



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.9...1.25A, N-REL. 16A SPRING-L. CONNECTION STANDARD SW. CAPACITY

Figure similar

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

| General technical data: | | |
|-----------------------------------------------------------|----|------------------|
| Active power loss total typical | W | 6 |
| Insulation voltage | V | 690 |
| • with degree of pollution 3 Rated value | | |
| Shock resistance | | 25g / 11 ms |
| • acc. to IEC 60068-2-27 | | |
| Surge voltage resistance Rated value | kV | 6 |
| Mechanical service life (switching cycles) | | |
| • of the main contacts typical | | 100 000 |
| • of the auxiliary contacts typical | | 100 000 |
| Electrical endurance (switching cycles) | | |
| • typical | | 100 000 |
| Temperature compensation | °C | -20 ... +60 |
| Size of contactor can be combined company-specific | | S2 |
| Protection class IP | | |
| • on the front | | IP20 |
| • of the terminal | | IP20 |
| Type of protection | | Increased safety |
| Equipment marking | | |
| • acc. to DIN EN 81346-2 | | Q |

| Main circuit: | | |
|-------------------------------------------------|--|---|
| Number of poles for main current circuit | | 3 |

| | | |
|------------------------------------------------------------------------------------|-----|--------------|
| Adjustable response value current of the current-dependent overload release | A | 0.9 ... 1.25 |
| Operating voltage | | |
| • Rated value | V | 690 |
| • at AC-3 Rated value maximum | V | 690 |
| Operating frequency Rated value | Hz | 50 ... 60 |
| Operating current Rated value | A | 1.25 |
| Operating current | | |
| • at AC-3 | | |
| — at 400 V Rated value | A | 1.25 |
| Operating power | | |
| • at AC-3 | | |
| — at 230 V Rated value | W | 180 |
| — at 400 V Rated value | W | 370 |
| — at 500 V Rated value | W | 370 |
| — at 690 V Rated value | W | 750 |
| Operating frequency | | |
| • at AC-3 maximum | 1/h | 15 |

Auxiliary circuit:

| | | |
|-------------------------------------------|--|-----|
| Number of NC contacts | | |
| • for auxiliary contacts | | 0 |
| Number of NO contacts | | |
| • for auxiliary contacts | | 0 |
| Number of CO contacts | | |
| • for auxiliary contacts | | 0 |
| Product expansion Auxiliary switch | | Yes |

Protective and monitoring functions:

| | | |
|--------------------------------------------------------------------------|----|----------|
| Trip class | | CLASS 10 |
| Design of the overload circuit breaker | | thermal |
| Operational short-circuit current breaking capacity (Ics) with AC | | |
| • at 240 V Rated value | kA | 100 |
| • at 400 V Rated value | kA | 100 |
| • at 500 V Rated value | kA | 100 |
| • at 690 V Rated value | kA | 100 |
| Maximum short-circuit current breaking capacity (Icu) | | |
| • 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 | 100 |
| • with AC at 690 V Rated value | kA | 100 |
| Breaking capacity short-circuit current (Icn) | | |
| • with 1 current path for DC at 150 V Rated value | kA | 10 |

| | | |
|--------------------------------------------------------------------------------------------------------------|----|----|
| <ul style="list-style-type: none"> with 2 current paths in series for DC at 300 V Rated value | kA | 10 |
| <ul style="list-style-type: none"> with 3 current paths in series for DC at 450 V Rated value | kA | 10 |
| Response value current of the instantaneous short-circuit release | A | 16 |

UL/CSA ratings:

| | | |
|-----------------------------------------------------------------------------------------------------|-----------|------|
| Full-load current (FLA) for three-phase AC motor | | |
| <ul style="list-style-type: none"> at 480 V Rated value | A | 1.25 |
| <ul style="list-style-type: none"> at 600 V Rated value | A | 1.25 |
| yielded mechanical performance [hp] | | |
| <ul style="list-style-type: none"> for three-phase AC motor at 460/480 V Rated value | metric hp | 0.5 |
| <ul style="list-style-type: none"> for three-phase AC motor at 575/600 V Rated value | metric hp | 0.5 |

Short-circuit:

| | | |
|--------------------------------------------------|--|----------|
| Product function Short circuit protection | | Yes |
| Design of the short-circuit trip | | magnetic |

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 | mm | 109 |
| Width | mm | 45 |
| Depth | mm | 96 |
| Required spacing | | |
| <ul style="list-style-type: none"> with side-by-side mounting <ul style="list-style-type: none"> forwards Backwards upwards downwards at the side for grounded parts <ul style="list-style-type: none"> forwards Backwards upwards at the side downwards for live parts <ul style="list-style-type: none"> forwards Backwards upwards | mm | 0 0 50 50 0 0 0 50 30 50 0 0 50 |

— downwards

mm 50

— at the side

mm 30

Connections/ Terminals:

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------|
| Type of electrical connection <ul style="list-style-type: none">• for main current circuit | | spring-loaded terminals |
| Arrangement of electrical connectors for main current circuit | | Top and bottom |
| Product function <ul style="list-style-type: none">• removable terminal for auxiliary and control circuit | | No |
| Type of connectable conductor cross-section <ul style="list-style-type: none">• for main contacts<ul style="list-style-type: none">— single or multi-stranded— finely stranded with core end processing— finely stranded without core end processing• for AWG conductors for main contacts | | 2x (1 ... 10 mm ²) 2x (1 ... 6 mm ²) 2x (1 ... 6 mm ²) 2x (18 ... 8) |
| Design of screwdriver shaft | | Diameter 5 to 6 mm |

Safety related data:

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------|
| B10 value with high demand rate acc. to SN 31920 | | 50 000 |
| Proportion of dangerous failures <ul style="list-style-type: none">• with low demand rate acc. to SN 31920• with high demand rate acc. to SN 31920 | % % | 40 40 |
| Failure rate [FIT] with low demand rate acc. to SN 31920 | FIT | 50 |
| T1 value for proof test interval or service life acc. to IEC 61508 | y | 10 |
| Protection against electrical shock | | finger-safe |

Mechanical data:

| | | |
|------------------------------------|--|----|
| Size of the circuit-breaker | | S0 |
|------------------------------------|--|----|

Ambient conditions:

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------|
| Installation altitude at height above sea level maximum | m | 2 000 |
| Ambient temperature <ul style="list-style-type: none">• during operation• during storage• during transport | °C °C °C | -20 ... +60 -50 ... +80 -50 ... +80 |
| Relative humidity during operation | % | 10 ... 95 |

Display:

| | | |
|-----------------------------------------------------------------------------------------------|--|--------|
| Display version <ul style="list-style-type: none">• for switching status | | Handle |
|-----------------------------------------------------------------------------------------------|--|--------|

Certificates/ approvals:

| | | |
|--------------------------|---------------------------|-------------------|
| General Product Approval | Declaration of Conformity | Test Certificates |
|--------------------------|---------------------------|-------------------|



[Special Test Certificate](#)

| | |
|-------------------|-------------------|
| Test Certificates | Shipping Approval |
|-------------------|-------------------|

[Declaration of the Compliance with the order](#)

[Type Test Certificates/Test Report](#)



| | |
|-------------------|-------|
| Shipping Approval | other |
|-------------------|-------|



[Confirmation](#)

[Environmental Confirmations](#)

| |
|-------|
| other |
|-------|



[other](#)

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

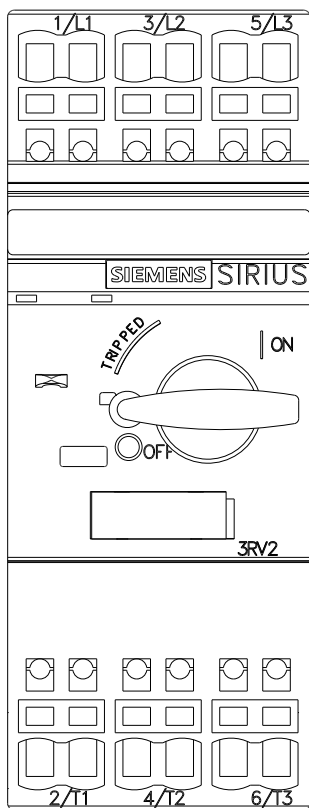
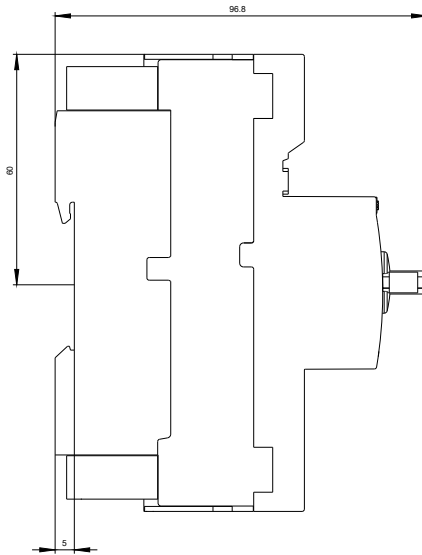
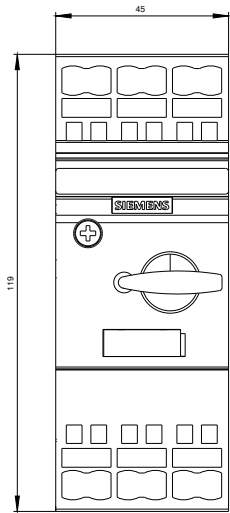
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV20210KA20>

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

<http://support.automation.siemens.com/WW/view/en/3RV20210KA20/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20210KA20&lang=en





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