



Circuit breaker size S00 for transformer protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 5 A N-release 104 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 (switching cycles)	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
electrical endurance (switching 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	5 A
operational current	
• at AC-3 at 400 V rated value	5 A
• at AC-3e at 400 V rated value	5 A
operating power	

• at AC-3 — at 230 V rated value — at 400 V rated value — 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	1.1 kW 1.5 kW 2.2 kW 4 kW 1.1 kW 1.5 kW 2.2 kW 4 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
breaking capacity maximum short-circuit current (I_{cu})	
• 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 6 kA 65 kA
breaking capacity operating short-circuit current (I_{cs}) 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 4 kA
response value current of instantaneous short-circuit trip unit	104 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 32 A gL/gG 32 A gL/gG 25 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	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	
• for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards — upwards — at the side	30 mm 30 mm 30 mm 30 mm 30 mm 30 mm

• for grounded parts at 500 V — downwards — upwards — at the side • for live parts at 500 V — downwards — upwards — at the side • for grounded parts at 690 V — downwards — upwards — backwards — at the side — forwards • for live parts at 690 V — downwards — upwards — backwards — at the side — forwards	30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 70 mm 70 mm 0 mm 30 mm 0 mm 70 mm 70 mm 0 mm 30 mm 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	1 ... 10 mm ² , max. 2x 10 mm ² 1 ... 16 mm ² , max. 6 + 16 mm ²		
• 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 y		
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			
<table> <tr> <td>General Product Approval</td><td>Declaration of Conformity</td></tr> </table>		General Product Approval	Declaration of Conformity
General Product Approval	Declaration of Conformity		



[Confirmation](#)



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Declaration of Conformity	Test Certificates	Marine / Shipping
 EG-Konf.	Type Test Certificates/Test Report Special Test Certificate	  LRS  RMRS

other	Railway
Confirmation  VDE	Vibration and Shock

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=3RV2811-1FD10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2811-1FD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2811-1FD10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2811-1FD10&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2811-1FD10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2811-1FD10&objecttype=14&gridview=view1>

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