## **SIEMENS**

Data sheet 3RV1011-1EA10



Circuit breaker size S00 for motor protection, CLASS 10 A-release 2.8...4 A N release 52 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	
<ul> <li>at AC in hot operating state</li> </ul>	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)	
<ul> <li>of the main contacts typical</li> </ul>	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
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
<ul><li>during storage</li></ul>	-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	2.8 4 A
operating voltage	
rated value	20 690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	4 A
operational current	
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	4 A

a at A.C. 3a at 400 V rated value	A A
at AC-3e at 400 V rated value	4 A
operating power	
• at AC-3	
— at 230 V rated value	0.8 kW
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	3 kW
• at AC-3e	
— at 230 V rated value	0.8 kW
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	3 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	3 kA
at AC at 690 V rated value	2 kA
operating short-circuit current breaking capacity (Ics) at AC	2.00
• at 240 V rated value	100 kA
at 400 V rated value	100 kA
at 500 V rated value     at 500 V rated value	3 kA
at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	52 A
UL/CSA ratings	32 A
full-load current (FLA) for 3-phase AC motor	**
• at 480 V rated value	4 A
• at 600 V rated value	4 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	0.13 hp
— at 230 V rated value	0.33 hp
• for 3-phase AC motor	
— at 200/208 V rated value	0.8 hp
— at 220/230 V rated value	0.75 hp
— at 460/480 V rated value	2 hp
— at 575/600 V rated value	3 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	gL/gG 40 A
● at 500 V	gL/gG 35 A
● at 690 V	gL/gG 35 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	90 mm
width	45 mm

depth	75 mm
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	Top and bottom
circuit	
type of connectable conductor cross-sections	
• for main contacts	
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (1 4 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
tightening torque	00.401
for main contacts with screw-type terminals	0.8 1.2 N·m
for auxiliary contacts with screw-type terminals	0.8 1.2 N·m
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	No
• for main contacts	M3
Safety related data	
B10 value	5,000
with high demand rate according to SN 31920  Proportion of degrees us failures.	5 000
proportion of dangerous failures	E0 0/
with low demand rate according to SN 31920     with high demand rate according to SN 31920	50 %
with high demand rate according to SN 31920  follows rate ISIT:	50 %
failure rate [FIT]	50 FIT
with low demand rate according to SN 31920	
mentantian place ID on the fourt account to 150 cores	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	IP20 finger-safe, for vertical contact from the front
touch protection on the front according to IEC 60529 display version for switching status	IP20
touch protection on the front according to IEC 60529	IP20 finger-safe, for vertical contact from the front











**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





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

Type Test Certificates/Test Report





Marine / Shipping









Confirmation

other

other

Railway

Miscellaneous



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=3RV1011-1EA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1EA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1EA10

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

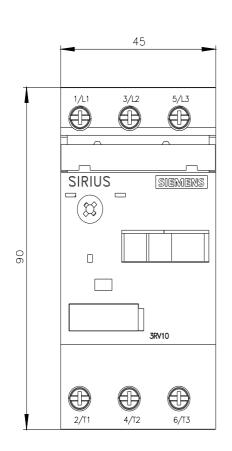
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV1011-1EA10&lang=en

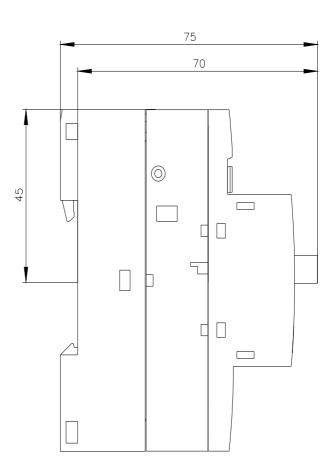
Characteristic: Tripping characteristics, I2t, Let-through current

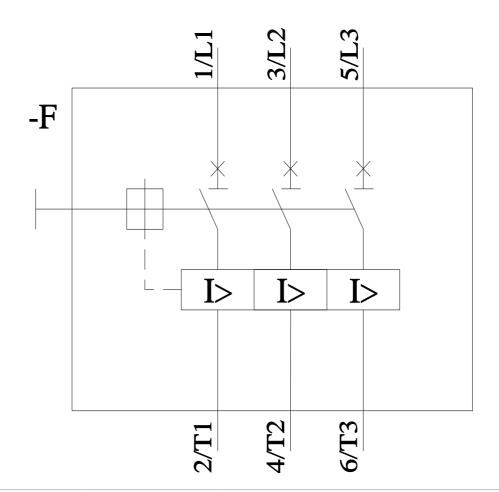
https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1EA10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-1EA10&objecttype=14&gridview=view1







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