

CIRCUIT-BREAKER 28...40 A,  
N-RELEASE 520 A, SIZE S2,  
MOTOR PROTECTION CLASS 10 SCREW CONNECTION  
STANDARD BREAKING CAPACITY MULTIUNIT-PACKING  
PACK = 24 UNITS

### General technical data:

|                                                                                                                                                                                                                                                |                |                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------|
| product brand name                                                                                                                                                                                                                             |                | SIRIUS                                    |
| product designation                                                                                                                                                                                                                            |                | circuit breaker                           |
| Size of the circuit-breaker                                                                                                                                                                                                                    |                | S2                                        |
| Number of poles / for main current circuit                                                                                                                                                                                                     |                | 3                                         |
| <b>Product function</b> <ul style="list-style-type: none"> <li>removable terminal for auxiliary and control circuit</li> <li>overload protection</li> <li>phase disturbance recognition</li> <li>short-circuit to earth recognition</li> </ul> |                | No<br>Yes<br>Yes<br>No                    |
| <b>Product component</b> <ul style="list-style-type: none"> <li>auxiliary switch</li> <li>undervoltage release mechanism</li> <li>trip indicator</li> </ul>                                                                                    |                | No<br>No<br>No                            |
| <b>Product extension</b> <ul style="list-style-type: none"> <li>auxiliary switch</li> <li>optional / motor drive</li> </ul>                                                                                                                    |                | Yes<br>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                               |
| <b>Ambient temperature</b> <ul style="list-style-type: none"> <li>during transport</li> <li>during storage</li> <li>during operating</li> </ul>                                                                                                | °C<br>°C<br>°C | -50 ... +80<br>-50 ... +80<br>-20 ... +70 |
| Active power loss / total / typical                                                                                                                                                                                                            | W              | 20                                        |

### Main circuit:

|                                 |   |       |
|---------------------------------|---|-------|
| Operating voltage / rated value | V | 690   |
| type of voltage                 |   | AC/DC |

|                                                                                       |     |        |
|---------------------------------------------------------------------------------------|-----|--------|
| <b>Service power / at AC-3 / at 400 V / rated value</b>                               | kW  | 18.5   |
| <b>Operational current / at AC-3 / at 400 V / rated value</b>                         | A   | 40     |
| <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:

**Number of change-over switches / for auxiliary contacts**

0

#### Protection function:

**Trip class**

CLASS 10

**Adjustable response current / of the current-dependent overload release**

A

28 ... 40

**Breaking capacity limit short-circuit current (I<sub>cu</sub>)**

- at 400 V / rated value
- at 500 V / rated value
- at 690 V / rated value

kA

50

kA

10

kA

4

#### Installation/mounting/dimensions:

**Type of mounting**

screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022

**mounting position**

any

**Depth**

mm

149

**Height**

mm

140

**Width**

mm

55

#### Connections:

**Arrangement of electrical connectors / for main current circuit**

front side

**Design of the electrical connection**

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

screw-type terminals with box terminals  
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 (0.75 ... 16 mm<sup>2</sup>)

2x (0.75 ... 16 mm<sup>2</sup>), 0.75 ... 25 mm<sup>2</sup>

2x (0.75 ... 25 mm<sup>2</sup>), 0.75 ... 35 mm<sup>2</sup>

2x (18 ... 2), 1x (18 ... 2)

#### Certificates/approvals:

## General Product Approval

For use in  
hazardous  
locations



CCC



CSA



GOST



KETI



UL



ATEX

## Declaration of Conformity

## Test Certificates



EG-Konf.

[Special Test  
Certificate](#)

## Shipping Approval



ABS



BUREAU  
VERITAS



DNV



LRS



RMRS

## 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:

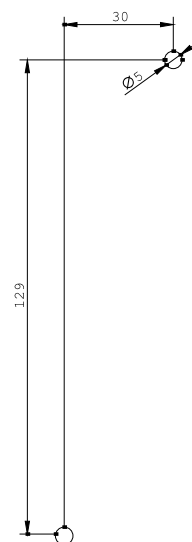
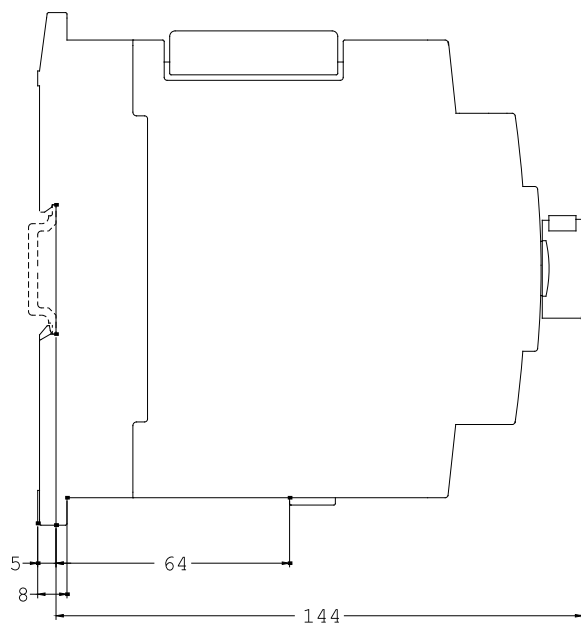
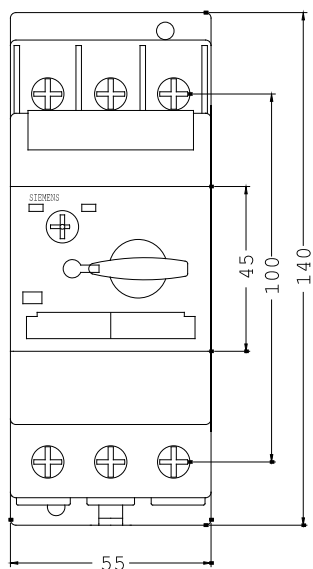
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RV1031-4FA10-ZW95/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV1031-4FA10-ZW95](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV1031-4FA10-ZW95)



last change:

Feb 11, 2013