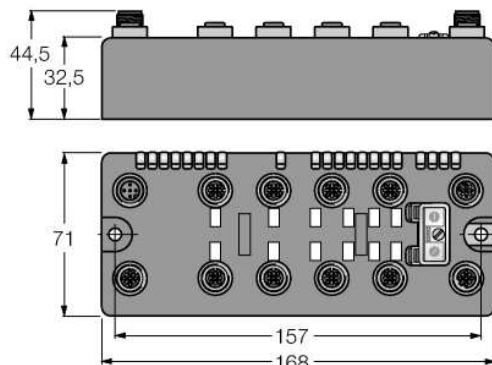


BL compact fieldbus station for DeviceNet™
8 Digital NPN Inputs and 8 Digital NPN Outputs
BLCDN-8M12LT-8DI-N-8DO-0.5A-N

- Compact fieldbus I/O module in IP69K
- DeviceNet™ slave
- 125 / 250 / 500 kbps
- Two 5-pole M12 connectors for fieldbus connection
- 2 rotary switches for node address
- IP69K
- M12 I/O connectors
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- 8 digital NPN inputs, 24 VDC
- 8 digital NPN outputs, 24 VDC
- Max. 0.5A per output

Type code	BLCDN-8M12LT-8DI-N-8DO-0.5A-N
Ident no.	6811064

Nominal system voltage	24 VDC
System power supply	via fieldbus and auxiliary
Voltage supply connection	2 x M12, 4-pole
Admissible range V+	11...30VDC
Nominal current V+	30 mA
Max. current V+	4 A
Admissible range Vi	18...30VDC
Nominal current Vi	1 mA
Max. current Vi	2 A
Admissible range Vo	18...30VDC
Nominal current Vo	100 mA
Max. current Vo	4 A

Fieldbus transmission rate	125 / 250 / 500 kbps
Adjustment transmission rate	auto detection
Fieldbus addressing range	0...63
	64...80 (Programmable MACID)
	81...99 (Vendor Specific)
Fieldbus addressing	2 decimally coded rotary switches
Fieldbus connection technology	2 x M12
	5-pole
Fieldbus termination	external
Service interface	RS232 interface
Vendor ID	30
Product type	12
Product code	11064

Digital inputs	
Input type	NPN
Type of input diagnostics	group diagnostics
Sensor supply (V _{SENSE})	24 VDC
Low level signal voltage	7...30 VDC
High level signal voltage	< 5 VDC
Low level signal current	< 1.2 mA
High level signal current	> 1.5 mA
Input delay	0.25 ms

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Digital outputs

Output type	NPN
Type of output diagnostics	Channel diagnostics
Sensor supply (V_{Sens})	24 VDC
Output current per channel	0.5 A
Output voltage	24 VDC
Output delay	3 ms
Load type	resistive, inductive, lamp load
Load resistance, resistive	> 48 Ω
Load resistance, inductive	< 1.2 H
Lamp load	< 3 W
Switching frequency, resistive	< 200 Hz
Switching frequency, inductive	< 2 Hz
Switching frequency, lamp load	< 20 Hz
Short-circuit protection	yes

Dimensions

Operating temperature	1680x 710x 325 mm
Storage temperature	-40...+70 °C
Relative humidity	-40...+85 °C
Vibration test	15 to 95% (non-condensing)
Extended vibration resistance	according to IEC 61131-2
- up to 20 g (at 10 to 150 Hz)	For mounting on base plate or machinery
Shock test	according to IEC 61131-2
Electro-magnetic compatibility	according to IEC 61131-2
Protection class	IP69K
Housing material	Glass-filled nylon, nickel plated brass connectors
Housing color	Black
Window material	Lexan
Screw material	Nickel plated brass
Label material	Polyester with Polycarbonate overlay
Ground tab material	Nickel plated brass
Weight	620 $\pm$ 20 g
Approvals and certificates	CE, cULus

	Fieldbus cable (example): RSC RKC 572-2M ident-no. U0323 or RSC-RKC572-2M ident-no. 6603629	Pin assignment 1 = shield 2 = V + 3 = V - 4 = CAN_H 5 = CAN_L 1 = shield 2 = V + 3 = V - 4 = CAN_H 5 = CAN_L
	Extension cable (example): RK 4.4T-2-RS 4.4T ident-no. U2445 or RKC4.4T-2-RSC4.4T/TEL ident-no. 6625208	Pin assignment 1 = V_{SENS} 2 = Input B 3 = GND 4 = Input A 5 = PE 1 (+) BN 2 (J) WH 3 (-) BU 4 (J) BK
	Extension cable (example): RK 4.4T-2-RS 4.4T ident-no. U2445 or RKC4.4T-2-RSC4.4T/TEL ident-no. 6625208	Pin assignment 1 = V_{SENS} 2 = Output B 3 = GND 4 = Output A 5 = PE Wiring diagram 2 (J) WH 4 (J) BK 1 (+) BN
	Extension cable (example): RKC 4.4T-2-RSC 4.4T ident-no. U5264 or RKC4.4T-2-RSC4.4T/TEL ident-no. 6625208	Pin assignment 1 = V_I 2 = V_O 3 = GND 4 = GND 1 = V_I 2 = V_O 3 = GND 4 = GND

Status: Station LED

LED	Color	Status	Description
IOs		OFF	No power supply
	RED	ON	Insufficient power supply
	RED	FLASHING (1Hz)	Deviating station configuration
	RED	FLASHING (4 Hz)	No module bus communication
	GREEN	ON	Station OK
	GREEN	FLASHING	Force mode active
MNS		OFF	No connection
	GREEN	ON	Fieldbus communication active
	GREEN	FLASHING (1Hz)	Fieldbus communication disabled, device status OK
	RED	ON	Double MAC-ID
	RED	FLASHING	Fieldbus communication timeout
IO	GREEN	ON	I/O slots OK
	GREEN	FLASHING (1Hz)	At least one I/O slot in idle state
	RED	ON	At least one faulty I/O slot
	RED	FLASHING	At least one I/O slot in faulty state

Status: I/O LED, slot 1

LED	Color	Status	Description
D1 *		OFF	Diagnostic disabled
	RED	ON	Station / module bus communication failure
	RED	FLASHING (0.5Hz)	Group diagnostic

* D1 LED also indicates gateway diagnostic

I/O LED Status Slot 2

LED	Colour	Status	Description
D2 *		OFF	No diagnostics active
	RED	ON	Station error/ module bus communication failure
	RED	FLASHING (0.5Hz)	Any diagnostics active

* D2 LED also reports gateway diagnostics

BL compact fieldbus station for DeviceNet™
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BLCDN-8M12LT-8DI-N-8DO-0.5A-N**I/O & Diagnostic Data Map**

INPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
	0	DI 1 ₇	DI 1 ₆	DI 1 ₅	DI 1 ₄	DI 1 ₃	DI 1 ₂	DI 1 ₁	DI 1 ₀
	1	-	-	-	-	-	-	-	-
Diagnostics	2	Module number reporting diagnostic data							
	3	Replace Station	-	Diagnostics Active	-	-	-	-	-
Slot 2 (ref. Byte 2)	4	Over Current DO 2 ₇	Over Current DO 2 ₆	Over Current DO 2 ₅	Over Current DO 2 ₄	Over Current DO 2 ₃	Over Current DO 2 ₂	Over Current DO 2 ₁	Over Current DO 2 ₀
	3	-	-	-	-	-	-	-	-
OUTPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
	0	DO 2 ₇	DO 2 ₆	DO 2 ₅	DO 2 ₄	DO 2 ₃	DO 2 ₂	DO 2 ₁	DO 2 ₀
	1	-	-	-	-	-	-	-	-