

SIRIUS, 3RK32 EXPANSION MODULE FOR MODULAR 3RK3 SAFETY SYSTEM 4/8 F-RO, 24 V DC/2A PARAMETERIZABLE VIA SW MSS ES 45MM MODULE WIDTH CAGE-CLAMP 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		Expansion module 4/8 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

Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		K
Equipment marking acc. to DIN EN 61346-2		K
Product function		
• EMERGENCY OFF function		No
• protective door monitoring		No
• evaluation: electro-sensitive protective equipment		No
• evaluation: selector switch		No
• Pressure-sensitive mat monitoring		No
• evaluation: two-hand operator panel		No
• evaluation: enabling switch		No
• monitored start-up		No

Control circuit/ Control:

Type of voltage		DC
Control supply voltage 1 for DC Rated value	V	24
Operating range factor control supply voltage rated value of the magnet coil		0.85 ... 1.15

Auxiliary circuit:

Product function		
• Parameterizable outputs		Yes
Number of inputs		
• safety-related		0
• non-safety-related		0
Number of outputs		
• as contact-affected switching element safety-related		
— 1-channel		8
— 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		0

Short-circuit:

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	45
Height	mm	113

Depth	mm	124
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Connections/ Terminals:

Product function removable terminal for auxiliary and control circuit		Yes
Type of electrical connection for auxiliary and control current circuit		spring-loaded terminals
Connectable conductor cross-section for auxiliary contacts		
<ul style="list-style-type: none"> • single or multi-stranded 	mm ²	0.25 ... 1.5
<ul style="list-style-type: none"> • finely stranded 		
— with core end processing	mm ²	0.25 ... 1.5
— without core end processing	mm ²	0.25 ... 1.5

Certificates/ approvals:

General Product Approval	EMC
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CCC



CSA



GOST



UL



C-TICK

Functional Safety/Safety of Machinery	Test Certificates	other
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[Type Examination Certificate](#)

[other](#)

[Special Test Certificate](#)

[Environmental Confirmations](#)

[Declaration of Conformity](#)

[Confirmation](#)

Safety related data:

Safety Integrity Level (SIL) acc. to IEC 61508		SIL3
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	0.0000000072
Average probability of failure on demand (PFDavg) with low demand rate acc. to IEC 61508	1/y	0.000044
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)

<http://www.siemens.com/industrymall>

Cax online generator

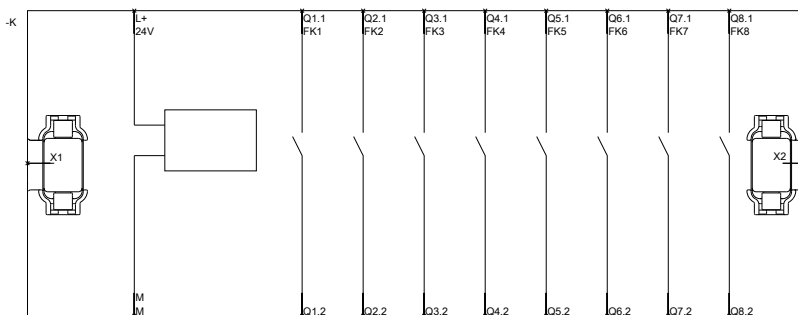
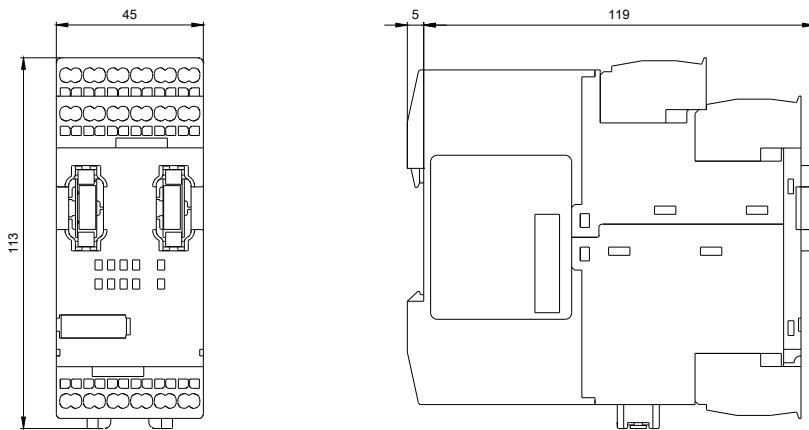
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK32512AA10>

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

<http://support.automation.siemens.com/WW/view/en/3RK32512AA10/all>

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

<http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RK32512AA10&lang=en>



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