

## Data sheet

## 3RV1021-1EA10

Circuit breaker size S0 for motor protection CLASS 10 A-release  
2.8...4 A Short-circuit release 52 A Screw terminal Standard  
switching capacity !!! Phased-out product !!! Successor is SIRIUS  
3RV2 Preferred successor type is >>3RV2011-1EA10<<



Figure similar

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

### General technical data

Product extension	Yes
<ul style="list-style-type: none"> <li>Auxiliary switch</li> </ul>	
Power loss [W] for rated value of the current	
<ul style="list-style-type: none"> <li>at AC in hot operating state</li> <li>at AC in hot operating state per pole</li> </ul>	7.25 W 2.4 W
Surge voltage resistance rated value	6 000 V
Protection class IP	
<ul style="list-style-type: none"> <li>on the front</li> </ul>	IP20
Shock resistance	25g / 11 ms
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> <li>of the main contacts typical</li> </ul>	100 000
Continuous current rated value	4 A

### Ambient conditions

<b>Installation altitude at height above sea level</b>	
<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>	2.8 ... 4 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 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>	4 A
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>	1.5 kW
<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 (Icu)</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>	100 kA
<ul style="list-style-type: none"> <li>• at AC at 500 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• at AC at 690 V rated value</li> </ul>	6 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

Height	97 mm
Width	45 mm
Depth	96 mm
Required spacing	
<ul style="list-style-type: none"> <li>with side-by-side mounting <ul style="list-style-type: none"> <li>Backwards 0 mm</li> <li>at the side 0 mm</li> </ul> </li> </ul>	

### Connections/ Terminals

<b>Product function</b> <ul style="list-style-type: none"> <li>removable terminal for auxiliary and control circuit</li> </ul>	No
<b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>for main current circuit screw-type terminals</li> <li>for auxiliary and control current circuit screw-type terminals</li> </ul>	
<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 2x (1 ... 2.5 mm<sup>2</sup>), 2x (2.5 ... 6 mm<sup>2</sup>)</li> <li>stranded 2x (1 ... 2.5 mm<sup>2</sup>), 2x (2.5 ... 6 mm<sup>2</sup>)</li> <li>finely stranded with core end processing 2x (1 ... 2.5 mm<sup>2</sup>), 2x (2.5 ... 6 mm<sup>2</sup>)</li> </ul> </li> <li>at AWG conductors for main contacts 2x (14 ... 10)</li> </ul>	

### 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	Railway
-------------------	-------	---------



[Confirmation](#)

[Miscellaneous](#)



[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=3RV1021-1EA10>

### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1021-1EA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1021-1EA10>

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

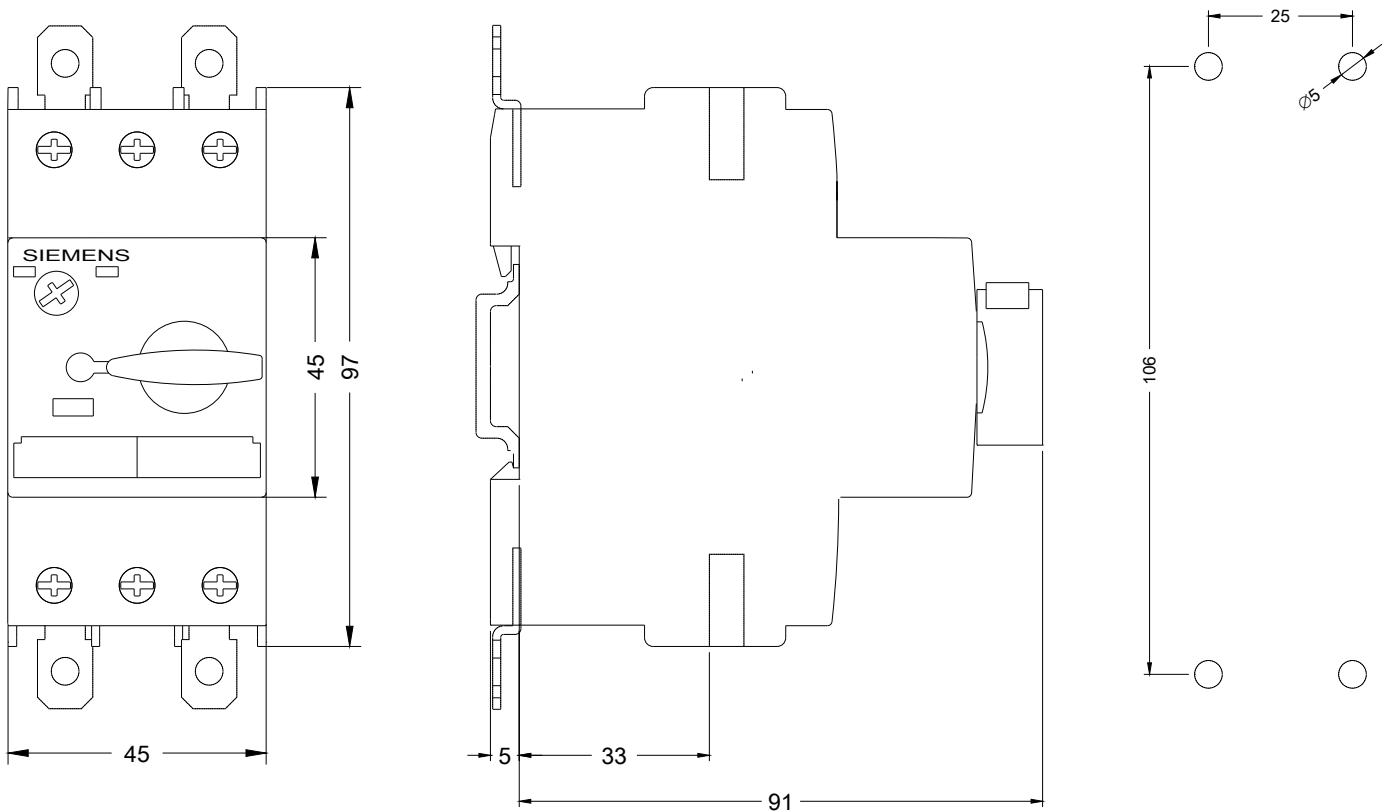
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV1021-1EA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1021-1EA10&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1021-1EA10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1021-1EA10&objecttype=14&gridview=view1>





last modified:

08/07/2020