## **SIEMENS**

## **Data sheet**



Special type Circuit breaker size S00 for motor protection, CLASS 10 Arelease 1.1...1.6 A N-release 21 A screw terminal Standard switching capacity Ambient temperature -50  $^{\circ}\text{C}$  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		
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		
maximum permissible voltage for safe isolation in networks with grounded star point			
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V		
between main and auxiliary circuit	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		
of auxiliary contacts typical	500		
electrical endurance (switching cycles) typical	500		
reference code acc. to IEC 81346-2	Q		
Substance Prohibitance (Date)	01.10.2009		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
ambient temperature			
<ul> <li>during operation</li> </ul>	-50 +60 °C		
during storage	-50 +80 °C		
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	1.1 1.6 A		
operating voltage			
• rated value	690 V		
rated value	20 690 V		

<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V		
operating frequency rated value	50 60 Hz		
operational current rated value	1.6 A		
operational current at AC-3 at 400 V rated value	1.6 A		
operating power at AC-3			
at 230 V rated value	0.3 kW		
at 400 V rated value	0.6 kW		
at 500 V rated value	0.8 kW		
at 690 V rated value	1.1 kW		
operating frequency at AC-3 maximum	15 1/h		
Auxiliary circuit			
number of NC contacts for auxiliary contacts	0		
number of NO contacts for auxiliary contacts	0		
number of CO contacts for auxiliary contacts	0		
Protective and monitoring functions			
product function	No		
ground fault detection     phase failure detection	No You		
phase failure detection  Aria class	Yes		
trip class	CLASS 10		
design of the overload release	thermal		
breaking capacity operating short-circuit current (lcs) at AC			
at 240 V rated value	100 kA		
at 400 V rated value	100 kA		
at 500 V rated value	100 kA		
at 690 V rated value	100 kA		
breaking capacity maximum short-circuit current (Icu)	100 104		
at AC at 240 V rated value	100 kA		
at AC at 400 V rated value	100 kA		
at AC at 400 V rated value     at AC at 500 V rated value	100 kA		
at AC at 690 V rated value	100 kA		
response value current of instantaneous short-circuit trip	21 A		
unit	ZIA		
Short-circuit protection			
product function short circuit protection	Yes		
design of the short-circuit trip	magnetic		
design of the fuse link for IT network for short-circuit protection of the main circuit			
• at 500 V	gG 20 A		
• at 690 V	gG 16 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			
• for grounded parts at 400 V			
— downwards	30 mm		
— upwards	30 mm		
— at the side	9 mm		
• for live parts at 400 V			
— 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		

<ul> <li>for live parts at 500 V</li> </ul>					
— downwards	30 mm				
— upwards	30 mm				
— at the side	9 mm				
<ul> <li>for grounded parts at 690 V</li> </ul>					
— downwards	50 mm				
— upwards	50 mm				
— backwards	0 mm				
— at the side	30 mm				
— forwards	0 mm				
<ul> <li>for live parts at 690 V</li> </ul>					
— downwards	50 mm				
— upwards	50 mm				
— backwards	0 mm				
— at the side	30 mm				
— forwards	0 mm				
Connections/ Terminals					
product component removable terminal for auxiliary	No				
and control circuit					
type of electrical connection					
for main current 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 (0,75 2,5 mm²), 2x 4 mm²				
<ul> <li>finely stranded with core end processing</li> </ul>	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				
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					
<ul> <li>for main contacts</li> </ul>	M3				
Safety related data					
T1 value for proof test interval or service life acc. to IEC 61508	10 y				
protection class IP on the front acc. to IEC 60529	IP20				
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front				
display version for switching status	Handle				
Certificates/ approvals					
General Product Approval		Declaration of Conformity	Test Certificates		

Confirmation

<u>KC</u>

EHC

UK Declaration of Conformity



Type Test Certificates/Test Report

**Test Certificates** 

Marine / Shipping

Special Test Certificate











Marine / Shipping

other

Railway







## 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=3RV2011-1AA10-0BA0

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV2011-1AA10-0BA0}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1AA10-0BA0

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

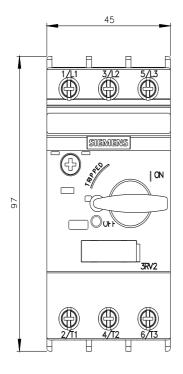
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2011-1AA10-0BA0&lang=en

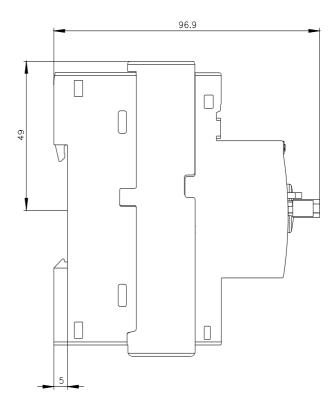
Characteristic: Tripping characteristics, I2t, Let-through current

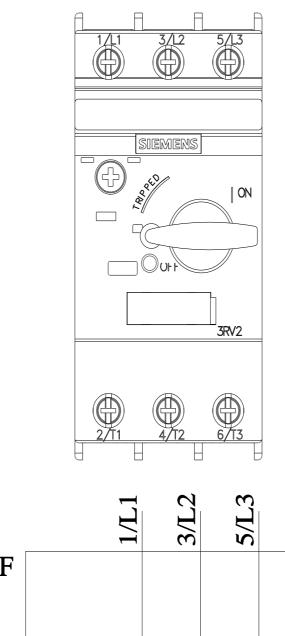
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1AA10-0BA0/char

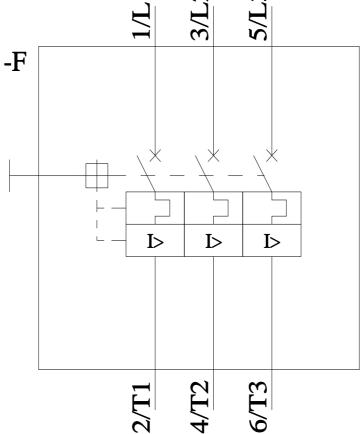
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1AA10-0BA0&objecttype=14&gridview=view1









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