

Energy Regulators

E.G.O Energy Regulators (series 50.57) have been developed to provide infinitely variable input control of single-circuit elements. Designed around the latest platinum substrate technology they are compact, high quality products for use in a variety of applications including microwave ovens, grills, hob units and Bain Marie.

Independent of the application the product dimensions and principal operation mode remain the same. The differing requirements for each application are met by the individual performance curves in each case.

E.G.O Energy Regulators are provided with a snap-action switch actuated by a heat bimetal strip. The switch periodically connects and disconnects the element.

Energy regulators control the temperature by switching the power on or off at longer or shorter intervals. The output is continuous at the highest setting. Energy regulators are installed immediately behind the control knob. They essentially consist of a heated bimetallic strip and a snap-action mechanism, i.e. a switch spring with a contact.

When the heating element is switched on, the bimetallic strip is heated, allowing current to flow in parallel to the heating resistor of the cooking zone. This heats up the bimetallic strip, which changes shape and triggers the relevant contact.

When the position of the control knob changes, the distance between the bimetallic strip and the regulator contact is also changed by a cam disc. The energy regulator allows the current to flow for longer or shorter intervals according to the size of this gap.

Controlling the output

The EGO energy regulator is infinitely variable in the range between 6 and 70% of nominal output. At the highest setting, the heating is switched on continuously and the output is 100% of the nominal output.

Long ON periods and short pauses between heating bursts mean higher output, as needed, for heat-up and for frying, for example. Short ON Periods and longer pauses between heating bursts mean a lower output for simmering, for example.



Infinitely variable output

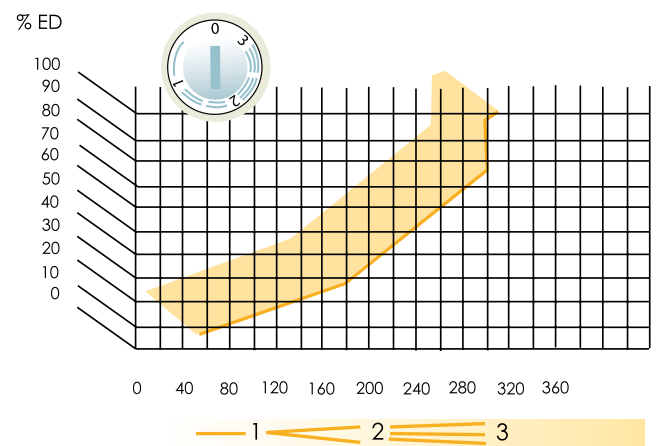
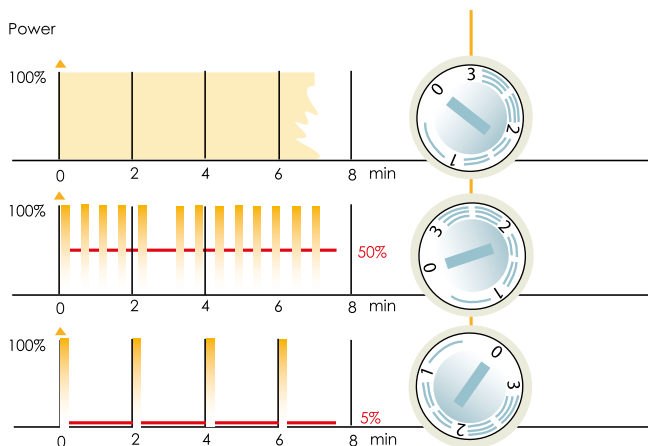
With infinitely variable setting, the heat output can be matched particularly well to different cooking processes and quantities of food. The cooking zone can be heated with one or more heating coils or elements. Control knobs are usually labelled as follows:

- 0 to 3
- 0 to 9
- 0 to 12

Output Curves

If the controlling power range of a cooking zone is known, then the corresponding output can be accurately calculated for every control knob position. The "output curve" for an energy regulator clearly shows the average ON period for every control knob setting as a percentage of continuous duty (100%).

Output curves enable comparable settings to be found for different hot plates and control knob markings.



EGO's extensive range of energy regulators enables a variety of functions and features to be offered for example, energy regulators with automatic heat up or energy regulators with auxiliary switch for connecting the second circuit of double-circuit radiant heating elements.

Energy regulators are voltage-dependent, i.e. they must be designed for the same nominal voltage as the appliance to be controlled.

Part No.	Description
50.57071.010	13A 240v 52 – 308 (clockwise gradient 2 screw fixing) 2 x M4
50.57076.070	13A 240v 75 – 285 (clockwise gradient) central nut
