

CIRCUIT-BREAKER SZ S00,
FOR MOTOR PROTECTION, CLASS 10,
A-REL. 0.14...0.2A, N-RELEASE2.6A,
SPRING-L. CONNECTION

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 |
| 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 |

| | | |
|---|--|----|
| • 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 | 0.2 |
| Service power / at AC-3 | | |
| • at 400 V / rated value | W | 60 |
| • at 500 V / rated value | W | 60 |
| • at 690 V / rated value | W | 90 |
| 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 current-dependent overload release | A | 0.14 ... 0.2 |
| Service power / at AC-3 / at 230 V / rated value | W | 30 |
| Continuous current / rated value | A | 0.2 |

Auxiliary circuit:

| | | |
|---|--|-----|
| Product extension / auxiliary switch | | Yes |
| Number of NC contacts / for auxiliary contacts / instantaneous switching | | 0 |
| Number of NO contacts / for auxiliary contacts / instantaneous switching | | 0 |
| Number of change-over switches / for auxiliary contact | | 0 |

Inputs/ Outputs:

| | | |
|---------------------------------|--|---|
| Number of digital inputs | | 0 |
|---------------------------------|--|---|

Short-circuit:

| | | |
|---|---|----------------|
| Breaking capacity limit short-circuit current (I_{cu}) | | |
| • at 400 V / rated value | A | 100,000 |
| • at 500 V / rated value | A | 100,000 |
| • at 690 V / rated value | A | 100,000 |
| Design of the overcurrent release and short-circuit release | | thermomagnetic |

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 |
| Width | mm | 45 |

| | | |
|--|----|-----|
| Height | mm | 109 |
| Depth | mm | 91 |
| distance, to be maintained, to the ranks assembly | | |
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • upwards | mm | 50 |
| • downwards | mm | 50 |
| • sideways | mm | 0 |
| distance, to be maintained, to earthed part | | |
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • upwards | mm | 50 |
| • sideways | mm | 30 |
| • downwards | mm | 50 |
| distance, to be maintained, conductive elements | | |
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • upwards | mm | 50 |
| • downwards | mm | 50 |
| • sideways | 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 | | spring-loaded terminals |
| Type of the connectable conductor cross-section | | |
| • for main contacts | | |
| • unifilar | | 2x (0.5 ... 4 mm ²) |
| • stranded wire | | 2x (0.5 ... 4 mm ²) |
| • stranded wire | | |
| • with conductor end processing | | 2 x (0.5 ... 2.5 mm ²) |
| • without conductor final cutting | | 2x (0.5 ... 2.5 mm ²) |
| • at AWG-conductors / for main contacts | | 2x (20 ... 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 <ul style="list-style-type: none">• according to SN 31920 | | 50,000 |
| T1 value / for proof test interval or service life <ul style="list-style-type: none">• according to IEC 61508 | a | 10 |
| Failure rate (FIT value) / with low demand rate <ul style="list-style-type: none">• according to SN 31920 | FIT | 50 |
| Proportion of dangerous failures <ul style="list-style-type: none">• 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>

Global Industry Mall (Online ordering system)

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

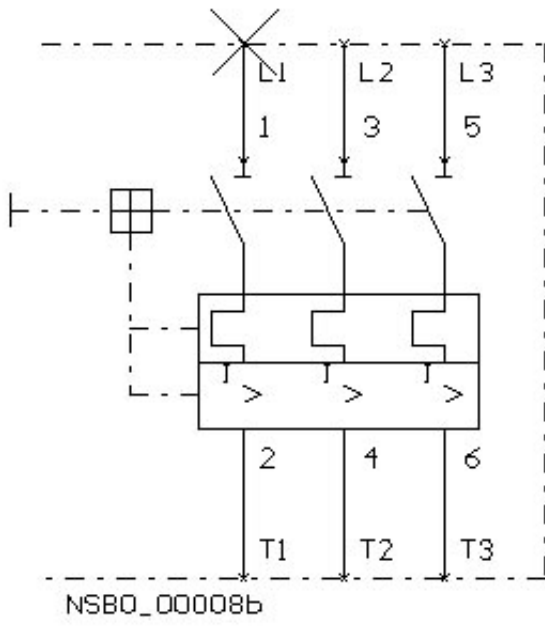
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WWW/view/en/3RV2011-0BA20/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-0BA20





last change:

Apr 26, 2010