SIEMENS

Data sheet 3RV2421-0CA10



Circuit breaker size S0 For transformer protection A-release 0.18...0.25 A Short-circuit release 5.2 A Screw terminal Standard switching capacity

product designation Circuit breaker design of the product For transformer protection product type designation 3RV2	
product type designation 3RV2	
F 5 5	
Occupation shared date	
General technical data	
size of the circuit-breaker S0	
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 5.5 W	
• at AC in hot operating state per pole 1.8 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 25g / 11 ms	
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	
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 20 690 V	
• 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 0.25 A	
operational current	
• at AC-3 at 400 V rated value 0.25 A	

operating power	
• at AC-3	
— at 230 V rated value	0 kW
— at 400 V rated value	0.1 kW
— at 500 V rated value	0.1 kW
— at 690 V rated value	0.1 kW
• at AC-3e	
— at 230 V rated value	0 kW
— at 400 V rated value	0.1 kW
— at 500 V rated value	0.1 kW
— at 690 V rated value	0.1 kW
operating frequency	
• at AC-3 maximum	15 1/h
at AC-3e maximum	15 1/h
Auxiliary circuit	
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 (Ics) 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	5.2 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	0.25 A
• at 600 V rated value	0.25 A
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
Installation/ mounting/ dimensions	magnetic
	ODV
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	
— 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	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	4
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
for AWG cables for main contacts	2x (16 12), 2x (14 8)
tightening torque	
for main contacts with screw-type terminals	2 2.5 N·m
design of screwdriver shaft	Diameter 5 to 6 mm
	Diameter 5 to 6 min
	Pozidriy cizo 2
size of the screwdriver tip	Pozidriv size 2
size of the screwdriver tip design of the thread of the connection screw	
size of the screwdriver tip design of the thread of the connection screw of the for main contacts	Pozidriv size 2 M4
size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data	
size of the screwdriver tip design of the thread of the connection screw of or main contacts Safety related data B10 value	
size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data	
size of the screwdriver tip design of the thread of the connection screw of or main contacts Safety related data B10 value	M4
size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data B10 value • with high demand rate according to SN 31920	M4
size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data B10 value • with high demand rate according to SN 31920 proportion of dangerous failures	M4 5 000
size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data B10 value • with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920	5 000 50 %
size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data B10 value • with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920	5 000 50 %
size of the screwdriver tip design of the thread of the connection screw	5 000 50 % 50 %
size of the screwdriver tip design of the thread of the connection screw	M4 5 000 50 % 50 % 50 FIT
size of the screwdriver tip design of the thread of the connection screw	M4 5 000 50 % 50 % 50 FIT
size of the screwdriver tip design of the thread of the connection screw	5 000 50 % 50 % 50 FIT 10 a
size of the screwdriver tip design of the thread of the connection screw	5 000 50 % 50 % 50 FIT 10 a
size of the screwdriver tip design of the thread of the connection screw	M4 5 000 50 % 50 % 50 FIT 10 a IP20 finger-safe, for vertical contact from the front
size of the screwdriver tip design of the thread of the connection screw	M4 5 000 50 % 50 % 50 FIT 10 a IP20 finger-safe, for vertical contact from the front
size of the screwdriver tip design of the thread of the connection screw	M4 5 000 50 % 50 % 50 FIT 10 a IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity
size of the screwdriver tip design of the thread of the connection screw	M4 5 000 50 % 50 % 50 FIT 10 a IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity
size of the screwdriver tip design of the thread of the connection screw	M4 5 000 50 % 50 % 50 FIT 10 a IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity
size of the screwdriver tip design of the thread of the connection screw	5 000 50 % 50 % 50 FIT 10 a IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity
size of the screwdriver tip design of the thread of the connection screw	M4 5 000 50 % 50 % 50 FIT 10 a IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity
size of the screwdriver tip design of the thread of the connection screw	M4 5 000 50 % 50 % 50 FIT 10 a IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity
size of the screwdriver tip design of the thread of the connection screw	M4 5 000 50 % 50 % 50 FIT 10 a IP20 finger-safe, for vertical contact from the front Handle Declaration of Conformity



Type Test Certificates/Test Report

Special Test Certificate







Marine / Shipping other Railway







Confirmation



Confirmation

Railway

Vibration and Shock

Further information

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=3RV2421-0CA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2421-0CA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2421-0CA10

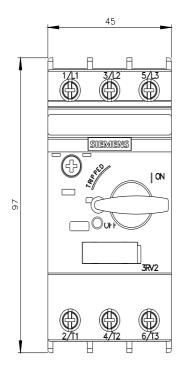
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

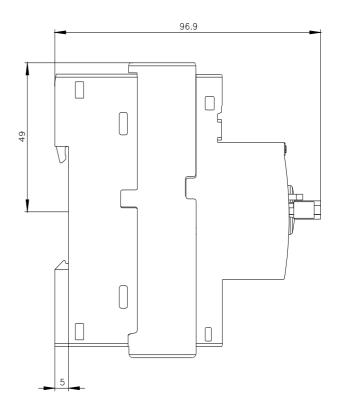
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2421-0CA10&lang=en

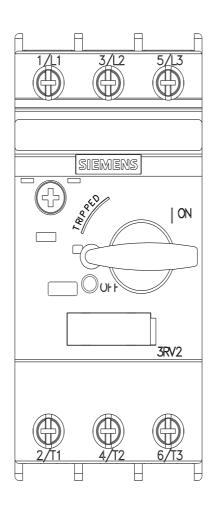
Characteristic: Tripping characteristics, I2t, Let-through current

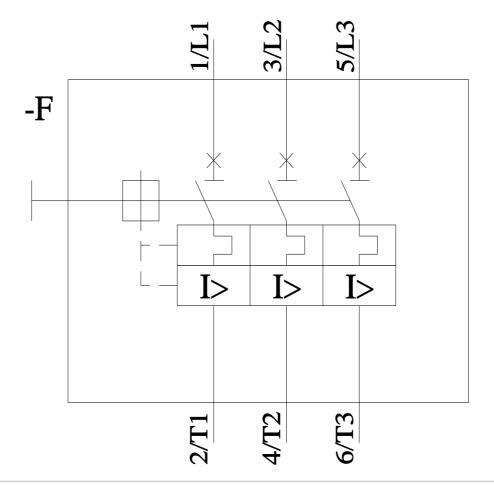
https://support.industry.siemens.com/cs/ww/en/ps/3RV242

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2421-0CA10&objecttype=14&gridview=view1









last modified: 11/21/2022 🖸