SIEMENS

Data sheet 3RK3231-1AA10



SIRIUS, EXPANSION MODULE 3RK32 FOR MODULAR SAFETY SYSTEM 3RK3 2/4 F-DI, 2 F-DO, 24V DC/1.2A PARAMETERIZABLE VIA SW MSS ES WIDTH 22.5MM SCREW TERMINAL UP TO SIL3 (IEC 61508) UP TO PERFORMANCE LEVEL E (ISO 13849-1)

General technical data:		
product brand name		SIRIUS
Product designation		Modular Safety System 3RK3
Design of the product		entension module 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	m	2 000
maximum		
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		2 kV
acc. to IEC 61000-4-5		ZKV
Conducted interference due to conductor-conductor		1 kV
surge acc. to IEC 61000-4-5		
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	500
Insulation voltage Rated value	V	50

Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		К
Equipment marking acc. to DIN EN 61346-2		K
Product function		
 EMERGENCY OFF function 		Yes
 protective door monitoring 		Yes
 evaluation: electro-sensitive protective 		Yes
equipment		
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 for DC Rated value	V	24
Operating range factor control supply voltage rated		0.85 1.15
value of the magnet coil		
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		
— 1-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
nstallation/ 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				
• single or multi-stranded	mm²	0.5 4		
finely stranded— with core end processing	mm²	0.5 2.5		

Certificates/ approvals:

General Product Approval

EMC













Functional Safety/S Machinery	Safety of	Test Certificates	other		
Type Examination Certificate	other	Special Test Certificate	Confirmation	Environmental Confirmations	Declaration of Conformity

other



Profibus

Safety related data:		
Safety Integrity Level (SIL) acc. to IEC 61508		SIL3
Performance level (PL) acc. to EN ISO 13849-1		е
Category acc. to EN 954-1		4
PFHD with high demand rate acc. 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 acc. to IEC 61508	У	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)

http://www.siemens.com/industrymall

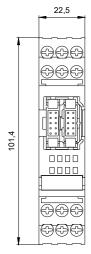
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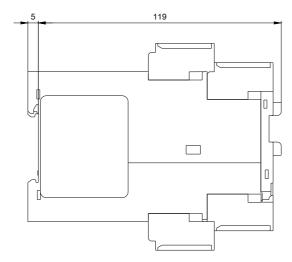
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK32311AA10

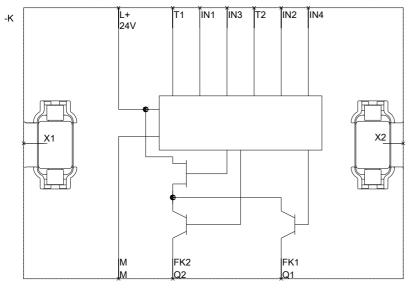
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RK32311AA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK32311AA10&lang=en







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