3RV2011-1FA15-0BA0

## **Data sheet**



Special type Circuit breaker size S00 for motor protection, CLASS 10 A-release 3.5...5 A N release 65 A screw terminal Standard switching capacity with transverse auxiliary switches 1 NO+1 NC Ambient temperature -50 °C 500 switching cycles

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	S00
size of contactor can be combined company-specific	S00, S0
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
maximum permissible voltage for safe isolation in networks with grounded star point	
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V
shock resistance acc. to IEC 60068-2-27	25g / 11 ms
mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	500
<ul> <li>of auxiliary contacts typical</li> </ul>	500
electrical endurance (switching cycles) typical	500
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature during operation	-50 +60 °C
ambient temperature during storage	-50 +80 °C
ambient temperature during transport	-50 +80 °C
temperature compensation	-20 +60 °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	3.5 5 A
operating voltage rated value	690 V
<ul> <li>operating voltage at AC-3 rated value maximum</li> </ul>	690 V

operating frequency rated value	50 60 Hz
operational current rated value	5 A
operational current at AC-3 at 400 V rated value	5 A
operating power at AC-3	
at 230 V rated value	1 100 W
at 400 V rated value	1 500 W
at 500 V rated value     at 500 V rated value	2 200 W
at 690 V rated value	4 000 W
operating frequency at AC-3 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	0
operational current of auxiliary contacts at AC-15	
• at 24 V	2 A
• at 120 V	0.5 A
• at 125 V	0.5 A
• at 230 V	0.5 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1 A
● at 60 V	0.15 A
Protective and monitoring functions	
product function	
ground fault detection	No
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
breaking capacity operating short-circuit current (Ics)	
at AC	
<ul> <li>at 240 V rated value</li> </ul>	100 kA
<ul> <li>at 400 V rated value</li> </ul>	100 kA
at 500 V rated value	100 kA
at 690 V rated value	4 kA
breaking capacity maximum short-circuit current (Icu)	
at AC at 240 V rated value	100 kA
<ul> <li>at AC at 400 V rated value</li> </ul>	100 kA
• at AC at 500 V rated value	100 kA
at AC at 690 V rated value	6 kA
response value current of instantaneous short-circuit trip	65 A
unit	
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link	
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A)
design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 400 V	gG 32 A
● at 500 V	gG 32 A
• at 690 V	gG 25 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
	according to DIN EN 60715
height	97 mm
width	45 mm
depth	97 mm

required spacing	
<ul> <li>for grounded parts at 400 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for live parts at 400 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for grounded parts at 500 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
for grounded parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— upwards — backwards	0 mm
— at the side	30 mm
— at the side — forwards	0 mm
	O IIIIII
• for live parts at 690 V	F0
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
product function removable terminal for auxiliary and control circuit	No
product function removable terminal for auxiliary and	
product function removable terminal for auxiliary and control circuit	No screw-type terminals
product function removable terminal for auxiliary and control circuit  type of electrical connection	screw-type terminals screw-type terminals
product function removable terminal for auxiliary and control circuit  type of electrical connection  for main current circuit  for auxiliary and control circuit  arrangement of electrical connectors for main current circuit	screw-type terminals
product function removable terminal for auxiliary and control circuit  type of electrical connection  of or main current circuit  for auxiliary and control circuit  arrangement of electrical connectors for main current	screw-type terminals screw-type terminals
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product function removable terminal for auxiliary and control circuit  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing	screw-type terminals screw-type terminals Top and bottom
product function removable terminal for auxiliary and control circuit  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing  type of connectable conductor cross-sections	screw-type terminals screw-type terminals Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm²
product function removable terminal for auxiliary and control circuit  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing	screw-type terminals screw-type terminals Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
product function removable terminal for auxiliary and control circuit  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing  type of connectable conductor cross-sections	screw-type terminals screw-type terminals Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm²
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product function removable terminal for auxiliary and control circuit  type of electrical connection	screw-type terminals screw-type terminals Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²) 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
product function removable terminal for auxiliary and control circuit  type of electrical connection	screw-type terminals Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)  2x (0.5 1,5 mm²), 2x (0,75 2,5 mm²)  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0.8 1.2 N·m
product function removable terminal for auxiliary and control circuit  type of electrical connection	screw-type terminals Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)  2x (0.5 1,5 mm²), 2x (0.75 2,5 mm²)  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0.8 1.2 N·m
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product function removable terminal for auxiliary and control circuit  type of electrical connection	screw-type terminals Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)  2x (0.5 1.5 mm²), 2x (0,75 2,5 mm²)  0x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0x (0.5 1.2 N·m  0x 1.2 N·m
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product function removable terminal for auxiliary and control circuit  type of electrical connection	screw-type terminals Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)  2x (0.5 1.5 mm²), 2x (0.75 2,5 mm²)  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0.8 1.2 N·m  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv 2  M3  M3

display version for switching status

Handle

Certificates/ approvals

General Product Approval

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





**Miscellaneous** 

Type Test Certificates/Test Report Special Test Certificate



## Marine / Shipping













other

Railway

Confirmation



Vibration and Shock

Confirmation

## **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=3RV2011-1FA15-0BA0

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV2011-1FA15-0BA0}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1FA15-0BA0

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

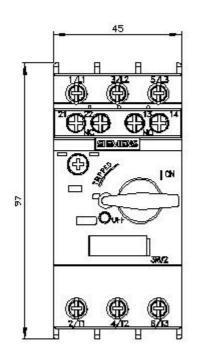
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2011-1FA15-0BA0&lang=en

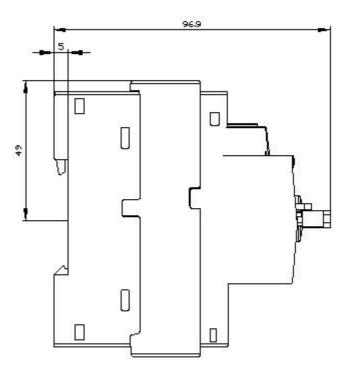
Characteristic: Tripping characteristics, I²t, Let-through current

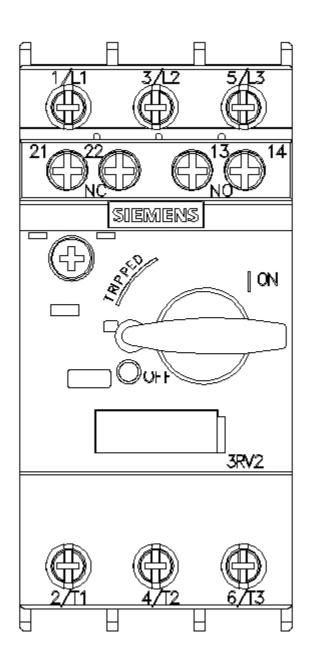
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1FA15-0BA0/char

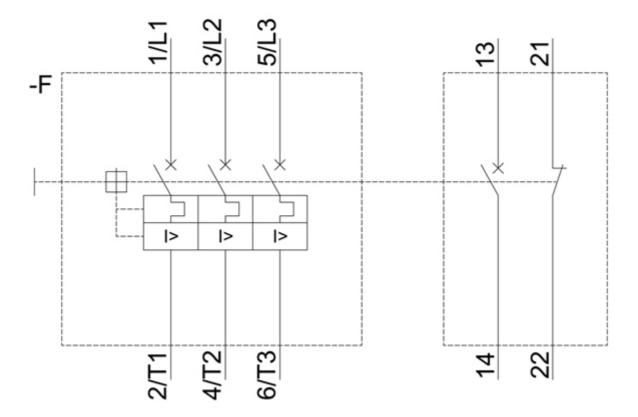
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1FA15-0BA0&objecttype=14&gridview=view1









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