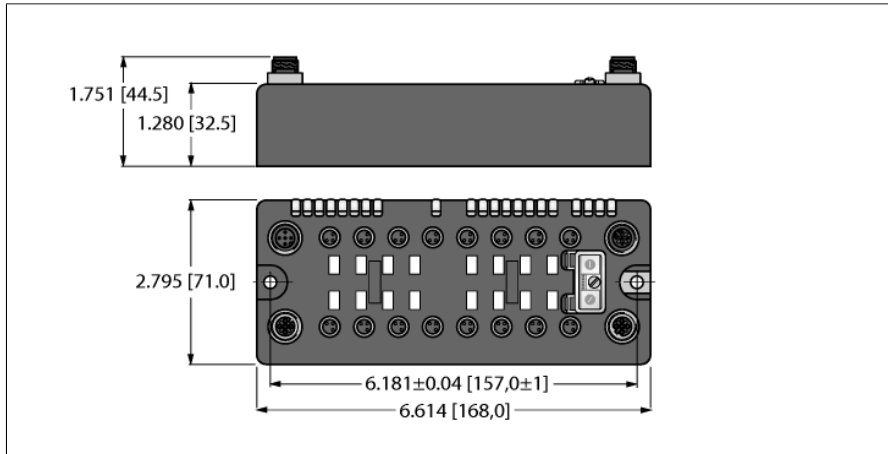


BL compact™ fieldbus station for DeviceNet™

16 Digital PNP Outputs

BLCDN-16M8LT-8DO-0.5A-P-8DO-0.5A-P

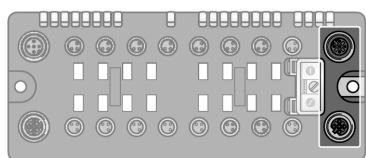
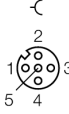
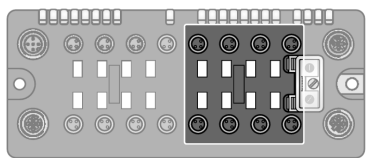
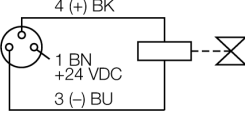
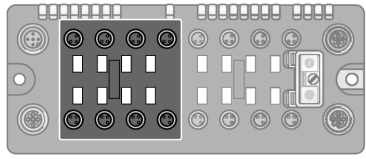
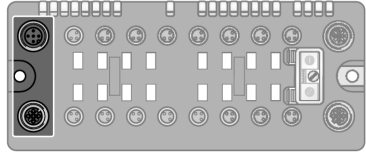
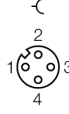


Type	BLCDN-16M8LT-8DO-0.5A-P-8DO-0.5A-P
ID	6811030
Nominal system voltage	24 VDC
System power supply	Via fieldbus and auxiliary power
Voltage supply connection	2 x M12, 4-pin
Admissible range V+	11...30 VDC
Nominal current V+	30 mA
Max. current V+	4 A
Admissible range Vo	11...30 VDC
Nominal current Vo	200 mA
Max. current Vo	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 x M12 5-pole
Fieldbus termination	external
Service interface	RS232 interface
Vendor ID	48
Product type	12
Product code	11030

- 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
- M8 I/O connectors
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- 16 digital PNP outputs, 24 VDC
- Max. 0.5A per output (4A total)

Digital outputs	
Output type	PNP
Type of output diagnostics	Channel diagnostics
Sensor supply (V _{SENS})	24 VDC
Output current per channel	0.5 A
Output voltage	24 VDC from supply voltage
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	168 x 71 x 32.5 mm
Mounting	2 × 5.4 mm diameter holes, 1.7 Nm torque
Weight	590 ± 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
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

Pinning and wiring diagram

	DeviceNet Fieldbus cable (example): RSC RKC 572-2M ident-no. U0323 or RSC-RKC572-2M ident-no. 6603629	Pin Assignment  2 3 1 4 5 1 = shield 2 = V + 3 = V - 4 = CAN_H 5 = CAN_L  2 1 3 5 4 1 = shield 2 = V + 3 = V - 4 = CAN_H 5 = CAN_L
	Slot 1: Digital Outputs Extension cable (example): PKG 3M-2-PSG 3M ident-no. U2515-20 or PKG3M-2-PSG3M/TEL ident-no. 6625303	Pin Assignment  4 3 1 1 = V_{SENS} 3 = GND 4 = Output A Wiring Diagram 
	Slot 2: Digital Outputs	Pin Assignment  4 3 1 1 = V_{SENS} 3 = GND 4 = Output A
	Auxiliary Power 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  2 3 1 4 1 = V_i 2 = V_o 3 = GND 4 = GND  2 1 3 4

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 slot 1

LED	Color	Status	Description
D1 *		OFF	No diagnostics active
	RED	ON	Station error/ module bus communication failure
	RED	FLASHING (0.5Hz)	Diagnostics active (Slot 1)
DO channels 0...7		OFF	Status of channel x = „0“ (OFF), no diagnostics active
	GREEN	ON	Status of channel x = „1“ (ON)
	RED	ON	Short circuit / overload on channel x

* D1 LED also indicates gateway diagnostics

I/O LED status slot 2

LED	Color	Status	Description
D2 *		OFF	No diagnostics active
	RED	ON	Station error/ module bus communication failure
	RED	FLASHING (0.5Hz)	Diagnostics active (Slot 2)

* D2 LED also indicates gateway diagnostics

I/O & Diagnostic Data Map

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

* The scheduled diagnostic information changes every 125 ms between Slot 1 and Slot 2, if both slots send active diagnostics.