## **SIEMENS**

Data sheet 3RV1611-1DG14



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	
<ul> <li>at AC in hot operating state</li> </ul>	7.25 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	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 (operating cycles)	
<ul> <li>of the main contacts typical</li> </ul>	10 000
<ul> <li>of auxiliary contacts typical</li> </ul>	10 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	01/01/2013
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
during storage	-50 +80 °C
<ul> <li>during transport</li> </ul>	-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	
<ul> <li>ground fault detection</li> </ul>	No
phase failure detection	Yes
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	50 kA
operating short-circuit current breaking capacity (Ics) 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
-+ 400 \/	14.0.40.4
• at 400 V	gL/gG 40 A
at 400 V     at 500 V	gL/gG 40 A gL/gG 35 A
● at 500 V	gL/gG 35 A
at 500 V     at 690 V	gL/gG 35 A
• at 500 V • at 690 V Installation/ mounting/ dimensions	gL/gG 35 A gL/gG 35 A
at 500 V     at 690 V  Installation/ mounting/ dimensions mounting position	gL/gG 35 A gL/gG 35 A any
at 500 V at 690 V  Installation/ mounting/ dimensions  mounting position fastening method	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position fastening method height width	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm
at 500 V at 690 V  Installation/ mounting/ dimensions  mounting position fastening method height width depth	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts at 400 V	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing  for grounded parts at 400 V — downwards	gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing  for grounded parts at 400 V  downwards  upwards	gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 20 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing  for grounded parts at 400 V  — downwards — upwards — at the side	gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 20 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts at 400 V  — downwards — upwards — at the side  • for live parts at 400 V	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 20 mm 9 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  at for grounded parts at 400 V  — downwards  — upwards — at the side  for live parts at 400 V — downwards	gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing  for grounded parts at 400 V  downwards  upwards  at the side for live parts at 400 V  downwards  upwards  upwards  upwards  upwards  upwards  upwards	gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 20 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing  for grounded parts at 400 V  downwards  upwards  at the side for live parts at 400 V  downwards  upwards  at the side  for live parts at 400 V  downwards  upwards  at the side  at the side  at the side	gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 20 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position fastening method height width depth  required spacing  for grounded parts at 400 V  downwards  upwards  at the side  for live parts at 400 V  downwards  upwards  at the side  for grounded parts at 400 V  for grounded parts at 400 V  downwards  upwards  at the side  for grounded parts at 500 V	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 9 mm
<ul> <li>at 500 V</li> <li>at 690 V</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for grounded parts at 500 V</li> <li>downwards</li> </ul>	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 20 mm 9 mm
<ul> <li>at 500 V</li> <li>at 690 V</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for grounded parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>upwards</li> <li>upwards</li> <li>upwards</li> </ul>	gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm
at 500 V  at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  at for grounded parts at 400 V  downwards  upwards  at the side  for live parts at 400 V  downwards  upwards  at the side  for grounded parts at 500 V  downwards  upwards  at the side  for grounded parts at 500 V  downwards  upwards  at the side	gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm
<ul> <li>at 500 V</li> <li>at 690 V</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for grounded parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for grounded parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 500 V</li> </ul>	gL/gG 35 A gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm
<ul> <li>at 500 V</li> <li>at 690 V</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts at 400 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for live parts at 400 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for grounded parts at 500 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for live parts at 500 V</li> <li>— downwards</li> <li>— at the side</li> <li>for live parts at 500 V</li> <li>— downwards</li> <li>— at the side</li> <li>for live parts at 500 V</li> <li>— downwards</li> </ul>	gL/gG 35 A gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm
<ul> <li>at 500 V</li> <li>at 690 V</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for grounded parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 500 V</li> <li>downwards</li> <li>at the side</li> <li>at the side</li> <li>for live parts at 500 V</li> <li>downwards</li> <li>at the side</li> </ul>	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 20 mm 9 mm 20 mm 20 mm 20 mm
<ul> <li>at 500 V</li> <li>at 690 V</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts at 400 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for live parts at 400 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for grounded parts at 500 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for live parts at 500 V</li> <li>— downwards</li> <li>— at the side</li> <li>for live parts at 500 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul>	gL/gG 35 A gL/gG 35 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 20 mm 9 mm 20 mm 20 mm 20 mm
<ul> <li>at 500 V</li> <li>at 690 V</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for grounded parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for grounded parts at 690 V</li> <li>downwards</li> <li>at the side</li> <li>for grounded parts at 690 V</li> <li>downwards</li> </ul>	gL/gG 35 A gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm
<ul> <li>at 500 V</li> <li>at 690 V</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 400 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for grounded parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for live parts at 500 V</li> <li>downwards</li> <li>upwards</li> <li>at the side</li> <li>for grounded parts at 690 V</li> </ul>	gL/gG 35 A gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm
<ul> <li>at 500 V</li> <li>at 690 V</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts at 400 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for live parts at 400 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for grounded parts at 500 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for live parts at 500 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for live parts at 500 V</li> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>for grounded parts at 690 V</li> <li>— downwards</li> <li>— upwards</li> <li>— upwards</li> <li>— downwards</li> <li>— upwards</li> <li>— upwards</li> </ul>	gL/gG 35 A gL/gG 35 A gL/gG 35 A  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm 45 mm 75 mm  20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm 20 mm 9 mm

— forwards	0 mm
• for live parts at 690 V	O THIN
— downwards	20 mm
	<del></del>
— upwards	20 mm
— backwards	0 mm
— at the side	9 mm
— forwards	0 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
<ul> <li>for main contacts</li> </ul>	
<ul><li>— solid or stranded</li></ul>	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (1 4 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	0.8 1.2 N·m
for auxiliary contacts with screw-type terminals	0.8 1.2 N·m
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	
<ul> <li>for main contacts</li> </ul>	M3
<ul> <li>of the auxiliary and control contacts</li> </ul>	M3
Safety related data	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
display version for switching status	Rocker switch
Certificates/ approvals	

**General Product Approval** 

**Declaration of Conformity** 



Confirmation









Marine / Shipping **Test Certificates** 

**Special Test Certific-**<u>ate</u>

Type Test Certificates/Test Report







**Miscellaneous** 

other Railway

Confirmation



Special Test Certific-<u>ate</u>

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RV1611-1DG14

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV1611-1DG14}$ 

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

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

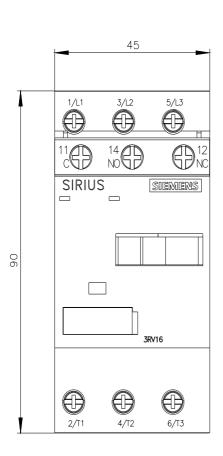
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

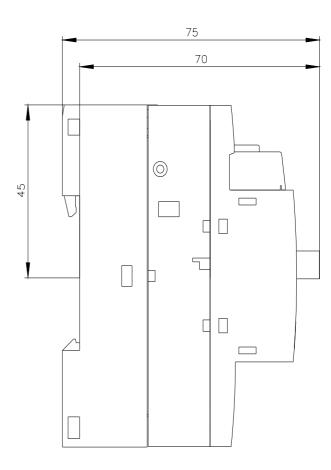
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV1611-1DG14&lang=en

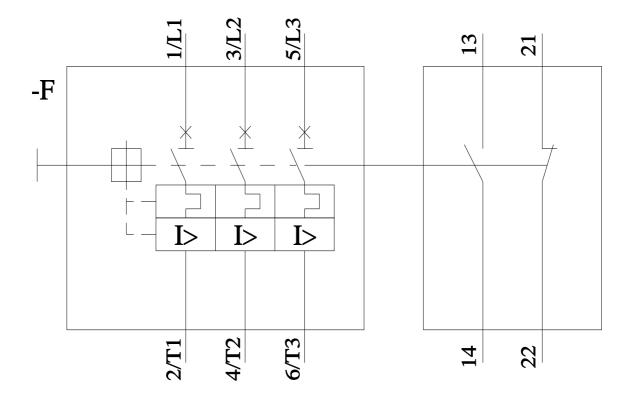
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

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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