



CIRCUIT-BREAKER SZ S00,
FOR MOTOR PROTECTION, CLASS 10,
A-RELEASE 4.5...6.3A,
N-RELEASE 82A 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		S00
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	6
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		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	4.9
Service power / at AC-3		
• at 400 V / rated value	W	2200
• at 500 V / rated value	W	3000
• at 690 V / rated value	W	4000
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	82 ... 82
• of the current-dependent overload release	A	4.5 ... 6.3
Service power / at AC-3 / at 230 V / rated value	W	1500
Continuous current / rated value	A	6.3

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

- at AC-15
 - at 24 V
 - at 230 V
- at DC-13
 - maximum
 - at 24 V
 - at 60 V

A	2
A	0.5
A	1
A	1
A	0.15

Inputs/ Outputs:

Number of digital inputs

0

Short-circuit:

Breaking capacity limit short-circuit current (I_{cu})

- at 400 V / rated value
- at 500 V / rated value
- at 690 V / rated value

A	100000
A	100000
A	6000

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 I_k < 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
- backwards
- upwards
- downwards
- sideways

mm	0
mm	0
mm	50
mm	50
mm	0

Distance, to be maintained, to earthed part

- forwards
- backwards
- upwards
- sideways
- downwards

mm	0
mm	0
mm	50
mm	30
mm	50

Distance, to be maintained, conductive elements

- forwards
- backwards

mm	0
mm	0

- upwards
- downwards
- sideways

mm	50
mm	50
mm	30

Connections:

Product function

- removable terminal for main circuit
- removable terminal for auxiliary and control circuit

No

No

Design of the electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

Type of the connectable conductor cross-section

- for main contacts
 - unifilar
 - stranded wire
 - stranded wire
 - with conductor end processing
- at AWG-conductors / for main contacts
- for auxiliary contact
 - solid
 - stranded wire
 - with wire end processing
- for AWG conductors / for auxiliary contacts

2x (0.75 ... 2.5 mm²), 2x (1 ... 4 mm²)

2x (0.75 ... 2.5 mm²), 2x 4 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (18 ... 14), 2x 12

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14)

Certificates/approvals:

Verification of suitability

- für Staubexplosionsschutz für Zone 21/22
- for gas explosion protection for zone 1/2

CE / UL / CSA

no

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
- with high demand rate / according to SN 31920

%

40

%

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

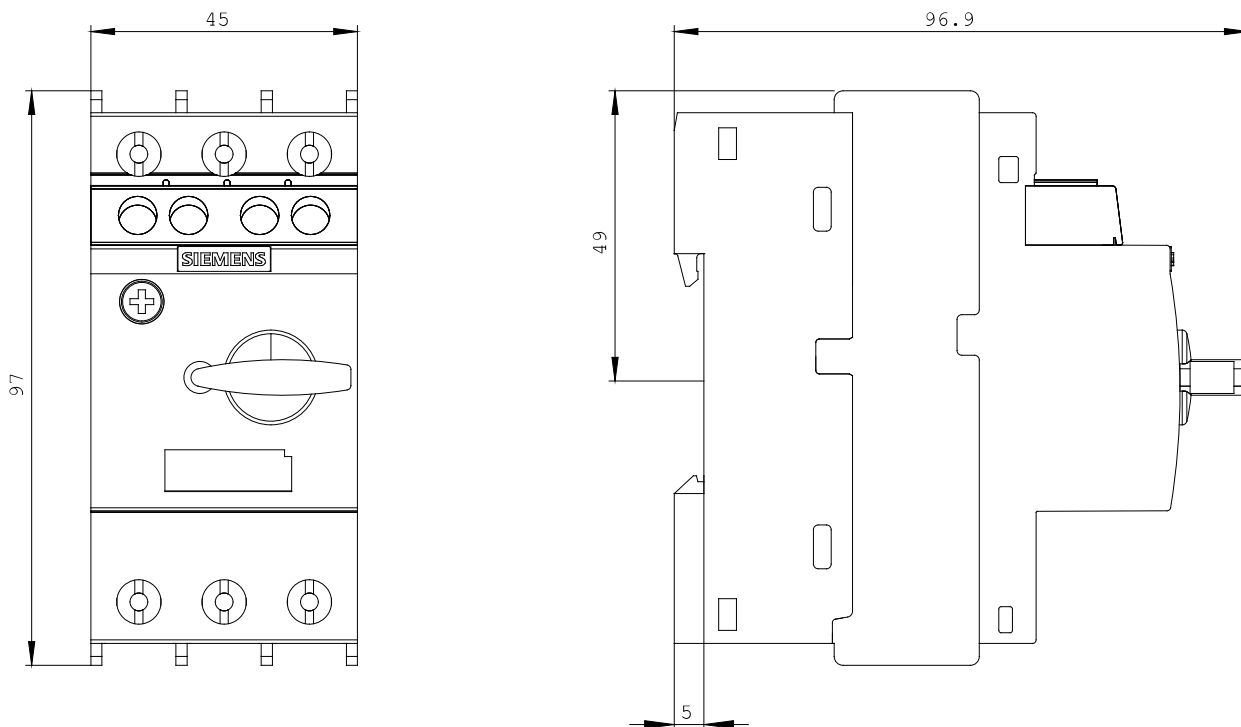
<http://www.siemens.com/cax>

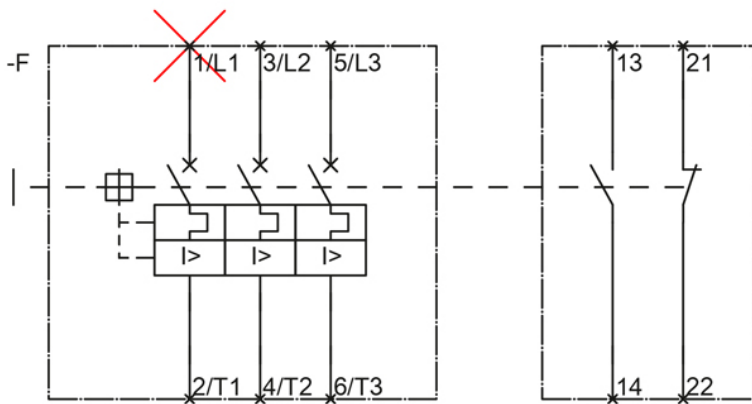
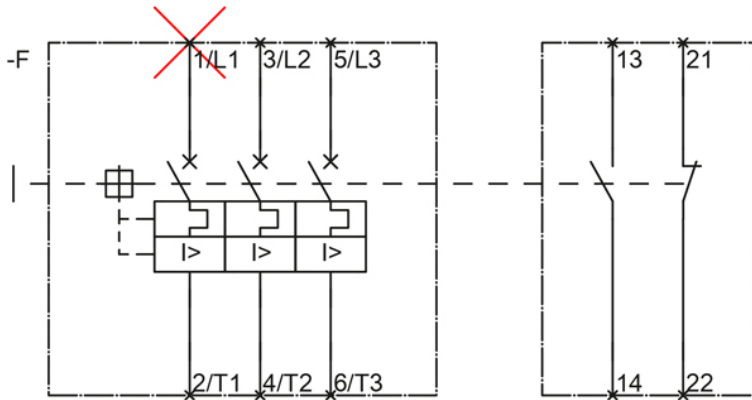
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RV2011-1GA15/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-1GA15





last change:

Sep 20, 2010