



SIRIUS,
CENTRAL UNIT 3RK3 ADVANCED FOR MODULAR
SAFETY SYSTEM 3RK3 4/8 F-DI,
1F-RO, 1 F-DO,
24 VDC MONITORING OF ASI SLAVES,
CONTROL OF 12 SAFE OUTPUTS ON AS-I BUS
PARAMETERIZABLE VIA SW MSS ES WIDTH 45MM
SPRING-LOADED TERMINAL UP TO SIL3 (IEC 61508) UP
TO PERFORMANCE LEVEL E (ISO 13849-1) 9
EXPANSION MODULES CONNECTABLE

General technical data:		
product brand name		SIRIUS
Product designation		Modular Safety System 3RK3
Design of the product		Central module - Advanced
Protection class IP		IP20
Resistance against shock		15g / 11 ms
Degree of pollution		3
mounting position		vertical
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during operating	°C	-20 ... +60
• during storage	°C	-40 ... +85
• during transport	°C	-40 ... +85
Relative humidity		
• during operating phase	%	95 ... 10
Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4		2 kV (power ports) / 1 kV (signal ports)
Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5		2 kV
Conductor-bound parasitic coupling 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-bound parasitic coupling / according to IEC 61000-4-3		10 V/m
Impulse voltage resistance / rated value	V	2,500
Insulation voltage / rated value	V	300
Reference code / according to DIN EN 61346-2		K
Product function		
• EMERGENCY STOP function		Yes
• protective door monitoring		Yes
• protective door monitoring with tumbler		Yes
• muting, 2 sensor parallel		Yes
• muting, 4 sensor parallel		Yes
• muting, 4 sensor sequential		Yes
• monitoring parameterizable		Yes
• evaluation: contact-free acting protection device		Yes
• evaluation: selector switch		Yes
• step mat monitoring		Yes
• evaluation: two-hand control panel		Yes
• evaluation: enabling switch		Yes
• monitored start-up		Yes
Protocol / optional / is supported / PROFIBUS DP protocol		Yes
• comment		when using the DP interface module; 64 bit cyclical data

Control circuit:

Type of voltage		DC
Control supply voltage / 1 / for DC / rated value	V	24

Auxiliary circuit:

Product function		
• inputs parameterisable		Yes
• outputs parameterisable		Yes
Number of inputs		
• safety-related		8
• not safety-related		0
Number of outputs		
• as contact-affected switching element / safety-related		
• 1-channel		0
• 2-channel		1
• as contact-less semiconductor switching element		
• safety-related / 2-channel		1
• not safety-oriented / 2-channel		0

- to the test of contact afflicted sensors

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Installation/mounting/dimensions:

Mounting type		Snap-mounted to DIN rail or screw-mounted with additional push-in lug
Width	mm	45
Height	mm	113
Depth	mm	124

Connections:

Product function / removable terminal for auxiliary and control circuit		Yes
Design of the electrical connection / for auxiliary and control current circuit		spring-loaded terminals

Certificates/approvals:

General Product Approval

EMC



Functional Safety / Safety of Machinery

Test Certificates

Shipping Approval



[other](#)

[Special Test Certificate](#)



other



[Confirmation](#)

[Declaration of Conformity](#)

[Environmental Confirmations](#)

Safety:

Safety Integrity Level (SIL) / according to IEC 61508		SIL CL 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	0.27999999999999997E-8
Average probability of failure on demand (PFDavg)		0.00017 1/y
T1 value / for proof test interval or service life / according to IEC 61508	a	20
Stop category / according to DIN EN 60204-1		0 / 1
Protection against electrical shock		finger-safe
Contact reliability		one incorrect switching operation of 100 million switching operations (17 V, 1 mA)

Further information:

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

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

Industry Mall (Online ordering system)

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

Cax online generator:

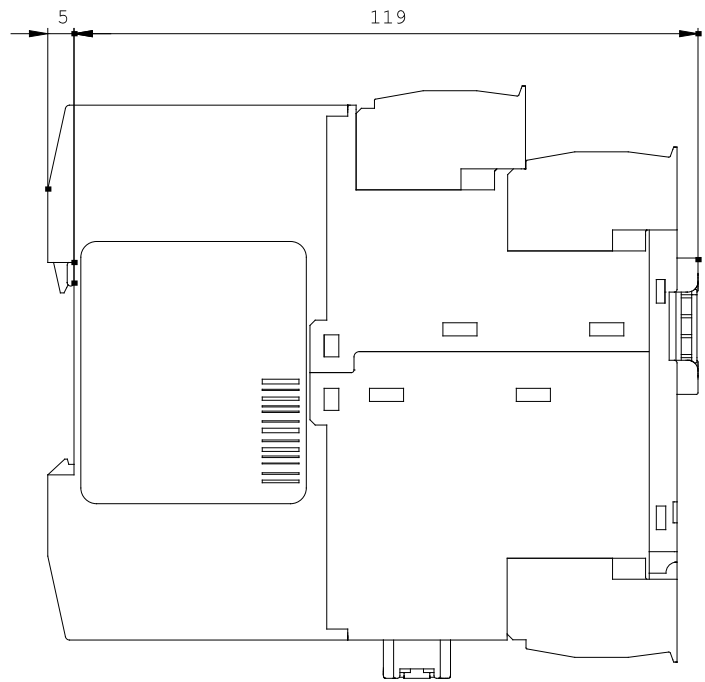
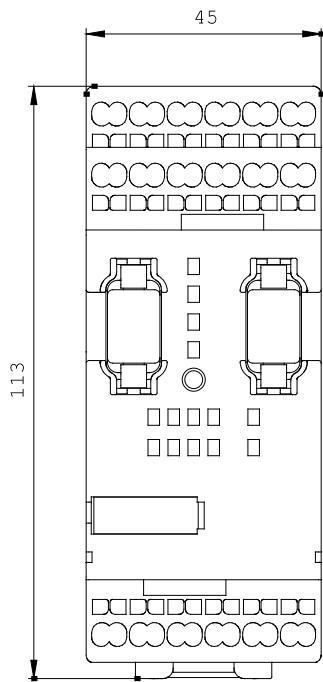
<http://www.siemens.com/cax>

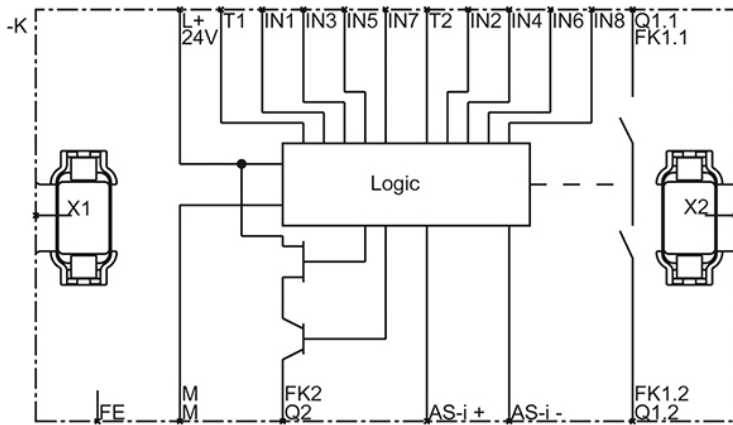
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RK3131-2AC10/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RK3131-2AC10





last change:

Jun 16, 2014