

# SLLR23-490-S

## Safety Technology – Safety Light Curtain Receiver



### Technical data

|                                      |                                  |
|--------------------------------------|----------------------------------|
| Type                                 | SLLR23-490-S                     |
| ID no.                               | 3808954                          |
| <b>Optical data</b>                  |                                  |
| Function                             | Light screen                     |
| Light type                           | IR                               |
| Optical resolution                   | 23 mm                            |
| Range                                | 100...12000 mm                   |
| Scan field                           | 490 mm                           |
| Number of beams                      | 28                               |
| With muting function                 | no                               |
| <b>Electrical data</b>               |                                  |
| Operating voltage                    | 20.4...27.6 VDC                  |
| DC rated operational current         | ≤ 76 mA                          |
| Max. current safe output             | 500 mA                           |
| Short-circuit protection             | yes                              |
| Reverse polarity protection          | yes                              |
| Output function                      | 2 normally open contact, 2 × PNP |
| Voltage output                       | 0...22.5 V                       |
| Current output                       | 0 mA                             |
| Number of safe semiconductor outputs | 2                                |
| Response time typical                | < 10.8 ms                        |
| With restart interlock               | yes                              |
| Blanking function                    | yes                              |
| Max. DC switching capacity           | 12 W                             |
| <b>Mechanical data</b>               |                                  |
| Design                               | Rectangular, EZ-Screen LS        |

### Features

- Rugged housing
- Protection class IP67
- Diagnosis display for status and error indication
- Scan field L: 490 mm
- Optical Alignment aid
- No blind zone
- Range: 0.1...12 m
- Resolution: 23 mm
- Operating voltage: 24 VDC
- No restart interlock
- Safety light curtain type 4 acc. to IEC 61496-1 and 61496-2
- Category 4 PLe acc. to EN ISO 13849-1
- SIL 3 acc. to IEC 61508 SIL 3 and CL3 acc. to IEC 62061
- Shock and vibration resistant acc. to IEC 61496-1
- The device is supplied without wiring or mounting brackets. Wiring and mounting brackets must be selected under connection or mounting accessories and are required to operate the device.

### Wiring diagram



## Technical data

|                        |                                                                      |
|------------------------|----------------------------------------------------------------------|
| Dimensions             | 45 x 36 x 4995 mm                                                    |
| Housing material       | Metal, AL, Yellow                                                    |
| Lens                   | acrylic, Plastic                                                     |
| Cascadable             | no                                                                   |
| Electrical connection  | Flat connector                                                       |
| Ambient temperature    | -20...+55 °C                                                         |
| Protection class       | IP67                                                                 |
| Power-on indication    | LED, Yellow                                                          |
| Switching state        | LED, Red                                                             |
| Error indication       | LED, red                                                             |
| <b>Tests/approvals</b> |                                                                      |
| Approvals              | CE, cULus, PL e acc. to EN ISO 13849-1:2008, SIL 3 acc. to IEC 61508 |



## Functional principle

The self-monitoring safety light screens with redundant switching outputs are available in lengths up to 1.8 m and resolutions of 14, 23 or 40 mm. The devices are available individually or in pairs and are synchronized optically - a physical connection between transmitter and receiver is not necessary. For versions with cascading no further configuration is necessary. The setting is made automatically. Up to 4 couples of any length and resolution can be connected together. The dual scan of each receiver provides immunity against EMI, radio wave, ambient or strobe lights and welding sparks. All recipients have no restart interlock – an automatic reset is performed. If required individual beams can be hidden. The robust and sealed housing is ideally suited for industrial use. Status and error code can be read out in case of need via the diagnostic display. For easy mounting, LEDs indicate the proper alignment of each segment.

## Accessories

|                                                           |                                                                                                     |                                                           |                                                                                                                   |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>EZLSA-MBK-16</b>                                       | <b>3088559</b>                                                                                      | <b>EZLSA-MBK-11</b>                                       | <b>3087521</b>                                                                                                    |
| Kein Maßbild vorhanden/<br>No dimension drawing available | Mounting bracket, black, die-cast zinc, for side mounting of an LS light screen                     | Kein Maßbild vorhanden/<br>No dimension drawing available | Mounting bracket, rotatable 360°, black, steel, for end mounting of an LS light screen                            |
| <b>EZLSA-MBK-12</b>                                       | <b>3090989</b>                                                                                      | <b>EZLSA-MBK-20</b>                                       | <b>3093176</b>                                                                                                    |
| Kein Maßbild vorhanden/<br>No dimension drawing available | Mounting bracket, black, die-cast zinc, for central mounting of LS light screens larger than 980 mm | Kein Maßbild vorhanden/<br>No dimension drawing available | Mounting bracket, rotatable 360°, black, steel, universal mounting bracket for end mounting of an LS light screen |

Accessories

| Dimension drawing                                                                 | Type      | ID no.  |                                                                                                                                      |
|-----------------------------------------------------------------------------------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------|
|  | DELSE-51D | 3086941 | Connection cable, 5-pin, M12 male connector, PVC, yellow, length: 0.31 m, RD male connector for direct connection to LS light screen |
|  | DELSE-81D | 3086942 | Connection cable, 8-pin, M12 male connector, PVC, yellow, length: 0.31 m, RD male connector for direct connection to LS light screen |
| Kein Maßbild vorhanden/<br>No dimension drawing available                         | RDLS-815D | 3093156 | Connection cable, 8-pin, open end, PVC, yellow, length: 4.57 m, RD male connector for direct connection to LS light screen           |
| Kein Maßbild vorhanden/<br>No dimension drawing available                         | RDLS-515D | 3801010 | Connection cable, 5-pin, open end, PVC, yellow, length: 4.57 m, RD male connector for direct connection to LS light screen           |