

SIGUARD SAFETY COMBINATION ELEKTRONICS BASIC
 DEVICE STOP-0,
 MAX. ACHIEVABLE SIL:3, PL:E STOP-0,
 6FK, 1 HL SIGNALING CIRCUIT,
 1 NC SPRING-LOADED TERMINAL DC 24 V CUSTOMIZED
 TYPE (KRAUSS-MAFFEI) WIDTH 90 MM

General technical details:

product brand name		SIRIUS
Protection class IP / of the enclosure		IP20
Protection class IP / of the terminal		IP20
Protection against electrical shock		finger-safe
Insulation voltage / Rated value	V	690
Ambient temperature		
• during storage	°C	-40 ... +80
• during operation	°C	-25 ... +60
Air pressure		
• acc. to SN 31205	kPa	90 ... 106
Relative humidity		
• during operation	%	10 ... 95
Installation altitude / at height above sea level / maximum	m	2,000
Vibration resistance / acc. to IEC 60068-2-6		5 ... 500 Hz: 0,075 mm
Shock resistance		5g / 11 ms
Surge voltage resistance / Rated value	V	6,000
EMC emitted interference		IEC 60947-5-1, IEC 60000-4-3, IEC 60000-4-5, IEC 60000-4-6
Number of sensor inputs		
• 1-channel or 2-channel		1
Safety Integrity Level (SIL)		
• acc. to IEC 61508		SIL3
Performance level (PL)		
• acc. to EN ISO 13849-1		e
Category / acc. to EN ISO 13849-1		4
Hardware fault tolerance / acc. to IEC 61508		1
Safety device type / acc. to IEC 61508-2		Type B
PFHD / with high demand rate / acc. to EN 62061	1/h	0.11E-7
T1 value / for proof test interval or service life / acc. to IEC 61508	a	20

Stop category / acc. to DIN EN 60204-1		0
General technical details:		
Operating frequency / maximum	1/h	1,000
Switching capacity current		
• of the NO contacts of the relay outputs		
• at DC-13		
• at 24 V	A	10
• at 115 V	A	1
• at 230 V	A	0.3
• at AC-15		
• at 115 V	A	6
• at 230 V	A	6
• of the NC contacts of the relay outputs		
• at DC-13		
• at 24 V	A	10
• at 115 V	A	1
• at 230 V	A	0.3
• at AC-15		
• at 115 V	A	6
• at 230 V	A	6
Mechanical service life (switching cycles) / typical		30,000,000
maximum permissible voltage for safe isolation / between electronic evaluation device and enabling circuit / acc. to EN 60947-1	V	400
Design of the fuse link / for short-circuit protection of the NO contacts of the relay outputs / required		gL/gG: 10 A
DC resistance / of the cable / maximum	Ω	500
Cable length / between sensor and electronic evaluation device / with Cu 1.5 mm² and 150 nF/km / maximum	m	2,000
Make time / with automatic start		
• typical	ms	60
• for DC / maximum	ms	100
Make time / with automatic start / after power failure		
• typical	ms	6,000
• maximum	ms	7,000
Make time / with monitored start		
• maximum	ms	100
• typical	ms	60
Backslide delay time / after opening of the safety circuits / typical	ms	50
Backslide delay time / in the event of power failure		
• typical	ms	120

• maximum	ms	120
Recovery time / after opening of the safety circuits / typical	ms	500
Recovery time / after power failure / typical	s	7
Pulse duration		
• of the sensor input / minimum	ms	45
• of the ON pushbutton input / minimum	s	0.2
• of the cascading input / minimum	s	0.045

Control circuit:		
Type of voltage / of the control supply voltage		DC
Control supply voltage / 1 / for DC / Rated value	V	24
Operating range factor control supply voltage rated value / of the magnet coil		
• for DC		0.85 ... 1.1

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles

Installation/mounting/dimensions:		
mounting position		any

Connections:		
Design of the electrical connection		spring-loaded terminals
Type of connectable conductor cross-section		
• solid		1x (0.2 ... 2.5 mm ²)
• finely stranded		
• without core end processing		1x (0.25 ... 1.5 mm ²)
Type of connectable conductor cross-section / for AWG conductors		
• solid		1x (24 ... 18)
• stranded		1x (24 ... 18)

Product Function:		
Suitability for use		
• Monitoring of floating sensors		Yes
• Monitoring of non-floating sensors		Yes
• safety switch		Yes
• position switch monitoring		Yes
• EMERGENCY-OFF circuit monitoring		Yes
• valve monitoring		No
• tactile sensor monitoring		Yes
• magnetically operated switch monitoring		No
• safety-related circuits		Yes

Certificates/approvals:

Certificate of suitability

- TÜV (German technical inspectorate) certificate
- UL approval
- BG BIA certificate

UL, CSA, EN 60204-1, EN ISO 12100, EN 954-1, IEC 61508

Yes

Yes

Yes

General Product Approval

EMC



CCC



CSA



TÜV



UL



C-TICK

Functional Safety /
Safety of Machinery

Declaration of
Conformity

Test Certificates

other



VDE



EG-Konf.

[Special Test
Certificate](#)

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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:

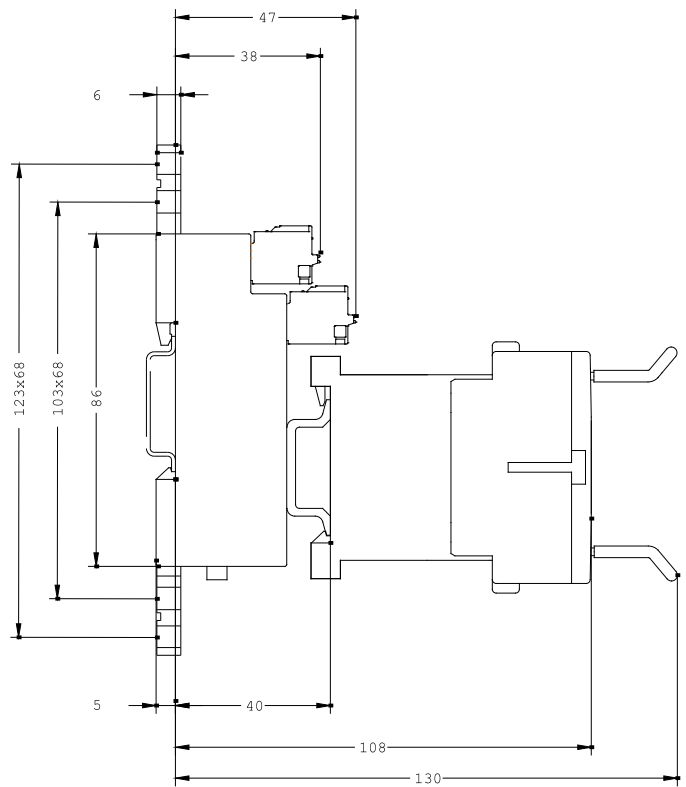
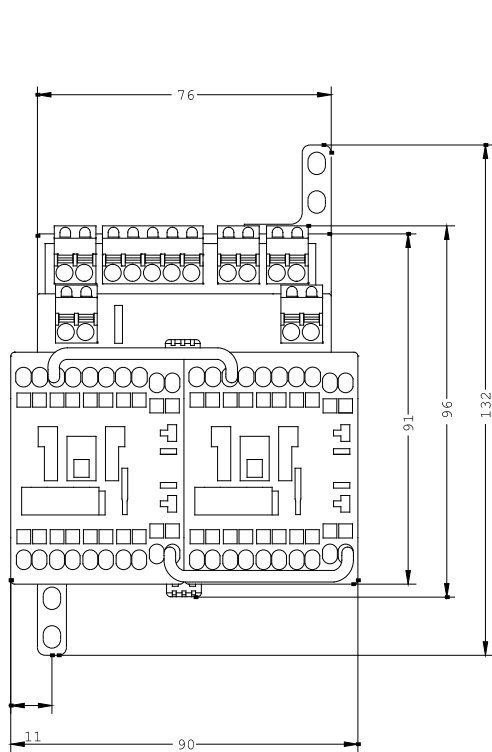
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3TK2853-2BB40-0AB1/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3TK2853-2BB40-0AB1



last change:

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