



Special type Circuit breaker size S0 for motor protection, CLASS 10 A-release 1.1...1.6 A N-release 21 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	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	500
• of auxiliary contacts typical	500
electrical endurance (switching cycles) typical	500
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009

Ambient conditions

installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-50 ... +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
adjustable current response value current of the current-dependent overload release	1.1 ... 1.6 A
operating voltage	
• rated value	20 ... 690 V
• at AC-3 rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	1.6 A
operational current	
• at AC-3 at 400 V rated value	1.6 A
operating power	
• at AC-3	
— at 230 V rated value	0.3 kW

— at 400 V rated value	0.6 kW
— at 500 V rated value	0.8 kW
— at 690 V rated value	1.1 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	Yes
trip class	CLASS 10
design of the overload release	thermal
breaking capacity maximum short-circuit current (Icu)	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	100 kA
• at AC at 500 V rated value	100 kA
• at AC at 690 V rated value	100 kA
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	100 kA
response value current of instantaneous short-circuit trip unit	21 A
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
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	
• with side-by-side mounting at the side	0 mm
• 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

type of electrical connection

- for main current circuit

arrangement of electrical connectors for main current circuit

type of connectable conductor cross-sections

- for main contacts
 - solid or stranded
 - finely stranded with core end processing
 - finely stranded without core end processing

design of screwdriver shaft

size of the screwdriver tip

spring-loaded terminals
Top and bottom

2x (1 ... 10 mm²)
2x (1 ... 6 mm²)
2x (1 ... 6 mm²)
Diameter 3 mm
3,0 x 0,5 mm

Safety related data

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
display version for switching status

finger-safe, for vertical contact from the front
Handle

Certificates/ approvals

General Product Approval

Declaration of Conformity

Test Certificates

[Confirmation](#)

[KC](#)



EG-Konf.

[Special Test Certificate](#)

Test Certificates

Marine / Shipping

[Type Test Certificates/Test Report](#)



ABS



BUREAU
VERITAS



DNV



LRS



PRS

Marine / Shipping

other

Railway



RINA



RMRS

[Confirmation](#)



VDE

[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=3RV2021-1AA20-0BA0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-1AA20-0BA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-1AA20-0BA0>

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

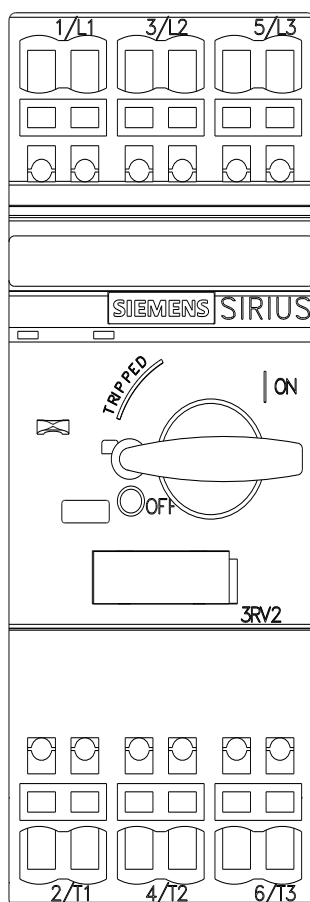
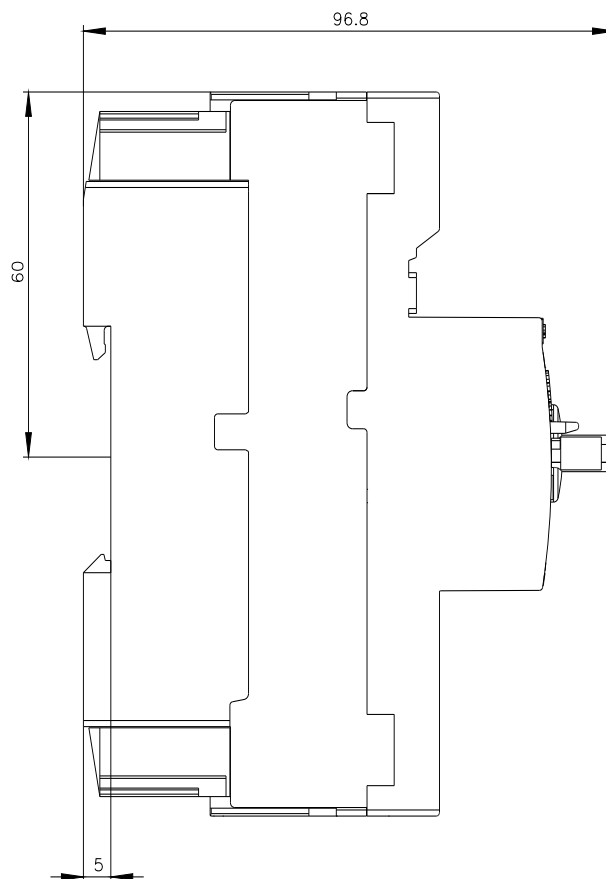
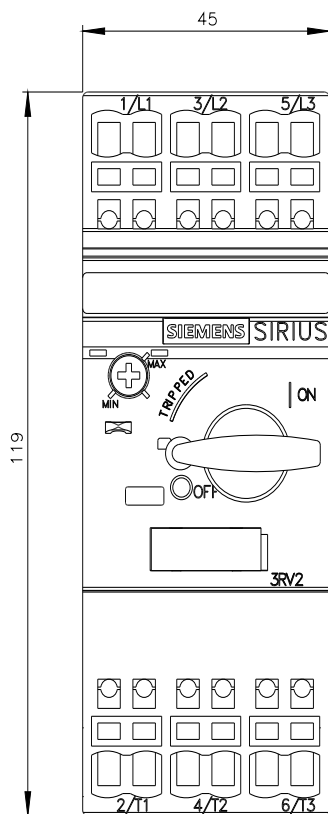
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-1AA20-0BA0&lang=en

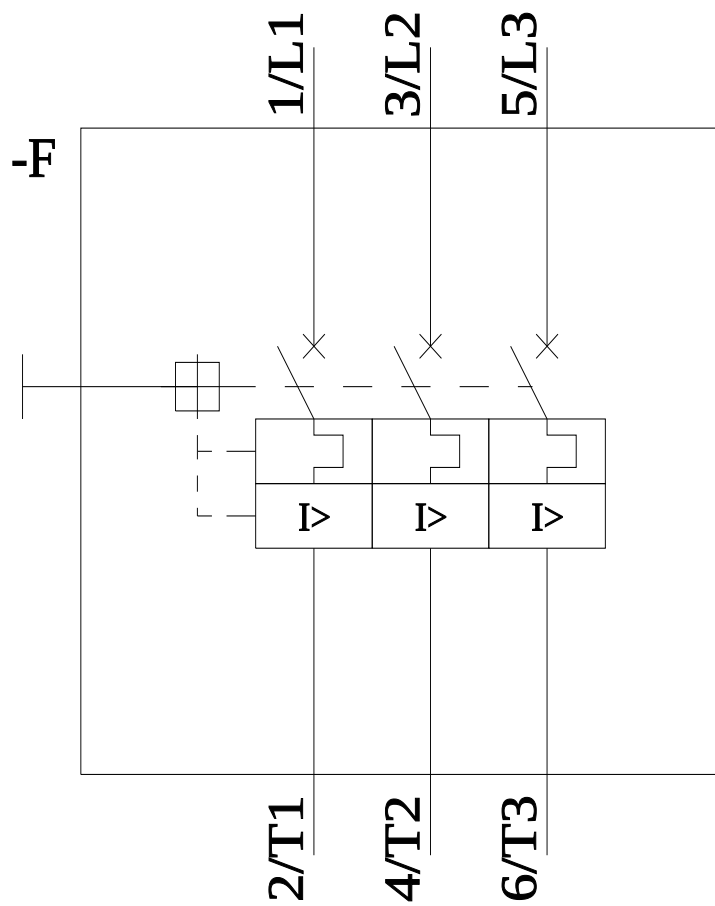
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-1AA20-0BA0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-1AA20-0BA0&objecttype=14&gridview=view1>





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