3RV2011-1JA10-0BA0

## **Data sheet**



Special type Circuit breaker size S00 for motor protection, CLASS 10 Arelease 7...10 A N release 130 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>	9.25 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	3.1 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance according 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 according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul><li>during operation</li></ul>	-50 +60 °C
<ul> <li>during storage</li> </ul>	-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	7 10 A
operating voltage	
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	10 A
operational current	
• at AC-3 at 400 V rated value	10 A
operating power	

• at AC-3	0.0 1444
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
operating frequency	4-40
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	
<ul> <li>ground fault detection</li> </ul>	No
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
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>	42 kA
at AC at 690 V rated value	6 kA
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	42 kA
at 690 V rated value	4 kA
response value current of instantaneous short-circuit trip	130 A
unit	
Short-circuit protection	
Short-circuit protection product function short circuit protection	Yes
	Yes magnetic
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit	
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit	magnetic
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V	magnetic gG 50 A
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V • at 500 V	gG 50 A gG 40 A
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit  at 400 V  at 500 V  at 690 V	magnetic gG 50 A
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions	gG 50 A gG 40 A gG 40 A
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions mounting position	magnetic  gG 50 A gG 40 A gG 40 A
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions	gG 50 A gG 40 A gG 40 A
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions mounting position	magnetic  gG 50 A gG 40 A gG 40 A any screw and snap-on mounting onto 35 mm standard mounting rail
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position fastening method	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions mounting position fastening method  height	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 97 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm 45 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm 45 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position fastening method  height width depth required spacing	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm 45 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position fastening method  height width depth required spacing • for grounded parts at 400 V	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 97 mm 45 mm 97 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts at 400 V  — downwards	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm 45 mm 97 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts at 400 V  — downwards — upwards	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm 45 mm 97 mm 30 mm 30 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V • at 500 V • at 690 V  Installation/ mounting/ dimensions  mounting position fastening method  height  width  depth  required spacing • for grounded parts at 400 V  — downwards — upwards — at the side	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm 45 mm 97 mm 30 mm 30 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V • at 500 V • at 690 V  Installation/ mounting/ dimensions  mounting position fastening method  height width depth required spacing • for grounded parts at 400 V  — downwards — upwards — at the side • for live parts at 400 V	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm 45 mm 97 mm  30 mm 30 mm 9 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts at 400 V  — downwards  — upwards  — at the side  • for live parts at 400 V  — downwards	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm 45 mm 97 mm  30 mm 30 mm 9 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V • at 500 V • at 690 V  Installation/ mounting/ dimensions  mounting position fastening method  height width depth required spacing • for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards — upwards	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V • at 500 V • at 690 V  Installation/ mounting/ dimensions  mounting position fastening method  height  width depth  required spacing • for grounded parts at 400 V  — downwards — upwards — at the side • for live parts at 400 V — downwards — upwards — upwards — upwards — upwards — at the side • for live parts at 400 V — downwards — upwards — upwards — upwards — at the side	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm 45 mm 97 mm  30 mm 30 mm 30 mm 30 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V • at 500 V • at 690 V  Installation/ mounting/ dimensions  mounting position fastening method  height width depth required spacing • for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards — upwards — upwards — at the side • for grounded parts at 500 V	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 97 mm 45 mm 97 mm  30 mm 30 mm 30 mm 9 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V • at 500 V • at 690 V  Installation/ mounting/ dimensions  mounting position fastening method  height width depth required spacing • for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards — upwards — at the side • for grounded parts at 500 V — downwards — at the side • for grounded parts at 500 V — downwards	magnetic  gG 50 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  97 mm  45 mm  97 mm  30 mm  30 mm  9 mm  30 mm  9 mm  30 mm  30 mm  9 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position fastening method  height  width  depth  required spacing  • for grounded parts at 400 V  — downwards — upwards — at the side  • for live parts at 400 V  — downwards — upwards — at the side  • for grounded parts at 500 V  — downwards — upwards — at the side  • for grounded parts at 500 V  — downwards — upwards — at the side  • for live parts at 500 V	magnetic  gG 50 A gG 40 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 97 mm 45 mm 97 mm  30 mm 30 mm 9 mm 30 mm 30 mm 30 mm 30 mm
product function short circuit protection  design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit  • at 400 V  • at 500 V  • at 690 V  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts at 400 V  — downwards — upwards — at the side  • for live parts at 400 V  — downwards — upwards — at the side  • for grounded parts at 500 V  — downwards — upwards — at the side  • for grounded parts at 500 V  — downwards — upwards — at the side  • for grounded parts at 500 V  — downwards — upwards — at the side  • for grounded parts at 500 V  — downwards — upwards — at the side	magnetic  gG 50 A gG 40 A gG 40 A gG 40 A  any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 97 mm 45 mm 97 mm  30 mm 30 mm 9 mm 30 mm 30 mm 30 mm 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	
type of electrical connection	
for main current circuit	screw-type terminals
	Taxana di battara
arrangement of electrical connectors for main current circuit	Top and bottom
•	rop and bottom
circuit	Top and bottom
type of connectable conductor cross-sections	2x (0,75 2,5 mm²), 2x 4 mm²
type of connectable conductor cross-sections  • for main contacts	
type of connectable conductor cross-sections  • for main contacts  — solid or stranded	2x (0,75 2,5 mm²), 2x 4 mm²
type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing	2x (0,75 2,5 mm²), 2x 4 mm²
type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing  tightening torque	2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing  tightening torque  • for main contacts with screw-type terminals	2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m
type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft	2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0.8 1.2 N·m  Diameter 5 to 6 mm
type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip	2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0.8 1.2 N·m  Diameter 5 to 6 mm
type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw	2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2
type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts	2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2
type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data  T1 value for proof test interval or service life according to	2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3
circuit  type of connectable conductor cross-sections  • for main contacts  — solid or stranded  — finely stranded with core end processing  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC	2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3

Handle

Certificates/ approvals

**General Product Approval** 

display version for switching status

**Declaration of Conformity** 

**Test Certificates** 

Confirmation

<u>KC</u>







Type Test Certificates/Test Report

**Test Certificates** 

Marine / Shipping

Special Test Certificate











Marine / Shipping

other

Railway





Confirmation



Confirmation

Vibration and Shock

## **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=3RV2011-1JA10-0BA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1JA10-0BA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1JA10-0BA0

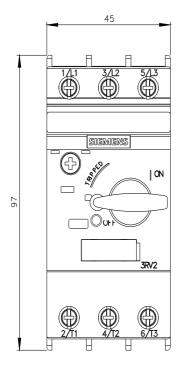
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

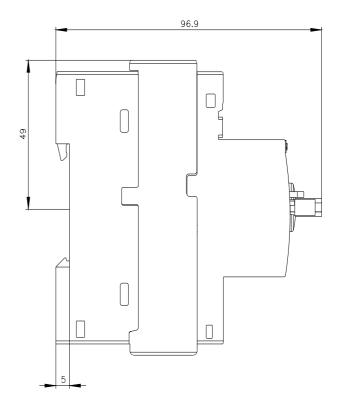
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2011-1JA10-0BA0&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1JA10-0BA0/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1JA10-0BA0&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1JA10-0BA0&objecttype=14&gridview=view1</a>





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