

CONTACTOR, AC-3 4 KW/400 V, 1 NO, AC 230 V, 50/60 HZ, 3-  
POLE, SIZE S00, SCREW CONNECTION MULTI-UNIT PACKING  
PACKING = 20 ITEMS 2X1 LAYERS



|                                                                                     |                 |
|-------------------------------------------------------------------------------------|-----------------|
| product brand name                                                                  | SIRIUS          |
| Product designation                                                                 | power contactor |
| General technical data                                                              |                 |
| Size of contactor                                                                   | S00             |
| Degree of pollution                                                                 | 3               |
| Protection class IP                                                                 |                 |
| • on the front                                                                      | IP20            |
| • of the terminal                                                                   | IP20            |
| Mechanical service life (switching cycles)                                          |                 |
| • of contactor typical                                                              | 30 000 000      |
| • 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      |
| Ambient conditions                                                                  |                 |
| Installation altitude at height above sea level maximum                             | 2 000 m         |
| Ambient temperature                                                                 |                 |
| • during operation                                                                  | -25 ... +60 °C  |

| Main circuit                                                                                                                                                                                                                    |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Number of poles for main current circuit                                                                                                                                                                                        | 3              |
| Number of NO contacts for main contacts                                                                                                                                                                                         | 3              |
| Number of NC contacts for main contacts                                                                                                                                                                                         | 0              |
| Operating current                                                                                                                                                                                                               |                |
| <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>                                                                  | 22 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> | 22 A<br>20 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>                                                                                               | 9 A            |
| Operating current                                                                                                                                                                                                               |                |
| <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>                                                | 20 A<br>2.1 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>                                   | 20 A<br>12 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>                                   | 20 A<br>20 A   |
| Operating current                                                                                                                                                                                                               |                |
| <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>0.15 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 110 V rated value</li> <li>at 24 V rated value</li> </ul> </li> </ul>                           | 0.35 A<br>20 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 110 V rated value</li> <li>at 24 V rated value</li> </ul> </li> </ul>                           | 20 A<br>20 A   |
| Operating power                                                                                                                                                                                                                 |                |
| <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>                                                                                               | 13 kW          |
| <ul style="list-style-type: none"> <li>at AC-2 at 400 V rated value</li> </ul>                                                                                                                                                  | 4 kW           |
| <ul style="list-style-type: none"> <li>at AC-3 <ul style="list-style-type: none"> <li>at 400 V rated value</li> <li>at 500 V rated value</li> </ul> </li> </ul>                                                                 | 4 kW<br>4.5 kW |

|                                                                                               |                                                 |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------|
| — at 690 V rated value                                                                        | 5.5 kW                                          |
| <b>Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor</b> | 0.7 W                                           |
| <b>Control circuit/ Control</b>                                                               |                                                 |
| <b>Type of voltage of the control supply voltage</b>                                          | AC                                              |
| <b>Control supply voltage at AC</b>                                                           |                                                 |
| • at 50 Hz rated value                                                                        | 230 V                                           |
| • at 60 Hz rated value                                                                        | 230 V                                           |
| <b>Control supply voltage frequency 1 rated value</b>                                         | 50 Hz                                           |
| <b>Control supply voltage frequency 2 rated value</b>                                         | 60 Hz                                           |
| <b>Operating range factor control supply voltage rated value of magnet coil at AC</b>         |                                                 |
| • at 50 Hz                                                                                    | 0.8 ... 1.1                                     |
| • at 60 Hz                                                                                    | 0.85 ... 1.1                                    |
| <b>Apparent pick-up power of magnet coil at AC</b>                                            | 27 V·A                                          |
| <b>Inductive power factor with closing power of the coil</b>                                  | 0.8                                             |
| <b>Apparent holding power of magnet coil at AC</b>                                            | 4.4 V·A                                         |
| <b>Inductive power factor with the holding power of the coil</b>                              | 0.27                                            |
| <b>Auxiliary circuit</b>                                                                      |                                                 |
| <b>Number of NC contacts</b>                                                                  |                                                 |
| • for auxiliary contacts                                                                      |                                                 |
| — instantaneous contact                                                                       | 0                                               |
| <b>Number of NO contacts</b>                                                                  |                                                 |
| • for auxiliary contacts                                                                      |                                                 |
| — instantaneous contact                                                                       | 1                                               |
| <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) |
| <b>Short-circuit protection</b>                                                               |                                                 |
| <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: 35 A  
 fuse gL/gG: 20 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>                                                                        | 57.5 mm                                                                                |
| <b>Width</b>                                                                         | 45 mm                                                                                  |
| <b>Depth</b>                                                                         | 72 mm                                                                                  |
| <b>Required spacing</b>                                                              |                                                                                        |
| • for grounded parts <ul style="list-style-type: none"> <li>— at the side</li> </ul> | 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 <ul style="list-style-type: none"> <li>— solid</li> <li>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> | 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> )<br>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> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) |
| • at AWG conductors for main contacts                                                                                                                                 | 2x (20 ... 16), 2x (18 ... 14), 1x 12                                                                                                                                                                                                                                                                 |
| <b>Type of connectable conductor cross-sections</b>                                                                                                                   |                                                                                                                                                                                                                                                                                                       |
| • for auxiliary contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— finely stranded with core end processing</li> </ul>                                | 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> )<br>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 | Functional Safety/Safety of Machinery | Declaration of Conformity |
|--------------------------|---------------------------------------|---------------------------|
|--------------------------|---------------------------------------|---------------------------|



[Baumusterprüfbescheinigung](#)



| Test Certificates | Shipping Approval |
|-------------------|-------------------|
|-------------------|-------------------|

[spezielle Prüfbescheinigungen](#)



| Shipping Approval | other |
|-------------------|-------|
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#### 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=3RT1016-1AP01-Z W98>

**Cax online generator**

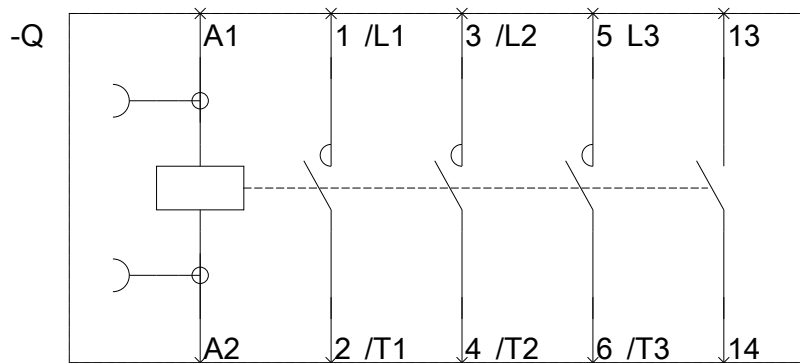
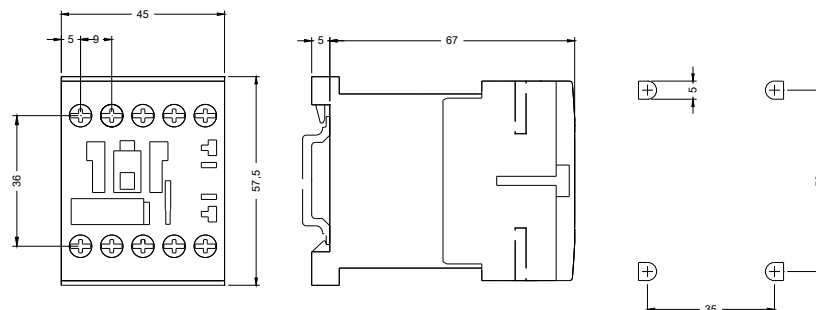
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1016-1AP01-Z W98>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1016-1AP01-Z W98>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1016-1AP01-Z W98&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1016-1AP01-Z W98&lang=en)



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