



SSP

Safety System Products

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

Safety Simplifier | for tGard SMDU

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

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

With the Safety Simplifier, we bring safety to where it is needed and make it easier for you to create user-friendly safety systems, such as on access doors. Simply connect your sensors, guard locking devices or light curtains. A complete safety solution with evaluation and diagnostics, which can be transmitted wirelessly via another Safety Simplifier or directly to your existing system in a safety-oriented manner.

General data

Type designation	S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17
Item number	1044907
Item number (old)	SP-X-89-000-57
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 2 positions, latching, individual labelling
Colour	red, yellow, green, blue, white

Connection

- Position 2	Q2A0 - Connection top left with cover
- Position 3	Q3C - connector male M12 5-Pin
- Position 4	Q4J - connector female M12 12-Pin

Safety data

CPU



Safety System Products

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

- 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
--------------------------	-------------------

we simplify safety



Safety System Products

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

Max. operating temperature

-20 °C ... +65 °C

Electrical data

Technical data wireless safety

- max. amount of safe wireless channels 16

Channels

- Channel 1 2405 MHz

- Channel 2 2410 MHz

- Channel 3 2410 MHz

- Channel 4 2420 MHz

- Channel 5 2425 MHz

- Channel 6 2430 MHz

- Channel 7 2435 MHz

- Channel 8 2440 MHz

- Channel 9 2445 MHz

- Channel 11 2455 MHz

- Channel 10 2450 MHz

- Channel 12 2460 MHz

- Channel 13 2465 MHz

- Channel 14 2470 MHz

- Channel 15 2475 MHz

- Channel 16 2480 MHz

- amount of clamps 32

Supply voltage 10 - 30 V

Current consumption 110 mA with LED display

Conductor cross section

- single wire 0,08 ... 0,5 mm²

- fine wire 0,08 ... 0,5 mm²

- fine wired (wire sleeve without plastic collar) 0,25 mm²

stripping length 5-6 mm

configurable In-/ Outputs

14 semiconductor In-/ Outputs with help of software configurable



we simplify safety



Safety System Products

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

Amount of safe inputs	max. 14
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	Operation 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	I1
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

we simplify safety

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

Colour	red, yellow, green, blue, white
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 2 positions, latching, individual labelling
Colour	red, yellow, green, blue, white
Switch type	2 closing devices
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	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
Type terminal connection	clamp terminals
- 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
---------------------------------	---------

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

Type of housing	H0A
-----------------	-----

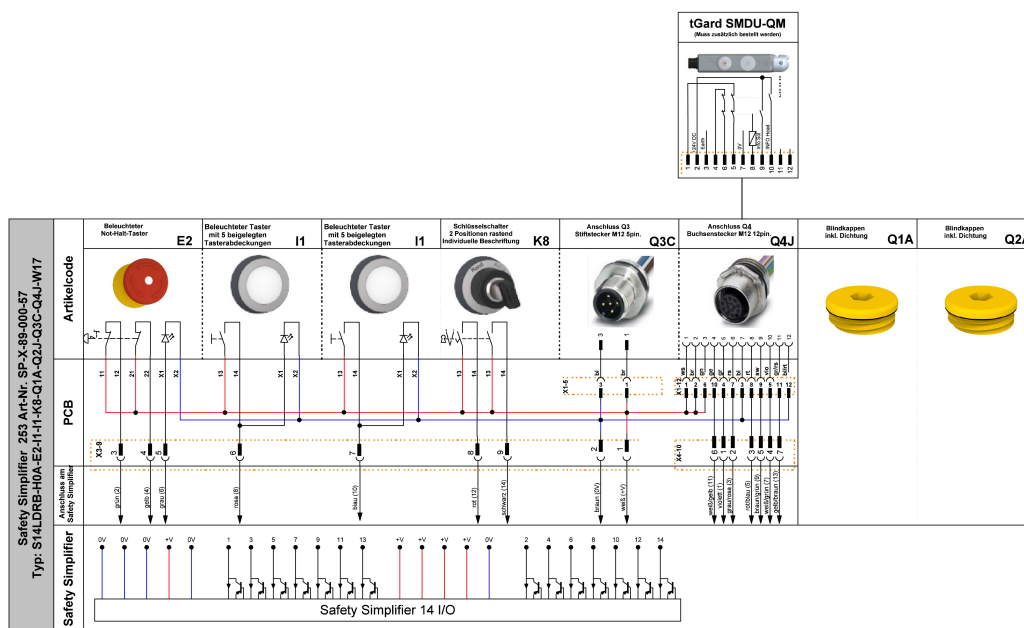
Dimensions

Height	44 mm
Length	253 mm
Width	42 mm

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

Electrical drawings

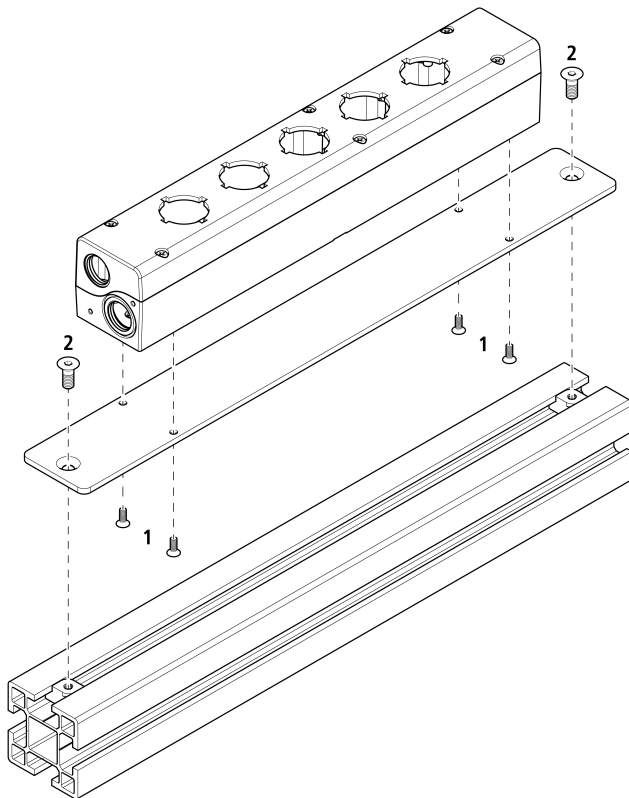
Connection example 1



S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

Drawings

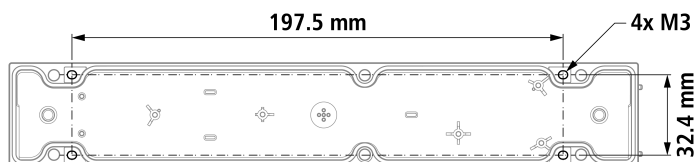
Assembly



- 1.) Position the housing over the holes provided and fasten it to the mounting plate using the four M3 countersunk screws supplied
- 2.) Fasten the mounting plate to a profile rail, for example, using two M5 countersunk screws (not included).

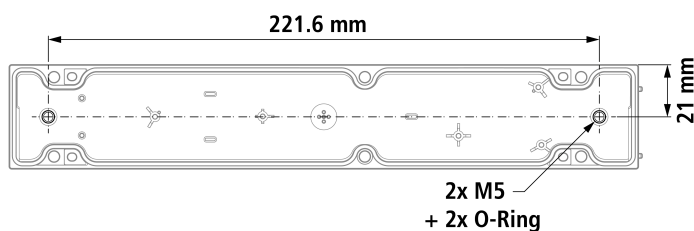
S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

Assembly 2



Mounting variant 1:

From the outside, with four M3 screws in the slotted holes provided.



Mounting variant 2:

Inside the housing, with two M5 screws fitted with O-rings at both ends of the housing.

The openings for the two M5 screws must be broken out.

Equipment

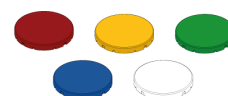
Wireless Safety

Article code ZTK5

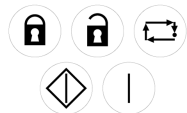
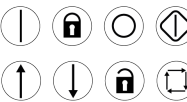
Button cap set for

1028969

illuminated buttons



S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

	Inscription label set ZB1	1028971	
	Inscription label set ZB2	1028972	
	Inscription label set ZB3	1028973	
	Inscription label set ZB4	1029020	
Article code ZMT	Installation wrench	1028974	
Article code ZUK	Liftingtool for button and light caps	1028975	
Article code ZMB	Mounting plate big	1019520	

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

Article code ZMS

Mountingplate small

1019519



Article code ZSD

Screw with seal

1029016



External antenna for Safety Simplifier, cable length

Simplifier EXTA 1 m

1029141

1 m



External antenna for Safety Simplifier, cable length

Simplifier EXTA 10 m

1029137

10 m



External antenna for Safety Simplifier, cable length

Simplifier EXTA 2 m

1029140

2 m



External antenna for Safety Simplifier, cable length

Simplifier EXTA 5 m

1029139

5 m



External antenna for Safety Simplifier, cable length

Simplifier EXTA 8 m

1029138

8 m



Free software for the Safety Simplifier System

Simplifier Manager



S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

	Simplifier Monitor SRM	1019521	
Fastening set for Safety Simplifier for back panel mounting	Simplifier ZHMS	1029018	
Fastening set for Safety Simplifier	Simplifier ZHS	1029018	
Accessories			
M12-female connector, 12 pin, 10 m	M12-C12101-G	1022362	
M12-female connector, 12 pin, 20 m	M12-C12201-G	1022364	
M12-female connector, 5-pin	M12-C51-G	1022422	
M12-male connector, 5 pin	M12-C52-G	1022423	
M12-female connector, 8 pin	M12-C81-G	1022424	

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

M12-male connector, 8 pin

M12-C82-G

1022425



M12-connecting cable, 12 pin, 1 m

M12-M12-C1213-G

1022373



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

1022352



M12-connecting cable, 8 pin, 1 m

M12-M12-C813-G

1022368



Operating elements

Universal hook

SP UH-K

1022689



Safety switches

S14LDRB-H0A-E2-I1-I1-K4-Q1A0-Q2A0-Q3C0-Q4J0-W17

Safety switch with locking function

THM-SMDU-QM

1016137



Downloads

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