



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 Spring-type 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 acc. to IEC 61000-4-4 | | 2 kV (power ports) |
| conducted interference due to conductor-earth surge acc. to IEC 61000-4-5 | | 2 kV |
| conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5 | | 1 kV |
| electrostatic discharge acc. to IEC 61000-4-2 | | 4 kV contact discharge / 8 kV air discharge |
| field-based interference acc. 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 acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 | | K |
| reference code acc. to DIN 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 | | |
| <ul style="list-style-type: none"> parameterizable outputs | | Yes |
| number of inputs | | |
| <ul style="list-style-type: none"> safety-related non-safety-related | | 4 0 |
| number of outputs | | |
| <ul style="list-style-type: none"> as contact-affected switching element safety-related <ul style="list-style-type: none"> single channel 2-channel as contact-less semiconductor switching element <ul style="list-style-type: none"> safety-related 2-channel non-safety-related 2-channel for testing contact-based sensors | | 0 0 2 0 2 |
| switching capacity current of semiconductor outputs at DC-13 at 24 V | A | 1.2 |

Installation/ mounting/ dimensions

| | | |
|-------------------------|----|---------------|
| fastening method | | standard 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 | | |
| <ul style="list-style-type: none"> solid or stranded finely stranded <ul style="list-style-type: none"> with core end processing without core end processing | mm ² mm ² mm ² | 0.25 ... 1.5 0.25 ... 1.5 0.25 ... 1.5 |

Certificates/ approvals

| | | |
|---------------------------------|------------|--|
| General Product Approval | EMC | Functional Safety/Safety of Machinery |
|---------------------------------|------------|--|



[Type Examination Certificate](#)

[Miscellaneous](#)

| | | |
|----------------------------------|--------------------------|--------------|
| Declaration of Conformity | Test Certificates | other |
|----------------------------------|--------------------------|--------------|



[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Confirmation](#)



Safety related data

| | | |
|---|-----|--------------|
| Safety Integrity Level (SIL) acc. to IEC 61508 | | 3 |
| performance level (PL) acc. to EN ISO 13849-1 | | e |
| category acc. to EN 954-1 | | 4 |
| PFHD with high demand rate acc. to EN 62061 | 1/h | 0.0000000027 |
| Average probability of failure on demand (PFDAvg) with low demand rate acc. to IEC 61508 | 1/y | 0.0000083 |
| T1 value for proof test interval or service life acc. to IEC 61508 | y | 20 |

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=3RK3231-2AA10>

Cax online generator

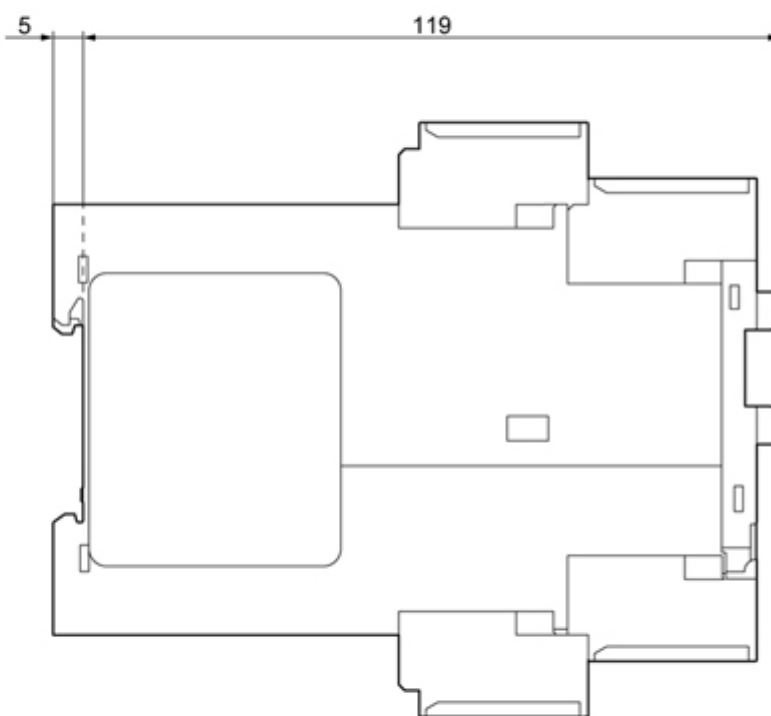
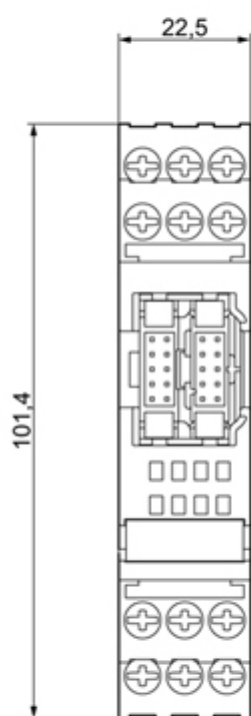
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK3231-2AA10>

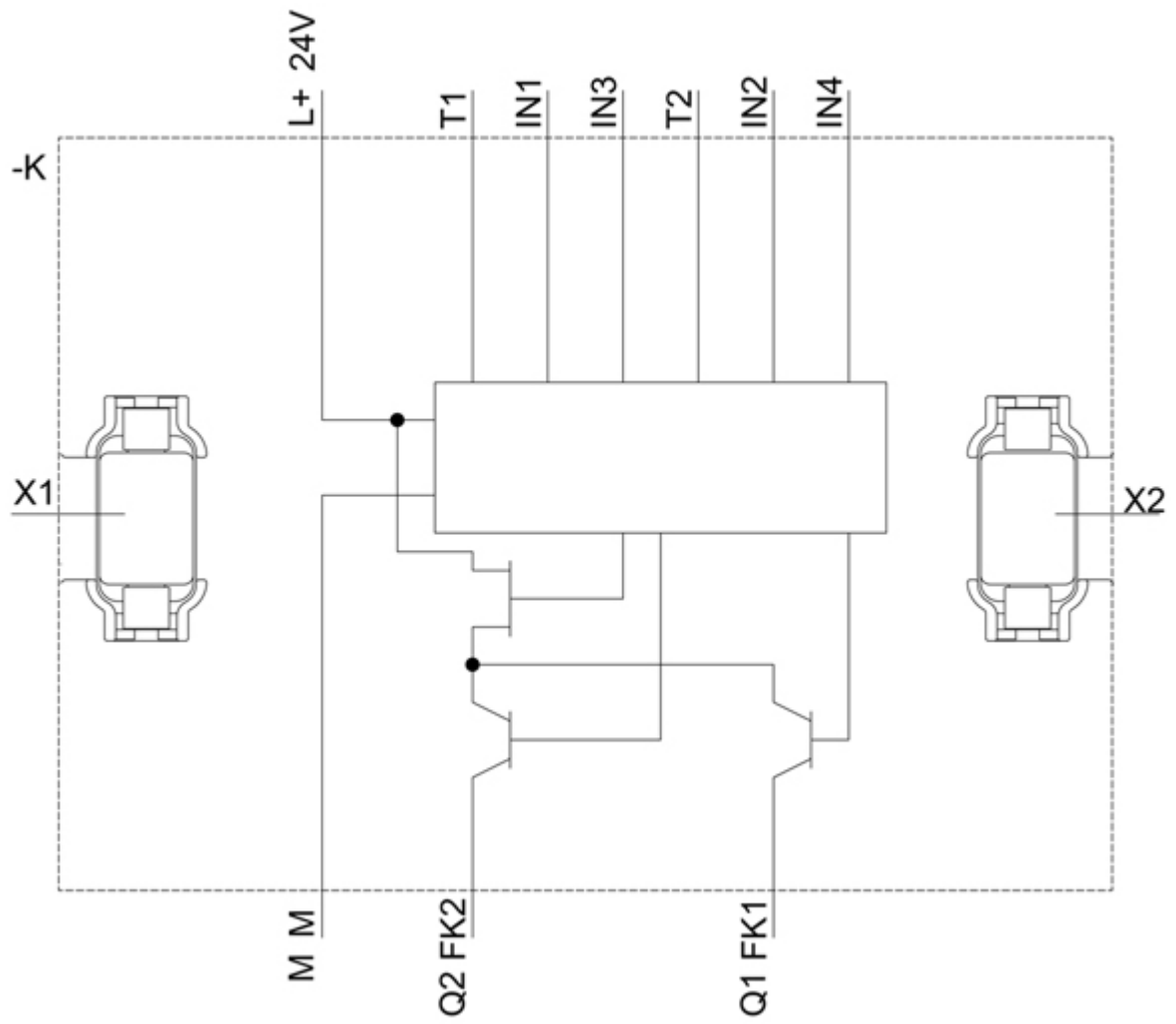
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<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





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