

Circuit breaker size S3 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 20 A N-release 260 A Screw terminal Standard switching capacity



Figure similar

| | |
|------------------------------|--|
| Product brand name | SIRIUS |
| Product designation | circuit breaker |
| Design of the product | for plant protection according to UL 489/CSA C22.2 No.5-02 |

General technical data

| | |
|---|-------------|
| Product extension | |
| • Auxiliary switch | Yes |
| Power loss [W] total typical | 12 W |
| Surge voltage resistance rated value | 6 000 V |
| Protection class IP | |
| • on the front | IP20 |
| Shock resistance | 25g / 11 ms |
| Mechanical service life (switching cycles) | |
| • of the main contacts typical | 50 000 |
| Continuous current rated value | 20 A |

Ambient conditions

| | |
|--|---------|
| Installation altitude at height above sea level | |
| • maximum | 2 000 m |

| | |
|--|----------------|
| Ambient temperature | |
| <ul style="list-style-type: none"> during operation | -20 ... +60 °C |
| <ul style="list-style-type: none"> during storage | -50 ... +80 °C |
| <ul style="list-style-type: none"> during transport | -50 ... +80 °C |

Main circuit

| | |
|---|-------------|
| Number of poles for main current circuit | 3 |
| Adjustable pick-up value current of the current-dependent overload release | 20 ... 20 A |
| Operating voltage | |
| <ul style="list-style-type: none"> rated value | 690 V |
| <ul style="list-style-type: none"> at AC-3 rated value maximum | 690 V |
| Operating current | |
| <ul style="list-style-type: none"> at AC-3 <ul style="list-style-type: none"> — at 400 V rated value | 20 A |
| Operating frequency | |
| <ul style="list-style-type: none"> at AC-3 maximum | 15 1/h |

Auxiliary circuit

| | |
|--|---|
| Number of CO contacts | |
| <ul style="list-style-type: none"> for auxiliary contacts | 0 |

Protective and monitoring functions

| | |
|--|--------|
| Product function | |
| <ul style="list-style-type: none"> Ground fault detection | No |
| <ul style="list-style-type: none"> Phase failure detection | No |
| Maximum short-circuit current breaking capacity (I_{cu}) | |
| <ul style="list-style-type: none"> at AC at 240 V rated value | 100 kA |
| <ul style="list-style-type: none"> at AC at 400 V rated value | 100 kA |
| <ul style="list-style-type: none"> at AC at 500 V rated value | 30 kA |
| <ul style="list-style-type: none"> at AC at 690 V rated value | 12 kA |
| <ul style="list-style-type: none"> at 480 AC Y/277 V acc. to UL 489 rated value | 65 kA |

Short-circuit protection

| | |
|--|----------------|
| Design of the overcurrent release and short-circuit release | thermomagnetic |
|--|----------------|

Installation/ mounting/ dimensions

| | |
|--|--|
| Mounting position | any |
| Mounting type | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| Height | 168 mm |
| Width | 70 mm |
| Depth | 174 mm |
| Required spacing | |
| <ul style="list-style-type: none"> with side-by-side mounting | |

- Backwards
- at the side









0 mm

0 mm

Connections/Terminals

| | |
|---|--|
| Product function | No |
| <ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit | |
| Type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit | <p>screw-type terminals with box terminals</p> <p>screw-type terminals</p> |
| Arrangement of electrical connectors for main current circuit | front side |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — stranded — finely stranded with core end processing • at AWG conductors for main contacts | <p>2x (2.5 ... 16 mm²)</p> <p>2x (10 ... 50 mm²), 1x (10 ... 70 mm²)</p> <p>2x (2.5 ... 35 mm²), 2.5 ... 50 mm²</p> <p>2x (10 ... 1), 1x (10 ... 2)</p> |

Certificates/approvals

| General Product Approval | | | Declaration of Conformity | Test Certificates |
|---|---|---|---|---|
|  |  |  |  |  |
| CCC | CSA | UL | EG-Konf. | Special Test Certificate |
| Marine / Shipping | | other | | |
|  |  | Miscellaneous | Confirmation |  |
| ABS | RMRS | | | VDE |

Further information

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=3RV1742-5CD10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1742-5CD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1742-5CD10>

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

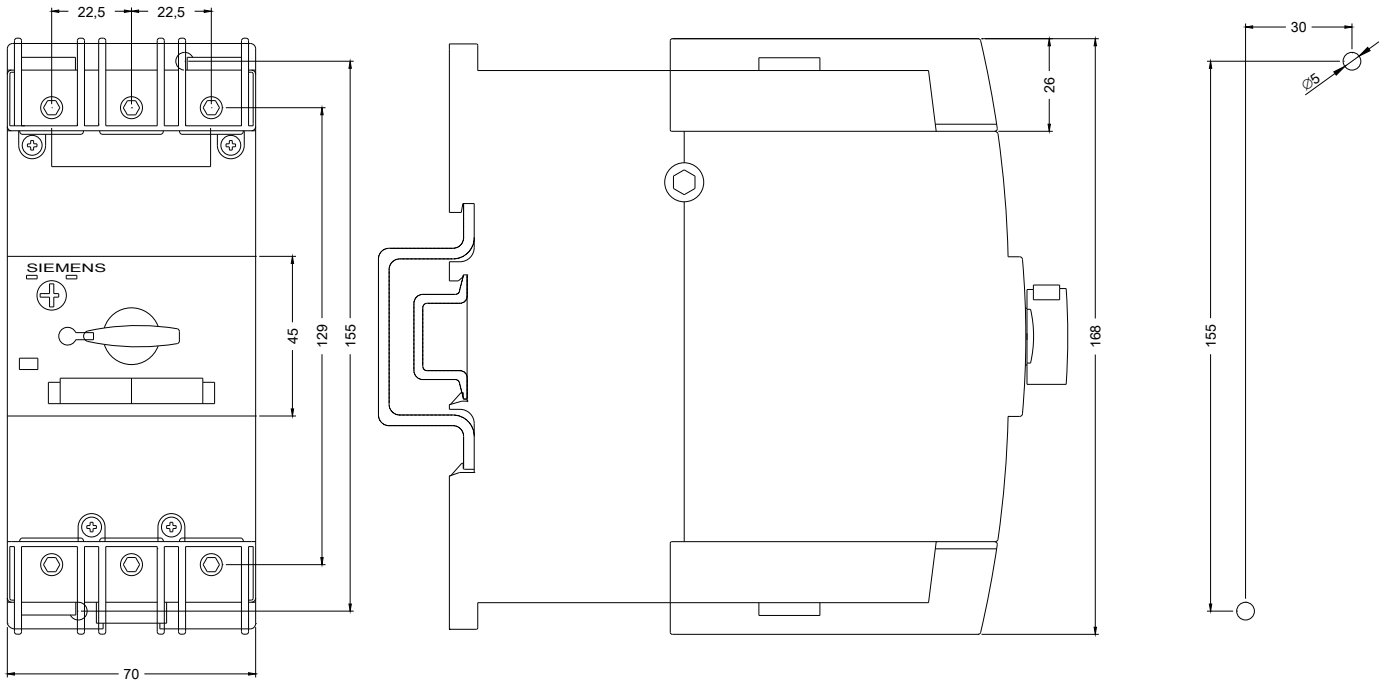
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1742-5CD10&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1742-5CD10/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1742-5CD10&objecttype=14&gridview=view1>



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