PRODUCT-DETAILS

# ACH480-04-03A4-4

## LV AC drive module for HVAC, IEC: Pn 1.1 kW, 3.3 A, 400 V (ACH480-04-03A4-4)



### General Information

| | |
|---|---|
| Global Commercial Alias | ACH480-04-03A4-4 |
| Product ID | 3AXD50000275441 |
| ABB Type Designation | ACH480-04-03A4-4 |
| EAN | 6438177541745 |
| Catalog Description | LV AC drive module for HVAC, IEC: Pn 1.1 kW, 3.3 A, 400 V (ACH480-04-03A4-4) |
| Long Description | The cabinet-optimized ACH480 drive has complete HVAC functionality to control fans, pumps, compressors, and more complex HVAC equipment like air-handling units, ensuring smooth, energy-efficient operation of your HVAC systems in normal and mission-critical situations. The built-in features significantly reduce installation time and the intuitive control panel with an HVAC-specific primary settings menu and help assistants makes startup, commissioning and operation easy. The optional Bluetooth® capability enables the commissioning and monitoring of the drive from a distance. The ACH480 is especially a good fit for panel builders and OEMs. |

### Ordering

| | |
|---|---|
| Customs Tariff Number | 850440 |
| HS Code | 850440 -- ELECTRICAL MACHINERY AND EQUIPMENT AND PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS, AND PARTS AND |

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| | |
|---|---|
| | ACCESSORIES OF SUCH ARTICLES;Electrical transformers, static converters (for example, rectifiers) and inductors;Static converters |
| Invoice Description | ACH480-04-03A4-4 PN: 1.1 kW, IN: 3.3 A |
| Made To Order | Yes |
| Minimum Order Quantity | 1 piece |
| Order Multiple | 1 piece |
| Quote Only | No |
| Selling Unit of Measure | piece |

## Dimensions

| | |
|---|---|
| Product Net Weight | 1.7 kg<br>3.7 lb |
| Product Net Depth / Length | 208 mm<br>8.19 in |
| Product Net Height | 223 mm<br>8.780 in |
| Product Net Width | 73 mm<br>2.87 in |
| Package Level 1 Depth / Length | 282 mm<br>11.10 in |
| Package Level 1 Height | 273 mm<br>10.75 in |
| Package Level 1 Width | 148 mm<br>5.83 in |
| Package Level 1 Units | 1 carton |

## Technical

| | |
|---|---|
| Number of Phases | 3-phase |
| Degree of Protection | IP20 |
| Enclosure Type NEMA | Open Type |
| Sound dB (A) | 63.10 dB(A) |
| Multiple Battery Information | Lithium Coin, CR2032, 220 mAh, 3 V, 1 pc, 3 g |
| Frequency (f) | 47.5 ... 63 Hz |
| Frame Size | R1 |
| Input Voltage ($U_{in}$) | 380 ... 480 V |
| Mounting Type | Module |
| Communication Protocol | BACNET<br>CAN<br>DeviceNet<br>EtherNet/IP<br>LON<br>MODBUS<br>Other Bus Systems<br>PROFIBUS<br>PROFINET IO<br>TCP/IP |
| Number of Hardware Interfaces | Industrial Ethernet 0<br>Other 2<br>Parallel 0<br>PROFINET 0<br>RS-232 0<br>RS-422 0<br>RS-485 1<br>Serial TTY 0<br>USB 1 |
| Includes | Control unit<br>PC connection |

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| | |
|---|---|
| Analog Inputs | 2 |
| Analog Outputs | 2 |
| Number of Digital In/Outputs | 6 / 3 |
| Output Current, Normal Use ($I_n$) | 3.3 A |
| Output Current, Light-Overload Use ($I_{LD}$) | 3.1 A |
| Output Current, Heavy-Duty Use ($I_{HD}$) | 2.6 A |
| Output Power, Normal Use ($P_n$) | 1.1 kW |
| Output Power, Light-Overload Use ($P_{LD}$) | 1.1 kW |
| Output Power, Heavy-Duty Use ($P_{HD}$) | 0.75 kW |
| | 55 W |
| Apparent Power Output | 2.3 kV·A |
| Efficiency Level | IE2 |
| Standby Loss | 15 W |

Complete Drive Module Efficiency (IEC61800-9-2)

| Operating Point Frequency / Current | Absolute Loss | Efficiency | Relative Loss |
|---|---|---|---|
| 0/25 % | 31 W | 79.8 % | 1.3 % |
| 0/50 % | 34 W | 87.2 % | 1.5 % |
| 0/100 % | 42 W | 91.1 % | 1.9 % |
| 50/25 % | 32 W | 88.7 % | 1.4 % |
| 50/50 % | 36 W | 93.1 % | 1.6 % |
| 50/100 % | 47 W | 95.0 % | 2.1 % |
| 90/50 % | 39 W | 95.7 % | 1.7 % |
| 90/100 % | 55 W | 96.8 % | 2.4 % |

| | |
|---|---|
| Temperature Rating | Maximum 50 °C |

## Technical UL

| | |
|---|---|
| Output Current, Heavy-Duty Use (UL) | 2.1 A |
| Output Current, Light-Overload Use (UL) | 3.0 A |
| Output Current, Normal Use (UL) | 3 A |

## Certificates and Declarations

| | |
|---|---|
| Declaration of Conformity - CE | 3AXD10000594967 |
| REACH Date | 20250320 |
| REACH Declaration | 9AKK107992A7060 |
| REACH Information | True - contains substances > 0.1 mass percentage |
| RoHS Date | 20230315 |

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| | |
|---|---|
| RoHS Declaration | 3AXD10000594967 |
| RoHS Information | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |

## Environmental

| | |
|---|---|
| SCIP | 4b7f0af1-4313-4811-b990-f45b6c1653c8 Finland |
| WEEE Category | 5. Small Equipment (No External Dimension More Than 50 cm) |

## External Classifications and Standards

| | |
|---|---|
| ETIM 9 | EC001857 - Frequency converter =< 1 kV |
| UNSPSC | 39122001 |

## Categories

Drives → Low Voltage AC Drives → Industry-Specific Drives → Drives for HVAC → ACH480-04 - Drive module for HVAC



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