



# SSP

Safety System Products

## S16LDRX-H10-Q1A0-Q2A0-Q3A0-Q4A0

Safety Simplifier | S16 Control cabinet unit with external antenna connection

### 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



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## Safety System Products

### S16LDRX-H10-Q1A0-Q2A0-Q3A0-Q4A0

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-H10-Q1A0-Q2A0-Q3A0-Q4A0                            |
| Item number      | SP-X-89-000-03   |
| Functional type  | Safety- PLC with safe wireless interface, internal antenna |

#### Safety data

##### CPU

|                                  |            |
|----------------------------------|------------|
| - 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   |



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|                                  |    |
|----------------------------------|----|
| - 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         |

#### Environmental conditions

|                            |                   |
|----------------------------|-------------------|
| Max. storage temperature   | -20 °C ... +65 °C |
| 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  | 2415 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 |



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|                     |                         |
|---------------------|-------------------------|
| - 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 mm <sup>2</sup> |
| - fine wire                                       | 0,08 ... 0,5 mm <sup>2</sup> |
| - fine wired (wire sleeve without plastic collar) | 0,25 mm <sup>2</sup>         |

#### configurable In-/ Outputs

|  |  |
|--|--|
| 14 semiconductor In-/ Outputs with help of software configurable | □  |
| 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   | 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)                           |

#### General data

|  |   |
|--|---|
| Memory card                                    | Installation of a memory card MEM<br>SP-N-88-001-93 possible                          |
| Programming connection                         | Micro USB Wireless-Interface  |
| - fine wired (wire sleeve with plastic collar) | 0,08 ... 0,5 mm <sup>2</sup>  |
| Input voltage                                  | HIGH 75% from UB (adjustable by software)<br>LOW 25% from UB (adjustable by software) |

#### Technical data inputs

#### Technical data safe OSSD outputs, auxilliary and test pulse outputs

|                     |     |
|---------------------|-----|
| Short-circuit proof | Yes |
|---------------------|-----|

### S16LDRX-H10-Q1A0-Q2A0-Q3A0-Q4A0

#### Mechanical data

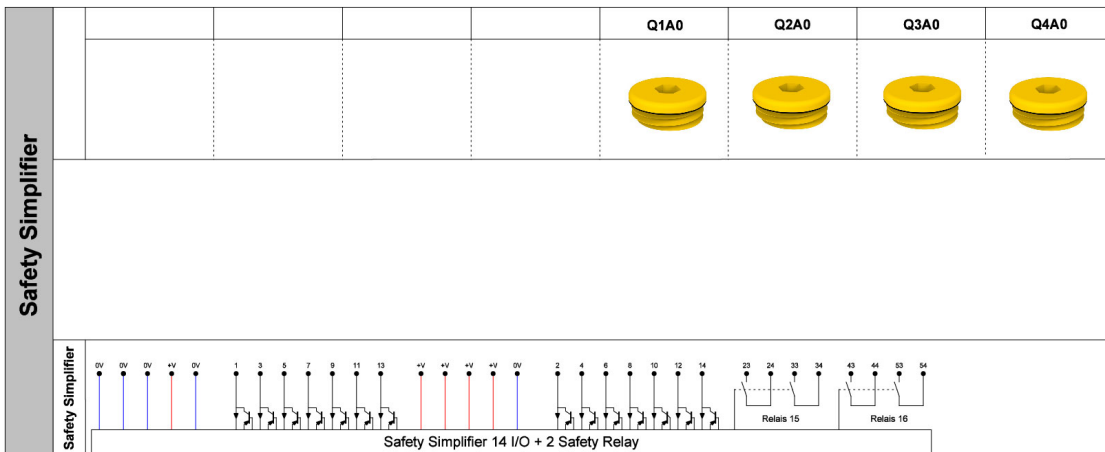
|                                 |         |
|---------------------------------|---------|
| Installation opening of buttons | 22,5 mm |
| Type of housing                 | H10     |

#### Dimensions

|        |        |
|--------|--------|
| Height | 44 mm  |
| Length | 253 mm |
| Width  | 42 mm  |



#### Electrical drawings

Connection example 1



#### Equipment

##### Accessories

|                             |           |                |   |
|-----------------------------|-----------|----------------|---|
| 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 |  |

### S16LDRX-H10-Q1A0-Q2A0-Q3A0-Q4A0

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



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



## S16LDRX-H10-Q1A0-Q2A0-Q3A0-Q4A0

M12-connecting cable, 8 pin, 5 m

M12-M12-C853-G

SP-X-33-000-08



### Wireless Safety

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



External antenna for Safety Simplifier, cable length

Simplifier EXTA 1 m

SP-X-88-200-24

1 m



External antenna for Safety Simplifier, cable length

Simplifier EXTA 10 m

SP-X-88-200-20

10 m



External antenna for Safety Simplifier, cable length

Simplifier EXTA 2 m

SP-X-88-200-23

2 m



External antenna for Safety Simplifier, cable length

Simplifier EXTA 5 m

SP-X-88-200-22

5 m



## S16LDRX-H10-Q1A0-Q2A0-Q3A0-Q4A0

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



Fastening set for Safety Simplifier

Simplifier ZHS

SP-X-88-001-91



### Operating elements

Universal hook

SP UH-K



### Downloads

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

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