

Technical data sheet

Safety relay

Part no.: 50149653

LBK ISC110

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For illustration purposes only



Technical data

Basic data

| | |
|-------------|---|
| Series | LBK ISC |
| Type | Controller for radar sensor |
| Contains | Slot for MicroSD card |
| Application | Stationary access guarding Stationary danger zone guarding |

Functions

| | |
|-----------|---|
| Functions | Changeover between configurations Configuration memory Connection of up to 6 sensors Deactivation of sensor groups Slot for MicroSD card Start/restart interlock (RES), selectable Synchronization of controllers |
| Restart | Automatic Manual |

Characteristic parameters

| | |
|-----------------------------|--------------------------|
| SILCL | 2, IEC/EN 62061 |
| Performance Level (PL) | d, EN ISO 13849-1 |
| MTTF _d | 42 years, EN ISO 13849-1 |
| PFH _D | 1.30E-08 per hour |
| Mission time T _M | 20 years, EN ISO 13849-1 |
| Category | 3, EN ISO 13849-1 |

Electrical data

| | |
|--------------------|---|
| Protective circuit | External power supply unit with integrated short circuit protection Overcurrent through integrated resettable fuse (max. 5s at 8A) |
|--------------------|---|

Performance data

| | |
|-------------------------------|---------------------------------|
| Supply voltage U _B | 20 ... 28 V, DC |
| Current consumption, max. | 1,000 mA, Without external load |
| Power consumption, max. | 5 W |

Outputs

| | |
|--|------------|
| Number of safety-related switching outputs (OSSDs) | 2 Piece(s) |
|--|------------|

Service interface

| | |
|------|-----|
| Type | USB |
|------|-----|

Connection

| | |
|-----------------------|------------|
| Number of connections | 4 Piece(s) |
|-----------------------|------------|

Connection 1

| | |
|--------------------|----------------|
| Function | Voltage supply |
| Type of connection | Terminal |
| Type of terminal | Screw terminal |
| No. of pins | 3 -pin |

Connection 2

| | |
|--------------------|----------|
| Function | BUS OUT |
| Type of connection | Terminal |

Connection 3

| | |
|--------------------|-------------------------|
| Function | Signal IN Signal OUT |
| Type of connection | Terminal |

Connection 4

| | |
|--------------------|------------------------------|
| Function | Configuration/parametization |
| Type of connection | USB |

Mechanical data

| | |
|-----------------------|---------------------------------------|
| Dimension (W x H x L) | 106 mm x 33 mm x 103 mm |
| Housing material | Plastic |
| Net weight | 170 g |
| Housing color | White |
| Type of fastening | DIN rail mounting Snap-on mounting |

Environmental data

| | |
|------------------------------------|---------------|
| Ambient temperature, operation | -30 ... 60 °C |
| Ambient temperature, storage | -40 ... 80 °C |
| Relative humidity (non-condensing) | 0 ... 95 % |

Certifications

| | |
|----------------------|----------------------|
| Degree of protection | IP 20 |
| Protection class | II |
| Certifications | TÜV Süd Italia UL |

Classification

| | |
|-----------------------|----------|
| Customs tariff number | 85299097 |
| ECLASS 5.1.4 | 27371800 |
| ECLASS 8.0 | 27371819 |
| ECLASS 9.0 | 27243101 |
| ECLASS 10.0 | 27371819 |
| ECLASS 11.0 | 27371819 |
| ECLASS 12.0 | 27371819 |
| ECLASS 13.0 | 27371819 |
| ECLASS 14.0 | 27371819 |
| ETIM 5.0 | EC001449 |
| ETIM 6.0 | EC001449 |
| ETIM 7.0 | EC001449 |
| ETIM 8.0 | EC001449 |
| ETIM 9.0 | EC001449 |

Electrical connection

Connection 1

| | |
|--------------------|----------------|
| Function | Voltage supply |
| Type of connection | Terminal |
| Type of terminal | Screw terminal |
| No. of pins | 3 -pin |

Terminal

Assignment

| | |
|---|----------|
| + | +24 V DC |
| E | PE |
| - | GND |

Connection 2

| | |
|--------------------|----------------|
| Function | BUS OUT |
| Type of connection | Terminal |
| Type of terminal | Screw terminal |
| No. of pins | 4 -pin |

Terminal

Assignment

| | |
|---|----------|
| + | +12 V DC |
| H | CAN H |
| L | CAN L |
| - | GND |

Connection 3

| | |
|--------------------|-------------------------|
| Function | Signal IN Signal OUT |
| Type of connection | Terminal |
| Type of terminal | Screw terminal |
| No. of pins | 12 -pin |

Terminal

Assignment

| | |
|-----------------|----------------------------|
| Digital In 4 | Input +24V DC |
| Digital In 3 | Input +24V DC |
| Digital In 2 | Input +24V DC |
| Digital In 1 | Input +24V DC |
| Digital In V+ | Input +24V DC, diagnostics |
| Digital In V- | GND |
| Digital Out GND | GND |
| Digital Out 4 | Safe output |
| Digital Out 3 | Safe output |
| Digital Out 2 | Safe output |
| Digital Out 1 | Safe output |
| Digital Out GND | GND |

Connection 4

| | |
|--------------------|------------------------------|
| Function | Configuration/parametization |
| Type of connection | USB |
| Connector type | micro USB |

Accessories

Connection technology - Connection cables

| | Part no. | Designation | Article | Description |
|--|----------|---------------------|------------------|--|
| | 50143389 | KD DN-M12-5W-P1-150 | Connection cable | Connection 1: Connector, M12, Angled, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: Yes Cable length: 15.000 mm Sheathing material: PUR |

Connection technology - Interconnection cables

| | Part no. | Designation | Article | Description |
|--|----------|-----------------------------|-----------------------|--|
| | 50143385 | KDS DN-M12-5W-M12-5W-P3-030 | Interconnection cable | Suitable for interface: DeviceNet, CANopen Connection 1: Connector, M12, Angled, Male, A-coded, 5 -pin Connection 2: Connector, M12, Angled, Female, A-coded, 5 -pin Shielded: Yes Cable length: 3,000 mm Sheathing material: PUR |
| | 50143386 | KDS DN-M12-5W-M12-5W-P3-050 | Interconnection cable | Suitable for interface: DeviceNet, CANopen Connection 1: Connector, M12, Angled, Male, A-coded, 5 -pin Connection 2: Connector, M12, Angled, Female, A-coded, 5 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR |
| | 50143459 | KSS US-USB2-A-mic-B-V0-018 | Interconnection cable | Suitable for interface: USB Connection 1: USB Connection 2: USB Shielded: No Cable length: 1,800 mm |

Mounting technology - Other

| Part no. | Designation | Article | Description |
|----------|------------------|----------------|-------------|
| 50150799 | LBK-MicroSD-Card | Program memory | |

Note



A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.