SIEMENS

Data sheet 3RV1011-1BA10



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

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV1
General technical data	
size of the circuit-breaker	S00
size of contactor can be combined company-specific	S00
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
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)	01/01/2013
SVHC substance name	Blei - 7439-92-1
SVHC substance name Ambient conditions	Blei - 7439-92-1
	Blei - 7439-92-1 2 000 m
Ambient conditions	
Ambient conditions installation altitude at height above sea level maximum	
Ambient conditions installation altitude at height above sea level maximum ambient temperature	2 000 m
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation	2 000 m -20 +60 °C
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage	2 000 m -20 +60 °C -50 +80 °C
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport	2 000 m -20 +60 °C -50 +80 °C -50 +80 °C
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation	2 000 m -20 +60 °C -50 +80 °C -50 +80 °C
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation Main circuit	2 000 m -20 +60 °C -50 +80 °C -50 +80 °C 10 95 %
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-	2 000 m -20 +60 °C -50 +80 °C -50 +80 °C 10 95 %
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release	2 000 m -20 +60 °C -50 +80 °C -50 +80 °C 10 95 %
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage	2 000 m -20 +60 °C -50 +80 °C -50 +80 °C 10 95 % 3 1.4 2 A
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value	2 000 m -20 +60 °C -50 +80 °C -50 +80 °C 10 95 % 3 1.4 2 A
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum	2 000 m -20 +60 °C -50 +80 °C -50 +80 °C 10 95 % 3 1.4 2 A
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum	2 000 m -20 +60 °C -50 +80 °C -50 +80 °C 10 95 % 3 1.4 2 A 20 690 V 690 V

 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 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	10 kA
at AC at 690 V rated value	2 kA
operating short-circuit current breaking capacity (Ics) at AC	-100
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	2 kA
response value current of instantaneous short-circuit trip unit	26 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	magnetic
• at 240 V	none required
• at 400 V	gL/gG 35 A
• at 500 V	gL/gG 25 A
• at 690 V	gL/gG 25 A
Installation/ mounting/ dimensions	3-30-2071
	any
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 90 mm
height	
width	45 mm 75 mm
depth	75 11111
required spacing	

 for grounded parts at 400 V 	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for live parts at 400 V	·
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for grounded parts at 500 V	·
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for live parts at 500 V	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for grounded parts at 690 V	
— downwards	20 mm
— upwards	20 mm
— backwards	0 mm
— at the side	9 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	20 mm
— upwards	20 mm
— backwards	0 mm
— at the side	9 mm
— forwards	0 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
• for main contacts	
	Ov. (0 F 4 F mm²) Ov. (0 7F 2 F mm²) Ov. (4 4 mm²)
 solid or stranded 	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (1 4 mm²)
solid or stranded finely stranded with core end processing	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
— finely stranded with core end processing	
— finely stranded with core end processing type of connectable conductor cross-sections	
 finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals size of the screwdriver tip design of the thread of the connection screw • for main contacts	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals size of the screwdriver tip design of the thread of the connection screw	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data proportion of dangerous failures	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2 M3
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2 M3 50 % 50 %
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2 M3
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2 M3 50 % 50 %
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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 protection class IP on the front according to IEC 60529	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2 M3 50 % 50 % 50 FIT
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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 IEC 60529 touch protection on the front according to IEC 60529	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2 M3 50 % 50 % 50 FIT 5 000 IP20 finger-safe, for vertical contact from the front
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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 IEC 60529 touch protection on the front according to IEC 60529 display version for switching status	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2 M3 50 % 50 % 50 FIT 5 000 IP20
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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 IEC 60529 touch protection on the front according to IEC 60529	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2 M3 50 % 50 % 50 FIT 5 000 IP20 finger-safe, for vertical contact from the front
— finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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 IEC 60529 touch protection on the front according to IEC 60529 display version for switching status	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Pozidriv size 2 M3 50 % 50 % 50 FIT 5 000 IP20 finger-safe, for vertical contact from the front







Confirmation





For use in hazardous locations

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report

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





Marine / Shipping











Miscellaneous

other

other

Railway

Confirmation



Special Test Certificate

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=3RV1011-1BA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1BA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1BA10

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

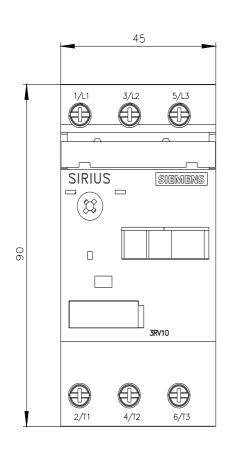
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1BA10&lang=en

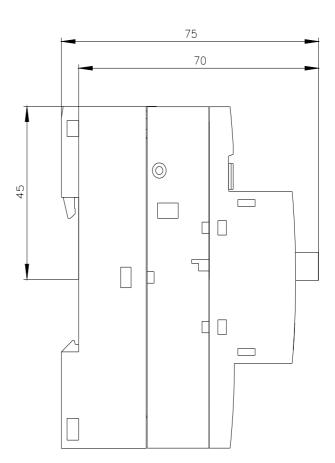
Characteristic: Tripping characteristics, I2t, Let-through current

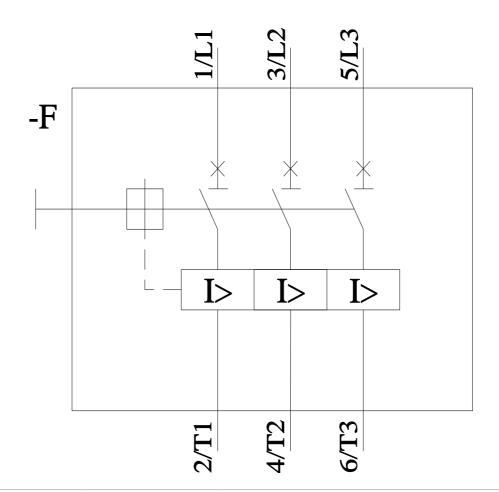
https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1BA10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-1BA10&objecttype=14&gridview=view1







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