



SIRIUS, Extension module 3RK32 for modular Safety system 3RK3 2/4 F-DI, 1/2 F-RO, 24 V DC/1 A Can be parameterized via MSS ES 22.5 mm overall width screw 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 1/2 F-RO
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-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m, 3 V/m, 1 V/m
Surge voltage resistance rated value	V	4 000
Insulation voltage rated value	V	300
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
<b>Product function</b>		
• 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

<b>Type of voltage</b>		DC
<b>Control supply voltage 1 at DC rated value</b>	V	24
Operating range factor control supply voltage rated value of magnet coil		0.85 ... 1.15

#### Auxiliary circuit

<b>Product function</b>		
• Parameterizable outputs		Yes
<b>Number of inputs</b>		
• safety-related		4
• non-safety-related		0
<b>Number of outputs</b>		
• as contact-affected switching element safety-related		
— 1-channel		2
— 2-channel		0
• as contact-less semiconductor switching element		
— safety-related 2-channel		0
— non-safety-related 2-channel		0
• for testing contact-based sensors		2

### Short-circuit protection

Design of the fuse link for short-circuit protection of non-solid-state switching element required		NH Typ 3NA, DIAZED Typ 5SB, NEOZED Typ 5SE
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### Installation/ mounting/ dimensions

Mounting type		standard rail
Width	mm	22.5
Height	mm	102
Depth	mm	124

### Connections/Terminals

Product function removable terminal for auxiliary and control circuit		Yes
Type of electrical connection for auxiliary and control current circuit		screw-type terminals
Connectable conductor cross-section for auxiliary contacts		
<ul style="list-style-type: none"> <li>• single or multi-stranded</li> </ul>	mm <sup>2</sup>	0.5 ... 4
<ul style="list-style-type: none"> <li>• finely stranded</li> <li>— with core end processing</li> </ul>	mm <sup>2</sup>	0.5 ... 2.5

### Certificates/approvals

General Product Approval	EMC	Functional Safety/Safety of Machinery
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[Type Examination Certificate](#)

Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates	other
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[Miscellaneous](#)

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[Type Test Certificates/Test Report](#)

[Confirmation](#)



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### 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	0.0000000038
Average probability of failure on demand (PFDavg) with low demand rate acc. to IEC 61508	1/y	0.0000059

T1 value for proof test interval or service life acc. to IEC 61508	y	20
Protection against electrical shock		finger-safe

#### Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK3221-1AA10>

**Cax online generator**

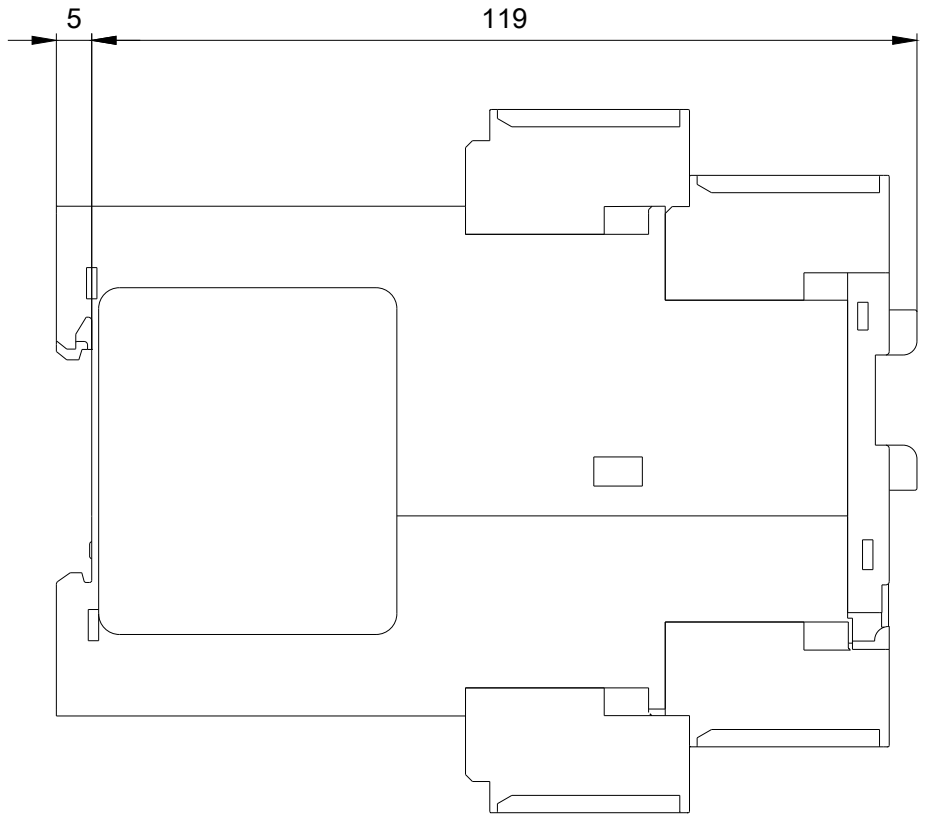
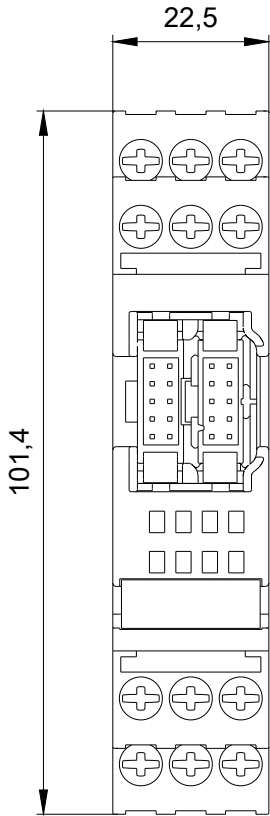
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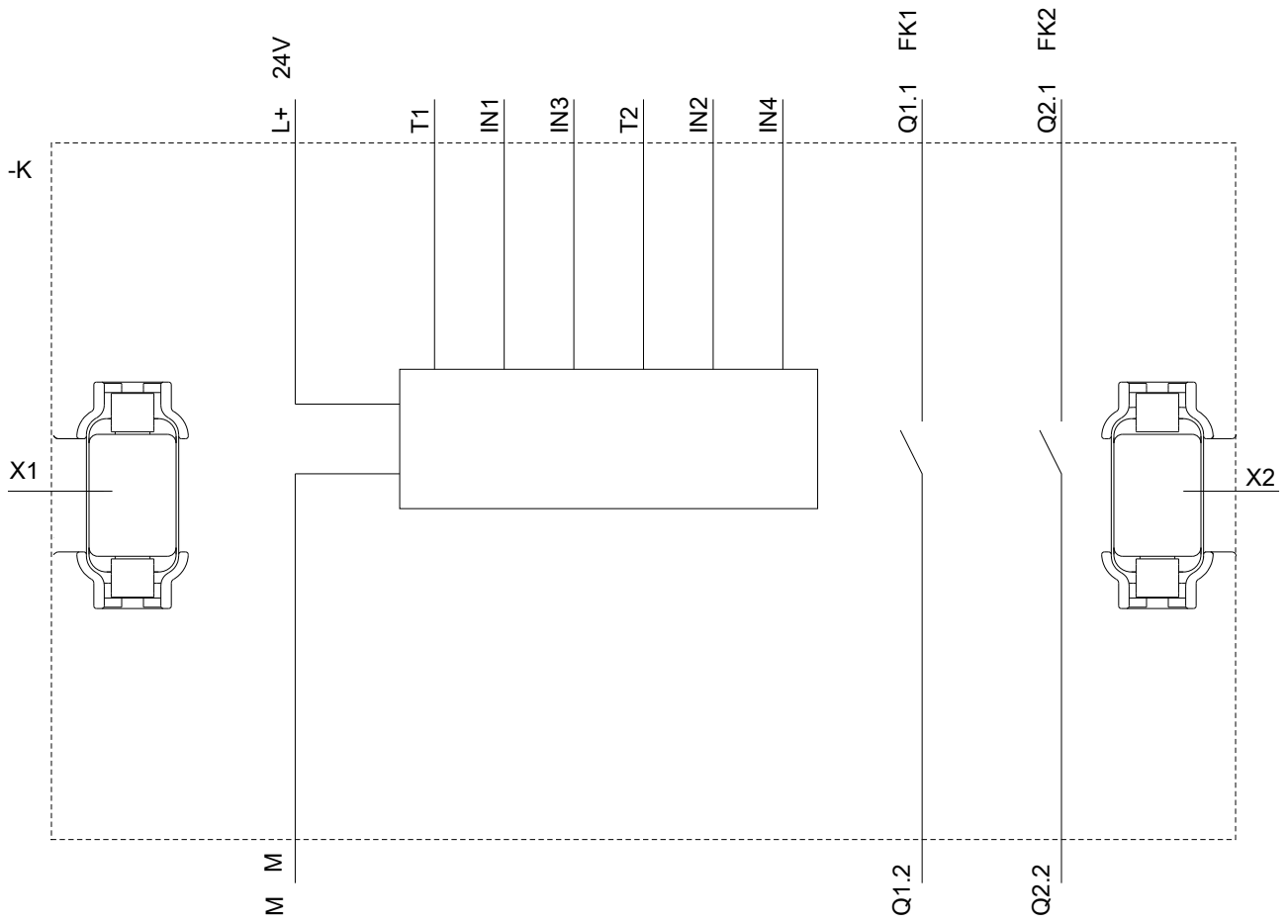
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RK3221-1AA10>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RK3221-1AA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK3221-1AA10&lang=en)





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