SIEMENS

Data sheet

3RV2011-1BA10



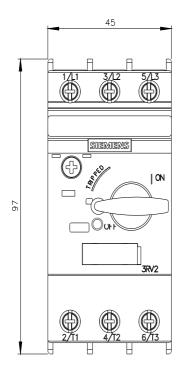
Circuit breaker size S00 for motor protection, CLASS 10 A-release 1.4...2 A N-release 26 A screw terminal Standard switching capacity

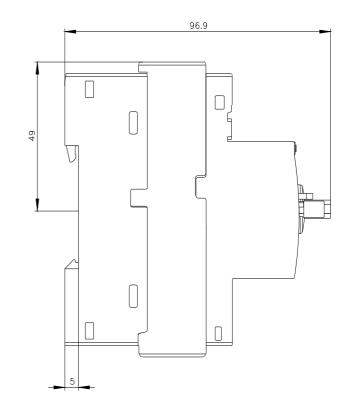
4/17 6/15	
product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	S00
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	7.25 W
 at AC in hot operating state per pole 	2.4 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 (operating cycles)	
 of the main contacts typical 	100 000
 of auxiliary contacts typical 	100 000
electrical endurance (operating 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 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	
 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	1.4 2 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
operational current rated value	2 A

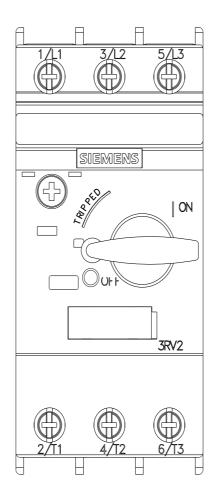
operational ourrant	
 operational current at AC-3 at 400 V rated value 	2 A
• at AC-3e at 400 V rated value	2 A
operating power	
• at AC-3	
— at 230 V rated value	0.4 kW
— at 400 V rated value	0.75 kW
— at 500 V rated value	0.8 kW
— at 690 V rated value	1.1 kW
• at AC-3e	
— at 230 V rated value	0.4 kW
— at 400 V rated value	0.75 kW
— at 500 V rated value	0.8 kW
— at 690 V rated value	1.1 kW
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
number of CO contacts for auxiliary contacts	0
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 	100 kA
 at AC at 400 V rated value 	100 kA
 at AC at 500 V rated value 	100 kA
at AC at 690 V rated value	10 kA
operating short-circuit current breaking capacity (Ics) at AC	
at 240 V rated value	100 kA
at 400 V rated value	100 kA
at 500 V rated value	100 kA
at 690 V rated value	10 kA 26 A
response value current of instantaneous short-circuit trip unit	20 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	2 A
 at 600 V rated value 	2 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 230 V rated value	0.13 hp
 for 3-phase AC motor 	
— at 460/480 V rated value	1 hp
— at 575/600 V rated value	1 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 400 V	gL/gG 25 A
• at 500 V	gL/gG 25 A
• at 690 V	gL/gG 20 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	97 mm

width	45 mm
depth	97 mm
required spacing	
 with side-by-side mounting at the side 	0 mm
 for grounded parts at 400 V 	
— 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
 for grounded parts at 500 V 	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
 for live parts at 500 V 	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
 for grounded parts at 690 V 	
	50 mm
— 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
— forwards	0 mm
Connections/ Terminals	0 mm
Connections/ Terminals type of electrical connection	
Connections/ Terminals type of electrical connection • for main current circuit	screw-type terminals
Connections/ Terminals type of electrical connection • for main current circuit arrangement of electrical connectors for main current	
Connections/ Terminals type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit	screw-type terminals
Connections/ Terminals type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections	screw-type terminals
Connections/ Terminals type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts	screw-type terminals Top and bottom
Connections/ Terminals type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded	screw-type terminals Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm²
Connections/ Terminals type of electrical connection • for main current circuit 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	screw-type terminals Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
Connections/ Terminals type of electrical connection • for main current circuit 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 • at AWG cables for main contacts	screw-type terminals Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm²
Connections/ Terminals type of electrical connection • for main current circuit 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 • at AWG cables for main contacts tightening torque	screw-type terminals Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12
Connections/ Terminals type of electrical connection • for main current circuit 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 • at AWG cables for main contacts	screw-type terminals Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
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Connections/ Terminals type of electrical connection • for main current circuit 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 • at AWG cables for main contacts tightening torque • for main contacts with screw-type terminals	screw-type terminals Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12 0.8 1.2 N⋅m
Connections/ Terminals type of electrical connection • for main current circuit 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 • at AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip	screw-type terminals Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm
Connections/ Terminals type of electrical connection • for main current circuit 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 • at AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft	screw-type terminals Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2
Connections/ Terminals type of electrical connection • for main current circuit 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 • at 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	screw-type terminals Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm
Connections/ Terminals type of electrical connection • for main current circuit 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 • at 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	screw-type terminals Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2
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Connections/ Terminals type of electrical connection • for main current circuit 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 • at 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 B10 value • with high demand rate according to SN 31920	screw-type terminals Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2
Connections/ Terminals type of electrical connection • for main current circuit 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 • at 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 B10 value • with high demand rate according to SN 31920 proportion of dangerous failures	screw-type terminals Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 5 000
Connections/ Terminals type of electrical connection • for main current circuit 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 • at 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 B10 value • with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920	screw-type terminals Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 5 000 50 %
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Connections/ Terminals type of electrical connection • for main current circuit 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 • at 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 B10 value • with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 i with high demand rate according to SN 31920 failure rate [FIT] • with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 61508 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529	screw-type terminals Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 5 000 50 % 50 % 50 FIT 10 a
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General Product A	pproval				For use in hazard- ous locations
	<u>Confirmation</u>		KC	EHC	IECEx
For use in hazard- ous locations	Declaration of Cor	formity	Test Certificates		Marine / Shipping
K ATEX	CE EG-Konf.	UK CA	<u>Type Test Certific-</u> ates/Test Report	Special Test Certific- ate	ABS
Marine / Shipping					other
B U R E A U VERITAS		Hoyd's Kegister uis	PRS	RINA	<u>Confirmation</u>
other	Railway				
urther information	14 14 D 1				
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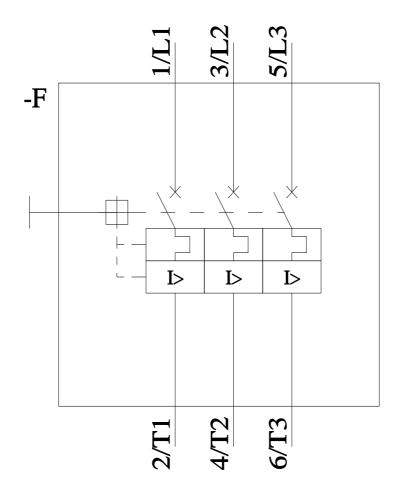






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