



CONTACTOR,  
690A/AC-1 AC(40...60HZ)/DC OPERATION UC 380-420V  
AUXILIARY CONTACTS 2NO+2NC 3-POLE,  
SIZE S12 BAR CONNECTIONS CONVENT. OPERATING  
MECHANISM

| General technical data:                                                               |    |             |
|---------------------------------------------------------------------------------------|----|-------------|
| product brand name                                                                    |    | SIRIUS      |
| Size of the contactor                                                                 |    | S12         |
| Protection class IP / on the front                                                    |    | IP00        |
| 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 | 690 |
| • at AC-3 / at 400 V / rated value           | A | 170 |
| • with 1 current path / at DC-1              |   |     |

|                                                      |    |     |
|------------------------------------------------------|----|-----|
| • at 24 V / rated value                              | A  | 500 |
| • at 110 V / rated value                             | A  | 33  |
| • with 2 current paths in series / at DC-1           |    |     |
| • at 24 V / rated value                              | A  | 500 |
| • at 110 V / rated value                             | A  | 500 |
| • with 3 current paths in series / at DC-1           |    |     |
| • at 24 V / rated value                              | A  | 500 |
| • at 110 V / rated value                             | A  | 500 |
| • with 1 current path / at DC-3 / at DC-5            |    |     |
| • at 24 V / rated value                              | A  | 500 |
| • at 110 V / rated value                             | A  | 3   |
| • with 2 current paths in series / at DC-3 / at DC-5 |    |     |
| • at 24 V / rated value                              | A  | 500 |
| • at 110 V / rated value                             | A  | 500 |
| • with 3 current paths in series / at DC-3 / at DC-5 |    |     |
| • at 24 V / rated value                              | A  | 500 |
| • at 110 V / rated value                             | A  | 500 |
| <b>Service power</b>                                 |    |     |
| • at AC-2 / at 400 V / rated value                   | kW | 90  |
| • at AC-3 / at 400 V / rated value                   | kW | 90  |

| Control circuit:                                                                      |     |               |
|---------------------------------------------------------------------------------------|-----|---------------|
| <b>Design of the surge suppressor</b>                                                 |     | with varistor |
| <b>Voltage type / of control feed voltage</b>                                         |     | AC/DC         |
| <b>Operating range factor control supply voltage rated value / of the magnet coil</b> |     |               |
| • at 50 Hz                                                                            |     |               |
| • for AC                                                                              |     | 0.8 ... 1.1   |
| • at 60 Hz                                                                            |     |               |
| • for AC                                                                              |     | 0.8 ... 1.1   |
| • for DC                                                                              |     | 0.8 ... 1.1   |
| <b>Apparent pull-in power / of the solenoid / for AC</b>                              | V·A | 830           |
| <b>Apparent holding power / of the solenoid / for AC</b>                              | V·A | 9.2           |
| <b>Inductive power factor / with the pull-in power of the coil</b>                    |     | 0.9           |
| <b>Inductive power factor / with the pull-in power of the coil</b>                    |     | 0.9           |
| <b>Pull-in power / of the solenoid / for DC</b>                                       | W   | 920           |
| <b>Holding power / of the solenoid / for DC</b>                                       | W   | 10            |
| Auxiliary circuit:                                                                    |     |               |
| <b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b>       |     | 2             |

|                                                                                 |  |   |
|---------------------------------------------------------------------------------|--|---|
| <b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b> |  | 2 |
|---------------------------------------------------------------------------------|--|---|

#### 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: 800 A

fuse gL/gG: 710 A

#### Installation/mounting/dimensions:

|                                                               |    |              |
|---------------------------------------------------------------|----|--------------|
| <b>Mounting type</b>                                          |    | screw fixing |
| <b>series installation</b>                                    |    | Yes          |
| <b>Width</b>                                                  | mm | 160          |
| <b>Height</b>                                                 | mm | 214          |
| <b>Depth</b>                                                  | mm | 225          |
| <b>Distance, to be maintained, to earthed part / sideways</b> | mm | 10           |

#### 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 AWG conductors / for main contacts
- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
- for AWG conductors / for auxiliary contacts

2/0 ... 500 kcmil

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                                                                                                        |
| <br>CCC | <br>CSA |         | <br>UL | <a href="#">Type Examination</a><br><br>EG-Konf. |
| Test Certificates                                                                        | Shipping Approval                                                                        |                                                                                          |                                                                                         |                                                                                                                                     |
| <a href="#">Special Test<br/>Certificate</a>                                             | <br>ABS | <br>DNV | <br>GL | <br>RMRS                                         |
| other                                                                                    |                                                                                          |                                                                                          |                                                                                         |                                                                                                                                     |
| <a href="#">Confirmation</a>                                                             | <a href="#">other</a>                                                                    | <a href="#">Environmental<br/>Confirmations</a>                                          |                                                                                         |                                                                                                                                     |

**Further information:**

**Information- and Downloadcenter (Catalogs, Brochures,...)**  
<http://www.siemens.com/industrial-controls/catalogs>

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**Industry Mall (Online ordering system)**  
<http://www.siemens.com/industrial-controls/mall>

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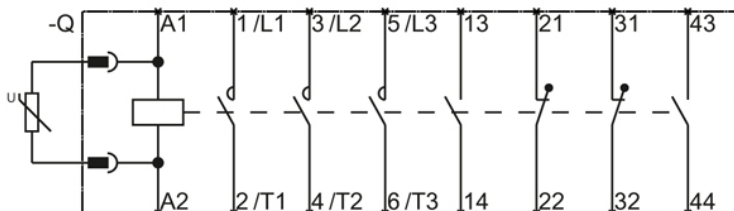
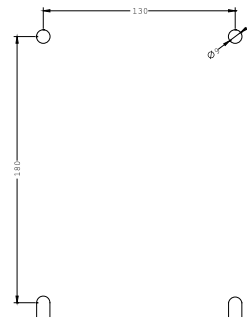
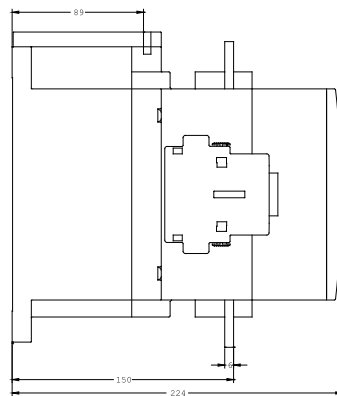
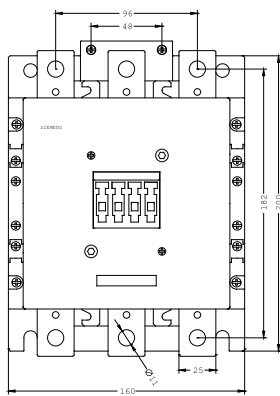
**Cax online generator:**  
<http://www.siemens.com/cax>

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**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<http://support.automation.siemens.com/WW/view/en/3RT1476-6AV36/all>

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**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT1476-6AV36](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1476-6AV36)



last change:

Aug 4, 2014