

**Most suited for:**

**Chamber- and cooking vat units respectively, refrigeration units, tumblers, mixing units**

**Function:**

The regulator can be set to switch off **either after the operating time** has run out, or when a certain **core temperature** has been reached. A signal output will announce the end of the program or a sensor failure. An output is available for either **heating- or refrigeration control**, another one for either the **signal-, operation status report or lower value** (can be selected). **Two Pt100 inputs for temperature measurement** exist for chamber temperature and core temperature.

In case of a power cut, the regulator MKA 110 will resume the interrupted program automatically as soon as power is restored.



Graphic with optional WP-frame

**Special features:**

- Heating- and cooling operation can be set.
- Signal output/operation status report can be set.
- Various signal functions can be set.
- Waiting time can be set.
- Core temperature shut-down.
- Delta-T-cooking/F-value cooking
- Control action for the heating can be set as: 2-point, XP or clocking, hysteresis can be set.
- Window for 2-level-heating can be set (lower value contact).
- Option of starting the operation time only when a certain temperature has been reached.

**Range of settings:** Operating time from 00h : 01min to 99h : 59min, 00 : 00 = continuous operation

Waiting time from 00h : 00min to 99h : 59min

Temperature range for chamber temperature from 0°C to 250°C

Temperature range for Delta temperature from 0°C to 99°C

Temperature range for core temperature from 0°C to 99°C

**Technical data**

**Mechanical data**

Casing: DIN 43700

reinforced fibre-glass Noryl,  
shock-resistant, black colour,  
temperature-resistant up to 110°C  
(low flammability)

Front frame 96 x 96 mm

with waterproof frame 138 x 138 mm

Mounting dims. 90 x 90 mm

Mounting depth 55 mm

with terminals 70 mm

Own weight: 600 g

**In-/outputs**

Inputs: 2x Pt100, two-wire circuit,  
can be aligned digitally

Outputs: 2x relay outputs,  
Switching capacity 250V AC/5A  
potential free, of which  
1x change-over contact for signal,  
operating or lower value  
1x closer for heating or cooling

**Options:**

- Waterproof frame (WP), protection IP 67 from the front
- aditec **VisuNet** quality control
- Serial interface RS232 or RS 485  
for protocol print out or "SVN" for  
data transfer „aditec **VisuNet**“
- 2x Pt500 two-wire circuit

**Electrical data**

Operating voltage (standard): 230V 50/60Hz +/-10%

Special design: 24/42/48/110/127/240 V

Own consumption: ca. 6 VA

Safeguards on front side with rubber seal: **IP 65**  
**optional WP frame: IP 67**

Connections: connection terminals 1,5 mm<sup>2</sup> (detachable)

Permissible ambient temperature: -10/+70°C

**Displays**

digital (7-segment display, red)

Height of numbers: 14 mm

3-digit for temperature, resolution 1°C

4-digit for operating time, resolution 1 min

Switching status display: light-emitting diodes (LED)

**Circuit diagram**

