



CIRCUIT BREAKER, SIZE S2,
FOR MOTOR PROTECTION, CLASS 20,
A-RELEASE 35...45A, N-RELEASE 650A,
SCREW TERMINAL,
STANDARD BREAKING CAPACITY

| General technical data: | | |
|--|--|----------------------|
| product brand name | | SIRIUS |
| Product designation | | 3RV2 circuit breaker |
| Size of the circuit-breaker | | S2 |
| Size of contactor / can be combined / company-specific | | S2 |
| Number of poles / for main current circuit | | 3 |
| Product function | | |
| • Short circuit protection | | Yes |
| • overload protection | | Yes |
| • Phase failure detection | | Yes |
| • motor protection | | Yes |
| • Disconnecter functionality | | Yes |
| • Main switches with supply disconnect function and EM-STOP switches | | Yes |
| Design of the operating mechanism | | selector switch |
| Product component | | |
| • Auxiliary switch | | No |
| • undervoltage release | | No |
| • Trip indicator | | No |
| Product expansion | | |
| • Auxiliary switch | | Yes |

| | | |
|--|----|-------------------|
| • optional / motor drive | | No |
| Insulation voltage / with degree of pollution 3 / Rated value | V | 690 |
| Surge voltage resistance / Rated value | kV | 6 |
| Protection class IP | | |
| • of the terminal | | IP00 |
| • on the front | | IP20 |
| Protection against electrical shock | | finger-safe |
| Installation altitude / at height above sea level / maximum | m | 2,000 |
| Relative humidity | | |
| • during operation | % | 10 ... 95 |
| Ambient temperature | | |
| • during transport | °C | -50 ... +80 |
| • during storage | °C | -50 ... +80 |
| • during operation | °C | -20 ... +60 |
| Shock resistance / acc. to IEC 60068-2-27 | | 25g / 11 ms Sinus |
| Usage category | | |
| • acc. to IEC 60947-4-1 | | AC-3 |
| • acc. to IEC 60947-2 | | A |
| Active power loss / total / typical | W | 17 |

Main circuit:

| | | |
|---|----|-----------|
| Operating current / Rated value | A | 45 |
| Operating voltage / Rated value | V | 690 |
| Type of voltage / for main current circuit | | AC/DC |
| Operating frequency | | |
| • Rated value | Hz | 50 ... 60 |
| Operating current / at AC-3 / at 400 V / Rated value | A | 45 |

Protective and monitoring functions:

| | | |
|--|----|-----------|
| Design of the overload circuit breaker | | thermal |
| Adjustable response value current / of the current-dependent overload release | A | 35 ... 45 |
| Trip class | | CLASS 20 |
| Design of the short-circuit trip | | magnetic |
| Response value current / of the instantaneous short-circuit release | A | 650 |
| Operational short-circuit current breaking capacity (Ics) / with AC | | |
| • at 240 V / Rated value | A | 100 |
| • at 400 V / Rated value | kA | 30 |
| • at 500 V / Rated value | kA | 5 |

| | | |
|--|----|---------------|
| • at 690 V / Rated value | kA | 2 |
| Maximum short-circuit current breaking capacity (Icu) | | |
| • with AC / at 240 V / Rated value | kA | 100 |
| • with AC / at 400 V / Rated value | kA | 65 |
| • with AC / at 500 V / Rated value | kA | 10 |
| • with AC / at 690 V / Rated value | kA | 4 |
| Design of the fuse link / for IT network / for short-circuit protection of the main circuit | | |
| • at 240 V | | none required |
| • at 500 V | | 100 |
| • at 690 V | | 80 |

Installation/ mounting/ dimensions:

| | | |
|--------------------------|----|--|
| Mounting type | | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| mounting position | | any |
| Depth | mm | 149 |
| Height | mm | 140 |
| Width | mm | 55 |

Connections/ terminals:

| | | |
|--|--|--------------------------------------|
| Arrangement of electrical connectors / for main current circuit | | Top and bottom |
| Design of the electrical connection / for main current circuit | | screw-type terminals |
| Type of connectable conductor cross-section | | |
| • for main contacts | | |
| • single or multi-stranded | | 2x (1 ... 25 mm²), 1x (1 ... 35 mm²) |
| • finely stranded | | |
| • with core end processing | | 2x (1 ... 16 mm²), 1x (1 ... 25 mm²) |
| • for AWG conductors / for main contacts | | 2x (18 ... 3), 1x (18 ... 2) |

UL/CSA ratings:

| | | |
|---|---|-----|
| Operating voltage / acc. to UL 60947 / Rated value | V | 600 |
| Full-load current (FLA) / for three-phase AC motor | | |
| • at 480 V / Rated value | A | 45 |
| • at 600 V / Rated value | A | 45 |

Certificates/ approvals:

| | |
|---------------------------------|--------------|
| General Product Approval | other |
|---------------------------------|--------------|



[Confirmation](#)

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

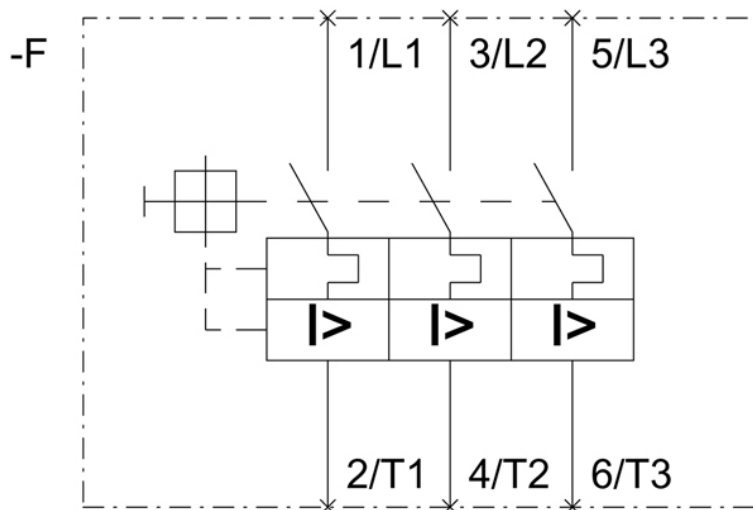
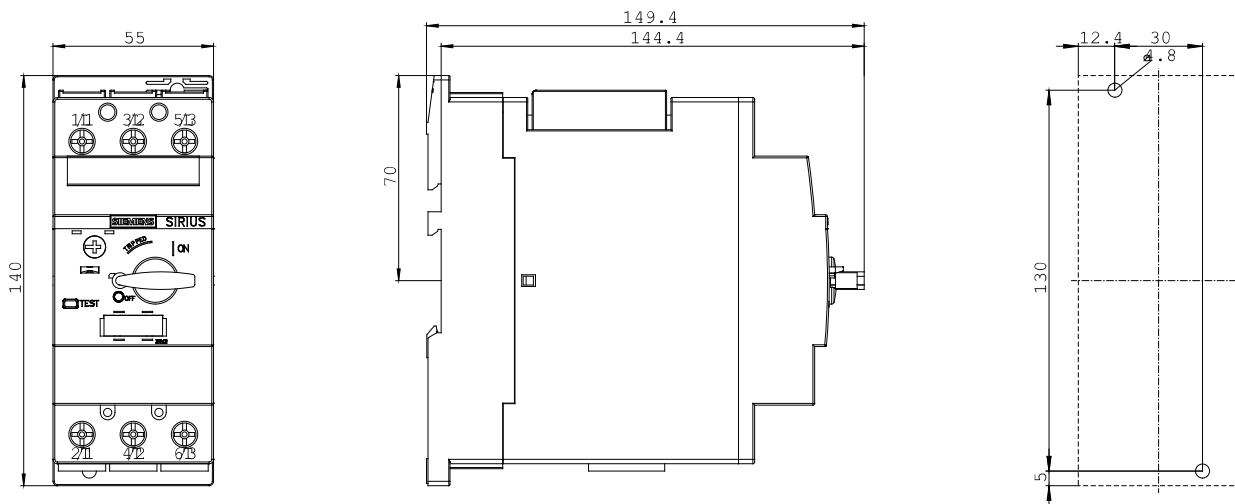
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RV2031-4VB10/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2031-4VB10



last change:

Dec 18, 2014