



PRODUCT-DETAILS

ACS380-040S-05A6-4

LV AC machinery drive module, IEC: Pn 2.2 kW, 5.6 A, 400 V, UL: Pld 3 Hp, 4.8 A, 480 V (ACS380-040S-05A6-4)



| General Information     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Global Commercial Alias | ACS380-040S-05A6-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Product ID              | 3AXD50000031890                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| ABB Type Designation    | ACS380-040S-05A6-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| EAN                     | 6438177506423                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Catalog Description     | LV AC machinery drive module, IEC: Pn 2.2 kW, 5.6 A, 400 V, UL: Pld 3 Hp, 4.8 A, 480 V (ACS380-040S-05A6-4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Long Description        | The ACS380 machinery drive comes in several variants ensuring seamless integration into machines and connecting perfectly to automation systems. It's a great fit for industries such as food and beverage, material handling and textile. Typical applications include mixers, conveyors, EOT and tower cranes, extruders and textile machinery. With the integrated functional safety features, the ACS380 drive can be also part of the machine's safety system via PROFIsafe over PROFINET, ensuring the motor is safely stopped when required. In addition, the drive's software can be easily customized with adaptive programming to match any specific application requirements. |

| Ordering              |                                                        |
|-----------------------|--------------------------------------------------------|
| Customs Tariff Number | 85044087                                               |
| 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     | ACS380-040S-05A6-4 PN: 2.2 kW, IN: 5.6 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                | 1.40 kg<br>3.086 lb |
| Product Net Depth /<br>Length     | 176 mm<br>6.929 in  |
| Product Net Height                | 223 mm<br>8.780 in  |
| Product Net Width                 | 70 mm<br>2.756 in   |
| Package Level 1 Depth /<br>Length | 282 mm<br>11.102 in |
| Package Level 1 Height            | 273 mm<br>10.748 in |
| Package Level 1 Width             | 148 mm<br>5.827 in  |
| Package Level 1 Units             | 1 carton            |

## Technical

|                                  |                                                                                                                           |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Number of Phases                 | 3-phase                                                                                                                   |
| Degree of Protection             | IP20                                                                                                                      |
| Enclosure Type NEMA              | Open Type                                                                                                                 |
| Altitude                         | 1000 m<br>5 ... 95                                                                                                        |
| Power Factor                     | 0.98                                                                                                                      |
| Sound dB (A)                     | 63.10 dB(A)                                                                                                               |
| Multiple Battery<br>Information  | No battery / cell included                                                                                                |
| Frequency (f)                    | 47.5 ... 63 Hz                                                                                                            |
| Frame Size                       | R1                                                                                                                        |
| Input Voltage (U <sub>in</sub> ) | 380 ... 480 V                                                                                                             |
| Mounting Type                    | Module                                                                                                                    |
| Communication Protocol           | MODBUS<br>Other Bus Systems                                                                                               |
| Number of Hardware<br>Interfaces | Industrial Ethernet 0<br>Other 3<br>Parallel 0<br>PROFINET 0<br>RS-232 0<br>RS-422 0<br>RS-485 1<br>Serial TTY 0<br>USB 0 |
| Includes                         | Control unit<br>PC connection                                                                                             |
| Analog Inputs                    | 2                                                                                                                         |

|                                                 |          |
|-------------------------------------------------|----------|
| Analog Outputs                                  | 1        |
| Number of Digital In/Outputs                    | 5 / 2    |
| Output Current, Normal Use ( $I_n$ )            | 5.6 A    |
| Output Current, Light-Overload Use ( $I_{LD}$ ) | 5.3 A    |
| Output Current, Heavy-Duty Use ( $I_{HD}$ )     | 4.0 A    |
| Output Power, Normal Use ( $P_n$ )              | 2.2 kW   |
| Output Power, Light-Overload Use ( $P_{LD}$ )   | 2.2 kW   |
| Output Power, Heavy-Duty Use ( $P_{HD}$ )       | 1.5 kW   |
|                                                 | 91 W     |
| Apparent Power Output                           | 3.9 kV-A |
| Efficiency Level                                | IE2      |
| Standby Loss                                    | 15 W     |
| Complete Drive Module Efficiency (IEC61800-9-2) |          |

| Operating Point<br>Frequency / Current | Absolute<br>Loss | Efficiency | Relative<br>Loss |
|----------------------------------------|------------------|------------|------------------|
| 0/25 %                                 | 44 W             | 82.4 %     | 1.1 %            |
| 0/50 %                                 | 51 W             | 88.5 %     | 1.3 %            |
| 0/100 %                                | 70 W             | 91.3 %     | 1.8 %            |
| 50/25 %                                | 46 W             | 90.3 %     | 1.2 %            |
| 50/50 %                                | 54 W             | 93.8 %     | 1.4 %            |
| 50/100 %                               | 78 W             | 95.2 %     | 2.0 %            |
| 90/50 %                                | 60 W             | 96.1 %     | 1.5 %            |
| 90/100 %                               | 90 W             | 96.8 %     | 2.3 %            |

|                    |               |
|--------------------|---------------|
| Temperature Rating | Maximum 50 °C |
|--------------------|---------------|

Technical UL

|                                         |       |
|-----------------------------------------|-------|
| Output Current, Heavy-Duty Use (UL)     | 3.5 A |
| Output Current, Light-Overload Use (UL) | 4.8 A |
| Output Current, Normal Use (UL)         | 4.8 A |
| Output Power, Heavy-Duty Use (UL)       | 2 Hp  |
| Output Power, Light-Overload Use (UL)   | 3 Hp  |

Certificates and Declarations

|                                |                 |
|--------------------------------|-----------------|
| Declaration of Conformity - CE | 3AXD10000495941 |
| REACH Date                     | 20250905        |

|                   |                                                                        |
|-------------------|------------------------------------------------------------------------|
| REACH Declaration | 9AKK107992A7060                                                        |
| REACH Information | True - contains substances > 0.1 mass percentage                       |
| RoHS Date         | 20230303                                                               |
| RoHS Declaration  | 3AXD10000495941                                                        |
| RoHS Information  | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |

Environmental

|               |                                                            |
|---------------|------------------------------------------------------------|
| SCIP          | df417ff4-f8a5-4aa8-b5b9-bb43623953af Finland               |
| WEEE Category | 5. Small Equipment (No External Dimension More Than 50 cm) |

External Classifications and Standards

|         |                                        |
|---------|----------------------------------------|
| ETIM 9  | EC001857 - Frequency converter =< 1 kV |
| ETIM 10 | EC001857 - Frequency converter =< 1 kV |
| UNSPSC  | 39122001                               |

Categories

Drives → Low Voltage AC Drives → Machinery Drives → ACS380 - Machinery Drive

