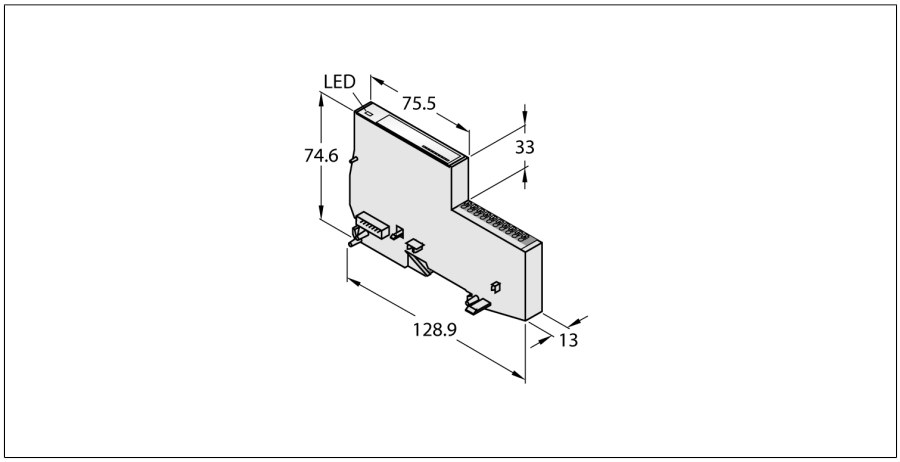
BL20 Economy Module
4 Analog Thermocouple Inputs
BL20-E-4AI-TC



- Fieldbus-independent
- Electronics and connection technology in one housing
- Connectivity: Push-in terminals
- Protection class IP20
- LEDs indicate status and diagnostic
- Electronics galvanically separated from the field level via optocouplers
- 4 analog inputs for the connection of thermocouples
- Types B, C, E, G, J, K, N, R, S and T
- Cold junction compensation via integrated Pt1000 probe

Type	BL20-E-4AI-TC
ID	6827367
Number of channels	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
Inputs	
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
Voltage resolution	± 50 mV: < 2 µV ± 100 mV: < 4 µV ± 500 mV: < 20 µV ± 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
	12 bit full range left-justified
Dimensions (W x L x H)	13 x 128.9 x 74.6 mm
Approvals	CE
Ambient temperature	0…+55 °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 68-2-31 and free fall to IEC 68-2-32
Electromagnetic compatibility	Acc. to EN 50082-2
Protection class	IP20
MTTF	341 years acc. to SN 29500 (Ed. 99) 20 °C

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.

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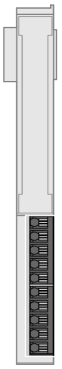
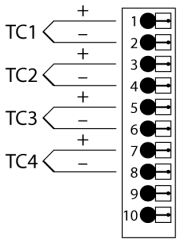
Terminal assignment



Thermocouple Inputs



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