



baelz 6490
96 mm x 96 mm x 135 mm, IP65
GL – Germanischer Lloyd



baelz 6590
48 mm x 96 mm x 140 mm, IP65



Removable terminal block
No ventilation slots

µCelsitron constant controller: temperature, pressure, level, flow-rate, etc.

Inputs

Process factors: Pt 100 | 0/4–20 mA | 0/2–10 V

External setpoint: 0/4–20 mA | 0/2–10 V | via serial interface

Control functions via digital inputs:

- OPEN Valve opens, stroke 100 %
- CLOSE Valve closes, stroke 0 %
- STOP Valve does not move
- REM/LOC Setpoint changeover external / internal
- SP.2 Changeover to setpoint 2, safety setpoint

Output

	96 mm x 96 mm	48 mm x 96 mm
➔ Two position Three position PID three position step	baelz 6490	baelz 6590
➔ PID 0/4–20 mA PID 0/2–10 V	baelz 6496	baelz 6596
➔ Two position PID pulse-pause-modulation	baelz 6440	baelz 6540

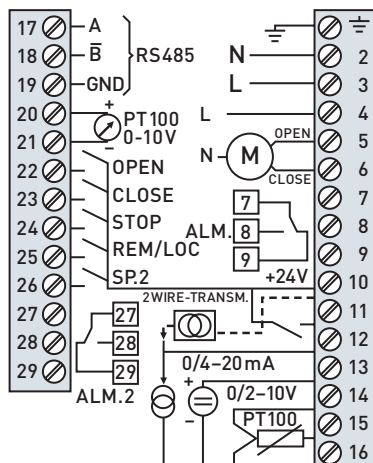
Alarm relays: Fixed limit value | Setpoint dependent limit value

Serial interface RS 485, data transfer MODBUS RTU

High-value control algorithm: P | PD | PI | PID | self-optimization

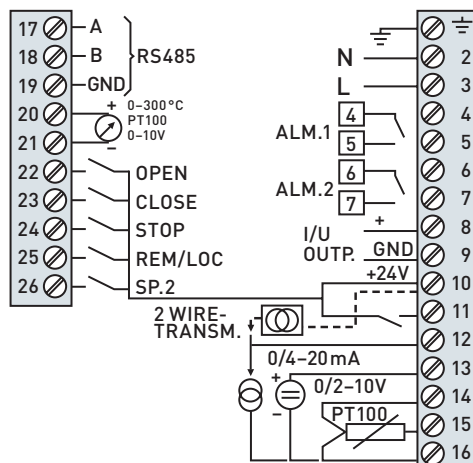
Robust electromagnetic compatibility

Electrical connection



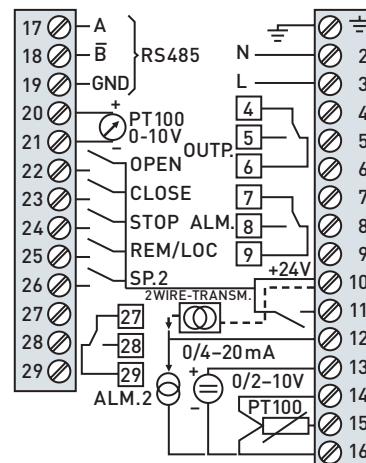
baelz 6490/6590

Maximum configuration



baelz 6496/6596

Pluggable screw terminals



baelz 6440/6540

The controllers can be supplied partially configured (right-hand terminal block) or fully configured (both terminal blocks).

Technical data

Power supply	230 V AC 115 V AC 24 V AC
Power consumption	Approx. 7 VA
Permissible ambient temperatures	
➔ Operation	0 °C to 50 °C
➔ Transport	-25 °C to +65 °C
Degree of protection	Front IP 65 according to DIN 40050
Analog inputs	Pt 100 2.4 = 0 °C to 300 °C or 2.2 = 0 °C to 400 °C Connection in three-wire system 0/4-20 mA, input resistance = 50 Ω 0/2-10 V, input resistance = 100 kΩ
Accuracy	0.1 % of the measuring range
Digital inputs	High active, Ri = 1 kΩ; n.c. 0 V DC = low 12 V to 24 V DC = high
Analog output for process variable	0 to +10 V corresponds to 0 °C to 300 °C (2.4) or 0 °C to 400 °C (2.2) I _{max} = 2 mA
Relays [controller output and alarm relay]	Spark quenching element Switching capacity: 250 V AC / 3 A Contact equipment: Potential-free changeover contact Potential-free normally open contact
Controller output continuous [baelz 6496/6596]	0/4-20 mA, working resistance max. 500 Ω 0/2-10 V, working resistance min. 5 kΩ
Interface	RS 485, MODBUS protocol, RTU mode 1,200 to 19,200 Baud
Data storage	Semi-conductor memory

Customized hardware or software on request.