SIEMENS

Product data sheet

3RV2011-0CA10



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.18...0.25A, N-RELEASE3.3A SCREW CONNECTION, STANDARD SW. CAPACITY

General technical data:		
Product brand name		SIRIUS
product designation	-	3RV2 circuit breaker
Size of the circuit-breaker		S00
Trip class		CLASS 10
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-50 80
during operating	°C	-20 60
during transport	°C	-50 80
Resistance against shock		25g / 11 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Active power loss / total / typical	W	4.8
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		F
according to DIN EN 61346-2		F

• of the main contacts / typical100,000• of the auxiliary contacts / typical100,000Type of the driving mechanism / motor driveNoDesign of the operating mechanismNoProduct functionYes• overload protectionYes• phase disturbance recognitionNo• auxiliary switchNo• outcoding release mechanismNo• individual release mechanismNo• of polonal / motor driveNoNumber of polose / for main current circuitNo• of parating valke? / at AC-3 / rated valueNo• of parating valke? / at AC-3 / rated valueNW• at 400 V / rated valueNW• at 400 V / rated valueNW• at 500 V / rated valueNW• of the non-delayed short-ricuit ricuitsNW• of the non-delayed short-ricuit ricuitsA• of the non-delayed short-ricuit ricuits	Mechanical operating cycles as operating time	_	
Type of the driving mechanism / motor drive No Design of the operating mechanism selector switch Product function ''''''''''''''''''''''''''''''''''''	of the main contacts / typical		100,000
Design of the operating mechanism ideal selector switch Product function Yes Yes • overload protection Yes Yes • duality switch No Yes • undervoltage release mechanism No Yes • trip indicator No Yes Product extension / optional / motor drive No Yes Main circuit: No Yes Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating voltage / at AC-3 / rated value / maximum V 600 Yes • at 400 V / rated value W 60 Yes • at 400 V / rated value W 80 Yes • at 600 V / rated value W 10 Yes • at 600 V / rated value W 80 Yes • at 600 V / rated value W 10 Yes • at 600 V / rated value W 10 Yes • of the non-deleyed short-circuit release A 3.3 3.3 3 </th <th>• of the auxiliary contacts / typical</th> <th></th> <th>100,000</th>	• of the auxiliary contacts / typical		100,000
Product function Yes • overload protection Yes • phase disturbance recognition Yes Product component Yes • auxiliary switch No • undervoltage release mechanism No • trip indicator No Product stansion / optional / motor drive No Main circuit: No Number of poles / for main current circuit 3 Operating outage / at AC-3 / rated value / maximum V Service power / at AC-3 Service power / at AC-3 • at 400 V / rated value W • at 400 V / rated value W • at 400 V / rated value W • at 600 V / rated value W • at 600 V / rated value W • at 600 V rated value W • of the on-delayed short-foroit release A • of the outert-foroit release A • of the outert-dependent overload release A • of the outert-dependent overload release A • of the outert-foroit release A • of the outert-foroit release A • of the outert-foroit release A <tr< th=""><th>Type of the driving mechanism / motor drive</th><th></th><th>No</th></tr<>	Type of the driving mechanism / motor drive		No
• overload protectionYes• phase disturbance recognitionYesProduct componentNo• auxiliary switchNo• undervoltage release mechanismNo• indervoltage release mechanismNo• tip indicatorNoProduct extension / optional / motor driveNoMather of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumVService power / at AC-3 / rated value / maximumV• at 400 V / rated valueW• at 400 V / rated valueW• at 400 V / rated valueW• at 400 V rated valueNo• at 400 V rated valueNo• at 400 V rated valueNo• at	Design of the operating mechanism		selector switch
• phase disturbance recognitionImage: Second Se	Product function		
Product component No • auxiliary switch No • undervoltage release mechanism No • tip indicator No Product extension / optional / motor drive No Main circuit: No Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value A 0.2 Service power / at AC-3 Image: Component / Componen	overload protection		Yes
• auxiliary switchNo• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoProduct extension / optional / motor driveNoMumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumVOperating current / at AC-3 / rated value / maximumVOperating current / at AC-3 / rated value / maximumAOperating current / at AC-3 / rated valueA00.2Service power / at AC-3W• at 400 V / rated valueW• at 400 V / rated valueA• at 40 Contacts / for auxili	phase disturbance recognition		Yes
• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoMain circuit:NoNumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV690Operating current / at AC-3 / at 400 V / rated valueA0.2Service power / at AC-3W60• at 400 V / rated valueW60• at 400 V / rated valueW90• at 600 V / rated valueW90• at 600 V / rated valueW120Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximumTop and bottomAdjustable response currentM3.33.3• of the non-delayed short-circuit releaseA3.33.3• of the non-delayed short-circuit releaseA0.25Service power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueM0.25Service power / at AC-3 / at 230 V / rated valueM0.25Mumber of NC contacts / for auxiliary contacts / instantaneous switchingYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of ND contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0 <th>Product component</th> <th></th> <th></th>	Product component		
• trip indicator No Product extension / optional / motor drive No Main circuit: 3 Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value / maximum V 690 • at 400 V / rated value M 0.2 Service power / at AC-3 W 60 • at 400 V / rated value W 90 • at 400 V / rated value W 90 • at 690 V / rated value W 90 • at 690 V / rated value W 120 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum I/h 15 Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current A 3.3 3.3 • of the non-delayed short-circuit release A 0.18 0.25 Service power / at AC-3 / at 230 V / rated value W 40 Continuous current / rated value Yes Number of NC contacts / for auxiliary contacts / instantaneous switching <th>auxiliary switch</th> <th></th> <th>No</th>	auxiliary switch		No
Product extension / optional / motor drive No Main circuit: 3 Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 0.2 Service power / at AC-3 400 V / rated value A 0.2 Service power / at AC-3 W 60 60 • at 400 V / rated value W 90 90 • at 400 V / rated value W 90 90 • at 600 V / rated value W 90 90 • at 600 V / rated value W 90 90 • at 600 V / rated value W 90 90 • at 600 V / rated value W 90 90 • at 600 V / rated value W 120 170 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / 17h 15 • of the non-delayed short-circuit release A 3.3 3.3 3.3 3.3 • of the non-delayed short-circuit release A 0.18 0.25 90 Service power / at AC-3 / at 230 V / rated value Y <th>undervoltage release mechanism</th> <th></th> <th>No</th>	undervoltage release mechanism		No
Main circuit: 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 0.2 Service power / at AC-3 W 60 • at 400 V / rated value W 60 • at 400 V / rated value W 90 • at 500 V / rated value W 120 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Top and bottom Adjustable response current Inh 15 • of the non-delayed short-circuit release A 0.3 3.3 • of the current-dependent overload release A 0.25 Service power / at AC-3 / at 230 V / rated value W 40 Continuous current / rated value W 0 Continuous current / rated value Yes 1 Product extension / auxiliary switch Yes 0 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 0 witching 0 0 0	• trip indicator		No
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• at 500 V / rated valueW90• at 690 V / rated valueW120Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response current • of the non-delayed short-circuit releaseA3.33.3• of the current-dependent overload releaseA0.180.25Service power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueW0.25Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Number of chang	Service power / at AC-3	_	
• at 690 V / rated valueW120Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response current-Top and bottom• of the non-delayed short-circuit releaseA3.3 3.3• of the current-dependent overload releaseA0.18 0.25Service power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueA0.25Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts / instantaneous switching0	• at 400 V / rated value	W	60
Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum 1/h 15 Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current - - • of the non-delayed short-circuit release A 3.3 3.3 • of the current-dependent overload release A 0.18 0.25 Service power / at AC-3 / at 230 V / rated value W 40 Continuous current / rated value A 0.25 Auxiliary circuit: - Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/Outputs: - -	• at 500 V / rated value	W	90
maximum Imaximum Image: Imaximum Imaxim Imaxim Imaxim Imax	• at 690 V / rated value	W	120
Adjustable response currentImage: Constant of the non-delayed short-circuit releaseA3.3 3.3• of the current-dependent overload releaseA0.18 0.25Service power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueA0.25Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:Imputs/ Outputs:		1/h	15
• of the non-delayed short-circuit releaseA3.3 3.3• of the current-dependent overload releaseA0.18 0.25Service power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueA0.25Auxiliary circuit:YesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of the contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:Inputs/ Outputs:	Arrangement of electrical connectors / for main current circuit		Top and bottom
• of the current-dependent overload releaseA0.18 0.25Service power / at AC-3 / at 230 V / rated valueW40Continuous current / rated valueA0.25Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:Ves	Adjustable response current		
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Continuous current / rated value A 0.25 Auxiliary circuit: Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Imputs/ Outputs: 0	• of the current-dependent overload release	А	0.18 0.25
Auxiliary circuit: Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Service power / at AC-3 / at 230 V / rated value	W	40
Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Continuous current / rated value	А	0.25
Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Auxiliary circuit:		
switching Image: Switching Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0	Product extension / auxiliary switch		Yes
switching Image: Switches / for auxiliary contacts Number of change-over switches / for auxiliary contacts 0	•		0
Inputs/ Outputs:	-		0
	Number of change-over switches / for auxiliary contacts		0
Number of digital inputs 0	Inputs/ Outputs:		
	Number of digital inputs		0

Short-circuit:			
Breaking capacity limit short-circuit current (lcu)			
• at 400 V / rated value	А	100,000	
• at 500 V / rated value	А	100,000	
• at 690 V / rated value	А	100,000	
Design of the overcurrent release and short-circuit release		thermomagnetic	
Installation/mounting/dimensions:			
Built in orientation		any	
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	
Width	mm	45	
Height	mm	97	
Depth	mm	91	
Distance, to be maintained, to the ranks assembly			
• forwards	mm	0	
backwards	mm	0	
• upwards	mm	50	
downwards	mm	50	
• sidewards	mm	0	
Distance, to be maintained, to earthed part			
• forwards	mm	0	
backwards	mm	0	
• upwards	mm	50	
• sidewards	mm	30	
downwards	mm	50	
Distance, to be maintained, conductive elements			
forwards	mm	0	
backwards	mm	0	
• upwards	mm	50	
downwards	mm	50	
• sidewards	mm	30	
Connections:			
Product function			
removable terminal for main circuit		No	
removable terminal for auxiliary and control circuit		No	
Design of the electrical connection			
for main current circuit		screw-type terminals	
Type of the connectable conductor cross-section			
for main contacts			

• solid				$2 \times (0.75 - 0.5 \text{ mm}^2) - 2 \times (1.5 \text{ mm}^2)$	4 mm2)
				2x (0.75 2.5 mm²), 2x (1	
 stranded 				2x (0.75 2.5 mm²), 2x 4 r	nm²
 finely strand 	led				
 with conc 	ductor end processing			2x (0.5 1.5 mm²), 2x (0.7	5 2.5 mm²)
 for AWG condu 	uctors / for main contact	S		2x (18 14), 2x 12	
Certificates/app	rovals:				
Verification of sui	tability			CE / UL / CSA	
 für Staubexplos 	sionsschutz für Zone 21	/22		no	
 for gas explosi 	on protection for zone 1	/2		no	
General Product	Approval			For use in hazard	lous locations
coc	(SA)	ROSTEST		DEKRA EXAM, DMT	
Test Certificates	i				
Manufacturer	other				
Shipping Approv	val				
ABS	GL	Lloyd's Register Lrs	PRS	RINA	RMRS
other					
Manufacturer	other				

Safety:			
B10 value / with high demand rate			
according to SN 31920		50,000	
T1 value / for proof test interval or service life			
according to IEC 61508	а	10	
Failure rate (FIT value) / with low demand rate			
according to SN 31920	FIT	50	
Proportion of dangerous failures			
with low demand rate / according to SN 31920	%	40	
with high demand rate / according to SN 31920	%	40	
Protection against electrical shock		finger-safe	

Further information

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

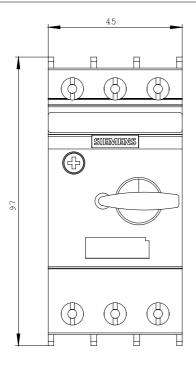
CAx-Online-Generator

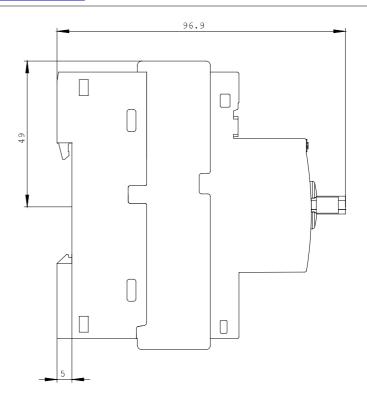
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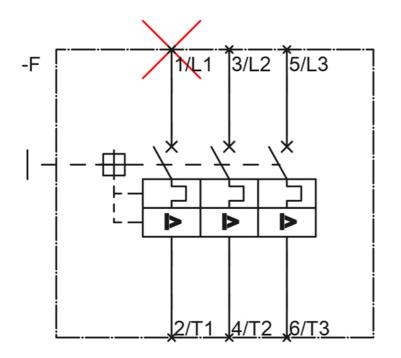
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RV2011-0CA10/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-0CA10







last change:

Oct 24, 2011