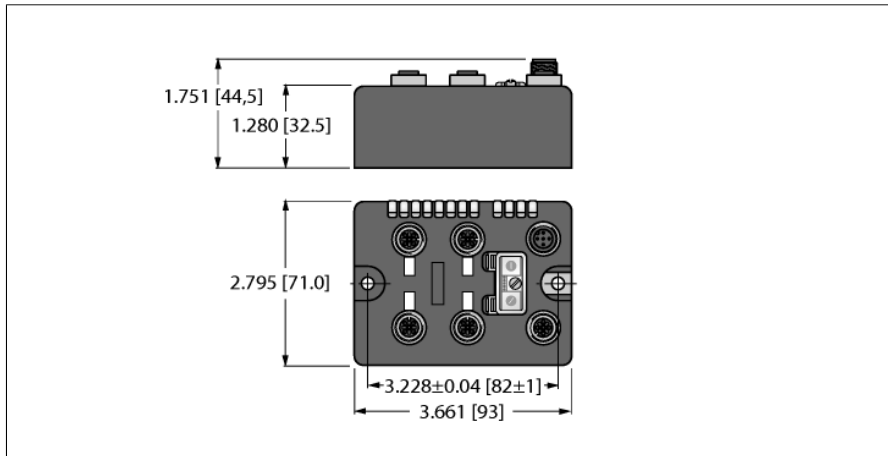


BL compact™ fieldbus station for CANopen
4 Analog Inputs for Current or Voltage
BLCCO-4M12S-4AI-VI

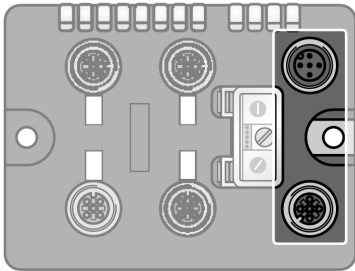


- On-machine Compact fieldbus I/O block
- CANopen slave
- 10, 20, 50, 125, 250, 500, 800, or 1000 kbps
- Two 5-pole M12 connectors for fieldbus connection
- 2 rotary switches for node address
- IP67, IP69K
- M12 I/O connectors
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- 4 analog inputs for current or voltage
- 0/4...20 mA or -10/0...+10 VDC (selectable per channel)

Type designation	BLCCO-4M12S-4AI-VI
Ident-No.	6811301
Fieldbus transmission rate	10 kbps ... 1 Mbps
Adjustment transmission rate	Automatic detection
Fieldbus connection technology	2 × M12, 5-pole
Fieldbus address range	1...99
Fieldbus addressing	2 decimally coded rotary switches
Service interface	RS232 interface
Analog inputs	from 4AI-VI
Operating modes	0/4 ... 20 mA or -10/0 ... 10 VDC
Resolution	16 bit
Repeatability	< 0.05 %
Temperature coefficient	< 300 ppm / °C of full scale
Vibration test	according 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	according to IEC 61131-2
Electromagnetic compatibility	according to IEC 61131-2
Approvals and certificates	CE, cULus
Dimensions (W x L x H)	71 x 93 x 32.5mm
Operating temperature	-40...+70 °C
Storage temperature	-40...+85 °C
Relative humidity	15 to 95% (non-condensing)
Protection class	IP67 IP69K
Housing material	Glass-filled nylon, nickel plated brass connectors
Housing color	Black
Window material	Lexan
Material screw	Nickel-plated brass
Material label	Polyester with polycarbonate overlay
Ground label material	Nickel plated brass
Weight	320 ± 20 g
Mounting	2 × 5.4 mm diameter holes, 1.7 Nm torque

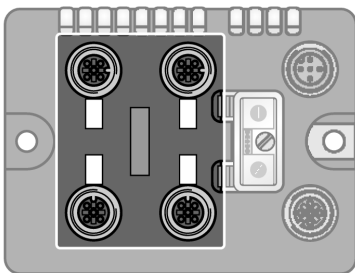
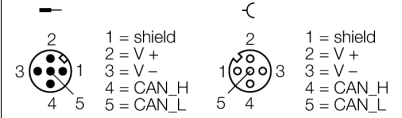
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4 Analog Inputs for Current or Voltage
BLCCO-4M12S-4AI-VI

Pinning and wiring diagram



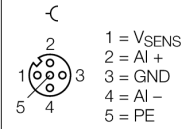
CANopen
Fieldbus cable (example): RSC RKC 572-2M ident-no. U0323 or RSC-RKC572-2M ident-no. 6603629

Pin Assignment

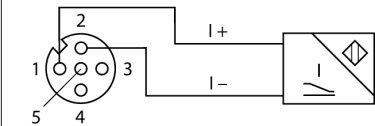


Analog Inputs
Extension cable (example): RK 4.5T-2-RS 4.5T/S653 ident-no. U2187-09 or RKC4.5T-2-RSC4.5T/TEL ident-no. 6625212

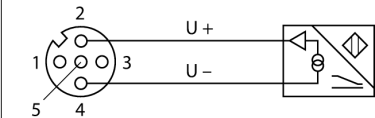
Pin Assignment



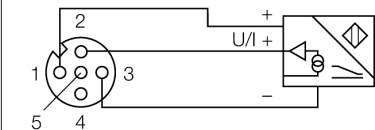
2-wire Technology (Current)



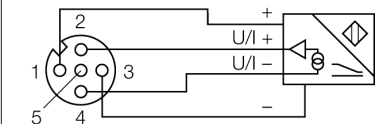
2-wire Technology (Voltage)



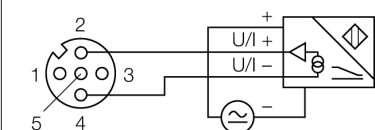
3-wire Technology



4-wire Technology



4-wire Technology (External Power)



BL compact™ fieldbus station for CANopen
4 Analog Inputs for Current or Voltage
BLCCO-4M12S-4AI-VI**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

LED	Color	Status	Description
D *		OFF	No diagnostics active
	RED	ON	Station error/ module bus communication failure
	RED	FLASHING (0.5Hz)	Diagnostics active
AI channel 0...3		OFF	Not active
	GREEN	ON	Active
	GREEN	FLASHING (0.5 Hz)	Underflow in measuring range
	GREEN	FLASHING (4 Hz)	Overflow in measuring range

* D LED also indicates gateway diagnostics

BL compact™ fieldbus station for CANopen
4 Analog Inputs for Current or Voltage
BLCCO-4M12S-4AI-VI**I/O Data Map**

INPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
AI 1 ₀	0	AI 1 ₀ LSB							
	1	AI 1 ₀ MSB							
AI 1 ₁	2	AI 1 ₁ LSB							
	3	AI 1 ₁ MSB							
AI 1 ₂	4	AI 1 ₂ LSB							
	5	AI 1 ₂ MSB							
AI 1 ₃	6	AI 1 ₃ LSB							
	7	AI 1 ₃ MSB							