



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 (operating cycles)	
• of the main contacts typical	10 000
• of auxiliary contacts typical	10 000
electrical endurance (operating cycles) typical	10 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	01/01/2013
SVHC substance name	Lead - 7439-92-1
Weight	0.304 kg
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
type of voltage for main current circuit	AC
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	50 ... 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	

<ul style="list-style-type: none"> • at AC-3 maximum 	15 1/h
<ul style="list-style-type: none"> • at AC-3e maximum 	15 1/h
Auxiliary circuit	
design of the auxiliary switch	transverse
type of voltage for auxiliary and control circuit	AC/DC
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	
<ul style="list-style-type: none"> • at 24 V 	0.3 A
<ul style="list-style-type: none"> • at 60 V 	0.3 A
Protective and monitoring functions	
product function	
<ul style="list-style-type: none"> • ground fault detection 	No
<ul style="list-style-type: none"> • phase failure detection 	Yes
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> • at AC at 240 V rated value 	100 kA
<ul style="list-style-type: none"> • at AC at 400 V rated value 	50 kA
operating short-circuit current breaking capacity (Ics) at AC	
<ul style="list-style-type: none"> • at 240 V rated value 	100 kA
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • at 480 V rated value 	3 A
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • at 240 V 	none required
<ul style="list-style-type: none"> • at 500 V 	gG 35 A
<ul style="list-style-type: none"> • at 690 V 	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	
<ul style="list-style-type: none"> • for grounded parts at 400 V <ul style="list-style-type: none"> — downwards 	20 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — upwards 	20 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — at the side 	9 mm
<ul style="list-style-type: none"> • for live parts at 400 V <ul style="list-style-type: none"> — downwards 	20 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — upwards 	20 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — at the side 	9 mm
<ul style="list-style-type: none"> • for grounded parts at 500 V <ul style="list-style-type: none"> — downwards 	20 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — upwards 	20 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — at the side 	9 mm
<ul style="list-style-type: none"> • for live parts at 500 V <ul style="list-style-type: none"> — downwards 	20 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — upwards 	20 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — at the side 	9 mm
<ul style="list-style-type: none"> • 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	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	
• for main contacts	
— solid or stranded	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	
• 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	0,8 ... 1,2 N·m
• for auxiliary contacts with screw-type terminals	0,8 ... 1,2 N·m
design of screwdriver shaft	Diameter 5 to 6 mm
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	
• for main contacts	M3
• of the auxiliary and control contacts	M3

Electrical Safety

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

display version for switching status	Rocker switch
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Approvals Certificates

General Product Approval



[KC](#)



Test Certificates

Maritime application

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Maritime application

other

Railway

Environment



[Miscellaneous](#)

[Confirmation](#)



[Special Test Certificate](#)

[Environmental Confirmations](#)

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=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, ...)

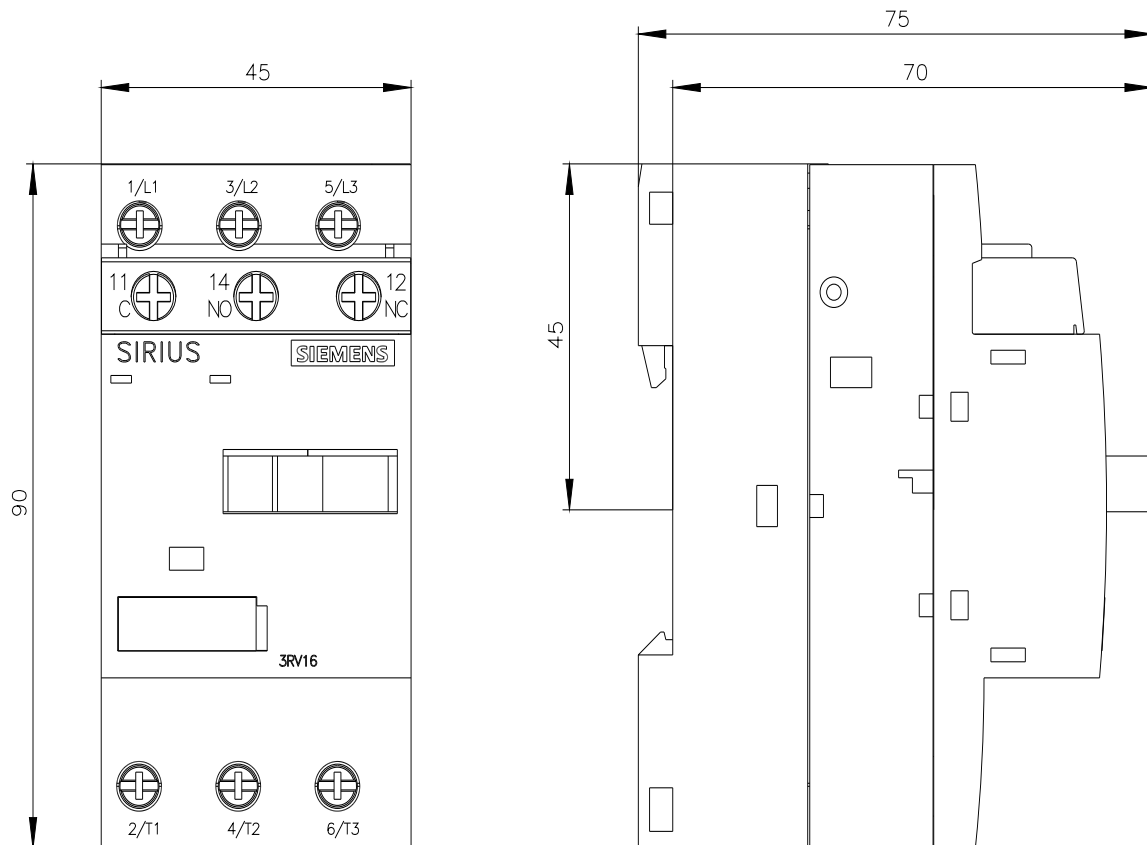
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1611-1DG14&lang=en

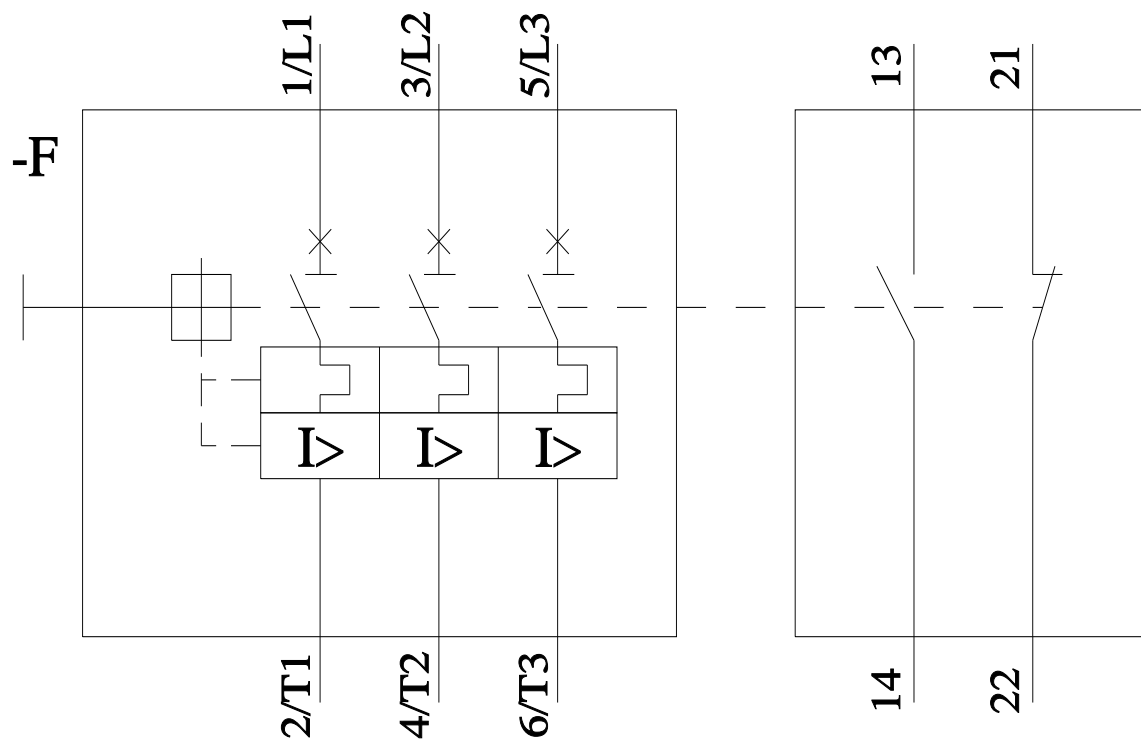
Characteristic: Tripping characteristics, I_t, Let-through current

<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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