

IEC LV MOTORS

Motor data sheet

M2BAX 90SB 2

Definition	Data	Unit	Remarks
Product code	3GBA091120-**D		CalcId: 3GZC021009-232
Voltage code	D		
Type/Frame	M2BAX 90SB 2		
Design	BASIC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P_N	1.5	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	2904	r/min	
Rated current I_N	2.92	A	
Starting current I_S/I_N	8.3		
Nominal torque T_N	4.93	Nm	
Locked rotor torque T_l/T_N	2.8		
Maximum torque T_b/T_N	3.7		
Efficiency - full load 100%	84.2	%	IEC 60034-2-1:2014
Efficiency - 75%	84.9	%	
Efficiency - 50%	83.7	%	
Power factor - full load 100%	0.88		
Bearing DE/NDE	6205-2Z/C3 6204-2Z/C3		
Sound pressure level L_{pA} dB	54	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm ²	0.0023	kg-m ²	
Weight	23	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%	82.8	280	18.7
VSD Speed 50% Torque 100%	74.3	259	17.3
VSD Speed 25% Torque 100%	56.0	295	19.6
VSD Speed 90% Torque 50%	81.8	150	10.0
VSD Speed 50% Torque 50%	78.0	106	7.1
VSD Speed 50% Torque 25%	71.9	73	4.9
VSD Speed 25% Torque 25%	63.2	55	3.6