

IEC LV MOTORS

# Motor data sheet

## M2BAX 250SMA 4

Definition	Data	Unit	Remarks
Product code	3GBA252210-**F		CalcId: 3GZC021025-22
Voltage code	D		
Type/Frame	M2BAX 250SMA 4		
Design	BASIC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P <sub>N</sub>	55	kW	
Rated voltage U <sub>N</sub>	400	V	± 5 % (IEC 60034-1)
Rated frequency f <sub>N</sub>	50	Hz	± 2 % (IEC 60034-1)
Rated speed n <sub>N</sub>	1479	r/min	
Rated current I <sub>N</sub>	102	A	
Starting current I <sub>S</sub> /I <sub>N</sub>	10.1		
Nominal torque T <sub>N</sub>	351.77	Nm	
Locked rotor torque T <sub>l</sub> /T <sub>N</sub>	4.35		
Maximum torque T <sub>b</sub> /T <sub>N</sub>	3.43		
Efficiency - full load 100%	94.6	%	IEC 60034-2-1:2014
Efficiency - 75%	94.7	%	
Efficiency - 50%	93.9	%	
Power factor - full load 100%	0.83		
Bearing DE/NDE	6215-2Z/C3 6212-2Z/C3		
Sound pressure level L <sub>pA</sub> dB	74.3	dB(A)	+3dB(A)
Moment of inertia J = ¼ GD <sup>2</sup> kgm <sup>2</sup>	0.62	kg-m <sup>2</sup>	
Weight	386	kg	
Ambient temperature	40	°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%	94.1	3104	5.6
VSD Speed 50% Torque 100%	91.8	2456	4.5
VSD Speed 25% Torque 100%	85.9	2257	4.1
VSD Speed 90% Torque 50%	93.5	1721	3.1
VSD Speed 50% Torque 50%	92.4	1131	2.1
VSD Speed 50% Torque 25%	89.9	772	1.4
VSD Speed 25% Torque 25%	85.9	564	1.0