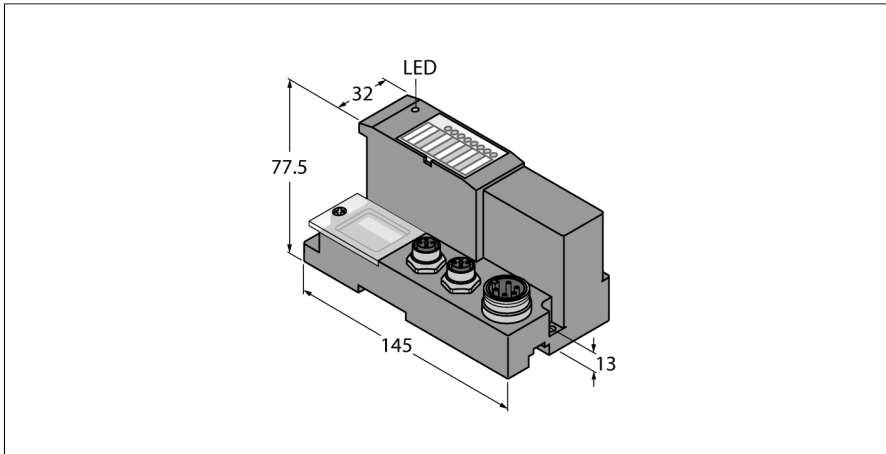


# Gateway for BL67 I/O system

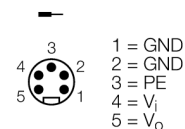
## Interface for EtherCAT

### BL67-GW-EC-20



|  |  |
|--|--|
| Type                                     | BL67-GW-EC-20                                |
| ID                                       | 100042217                                    |
| Supply voltage                           | 24 VDC                                       |
| Admissible range                         | 18...30 VDC                                  |
| Nominal current from module bus          | ≤ 600 mA                                     |
| max. system supply current $I_{mb (GV)}$ | 1.3A   |
| Max. sensor supply $I_{sens}$            | 4 A electronically limited current supply    |
| max. load current $I_L$                  | 10 A   |
| Voltage supply connection                | 7/8", 5-pin                                  |
| <b>System data</b>                       |  |
| Max. number of I/O modules               | 32   |
| Connection technology Ethernet           | 2 × M12 × 1 female connector, 4-pin, D-coded |
| Service interface                        | Mini USB, Ethernet                           |
| <b>EtherCAT</b>                          |  |
| Address allocation                       | automatic                                    |
| MinCycleTime                             | 125 μs                                       |
| Diagnostics                              | CoE Emergencies, DiagnosisHistory            |
| CAN over EtherCAT                        | acc. to modular device profile (ETG.5001.1)  |

- 3 decimal rotary coding switches
- Protection class IP67
- LEDs for display of supply voltage, group and bus errors
- Gateway between the BL67 system and EtherCAT
- 10/100 Mbps, Auto MDIX
- Two 4-pin D-coded M12 female connectors for fieldbus connection (from VN 03-00)
- One 5-pin 7/8" male connector for power supply



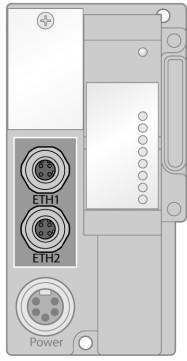
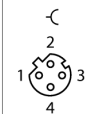
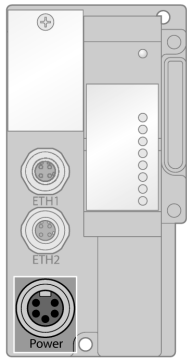
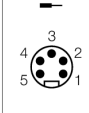
#### Functional principle

BL67 gateways are the head component of a BL67 station. They are designed to connect the modular fieldbus nodes to the higher-level fieldbus (PROFIBUS-DP, DeviceNet, CANopen, Ethernet Modbus TCP, PROFINET, EtherCAT or EtherNet/IP).

All BL67 electronic modules communicate via the internal module bus, the data of which is transferred to the fieldbus via the gateway. All I/O modules can thus be configured independently of the bus system.

|                                       |   |
|---------------------------------------|---|
| Dimensions (W x L x H)                | 74 x 145 x 77.5 mm  |
| Approvals                             | CE, cULus   |
| Ambient temperature                   | -40...+70 °C  |
| Temperature derating                  |   |
| > 55 °C Circulating air (Ventilation) | no limitation   |
| > 55 °C Steady ambient air            | Isens < 3A, I <sub>mb</sub> < 1A  |
| 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  |
| Extended vibration resistance         | VN 02-00 and higher   |
| - 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  |
| DIN rail mounting                     | yes, Attention: Offset  |
| Direct mounting                       | Two mounting holes, Ø 6 mm  |
| Included in delivery                  | 1 x end plate BL67  |

## Pin assignment and supply concept

|  |   |  |
|--|---|--|
|   | <p><b>Ethernet Ports</b></p> <p>The ports are used as interfaces for configuration and fieldbus communication. The gateway supports EtherCAT.</p>   | <p>Pin assignment</p>  <ul style="list-style-type: none"> <li>1 = YE (TX +)</li> <li>2 = WH (RX +)</li> <li>3 = OG (TX -)</li> <li>4 = BU (RX -)</li> </ul>                   |
|  | <p><b>Power Supply</b></p> <p>The BL67 system is supplied with power via two circuits.</p> <p><b>System supply <math>V_i</math></b></p> <p><math>V_i</math> is for the internal system supply at the backplane bus (<math>V_{MB(SV)}</math>), and for the sensor supply (<math>V_{sens}</math>) with a short-circuit current limit of 4 A.</p> <p><b>Load voltage <math>V_o</math></b></p> <p><math>V_o</math> is for supplying the outputs and is limited to max.10 A.</p> | <p>Pin assignment</p>  <ul style="list-style-type: none"> <li>1 = GND</li> <li>2 = GND</li> <li>3 = PE</li> <li>4 = <math>V_i</math></li> <li>5 = <math>V_o</math></li> </ul> |