SIEMENS

Data sheet

3RV2421-4DA10

CIRCUIT-BREAKER SZ S0, FOR TRANSFORMER PROT. A-RELEASE 18...25A, N-RELEASE 400A, SCREW CONNECTION, STANDARD SW. CAPACITY



product brandname	SIRIUS
Product designation	Circuit breaker
Design of the product	For transformer protection
Product type designation	3RV2
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] total typical	8 W
Insulation voltage with degree of pollution 3 rated value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
 in networks with grounded star point between main and auxiliary circuit 	400 V
 in networks with grounded star point between main and auxiliary circuit 	400 V
Protection class IP	

of the terminal IP20 Mechanical service life (switching cycles) 100 000 • of the main contacts typical 100 000 Electrical endurance (switching cycles) • • typical 100 000 Protection against electrical shock finger-safe Equipment marking acc. to DIN EN 81346-2 Q Ambient conditions - A during operation -20 +60 °C • during storage -50 +80 °C • during storage -50 +80 °C • during storage -50 +80 °C • during transport -50 +80 °C Temperature compensation -20 +60 °C • during transport -20 +60 °C Temperature compensation -20 +60 °C • during transport -50 +80 °C Temperature compensation -20 +60 °C • during transport -50 +80 °C Temperature compensation -20 +60 °C • at do value current of the current-dependent overload release -90 °C Operating current rated value 690 V • at 4C-3 rated value maximum		1000
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• at AC-3 maximum15 1/hAuxiliary circuitNumber of NC contacts• for auxiliary contacts0Number of NO contacts• for auxiliary contacts00	— at 690 V rated value	22 000 W
Auxiliary circuit Number of NC contacts • for auxiliary contacts 0 Number of NO contacts • for auxiliary contacts • for auxiliary contacts 0	Operating frequency	
Number of NC contacts 0 • for auxiliary contacts 0 Number of NO contacts 0 • for auxiliary contacts 0	• at AC-3 maximum	15 1/h
• for auxiliary contacts 0 Number of NO contacts 0 • for auxiliary contacts 0	Auxiliary circuit	
Number of NO contacts 0	Number of NC contacts	
• for auxiliary contacts 0	 for auxiliary contacts 	0
	Number of NO contacts	
Number of CO contacts	 for auxiliary contacts 	0
	Number of CO contacts	

•	for	auxiliary	contacts
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Protective and monitoring functions			
Product function			
 Ground fault detection 	No		
 Phase failure detection 	Yes		
Trip class	CLASS 10		
Design of the overload release	thermal		
Operational short-circuit current breaking capacity			
(Ics) at AC			
• 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		
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 690 V rated value	4 kA		
Breaking capacity short-circuit current (Icn)			
 at 1 current path at DC at 150 V rated value 	10 kA		
 with 2 current paths in series at DC at 300 V rated value 	10 kA		
 with 3 current paths in series at DC at 450 V 	10 kA		
rated value			
UL/CSA ratings			
Full-load current (FLA) for three-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 three-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			
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		
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715		
Height	97 mm		
Width	45 mm		
Depth	96 mm		
Required spacing			
 with side-by-side mounting 			
— forwards	0 mm		
— Backwards	0 mm		
— upwards	50 mm		
— downwards	50 mm		
— at the side	0 mm		
 for grounded parts 			
— forwards	0 mm		
— Backwards	0 mm		
— upwards	50 mm		
— at the side	30 mm		
— downwards	50 mm		
• for live parts			
— forwards	0 mm		
— Backwards	0 mm		
— upwards	50 mm		
— downwards	50 mm		
— at the side	30 mm		
Connections/Terminals			
Product function			
 removable terminal for auxiliary and control circuit 	No		
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 			
— single or multi-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		

 at AWG conductors 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		
Safety related data			
B10 value			
 with high demand rate acc. to SN 31920 	5 000		
Proportion of dangerous failures			
 with low demand rate acc. to SN 31920 	50 %		
 with high demand rate acc. to SN 31920 	50 %		
Failure rate [FIT]			
 with low demand rate acc. to SN 31920 	50 FIT		
T1 value for proof test interval or service life acc. to IEC 61508	10 у		
Display version			
 for switching status 	Handle		
Certificates/approvals			

General Produ	ct Approval				Declaration of Conformity
	CSA		<u>KC</u>	EHC	EG-Konf.
Test Certificate	s	Shipping Appro	oval		
Type Test Certificates/Test Report	Special Test Certificate	ABS	BUREAU VERITAS	Lloyd's Register _{LRS}	PRS
Shipping Appro	oval	other			
RINA	RMRS	Confirmation	Environmental Confirmations	VDE	Miscellaneous
Railway					
Vibration and Shock					

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

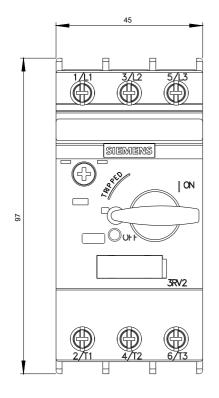
Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2421-4DA10

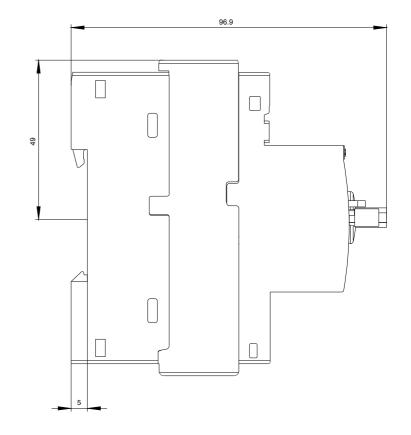
Cax online generator

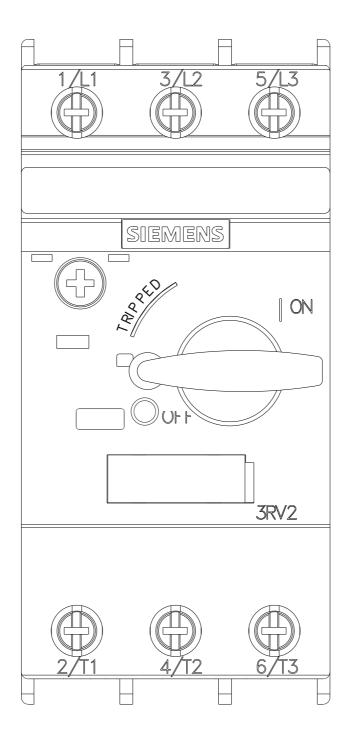
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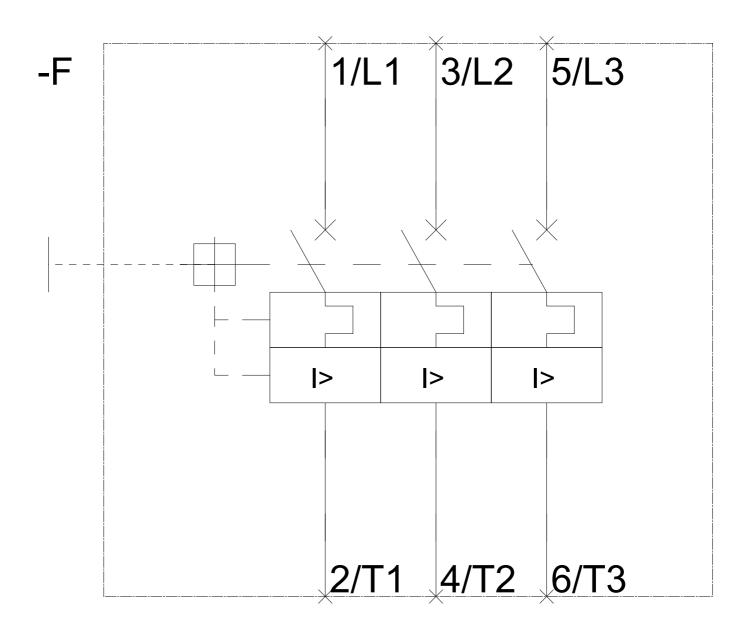
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RV2421-4DA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2421-4DA10&lang=en









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