

Multi channel controller for 30 temperatures control **Z-501-P01**



APPLICATION

The Z-501-P01 is the multi channel controller used for temperature control in maximum 30 different objects. For example: with this device one can control temperature in many refrigeration rooms, cold rooms and freezing rooms simultaneously.

The Z-501-P01 it is multi module controller which consists of the following main components: G-510, G-500, G-540-2, and G-520-2.

PROPERTIES

- Multi module construction
- Temperature measurements using different sensors:
 - NTC (0 <-> 120 Celsius degrees)
 - PT1000 (0 <-> 440 Celsius degrees)
 - Thermocouple T type (-100 <-> + 400 Celsius Degree), J, K, and others
- Temperature control in options: using compressor and heater, only heater or compressor, or three way valve.
- Possibility to choose operation algorithms, PID or two-position control.
- Alarm output.
- Alarm indication of temperature increase above set hysteresis..

TECHNICAL DATA

Power supply voltage:

Output voltage:

Modules operating voltage:

Environment temperature

Humidity

Connectors load in the module

Temperature range NTC

Temperature range Pt1000

Power consumption by the module G-510

Power consumption by the module G-500

Power consumption by the module G-520(8 relays activated)

Power consumption by the module G-540

Protection level (from the front side of the panel)

Modules are build of incombustible materials

~230V +10% -15%

+12V for 4A

+12V +10% -15%

from +5°C to +40°C

from 20% to 80% RH

G-520 - 4A/230V

from -40°C to 120°C

from 0°C to 440°C

400mA

60mA

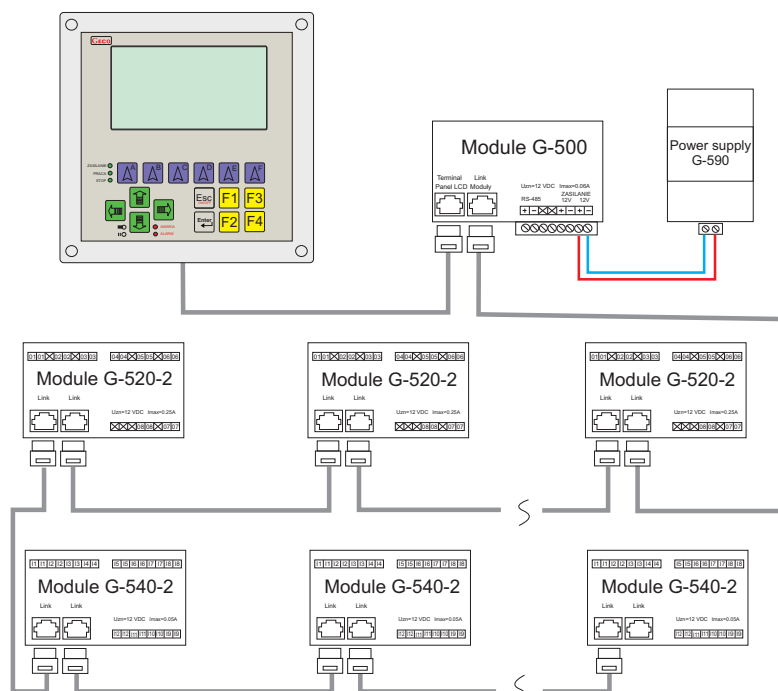
250mA

50mA

Ip65

POLYFLAM HSF13N

DIAGRAM OF MODULES CONNECTIONS



MODULES DESCRIPTION

G-500 Module

The main module is responsible for whole system management. This module sends signals to G-520-2 modules and collects signals from G-540-2 modules. Also equipped with RS-485 output.

G-520-2 Module

Equipped with 8 relays outputs. Each output can be charged with 4A current, and 230V voltage. In case of three phase current devices it is necessary to use contactors.

G-540-2 Module

This module has 10 inputs which can be used as temperature inputs of range from - 40°C to 120°C, or digital inputs. It also has two only digital inputs.

G-540-3-PT

It has four PT1000 outputs which are used for temperature measures of 0-440°C degrees range, and 6 inputs which can be used as temperature inputs of range from -40°C to 120°C or digital inputs. It also has two additional, only digital inputs.

G-510 Module

Graphical screen. Always in the system. Used for communication with the system.

G-590 Module

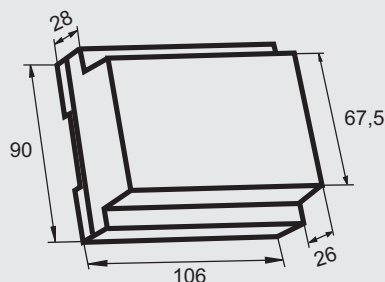
Power supply that transforms voltage from 230V to 12V of the constant current.

G-570 Module

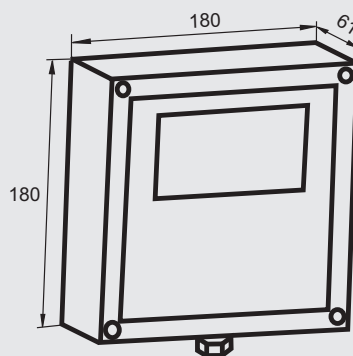
Mobile phone module. For the communication and remote control of the heating plant.

UNITS DIMENSIONS [mm]:

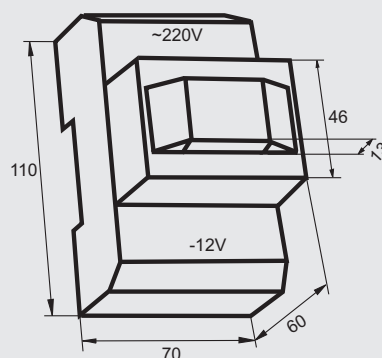
Modules : G-520, G-540, G-500, G-570



Unit G-510



G-590 (Power supply)



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