



SIRIUS,
CENTRAL UNIT 3RK3 ADVANCED FOR MODULAR
SAFETY SYSTEM 3RK3 4/8 F-DI,
1F-RO, 1 F-DO,
24VDC MONITORING OF ASI SLAVES,
CONTROL OF 12 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) 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 BURST / acc. to IEC 61000-4-4		2 kV (power ports) / 1 kV (signal ports)
Conducted interference conductor-earth SURGE / acc. to IEC 61000-4-5		2 kV
Conducted interference 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
Reference code / acc. to DIN EN 61346-2		K
Product function <ul style="list-style-type: none"> • 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: electro-sensitive protective equipment • evaluation: selector switch • Pressure-sensitive mat monitoring • evaluation: two-hand operator 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 <ul style="list-style-type: none"> • Note 		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 <ul style="list-style-type: none"> • Parameterizable inputs • Parameterizable outputs 		Yes Yes
Number of inputs <ul style="list-style-type: none"> • safety-related • non-safety-related 		8 0
Number of outputs <ul style="list-style-type: none"> • as contact-affected switching element / safety-related <ul style="list-style-type: none"> • 1-channel • 2-channel • as contact-less semiconductor switching element <ul style="list-style-type: none"> • safety-related / 2-channel • non-safety-related / 2-channel • for testing contact-based sensors 		0 1 1 0 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****EMC**

CCC



GOST



UL



C-TICK

Functional Safety / Safety of Machinery**Test Certificates**

VDE

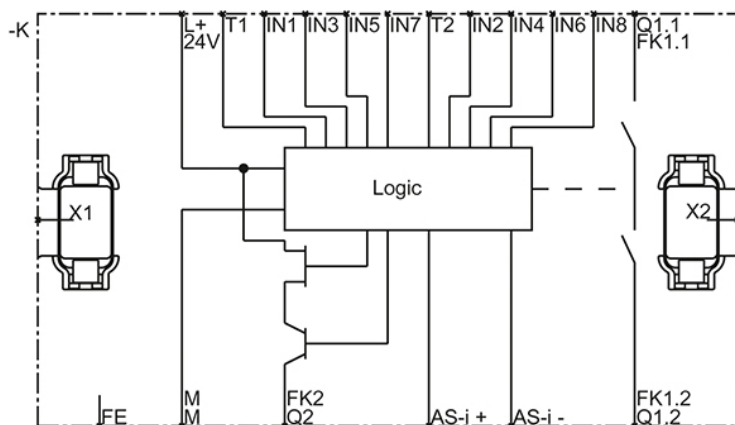
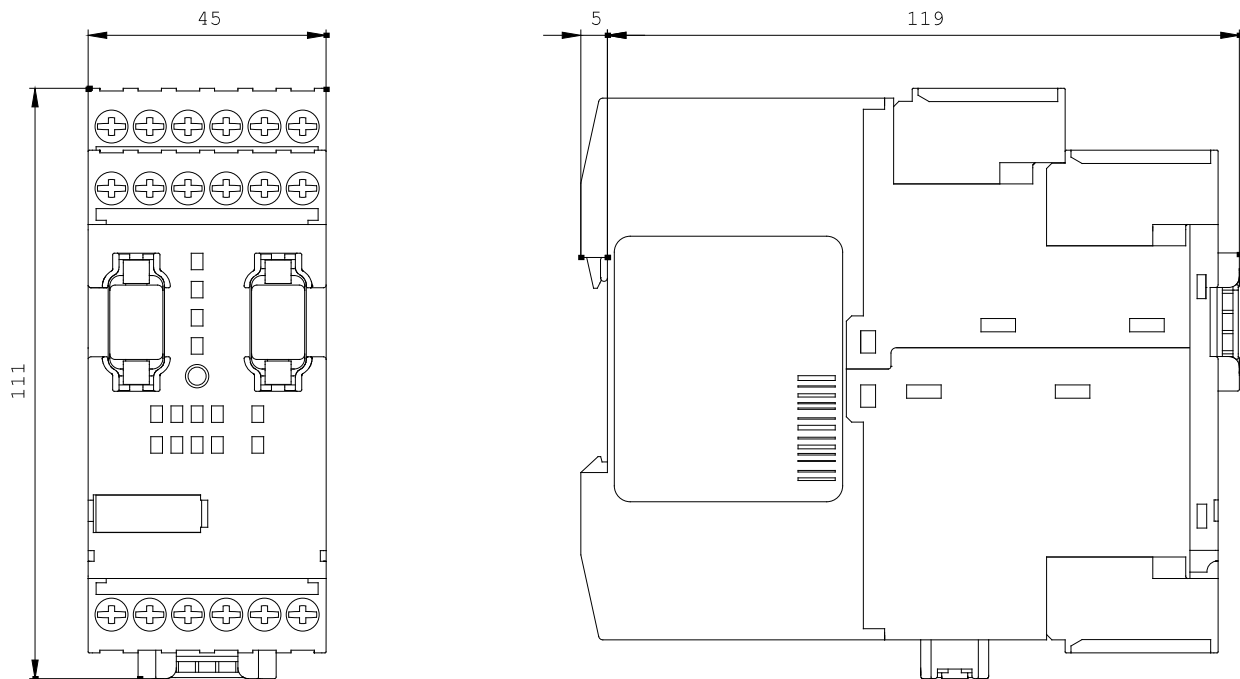
[other](#)[Special Test Certificate](#)**other**

ASi

[Confirmation](#)[Declaration of Conformity](#)[Environmental Confirmations](#)**Safety:**

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	0.27999999999999997E-8
Average probability of failure on demand (PFDavg)		0.00017 1/y
T1 value / for proof test interval or service life / acc. to IEC 61508	a	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>



last change:

Sep 29, 2014