



Special type Circuit breaker size S0 for motor protection, CLASS 10 A-release 18...25 A N-release 325 A Spring-type terminal Standard switching capacity Ambient temperature -50 °C 500 switching cycles

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	S0
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	10.5 W
• at AC in hot operating state per pole	3.5 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	
• between main and auxiliary circuit	400 V
• between main and auxiliary circuit	400 V
shock resistance acc. to IEC 60068-2-27	25g / 11 ms
mechanical service life (switching cycles)	
• of the main contacts typical	500
• of auxiliary contacts typical	500
electrical endurance (switching cycles) typical	500
reference code acc. to IEC 81346-2	Q
Substance Prohibance (Date)	01.10.2009 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
• ambient temperature during operation	-50 ... +60 °C
• ambient temperature during storage	-50 ... +80 °C
• ambient temperature during transport	-50 ... +80 °C
temperature compensation	-20 ... +60 °C
relative humidity during operation	10 ... 95 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	18 ... 25 A
• operating voltage rated value	690 V
• operating voltage at AC-3 rated value maximum	690 V

operating frequency rated value	50 ... 60 Hz
operational current rated value	25 A
operational current at AC-3 at 400 V rated value	25 A
operating power at AC-3	
• at 230 V rated value	5 500 W
• at 400 V rated value	11 000 W
• at 500 V rated value	15 000 W
• at 690 V rated value	22 000 W
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	Yes
trip class	CLASS 10
design of the overload release	thermal
breaking capacity operating short-circuit current (Ics) at AC	
• at 240 V rated value	25 kA
• at 400 V rated value	25 kA
• at 500 V rated value	5 kA
• at 690 V rated value	2 kA
breaking capacity maximum short-circuit current (Icu)	
• at AC at 240 V rated value	50 kA
• at AC at 400 V rated value	50 kA
• at AC at 500 V rated value	10 kA
• at AC at 690 V rated value	4 kA
response value current of instantaneous short-circuit trip unit	325 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 63 A
• at 500 V	gG 50 A
• at 690 V	gG 50 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	119 mm
width	45 mm
depth	97 mm
required spacing	
• for grounded parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 500 V	
— downwards	30 mm
— upwards	30 mm

- at the side 9 mm
- for live parts at 500 V
 - downwards 30 mm
 - upwards 30 mm
 - at the side 9 mm
- for grounded parts at 690 V
 - downwards 50 mm
 - upwards 50 mm
 - backwards 0 mm
 - at the side 30 mm
 - forwards 0 mm
- for live parts at 690 V
 - downwards 50 mm
 - upwards 50 mm
 - backwards 0 mm
 - at the side 30 mm
 - forwards 0 mm

Connections/ Terminals

product function removable terminal for auxiliary and control circuit	No
type of electrical connection	
• for main current circuit	spring-loaded terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
• for main contacts	
— solid or stranded	2x (1 ... 10 mm ²)
— finely stranded with core end processing	2x (1 ... 6 mm ²)
— finely stranded without core end processing	2x (1 ... 6 mm ²)
design of screwdriver shaft	Diameter 3 mm
size of the screwdriver tip	3,0 x 0,5 mm

Safety related data

T1 value for proof test interval or service life acc. to IEC 61508	10 y
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. 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	Test Certificates
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[Miscellaneous](#)



EG-Konf.

[Type Test
Certificates/Test
Report](#)

[Special Test
Certificate](#)

Marine / Shipping



ABS



BUREAU
VERITAS



LRS



PRS



RINA



RMRS

Marine / Shipping

other

Railway



[Confirmation](#)



[Confirmation](#)

[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=3RV2021-4DA20-0BA0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-4DA20-0BA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-4DA20-0BA0>

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

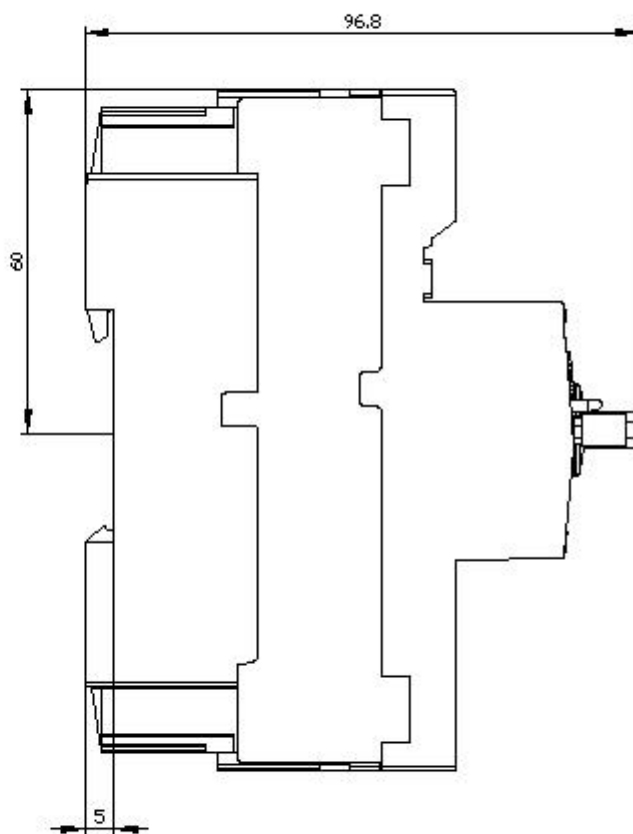
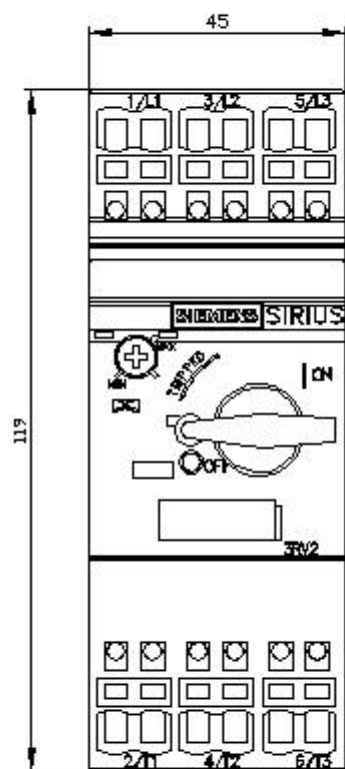
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-4DA20-0BA0&lang=en

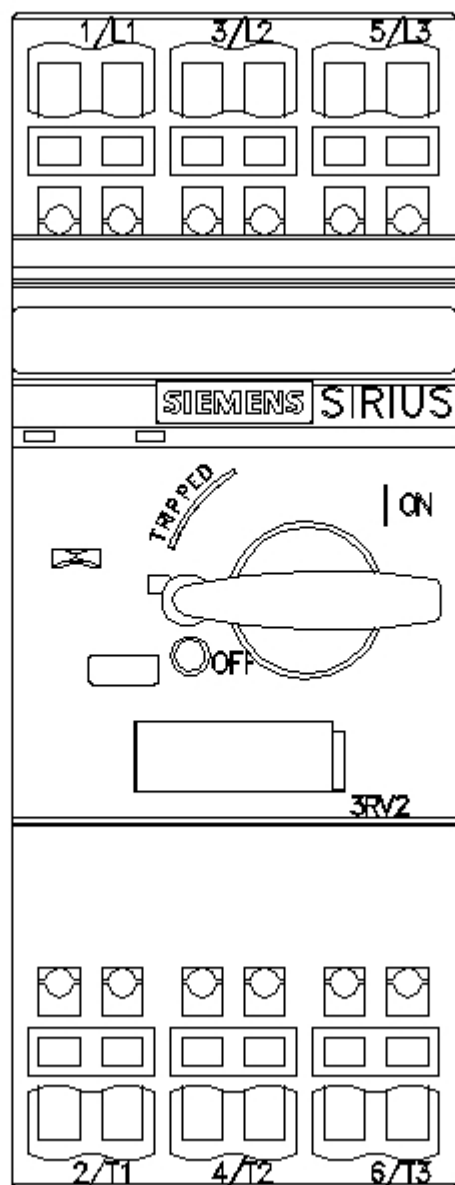
Characteristic: Tripping characteristics, I^2t , Let-through current

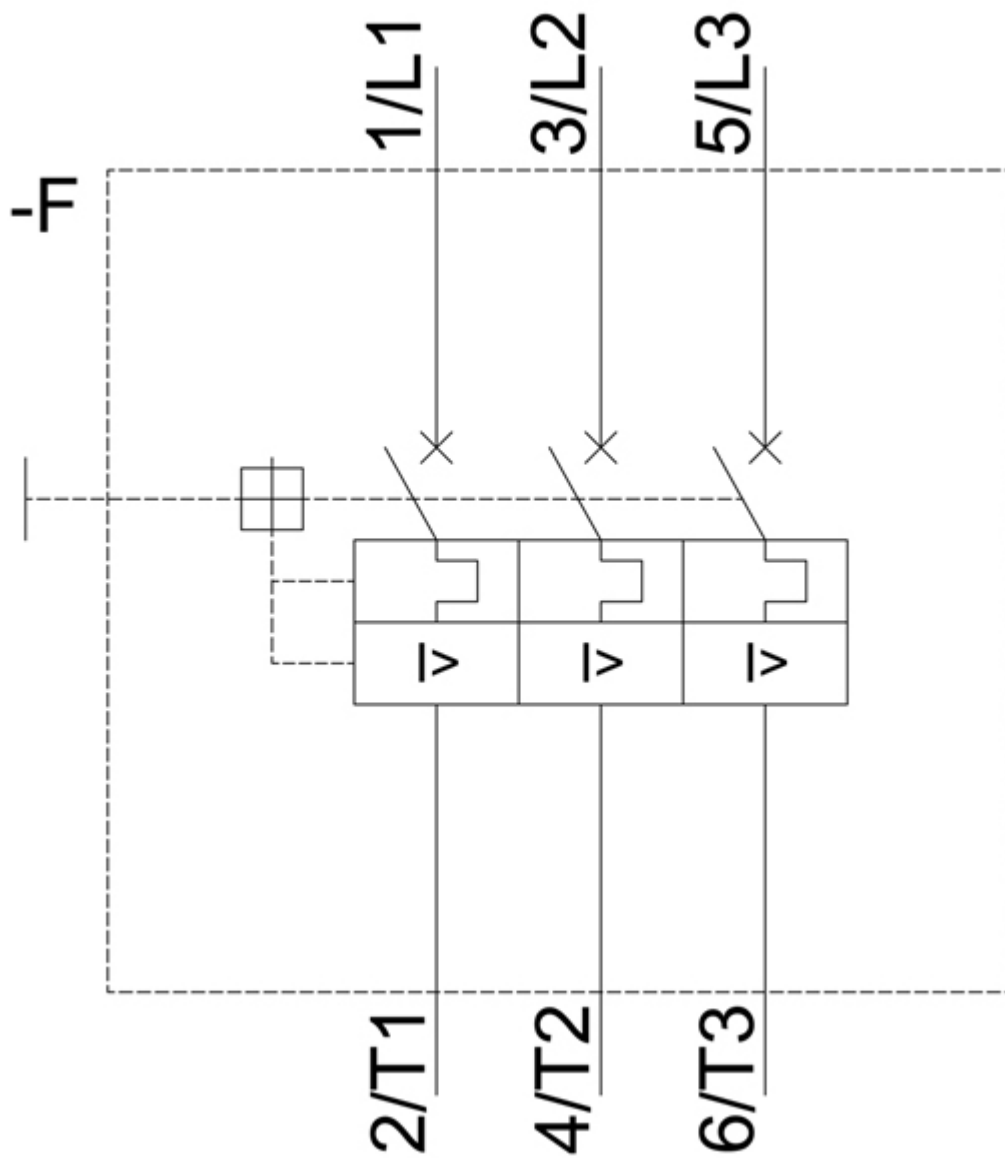
<https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-4DA20-0BA0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-4DA20-0BA0&objecttype=14&gridview=view1>







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