



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

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Circuit breaker
<b>design of the product</b>	for distance protection
<b>product type designation</b>	3RV1
<b>General technical data</b>	
<b>size of the circuit-breaker</b>	S00
product extension auxiliary switch	Yes
<b>power loss [W] for rated value of the current</b>	
• 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
<b>surge voltage resistance rated value</b>	6 kV
<b>mechanical service life (switching cycles)</b>	
• of the main contacts typical	10 000
• of auxiliary contacts typical	10 000
<b>reference code according to IEC 81346-2</b>	Q
<b>Substance Prohibitance (Date)</b>	01/01/2013
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-50 ... +80 °C
relative humidity during operation	10 ... 95 %
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	3
<b>operating voltage</b>	
• rated value	20 ... 690 V
• at AC-3 rated value maximum	400 V
• at AC-3e rated value maximum	400 V
<b>operating frequency rated value</b>	60 Hz
<b>operational current rated value</b>	3 A
<b>operational current</b>	
• at AC-3 at 400 V rated value	3 A
• at AC-3e at 400 V rated value	3 A
<b>operating frequency</b>	
• at AC-3 maximum	15 1/h
• at AC-3e maximum	15 1/h

<b>Auxiliary circuit</b>	
<b>design of the auxiliary switch</b>	transverse
<b>number of NC contacts for auxiliary contacts</b>	1
<b>number of NO contacts for auxiliary contacts</b>	1
number of CO contacts for auxiliary contacts	1
<b>operational current of auxiliary contacts at DC-13</b>	
• at 24 V	0.3 A
• at 60 V	0.3 A
<b>Protective and monitoring functions</b>	
<b>product function</b>	
• ground fault detection	No
• phase failure detection	Yes
<b>design of the overload release</b>	thermal
<b>breaking capacity maximum short-circuit current (I<sub>cu</sub>)</b>	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	50 kA
<b>breaking capacity operating short-circuit current (I<sub>cs</sub>) at AC</b>	
• 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
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-phase AC motor</b>	
• at 480 V rated value	3 A
• at 600 V rated value	3 A
<b>Short-circuit protection</b>	
<b>product function short circuit protection</b>	Yes
<b>design of the short-circuit trip</b>	magnetic
<b>design of the fuse link</b>	
• for short-circuit protection of the auxiliary switch required	2A FF 250V/1.1kA
<b>design of the fuse link for IT network for short-circuit protection of the main circuit</b>	
• 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
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</b>	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
<b>height</b>	90 mm
<b>width</b>	45 mm
<b>depth</b>	75 mm
<b>required spacing</b>	
• 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
- for grounded parts at 690 V
  - downwards
  - upwards
  - backwards
  - at the side
  - forwards
- for live parts at 690 V
  - downwards
  - upwards
  - backwards
  - at the side
  - forwards

9 mm

20 mm

20 mm

0 mm

9 mm

0 mm

20 mm

20 mm

0 mm

9 mm

0 mm

#### Connections/ Terminals

<b>type of electrical connection</b>	
• for main current circuit	screw-type terminals
• for auxiliary and control circuit	screw-type terminals
<b>arrangement of electrical connectors for main current circuit</b>	Top and bottom
<b>type of connectable conductor cross-sections</b>	
• for main contacts	
— solid or stranded	2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ), 2x (1 ... 4 mm <sup>2</sup> )
— finely stranded with core end processing	2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> )
<b>type of connectable conductor cross-sections</b>	
• for auxiliary contacts	
— solid or stranded	2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> )
<b>tightening torque</b>	
• for main contacts with screw-type terminals	0,8 ... 1,2 N·m
• for auxiliary contacts with screw-type terminals	0,8 ... 1,2 N·m
<b>size of the screwdriver tip</b>	Pozidriv size 2
<b>design of the thread of the connection screw</b>	
• for main contacts	M3
• of the auxiliary and control contacts	M3

#### Safety related data

<b>protection class IP on the front according to IEC 60529</b>	IP20
<b>touch protection on the front according to IEC 60529</b>	finger-safe, for vertical contact from the front
display version for switching status	Rocker switch

#### Certificates/ approvals

General Product Approval	Declaration of Conformity
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[Confirmation](#)



Declaration of Conformity	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



other	Railway
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## 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, ...)

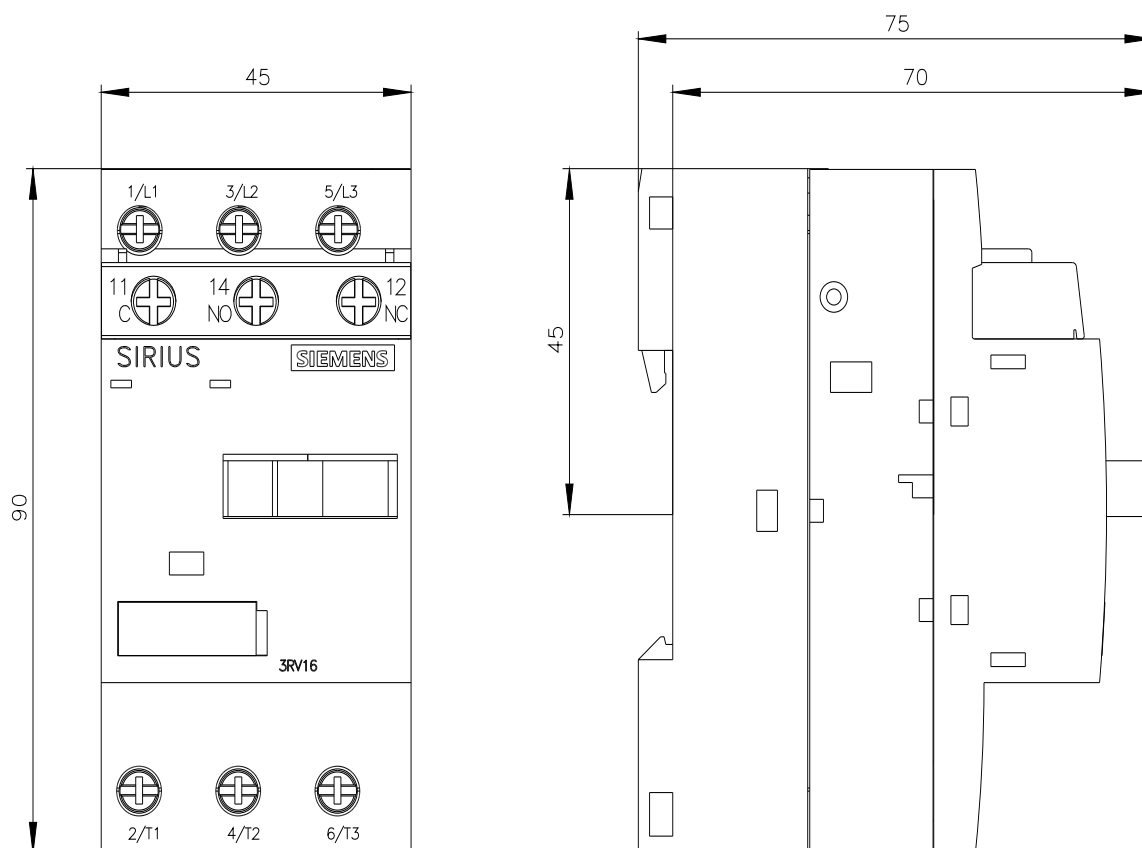
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV1611-1DG14&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1611-1DG14&lang=en)

Characteristic: Tripping characteristics, I<sub>t</sub>, 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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