

## PRODUCT-DETAILS

# ACQ580-01-206A-4

LV AC wall-mounted drive for water and wastewater, IEC: Pn 110 kW, 206 A, 400 V (ACQ580-01-206A-4)



## General Information

|                         |                  |
|-------------------------|------------------|
| Global Commercial Alias | ACQ580-01-206A-4 |
| Product ID              | 3AXD50000034605  |
| ABB Type Designation    | ACQ580-01-206A-4 |
| EAN                     | 6438177409915    |

|                     |  |
|---------------------|--|
| Catalog Description | LV AC wall-mounted drive for water and wastewater, IEC: Pn 110 kW, 206 A, 400 V (ACQ580-01-206A-4) |
|---------------------|--|

The ACQ580-01 drives deliver innovative pump features for the water and wastewater industry, securing energy efficient flow of water and wastewater in your pumping solutions. This robust and compact wall-mounted drive has built-in pump application functionality such as sensorless flow calculation, multipump control, level control, soft pipe fill, dry run protection, quick ramps and a solution for keeping the impeller of the pump clean.

### Long Description

Usability is further enhanced with the intuitive Hand-Off-Auto control panel, the PC tool Drive composer and an optional Bluetooth® control panel. The built-in energy calculator visualizes the energy savings achieved with the use of the drive. The ACQ580-01 variant comes in IP21 enclosure as standard and can be installed on the wall. Also, IP55 and flange mounting units are available.

## Ordering

|                       |  |
|-----------------------|--|
| Country of Origin     | Finland (FI)                           |
| Customs Tariff Number | 85044086                               |
| Invoice Description   | ACQ580-01-206A-4 PN: 110 kW, IN: 206 A |

|                         |         |
|-------------------------|---------|
| Made To Order           | Yes     |
| Minimum Order Quantity  | 1 piece |
| Order Multiple          | 1 piece |
| Quote Only              | No      |
| Selling Unit of Measure | piece   |

Container Information

|              |           |
|--------------|-----------|
| Gross Volume | 92.47 dm³ |
|--------------|-----------|

Dimensions

|                                |                       |
|--------------------------------|-----------------------|
| Product Net Weight             | 54 kg<br>119.050 lb   |
| Product Net Depth / Length     | 370 mm<br>14.57 in    |
| Product Net Height             | 880 mm<br>34.65 in    |
| Product Net Width              | 284 mm<br>11.18 in    |
| Package Level 1 Depth / Length | 992.00 mm<br>39.06 in |
| Package Level 1 Height         | 568.00 mm<br>22.36 in |
| Package Level 1 Width          | 400.00 mm<br>15.75 in |
| Package Level 1 Units          | 1 carton              |

Technical

|                                  |   |
|----------------------------------|---|
| Number of Phases                 | 3   |
| Degree of Protection             | IP21  |
| Enclosure Type NEMA              | Type1   |
| Altitude                         | 4000 m<br>95  |
| Power Factor                     | 0.98  |
| Sound dB (A)                     | 67 dB(A)  |
| Multiple Battery Information     | Lithium Coin; CR2032; 220 mAh; 3 V; 1 pc; 3 g   |
| Frequency (f)                    | 47.5 ... 63 Hz  |
| Frame Size                       | R7  |
| Input Voltage (U <sub>in</sub> ) | 380 ... 480 V   |
| Mounting Type                    | Wall-mounted  |
| Communication Protocol           | CAN<br>DeviceNet<br>EtherNet/IP<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 2<br>PROFINET 0<br>RS-232 0<br>RS-422 0                |

|   |                                   |
|---|-----------------------------------|
|   | RS-485 1<br>Serial TTY 0<br>USB 1 |
| Includes  | Control unit<br>PC connection     |
| Analog Inputs                                   | 2                                 |
| Analog Outputs                                  | 2                                 |
| Number of Digital In/Outputs                    | 6 / 3                             |
| Output Current, Heavy-Duty Use ( $I_{HD}$ )     | 169 A                             |
| Output Current, Light-Overload Use ( $I_{LD}$ ) | 196 A                             |
| Output Current, Normal Use ( $I_n$ )            | 206 A                             |
| Output Power, Heavy-Duty Use ( $P_{HD}$ )       | 90 kW                             |
| Output Power, Light-Overload Use ( $P_{LD}$ )   | 110 kW                            |
| Output Power, Normal Use ( $P_n$ )              | 110 kW                            |
| Apparent Power Output                           | 143 kV·A                          |
| Efficiency Level                                | IE2                               |
| Standby Loss                                    | 36 W                              |
| Complete Drive Module Efficiency (61800-9-2)    |                                   |

| Operating Point<br>Frequency / Current | Absolute<br>Loss | Efficiency | Relative<br>Loss |
|--|------------------|------------|------------------|
| 0/25 %                                 | 722 W            | 91.5 %     | 0.5 %            |
| 0/50 %                                 | 1001 W           | 93.7 %     | 0.7 %            |
| 0/100 %                                | 1797 W           | 94.2 %     | 1.3 %            |
| 50/25 %                                | 793 W            | 95.3 %     | 0.6 %            |
| 50/50 %                                | 1138 W           | 96.5 %     | 0.8 %            |
| 50/100 %                               | 2116 W           | 96.7 %     | 1.5 %            |
| 90/50 %                                | 1345 W           | 97.6 %     | 0.9 %            |
| 90/100 %                               | 2785 W           | 97.5 %     | 2.0 %            |

|                    |                                 |
|--------------------|---------------------------------|
| Temperature Rating | Maximum 40 °C<br>Minimum -15 °C |
|--------------------|---------------------------------|

Additional Information

|                   |                     |
|-------------------|---------------------|
| Product Main Type | ACQ580-01           |
| Product Name      | Frequency converter |

Classifications

|        |  |
|--------|--|
| ETIM 8 | EC001857 - Frequency converter =< 1 kV |
| ETIM 9 | EC001857 - Frequency converter =< 1 kV |
| UNSPSC | 39122001                               |

| Environmental |   |
|---------------|---|
| SCIP          | 71e4e108-7fa3-4fef-ae88-63d19649578b Finland (FI)           |
| WEEE Category | 4. Large Equipment (Any External Dimension More Than 50 cm) |

| Categories   |
|--|
| Drives → Low Voltage AC Drives → Industry-Specific Drives → Drives for water → ACQ580-01 - Wall-mounted drive for water and wastewater |

