

Motor data sheet

IEC LV MOTORS

M3AA 112MB 4

Definition	Data	Unit	Remarks
Product code	3GAA112320-***K		
Voltage code	D		
Type/Frame	M3AA 112MB 4		
Design	CENELEC		
Efficiency class	IE3		Acc. to IEC 60034-30-1:2014
Rated output P_N	4	kW	
Rated voltage U_N	400	V	± 5 % (IEC 60034-1)
Rated frequency f_N	50	Hz	± 2 % (IEC 60034-1)
Rated speed n_N	1451	r/min	
Rated current I_N	8.6	A	
Starting current I_s/I_N	7.6		
Nominal torque T_N	26.3	Nm	
Locked rotor torque T_l/T_N	3.1		
Maximum torque T_b/T_N	4.1		
Efficiency - full load 100%	88.6	%	Acc. to IEC 60034-2-1
Efficiency - 75%	89.4	%	
Efficiency - 50%	89.0	%	
Power factor - full load 100%	0.77		
Bearing DE/NDE	6306-2Z/C3 6205-2Z/C3		
Sound pressure level L_{pA} dB	64	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm ²	0.02	kg-m ²	
Weight	44	kg	
Motor losses with VSD supply	Efficiency %	Losses in Watts	Relative losses %
Speed 90% Torque 100%	87.4	519	13.0
Speed 50% Torque 100%	80.4	488	12.2
Speed 90% Torque 50%	87.6	255	6.4
Speed 50% Torque 50%	83.5	198	4.9
Speed 25% Torque 100%	59.5	681	17.0
Speed 50% Torque 25%	78.8	134	3.4
Speed 25% Torque 25%	69.3	111	2.8

All data subject to tolerances in accordance with IEC. Data subject to changes.