SIEMENS

Data sheet 3RK3231-1AA10



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		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	Α	1.2		
Installation/ mounting/ dimensions				
fastening method		standard rail		
width	mm	22.5		
height	mm	102		
depth	mm	124		
Connections/ Terminals				
type of electrical connection		screw-type ter	minals	
connectable conductor cross-section for auxiliary contacts				
solid or stranded	mm²	0.5 4		
finely stranded				
with core end processing	mm²	0.5 2.5		
Certificates/ approvals				
General Product Approval			EMC	Functional Safety/Safety of



Confirmation







Type Examination Certificate

Machinery

Machinery Conformity Test Certificates other	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates	other
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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		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	0.0000083
T1 value for proof test interval or service life according to IEC 61508	У	20
touch protection against electrical shock		finger-safe
Further information		

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

https://www.siemens.com/ic10

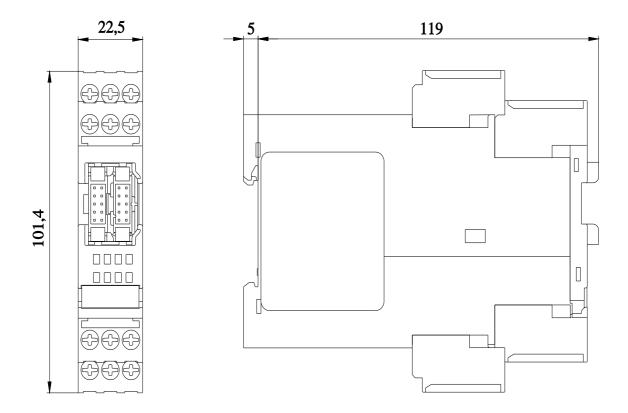
Industry Mall (Online ordering system)

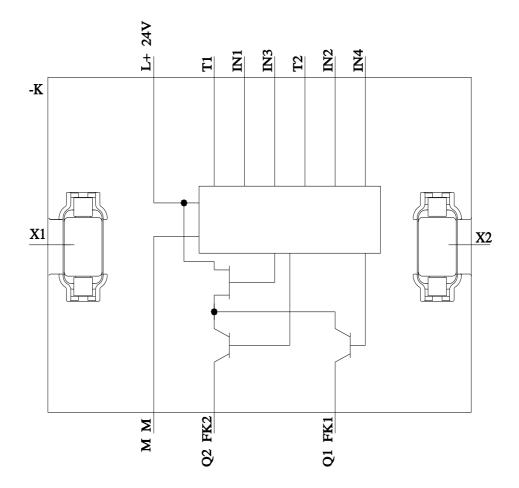
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK3231-1AA10

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





last modified: 12/21/2020 🖸