SIEMENS

Data sheet

3RV2021-1GA10



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-REL. 4.5...6.3A, N-REL. 82A SCREW CONNECTION, STANDARD SW. CAPACITY

Figure similar		
product brand name		SIRIUS
Product designation		3RV2 circuit breaker
General technical data:		
Active power loss total typical	W	6
Insulation voltage		
 with degree of pollution 3 Rated value 	V	690
Shock resistance		
• acc. to IEC 60068-2-27		25g / 11 ms
Surge voltage resistance Rated value	kV	6
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	°C	-20 +60
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:		
Number of poles for main current circuit		3

Adjustable response value current of the current-	А	4.5 6.3
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	A	6.3
Operating current	_	
• at AC-3		
— at 400 V Rated value	А	6.3
Operating power	-	
• at AC-3		
— at 230 V Rated value	W	1 500
— at 400 V Rated value	W	2 200
— at 500 V Rated value	W	3 000
— at 690 V Rated value	W	4 000
Operating frequency		
• at AC-3 maximum	1/h	15
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	kA	100
at 240 V Rated value at 400 V Rated value	kA	100
	kA	100
 at 500 V Rated value at 690 V Rated value 	kA kA	4
Maximum short-circuit current breaking capacity (Icu)		7
with AC at 240 V Rated value	kA	100
	kA	100
• with AC at 400 V Rated value	kA kA	100
• with AC at 500 V Rated value		
with AC at 690 V Rated value Procking conscitu short aircuit current (lop)	kA	6
Breaking capacity short-circuit current (Icn)	kΔ	10
 with 1 current path for DC at 150 V Rated value 	kA	

 with 2 current paths in series for DC at 300 V Rated value 	kA	10
 with 3 current paths in series for DC at 450 V Rated value 	kA	10
Response value current of the instantaneous short- circuit release	A	82
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	А	6.3
• at 600 V Rated value	А	6.3
yielded mechanical performance [hp]		
 for single-phase AC motor at 110/120 V Rated 	metric	0.25
value	hp	
 for single-phase AC motor at 230 V Rated 	metric	0.5
value	hp	
 for three-phase AC motor at 200/208 V Rated 	metric	1
value	hp	
 for three-phase AC motor at 220/230 V Rated 	metric	1.5
value	hp	
 for three-phase AC motor at 460/480 V Rated 	metric	3
value	hp	
 for three-phase AC motor at 575/600 V Rated 	metric	5
value	hp	

Short-circuit:

Product function Short circuit protection	Ye	es
Design of the short-circuit trip	ma	nagnetic

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	97
Width	mm	45
Depth	mm	96
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

mm	0
mm	50
mm	30
mm	50
mm	0
mm	0
mm	50
mm	50
mm	30
	mm mm mm mm mm mm

Connections/ Terminals	
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Type of electrical connection		
• for main current circuit		screw-type terminals
Arrangement of electrical connectors for main current circuit	-	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 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)
Tightening torque	-	
 for main contacts with screw-type terminals 	N∙m	2 2.5
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
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	50
T1 value for proof test interval or service life acc. to IEC 61508	У	10
Protection against electrical shock		finger-safe
lechanical data:		

		°C	-20 +60		
		°C	-50 +80		
		°C	-50 +80		
ng operation		%	10 95		
				_	
tus			Handle		
Approval				Declaration of Conformity	Test Certificates
(SA) CSA		E	AC	EG-Konf.	Special Test Certificate
Turno Toot	Shipping Approval				
<u>Certificates/Test</u> <u>Report</u>	ABS			ĴÅ DNV DNV	GL
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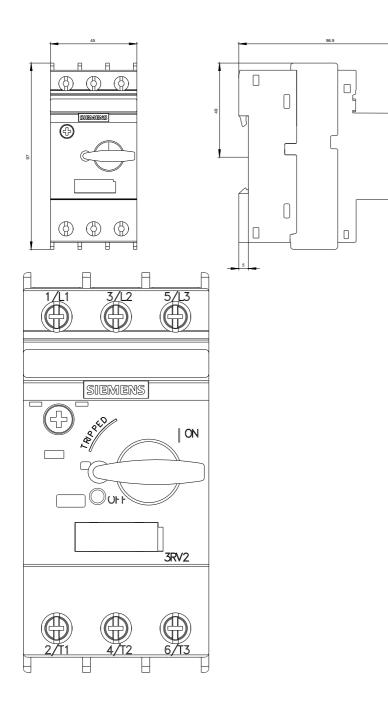
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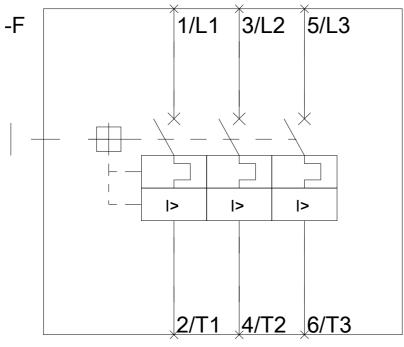
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last modified:

11.03.2015