

Technical data sheet

Modular connection unit

Part no.: 50112893
MA 204i Profibus Gateway

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For illustration purposes only



Technical data

Basic data

| | |
|---------------------|--|
| Series | MA 2xxi |
| Suitable for | BCL 2x series bar code readers |
| | BCL 8 series bar code readers |
| | BPS 8 series bar code positioning system |
| | DCR 200i series stationary 2D-code readers |
| | FIS series mobile 2D-code readers |
| | HFxx series mobile RFID read/write systems |
| | HS 65x8 |
| | IT 1900g series mobile 2D-code readers |
| | IT 1902g series mobile 2D-code readers |
| | IT 1910 series mobile 2D-code readers |
| | IT 1911i series mobile 2D-code readers |
| | LSIS 222 series stationary 2D-code readers |
| | RFI |
| | RFM |

Electrical data

| | |
|-------------------------------------|-----------------|
| Performance data | |
| Supply voltage U_B | 18 ... 30 V, DC |
| Current consumption, max. | 300 mA |

Interface

| | |
|-------------|---------------------|
| Type | PROFIBUS DP, RS 232 |
|-------------|---------------------|

Connection

| | |
|------------------------------|----------------------|
| Number of connections | 6 Piece(s) |
| Connection 1 | |
| Function | Connection to device |
| Type of connection | Plug connector |
| Connection 2 | |
| Function | BUS OUT |
| Type of connection | Connector |
| Thread size | M12 |
| Type | Female |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | B-coded |
| Connection 3 | |
| Function | BUS IN |
| Type of connection | Connector |
| Thread size | M12 |
| Type | Male |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | B-coded |

Connection 4

| | |
|---------------------------|----------------|
| Function | Voltage supply |
| Type of connection | Connector |
| Thread size | M12 |
| Type | Female |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | A-coded |

Connection 5

| | |
|---------------------------|----------------|
| Function | Voltage supply |
| Type of connection | Connector |
| Thread size | M12 |
| Type | Male |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | A-coded |

Connection 6

| | |
|---------------------------|-------------------|
| Function | Service interface |
| Type of connection | Sub-D |
| No. of pins | 9 -pin |

Mechanical data

| | |
|------------------------------|-------------------------|
| Design | Cubic |
| Dimension (W x H x L) | 107 mm x 40 mm x 180 mm |
| Housing material | Metal |
| Net weight | 700 g |
| Housing color | Red, RAL 3000 |
| Type of fastening | Through-hole mounting |

Operation and display

| | |
|------------------------|------------|
| Type of display | LED |
| Number of LEDs | 2 Piece(s) |

Environmental data

| | |
|---|---------------|
| Ambient temperature, operation | 0 ... 55 °C |
| Ambient temperature, storage | -20 ... 60 °C |
| Relative humidity (non-condensing) | 5 ... 90 % |

Certifications

| | |
|-----------------------------|---------------------|
| Degree of protection | IP 65 |
| Approvals | c UL US PROFIBUS |

Technical data

| | |
|-----------------------|----------|
| Customs tariff number | 85176200 |
| ECLASS 5.1.4 | 27069190 |
| ECLASS 8.0 | 27069190 |
| ECLASS 9.0 | 27069190 |
| ECLASS 10.0 | 27069190 |
| ECLASS 11.0 | 27069090 |
| ECLASS 12.0 | 27069090 |
| ECLASS 13.0 | 27069090 |
| ECLASS 14.0 | 27069090 |
| ECLASS 15.0 | 27069090 |
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |
| ETIM 8.0 | EC001855 |
| ETIM 9.0 | EC001855 |
| ETIM 10.0 | EC001855 |

Electrical connection

Connection 1

Leuze device

| | |
|--------------------|----------------------|
| Function | Connection to device |
| Type of connection | Plug connector |
| No. of pins | 10 pins -pin |
| | 12 pins -pin |
| | 6 pins -pin |

Connection 2

BUS OUT

| | |
|--------------------|-----------|
| Function | BUS OUT |
| Type of connection | Connector |
| Thread size | M12 |
| Type | Female |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | B-coded |

Pin Pin assignment

| | |
|---|---------|
| 1 | VCC |
| 2 | A (N) |
| 3 | GND 485 |
| 4 | B (P) |
| 5 | FE |

Connection 3

BUS IN

| | |
|--------------------|-----------|
| Function | BUS IN |
| Type of connection | Connector |
| Thread size | M12 |
| Type | Male |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | B-coded |

Electrical connection

Pin Pin assignment

| | |
|---|---------|
| 1 | n.c. |
| 2 | A (N) |
| 3 | GND 485 |
| 4 | B (P) |
| 5 | FE |

Connection 4

PWR

| | |
|--------------------|----------------|
| Function | Voltage supply |
| Type of connection | Connector |
| Thread size | M12 |
| Type | Female |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | A-coded |

Pin Pin assignment

| | |
|---|--------|
| 1 | VCC |
| 2 | SWIO 2 |
| 3 | GND |
| 4 | SWIO 1 |
| 5 | FE |

Connection 5

PWR

| | |
|--------------------|----------------|
| Function | Voltage supply |
| Type of connection | Connector |
| Thread size | M12 |
| Type | Male |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | A-coded |

Pin Pin assignment

| | |
|---|--------|
| 1 | V_IN |
| 2 | SWIO 2 |
| 3 | GND |
| 4 | SWIO 1 |
| 5 | FE |

Connection 6

SERVICE

| | |
|--------------------|-------------------|
| Function | Service interface |
| Type of connection | Sub-D |
| No. of pins | 9 -pin |
| Type | Male |

Electrical connection



| Pin | Pin assignment |
|-----|----------------|
| 1 | n.c. |
| 2 | RxD Service |
| 3 | TXD service |
| 4 | n.c. |
| 5 | GND |
| 6 | n.c. |
| 7 | n.c. |
| 8 | n.c. |
| 9 | n.c. |

Operation and display

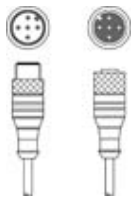
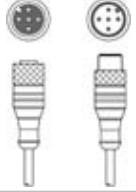
| LED | Display | Meaning |
|-----|-------------------------|-----------------------|
| 1 | Green, continuous light | BUS OK |
| | Red, continuous light | Bus error |
| 2 | Green, continuous light | Operational readiness |
| | Red, continuous light | Device error |

Accessories

Connection technology - Connection cables


| | Part no. | Designation | Article | Description |
|--|----------|---------------------|------------------|---|
|  | 50135243 | KD PB-M12-4A-P3-050 | Connection cable | Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR |
|  | 50132079 | KD U-M12-5A-V1-050 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC |

Connection technology - Interconnection cables

| | Part no. | Designation | Article | Description |
|--|----------|-----------------------------|-----------------------|---|
|  | 50135254 | KDS PB-M12-4A-M12-4A-P3-050 | Interconnection cable | Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, B-coded, 4 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR |
|  | 50133298 | KDS U-M12-5A-M12-5A-V1-050 | Interconnection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 5 -pin Shielded: No Cable length: 5,000 mm Sheathing material: PVC |

Accessories

Connection technology - Terminating resistors

| | Part no. | Designation | Article | Description |
|--|----------|-------------|-----------------|---|
|  | 50038539 | TS 02-4-SA | Terminator plug | Suitable for: MultiNet Plus, PROFIBUS DP Function: Bus termination Connection 1: Connector, M12, Axial, Male, B-coded, 4 -pin |

Note



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