

PRODUCT-DETAILS

# A40-30-32 48V 50Hz / 48V 60Hz

## A40-30-32 48V 50Hz / 48V 60Hz Contactor



### General Information

|                       |   |
|-----------------------|---|
| Extended Product Type | A40-30-32 48V 50Hz / 48V 60Hz           |
| Product ID            | 1SBL321001R8332                         |
| EAN                   | 3471522078834                           |
| Catalog Description   | A40-30-32 48V 50Hz / 48V 60Hz Contactor |

|                  |   |
|------------------|---|
| Long Description | <p>A40 contactors are mainly used for controlling 3-phase motors and generally for controlling power circuits up to 690 V AC or 220 V DC. The contactors can also be used for many other applications such as isolation, capacitor switching, lighting. The A... series 2-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 1st stack with 3 main poles and 1 built-in auxiliary contact, 2nd stack with 4 built-in auxiliary contacts, side-mounted add-on auxiliary contact blocks (The built-in auxiliary contact elements are mechanically linked) - Control circuit: AC operated with laminated magnet circuit - Accessories: a wide range of accessories is available.</p> |
|------------------|---|

### Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85364900 |

### Popular Downloads

|                                   |                      |
|-----------------------------------|----------------------|
| Data Sheet, Technical Information | 1SBC100122C0202_Ch02 |
| Instructions and Manuals          | FPTC407722P0001      |

## Dimensions

|                            |         |
|----------------------------|---------|
| Product Net Width          | 54 mm   |
| Product Net Depth / Length | 141 mm  |
| Product Net Height         | 90 mm   |
| Product Net Weight         | 0.77 kg |

## Technical

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| Number of Main Contacts NO                         | 3  |
| Number of Main Contacts NC                         | 0  |
| Number of Auxiliary Contacts NO                    | 3  |
| Number of Auxiliary Contacts NC                    | 2  |
| Standards  | Devices complying with international standards IEC 947-1 / 947-4-1, and European standards EN 60 947-1 / 60 947-4-1. Electromagnetic compatibility (EMC) acc. to amendment A11 to IEC 947-1, EN 60 947-1 and amendment 2 to IEC 947-4-1  |
| Rated Operational Voltage                          | Main Circuit 690 V   |
| Rated Frequency (f)                                | Supply Circuit 50 / 60 Hz  |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | acc. to IEC 60947-4-1, Open Contactors $q = 40^\circ\text{C}$ 65 A<br>acc. to IEC 60947-5-1, $q = 40^\circ\text{C}$ 16 A   |
| Rated Operational Current AC-1 ( $I_e$ )           | (690 V) $40^\circ\text{C}$ 60<br>(690 V) $55^\circ\text{C}$ 60<br>(690 V) $70^\circ\text{C}$ 42  |
| Rated Operational Current AC-3 ( $I_e$ )           | (415 V) $55^\circ\text{C}$ 37 A<br>(440 V) $55^\circ\text{C}$ 37 A<br>(500 V) $55^\circ\text{C}$ 33 A<br>(690 V) $55^\circ\text{C}$ 25 A<br>(380 / 400 V) $55^\circ\text{C}$ 37 A<br>(220 / 230 / 240 V) $55^\circ\text{C}$ 40   |
| Rated Operational Power AC-3 ( $P_e$ )             | (415 V) 18.5 kW<br>(440 V) 22 kW<br>(500 V) 22 kW<br>(690 V) 22 kW<br>(380 / 400 V) 18.5 kW<br>(220 / 230 / 240 V) 11 kW   |
| Rated Operational Power AC-6b ( $P_e$ )            | (230 / 240 V) $40^\circ\text{C}$ , 50 / 60 Hz 15 kvar<br>(230 / 240 V) $55^\circ\text{C}$ , 50 / 60 Hz 15 kvar<br>(230 / 240 V) $70^\circ\text{C}$ , 50 / 60 Hz 12 kvar<br>(400 / 415 V) $40^\circ\text{C}$ , 50 / 60 Hz 26 kvar<br>(400 / 415 V) $70^\circ\text{C}$ , 50 / 60 Hz 20 kvar<br>(400 / 415 V) $55^\circ\text{C}$ , 50 / 60 Hz 26 kvar<br>(440 V) $40^\circ\text{C}$ , 50 / 60 Hz 29 kvar<br>(440 V) $55^\circ\text{C}$ , 50 / 60 Hz 29 kvar<br>(440 V) $70^\circ\text{C}$ , 50 / 60 Hz 22 kvar<br>(500 / 550 V), $40^\circ\text{C}$ , 50 / 60 Hz 35 kvar<br>(500 / 550 V) $55^\circ\text{C}$ , 50 / 60 Hz 35 kvar<br>(500 / 550 V) $70^\circ\text{C}$ , 50 / 60 Hz 25 kvar<br>(690 V) $40^\circ\text{C}$ , 50 / 60 Hz 46 kvar<br>(690 V) $55^\circ\text{C}$ , 50 / 60 Hz 46 kvar<br>(690 V) $70^\circ\text{C}$ , 50 / 60 Hz 34.5 kvar |
| Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1 | 8 x $I_e$ AC-3   |
| Rated Making Capacity AC-3 acc. to IEC 60947-4-1   | 10 x $I_e$ AC-3  |
| Rated Operational Current AC-15 ( $I_e$ )          | (500 V) 2 A<br>(690 V) 2 A<br>(24 / 127 V) 6 A<br>(220 / 240 V) 4 A  |

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|  | (380 / 400 V) 3 A  |
| Short-Circuit Protective Devices                             | Auxiliary Circuit - gG Type Fuses 10 A<br>gG Type Fuses 63 A   |
| Maximum Breaking Capacity                                    | cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 820 A<br>cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 340 A   |
| Maximum Electrical Switching Frequency                       | (AC-1) 600 cycles per hour<br>(AC-2 / AC-4) 300 cycles per hour<br>(AC-3) 1200 cycles per hour   |
| Rated Operational Current DC-13 (I <sub>e</sub> )            | (24 V) 6 / 144 A<br>(48 V) 2.8 / 134 A<br>(72 V) 1 / 72 A<br>(125 V) 0.55 / 69 A<br>(250 V) 0.3 / 75 A   |
| Rated Insulation Voltage (U <sub>i</sub> )                   | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V<br>acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V<br>acc. to UL/CSA 600 V  |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> )          | 8 kV   |
| Mechanical Durability  | 10 million   |
| Maximum Mechanical Switching Frequency                       | 3600 cycles per hour   |
| Rated Control Circuit Voltage (U <sub>c</sub> )              | 50 Hz 48 V<br>60 Hz 48 V   |
| Coil Consumption   | Average Holding Value 50 / 60 Hz 12 V·A<br>Average Pull-in Value 50 Hz 125 V·A<br>Average Pull-in Value 60 Hz 120 V·A  |
| Operate Time   | Between Coil De-energization and NC Contact Closing 7 ... 14 ms<br>Between Coil De-energization and NO Contact Opening 4 ... 11 ms<br>Between Coil Energization and NC Contact Opening 6 ... 18 ms<br>Between Coil Energization and NO Contact Closing 8 ... 21 ms |
| Connecting Capacity Main Circuit                             | Flexible with Cable End 2.5 ... 10 mm <sup>2</sup><br>Rigid Cable 2.5 ... 16 mm <sup>2</sup>   |
| Connecting Capacity Auxiliary Circuit                        | Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup><br>Rigid Cable 1 ... 4 mm <sup>2</sup>  |
| Degree of Protection   | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20  |
| Connecting Terminals (delivered in open position) Main Poles | M 5 (+,-) pozidriv 2 screw with 2x (5.6x6.5 mm) connector  |
| Terminal Type  | Screw Terminals  |

## Technical UL/CSA

|                           |                 |
|---------------------------|-----------------|
| General Use Rating UL/CSA | (600 V AC) 60 A |
|---------------------------|-----------------|

## Environmental

|  |  |
|--|--|
| Ambient Air Temperature                | Close to Contactor Fitted with Thermal O/L Relay -25 ... 55 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -40 ... 55 °C<br>Close to Contactor without Thermal O/L Relay (U <sub>c</sub> ) -40 ... 70 °C<br>Close to Contactor for Storage -60 ... +80 °C |
| Climatic Withstand                     | acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II  |
| Maximum Operating Altitude Permissible | Without Derating 3000 m  |
| RoHS Status                            | Following EU Directive 2011/65/EU  |

## Certificates and Declarations (Document Number)

|                |                 |
|----------------|-----------------|
| BV Certificate | BV_2634H07559E0 |
| CB Certificate | CB_FR_602227A   |

|                                    |  |
|------------------------------------|--|
| CCC Certificate                    | CCC_2013010304615752                       |
| CQC Certificate                    | CQC2013010304615752<br>CQC2004010309133982 |
| CSA Certificate                    | CSA_1033838_LR056745                       |
| Declaration of<br>Conformity - CCC | 2020980304001609<br>2020980304001227       |
| Declaration of<br>Conformity - CE  | 1SBD250801U1000                            |
| DNV Certificate                    | DNV-GL_TAE00000TX                          |
| DNV GL Certificate                 | DNV-GL_TAE00000TX                          |
| EAC Certificate                    | EAC_RU C-FR ME77 B03599                    |
| Environmental<br>Information       | 1SBD250006E1002                            |
| Instructions and<br>Manuals        | FPTC407722P0001                            |
| LR Certificate                     | LRS_9830011E4                              |
| RINA Certificate                   | RINA_ELE172319XG001                        |
| RMRS Certificate                   | RMRS_0507015250                            |
| RoHS Information                   | 1SBD250801U1000                            |
| UL Certificate                     | UL_071301E39231                            |

## Container Information

|                                   |               |
|-----------------------------------|---------------|
| Package Level 1 Units             | 1 piece       |
| Package Level 1 Width             | 100 mm        |
| Package Level 1 Depth /<br>Length | 149 mm        |
| Package Level 1 Height            | 61 mm         |
| Package Level 1 Gross<br>Weight   | 0.77 kg       |
| Package Level 1 EAN               | 3471522078834 |
| Package Level 2 Units             | box 20 piece  |
| Package Level 2 Width             | 300 mm        |
| Package Level 2 Depth /<br>Length | 245 mm        |
| Package Level 2 Height            | 308 mm        |
| Package Level 2 Gross<br>Weight   | 15.4 kg       |
| Package Level 3 Units             | 240 piece     |

## Classifications

|                               |   |
|-------------------------------|---|
| Object Classification<br>Code | Q   |
| ETIM 4                        | EC000066 - Magnet contactor, AC-switching |
| ETIM 5                        | EC000066 - Magnet contactor, AC-switching |
| ETIM 6                        | EC000066 - Power contactor, AC switching  |
| ETIM 7                        | EC000066 - Power contactor, AC switching  |
| eClass                        | V11.0 : 27371003                          |
| UNSPSC                        | 39121529                                  |

## Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors

