



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

| General technical data:                                                               |    |             |
|---------------------------------------------------------------------------------------|----|-------------|
| product brand name                                                                    |    | SIRIUS      |
| Size of the contactor                                                                 |    | S0          |
| Protection class IP / on the front                                                    |    | IP20        |
| Degree of pollution                                                                   |    | 3           |
| Installation altitude / at a height over sea level / maximum                          | m  | 2,000       |
| Ambient temperature / during operating                                                | °C | -25 ... +60 |
| Mechanical operating cycles as operating time                                         |    |             |
| • of the contactor / typical                                                          |    | 10,000,000  |
| • of the contactor with added auxiliary switch block / typical                        |    | 10,000,000  |
| • of the contactor with added electronics-compatible auxiliary switch block / typical |    | 5,000,000   |

| Main circuit:                                |   |      |
|----------------------------------------------|---|------|
| Number of NC contacts / for main contacts    |   | 0    |
| Number of NO contacts / for main contacts    |   | 3    |
| Operating current                            |   |      |
| • at AC-1 / at 400 V                         |   |      |
| • at 40 °C ambient temperature / rated value | A | 40   |
| • at AC-3 / at 400 V / rated value           | A | 17   |
| • at AC-4 / at 400 V / rated value           | A | 15.5 |

|                                                      |    |       |
|------------------------------------------------------|----|-------|
| • with 1 current path / at DC-1                      |    |       |
| • at 24 V / rated value                              | A  | 35    |
| • at 110 V / rated value                             | A  | 4.5   |
| • with 2 current paths in series / at DC-1           |    |       |
| • at 24 V / rated value                              | A  | 35    |
| • at 110 V / rated value                             | A  | 35    |
| • with 3 current paths in series / at DC-1           |    |       |
| • at 24 V / rated value                              | A  | 35    |
| • at 110 V / rated value                             | A  | 35    |
| • with 1 current path / at DC-3 / at DC-5            |    |       |
| • at 24 V / rated value                              | A  | 20    |
| • at 110 V / rated value                             | A  | 2.5   |
| • with 2 current paths in series / at DC-3 / at DC-5 |    |       |
| • at 24 V / rated value                              | A  | 35    |
| • at 110 V / rated value                             | A  | 15    |
| • with 3 current paths in series / at DC-3 / at DC-5 |    |       |
| • at 24 V / rated value                              | A  | 35    |
| • at 110 V / rated value                             | A  | 35    |
| <b>Service power</b>                                 |    |       |
| • at AC-2 / at 400 V / rated value                   | kW | 7.5   |
| • at AC-3 / at 400 V / rated value                   | kW | 7.5   |
| • at AC-4 / at 400 V / rated value                   | W  | 7,500 |

|                                                                                       |   |             |
|---------------------------------------------------------------------------------------|---|-------------|
| <b>Control circuit:</b>                                                               |   |             |
| <b>Voltage type / of control feed voltage</b>                                         |   | DC          |
| <b>Operating range factor control supply voltage rated value / of the magnet coil</b> |   |             |
| • for DC                                                                              |   | 0.8 ... 1.1 |
| <b>Pull-in power / of the solenoid / for DC</b>                                       | W | 5.4         |
| <b>Holding power / of the solenoid / for DC</b>                                       | W | 5.4         |

|                                                                                 |  |                                                 |
|---------------------------------------------------------------------------------|--|-------------------------------------------------|
| <b>Auxiliary circuit:</b>                                                       |  |                                                 |
| <b>Contact reliability / of the auxiliary contacts</b>                          |  | 1 faulty switching per 100 million (17 V, 1 mA) |
| <b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b> |  | 2                                               |
| <b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b> |  | 2                                               |

|                                                                   |  |                  |
|-------------------------------------------------------------------|--|------------------|
| <b>Short-circuit:</b>                                             |  |                  |
| <b>Design of the fuse link</b>                                    |  |                  |
| • for short-circuit protection of the auxiliary switch / required |  | fuse gL/gG: 10 A |
| • for short-circuit protection of the main circuit                |  |                  |

- with type of assignment 1 / required
- at type of coordination 2 / required

fuse gL/gG: 63 A

fuse gL/gG: 25 A

#### Installation/mounting/dimensions:

|                                                               |    |                                                                                        |
|---------------------------------------------------------------|----|----------------------------------------------------------------------------------------|
| <b>Mounting type</b>                                          |    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| <b>series installation</b>                                    |    | Yes                                                                                    |
| <b>Width</b>                                                  | mm | 45                                                                                     |
| <b>Height</b>                                                 | mm | 85                                                                                     |
| <b>Depth</b>                                                  | mm | 150                                                                                    |
| <b>Distance, to be maintained, to earthed part / sideways</b> | mm | 6                                                                                      |

#### Connection type:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Design of the electrical connection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | <p>screw-type terminals</p> <p>screw-type terminals</p>                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Type of the connectable conductor cross-section</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded <ul style="list-style-type: none"> <li>• with conductor end processing</li> </ul> </li> </ul> </li> <li>• for AWG conductors / for main contacts</li> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded <ul style="list-style-type: none"> <li>• with conductor end processing</li> </ul> </li> </ul> </li> <li>• for AWG conductors / for auxiliary contacts</li> </ul> |  | <p>2x (1 ... 2.5 mm<sup>2</sup>), 2x (2.5 ... 6 mm<sup>2</sup>), max. 2x 10 mm<sup>2</sup></p> <p>2x (1 ... 2.5 mm<sup>2</sup>), 2x (2.5 ... 6 mm<sup>2</sup>)</p> <p>2x (20 ... 16), 2x (18 ... 14), 1x 12</p> <p>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>)</p> <p>2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</p> <p>2x (20 ... 16), 2x (18 ... 14), 1x 12</p> |

#### Certificates/approvals:

## General Product Approval

## Functional Safety / Safety of Machinery

## Declaration of Conformity



CCC



CSA



UL

[Type Examination](#)



EG-Konf.

## Test Certificates

[Special Test  
Certificate](#)

[Type Test  
Certificates/Test  
Report](#)

## Shipping Approval



ABS



DNV



GL



LRS



RINA



RMRS

## other

[Confirmation](#)

[other](#)

[Environmental  
Confirmations](#)

## Further information:

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

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

### Industry Mall (Online ordering system)

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

### Cax online generator:

<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT1025-1BD44/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT1025-1BD44](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1025-1BD44)



