



- On-machine Compact fieldbus I/O block
- DeviceNet™ slave
- 125 / 250 / 500 kbps
- Two 5-pole M12 connectors for fieldbus connection
- 2 rotary switches for node address
- IP67
- M8 I/O connectors
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- 8 digital PNP inputs, 24 VDC
- 8 digital PNP outputs, 24 VDC
- Max. 0.5A per output

Type code	BLCDN-16M8LT-8DI-P-8DO-0.5A-P
Ident-No.	6811014
Ident-No (TUSA)	F6811014
Nominal system voltage	24 VDC
System power supply	via fieldbus and auxiliary
Voltage supply connection	2 x M12, 4-pole
Admissible range V+	11...30VDC
Nominal current V+	30 mA
Max. current V+	4 A
Admissible range Vi	11...30VDC
Nominal current Vi	40 mA
Max. current Vi	2 A
Admissible range Vo	11...30VDC
Nominal current Vo	100 mA
Max. current Vo	4 A
Fieldbus transmission rate	125 / 250 / 500 kbps
Adjustment transmission rate	auto detection
Fieldbus addressing range	0...63
	64...80 (Programmable MACID)
	81...99 (Vendor Specific)
Fieldbus addressing	2 decimally coded rotary switches
Fieldbus connection technology	2 x M12
	5-pole
Fieldbus termination	external
Service interface	RS232 interface
Vendor ID	30
Product type	12
Product code	11014

Digital inputs	
Input type	PNP
Type of input diagnostics	group diagnostics
Sensor supply (V _{SENS})	24 VDC
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 ms

BL compact™ fieldbus station for DeviceNet™
8 Digital PNP Inputs and 8 Digital PNP Outputs
BLCDN-16M8LT-8DI-P-8DO-0.5A-P

Digital outputs

Output type	PNP
Type of output diagnostics	Channel diagnostics
Sensor supply (V_{Sens})	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

Dimensions

	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
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	590 \pm 20 g
Approvals and certificates	CE, cULus

Pinning and wiring diagram

	<p>DeviceNet™ Fieldbus cable (example): RSC RKC 572-2M ident-no. U0323 or RSC-RKC572-2M ident-no. 6603629</p>	<p>Pin Assignment</p> <p> 1 = shield 2 = V + 3 = V - 4 = CAN_H 5 = CAN_L </p>
	<p>Slot 1: Digital Inputs Extension cable (example): PKG 3M-2-PSG 3M ident-no. U2515-20 or PKG3M-2-PSG3M/TEL ident-no. 6625303</p>	<p>Pin Assignment</p> <p> 1 = V_{SENS} 3 = GND 4 = Input A </p> <p>Wiring Diagram</p>
	<p>Slot 2: Digital Outputs Extension cable (example): PKG 3M-2-PSG 3M ident-no. U2515-20 or PKG3M-2-PSG3M/TEL ident-no. 6625303</p>	<p>Pin Assignment</p> <p> 1 = V_{SENS} 3 = GND 4 = Output A </p> <p>Wiring Diagram</p>
	<p>Auxiliary Power Supply 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>Pin Assignment</p> <p> 1 = V_i 2 = V_o 3 = GND 4 = GND </p>

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
MNS		OFF	No connection
	GREEN	ON	Connection established
	GREEN	FLASHING (1 Hz)	No connection established, device OK
	RED	ON	Duplicate MAC-ID
	RED	FLASHING	Connection time out
IO	GREEN	ON	I/O active
	GREEN	FLASHING (1 Hz)	One or more I/O in Idle State
	RED	ON	One or more I/O error
	RED	FLASHING	One or more I/O in Faulted State

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)
DI Channels		OFF	Status of channel x = „0“ (OFF)
1 ₀ ...1 ₇	GREEN	ON	Status of channel x = „1“ (ON)

* 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)

* D2 LED also indicates gateway diagnostics

I/O & Diagnostic Data Map

INPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
	0	DI 1 ₇	DI 1 ₆	DI 1 ₅	DI 1 ₄	DI 1 ₃	DI 1 ₂	DI 1 ₁	DI 1 ₀
	1	-	-	-	-	-	-	-	-
Diagnostics	2	Module number reporting diagnostic data							
	3	Replace Station	-	Diagnostics Active	-	-	-	-	-
Slot 2 (ref. Byte 2)	4	Over Current DO 2 ₇	Over Current DO 2 ₆	Over Current DO 2 ₅	Over Current DO 2 ₄	Over Current DO 2 ₃	Over Current DO 2 ₂	Over Current DO 2 ₁	Over Current DO 2 ₀
	3	-	-	-	-	-	-	-	-
OUTPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
	0	DO 2 ₇	DO 2 ₆	DO 2 ₅	DO 2 ₄	DO 2 ₃	DO 2 ₂	DO 2 ₁	DO 2 ₀
	1	-	-	-	-	-	-	-	-