



Circuit breaker size S2 for motor protection, Class 10 A-release 36...45 A Short-circuit release 585 A Screw terminal Standard switching capacity !!! Phased-out product !!! Successor is SIRIUS 3RV2 Preferred successor type is >>3RV2031-4VA10<<

|                                                 |                      |
|-------------------------------------------------|----------------------|
| Product brand name                              | SIRIUS               |
| Product designation                             | circuit breaker      |
| Design of the product                           | for motor protection |
| General technical data                          |                      |
| Product extension                               |                      |
| • Auxiliary switch                              | Yes                  |
| Power loss [W] total typical                    | 20 W                 |
| Surge voltage resistance rated value            | 6 000 V              |
| Protection class IP                             |                      |
| • on the front                                  | IP20                 |
| Shock resistance                                | 25g / 11 ms          |
| Mechanical service life (switching cycles)      |                      |
| • of the main contacts typical                  | 50 000               |
| Continuous current rated value                  | 45 A                 |
| Ambient conditions                              |                      |
| Installation altitude at height above sea level |                      |
| • maximum                                       | 2 000 m              |
| Ambient temperature                             |                      |

|                    |                |
|--------------------|----------------|
| • during operation | -20 ... +60 °C |
| • during storage   | -50 ... +80 °C |
| • during transport | -50 ... +80 °C |

#### Main circuit

|                                                                                   |             |
|-----------------------------------------------------------------------------------|-------------|
| <b>Number of poles for main current circuit</b>                                   | 3           |
| <b>Adjustable pick-up value current of the current-dependent overload release</b> | 36 ... 45 A |
| <b>Operating voltage</b>                                                          |             |
| • rated value                                                                     | 690 V       |
| • at AC-3 rated value maximum                                                     | 690 V       |
| <b>Operating current</b>                                                          |             |
| • at AC-3                                                                         |             |
| — at 400 V rated value                                                            | 45 A        |
| <b>Operating power</b>                                                            |             |
| • at AC-3                                                                         |             |
| — at 400 V rated value                                                            | 22 kW       |
| <b>Operating frequency</b>                                                        |             |
| • at AC-3 maximum                                                                 | 15 1/h      |

#### Auxiliary circuit

|                              |   |
|------------------------------|---|
| <b>Number of CO contacts</b> |   |
| • for auxiliary contacts     | 0 |

#### Protective and monitoring functions

|                                                              |          |
|--------------------------------------------------------------|----------|
| <b>Product function</b>                                      |          |
| • Ground fault detection                                     | No       |
| • Phase failure detection                                    | Yes      |
| <b>Trip class</b>                                            | CLASS 10 |
| <b>Maximum short-circuit current breaking capacity (Icu)</b> |          |
| • at AC at 240 V rated value                                 | 100 kA   |
| • at AC at 400 V rated value                                 | 50 kA    |
| • at AC at 500 V rated value                                 | 10 kA    |
| • at AC at 690 V rated value                                 | 4 kA     |

#### Short-circuit protection

|                                                                    |                |
|--------------------------------------------------------------------|----------------|
| <b>Design of the overcurrent release and short-circuit release</b> | thermomagnetic |
|--------------------------------------------------------------------|----------------|

#### Installation/ mounting/ dimensions

|                          |                                                                                        |
|--------------------------|----------------------------------------------------------------------------------------|
| <b>Mounting position</b> | any                                                                                    |
| <b>Mounting type</b>     | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| <b>Height</b>            | 140 mm                                                                                 |
| <b>Width</b>             | 55 mm                                                                                  |
| <b>Depth</b>             | 149 mm                                                                                 |

|                              |      |
|------------------------------|------|
| <b>Required spacing</b>      |      |
| • with side-by-side mounting |      |
| — Backwards                  | 0 mm |
| — at the side                | 0 mm |

## Connections/Terminals

|                                                                      |                                                                      |
|----------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>Product function</b>                                              |                                                                      |
| • removable terminal for auxiliary and control circuit               | No                                                                   |
| <b>Type of electrical connection</b>                                 |                                                                      |
| • for main current circuit                                           | screw-type terminals with box terminals                              |
| • for auxiliary and control current circuit                          | screw-type terminals                                                 |
| <b>Arrangement of electrical connectors for main current circuit</b> | front side                                                           |
| <b>Type of connectable conductor cross-sections</b>                  |                                                                      |
| • for main contacts                                                  |                                                                      |
| — solid                                                              | 2x (0.75 ... 16 mm <sup>2</sup> )                                    |
| — stranded                                                           | 2x (0.75 ... 25 mm <sup>2</sup> ), 1x (0.75 ... 35 mm <sup>2</sup> ) |
| — finely stranded with core end processing                           | 2x (0.75 ... 16 mm <sup>2</sup> ), 0.75 ... 25 mm <sup>2</sup>       |
| • at AWG conductors for main contacts                                | 2x (18 ... 2), 1x (18 ... 2)                                         |

## Certificates/approvals

| General Product Approval | For use in hazardous locations |
|--------------------------|--------------------------------|
|--------------------------|--------------------------------|



| Declaration of Conformity | Test Certificates | Marine / Shipping |
|---------------------------|-------------------|-------------------|
|---------------------------|-------------------|-------------------|



[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



| Marine / Shipping | other |
|-------------------|-------|
|-------------------|-------|



[Confirmation](#)

[Miscellaneous](#)



## Further information

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

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

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV1031-4GA10>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1031-4GA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1031-4GA10>

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

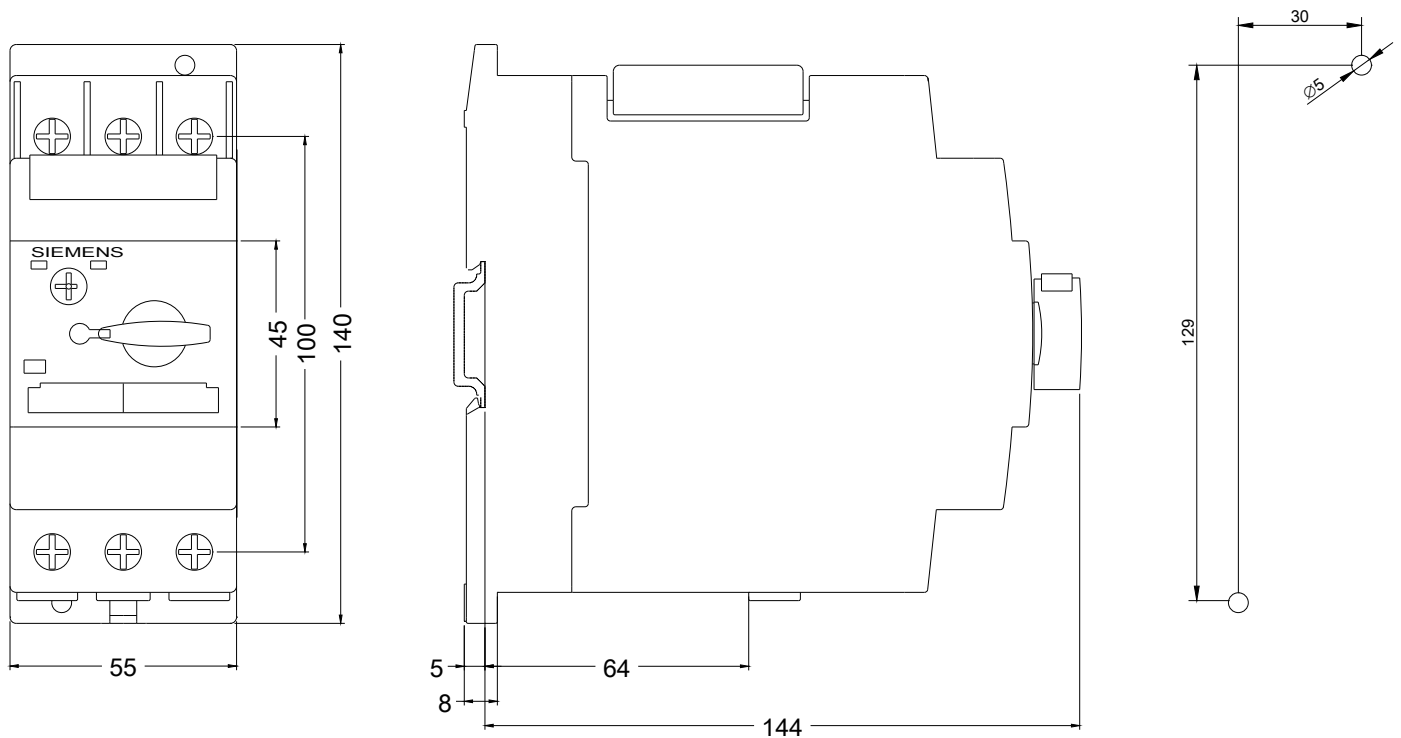
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV1031-4GA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1031-4GA10&lang=en)

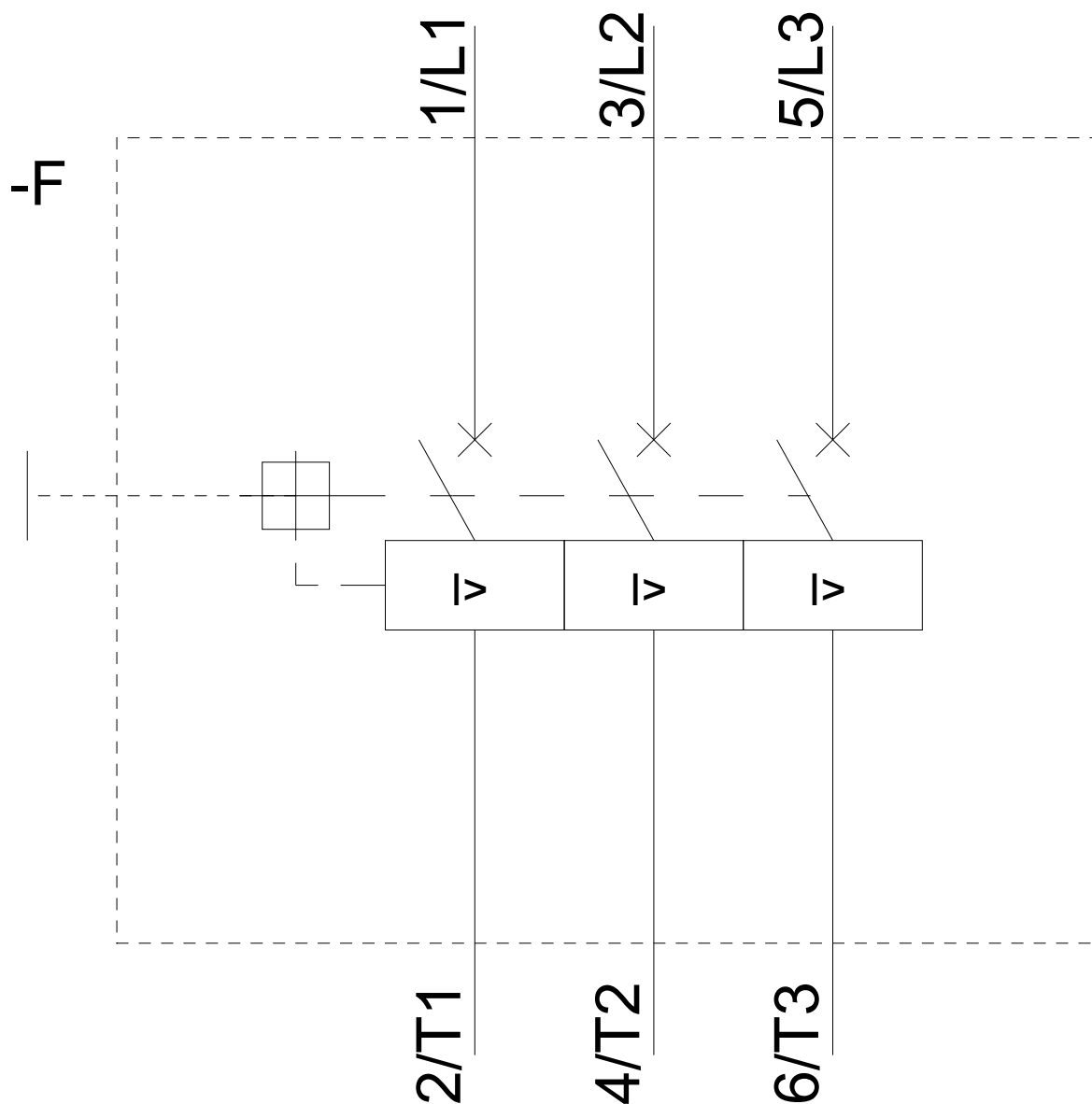
**Characteristic: Tripping characteristics,  $I^2t$ , Let-through current**

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1031-4GA10/char>

**Further characteristics (e.g. electrical endurance, switching frequency)**

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1031-4GA10&objecttype=14&gridview=view1>





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