

Power contactor, AC-3 12 A, 5.5 kW / 400 V 24 V AC, 50 Hz, 3-pole  
 Size S0 Screw terminal !!! Phased-out product !!! Successor is  
 SIRIUS 3RT2 Preferred successor type is >>3RT2024-1AB00<<



Figure similar

|   |                 |
|---|-----------------|
| <b>Product brand name</b>   | SIRIUS          |
| <b>Product designation</b>  | power contactor |
| <b>General technical data</b>   |                 |
| <b>Size of contactor</b>  | S0              |
| <b>Degree of pollution</b>  | 3               |
| <b>Protection class IP</b>  |                 |
| • on the front  | IP20            |
| • of the terminal   | IP00            |
| <b>Mechanical service life (switching cycles)</b>                                   |                 |
| • of contactor typical  | 10 000 000      |
| • of the contactor with added electronics-compatible auxiliary switch block typical | 5 000 000       |
| • of the contactor with added auxiliary switch block typical                        | 10 000 000      |
| <b>Reference code acc. to DIN EN 81346-2</b>  | Q               |
| <b>Ambient conditions</b>   |                 |
| <b>Installation altitude at height above sea level</b>                              |                 |

|   |                |
|---|----------------|
| <ul style="list-style-type: none"> <li>• maximum</li> </ul>   | 2 000 m        |
| <b>Ambient temperature</b> <ul style="list-style-type: none"> <li>• during operation</li> </ul>   | -25 ... +60 °C |
| <b>Main circuit</b>   |                |
| <b>Number of poles for main current circuit</b>   | 3              |
| <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> </ul>  | 40 A           |
| <ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— up to 690 V at ambient temperature 40 °C rated value</li> <li>— up to 690 V at ambient temperature 60 °C rated value</li> </ul> </li> </ul> | 40 A<br>35 A   |
| <ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>   | 12 A           |
| <ul style="list-style-type: none"> <li>• at AC-4 at 400 V rated value</li> </ul>  | 12.5 A         |
| <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> </ul>  | 35 A<br>4.5 A  |
| <ul style="list-style-type: none"> <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> </ul>                                   | 35 A<br>35 A   |
| <ul style="list-style-type: none"> <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>                                   | 35 A<br>35 A   |
| <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> </ul>  | 20 A<br>2.5 A  |
| <ul style="list-style-type: none"> <li>• with 2 current paths in series 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> </ul>                           | 35 A<br>15 A   |
| <ul style="list-style-type: none"> <li>• with 3 current paths in series 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> </ul>                           | 35 A<br>35 A   |
| <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> </ul>   | 23 kW          |

|                                |        |
|--------------------------------|--------|
| • at AC-2 at 400 V rated value | 5.5 kW |
| • at AC-3                      |        |
| — at 400 V rated value         | 5.5 kW |
| — at 500 V rated value         | 7.5 kW |
| — at 690 V rated value         | 7.5 kW |

#### Control circuit/ Control

|   |             |
|---|-------------|
| <b>Type of voltage of the control supply voltage</b>                                  | AC          |
| <b>Control supply voltage at AC</b>   |             |
| • at 50 Hz rated value  | 24 V        |
| <b>Control supply voltage frequency</b>   |             |
| • 1 rated value   | 50 Hz       |
| <b>Operating range factor control supply voltage rated value of magnet coil at AC</b> |             |
| • at 50 Hz  | 0.8 ... 1.1 |
| <b>Apparent pick-up power of magnet coil at AC</b>                                    | 61 V·A      |
| <b>Inductive power factor with closing power of the coil</b>                          | 0.82        |
| <b>Apparent holding power of magnet coil at AC</b>                                    | 7.8 V·A     |
| <b>Inductive power factor with the holding power of the coil</b>                      | 0.24        |

#### Auxiliary circuit

|   |   |
|---|---|
| <b>Number of NC contacts for auxiliary contacts</b> |   |
| • instantaneous contact                             | 0   |
| <b>Number of NO contacts for auxiliary contacts</b> |   |
| • instantaneous contact                             | 0   |
| <b>Operating current at AC-12 maximum</b>           | 10 A  |
| <b>Operating current at AC-15</b>                   |   |
| • at 230 V rated value                              | 6 A   |
| • at 400 V rated value                              | 3 A   |
| <b>Operating current at DC-12</b>                   |   |
| • at 60 V rated value                               | 6 A   |
| • at 110 V rated value                              | 3 A   |
| • at 220 V rated value                              | 1 A   |
| <b>Operating current at DC-13</b>                   |   |
| • at 24 V rated value                               | 10 A  |
| • at 60 V rated value                               | 2 A   |
| • at 110 V rated value                              | 1 A   |
| • at 220 V rated value                              | 0.3 A   |
| <b>Contact reliability of auxiliary contacts</b>    | 1 faulty switching per 100 million (17 V, 1 mA) |

#### Short-circuit protection

|  |  |
|--|--|
| <b>Design of the fuse link</b>                     |  |
| • for short-circuit protection of the main circuit |  |

- with type of coordination 1 required
- with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required

fuse gL/gG: 63 A  
 fuse gL/gG: 25 A  
 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>            | 91 mm  |
| <b>Required spacing</b> |  |
| • for grounded parts    |  |
| — 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 | EMC | Functional Safety/Safety of Machinery |
|--------------------------|-----|---------------------------------------|



CCC



CSA



UL



RCM

[Type Examination Certificate](#)

|                           |                   |                   |
|---------------------------|-------------------|-------------------|
| Declaration of Conformity | Test Certificates | Marine / Shipping |
|---------------------------|-------------------|-------------------|



EG-Konf.

[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



ABS



LRS

|                   |       |         |
|-------------------|-------|---------|
| Marine / Shipping | other | Railway |
|-------------------|-------|---------|



RINA



RMRS



DNV-GL

[Miscellaneous](#)

[Confirmation](#)

[Special Test Certificate](#)

## Further information

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

[www.siemens.com/ic10](http://www.siemens.com/ic10)

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1024-1AB00>

### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1024-1AB00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1024-1AB00>

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

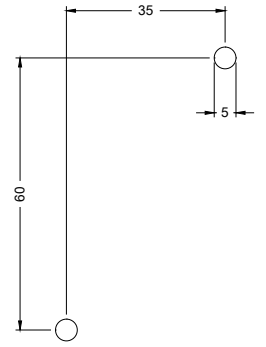
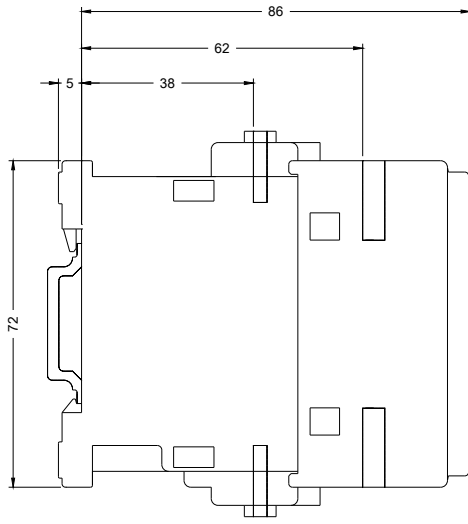
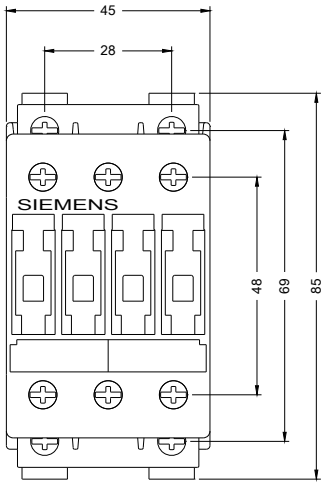
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1024-1AB00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1024-1AB00&lang=en)

### Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

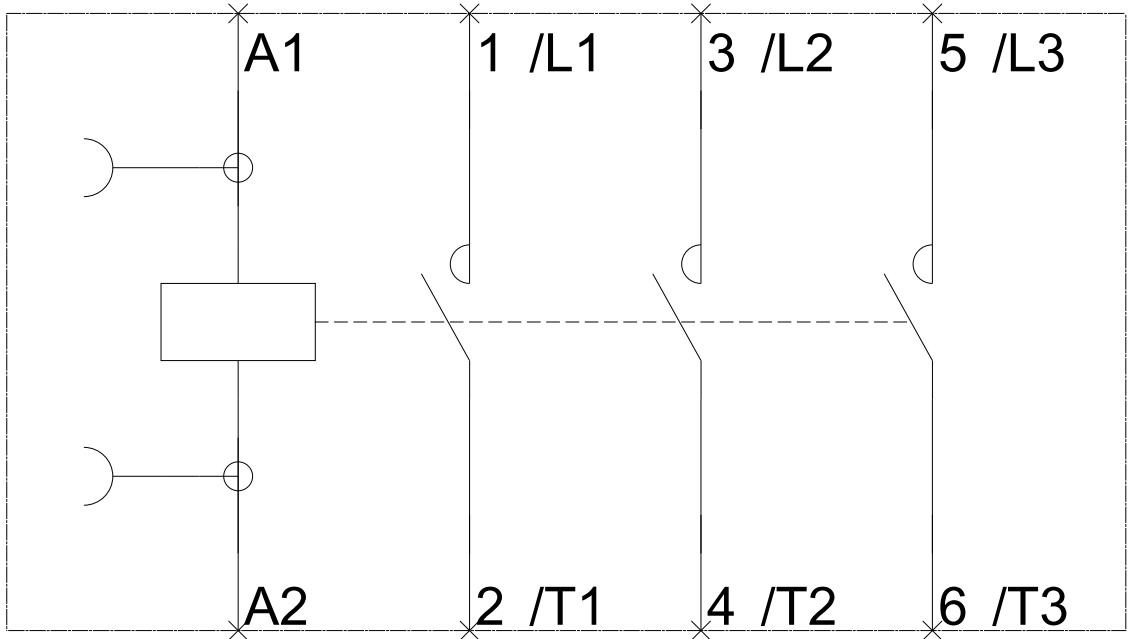
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1024-1AB00/char>

### Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1024-1AB00&objecttype=14&gridview=view1>



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