



Circuit breaker size S0 for transformer protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 22 A N-release 364 A screw terminal Standard switching capacity

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Circuit breaker
<b>design of the product</b>	For transformer protection according to UL 489/CSA C22.2 No.5
<b>product type designation</b>	3RV2

### General technical data

<b>size of the circuit-breaker</b>	S0
product extension auxiliary switch	Yes
<b>power loss [W] for rated value of the current</b>	
• at AC in hot operating state	10.5 W
• at AC in hot operating state per pole	3.5 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
<b>surge voltage resistance rated value</b>	6 kV
<b>mechanical service life (operating cycles)</b>	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
electrical endurance (operating cycles) typical	100 000
<b>reference code according to IEC 81346-2</b>	Q
<b>Substance Prohibitive (Date)</b>	10/01/2009

### Ambient conditions

installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-50 ... +80 °C
relative humidity during operation	10 ... 95 %

### Main circuit

<b>number of poles for main current circuit</b>	3
<b>operating voltage</b>	
• rated value	20 ... 690 V
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
<b>operating frequency rated value</b>	50 ... 60 Hz
<b>operational current rated value</b>	22 A
<b>operational current</b>	
• at AC-3 at 400 V rated value	22 A
• at AC-3e at 400 V rated value	22 A
<b>operating power</b>	
• at AC-3	
— at 230 V rated value	5.5 kW
— at 400 V rated value	11 kW
— at 500 V rated value	11 kW



- at the side 30 mm
- forwards 0 mm
- for live parts at 690 V
  - downwards 70 mm
  - upwards 70 mm
  - backwards 0 mm
  - at the side 30 mm
  - forwards 0 mm

### Connections/ Terminals

#### type of electrical connection

- for main current circuit

screw-type terminals

#### arrangement of electrical connectors for main current circuit

Top and bottom

#### type of connectable conductor cross-sections

- for main contacts
  - solid or stranded 1 ... 10 mm<sup>2</sup>, max. 2x 10 mm<sup>2</sup>
  - finely stranded with core end processing 1 ... 16 mm<sup>2</sup>, max. 6 + 16 mm<sup>2</sup>
- at AWG cables for main contacts 2x (14 ... 10)

#### tightening torque

- for main contacts with screw-type terminals 2.5 ... 3 N·m

#### design of screwdriver shaft

Diameter 5 to 6 mm

#### size of the screwdriver tip

Pozidriv size 2

#### design of the thread of the connection screw

- for main contacts M4

### Safety related data

#### B10 value

- with high demand rate according to SN 31920 5 000

#### proportion of dangerous failures

- with low demand rate according to SN 31920 50 %
- with high demand rate according to SN 31920 50 %

#### failure rate [FIT]

- with low demand rate according to SN 31920 50 FIT

T1 value for proof test interval or service life according to IEC 61508 10 a

#### protection class IP on the front according to IEC 60529

IP20

#### touch protection on the front according to IEC 60529

finger-safe, for vertical contact from the front

display version for switching status

Handle

### Certificates/ approvals

General Product Approval

Declaration of Conformity

[Confirmation](#)



[KC](#)



Declaration of Conformity

Test Certificates

Marine / Shipping

other



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



[Confirmation](#)

other

Railway



[Vibration and Shock](#)

## Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3RV2821-4CD10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2821-4CD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2821-4CD10>

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

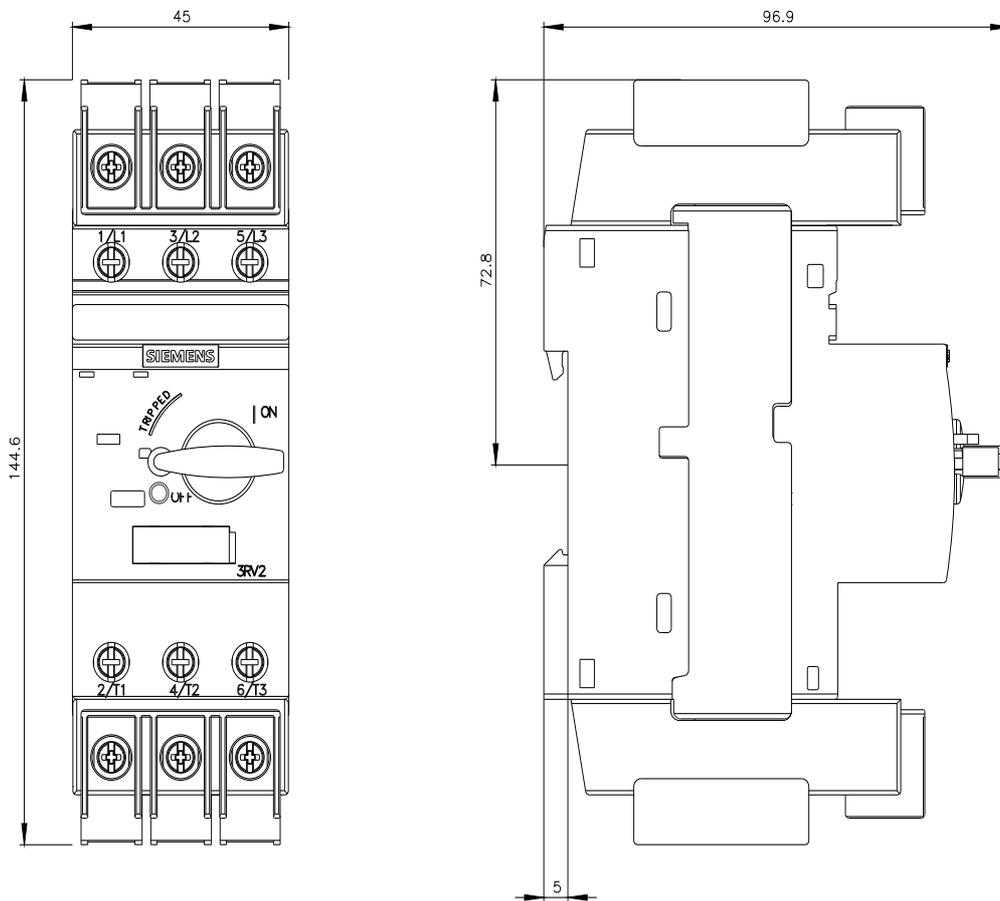
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2821-4CD10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2821-4CD10&lang=en)

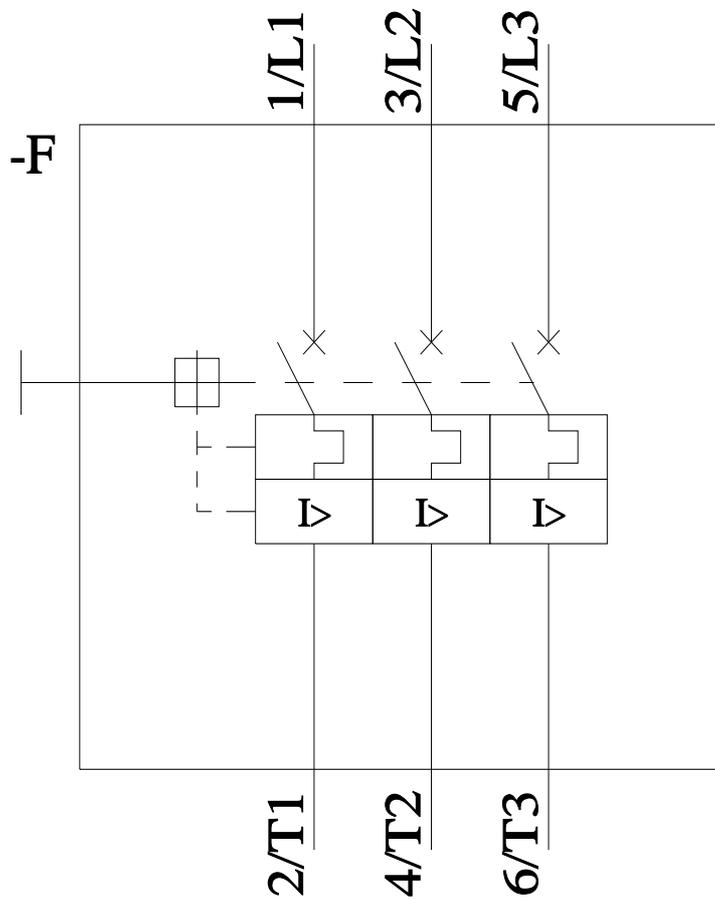
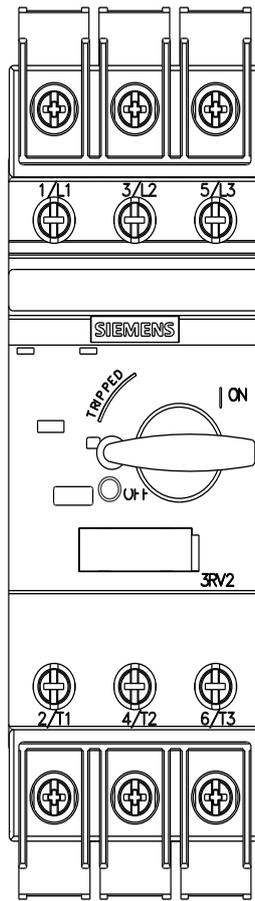
Characteristic: Tripping characteristics, I<sup>t</sup>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2821-4CD10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2821-4CD10&objecttype=14&gridview=view1>





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3/1/2023