

ECOMASTER BASIC "DAH" USER'S MANUAL



Version 1.0 030611

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INSTALLATION AND SERVICE MANUAL

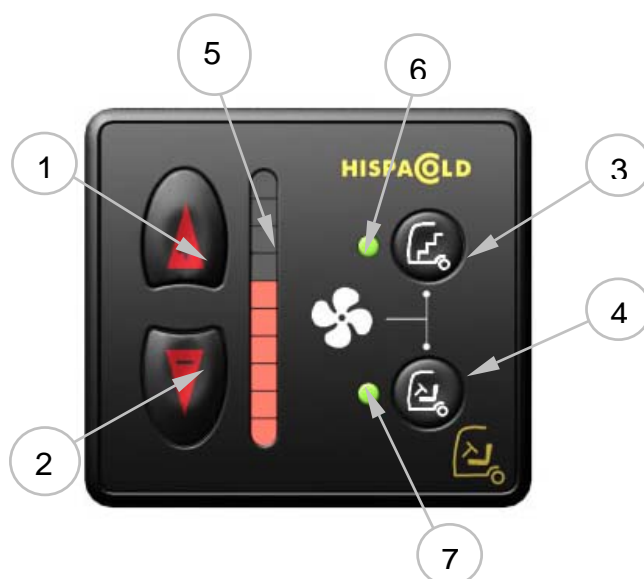
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1. DESCRIPTION OF OPERATION


In certain extremely cold climates, it is necessary to increase the heating capacity for the driver. For this, additional heaters over and above the anti-condensation heater are installed and are usually placed in the driver's seat area (driver's additional heater) and around the front door (guide's additional heater).


Ecomaster Basic DAH is a control for the additional heating of the driver that allows, through its keypad, the handling of the following elements:


- Air propulsion temperature for additional heaters.
- Ventilation speed of the driver's additional heater.
- Ventilation speed of the guide's additional heater.




The control consists of 4 keys for the selection of the different functions, a led bar for the indication of the temperature level required and two leds or light indicators as a signal of the activation of the different elements.

By pressing key ⁽¹⁾ the selected temperature for the propulsion air increases. Each keystroke increases this temperature.

By pressing key ⁽²⁾ the selected temperature for the propulsion air decreases. Each keystroke decreases this temperature.

The key  is used to vary the speed of the air propelled by the driver's additional heater. There are two air speeds that are indicated by the colour of led No. 6.


The state of the fans varies according to the key pressed : stopped (led No. 6 off), minimum speed (led No. 6 shows green), maximum speed (led No. 6 shows red) and so on.


The speed of the driver's additional heater is connected by pressing the key  (4).

The state of this fan is indicated by means of led No. 7. If this latter is on (green colour), the fans of the driver's additional heaters will be working, if the led is off, they will not be operational.

When the front door is opened, the control can activate the maximum speed of the fans of the guide's additional heater. Nevertheless, this activation may not be desirable during certain times of year.

In order to select whether this fan is activated or not when opening the door, the driver can programme Summer Mode (where the fan is not activated by the door's opening) or Winter Mode (where the fan is activated when opening the door).

The selection of Summer/Winter Mode is carried out by pressing key  (3) for 6 seconds. The confirmation of the programmed mode is given by the flashing of led No. 6.

If after 6 seconds of pressing key  (3), led No. 6 flashes green three times, the programmed mode will be Winter Mode and the fans of the guide's additional heater will be activated while the front door remains open. Manually, the driver will be able to change this speed.

If led No. 6 flashes red three times, the programmed mode will be Summer Mode and the fans will not start working when the door is opened.



2. ERROR DETECTION AND WARNING.

The Ecomaster Basic DAH control panel includes a sophisticated system for error detection and warning.

Each time the control is powered on, it carries out an automatic check of all the outlets.

If any problem is detected with the power supply during the following 12 seconds, it will show the detected error through the flashing of one of the leds in the led bar No. 6. (See Table 2.1)

After any error warning, the control panel will activate those outlets which were free of errors.

In addition to error warning during the initial starting process, it is possible to check the detected errors by pressing the keys ⁽¹⁾ and ⁽²⁾ simultaneously.

There is another form of failure warning through the flashing of leds 7 and 6 in the following way:

If there is a short circuit in the outlet for minimum speed of the guide's additional heater, maximum speed will begin functioning and led No. 6 will flash green.

If there is a short circuit in the outlet for maximum speed of the guide's additional heater, minimum speed will begin functioning and led No. 6 will flash red.

If there is a short circuit in the speed outlet of the driver's additional heater, led No. 7 will flash.

| LED | ERROR |
|---------|--|
| (lower) | Indicates that valve calibration is under way. |
| 2 | Fans outlet of the guide's additional heaters to V1 connected due to a failure to positive power supply. |
| 3 | Fans outlet of the guide's additional heaters to V1 short-circuited to ground. |
| 4 | Fans outlet of the guide's additional heaters to V2 connected due to a failure to positive power supply. |
| 5 | Fans outlet of the guide's additional heaters to V2 short-circuited to ground. |
| 6 | Fan outlet of the driver's additional heater connected due to a failure to positive power supply. |
| 7 | Fan outlet of the driver's additional heater short-circuited to ground. |
| 8 | Error in the outlet of the water valve. |
| 9 | Error in return to position of valve (emergency mode). |
| 10 | Internal error. |

2.1. Error table.