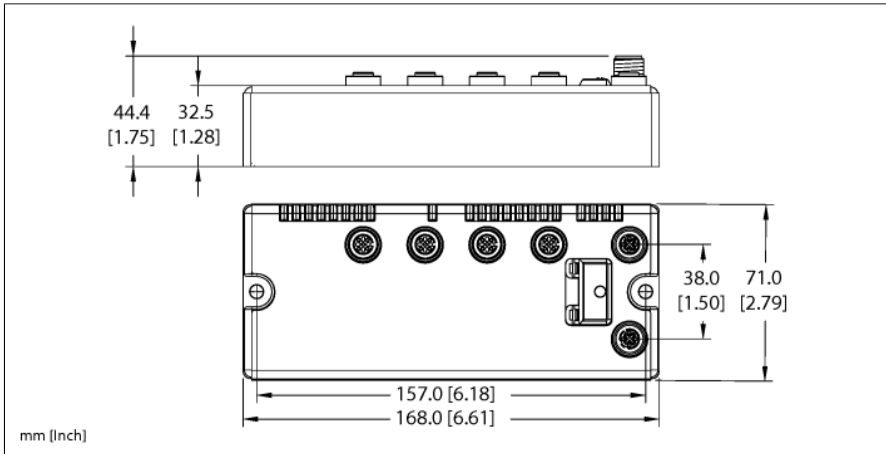


# BL compact™ fieldbus station for CANopen

## 4 Analog Inputs for Pt and Ni Sensors

### BLCCO-4M12L-2AI-PT-2AI-PT

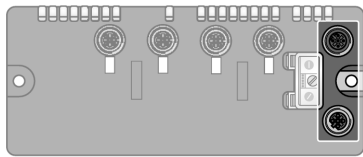


ID	6811308
Nominal system voltage	24 VDC
System power supply	Via CANopen
Admissible range V+	11...30 VDC
Nominal current V+	120 mA
Max. current V+	4 A
Fieldbus transmission rate	10 kbps ...1 Mbps
Adjustment transmission rate	Automatic detection
Fieldbus address range	1...99
Fieldbus addressing	2 decimally coded rotary switches
Fieldbus connection technology	2 × M12
Fieldbus termination	5-pole
Fieldbus termination	external
Service interface	RS232 interface
<b>Analog inputs</b>	
Operating modes	Pt100, 200, 500, 1000 & Ni100, 1000
Type of input diagnostics	Channel diagnostics
Sensor supply	24 VDC, 1 amp max.
Basic fault limit at 23 °C	< 0.2 %
Repeatability	< 0.05 %
Temperature coefficient	< 300 ppm / °C of full scale
Resolution	16 Bit
Measurement display	16 bit signed integer
	12 bit full range left-justified

- On-machine Compact fieldbus I/O block
- CANopen slave
- 10, 20, 50, 125, 250, 500, 800, or 1000 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
- 4 analog inputs for RTDs
- Pt100, Pt200, Pt500, Pt1000, Ni100, Ni1000, 0...100Ω, 0...200Ω, 0...400Ω, or 0...1000Ω (selectable per channel)

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

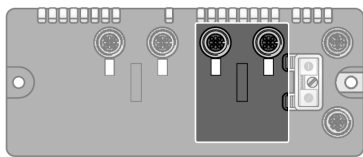
## Pinning and wiring diagram



### CANopen

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

### Pin Assignment

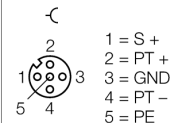


### Slot 1: RTD Inputs

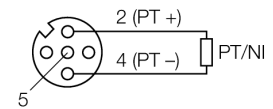
Extension cable (example): RK 4T-2-RS 4T/S3041 ident-no. U-1666 or RKC4.5T-2-RSC4.5/TEL ident no. 6625212

NOTE: Do not connect Pin 3. Use only sensor cables without pin 3 or field-wireable connectors.

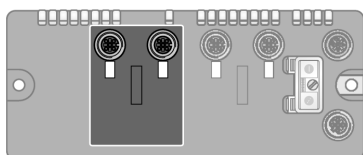
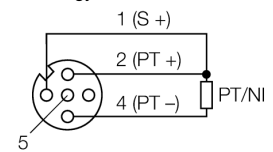
### Pin Assignment



### 2-wire Technology



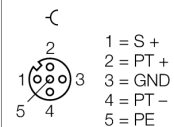
### 3-wire Technology



### Slot 2: RTD Inputs

See slot 1

### Pin Assignment



**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
ERR	-	OFF	No communication error
	RED	ON	CAN bus communication error
BUS	GREEN	ON	NMT-slave state is „Operational“
	ORANGE	ON	NMT-slave state is „Pre-Operational“
	RED	ON	NMT-slave state is „Stopped“
ERR & BUS	RED (ERR) & GREEN (BUS)	FLASHING (4 Hz)	Searching for the baud rate

**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)
AI channels 0 / 1			Not connected

\* 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)
AI channels 0 / 1			Not connected

\* D2 LED also indicates gateway diagnostics

**I/O Data Map**

<b>INPUT</b>	<b>BYTE</b>	<b>Bit 7</b>	<b>Bit 6</b>	<b>Bit 5</b>	<b>Bit 4</b>	<b>Bit 3</b>	<b>Bit 2</b>	<b>Bit 1</b>	<b>Bit 0</b>
AI 1 <sub>0</sub>	0	AI 1 <sub>0</sub> LSB							
	1	AI 1 <sub>0</sub> MSB							
AI 1 <sub>1</sub>	2	AI 1 <sub>1</sub> LSB							
	3	AI 1 <sub>1</sub> MSB							
AI 2 <sub>0</sub>	4	AI 2 <sub>0</sub> LSB							
	5	AI 2 <sub>0</sub> MSB							
AI 2 <sub>1</sub>	6	AI 2 <sub>1</sub> LSB							
	7	AI 2 <sub>1</sub> MSB							