



CIRCUIT-BREAKER SIZE S3,  
A-REL.36...50 A,N-REL.650A W. OVERLOAD RELAY  
FUNCTION,  
MOTOR PROT. TO 100KA,CL. 10 SCREW TERMINAL  
INCREASED SWITCHING CAPACITY INCREASED  
SWITCHING CAPACITY

### General technical data:

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

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

|                                                                                |     |        |
|--------------------------------------------------------------------------------|-----|--------|
| <b>Main circuit:</b>                                                           |     |        |
| Operating voltage / rated value                                                | V   | 690    |
| type of voltage                                                                |     | AC/DC  |
| Service power / at AC-3 / at 400 V / rated value                               | kW  | 22     |
| Operational current / at AC-3 / at 400 V / rated value                         | A   | 50     |
| Mechanical operating cycles as operating time / of the main contacts / typical |     | 50,000 |
| Frequency of operation / at AC-3 / according to IEC 60947-6-2                  | 1/h | 15     |

|                                                         |  |   |
|---------------------------------------------------------|--|---|
| <b>Auxiliary circuit:</b>                               |  |   |
| Number of change-over switches / for auxiliary contacts |  | 0 |

|                                                                         |    |           |
|-------------------------------------------------------------------------|----|-----------|
| <b>Protection function:</b>                                             |    |           |
| Trip class                                                              |    | CLASS 10  |
| Adjustable response current / of the current-dependent overload release | A  | 36 ... 50 |
| Breaking capacity limit short-circuit current (I <sub>cu</sub> )        |    |           |
| • at 400 V / rated value                                                | kA | 100       |
| • at 500 V / rated value                                                | kA | 15        |
| • at 690 V / rated value                                                | kA | 10        |

|                                          |    |                                                                                        |
|------------------------------------------|----|----------------------------------------------------------------------------------------|
| <b>Installation/mounting/dimensions:</b> |    |                                                                                        |
| Type of mounting                         |    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| mounting position                        |    | any                                                                                    |
| Depth                                    | mm | 174                                                                                    |
| Height                                   | mm | 165                                                                                    |
| Width                                    | mm | 70                                                                                     |

|                                                                 |  |                                         |
|-----------------------------------------------------------------|--|-----------------------------------------|
| <b>Connections:</b>                                             |  |                                         |
| Arrangement of electrical connectors / for main current circuit |  | front side                              |
| Design of the electrical connection                             |  |                                         |
| • for main current circuit                                      |  | screw-type terminals with box terminals |
| • for auxiliary and control current circuit                     |  | screw-type terminals                    |
| Type of the connectable conductor cross-section                 |  |                                         |

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

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

2x (2.5 ... 35 mm<sup>2</sup>), 2.5 ... 50 mm<sup>2</sup>

2x (10 ... 50 mm<sup>2</sup>), 10 ... 70 mm<sup>2</sup>

2x (10 ... 1), 1x (10 ... 2)

#### Certificates/approvals:

##### General Product Approval



[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:

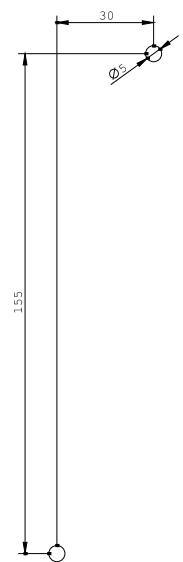
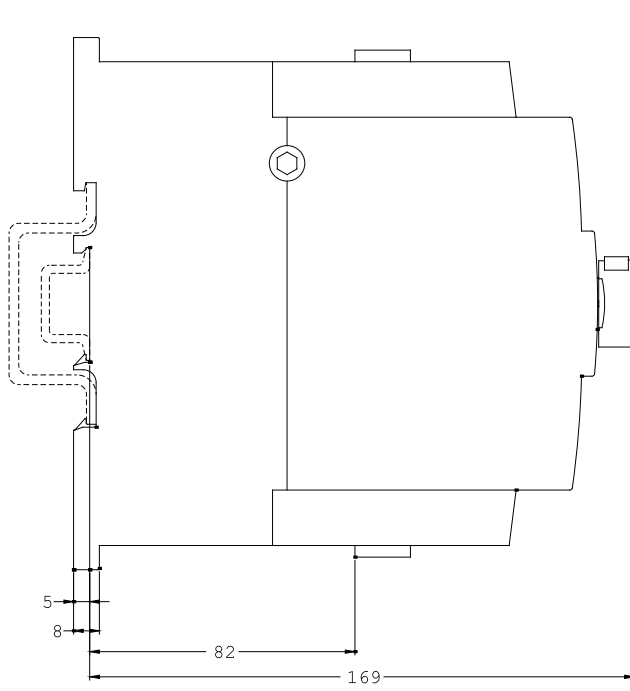
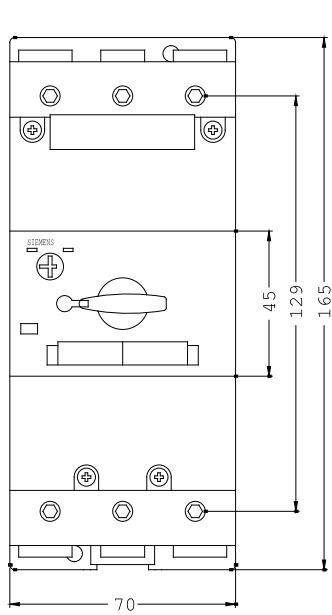
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RV1042-4HA10/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV1042-4HA10](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV1042-4HA10)



last change:

Feb 11, 2013