

IEC LV MOTORS

Motor data sheet

M2BAX 100LKA 4

Definition	Data	Unit	Remarks
Product code	3GBA102810-**D		CalcId: 3GZC021010-160
Voltage code	S		
Type/Frame	M2BAX 100LKA 4		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P_N	3	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	1445	r/min	
Rated current I_N	5.95	A	
Starting current I_S/I_N	8.8		
Nominal torque T_N	19.83	Nm	
Locked rotor torque T_l/T_N	3.27		
Maximum torque T_b/T_N	4.15		
Efficiency - full load 100%	87.7	%	IEC 60034-2-1:2014
Efficiency - 75%	87.7	%	
Efficiency - 50%	86.7	%	
Power factor - full load 100%	0.8		
Bearing DE/NDE	6206-2Z/C3 6205-2Z/C3		
Sound pressure level L_{pA} dB	57	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm ²	0.012	kg-m ²	
Weight	41	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%	78.2	418	13.9
VSD Speed 25% Torque 100%	56.0	589	19.6
VSD Speed 90% Torque 50%	85.8	223	7.4
VSD Speed 50% Torque 50%	80.2	185	6.2
VSD Speed 50% Torque 25%	73.7	134	4.5
VSD Speed 25% Torque 25%	61.7	116	3.9