



PRODUCT-DETAILS

ACS880-01-174A-7

LV AC industrial wall-mounted single drive,  
IEC: Pn 160 kW, 174 A, 690 V, UL: Pld 200 Hp,  
180 A, 575 V (ACS880-01-174A-7)



| General Information     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Global Commercial Alias | ACS880-01-174A-7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Product ID              | 3AUA0000115109                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| ABB Type Designation    | ACS880-01-174A-7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| EAN                     | 6438177388647                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Catalog Description     | LV AC industrial wall-mounted single drive, IEC: Pn 160 kW, 174 A, 690 V, UL: Pld 200 Hp, 180 A, 575 V (ACS880-01-174A-7)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Long Description        | <p>The ACS880-01 drives are customized to meet the particular needs of specific industries, such as oil and gas, mining, metals, chemicals, cement, power plants, material handling, pulp and paper, sawmills, marine, water and wastewater, food and beverage, and automotive. They can control a wide range of applications, including cranes, extruders, winches, winders, conveyors, mixers, compressors, centrifuges, test benches, elevators, extruders, pumps and fans. The ACS880-01 comes in one compact package for easy installation and commissioning. The drive can be installed on the wall as standard and in a cabinet as an option. The drive offering includes enclosure classes up to IP55, making it suitable for most environments and installations. ACS880-01 drives have all the essential features built-in. These features include as standard a choke for harmonic filtering as well as options like a brake chopper, EMC filter and communication protocol adapter, functional safety, external output filters and I/O extension modules.</p> |

## Ordering

|                         |                                                                                                                                                                                                                                                                                                        |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Customs Tariff Number   | 85044086                                                                                                                                                                                                                                                                                               |
| 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     | ACS880-01-174A-7 PN: 160 kW, IN: 174 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             | 68.0 kg<br>149.914 lb |
| Product Net Depth / Length     | 386 mm<br>15.197 in   |
| Product Net Height             | 965 mm<br>37.992 in   |
| Product Net Width              | 300 mm<br>11.811 in   |
| Package Level 1 Depth / Length | 1145 mm<br>45.08 in   |
| Package Level 1 Height         | 654 mm<br>25.75 in    |
| Package Level 1 Width          | 485 mm<br>19.09 in    |
| Package Level 1 Units          | 1 case                |

## Technical

|                                  |                                                                                                        |
|----------------------------------|--------------------------------------------------------------------------------------------------------|
| Number of Phases                 | 3-phases                                                                                               |
| Degree of Protection             | IP21                                                                                                   |
| Enclosure Type NEMA              | Type1                                                                                                  |
| Altitude                         | 4000 m<br>5 ... 95                                                                                     |
| Sound dB (A)                     | 68 dB(A)                                                                                               |
| Multiple Battery Information     | Lithium Coin, CR2032, 220 mAh, 3 V, 2 pcs, 6 g                                                         |
| Frequency (f)                    | 47.5 ... 63 Hz                                                                                         |
| Frame Size                       | R8                                                                                                     |
| Input Voltage (U <sub>in</sub> ) | 525 ... 690 V                                                                                          |
| Mounting Type                    | Wall-mounted                                                                                           |
| Communication Protocol           | CAN<br>DeviceNet<br>EtherNet/IP<br>MODBUS<br>Other Bus Systems<br>PROFIsafe<br>PROFIBUS<br>PROFINET IO |
| Number of Hardware Interfaces    | Industrial Ethernet 0<br>Other 4<br>Parallel 0<br>PROFINET 0                                           |

|                                                        |                               |
|--------------------------------------------------------|-------------------------------|
|                                                        | RS-232 0                      |
|                                                        | RS-422 0                      |
|                                                        | RS-485 1                      |
|                                                        | Serial TTY 0                  |
|                                                        | USB 1                         |
| Includes                                               | Control unit<br>PC connection |
| Analog Inputs                                          | 2                             |
| Analog Outputs                                         | 2                             |
| Number of Digital<br>In/Outputs                        | 6 / 2                         |
| Output Current, Normal<br>Use ( $I_n$ )                | 174 A                         |
| Output Current, Light-<br>Overload Use ( $I_{LD}$ )    | 165 A                         |
| Output Current, Heavy-<br>Duty Use ( $I_{HD}$ )        | 142 A                         |
| Output Power, Normal<br>Use ( $P_n$ )                  | 160 kW                        |
| Output Power, Light-<br>Overload Use ( $P_{LD}$ )      | 160 kW                        |
| Output Power, Heavy-<br>Duty Use ( $P_{HD}$ )          | 132 kW                        |
|                                                        | 2670 W                        |
| Apparent Power Output                                  | 208 kV-A                      |
| Efficiency Level                                       | IE2                           |
| Standby Loss                                           | 83 W                          |
| Complete Drive Module<br>Efficiency (IEC61800-9-<br>2) |                               |

| Operating Point<br>Frequency / Current | Absolute<br>Loss | Relative<br>Loss | Efficiency |
|----------------------------------------|------------------|------------------|------------|
| 0 / 25 %                               | 880 W            | 0.4 %            | 92.8 %     |
| 0 / 50 %                               | 1228 W           | 0.6 %            | 94.6 %     |
| 0 / 100 %                              | 1736 W           | 0.8 %            | 96.1 %     |
| 50 / 25 %                              | 926 W            | 0.4 %            | 96.2 %     |
| 50 / 50 %                              | 1274 W           | 0.6 %            | 97.3 %     |
| 50 / 100 %                             | 2010 W           | 1.0 %            | 97.8 %     |
| 90 / 50 %                              | 1461 W           | 0.7 %            | 98.2 %     |
| 90 / 100 %                             | 2670 W           | 1.3 %            | 98.4 %     |

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

**Technical UL**

|                                             |        |
|---------------------------------------------|--------|
| Output Current, Heavy-<br>Duty Use (UL)     | 144 A  |
| Output Current, Light-<br>Overload Use (UL) | 180 A  |
| Output Current, Normal<br>Use (UL)          | - A    |
| Output Power, Heavy-<br>Duty Use (UL)       | 150 Hp |
| Output Power, Light-<br>Overload Use (UL)   | 200 Hp |

| Certificates and Declarations  |                                                                        |
|--------------------------------|------------------------------------------------------------------------|
| Declaration of Conformity - CE | 3AXD10000497831                                                        |
| REACH Date                     | 20250320                                                               |
| REACH Declaration              | 9AKK107992A7060                                                        |
| REACH Information              | True - contains substances > 0.1 mass percentage                       |
| RoHS Date                      | 20240508                                                               |
| RoHS Declaration               | 3AXD10000497831                                                        |
| RoHS Information               | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |

| Environmental |                                                             |
|---------------|-------------------------------------------------------------|
| SCIP          | d78dbb8e-1a37-478b-9675-e9e23a420e09 Finland                |
| WEEE Category | 4. Large Equipment (Any 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 → Industrial Drives → ACS880 Single Drives → ACS880-01 - Wall-mounted single drive |  |

