

# Motor data sheet

IEC LV MOTORS

## M3AA 90LC 2

Definition	Data	Unit	Remarks
Product code	3GAA091530-***K		
Voltage code	S		
Type/Frame	M3AA 90LC 2		
Design	CENELEC		
Efficiency class	IE3		Acc. to IEC 60034-30-1:2014
Rated output $P_N$	2.2	kW	
Rated voltage $U_N$	400	V	± 5 % (IEC 60034-1)
Rated frequency $f_N$	50	Hz	± 2 % (IEC 60034-1)
Rated speed $n_N$	2900	r/min	
Rated current $I_N$	4	A	
Starting current $I_s/I_N$	8.3		
Nominal torque $T_N$	7.2	Nm	
Locked rotor torque $T_l/T_N$	2.9		
Maximum torque $T_b/T_N$	3.5		
Efficiency - full load 100%	85.9	%	Acc. to IEC 60034-2-1
Efficiency - 75%	87.4	%	
Efficiency - 50%	87.5	%	
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 $J = \frac{1}{4} GD^2$ kgm <sup>2</sup>	0	kg-m <sup>2</sup>	
Weight	20	kg	
<b>Motor losses with VSD supply</b>	<b>Efficiency %</b>	<b>Losses in Watts</b>	<b>Relative losses %</b>
Speed 90% Torque 100%	84.8	355	16.1
Speed 50% Torque 100%	78.0	310	14.1
Speed 90% Torque 50%	85.3	171	7.8
Speed 50% Torque 50%	82.6	116	5.3
Speed 25% Torque 100%	48.6	582	26.4
Speed 50% Torque 25%	79.1	73	3.3
Speed 25% Torque 25%	71.2	56	2.5

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