



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
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 operation	°C	-20 ... +60
• during storage	°C	-40 ... +85
• during transport	°C	-40 ... +85
Relative humidity during operation	%	95 ... 10
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV (power ports) / 1 kV (signal 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
Surge voltage resistance Rated value	V	2 500
Insulation voltage Rated value	V	300
Equipment marking acc. 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: 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
Protocol optional is supported PROFIBUS DP protocol		Yes
• Note		when using the DP interface module; 64 bit cyclical data

Control circuit/ Control:

Type of voltage		DC
Control supply voltage 1 for DC Rated value	V	24

Auxiliary circuit:

Product function		
• Parameterizable inputs		Yes
• Parameterizable outputs		Yes
Number of inputs		
• safety-related		8
• non-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
— non-safety-related 2-channel		0
• for testing contact-based sensors		2

Short-circuit:

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/ Terminals:

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

Safety related data:

Safety Integrity Level (SIL) acc. to IEC 61508		SIL CL 3
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	0.0000000028
T1 value for proof test interval or service life acc. to IEC 61508	y	20
Stop category acc. 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)

Certificates/ approvals:

General Product Approval	EMC	Functional Safety/Safety of Machinery
--------------------------	-----	---------------------------------------



[Type Examination Certificate](#)

Functional Safety/Safety of Machinery	Test Certificates	other
---------------------------------------	-------------------	-------

[other](#)

[Special Test Certificate](#)



ASi

[Environmental Confirmations](#)

[Confirmation](#)

[Declaration of Conformity](#)

Safety related data:

Safety Integrity Level (SIL) acc. to IEC 61508		SIL CL 3
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	0.0000000028
T1 value for proof test interval or service life acc. to IEC 61508	y	20
Stop category acc. 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/industrymall>

Cax online generator

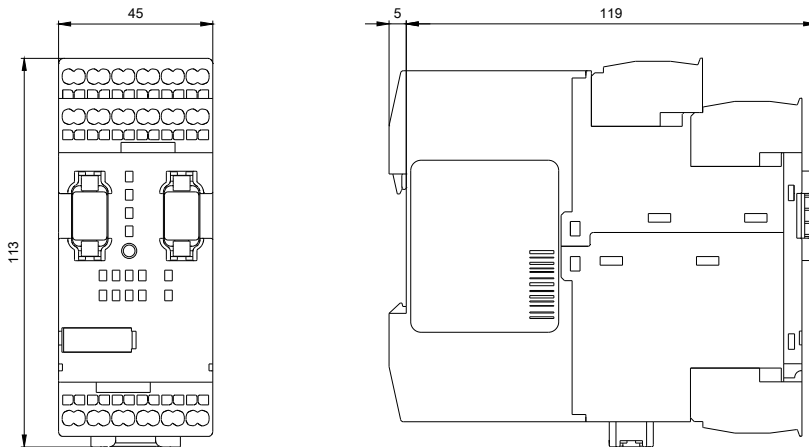
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK31312AC10>

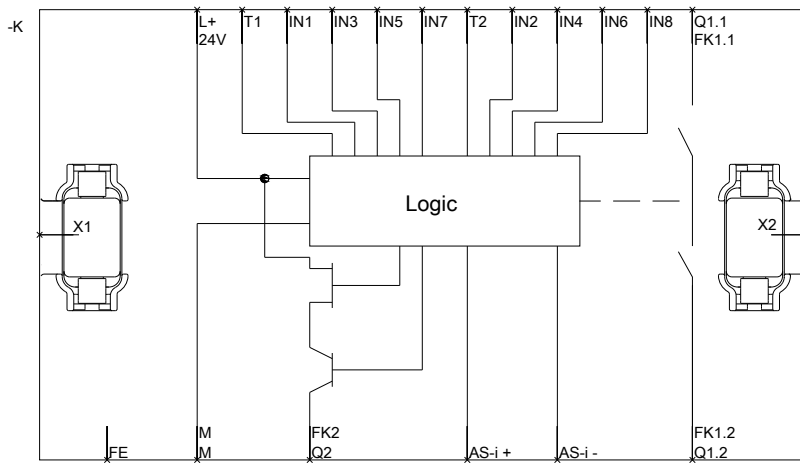
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RK31312AC10/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK31312AC10&lang=en





last modified:

13.03.2015