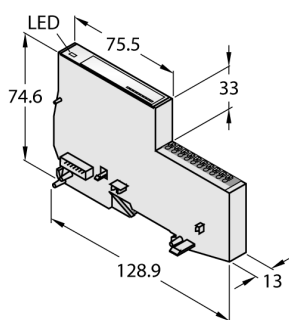


# BL20 Economy Module

## 8 Digital Outputs, PNP, 0.5 A

### With Extended Temperature Range

#### BL20-E-8DO-24VDC-0.5A-P/ET



- Fieldbus-independent
- Electronics and connection technology in one housing
- Connectivity: Push-in terminals
- Protection class IP20
- 8 digital outputs, 24 VDC
- Max. 0.5 A
- P switching
- Extended temperature range: -25 °C...+60 °C
- Circuit boards with conformal coating

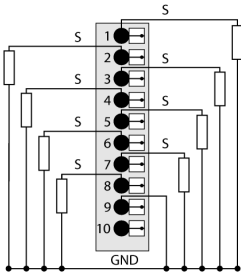
#### Functional principle

Electronics and connection technology are integrated in the housing. A base module is not needed. Economy modules and modules with separate electronics and connection technology can be fitted into a station, provided the base modules feature tension spring connections.

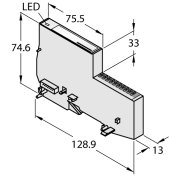
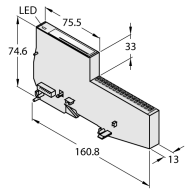
The use of gateways makes economy modules completely independent from the higher level fieldbus.

|                                        |                                            |
|----------------------------------------|--------------------------------------------|
| Type                                   | BL20-E-8DO-24VDC-0.5A-P/ET                 |
| ID                                     | 100000400                                  |
| Number of channels                     | 8                                          |
| Rated voltage from the supply terminal | 24 VDC                                     |
| Admissible range                       | 18...30 VDC                                |
| Nominal current from field supply      | ≤ 3 mA                                     |
| Nominal current from module bus        | ≤ 15 mA                                    |
| Power dissipation, typical             | ≤ 1.5 W                                    |
| Output connectivity                    | Push-in                                    |
| Output type                            | PNP                                        |
| Output voltage                         | 24 VDC                                     |
| Output current per channel             | 0.5 A                                      |
| Output delay                           | 0.3 ms                                     |
| Load type                              | Resistive, inductive, lamp load            |
| Load resistance, resistive             | > 48 Ω                                     |
| Lamp load                              | < 6 W                                      |
| Switching frequency, resistive         | < 100 Hz                                   |
| Switching frequency, lamp load         | < 10 Hz                                    |
| Short-circuit protection               | yes                                        |
| Simultaneity factor                    | 1                                          |
| Electrical isolation                   | electronics for the field level            |
| Dimensions (W x L x H)                 | 13 x 128.9 x 74.6 mm                       |
| Approvals                              | CE                                         |
| Ambient temperature                    | -25...+60 °C                               |
| Storage temperature                    | -25...+85 °C                               |
| Relative humidity                      | 15...95 %, no condensation allowed         |
| Vibration test                         | Acc. to EN 61131                           |
| Shock test                             | Acc. to IEC 60068-2-27                     |
| Drop and topple                        | Acc. to IEC 60068-2-31                     |
| Electromagnetic compatibility          | Acc. to EN 61131-2                         |
| Protection class                       | IP20                                       |
| MTTF                                   | 1008 years acc. to SN 29500 (Ed. 99) 20 °C |

Connection Overview

|                                                                                   |                 |                                                                                                           |
|-----------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------|
|  | Digital Outputs | <p>Pin Assignment</p>  |
|-----------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------|

## Accessories

| Type code     | Ident-No. |                                                                                                | Dimension drawing                                                                                                                                                                                                                                                            |
|---------------|-----------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BL20-E-10GNDL | 100001336 | BL20 ECO module with 10 connection terminals for wiring GND potential from the UL field supply |  <p>Technical drawing showing the dimensions of the BL20-E-10GNDL module. The dimensions are: LED (top), 75.5 (width), 33 (height), 74.6 (depth), 128.9 (length), and 13 (thickness).</p> |
| BL20-E-16GNDL | 100001338 | BL20 ECO module with 16 connection terminals for wiring GND potential from the UL field supply |  <p>Technical drawing showing the dimensions of the BL20-E-16GNDL module. The dimensions are: LED (top), 75.5 (width), 33 (height), 74.6 (depth), 160.8 (length), and 13 (thickness).</p> |