



Circuit breaker size S3 A-release 70...90 A Short-circuit release 1170 A
Motor protection up to 100 kA, Class 10 Screw terminal Increased switching capacity !!! Phased-out product !!! Successor is SIRIUS 3RV2 Preferred successor type is >>3RV2042-4YA10<<

product brand name	SIRIUS
product designation	circuit breaker
design of the product	for motor protection

General technical data

product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	38 W
• at AC in hot operating state per pole	12.7 W
surge voltage resistance rated value	6 000 V
protection class IP on the front	IP20
shock resistance	25g / 11 ms
mechanical service life (switching cycles) of the main contacts typical	50 000
continuous current rated value	90 A
Substance Prohibitance (Date)	07/01/2006

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

Main circuit

number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	70 ... 90 A
operating voltage	
• rated value	690 V
• at AC-3 rated value maximum	690 V
operational current at AC-3 at 400 V rated value	90 A
operating power at AC-3	
• at 400 V rated value	45 kW
operating frequency at AC-3 maximum	15 1/h

Auxiliary circuit

number of CO contacts for auxiliary contacts	0
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Protective and monitoring functions

product function	
• ground fault detection	No
• phase failure detection	Yes
trip class	CLASS 10
breaking capacity maximum short-circuit current (Icu)	
• at AC at 240 V rated value	100 kA

- at AC at 400 V rated value 100 kA
- at AC at 500 V rated value 10 kA
- at AC at 690 V rated value 6 kA

Short-circuit protection

design of the overcurrent release and short-circuit release	thermomagnetic
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Installation/ mounting/ dimensions

mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
height	165 mm
width	70 mm
depth	174 mm
required spacing with side-by-side mounting	
• backwards	0 mm
• at the side	0 mm

Connections/ Terminals

product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
• for main current circuit	screw-type terminals with box terminals
• for auxiliary and control circuit	screw-type terminals
arrangement of electrical connectors for main current circuit	front side
type of connectable conductor cross-sections	
• for main contacts	
— solid	2x (2.5 ... 16 mm ²)
— stranded	2x (10 ... 50 mm ²), 1x (10 ... 70 mm ²)
— finely stranded with core end processing	2x (2.5 ... 35 mm ²), 2.5 ... 50 mm ²
• at AWG cables for main contacts	2x (10 ... 1), 1x (10 ... 2)

Safety related data

touch protection against electrical shock	finger-safe
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Certificates/ approvals

General Product Approval

For use in hazardous locations



[Confirmation](#)



For use in hazardous locations

Declaration of Conformity

Test Certificates

Marine / Shipping



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping

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=3RV1042-4LA10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1042-4LA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1042-4LA10>

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

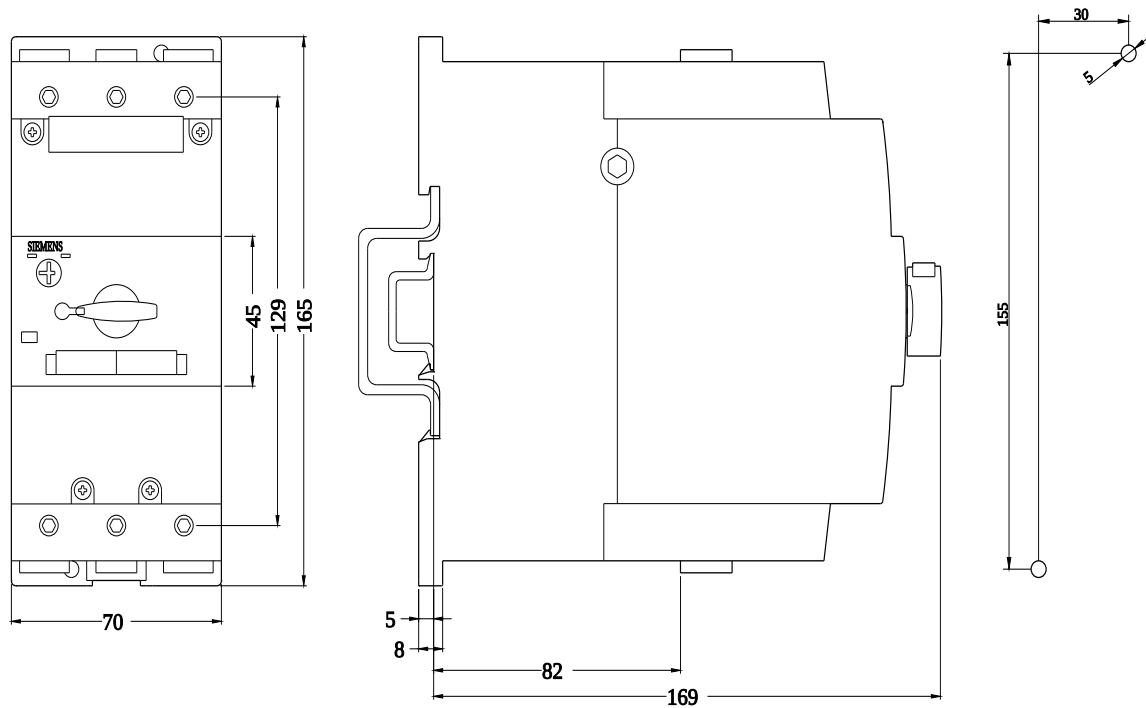
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1042-4LA10&lang=en

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1042-4LA10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1042-4LA10&objecttype=14&gridview=view1>



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12/23/2020 