SIEMENS

Data sheet

3RV2421-4DA10



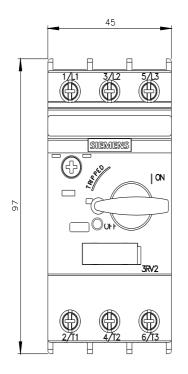
Circuit breaker size S0 for transformer protection A-release 18...25 A N-release 400 A screw terminal Standard switching capacity

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For transformer protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	SO
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 	10.5 W
 at AC in hot operating state per pole 	3.5 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
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	18 25 A
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

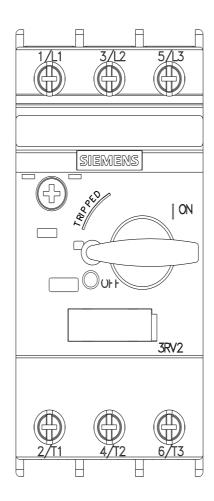
operational current rated value	25 A
operational current	
 at AC-3 at 400 V rated value 	25 A
 at AC-3e at 400 V rated value 	25 A
operating power	
• at AC-3	
— at 230 V rated value	5.5 kW
— at 400 V rated value	11 kW
— at 500 V rated value	15 kW
— at 690 V rated value	22 kW
• at AC-3e	
— at 230 V rated value	5.5 kW
— at 400 V rated value	11 kW
— at 500 V rated value	15 kW
— at 690 V rated value	22 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	55 kA
at AC at 500 V rated value	10 kA
at AC at 500 V rated value at AC at 690 V rated value	4 kA
	4 MA
operating short-circuit current breaking capacity (Ics) at AC	100 //4
at 240 V rated value	100 kA
• at 400 V rated value	25 kA
• at 500 V rated value	5 kA
at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	400 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	25 A
• at 600 V rated value	25 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	2 hp
— at 230 V rated value	3 hp
• for 3-phase AC motor	
— at 200/208 V rated value	5 hp
— at 220/230 V rated value	7.5 hp
— at 460/480 V rated value	15 hp
Short-circuit protection	411.01
	Vee
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 400 V	gL/gG 63 A
• at 500 V	gL/gG 50 A
• at 690 V	gL/gG 50 A
Installation/ mounting/ dimensions	
mounting position	any

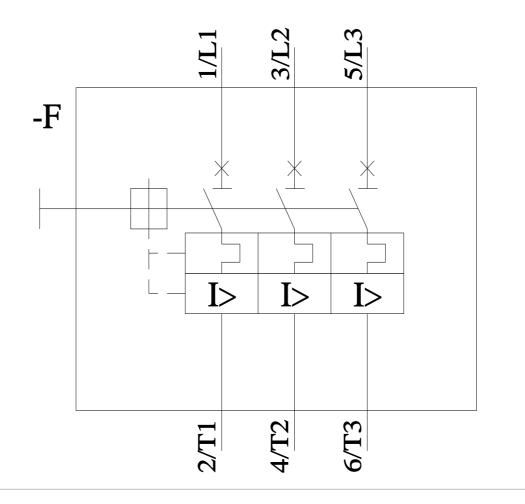
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	97 mm
width	45 mm
depth	97 mm
required spacing	
with side-by-side mounting at the side	0 mm
 for grounded parts at 400 V 	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 500 V	
— 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	5 mm
 of grounded parts at 690 v downwards 	50 mm
	50 mm
— upwards — backwards	0 mm
— at the side	30 mm
— forwards	0 mm
for live parts at 690 V	0 mm
- downwards	50 mm
	50 mm
— upwards — backwards	0 mm
	30 mm
— at the side — forwards	0 mm
Connections/ Terminals	01111
type of electrical connection	
	corow type terminale
for main current circuit	screw-type terminals Top and bottom
arrangement of electrical connectors for main current circuit	Top and bottom
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
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	
for main contacts	M4
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	
	40 %
with low demand rate according to SN 31920 with high demand rate according to SN 31920	40 % 50 %

Ising a second product of First with low demand rate according to SN SD FIT ISO 13989							
device type according to 100 13849-1 9 evendmensioning according to 100 13849-2 necessary Yes device type according to 100 13849-2 necessary Type A 11 value • op modified to 100 13849-2 necessary Type A 11 value • op modified to 100 necessary 10 a Beschool Stafky Protection classes 100 a Display Type A 10 a Display Type Control Classes 10 a Opplay Inter-Classes 10 a Opplay Continuation ECC 10 a Opplay Test Certificates Marine / Shipping ECC Opplay Special Test Certificates Marine / Shipping ECC Marine / Shipping Environment Ecc Ecc Its Speci		ow demand rate accordi	ng to SN 50	0 FIT			
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