

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 IE3 Three-Phase	Product code : 12863073				
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 <sup>1</sup> : Both (CW and CCW) Starting method : Direct On Line Approx. weight <sup>3</sup> : 468 kg Moment of inertia (J) : 1.05 kgm <sup>2</sup>				
Output [kW]	55	55	55	55	
Poles	4	4	4	4	
Frequency [Hz]	50	50	50	60	
Rated voltage [V]	380/660	400/690	415	460	
Rated current [A]	103/59.3	98.7/57.2	97.5	87.2	
L. R. Amperes [A]	742/427	760/441	799	741	
LRC [A]	7.2	7.7	8.2	8.5	
No load current [A]	36.0/20.7	39.0/22.6	42.0	37.0	
Rated speed [RPM]	1480	1482	1484	1785	
Slip [%]	1.33	1.20	1.07	0.83	
Rated torque [Nm]	355	355	354	294	
Locked rotor torque [%]	240	270	300	310	
Breakdown torque [%]	270	300	330	340	
Service factor	1.00	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	28s (cold) 16s (hot)	28s (cold) 16s (hot)	27s (cold) 15s (hot)	34s (cold) 19s (hot)	
Noise level <sup>2</sup>	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)	68.0 dB(A)	
Efficiency (%)	25%				
	50%	94.5	94.3	94.0	94.1
	75%	94.6	94.6	94.6	95.0
	100%	94.6	94.6	94.6	95.4
Power Factor	25%				
	50%	0.73	0.69	0.60	0.67
	75%	0.82	0.80	0.78	0.78
	100%	0.86	0.85	0.83	0.83
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	5.5	5.5	5.5	4.6
	P2 (0,5;1,0)	4.6	4.6	4.6	3.9
	P3 (0,25;1,0)	4.6	4.6	4.6	3.9
	P4 (0,9;0,5)	2.5	2.5	2.5	2.1
	P5 (0,5;0,5)	1.7	1.7	1.7	1.5
	P6 (0,5;0,25)	1.1	1.1	1.1	0.9
	P7 (0,25;0,25)	0.7	0.7	0.7	0.6
Bearing type	Drive end : 6314 C3	Non drive end : 6314 C3	Foundation loads		
Sealing	: WSeal	: WSeal	Max. traction	: 7564 N	
Lubrication interval	: 14000 h	: 14000 h	Max. compression	: 12159 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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Notes

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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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