

BasicLine BL 530



Caution!

Be sure to take protective measures against electrostatic discharge (ESD) when handling the devices!

Note for installation

Installation must be performed by qualified personnel.
Connect the output before applying the power supply.

Intended use

Doubling and 1:1 transmission of 0(4) ... 20 mA standard signals in two 0(4) ... 20 mA output channels with galvanic isolation between input, outputs and power supply.

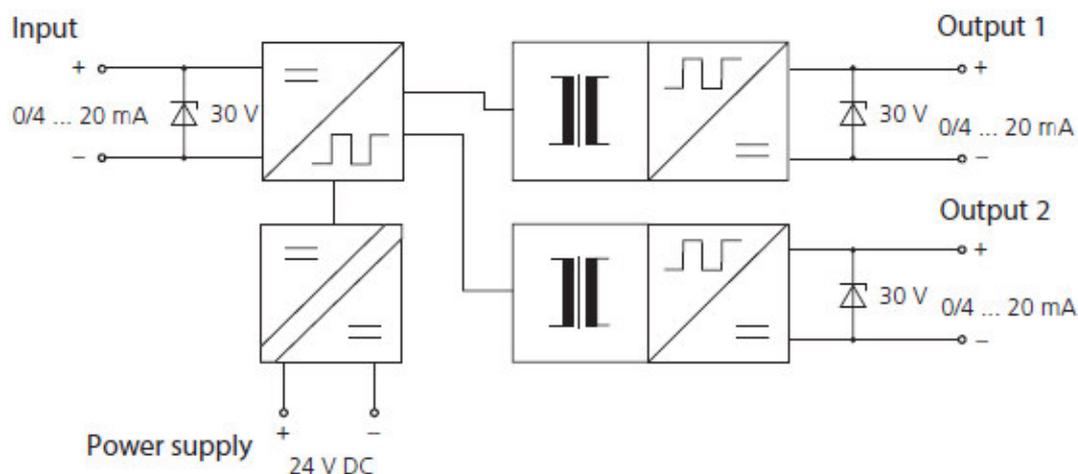
Warning against misuse

Do not operate the device outside the conditions specified by the manufacturer, as this might result in hazards to operators or malfunction of the equipment.

Caution

The system installer is responsible for the safety of the system in which the device is integrated.

Block diagram



BasicLine BL 530

Input data

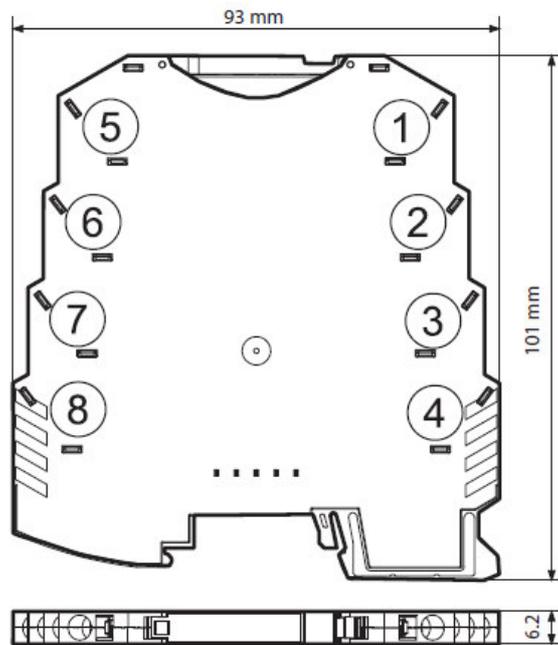
Input	0 (4) ... 20 mA
Input resistance	
Current input:	Voltage drop ≤ 0.1 V at 20 mA (with power failure approx. 350 mV)
Overload capacity	
Current input:	Self-resetting overcurrent protection (PTC characteristic)

Output data

Outputs 1 and 2	0 (4) ... 20 mA
Load	≤ 8 V ($\leq 400 \Omega$ at 20 mA) ≤ 16 V (both outputs in series)
Residual ripple	< 10 mV _{rms}
Cutoff frequency	> 100 Hz

Transmission behavior

Gain error	< 0.3 % full scale
Temperature influence ²⁾	< 0.01 %/K full scale (reference temp. 23 °C)
²⁾ Average TC in specified operating temperature range 0 °C ... +55 °C	
Power supply	
Power supply	24 V DC (± 15%), 1.2 W
Isolation	
Test voltage	1.5 kV AC, 50 Hz: Power supply against input, and outputs against each other and against input//power supply
Working voltage (basic insulation)	300 V AC/DC with overvoltage category II and pollu- tion degree 2 according to EN 61010-1. For applications with high working voltages, take measures to prevent accidental contact and make sure that there is sufficient distance or insulation between adjacent devices.
Further data	
Ambient temperature during operation:	0 ... +55 °C when mounted in row
during storage:	-25... +85 °C
Design	Modular housing with screw terminals, 6.2 mm wide, see dimension drawing
Ingress protection	IP 20
Mounting	For 35-mm mounting rail acc. to EN 60715
Weight	Approx. 50 g
Standards and approvals	
EMC ³⁾	Product standard EN 61326

Dimension drawing

1. Output 2, +
2. Output 2, -
3. Input, +
4. Input, -
5. Output 1, +
6. Output 1, -
7. Power supply, +
8. Power supply, -

Caution

Connect a jumper across unused outputs!