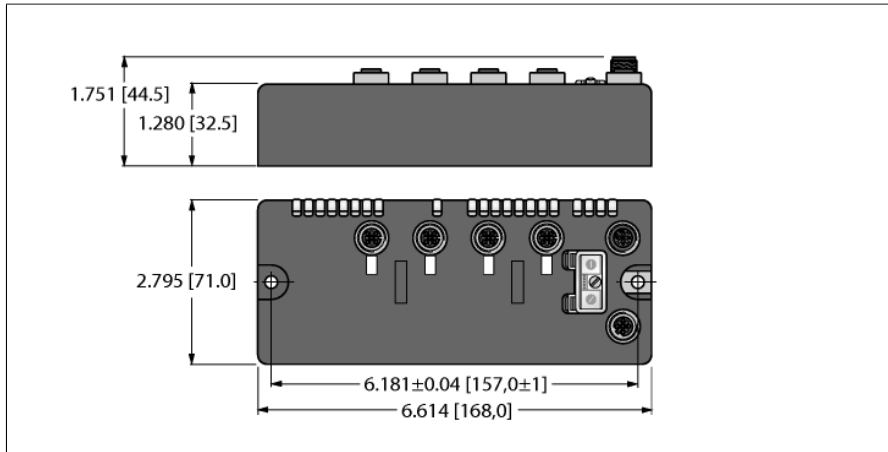


BL compact™ fieldbus station for DeviceNet™

Interface for Connection of 4 BL ident Read/Write Heads (HF/UHF)

BLCDN-4M12L-2RFID-S-2RFID-S

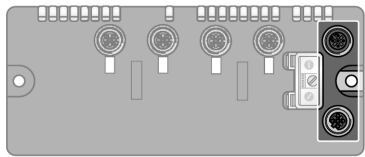


Type	BLCDN-4M12L-2RFID-S-2RFID-S
ID	6811055
Nominal system voltage	24 VDC
System power supply	Via DeviceNet
Admissible range V+	18...30 VDC
Nominal current V+	80 mA
Max. current V+	4 A
Fieldbus transmission rate	125/250/500 kbps
Adjustment transmission rate	Automatic detection
Fieldbus address range	0...63 64...80 (MacID programmable) 81...99 (manufacturer specific)
Fieldbus addressing	2 decimally coded rotary switches
Fieldbus connection technology	2 × M12
Fieldbus termination	5-pole external
Service interface	RS232 interface
Vendor ID	48
Product type	12
Product code	11055
Technology	
Signal type	Simple RFID interface
Number of channels	4
Sensor supply	0.5 A per channel, short-circuit proof
Simultaneity factor	1
Transmission rate	115.2 kbps
Cable length	50 m
Electrical isolation	isolation of electronics and field level via optocouplers

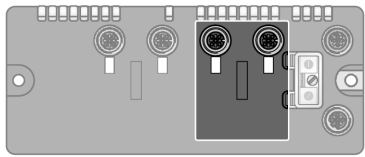
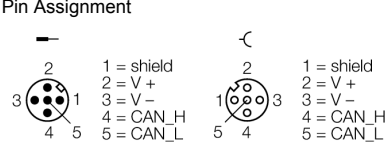
- On-machine Compact fieldbus I/O block
- DeviceNet™ slave
- 125 / 250 / 500 kbps
- Two 5-pole M12 connectors for fieldbus connection
- 2 rotary switches for node address
- IP67, IP69K
- M12 I/O connectors
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- Simple RFID interface
- Connection of 4 BL ident® read/write heads
- Max cable length of 50 m

Dimensions	168 x 71 x 32.5 mm
Mounting	2 × 5.4 mm diameter holes, 1.7 Nm torque
Weight	470 ± 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

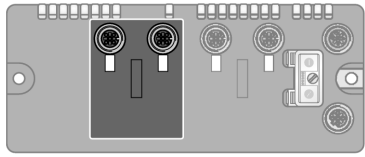
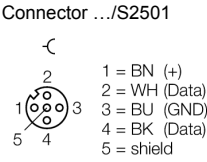
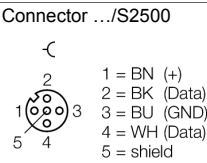
Pinning and wiring diagram



DeviceNet
Fieldbus cable (example): RSC RKC 572-2M ident-no. U0323 or
RSC-RKC572-2M ident-no. 6603629



Slot 1: RFID Channels
Extension cable (example): RK 4.5T-2-RS 4.5T/S2501 ident-no.
U3-01243 or RK4.5T-2-RS4.5T/S2500 ident-no. 6699200



Slot 2: RFID Channels
See slot 1

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)
RW0 / RW1		OFF	No tag present, no diagnostics active
	GREEN	ON	Tag present
	GREEN	FLASHING (2 Hz)	Data communication from / to tag active
	RED	ON	Error in the R/W head
	RED	FLASHING (2 Hz)	Short circuit in the transceiver supply

* 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)
RW0 / RW1		OFF	No tag present, no diagnostics active
	GREEN	ON	Tag present
	GREEN	FLASHING (2 Hz)	Data communication from / to tag active
	RED	ON	Error in the R/W head
	RED	FLASHING (2 Hz)	Short circuit in the transceiver supply

* 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
RFID 1 ₀	0	Done	Busy	Error	Trans. Conn.	Trans. On	TP	TFR	-
	1	Error Cat. (Category Code)							
	2	Error Desc. (Description Code)							
	3	-	-	-	-	-	-	-	-
	4...11	Read Data (8 Byte)							
RFID 1 ₁	12	Done	Busy	Error	Trans. Conn.	Trans. On	TP	TFR	-
	13	Error Cat. (Category Code)							
	14	Error Desc. (Description Code)							
	15	-	-	-	-	-	-	-	-
	16...23	Read Data (8 Byte)							
RFID 2 ₀	24	Done	Busy	Error	Trans. Conn.	Trans. On	TP	TFR	-
	25	Error Cat. (Category Code)							
	26	Error Desc. (Description Code)							
	27	-	-	-	-	-	-	-	-
	28...35	Read Data (8 Byte)							
RFID 2 ₁	36	Done	Busy	Error	Trans. Conn.	Trans. On	TP	TFR	-
	37	Error Cat. (Category Code)							
	38	Error Desc. (Description Code)							
	39	-	-	-	-	-	-	-	-
	40...47	Read Data (8 Byte)							
Diagnostics	48	Module number reporting diagnostic data							
	49	Replace Station	-	Diagnostics Active	-	-	-	-	-
Slot X (ref. Byte 48)	50	-	-	-	-	-	RFID X ₀ Trans. PS Off	-	-
	51	-	-	-	-	RFID X ₀ Trans. PS Error	-	-	RFID X ₀ Trans. Hardware Error
	52	-	-	-	-	-	RFID X ₁ Trans. PS Off	-	-
	53	-	-	-	-	RFID X ₁ Trans. PS Error	-	-	RFID X ₁ Trans. Hardware Error
OUTPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
RFID 1 ₀	0	Transceiver	Next	Tag ID	Read	Write	Tag Info.	Trans. Info.	Reset
	1	-	-	-	-	-	Byte Count 2	Byte Count 1	Byte Count 0
	2	Address High Byte (MSB)							
	3	Address Low Byte (LSB)							
	4...11	Write Data (8 Byte)							
RFID 1 ₁	12	Transceiver	Next	Tag ID	Read	Write	Tag Info.	Trans. Info.	Reset
	13	-	-	-	-	-	Byte Count 2	Byte Count 1	Byte Count 0
	14	Address High Byte (MSB)							
	15	Address Low Byte (LSB)							
	16...23	Write Data (8 Byte)							
RFID 2 ₀	24	Transceiver	Next	Tag ID	Read	Write	Tag Info.	Trans. Info.	Reset
	25	-	-	-	-	-	Byte Count 2	Byte Count 1	Byte Count 0
	26	Address High Byte (MSB)							
	27	Address Low Byte (LSB)							
	28...35	Write Data (8 Byte)							
RFID 2 ₁	36	Transceiver	Next	Tag ID	Read	Write	Tag Info.	Trans. Info.	Reset
	37	-	-	-	-	-	Byte Count 2	Byte Count 1	Byte Count 0
	38	Address High Byte (MSB)							
	39	Address Low Byte (LSB)							
	40...47	Write Data (8 Byte)							

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