

NEW

# HEATING GLASS

## INTELLIGENT HEATING POWER CONTROLLER IHPC-110 / IHPC-230 / IHPC-440



The New Generation series of miniature IHPC controllers introduces a new standard and innovative solutions for regulation/control of the temperature of electrically heated glass panes as regards their power, independently on their shape, structure and intended use. IHPC controllers guarantee smooth and stable regulation of the heating power supplied to the glass panes in the form of time splices, depending on the current demand and working conditions, in the full range from 0 to 100% of the total power.

## CHARACTERISTICS

The innovative approach to the heating power control and the analysis of its demand, significantly reduces and stabilizes consumption of electric power depending on the selected operating mode within the following range:

- 20-30% for operation in the set temperature mode;
- 50-60% for operation in the differential temperature mode (temperature of the glass is equal to the ambient temperature adjusted by the added value).

The advanced algorithm controls the operation of a specialist controller which analyzes detailed information received from digital temperature sensors in a real time with a period of 1 second, and uses them to create a „sub-programme” for activation and deactivation with a resolution of 1/25 of a second, which both reduces power consumption and ensures complete protection of heating elements for their reliability and durability.

Functions of regulation with a set temperature, including the possibility of operation in the defrosting and water steam condensation protection modes, have become the basic operating modes of each IHPC controller.\* The unusually wide working voltage range of  $\pm 20\%$  nominal voltage, as well as zero voltage switching eliminating the emission of disturbances generated to the ship power supply system, constitutes another package of innovative solutions applied in controllers of the IHPC series. The multilevel auto diagnostics system offering full control and equipped with the controller operating status indicator with a double temperature measurement system of electrically heated glass and the possibility of remote control of the controller, completes the range of innovative solutions of the new series of IHPC controllers. The Intelligent Heating Power Controller comes in three versions: IHPC-110 / IHPC-230 / IHPC-440, depending on the applied supply voltage.

## TECHNICAL DATA

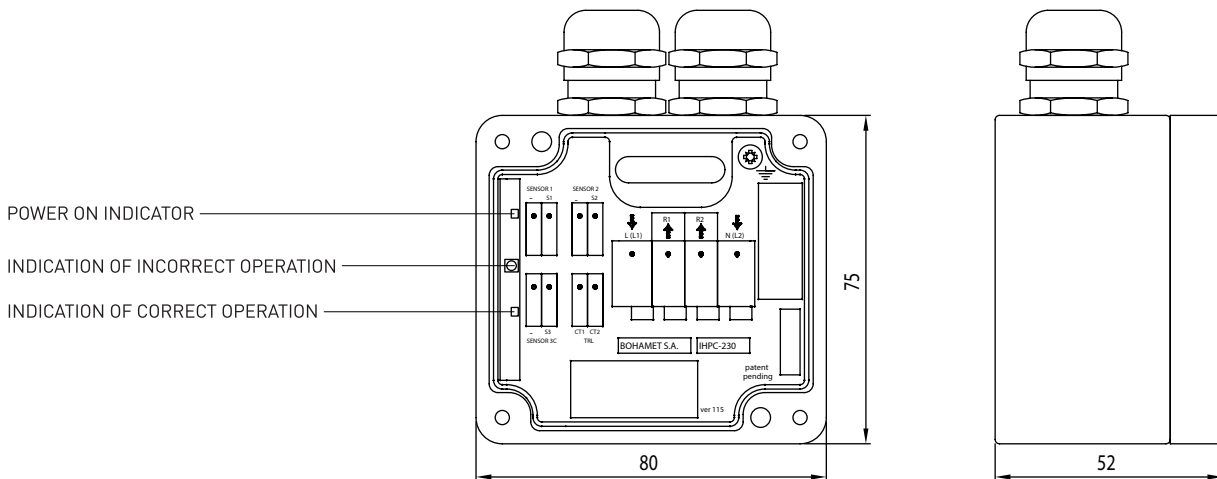
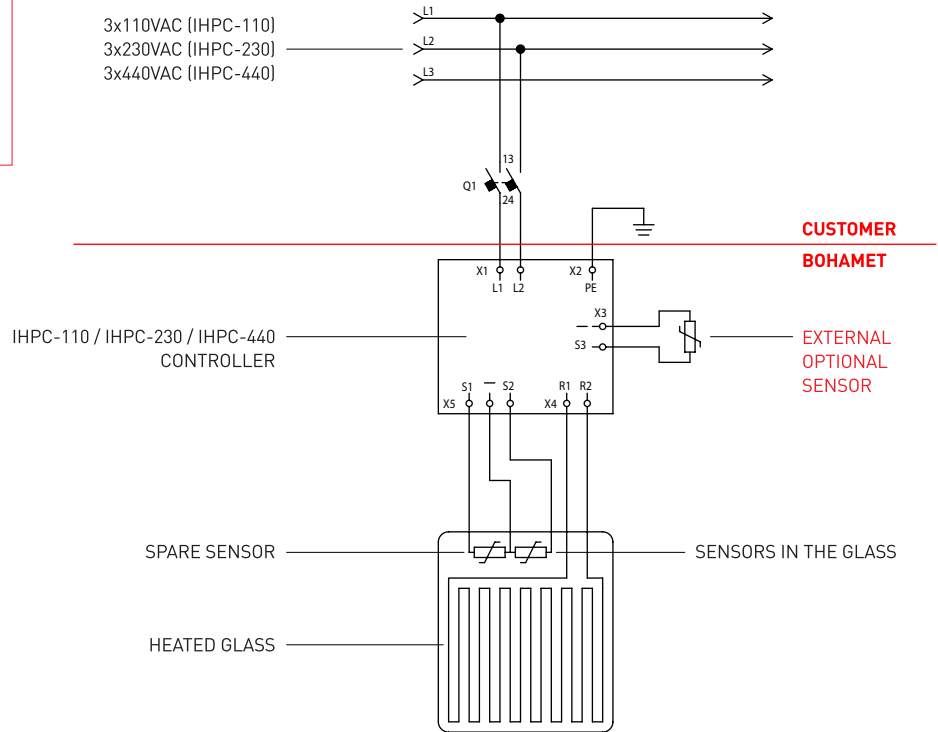
Nominal voltage:	<b>IHPC-110</b> 110VAC $\pm 20\%$ 50-60Hz / <b>IHPC-230</b> 110VAC $\pm 20\%$ 50-60Hz / <b>IHPC-440</b> 110VAC $\pm 20\%$ 50-60Hz
Maximum load:	20A
Controller IP:	65
Working conditions:	-10 to +60

To be mounted on or outside the surface of an electrically heated glass pane, in a dedicated version depending on the floor.

\* Defrosting and water steam condensation protection modes require application of an additional, optional temperature sensor.

# IHPC-110 / IHPC-230 / IHPC-440 CONTROLLER CONNECTION DIAGRAM

**!** If you change controller, before connecting please calibrate.



## IHPC-110 / IHPC-230 / IHPC-440 CONTROLLER FIXING METHODS

Please refer to page 17.