



Supported Fans

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

PWM Fans

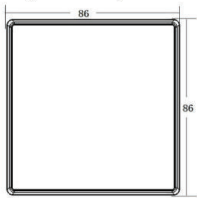
This connection is designed to run Kalori fan heads with simple 12v 2 wire fans, i.e. VA200, Silencio 2 or Silencio FA as sold by Dieselheat. The controller uses Pulse Wave Modulation (PWM) to directly control the fan speed, so all the power being used by the fan is passing through the thermostat. The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

EC Fans

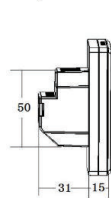
This connection is to run 0-10v electronically controlled 3 wire fans such as the Dieselheat ducted fan units. These fans have in-built microprocessors that use a 0-10v signal to control their speed. The EC fan output cannot directly control a fan motor and connecting this output to any other kind of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

Dimensions

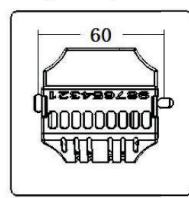
Front (unit: mm)



Thickness (unit: mm)



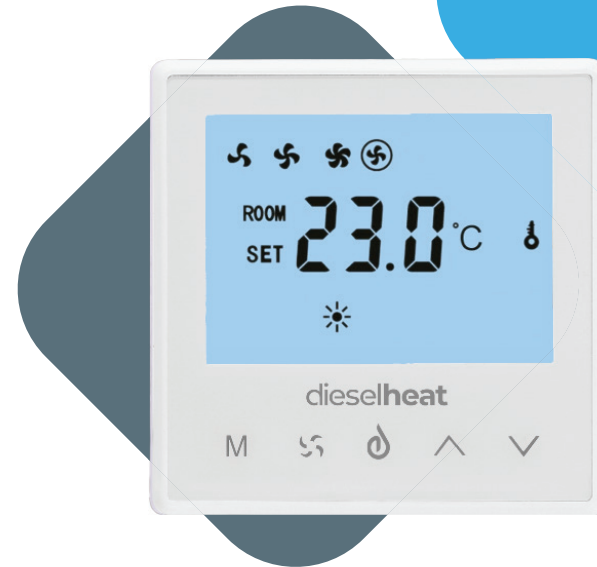
Mounting Hole (unit: mm)



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



YOUR DIESEL HEATER
SPECIALISTS

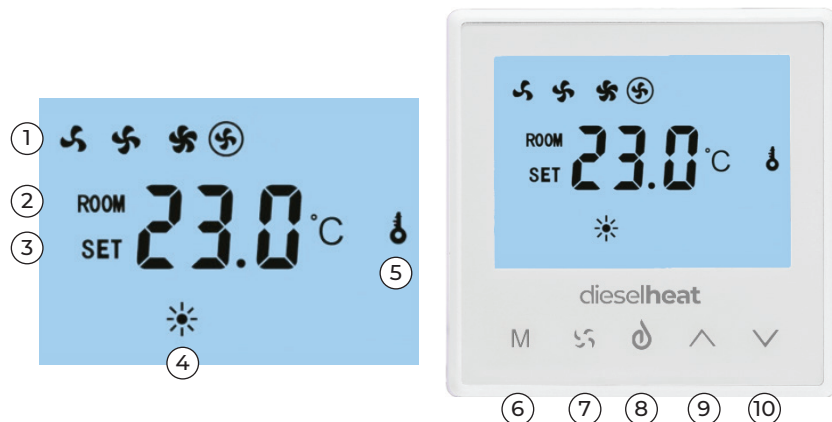
We sell, install and service
diesel appliances for caravans,
RVs, boats and off grid.

General

The Dieselheat Touch Screen Thermostat is designed to control the room temperature and hydronic furnace in a Dieselheat hydronic hot water and heating system.

- The thermostat features 2 fan control outputs to control either a 12v Kalori fan directly or the electronically controlled Dieselheat ducted fan units.
- The thermostat also includes a relay that acts as a switch to turn on or off a diesel hydronic furnace.
- The thermostat can operate in either hot water only or hot water and air heating modes.
- This controller does not provide any error codes or diagnostics for diesel hydronic furnaces. This function must be provided by the manufacturer's controller.

Display Icons & Buttons




Display



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

Buttons

- ⑥ Mode: furnace only (only hot water), furnace and fan (hot water and air heating), no furnace and no fan (display temperature only).
- 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

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 **M & UP** buttons for 3 seconds. Once in Parameter mode, use the M button to scroll through the parameters and the UP and DOWN 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%)

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.