## **SIEMENS**

Data sheet 3RV2011-0AA40



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.11...0.16 A N-release 2.1 A ring cable lug connection Standard switching capacity

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>	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
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>	100 000
of auxiliary contacts typical	100 000
electrical endurance (switching cycles) typical	100 000
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
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	-20 +60 °C
<ul> <li>ambient temperature during storage</li> </ul>	-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 recognics value current of the	0.11 0.16 A
adjustable current response value current of the current-dependent overload release	0.11 0.10 A
operating voltage rated value	690 V
operating voltage rated value     operating voltage at AC-3 rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	0.16 A
operational current at AC-3 at 400 V rated value	0.16 A
operating power at AC-3	0.1071
at 230 V rated value	20 W
at 400 V rated value	40 W
at 500 V rated value	60 W
at 690 V rated value	60 W
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
<ul><li> ground fault detection</li><li> phase failure detection</li></ul>	Yes
trip class	CLASS 10
design of the overload release	thermal
breaking capacity operating short-circuit current (Ics)	tiletillai
at AC	
• at 240 V rated value	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	100 kA
breaking capacity maximum short-circuit current (Icu)	
<ul> <li>at AC at 240 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 400 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 500 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 690 V rated value</li> </ul>	100 kA
response value current of instantaneous short-circuit trip	2.1 A
unit	
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
<ul> <li>at 480 V rated value</li> </ul>	0.16 A
at 600 V rated value	0.16 A
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
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	20
— 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	
● for live parts at 690 V		
— 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	
type of electrical connection		
for main current circuit	Ring cable lug connection	
for auxiliary and control circuit	ring cable connection	
arrangement of electrical connectors for main current	Top and bottom	
circuit		
tightening torque		
— for main contacts for ring cable lug	0.8 1.2 N·m	
— for auxiliary contacts for ring cable lug	1.2 0.8 N·m	
outer diameter of the usable ring cable lug maximum	7.5 mm	
design of screwdriver shaft	Diameter 5 to 6 mm	
size of the screwdriver tip	Size 2 and Pozidriv 2	
design of the thread of the connection screw	Size 2 and Pozidny 2	
• for main contacts	M3	
of the auxiliary and control contacts	M3	
Safety related data		
B10 value		
with high demand rate acc. to SN 31920	5 000	
proportion of dangerous failures		
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 %	
with high demand rate acc. to SN 31920	50 %	
failure rate [FIT]		
with low demand rate acc. to SN 31920	50 FIT	
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	IP00	
display version for switching status	Handle	
Certificates/ approvals		
General Product Approval		For use in hazardous locations











For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 

<u>KC</u>

Marine / Shipping



**Miscellaneous** 



Special Test Certificate Type Test Certificates/Test Report



## 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=3RV2011-0AA40

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV2011-0AA40}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0AA40

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

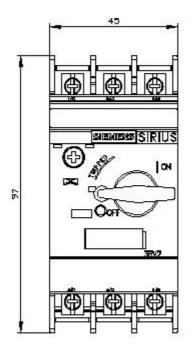
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2011-0AA40\&lang=en}}$ 

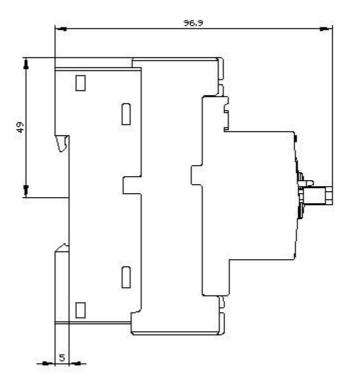
Characteristic: Tripping characteristics, I2t, Let-through current

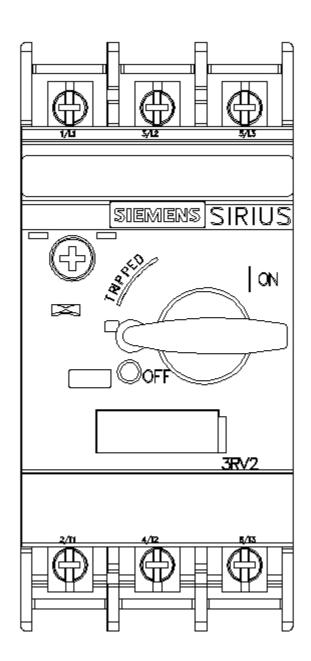
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0AA40/char

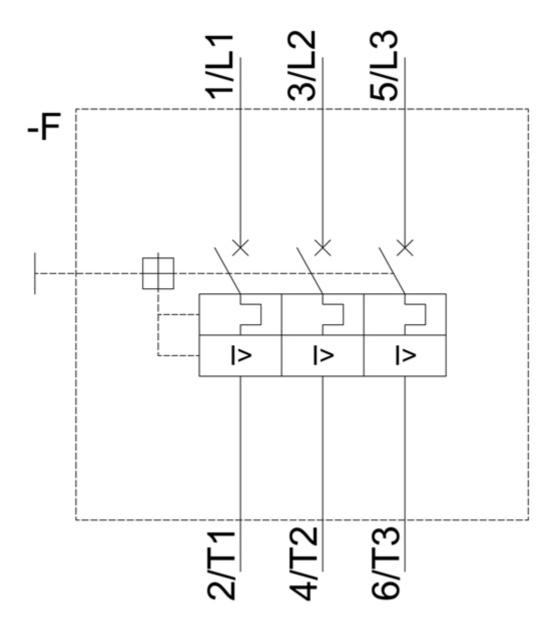
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-0AA40&objecttype=14&gridview=view1









last modified: 12/23/2020 ☑