

## evaluation devices

### universal-controller UREG 50

#### features

- microprocessor controller for many application areas
- simple handling over 4 keys and/or pc software
- sensor input for resistance thermometer, thermocouples, or power 0/4-20mA, or voltage 0-10VDC
- controller outputs as relay and bistable voltage output for solid-state relay
- optional constant controller with output 0/4-20mA (adequat for control valve)
- optional additional analog output as an actual value output
- optional with sensor supply unit for feeding off 2-wire transmitter
- optional with different interfaces RS 232 or RS 485
- self improvement
- 1 alarm contact with programmable switching function
- dimensions 48 x 48 mm installation depth 105 mm



UREG50-1-A-B-D-3-1

### news & highlights:

- programmable cutting sites on board
- optional further communication cutting sites possible
- additional analog output with lots of functions

order-code UREG 50...

order example: UREG50-1-A-B-D-3-1

#### voltage supply

- 1 90-264VAC, 47-63 Hz
- 2 11-26 VAC/DC

#### sensor input

- A PT100 and thermocouples
- B analog input 0/4-20mA
- C analog input 0-10VDC

#### adjusting output out1

- A switching output relay
- B analog output 0/4-20mA as constant output
- C switching output to trigger the solid state relay 14V/40mA

#### adjusting output out2 or sensor supply for 2-wire transmitter

- A switching output relais
- B analog output 0/4-20mA as constant output
- C switching output to trigger the solid state relay 14V/40mA
- D sensor supply for 2-wire transmitter 20VDC, 25mA

#### option 1: interfaces, analog output, actual value

- 0 without interface
- 1 with interface RS 232 for communication
- 2 with interface RS 485 for communication
- 3 with analog output 0/4-20mA as actual value output

#### option 2: higher protection class of the box

- 0 protection type IP50 at the front (standard)
- 1 protection type IP65 at the front

#### auxiliary equipment like software, interface adapter, sealing kit upgrate a.s.o.

UREG-config easy parameterizing software for UREG-controller (except UREG100)  
 UREG-CON interface adapter UREG-controller on PC RS232

UREG-prog-kit complete prog.-kit, made up software, interface adapter and USB-adapter

UREG50-IP65 sealing kit for upgrade the protection type IP50 to IP65 at the front

universal-controller UREG 50

technical specifications

voltage supply

90-264VAC, 47-63 Hz, 15VA, 5W max.  
11-26 VAC/DC, 15VA, 7W max.

analog input 1

thermocouple type J -120°C...+1000°C  
thermocouple type K -200°C...+1370°C  
thermocouple type T -250°C...+400°C  
thermocouple type E -100°C...+900°C  
thermocouple type B 0°C...+1820°C  
thermocouple type R 0°C...+1767,80°C  
thermocouple type S 0°C...+1767,80°C  
thermocouple type N -250°C...+1300°C  
thermocouple type L -200°C...+900°C  
PT100 2/3-wire DIN -210°C...+700°C  
power 0/4...20mA, +/-0,05%  
voltage 0...10VDC, +/-0,05%  
definition: 18bit  
sample rate: 5/s

alarm output 1

1 changer max 2A/240VAC  
different functions programmable

adjusting output 1/adjusting output 2  
at function relay: normally open contact max. 2A 240VAC  
at function contact: 0/4-20mA max. 500Ohm  
(over 500Ohm extern resistance 0/2-10VDC)  
definition: 15bit  
at function solid state 14V/40mA

sensor supply unit for 2-wire transmitter  
20VDC, 25mA, isolation voltage: 500VAC

communication interface

RS232 (1 unit), RS485 (up to 247 units)  
protokoll: modbus RTU  
interval: 1...247  
baud-rate: 0,3...38,4 Kbits/s  
data bits: 7 oder 8  
parity bit: none, even or odd  
stop bit: 1 or 2  
data cage: 50 bytes

analog output optional

function: actual value  
output 0/4-20mA,  
(over 500Ohm extern resistance 0/2-10VDC)  
definition: 15 bit  
accuracy: +/-0,05%  
working resistance: max 500 Ohm  
isolation voltage: 1000VAC

front operation and display

actual value (PROCESS): LED-display, height 10mm colour red  
reference value (SET): LED-display height 8mm, colour green  
LEDs for out1, out2, alarm1, alarm2, °C, °F  
operation at the front about 4 keys

interface for the programming

on the side for interface adapter UREG-Con  
parameterization with software UREG-Konfig

dimensions etc..

box 48 x4 8mm  
installation depth: 105mm  
cut-out control panel : 45 x 45mm  
weight: 150g  
protection type: IP50 at the front, optional IP65, IP20 at the back  
protection against contact of the clamps about plastics cover,  
detachable  
electronic to extract of the box forwards

connection chart

