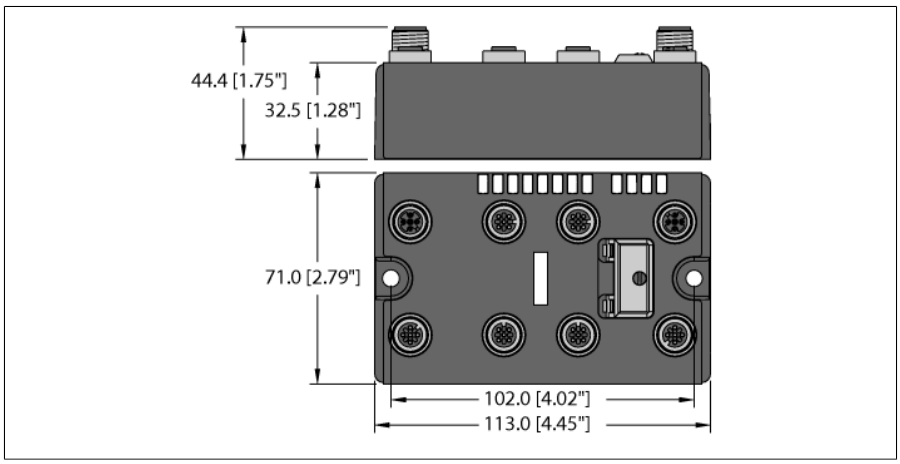
OBSOLETE

BL compact™ fieldbus station for PROFIBUS-DP 4 Digital PNP Outputs BLCDP-4M12VMH-4DO-2A-P



Type	BLCDP-4M12VMH-4DO-2A-P
ID	6811187

Nominal system voltage	24 VDC
System power supply	Via auxiliary power
Voltage supply connection	2 x M12, 5-pin
Admissible range Vi	18…30 VDC
Nominal current Vi	100 mA
Max. current Vi	1 A
Admissible range Vo	18…30 VDC
Nominal current Vo	100 mA
Max. current Vo	8 A

Fieldbus transmission rate	9.6 kbps …12 Mbps
Adjustment transmission rate	Automatic detection
Fieldbus address range	0...99
Fieldbus addressing	2 decimally coded rotary switches
Fieldbus connection technology	2 × M12
	5-pole, reverse keyed
Fieldbus termination	external
Service interface	RS232 interface

- On-machine Compact fieldbus I/O block
- PROFIBUS-DP slave
- 9.6 kbps … 12 Mbps
- Two 5-pole M12, reverse-keyed, connectors for fieldbus connection
- 2 rotary switches for node address
- IP67, IP69K
- All exposed metal is stainless steel
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- 4 digital PNP outputs, 24 VDC
- Max. 2A per output (8A total)
- Two 5-pole M12 male connectors for auxiliary power connection

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Digital outputs	
Output type	PNP
Type of output diagnostics	Channel diagnostics
Sensor supply (V_{SENS})	24 VDC
Output current per channel	2 A
Output voltage	24 VDC from supply voltage
Output delay	3 ms
Load type	resistive, inductive, lamp load
Load resistance, resistive	> 12 Ω
Load resistance, inductive	< 1.2 H
Lamp load	< 10 W
Switching frequency, resistive	< 200 Hz
Switching frequency, inductive	< 2 Hz
Switching frequency, lamp load	< 20 Hz
Short-circuit protection	yes

Dimensions	113 x 71 x 32.5 mm
Mounting	2 × 5.4 mm diameter holes, 1.7 Nm torque
Weight	390 ± 20 g
Housing material	Glass-filled nylon, 316L stainless steel connectors
Housing color	Black
Material screw	303 stainless steel
Material label	Polyester with polycarbonate overlay
Ground label material	304 Stainless Steel
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

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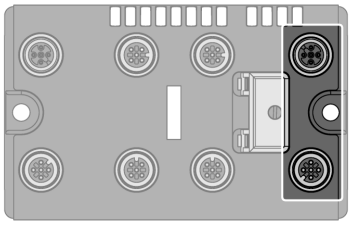
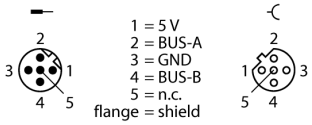
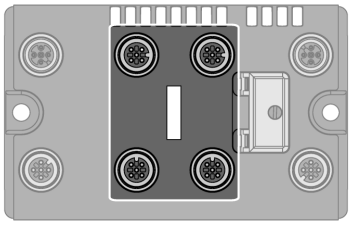
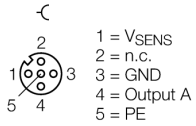
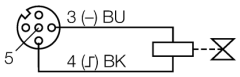
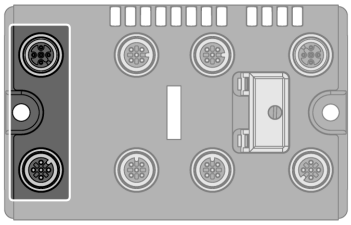
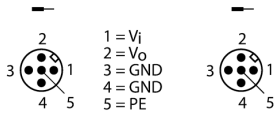
Pinning and wiring diagram

	**PROFIBUS-DP** Fieldbus cable (example): RSSW RKSW 455-2M ident-no. U0350 or RSSW-RKSW455-2M ident-no. 6602222	Pin Assignment (M12, B-Code) 
	**Digital Outputs** Extension cable (example): RK 4T-2-RS 4T ident-no. U2151-3 or RKC4T-2-RSC4T/TEL ident-no. 6625204	Pin Assignment  Wiring Diagram 
	**Auxiliary Power** Extension cable (example): RKC 4.4T-2-RSC 4.4T ident-no. U5264 or RKC4.4T-2-RSC4.4T/TEL ident-no. 6625208	Pin Assignment 

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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
BUS		OFF	No field bus communication
	GREEN	ON	Field bus communication active
	GREEN	FLASHING (1 Hz)	No field bus communication active, device status OK
	RED	ON	Bus error at the gateway; no data exchange
	RED	FLASHING	Faulty PROFIBUS-DP address
BUS		OFF	No field bus communication
	GREEN	ON	Field bus communication active
	GREEN	FLASHING (1 Hz)	No field bus communication active, device status OK
	RED	ON	Bus error at the gateway; no data exchange
	RED	FLASHING	Faulty PROFIBUS-DP address

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
DO channels 0...3		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

* D 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 1_3	DO 1_2	DO 1_1	DO 1_0
	1	-	-	-	-	-	-	-	-