SIEMENS

Data sheet 3RV1011-1FA10



Circuit breaker size S00 for motor protection, CLASS 10 A-release 3.5...5 A N release 65 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	
reference code according to IEC 81346-2	Q	
Substance Prohibitance (Date)	01/01/2013	
Weight	282 g	
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	
number of poles for main current circuit adjustable current response value current of the current- dependent overload release	3 3.5 5 A	
adjustable current response value current of the current-		
adjustable current response value current of the current- dependent overload release	3.5 5 A	
adjustable current response value current of the current- dependent overload release type of voltage for main current circuit	3.5 5 A	
adjustable current response value current of the current- dependent overload release type of voltage for main current circuit operating voltage	3.5 5 A AC	
adjustable current response value current of the current- dependent overload release type of voltage for main current circuit operating voltage • rated value	3.5 5 A AC 20 690 V	
adjustable current response value current of the current- dependent overload release type of voltage for main current circuit operating voltage • rated value • at AC-3 rated value maximum	3.5 5 A AC 20 690 V 690 V	
adjustable current response value current of the current- dependent overload release type of voltage for main current circuit operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum	3.5 5 A AC 20 690 V 690 V 690 V	
adjustable current response value current of the current- dependent overload release type of voltage for main current circuit operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operating frequency rated value	3.5 5 A AC 20 690 V 690 V 690 V 50 60 Hz	
adjustable current response value current of the current- dependent overload release type of voltage for main current circuit operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operating frequency rated value operational current rated value	3.5 5 A AC 20 690 V 690 V 690 V 50 60 Hz	

at AC-3e at 400 V rated value	5 A
operating power	
• at AC-3	
— at 230 V rated value	1.1 kW
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	4 kW
• at AC-3e	+ AVV
— at 230 V rated value	1.1 kW
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	4 kW
	4 6 7 7
operating frequency • at AC-3 maximum	15 1/h
	15 1/h
at AC-3e maximum Auxiliary circuit	10 1/11
Auxiliary circuit	A0/D0
type of voltage for auxiliary and control circuit	AC/DC
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 	3 kA
at AC at 690 V rated value	2 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	3 kA
at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	65 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	5 A
• at 600 V rated value	5 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	0.17 hp
— at 230 V rated value	0.5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	1 hp
— at 220/230 V rated value	1 hp
— at 460/480 V rated value	3 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	gG 50 A
• at 500 V	gG 35 A
• at 690 V	gG 35 A
Installation/ mounting/ dimensions	
mounting position	any
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	70 11111
• for grounded parts at 400 V	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for live parts at 400 V	9 111111
— downwards	20 mm
	20 mm
— upwards	9 mm
— at the side	9 111111
• for grounded parts at 500 V	00
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for live parts at 500 V	00
— 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 	
— 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	
type of connectable conductor cross-sections • for auxiliary contacts	
	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for auxiliary contacts — solid or stranded	
• for auxiliary contacts — solid or stranded tightening torque	
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)
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) 0.8 1.2 N·m
for auxiliary contacts — solid or stranded tightening torque for main contacts with screw-type terminals for auxiliary contacts with screw-type terminals design of screwdriver shaft	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm
for auxiliary contacts — solid or stranded tightening torque for main contacts with screw-type terminals for auxiliary contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m
for auxiliary contacts — solid or stranded tightening torque for main contacts with screw-type terminals for auxiliary contacts with screw-type terminals design of screwdriver shaft 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) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2
for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary 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	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm
for auxiliary contacts — solid or stranded tightening torque for main contacts with screw-type terminals for auxiliary 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	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3
for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary 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 product function suitable for safety function	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2
for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary 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 afety related data product function suitable for safety function suitability for use	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3
for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary 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 product function suitable for safety function suitability for use • safety-related switching on	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 Yes
for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary 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 product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 Yes No Yes
for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary 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 product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 Yes No Yes 10 a
for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary 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 product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 Yes No Yes
for auxiliary contacts — solid or stranded tightening torque • for main contacts with screw-type terminals • for auxiliary 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 product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 Yes No Yes 10 a

 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
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type 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	Rocker switch
Approvals Certificates	

General Product Approval









<u>KC</u>



General Product Ap-

For use in hazardous locations

Test Certificates

Marine / Shipping

BIS CRS



IECEx



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

Type Test Certificates/Test Report



Marine / Shipping













other Railway **Environment**

Miscellaneous

Confirmation



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

Environmental Confirmations

Further information

Information on the packaging

om/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=3RV1011-1FA10

Cax online generator

nation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1FA10

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

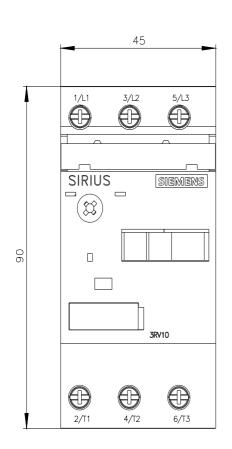
https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1FA10

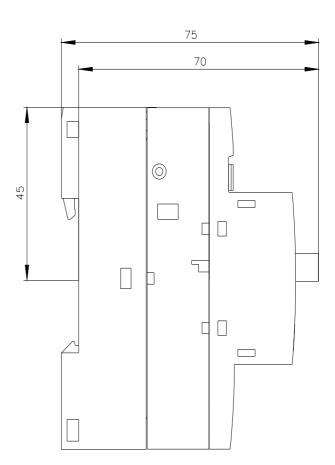
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

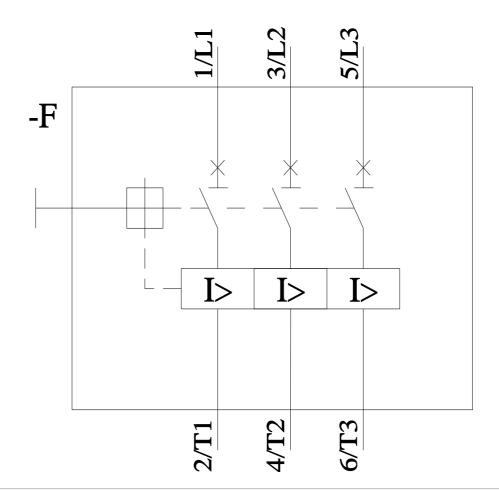
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1FA10&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-1FA10&objecttype=14&gridview=view1







last modified: 4/2/2025 🖸

