SIEMENS

Data sheet 3RV2111-1AA10





Circuit breaker size S00 for motor protection, CLASS 10 with overload relay function A-release 1.1...1.6 A N-release 21 A screw terminal Standard switching capacity



size of the circuit-breaker \$00 size of contactor can be combined company-specific \$00, \$0 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 9.24 W insulation voltage with degree of pollution 3 at AC rated value 690 V surge voltage resistance rated value 6kV shock resistance according to IEC 60068-2-27 25g / 11 ms mechanical service life (operating cycles) • of the main contacts typical 100 000 electrical endurance (operating cycles) typical 100 000 electrical endurance (operating cycles) typical 100 000 electrical endurance (operating cycles) typical 100 000 substance prohibitance (Date) 10/01/2009 SVHC substance name Lead - 7439-92-1 mbient conditions installation altitude at height above sea level maximum 2 000 m authority operation -20 +60 °C -during operation -50 +80 °C eduring transport -50 +80 °C relative humidity during operation 10 95 % ain circuit number of poles for main current circuit 3 adjustable current response value current of the current-dependent overload release operating voltage • rated value - 40 - 30 - 40 - 40 - 40 - 40 - 40 - 40	product brand name	SIRIUS
design of the product product ype designation aproduct type designation aproduct type designation aproduct type designation asize of the circuit-breaker size of the circuit-breaker S00 size of contactor can be combined company-specific S00, S0 product extension auxiliary switch Yes power loss IWJ for rated value of the current at AC in hot operating state at AC in hot operating state per pole 2,4 W sinusulation voltage with degree of pollution 3 at AC rated value 6 kV shock resistance according to IEC 60068-2-27 25g /11 ms mechanical service life (operating cycles) of auxiliary contacts typical 100 000 electrical endurance (operating cycles) typical 100 000 electroace (operating cycles) typical 100 000 electroace (operating cycles) typical 100 000 electroace ode according to IEC 81346-2 Q Substance Prohibitance (Date) 100/1/2009 SWHC substance name Lead - 7439-92-1 mislent dominance (Date) 100/1/2009 substance Prohibitance (Date) 100/1/2009 substance Prohibitance (Date) 100 000 mambient temperature 4 during operation 200 - 200 - 480 °C - 400 °C - 40	product designation	Circuit breaker
product type designation 3RV2 eneral 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 • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value 6 ktV surge voltage resistance rated value 6 ktV surge voltage resistance rated value 9 of the main contacts typical 9 of auxiliary contacts typical 100 000 100		For motor protection with overload relay function
size of the circuit-breaker size of the circuit-breaker size of contactor can be combined company-specific solves product extension auxiliary switch yes power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole 2.4 W insulation voltage with degree of pollution 3 at AC rated value 6.6 kV shock resistance according to IEC 60068-2-27 25g / 11 ms mechanical service life (operating cycles) • of the main contacts typical • of auxiliary co		i i
size of contactor can be combined company-specific product extension auxiliary switch yes ower loss [W] for rated value of the current • at AC in hot operating state per pole at AC in hot operating state per pole tinsulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value 690 V surge voltage resistance rated value 680 V surge voltage resistance according to IEC 60068-2-27 25g /11 ms mechanical service life (operating cycles) 6 of the main contacts typical 100 000 6 of auxiliary contacts typical 100 000 7 of auxiliary contacts typical 100 000 100	General technical data	
product extension auxiliary switch power loss [W] for rated value of the current at AC in hot operating state	size of the circuit-breaker	S00
e at AC in hot operating state continuation of the current of the AC in hot operating state per pole at AC in hot operating state per pole and AC in hot operating with degree of pollution 3 at AC rated value and AC in hot operating state per pole and AC in hot operation an	size of contactor can be combined company-specific	S00, S0
at AC in hot operating state at AC in hot operating state per pole 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 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) 10/01/2009 SVHC substance name Lead - 7439-92-1 mbient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature olduring operation - 40uring storage - 50 +80 °C - 40uring transport - 50 +80 °C relative humidity during operation ain circuit number of poles for main current circuit 3 adjustable current response value current of the current-dependent overload release operating voltage - 11 1.6 A en at AC-3 rated value maximum - 690 V - at AC-3 rated value maximum - 690 V - at AC-3 rated value maximum - 690 V	product extension auxiliary switch	Yes
at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value 680 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 electrical endurance (operating cycles) typical 100 000 electrical endurance (Date) 100 01/2009 SVHC substance Prohibitance (Date) 100 11/2009 SVHC substance name Lead - 7439-92-1 mbient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature 2 0 uring operation 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	power loss [W] for rated value of the current	
insulation voltage with degree of pollution 3 at AC rated value 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 • of auxiliary contacts typical 100 000 electrical endurance (operating cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 mbient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation • during storage • during transport -50 +80 °C • during transport relative humidity during operation altitude altitude In 1.6 A aldjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum 690 V • at AC-3 rated value maximum 690 V	at AC in hot operating state	7.25 W
surge voltage resistance rated value shock resistance according to IEC 60068-2-27 25g / 11 ms mechanical service life (operating cycles) of the main contacts typical of auxiliary contacts typical lectrical endurance (operating cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 mblent conditions installation altitude at height above sea level maximum during operation during operation during storage during ransport relative humidity during operation alditude thumidity during operation alditude turrent response value current of the current-dependent overload release operating voltage arated value at AC-3 rated value maximum at AC-3 rated value maximum arate value arate value at AC-3 rated value maximum arate value arate value at AC-3 rated value maximum arate value arate value at AC-3 rated value maximum arate value arate value arate value arate value arate value arate value maximum arate value arate	at AC in hot operating state per pole	2.4 W
shock resistance according to IEC 60068-2-27 mechanical service life (operating cycles) of the main contacts typical of auxiliary contacts typical lectrical endurance (operating cycles) typical low 00000 SVHC substance Prohibitance (Date) SVHC substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 mbient conditions linstallation altitude at height above sea level maximum ambient temperature of during operation during operation of during storage of during transport -20 +60 °C -50 +80 °C eduring transport -50 +80 °C relative humidity during operation 10 95 % and circuit number of poles for main current circuit adjustable current response value current of the current- dependent overload release operating voltage orated value at AC-3 rated value maximum 690 V orat AC-3 rated value maximum 690 V	insulation voltage with degree of pollution 3 at AC rated value	690 V
e of the main contacts typical 100 000 100 100 000 10	surge voltage resistance rated value	6 kV
of the main contacts typical of auxiliary contacts typical lou 000 electrical endurance (operating cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 mbient conditions installation altitude at height above sea level maximum ambient temperature olduring operation during operation during transport relative humidity during operation ain 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 100 0000 100 000 100 000 100 000	shock resistance according to IEC 60068-2-27	25g / 11 ms
of auxiliary contacts typical electrical endurance (operating cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 mbient conditions installation altitude at height above sea level maximum ambient temperature oluring operation during storage during transport relative humidity during operation ain 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 of 100 000 100	mechanical service life (operating cycles)	
electrical endurance (operating cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 mbient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during transport elutive humidity during operation 10 95 % lain 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 690 V at AC-3 erated value maximum 690 V	of the main contacts typical	100 000
reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 mbient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during transport relative humidity during operation and 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 endown 10/01/2009 10/01/2009 20 00 m 10/01/2009 20 00 m 10/01/2009 20 00 m 10/01/2009 10/	 of auxiliary contacts typical 	100 000
Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 mbient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation ain 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 10/01/2009 Lead - 7439-92-1 Lead	electrical endurance (operating cycles) typical	100 000
SVHC substance name mbient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport • during transport relative humidity during operation and in circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release • rated value • rated value • at AC-3 rated value maximum Ead o 0 m 2 000 m 2 000 m -20 +60 °C -50 +80 °C -50	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation ain 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 % 11 1.6 A	Substance Prohibitance (Date)	10/01/2009
installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport -50 +80 °C • during transport -50 +80 °C relative humidity during operation 10 95 % ain 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 • 690 V • at AC-3e rated value maximum 690 V	SVHC substance name	Lead - 7439-92-1
ambient temperature • during operation • during storage • during transport -50 +80 °C • during transport -50 +80 °C relative humidity during operation 10 95 % ain circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • rated value maximum • at AC-3 rated value maximum • 690 V	Ambient conditions	
 during operation during storage during transport 50 +80 °C during transport 50 +80 °C relative humidity during operation 10 95 % ain 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 690 V at AC-3e rated value maximum 690 V 	installation altitude at height above sea level maximum	2 000 m
 during storage during transport 50 +80 °C relative humidity during operation 10 95 % Inumber 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 690 V 	ambient temperature	
 during transport -50 +80 °C relative humidity during operation 10 95 % lain 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 690 V 	during operation	-20 +60 °C
relative humidity during operation 10 95 % ain circuit number of poles for main current circuit 3 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 690 V	during storage	-50 +80 °C
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 • at AC-3e rated value maximum • at AC-3e rated value maximum • at AC-3e rated value maximum	during transport	-50 +80 °C
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 690 V	relative humidity during operation	10 95 %
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 • at AC-3e rated value maximum • at AC-3e rated value maximum • at AC-3e rated value maximum • at AC-3e rated value maximum	Main circuit	
dependent overload release operating voltage • rated value	number of poles for main current circuit	3
 rated value at AC-3 rated value maximum at AC-3e rated value maximum 690 V 690 V 	adjustable current response value current of the current- dependent overload release	1.1 1.6 A
 at AC-3 rated value maximum at AC-3e rated value maximum 690 V 690 V 	operating voltage	
• at AC-3e rated value maximum 690 V	rated value	20 690 V
	 at AC-3 rated value maximum 	690 V
operating frequency rated value 50 60 Hz	at AC-3e rated value maximum	690 V
	operating frequency rated value	50 60 Hz

operational current rated value	1.6 A
operational current	
at AC-3 at 400 V rated value	1.6 A
at AC-3e at 400 V rated value	1.6 A
operating power	1.0 A
• at AC-3	
— at 230 V rated value	0.3 kW
— at 400 V rated value	0.55 kW
	0.8 kW
— at 500 V rated value — at 690 V rated value	
• at AC-3e	1.1 kW
	0.2 kW
— at 230 V rated value	0.3 kW
— at 400 V rated value	0.55 kW
— at 500 V rated value	0.8 kW
— at 690 V rated value	1.1 kW
operating frequency	4F 4II-
• at AC-3 maximum	15 1/h
at AC-3e maximum	15 1/h
Auxiliary circuit	late and the
design of the auxiliary switch	laterally
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
• at 24 V	1.5 A
• at 230 V	1.5 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1A
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	100 kA
operating short-circuit current breaking capacity (lcs) 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	100 kA
response value current of instantaneous short-circuit trip unit	21 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	1.6 A
at 600 V rated value	1.6 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 230 V rated value	0.1 hp
• for 3-phase AC motor	
— at 460/480 V rated value	1 hp
— at 575/600 V rated value	0.8 hp
contact rating of auxiliary contacts according to UL	C600 / R300
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link	
-	

for short-circuit protection of the auxiliary switch required	fuse gL/gG: 6 A, quick: 10 A
design of the fuse link for IT network for short-circuit	J
protection of the main circuit	
• at 500 V	gL/gG 20 A
● at 690 V	gL/gG 16 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	65 mm
depth	97 mm
required spacing	0
with side-by-side mounting at the side for grounded parts at 400 V	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	3 11111
— 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 	
— 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
Connections/ Terminals	
type of electrical connection	
for main current circuit for qualitary and control circuit	screw-type terminals
for auxiliary and control 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 (0,75 2,5 mm²), 2x 4 mm²
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• for AWG cables for main contacts	2x (18 14), 2x 12
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 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)
tightening torque	
 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	
• for main contacts	M3
 of the auxiliary and control contacts 	M3
Safety related data	
product function suitable for safety function	Yes
suitability for use	
 safety-related switching on 	No
 safety-related switching OFF 	Yes
service life maximum	10 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 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
T1 value	
 for proof test interval or service life according to IEC 61508 	10 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	Handle
Approvals Certificates	
Consul Braduct Annuaud	

General Product Approval





Confirmation





<u>KC</u>

General Product Approval

Test Certificates

Marine / Shipping



Special Test Certificate

Type Test Certificates/Test Report







Marine / Shipping

other







Miscellaneous

Confirmation



Railway

Special Test Certificate

Confirmation



Environment

Siemens EcoTech



Environmental Confirmations

Further information

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=3RV2111-1AA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2111-1AA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2111-1AA10

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

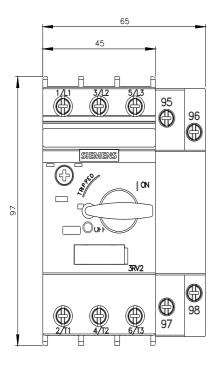
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2111-1AA10&lang=en

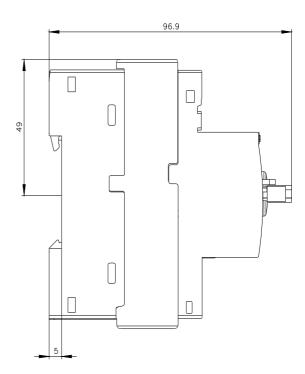
Characteristic: Tripping characteristics, I2t, Let-through current

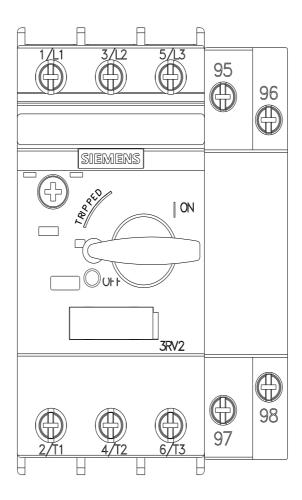
https://support.industry.siemens.com/cs/ww/en/ps/3RV2111-1AA10/char

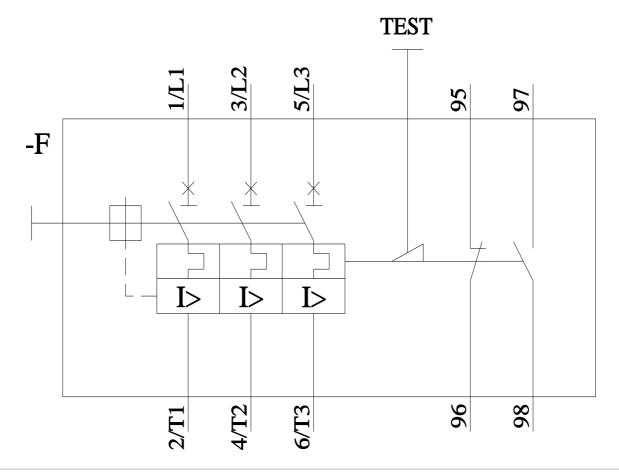
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2111-1AA10&objecttype=14&gridview=view1









last modified: 4/12/2024 🖸