




---

 PRODUCT-DETAILS

## ACH580-01-03A4-4

LV AC wall-mounted drive for HVAC, IEC: Pn 1.1 kW, 3.3 A, 400 V, UL: Pld 1.5 Hp, 3.0 A (ACH580-01-03A4-4)




---

**General Information**

|                         |                  |
|-------------------------|------------------|
| Global Commercial Alias | ACH580-01-03A4-4 |
| Product ID              | 3AXD50000038982  |
| ABB Type Designation    | ACH580-01-03A4-4 |
| EAN                     | 6438177459422    |

|                     |   |
|---------------------|---|
| Catalog Description | LV AC wall-mounted drive for HVAC, IEC: Pn 1.1 kW, 3.3 A, 400 V, UL: Pld 1.5 Hp, 3.0 A (ACH580-01-03A4-4) |
|---------------------|---|

|                  |  |
|------------------|--|
| Long Description | <p>ACH580 HVAC drive offering has all key features built-in to control fans, pumps and compressors, and more complex equipment like air-handling units and chillers, 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 ACH580-01 comes in IP21 enclosure and can be installed on the wall as standard. Also, IP55 and flange mounting units are available.</p> |
|------------------|--|

---

**Ordering**

|                       |  |
|-----------------------|--|
| Customs Tariff Number | 85044085   |
| HS Code               | 850440 -- ELECTRICAL MACHINERY AND EQUIPMENT AND PARTS |

THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS, AND PARTS AND ACCESSORIES OF SUCH ARTICLES;Electrical transformers, static converters (for example, rectifiers) and inductors;Static converters

|                         |  |
|-------------------------|--|
| Invoice Description     | ACH580-01-03A4-4 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             | 4.6 kg<br>10.141 lb    |
| Product Net Depth / Length     | 223.00 mm<br>8.78 in   |
| Product Net Height             | 373.00 mm<br>14.69 in  |
| Product Net Width              | 125.00 mm<br>4.92 in   |
| Package Level 1 Depth / Length | 225.00 mm<br>8.858 in  |
| Package Level 1 Height         | 370.00 mm<br>14.567 in |
| Package Level 1 Width          | 526.00 mm<br>20.709 in |
| Package Level 1 Units          | 1 carton               |

## Certificates and Declarations

|                                |  |
|--------------------------------|--|
| Declaration of Conformity - CE | 3AXD10001818627  |
| REACH Date                     | 20250320   |
| REACH Declaration              | 9AKK107992A7060  |
| REACH Information              | True - contains substances > 0.1 mass percentage                       |
| RoHS Date                      | 20240508   |
| RoHS Declaration               | 3AXD10001818627  |
| RoHS Information               | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |

## Technical

|                                  |   |
|----------------------------------|---|
| Number of Phases                 | 3-phase                                       |
| Degree of Protection             | IP21  |
| Enclosure Type NEMA              | Type1   |
| Altitude                         | 1000 m<br>95                                  |
| Sound dB (A)                     | 59 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 <sub>in</sub> ) | 380 ... 480 V                                 |
| Mounting Type                    | Wall-mounted                                  |
| Communication Protocol           | BACNET<br>CAN                                 |

|   |                       |
|---|-----------------------|
|   | DeviceNet             |
|   | EtherNet/IP           |
|   | LON                   |
|   | MODBUS                |
|   | Other Bus Systems     |
|   | PROFIBUS              |
|   | PROFINET IO           |
|   | TCP/IP                |
| Number of Hardware Interfaces                   | Industrial Ethernet 0 |
|   | Other 2               |
|   | Parallel 2            |
|   | PROFINET 0            |
|   | RS-232 0              |
|   | RS-422 0              |
|   | RS-485 1              |
|   | Serial TTY 0          |
|   | USB 1                 |
| Includes  | Control unit          |
|   | PC connection         |
| 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 ( $P_{HD}$ )       | 0.8 kW                |
|   | 51 W                  |
| Apparent Power Output                           | 2.3 kV-A              |
| Efficiency Level                                | IE2                   |
| Standby Loss                                    | 14 W                  |
| Complete Drive Module Efficiency (IEC61800-9-2) |                       |

| Operating Point Frequency / Current | Absolute Loss | Efficiency | Relative Loss |
|-------------------------------------|---------------|------------|---------------|
| 0/25 %                              | 32 W          | 79.2 %     | 1.4 %         |
| 0/50 %                              | 34 W          | 87.2 %     | 1.5 %         |
| 0/100 %                             | 41 W          | 91.4 %     | 1.8 %         |
| 50/25 %                             | 33 W          | 88.5 %     | 1.4 %         |
| 50/50 %                             | 36 W          | 93.1 %     | 1.6 %         |
| 50/100 %                            | 45 W          | 95.2 %     | 2.0 %         |
| 90/50 %                             | 39 W          | 95.7 %     | 1.7 %         |
| 90/100 %                            | 51 W          | 96.9 %     | 2.2 %         |

|                    |                |
|--------------------|----------------|
| Temperature Rating | Maximum 40 °C  |
|                    | Minimum -15 °C |

---

## Technical UL

---

|   |        |
|---|--------|
| Output Current, Heavy-Duty Use (UL)     | 2.1 A  |
| Output Current, Light-Overload Use (UL) | 3.0 A  |
| Output Power, Light-Overload Use (UL)   | 1.5 Hp |

---



---

## External Classifications and Standards

---

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

---



---

## Environmental

---

|               |  |
|---------------|--|
| SCIP          | a5c3dd71-8ecd-44d9-98e4-45c53b6836e1 Finland               |
| WEEE Category | 5. Small Equipment (No External Dimension More Than 50 cm) |

---



---

## Categories

---

Drives → Low Voltage AC Drives → Industry-Specific Drives → Drives for HVAC → ACH580-01 - Wall-mounted drive for HVAC

