

## PRODUCT-DETAILS

# ACH580-04-820A-4

LV AC drive module for HVAC, IEC: Pn 450 kW, 820 A (ACH580-04-820A-4)



## General Information

|                         |  |
|-------------------------|--|
| Global Commercial Alias | ACH580-04-820A-4   |
| Product ID              | 3ABD00046072-D   |
| ABB Type Designation    | ACH580-04-820A-4   |
| Catalog Description     | LV AC drive module for HVAC, IEC: Pn 450 kW, 820 A (ACH580-04-820A-4)  |
| Long Description        | <p>The 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 a 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 make startup, commissioning, and operation easy. The optional Bluetooth® capability enables the commissioning and monitoring of the drive from a distance. The ACH580-04 drive module comes in an IP00 enclosure as standard for cabinet installation. In addition, an IP20 enclosure is available.</p> |

## Ordering

|                        |                                      |
|------------------------|--------------------------------------|
| Country of Origin      | China (CN)                           |
| Customs Tariff Number  | 85044099                             |
| Invoice Description    | ACH580-04-820A-4 PN: 450kW, IN: 820A |
| Made To Order          | No                                   |
| Minimum Order Quantity | 1 piece                              |
| Order Multiple         | 1 piece                              |

|                         |       |
|-------------------------|-------|
| Quote Only              | No    |
| Selling Unit of Measure | piece |

Container Information

|              |       |
|--------------|-------|
| Gross Volume | 0 dm³ |
|--------------|-------|

Dimensions

|                                |          |
|--------------------------------|----------|
| Product Net Weight             | 199 kg   |
| Product Net Depth / Length     | 529 mm   |
| Product Net Height             | 1662 mm  |
| Product Net Width              | 345 mm   |
| Package Level 1 Depth / Length | 1000 mm  |
| Package Level 1 Height         | 500 mm   |
| Package Level 1 Width          | 400 mm   |
| Package Level 1 Units          | 0 carton |

Technical

|   |                         |
|---|-------------------------|
| Number of Phases                                | 3                       |
| Degree of Protection                            | IP00                    |
| Enclosure Type NEMA                             | Open Type               |
| Frequency (f)                                   | 47.5 ... 63 Hz          |
| Frame Size                                      | R11                     |
| Input Voltage ( $U_{in}$ )                      | 380 ... 480 V           |
| Mounting Type                                   | Cabinet-built_NO UNIT\$ |
| Output Current, Heavy-Duty Use ( $I_{HD}$ )     | 625 A                   |
| Output Current, Light-Overload Use ( $I_{LD}$ ) | 810 A                   |
| Output Current, Normal Use ( $I_n$ )            | 820 A                   |
| Output Power, Heavy-Duty Use ( $P_{HD}$ )       | 355 kW                  |
| Output Power, Light-Overload Use ( $P_{LD}$ )   | 450 kW                  |
| Output Power, Normal Use ( $P_n$ )              | 450 kW                  |
| Efficiency Level                                | IE2                     |
| Complete Drive Module Efficiency (61800-9-2)    |                         |

| Operating Point<br>Frequency / Current | Absolute<br>Loss | Relative<br>Loss | Efficiency |
|--|------------------|------------------|------------|
| 0 / 25 %                               | 2551 W           | 0.4 %            | 93.4 %     |
| 0 / 50 %                               | 3666 W           | 0.5 %            | 95.1 %     |
| 0 / 100 %                              | 6680 W           | 1.0 %            | 95.5 %     |
| 50 / 25 %                              | 2748 W           | 0.4 %            | 96.5 %     |
| 50 / 50 %                              | 4097 W           | 0.6 %            | 97.3 %     |
| 50 / 100 %                             | 7768 W           | 1.1 %            | 97.4 %     |
| 90 / 50 %                              | 4753 W           | 0.7 %            | 98.3 %     |
| 90 / 100 %                             | 9652 W           | 1.4 %            | 98.2 %     |

Additional Information

|              |                     |
|--------------|---------------------|
| Product Name | Frequency Converter |
|--------------|---------------------|

Classifications

|        |          |
|--------|----------|
| UNSPSC | 39122001 |
|--------|----------|

Environmental

|               |   |
|---------------|---|
| WEEE Category | 4. Large Equipment (Any External Dimension More Than 50 cm) |
|---------------|---|

Categories

Drives → Low Voltage AC Drives → Industry-Specific Drives → Drives for HVAC → ACH580-04 - Drive module for HVAC

