



PRODUCT-DETAILS

# 3GAA182420-AEG

## IE2 High Efficiency Aluminum Motors, 22 kW, 500 V (3GAA182420-AEG)



| General Information  |  |
|----------------------|--|
| Product ID           | 3GAA182420-AEG   |
| ABB Type Designation | M3AA 180MLB 4  |
| Catalog Description  | IE2 High Efficiency Aluminum Motors, 22 kW, 500 V (3GAA182420-AEG) |

| Ordering                  |  |
|---------------------------|--|
| ABB Type Designation      | M3AA 180MLB 4  |
| Invoice Description       | M3AA 180MLB 4  |
| 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)<br>Poland (PL)  |
| Customs Tariff Number     | 85015230   |
| Replaced Product ID (OLD) | 3GAA182032-AEG   |
| Medium Description        | 22kW, 4 Poles, Frame Size 180, 3 Phases, 500V, 50Hz, IP55 Enclosure, IMB3/IM1001 Mounting (3GAA182420-AEG) |

Short Description

22kW, 4P, Frame Size 180, 3PH, 500V, 50Hz, IP55, IMB3/IM1001

Electrical

Electrical Data

| Conn | Temp Class | Freq  | Voltage | Power    | Speed      | Current | Power Factor | Efficiency | Torque     | IS/IN |
|------|------------|-------|---------|----------|------------|---------|--------------|------------|------------|-------|
| D    | --         | 50 Hz | 500 V   | 22.00 kW | 1475 r/min | 32.90 A | 0.840        | 92.30 %    | 142.00 N·m | 7.30  |
| D    | --         | 60 Hz | 575 V   | 22.00 kW | 1780 r/min | 29.00 A | 0.830        | 93.10 %    | 118.00 N·m | 8.30  |

|                                  |   |
|----------------------------------|---|
| Connection Configuration         | D   |
| Temperature Class Default        | --  |
| Input Voltage (U <sub>in</sub> ) | 500 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 IE2<br>Full Load (100%) 92.3 %<br>Partial Load (75%) 93.3 %<br>Partial Load (50%) 93.2 % |
| IE Class Data (60 Hz)            | IE Class IE2<br>Full Load (100%) 93.1 %<br>Partial Load (75%) 93.4 %<br>Partial Load (50%) 92.5 % |
| IP Class                         | IP55  |
| Insulation Class                 | ICLF  |
| Direction of Rotation            | Both sides  |
| Number of Poles (High)           | 4   |
| Two Speed Motor                  | No  |
| Type of Duty                     | S1  |
| Voltage Code                     | E   |

Mechanical

|                         |             |
|-------------------------|-------------|
| Frame Material          | Aluminum    |
| Frame Size              | 180         |
| Bearing                 | 6310-2Z/C3  |
| Bearing NDE             | 6209-2Z/C3  |
| IM Class                | IMB3 IM1001 |
| 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          | 354 mm          |
| Product Net Weight         | 163 kg          |

Gross Weight

173 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

