

# LCF

Electronic FanCoil Thermostat (flush mounting)  
(from Firmware 1.7.3)

**thermokon**<sup>®</sup>  
HOME OF SENSOR TECHNOLOGY

## Datasheet

Subject to technical alteration  
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### » APPLICATION

The fan coil room thermostat has been designed for individual control of temperature in commercial, industrial and residential buildings. It is tailored for two-pipe and four-pipe fan coil with two-wire electric valves. With its flush mounted modern design the device combines digital technology with a large LCD display and additional buttons, which enables the 2-point-single room controller to be used intuitively.



### » SECURITY ADVICE – CAUTION

The installation and assembly of electrical equipment should only be performed by authorized personnel.



The product should only be used for the intended application. Unauthorised modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.



**CAUTION! Risk of electric shock due to live components within the enclosure, especially devices with mains voltage supply (usually between 90..265 V).**

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

### » NOTES ON DISPOSAL



As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most of the products may contain valuable materials that should be recycled and not disposed of as domestic waste. Please note the relevant regulations for local disposal.

### » MOUNTING ADVISE ROOM SENSORS

The Accuracy of the room sensors are influenced by the technical specifications as well as the positioning and the installation type.

#### During Assembly:

- Seal mounting box (if present).
- Installation type, air draught, heat source, radiation heat or direct sunlight can affect the measurement.
- Building material specific properties of the installation place (*brick-, concrete-, partition wall, cavity wall, ...*) can affect the measurement. (*e.g.: Concrete accepts room temperature variation slower than cavity walls*)

#### Assembly not recommendet in...

- Air draught (e.g.: close to windows / doors / fans ...)
- Near heating sources,
- Direct sunlight
- Niches / between furniture / ...

### » PRODUCT TESTING AND CERTIFICATION



#### Declaration of conformity

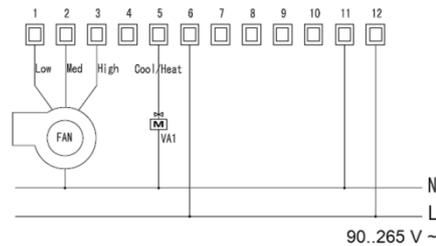
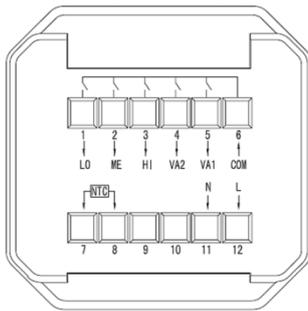
The declaration of conformity of the products can be found on our website <https://www.thermokon.de/>

## » TECHNICAL DATA

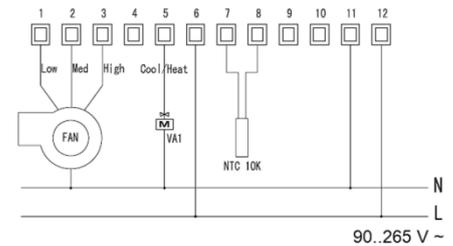
Measuring values	temperature
Output switch contact	5x contact NO (2x heating & cooling, 3x fan stages, 2-point-controller), 250 V ~ max. load 3 A fan stages switchover pause 0,5 s
Power supply	90..265 V ~
Power consumption	max. 0,9 W
Measuring range temp	+1..+50 °C   +34..+122 °F
Accuracy temperature	±1 K (typ. at 21 °C   70°F)
Inputs	input for change-over sensor NTC10k, (optional)
Display	LCD 35,5x48,5 mm (1.4x1.9 in.), white background lighting
Enclosure	ABS, pure white, scratch resistant acrylic glass
Protection	IP20 according to EN 60529
Cable entry	rear entry
Connection electrical	terminal block, max. 1,5 mm <sup>2</sup> (AWG 16)
Ambient condition	-10..+50 °C (+14..+122 °F), max. 85% rH non-condensing
Mounting	flush mounted in standard EU box (Ø=60 mm)

## » TERMINAL CONNECTION PLAN

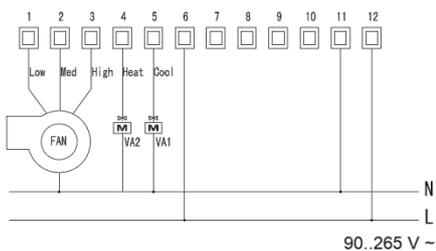
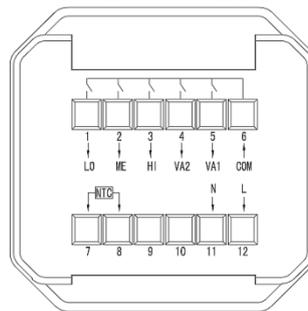
Wiring diagram for 2-pipe fan coil:



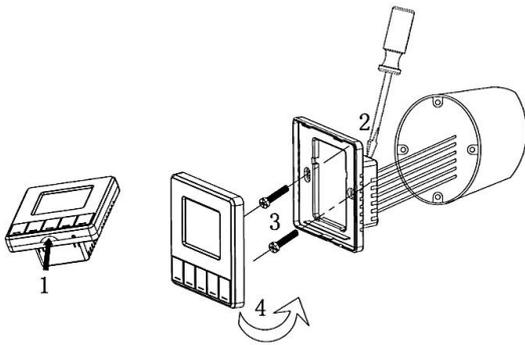
with external sensor:



Wiring diagram for 4-pipe fan coil



» MOUNTING ADVICES

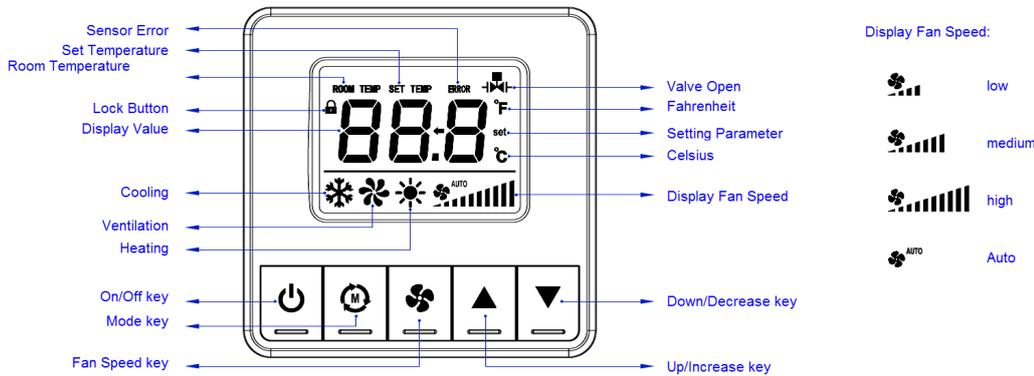


For Installing or repairing, please make sure the power is disconnected. Insert the screw driver in the plastic teeth of thermostat. Clockwise rotation of the screwdriver will separate front cover from base plate. Please follow the wiring diagram to connect the wires. Fix the thermostat base plate to the wall through the four screw holes with distance between axes of 60 mm (2,36 in.). Fasten base plate and front cover. Do not press the panel in order to protect LCD.

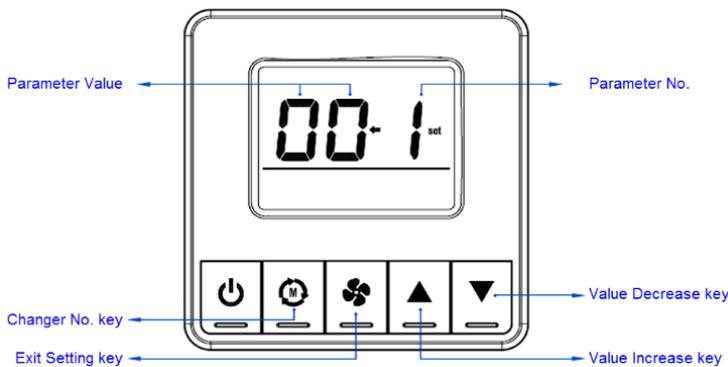
» CONFIGURATION

The firmware version is located on a label inside the device.

Display Panel



By pressing the MODE Button for more than 3 seconds, the parameter interface will appear.



After parameter selection / setting, don't press any button for 3 seconds to save the settings.

No.	Name of parameter	Parameter definition	Default
1	Temp. correction	Range $\pm 10$ °C / °F	0
2	Key-lock	0 - unlocked    1 - lock on/off    2 - lock Mode 3 - lock fan speed    4 - lock temp setting    5 - lock all the keystrokes	0
3	not used		
4	Temp. upper limit	Range: +1..+50 °C (+34..+99 °F)	30 °C   86 °F
5	Temp. lower limit	Range: +1..+50 °C (+34..+99 °F)	16 °C   60 °F
6	LCD backlight	0 - without backlight    1 - with backlight	1
7	Fan chain setting (Fan Mode AUTO)	0 – Independent (AUTO OFF) 1 – Dependent (AUTO ON)	0
8	Fan coil selective	2 - 2-pipe system    4 - 4-pipe system	2
9	Polarity Outputs	0 - Valve de-energized closed    1 - Valve de-energized open	0
10	FAN-OFF-Delay	(if parameter 7 = 1) the fan continues running for x seconds after the valve has closed 0..99 (switch-off delay in seconds)	0

All parameters are stored within an EEPROM ensuring no data loss if the Thermostat is powered off.

Hysteresis: 1 K + 1 minute switching delay

