

Product data sheet 3RV2011-0FA10

CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.35...0.5A, N-RELEASE6.5A SCREW CONNECTION,

General technical data:		
Product brand name		SIRIUS
Product designation		3RV2 circuit breaker
Size of the circuit-breaker		\$00
Trip class		CLASS 10
Protection class IP / frontal/front side		IP20
Degree of pollution	_	3
Altitude of installation site / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-50 80
 during the operating phase 	°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
Real loss power / total / typical	W	5
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		F
• according to DIN EN 61346-2		F
Mechanical switching cycle as operating period		
of the main contacts / typical		100,000
of the auxiliary contacts / typical		100,000
Type of the driving mechanism / Motor drive		No
design of the operating mechanism		selector switch
Product function		
Overload protection		Yes
Short-circuit to earth recognition		No
Phase disturbance recognition		Yes
Product component		
auxiliary switch		No

No No No			
Product extension / optional / Motor drive Main circuit: Number of poles / for main current circuit Operating voltage / at 3 AC / rated value / maximum Operating current / at AC-3 / at 400 V / rated value Service power / at AC-3 - at 400 V / rated value - at 690 V / rate	Undervoltage release mechanism		No
Number of poles / for main current circuit Operating voltage / at 3 AC / rated value / maximum Operating current / at AC-3 / at 400 V / rated value A 0.44 Service power / at AC-3 - at 400 V / rated value - at 690 V rated value - at	• trip indicator		No
Number of poles / for main current circuit Operating voltage / at 3 AC / rated value / maximum Operating current / at AC-3 / at 400 V / rated value Service power / at AC-3 - at 400 V / rated value - at 500 V / rated value - at 600 V / rated value	Product extension / optional / Motor drive		No
Operating voltage / at 3 AC / rated value / maximum Operating current / at AC-3 / at 400 V / rated value A	Main circuit:		
Operating current / at AC-3 / at 400 V / rated value Service power / at AC-3 • at 400 V / rated value • at 500 V / rated value • at 600 V / rated value • at 600 V / rated value Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit • of the current-dependent overload release • A 0.35 0.5 Service power / at AC-3 / at 230 V / rated value • A 0.5 Service power / at AC-3 / at 230 V / rated value • A 0.5 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NC contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contact Inputs/ Outputs: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 500 V / rated value A 100,000 A 100,000 A 100,000 Design of the overcurrent release and short-circuit release Installation/mounting/dimensions: Installation/mounting/dimensions: Installation/mounting/dimensions: Installation/mounting/dimensions: Service power / at AC-3 / at 230 V / rated value Installation/mounting aliaccording to DIN EN 60715	Number of poles / for main current circuit		3
Service power / at AC-3 - at 400 V / rated value - at 500 V / rated value - AC-3 / according to IEC 60947-6-2 / maximum - Arrangement of electrical connectors / for main current circuit - Adjustable response current - of the current-dependent overload release - A	Operating voltage / at 3 AC / rated value / maximum	V	690
at 400 V / rated value at 690 V / rated value at 690 V / rated value W 120 W 180 Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Adjustable response current of the current-dependent overload release A 0.35 0.5 Service power / at AC-3 / at 230 V / rated value Continuous current / rated value W 60 Continuous current / rated value Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) at 400 V / rated value at 600 V / rated value A 100,000 A 100,000 Design of the overcurrent release and short-circuit release Installation/mounting/dimensions: built in orientation Type of fixing/fixation	Operating current / at AC-3 / at 400 V / rated value	Α	0.44
- at 500 V / rated value - at 690 V / rated value Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit - of the current-dependent overload release - of the current-dependent overload release - A 0.35 0.5 Service power / at AC-3 / at 230 V / rated value - Octinuous current / rated value - A 0.5 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of digital inputs - O Short-circuit: Breaking capacity limit short-circuit current (lcu) - at 400 V / rated value - at 690	Service power / at AC-3		
Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Adjustable response current • of the current-dependent overload release A 0.35 0.5 Service power / at AC-3 / at 230 V / rated value Continuous current / rated value Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 600 V / rated value • at 6	• at 400 V / rated value	W	120
Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Adjustable response current • of the current-dependent overload release A 0.35 0.5 Service power / at AC-3 / at 230 V / rated value Continuous current / rated value W 60 A 0.5 Auxillary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (lcu) • at 400 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value • beign of the overcurrent release and short-circuit release Installation/mounting/dimensions: built in orientation Type of fixing/fixation	• at 500 V / rated value	W	120
Maximum Arrangement of electrical connectors / for main current circuit Adjustable response current • of the current-dependent overload release A 0.35 0.5 Service power / at AC-3 / at 230 V / rated value W 60 Continuous current / rated value A 0.5 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of Quitable response switches / for auxiliary contacts / instantaneous switching Number of Unitable response current (for auxiliary contacts / instantaneous switching Number of VO contacts / for auxiliary contacts / instantaneous value Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (lcu) • at 400 V / rated value • at 500 V / rated value • at 500 V / rated value • at 690 V / rated value	• at 690 V / rated value	W	180
Adjustable response current • of the current-dependent overload release A 0.35 0.5 Service power / at AC-3 / at 230 V / rated value Continuous current / rated value W 60 A 0.5 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of dange-over switches / for auxiliary contact Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value Installation/mounting/dimensions: built in orientation Type of fixing/fixation Type of fixing/fixation A 0.35 0.5 0 60 A 0.5 O O A 0.5 O O A 10.000 A 100.000 A 100.00		1/h	15
• of the current-dependent overload release Service power / at AC-3 / at 230 V / rated value Continuous current / rated value W 60 A 0.5 Auxillary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contact Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value Installation/mounting/dimensions: built in orientation Type of fixing/fixation A 0.35 0.5 V 60 A 0.5 O O O O O O O O O O O O O	Arrangement of electrical connectors / for main current circuit		Top and bottom
Service power / at AC-3 / at 230 V / rated value Continuous current / rated value Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of thonge-over switches / for auxiliary contact Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value Installation/mounting/dimensions: built in orientation Type of fixing/fixation W 60 A 0.5 Yes O 0 10 10 10 10 10 10 10 10	Adjustable response current		
A 0.5	of the current-dependent overload release	Α	0.35 0.5
Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contact Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at 690 V / rated value Installation/mounting/dimensions: Installation/mounting/dimensions: built in orientation Type of fixing/fixation Yes O 10 10 10 10 10 10 10 10 10	Service power / at AC-3 / at 230 V / rated value	W	60
Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contact Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at 690 V / rated value Installation/mounting/dimensions: built in orientation Type of fixing/fixation Yes O 10 0 10 10 10 10 10 10 10	Continuous current / rated value	Α	0.5
Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contact Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at 690 V / rated value Installation/mounting/dimensions: built in orientation Type of fixing/fixation O availary contacts / instantaneous 0 0 4 100,000 A 100,000 A 100,000 A 100,000 Screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	Auxiliary circuit:		
Switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contact Inputs / Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at 690 V / rated value Installation/mounting/dimensions: built in orientation Type of fixing/fixation O O availiary contact / 0 0 10 0 10 10 10 10 10 10 10	Product extension / auxiliary switch		Yes
Number of change-over switches / for auxiliary contact Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at 690 V / rated value Design of the overcurrent release and short-circuit release Installation/mounting/dimensions: built in orientation Type of fixing/fixation O O O O O O O O O O O O O			0
Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value Design of the overcurrent release and short-circuit release Installation/mounting/dimensions: built in orientation Type of fixing/fixation o 0 100,000 A 100,000 A 100,000 A 100,000 A 100,000 any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715			0
Number of digital inputs Short-circuit:	Number of change-over switches / for auxiliary contact		0
Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value A 100,000 Design of the overcurrent release and short-circuit release Installation/mounting/dimensions: built in orientation Type of fixing/fixation any Screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	Inputs/ Outputs:		
Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value A 100,000 Design of the overcurrent release and short-circuit release Installation/mounting/dimensions: built in orientation Type of fixing/fixation A 100,000 A 100,000 A 100,000 A 100,000 A 100,000 A 100,000 Serious and short-circuit release Thermomagnetic any Screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	Number of digital inputs		0
 • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value Design of the overcurrent release and short-circuit release Installation/mounting/dimensions: built in orientation Type of fixing/fixation A 100,000 Stermomagnetic Serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 	Short-circuit:		
at 500 V / rated value at 690 V / rated value A 100,000 Design of the overcurrent release and short-circuit release Installation/mounting/dimensions: built in orientation Type of fixing/fixation A 100,000 A 100,000 Thermomagnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	Breaking capacity limit short-circuit current (lcu)		
• at 690 V / rated value Design of the overcurrent release and short-circuit release Installation/mounting/dimensions: built in orientation Type of fixing/fixation A 100,000 thermomagnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	• at 400 V / rated value	Α	100,000
Design of the overcurrent release and short-circuit release Installation/mounting/dimensions: built in orientation any Type of fixing/fixation screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	• at 500 V / rated value	Α	100,000
Installation/mounting/dimensions: built in orientation any Type of fixing/fixation screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	• at 690 V / rated value	А	100,000
built in orientation any Type of fixing/fixation screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	Design of the overcurrent release and short-circuit release		thermomagnetic
Type of fixing/fixation screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	Installation/mounting/dimensions:		
mounting rail according to DIN EN 60715	built in orientation		any
	Type of fixing/fixation		screw and snap-on mounting onto 35 mm standard
····	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	
• unifilar	2x (0.75 2.5 mm2), 2x (1 4 mm2)
stranded wire	2x (0.75 2.5 mm2), 2x 4 mm2
stranded wire	
 with conductor end processing 	2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2)
at AWG-conductors / for main contacts	2x (18 14), 2x 12

Certificates/approvals:			
verification of suitability	CE / UL / CSA		
• für Staubexplosionsschutz für Zone 21/22	no		
 for gas explosion protection for zone 1/2 	no		

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

Global Industry Mall (Online ordering system)

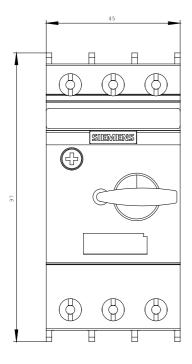
http://www.siemens.com/industrial-controls/mall

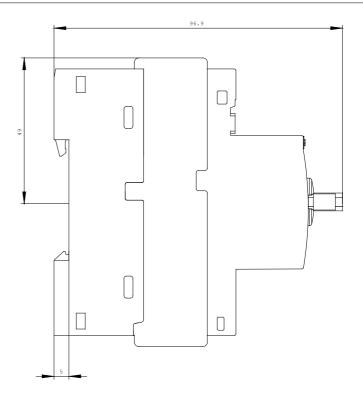
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

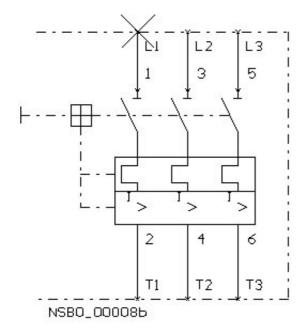
http://support.automation.siemens.com/WW/view/en/3RV2011-0FA10/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-0FA10







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