

Circuit breaker size S2 For transformer protection A-release 11...16 A Short-circuit release 325 A Screw terminal Standard switching capacity !!! Phased-out product !!! Successor is SIRIUS 3RV2 Preferred successor type is >>3RV2431-4TA10<<



Product brand name	SIRIUS
Product designation	circuit breaker
Design of the product	for transformer protection

**General technical data**

<b>Product extension</b>	
<ul style="list-style-type: none"> <li>Auxiliary switch</li> </ul>	Yes
<b>Power loss [W] for rated value of the current</b>	
<ul style="list-style-type: none"> <li>at AC in hot operating state</li> </ul>	14.5 W
<ul style="list-style-type: none"> <li>at AC in hot operating state per pole</li> </ul>	4.8 W
<b>Surge voltage resistance rated value</b>	6 000 V
<b>Protection class IP</b>	
<ul style="list-style-type: none"> <li>on the front</li> </ul>	IP20
<b>Shock resistance</b>	25g / 11 ms
<b>Mechanical service life (switching cycles)</b>	
<ul style="list-style-type: none"> <li>of the main contacts typical</li> </ul>	50 000
<b>Continuous current rated value</b>	16 A

**Ambient conditions**

<b>Installation altitude at height above sea level</b>	
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<ul style="list-style-type: none"> <li>• maximum</li> </ul>	2 000 m
<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-20 ... +60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-50 ... +80 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-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>	11 ... 16 A
<b>Operating voltage</b>	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	690 V
<ul style="list-style-type: none"> <li>• at AC-3 rated value maximum</li> </ul>	690 V
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at AC-3</li> </ul>	16 A
— at 400 V rated value	
<b>Operating frequency</b>	
<ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>	15 1/h

### Auxiliary circuit

<b>Number of CO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	0

### Protective and monitoring functions

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• Ground fault detection</li> </ul>	No
<ul style="list-style-type: none"> <li>• Phase failure detection</li> </ul>	Yes
<b>Trip class</b>	CLASS 10
<b>Maximum short-circuit current breaking capacity (I<sub>cu</sub>)</b>	
<ul style="list-style-type: none"> <li>• at AC at 240 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• at AC at 400 V rated value</li> </ul>	50 kA
<ul style="list-style-type: none"> <li>• at AC at 500 V rated value</li> </ul>	12 kA
<ul style="list-style-type: none"> <li>• at AC at 690 V rated value</li> </ul>	5 kA

### Short-circuit protection

<b>Design of the overcurrent release and short-circuit release</b>	thermomagnetic
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### 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
  - at the side

0 mm  
0 mm

## Connections/ Terminals

<b>Product function</b>	No
<ul style="list-style-type: none"> <li>• removable terminal for auxiliary and control circuit</li> </ul>	
<b>Type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> </ul>	<p>screw-type terminals with box terminals</p> <p>screw-type terminals</p>
<b>Arrangement of electrical connectors for main current circuit</b>	front side
<b>Type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• for main contacts           <ul style="list-style-type: none"> <li>— solid</li> <li>— stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG conductors for main contacts</li> </ul>	<p>2x (0.75 ... 16 mm<sup>2</sup>)</p> <p>2x (0.75 ... 25 mm<sup>2</sup>), 1x (0.75 ... 35 mm<sup>2</sup>)</p> <p>2x (0.75 ... 16 mm<sup>2</sup>), 0.75 ... 25 mm<sup>2</sup></p> <p>2x (18 ... 2), 1x (18 ... 2)</p>

## Certificates/ approvals

### General Product Approval



[Miscellaneous](#)

### Test Certificates

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



### Marine / Shipping

### Marine / Shipping



### other

[Miscellaneous](#)

[Confirmation](#)



### Railway

[Special Test Certificate](#)

## Further information

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

<https://www.siemens.com/ic10>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV1431-4AA10>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1431-4AA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1431-4AA10>

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

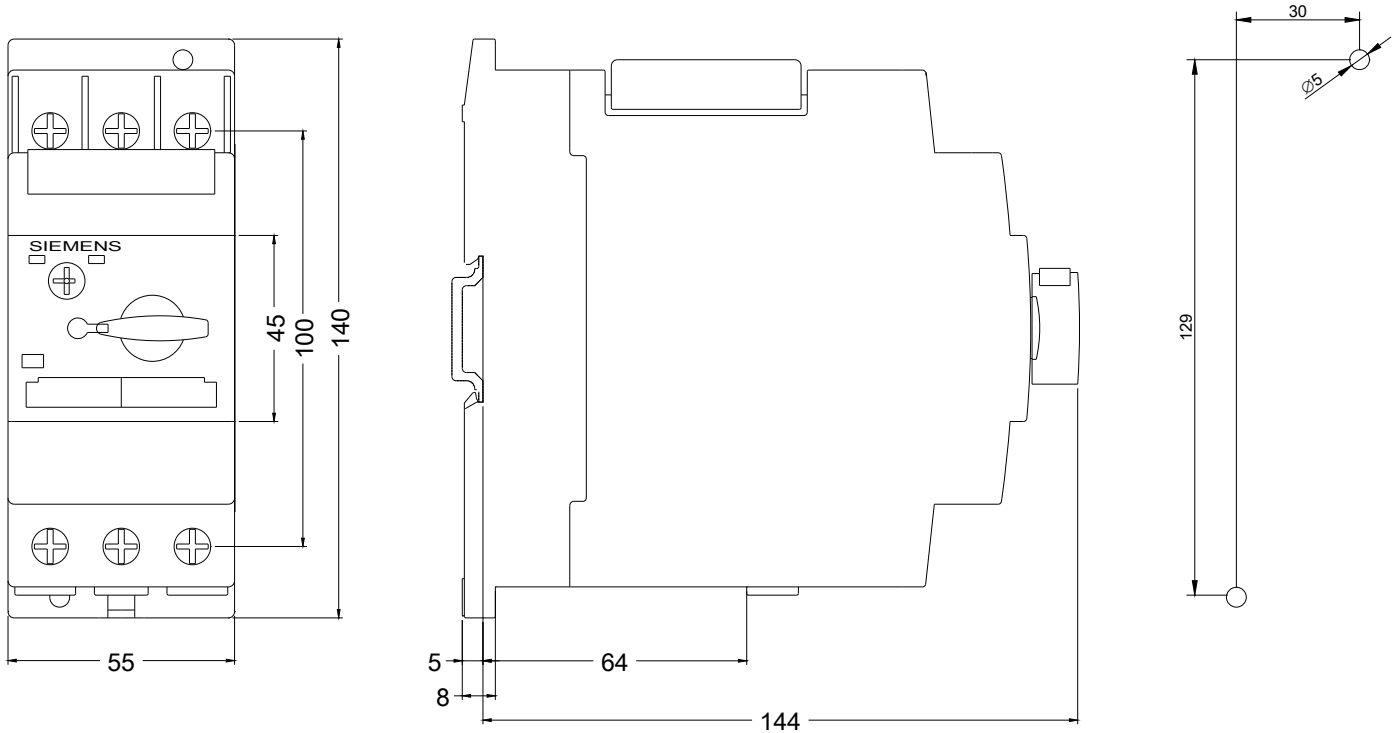
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV1431-4AA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1431-4AA10&lang=en)

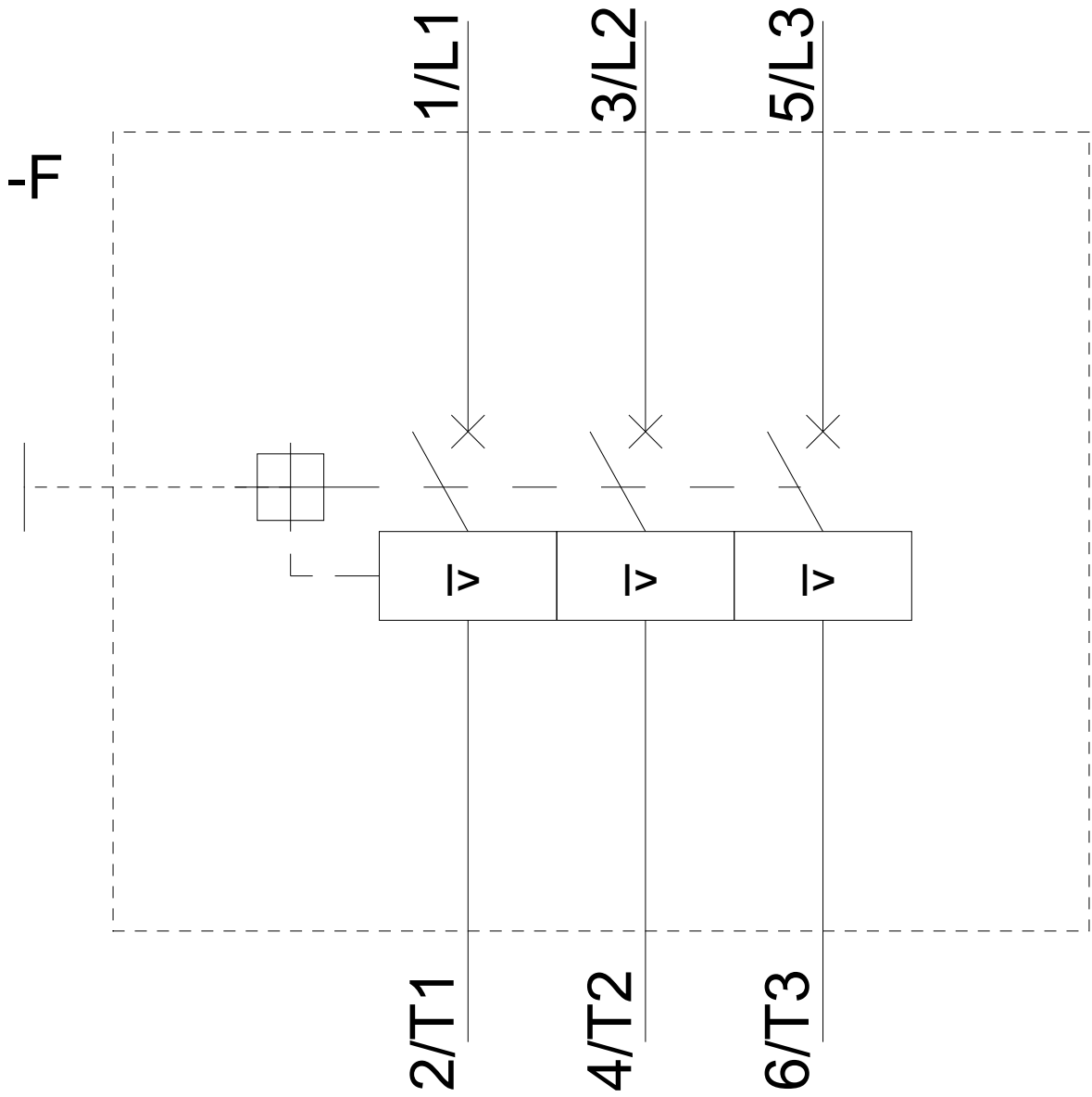
**Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current**

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1431-4AA10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1431-4AA10&objecttype=14&gridview=view1>





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