



Voltage transformer Circuit breaker, Size S00 3 A, N-release 20 A 1 CO with transverse auxiliary switch

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	for distance protection
product type designation	3RV1
General technical data	
size of the circuit-breaker	S00
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
mechanical service life (switching cycles)	
• of the main contacts typical	10 000
• of auxiliary contacts typical	10 000
reference code according to IEC 81346-2	Q
Substance Prohibition (Date)	01/01/2013
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-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
• at AC-3 rated value maximum	400 V
• at AC-3e rated value maximum	400 V
operating frequency rated value	60 Hz
operational current rated value	3 A
operational current	
• at AC-3 at 400 V rated value	3 A
• at AC-3e at 400 V rated value	3 A
operating frequency	
• at AC-3 maximum	15 1/h
• at AC-3e maximum	15 1/h
Auxiliary circuit	
design of the auxiliary switch	transverse

number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	1
operational current of auxiliary contacts at DC-13	
• at 24 V	0.3 A
• at 60 V	0.3 A

Protective and monitoring functions

product function	
• ground fault detection	No
• phase failure detection	Yes
design of the overload release	thermal
breaking capacity maximum short-circuit current (I_{cu})	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	50 kA
breaking capacity operating short-circuit current (I_{cs}) at AC	
• at 240 V rated value	100 kA
• at 400 V rated value	50 kA
response value current of instantaneous short-circuit trip unit	20 A

UL/CSA ratings

full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	3 A
• at 600 V rated value	3 A

Short-circuit protection

product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link	
• for short-circuit protection of the auxiliary switch required	2A FF 250V/1.1kA
design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 240 V	none required
• at 400 V	gL/gG 40 A
• at 500 V	gL/gG 35 A
• at 690 V	gL/gG 35 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	90 mm
width	45 mm
depth	75 mm
required spacing	
• for grounded parts at 400 V	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for live parts at 400 V	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for grounded parts at 500 V	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for live parts at 500 V	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for grounded parts at 690 V	
— downwards	20 mm
— upwards	20 mm
— backwards	0 mm

— at the side	9 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	20 mm
— upwards	20 mm
— backwards	0 mm
— at the side	9 mm
— forwards	0 mm

Connections/ Terminals

type of electrical connection

- for main current circuit
- for auxiliary and control circuit

screw-type terminals
screw-type terminals
Top and bottom

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

2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x (1 ... 4 mm²)
2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

type of connectable conductor cross-sections

- for auxiliary contacts
 - solid or stranded

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

tightening torque

- for main contacts with screw-type terminals
- for auxiliary contacts with screw-type terminals

0.8 ... 1.2 N·m
0.8 ... 1.2 N·m

size of the screwdriver tip

Pozidriv size 2

design of the thread of the connection screw

- for main contacts
- of the auxiliary and control contacts

M3
M3

Safety related data

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
Rocker switch

Certificates/ approvals

General Product Approval

Declaration of Conformity



[Confirmation](#)



Declaration of Conformity

Test Certificates

Marine / Shipping



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



other

Railway

[Miscellaneous](#)

[Confirmation](#)



[Special Test Certificate](#)

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=3RV1611-1DG14>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1611-1DG14>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1611-1DG14>

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

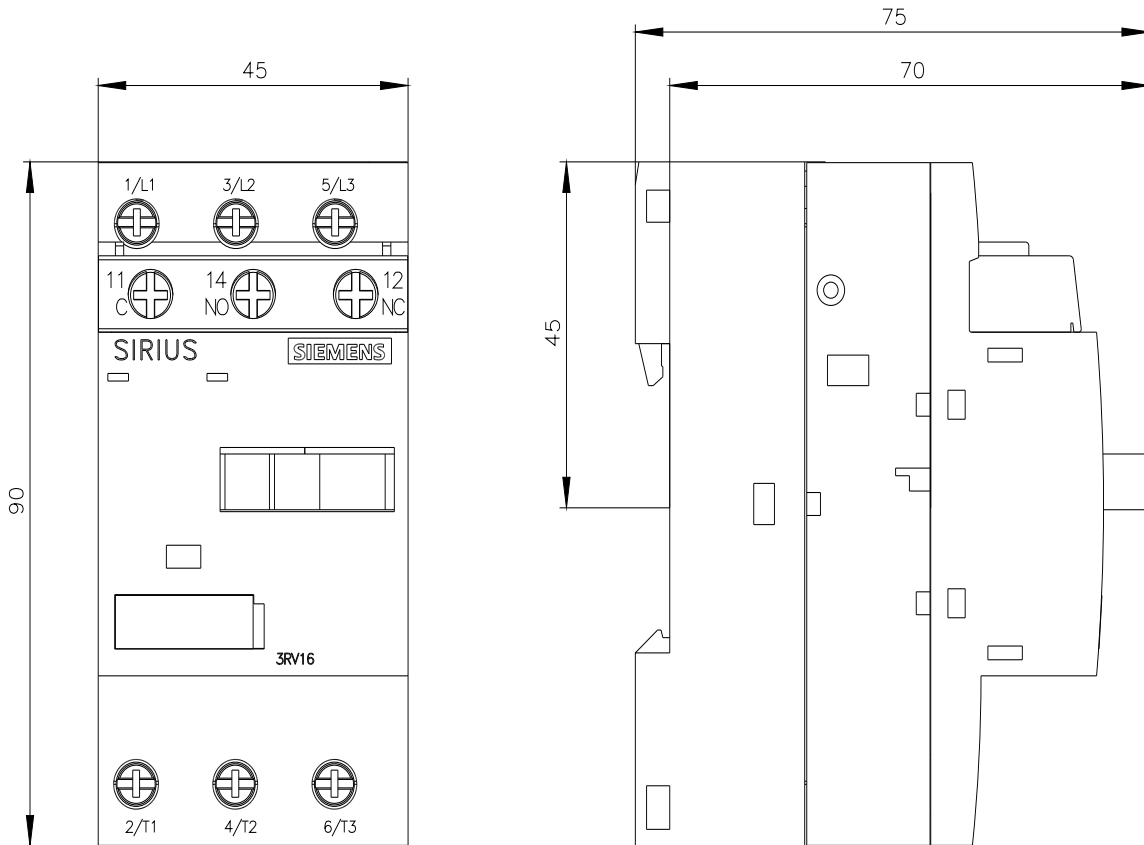
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1611-1DG14&lang=en

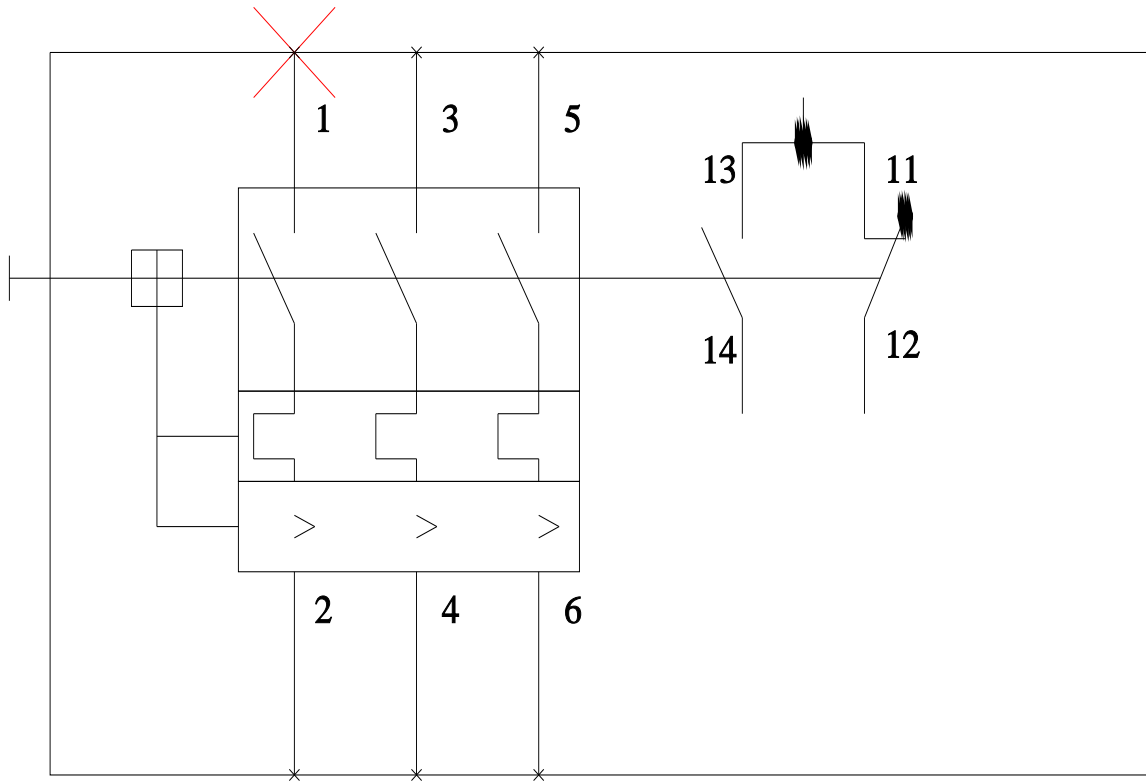
Characteristic: Tripping characteristics, I^t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1611-1DG14/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1611-1DG14&objecttype=14&gridview=view1>





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