



CONTACTOR 3-PH 45 KW/400 V, 500 V AC,  
50 HZ, 3-POLE, SIZE S3, SCREW CONNECTION

| General technical data:                                                               |    |             |
|---------------------------------------------------------------------------------------|----|-------------|
| product brand name                                                                    |    | SIRIUS      |
| Size of the contactor                                                                 |    | S3          |
| 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 | 120 |
| • at AC-3 / at 400 V / rated value           | A | 95  |
| • at AC-4 / at 400 V / rated value           | A | 80  |

|                                                      |    |        |
|------------------------------------------------------|----|--------|
| • with 1 current path / at DC-1                      |    |        |
| • at 24 V / rated value                              | A  | 100    |
| • at 110 V / rated value                             | A  | 9      |
| • with 2 current paths in series / at DC-1           |    |        |
| • at 24 V / rated value                              | A  | 100    |
| • at 110 V / rated value                             | A  | 100    |
| • with 3 current paths in series / at DC-1           |    |        |
| • at 24 V / rated value                              | A  | 100    |
| • at 110 V / rated value                             | A  | 100    |
| • with 1 current path / at DC-3 / at DC-5            |    |        |
| • at 24 V / rated value                              | A  | 40     |
| • 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  | 100    |
| • at 110 V / rated value                             | A  | 100    |
| • with 3 current paths in series / at DC-3 / at DC-5 |    |        |
| • at 24 V / rated value                              | A  | 100    |
| • at 110 V / rated value                             | A  | 100    |
| <b>Service power</b>                                 |    |        |
| • at AC-2 / at 400 V / rated value                   | kW | 45     |
| • at AC-3 / at 400 V / rated value                   | kW | 45     |
| • at AC-4 / at 400 V / rated value                   | 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> |     |             |
| • at 50 Hz                                                                            |     |             |
| • for AC                                                                              |     | 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> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>• with type of assignment 1 / required</li> <li>• at type of coordination 2 / required</li> </ul> </li> </ul> |  | fuse gL/gG: 10 A<br><br>fuse gL/gG: 250 A<br><br>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> <li>• for auxiliary and control current circuit</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | screw-type terminals<br><br>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>• stranded</li> <li>• finely stranded <ul style="list-style-type: none"> <li>• with conductor end processing</li> <li>• without conductor final cutting</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> |  | 2x (2.5 ... 16 mm <sup>2</sup> )<br>2x (10 ... 50 mm <sup>2</sup> )<br><br>2x (2.5 ... 35 mm <sup>2</sup> )<br>2x (10 ... 35 mm <sup>2</sup> )<br>2x (10 ... 1/0)<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                                                                                                                                                                                                                                         |                                                                                          |                                                                                          |                                                                                         | Functional Safety /<br>Safety of<br>Machinery                                            | Declaration of<br>Conformity                                                                    |                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <br>CCC                                                                                                                                                                         | <br>CSA |         | <br>UL | <a href="#">Type Examination</a>                                                         | <br>EG-Konf. |                                                                                             |
| Test Certificates                                                                                                                                                                                                                                                |                                                                                          | Shipping Approval                                                                        |                                                                                         |                                                                                          |                                                                                                 |                                                                                             |
| <a href="#">Special Test<br/>Certificate</a>                                                                                                                                                                                                                     |                                                                                          | <br>ABS | <br>GL | <br>LRS | <br>RINA     | <br>RMRS |
| other                                                                                                                                                                                                                                                            |                                                                                          |                                                                                          |                                                                                         |                                                                                          |                                                                                                 |                                                                                             |
| <a href="#">Confirmation</a>                                                                                                                                                                                                                                     |                                                                                          | <a href="#">other</a>                                                                    |                                                                                         | <a href="#">Environmental<br/>Confirmations</a>                                          |                                                                                                 |                                                                                             |
| Further information:                                                                                                                                                                                                                                             |                                                                                          |                                                                                          |                                                                                         |                                                                                          |                                                                                                 |                                                                                             |
| Information- and Downloadcenter (Catalogs, Brochures,...)<br><a href="http://www.siemens.com/industrial-controls/catalogs">http://www.siemens.com/industrial-controls/catalogs</a>                                                                               |                                                                                          |                                                                                          |                                                                                         |                                                                                          |                                                                                                 |                                                                                             |
| Industry Mall (Online ordering system)<br><a href="http://www.siemens.com/industrial-controls/mall">http://www.siemens.com/industrial-controls/mall</a>                                                                                                          |                                                                                          |                                                                                          |                                                                                         |                                                                                          |                                                                                                 |                                                                                             |
| Cax online generator:<br><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>                                                                                                                                                                     |                                                                                          |                                                                                          |                                                                                         |                                                                                          |                                                                                                 |                                                                                             |
| Service&Support (Manuals, Certificates, Characteristics, FAQs,...)<br><a href="http://support.automation.siemens.com/WW/view/en/3RT1046-1AS00/all">http://support.automation.siemens.com/WW/view/en/3RT1046-1AS00/all</a>                                        |                                                                                          |                                                                                          |                                                                                         |                                                                                          |                                                                                                 |                                                                                             |
| Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)<br><a href="http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1046-1AS00">http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1046-1AS00</a> |                                                                                          |                                                                                          |                                                                                         |                                                                                          |                                                                                                 |                                                                                             |



last change:

Jul 28, 2014