

Circuit breaker size S00 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 3.2 A N release 42 A screw terminal Standard switching capacity



Product brand name	SIRIUS
Product designation	Circuit breaker
Design of the product	For system 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] total typical	6 W
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
• in networks with grounded star point between main and auxiliary circuit	400 V
• in networks with grounded star point between main and auxiliary circuit	400 V
Protection class IP	
• on the front	IP20
• of the terminal	IP00
Shock resistance	

• acc. to IEC 60068-2-27	25g / 11 ms
Mechanical service life (switching cycles)	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Protection against electrical shock	finger-safe when touched vertically from front acc. to IEC 60529
Reference code acc. to DIN EN 81346-2	Q

Ambient conditions

Installation altitude at height above sea level	
• maximum	2 000 m
Temperature compensation	-20 ... +60 °C
Relative humidity during operation	10 ... 95 %

Main circuit

Number of poles for main current circuit	3
Operating voltage	
• rated value	690 V
• at AC-3 rated value maximum	690 V
Operating frequency rated value	50 ... 60 Hz
Operating current rated value	3.2 A
Operating current	
• at AC-3	
— at 400 V rated value	3.2 A
Operating power	
• at AC-3	
— at 230 V rated value	550 W
— at 400 V rated value	1 100 W
— at 500 V rated value	1 500 W
— at 690 V rated value	2 200 W
Operating frequency	
• at AC-3 maximum	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	No
• Phase failure detection	No
Design of the overload release	thermal

Operational short-circuit current breaking capacity (Ics) at AC	
<ul style="list-style-type: none"> • at 240 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value 	<p>100 kA</p> <p>100 kA</p> <p>100 kA</p> <p>10 kA</p>
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> • 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 acc. to UL 489 rated value 	<p>100 kA</p> <p>100 kA</p> <p>100 kA</p> <p>10 kA</p> <p>65 000 A</p>
Breaking capacity short-circuit current (Icn)	
<ul style="list-style-type: none"> • at 1 current path at DC at 150 V rated value • with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value 	<p>10 kA</p> <p>10 kA</p> <p>10 kA</p>
Response value current	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • at 400 V • at 500 V • at 690 V 	<p>gL/gG 25 A</p> <p>gL/gG 32 A</p> <p>gL/gG 25 A</p>

Installation/ mounting/ dimensions

Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Height	144 mm
Width	45 mm
Depth	97 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 	<p>0 mm</p> <p>0 mm</p> <p>50 mm</p> <p>50 mm</p> <p>0 mm</p>

- for grounded parts
 - forwards 0 mm
 - Backwards 0 mm
 - upwards 50 mm
 - at the side 30 mm
 - downwards 50 mm
- for live parts
 - forwards 0 mm
 - Backwards 0 mm
 - upwards 50 mm
 - downwards 50 mm
 - at the side 30 mm

0 mm
0 mm
50 mm
30 mm
50 mm
0 mm
0 mm
50 mm
50 mm
30 mm

Connections/Terminals

Product function	
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 	No
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded 1 ... 10 mm², max. 2x 10 mm² — finely stranded with core end processing 1 ... 16 mm², max. 6 + 16 mm² • at AWG conductors for main contacts 2x (14 ... 10) 	
Tightening torque	
<ul style="list-style-type: none"> • 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 2
Design of the thread of the connection screw	
<ul style="list-style-type: none"> • for main contacts 	M4





Safety related data

B10 value	
<ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 	5 000
Proportion of dangerous failures	
<ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 	50 % 50 %
Failure rate [FIT]	
<ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 	50 FIT
T1 value for proof test interval or service life acc. to IEC 61508	10 y
Display version	

- for switching status

Handle

Certificates/approvals

General Product Approval	Declaration of Conformity	Test Certificates
 CSA  UL  EAC  EG-Konf.	Miscellaneous	Type Test Certificates/Test Report
Test Certificates	Marine / Shipping	other

[Special Test Certificate](#)



Lloyd's Register

LRS



RMRS

[Confirmation](#)



VDE

Railway

[Vibration and Shock](#)

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=3RV2711-1DD10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2711-1DD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-1DD10>

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

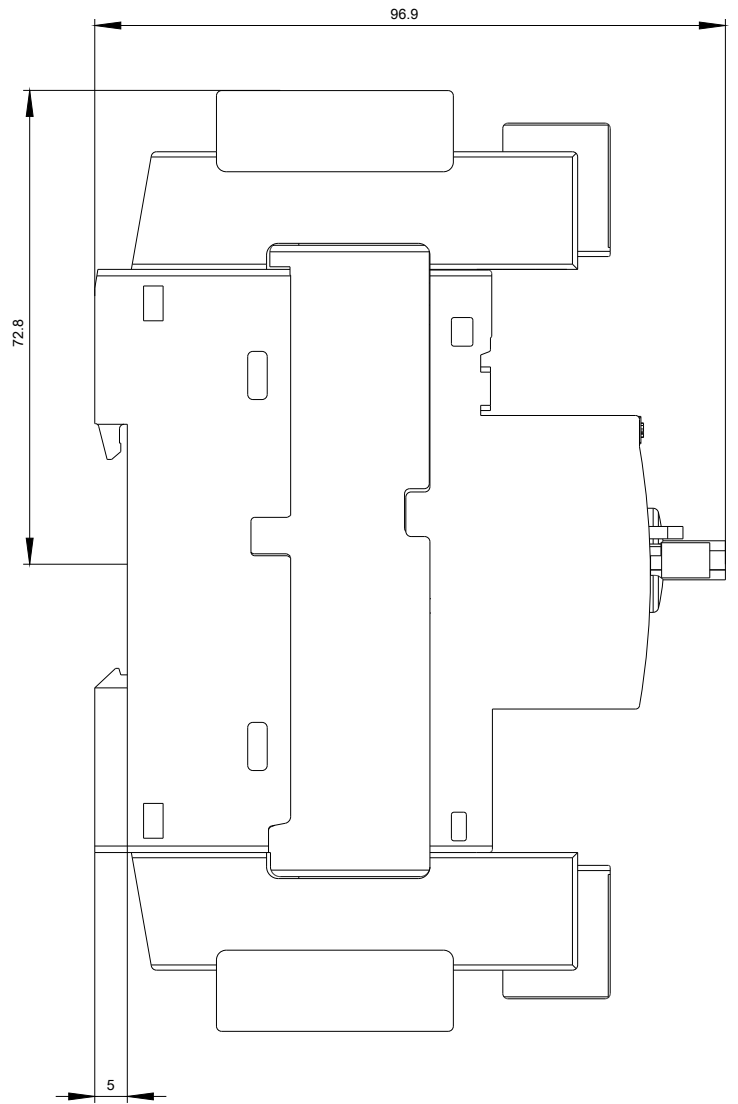
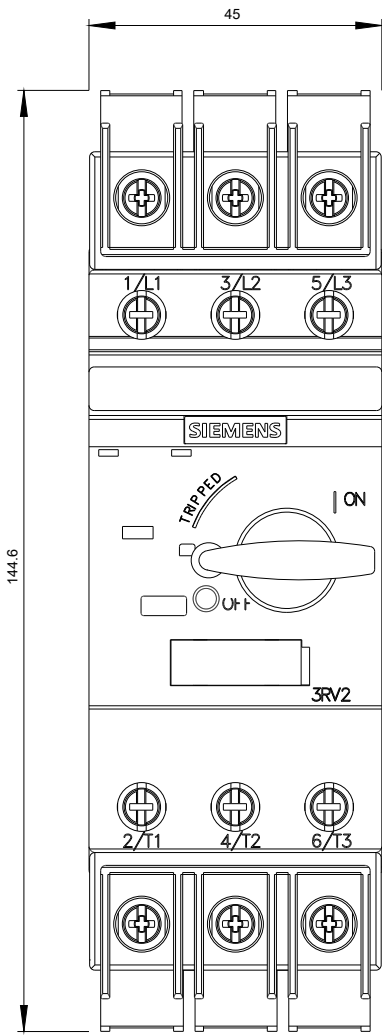
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2711-1DD10&lang=en

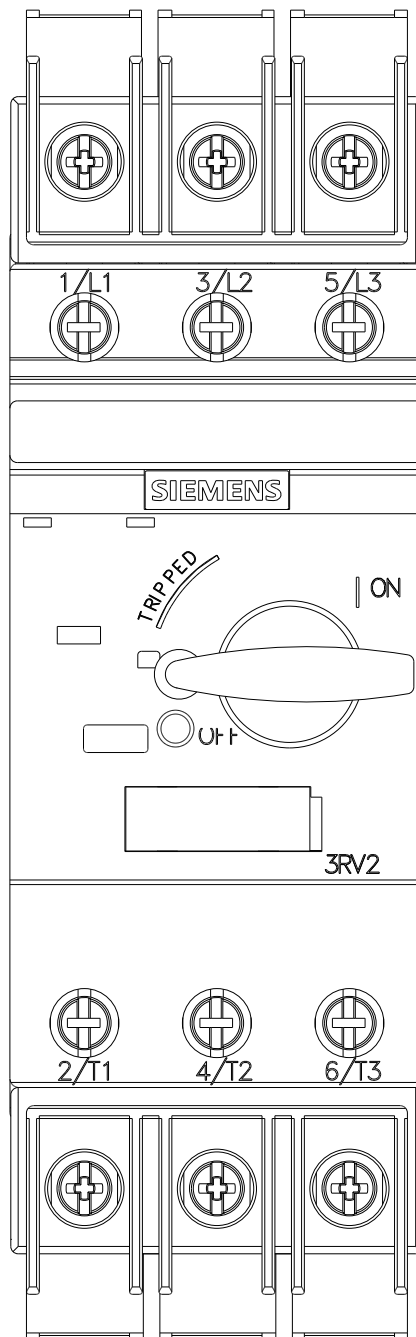
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-1DD10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2711-1DD10&objecttype=14&gridview=view1>







last modified:

06/07/2019