



PRODUCT-DETAILS

ACS180-04S-048A-2

LV AC machinery drive module, IEC: Pn 11 kW,  
48.0 A, 230 V, UL: Pld 15 Hp, 46.2 A, 208 V  
(ACS180-04S-048A-2)



| General Information     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Global Commercial Alias | ACS180-04S-048A-2                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Product ID              | 3AXD50000814589                                                                                                                                                                                                                                                                                                                                                                                                                              |
| ABB Type Designation    | ACS180-04S-048A-2                                                                                                                                                                                                                                                                                                                                                                                                                            |
| EAN                     | 6438177690313                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Catalog Description     | LV AC machinery drive module, IEC: Pn 11 kW, 48.0 A, 230 V, UL: Pld 15 Hp, 46.2 A, 208 V (ACS180-04S-048A-2)                                                                                                                                                                                                                                                                                                                                 |
| Long Description        | The ACS180 is a compact and robust adaptable variable speed drive (VSD) for applications such as pumps, fans, compressors, conveyors, winders and mixers. This easy-to-use compact VSD offers excellent performance and quality at superior value with all essential machinery application features embedded. And as a member of ABB's all-compatible drives portfolio, it shares the same architecture and user interfaces for ease of use. |

| Ordering              |                                                                                                                 |
|-----------------------|-----------------------------------------------------------------------------------------------------------------|
| Customs Tariff Number | 85044086                                                                                                        |
| HS Code               | 850440-- Electrical transformers, static converters (for example, rectifiers) and inductors.- Static converters |
| Invoice Description   | ACS180-04S-048A-2 PN: 11.0 kW, IN: 48 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             | 5.3 kg<br>11.685 lb  |
| Product Net Depth / Length     | 178.6 mm<br>7.031 in |
| Product Net Height             | 240 mm<br>9.449 in   |
| Product Net Width              | 260 mm<br>10.236 in  |
| Package Level 1 Depth / Length | 356 mm<br>14.016 in  |
| Package Level 1 Height         | 275 mm<br>10.827 in  |
| Package Level 1 Width          | 290 mm<br>11.417 in  |
| Package Level 1 Units          | 1 carton             |

## Certificates and Declarations

|                                |                                                                        |
|--------------------------------|------------------------------------------------------------------------|
| Declaration of Conformity - CE | 3AXD10001117584                                                        |
| REACH Date                     | 20241203                                                               |
| REACH Declaration              | 9AKK107992A7060                                                        |
| REACH Information              | True - contains substances > 0.1 mass percentage                       |
| RoHS Date                      | 20230321                                                               |
| RoHS Information               | 3AXD10001117584                                                        |
| RoHS Status                    | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |

## Technical

|                                  |                                                              |
|----------------------------------|--------------------------------------------------------------|
| Number of Phases                 | 3                                                            |
| Degree of Protection             | IP20                                                         |
| Enclosure Type NEMA              | Open Type                                                    |
| Altitude                         | 2000 m<br>5 ... 95                                           |
| Power Factor                     | 0.98                                                         |
| Sound dB (A)                     | 69 dB(A)                                                     |
| Multiple Battery Information     | No battery / cell included                                   |
| Frequency (f)                    | 47 ... 63 Hz                                                 |
| Frame Size                       | R4                                                           |
| Input Voltage (U <sub>in</sub> ) | 200 ... 240 V                                                |
| Mounting Type                    | Module                                                       |
| Communication Protocol           | MODBUS                                                       |
| Number of Hardware Interfaces    | Industrial Ethernet 0<br>Other 1<br>Parallel 0<br>PROFINET 0 |

|                                                 |               |
|-------------------------------------------------|---------------|
|                                                 | RS-232 0      |
|                                                 | RS-422 0      |
|                                                 | RS-485 1      |
|                                                 | Serial TTY 0  |
|                                                 | USB 0         |
| Includes                                        | Control unit  |
|                                                 | PC connection |
| Analog Inputs                                   | 2             |
| Analog Outputs                                  | 1             |
| Number of Digital In/Outputs                    | 4 / 2         |
| Output Current, Normal Use ( $I_n$ )            | 48.0 A        |
| Output Current, Light-Overload Use ( $I_{LD}$ ) | 46.2 A        |
| Output Current, Heavy-Duty Use ( $I_{HD}$ )     | 30.8 A        |
| Output Power, Normal Use ( $P_n$ )              | 11 kW         |
| Output Power, Light-Overload Use ( $P_{LD}$ )   | 11 kW         |
| Output Power, Heavy-Duty Use ( $P_{HD}$ )       | 7.5 kW        |
|                                                 | 586 W         |
| Apparent Power Output                           | 19 kV-A       |
| Efficiency Level                                | IE2           |
| Standby Loss                                    | 35 W          |
| Complete Drive Module Efficiency (IEC61800-9-2) |               |

| Operating Point<br>Frequency / Current | Absolute<br>Loss | Efficiency | Relative<br>Loss |
|----------------------------------------|------------------|------------|------------------|
| 0/25 %                                 | 193 W            | 84.0 %     | 1.0 %            |
| 0/50 %                                 | 258 W            | 88.3 %     | 1.3 %            |
| 0/100 %                                | 461 W            | 89.4 %     | 2.4 %            |
| 50/25 %                                | 205 W            | 91.1 %     | 1.1 %            |
| 50/50 %                                | 282 W            | 93.5 %     | 1.5 %            |
| 50/100 %                               | 516 W            | 94.0 %     | 2.7 %            |
| 90/50 %                                | 314 W            | 95.9 %     | 1.6 %            |
| 90/100 %                               | 586 W            | 96.1 %     | 3.1 %            |

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

**Technical UL**

|                                         |        |
|-----------------------------------------|--------|
| Output Current, Heavy-Duty Use (UL)     | 32.0 A |
| Output Current, Light-Overload Use (UL) | 46.2 A |
| Output Power, Heavy-Duty Use (UL)       | 10 Hp  |
| Output Power, Light-Overload Use (UL)   | 15 Hp  |

| External Classifications and Standards |                                        |
|----------------------------------------|----------------------------------------|
| ETIM 9                                 | EC001857 - Frequency converter =< 1 kV |

| Environmental |                                                            |
|---------------|------------------------------------------------------------|
| SCIP          | 2fa266a4-ca31-4604-a9f6-9646f8174b5e Finland               |
| WEEE Category | 5. Small Equipment (No External Dimension More Than 50 cm) |

| Categories                                                                   |
|------------------------------------------------------------------------------|
| Drives → Low Voltage AC Drives → Machinery Drives → ACS180 - Machinery Drive |

