



SIRIUS,  
CENTRAL UNIT 3RK3 ASISAFE EXTENDED FOR  
MODULAR SAFETY SYSTEM 3RK3 2/4F-DI,4DI,1F-RO,1F-  
DO,24V DC MONITORING OF ASI SLAVES,  
CONTROL OF 10 SAFE OUTPUTS ON AS-I BUS  
PARAMETERIZABLE VIA SW MSS ES WIDTH 45MM  
SCREW TERMINAL UP TO SIL3 (IEC 61508) UP TO  
PERFORMANCE LEVEL E (ISO 13849-1) 2 EXPANSION  
MODULES CAN BE CONNECTED

**General technical data:**

<b>product brand name</b>		SIRIUS
<b>Product designation</b>		Modular Safety System 3RK3
<b>Design of the product</b>		Central unit - ASIsafe
<b>Protection class IP</b>		IP20
<b>Resistance against shock</b>		15g / 11 ms
<b>Degree of pollution</b>		3
<b>mounting position</b>		vertical
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Ambient temperature</b>		
• during operating	°C	-20 ... +60
• during storage	°C	-40 ... +85
• during transport	°C	-40 ... +85
<b>Relative humidity</b>		
• during operating phase	%	95 ... 10
<b>Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4</b>		2 kV (power ports) / 1 kV (signal ports)
<b>Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5</b>		2 kV
<b>Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5</b>		1 kV

<b>Electrostatic discharge / according to IEC 61000-4-2</b>		4 kV contact discharge / 8 kV air discharge
<b>Field-bound parasitic coupling / according to IEC 61000-4-3</b>		10 V/m
<b>Impulse voltage resistance / rated value</b>	V	2,500
<b>Insulation voltage / rated value</b>	V	300
<b>Reference code / according to DIN EN 61346-2</b>		K
<b>Product function</b>		
• 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
<b>Protocol / optional / is supported / PROFIBUS DP protocol</b>		Yes
• comment		when using the DP interface module; 64 bit cyclical data

#### Control circuit:

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

#### Auxiliary circuit:

<b>Product function</b>		
• inputs parameterisable		Yes
• outputs parameterisable		Yes
<b>Number of inputs</b>		
• safety-related		4
• not safety-related		4
<b>Number of outputs</b>		
• 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

2

### Installation/mounting/dimensions:

<b>Mounting type</b>		Snap-mounted to DIN rail or screw-mounted with additional push-in lug
<b>Width</b>	mm	45
<b>Height</b>	mm	111
<b>Depth</b>	mm	124

### Connections:

<b>Product function / removable terminal for auxiliary and control circuit</b>		Yes
<b>Design of the electrical connection / for auxiliary and control current circuit</b>		screw-type terminals

### Certificates/approvals:

#### General Product Approval



CCC



GOST



VDE

[other](#)

#### Functional Safety / Safety of Machinery

other



ASi

[Declaration of Conformity](#)
[Environmental Confirmations](#)

### Safety:

<b>Safety Integrity Level (SIL) / according to IEC 61508</b>		SIL CL 3
<b>Performance level (PL) / according to EN ISO 13849-1</b>		e
<b>Category / according to EN 954-1</b>		4
<b>PFHD / with high demand rate / according to EN 62061</b>	1/h	0.27999999999999997E-8
<b>Average probability of failure on demand (PFDavg)</b>		0.00017 1/y
<b>T1 value / for proof test interval or service life / according to IEC 61508</b>	a	20
<b>Stop category / according to DIN EN 60204-1</b>		0 / 1
<b>Protection against electrical shock</b>		finger-safe
<b>Contact reliability</b>		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:

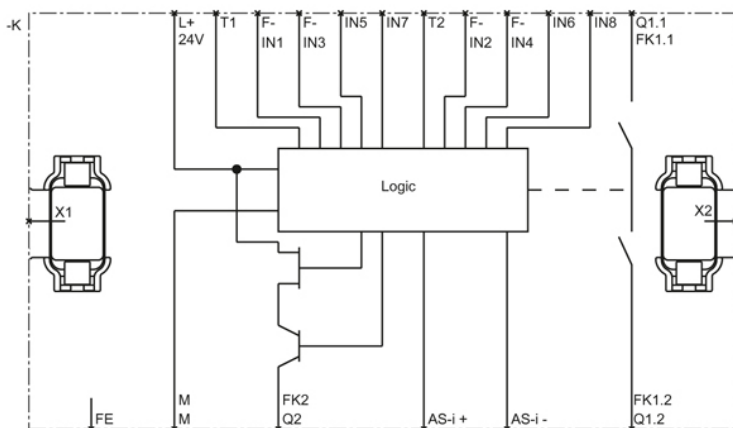
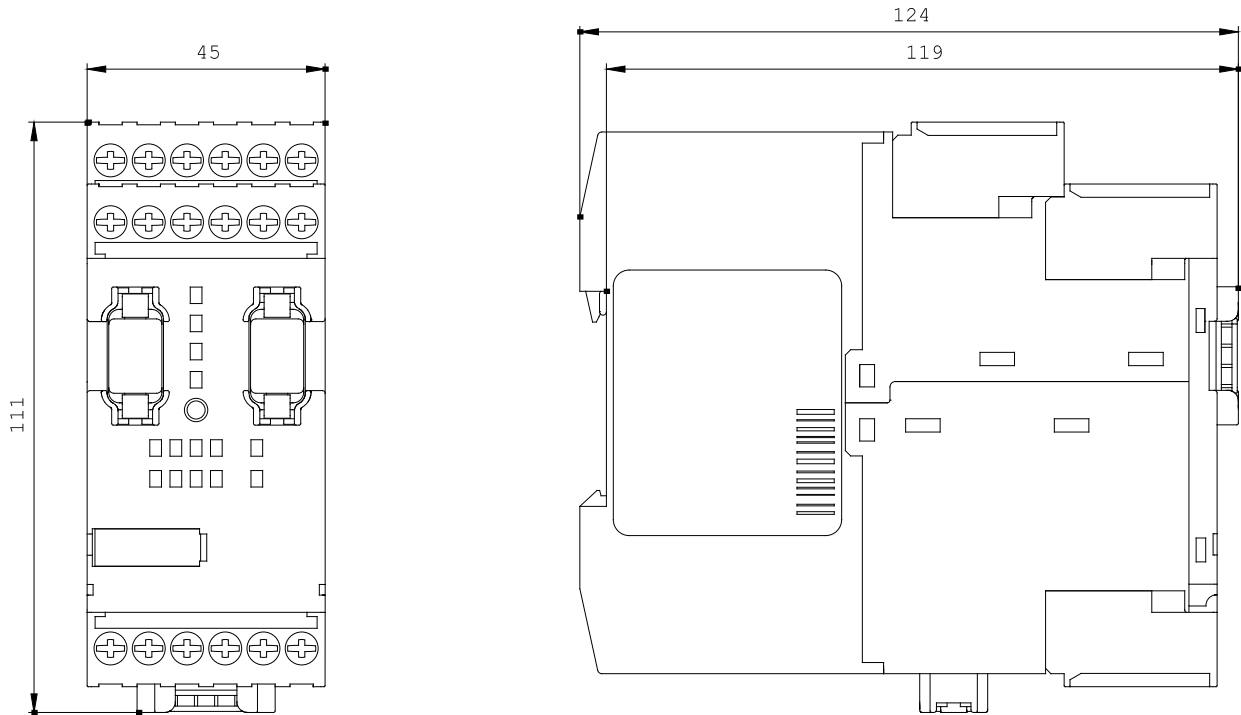
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RK3122-1AC00/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RK3122-1AC00](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RK3122-1AC00)



last change:

Jun 16, 2014