



Circuit breaker size S0 for starter combination Rated current 40 A N-release 480 A screw terminal Standard switching capacity

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For starter combinations
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	16.25 W
• at AC in hot operating state per pole	5.4 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 (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

Ambient conditions

installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-20 ... +40 °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
operating frequency rated value	50 ... 60 Hz
operational current rated value	40 A
operational current	
• at AC-3 at 400 V rated value	40 A
operating power	
• at AC-3	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	22 kW

— at 690 V rated value	39 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
maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	20 kA
• at AC at 500 V rated value	6 kA
• at AC at 690 V rated value	3 kA
operating short-circuit current breaking capacity (Ics) at AC	
• at 240 V rated value	100 kA
• at 400 V rated value	10 kA
• at 500 V rated value	3 kA
• at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	480 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	40 A
• at 600 V rated value	40 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	3 hp
— at 230 V rated value	7.5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	10 hp
— at 220/230 V rated value	10 hp
— at 460/480 V rated value	30 hp
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 63 A
• at 690 V	gG 63 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	97 mm
width	45 mm
depth	97 mm
required spacing	
• with side-by-side mounting at the side	9 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
- at AWG cables for main contacts

tightening torque

- for main contacts with screw-type terminals

design of screwdriver shaft

size of the screwdriver tip

design of the thread of the connection screw

- for main contacts

screw-type terminals

Top and bottom

2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)

2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²

2x (16 ... 12), 2x (14 ... 8)

2 ... 2.5 N·m

Diameter 5 to 6 mm

Pozidriv size 2

M4

Safety related data

B10 value

- with high demand rate according to SN 31920

proportion of dangerous failures

- with low demand rate according to SN 31920
- with high demand rate according to SN 31920

T1 value for proof test interval or service life according to IEC 61508

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529

display version for switching status

5 000

50 %

50 %

10 a

IP20

finger-safe, for vertical contact from the front

Handle

Certificates/ approvals

General Product Approval

Declaration of
Conformity

[Confirmation](#)



[KC](#)



Declaration of
Conformity

Test Certificates

Marine / Shipping



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping

other



[Confirmation](#)



Railway

[Vibration and Shock](#)

[Confirmation](#)

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=3RV2321-4FC10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2321-4FC10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2321-4FC10>

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

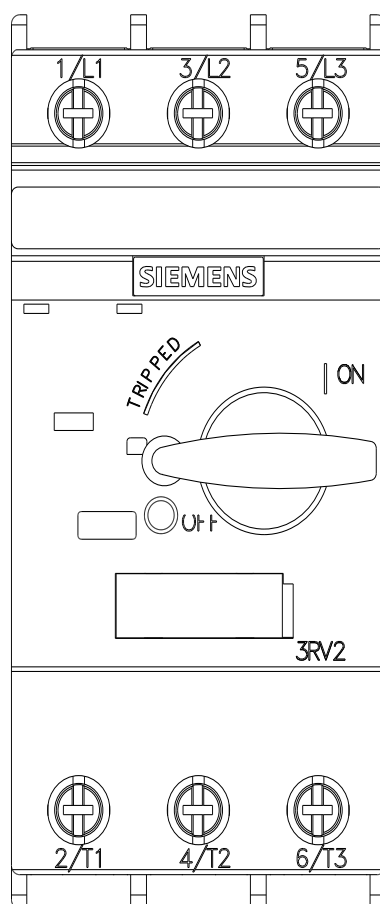
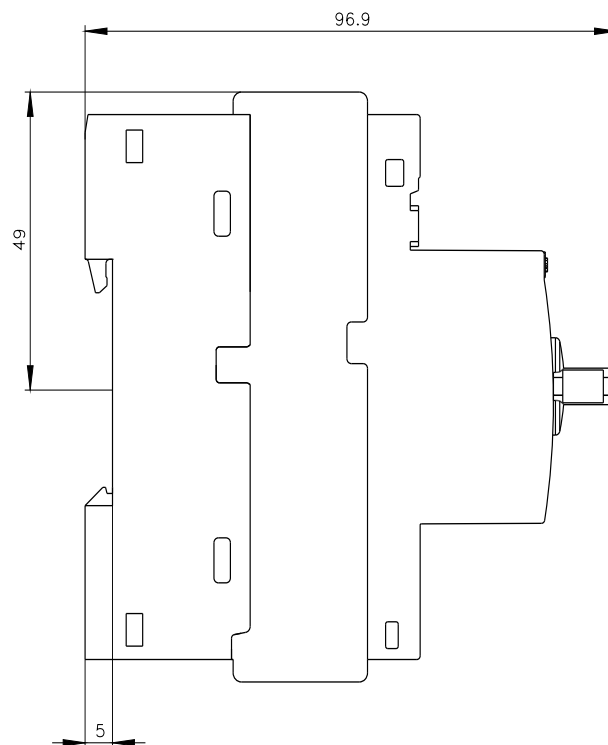
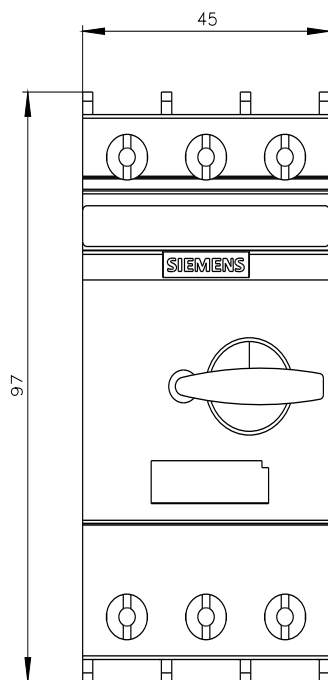
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2321-4FC10&lang=en

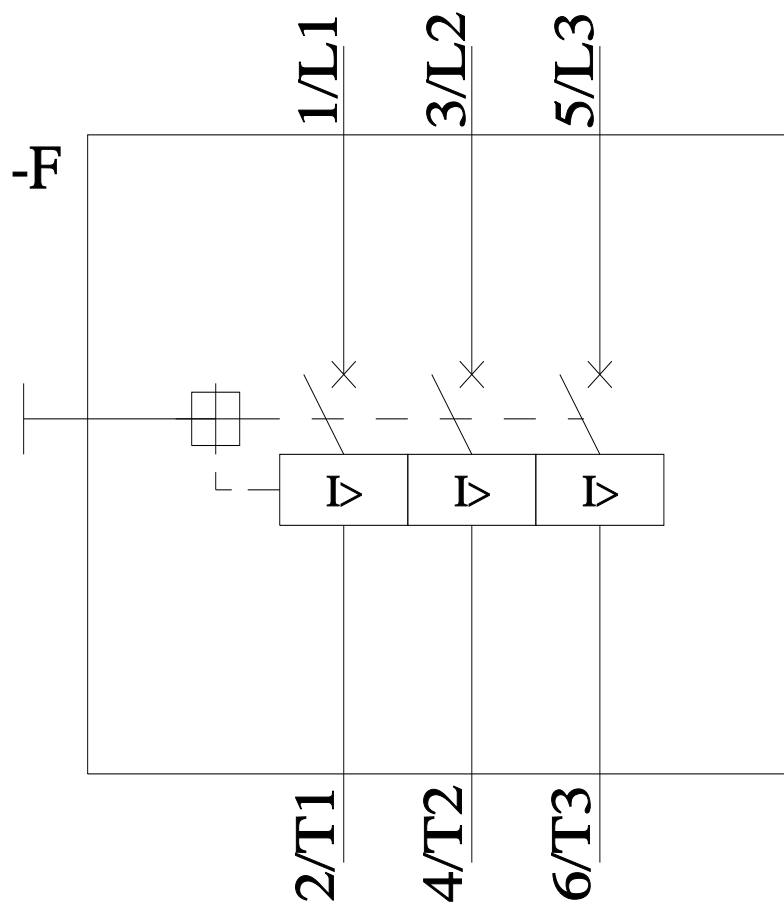
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2321-4FC10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2321-4FC10&objecttype=14&gridview=view1>





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