## **SIEMENS**

Data sheet 3RV2811-1BD10



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			
<ul> <li>at AC in hot operating state</li> </ul>	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	25 g / 11 ms (rectangular impulse and sine pulse)		
mechanical service life (operating cycles)			
<ul> <li>of the main contacts typical</li> </ul>	100 000		
of auxiliary contacts typical	100 000		
electrical endurance (operating cycles) typical	100 000		
reference code according to IEC 81346-2	Q		
Substance Prohibitance (Date)	10/01/2009		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
ambient temperature			
<ul> <li>during operation</li> </ul>	-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		
<ul> <li>at AC-3 rated value maximum</li> </ul>	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			
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	2 A		
at AC-3e at 400 V rated value	2 A		
operating power			
• at AC-3			
<ul> <li>at 230 V rated value</li> </ul>	0.4 kW		

— at 400 V rated value	0.8 kW
— at 500 V rated value	0.8 kW
— at 690 V rated value	1.1 kW
• at AC-3e	
— at 230 V rated value	0.4 kW
— at 400 V rated value	0.8 kW
— at 500 V rated value	0.8 kW
— at 690 V rated value	1.1 kW
operating frequency	
• at AC-3 maximum	15 1/h
• at AC-3e maximum	15 1/h
Protective and monitoring functions	
product function	
ground fault detection	No
phase failure detection	No
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V rated value	100 kA
at AC at 400 V rated value	100 kA
at AC at 500 V rated value	100 kA
at AC at 690 V rated value	10 kA
at 480 AC Y/277 V according to UL 489 rated value	65 kA
operating short-circuit current breaking capacity (Ics) at AC	55 to t
at 240 V rated value	100 kA
at 400 V rated value     at 400 V rated value	100 kA
	100 kA
at 500 V rated value	
at 690 V rated value	10 kA
response value current of instantaneous short-circuit trip unit	42 A
Short-circuit protection	v.
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	
protection of the main circuit  ● at 400 V	gG 25 A
protection of the main circuit	gG 25 A
protection of the main circuit  • at 400 V  • at 500 V  • at 690 V	
protection of the main circuit  ■ at 400 V  ■ at 500 V	gG 25 A
protection of the main circuit  • at 400 V  • at 500 V  • at 690 V	gG 25 A
protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions	gG 25 A gG 20 A
protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position	gG 25 A gG 20 A any
protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method	gG 25 A gG 20 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method height	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm
protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm
protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm
protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  for grounded parts at 400 V	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  for grounded parts at 400 V  — downwards	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm
protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts at 400 V  — downwards — upwards — at the side	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm  30 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  for grounded parts at 400 V  — downwards — upwards	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm  30 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  for grounded parts at 400 V  — downwards — upwards — at the side  for live parts at 400 V — downwards	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm  30 mm 30 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  for grounded parts at 400 V  — downwards — upwards — at the side  for live parts at 400 V — downwards — upwards — upwards — upwards — upwards — at the side  for live parts at 400 V — downwards — upwards	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  for grounded parts at 400 V  downwards  upwards  at the side  for live parts at 400 V  downwards  upwards  upwards  at the side  for live parts at 400 V  downwards  upwards  at the side  at the side	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm  30 mm 30 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  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	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715  144 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  for grounded parts at 400 V  downwards  upwards  at the side  for live parts at 400 V  downwards  upwards  upwards  at the side  for grounded parts at 500 V  downwards  at the side  for grounded parts at 500 V  downwards	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715  144 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  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 — at the side  • for grounded parts at 500 V  — downwards — upwards — at the side	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  at 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 — at the side  for grounded parts at 500 V  — downwards — upwards — at the side  for grounded parts at 500 V  — downwards — upwards — at the side  for grounded parts at 500 V  — downwards — upwards — at the side	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715  144 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  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  at the side  for grounded parts at 500 V  downwards  upwards  at the side  for grounded parts at 500 V	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  at 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 grounded parts at 500 V  — downwards — upwards — at the side  for live parts at 500 V — downwards — upwards — at the side  for live parts at 500 V — downwards	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
protection of the main circuit  at 400 V at 500 V at 690 V  Installation/ mounting/ dimensions  mounting position fastening method height width depth  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 grounded parts at 500 V downwards upwards at the side for live parts at 500 V downwards at the side for live parts at 500 V downwards upwards at the side for live parts at 500 V downwards upwards upwards upwards	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
protection of the main circuit  at 400 V  at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  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 grounded parts at 500 V  downwards  upwards  at the side  for live parts at 500 V  downwards  upwards  at the side  for live parts at 500 V  downwards  upwards  at the side  for live parts at 500 V  downwards  at the side  for live parts at 500 V  at the side  for live parts at 500 V  at the side  for live parts at 500 V  at the side  for live parts at 500 V  at the side  for live parts at 500 V  at the side	gG 25 A gG 20 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
protection of the main circuit  at 400 V at 500 V at 690 V  Installation/ mounting/ dimensions  mounting position fastening method height width depth  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 grounded parts at 500 V downwards upwards at the side for live parts at 500 V downwards at the side for live parts at 500 V downwards upwards at the side for live parts at 500 V downwards upwards upwards upwards	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm

— upwards	70 mm	
— backwards	0 mm	
— at the side	30 mm	
— forwards	0 mm	
	Ollilli	
• for live parts at 690 V	70	
— downwards	70 mm	
— upwards	70 mm	
— backwards	0 mm	
— at the side	30 mm	
— forwards  Connections/ Terminals	0 mm	
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 mm², max. 2x 10 mm²	
<ul> <li>finely stranded with core end processing</li> </ul>	1 16 mm², max. 6 + 16 mm²	
<ul> <li>for AWG cables for main contacts</li> </ul>	2x (14 10)	
tightening torque		
<ul> <li>for main contacts with screw-type terminals</li> </ul>	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		
<ul> <li>with high demand rate according to SN 31920</li> </ul>	5 000	
proportion of dangerous failures		
<ul> <li>with low demand rate according to SN 31920</li> </ul>	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 (U)	EAC	<b>C</b> € EG-Konf.

Declaration of Conformity

**Test Certificates** 

Marine / Shipping

other

Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report





Confirmation

other Railway



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=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

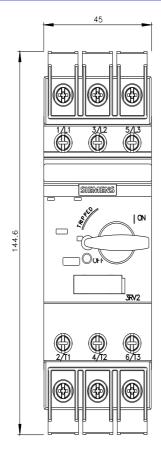
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

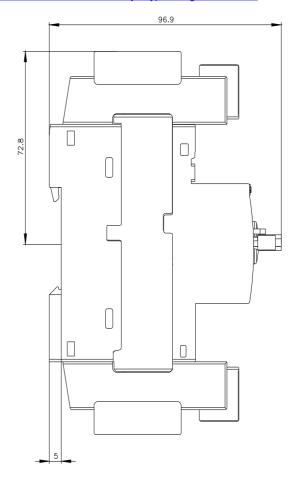
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2811-1BD10&lang=en

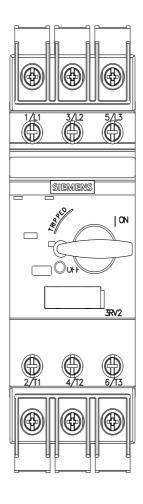
Characteristic: Tripping characteristics, I2t, Let-through current

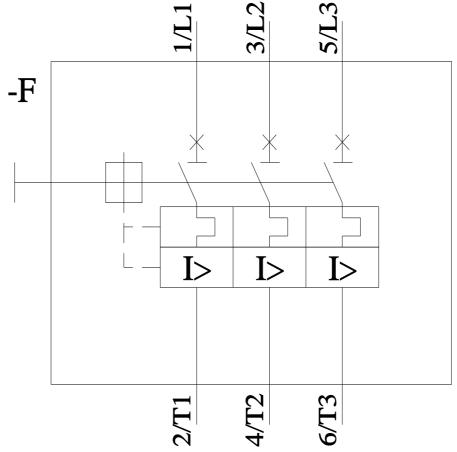
https://support.industry.siemens.com/cs/ww/en/ps/3RV2811-1BD10/char

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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