



CONTACTOR, 3PH, 45 KW/400 V, 32 V AC, 50 HZ, 3-POLE, SIZE S3, SCREW TERMINAL

#### General technical data:

|   |    |             |
|---|----|-------------|
| <b>product brand name</b>   |    | SIRIUS      |
| <b>Size of the contactor</b>  |    | S3          |
| <b>Protection class IP / on the front</b>   |    | IP20        |
| <b>Degree of pollution</b>  |    | 3           |
| <b>Installation altitude / at a height over sea level / maximum</b>   | m  | 2,000       |
| <b>Ambient temperature / during operating</b>   | °C | -25 ... +60 |
| <b>Mechanical operating cycles as operating time</b>  |    |             |
| <ul style="list-style-type: none"> <li>• of the contactor / typical</li> </ul>  |    | 10,000,000  |
| <ul style="list-style-type: none"> <li>• of the contactor with added auxiliary switch block / typical</li> </ul>                        |    | 10,000,000  |
| <ul style="list-style-type: none"> <li>• of the contactor with added electronics-compatible auxiliary switch block / typical</li> </ul> |    | 5,000,000   |

#### Main circuit:

|  |   |     |
|--|---|-----|
| <b>Number of NC contacts / for main contacts</b>   |   | 0   |
| <b>Number of NO contacts / for main contacts</b>   |   | 3   |
| <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 40 °C ambient temperature / rated value</li> </ul> </li> </ul> | A | 120 |
| <ul style="list-style-type: none"> <li>• at AC-3 / at 400 V / rated value</li> </ul>   | A | 95  |
| <ul style="list-style-type: none"> <li>• at AC-4 / at 400 V / rated value</li> </ul>   | A | 80  |

|   |    |        |
|---|----|--------|
| <ul style="list-style-type: none"> <li>with 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>                      | A  | 100    |
|   | A  | 9      |
| <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>           | A  | 100    |
|   | A  | 100    |
| <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>           | A  | 100    |
|   | A  | 100    |
| <ul style="list-style-type: none"> <li>with 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>            | A  | 40     |
|   | A  | 2.5    |
| <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> | A  | 100    |
|   | A  | 100    |
| <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> | A  | 100    |
|   | A  | 100    |
| <b>Service power</b>  |    |        |
| <ul style="list-style-type: none"> <li>at AC-2 / at 400 V / rated value</li> </ul>  | kW | 45     |
| <ul style="list-style-type: none"> <li>at AC-3 / at 400 V / rated value</li> </ul>  | kW | 45     |
| <ul style="list-style-type: none"> <li>at AC-4 / at 400 V / rated value</li> </ul>  | W  | 45,000 |

#### Control circuit:

|   |     |             |
|---|-----|-------------|
| <b>Voltage type / of control feed voltage</b>   |     | AC          |
| <b>Operating range factor control supply voltage rated value / of the magnet coil</b> |     |             |
| <ul style="list-style-type: none"> <li>at 50 Hz</li> <li>for AC</li> </ul>            |     | 0.8 ... 1.1 |
| <b>Apparent pull-in power / of the solenoid / for AC</b>                              | V·A | 270         |
| <b>Apparent holding power / of the solenoid / for AC</b>                              | V·A | 22          |
| <b>Inductive power factor / with the pull-in power of the coil</b>                    |     | 0.68        |
| <b>Inductive power factor / with the pull-in power of the coil</b>                    |     | 0.27        |

#### 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   |

#### Short-circuit:

|                                |  |                   |
|--------------------------------|--|-------------------|
| <b>Design of the fuse link</b> | <ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch / required</li> </ul>                      | fuse gL/gG: 10 A  |
|                                | <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit</li> </ul>                                     | fuse gL/gG: 250 A |
|                                | <ul style="list-style-type: none"> <li>• with type of assignment 1 / required</li> <li>• at type of coordination 2 / required</li> </ul> | fuse gL/gG: 160 A |

### Installation/mounting/dimensions:

|   |    |  |
|---|----|--|
| <b>Mounting type</b>  |    | screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail |
| <b>series installation</b>                                    |    | Yes  |
| <b>Width</b>  | mm | 70   |
| <b>Height</b>   | mm | 146  |
| <b>Depth</b>  | mm | 139  |
| <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> </ul>                  | 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</li> </ul>                         |  |
|   | <ul style="list-style-type: none"> <li>• solid</li> </ul>                                     | 2x (2.5 ... 16 mm <sup>2</sup> )   |
|   | <ul style="list-style-type: none"> <li>• stranded</li> </ul>                                  | 2x (10 ... 50 mm <sup>2</sup> )  |
|   | <ul style="list-style-type: none"> <li>• finely stranded</li> </ul>                           |  |
|   | <ul style="list-style-type: none"> <li>• with conductor end processing</li> </ul>             | 2x (2.5 ... 35 mm <sup>2</sup> )   |
|   | <ul style="list-style-type: none"> <li>• without conductor final cutting</li> </ul>           | 2x (10 ... 35 mm <sup>2</sup> )  |
| <ul style="list-style-type: none"> <li>• for AWG conductors / for main contacts</li> </ul>      |   | 2x (10 ... 1/0)  |
|   | <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>                    |  |
| <ul style="list-style-type: none"> <li>• solid</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> ) |
| <ul style="list-style-type: none"> <li>• finely stranded</li> </ul>                             |   |  |
| <ul style="list-style-type: none"> <li>• with conductor end processing</li> </ul>               |   | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )  |
| <ul style="list-style-type: none"> <li>• for AWG conductors / for auxiliary contacts</li> </ul> |   | 2x (20 ... 16), 2x (18 ... 14), 1x 12  |

### Certificates/approvals:

General Product Approval

Functional Safety / Safety of Machinery

Declaration of Conformity



CCC



CSA



UL

[Type Examination](#)



EG-Konf.

Test Certificates

Shipping Approval

[Special Test Certificate](#)



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/industrial-controls/mall>

Cax online generator:

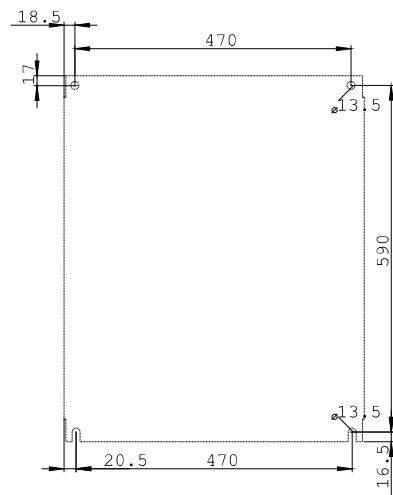
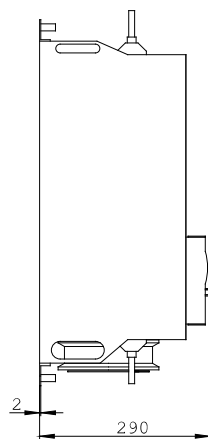
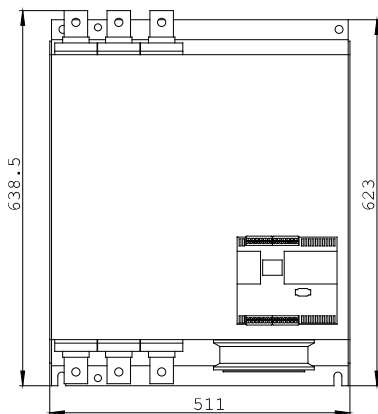
<http://www.siemens.com/cax>

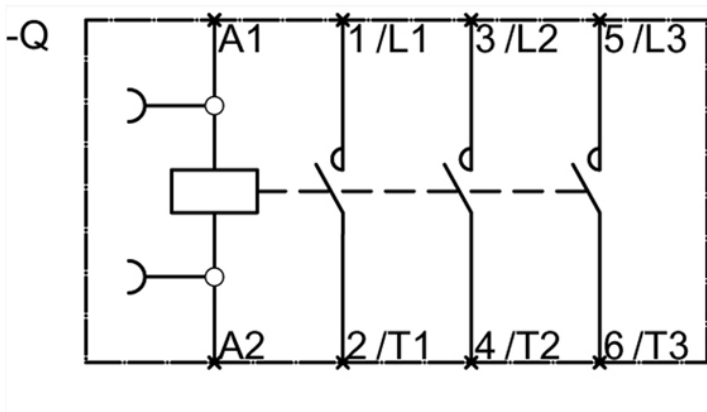
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT1046-1AC00/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT1046-1AC00](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1046-1AC00)





last change:

Jul 28, 2014