

IEC LV MOTORS

Motor data sheet

M2BAX 90SB 4

Definition	Data	Unit	Remarks
Product code	3GBA092120-**D		CalcId: 3GZC021009-194
Voltage code	S		
Type/Frame	M2BAX 90SB 4		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P_N	1.1	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	1439	r/min	
Rated current I_N	2.56	A	
Starting current I_S/I_N	7.3		
Nominal torque T_N	7.3	Nm	
Locked rotor torque T_l/T_N	3.8		
Maximum torque T_b/T_N	4.3		
Efficiency - full load 100%	84.1	%	IEC 60034-2-1:2014
Efficiency - 75%	83.1	%	
Efficiency - 50%	81.0	%	
Power factor - full load 100%	0.71		
Bearing DE/NDE	6205-2Z/C3 6204-2Z/C3		
Sound pressure level L_{pA} dB	48	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm ²	0.0039	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%	82.4	212	19.2
VSD Speed 50% Torque 100%	73.7	196	17.8
VSD Speed 25% Torque 100%	50.7	267	24.3
VSD Speed 90% Torque 50%	79.0	132	12.0
VSD Speed 50% Torque 50%	71.8	108	9.8
VSD Speed 50% Torque 25%	60.6	89	8.1
VSD Speed 25% Torque 25%	47.3	77	7.0