SIEMENS

Data sheet 3RV2111-0DA10



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, W. OVERLOAD RELAY FUNCTION A-RELEASE 0.22...0.32A, N-RELEASE4.2A SCREW CONNECTION, STANDARD SW. CAPACITY

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:		
Active power loss total typical	W	5
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-	Α	0.22 0.32
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	0.32
Operating current		
• at AC-3		
— at 400 V Rated value	Α	0.32
Operating power		
• at AC-3		
— at 230 V Rated value	W	40
— at 400 V Rated value	W	90
— at 500 V Rated value	W	120
— at 690 V Rated value	W	120
Operating frequency		
• at AC-3 maximum	1/h	15
Auxiliary circuit:		
Number of NC contacts		
for auxiliary contacts		0

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
Design of the auxiliary switch		laterally
Operating current of the auxiliary contacts at AC-15		
● at 24 V	Α	1.5
● at 230 V	Α	1.5
Operating current of the auxiliary contacts at DC-13		
● at 24 V	Α	1

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 400 V Rated value	kA	100
● at 500 V Rated value	kA	100
● at 690 V Rated value	kA	100
Maximum short-circuit current breaking capacity (Icu)		

with AC at 240 V Rated value with AC at 500 V Rated value with AC at 690 V Rated value with 1 current path for DC at 150 V Rated value with 2 activent path for DC at 150 V Rated value with 3 current paths in series for DC at 300 V Rated value with 3 current paths in series for DC at 450 V Rated value with 3 current paths in series for DC at 450 V Rated value with 3 current paths in series for DC at 450 V Rated value Response value current of the Instantaneous short-circuit release **LICSA ratings** **Full-load current (FLA) for three-phase AC motor			
with AC at 500 V Rated value with AC at 690 V Rated value with AC at 690 V Rated value with AC at 690 V Rated value Preaking capacity short-circuit current (Icn) with 1 current paths in series for DC at 300 V Rated value with 2 current paths in series for DC at 300 V Rated value with 3 current paths in series for DC at 450 V Rated value with 3 current paths in series for DC at 450 V Rated value with 3 current of the instantaneous short-circuit release **Pull-load current (FLA) for three-phase AC motor	 with AC at 240 V Rated value 	kA	100
with AC at 690 V Rated value with AC at 690 V Rated value Preaking capacity short-circuit current (Ion) with 1 current path for DC at 150 V Rated value with 2 current paths in series for DC at 300 V Rated value with 3 current paths in series for DC at 450 V Rated value with 3 current paths in series for DC at 450 V Rated value with 3 current of the instantaneous short-circuit release A	• with AC at 400 V Rated value	kA	100
Breaking capacity short-circuit current (ton) • with 1 current path for DC at 150 V Rated value • with 2 current paths in series for DC at 300 V Rated value • with 3 current paths in series for DC at 450 V Rated value • with 3 current paths in series for DC at 450 V Rated value • with 3 current paths in series for DC at 450 V Rated value • with 3 current paths in series for DC at 450 V Rated value • with 3 current paths in series for DC at 450 V Rated value • with 3 current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value • at 600 V Rated value • at 600 V Rated value • or short-circuit Product function Short circuit protection Design of the fuse link • fuse gL/gG: 6 A, quick: 10 A **Short-circuit protection of the auxiliary switch required **stallation/ mounting/ dimensions:** **mounting position** **Mounting type** **ericuit protection of the auxiliary switch required **ericuit protection of the auxiliary switch required spacing • with side-by-side mounting • forwards • upwards **mounting for grounded parts • for grounded parts • forwards • at the side • for grounded parts • forwards • upwards **mounting for grounded parts • forwards • upwards	• with AC at 500 V Rated value	kA	100
with 1 current path for DC at 150 V Rated value with 2 current paths in series for DC at 300 V Rated value with 3 current paths in series for DC at 300 V Rated value with 3 current paths in series for DC at 450 V Rated value with 3 current paths in series for DC at 450 V Rated value Response value current of the instantaneous short-circuit release A	• with AC at 690 V Rated value	kA	100
with 2 current paths in series for DC at 300 V Rated value with 3 current paths in series for DC at 450 V Rated value Response value current of the instantaneous short-circuit release **IJ-CSA ratings:** **Full-load current (FLA) for three-phase AC motor	Breaking capacity short-circuit current (Icn)		
Rated value with 3 current paths in series for DC at 450 V Rated value Response value current of the instantaneous short-circuit release I/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value	• with 1 current path for DC at 150 V Rated value	kA	10
Rated value Response value current of the instantaneous short- circuit release A	•	kA	10
Circuit release Full-load current (FLA) for three-phase AC motor	•	kA	10
Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value A 0.32 Contact rating of the auxiliary contacts acc. to UL Short-circuit: Product function Short circuit protection Design of the short-circuit trip Design of the fuse link • for short-circuit protection of the auxiliary switch required mounting position Mounting type any Screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Height mm 97 Width Depth Required spacing • with side-by-side mounting — forwards — upwards — at the side • for grounded parts — forwards — at the side — upwards — upwards — Backwards — upwards — mm 0 • for grounded parts — forwards — Backwards — upwards — mm 0 Backwards — mm 0 • for grounded parts — forwards — mm 0 Backwards — upwards — mm 0 Backwards — mm 0 • for grounded parts — forwards — mm 0 Backwards — upwards — mm 0 Backwards — mm 0 • for grounded parts — forwards — mm 0 Backwards — mm 0	-	Α	4.2
at 480 V Rated value at 600 V Rated value Contact rating of the auxiliary contacts acc. to UL C600 / R300 Short-circuit: Product function Short circuit protection Design of the short-circuit trip magnetic Design of the fuse link fuse gL/gG: 6 A, quick: 10 A screw and snap-on mounting onto 35 mm standard mounting position Mounting type screw and snap-on mounting not 35 mm standard mounting rail according to DIN EN 60715 Height mm g7 Width mm 65 Depth Required spacing with side-by-side mounting — forwards — upwards — at the side fuse gL/gG: 6 A, quick: 10 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 mm g6 any fuse gL/gG: 6 A, quick: 10 A fuse gL/gG: 6 A, qui	JL/CSA ratings:		
• at 600 V Rated value Contact rating of the auxiliary contacts acc. to UL Short-circuit: Product function Short circuit protection Design of the short-circuit trip Design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions: mounting position Mounting type Installation/ many type Installati	Full-load current (FLA) for three-phase AC motor		
Contact rating of the auxiliary contacts acc. to UL Short-circuit: Product function Short circuit protection Design of the short-circuit trip Design of the fuse link • for short-circuit protection of the auxiliary switch required **Nounting position** Mounting type **Serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Height **Mounting type **Serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Height **Mounting type **Serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 **Height **Mounting type **Serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 **Height **Mounting type **Serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 **Mounting type **Serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 **Mounting type **Serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 **Mounting type **Serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 **Mounting type **Serve and snap-on mounting onto 35 mm standard mounting onto 35 mm standard mounting rail according to DIN EN 60715 **Mounting type **Serve and snap-on mounting onto 35 mm standard m	• at 480 V Rated value	Α	0.32
Product function Short circuit protection Design of the short-circuit trip Design of the fuse link • for short-circuit protection of the auxiliary switch required ***Installation/ mounting/ dimensions:** ***mounting position** **Mounting type** **Screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 **Height** **mm** **Mounting type** **Mounting type** **Mounting type** **Mounting type** **Mounting type** **Mounting type** **Screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 **Mounting type**	• at 600 V Rated value	Α	0.32
Product function Short circuit protection Yes Design of the short-circuit trip magnetic Design of the fuse link	Contact rating of the auxiliary contacts acc. to UL		C600 / R300
Product function Short circuit protection Yes Design of the short-circuit trip magnetic Design of the fuse link	Short-circuit:		
Design of the short-circuit trip magnetic Design of the fuse link for short-circuit protection of the auxiliary switch required fuse gL/gG: 6 A, quick: 10 A 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 96 Required spacing mm 96 • with side-by-side mounting mm 0 — Backwards mm 0 — upwards mm 50 — at the side mm 0 • for grounded parts mm 0 — Backwards mm 0 — Backwards mm 0 — Backwards mm 0 — upwards mm 0			Yes
• for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions: Important position Mounting type Important position Mounting type Important position Mounting type Important position	<u>-</u>		magnetic
required mounting position Mounting type mm mounting type mm mm mm mm mm mm mm mm mm	Design of the fuse link		
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 65 Depth mm 96 Required spacing Fequired spacing • with side-by-side mounting mm 0 — forwards mm 0 — Backwards mm 50 — downwards mm 50 — at the side mm 0 • for grounded parts mm 0 — Forwards mm 0 — Backwards mm 0 — Backwards mm 0 — upwards mm 0 — upwards mm 0			fuse gL/gG: 6 A, quick: 10 A
Mounting typescrew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715Heightmm97Widthmm65Depthmm96Required spacingFragment of the properties of the	nstallation/ mounting/ dimensions:		
Height mm 97 Width mm 65 Depth mm 96 Required spacing • with side-by-side mounting — forwards — Backwards — upwards — at the side • for grounded parts — forwards — forwards — mm 0 • for grounded parts — forwards — Backwards — mm 0 • for grounded parts — forwards — mm 0 — abackwards — mm 0 • for grounded parts — forwards — mm 0 — abackwards — mm 0 — abackwards — mm 0 — of grounded parts — forwards — mm 0 — m	mounting position		any
Width mm 65 Depth mm 96 Required spacing • with side-by-side mounting — forwards mm 0 — Backwards mm 50 — upwards mm 50 — downwards mm 50 — at the side mm 0 • for grounded parts — forwards mm 0 — abackwards mm 50 — at the side mm 0 — upwards mm 50 — at the side mm 50	Mounting type		· · · · · · · · · · · · · · · · · · ·
Depth mm 96 Required spacing • with side-by-side mounting — forwards — forwards mm 0 — Backwards mm 50 — upwards mm 50 — at the side mm 0 • for grounded parts — forwards mm 0 — Backwards mm 0 — upwards mm 0 — upwards mm 0	Height	mm	97
Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts — forwards — Backwards — mm 0 • for grounded parts — forwards — mm 0 — upwards mm 0 — upwards mm 0 — upwards mm 0 — and mm 0 — backwards — mm 0 — upwards mm 0 — upwards	Width		
 with side-by-side mounting forwards mm Backwards upwards downwards at the side for grounded parts forwards Backwards mm mm 0 forwards mm mm 0 upwards mm <		mm	65
 — forwards — Backwards — upwards — downwards — at the side ● for grounded parts — forwards — Backwards — upwards mm 0 mm 0 mm 0 mm 0 mm 50 	Depth		
 — Backwards — upwards — downwards — at the side ● for grounded parts — forwards — Backwards — upwards mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 50 	-		
— upwards mm 50 — downwards mm 50 — at the side mm 0 • for grounded parts mm 0 — forwards mm 0 — Backwards mm 0 — upwards mm 50	Required spacing		
 — downwards — at the side ● for grounded parts — forwards — Backwards — upwards mm 0 mm 0 mm 50 	Required spacing • with side-by-side mounting	mm	96
 — at the side ● for grounded parts — forwards — Backwards — upwards mm 0 mm 0 mm 50 	Required spacing • with side-by-side mounting — forwards	mm	96
 for grounded parts — forwards — Backwards — upwards mm 0 mm 0 mm 50 	Required spacing • with side-by-side mounting — forwards — Backwards	mm mm mm	96 0 0
 forwards Backwards upwards mm 0 mm 0 mm 50 	Required spacing • with side-by-side mounting — forwards — Backwards — upwards	mm mm mm	96 0 0 50
 forwards Backwards upwards mm 0 mm 0 mm 50 	Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards	mm mm mm mm	96 0 0 50 50
— Backwards— upwardsmm50	Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side	mm mm mm mm	96 0 0 50 50
— upwards mm 50	Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts	mm mm mm mm mm	96 0 0 50 50 0
	Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts — forwards	mm mm mm mm mm mm	96 0 0 50 50 0
	Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts — forwards — Backwards	mm mm mm mm mm mm	96 0 0 50 50 0

— downwards	mm	50
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— downwards	mm	50
— at the side	mm	30

Connections/ Terminals:		
Type of electrical connection		
for main current circuit		screw-type terminals
 for auxiliary and control 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 (0,75 2,5 mm²), 2x 4 mm²
 finely stranded with core end processing 		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG conductors for main contacts 		2x (18 14), 2x 12
• for auxiliary contacts		
 single or multi-stranded 		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
— finely stranded with core end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG conductors for auxiliary contacts 		2x (20 16), 2x (18 14)
Tightening torque		
 for main contacts with screw-type terminals 	N·m	0.8 1.2
Design of screwdriver shaft		Diameter 5 to 6 mm
Design of the thread of the connection screw		
• for main contacts		M3
 of the auxiliary and control contacts 		M3

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

Mechanical data:		
Size of the circuit-breaker		S00
Analisant associations		
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
during operation	°C	-20 +60
during storage	°C	-50 + 80
during transport	°C	-50 +80
Relative humidity during operation	%	10 95

Display:

Display version

• for switching status Handle

Certificates/ approvals:

General Product Approval

Declaration of Conformity

Test Certificates









Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval













Shipping Approval

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

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

http://support.automation.siemens.com/WW/view/en/3RV21110DA10/all



