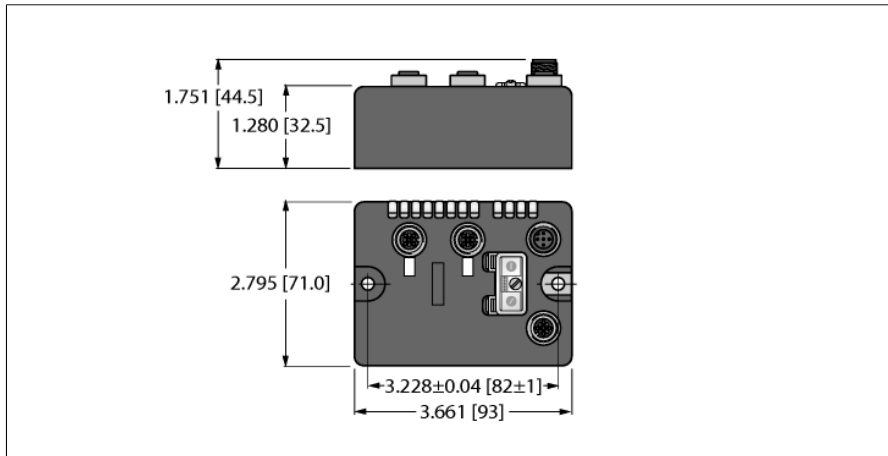


BL compact™ fieldbus station for DeviceNet™

2 Analog Outputs for Voltage

BLCDN-2M12S-2AO-V



- On-machine Compact fieldbus I/O block
- DeviceNet™ slave
- 125 / 250 / 500 kbps
- Two 5-pole M12 connectors for fieldbus connection
- 2 rotary switches for node address
- IP67, IP69K
- M12 I/O connectors
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- 2 analog voltage outputs
- -10/0...+10 VDC

| | |
|-----------------------------------|-----------------------------------|
| Type | BLCDN-2M12S-2AO-V |
| ID | 6811038 |
| Nominal system voltage | 24 VDC |
| System power supply | Via DeviceNet |
| Admissible range V+ | 18...30 VDC |
| Nominal current V+ | 80 mA |
| Max. current V+ | 4 A |
| Fieldbus transmission rate | 125/250/500 kbps |
| Adjustment transmission rate | Automatic detection |
| Fieldbus address range | 0...63 |
| | 64...80 (MacID programmable) |
| | 81...99 (manufacturer specific) |
| Fieldbus addressing | 2 decimally coded rotary switches |
| Fieldbus connection technology | 2 × M12 |
| | 5-pole |
| Fieldbus termination | external |
| Service interface | RS232 interface |
| Vendor ID | 48 |
| Product type | 12 |
| Product code | 11038 |
| Analog outputs | from 2AO-V |
| Operating modes | -10/0 ... 10 V |
| Type of output diagnostics | Channel diagnostics |
| Sensor supply | 24 VDC, 250 mA per channel |
| Load resistance, resistive | > 1 kΩ |
| Load resistance, capacitive | < 1 μF |
| Transmission frequency | < 100 Hz |
| Basic fault limit at 23 °C | < 0.2 % |
| Repeat accuracy | < 0.05 % |
| Temperature coefficient | < 300 ppm/°C of full scale |
| Resolution | 16 bit |
| Measured-value display | 16 bit signed integer |
| | 12 bit full range left-justified |

BL compact™ fieldbus station for DeviceNet™

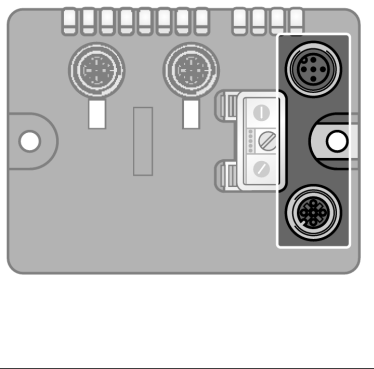
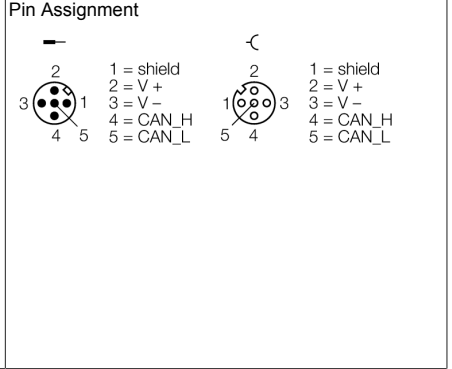
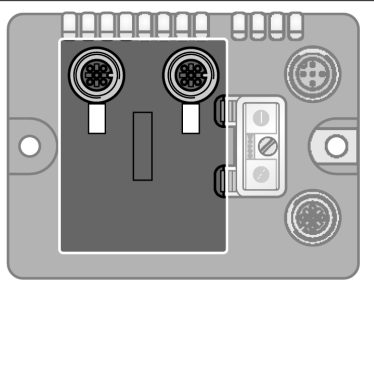
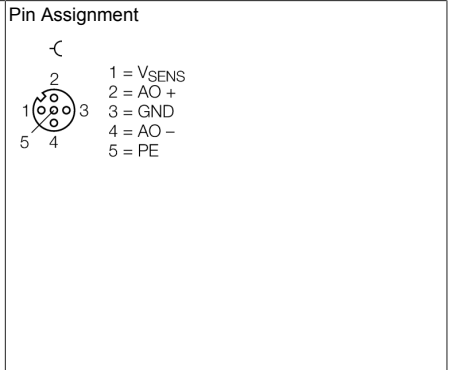
2 Analog Outputs for Voltage

BLCDN-2M12S-2AO-V

| | |
|-----------------------------------|--|
| Dimensions | 93 x 71 x 32.5 mm |
| Mounting | 2 × 5.4 mm diameter holes, 1.7 Nm torque |
| Weight | 290 ± 20 g |
| Housing material | Glass-filled nylon, nickel plated brass connectors |
| Housing color | Black |
| Material screw | Nickel-plated brass |
| Material label | Polyester with polycarbonate overlay |
| Ground label material | Nickel plated brass |
| Protection class | IP67 IP69K |
| Ambient temperature | -40...+70 °C |
| Storage temperature | -40...+85 °C |
| Relative humidity | 15 to 95% (non-condensing) |
| Vibration test | Acc. to IEC 61131-2 |
| - up to 20 g (at 10 up to 150 Hz) | For mounting on base plate or machinery |
| Shock test | according to IEC 61131-2 |
| Electromagnetic compatibility | Acc. to IEC 61131-2 |
| Approvals and certificates | CE, cULus |

BL compact™ fieldbus station for DeviceNet™
2 Analog Outputs for Voltage
BLCDN-2M12S-2AO-V

Pinning and wiring diagram

| | | |
|--|--|--|
|  | <p>DeviceNet Fieldbus cable (example): RSC RKC 572-2M ident-no. U0323 or RSC-RKC572-2M ident-no. 6603629</p> | <p>Pin Assignment</p>  <p>1 = shield 2 = V + 3 = V - 4 = CAN_H 5 = CAN_L</p> |
|  | <p>Analog Outputs Extension cable (example): RK 4.5T-2-RS 4.5T/S653 ident-no. U2187-09 or RKC4.5T-2-RSC4.5T/TEL ident-no. 6625212</p> | <p>Pin Assignment</p>  <p>1 = VSENS 2 = AO + 3 = GND 4 = AO - 5 = PE</p> |

BL compact™ fieldbus station for DeviceNet™

2 Analog Outputs for Voltage

BLCDN-2M12S-2AO-V

Station LED status

| LED | Color | Status | Description |
|-----|-------|-----------------|--------------------------------------|
| IOs | | OFF | No power |
| | RED | ON | Low power or station error |
| | RED | FLASHING (1 Hz) | I/O module configuration error |
| | RED | FLASHING (4 Hz) | No I/O module bus communication |
| | GREEN | ON | Station ok |
| | GREEN | FLASHING | Force mode active |
| MNS | | OFF | No connection |
| | GREEN | ON | Connection established |
| | GREEN | FLASHING (1 Hz) | No connection established, device OK |
| | RED | ON | Duplicate MAC-ID |
| | RED | FLASHING | Connection time out |
| IO | GREEN | ON | I/O active |
| | GREEN | FLASHING (1 Hz) | One or more I/O in Idle State |
| | RED | ON | One or more I/O error |
| | RED | FLASHING | One or more I/O in Faulted State |

I/O LED status

| LED | Color | Status | Description |
|---------------------|-------|------------------|---|
| D * | | OFF | No diagnostics active |
| | RED | ON | Station error/ module bus communication failure |
| | RED | FLASHING (0.5Hz) | Diagnostics active |
| AO channel 0 / 1 | | | Not connected |

* D LED also indicates gateway diagnostics

BL compact™ fieldbus station for DeviceNet™
2 Analog Outputs for Voltage
BLCDN-2M12S-2AO-V**I/O & Diagnostic Data Map**

| OUTPUT | BYTE | Bit 7 | Bit 6 | Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 |
|-------------------|-------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| AO 1 ₀ | 0 | AO 1 ₀ LSB | | | | | | | |
| | 1 | AO 1 ₀ MSB | | | | | | | |
| AO 1 ₁ | 2 | AO 1 ₁ LSB | | | | | | | |
| | 3 | AO 1 ₁ MSB | | | | | | | |