

IEC LV MOTORS

# Motor data sheet

## M3AA 80MC 2

Definition	Data	Unit	Remarks
Product code	3GAA081330-**K		CalcId: 3GZF021008-247
Voltage code	S		
Type/Frame	M3AA 80MC 2		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output $P_N$	1.1	kW	
Rated voltage $U_N$	415	V	± 5 % (IEC 60034-1)
Rated frequency $f_N$	50	Hz	± 2 % (IEC 60034-1)
Rated speed $n_N$	2895	r/min	
Rated current $I_N$	2.3	A	
Starting current $I_S/I_N$	8.2		
Nominal torque $T_N$	3.6	Nm	
Locked rotor torque $T_l/T_N$	4		
Maximum torque $T_b/T_N$	4.55		
Efficiency - full load 100%	82.7	%	IEC 60034-2-1:2014
Efficiency - 75%	81.9	%	
Efficiency - 50%	79.5	%	
Power factor - full load 100%	0.78		
Bearing DE/NDE	6204-2Z/C3 6203-2Z/C3		
Sound pressure level $L_{pA}$ dB	56	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm <sup>2</sup>	0.001	kg-m <sup>2</sup>	
Weight	10.5	kg	
Ambient temperature	40	°C	
<b>Motor losses at VSD operating points</b>	<b>losses in efficiency %</b>	<b>losses in Watt</b>	<b>losses in relative to nom. power %</b>
VSD Speed 90% Torque 100%	81.0	232	21.1
VSD Speed 50% Torque 100%	73.7	196	17.8
VSD Speed 25% Torque 100%	45.8	325	29.6
VSD Speed 90% Torque 50%	77.8	141	12.8
VSD Speed 50% Torque 50%	72.8	103	9.3
VSD Speed 50% Torque 25%	62.5	82	7.5
VSD Speed 25% Torque 25%	50.7	67	6.1