SIEMENS

Data sheet 3RV2011-1AA10



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

product designation design of the product product type designation 3RV2 Ceneral technical data size of the circuit-breaker size of the circuit-breaker size of orbitator can be combined company-specific product yet extension auxiliary switch yes power loss [W] for rated value of the current at AC in hot operating state per pole tinsulation voltage with degree of pollution 3 at AC rated value shock resistance according to IEC 60068-2-27 surge voltage resistance rated value of auxiliary contacts typical of the main contacts typical of auxiliary contacts typical of deviation (poperating cycles) typical reference code according to IEC 61068-1-2 Substance Prohibitance (Date) SVHC substance name Lead -7439-92-1 Ambient conditions installation altitude at height above sea level maximum autiliation altitude value (poperation of the current- dependent overload release operating voltage	product brand name	SIRIUS
product type designation 3RV2 General technical data size of the circuit-breaker S00 S0	product designation	Circuit breaker
Size of the circuit-broaker size of the circuit-broaker size of the circuit-broaker 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 7.25 W sinsulation voltage with degree of pollution 3 at AC rated value 880 V surge voltage resistance rated value 6 kV shock resistance according to IEC 60068-227 25g / 11 ms mechanical service Iffe (operating cycles) of the main contacts typical 100 000 source of the main contacts typical 100 000 source of the main contacts typical 100 000 reference code according to IEC 81348-2 Q Substance Prohibitance (Date) 100/1/2009 SVHC substance name Lead - 7439-92-1 Ambient conditions Installation altitude at height above sea level maximum 200 m ambient temperature during operation 200 m substance Prohibitance (Date) 100 m substance Prohibitance Prohibitance (Date) 100 m substance Prohibitance (Date) 100 m	design of the product	For motor protection
size of the circuit-breaker size of contactor can be combined company-specific size of contactor can be combined company-specific prowur loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state at AC in hot operating state per pole at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 ac 5g / 11 ms mechanical service life (operating cycles) of the main contacts typical of the main contacts typical of the main 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 Ambient conditions installation altitude at height above sea level maximum ambient temperature of uring storage of uring storage of uring transport of uring storage of uring transport of uring 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 orated value at AC-3 rated value maximum operating frequency rated value operational current operational current 1.6 A operational current operational current rated value operational current orated value operational current rated value operational current rated value operational current	product type designation	3RV2
size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • 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 surge voltage resistance rated value • 6k W 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 • of auxiliary contacts typical 100 000 electrical endurance (operating cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 3VHG substance name Lead - 7439-92-1 Ambient conditions installation altitude at height above sea level maximum a bent emperature • during operation • during storage • during transport relative humidity during operation 10 95 % 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 • 690 V • at AC-3 rated value maximum • 690 V • at AC-3 rated value maximum • operational current event of the current reformal current retovate operating frequency rated value • operational current retovated operation • at AC-3 rated value maximum • 690 V • at AC-3 rated value maximum • 690 V • at AC-3 rated value maximum • 690 V • aperational current retovated value operational current retovate	General technical data	
product extension auxiliary switch power loss [W] for rated value of the current e at AC in hot operating state e at AC in hot operating state per pole 2.4 W 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 mechanical service life (operating cycles) e of the main contacts typical of auxiliary contacts typical leelectrical endurance (operating cycles) (violating to IEC 81346-2) Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Ambient conditions installation altitude at height above sea level maximum ambient temperature e during operation during storage of utring 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 e rated value e at AC-3 rated value maximum operating frequency rated value operating frequency rated value operating frequency rated value operational current 1.6 A operating frequency rated value operating frequency rated value operational current operating frequency rated value operational current 1.6 A	size of the circuit-breaker	S00
power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 25g / 11 ms mechanical service life (operating cycles) of auxiliary contacts typical of the main contacts typical of auxiliary contacts typical lelectrical endurance (operating cycles) typical electrical endurance (operating cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 100 100 SVHC substance name Lead - 7439-92-1 Ambient conditions ambient temperature during operation during operation during transport during transport eluting transport relative humidity during operation 100 +80 °C relative humidity during operation 100 +80 °C relative humidity during operation 100 +80 °C relative numidity during operation 100 +80 °C	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 insulation voltage with degree of pollution 3 at AC rated value 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 lou 000 electrical endurance (operating cycles) typical electrical endurance (operating cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Ambient conditions installation altitude at height above sea level maximum ambient temperature oluring operation oluring storage oluring 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 orated value at AC-3 rated value maximum endured the current rated value operational current rated value operational current rated value operational current rated value operational current of the wain circuit at AC-3 careated value maximum operational current rated value operational current rated value operational current rated value operational current of the care to take V. 4 to V. 4 to AC-3 careated value operational current rated value operational current rated value operational current of the carted value at AC-3 careated value operational current of the carted value operational current of the value operational current of th	product extension auxiliary switch	Yes
at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (operating cycles) of the main contacts typical of auxiliary contacts typical leetrical endurance (operating cycles) typical electrical endurance (operating cycles) typical leetrical endurance (operating cycles) typical leetrical endurance (operating cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Ambient conditions installation altitude at height above sea level maximum ambient temperature olduring operation -20 +60 °C olduring storage olduring storage olduring storage olduring 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 operating voltage at AC-3 rated value maximum operating frequency rated value operational current rated value operational current rated value operational current of the Cr	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 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 electrical endurance (operating cycles) typical preference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Ambient conditions installation altitude at height above sea level maximum ambient temperature olduring operation olduring operation olduring storage olduring transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage operating frequency rated value at AC-3 rated value maximum eat AC-3 rated value operating frequency rated value operating frequency rated value operational current 1.6 A	 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 lelectrical endurance (operating cycles) typical lelectrical endurance (operating cycles) typical lelectrical endurance (operating cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 SVHC substance name Lead - 7439-92-1 Ambient conditions installation altitude at height above sea level maximum ambient temperature oluring operation during storage during storage during transport relative humidity during operation 10 95 % 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-3 rated value maximum en at AC-3 rated value maximum operating frequency rated value operational current of the AC-4 rated value operational current rated value operational current rated value operational current	 at AC in hot operating state per pole 	2.4 W
shock resistance according to IEC 60068-2-27 ### Body	insulation voltage with degree of pollution 3 at AC rated value	690 V
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) SYHC substance name Lead - 7439-92-1 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation 10 95 % 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-3 e rated value maximum operational current rated value operational current	surge voltage resistance rated value	6 kV
of the main contacts typical of auxiliary contacts typical loud 000 electrical endurance (operating cycles) typical loud 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Ambient conditions installation altitude at height above sea level maximum ambient temperature olduring 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 epending Incarent of the AC-3 rated value maximum epending Incarent operational current rated value operational current rated value operational current of the Main circuit 1.6 A operational current rated value operational current rated value 1.6 A operational current of the Cu	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) 10//01/2009 SVHC substance name Lead - 7439-92-1 Ambient conditions installation altitude at height above sea level maximum of during operation of during storage of during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage otation at AC-3 rated value maximum 690 V operational current rated value operational current rated value operational current rated value operational current rated value 1.6 A operational current rated value operational current rated value operational current rated value 1.6 A	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 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 • at AC-3 rated value maximum 690 V operating frequency rated value operational current rated value 1.6 A operational current	 of the main contacts typical 	100 000
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 SVHC substance name Lead - 7439-92-1 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 operating voltage • rated value • 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 1.6 A operational current rated value 1.6 A	 of auxiliary contacts typical 	100 000
Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation 10 95 % 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 690 V operating frequency rated value operational current rated value operational current rated value operational current rated value 1.6 A operational current	electrical endurance (operating cycles) typical	100 000
SVHC substance name Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation 10 95 % 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 operational current rated value operational current rated value operational current rated value 1.6 A operational current Lead - 7439-92-1 A 39-92-1 A 30-00 m - 20 +60 °C - 50 +80 °C - 50 +80 °C - 10 95 % Minimation altitude at height above sea level maximum 3	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 10 95 % 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 operating frequency rated value operational current rated value operational current rated value 1.6 A operational current 2 0 0 60 Hz operational current 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 relative humidity during operation 10 95 % 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 • operating frequency rated value operational current rated value operational current rated value 1.6 A operational current 1.6 A	SVHC substance name	Lead - 7439-92-1
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 operating frequency rated value operational current rated value 1.6 A operational current rated value 1.6 A	Ambient conditions	
 during operation during storage during transport four H80 °C during transport relative humidity during operation mumber 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 operating frequency rated value operational current rated value four H20 °C H20 °C <	installation altitude at height above sea level maximum	2 000 m
 during storage during transport feative humidity during operation 10 95 % 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 operating frequency rated value operating frequency rated value operational current rated value 1.6 A 	ambient temperature	
 during transport relative humidity during operation 10 95 % 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 operating frequency rated value operating frequency rated value operational current rated value 1.6 A 	 during operation 	-20 +60 °C
relative humidity during operation 10 95 % 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 690 V operating frequency rated value 50 60 Hz operational current rated value 1.6 A	 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 operating frequency rated value operational current rated value 1.1 1.6 A 20 690 V 690 V • at AC-3e rated value maximum 690 V operational current rated value 1.6 A	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 operating frequency rated value operational current rated value 1.1 1.6 A 1.1 1.6 A 20 690 V 690 V • at AC-3e rated value maximum 690 V operational current rated value 1.6 A	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 operating frequency rated value operational current rated value 1.1 1.6 A 1.1 1.6 A 1.1 1.6 A	Main circuit	
dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum 690 V operating frequency rated value 50 60 Hz operational current rated value 1.6 A	number of poles for main current circuit	3
 rated value at AC-3 rated value maximum at AC-3e rated value maximum operating frequency rated value operational current rated value 1.6 A 	•	1.1 1.6 A
• at AC-3 rated value maximum • at AC-3e rated value maximum 690 V operating frequency rated value 50 60 Hz operational current rated value 1.6 A operational current	operating voltage	
at AC-3e rated value maximum 690 V operating frequency rated value 50 60 Hz operational current rated value 1.6 A operational current	rated value	20 690 V
operating frequency rated value 50 60 Hz operational current rated value 1.6 A operational current	• at AC-3 rated value maximum	690 V
operational current rated value 1.6 A operational current	 at AC-3e rated value maximum 	690 V
operational current	operating frequency rated value	50 60 Hz
	operational current rated value	1.6 A
• at AC-3 at 400 V 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	
• at AC-3	
— 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
• at AC-3e	
— 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	
• at AC-3 maximum	15 1/h
at AC-3e maximum	15 1/h
Auxiliary circuit	10 mil
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	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	6.1 hp
at 460/480 V rated value	1 hn
	1 hp
— at 575/600 V rated value	0.8 hp
Short-circuit protection	V
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 500 V	gL/gG 20 A
• at 500 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	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	3 111111
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 500 V	3 111111
— downwards	30 mm
— upwards	30 mm
— upwards — at the side	9 mm
for grounded parts at 690 V	9 111111
	50 mm
— downwards	
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
• for live parts at 690 V	50
— 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	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
tightening torque	
for main contacts with screw-type terminals	0.8 1.2 N·m
design of screwdriver shaft	Diameter 5 to 6 mm
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	
for main contacts	M3
Safety related data	
proportion of dangerous failures	
with low demand rate according to SN 31920	50 %
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	50 FIT
31920	
IEC 61508	
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 version for switching status	Handle
Approvals Certificates	Handio
General Product Approval	







Confirmation



<u>KC</u>

General Product Approval

For use in hazardous locations

Test Certificates

Marine / Shipping







Type Test Certificates/Test Report

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



Marine / Shipping











Confirmation

other

other

Railway

Environment

Miscellaneous



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

Confirmation



Environmental Con-firmations

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=3RV2011-1AA10

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV2011-1AA10}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1AA10

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

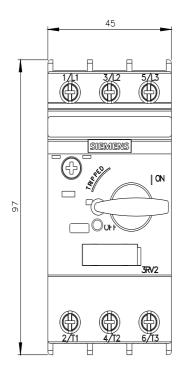
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-1AA10&lang=en

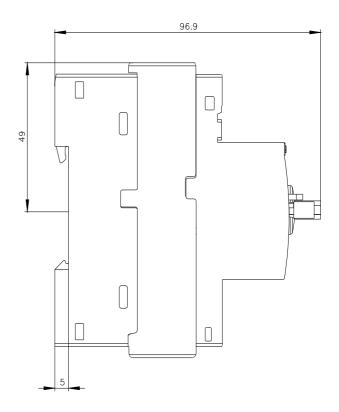
Characteristic: Tripping characteristics, I2t, Let-through current

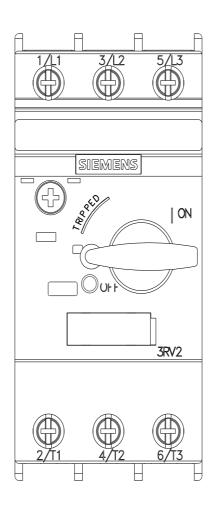
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011

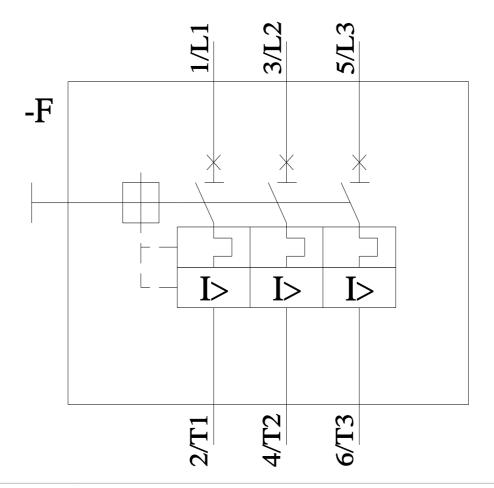
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1AA10&objecttype=14&gridview=view1









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