

PRODUCT-DETAILS

# 3GAA281220-BDG

## IE2 High Efficiency Aluminum Motors, 90 kW, 400 V (3GAA281220-BDG)



General Information	
Product ID	3GAA281220-BDG
ABB Type Designation	M3AA 280SMB 2
Catalog Description	IE2 High Efficiency Aluminum Motors, 90 kW, 400 V (3GAA281220-BDG)

Ordering	
ABB Type Designation	M3AA 280SMB 2
Invoice Description	M3AA 280SMB 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)
Customs Tariff Number	85015381
Replaced Product ID (OLD)	3GAA281032-BDG
Medium Description	90kW, 2 Poles, Frame Size 280, 3 Phases, 400V, 50Hz, IP55 Enclosure, IMB5/IM3001 Mounting (3GAA281220-BDG)
Short Description	90kW, 2P, Frame Size 280, 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	90.00 kW	2971 r/min	88.70 A	0.890	94.90 %	289.00 N·m	7.80	
D	--	50 Hz	400 V	90.00 kW	2971 r/min	153.00 A	0.890	94.90 %	289.00 N·m	7.80	
D	--	50 Hz	415 V	90.00 kW	2974 r/min	149.00 A	0.880	95.00 %	289.00 N·m	8.40	
D	--	60 Hz	440 V	90.00 kW	3573 r/min	138.00 A	0.900	94.70 %	240.00 N·m	8.20	
D	--	60 Hz	460 V	90.00 kW	3575 r/min	133.00 A	0.890	94.90 %	240.00 N·m	8.90	
Connection Configuration										D	
Temperature Class Default										--	
Input Voltage (U <sub>in</sub> )										400 V	
Frequency (f)										50 Hz	
Output Power										90 kW	
Altitude										1000 m	
Ambient Temperature										40 °C	
IC Class										IC411	
IE Class Data (50 Hz)										IE Class IE2 Full Load (100%) 94.9 % Partial Load (75%) 95.2 % Partial Load (50%) 94.7 %	
IE Class Data (60 Hz)										IE Class IE2 Full Load (100%) 94.7 % Partial Load (75%) 94.7 % Partial Load (50%) 93.8 %	
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										280	
Bearing										6315/C3	
Bearing NDE										6213/C3	
IM Class										IMB5 IM3001	
Terminator Box Location										D-End top	
Dimensions											
Package Level 1 Units										0 pallet (lift)	
Product Net Depth /										884 mm	

Length	
Product Net Height	657 mm
Product Net Width	522 mm
Product Net Weight	425 kg
Gross Weight	445 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
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Categories

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

