



PRODUCT-DETAILS

3GAA221210-BSG

IE2 High Efficiency Aluminum Motors, 45 kW,
400 V (3GAA221210-BSG)



General Information

Product ID	3GAA221210-BSG
ABB Type Designation	M3AA 225SMA 2
Catalog Description	IE2 High Efficiency Aluminum Motors, 45 kW, 400 V (3GAA221210-BSG)

Ordering

ABB Type Designation	M3AA 225SMA 2
Invoice Description	M3AA 225SMA 2
Product Name	3-Phase squirrel cage motor
Product Type	3AA2_M3AA_IE2_AA
Made To Order	No
Minimum Order Quantity	1 piece
Order Multiple	1 piece
Selling Unit of Measure	piece
Country of Origin	Finland (FI) Poland (PL)
Customs Tariff Number	85015290
Replaced Product ID (OLD)	3GAA221061-BSA 3GAA221031-BSG
Medium Description	45kW, 2 Poles, Frame Size 225, 3 Phases, 400V, 50Hz, IP55 Enclosure, IMB5/IM3001 Mounting (3GAA221210-BSG)
Short Description	45kW, 2P, Frame Size 225, 3PH, 400V, 50Hz, IP55, IMB5/IM3001

Electrical

Electrical Data											
Conn	Temp Class	Freq	Voltage	Power	Speed	Current	Power Factor	Efficiency	Torque	IS/IN	
Y	--	50 Hz	400 V	45.00 kW	2961 r/min	78.80 A	0.880	93.60 %	145.00 N·m	6.70	
D	--	50 Hz	230 V	45.00 kW	2961 r/min	139.00 A	0.880	93.60 %	145.00 N·m	6.70	
Y	--	50 Hz	415 V	45.00 kW	2964 r/min	76.70 A	0.870	93.70 %	145.00 N·m	7.10	
Y	--	60 Hz	440 V	45.00 kW	3562 r/min	71.10 A	0.890	93.30 %	120.00 N·m	7.10	
Y	--	60 Hz	460 V	45.00 kW	3566 r/min	69.70 A	0.880	93.50 %	120.00 N·m	7.70	
Connection Configuration										Y	
Temperature Class Default										--	
Input Voltage (U _{in})										400 V	
Frequency (f)										50 Hz	
Output Power										45 kW	
Altitude										1000 m	
Ambient Temperature										40 °C	
IC Class										IC411	
IE Class Data (50 Hz)										IE Class IE2 Full Load (100%) 93.6 % Partial Load (75%) 93.9 % Partial Load (50%) 93.1 %	
IE Class Data (60 Hz)										IE Class IE2 Full Load (100%) 93.3 % Partial Load (75%) 93.1 % Partial Load (50%) 91.9 %	
IP Class										IP55	
Insulation Class										ICLF	
Direction of Rotation										Both sides	
Number of Poles (High)										2	
Two Speed Motor										No	
Type of Duty										S1	
Voltage Code										S	

Mechanical

Frame Material	Aluminum
Frame Size	225
Bearing	6313-2Z/C3
Bearing NDE	6212-2Z/C3
IM Class	IMB5 IM3001
Terminator Box Location	D-End top

Dimensions

Package Level 1 Units	0 pallet (lift)
Product Net Depth / Length	850 mm
Product Net Height	547 mm
Product Net Width	425 mm
Product Net Weight	263 kg
Gross Weight	273 kg

Environmental	
WEEE Category	4. Large Equipment (Any External Dimension More Than 50 cm)
SCIP	27ac6190-e1ce-4080-8654-6552aaabbe58 Finland (FI)

Classifications	
UNSPSC	26101100

Categories	
Motors and Generators → IEC Low Voltage AC Motors → Process Performance Motors → IE2 High Efficiency Aluminum Motors	

