



CIRCUIT BREAKER, SIZE S2, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 14...20A, N-RELEASE 260A, SCREW TERMINAL, INCREASED SWITCHING CAPACITY

Figure similar

|                     |  |                      |
|---------------------|--|----------------------|
| product brand name  |  | SIRIUS               |
| Product designation |  | 3RV2 circuit breaker |

### General technical data:

|   |    |                   |
|---|----|-------------------|
| <b>Active power loss total typical</b>                    | W  | 12                |
| <b>Insulation voltage</b>                                 |    |                   |
| • with degree of pollution 3 Rated value                  | V  | 690               |
| <b>Shock resistance</b>                                   |    |                   |
| • acc. to IEC 60068-2-27                                  |    | 25g / 11 ms Sinus |
| <b>Surge voltage resistance Rated value</b>               | kV | 6                 |
| <b>Mechanical service life (switching cycles)</b>         |    |                   |
| • of the main contacts typical                            |    | 50 000            |
| • of the auxiliary contacts typical                       |    | 50 000            |
| <b>Electrical endurance (switching cycles)</b>            |    |                   |
| • typical   |    | 50 000            |
| <b>Temperature compensation</b>                           | °C | -20 ... +60       |
| <b>Size of contactor can be combined company-specific</b> |    | S2                |
| <b>Protection class IP</b>                                |    |                   |
| • on the front  |    | IP20              |
| • of the terminal   |    | IP00              |
| <b>Equipment marking</b>                                  |    |                   |
| • acc. to DIN EN 81346-2                                  |    | Q                 |

### Main circuit:

|  |   |           |
|--|---|-----------|
| <b>Number of poles for main current circuit</b>                                    |   | 3         |
| <b>Adjustable response value current of the current-dependent overload release</b> | A | 14 ... 20 |

|                                      |     |           |
|--------------------------------------|-----|-----------|
| <b>Operating voltage</b>             |     |           |
| • Rated value                        | V   | 690       |
| • at AC-3 Rated value maximum        | V   | 690       |
| Operating frequency Rated value      | Hz  | 50 ... 60 |
| <b>Operating current Rated value</b> | A   | 20        |
| <b>Operating current</b>             |     |           |
| • at AC-3                            |     |           |
| — at 400 V Rated value               | A   | 20        |
| <b>Operating power</b>               |     |           |
| • at AC-3                            |     |           |
| — at 230 V Rated value               | W   | 5 500     |
| — at 400 V Rated value               | W   | 7 500     |
| — at 500 V Rated value               | W   | 11 000    |
| — at 690 V Rated value               | W   | 15 000    |
| <b>Operating frequency</b>           |     |           |
| • at AC-3 maximum                    | 1/h | 15        |

#### Auxiliary circuit:

|   |  |     |
|---|--|-----|
| <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> |    |          |
| • at 240 V Rated value   | A  | 100      |
| • at 400 V Rated value   | kA | 50       |
| • at 500 V Rated value   | kA | 10       |
| • at 690 V Rated value   | kA | 5        |
| <b>Maximum short-circuit current breaking capacity (Icu)</b>             |    |          |
| • with AC at 240 V Rated value   | kA | 100      |
| • with AC at 400 V Rated value   | kA | 100      |
| • with AC at 500 V Rated value   | kA | 18       |
| • with AC at 690 V Rated value   | kA | 8        |
| <b>Response value current of the instantaneous short-circuit release</b> | A  | 260      |

#### UL/CSA ratings:

|   |              |     |
|---|--------------|-----|
| <b>Full-load current (FLA) for three-phase AC motor</b> |              |     |
| • at 480 V Rated value                                  | A            | 20  |
| • at 600 V Rated value                                  | A            | 20  |
| <b>yielded mechanical performance [hp]</b>              |              |     |
| • for single-phase AC motor at 110/120 V Rated value    | metric<br>hp | 1.5 |

- for single-phase AC motor at 230 V Rated value
- for three-phase AC motor at 200/208 V Rated value
- for three-phase AC motor at 220/230 V Rated value
- for three-phase AC motor at 460/480 V Rated value
- for three-phase AC motor at 575/600 V Rated value

|           |     |
|-----------|-----|
| metric hp | 3   |
| metric hp | 7.5 |
| metric hp | 7.5 |
| metric hp | 15  |
| metric hp | 20  |

#### Short-circuit:

|  |  |                                  |
|--|--|----------------------------------|
| <b>Product function Short circuit protection</b>   |  | Yes                              |
| <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 240 V</li> <li>• at 400 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul> |  | none required<br>100<br>80<br>63 |

#### 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>   | mm | 140  |
| <b>Width</b>  | mm | 55   |
| <b>Depth</b>  | mm | 149  |
| <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> <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> <li>• for live parts               <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> </ul> </li> </ul> | mm | 0<br>0<br>50<br>50<br>0<br><br>0<br>0<br>50<br>10<br>50<br><br>0<br>0                  |

|               |    |    |
|---------------|----|----|
| — upwards     | mm | 50 |
| — downwards   | mm | 50 |
| — at the side | mm | 10 |

#### Connections/ Terminals:

|  |     |  |
|--|-----|--|
| <b>Type of electrical connection</b>                                 |     | screw-type terminals   |
| • for main current circuit   |     |  |
| <b>Arrangement of electrical connectors for main current circuit</b> |     | Top and bottom   |
| <b>Product function</b>  |     | No   |
| • removable terminal for auxiliary and control circuit               |     |  |
| <b>Type of connectable conductor cross-section</b>                   |     |  |
| • for main contacts  |     |  |
| — single or multi-stranded   |     | 2x (1 ... 35 mm <sup>2</sup> ), 1x (1 ... 50 mm <sup>2</sup> ) |
| — finely stranded with core end processing                           |     | 2x (1 ... 25 mm <sup>2</sup> ), 1x (1 ... 35 mm <sup>2</sup> ) |
| • for AWG conductors for main contacts                               |     | 2x (18 ... 2), 1x (18 ... 1)                                   |
| <b>Tightening torque</b>   |     |  |
| • for main contacts with screw-type terminals                        | N·m | 3 ... 4.5  |
| <b>Design of screwdriver shaft</b>                                   |     | Diameter 5 to 6 mm   |
| <b>Design of the thread of the connection screw</b>                  |     |  |
| • for main contacts  |     | M6   |

#### Safety related data:

|  |  |  |
|--|--|--|
| <b>Protection against electrical shock</b> |  | finger-safe when touched vertically from front acc. to IEC 60529 |
|--|--|--|

#### Mechanical data:

|                                    |  |    |
|------------------------------------|--|----|
| <b>Size of the circuit-breaker</b> |  | S2 |
|------------------------------------|--|----|

#### Ambient conditions:

|  |    |             |
|--|----|-------------|
| <b>Installation altitude at height above sea level maximum</b> | m  | 2 000       |
| <b>Ambient temperature</b>                                     |    |             |
| • during operation   | °C | -20 ... +60 |
| • during storage   | °C | -50 ... +80 |
| • during transport   | °C | -50 ... +80 |
| <b>Relative humidity during operation</b>                      | %  | 10 ... 95   |

#### Display:

|                        |  |        |
|------------------------|--|--------|
| <b>Display version</b> |  |        |
| • for switching status |  | Handle |

#### Certificates/ approvals:



CSA



UL

[Confirmation](#)[Environmental  
Confirmations](#)

## Further information

### Information- and Downloadcenter (Catalogs, Brochures,...)

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

### Industry Mall (Online ordering system)

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

### Cax online generator

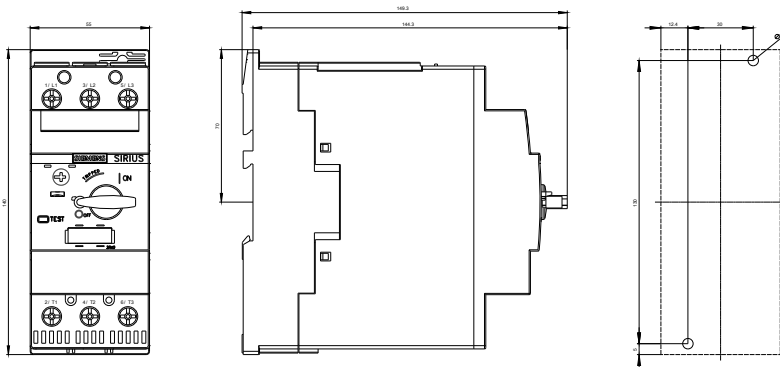
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RV20324BA10>

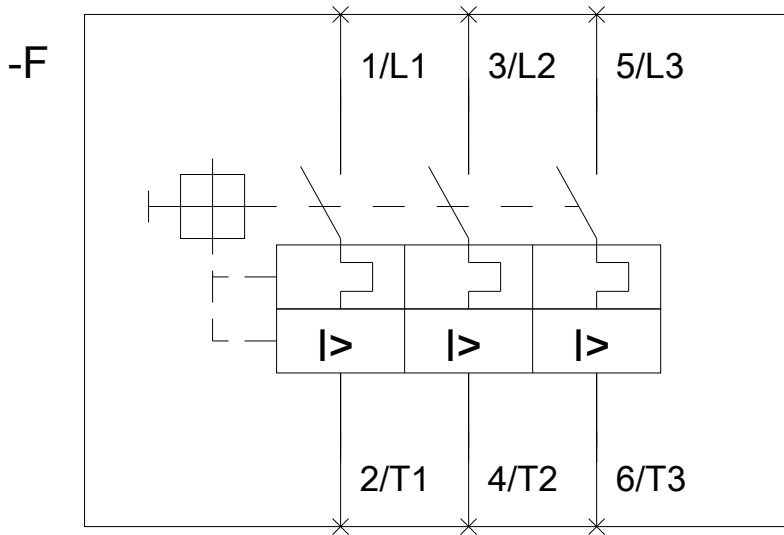
### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RV20324BA10/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RV20324BA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RV20324BA10&lang=en)





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