

# MICROPROCESSOR CONTROLLER RE54 TYPE



## Weight

### Safety level ensured by the housing:

- from the frontal side
- from the terminal side

300 g  
EN 60529  
IP40  
IP20

### Fulfilled standards:

- safety requirements
- insulation ensured by the housing
- insulation between circuits
- installation category
- pollution level
- maximal voltage in relation to the earth:
  - supply circuit and relay outputs
  - measurement circuit and the OC output

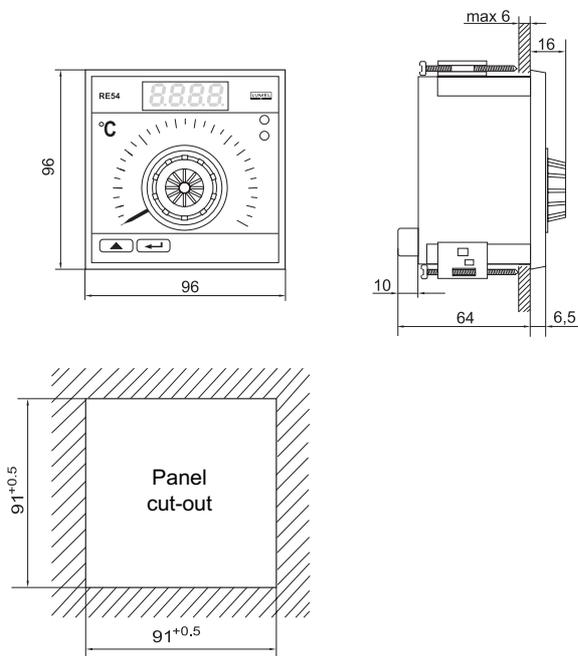
acc. EN 61010-1  
double  
basic  
III  
2  
300 V a.c.  
50 V a.c.

### Electromagnetic compatibility:

- emission
- immunity

acc. EN-61000-6-4  
acc. EN-61000-6-2

## EXTERNAL AND CUT-OUT DIMENSIONS



## APPLICATION

The RE54 microprocessor temperature and process controller with an analog setpoint and digital measurement of the measured process value is destined to control the temperature or other physical quantities e.g. pressure, humidity, level, converted into current, voltage or resistance values.

This controller enables the digital read-out of the setpoint, on / off, P, PID with programmed setpoint or PID control with autotuning.

In the version destined to co-operate with a potentiometer transmitter the function of input scaling is accessible

## TECHNICAL DATA

**Control algorithm** see table 1

**Range, resolution, basic errors for different version** see table 2

**Control algorithm** ON/OFF, P, PID, PID with autotuning

### Additional errors caused by:

- resistance change of the thermoresistance sensor line  $\leq 50\%$  of the basic error value
- controller work temperature  $\leq 100\%$  of the basic error value

### Kinds of outputs:

- relay make contact for the main and alarm (optionally) output, contact loading: 220 V, 2 A,  $\cos\phi = 0.4$ ,  $S = 440$  VA
- logic for the main and alarm (optionally) output. OC type, in series with the 200  $\Omega$  resistor,  $U_{max} = 24$  V,  $I_{max} = 20$  mA

### Rated work conditions:

- supply voltage 90...115...230...254 V ac./d.c.
- supply voltage frequency 20...24...40 V a.c./d.c.
- power consumption 40...50...440 Hz
- work temperature  $< 5$  VA
- relative humidity 5... 23... 45°C
- external magnetic field 25 ... 85%
- work position  $< 400$  A/m
- any

## ELECTRICAL CONNECTIONS OF EXTERNAL CIRCUITS

