



Circuit breaker size S00 for motor protection, CLASS 10 A-release
0.22...0.32 A N-release 4.2 A Screw terminal Standard switching capacity
with transverse auxiliary switch 1 NO+1 NC

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| product brand name | 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 auxiliary switch | Yes |
| power loss [W] for rated value of the current | |
| • at AC in hot operating state | 5.5 W |
| • at AC in hot operating state per pole | 1.8 W |
| insulation voltage with degree of pollution 3 at AC rated value | 690 V |
| surge voltage resistance rated value | 6 kV |
| 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 |
| reference code according to IEC 81346-2 | Q |
| Substance Prohibition (Date) | 01/01/2013 |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| • during operation | -20 ... +60 °C |
| • during storage | -50 ... +80 °C |
| • during transport | -50 ... +80 °C |
| relative humidity during operation | 10 ... 95 % |
| Main circuit | |
| number of poles for main current circuit | 3 |
| adjustable current response value current of the current-dependent overload release | 0.22 ... 0.32 A |
| operating voltage | |
| • rated value | 20 ... 690 V |
| • at AC-3 rated value maximum | 690 V |
| • at AC-3e rated value maximum | 690 V |
| operating frequency rated value | 50 ... 60 Hz |
| operational current rated value | 0.32 A |
| operational current | |
| • at AC-3 at 400 V rated value | 0.32 A |
| • at AC-3e at 400 V rated value | 0.32 A |

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|---|---|
| operating power | |
| <ul style="list-style-type: none"> ● at AC-3 <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value ● at AC-3e <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value | <p>0 kW</p> <p>0.09 kW</p> <p>0.1 kW</p> <p>0.1 kW</p> <p>0 kW</p> <p>0.09 kW</p> <p>0.1 kW</p> <p>0.1 kW</p> |
| operating frequency | |
| <ul style="list-style-type: none"> ● at AC-3 maximum ● at AC-3e maximum | <p>15 1/h</p> <p>15 1/h</p> |
| Auxiliary circuit | |
| design of the auxiliary switch | transverse |
| number of NC contacts for auxiliary contacts | 1 |
| <ul style="list-style-type: none"> ● note | 1 |
| number of NO contacts for auxiliary contacts | 1 |
| <ul style="list-style-type: none"> ● note | 1 |
| number of CO contacts for auxiliary contacts | 0 |
| operational current of auxiliary contacts at AC-15 | |
| <ul style="list-style-type: none"> ● at 24 V ● at 110 V ● at 120 V ● at 125 V ● at 230 V | <p>2 A</p> <p>2 A</p> <p>2 A</p> <p>2 A</p> <p>0.5 A</p> |
| operational current of auxiliary contacts at DC-13 | |
| <ul style="list-style-type: none"> ● at 24 V ● at 60 V | <p>1 A</p> <p>0.15 A</p> |
| Protective and monitoring functions | |
| product function | |
| <ul style="list-style-type: none"> ● ground fault detection ● phase failure detection | <p>No</p> <p>Yes</p> |
| trip class | CLASS 10 |
| design of the overload release | thermal |
| breaking capacity maximum short-circuit current (I_{cu}) | |
| <ul style="list-style-type: none"> ● at AC at 240 V rated value ● at AC at 400 V rated value ● at AC at 500 V rated value ● at AC at 690 V rated value | <p>100 kA</p> <p>100 kA</p> <p>100 kA</p> <p>100 kA</p> |
| breaking capacity operating short-circuit current (I_{cs}) at AC | |
| <ul style="list-style-type: none"> ● at 240 V rated value ● at 400 V rated value ● at 500 V rated value ● at 690 V rated value | <p>100 kA</p> <p>100 kA</p> <p>100 kA</p> <p>100 kA</p> |
| response value current of instantaneous short-circuit trip unit | 4.2 A |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| <ul style="list-style-type: none"> ● at 480 V rated value ● at 600 V rated value | <p>0.32 A</p> <p>0.32 A</p> |
| 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) |

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| 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 | none required None required None required None required |

Installation/ mounting/ dimensions

| | |
|--|--|
| mounting position | any |
| fastening method | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| height | 90 mm |
| width | 45 mm |
| depth | 75 mm |
| required spacing | |
| <ul style="list-style-type: none"> • for grounded parts at 400 V <ul style="list-style-type: none"> — downwards 20 mm — upwards 20 mm — at the side 9 mm • for live parts at 400 V <ul style="list-style-type: none"> — downwards 20 mm — upwards 20 mm — at the side 9 mm • for grounded parts at 500 V <ul style="list-style-type: none"> — downwards 20 mm — upwards 20 mm — at the side 9 mm • for live parts at 500 V <ul style="list-style-type: none"> — downwards 20 mm — upwards 20 mm — at the side 9 mm • for grounded parts at 690 V <ul style="list-style-type: none"> — downwards 20 mm — upwards 20 mm — backwards 0 mm — at the side 9 mm — forwards 0 mm • for live parts at 690 V <ul style="list-style-type: none"> — downwards 20 mm — upwards 20 mm — backwards 0 mm — at the side 9 mm — forwards 0 mm | |

Connections/ Terminals

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|---|--|
| type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control 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"> — solid or stranded 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x (1 ... 4 mm²) — finely stranded with core end processing 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²) | |
| type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²) | |
| tightening torque | |
| <ul style="list-style-type: none"> • 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 | |
| size of the screwdriver tip | Pozidriv size 2 |
| design of the thread of the connection screw | |
| <ul style="list-style-type: none"> • for main contacts M3 | |

- of the auxiliary and control contacts

M3

Safety related data

| | |
|---|--|
| B10 value | |
| <ul style="list-style-type: none"> • with high demand rate according to SN 31920 | 5 000 |
| proportion of dangerous failures | |
| <ul style="list-style-type: none"> • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 | 50 % 50 % |
| failure rate [FIT] | |
| <ul style="list-style-type: none"> • with low demand rate according to SN 31920 | 50 FIT |
| protection class IP on the front according to IEC 60529 | IP20 |
| touch protection on the front according to IEC 60529 | finger-safe, for vertical contact from the front |
| display version for switching status | Rocker switch |

Certificates/ approvals

General Product Approval

For use in hazardous locations



[Confirmation](#)



For use in hazardous locations

Declaration of Conformity

Test Certificates

Marine / Shipping



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping



other

Railway

[Miscellaneous](#)

[Confirmation](#)



[Special Test Certificate](#)

Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV1011-0DA15>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-0DA15>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0DA15>

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

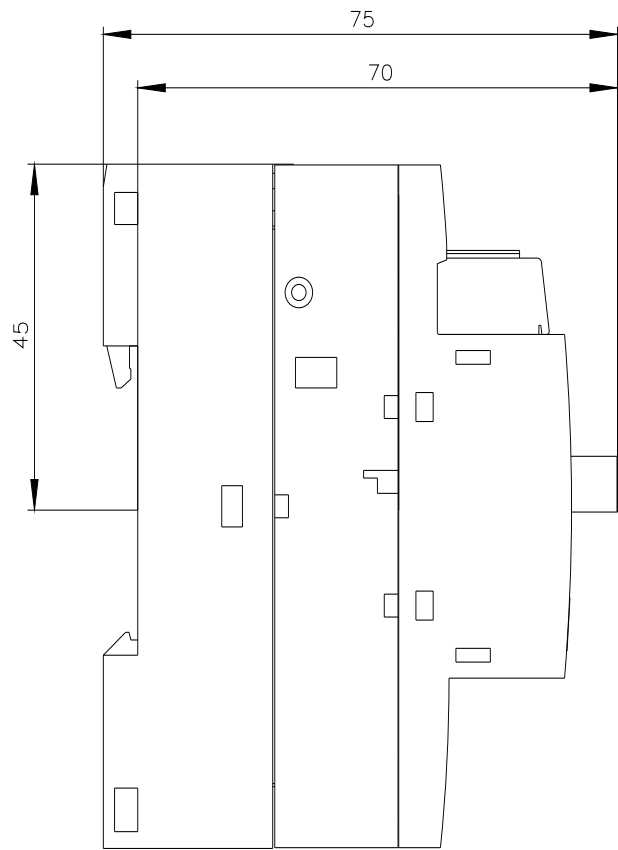
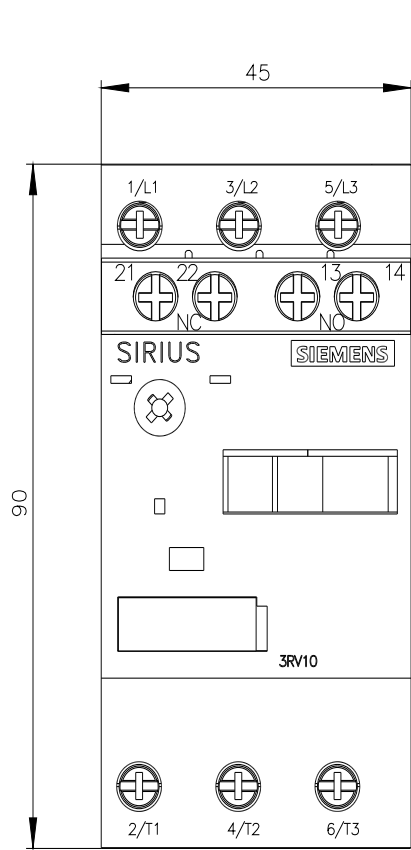
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-0DA15&lang=en

Characteristic: Tripping characteristics, I_t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0DA15/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-0DA15&objecttype=14&gridview=view1>



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