

Motor data sheet

IEC LV MOTORS

M3AA 90LB 2

Definition	Data	Unit	Remarks
Product code	3GAA091520-***K		
Voltage code	S		
Type/Frame	M3AA 90LB 2		
Design	CENELEC		
Efficiency class	IE3		Acc. to IEC 60034-30-1:2014
Rated output P_N	1.5	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	2906	r/min	
Rated current I_N	2.8	A	
Starting current I_s/I_N	7.9		
Nominal torque T_N	4.9	Nm	
Locked rotor torque T_l/T_N	2.3		
Maximum torque T_b/T_N	3.3		
Efficiency - full load 100%	84.2	%	Acc. to IEC 60034-2-1
Efficiency - 75%	84.7	%	
Efficiency - 50%	84.6	%	
Power factor - full load 100%	0.89		
Bearing DE/NDE	6205-2Z/C3 6204-2Z/C3		
Sound pressure level L_{pA} dB	60	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2 \text{ kgm}^2$	0	kg-m ²	
Weight	17	kg	
Motor losses with VSD supply	Efficiency %	Losses in Watts	Relative losses %
Speed 90% Torque 100%	83.0	276	18.4
Speed 50% Torque 100%	75.4	245	16.3
Speed 90% Torque 50%	83.6	132	8.8
Speed 50% Torque 50%	80.7	90	6.0
Speed 25% Torque 100%	53.0	332	22.2
Speed 50% Torque 25%	76.8	57	3.8
Speed 25% Torque 25%	68.0	44	2.9

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