

C€-conform



Most suited for:

Cooking-, baking- units and cooking vats, refrigeration units, tumblers

Function:

After the operating time has run out, the regulator will switch off. The signal output will alert you to the end of the program or a sensor failure. One output is available for either the **heating- or refrigeration control**, another one for either the signal, operation status report or upper-/lower Value (selectable). One Pt100 sensor input for temperature measurement of the operating temperature is available.

In case of a power cut, the regulator MKA 109 resumes the interrupted program automatically after power is restored.



Graphic with optional WP-frame

Special features:

- Function with two steps can be set
- heating- and cooling operation can be set
- signal output or operational relay can be set
- various signal functions can be set
- optional waiting time before every program start
- control action for the heating can be set: 2-point, XP or clocking, hysteresis can be set
- adjustable window for 2-level-heating
- option of starting the operating time only after a certain adjustable temperature has been reached

Rang of settings: Operating time from 00h: 01min to 99h: 59min or can be changed over from 00min: 01sec to 99min: 59sec; 00: 00 = continuous operation Temperature range for the chamber temperature from 0°C to 250°C

Technical data

Mechanical data

Casing: DIN 43700

Front frame 96 x 96 mm with WP frame 138 x 138 mm Mounting dims. 90 x 90 mm Mounting depth 55 mm with terminals 70 mm

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

(low flammability)

Own weight: 600 g

In-/outputs

Inputs: 1x Pt100, two-wire circuit, can be digitally aligned

Outputs: 2x relay outputs,

Switching capacity 250V AC/5A potential free, of which 1x change-over contact for signal, operation or upper-/lower value 1x closer for heating or cooling

Options:

waterproof frame (WP), protection IP 67 from the front

Electrical data

Operating voltage (standard): 230V 50/60Hz +/-10% 24/42/48/110/127/240 V Special design:

Own consumption: ca. 6 VA

Safeguards on front side: with rubber seal IP 65

optional: with WP frame IP 67

Connections: connection terminals 1,5 mm² (detachable)

Permissible ambient temperature: -10/+70°C

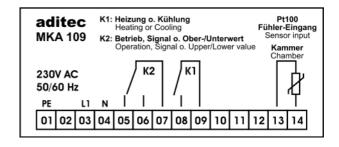
Displays

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



22.11.11 V01