

IEC LV MOTORS

Motor data sheet

M3AA 225SMA 4

Definition	Data	Unit	Remarks
Product code	3GAA222210-**K		CalcId: 3GZF021022-1124
Voltage code	D		
Type/Frame	M3AA 225SMA 4		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P_N	37	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	1482	r/min	
Rated current I_N	69	A	
Starting current I_S/I_N	8.5		
Nominal torque T_N	235.2	Nm	
Locked rotor torque T_l/T_N	3.62		
Maximum torque T_b/T_N	3.72		
Efficiency - full load 100%	93.9	%	IEC 60034-2-1:2014
Efficiency - 75%	94.0	%	
Efficiency - 50%	93.2	%	
Power factor - full load 100%	0.8		
Bearing DE/NDE	6313-2Z/C3 6212-2Z/C3		
Sound pressure level L_{pA} dB		dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm ²	0.43	kg-m ²	
Weight	315	kg	
Ambient temperature	40	°C	
Motor losses at VSD operating points	losses in efficiency %	losses in Watt	losses in relative to nom. power %
VSD Speed 90% Torque 100%	93.3	2391	6.5
VSD Speed 50% Torque 100%	90.5	1942	5.2
VSD Speed 25% Torque 100%	83.7	1801	4.9
VSD Speed 90% Torque 50%	92.3	1389	3.8
VSD Speed 50% Torque 50%	90.6	960	2.6
VSD Speed 50% Torque 25%	86.9	697	1.9
VSD Speed 25% Torque 25%	81.3	532	1.4