

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 IE3 Three-Phase	Product code : 12881494				
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 : 146 kg Moment of inertia (J) : 0.1191 kgm ²				
Output [kW]	11	11	11	11	
Poles	4	4	4	4	
Frequency [Hz]	50	50	50	60	
Rated voltage [V]	220/380	230/400	240/415	460	
Rated current [A]	37.1/21.5	36.3/20.9	35.8/20.7	18.4	
L. R. Amperes [A]	260/151	291/167	304/176	156	
LRC [A]	7.0	8.0	8.5	8.5	
No load current [A]	15.5/9.00	16.5/9.50	18.2/10.5	9.20	
Rated speed [RPM]	1475	1479	1480	1780	
Slip [%]	1.67	1.40	1.33	1.11	
Rated torque [Nm]	71.3	71.1	71.0	59.0	
Locked rotor torque [%]	240	270	300	360	
Breakdown torque [%]	270	300	320	360	
Service factor	1.00	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	23s (cold) 13s (hot)	21s (cold) 12s (hot)	28s (cold) 16s (hot)	
Noise level ²	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	64.0 dB(A)	
Efficiency (%)	25%				
	50%	91.4	90.7	90.6	90.5
	75%	91.4	91.6	91.4	92.2
	100%	91.4	91.4	91.4	92.4
Power Factor	25%				
	50%	0.69	0.65	0.61	0.62
	75%	0.80	0.77	0.74	0.75
	100%	0.85	0.83	0.81	0.81
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	9.2	9.2	9.2	8.0
	P2 (0,5;1,0)	8.0	8.0	8.0	7.0
	P3 (0,25;1,0)	7.7	7.7	7.7	6.7
	P4 (0,9;0,5)	4.4	4.4	4.4	3.9
	P5 (0,5;0,5)	3.2	3.2	3.2	2.8
	P6 (0,5;0,25)	2.2	2.2	2.2	1.9
	P7 (0,25;0,25)	1.6	1.6	1.6	1.4
Bearing type	Drive end : 6309 ZZ C3	Non drive end : 6209 ZZ C3	Foundation loads		
Sealing	Oil Seal	Lip Seal	Max. traction	: 2631 N	
Lubrication interval	-	-	Max. compression	: 4063 N	
Lubricant amount	-	-			
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.		
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	29/08/2023			1 / 3	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



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Notes

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	29/08/2023		2 / 3	

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Thermal protection

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 3		Revision
Checked by				
Date	29/08/2023			