## SIEMENS

## Data sheet

## 3RV2711-1DD10



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 brand name product designation	Circuit breaker
design of the product	For system protection according to UL 489/CSA C22.2 No. 5
product type designation	3RV2
	SRV2
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
<ul> <li>at AC in hot operating state per pole</li> </ul>	2.4 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation in networks with grounded star point	
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V
shock resistance acc. to IEC 60068-2-27	25g / 11 ms
mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	100 000
<ul> <li>of auxiliary contacts typical</li> </ul>	100 000
electrical endurance (switching cycles) typical	100 000
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
<ul> <li>during storage</li> </ul>	-50 +80 °C
<ul> <li>during transport</li> </ul>	-50 +80 °C
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
rated value	20 690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operational current rated value	3.2 A

operational ourrant at AC 2 at 400 V retail value	2.2.4
operational current at AC-3 at 400 V rated value	3.2 A
operating power at AC-3 • at 230 V rated value	
	0.6 kW
• at 400 V rated value	1.1 kW
at 500 V rated value	1.5 kW
at 690 V rated value	2.2 kW
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
breaking capacity operating short-circuit current (Ics) 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
breaking capacity maximum short-circuit current (lcu)	
<ul> <li>at AC at 240 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 400 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 500 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 690 V rated value</li> </ul>	10 kA
at 480 AC Y/277 V acc. to UL 489 rated value	65 kA
response value current of instantaneous short-circuit trip unit	42 A
Short-circuit protection	
Short-circuit protection product function short circuit protection	Yes
product function short circuit protection design of the short-circuit trip	Yes magnetic
product function short circuit protection	
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit	
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit	magnetic
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit • at 400 V	magnetic gL/gG 25 A
product function short circuit protection         design of the short-circuit trip         design of the fuse link for IT network for short-circuit         protection of the main circuit         • at 400 V         • at 500 V	magnetic gL/gG 25 A gL/gG 32 A
product function short circuit protection design of the short-circuit trip 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	magnetic gL/gG 25 A gL/gG 32 A
product function short circuit protection design of the short-circuit trip 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 Installation/ mounting/ dimensions	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail
product function short circuit protection design of the short-circuit trip 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 Installation/ mounting/ dimensions mounting position fastening method	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing         • for grounded parts at 400 V	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm 97 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing         • for grounded parts at 400 V         — downwards	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm 97 mm 30 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing         • for grounded parts at 400 V         — downwards         — upwards	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm 97 mm 30 mm 30 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing         • for grounded parts at 400 V         — downwards         — upwards         — at the side	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm 97 mm 30 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing         • for grounded parts at 400 V         — at the side         — at the side         • for live parts at 400 V	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm 97 mm 30 mm 30 mm 30 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing         • for grounded parts at 400 V         — at the side         • for live parts at 400 V         — downwards         — upwards         — at the side         • for live parts at 400 V	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm 97 mm 30 mm 30 mm 30 mm 30 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing         • for grounded parts at 400 V         — at the side         • for live parts at 400 V         — downwards         — upwards	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm 97 mm 30 mm 30 mm 30 mm 30 mm 30 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing         • for grounded parts at 400 V         — at the side         • for live parts at 400 V         — downwards         — upwards         — at the side         • for live parts at 400 V	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm 97 mm 30 mm 30 mm 30 mm 30 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing         • for grounded parts at 400 V         — at the side         • for live parts at 400 V         — downwards         — upwards	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm 97 mm 30 mm 30 mm 30 mm 30 mm 30 mm
product function short circuit protection         design of the short-circuit trip         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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing         • for grounded parts at 400 V         — at the side         • for live parts at 400 V         — downwards         — upwards         — at the side         • for live parts at 400 V         — downwards         — upwards         — at the side	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 144 mm 45 mm 97 mm 30 mm 30 mm 30 mm 30 mm 30 mm
product function short circuit protection         design of the short-circuit trip         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         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 live parts at 400 V         — downwards         — upwards         — upwards         — upwards         — upwards         — at the side         • for grounded parts at 500 V	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting 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
product function short circuit protection         design of the short-circuit trip         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         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         — at the side         • for grounded parts at 500 V         — at the side         • for grounded parts at 500 V         — at the side         • for grounded parts at 500 V         — at the side	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting 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
product function short circuit protection         design of the short-circuit trip         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         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	magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting 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	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	
<ul> <li>for live parts at 690 V</li> </ul>		
— downwards	70 mm	
— upwards	70 mm	
— backwards	0 mm	
— at the side	30 mm	
— forwards	0 mm	
Connections/ Terminals		
product component removable terminal for auxiliary and control circuit	No	
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		
<ul> <li>for main contacts</li> </ul>		
— 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	
at AWG cables for main contacts	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 2	
design of the thread of the connection screw		
for main contacts	M4	
Safety related data		
B10 value		_
	5 000	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>		
with high demand rate acc. to SN 31920  proportion of dangerous failures		
proportion of dangerous failures	50 %	
<ul><li>proportion of dangerous failures</li><li>with low demand rate acc. to SN 31920</li></ul>	50 % 50 %	
<ul> <li>proportion of dangerous failures</li> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> </ul>	50 % 50 %	
<ul> <li>proportion of dangerous failures</li> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>failure rate [FIT]</li> </ul>	50 %	
<ul> <li>proportion of dangerous failures</li> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>failure rate [FIT]</li> <li>with low demand rate acc. to SN 31920</li> </ul>	50 % 50 FIT	
<ul> <li>proportion of dangerous failures</li> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>failure rate [FIT]</li> </ul>	50 %	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to	50 % 50 FIT	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508	50 % 50 FIT 10 y	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         protection class IP on the front acc. to IEC 60529	50 % 50 FIT 10 y IP20	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         protection class IP on the front acc. to IEC 60529         touch protection on the front acc. to IEC 60529	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         protection class IP on the front acc. to IEC 60529         touch protection on the front acc. to IEC 60529         display version for switching status	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         protection class IP on the front acc. to IEC 60529         touch protection on the front acc. to IEC 60529         display version for switching status         Certificates/ approvals         General Product Approval	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         protection class IP on the front acc. to IEC 60529         touch protection on the front acc. to IEC 60529         display version for switching status         Certificates/ approvals	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         protection class IP on the front acc. to IEC 60529         touch protection on the front acc. to IEC 60529         display version for switching status         Certificates/ approvals         General Product Approval	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity KC UK Declaration	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         protection class IP on the front acc. to IEC 60529         touch protection on the front acc. to IEC 60529         display version for switching status         Certificates/ approvals         General Product Approval	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         protection class IP on the front acc. to IEC 60529         touch protection on the front acc. to IEC 60529         display version for switching status         Certificates/ approvals         General Product Approval <ul> <li>Confirmation</li> <li>Up</li> <li>Up</li> <li>Declaration of</li> </ul>	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front Handle	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         protection class IP on the front acc. to IEC 60529         touch protection on the front acc. to IEC 60529         display version for switching status         Certificates/ approvals         General Product Approval <u>u</u>	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity	
proportion of dangerous failures         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT]         • with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         protection class IP on the front acc. to IEC 60529         touch protection on the front acc. to IEC 60529         display version for switching status         Certificates/ approvals         General Product Approval <u>u</u> Declaration of         Tast Certificates	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front Handle	



<u>Type Test Certific-</u> ates/Test Report Special Test Certificate







other





Vibration and Shock

Railway

## 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=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, ...)

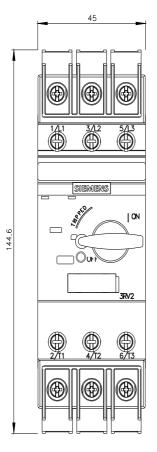
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2711-1DD10&lang=en

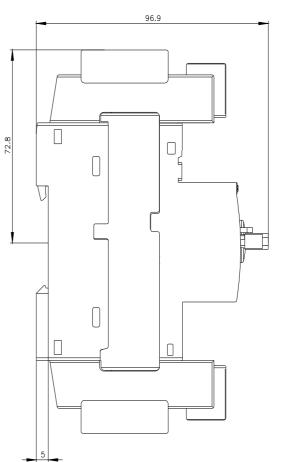
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

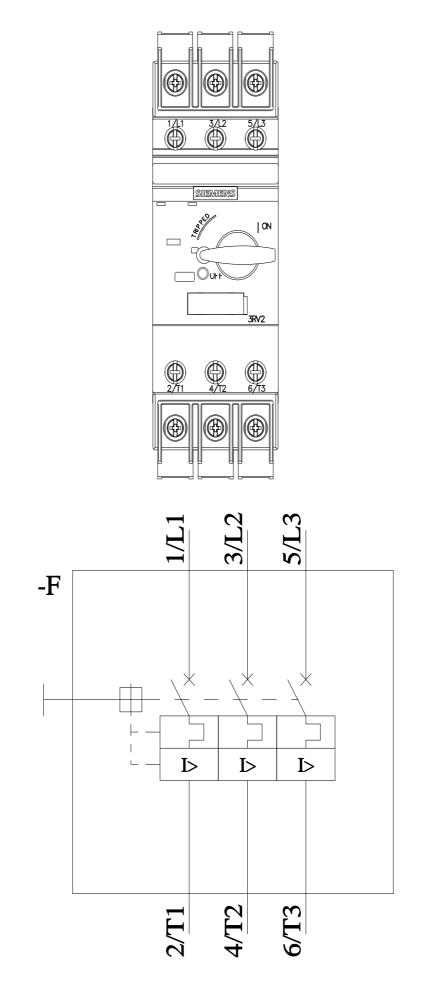
https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-1DD10/char

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







11/16/2021 🖸