



SSP

Safety System Products

S16LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4A0-W67

Safety Simplifier | for safety relais

Your advantages

- 14 I/O's as safety inputs or redundant OSSD-outputs
- wireless interface for safe communication, programming & diagnosis
- IP65
- 40mm width for aluminium safety fence systems



To the downloads ►

we simplify safety



Safety System Products

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With the Safety Simplifier we take safety where it is needed and we provide safety where it is needed with the Safety Simplifier and make it easier for you to develop user-friendly safety systems, such as on access doors. Simply connect up your sensors, locking systems or light curtains. Select the required push button and/or emergency stop button and you have a complete safety solution with analysis and diagnosis functions. This data is wirelessly transmitted via another Safety Simplifier or directly transmitted to your existing system in a fail-safe manner.

General data

Type designation	S16LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4A0-W67
Item number	SP-X-89-100-42
Functional type	safety PLC with safe wireless interface, internal antenna

Button position 1

Type designation	E2
Function type	Emergency- Stop- Button

Button position 2

Type designation	I1
Function type	Illuminated Button

Button position 3

Type designation	I1
Function type	Illuminated Button

Button position 4

Type designation	K4
Function type	Key switch resting, 2 Positions, 2 x NO
Colour	red, yellow, green, blue, white

Connection

- Position 1	Q1A0 - Connection bottom left with cover
- Position 2	Q2A0 - Connection top left with cover
- Position 3	Q3C0 - male connector M12 5-Pin
- Position 4	Q4A0 - Connection top right with cover

Safety data

CPU



Safety System Products

S16LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4A0-W67

- EN ISO 13849-1: 2008	Category 4
- IEC 61508-2	SIL CL 3
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
1-channel input	
- EN ISO 13849-1: 2008	Category 2
- IEC 61508-2	SIL CL 2
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
2-channel input	
- EN ISO 13849-1: 2008	Category 4
- IEC 61508-2	SIL CL 3
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
1-channel OSSD output	
- EN ISO 13849-1: 2008	Category 2
- IEC 61508-2	SIL CL 2
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
2- channel OSSD Output	
- EN ISO 13849-1: 2008	Category 4
- IEC 61508-2	SIL CL 3
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
2- channel relais output	
- EN ISO 13849-1: 2008	Category 4
- EN 62061 SIL CIL	SIL CL 3
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
Approvals	CE, TÜV
Environmental conditions	
Max. storage temperature	-20°C ... +65 °C



Safety System Products

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Max. operating temperature -20°C ... +65 °C

Electrical data

- max. amount of safe wireless channels	16
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Channels

- Channel 1	2405 MHz
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- Channel 2	2410 MHz
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- Channel 3	2415 MHz
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- Channel 4	2420 MHz
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- Channel 5	2425 MHz
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- Channel 6	2430 MHz
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- Channel 7	2435 MHz
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- Channel 8	2440 MHz
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- Channel 9	2445 MHz
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- Channel 11	2455 MHz
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- Channel 10	2450 MHz
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- Channel 12	2460 MHz
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- Channel 13	2465 MHz
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- Channel 14	2470 MHz
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- Channel 15	2475 MHz
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- Channel 16	2480 MHz
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- amount of clamps	32
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Supply voltage	10 - 30 V
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Current consumption	110 mA with LED display
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Conductor cross section

- single wire	0,08 ... 0,5 mm ²
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- fine wire	0,08 ... 0,5 mm ²
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- fine wired (wire sleeve without plastic collar)	0,25 mm ²
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stripping length	5...6 mm
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configurable In-/ Outputs

14 semiconductor In-/ Outputs with help of software configurable	□
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Amount of safe inputs	max. 14
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S16LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4A0-W67

Amount of safe semi-conductors OSSD outputs	max. 14
Amount of semi-conductors auxilliary outputs	max. 14
Amount of semi-conductors clock outputs	max. 8
Input current	HIGH 2,4 mA ... 3,8 mA LOW -2,5 mA ... 2,1 mA
Output type	PNP- Semiconductor
Output voltage	Operating voltage UB -0,5 V
Seperate output current	max. 600 mA (bei UB 24 V)
Total output current	max. 2 A (bei UB 24 V)

Button position 1

Type designation	E2
Function type	Emergency-Stop-Button
Switch type	2 Openers + LED
Bounce time NO	<10 ms
Bounce time NC	<10 ms
Break contact force opening	according to EN60947-5-1 Anh-K.
Illumination	LED
mechanical lifespan	50.000 switching cycles
electrical lifespan	50.000 switching cycles
B10d- Value	250.000

Button position 2

Type designation	I2
Function type	Illuminated Button
Switch type	1 closing device + LED
Bounce time NO	<10 ms
Bounce time NC	<10 ms
Break contact force opening	according to EN60947-5-1 Anh-K
Illumination	LED
mechanical lifespan	30.000 switching cycles
electrical lifespan	30.000 switching cycles

Button position 3

Type designation	I1
Function type	Illuminated Button
Colour	red, yellow, green, blue, white



Safety System Products

S16LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4A0-W67

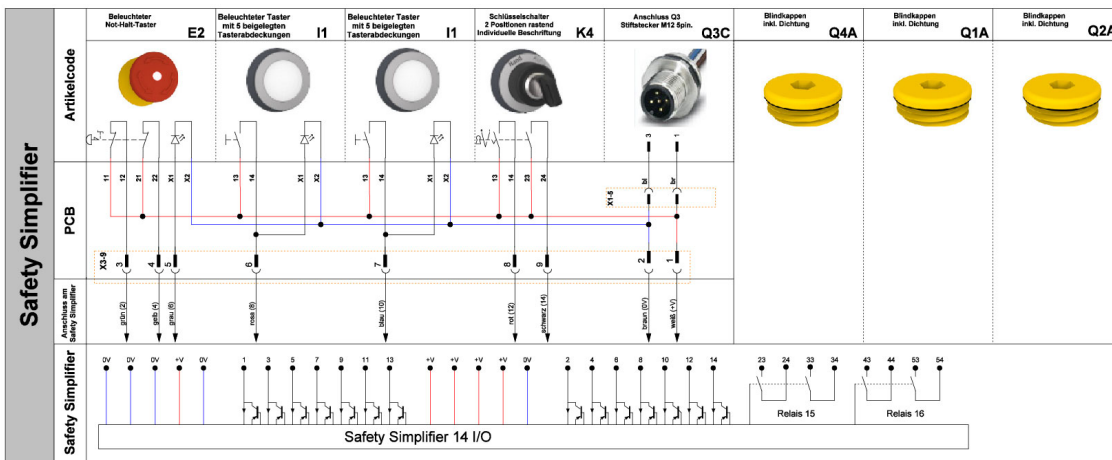
Switch type	1 closing device + LED
Bounce time NO	<10 ms
Bounce time NC	<10 ms
Break contact force opening	according to EN60947-5-1 Anh-K
Illumination	LED
mechanical lifespan	30.000 switching cycles
electrical lifespan	30.000 switching cycles
Button position 4	
Type designation	K4
Function type	Key switch resting, 2 Positions, 2 x NO
Switch type	2 closing device
Bounce time NO	<10 ms
Bounce time NC	<10 ms
Break contact force opening	according to EN60947-5-1 Anh-K
mechanical lifespan	1.000.000 switching cycles
electrical lifespan	1.000.000 switching cycles
General data	
Memory card	Installation of a memory card MEM-SP-N-88-001-93 possible
Programming connection	Micro USB Wireless-Interface
Type terminal connection	terminal clamps
- fine wired (wire sleeve with plastic collar)	0,08 ... 0,5 mm ²
Input voltage	HIGH 75% from UB (adjustable by software) LOW 25% from UB (adjustable by software)
Technical data inputs	
Technical data safe OSSD outputs, auxilliary and test pulse outputs	
Short-circuit proof	Yes
Mechanical data	
Installation opening of buttons	22,5 mm
Type of housing	H0A
Dimensions	
Height	44 mm

S16LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4A0-W67

Length	253 mm
Width	42 mm

Electrical drawings

Connection example 1

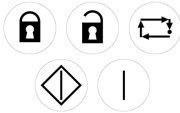
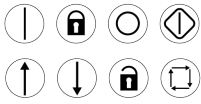







Equipment









Wireless Safety

Article code ZTK5	Button cap set for illuminated buttons	SP-X-88-001-19	
	Inscription label set ZB1	SP-X-88-001-21	
	Inscription label set ZB2	SP-X-88-001-22	

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	Inscription label set ZB3	SP-X-88-001-23	
	Inscription label set ZB4	SP-X-88-001-93	
Article code ZMT	Installation wrench	SP-X-88-001-25	
Article code ZUK	Liftingtool for button and light caps	SP-X-88-001-26	
Article code ZMB	Mounting plate big	SP-N-88-850-02	
Article code ZMS	Mountingplate small	SP-N-88-850-01	
Article code ZSD	Screw with seal	SP-X-88-001-89	

S16LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4A0-W67

External antenna for Safety Simplifier, cable length 1 m	Simplifier EXTA 1 m	SP-X-88-200-24	
External antenna for Safety Simplifier, cable length 10 m	Simplifier EXTA 10 m	SP-X-88-200-20	
External antenna for Safety Simplifier, cable length 2 m	Simplifier EXTA 2 m	SP-X-88-200-23	
External antenna for Safety Simplifier, cable length 5 m	Simplifier EXTA 5 m	SP-X-88-200-22	
External antenna for Safety Simplifier, cable length 8 m	Simplifier EXTA 8 m	SP-X-88-200-21	
Free software for the Safety Simplifier System	Simplifier Manager		
	Simplifier Monitor SRM	SP-N-88-850-03	
Fastening set for Safety Simplifier for back panel mounting	Simplifier ZHMS	SP-X-88-001-91	

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Fastening set for Safety Simplifier

Simplifier ZHS

SP-X-88-001-91



Accessories

M12-female connector, 12 pin, 10 m

M12-C12101-G

SP-X-33-000-21



M12-female connector, 12 pin, 20 m

M12-C12201-G

SP-X-33-000-22



M12-female connector, 5-pin

M12-C51-G

SP-X-33-001-00



M12-male connector, 5 pin

M12-C52-G

SP-X-33-001-01



M12-female connector, 8 pin

M12-C81-G

SP-X-33-001-02



M12-male connector, 8 pin

M12-C82-G

SP-X-33-001-03








M12-connecting cable, 12 pin, 1 m

M12-M12-C1213-G


SP-X-33-000-30



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M12-connecting cable, 5 pin, 0,5 m	M12-M12-C5023-G	SP-X-33-000-10	
M12-connecting cable, 5 pin, 1 m	M12-M12-C513-G	SP-X-33-000-11	
M12-connecting cable, 5 pin, 2 m	M12-M12-C523-G	SP-X-33-000-12	
M12-connecting cable, 8 pin, 10 m	M12-M12-C8103-G	SP-X-33-000-09	
M12-connecting cable, 8 pin, 1 m	M12-M12-C813-G	SP-X-33-000-25	

Operating elements

Universal hook	SP UH-K	
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Downloads

- Certificates
- STEP
- Catalog
- Product line
- Certificates
- Catalog packaging systems
- Operating manual
- EPLAN-Data