

Power contactor, AC-3 32 A, 15 kW / 400 V 220 V AC, 50 Hz / 240 V, 60 Hz, 3-pole, Size S2, Screw terminal !!! Phased-out product !!!  
Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2027-1AP60<<



Figure similar

|                                                     |                        |
|-----------------------------------------------------|------------------------|
| Product brand name                                  | SIRIUS                 |
| Product designation                                 | power contactor        |
| General technical data                              |                        |
| Size of contactor                                   | S2                     |
| Insulation voltage                                  |                        |
| • rated value                                       | 690 V                  |
| Degree of pollution                                 | 3                      |
| Surge voltage resistance rated value                | 6 kV                   |
| maximum permissible voltage for safe isolation      |                        |
| • between coil and main contacts acc. to EN 60947-1 | 400 V                  |
| Protection class IP                                 |                        |
| • on the front                                      | IP20                   |
| • of the terminal                                   | IP00                   |
| Shock resistance at rectangular impulse             |                        |
| • at AC                                             | 10g / 5 ms, 5g / 10 ms |
| Shock resistance with sine pulse                    |                        |

|                                                                                     |                        |
|-------------------------------------------------------------------------------------|------------------------|
| • at AC                                                                             | 15g / 5 ms, 8g / 10 ms |
| <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                      |

#### Ambient conditions

|                                                        |                |
|--------------------------------------------------------|----------------|
| <b>Installation altitude at height above sea level</b> |                |
| • maximum                                              | 2 000 m        |
| <b>Ambient temperature</b>                             |                |
| • during operation                                     | -25 ... +60 °C |
| • during storage                                       | -55 ... +80 °C |

#### Main circuit

|                                                                      |        |
|----------------------------------------------------------------------|--------|
| <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>                                             |        |
| • at AC-1 at 400 V                                                   |        |
| — at ambient temperature 40 °C rated value                           | 50 A   |
| • at AC-1                                                            |        |
| — up to 690 V at ambient temperature 40 °C rated value               | 50 A   |
| — up to 690 V at ambient temperature 60 °C rated value               | 45 A   |
| • at AC-3                                                            |        |
| — at 400 V rated value                                               | 32 A   |
| — at 690 V rated value                                               | 20 A   |
| • at AC-4 at 400 V rated value                                       | 29 A   |
| <b>Connectable conductor cross-section in main circuit at AC-1</b>   |        |
| • at 60 °C minimum permissible                                       | 10 mm² |
| • at 40 °C minimum permissible                                       | 16 mm² |
| <b>Operating current for approx. 200000 operating cycles at AC-4</b> |        |
| • at 400 V rated value                                               | 15.6 A |
| • at 690 V rated value                                               | 11 A   |
| <b>Operating current</b>                                             |        |
| • at 1 current path at DC-1                                          |        |
| — at 24 V rated value                                                | 45 A   |
| — at 110 V rated value                                               | 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> <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>                                                                                                                                                                                                | 45 A<br>25 A<br><br>45 A<br>45 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> <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> <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> | <br>35 A<br>2.5 A<br><br>45 A<br>25 A<br><br>45 A<br>45 A                                  |
| <b>Operating power</b> <ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— at 230 V at 60 °C rated value</li> <li>— at 400 V rated value</li> <li>— at 690 V rated value</li> <li>— at 690 V at 60 °C 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 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>                                           | <br>18 kW<br>31 kW<br>54 kW<br>54 kW<br>15 kW<br><br>7.5 kW<br>15 kW<br>18.5 kW<br>18.5 kW |
| <b>Operating power for approx. 200000 operating cycles at AC-4</b> <ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 690 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                   | 8.2 kW<br>10 kW                                                                            |
| <b>Thermal short-time current limited to 10 s</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 320 A                                                                                      |
| <b>Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.8 W                                                                                      |
| <b>No-load switching frequency</b> <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5 000 1/h                                                                                  |
| <b>Operating frequency</b> <ul style="list-style-type: none"> <li>• at AC-1 maximum</li> <li>• at AC-2 maximum</li> <li>• at AC-3 maximum</li> <li>• at AC-4 maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                                                               | 1 200 1/h<br>750 1/h<br>1 000 1/h<br>250 1/h                                               |

| Control circuit/ Control                                                       |                                                 |
|--------------------------------------------------------------------------------|-------------------------------------------------|
| Type of voltage of the control supply voltage                                  | AC                                              |
| Control supply voltage at AC                                                   |                                                 |
| • at 50 Hz rated value                                                         | 220 V                                           |
| • at 60 Hz rated value                                                         | 240 V                                           |
| Control supply voltage frequency                                               |                                                 |
| • 1 rated value                                                                | 50 Hz                                           |
| • 2 rated value                                                                | 60 Hz                                           |
| Operating range factor control supply voltage rated value of magnet coil at AC |                                                 |
| • at 50 Hz                                                                     | 0.8 ... 1.1                                     |
| • at 60 Hz                                                                     | 0.8 ... 1.1                                     |
| Apparent pick-up power of magnet coil at AC                                    | 120 V·A                                         |
| Inductive power factor with closing power of the coil                          | 0.7                                             |
| Apparent holding power of magnet coil at AC                                    | 10.1 V·A                                        |
| Inductive power factor with the holding power of the coil                      | 0.42                                            |
| Closing delay                                                                  |                                                 |
| • at AC                                                                        | 11 ... 30 ms                                    |
| Opening delay                                                                  |                                                 |
| • at AC                                                                        | 7 ... 20 ms                                     |
| Arcing time                                                                    | 10 ... 15 ms                                    |
| Auxiliary circuit                                                              |                                                 |
| Number of NC contacts for auxiliary contacts                                   |                                                 |
| • instantaneous contact                                                        | 0                                               |
| Number of NO contacts for auxiliary contacts                                   |                                                 |
| • instantaneous contact                                                        | 0                                               |
| Operating current at AC-12 maximum                                             | 10 A                                            |
| Operating current at AC-15                                                     |                                                 |
| • at 230 V rated value                                                         | 6 A                                             |
| • at 400 V rated value                                                         | 3 A                                             |
| Operating current at DC-12                                                     |                                                 |
| • at 60 V rated value                                                          | 6 A                                             |
| • at 110 V rated value                                                         | 3 A                                             |
| • at 220 V rated value                                                         | 1 A                                             |
| Operating current at DC-13                                                     |                                                 |
| • 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                                           |
| Contact reliability of auxiliary contacts                                      | 1 faulty switching per 100 million (17 V, 1 mA) |

## UL/CSA ratings

### Contact rating of auxiliary contacts according to UL

A600 / Q600

## Short-circuit protection

### Design of the fuse link

- 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: 125 A

fuse gL/gG: 63 A

fuse gL/gG: 10 A

## Installation/ mounting/ dimensions

### Mounting type

screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022

- Side-by-side mounting

Yes

### Height

112 mm

### Width

55 mm

### Depth

115 mm

### Required spacing

- for grounded parts
  - at the side

6 mm

## Connections/Terminals

### Type of electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

### Type of connectable conductor cross-sections

- for main contacts
  - solid
  - stranded
  - single or multi-stranded
  - finely stranded with core end processing
  - finely stranded without core end processing
- at AWG conductors for main contacts

2x (0.75 ... 16 mm<sup>2</sup>)

2x (0.75 ... 25 mm<sup>2</sup>)

2x (0,75 ... 16 mm<sup>2</sup>)

2x (0.75 ... 16 mm<sup>2</sup>)

2x (0.75 ... 16 mm<sup>2</sup>)

2x (18 ... 2)

### Type of connectable conductor cross-sections

- for auxiliary contacts
  - solid
  - finely stranded with core end processing
- at AWG conductors for auxiliary contacts

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>)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14), 1x 12

## Certificates/approvals

|                          |                                       |                           |
|--------------------------|---------------------------------------|---------------------------|
| General Product Approval | Functional Safety/Safety of Machinery | Declaration of Conformity |
|--------------------------|---------------------------------------|---------------------------|



[Type Examination Certificate](#)



|                   |                   |
|-------------------|-------------------|
| Test Certificates | Marine / Shipping |
|-------------------|-------------------|

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



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



[Confirmation](#)

[Miscellaneous](#)

## 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=3RT1034-1AP60>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1034-1AP60>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-1AP60>

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

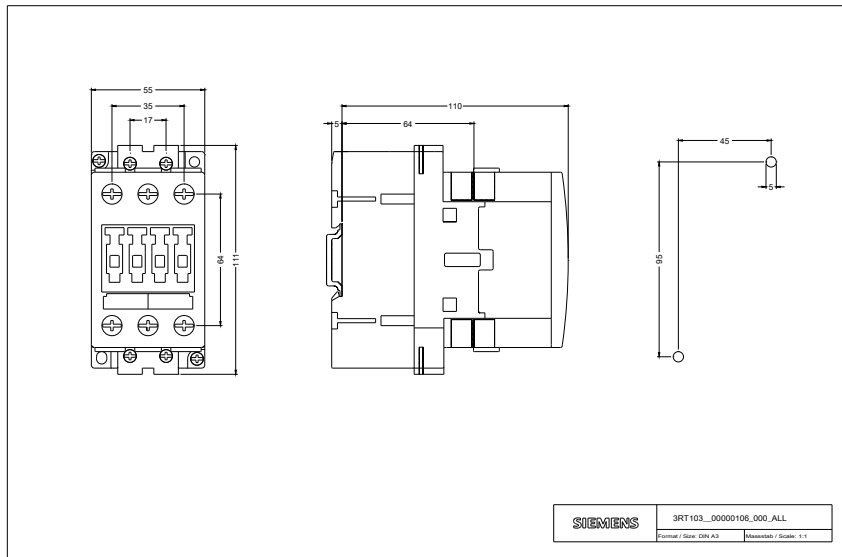
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1034-1AP60&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1034-1AP60&lang=en)

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

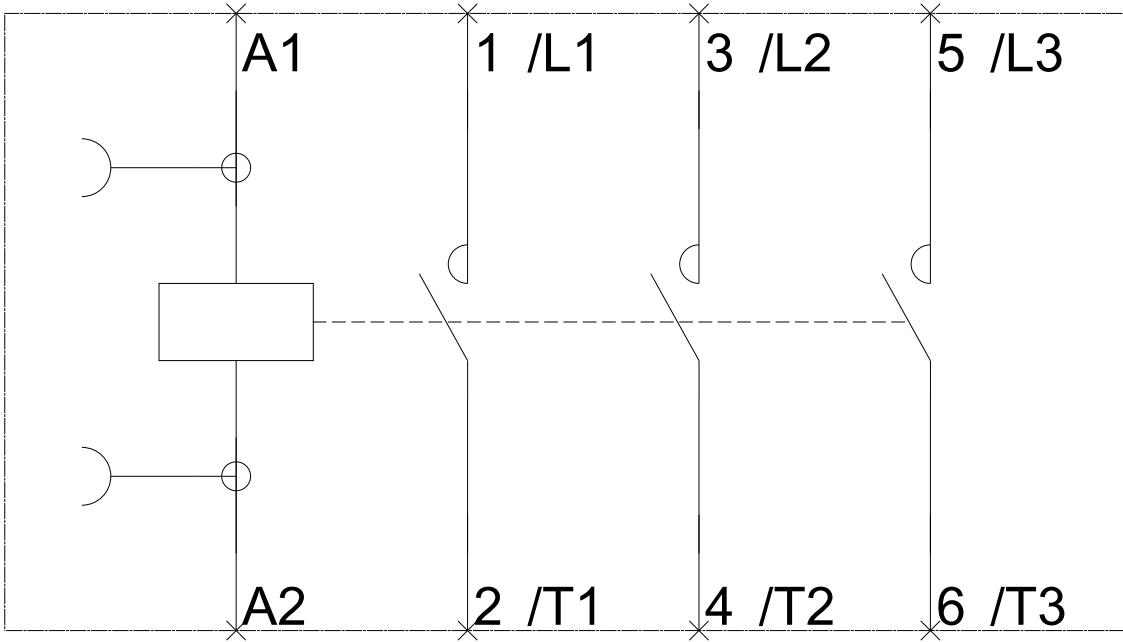
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-1AP60/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1034-1AP60&objecttype=14&gridview=view1>



-Q



last modified:

07/16/2018