



SIRIUS, EXPANSION MODULE 3RK32 FOR MODULAR SAFETY SYSTEM 3RK3 4/8 F-DI, 24V DC PARAMETERIZABLE VIA SW MSS ES WIDTH 22.5MM SCREW TERMINAL UP TO SIL3 (IEC 61508) UP TO PERFORMANCE LEVEL E (ISO 13849-1) .

General technical data		
product brandname		SIRIUS
Product designation		Modular Safety System 3RK3
Design of the product		extension module 4/8 F-DI
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 storage	°C	-40 ... +85
• during operation	°C	-20 ... +60
• during transport	°C	-40 ... +85
Relative humidity during operation	%	10 ... 95
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV (power 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, 3 V/m, 1 V/m
Surge voltage resistance rated value	V	500
Insulation voltage rated value	V	50
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		K
Equipment marking acc. to DIN EN 61346-2		K
Product function		
• EMERGENCY OFF function		Yes
• protective door monitoring		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

Control circuit/ Control

Type of voltage		DC
Control supply voltage 1 at DC rated value	V	24
Operating range factor control supply voltage rated value of magnet coil		0.85 ... 1.15

Auxiliary circuit

Product function		
• Parameterizable outputs		No
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		0
• as contact-less semiconductor switching element		
— safety-related 2-channel		0
— non-safety-related 2-channel		0
• for testing contact-based sensors		2

Short-circuit protection

Design of the fuse link for short-circuit protection of non-solid-state switching element required		NH Typ 3NA, DIAZED Typ 5SB, NEOZED Typ 5SE
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Installation/ mounting/ dimensions


Mounting type		standard rail
Width	mm	22.5
Height	mm	102
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		screw-type terminals
Connectable conductor cross-section for auxiliary contacts		
<ul style="list-style-type: none"> • single or multi-stranded 	mm ²	0.5 ... 4
<ul style="list-style-type: none"> • finely stranded — with core end processing 	mm ²	0.5 ... 2.5

Certificates/approvals

General Product Approval	EMC	Functional Safety/Safety of Machinery
 CSA  UL  EAC  C-Tick		Type Examination Certificate Miscellaneous

Test Certificates	other
Special Test Certificate	Confirmation Environmental Confirmations  Profibus

Safety related data

Safety Integrity Level (SIL) acc. to IEC 61508		SIL3
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	0.0000000019
Average probability of failure on demand (PFDavg) with low demand rate acc. to IEC 61508	1/y	0.0000043
T1 value for proof test interval or service life acc. to IEC 61508	y	20
Protection against electrical shock		finger-safe

Further information

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3RK3211-1AA10>

Cax online generator

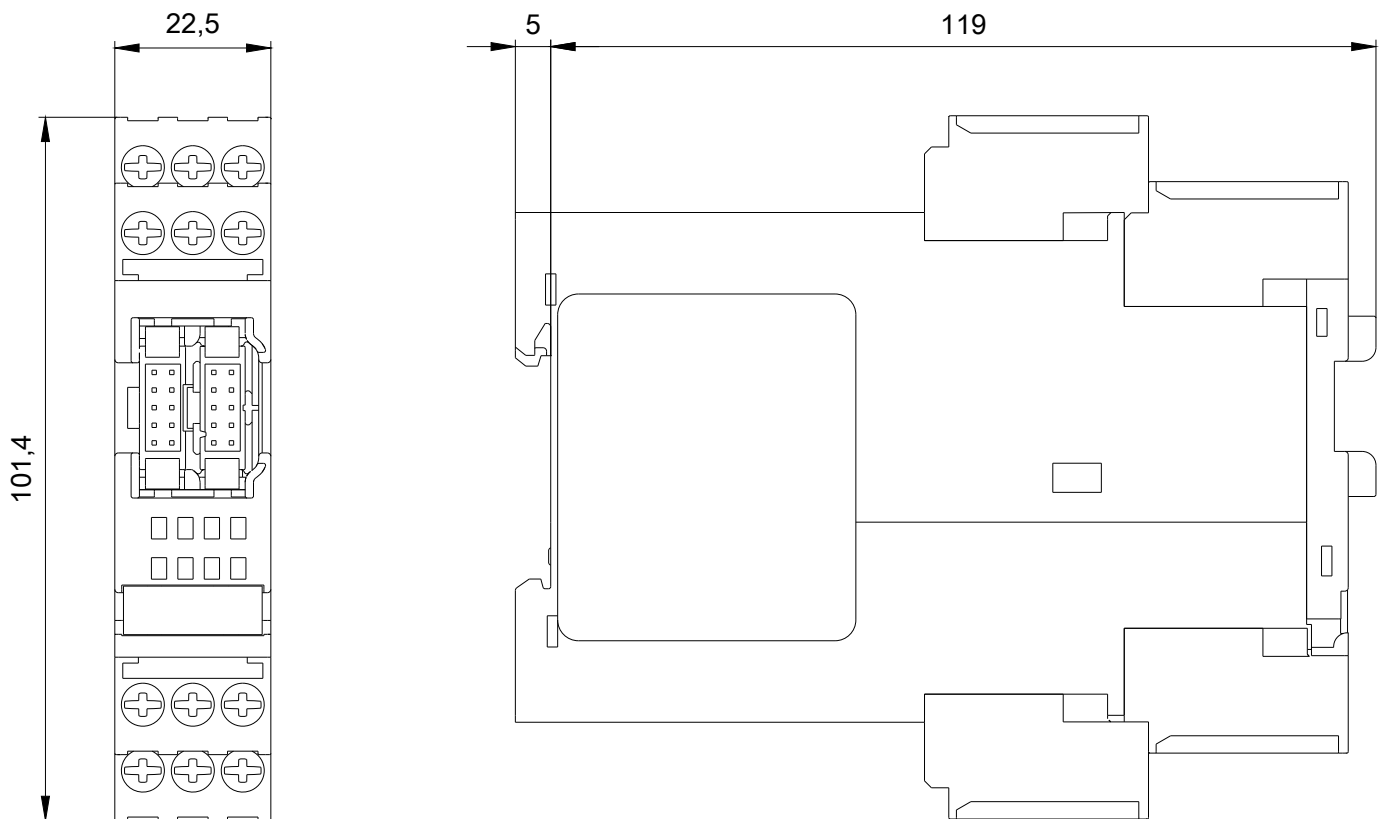
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RK3211-1AA10>

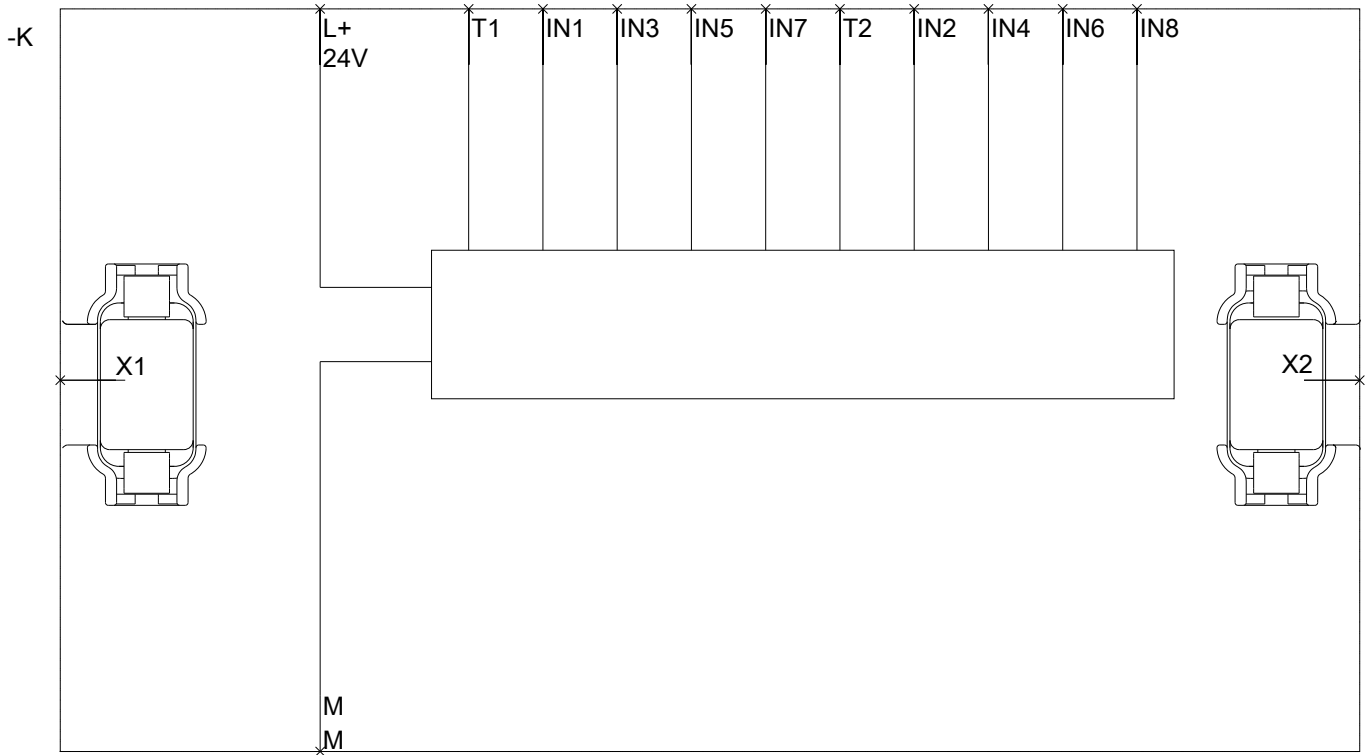
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RK3211-1AA10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RK3211-1AA10&lang=en





last modified:

06/05/2017