

IEC LV MOTORS

Motor data sheet

M3AA 160MLB 2

Definition	Data	Unit	Remarks
Product code	3GAA161420-**K		CalcId: 3GZF021016-1069
Voltage code	D		
Type/Frame	M3AA 160MLB 2		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P_N	15	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	2960	r/min	
Rated current I_N	26.6	A	
Starting current I_S/I_N	8.7		
Nominal torque T_N	48.4	Nm	
Locked rotor torque T_l/T_N	3.1		
Maximum torque T_b/T_N	4.1		
Efficiency - full load 100%	91.9	%	IEC 60034-2-1:2014
Efficiency - 75%	92.0	%	
Efficiency - 50%	91.4	%	
Power factor - full load 100%	0.86		
Bearing DE/NDE	6309-2Z/C3 6209-2Z/C3		
Sound pressure level L_{pA} dB	69.4	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm ²	0.063	kg-m ²	
Weight	123	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%	91.2	1303	8.7
VSD Speed 50% Torque 100%	87.8	1042	6.9
VSD Speed 25% Torque 100%	78.8	1009	6.7
VSD Speed 90% Torque 50%	90.1	742	4.9
VSD Speed 50% Torque 50%	88.6	482	3.2
VSD Speed 50% Torque 25%	84.6	341	2.3
VSD Speed 25% Torque 25%	79.1	248	1.7