



CONTACTOR, AC-3 18.5 KW,400V, AC 24 V,  
50 HZ 4-POLE, 2 NO + 2 NC, SIZE S2,  
SCREW CONNECTION

| General technical data:                                                               |    |             |
|---------------------------------------------------------------------------------------|----|-------------|
| product brand name                                                                    |    | SIRIUS      |
| Size of the contactor                                                                 |    | S2          |
| Protection class IP / on the front                                                    |    | IP00        |
| Protection against electrical shock                                                   |    | finger-safe |
| Degree of pollution                                                                   |    | 3           |
| Installation altitude / at a height over sea level / maximum                          | m  | 2,000       |
| Ambient temperature                                                                   |    |             |
| • during storage                                                                      | °C | -55 ... +80 |
| • during operating                                                                    | °C | -25 ... +60 |
| Insulation voltage / rated value                                                      | V  | 690         |
| 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                                             |    | 2           |
| Number of NO contacts / for main contacts                                             |    | 2           |
| Operational current / at AC-1 / up to 690 V                                           |    |             |

|                                                      |   |      |
|------------------------------------------------------|---|------|
| • at 40 °C ambient temperature / rated value         | A | 60   |
| • at 60 °C ambient temperature / rated value         | A | 55   |
| <b>Operating current / at AC-2 / at AC-3</b>         |   |      |
| • at 400 V                                           |   |      |
| • per NO contact / rated value                       | A | 40   |
| • per NC contact / rated value                       | A | 40   |
| <b>Operating current</b>                             |   |      |
| • with 1 current path / at DC-1                      |   |      |
| • at 24 V / rated value                              | A | 50   |
| • at 110 V / rated value                             | A | 4.5  |
| • at 220 V / rated value                             | A | 1    |
| • at 440 V / rated value                             | A | 0.4  |
| • with 2 current paths in series / at DC-1           |   |      |
| • at 24 V / rated value                              | A | 50   |
| • at 110 V / rated value                             | A | 45   |
| • at 220 V / rated value                             | A | 5    |
| • at 440 V / rated value                             | A | 1    |
| <b>Operating current</b>                             |   |      |
| • with 1 current path / at DC-3 / at DC-5            |   |      |
| • at 24 V                                            |   |      |
| • per NO contact / rated value                       | A | 35   |
| • per NC contact / rated value                       | A | 35   |
| • at 110 V                                           |   |      |
| • per NO contact / rated value                       | A | 2.5  |
| • per NC contact / rated value                       | A | 1.25 |
| • at 220 V                                           |   |      |
| • per NO contact / rated value                       | A | 1    |
| • per NC contact / rated value                       | A | 0.5  |
| • at 440 V                                           |   |      |
| • per NO contact / rated value                       | A | 0.1  |
| • per NC contact / rated value                       | A | 0.05 |
| • with 2 current paths in series / at DC-3 / at DC-5 |   |      |
| • at 24 V                                            |   |      |
| • per NO contact / rated value                       | A | 50   |
| • per NC contact / rated value                       | A | 50   |
| • at 110 V                                           |   |      |
| • per NO contact / rated value                       | A | 25   |
| • per NC contact / rated value                       | A | 12.5 |
| • at 220 V                                           |   |      |
| • per NO contact / rated value                       | A | 5    |

|                                                                                                    |     |       |
|----------------------------------------------------------------------------------------------------|-----|-------|
| • per NC contact / rated value                                                                     | A   | 2.5   |
| • at 440 V                                                                                         |     |       |
| • per NO contact / rated value                                                                     | A   | 0.27  |
| • per NC contact / rated value                                                                     | A   | 0.135 |
| <b>Operating performance</b>                                                                       |     |       |
| • at AC-1                                                                                          |     |       |
| • at 230 V / rated value                                                                           | kW  | 20    |
| • at 400 V / rated value                                                                           | kW  | 36    |
| • at AC-2 / at AC-3                                                                                |     |       |
| • at 230 V                                                                                         |     |       |
| • per NO contact / rated value                                                                     | kW  | 9.5   |
| • per NC contact / rated value                                                                     | kW  | 9.5   |
| • at 400 V                                                                                         |     |       |
| • per NO contact / rated value                                                                     | kW  | 18.5  |
| • per NC contact / rated value                                                                     | kW  | 18.5  |
| <b>Active power loss / at AC-3 / at 400 V / with rated Operating current value / per conductor</b> | W   | 2.6   |
| <b>Frequency of operation</b>                                                                      |     |       |
| • with AC-1 / maximum                                                                              | 1/h | 1,000 |
| • at AC-2 / at AC-3 / maximum                                                                      | 1/h | 750   |

| Control circuit/ Control:                                                             |     |             |
|---------------------------------------------------------------------------------------|-----|-------------|
| <b>Voltage type / of control feed voltage</b>                                         |     | AC          |
| <b>Control supply voltage</b>                                                         |     |             |
| • at 50 Hz / at AC / rated value                                                      | V   | 400         |
| <b>operating range factor control supply voltage rated value / of the magnet coil</b> |     |             |
| • at 50 Hz / for AC                                                                   |     | 0.8 ... 1.1 |
| <b>Apparent pull-in power / of the solenoid / for AC</b>                              | V·A | 145         |
| <b>Apparent holding power / of the solenoid / for AC</b>                              | V·A | 12.5        |
| <b>Inductive power factor</b>                                                         |     |             |
| • with the pull-in power of the coil                                                  |     | 0.79        |
| • with the pull-in power of the coil                                                  |     | 0.36        |
| <b>Closing delay</b>                                                                  |     |             |
| • at AC                                                                               | ms  | 4 ... 35    |
| • at DC                                                                               | ms  | 50 ... 110  |
| <b>Opening delay</b>                                                                  |     |             |
| • at AC                                                                               | ms  | 10 ... 30   |
| • at DC                                                                               | ms  | 15 ... 30   |
| <b>Arcing time</b>                                                                    | ms  | 10 ... 15   |
| <b>Residual current / of electronics / for control with signal &lt;0&gt;</b>          |     |             |

- at 230 V / with AC / maximum permissible

A 0.018

#### Auxiliary circuit:

|                                                                                 |   |                                                 |
|---------------------------------------------------------------------------------|---|-------------------------------------------------|
| <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> |   | 0                                               |
| <b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b> |   | 0                                               |
| <b>Operating current</b>                                                        |   |                                                 |
| • at AC-12 / maximum                                                            | A | 10                                              |
| • at AC-15 / at 230 V / rated value                                             | A | 6                                               |
| • at AC-15 / at 400 V / rated value                                             | A | 3                                               |
| <b>Operating current / at DC-12</b>                                             |   |                                                 |
| • at 60 V / rated value                                                         | A | 6                                               |
| • at 110 V / rated value                                                        | A | 3                                               |
| • at 220 V / rated value                                                        | A | 1                                               |
| <b>Operating current / at DC-13</b>                                             |   |                                                 |
| • at 24 V / rated value                                                         | A | 10                                              |
| • at 60 V / rated value                                                         | A | 2                                               |
| • at 110 V / rated value                                                        | A | 1                                               |
| • at 220 V / rated value                                                        | A | 0.3                                             |

#### Short-circuit:

|                                                                   |  |                   |
|-------------------------------------------------------------------|--|-------------------|
| <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                            |  | fuse gL/gG: 160 A |
| • at type of coordination 2 / required                            |  | fuse gL/gG: 80 A  |

#### Installation/ mounting/ dimensions:

|                                            |    |                                                                                                                         |
|--------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------|
| <b>mounting position</b>                   |    | with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back |
| <b>Mounting type</b>                       |    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022                                  |
| <b>Mounting type / series installation</b> |    | Yes                                                                                                                     |
| <b>Width</b>                               | mm | 73                                                                                                                      |
| <b>Height</b>                              | mm | 112                                                                                                                     |
| <b>Depth</b>                               | mm | 115                                                                                                                     |

#### Connections/ terminals:

|                                            |  |                      |
|--------------------------------------------|--|----------------------|
| <b>Design of the electrical connection</b> |  |                      |
| • for main current circuit                 |  | screw-type terminals |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• for auxiliary and control current circuit</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | screw-type terminals                                                                                                                                                                                                                                                                                                                                                                                            |
| <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> <li>• without conductor final cutting</li> </ul> </li> <li>• stranded</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> | 2x (0.75 ... 16 mm <sup>2</sup> )<br><br>2x (0.75 ... 16 mm <sup>2</sup> )<br>2x (0.75 ... 16 mm <sup>2</sup> )<br>2x (0.75 ... 25 mm <sup>2</sup> )<br>2x (18 ... 2)<br><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><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (20 ... 16), 2x (18 ... 14), 1x 12 |

#### Certificates/ approvals:

##### General Product Approval



CCC



CSA



UL

##### Functional Safety / Safety of Machinery

[Type Examination](#)

##### Declaration of Conformity



EG-Konf.

##### Test Certificates

[Special Test  
Certificate](#)

##### Shipping Approval



ABS



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/industrymall>

##### Cax online generator

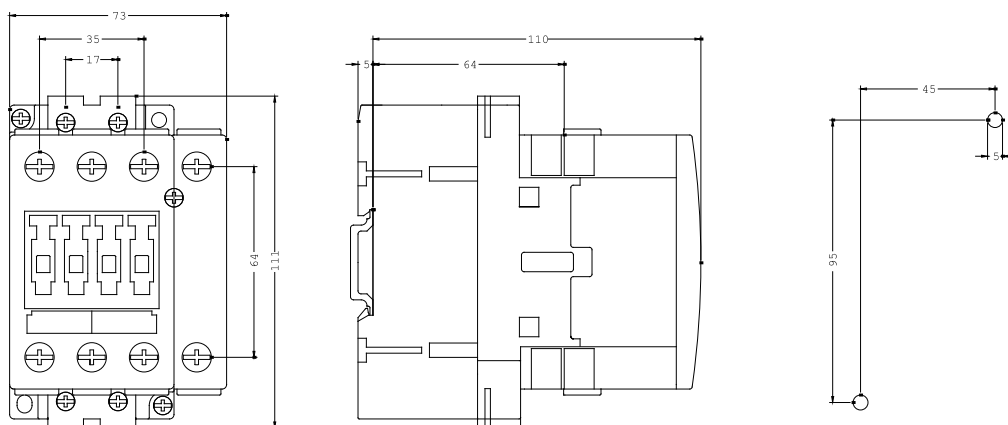
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT1535-1AV00/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT1535-1AV00](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1535-1AV00)



last change:

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