## **SIEMENS**

Data sheet 3RV2711-0KD10





Circuit breaker size S00 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 1.25 A N-release 16 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] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	5.5 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	1.8 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
SVHC substance name	Lead - 7439-92-1
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	1.25 A
operational current	
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	1.25 A

at AC-3e at 400 V rated value	1.25 A
operating power	
• at AC-3	
— at 230 V rated value	0.2 kW
— at 400 V rated value	0.4 kW
— at 500 V rated value	0.4 kW
— at 690 V rated value	0.8 kW
• at AC-3e	
— at 230 V rated value	0.2 kW
— at 400 V rated value	0.4 kW
— at 500 V rated value	0.4 kW
— at 690 V rated value	0.8 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)	поппа
at AC at 240 V rated value	100 kA
at AC at 240 V rated value     at AC at 400 V rated value	100 kA
	100 kA
<ul> <li>at AC at 500 V rated value</li> <li>at AC at 690 V rated value</li> </ul>	100 kA
at 480 AC Y/277 V according to UL 489 rated value	65 kA
operating short-circuit current breaking capacity (Ics) at AC	400 kA
• 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	100 kA
response value current of instantaneous short-circuit trip unit	16 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	-0.46 A
● at 500 V	gG 16 A
	0.40.4
• at 690 V	gG 16 A
Installation/ mounting/ dimensions	
Installation/ mounting/ dimensions mounting position	any
Installation/ mounting/ dimensions mounting position fastening method	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
Installation/ mounting/ dimensions mounting position fastening method height	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm
Installation/ mounting/ dimensions mounting position fastening method height width	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm
Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing • for grounded parts at 400 V	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing  • for grounded parts at 400 V — downwards	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts at 400 V — downwards — 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
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts at 400 V — downwards — upwards — at the side	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 144 mm 45 mm 97 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts at 400 V — downwards — 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
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts at 400 V — downwards — upwards — at the side	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
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	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
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	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
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	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
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 • at the side • for live parts at 400 V — downwards — upwards — at the side	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
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 400 V — downwards — upwards — upwards — upwards — upwards — if 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 30 mm 30 mm 30 mm 30 mm 30 mm
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	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
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 — 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
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	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

— at the side	30 mm
<ul> <li>for grounded parts at 690 V</li> </ul>	
— 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	Top and bottom
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
for 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	1 OZIGITV SIZE Z
for main contacts	M4
	1714
Safety related data	
Safety related data	Vas
product function suitable for safety function	Yes
product function suitable for safety function suitability for use	
product function suitable for safety function suitability for use • safety-related switching on	No
product function suitable for safety function  suitability for use  safety-related switching on safety-related switching OFF	No Yes
product function suitable for safety function  suitability for use  safety-related switching on safety-related switching OFF  service life maximum	No Yes 10 a
product function suitable for safety function  suitability for use  • safety-related switching on  • safety-related switching OFF  service life maximum  test wear-related service life necessary	No Yes
product function suitable for safety function  suitability for use  • safety-related switching on  • safety-related switching OFF  service life maximum  test wear-related service life necessary  proportion of dangerous failures	No Yes 10 a Yes
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 %
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 %
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT  3 Yes
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT  3 Yes
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT  3 Yes
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT  3 Yes  Type A 10 a
product function suitable for safety function  suitability for use  • 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	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT  3 Yes  Type A 10 a
product function suitable for safety function  suitability for use  • 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  Display	No 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
product function suitable for safety function  suitability for use  • 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  Display  display version for switching status	No Yes 10 a Yes 40 % 50 % 5 000 50 FIT  3 Yes  Type A 10 a
product function suitable for safety function  suitability for use  • 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  Display	No 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=3RV2711-0KD10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2711-0KD10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-0KD10

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

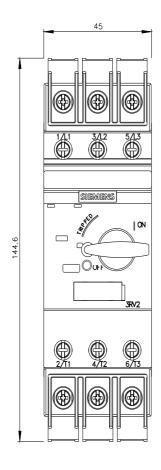
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2711-0KD10\&lang=en}}$ 

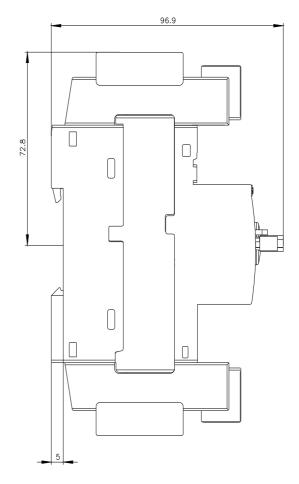
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

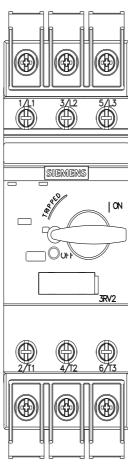
https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-0KD10/char

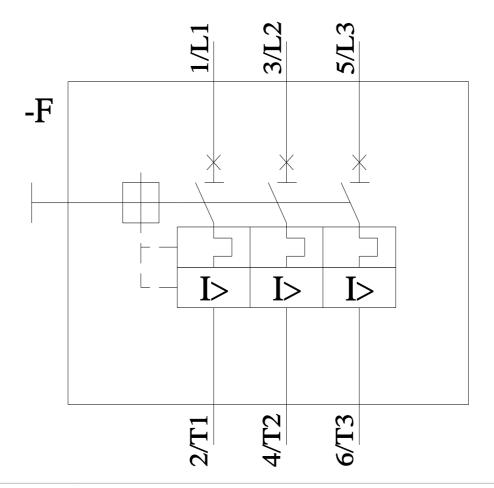
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2711-0KD10&objecttype=14&gridview=view1









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