

User manual



DHG-2

Frost protection device

Réf : PF10Y007

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Read these instructions carefully before installing, commissioning and using this product.

1. Technical specifications

Dimensions	155 x 155 x 125
Power supply	230 V AC 50Hz/60Hz
Consumed power	30 W
Weight	0,6 kg
IP rating	IP-65
Temperature measure	Measure by TNC sensor
Measuring range	-50°C / + 70°C
Accuracy	1°C
Relay output	Measure by combined sensor
Max. voltage	230V AC
Breaking capacity	8A
Insulation	Class II

2. Packaging content

1 panel DHG-2	4 screws and fixing dowels
1 temperature sensor	1 user manual (this document)

3. Description

DHG-2 is a device designed to protect the pool water against frost while forcing the filtration pump to run when there is a danger of freezing due to the outside temperature.

Forcing the pump will move the water around and increase the pressure in the pipes which lowers the freezing point. Water suction from the main drain will pump the warmer water from the bottom and warm the water on the surface.

This device can't protect the pipes against frost when outside temperatures are very low and freezing lasts steadily over days. Users of DHG-2 will not be dispensed from other protection measures like pipes insulation, wintering floats, even pipes draining.

4. Installation

Put the device at a dry place so that the sensor can measure the outside temperature or the pool water.

Mount the control panel on a dry and even wall with the supplied screws and dowels.



To measure the outside temperature place the sensor away from any heating source or radiation. To measure the pool water temperature place the sensor on the pipe with clamp saddles and protect it from surroundings with insulation foam.



Installation of this project involves a hazard of electric shocks. We strongly recommend you contract a professional installer. Incorrect installation places you in danger and may irreversibly damage the product and the equipment connected to it.

5. Connection

A terminal makes the connection of the power supply, temperature sensor and dry contact for the pump easy. If DHG-2 has been mounted with a CCEI filtration panel, the connection to the forced run of the filtration pump is directly done on terminals A and B in the control panel. If there is no input for the forced run for the pump you may connect the device on the NO contact of the filtration timer. The power supply of the DHG-2 should be protected by a 30mA differential protection and against overload.



6. Settings

DHG-2 displays the temperature when it is powered on. The red light top left on the screen shows if the forced run is on.



DHG-2 is factory preset to start the forced run when the temperature decreases bellow $-2^{\circ}C$ and to stop it when the temperature raises above $0^{\circ}C$.

The set point is the temperature stopping the forced filtration run. The switching point is set at 2° C bellow this set point.



According to the location of the sensor it may be necessary to modify the set point. It will be shown by pressing the switch SET.

To modify the set point press the cross up or down until the needed temperature is displayed.



Wrong settings may prevent proper operation of DHG-2 and lead to pipes freezing.

A. Declaration of conformity



