



CIRCUIT-BREAKER SZ S00,
FOR MOTOR PROTECTION, CLASS 10,
A-RELEASE 5.5...8A, N-RELEASE 104A,
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 | 7 |
| 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 | 6.5 |
| Service power / at AC-3 | | |
| • at 400 V / rated value | W | 3000 |
| • at 500 V / rated value | W | 4000 |
| • at 690 V / rated value | W | 5500 |
| 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 | 104 ... 104 |
| • of the current-dependent overload release | A | 5.5 ... 8 |
| Service power / at AC-3 / at 230 V / rated value | W | 1500 |
| Continuous current / rated value | A | 8 |

| | | |
|---|---|-----|
| 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 | 42000 |
| 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

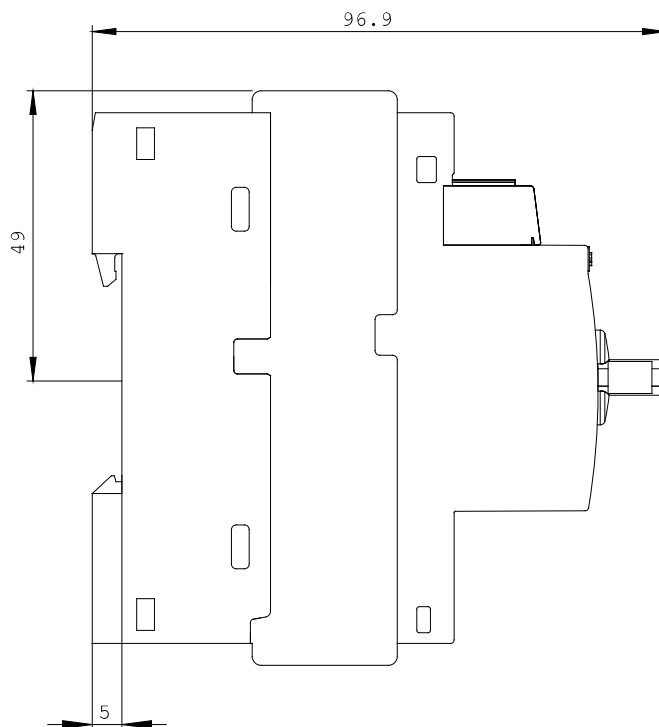
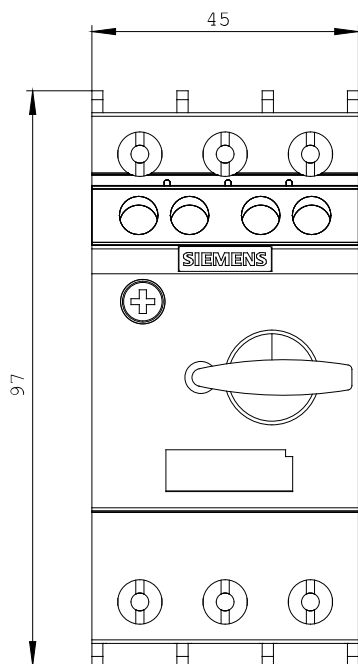
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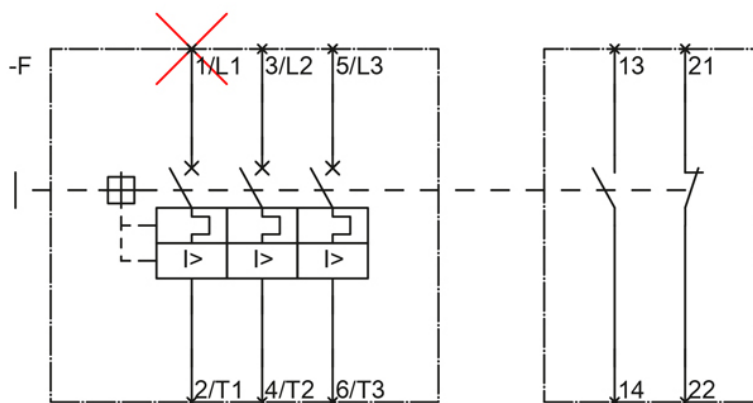
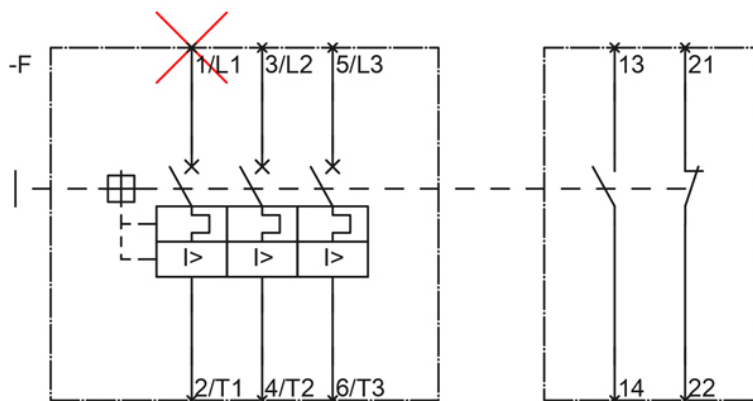
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RV2011-1HA15/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-1HA15





last change:

Sep 20, 2010