	50%	0.78	0.75	0.72	
	75%	0.85	0.83	0.81	
	100%	0.88	0.86	0.85	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	5.7	5.7	5.6	6.5
	P2 (0,5;1,0)	4.7	4.7	4.6	5.3
	P3 (0,25;1,0)	4.6	4.6	4.5	5.1
	P4 (0,9;0,5)	2.9	2.9	2.8	3.2
	P5 (0,5;0,5)	1.8	1.8	1.8	2.0
	P6 (0,5;0,25)	1.1	1.1	1.1	1.3
	P7 (0,25;0,25)	0.7	0.7	0.7	0.8
Bearing type	Drive end : 6314 C3	Non drive end : 6314 C3	Foundation loads		
Sealing	: WSeal	: WSeal	Max. traction	: 3046 N	
Lubrication interval	: 5000 h	: 5000 h	Max. compression	: 7679 N	
Lubricant amount	: 27 g	: 27 g			
Lubricant type	: Mobil Polyrex EM				
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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