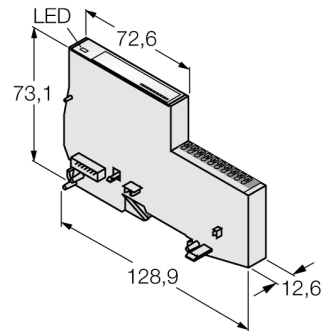


# BL20 Economy Module

## 4 Analog Thermocouple Inputs

### BL20-E-4AI-TC



#### Functional principle

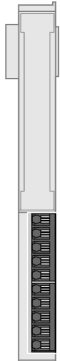
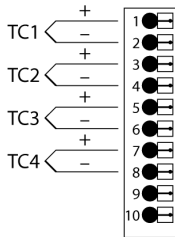
Electronics and connection technology are integrated in the housing. A base module is not needed. Economy modules and modules with separate electronics and connection technology can be fitted into a station, provided the base modules feature tension spring connections.

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

|                                        |                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------|
| <b>Type designation</b>                | BL20-E-4AI-TC                                                                  |
| Ident-No.                              | 6827367                                                                        |
| <b>Number of channels</b>              | 4                                                                              |
| Rated voltage from the supply terminal | 24 VDC                                                                         |
| Nominal current from field supply      | ≤ 30 mA                                                                        |
| Nominal current from module bus        | ≤ 50 mA                                                                        |
| Power dissipation, typical             | ≤ 1 W                                                                          |
| <b>Inputs</b>                          |                                                                                |
| Input type                             | types B, C, E, G, J, K, N, R, S, T                                             |
| Input resistance                       | > 7 MΩ                                                                         |
| Electrical isolation                   | electronics for the field level                                                |
| Output connectivity                    | Push-in                                                                        |
| <b>Voltage resolution</b>              | ± 50 mV: < 2 μV<br>± 100 mV: < 4 μV<br>± 500 mV: < 20 μV<br>± 1000 mV: < 50 μV |
| Maximum limiting frequency analog      | 70 Hz                                                                          |
| Basic fault limit at 23 °C             | < 0.2 %                                                                        |
| Repeatability                          | 0.05 %                                                                         |
| Temperature coefficient                | < 150 ppm / °C of full scale                                                   |
| Resolution                             | 16 Bit                                                                         |
| Measured-value display                 | 16 bit signed integer<br>12 bit full range left-justified                      |
| <b>Dimensions (W x L x H)</b>          | 12.6 x 128.6 x 74.6mm                                                          |
| Approvals                              | CE                                                                             |
| Operating temperature                  | 0 to +55 °C                                                                    |
| Storage temperature                    | -25...+85 °C                                                                   |
| Relative humidity                      | 5 to 95% (internal), Level RH-2, no condensation (at 45 °C storage)            |
| Vibration test                         | acc. to EN 61131                                                               |
| Shock test                             | acc. to IEC 68-2-27                                                            |
| Drop and topple                        | acc. to IEC 68-2-31 and free fall to IEC 68-2-32                               |
| Electromagnetic compatibility          | acc. to EN 50,082-2                                                            |
| Protection class                       | IP20                                                                           |

**BL20 Economy Module**  
**4 Analog Thermocouple Inputs**  
**BL20-E-4AI-TC**

**Terminal assignment**

|                                                                                   |                            |                                                                                     |
|-----------------------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------------------------|
|  | <b>Thermocouple Inputs</b> |  |
|-----------------------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------------------------|