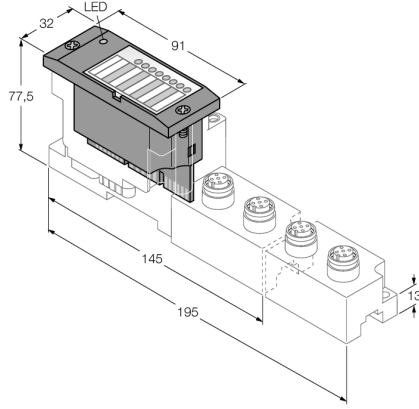


# BL67 electronic module

## 16 Digital Inputs, PNP

### BL67-16DI-P



- Kullanılan fieldbus ve bağlantı teknolojilerinden bağımsız
- Koruma sınıfı 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).

#### İşlevsel prensip

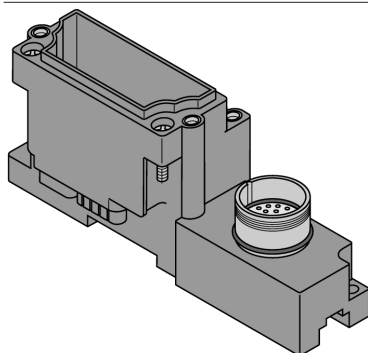
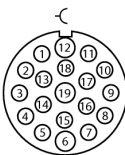
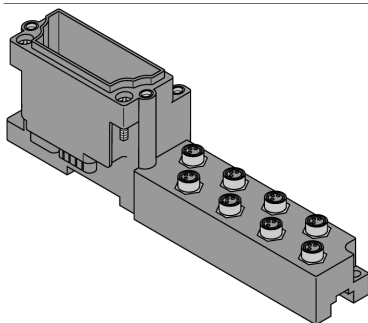
BL67 electronic modules are plugged on the purely passive base modules which in turn are connected to the field devices. The separation of connection level and electronics simplifies maintenance considerably. Flexibility is enhanced because the user can choose between base modules with different connection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

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

|                                        |                                                                     |
|----------------------------------------|---------------------------------------------------------------------|
| Tip                                    | BL67-16DI-P                                                         |
| Tanıt. no.                             | 6827383                                                             |
| Kanal sayısı                           | 16                                                                  |
| Besleme gerilimi                       | 24 VDC                                                              |
| Nominal voltage V <sub>N</sub>         | 24 VDC                                                              |
| Modül veri yolundan gelen nominal akım | ≤ 30 mA                                                             |
| Max. sensor supply I <sub>sensor</sub> | 4 A electronically limited current supply via gateway or power feed |
| Giriş tipi                             | PNP                                                                 |
| Düşük seviye sinyal gerilimi           | < 4.5 V                                                             |
| Yüksek seviye sinyal gerilimi          | 7...30 V                                                            |
| Düşük seviye sinyal akımı              | < 1.5 mA                                                            |
| Yüksek seviye sinyal akımı             | 2.1...3.7 mA                                                        |
| Giriş gecikmesi                        | 0,3 ms                                                              |
| Elektrik yalıtımı                      | electronics for the field level                                     |
| Çıkış bağlantısı                       | M8, M23                                                             |
| Simultaneity factor                    | 1                                                                   |

|                                   |                                                                                                               |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------|
| Boyutlar (W x L x H)              | 32 x 91 x 59 mm                                                                                               |
| Onaylar                           | CE, cULus                                                                                                     |
| Ortam sıcaklığı                   | -40...+70 °C                                                                                                  |
| Sıcaklık değeri kaybı             |                                                                                                               |
| > 55°C Sabit ortam havası         | Simultaneity factor 0.5                                                                                       |
| Saklama sıcaklığı                 | -40...+85 °C                                                                                                  |
| Bağıl nem                         | %5...95 (dahili), seviye RH-2, yoğuşmasız (45°C'de depolandığında)                                            |
| Titreşim testi                    | EN 61131 uyarınca                                                                                             |
| - 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. |
| Darbe testi                       | IEC 60068-2-27 uyarınca                                                                                       |
| Düşme ve devrilme                 | acc. to IEC 68-2-31 and free fall to IEC 68-2-32                                                              |
| Elektromanyetik uyumluluk         | EN 61131-2 uyarınca                                                                                           |
| IP Derecesi                       | IP67                                                                                                          |
| Tightening torque fixing screw    | 0,9...1,2 Nm                                                                                                  |

Compatible base modules

|                                                                                    |                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------|--------------|--------------|-------------|---------------|-------------|--------------|-------------|--------------|---------|--------------|-------------|--------------|-------------|---------------|-------------|------------------------|---------------|--|
|   | <p><b>Type</b></p> <p><b>BL67-B-1M23-19</b><br/>6827216<br/>1 x M23, 19-pin, female</p> <p><b>Comments</b><br/>Customizable connectors (for example):<br/>FW-M23ST19Q-G-LT-ME-XX-10<br/>Ident-No. 6604208</p> | <p><b>Pin configuration</b></p> <p>Tel ataması</p>  <table><tr><td>1 = Input 14</td><td>11 = Input 12</td></tr><tr><td>2 = Input 10</td><td>12 = PE</td></tr><tr><td>3 = Input 6</td><td>13 = Input 11</td></tr><tr><td>4 = Input 3</td><td>14 = Input 7</td></tr><tr><td>5 = Input 2</td><td>15 = Input 0</td></tr><tr><td>6 = GND</td><td>16 = Input 4</td></tr><tr><td>7 = Input 1</td><td>17 = Input 8</td></tr><tr><td>8 = Input 5</td><td>18 = Input 15</td></tr><tr><td>9 = Input 9</td><td>19 = V<sub>SENS</sub></td></tr><tr><td>10 = Input 13</td><td></td></tr></table> | 1 = Input 14          | 11 = Input 12 | 2 = Input 10 | 12 = PE      | 3 = Input 6 | 13 = Input 11 | 4 = Input 3 | 14 = Input 7 | 5 = Input 2 | 15 = Input 0 | 6 = GND | 16 = Input 4 | 7 = Input 1 | 17 = Input 8 | 8 = Input 5 | 18 = Input 15 | 9 = Input 9 | 19 = V <sub>SENS</sub> | 10 = Input 13 |  |
| 1 = Input 14                                                                       | 11 = Input 12                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 2 = Input 10                                                                       | 12 = PE                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 3 = Input 6                                                                        | 13 = Input 11                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 4 = Input 3                                                                        | 14 = Input 7                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 5 = Input 2                                                                        | 15 = Input 0                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 6 = GND                                                                            | 16 = Input 4                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 7 = Input 1                                                                        | 17 = Input 8                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 8 = Input 5                                                                        | 18 = Input 15                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 9 = Input 9                                                                        | 19 = V <sub>SENS</sub>                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 10 = Input 13                                                                      |                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
|  | <p><b>BL67-B-8M8-4-P</b><br/>6827384<br/>8 x M8, 4-pin, female, paired</p>                                                                                                                                    | <p><b>Tel ataması</b></p>  <table><tr><td>1 = V<sub>SENS</sub></td></tr><tr><td>2 = Signal A</td></tr><tr><td>3 = GND</td></tr><tr><td>4 = Signal B</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                              | 1 = V <sub>SENS</sub> | 2 = Signal A  | 3 = GND      | 4 = Signal B |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 1 = V <sub>SENS</sub>                                                              |                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |               |              |              |             |               |             |              |             |              |         |              |             |              |             |               |             |                        |               |  |
| 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<br>0...7  |        | OFF               | Input status x = 0 (OFF)                                                                                                                                        |
|                       | GREEN  | ON                | Input status x = 1 (ON)                                                                                                                                         |
| DI channels<br>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.