SIEMENS

Data sheet 3RK3231-2AA10



SIRIUS, Extension module 3RK32 for modular Safety system 3RK3 2/4 F-DI, 2 F-DO, 24 V DC/1.2 A Can be parameterized via MSS ES 22.5 mm overall width Springtype terminal Up to SIL3 (IEC 61508) Up to Performance Level E (ISO 13849-1) without connection cable

| General technical data | | |
|--|----|---|
| product brand name | | SIRIUS |
| product category | | Modular Safety System |
| product designation | | Expansion module |
| design of the product | | 2/4 F-DI 2 F-DO |
| protection class IP | | IP20 |
| shock resistance | | 15g / 11 ms |
| degree of pollution | | 3 |
| mounting position | | vertical |
| installation altitude at height above sea level maximum | m | 2 000 |
| ambient temperature | | |
| during storage | °C | -40 +85 |
| during operation | °C | -20 + 60 |
| during transport | °C | -40 +85 |
| relative humidity during operation | % | 10 95 |
| conducted interference due to burst according to IEC 61000-4-4 | | 2 kV (power ports) |
| conducted interference due to conductor-earth surge according to IEC 61000-4-5 | | 2 kV |
| conducted interference due to conductor-conductor surge according to IEC 61000-4-5 | | 1 kV |
| electrostatic discharge according to IEC 61000-4-2 | | 4 kV contact discharge / 8 kV air discharge |
| field-based interference according to IEC 61000-4-3 | | 10 V/m, 3 V/m, 1 V/m |
| surge voltage resistance rated value | V | 500 |
| insulation voltage rated value | V | 50 |
| reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750 | | К |
| reference code according to EN 61346-2 | | K |
| product function | | |
| EMERGENCY OFF function | | Yes |
| protective door monitoring | | Yes |
| evaluation: electro-sensitive protective equipment | | Yes |
| evaluation: selector switch | | Yes |
| pressure-sensitive mat monitoring | | Yes |
| evaluation: two-hand operator panel | | Yes |
| evaluation: enabling switch | | Yes |
| monitored start-up | | Yes |
| Control circuit/ Control | | |
| type of voltage | | DC |
| control supply voltage 1 at DC rated value | V | 24 |
| operating range factor control supply voltage rated value of magnet coil | | 0.85 1.15 |

| Auxiliary circuit | | | | |
|--|-----|---------------|-----------|---|
| product function | | | | |
| parameterizable outputs | | Yes | | |
| number of inputs | | | | |
| safety-related | | 4 | | |
| non-safety-related | | 0 | | |
| number of outputs | | | | |
| as contact-affected switching element safety-related | | | | |
| — single channel | | 0 | | |
| — 2-channel | | 0 | | |
| as contact-less semiconductor switching element | | | | |
| — safety-related 2-channel | | 2 | | |
| non-safety-related 2-channel | | 0 | | |
| for testing contact-based sensors | | 2 | | |
| switching capacity current of semiconductor outputs at DC-13 at 24 V | А | 1.2 | | |
| Installation/ mounting/ dimensions | | | | |
| fastening method | | DIN rail | | |
| width | mm | 22.5 | | |
| height | mm | 105 | | |
| depth | mm | 124 | | |
| Connections/ Terminals | | | | |
| type of electrical connection | | spring-loaded | terminals | |
| connectable conductor cross-section for auxiliary contacts | | | | |
| solid or stranded | mm² | 0.25 1.5 | | |
| finely stranded | | | | |
| — with core end processing | mm² | 0.25 1.5 | | |
| — without core end processing | mm² | 0.25 1.5 | | |
| Certificates/ approvals | | | | |
| General Product Approval | | | EMC | Functional Safety/Safety of Machinery |



Confirmation

EG-Konf.







Type Examination Certificate

| Functional Safety/Safety of Machinery | Declaration of Conformity | | Test Certificates | other | |
|---|---------------------------|----|------------------------------------|--------------|--|
| Miscellaneous | ϵ | UK | Type Test Certificates/Test Report | Confirmation | |

| Safety related data | | |
|--|-----|-------------|
| Safety Integrity Level (SIL) according to IEC 61508 | | 3 |
| performance level (PL) according to EN ISO 13849-1 | | е |
| category according to EN 954-1 | | 4 |
| PFHD with high demand rate according to EN 62061 | 1/h | 0.000000027 |
| Average probability of failure on demand (PFDavg) with low demand rate acc. to IEC 61508 | 1/y | 0.000083 |
| T1 value for proof test interval or service life according to IEC 61508 | а | 20 |
| touch protection against electrical shock | | finger-safe |
| Further information | | |

Information- and Downloadcenter (Catalogs, Brochures,...) https://www.siemens.com/ic10

Industry Mall (Online ordering system)

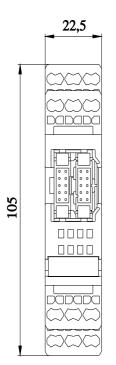
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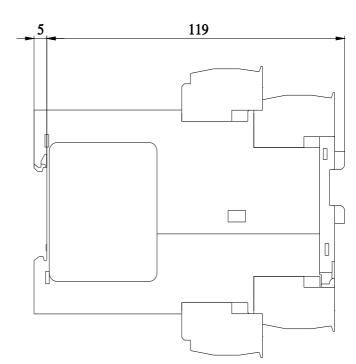
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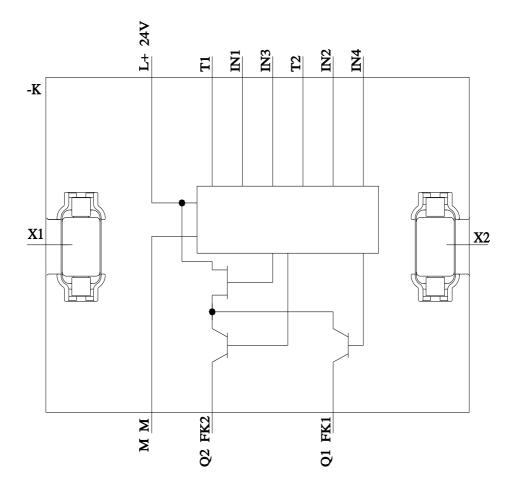
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK3231-2AA10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RK3231-2AA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RK3231-2AA10&lang=en







last modified: 11/21/2022 🖸