

IEC LV MOTORS

Motor data sheet

M3AA 100LF 4

Definition	Data	Unit	Remarks
Product code	3GAA102560-**K		CalcId: 3GZF021010-1147
Voltage code	D		
Type/Frame	M3AA 100LF 4		
Design	BASIC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P_N	3	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	1452	r/min	
Rated current I_N	5.9	A	
Starting current I_S/I_N	9		
Nominal torque T_N	19.7	Nm	
Locked rotor torque T_l/T_N	3.5		
Maximum torque T_b/T_N	4.2		
Efficiency - full load 100%	87.7	%	IEC 60034-2-1:2014
Efficiency - 75%	88.1	%	
Efficiency - 50%	87.1	%	
Power factor - full load 100%	0.83		
Bearing DE/NDE	6306-2Z/C3 6205-2Z/C3		
Sound pressure level L_{pA} dB	54	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm ²	0.014	kg-m ²	
Weight	36	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%	86.2	432	14.4
VSD Speed 50% Torque 100%	78.4	413	13.8
VSD Speed 25% Torque 100%	58.5	532	17.7
VSD Speed 90% Torque 50%	86.4	212	7.1
VSD Speed 50% Torque 50%	81.2	174	5.8
VSD Speed 50% Torque 25%	75.8	120	4.0
VSD Speed 25% Torque 25%	64.2	105	3.5