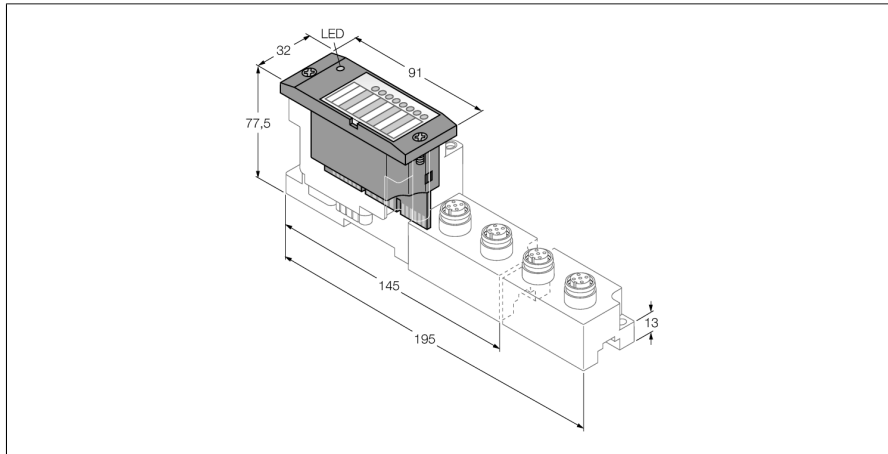


BL67 electronic module

16 Digital Inputs, PNP

BL67-16DI-P



- Independent of the fieldbus and connection technology used
- Protection class IP67
- LEDs indicate status and diagnostic
- Electronics galvanically separated from the field level via optocouplers
- 16 digital inputs, 24 VDC
- PNP
- From version VN 01-01 and higher, the module supports accelerated start-up for applications with Fast Start-Up (FSU) and QuickConnect (QC).

Functional principle

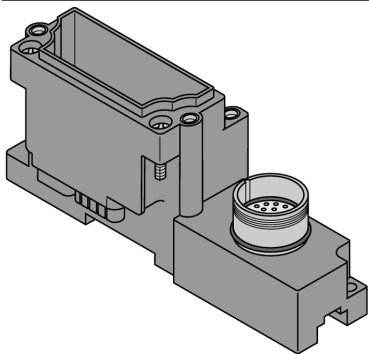
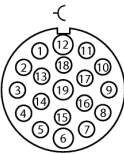
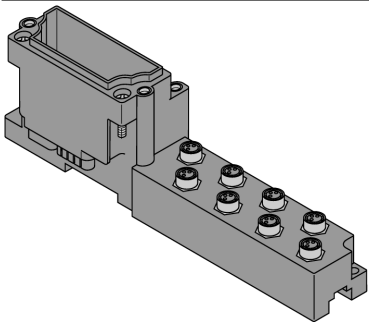
BL67 electronic modules are plugged on the purely passive base modules which in turn are connected to the field devices. The separation of connection level and electronics simplifies maintenance considerably. Flexibility is enhanced because the user can choose between base modules with different connection technologies.

The electronic modules are completely independent of the higher level fieldbus through the use of gateways.

Type	BL67-16DI-P
ID	6827383
Number of channels	16
Supply voltage	24 VDC
Nominal voltage V_i	24 VDC
Nominal current from module bus	$\leq 30 \text{ mA}$
Max. sensor supply I_{sensor}	4 A electronically limited current supply via gateway or power feed
Input type	PNP
Low-level signal voltage	$< 4.5 \text{ V}$
High level signal voltage	7...30 V
Low level signal current	$< 1.5 \text{ mA}$
High level signal current	2.1...3.7 mA
Input delay	0.3 ms
Electrical isolation	electronics for the field level
Output connectivity	M8, M23
Simultaneity factor	1

Dimensions (W x L x H)	32 x 91 x 59 mm
Approvals	CE, cULus
Ambient temperature	-40...+70 °C
Temperature derating	
> 55 °C Steady ambient air	Simultaneity factor 0.5
Storage temperature	-40...+85 °C
Relative humidity	5...95 % (internal), level RH-2, no condensation (when stored at 45 °C)
Vibration test	Acc. to EN 61131
- up to 5 g (at 10 to 150 Hz)	for mounting on DIN rail no drilling according to EN 60715, with end bracket
- up to 20 g (at 10 up to 150 Hz)	for mounting on base plate or machinery Therefore every second module has to be mounted with two screws each.
Shock test	Acc. to IEC 60068-2-27
Drop and topple	acc. to IEC 68-2-31 and free fall to IEC 68-2-32
Electromagnetic compatibility	Acc. to EN 61131-2
Protection class	IP67
Tightening torque fixing screw	0.9...1.2 Nm

Compatible base modules

Dimension drawing	Type	Pin configuration
	BL67-B-1M23-19 6827216 1 x M23, 19-pin, female Comments Customizable connectors (for example): FW-M23ST19Q-G-LT-ME-XX-10 Ident-No. 6604208	Pin Assignment  1 = Input 14 2 = Input 10 3 = Input 6 4 = Input 3 5 = Input 2 6 = GND 7 = Input 1 8 = Input 5 9 = Input 9 10 = Input 13 11 = Input 12 12 = PE 13 = Input 11 14 = Input 7 15 = Input 0 16 = Input 4 17 = Input 8 18 = Input 15 19 = V_{SENS}
	BL67-B-8M8-4-P 6827384 8 x M8, 4-pin, female, paired	Pin Assignment  1 = V_{SENS} 2 = Signal A 3 = GND 4 = Signal B

LED display

LED	Color	Status	Meaning
D		OFF	No error message or diagnostics active.
	RED	ON	Failure of module bus communication. Check if more than 2 adjacent electronic modules are pulled. Relevant modules are located between gateway and this module.
	RED	FLASHING (0.5 Hz)	Upcoming module diagnostics
DI channels 0...7		OFF	Input status x = 0 (OFF)
	GREEN	ON	Input status x = 1 (ON)
DI channels 8...15		OFF	Input status x = 0 (OFF)
	ORANGE	ON	Input status x = 1 (ON)

Note:

The numbering of the LEDs corresponds to the numbering of the channels.