

## Technical data sheet

### Stationary bar code reader

Part no.: 50116425

BCL 348i ON 100 D



Figure can vary

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## Technical data

### Basic data

|        |          |
|--------|----------|
| Series | BCL 300i |
|--------|----------|

### Functions

|           |                           |
|-----------|---------------------------|
| Functions | Alignment mode            |
|           | AutoControl               |
|           | AutoReflAct               |
|           | Code fragment technology  |
|           | LED indicator             |
|           | Reference code comparison |

### Characteristic parameters

|      |           |
|------|-----------|
| MTTF | 110 years |
|------|-----------|

### Read data

|   |                             |
|---|-----------------------------|
| Code types, readable                    | 2/5 Interleaved             |
|   | Codabar                     |
|   | Code 128                    |
|   | Code 39                     |
|   | Code 93                     |
|   | EAN 8/13                    |
|   | GS1 Databar Expanded        |
|   | GS1 Databar Limited         |
|   | GS1 Databar Omnidirectional |
|   | UPC                         |
| Scanning rate, typical                  | 1,000 scans/s               |
| Bar codes per reading gate, max. number | 64 Piece(s)                 |

### Optical data

|                              |   |
|------------------------------|---|
| Light source                 | Laser, Red  |
| Wavelength                   | 655 nm  |
| Laser class                  | 1, IEC/EN 60825-1:2014                                  |
| Transmitted-signal shape     | Continuous  |
| Reading method               | Oscillating-mirror scanner                              |
| Beam deflection              | Via rotating polygon wheel + stepping motor with mirror |
| Light beam exit              | Zero position at side at angle less than 90°            |
| Oscillating mirror frequency | 10 Hz   |
| Max. swivel angle            | 20 °  |

### Electrical data

|                                     |                              |
|-------------------------------------|------------------------------|
| Protective circuit                  | Polarity reversal protection |
| <b>Performance data</b>             |                              |
| Supply voltage U <sub>B</sub>       | 18 ... 30 V, DC              |
| Power consumption, max.             | 9 W                          |
| <b>Inputs/outputs selectable</b>    |                              |
| Output current, max.                | 60 mA                        |
| Number of inputs/outputs selectable | 2 Piece(s)                   |
| Input current, max.                 | 8 mA                         |

### Interface

|      |          |
|------|----------|
| Type | PROFINET |
|------|----------|

### Profinet

|                      |             |
|----------------------|-------------|
| Function             | Process     |
| Conformance class    | B           |
| Protocol             | PROFINET RT |
| Switch functionality | Integrated  |
| Transmission speed   | 10 Mbit/s   |
|                      | 100 Mbit/s  |

### Service interface

|      |         |
|------|---------|
| Type | USB 2.0 |
|------|---------|

### USB

|          |                            |
|----------|----------------------------|
| Function | Configuration via software |
|          | Service                    |

### Connection

|                       |            |
|-----------------------|------------|
| Number of connections | 1 Piece(s) |
|-----------------------|------------|

### Connection 1

|                    |   |
|--------------------|---|
| Function           | BUS IN  |
|                    | Connection to device  |
|                    | Data interface  |
|                    | PWR / SW IN / OUT   |
|                    | Service interface   |
| Type of connection | Plug connector, It is essential to use a connection unit when commissioning the device. |
| No. of pins        | 32 -pin   |
| Type               | Male  |

### Mechanical data

|                       |                         |
|-----------------------|-------------------------|
| Design                | Cubic                   |
| Dimension (W x H x L) | 125 mm x 58 mm x 110 mm |
| Housing material      | Metal                   |
| Metal housing         | Diecast aluminum        |
| Lens cover material   | Glass                   |
| Net weight            | 580 g                   |
| Housing color         | Red                     |
|                       | Silver                  |
| Type of fastening     | Dovetail grooves        |
|                       | Fastening on back       |

### Operation and display

|                       |  |
|-----------------------|--|
| Type of display       | LED  |
|                       | Monochromatic graphic display, 128 x 32 pixels |
| Number of LEDs        | 2 Piece(s)                                     |
| Type of configuration | Via web browser                                |

### Environmental data

|                                    |               |
|------------------------------------|---------------|
| Ambient temperature, operation     | 0 ... 40 °C   |
| Ambient temperature, storage       | -20 ... 70 °C |
| Relative humidity (non-condensing) | 0 ... 90 %    |

## Technical data

### Certifications

|   |                                      |
|---|--------------------------------------|
| Degree of protection  | IP 65                                |
| Protection class  | III                                  |
| Certifications  | c UL US                              |
| Test procedure for EMC in accordance with standard              | EN 55022<br>EN 61000-4-2, -3, -4, -6 |
| Test procedure for shock in accordance with standard            | IEC 60068-2-27, test Ea              |
| Test procedure for continuous shock in accordance with standard | IEC 60068-2-29, test Eb              |
| Test procedure for vibration in accordance with standard        | IEC 60068-2-6, test Fc               |

### Classification

|                       |          |
|-----------------------|----------|
| Customs tariff number | 84719000 |
|-----------------------|----------|

## Electrical connection

### Connection 1

|                    |  |
|--------------------|--|
| Function           | BUS IN<br>Connection to device<br>Data interface<br>PWR / SW IN / OUT<br>Service interface |
| Type of connection | Plug connector   |
| Type of connection | It is essential to use a connection unit when commissioning the device.                    |
| No. of pins        | 32 -pin  |
| Type               | Male   |

## Operation and display

| LED   | Display                               | Meaning                         |
|-------|---------------------------------------|---------------------------------|
| 1 PWR | Green, flashing                       | Device ok, initialization phase |
|       | Green, continuous light               | Device OK                       |
|       | Green, briefly off - on               | Reading successful              |
|       | green, briefly off - briefly red - on | Reading not successful          |
|       | Orange, continuous light              | Service mode                    |
|       | Red, flashing                         | Device OK, warning set          |
| 2 BUS | Red, continuous light                 | Error, device error             |
|       | Green, flashing                       | Initialization                  |
|       | Green, continuous light               | Bus operation ok                |
|       | Red, flashing                         | Communication error             |
|       | Red, continuous light                 | Bus error                       |

## Notes



### ATTENTION! LASER RADIATION – CLASS 1 LASER PRODUCT








The device satisfies the requirements of IEC/EN 60825-1:2014 safety regulations for a product of **laser class 1** and complies with 21 CFR 1040.10 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.

↳ Observe the applicable statutory and local laser protection regulations.

↳ The device must not be tampered with and must not be changed in any way.  
There are no user-serviceable parts inside the device.  
Repairs must only be performed by Leuze electronic GmbH + Co. KG.

## Accessories

### Connection technology - Connection boxes

|   | Part no.   | Designation | Article         | Description  |
|---|------------|-------------|-----------------|--|
|   | 50131256 * | ME 348 103  | Connection unit | Suitable for: BCL 348i<br>Suitable for interface: PROFINET<br>Number of connections: 4 Piece(s)<br>Connection: Cable with connector, M12, 900 mm |
|   | 50131259 * | ME 348 104  | Connection unit | Suitable for: BCL 348i<br>Suitable for interface: PROFINET<br>Number of connections: 5 Piece(s)<br>Connection: Cable with connector, M12, 900 mm |
|   | 50131258 * | ME 348 214  | Connection unit | Suitable for: BCL 348i<br>Suitable for interface: PROFINET<br>Number of connections: 5 Piece(s)<br>Connection: Cable with connector, M12, 600 mm |
|   | 50116467 * | MK 348      | Connection unit | Suitable for: BCL 348i, BPS 348i<br>Suitable for interface: PROFINET<br>Number of connections: 4 Piece(s)<br>Connection: Terminal                |
|  | 50116471 * | MS 348      | Connection unit | Suitable for: BCL 348i, BPS 348i<br>Suitable for interface: PROFINET<br>Number of connections: 4 Piece(s)<br>Connection: Connector, M12          |

\* Necessary accessories, please order separately

#### Note



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