



SIRIUS,
CENTRAL UNIT 3RK3 ASISAFE BASIC FOR MODULAR
SAFETY SYSTEM 3RK3 1/2F-DI,6DI,1F-RO,1F-DO,
24V DC MONITORING OF ASI SLAVES,
CONTROL OF 8 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) NO EXPANSION
MODULE CAN BE CONNECTED

General technical data:

product brand name		SIRIUS
Product designation		Modular Safety System 3RK3
Design of the product		Central unit - ASISafe
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 • protective door monitoring • protective door monitoring with tumbler • muting, 2 sensor parallel • muting, 4 sensor parallel • muting, 4 sensor sequential • monitoring parameterizable • evaluation: contact-free acting protection device • evaluation: selector switch • step mat monitoring • evaluation: two-hand control panel • evaluation: enabling switch • monitored start-up		Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
Protocol / optional / is supported / PROFIBUS DP protocol • comment		Yes 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 • outputs parameterisable		Yes Yes
Number of inputs • safety-related • not safety-related		2 6
Number of outputs • as contact-affected switching element / safety-related • 1-channel • 2-channel • as contact-less semiconductor switching element • safety-related / 2-channel • not safety-oriented / 2-channel		0 1 1 0

- to the test of contact afflicted sensors

2

Installation/mounting/dimensions:

Mounting type		Snap-mounted to DIN rail or screw-mounted with additional push-in lug
Width	mm	45
Height	mm	111
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		screw-type terminals

Certificates/approvals:

General Product Approval


[other](#)

other



ASi

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

Functional Safety / Safety of Machinery

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	0.2799999999999997E-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>

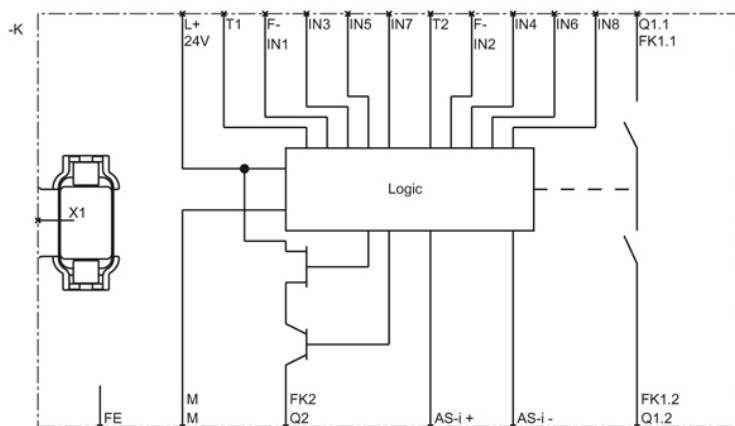
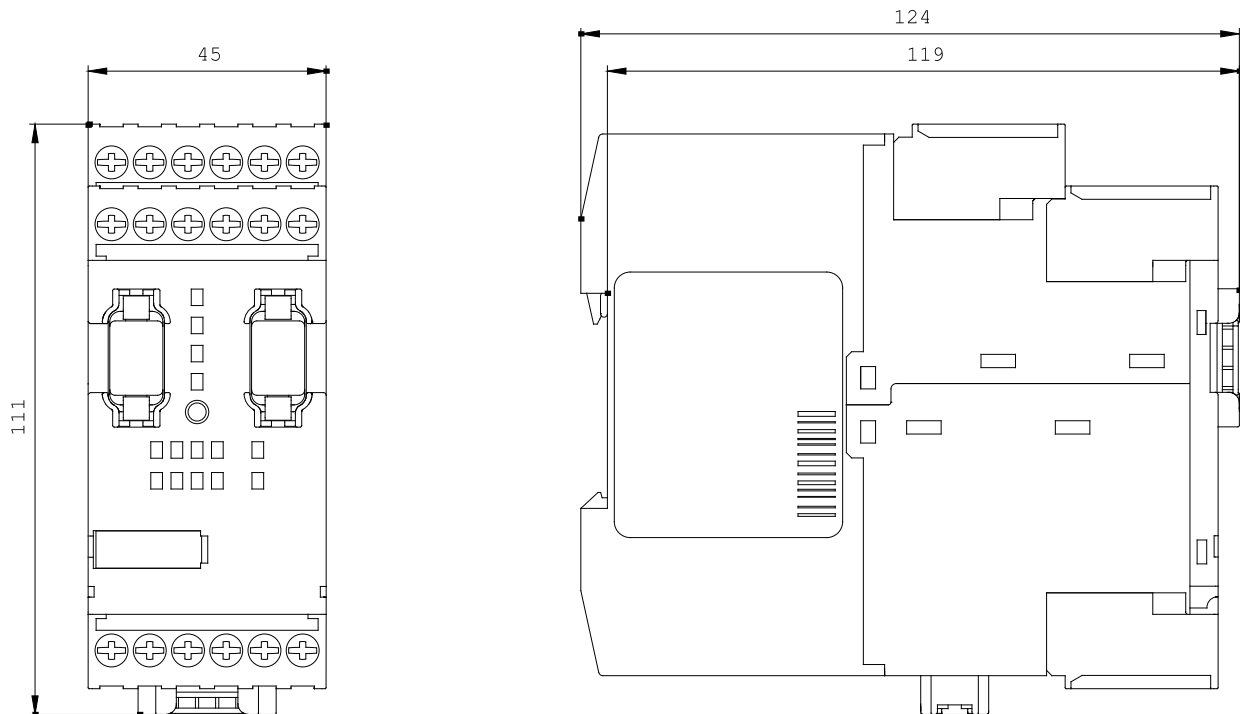
Industry Mall (Online ordering system)

<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/3RK3121-1AC00/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RK3121-1AC00



last change:

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