SIEMENS

Product data sheet 3RV2021-4AA15



CIRCUIT-BREAKER SZ S0,
FOR MOTOR PROTECTION, CLASS 10,
A-RELEASE 11...16A, N-RELEASE 208A,
SCREW CONNECTION,
STANDARD SW. CAPACITY,
W. TRANSVERSE AUX. SWITCH 1NO+1NC

General technical data:		
Product brand name		SIRIUS
Product designation		3RV2 circuit breaker
Size of the circuit-breaker		S0
Trip class		CLASS 10
Protection class IP / frontal/front side		IP20
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2000
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	7
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F

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Mechanical switching cycle as operating period		
• of the main contacts / typical		100000
• of the auxiliary contacts / typical		100000
Design of the auxiliary switch		transverse
Type of the driving mechanism / motor drive		No
Design of the operating mechanism		selector switch
Product function		
• overload protection		Yes
• phase disturbance recognition		Yes
Product component		
• auxiliary switch		Yes
• undervoltage release mechanism		No
• trip indicator		No
Product extension / optional / motor drive		No

Main circuit:		
Number of poles / for main current circuit		3
Operating voltage / at 3 AC / rated value / maximum	V	690
Operating current / at AC-3 / at 400 V / rated value	A	15.5
Service power / at AC-3		
• at 400 V / rated value	W	7500
• at 500 V / rated value	W	7500
• at 690 V / rated value	W	11000
Switching frequency / 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	208 … 208
• of the current-dependent overload release	A	11 … 16
Service power / at AC-3 / at 230 V / rated value	W	4000
Continuous current / rated value	A	16

Auxiliary circuit:		
Product extension / auxiliary switch		Yes
Number of NC contacts / for auxiliary contacts / instantaneous switching		1
Number of NO contacts / for auxiliary contacts / instantaneous switching		1
Number of change-over switches / for auxiliary contact		0
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	A	2.5

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• at AC-15		
• at 24 V	A	2
• at 230 V	A	0.5
• at DC-13		
• maximum	A	1
• at 24 V	A	1
• at 60 V	A	0.15

Inputs/ Outputs:		
Number of digital inputs		0

Short-circuit:		
Breaking capacity limit short-circuit current (Icu)		
• at 400 V / rated value	A	55000
• at 500 V / rated value	A	10000
• at 690 V / rated value	A	4000
Design of the fuse link / for short-circuit protection of the auxiliary switch / required		Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current Ik < 400 A)
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

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• 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
• for auxiliary and control current circuit		screw-type terminals
Type of the connectable conductor cross-section		
• for main contacts		
• unifilar		2x (1 ... 2.5 mm2), 2x (2.5 ... 10 mm2)
• stranded wire		2x (1 ... 2.5 mm2), 2x (2.5 ... 10 mm2)
• stranded wire		
• with conductor end processing		2x (1 ... 2.5 mm2), 2x (2.5 ... 6 mm2), 1x 10 mm2
• at AWG-conductors / for main contacts		2x (16 ... 12), 2x (14 ... 8)
• for auxiliary contact		
• solid		2x (0.5 ... 1.5 mm2), 2x (0.75 ... 2.5 mm2)
• stranded wire		
• with wire 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)

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		50000
T1 value / for proof test interval or service life		
• according to IEC 61508	a	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

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Further information:

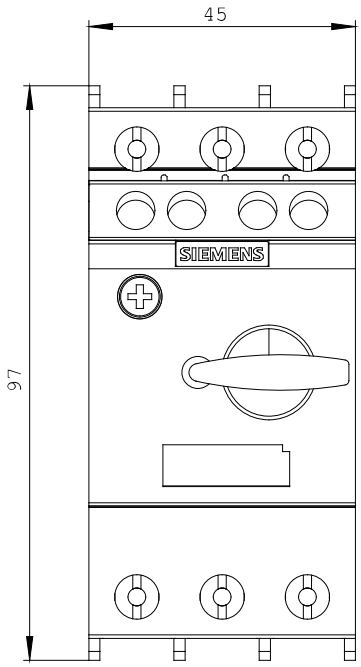
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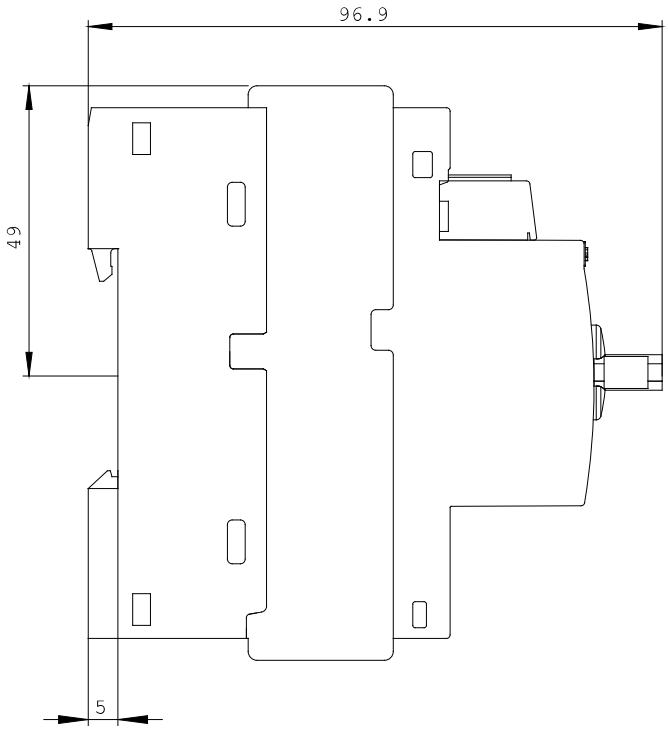
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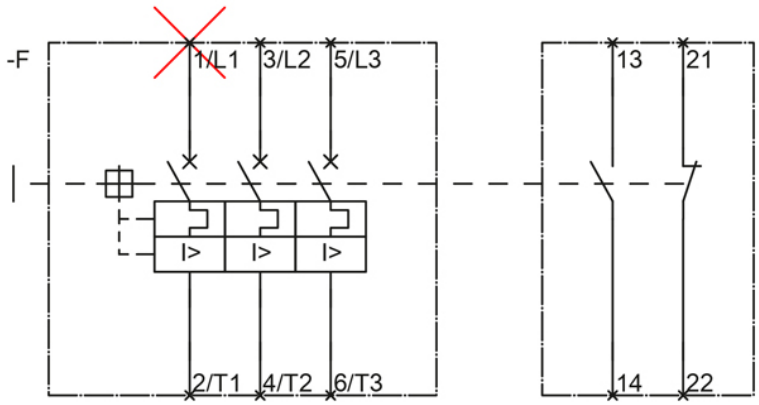
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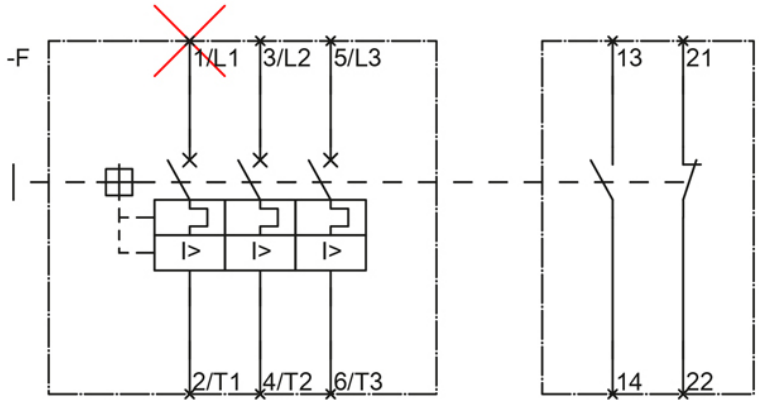
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