



CONTACTOR, AC-3 45 KW/400 V, AC 230 V,  
50 HZ, 3-POLE, SIZE S3,  
SCREW CONNECTION MOUNTING POSITION VERTICAL

| 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   |
| Operational current                          |   |     |
| • at AC-1 / at 400 V                         |   |     |
| • at 40 °C ambient temperature / rated value | A | 120 |
| • at 60 °C ambient temperature / rated value | A | 100 |
| • 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:                                                               |     |             |
|--------------------------------------------------------------------------------|-----|-------------|
| Type of voltage / of the controlled supply voltage                             |     | AC          |
| Operating range factor control supply voltage rated value / of the magnet coil |     |             |
| • at 50 Hz                                                                     |     |             |
| • for AC                                                                       |     | 0.8 ... 1.1 |
| Apparent pull-in power / of the solenoid / for AC                              | V·A | 270         |
| Apparent holding power / of the solenoid / for AC                              | V·A | 22          |
| Inductive power factor / with the pull-in power of the coil                    |     | 0.68        |
| Inductive power factor / with the pull-in power of the coil                    |     | 0.27        |

| Auxiliary circuit:                                                       |  |                                                 |
|--------------------------------------------------------------------------|--|-------------------------------------------------|
| Contact reliability / of the auxiliary contacts                          |  | 1 faulty switching per 100 million (17 V, 1 mA) |
| Number of NC contacts / for auxiliary contacts / instantaneous switching |  | 0                                               |
| Number of NO contacts / for auxiliary contacts / instantaneous switching |  | 0                                               |

### Short-circuit:

#### Design of the fuse link

- for short-circuit protection of the auxiliary switch / required
- for short-circuit protection of the main circuit
  - with type of assignment 1 / required
  - at type of coordination 2 / required

fuse gL/gG: 10 A

fuse gL/gG: 250 A

fuse gL/gG: 160 A

### Installation/mounting/dimensions:

#### Type of mounting

screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail

#### series installation

Yes

#### Width

mm

70

#### Height

mm

146

#### Depth

mm

139

#### Distance, to be maintained, to earthed part / sideways

mm

6

### Connection type:

#### Design of the electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

#### Type of the connectable conductor cross-section

- for main contacts
  - solid
  - stranded
  - finely stranded
    - with conductor end processing
    - without conductor final cutting
- for AWG conductors / for main contacts
- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
- for AWG conductors / for auxiliary contacts

2x (2.5 ... 16 mm<sup>2</sup>)

2x (4 ... 50 mm<sup>2</sup>)

2x (2.5 ... 35 mm<sup>2</sup>)

2x (4 ... 35 mm<sup>2</sup>)

2x (10 ... 1/0)

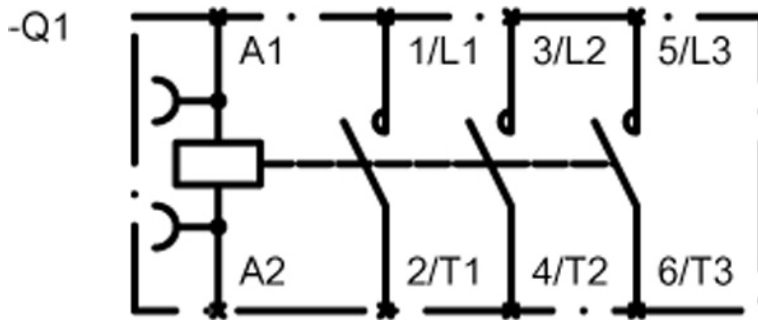
2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>), max. 2x (0.75 ... 4 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14), 1x 12

### Certificates/approvals:

| General Product Approval                                                                                                                                                |                                                                                   |                                                                                   |                                                                                   | Functional Safety /<br>Safety of<br>Machinery                                       | Declaration of<br>Conformity                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                        |  |  |  | <a href="#">Type Examination</a>                                                    |  |
| CCC                                                                                                                                                                     | CSA                                                                               | GOST                                                                              | UL                                                                                |                                                                                     | EG-Konf.                                                                            |
| Test Certificates                                                                                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| <a href="#">Special Test Certificate</a>                                                                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Shipping Approval                                                                                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|                                                                                        |  |  |  |  |  |
| ABS                                                                                                                                                                     | BUREAU<br>VERITAS                                                                 | GL                                                                                | LRS                                                                               | RINA                                                                                | RMRS                                                                                |
| other                                                                                                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| <a href="#">Confirmation</a>                                                                                                                                            | <a href="#">other</a>                                                             | <a href="#">Environmental Confirmations</a>                                       |                                                                                   |                                                                                     |                                                                                     |
| Further information:                                                                                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Information- and Downloadcenter (Catalogs, Brochures,...)                                                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| <a href="http://www.siemens.com/industrial-controls/catalogs">http://www.siemens.com/industrial-controls/catalogs</a>                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Industry Mall (Online ordering system)                                                                                                                                  |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| <a href="http://www.siemens.com/industrial-controls/mall">http://www.siemens.com/industrial-controls/mall</a>                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Cax online generator:                                                                                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>                                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Service&Support (Manuals, Certificates, Characteristics, FAQs,...)                                                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| <a href="http://support.automation.siemens.com/WW/view/en/3RT1046-1AP00-1AA0/all">http://support.automation.siemens.com/WW/view/en/3RT1046-1AP00-1AA0/all</a>           |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)                                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| <a href="http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1046-1AP00-1AA0">http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1046-1AP00-1AA0</a> |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |



last change:

Feb 15, 2013