

IEC LV MOTORS

# Motor data sheet

## M2BAX 315SMB 4

For ordering purposes within selected meps, please add , Restamping voltage, frequency and output, continuous duty

Definition	Data	Unit	Remarks
Product code	3GBA312220-**M		CalcId: 3GZF021031-527
Voltage code	D		
Type/Frame	M2BAX 315SMB 4		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output $P_N$	110	kW	
Rated voltage $U_N$	415	V	± 10 %
Rated frequency $f_N$	50	Hz	± 5 %
Rated speed $n_N$	1490	r/min	
Rated current $I_N$	196	A	
Starting current $I_S/I_N$	7.7		
Nominal torque $T_N$	705	Nm	
Locked rotor torque $T_l/T_N$	2.1		
Maximum torque $T_b/T_N$	3		
Efficiency - full load 100%	95.4	%	IEC 60034-2-1:2014
Efficiency - 75%	95.4	%	
Efficiency - 50%	94.4	%	
Power factor - full load 100%	0.82		
Bearing DE/NDE	6219/C3 6217/C3		
Sound pressure level $L_{pA}$ dB	85	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm <sup>2</sup>	2.4	kg-m <sup>2</sup>	
Weight	823	kg	
Ambient temperature	50	°C	
<b>Motor losses at VSD operating points</b>	<b>losses in efficiency %</b>	<b>losses in Watt</b>	<b>losses in relative to nom. power %</b>
VSD Speed 90% Torque 100%	94.9	5320	4.8
VSD Speed 50% Torque 100%	93.3	3950	3.6
VSD Speed 25% Torque 100%	89.0	3399	3.1
VSD Speed 90% Torque 50%	93.7	3328	3.0
VSD Speed 50% Torque 50%	92.9	2102	1.9
VSD Speed 50% Torque 25%	89.6	1596	1.5
VSD Speed 25% Torque 25%	85.5	1166	1.1