SIEMENS

Data sheet 3RV2431-4TA10



CIRCUIT BREAKER, SIZE S2, FOR TRANSFORMER PROTECTION, A-RELEASE 12...17A, N-RELEASE 410A, SCREW TERMINAL, STANDARD BREAKING CAPACITY

Figure similar

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:		
Active power loss total typical	W	12
Insulation voltage		
 with degree of pollution 3 Rated value 	V	690
Shock resistance		
• acc. to IEC 60068-2-27		25g / 11 ms Sinus
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
 of the main contacts typical 		50 000
 of the auxiliary contacts typical 		50 000
Electrical endurance (switching cycles)		
• typical		50 000
Temperature compensation	°C	-20 + 60
Size of contactor can be combined company-specific		S2
Protection class IP		
• on the front		IP20
• of the terminal		IP00
Equipment marking		
• acc. to DIN EN 81346-2		Q

Main circuit:		
Number of poles for main current circuit		3
Adjustable response value current of the current-	Α	12 17
dependent overload release		

Operating voltage		
Rated value	V	690
• at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 60
Operating current Rated value	Α	17
Operating current		
• at AC-3		
— at 400 V Rated value	Α	17
Operating power		
• at AC-3		
— at 230 V Rated value	W	4 000
— at 400 V Rated value	W	7 500
— at 500 V Rated value	W	7 500
— at 690 V Rated value	W	15 000
Operating frequency		
• at AC-3 maximum	1/h	15
Auxiliary circuit:		
Product expansion Auxiliary switch		Yes
Dratactive and manifering functions		
Protective and monitoring functions: Trip class		CLASS 10
Design of the overload circuit breaker		thermal
Operational short-circuit current breaking capacity		
(Ics) with AC		
• at 240 V Rated value	Α	100
• at 400 V Rated value	kA	30
• at 500 V Rated value	kA	6
• at 690 V Rated value	kA	3
Maximum short-circuit current breaking capacity (Icu)		
 with AC at 240 V Rated value 	kA	100
• with AC at 400 V Rated value	kA	65
• with AC at 500 V Rated value	kA	12
• with AC at 690 V Rated value	kA	5
Response value current of the instantaneous short-	Α	410
circuit release		
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
● at 480 V Rated value	Α	17
● at 600 V Rated value	Α	17
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated		
for single phase to motor at 116,125 v rated	metric	1.5

 for single-phase AC motor at 230 V Rated value 	metric hp	3
• for three-phase AC motor at 200/208 V Rated value	metric hp	5
 for three-phase AC motor at 220/230 V Rated value 	metric hp	7.5
• for three-phase AC motor at 460/480 V Rated value	metric hp	15
• for three-phase AC motor at 575/600 V Rated value	metric hp	15

Short-circuit:		
Product function Short circuit protection	Yes	
Design of the short-circuit trip	magnetic	

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	mm	140
Width	mm	55
Depth	mm	149
Required spacing		
with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— downwards	mm	50
— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— at the side	mm	10
— downwards	mm	50
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— downwards	mm	50
— at the side	mm	10

Connections/ Terminals:	
Type of electrical connection	
 for main current circuit 	screw-type terminals

Arrangement of electrical connectors for main currencircuit	t	Top and bottom
Product function		
 removable terminal for auxiliary and control circuit 		No
Type of connectable conductor cross-section		
• for main contacts		
 single or multi-stranded 		2x (1 25 mm²), 1x (1 35 mm²)
— finely stranded with core end processing		2x (1 16 mm²), 1x (1 25 mm²)
• for AWG conductors for main contacts		2x (18 3), 1x (18 2)
Tightening torque		
• for main contacts with screw-type terminals	N·m	3 4.5
Design of screwdriver shaft		Diameter 5 to 6 mm
Design of the thread of the connection screw		
• for main contacts		M6
Safety related data:		
Protection against electrical shock		finger-safe when touched vertically from front acc. to IEC 60529
Mechanical data:		
Size of the circuit-breaker		S2
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum Ambient temperature		
Ambient temperature ● during operation	°C	-20 +60
	°C	-50 +80
during storage	°C	-50 +80
during transport Relative humidity during operation	——————————————————————————————————————	10 95
reading during operation	/0	10 93
Display:		
Display version		
• for switching status		Handle
Certificates/ approvals:		
General Product Approval	other	





Confirmation

Environmental Confirmations

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

Industry Mall (Online ordering system)

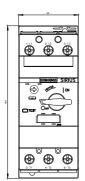
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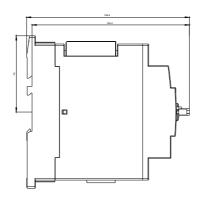
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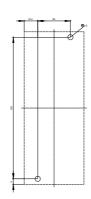
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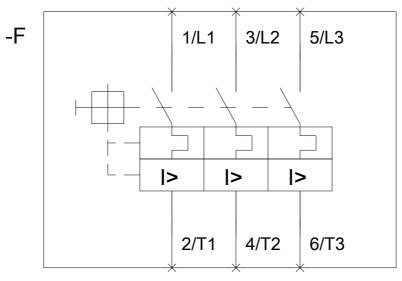
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV24314TA10/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV24314TA10&lang=en









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