SIEMENS

Data sheet

3RV2331-4SC10



Circuit breaker size S2 for starter combination Rated current 14 A N-release 208 A screw terminal Standard switching capacity

4/11 4/13 8/13	
product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For starter combinations
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	
 at AC in hot operating state 	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)	
 of the main contacts typical 	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	Blei - 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
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
operational current rated value	14 A
operational current	
• at AC-3 at 400 V rated value	14 A
• at AC-3e at 400 V rated value	14 A
operating power	

• at AC-3	
— 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
• at AC-3e	
— 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
	II KVV
operating frequency	
• at AC-3 maximum	15 1/h
• at AC-3e maximum	15 1/h
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
Protective and monitoring functions	
product function	
ground fault detection	No
phase failure detection	No
trip class	CLASS 10
maximum short-circuit current breaking capacity (Icu)	
	100 kA
at AC at 240 V rated value	
at AC at 400 V rated value	65 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 	100 kA
 at 400 V rated value 	30 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
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	14 A
at 600 V rated value	14 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	1.5 hp
— at 230 V rated value	3 hp
 for 3-phase AC motor 	
— at 200/208 V rated value	5 hp
— at 220/230 V rated value	5 hp
— at 460/480 V rated value	10 hp
— at 575/600 V rated value	15 hp
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 240 V	none required
• at 400 V	100
• at 500 V	80
• at 690 V	63
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 400 V 					
— downwards	50 mm				
— upwards	50 mm				
— at the side	10 mm				
• for live parts at 400 V	TO THIN				
- downwards	50 mm				
	50 mm				
— upwards					
— at the side	10 mm				
for grounded parts at 500 V	50 mm				
— 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				
— backwards	0 mm				
— at the side	10 mm				
— forwards	0 mm				
• for live parts at 690 V					
— downwards	50 mm				
— upwards	50 mm				
— backwards	0 mm				
— at the side	10 mm				
— forwards	0 mm				
Connections/ Terminals					
type of electrical connection					
	corout type terminale				
 for main current circuit 	screw-type terminals				
for main current circuit arrangement of electrical connectors for main current circuit	Top and bottom				
arrangement of electrical connectors for main current					
arrangement of electrical connectors for main current circuit					
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections					
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²)				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded	Top and bottom				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²)				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts tightening torque	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²)				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts	Top and bottom 2x (1 25 mm ²), 1x (1 35 mm ²) 2x (1 16 mm ²), 1x (1 25 mm ²) 2x (18 3), 1x (18 2)				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals	Top and bottom 2x (1 25 mm ²), 1x (1 35 mm ²) 2x (1 16 mm ²), 1x (1 25 mm ²) 2x (18 3), 1x (18 2) 3 4.5 N·m				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft	Top and bottom 2x (1 25 mm ²), 1x (1 35 mm ²) 2x (1 16 mm ²), 1x (1 25 mm ²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip	Top and bottom 2x (1 25 mm ²), 1x (1 35 mm ²) 2x (1 16 mm ²), 1x (1 25 mm ²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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	Top and bottom 2x (1 25 mm ²), 1x (1 35 mm ²) 2x (1 16 mm ²), 1x (1 25 mm ²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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	Top and bottom 2x (1 25 mm ²), 1x (1 35 mm ²) 2x (1 16 mm ²), 1x (1 25 mm ²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures	Top and bottom 2x (1 25 mm ²), 1x (1 35 mm ²) 2x (1 16 mm ²), 1x (1 25 mm ²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures • with low demand rate according to SN 31920	Top and bottom 2x (1 25 mm ²), 1x (1 35 mm ²) 2x (1 16 mm ²), 1x (1 25 mm ²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6 50 %				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures	Top and bottom 2x (1 25 mm ²), 1x (1 35 mm ²) 2x (1 16 mm ²), 1x (1 25 mm ²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN	Top and bottom 2x (1 25 mm ²), 1x (1 35 mm ²) 2x (1 16 mm ²), 1x (1 25 mm ²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6 50 % 50 %				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures • with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6 50 % 50 % 50 % 50 % 50 % 50 % 50 FIT				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 B10 value with high demand rate according to SN 31920	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6 50 % 50 % 50 % 50 % 50 % 50 % 50 FIT				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 IEC 61508 T1 value for proof test interval or service life according to	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6 50 % 50 % 50 % 50 FIT 5 000				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 IEC 61508 T1 value for proof test interval or service life according to IEC 61508	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6 50 % 50 % 50 % 50 FIT 5 000				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 IEC 61508 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6 50 % 50 % 50 % 50 % 50 % 50 % 50 FIT 5 000 10 a				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 IEC 61508 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety protection class IP on the front according to IEC 60529	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (1 8 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6 50 % 50 % 50 % 50 % 10 a IP20				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 IEC 61508 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (1 8 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6 50 % 50 % 50 % 50 % 50 % 50 % 50 FIT 5 000 10 a IP20 finger-safe, for vertical contact from the front				
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 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 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 IEC 61508 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 display version for switching status	Top and bottom 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (1 8 3), 1x (18 2) 3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M6 50 % 50 % 50 % 50 % 50 % 50 % 50 FIT 5 000 10 a IP20 finger-safe, for vertical contact from the front				

UK CA	CE EG-Konf.		<u>Confirmation</u>		<u>KC</u>
General Product Approval	Test Certificates		Marine / Shipping		
EHC	<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific- ates/Test Report	ABS	BUREAU VERITAS	
Marine / Shipping			other		
Lloyds Register uis	PRS	RINA	<u>Miscellaneous</u>	<u>Confirmation</u>	
Railway	Environment				
Confirmation	EPD Typ II/III (with life cylce assessment)				

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).

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=3RV2331-4SC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2331-4SC10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2331-4SC10

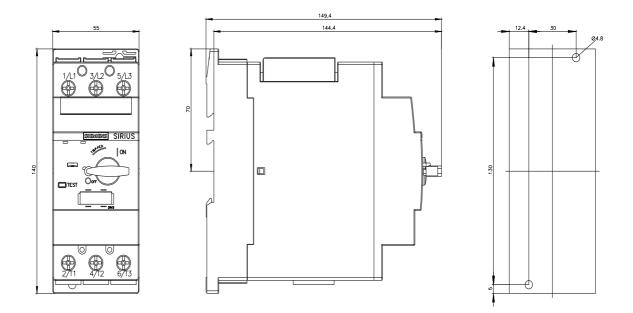
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2331-4SC10&lang=en

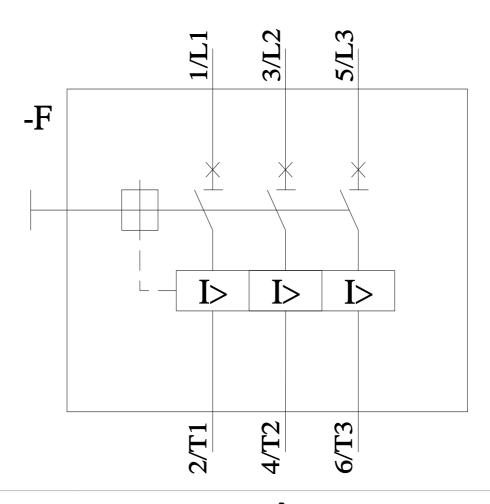
Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2331-4SC10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2331-4SC10&objecttype=14&gridview=view1





12/1/2023 🖸