



- 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
- 8 digital PNP outputs, 24 VDC
- Max. 0.5A per output

<b>Type code</b>	BLCCO-8M12LT-4DO-0.5A-P-4DO-0.5A-P
Ident-No.	6811309
Ident-No (TUSA)	F6811309
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<b>Nominal system voltage</b>	24 VDC
System power supply	via fieldbus and auxiliary
Voltage supply connection	2 x M12, 4-pole
Nominal current V+	30 mA
Max. current V+	4 A
Admissible range Vo	11...30VDC
Nominal current Vo	200 mA
Max. current Vo	4 A
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<b>Fieldbus transmission rate</b>	10 kbps ... 1 Mbps
Adjustment transmission rate	auto detection
Fieldbus addressing range	1...99
Fieldbus addressing	2 decimally coded rotary switches
Fieldbus connection technology	2 x M12 5-pole
Fieldbus termination	external
Service interface	RS232 interface
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<b>Digital outputs</b>	
Output type	PNP
Type of output diagnostics	Channel diagnostics
Sensor supply (V <sub>SENS</sub> )	24 VDC
Output current per channel	0.5 A
Output voltage	24 VDC
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

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<b>Dimensions</b>	1680 x 710 x 325 mm
Operating temperature	-40...+70 °C
Storage temperature	-40...+85 °C
Relative humidity	15 to 95% (non-condensing)
Vibration test	according to IEC 61131-2
Extended vibration resistance	
- up to 20 g (at 10 to 150 Hz)	For mounting on base plate or machinery
Shock test	according to IEC 61131-2
Electro-magnetic compatibility	according to IEC 61131-2
Protection class	IP67
	IP69K
Housing material	Glass-filled nylon, nickel plated brass connectors
Housing color	black
Window material	Lexan
Screw material	nickel-plated brass
Label material	Polyester with Polycarbonate overlay
Ground tab material	Nickel plated brass
Weight	620 ± 20 g
Approvals and certificates	CE, cULus

**Pinning and wiring diagram**

	<p><b>CANopen</b>          Fieldbus cable (example): RSC RKC 572-2M ident-no. U0323 or RSC-RKC572-2M ident-no. 6603629</p>	<p><b>Pin Assignment</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>1 = shield 2 = V + 3 = V - 4 = CAN_H 5 = CAN_L</p> </div> <div style="text-align: center;"> <p>1 = shield 2 = V + 3 = V - 4 = CAN_H 5 = CAN_L</p> </div> </div>
	<p><b>Slot 1: Digital Outputs</b>          Extension cable (example): RK 4T-2-RS 4T ident-no. U2151-3 or RKC4T-2-RSC4T/TEL ident-no. 6625204</p>	<p><b>Pin Assignment</b></p> <div style="text-align: center;"> <p>1 = VSSENS 2 = n.c. 3 = GND 4 = Output A 5 = PE</p> </div> <p><b>Wiring Diagram</b></p>
	<p><b>Slot 2: Digital Outputs</b>          Reference Slot 1</p>	<p><b>Pin Assignment</b></p> <div style="text-align: center;"> <p>1 = VSSENS 2 = n.c. 3 = GND 4 = Output A 5 = PE</p> </div>
	<p><b>Auxiliary Power Supply</b>          Extension cable (example): RKC 4.4T-2-RSC 4.4T ident-no. U5264 or RKC4.4T-2-RSC4.4T/TEL ident-no. 6625208</p>	<p><b>Pin Assignment</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>1 = Vi 2 = Vo 3 = GND 4 = GND</p> </div> <div style="text-align: center;"> </div> </div>

**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)
DO channels 1 <sub>0</sub> ...1 <sub>3</sub>		OFF	Status of channel x = „0“ (OFF), no diagnostics active
	GREEN	ON	Status of channel x = „1“ (ON)
	RED	ON	Short circuit / overload on channel x

\* 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)
DO channels 2 <sub>0</sub> ...2 <sub>3</sub>		OFF	Status of channel x = „0“ (OFF), no diagnostics active
	GREEN	ON	Status of channel x = „1“ (ON)
	RED	ON	Short circuit / overload on channel x

\* D2 LED also indicates gateway diagnostics

## I/O Data Map

OUTPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
	0	DO 2 <sub>3</sub>	DO 2 <sub>2</sub>	DO 2 <sub>1</sub>	DO 2 <sub>0</sub>	DO 1 <sub>3</sub>	DO 1 <sub>2</sub>	DO 1 <sub>1</sub>	DO 1 <sub>0</sub>
	1	-	-	-	-	-	-	-	-