



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 4.5...6.3A, N-RELEASE 82A SCREW CONNECTION, STANDARD SW. CAPACITY

|   |                      |
|---|----------------------|
| product brand name  | SIRIUS               |
| Product designation   | 3RV2 circuit breaker |
| <b>General technical data:</b>  |                      |
| Active power loss total typical   | 6 W                  |
| Insulation voltage  | 690 V                |
| • with degree of pollution 3 Rated value                                    |                      |
| Surge voltage resistance Rated value  | 6 kV                 |
| Mechanical service life (switching cycles)                                  |                      |
| • of the main contacts typical  | 100 000              |
| • of the auxiliary contacts typical   | 100 000              |
| Electrical endurance (switching cycles)                                     |                      |
| • typical   | 100 000              |
| Temperature compensation  | -20 ... +60 °C       |
| Size of contactor can be combined company-specific                          | S2                   |
| Protection class IP   |                      |
| • on the front  | IP20                 |
| • of the terminal   | IP20                 |
| Type of protection  | Increased safety     |
| Equipment marking   |                      |
| • acc. to DIN EN 81346-2  | Q                    |
| <b>Main circuit:</b>  |                      |
| Number of poles for main current circuit                                    | 3                    |
| Adjustable response value current of the current-dependent overload release | 4.5 ... 6.3 A        |
| Operating voltage   |                      |

|   |              |
|---|--------------|
| <ul style="list-style-type: none"> <li>• Rated value</li> </ul>   | 690 V        |
| <ul style="list-style-type: none"> <li>• at AC-3 Rated value maximum</li> </ul>   | 690 V        |
| <b>Operating frequency Rated value</b>  | 50 ... 60 Hz |
| <b>Operating current Rated value</b>  | 6.3 A        |
| <b>Operating current</b>  |              |
| <ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V Rated value</li> </ul> </li> </ul> | 6.3 A        |
| <b>Operating frequency</b>  |              |
| <ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>   | 15 1/h       |

#### Auxiliary circuit:

|  |     |
|--|-----|
| <b>Number of NC contacts</b>   |     |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul> | 0   |
| <b>Number of NO contacts</b>   |     |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul> | 0   |
| <b>Number of CO contacts</b>   |     |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul> | 0   |
| <b>Product expansion Auxiliary switch</b>                                  | Yes |

#### Protective and monitoring functions:

|   |                                    |
|---|------------------------------------|
| <b>Trip class</b>   | CLASS 10                           |
| <b>Design of the overload circuit breaker</b>   | thermal                            |
| <b>Operational short-circuit current breaking capacity (Ics) with AC</b>  |                                    |
| <ul style="list-style-type: none"> <li>• at 240 V Rated value</li> <li>• at 400 V Rated value</li> <li>• at 500 V Rated value</li> <li>• at 690 V Rated value</li> </ul>  | 100 kA<br>100 kA<br>100 kA<br>4 kA |
| <b>Maximum short-circuit current breaking capacity (Icu)</b>  |                                    |
| <ul style="list-style-type: none"> <li>• with AC at 240 V Rated value</li> <li>• with AC at 400 V Rated value</li> <li>• with AC at 500 V Rated value</li> <li>• with AC at 690 V Rated value</li> </ul>  | 100 kA<br>100 kA<br>100 kA<br>6 kA |
| <b>Breaking capacity short-circuit current (Icn)</b>  |                                    |
| <ul style="list-style-type: none"> <li>• with 1 current path for DC at 150 V Rated value</li> <li>• with 2 current paths in series for DC at 300 V Rated value</li> <li>• with 3 current paths in series for DC at 450 V Rated value</li> </ul> | 10 kA<br>10 kA<br>10 kA            |
| <b>Response value current of the instantaneous short-circuit release</b>  | 82 A                               |

#### UL/CSA ratings:

|  |       |
|--|-------|
| <b>Full-load current (FLA) for three-phase AC motor</b>                  |       |
| <ul style="list-style-type: none"> <li>• at 480 V Rated value</li> </ul> | 6.3 A |

- at 600 V Rated value

6.3 A

#### Short-circuit:

|  |            |
|--|------------|
| <b>Design of the short-circuit trip</b>  | magnetic   |
| <b>Design of the fuse link for IT network for short-circuit protection of the main circuit</b> |            |
| <ul style="list-style-type: none"> <li>• at 400 V</li> </ul>                                   | gL/gG 50 A |
| <ul style="list-style-type: none"> <li>• at 500 V</li> </ul>                                   | gL/gG 40 A |
| <ul style="list-style-type: none"> <li>• at 690 V</li> </ul>                                   | gL/gG 35 A |

#### Installation/ mounting/ dimensions:

|  |  |
|--|--|
| <b>mounting position</b>   | any  |
| <b>Mounting type</b>   | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| <b>Height</b>  | 97 mm  |
| <b>Width</b>   | 45 mm  |
| <b>Depth</b>   | 96 mm  |
| <b>Required spacing</b>  |  |
| <ul style="list-style-type: none"> <li>• with side-by-side mounting           <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul> | 0 mm<br>0 mm<br>50 mm<br>50 mm<br>0 mm   |
| <ul style="list-style-type: none"> <li>• for grounded parts           <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> </ul>         | 0 mm<br>0 mm<br>50 mm<br>30 mm<br>50 mm  |
| <ul style="list-style-type: none"> <li>• for live parts           <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul>             | 0 mm<br>0 mm<br>50 mm<br>50 mm<br>30 mm  |

#### Connections/ Terminals:

|  |                      |
|--|----------------------|
| <b>Product function</b>  |                      |
| <ul style="list-style-type: none"> <li>• removable terminal for auxiliary and control circuit</li> </ul> | No                   |
| <b>Type of electrical connection</b>   |                      |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>                             | screw-type terminals |

|   |  |
|---|--|
| <b>Arrangement of electrical connectors for main current circuit</b>  | Top and bottom   |
| <b>Type of connectable conductor cross-section</b>  |  |
| <ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG conductors for main contacts</li> </ul> | 2x (0,75 ... 2,5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (18 ... 14), 2x 12 |
| <b>Design of screwdriver shaft</b>  | Diameter 5 to 6 mm   |
| <b>Design of the thread of the connection screw</b>   |  |
| <ul style="list-style-type: none"> <li>• for main contacts</li> </ul>   | M3   |

#### Safety related data:

|   |              |
|---|--------------|
| <b>B10 value with high demand rate acc. to SN 31920</b>   | 50 000       |
| <b>Proportion of dangerous failures</b>   |              |
| <ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> <li>• with high demand rate acc. to SN 31920</li> </ul> | 40 %<br>40 % |
| <b>T1 value for proof test interval or service life acc. to IEC 61508</b>   | 10 y         |
| <b>Protection against electrical shock</b>  | finger-safe  |

#### Mechanical data:

|                                    |     |
|------------------------------------|-----|
| <b>Size of the circuit-breaker</b> | S00 |
|------------------------------------|-----|

#### Ambient conditions:

|  |  |
|--|--|
| <b>Installation altitude at height above sea level maximum</b>   | 2 000 m  |
| <b>Ambient temperature</b>   |  |
| <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul> | -20 ... +60 °C<br>-50 ... +80 °C<br>-50 ... +80 °C |
| <b>Relative humidity during operation</b>  | 10 ... 95 %  |

#### Display:

|  |        |
|--|--------|
| <b>Display version</b>   |        |
| <ul style="list-style-type: none"> <li>• for switching status</li> </ul> | Handle |

#### Certificates/ approvals:

|                          |                                |
|--------------------------|--------------------------------|
| General Product Approval | For use in hazardous locations |
|--------------------------|--------------------------------|



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|                           |                   |                   |
|---------------------------|-------------------|-------------------|
| Declaration of Conformity | Test Certificates | Shipping Approval |
|---------------------------|-------------------|-------------------|



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### Shipping Approval



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### Further information

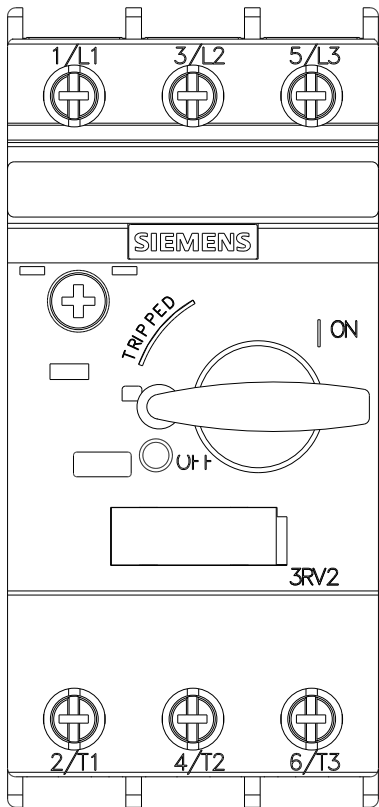
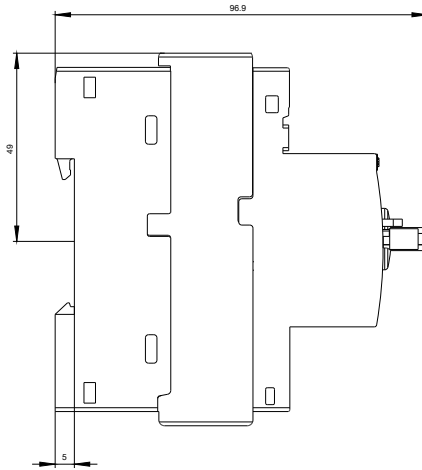
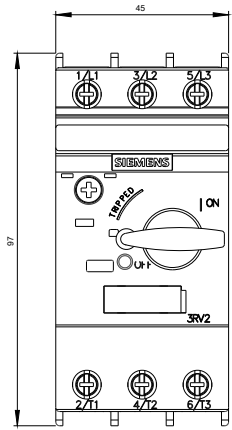
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