

CIRCUIT-BREAKER, SIZE S00, FOR MOTOR PROTECTION, CLASS 10, A REL.5.5...8 A, N REL.104 A, 1NO + 1NC TRANSVERSE, SCREW CONN., STANDARD BREAKING CAPAC.



Figure similar

| | |
|--------------------------|----------------------|
| product brandname | SIRIUS |
| Product designation | Circuit breaker |
| Design of the product | For motor protection |
| Product type designation | 3RV1 |

| General technical data | |
|---|-------|
| Size of the circuit-breaker | S00 |
| Size of contactor can be combined company-specific | S00 |
| Product extension | Yes |
| • Auxiliary switch | Yes |
| Power loss [W] total typical | 7 W |
| Insulation voltage with degree of pollution 3 rated value | 690 V |
| Surge voltage resistance rated value | 6 kV |
| maximum permissible voltage for safe isolation | |
| • in networks with grounded star point between main and auxiliary circuit | 400 V |
| • in networks with grounded star point between main and auxiliary circuit | 400 V |

| | |
|---|------------------|
| Protection class IP | |
| • on the front | IP20 |
| • of the terminal | IP00 |
| Mechanical service life (switching cycles) | |
| • of the main contacts typical | 100 000 |
| • of auxiliary contacts typical | 100 000 |
| Electrical endurance (switching cycles) | |
| • typical | 100 000 |
| Type of protection | Increased safety |
| Protection against electrical shock | finger-safe |
| Equipment marking acc. to DIN EN 81346-2 | Q |

Ambient conditions

| | |
|---------------------------------|----------------|
| Ambient temperature | |
| • during operation | -20 ... +60 °C |
| • during storage | -50 ... +80 °C |
| • during transport | -50 ... +80 °C |
| Temperature compensation | -20 ... +60 °C |

Main circuit

| | |
|---|--------------|
| Number of poles for main current circuit | 3 |
| Adjustable pick-up value current of the current-dependent overload release | 5.5 ... 8 A |
| Operating voltage | |
| • rated value | 690 V |
| • at AC-3 rated value maximum | 690 V |
| Operating frequency rated value | 50 ... 60 Hz |
| Operating current rated value | 8 A |
| Operating current | |
| • at AC-3 | |
| — at 400 V rated value | 8 A |
| Operating power | |
| • at AC-3 | |
| — at 230 V rated value | 1 500 W |
| — at 400 V rated value | 3 000 W |
| — at 500 V rated value | 4 000 W |
| — at 690 V rated value | 5 500 W |
| Operating frequency | |
| • at AC-3 maximum | 15 1/h |

Auxiliary circuit

| | |
|---------------------------------------|------------|
| Design of the auxiliary switch | transverse |
| Number of NC contacts | |
| • for auxiliary contacts | 1 |

| | |
|---|--------|
| — Note | 1 |
| Number of NO contacts | |
| • for auxiliary contacts | 1 |
| — Note | 1 |
| Number of CO contacts | |
| • for auxiliary contacts | 0 |
| Operating current of auxiliary contacts at AC-15 | |
| • at 24 V | 2 A |
| • at 110 V | 2 A |
| • at 120 V | 2 A |
| • at 125 V | 2 A |
| • at 230 V | 0.5 A |
| Operating current of auxiliary contacts at DC-13 | |
| • at 24 V | 1 A |
| • at 60 V | 0.15 A |

Protective and monitoring functions

| | |
|--|-----------|
| Product function | |
| • Ground fault detection | No |
| • Phase failure detection | Yes |
| Trip class | CLASS 10 |
| Design of the overload release | thermal |
| Operational short-circuit current breaking capacity (Ics) at AC | |
| • at 240 V rated value | 100 000 A |
| • at 400 V rated value | 12 500 A |
| • at 500 V rated value | 3 000 A |
| • at 690 V rated value | 2 000 A |
| Maximum short-circuit current breaking capacity (Icu) | |
| • at AC at 240 V rated value | 100 kA |
| • at AC at 400 V rated value | 50 kA |
| • at AC at 500 V rated value | 3 kA |
| • at AC at 690 V rated value | 2 kA |
| Breaking capacity short-circuit current (Icn) | |
| • at 1 current path at DC at 150 V rated value | 10 kA |
| • with 2 current paths in series at DC at 300 V rated value | 10 kA |
| • with 3 current paths in series at DC at 450 V rated value | 10 kA |

UL/CSA ratings

| | |
|---|-----|
| Full-load current (FLA) for three-phase AC motor | |
| • at 480 V rated value | 8 A |

| | |
|---|--|
| <ul style="list-style-type: none"> • at 600 V rated value | 8 A |
| Yielded mechanical performance [hp] | |
| <ul style="list-style-type: none"> • for single-phase AC motor <ul style="list-style-type: none"> — at 110/120 V rated value — at 230 V rated value • for three-phase AC motor <ul style="list-style-type: none"> — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value | 0.333 hp 1 hp 2 hp 2 hp 5 hp 5 hp |
| Contact rating of auxiliary contacts according to UL | C300 / R300 |

| Short-circuit protection | |
|--|--|
| Product function Short circuit protection | Yes |
| Design of the short-circuit trip | magnetic |
| Design of the fuse link | |
| <ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required | fuse gG: 10 A, miniature circuit breaker C 6 A (short-circuit current $I_k < 400$ A) |
| Design of the fuse link for IT network for short-circuit protection of the main circuit | |
| <ul style="list-style-type: none"> • at 240 V • at 400 V • at 500 V • at 690 V | gL/gG 80 A gL/gG 63 A gL/gG 40 A gL/gG 40 A |

| Installation/ mounting/ dimensions | |
|------------------------------------|--|
| Mounting position | any |
| Mounting type | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| Height | 90 mm |
| Width | 45 mm |
| Depth | 81 mm |

| Connections/Terminals | |
|---|--|
| Product function | |
| <ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit | No |
| Type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit | screw-type terminals screw-type terminals |
| Arrangement of electrical connectors for main current circuit | Top and bottom |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded | 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x (1 ... 4 mm ²) |

| | |
|---|---|
| — finely stranded with core end processing | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) |
| Type of connectable conductor cross-sections | |
| • for auxiliary contacts | |
| — single or multi-stranded | 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) |
| Tightening torque | |
| • for main contacts with screw-type terminals | 0.8 ... 1.2 N·m |
| • for auxiliary contacts with screw-type terminals | 0.8 ... 1.2 N·m |

Safety related data

| | |
|--|---------------|
| B10 value | |
| • with high demand rate acc. to SN 31920 | 5 000 |
| Proportion of dangerous failures | |
| • with low demand rate acc. to SN 31920 | 50 % |
| • with high demand rate acc. to SN 31920 | 50 % |
| Failure rate [FIT] | |
| • with low demand rate acc. to SN 31920 | 50 FIT |
| Display version | |
| • for switching status | Rocker switch |

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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|-------------------|-------|
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| Further information |
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Information- and Downloadcenter (Catalogs, Brochures,...)

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV1011-1HA15>

Cax online generator

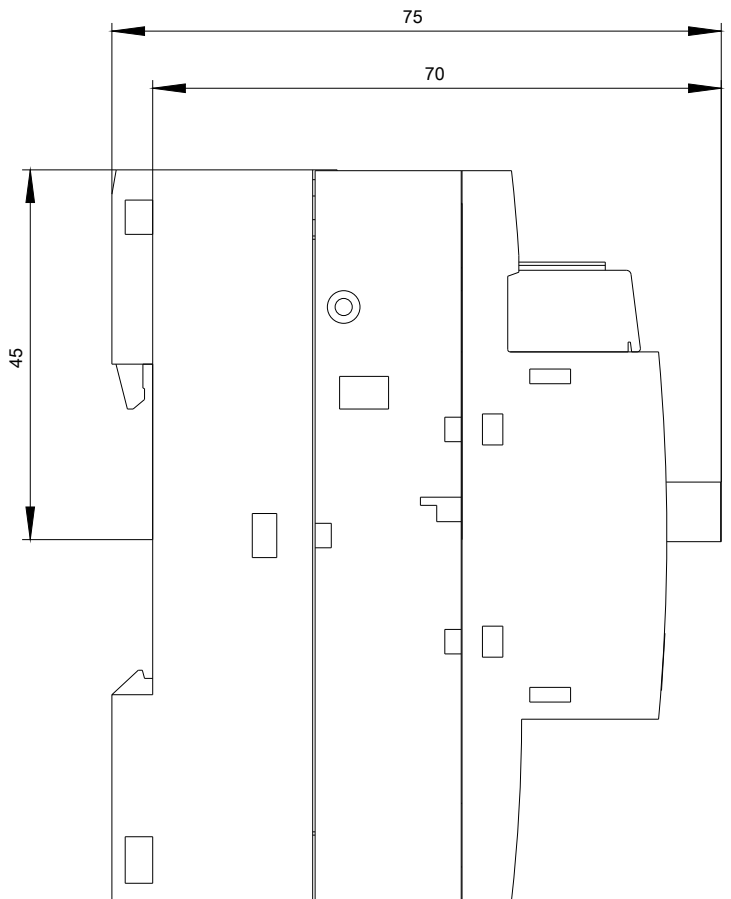
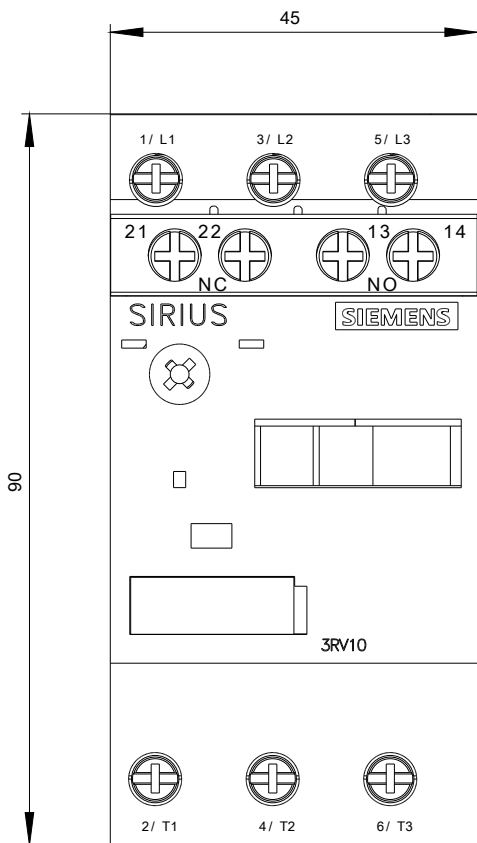
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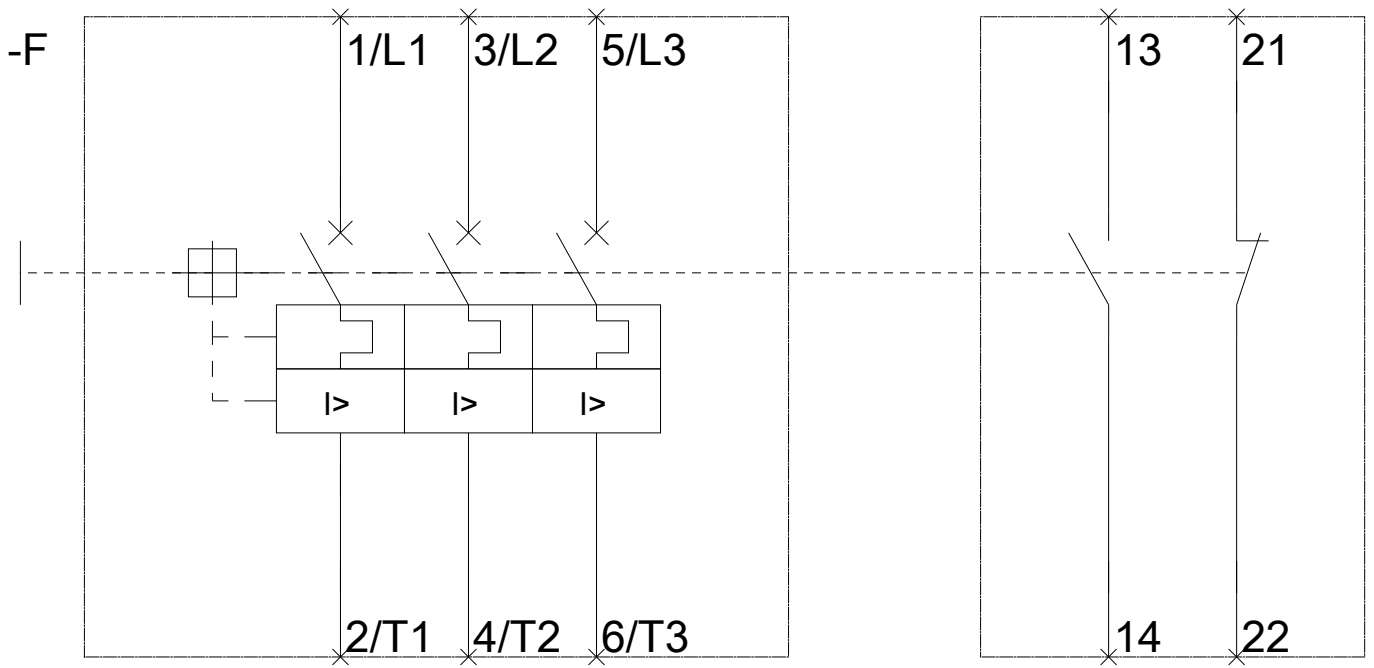
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1HA15>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1HA15&lang=en





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