SIEMENS

Data sheet 3RV2021-1DA10



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-REL.2.2...3.2A, N-REL. 42A SCREW CONNECTION, STANDARD SW. CAPACITY

Figure similar

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:	
Active power loss total typical	6 W
Insulation voltage	
 with degree of pollution 3 Rated value 	690 V
Surge voltage resistance Rated value	6 kV
Mechanical service life (switching cycles)	
 of the main contacts typical 	100 000
 of the auxiliary contacts typical 	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Temperature compensation	-20 +60 °C
Size of contactor can be combined company-specific	S00
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Type of protection	Increased safety
Equipment marking	
● acc. to DIN EN 81346-2	Q

Main circuit:	cuit:	
Number of poles for main current circuit	3	
Adjustable response value current of the current-	2.2 3.2 A	
dependent overload release		
Operating voltage		

Rated value	690 V
at AC-3 Rated value maximum	690 V
Operating frequency Rated value	50 60 Hz
Operating current Rated value	3.2 A
Operating current	
• at AC-3	
— at 400 V Rated value	3.2 A
Operating frequency	
• at AC-3 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
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	100 kA
• at 400 V Rated value	100 kA
● at 500 V Rated value	100 kA
• at 690 V Rated value	10 kA
Maximum short-circuit current breaking capacity (Icu)	
 with AC at 240 V Rated value 	100 kA
 with AC at 400 V Rated value 	100 kA
• with AC at 500 V Rated value	100 kA
• with AC at 690 V Rated value	10 kA
Breaking capacity short-circuit current (Icn)	
• with 1 current path for DC at 150 V Rated value	10 kA
 with 2 current paths in series for DC at 300 V Rated value 	10 kA
 with 3 current paths in series for DC at 450 V Rated value 	10 kA
Response value current of the instantaneous short- circuit release	42 A
UL/CSA ratings:	
Full-load current (FLA) for three-phase AC motor	
at 480 V Rated value	3.2 A

3.2 A

Short-circuit:		
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	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 	No	
circuit		
Type of electrical connection	corour turo terminale	
• for main current circuit	screw-type terminals	
Arrangement of electrical connectors for main current circuit	Top and bottom	
Type of connectable conductor cross-section		
• 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	

 for AWG conductors for main contacts 	2x (16 12), 2x (14 8)
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
• for main contacts	M4
Safety related data:	
B10 value with high demand rate acc. to SN 31920	50 000
Proportion of dangerous failures	
 with low demand rate acc. to SN 31920 	40 %
 with high demand rate acc. to SN 31920 	40 %
T1 value for proof test interval or service life acc. to IEC 61508	10 y
Protection against electrical shock	finger-safe
Mechanical data:	
Size of the circuit-breaker	S0
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 %
Display:	
Display version	
• for switching status	Handle
Certificates/ approvals:	

General Product Approval

For use in hazardous locations







KTL





Declaration of	Test Certificates
Conformity	

Shipping Approval



Special Test Certificate Declaration of the Compliance with the order

Type Test
Certificates/Test
Report





Shipping Approval





LRS







other

Environmental Confirmations

Confirmation



other

Further information

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=3RV20211DA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV20211DA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20211DA10&lang=en



