baelz 6496 / 6596

baelz 6496

baelz 6596

PID CONTINUOUS CONTROLLER

Constant controller with continuous control signal.

baelz 6X96 µCelsitron microprocessor controllers are compact and reliable controllers suitable for many industrial control applications, e.g.: in dryers, reactors, steam generators and superheated steam coolers (desuperheaters).

ADVANTAGES AT A GLANCE

- P/PD/PI/PID control behavior with continuous control signal
- Easy operation with 4 buttons
- Auto tuning, self-adaptation of the control parameters
- Option: RS485 Modbus RTU for connection to master computer
- Standard housing 96x96 mm / 96x48 mm
- Control digital input for OPEN, CLOSE, STOP, SP2, REM./LOC.
- Setpoint and positioning ramp with selectable gradient
- Manual/automatic switchover
- Measuring inputs PT 100, 0 / 2-10V, 0 / 4-20mA
- Thermocouple with ext. converter baelz 6261-Thermo
- 2 separate LED displays for setpoint and actual value
- 2 alarms standard: fixed, sliding, tolerance band/range
- LED status display

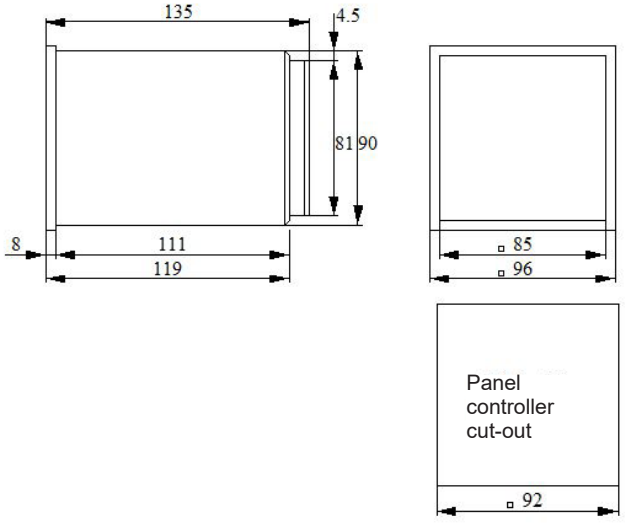
Technical specifications, baelz 6496/6596 (6X96 stands for both types)		
	6496...	**6596...**
Controller type	PID continuous controller	
Analog inputs	PT100, 2.4 = 0...300°C or 2.2 = 0...400°C (other measuring ranges on request) Connection in 3-core technology; 0/4 ... 20 mA, Re = 50 Ω; 0/2 ... 10 V, Re = 100 kΩ	
Analog output for actual value	0...10V corresponds to 0...300°C (2.4) or 2.2 = 0...400°C (2.2) Imax = 2 mA	
Digital inputs	high active, Re = 1 kΩ; open / 0 VDC = low, 12 ... 24 VDC = high	
Digital input & transducer supply voltage	24 VDC, Imax = 60 mA	
Interface	RS485 Modbus protocol in RTU mode 1200 to 19200 baud; 1 start bit, 8 data bits, 1 stop bit, no parity	
Display	2 LED displays for setpoint and actual value	
Mounting	Panel front installation	
Housing	plastic	
Dimensions WxHxD (mm)	96 x 96 x 135	48 x 96 x 140
Ingress protection rating	IP 65 (front)	
Power supply	230VAC (special voltages on request 115VAC, 24VAC, 50/60Hz, 24 VDC), -15%/+10%, 7VA	
Weight. approx. (kg)	0.6	0.5
Ambient temperature (°C)	Operating: 0...50; Transport / Storage: -25...+ 65	

Options / Supplements	Remarks
2 inputs 0/4 ... 20 mA	
2 inputs 0/2 ... 10 V	
Differential temperature 0...50 K	
Calibration of measuring input PT100	for connection to Zener barriers
RS 485 - preload S15	for connection to remote maintenance module baelz 5279-NB (only for devices with RS 485)

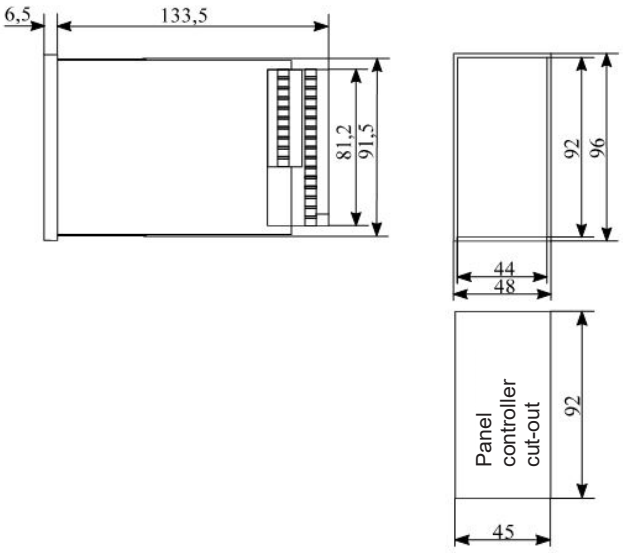
Note:
- Software for control technology, see baelz 4614
- Wall-mounted housing: Order No. 3570-001
- Adapter for rail mounting: Order No. 3506-004

Inputs and outputs, baelz 6496/6596 (6X96 stands for both types)						
Type	**Measuring inputs**	**Controller output**	**Digital inputs**	**Actual value output 0...10 V (PT100)**	**potential-free alarm relay 250 V AC / 3 A**	**with RS485 interface Modbus RTU**
6x96/1	2 measuring inputs can be assigned either with the process variable or the external setpoint: PT100, 0/2...10 V or 0/4...20 mA	1x 0/2...10 V oder 0/4...20 mA selectable	1x for switching external / internal setpoint	-	2x	No
6X96/2			5x (open, close, stop, external / internal and 2nd setpoint)	1x 0...10 V (PT100)	2x	No
6X96/3			With interface RS 485 Modbus RTU 5x (open, close, stop, external / internal and 2nd setpoint)	-	2x	Yes
6496/2-2.4-S7.1/ S8.1-24 V DC	2 measuring inputs as above, but switchable with special software S16		5x (open, close, stop, external / internal and 2nd setpoint)	1x 0...10 V (PT100)	2x	No

Housing dimensions baelz 6496



Housing dimensions baelz 6596



	Overview features depending on type / version baelz 6496 ... / 6596 ...			
			additional right controller card	
	Equipment	**.../1**	**.../2**	**.../3**
Basic version	**1 measuring input Pt100**	✓	✓	✓
	1 measuring input 0/4 ... 20 mA	✓	✓	✓
	1 measuring input 0/2 ... 10 V	✓	✓	✓
	integrated supply voltage 24 V DC (for external two-wire transmitter and digital input)	✓	✓	✓
	1 digital input REM/LOC	✓	✓	✓
Options	**5 digital inputs**		✓	✓
	1 Pt100 actual value output 0...10 V		✓	
	1 serial interface RS 485			✓

Connection diagram baelz 6x96