

BL20 electronic module

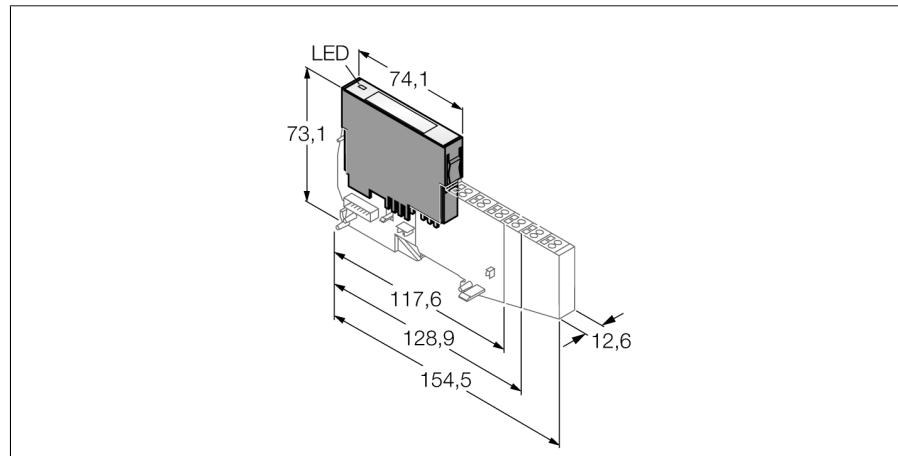
2 analog inputs for temperature measurement

BL20-2AI-THERMO-PI

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Type	BL20-2AI-THERMO-PI
Ident-No.	6827020
Ident-No (TUSA)	M6827020
Number of channels	2
Rated voltage from the supply terminal	24 VDC
Supply voltage	24 VDC
Rated current from field supply	≤ 30 mA
Rated current from module bus	≤ 45 mA
Power loss, typical	≤ 1 W
Inputs	
Input type	types B, E, J, K, N, R, S, T
Electrical isolation	electronics for the field level
Connection technology	Screw, tension spring
Voltage resolution	
	+ - 50mV: < 2µV
	+ - 100mV: < 4µV
	+ - 500mV: < 20µV
	+ - 1000mV: < 50µV
Basic fault limit at 23 °C	< 0.2 %
Repeatability	0.05 %
Temperature coefficient	< 300 ppm/°C of full scale
Resolution	16 Bit
Measured-value display	16 bit signed integer
	12 bit full range left justified
Cycle time	≤ 300 ms
Number of diagnostics bytes	2
Number of parameter bytes	2
Dimensions (W x L x H)	12,6x74,1x55,4mm
Approvals	CE, cULus, zone2, ClassI,div.2.
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
Electro-magnetic compatibility	acc. to EN 50,082-2
Protection class	IP20

- Fieldbus and connection technology independent
- Protection class IP20
- LEDs indicate status and diagnostic
- Electronics galvanically separated from the field level via optocouplers
- 2 analog inputs for connection of thermocouples, types B, E, J, K, N, R, S and T
- Base module with internal cold junction point compensation

Functional principle

BL20 electronic modules are plugged into the purely passive base modules which are used for connection of field devices. Maintenance is significantly facilitated due to separation of the connection level from the module electronics. Furthermore flexibility is enhanced because the base modules provide a choice of tension spring or screw connection technology. The electronic modules are completely independent of the type of higher level field bus through the use of gateways.

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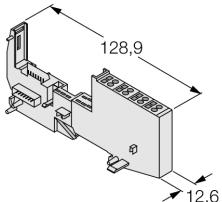
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Compatible base modules

Dimension drawing	Type	Pin configuration
	BL20-S4T-SBBS-CJ 6827048 tension spring connection BL20-S4S-SBBS-CJ 6827049 screw connection	Wiring diagram 