



Supported Fans

This thermostat supports 2 kinds of fans. Connection of an unsupported fan may damage the thermostat.

PWM Fans

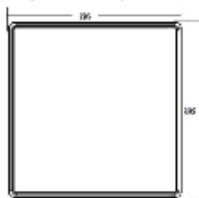
This connection is designed to run Kalori fan heads with simple 12v 2 wire fans, i.e. VA200, Silencio 2 or Silencio FA as sold by Dieselheat. The controller uses Pulse Wave Modulation (PWM) to directly control the fan speed, so all the power being used by the fan is passing through the thermostat. The rated capacity of the thermostat is 3A, we suggest a maximum of 2 fan motors be connected to any thermostat.

EC Fans

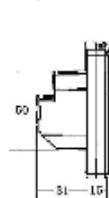
This connection is to run 0-10v electronically controlled 3 wire fans such as the Dieselheat ducted fan units. These fans have in-built microprocessors that use a 0-10v signal to control their speed. The EC fan output cannot directly control a fan motor and connecting this output to any other kind of fan may damage the thermostat.

Dimensions

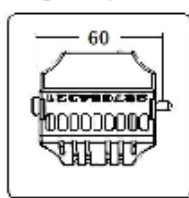
Front (unit: mm)



Thickness (unit: mm)



Mounting Hole (unit: mm)



Specification

Power Supply: 12 Vdc
Power Consumption: <1.5W
Current Load: <3 A
Setpoint Range: 5-35°C
Ambient Temp Range: 0-50°C

Accuracy/Tolerance: +/-1°C
Thermistor: 10K Ω @25°C
Humidity: <90% r.h
Storage Conditions Temp: -10~60°C



TOUCH SCREEN HYDRONIC THERMOSTAT

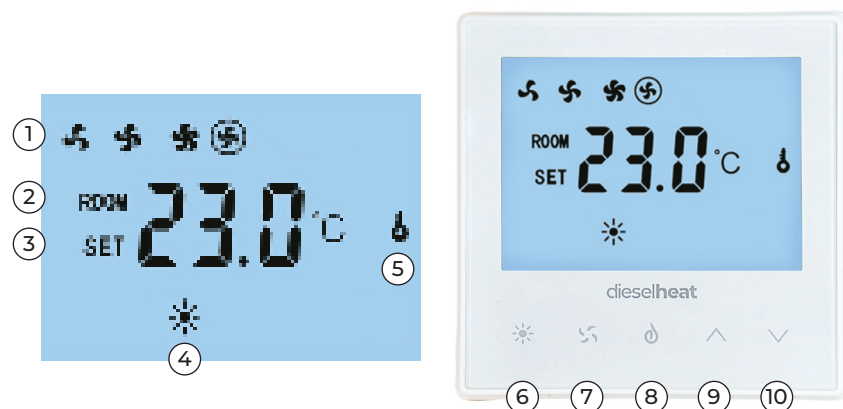
USER MANUAL



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We sell, install and service
diesel appliances for caravans,
RVs, boats and off grid.

Display Icons & Buttons



Display

- ① Fan speed: Low, Med, High and Off
- ② Room temp display
- ③ Set temp display
- ④ Hot water furnace is ON (if connected)
- ⑤ Keypad is locked


Buttons

- ⑥ Hot Water Furnace: On/Off
- ⑦ Fan speeds: Low, Med, High and Auto (only available when the furnace and fan mode is selected)
- ⑧ Power on/off
- ⑨ Temp up
- ⑩ Temp down



Backlight

The first touch of any button will activate the controller backlight. The backlight will turn off after approx 15 seconds.

Hot Water Control


To turn the hot water system on or off press .


Air Heating Control

To run the air heating first turn on the hot water using . The air heating is turned on by turning on the fan using . The fan can be run in manual mode (low, medium or high) or automatic mode where it will change its speed automatically to maintain the set room temperature. If installed, turning on the fan will also open the coolant control valve.








Keypad Lock/Unlock

Push and hold  and  buttons simultaneously for 5 seconds to LOCK all buttons.

Push and hold  and  buttons simultaneously for 5 seconds to UNLOCK all buttons.

Parameters Setting

Some of the operating parameters for the thermostat can be changed by the user. For example the fan speeds on each of the 3 manual fan speed settings can be adjusted. The pre-loaded settings work in most cases and generally these do not need to be changed. If you wish to change any of the parameters with the thermostat turned off, press and hold the  &  buttons for 3 seconds. Once in Parameter mode, use the  button to scroll through the parameters and the  and  buttons to make changes. Changes are saved instantly. Switch off to exit parameter settings.

CODE	PARAMETERS	RANGE	DEFAULT
1	Temp calibration/offset	-9 °C ~+9 °C	0 °C
2	Fan auto mode P-band range	2, 4, 6, 8, 10	10
3	Fan auto mode I-time range	1 - 60 mins	3 mins
4	Min EC Output for Auto Fan	0 - 10 Vdc	0 Vdc
5	Max EC Output of Auto Fan	0 - 10 Vdc	10 Vdc
6	Low Fan Speed for EC fans on manual mode	0 - 10 Vdc	4 Vdc
7	Medium Fan Speed for EC fans on manual	0 - 10 Vdc	7 Vdc
8	High Fan Speed for EC fans on manual mode	0 - 10 Vdc	9 Vdc
9	Min PWM Output for Auto Fan	0 - 100%	0% (00 stands for 0%)
10	Max PWM Output for Auto Fan	0 - 100%	100% (10 stands for 100%)
11	Low Fan Speed for PWM fans on manual mode	0 - 100%	30% (03 stands for 30%)
12	Medium Fan Speed for PWM fans on manual	0 - 100%	60% (06 stands for 60%)
13	High Fan Speed for PWM fans on manual	0 - 100%	90% (09 stands for 90%)
14	Hot water temperature display. Only used for DH22 and DH40 Electric Solar Systems.	0, 1	0

Note: Parameters 2 and 3 adjust the sensitivity of the fan in Auto mode. P sets the speed at which the fan adjusts as the set temp is approached and T sets the time interval at which the controller adjusts the fan.