SIEMENS

product brand name

Data sheet 3RV2711-1CD10

SIRIUS





Circuit breaker size S00 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 2.5 A N-release 33 A screw terminal Standard switching capacity



production and the second seco	
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] 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	25 g / 11 ms (rectangular impulse and sine pulse)
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 Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
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	2.5 A
operational current	
 at AC-3 at 400 V rated value 	2.5 A

at AC-3e at 400 V rated value	2.5 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	1.1 kW
— at 690 V rated value	1.5 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	1.1 kW
— at 690 V rated value	1.5 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)	ulcillidi
	400 kA
at AC at 400 V reted value	100 kA
• at AC at 500 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 (lcs) at AC	
 at 240 V rated value 	100 kA
 at 400 V rated value 	100 kA
 at 500 V rated value 	100 kA
at 690 V rated value	10 kA
response value current of instantaneous short-circuit trip unit	33 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	gG 25 A
● at 500 V	gG 25 A
● at 690 V	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 	
for grounded parts at 400 V— downwards	30 mm
-	30 mm 30 mm
— downwards	
— downwards — upwards	30 mm
downwardsupwardsat the side	30 mm
 — downwards — upwards — at the side • for live parts at 400 V — downwards 	30 mm 30 mm
 downwards upwards at the side for live parts at 400 V downwards upwards 	30 mm 30 mm 30 mm
 — downwards — upwards — at the side • for live parts at 400 V — downwards — upwards — at the side 	30 mm 30 mm
 downwards upwards at the side for live parts at 400 V downwards upwards at the side for grounded parts at 500 V 	30 mm 30 mm 30 mm 30 mm
 downwards upwards at the side for live parts at 400 V downwards upwards at the side for grounded parts at 500 V downwards 	30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
 downwards upwards at the side for live parts at 400 V downwards upwards at the side for grounded parts at 500 V downwards upwards upwards upwards 	30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
 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 	30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
 downwards upwards at the side for live parts at 400 V downwards upwards at the side for grounded parts at 500 V downwards upwards upwards upwards 	30 mm 30 mm 30 mm 30 mm 30 mm 30 mm

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— upwards	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
	Ollilli
• 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	Top and bottom
circuit	
type of connectable conductor cross-sections	
• for main contacts	
— solid or stranded	1 10 mm², max. 2x 10 mm²
finely stranded with core end processing	1 16 mm², max. 6 + 16 mm²
for AWG cables for main contacts	2x (14 10)
tightening torque	ZA (17 10)
	2.5 3 N·m
for main contacts with screw-type terminals	
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	
product function suitable for safety function	Yes
suitability for use	
suitability for use safety-related switching on	No
-	No Yes
safety-related switching on	
safety-related switching on safety-related switching OFF service life maximum	Yes 10 a
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary	Yes
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures	Yes 10 a Yes
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920	Yes 10 a Yes 40 %
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920	Yes 10 a Yes 40 % 50 %
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920	Yes 10 a Yes 40 % 50 % 5 000
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN	Yes 10 a Yes 40 % 50 %
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920	Yes 10 a Yes 40 % 50 % 5 000
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849	Yes 10 a Yes 40 % 50 % 5 000 50 FIT
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1	Yes 10 a Yes 40 % 50 % 5 000 50 FIT
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary	Yes 10 a Yes 40 % 50 % 5 000 50 FIT
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508	Yes 10 a Yes 40 % 50 % 5 000 50 FIT
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2	Yes 10 a Yes 40 % 50 % 5 000 50 FIT
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value	Yes 10 a Yes 40 % 50 % 5 000 50 FIT 3 Yes
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value for proof test interval or service life according to IEC	Yes 10 a Yes 40 % 50 % 5 000 50 FIT
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value for proof test interval or service life according to IEC 61508	Yes 10 a Yes 40 % 50 % 5 000 50 FIT 3 Yes
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety	Yes 10 a Yes 40 % 50 % 5 000 50 FIT 3 Yes Type A 10 a
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety protection class IP on the front according to IEC 60529	Yes 10 a Yes 40 % 50 % 5 000 50 FIT 3 Yes Type A 10 a
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529	Yes 10 a Yes 40 % 50 % 5 000 50 FIT 3 Yes Type A 10 a
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety protection class IP on the front according to IEC 60529	Yes 10 a Yes 40 % 50 % 5 000 50 FIT 3 Yes Type A 10 a
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529	Yes 10 a Yes 40 % 50 % 5 000 50 FIT 3 Yes Type A 10 a
safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety protection class IP on the front according to IEC 60529 Display	Yes 10 a Yes 40 % 50 % 5 000 50 FIT 3 Yes Type A 10 a IP20 finger-safe, for vertical contact from the front





Confirmation





<u>KC</u>

General Product Approval

Test Certificates

Marine / Shipping

other

EAC

Type Test Certificates/Test Report

Special Test Certificate





Miscellaneous

other

Railway

Environment

Confirmation



Special Test Certificate



Siemens EcoTech



Environmental Confirmations

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=3RV2711-1CD10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2711-1CD10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-1CD10

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

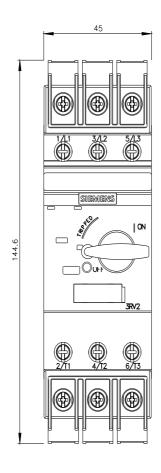
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2711-1CD10\&lang=en}}$

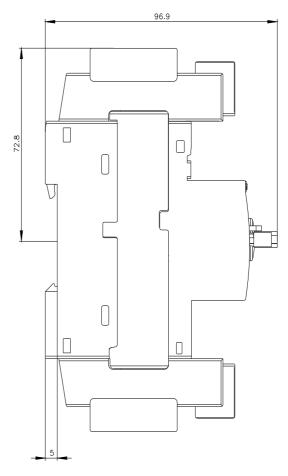
Characteristic: Tripping characteristics, I^2t , Let-through current

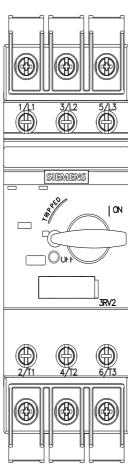
https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-1CD10/char

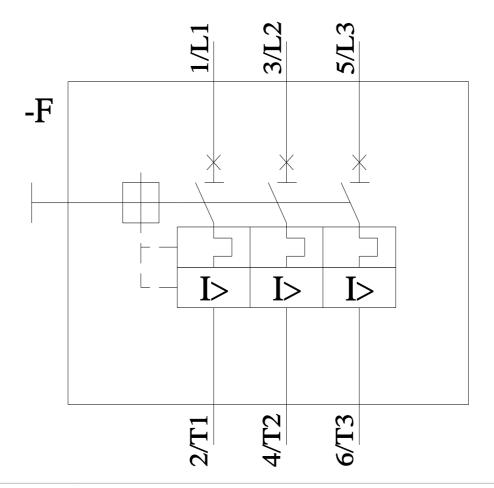
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2711-1CD10&objecttype=14&gridview=view1









last modified: 4/12/2024 🖸