## **SIEMENS**

Data sheet 3RV2431-4UA10



CIRCUIT BREAKER, SIZE S2, FOR TRANSFORMER PROTECTION, A-RELEASE 32...40A, N-RELEASE 820A, 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	15
Insulation voltage		
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	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)		
<ul> <li>of the main contacts typical</li> </ul>		50 000
<ul> <li>of the auxiliary contacts typical</li> </ul>		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
<ul><li>of the terminal</li></ul>		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	32 40
dependent overload release		

0 " "		
Operating voltage	V	600
Rated value	V	690
at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 60
Operating current Rated value	Α	40
Operating current		
● at AC-3		
— at 400 V Rated value	Α	40
Operating power		
• at AC-3		
— at 230 V Rated value	W	11 000
— at 400 V Rated value	W	18 500
— at 500 V Rated value	W	22 000
— at 690 V Rated value	W	37 000
Operating frequency		
• at AC-3 maximum	1/h	15
Auxiliary circuit:		
Product expansion Auxiliary switch		Yes
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	5
● at 690 V Rated value	kA	2
Maximum short-circuit current breaking capacity (Icu)		
<ul> <li>with AC at 240 V Rated value</li> </ul>	kA	100
• with AC at 400 V Rated value	kA	65
• with AC at 500 V Rated value	kA	10
• with AC at 690 V Rated value	kA	4
Response value current of the instantaneous short-	Α	820
circuit release		
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	Α	40
<ul><li>at 480 V Rated value</li><li>at 600 V Rated value</li></ul>	A A	40 40
• at 600 V Rated value		

• for single-phase AC motor at 230 V Rated value	metric hp	7.5
• for three-phase AC motor at 200/208 V Rated value	metric hp	15
• for three-phase AC motor at 220/230 V Rated value	metric hp	15
• for three-phase AC motor at 460/480 V Rated value	metric hp	30
• for three-phase AC motor at 575/600 V Rated value	metric hp	40

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		
<ul><li>with side-by-side mounting</li></ul>		
— 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		
<ul> <li>for main current circuit</li> </ul>		screw-type terminals

Arrangement of electrical connectors for main currencircuit	t	Top and bottom
Product function		
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>		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)

http://www.siemens.com/industrymall

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV24314UA10

# Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV24314UA10/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV24314UA10&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV24314UA10&lang=en</a>







