

## evaluation devices

### universal-controller UREG 100

#### features

- microprocessor PID universal controller for many application areas
- simple handling over 3 keys
- universal input for resistance thermometer, thermocouples, power 0/4-20mA, over an external measuring resistance also 0/2-10VDC
- universal adjustment of controller as 2 point controller heating, 2 point-controller cooling, 3 point controller heating/cooling, constant controller
- controller outputs as relay and bistable voltage output for solid-state relay
- optional constant controller with output 0/4-20mA (adapted for control valve)
- optional constant output / actual value output programmable
- self improvement
- alarm contacts with programmable switching function
- actual value offset-correction
- 2.reference value activatable by control input
- dimensions 48x96mm installation depth 122 mm

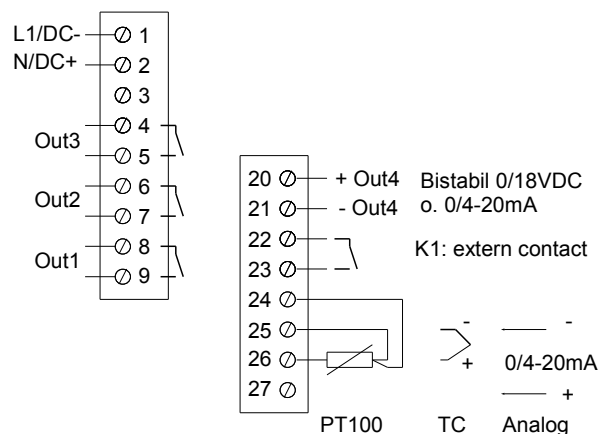


UREG 100-1-A-0

#### top:

- electrical connection pluggable Phoenix-clamps
- optional analog output as control output or actual value output programmable
- optional with different ports like RS 232, RS 485 and Profibus DP

#### connection chart



Out1: setting output for „heating“, „cooling“ 2 point controller „heating“ at 3 point controller

Out2: setting output for „cooling“ 3 point controller alarm output 2 at 2 point controller

Out3: alarm output 3

Out4: setting output bist. 0/18VDC constant control output 0/4-20mA reference value output 0/4-20mA (programmable)

K1: control input for change-over must value 1 or 2 control input for setting up barrier

order-code UREG 100...

order example: UREG100-1-B-3

#### voltage supply

- 1 230VAC
- 2 24VDC

#### adjusting output

- A switching output relay and bistable voltage outputs for solid-state relay
- B additional to A with constant output 0/4-20mA as control- or must value output
- C switching output relay with extra function 3-point step-by-step controller

#### option interface (at this time only available as switching controller)

- 0 without interface
- 1 with interface RS 232
- 2 with interface RS 485
- 3 with interface profibus DP

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technical specifications

input thermocouple	break-proof for sensor and intern reference junction integrated incorrect polarity protection existing up to 50 Ohm output resistance no calibration necessary calibration accuracy: <0,25%
input PT100	2- or 3-wire sensor break and short circuit control integrated max. allowable output resistance at 3-wire: 20 Ohm sensor power < 0,5mA, calibration accuracy: <0,2%
input normsignal power	0-20mA, 4-20mA, burden max. 10 Ohm optional 0-10VDC burden min. 10kOhm/Volt linearity error: <0,2% environmental effect to the span: <0,01%/K
external potential free contact (control input)	switching voltage: ca. 24VDC, max. 1mA
adjusting output	relay, turnkey max. 250VAC, 3A voltage bistabil 0/18VDC max. 10mA short-circuit proof  constant output 0/4-20mA at burden max. 500 Ohm linearity: <1,5% effective dead time: approx. 2s
alarm output	relay, turnkey max. 250VAC, 3A
display	10mm heigth for process and set, colour red
CE-marking	EMV: accordant 89/336/EWG.EN50081-2, EN50082-2 electr. reliability: EN 61010
auxiliary supply	standard 230VAC, +/- 10%, 48...62 Hz, 3,5VA
electr. connection	plugging-terminal strip, protection class IP20 DIN 40050, Iso group C
temperatures	working temperature area: 0...50°C storage temperature area: -30...70°C
fitting dimension	48x96mm (DIN43700), installation depth 122mm switchboard cut-out: 45+0,6mmx92+0,8mm
protection class	standard front side IP50, optional IP54
weight	approx. 380g