



Circuit breaker size S00 for transformer protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 2 A N release 42 A screw terminal Standard switching capacity

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

General technical data

size of the circuit-breaker	S00
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	7.25 W
• at AC in hot operating state per pole	2.4 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms
mechanical service life (operating cycles)	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
electrical endurance (operating cycles) typical	100 000
reference code according to IEC 81346-2	Q
Substance Prohibition (Date)	10/01/2009

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
relative humidity during operation	10 ... 95 %

Main circuit

number of poles for main current circuit	3
operating voltage	
• rated value	20 ... 690 V
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	2 A
operational current	
• at AC-3 at 400 V rated value	2 A
• at AC-3e at 400 V rated value	2 A
operating power	
• at AC-3	
— at 230 V rated value	0.4 kW
— at 400 V rated value	0.8 kW

— at 500 V rated value — at 690 V rated value • at AC-3e — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value	0.8 kW 1.1 kW 0.4 kW 0.8 kW 0.8 kW 1.1 kW
operating frequency	
• at AC-3 maximum • at AC-3e maximum	15 1/h 15 1/h
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	0
Protective and monitoring functions	
product function	
• ground fault detection • phase failure detection	No No
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at 480 AC Y/277 V according to UL 489 rated value	100 kA 100 kA 100 kA 10 kA 65 kA
operating short-circuit current breaking capacity (Ics) at AC	
• at 240 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	100 kA 100 kA 100 kA 10 kA
response value current of instantaneous short-circuit trip unit	42 A
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 400 V • at 500 V • at 690 V	gL/gG 25 A gL/gG 25 A gL/gG 20 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	144 mm
width	45 mm
depth	97 mm
required spacing	
• for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards — upwards — at the side • for grounded parts at 500 V — downwards — upwards — at the side • for live parts at 500 V — downwards — upwards	30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm

- at the side 30 mm
- for grounded parts at 690 V
 - downwards 70 mm
 - upwards 70 mm
 - backwards 0 mm
 - 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
 - finely stranded with core end processing
- at AWG cables for main contacts

1 ... 10 mm², max. 2x 10 mm²
 1 ... 16 mm², max. 6 + 16 mm²
 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
- with high demand rate according to SN 31920

50 %
 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
 display version for switching status

finger-safe, for vertical contact from the front
 Handle

Certificates/ approvals

General Product Approval

Declaration of
Conformity

[Confirmation](#)



[KC](#)



Declaration of
Conformity

Test Certificates

Marine / Shipping



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



other

Railway



Further information

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=3RV2811-1BD10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2811-1BD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2811-1BD10>

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

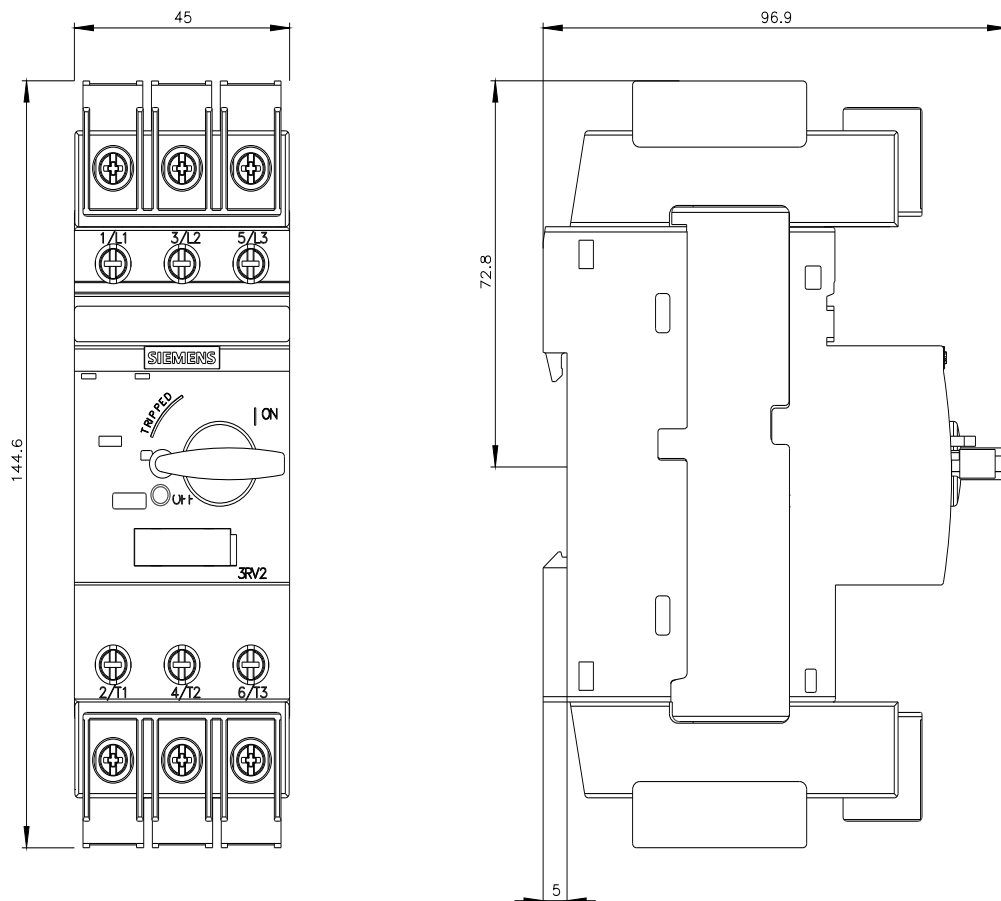
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2811-1BD10&lang=en

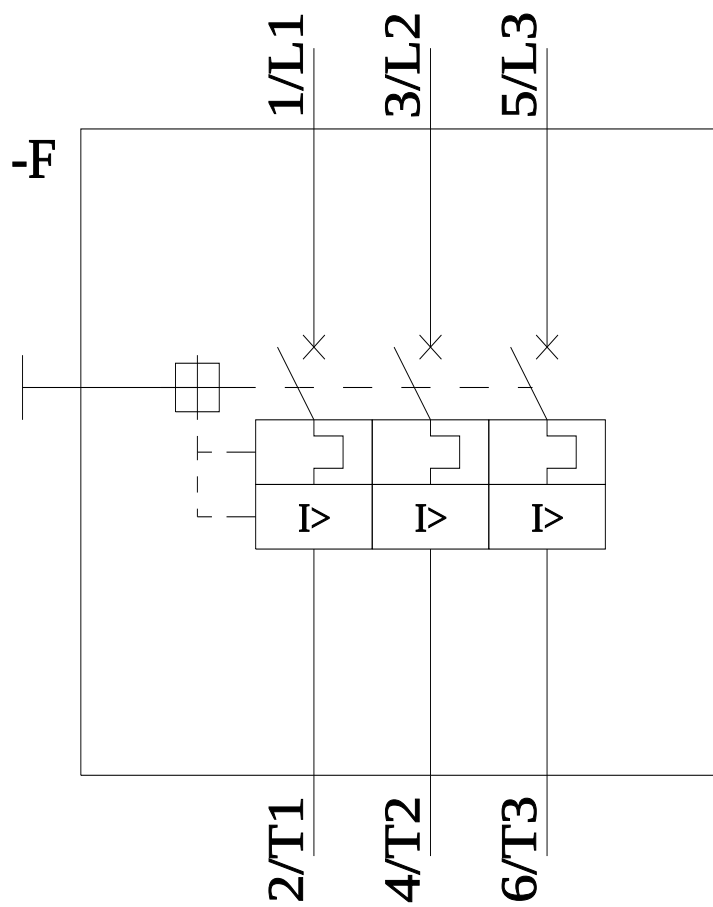
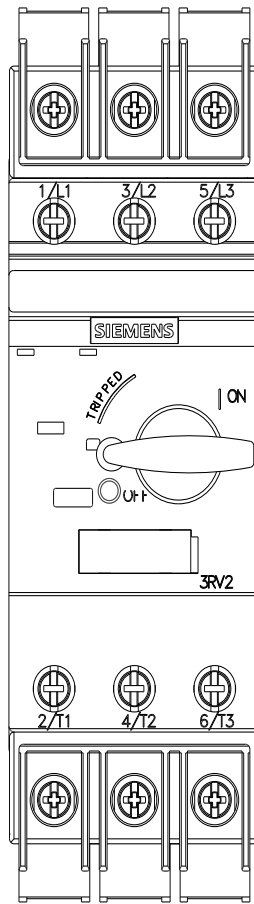
Characteristic: Tripping characteristics, I^2t , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2811-1BD10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2811-1BD10&objecttype=14&gridview=view1>





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