



PRODUCT-DETAILS

3GAA161440-BDK

IE3 Premium Efficiency Aluminum Motors, 22 kW, 400 V (3GAA161440-BDK)



General Information

Product ID	3GAA161440-BDK
ABB Type Designation	M3AA 160MLD 2
Catalog Description	IE3 Premium Efficiency Aluminum Motors, 22 kW, 400 V (3GAA161440-BDK)

Ordering

ABB Type Designation	M3AA 160MLD 2
Invoice Description	M3AA 160MLD 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	Finland (FI) China (CN) Poland (PL)
Customs Tariff Number	85015230
Replaced Product ID (OLD)	3GAA161054-BDK
Stocked At (Warehouses)	Menden, Germany
Medium Description	22kW, 2 Poles, Frame Size 160, 3 Phases, 400V, 50Hz, IP55 Enclosure, IMB5/IM3001 Mounting (3GAA161440-BDK)

Short Description22kW, 2P, Frame Size 160, 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	22.00 kW	2944 r/min	22.00 A	0.900	92.70 %	71.36 N·m	8.40
D	--	50 Hz	400 V	22.00 kW	2944 r/min	38.00 A	0.900	92.70 %	71.36 N·m	8.40
Y	--	50 Hz	660 V	22.00 kW	2934 r/min	22.80 A	0.910	92.70 %	71.60 N·m	7.60
D	--	50 Hz	380 V	22.00 kW	2934 r/min	39.60 A	0.910	92.70 %	71.60 N·m	7.60
D	--	50 Hz	415 V	22.00 kW	2949 r/min	37.00 A	0.890	92.70 %	71.24 N·m	9.00
D	--	60 Hz	460 V	22.00 kW	3552 r/min	32.90 A	0.900	92.90 %	59.15 N·m	9.70

Connection Configuration	D
Temperature Class	--
Default	
Input Voltage (U _{in})	400 V
Frequency (f)	50 Hz
Output Power	22 kW
Altitude	1000 m
Ambient Temperature	40 °C
IC Class	IC411
IE Class Data (50 Hz)	IE Class IE3 Full Load (100%) 92.7 % Partial Load (75%) 93.4 % Partial Load (50%) 93.2 %
IE Class Data (60 Hz)	IE Class IE3 Full Load (100%) 92.9 % Partial Load (75%) 93.2 % Partial Load (50%) 92.5 %
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	160
Bearing	6309-2Z/C3
Bearing NDE	6209-2Z/C3
IM Class	IMB5 IM3001
Terminator Box Location	D-End top

Dimensions

Package Level 1 Units	0 pallet (lift)
Product Net Depth / Length	681 mm
Product Net Height	370 mm
Product Net Width	310 mm
Product Net Weight	131 kg
Gross Weight	141 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	

