



PRODUCT-DETAILS

# 3GAA183420-HDK

## IE3 Premium Efficiency Aluminum Motors, 18.5 kW, 400 V (3GAA183420-HDK)



General Information	
Product ID	3GAA183420-HDK
ABB Type Designation	M3AA 180MLB 6
Catalog Description	IE3 Premium Efficiency Aluminum Motors, 18.5 kW, 400 V (3GAA183420-HDK)

Ordering	
ABB Type Designation	M3AA 180MLB 6
Invoice Description	M3AA 180MLB 6
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) Poland (PL)
Customs Tariff Number	85015230
Replaced Product ID (OLD)	3GAA183054-HDK
Medium Description	18.5kW, 6 Poles, Frame Size 180, 3 Phases, 400V, 50Hz, IP55 Enclosure, IMB35/IM2001 Mounting (3GAA183420-HDK)

Short Description

18.5kW, 6P, Frame Size 180, 3PH, 400V, 50Hz, IP55, IMB35/IM2001

Electrical

Electrical Data

Conn	Temp Class	Freq	Voltage	Power	Speed	Current	Power Factor	Efficiency	Torque	IS/IN
Y	--	50 Hz	690 V	18.50 kW	980 r/min	23.30 A	0.720	91.70 %	179.50 N·m	6.80
D	--	50 Hz	400 V	18.50 kW	980 r/min	40.30 A	0.720	91.70 %	179.50 N·m	6.80
Y	--	50 Hz	660 V	18.50 kW	978 r/min	23.90 A	0.740	91.70 %	179.86 N·m	6.20
D	--	50 Hz	380 V	18.50 kW	978 r/min	41.40 A	0.740	91.70 %	179.86 N·m	6.20
D	--	50 Hz	415 V	18.50 kW	982 r/min	40.50 A	0.690	91.70 %	179.16 N·m	7.10
D	--	60 Hz	460 V	18.50 kW	1183 r/min	36.10 A	0.690	93.00 %	149.00 N·m	8.20

Connection Configuration	D
Temperature Class Default	--
Input Voltage (U <sub>in</sub> )	400 V
Frequency (f)	50 Hz
Output Power	18.5 kW
Altitude	1000 m
Ambient Temperature	40 °C
IC Class	IC411
IE Class Data (50 Hz)	IE Class IE3 Full Load (100%) 91.7 % Partial Load (75%) 91.9 % Partial Load (50%) 91.0 %
IE Class Data (60 Hz)	IE Class IE3 Full Load (100%) 93.0 % Partial Load (75%) 93.0 % Partial Load (50%) 92.1 %
IP Class	IP55
Insulation Class	ICLF
Direction of Rotation	Both sides
Number of Poles (High)	6
Two Speed Motor	No
Type of Duty	S1
Voltage Code	D

Mechanical

Frame Material	Aluminum
Frame Size	180
Bearing	6310-2Z/C3
Bearing NDE	6209-2Z/C3
IM Class	IMB35 IM2001
Terminator Box Location	D-End top

Dimensions	
Package Level 1 Units	0 pallet (lift)
Product Net Depth / Length	726 mm
Product Net Height	405 mm
Product Net Width	341 mm
Product Net Weight	168 kg
Gross Weight	178 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	

