

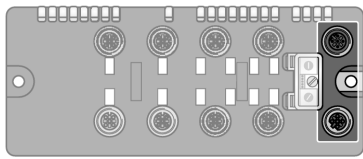
- On-Machine™ compact fieldbus I/O blocks
- CANopen slave
- 10, 20, 50, 125, 250, 500, 800, or 1000 kbps
- Two 5-pin M12 male receptacles for fieldbus connection
- 2 rotary coding switches for node-address
- IP 69K
- M12 I/O ports
- LEDs indicating status and diagnostics
- Electronics galvanically isolated from the field level via optocouplers
- 8 analog inputs for current or voltage
- 0/4...20 mA, -10/0...+10 VDC (selectable per channel)

<b>Type designation</b>	BLCCO-8M12L-4AI-VI-4AI-VI
Ident no.	6811310
<b>Nominal system voltage</b>	24 VDC
System power supply	Via CANopen
Admissible range V+	11...30VDC
Nominal current V+	54 mA
Max. current V+	4 A
<b>Fieldbus transmission rate</b>	10 kbps ...1 Mbps
Adjustment transmission rate	Automatic detection
Fieldbus address range	1...99
Fieldbus addressing	2 dec. Rotary coding switches
Fieldbus connection technology	2 ← M12
	5-pin
Fieldbus termination	External
Service Interface	RS232 interface
<b>Analog inputs</b>	
Operating modes	0/4 ... 20 mA or -10/0 ... 10 VDC
Type of input diagnostics	Channel diagnostics
Sensor supply	24 VAC, max. 1 A
Input resistance	Current: < 0.125 kΩ, Voltage: < 98.5 kΩ
Maximum limiting frequency analog	< 20 Hz
Basic fault limit at 23 °C	< 0.3 %
Repeatability	< 0.05 %
Temperature coefficient	< 300 ppm/°C of full scale
Resolution	16 Bit
Measuring principle	Sigma Delta
Measurement display	16 bit signed integer 12 bit full range left-justified

**BL compact Fieldbus Station for CANopen**  
**8 Analog Current or Voltage Inputs**  
**BLCCO-8M12L-4AI-VI-4AI-VI**

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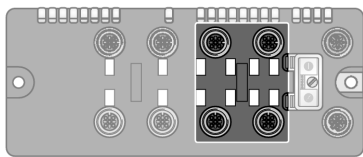
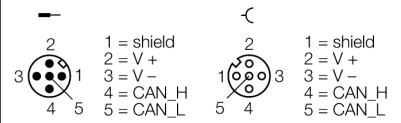
<b>Dimensions</b>	168 x 71 x 32.5 mm
Operating temperature	-40...+70 °C
Storage temperature	-40...+85 °C
Relative humidity	15 to 95% (non-condensing)
Vibration test	acc. to IEC 61131-2
Extended vibration resistance	
- up to 20 g (at 10 up to 150 Hz)	For mounting on base plate or machinery
Shock test	acc. to IEC 61131-2
Electro-magnetic compatibility	acc. to IEC 61131-2
Protection class	IP67
	IP69K
Housing material	Glass fiber reinforced nylon, nickel-plated connector
Housing color	Black
Window material	Lexan
Material screw	Nickel-plated brass
Material label	Polyester with polycarbonate overlay
Ground tab material	Nickel-plated brass
Weight	550 ± 20 g
Approvals and certificates	CE, cULus



**CANopen**

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

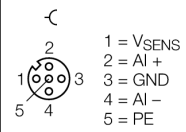
**Pin Assignment**



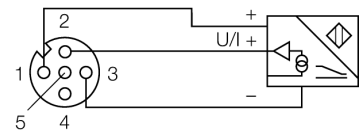
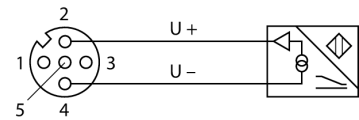
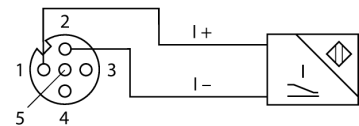
**Slot 1: Analog Inputs**

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

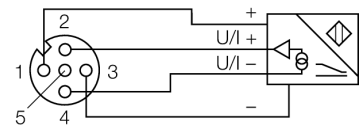
**Pin Assignment**



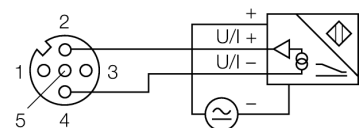
**2-wire Connection (current)**

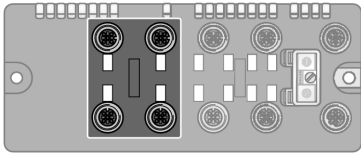


**4-wire connection technology**



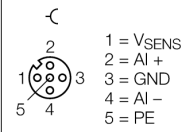
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**Slot 2: Analog Inputs**  
See slot 1

Pin Assignment



**Status: Station LED**

LED	Color	Status	Description
IOs		OFF	Power off
	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
ERR	-	OFF	Normal operating mode
	RED	ON	CAN communication interrupted
BUS	GREEN	ON	NMT slave status operational
	ORANGE	ON	NMT slave status pre-operational
	RED	ON	NMT slave status stopped
ERR & BUS	RED	FLASHING (4 Hz)	Invalid node ID

**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)	Summarized diagnostic
AI channels 1 <sub>0</sub> ...1 <sub>3</sub>		OFF	Channel inactive
	GREEN	ON	Channel active
	GREEN	FLASHING (0.5 Hz)	Measuring range undershoot
	GREEN	FLASHING (4 Hz)	Measuring range overshoot

\* D1 LED also indicates gateway diagnostic

**I/O LED Status Slot 2**

LED	Colour	Status	Description
D2 *		OFF	Diagnostic disabled
	RED	ON	Station / module bus communication failure
	RED	FLASHING (0.5Hz)	Summarized diagnostic
AI channels 2 <sub>0</sub> ...2 <sub>3</sub>		OFF	Not active
	GREEN	ON	Active
	GREEN	FLASHING (0.5 Hz)	Underflow in measuring range
	GREEN	FLASHING (4 Hz)	Overflow in measuring range

\* The D2 LED also indicates gateway diagnosis

**I/O Data Map**

INPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
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 1 <sub>2</sub>	4	AI 1 <sub>2</sub> LSB							
	5	AI 1 <sub>2</sub> MSB							
AI 1 <sub>3</sub>	6	AI 1 <sub>3</sub> LSB							
	7	AI 1 <sub>3</sub> MSB							
AI 2 <sub>0</sub>	8	AI 2 <sub>0</sub> LSB							
	9	AI 2 <sub>0</sub> MSB							
AI 2 <sub>1</sub>	10	AI 2 <sub>1</sub> LSB							
	11	AI 2 <sub>1</sub> MSB							
AI 2 <sub>2</sub>	12	AI 2 <sub>2</sub> LSB							
	13	AI 2 <sub>2</sub> MSB							
AI 2 <sub>3</sub>	14	AI 2 <sub>3</sub> LSB							
	15	AI 2 <sub>3</sub> MSB							