



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.45...0.63 A N-release 8.2 A Screw terminal Standard switching capacity with transverse auxiliary switch 1 NO+1 NC

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV1
General technical data	
size of the circuit-breaker	S00
size of contactor can be combined company-specific	S00
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	5.5 W
• at AC in hot operating state per pole	1.8 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	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)	01/01/2013
SVHC substance name	Lead - 7439-92-1
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
adjustable current response value current of the current-dependent overload release	0.45 ... 0.63 A
operating voltage	
• rated value	20 ... 690 V
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	0.63 A
operational current	
• at AC-3 at 400 V rated value	0.63 A
• at AC-3e at 400 V rated value	0.63 A

operating power	
<ul style="list-style-type: none"> ● at AC-3 <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value ● at AC-3e <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value 	0.1 kW 0.18 kW 0.2 kW 0.3 kW 0.1 kW 0.18 kW 0.2 kW 0.3 kW
operating frequency	
<ul style="list-style-type: none"> ● at AC-3 maximum ● at AC-3e maximum 	15 1/h 15 1/h

Auxiliary circuit

design of the auxiliary switch	transverse
number of NC contacts for auxiliary contacts	1
<ul style="list-style-type: none"> ● note 	1
number of NO contacts for auxiliary contacts	1
<ul style="list-style-type: none"> ● note 	1
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
<ul style="list-style-type: none"> ● at 24 V ● at 110 V ● at 120 V ● at 125 V ● at 230 V 	2 A 2 A 2 A 2 A 0.5 A
operational current of auxiliary contacts at DC-13	
<ul style="list-style-type: none"> ● at 24 V ● at 60 V 	1 A 0.15 A

Protective and monitoring functions

product function	
<ul style="list-style-type: none"> ● ground fault detection ● phase failure detection 	No Yes
trip class	CLASS 10
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 ● at AC at 400 V rated value ● at AC at 500 V rated value ● at AC at 690 V rated value 	100 kA 100 kA 100 kA 100 kA
operating short-circuit current breaking capacity (Ics) at AC	
<ul style="list-style-type: none"> ● at 240 V rated value ● at 400 V rated value ● at 500 V rated value ● at 690 V rated value 	100 kA 100 kA 100 kA 100 kA
response value current of instantaneous short-circuit trip unit	8.2 A

UL/CSA ratings

full-load current (FLA) for 3-phase AC motor	
<ul style="list-style-type: none"> ● at 480 V rated value ● at 600 V rated value 	0.63 A 0.63 A
contact rating of auxiliary contacts according to UL	C300 / R300

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 	fuse gG: 10 A, miniature circuit breaker C 6 A (short-circuit current I _k < 400 A)
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 ● at 400 V 	none required None required

<ul style="list-style-type: none"> • at 500 V • at 690 V 	gL/gG 6 A gL/gG 6 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 — upwards — at the side • for live parts at 400 V <ul style="list-style-type: none"> — downwards — upwards — at the side • for grounded parts at 500 V <ul style="list-style-type: none"> — downwards — upwards — at the side • for live parts at 500 V <ul style="list-style-type: none"> — downwards — upwards — at the side • for grounded parts at 690 V <ul style="list-style-type: none"> — downwards — upwards — backwards — at the side — forwards • for live parts at 690 V <ul style="list-style-type: none"> — downwards — upwards — backwards — at the side — forwards 	20 mm 20 mm 9 mm 20 mm 20 mm 9 mm 20 mm 20 mm 9 mm 20 mm 20 mm 0 mm 9 mm 0 mm 20 mm 20 mm 0 mm 9 mm 0 mm
Connections/ Terminals	
type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control circuit 	screw-type terminals screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid or stranded — finely stranded with core end processing 	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x (1 ... 4 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded 	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
tightening torque	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • for main contacts • of the auxiliary and control contacts 	M3 M3
Safety related data	
product function suitable for safety function	Yes
suitability for use	
<ul style="list-style-type: none"> • safety-related switching on 	No

• safety-related switching OFF	Yes
service life maximum	10 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
• with low demand rate according to SN 31920	40 %
• with high demand rate according to SN 31920	50 %
B10 value with high demand rate according to SN 31920	5 000
failure rate [FIT] with low demand rate according to SN 31920	50 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
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

Approvals Certificates

General Product Approval



[Confirmation](#)



[KC](#)

General Product Approval	For use in hazardous locations	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping



other	Railway	Environment
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[Miscellaneous](#)

[Confirmation](#)



[Special Test Certificate](#)

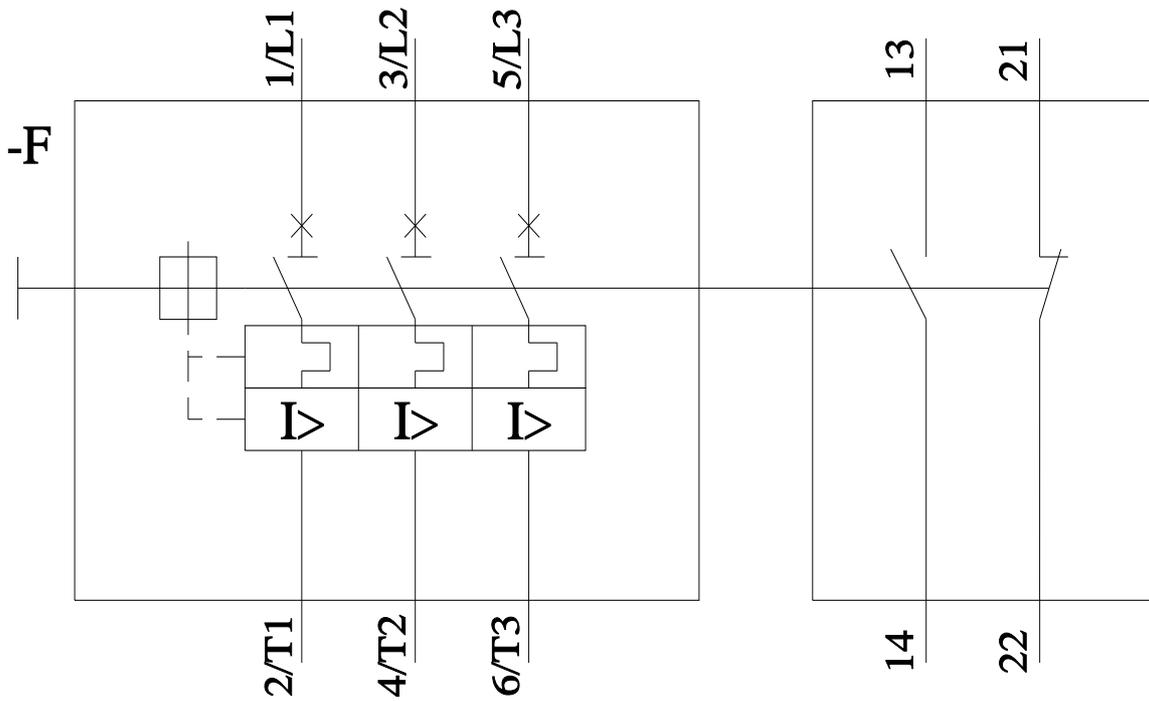
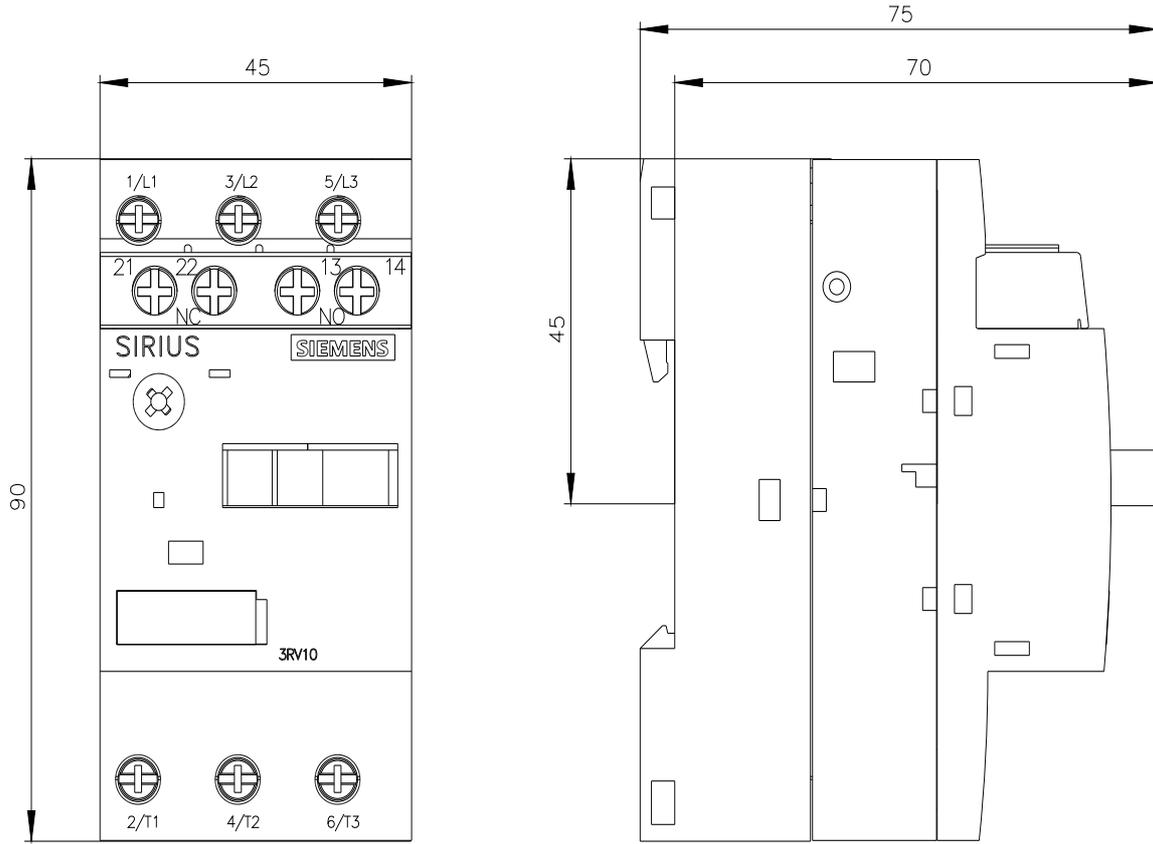
[Environmental Confirmations](#)

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=3RV1011-0GA15>
- Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-0GA15>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0GA15>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-0GA15&lang=en
- Characteristic: Tripping characteristics, I²t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0GA15/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-0GA15&objecttype=14&gridview=view1>



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