3RV2031-4SA15-0BA0

## **Data sheet**



Circuit breaker size S2 for motor protection, CLASS 10 A-release 9.5...14 A N-release 208 A screw terminal Standard switching capacity with transverse auxiliary switches 1 NO+1 NC

Figure similar

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	S2
size of contactor can be combined company-specific	S2
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state per pole</li> </ul>	4.2 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 Sinus
mechanical service life (operating cycles)	
of the main contacts typical	250
of auxiliary contacts typical	250
electrical endurance (operating cycles) typical	250
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/15/2014
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-50 +60 °C
during storage	-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	9.5 14 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	14 A
operational current	
at AC-3 at 400 V rated value	14 A
operating power	
• at AC-3	

at 220 V retad value	2 MM
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	11 kW
operating frequency	45.4%
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	0
number of CO contacts for auxiliary contacts  operational current of auxiliary contacts at AC-15	0
• at 24 V	2 A
• at 230 V	0.5 A
operational current of auxiliary contacts at DC-13	0.5 A
• at 24 V	1A
• at 60 V	0.15 A
• at 110 V	0.15 A
• at 125 V	0 A
• at 220 V	0 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
maximum short-circuit current breaking capacity (Icu)	
at AC at 240 V rated value	50 kA
<ul> <li>at AC at 400 V rated value</li> </ul>	50 kA
at AC at 500 V rated value	12 kA
• at AC at 690 V rated value	5 kA
operating short-circuit current breaking capacity (Ics) at AC	
at 240 V rated value	25 kA
at 400 V rated value	25 kA
• at 500 V rated value	6 kA
at 690 V rated value	3 kA
response value current of instantaneous short-circuit trip unit	208 A
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link	
for short-circuit protection of the auxiliary switch required	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 240 V	none required
• at 690 V	gG 63 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	140 mm
width	55 mm
depth	149 mm
required spacing	
with side-by-side mounting at the side	0 mm
• for grounded parts at 500 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
• for live parts at 500 V	
— downwards	50 mm
— upwards	50 mm

General Product Approval	Declaration of Conformity	Test Certificates
Certificates/ approvals		
display version for switching status	Handle	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front	
protection class IP on the front according to IEC 60529	IP20	
T1 value for proof test interval or service life according to IEC 61508	10 a	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	50 FIT	
failure rate [FIT]		
<ul> <li>with high demand rate according to SN 31920</li> </ul>	50 %	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	50 %	
proportion of dangerous failures		
Safety related data		
of the auxiliary and control contacts	M3	
• for main contacts	M6	
design of the thread of the connection screw		
size of the screwdriver tip	Pozidriv size 2	
design of screwdriver shaft	Diameter 5 to 6 mm	
• for auxiliary contacts with screw-type terminals	0.8 1.2 N·m	
for main contacts with screw-type terminals	3 4.5 N·m	
tightening torque		
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
• for auxiliary contacts		
type of connectable conductor cross-sections		
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 16 mm²), 1x (1 25 mm²)	
— solid or stranded	2x (1 25 mm²), 1x (1 35 mm²)	
• for main contacts		
type of connectable conductor cross-sections		
circuit	. 05 30 501(01)	
arrangement of electrical connectors for main current	Top and bottom	
for auxiliary and control circuit	screw-type terminals	
• for main current circuit	screw-type terminals	
type of electrical connection		
Connections/ Terminals	10 111111	
— upwards — at the side	10 mm	
	50 mm	
for live parts at 690 V          — downwards	50 mm	
— at the side	10 mm	
— upwards	50 mm	
— downwards	50 mm	
• for grounded parts at 690 V	50 mm	
— at the side	10 mm	
at the selection	40	

General Product Approval Declaration of Conformity

**Test Certificates** 

Confirmation

<u>KC</u>



CE EG-Konf.



Type Test Certificates/Test Report

**Test Certificates** 

Marine / Shipping

Special Test Certificate











Marine / Shipping

other

Railway







Vibration and Shock

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Confirmation

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RV2031-4SA15-0BA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2031-4SA15-0BA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2031-4SA15-0BA0

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

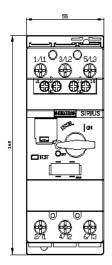
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2031-4SA15-0BA0&lang=en

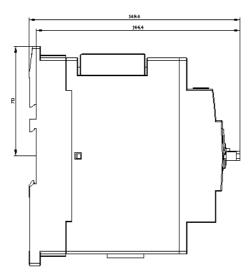
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2031-4SA15-0BA0/char

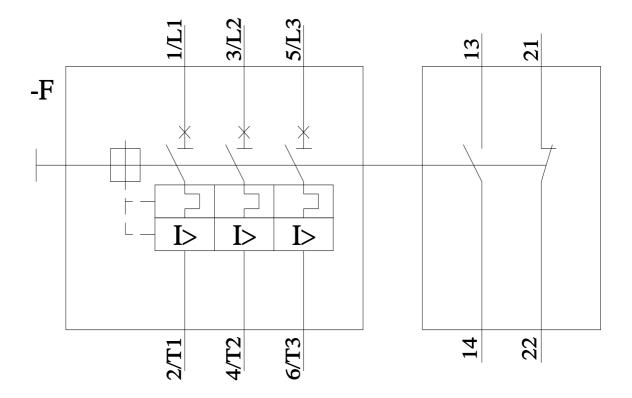
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2031-4SA15-0BA0&objecttype=14&gridview=view1









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