



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 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 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		K
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		Yes
<ul style="list-style-type: none"> parameterizable outputs 		
number of inputs		4
<ul style="list-style-type: none"> safety-related non-safety-related 		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		DIN rail
width	mm	22.5
height	mm	102
depth	mm	124

Connections/ Terminals

type of electrical connection		screw-type terminals
connectable conductor cross-section for auxiliary contacts		
<ul style="list-style-type: none"> solid or stranded 	mm ²	0.5 ... 4
<ul style="list-style-type: none"> finely stranded <ul style="list-style-type: none"> with core end processing 	mm ²	0.5 ... 2.5

Certificates/ approvals

General Product Approval

EMC

Functional Safety/Safety of Machinery



[Confirmation](#)



[Type Examination Certificate](#)

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates

other

[Miscellaneous](#)



[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		e
category according to EN 954-1		4
PFHD with high demand rate according 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 according to IEC 61508	a	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)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3RK3231-1AA10>

Cax online generator

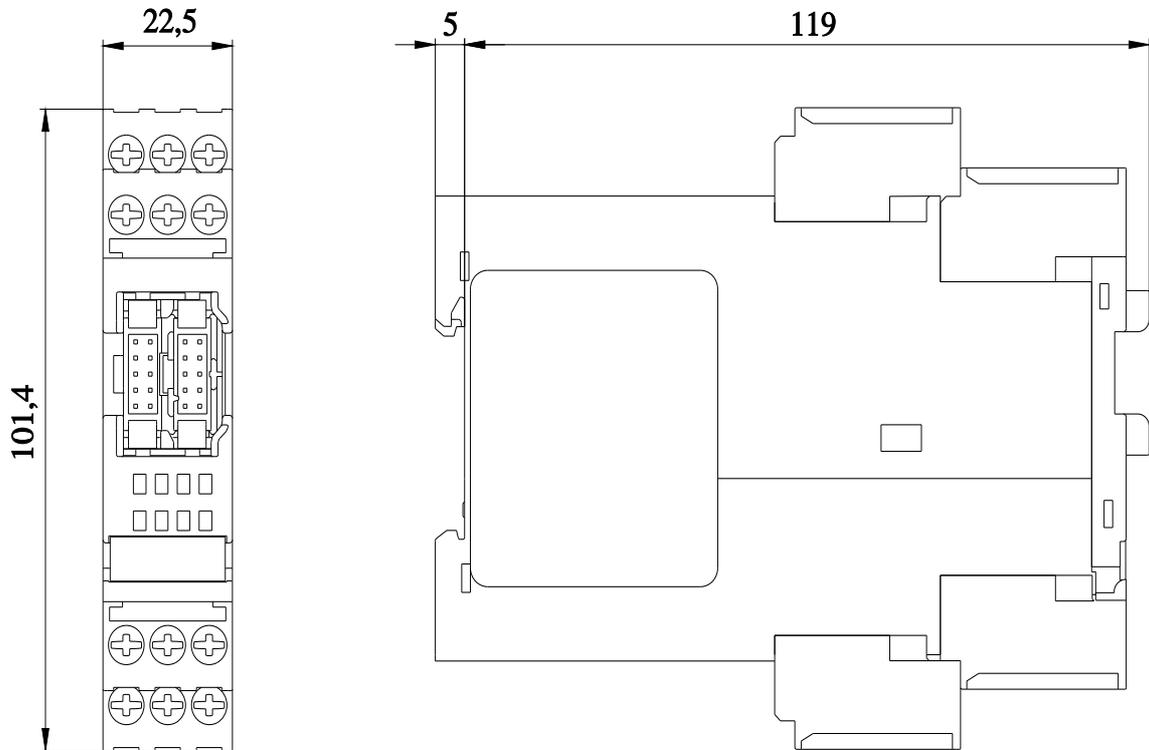
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK3231-1AA10>

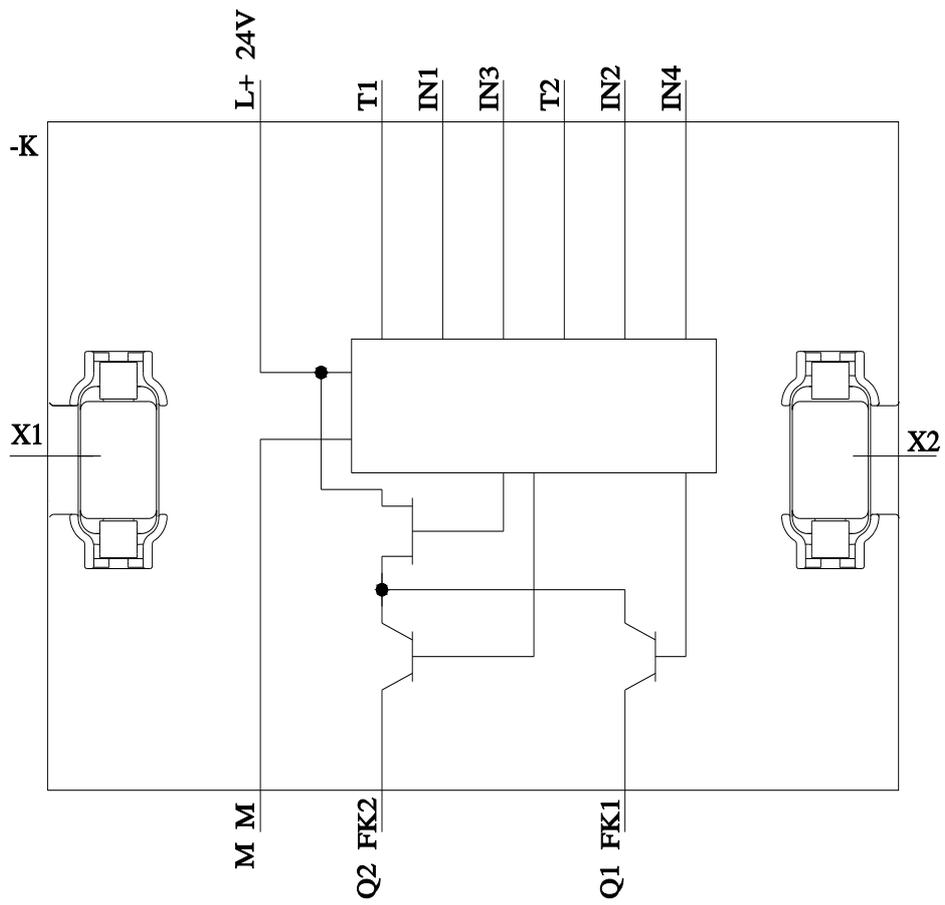
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RK3231-1AA10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK3231-1AA10&lang=en





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