

IEC LV MOTORS

Motor data sheet

M3AA 250SMA 4

Definition	Data	Unit	Remarks
Product code	3GAA252210-**K		CalcId: 3GZF021025-206
Voltage code	D		
Type/Frame	M3AA 250SMA 4		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P_N	55	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	1486	r/min	
Rated current I_N	95.2	A	
Starting current I_S/I_N	8.5		
Nominal torque T_N	353	Nm	
Locked rotor torque T_l/T_N	3.2		
Maximum torque T_b/T_N	3.6		
Efficiency - full load 100%	94.6	%	IEC 60034-2-1:2014
Efficiency - 75%	94.9	%	
Efficiency - 50%	94.6	%	
Power factor - full load 100%	0.84		
Bearing DE/NDE	6315-2Z/C3 6213-2Z/C3		
Sound pressure level L_{pA} dB	67	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm ²	0.93	kg-m ²	
Weight	376	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%	94.0	3160	5.7
VSD Speed 50% Torque 100%	91.8	2456	4.5
VSD Speed 25% Torque 100%	85.6	2313	4.2
VSD Speed 90% Torque 50%	92.9	1892	3.4
VSD Speed 50% Torque 50%	91.7	1244	2.3
VSD Speed 50% Torque 25%	88.1	929	1.7
VSD Speed 25% Torque 25%	83.0	704	1.3