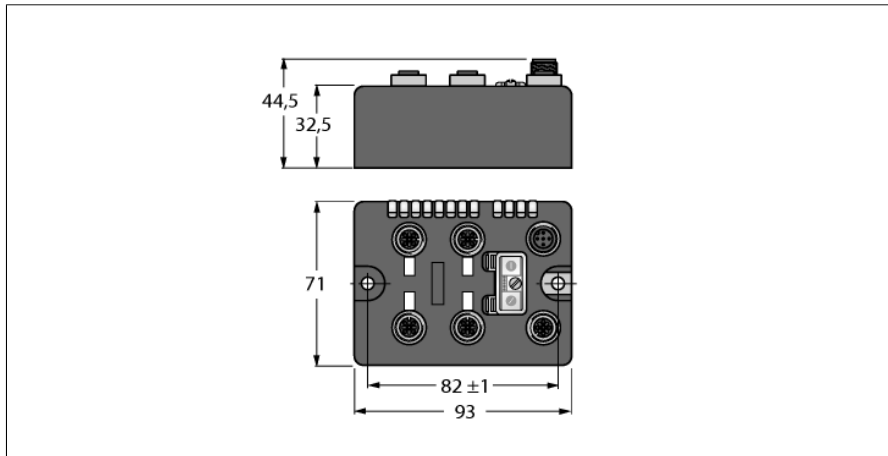


**BL compact Fieldbus Station for CANopen**  
**8 Configurable Digital Channels**  
**BLCCO-4M12S-8XSG-P**



- 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 digital PNP channels, 24 VDC
- Max. 0.5 A per channel
- Adjustable filter times (input delay)
- Input inverting possible

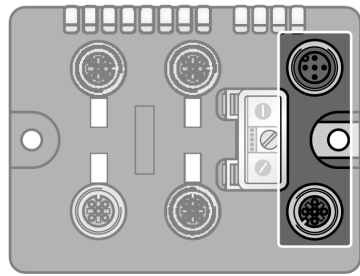
<b>Type designation</b>	BLCCO-4M12S-8XSG-P
Ident no.	6811302
<b>Nominal system voltage</b>	24 VDC
System power supply	Via CANopen
Admissible range V+	18...30 VDC
Nominal current V+	230 mA
Max. current V+	4 A
Electrical isolation	The 8XSG I/O cards have a common reference potential for operating and load voltage due to their freely selectable digital channels. Subsequently, all voltage sources (VI, VO, V+) present on this device must be concurrently connected to suitable power supplies.
<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>Digital inputs</b>	from 8XSG
Input type	PNP
Type of input diagnostics	Group diagnostics
Sensor supply (V <sub>SENSE</sub> )	24 VDC from supply voltage
Low level signal voltage	< 4.5 VDC
High level signal voltage	7...30 VDC
Low level signal current	< 1.5 mA
High level signal current	2.1 ... 3.7 mA
Input delay	0.25 or 2.5 (configurable) ms
<b>Digital outputs</b>	from 8XSG
Output type	PNP
Sensor supply (V <sub>SENSE</sub> )	24 VDC from supply voltage
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

**BL compact Fieldbus Station for CANopen**  
**8 Configurable Digital Channels**  
**BLCCO-4M12S-8XSG-P**

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<b>Dimensions</b>	93 x 71 x 32.5 mm
Mounting	2 × 5.4 mm diameter holes, 1.7 Nm torque
Weight	320 ± 20 g
Housing material	Glass fiber reinforced nylon, nickel-plated connector
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...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	acc. to IEC 61131-2
Electromagnetic compatibility	Acc. to IEC 61131-2
Approvals and certificates	CE, cULus

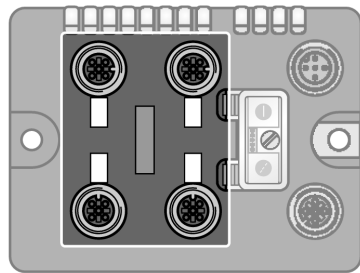
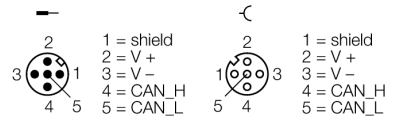
**BL compact Fieldbus Station for CANopen**  
**8 Configurable Digital Channels**  
**BLCCO-4M12S-8XSG-P**



**CANopen**

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

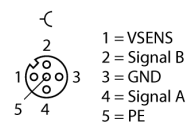
**Pin Assignment**



**Digital Inputs and Outputs**

Extension cable (example): PKGS 3M-2-PSGS 3M ident-no.  
U-43299 or PKG3M-2-PSG3M/TEL ident-no. 6625303

**Pin Assignment**



**BL compact Fieldbus Station for CANopen**  
**8 Configurable Digital Channels**  
**BLCCO-4M12S-8XSG-P****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**

LED	Color	Status	Description
D *		OFF	Diagnostic disabled
	RED	ON	Station / module bus communication failure
	RED	FLASHING (0.5Hz)	Summarized diagnostic
XSG channels 0...7		OFF	Status channel x = 0 (OFF), diagnostic disabled
	GREEN	ON	Status channel = 1 (ON)
	RED	ON	Short-circuit at output

\* D LED also indicates gateway diagnostic

**BL compact Fieldbus Station for CANopen**  
**8 Configurable Digital Channels**  
**BLCCO-4M12S-8XSG-P****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>
	0	DI 1 <sub>7</sub>	DI 1 <sub>6</sub>	DI 1 <sub>5</sub>	DI 1 <sub>4</sub>	DI 1 <sub>3</sub>	DI 1 <sub>2</sub>	DI 1 <sub>1</sub>	DI 1 <sub>0</sub>
	1	-	-	-	-	-	-	-	-
<b>OUTPUT</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>
	0	DO 1 <sub>7</sub>	DO 1 <sub>6</sub>	DO 1 <sub>5</sub>	DO 1 <sub>4</sub>	DO 1 <sub>3</sub>	DO 1 <sub>2</sub>	DO 1 <sub>1</sub>	DO 1 <sub>0</sub>
	1	-	-	-	-	-	-	-	-