



PRODUCT-DETAILS

3GAA221210-BDK

IE3 Premium Efficiency Aluminum Motors, 45 kW, 400 V (3GAA221210-BDK)



General Information	
Product ID	3GAA221210-BDK
ABB Type Designation	M3AA 225SMA 2
Catalog Description	IE3 Premium Efficiency Aluminum Motors, 45 kW, 400 V (3GAA221210-BDK)

Ordering	
ABB Type Designation	M3AA 225SMA 2
Invoice Description	M3AA 225SMA 2
Product Name	3-Phase squirrel cage motor
Product Type	3AA3_M3AA_IE3_AA
Made To Order	No
Minimum Order Quantity	1 piece
Order Multiple	1 piece
Selling Unit of Measure	piece
Country of Origin	Poland (PL) Finland (FI)
Customs Tariff Number	85015290
Replaced Product ID (OLD)	3GAA221051-BDK
Stocked At (Warehouses)	Menden, Germany

Medium Description	45kW, 2 Poles, Frame Size 225, 3 Phases, 400V, 50Hz, IP55 Enclosure, IMB5/IM3001 Mounting (3GAA221210-BDK)
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	690 V	45.00 kW	2968 r/min	46.00 A	0.870	94.00 %	144.80 N·m	7.30
D	--	50 Hz	400 V	45.00 kW	2968 r/min	79.60 A	0.870	94.00 %	144.80 N·m	7.30
Y	--	50 Hz	660 V	45.00 kW	2965 r/min	47.70 A	0.880	94.00 %	144.80 N·m	6.60
D	--	50 Hz	380 V	45.00 kW	2965 r/min	83.20 A	0.880	94.00 %	144.80 N·m	6.60
D	--	50 Hz	415 V	45.00 kW	2970 r/min	78.30 A	0.850	94.00 %	144.69 N·m	7.70
D	--	60 Hz	460 V	45.00 kW	3570 r/min	67.40 A	0.890	93.60 %	120.41 N·m	7.80

Connection Configuration	D
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 IE3 Full Load (100%) 94.0 % Partial Load (75%) 93.9 % Partial Load (50%) 92.8 %
IE Class Data (60 Hz)	IE Class IE3 Full Load (100%) 93.6 % Partial Load (75%) 93.1 % Partial Load (50%) 91.5 %
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	D

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	553 mm
Product Net Width	418 mm
Product Net Weight	326 kg
Gross Weight	336 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 → IE3 Premium Efficiency Aluminum Motors

