

CONTACTOR, AC-3 7.5 KW/400 V, AC 42 V, 50 HZ, 3-POLE, 2 NO + 2 NC, SIZE S0, SCREW CONNECTION



Figure similar

|                     |                 |
|---------------------|-----------------|
| product brand name  | SIRIUS          |
| Product designation | power contactor |

### General technical data:

|   |  |
|---|--|
| Size of contactor   | S0   |
| Degree of pollution   | 3  |
| Protection class IP   |  |
| <ul style="list-style-type: none"> <li>• on the front</li> <li>• of the terminal</li> </ul>   | <p>IP20</p> <p>IP20</p>                              |
| Mechanical service life (switching cycles)  |  |
| <ul style="list-style-type: none"> <li>• of contactor typical</li> <li>• of the contactor with added electronics-compatible auxiliary switch block typical</li> <li>• of the contactor with added auxiliary switch block typical</li> </ul> | <p>10 000 000</p> <p>5 000 000</p> <p>10 000 000</p> |

### Ambient conditions:

|  |                |
|--|----------------|
| Installation altitude at height above sea level maximum              | 2 000 m        |
| Ambient temperature  |                |
| <ul style="list-style-type: none"> <li>• during operation</li> </ul> | -25 ... +60 °C |

| Main circuit:  |  |
|--|--|
| <b>Number of NO contacts for main contacts</b>   | 3  |
| <b>Number of NC contacts for main contacts</b>   | 0  |
| <b>Operating current</b>   |  |
| <ul style="list-style-type: none"> <li>• at AC-1 at 400 V <ul style="list-style-type: none"> <li>— at ambient temperature 40 °C rated value</li> </ul> </li> <li>• at AC-1 up to 690 V <ul style="list-style-type: none"> <li>— at ambient temperature 40 °C rated value</li> <li>— at ambient temperature 60 °C rated value</li> </ul> </li> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>   | <p>40 A</p> <p>40 A</p> <p>35 A</p> <p>17 A</p>                          |
| <b>Operating current</b>   |  |
| <ul style="list-style-type: none"> <li>• at 1 current path at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> <li>• with 2 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> <li>• with 3 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>                         | <p>35 A</p> <p>4.5 A</p> <p>35 A</p> <p>35 A</p> <p>35 A</p> <p>35 A</p> |
| <b>Operating current</b>   |  |
| <ul style="list-style-type: none"> <li>• at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> <li>• with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V rated value</li> <li>— at 24 V rated value</li> </ul> </li> <li>• with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V rated value</li> <li>— at 24 V rated value</li> </ul> </li> </ul> | <p>20 A</p> <p>2.5 A</p> <p>15 A</p> <p>35 A</p> <p>35 A</p> <p>35 A</p> |
| <b>Operating power</b>   |  |
| <ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> <li>• at AC-2 at 400 V rated value</li> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>   | <p>23 kW</p> <p>7.5 kW</p> <p>7.5 kW</p> <p>10 kW</p> <p>11 kW</p>       |
| <b>Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor</b>  | 0.9 W  |

| Control circuit/ Control:   |               |
|---|---------------|
| Type of voltage of the control supply voltage   | AC            |
| Control supply voltage at AC  |               |
| <ul style="list-style-type: none"> <li>at 50 Hz rated value</li> <li>rated value</li> </ul> | 42 V<br>50 Hz |
| Operating range factor control supply voltage rated value of magnet coil at AC              |               |
| <ul style="list-style-type: none"> <li>at 50 Hz</li> </ul>                                  | 0.8 ... 1.1   |
| Apparent pick-up power of magnet coil at AC   | 61 V·A        |
| Inductive power factor with closing power of the coil                                       | 0.82          |
| Apparent holding power of magnet coil at AC   | 7.8 V·A       |
| Inductive power factor with the holding power of the coil                                   | 0.24          |

| Auxiliary circuit:   |   |
|--|---|
| Number of NC contacts  |   |
| <ul style="list-style-type: none"> <li>for auxiliary contacts <ul style="list-style-type: none"> <li>instantaneous contact</li> </ul> </li> </ul>              | 2   |
| Number of NO contacts  |   |
| <ul style="list-style-type: none"> <li>for auxiliary contacts <ul style="list-style-type: none"> <li>instantaneous contact</li> </ul> </li> </ul>              | 2   |
| Operating current at AC-12 maximum   | 10 A  |
| Operating current at AC-15   |   |
| <ul style="list-style-type: none"> <li>at 230 V rated value</li> <li>at 400 V rated value</li> </ul>   | 6 A<br>3 A                                      |
| Operating current at DC-12   |   |
| <ul style="list-style-type: none"> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 220 V rated value</li> </ul>                              | 6 A<br>3 A<br>1 A                               |
| Operating current at DC-13   |   |
| <ul style="list-style-type: none"> <li>at 24 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 220 V rated value</li> </ul> | 10 A<br>2 A<br>1 A<br>0.3 A                     |
| Contact reliability of auxiliary contacts  | 1 faulty switching per 100 million (17 V, 1 mA) |

| Short-circuit protection  |  |
|---|--|
| Design of the fuse link   |  |
| <ul style="list-style-type: none"> <li>for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>with type of coordination 1 required</li> <li>with type of assignment 2 required</li> </ul> </li> <li>for short-circuit protection of the auxiliary switch required</li> </ul> | fuse gL/gG: 63 A<br>fuse gL/gG: 25 A<br>fuse gL/gG: 10 A |

**Installation/ mounting/ dimensions:**






|                                       |  |
|---------------------------------------|--|
| <b>Mounting type</b>                  | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| • Side-by-side mounting               | Yes  |
| <b>Height</b>                         | 85 mm  |
| <b>Width</b>                          | 45 mm  |
| <b>Depth</b>                          | 140 mm   |
| <b>Required spacing</b>               |  |
| • for grounded parts<br>— at the side | 6 mm   |


**Connections/ Terminals:**

|   |  |
|---|--|
| <b>Type of electrical connection</b>                |  |
| • for main current circuit                          | screw-type terminals   |
| • for auxiliary and control current circuit         | screw-type terminals   |
| <b>Type of connectable conductor cross-sections</b> |  |
| • for main contacts                                 |  |
| — solid   | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), max. 2x 10 mm <sup>2</sup>                 |
| — single or multi-stranded                          | 2x (1 ... 2,5 mm <sup>2</sup> ), 2x (2,5 ... 6 mm <sup>2</sup> ), max. 2x 10 mm <sup>2</sup>                 |
| — finely stranded with core end processing          | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> )   |
| • at AWG conductors for main contacts               | 2x (16 ... 12), 2x (14 ... 10), 1x 8   |
| <b>Type of connectable conductor cross-sections</b> |  |
| • for auxiliary contacts                            |  |
| — solid   | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), max. 2x (0.75 ... 4 mm <sup>2</sup> ) |
| — finely stranded with core end processing          | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )  |
| • at AWG conductors for auxiliary contacts          | 2x (20 ... 16), 2x (18 ... 14), 1x 12  |

**Certificates/approvals**

|  |  |   |   |   |   |
|--|--|---|---|---|---|
| General Product Approval   |  |   |   | Declaration of Conformity   | Test Certificates                                 |
| <br>CCC | <br>CSA | <br>UL |  | <br>EG-Konf. | <a href="#">Typprüfbescheinigung/Werkszeugnis</a> |

|   |  |  |   |  |   |
|---|--|--|---|--|---|
| Test Certificates                           | Shipping Approval  |  |   |  |   |
| <a href="#">spezielle Prüfbescheinigung</a> | <br>ABS | <br>DNV | <br>GL | <br>LRS | <br>RINA |

|   |                               |                                   |                         |
|---|-------------------------------|-----------------------------------|-------------------------|
| Shipping Approval   | other                         |                                   |                         |
| <br>RMRS | <a href="#">Bestätigungen</a> | <a href="#">Umweltbestätigung</a> | <a href="#">sonstig</a> |

#### Further information

##### Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT10251AD04>

##### Cax online generator

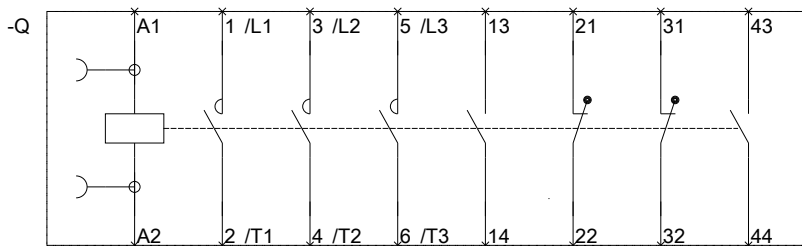
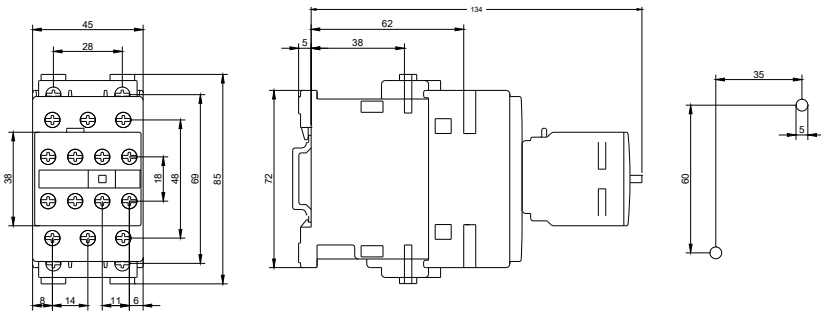
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10251AD04>

##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10251AD04>

##### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT10251AD04&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10251AD04&lang=en)



last modified:

19.03.2016