



CIRCUIT-BREAKER SIZE S3 A-RELEASE 45...63A,  
N-RELEASE 819 A MOTOR PROTECTION,  
CLASS 10 SCREW CONNECTION

**General technical data:**

|  |   |                 |
|--|---|-----------------|
| <b>product brand name</b>                              |   | SIRIUS          |
| <b>product designation</b>                             |   | circuit breaker |
| <b>Size of the circuit-breaker</b>                     |   | S3              |
| <b>Number of poles / for main current circuit</b>      |   | 3               |
| <b>Product function</b>                                |   |                 |
| • removable terminal for auxiliary and control circuit |   | No              |
| • overload protection                                  |   | Yes             |
| • phase disturbance recognition                        |   | Yes             |
| • short-circuit to earth recognition                   |   | No              |
| <b>Product component</b>                               |   |                 |
| • auxiliary switch                                     |   | Yes             |
| • undervoltage release mechanism                       |   | No              |
| • trip indicator                                       |   | Yes             |
| <b>Product extension</b>                               |   |                 |
| • auxiliary switch                                     |   | Yes             |
| • optional / motor drive                               |   | Yes             |
| <b>Impulse voltage resistance / rated value</b>        | V | 6,000           |
| <b>Protection class IP / on the front</b>              |   | IP20            |
| <b>Protection against electrical shock</b>             |   | finger-safe     |

|   |    |             |
|---|----|-------------|
| <b>Installation altitude / at a height over sea level / maximum</b> | m  | 2,000       |
| <b>Resistance against shock</b>                                     |    | 25g / 11 ms |
| <b>Ambient temperature</b>  |    |             |
| • during transport  | °C | -50 ... +80 |
| • during storage  | °C | -50 ... +80 |
| • during operating  | °C | -20 ... +70 |
| <b>Active power loss / total / typical</b>                          | W  | 20          |

#### Main circuit:

|   |     |        |
|---|-----|--------|
| <b>Operating voltage / rated value</b>  | V   | 690    |
| <b>type of voltage</b>  |     | AC/DC  |
| <b>Service power / at AC-3 / at 400 V / rated value</b>                               | kW  | 30     |
| <b>Operating current / at AC-3 / at 400 V / rated value</b>                           | A   | 63     |
| <b>Mechanical operating cycles as operating time / of the main contacts / typical</b> |     | 50,000 |
| <b>Frequency of operation / at AC-3 / according to IEC 60947-6-2</b>                  | 1/h | 15     |

#### Auxiliary circuit:

|   |   |            |
|---|---|------------|
| <b>Design of the auxiliary switch</b>                         |   | transverse |
| <b>Number of changeover contacts / for auxiliary contacts</b> |   | 0          |
| <b>Operating current / of the auxiliary contacts</b>          |   |            |
| • at AC-15  |   |            |
| • at 24 V   | A | 2          |
| • at 230 V  | A | 0.5        |
| • at DC-13  |   |            |
| • at 24 V   | A | 1          |
| • at 60 V   | A | 0.15       |

#### Protection function:

|  |    |           |
|--|----|-----------|
| <b>Trip class</b>  |    | CLASS 10  |
| <b>Adjustable response current / of the current-dependent overload release</b> | A  | 45 ... 63 |
| <b>Breaking capacity limit short-circuit current (I<sub>cu</sub>)</b>          |    |           |
| • at 400 V / rated value   | kA | 50        |
| • at 500 V / rated value   | kA | 12        |
| • at 690 V / rated value   | kA | 6         |

#### Installation/mounting/dimensions:

|                          |    |  |
|--------------------------|----|--|
| <b>Type of mounting</b>  |    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| <b>mounting position</b> |    | any  |
| <b>Depth</b>             | mm | 174  |

|               |    |     |
|---------------|----|-----|
| <b>Height</b> | mm | 165 |
| <b>Width</b>  | mm | 70  |

### Connections:

|   |  |  |
|---|--|--|
| <b>Arrangement of electrical connectors / for main current circuit</b>  |  | front side   |
| <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 with box terminals<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>• finely stranded                   <ul style="list-style-type: none"> <li>• with conductor end processing</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 / with conductor end processing</li> </ul> </li> <li>• for AWG conductors / for auxiliary contacts</li> </ul> |  | 2x (2.5 ... 16 mm <sup>2</sup> )<br><br>2x (2.5 ... 35 mm <sup>2</sup> ), 2.5 ... 50 mm <sup>2</sup><br>2x (10 ... 50 mm <sup>2</sup> ), 10 ... 70 mm <sup>2</sup><br>2x (10 ... 1), 1x (10 ... 2)<br><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (18 ... 14) |

### Certificates/approvals:

#### General Product Approval



#### Test Certificates

[Special Test Certificate](#)

#### Shipping Approval



#### other

[Confirmation](#)

[Declaration of Conformity](#)

[other](#)

[Environmental Confirmations](#)

### Further information:

#### Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

#### Industry Mall (Online ordering system)

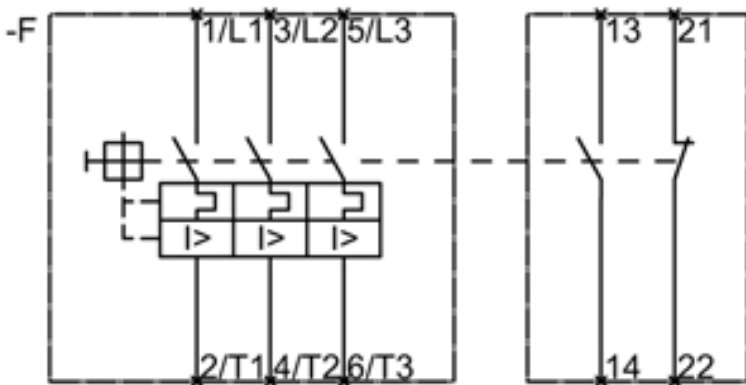
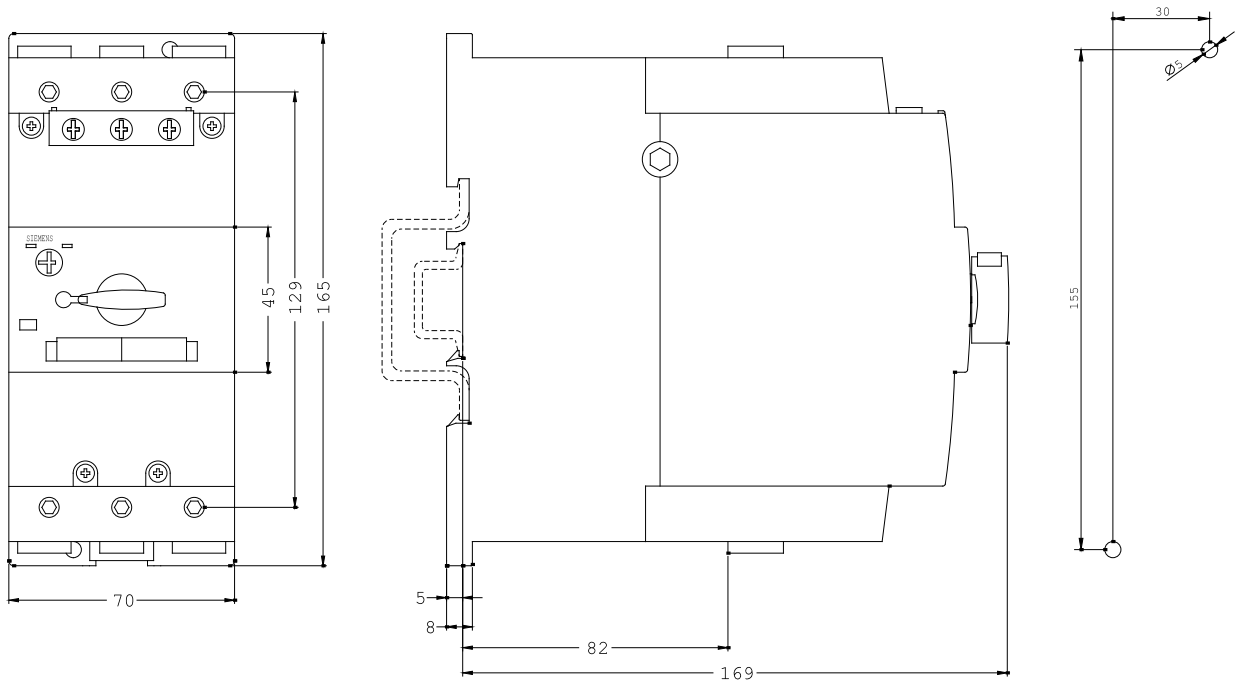
<http://www.siemens.com/industrial-controls/mall>

#### Cax online generator:

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

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

<http://support.automation.siemens.com/WW/view/en/3RV1041-4JA15/all>



last change:

Oct 28, 2013