



Monitoring relay, can be mounted to Contactor 3RT2, Size S00 basic, analog adjustment Apparent current monitoring 1.6-16 A, 20-400 Hz, 2-phase Supply 24 V AC/DC 1 change-over contact Monitoring for Current overshoot and undershoot Phase failure, Cable break with or without fault buffer ON delay 0-60 s Noise pulse suppression 0-30 s Switching hysteresis 6% spring-type connection system

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| product brand name | SIRIUS |
| product designation | Monitoring relays |
| design of the product | analogically adjustable, 2-phase current monitoring |
| General technical data | |
| size of contactor can be combined company-specific | S00 |
| operating apparent power rated value | 4 VA |
| insulation voltage for overvoltage category III according to IEC 60664 | |
| • with degree of pollution 3 rated value | 690 V |
| surge voltage resistance rated value | 6 kV |
| consumed current | |
| • at 24 V | 90 mA |
| • at 240 V | 12 mA |
| protection class IP | |
| • on the front | IP20 |
| • of the terminal | IP20 |
| shock resistance | 15g / 11 ms |
| vibration resistance | 10 ... 55 Hz / 0.35 mm |
| mechanical service life (operating cycles) typical | 10 000 000 |
| electrical endurance (operating cycles) at AC-15 at 230 V typical | 100 000 |
| reference code according to IEC 81346-2 | K |
| relative repeat accuracy | 2 % |
| Substance Prohibitance (Date) | 10/01/2009 |
| SVHC substance name | Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 |
| Weight | 0.228 kg |
| Supply voltage | |
| type of voltage of the supply voltage | AC/DC |
| supply voltage 1 at AC | |
| • at 50 Hz rated value | 24 V |
| • at 60 Hz rated value | 24 V |
| supply voltage 1 at DC rated value | 24 V |
| supply voltage frequency 1 | 50 ... 60 Hz |
| Measuring circuit | |
| type of current for monitoring | AC |
| adjustable current response value current | |
| • 1 | 1.6 ... 16 A |
| • 2 | 1.6 ... 16 A |
| adjustable response delay time | |
| • when starting | 0 ... 60 s |
| • with lower or upper limit violation | 0 ... 30 s |

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| Precision | |
| temperature drift per °C | 0.1 %/°C |
| Short-circuit protection | |
| design of the fuse link for short-circuit protection of the auxiliary switch required | fuse gG: 4 A |
| Communication/ Protocol | |
| protocol is supported IO-Link protocol | No |
| type of voltage supply via input/output link master | No |
| Auxiliary circuit | |
| number of CO contacts | |
| • for auxiliary contacts | 1 |
| operational current of auxiliary contacts at AC-15 | |
| • at 24 V | 3 A |
| • at 230 V | 3 A |
| • at 400 V | 3 A |
| operational current of auxiliary contacts at DC-13 | |
| • at 24 V | 1 A |
| • at 125 V | 0.2 A |
| • at 250 V | 0.1 A |
| contact rating of auxiliary contacts according to UL | B300 / R300 |
| Main circuit | |
| operating power rated value | 2.5 W |
| ampacity of the semiconductor output in SIO mode | 20 mA |
| operational current at 17 V minimum | 5 mA |
| Electromagnetic compatibility | |
| EMC emitted interference according to IEC 60947-1 | ambience A (industrial sector) |
| EMC immunity according to IEC 60947-1 | ambience A (industrial sector) |
| Electrical Safety | |
| protection class IP on the front according to IEC 60529 | IP20 |
| Connections/ Terminals | |
| product component removable terminal for main circuit | No |
| product component removable terminal for auxiliary and control circuit | Yes |
| type of electrical connection | |
| • for main current circuit | spring-loaded terminals |
| • for auxiliary and control circuit | spring-loaded terminals |
| type of connectable conductor cross-sections for main contacts | |
| • solid | 1x (0.5 ... 4 mm ²) |
| • finely stranded with core end processing | 1x (0.5 ... 2.5 mm ²) |
| • finely stranded without core end processing | 1x (0.5 ... 2.5 mm ²) |
| connectable conductor cross-section for main contacts | |
| • solid or stranded | 0.5 ... 4 mm ² |
| • finely stranded with core end processing | 2.5 ... 2.5 mm ² |
| • finely stranded without core end processing | 0.5 ... 2.5 mm ² |
| type of connectable conductor cross-sections | |
| • for auxiliary contacts | |
| — solid | 1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²) |
| — finely stranded with core end processing | 2x (0.25 ... 1.5 mm ²) |
| — finely stranded without core end processing | 2x (0.25 ... 1.5 mm ²) |
| • for AWG cables for auxiliary contacts | 2x (24 ... 16) |
| AWG number as coded connectable conductor cross section for main contacts | 20 ... 12 |
| tightening torque with screw-type terminals | 0.8 ... 1.2 N·m |
| Installation/ mounting/ dimensions | |
| mounting position | any |
| fastening method | direct mounting |
| height | 90 mm |
| width | 45 mm |
| depth | 80 mm |
| required spacing | |
| • with side-by-side mounting | |

- forwards 0 mm
- backwards 0 mm
- upwards 0 mm
- downwards 0 mm
- at the side 0 mm
- for grounded parts
 - forwards 6 mm
 - backwards 0 mm
 - upwards 0 mm
 - at the side 6 mm
 - downwards 0 mm
- for live parts
 - forwards 6 mm
 - backwards 0 mm
 - upwards 0 mm
 - downwards 0 mm
 - at the side 6 mm

Ambient conditions

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|---|----------------|
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| • during operation | -25 ... +60 °C |
| • during storage | -40 ... +80 °C |

Approvals Certificates

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|--------------------------|-----|
| General Product Approval | EMV |
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|-------------------|----------------------|
| Test Certificates | Maritime application |
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



| | | |
|----------------------|-------|-------------|
| Maritime application | other | Environment |
|----------------------|-------|-------------|



[Confirmation](#)

[Environmental Confirmations](#)

Further information

- Information on the packaging
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
- Information for data generation and storage
<https://support.industry.siemens.com/cs/ww/en/view/109995012>
- 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=3RR2141-2AA30>
- Cax online generator
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2141-2AA30>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RR2141-2AA30>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RR2141-2AA30&lang=en



