## **SIEMENS**

Data sheet 3RV2031-4SB10



Circuit breaker size S2 for motor protection, Class 20 A-release 9.5...14 A N-release 208 A screw terminal Standard switching capacity





product brand name	SIRIUS
product brand name	
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</li> </ul>	12.5 W
at AC in hot operating state per pole	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)	
<ul> <li>of the main contacts typical</li> </ul>	50 000
of auxiliary contacts typical	50 000
electrical endurance (operating cycles) typical	50 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/15/2014
SVHC substance name	Lead - 7439-92-1
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-20 +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
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz

14 A  14 A  14 A  3 kW  5.5 kW
14 A 3 kW
14 A 3 kW
3 kW
5.5 kW
7.5 kW
11 kW
3 kW
5.5 kW
7.5 kW
11 kW
15 1/h
15 1/h
No
Yes
CLASS 20
thermal
100 kA
65 kA
12 kA
5 kA
100 kA
30 kA
6 kA
3 kA
208 A
14 A
14 A
1.5 hp
3 hp
5 hp
5 hp
10 hp
15 hp
Yes
magnetic
none required
100
100 80
80
80 63
80

width	55 mm
depth	149 mm
required spacing	
with side-by-side mounting at the side	0 mm
for grounded parts at 400 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
• for live parts at 400 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
<ul> <li>for grounded parts at 500 V</li> </ul>	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
● for live parts at 500 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
• for grounded parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
• for live parts at 690 V	
— downwards	50 mm
<ul><li>— upwards</li><li>— at the side</li></ul>	50 mm 10 mm
— at the side  Connections/ Terminals	10 111111
type of electrical connection	
for main current circuit	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	14
type of connectable conductor cross-sections	
<ul> <li>for main contacts</li> </ul>	
— solid or stranded	2x (1 25 mm²), 1x (1 35 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 16 mm²), 1x (1 25 mm²)
for AWG cables for main contacts	2x (18 3), 1x (18 2)
tightening torque	
for main contacts with screw-type terminals	3 4.5 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	MC
• for main contacts	M6
Safety related data	Von
product function suitable for safety function	Yes
suitability for use	No
<ul><li>safety-related switching on</li><li>safety-related switching OFF</li></ul>	Yes
sarety-related switching OFF  service life maximum	10 a
test wear-related service life necessary	Yes
proportion of dangerous failures	1.00
with low demand rate according to SN 31920	40 %
with high demand rate according to SN 31920      with high demand rate according to SN 31920	50 %
B10 value with high demand rate according to SN 31920	5 000
failure rate [FIT] with low demand rate according to SN 31920	50 FIT
ISO 13849	
device type according to ISO 13849-1	3
	Yes
overdimensioning according to ISO 13849-2 necessary	res

safety device type according to IEC 61508-2	Type A
T1 value	
<ul> <li>for proof test interval or service life according to IEC 61508</li> </ul>	10 a
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Display	
display version for switching status	Handle
Approvals Certificates	
Conoral Broduct Approval	

General Product Approval





Confirmation





<u>KC</u>

**General Product Ap-**

**Test Certificates** 

Marine / Shipping



Type Test Certificates/Test Report

**Special Test Certific-**<u>ate</u>







Marine / Shipping







Miscellaneous

other

Confirmation



Railway

**Environment** 

**Special Test Certific-**<u>ate</u>

Confirmation



Siemens **EcoTech** 



**Environmental Confirmations** 

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=3RV2031-4SB10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2031-4SB10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2031-4SB10

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

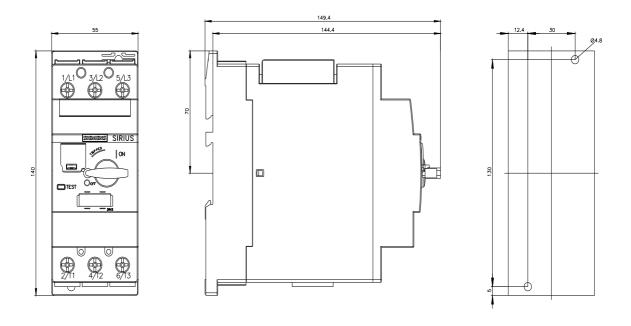
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2031-4SB10&lang=en

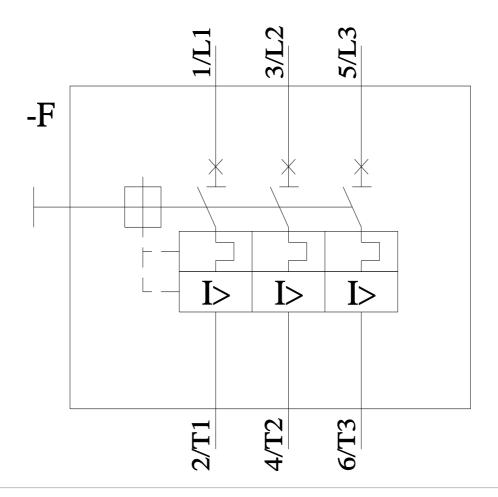
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2031-4SB10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2031-4SB10&objecttype=14&gridview=view1





last modified: 4/12/2024 🖸

