

FAN COIL SMART THERMOSTAT

models: ThermoB.FC.22XX.W

USER MANUAL



MAIN CHARACTERISTICS:

1. The device is suitable for the following types of fan coil units:
 - Conventional fan coil with 4 speeds and 1 valve.
 - Fan coil with 4 pipe connection, 2 valves, 4 speeds
 - Two zone combined operation, fan coil and under floor zone with 4 speeds of fan.
2. Relay outputs - a total of 1 or 2 pcs, see version.
3. Fan speed output 0-10V or PWM -10V
4. Built-in room temperature sensor
5. LCD display and four control buttons
6. Remote control and setup over WiFi/Internet
7. Optional auxiliary NTC.2 temperature sensor
8. Flush or wall box mounting (D80mm)
9. Freeze protection with selectable temperature
10. "Heating" and "Cooling" operating modes
11. Week schedule
12. Fade to dim back light, green or white.

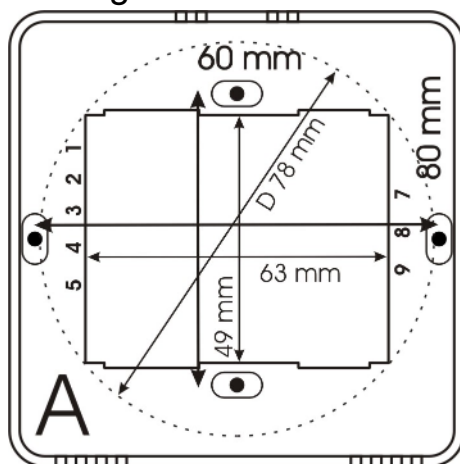


FEATURES:

- Setting the temperature limit for the operation of zone "fan coil" and zone# 2 "floor" for combined two zone heating / cooling.
- Selectable auxiliary NTC. 2 sensor function – fluid temperature or zone 2 temperature measurement or as a substitute of the built in sensor
- Lock of "Heating" or "Cooling" mode
- Coil drying function after "cooling is paused" (temperature reached)
- Fan activation "with delay" or by fluid temperature sensor (NTC.2)
- Two selectable operating temperature set-points: ECON - for economical operation and COMF - temperature for comfort
- System states: Off, Economy temperature set point (ECON), Comfort temperature set point (COMF), scheduled (AUTO) and timed (MAN)***
- BASIC and ADVANCED functionality mode for easier operation
- Fan speeds: Automatic, manually selectable level 1 to 4. Adjustable voltage for speeds 1 and 3; speed#2 = 1-3 average, speed 4 = 10V(max)
- Easy switch between heating and cooling.
- Schedule for weekly operation.
- Ability to fix the ECON temperature set-point relative to the COMF temperature set point.
- Keypad lock (child lock, PIN parameters / mode lock)

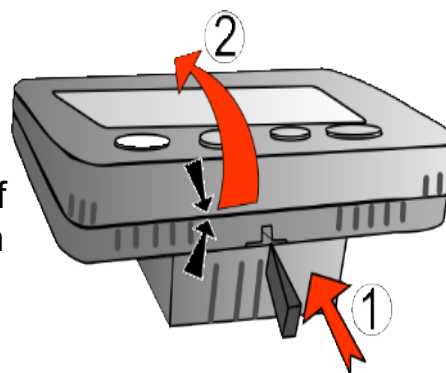
INSTALLATION

Please read the safety instructions at the end of this manual before starting the installation!



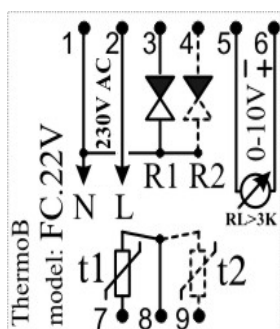
The device should be installed on a panel or in a wall box. Fixing distance is 60mm and 80mm. Use fasteners of a diameter up to 3.5mm

To install the device, it is necessary first to open the main body by pressing with a thin and sharp object the tongue of the hidden lock in the lower part.



Use "A" as a guide for upright position, correct terminals alignment and fixing.

ELECTRICAL WIRING



	System type	Terminal					
		1	2	3	4	5	6
1	Conventional, 2 pipes	N	L	Valve H / C	-	-10V	+10V
2	4 pipe system	N	L	Valve Heat	Valve Cool	-10V	+10V
3	Combined Fan coil + floor heating	N	L	FCU valve	UFH valve	-10V	+10V
4	Combined Fan coil + floor heating	N	L	UFH valve	-	-10V	+10V

Provide 230V/AC/50Hz power supply via $\leq 6A$ fuse terminals 7 / 8 - auxiliary sensor NTC.2

use 0.5 - 1.5mm² wire ; maximum cumulative load 4A

* connect the remaining terminal of each valve to "N"

Note!: Check your device version for correct functions.

APPLICATION

The system is designed for space heating or cooling by measuring room temperature and comparing it with the current set point, then it controls the fan speed of FCU and corresponding valves operation of FCU and/or UFH.

Can be used both for heating and cooling.

If combined two zone space heating FCU and UFH mode is selected it can provide several application modes:

- FCU & UFH are used both for heating and cooling
- FCU & UFH used for heating while FCU only is used for cooling.

Temperature set points can be set by the user. A service parameter can limit the range of each set point change.

Quick select button of temperature mode (ECO), (COMF) or schedule mode.

Quick ON/OFF/Fan speed select button (fixed speed or auto speed).

Internet control of the system can be done either via Proxel Connect mobile app (available for iOS and Android) or via standard web browser.

Frost protection with selectable temperature or function disable.

FUNCTIONAL MODES

Two functionality modes **BASIC** and **ADVANCED** are available, a service parameter selects which mode will apply.

If **BASIC** mode is selected, there is only one temperature set point, called comfortable temperature (COMF) which can be freely set by the user.

If **ADVANCED** mode is selected, there are two temperature set points, called economic (ECO) and comfortable (COMF). Also a weekly temperature schedule function is available. The real time clock is automatically set if internet connection is established.

The default mode is BASIC, heating.

Important part are service parameters which define device function, system configuration and fine tuning of operation for best comfort. These parameters include: functional mode select BASIC / ADVANCED, hydraulic scheme, use of auxiliary sensor, comfort sensitive parameters like main and fan speed hysteresis, temperature reading offset, set point range, time zone, PIN lock, constant ventilation, etc.

HOW TO OPERATE

The ThermoB.FC.22XX.W user panel comprises of the following items:



- large LCD display with back light
- 4 control buttons
- temperature sensor

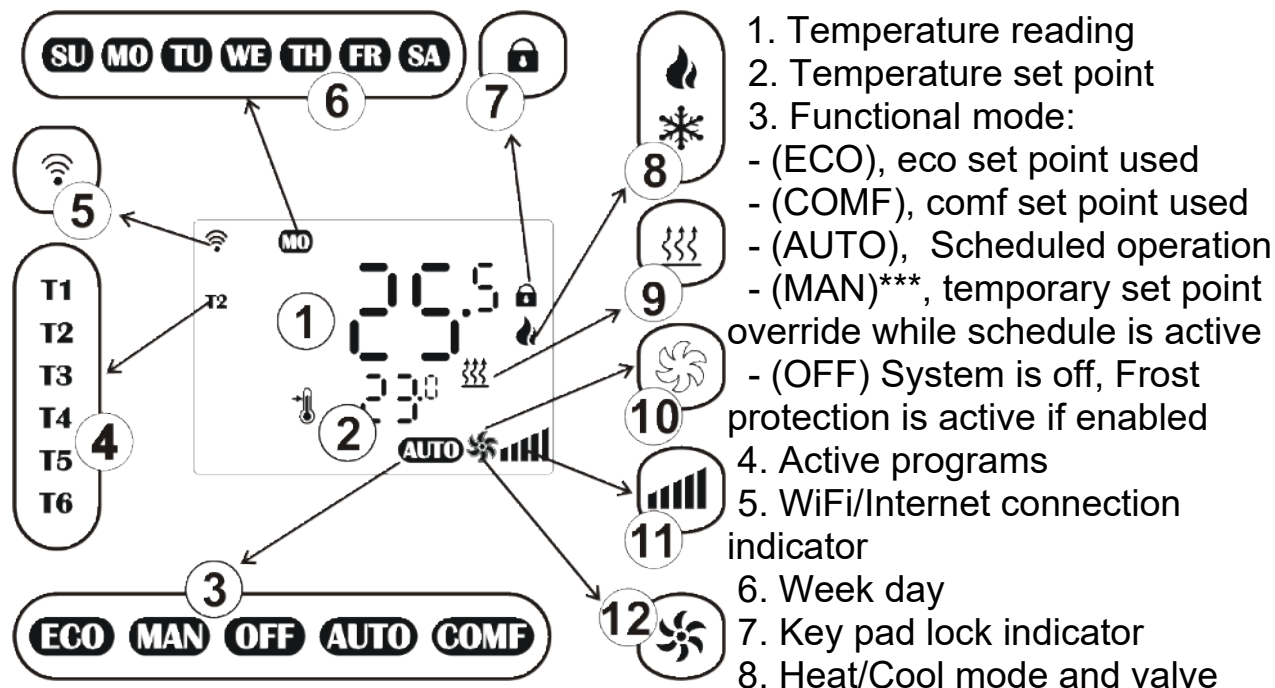
Buttons description:

- Buttons [1, ▼] & [4, ▲]: „Dec. / Inc.“ are used to adjust temperature or value.
- Button [2, M] „Mode”: select set-point temperature used (ECO), (COMF) or schedule (AUTO) if the certain mode is enabled
- Button [3, ⚙] „ON / OFF/ FAN SPEED“, turns on / Shuts down the system, selects fan speed.

Information screens: The user panel has a total of 5 information screens.

- Home screen, when home screen is displayed, the system is on.
- OFF
- Current time (not available if BASIC functional mode is used)
- Schedule (not available if BASIC functional mode is used)
- Service parameters

HOME SCREEN



operation indicator. If icon blinks valve is off, if icon is constant on – valve is on

9. Zone 2 operation indicator, if displayed zone 2 valve is active.

10. FCU zone 1 is active if combined FCU + UFH mode is selected.

11. Fan speed

12. Fan active

SWITCH ON / OFF

While home screen is displayed long press button [3, 8]. System will switch OFF.

While OFF screen is displayed long press button [3, 8]. System will switch ON.

FAN SPEED SELECT

While system is ON and home screen is displayed short press button [3, 8].

Each press will change speed consecutively... →1→2→3→4→AUTO→1...

If fan speed is selected manually, the speed will be displayed by scale.

If fan speed is set to AUTO, the entire scale will progress slowly. The current fan speed is shown as a missing bar while scale progresses.

Note: For “scale” see pos. 11.

The global fan operation is displayed by the filled fan icon see pos.12.

Note: if system is OFF, short press button [3, 8] will have no action.

TEMPERATURE ADJUST

While system is ON and home screen is displayed.

Short press buttons [1, ▼] & [4, ▲]: „Dec. / Inc.” to adjust the displayed temperature set point of selected “ECO” or “COMF” values.

During a temperature change, set point value pos.2 flashes.

- to adjust set point of "ECO", first select (ECO) temperature from functional mode (pos.3). "Eco" temperature is available only in ADVANCED mode.
- to adjust set point of "COMF", first select (COMF) temperature from functional mode (pos.3).
- if active mode is schedule (AUTO) and buttons [1,▼] or [4,▲] are pressed, manual temporary temperature override mode will start. Functional mode (pos.3) will change to (MAN)***.



Note! Temperatures "ECO" and "COMF" have individual limited high and low values which are defined in system parameters. The system will not allow user to set temperature outside the given limits.

OPERATING TEMPERATURE MODE SELECT

While system is ON in ADVANCED mode, and home screen is displayed.

Short press button [2,M] „Mode”. The temperature select mode will change consequentially ... (ECO) → (COMF) → (AUTO) → (ECO) ...

Notes:

Button [2,M] has no action if BASIC functional mode is set.

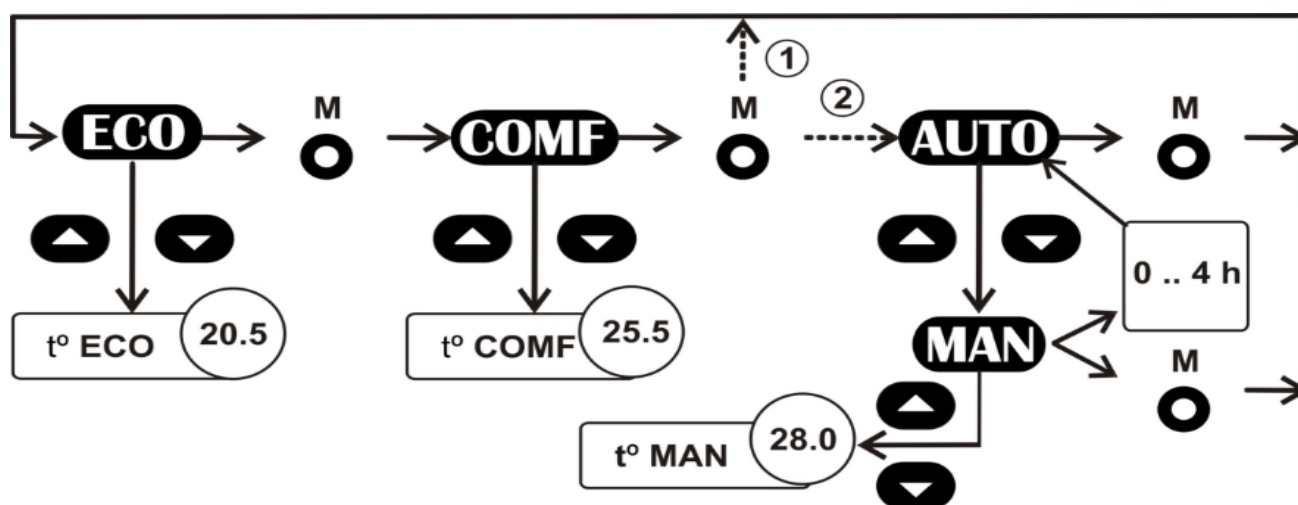
If there is no schedule set, the schedule mode (AUTO) is disabled.

TEMPERATURE OVERRIDE (MAN)*** this function is not available yet!

While schedule (AUTO) temperature select mode is active, and home screen is displayed.

A short press buttons [1,▼] or [4,▲] will set a new temporary (MAN) set temperature and (AUTO) will change to (MAN). This new set point will override the schedule (AUTO) till a preset time expires (1 to 4 hours, preset as a service parameter). The system will continue the scheduled (AUTO) operation after this time expires automatically - (MAN) changes to (AUTO).

This (MAN) mode will terminate also if a new temperature mode is selected (button [2,M] is pressed): (COMF) or (ECO) or system is switched OFF.



HEAT / COOL SELECT

The active Heat/Cool mode is displayed by icon shown at home screen, pos 8.

- „flame“ is for heating mode 🔥
- „snowflake“ is for cooling mode ❄️

If the system operates pos. 8 icon is illuminated continuously.

If the system is in “pause”(temperature reached), pos. 8 icon flashes

Heat/Cool mode change (if enabled) press and hold for 5-6 sec together both buttons [1, ▼] and [2, M] till the new mode is displayed

Heat / cool mode can also be set via service parameters, or it can be set and locked so user will not be able to change it.

The function will act while in home screen.

KEYPAD LOCK

The device can lock the keypad.

- to unlock keypad: press and hold for 10 sec both buttons [1, ▼] & [3, ⌚].
- to lock keypad: press and hold for 1-2 sec both buttons [4, ▲] & [3, ⌚].

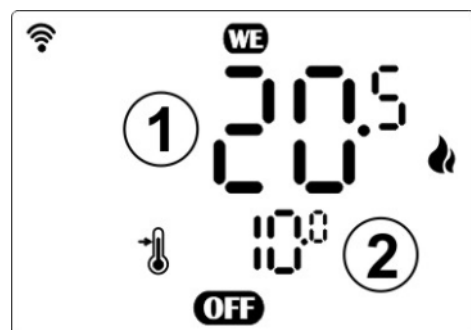
While keypad is locked, the icon pos.7 is displayed.

Note. Keypad lock is available in ADVANCED mode only and at home screen.

SYSTEM “OFF”

While the icon (OFF) is displayed the system is OFF. Freeze protection function can be activated or disabled by system parameters.

Display:



Pos. 1: room temperature reading

Pos. 2:

* Heat mode:

- Freeze protection temperature if enabled
- “ - - “ if Freeze protection is disabled

* Cool mode:

- displays “Hi”.

To switch the system ON press button [3, ⌚]

CURRENT TIME/WEEKDAY AND SCHEDULE

While home screen is displayed to access time and schedule long press button [2, M] for about 5 sec . The time/weekday screen will display.

Note: The time / schedule is not available in BASIC functional mode.

Current time/weekday and schedule set screen is split in two sub screens:

- current time/weekday set screen
- schedule set screen

Once time and schedule is accessed the current time screen is displayed first.

CURRENT TIME/WEEKDAY

While home screen is displayed long press button **[2, M]** for about 2-3 sec .

The time/weekday screen will display

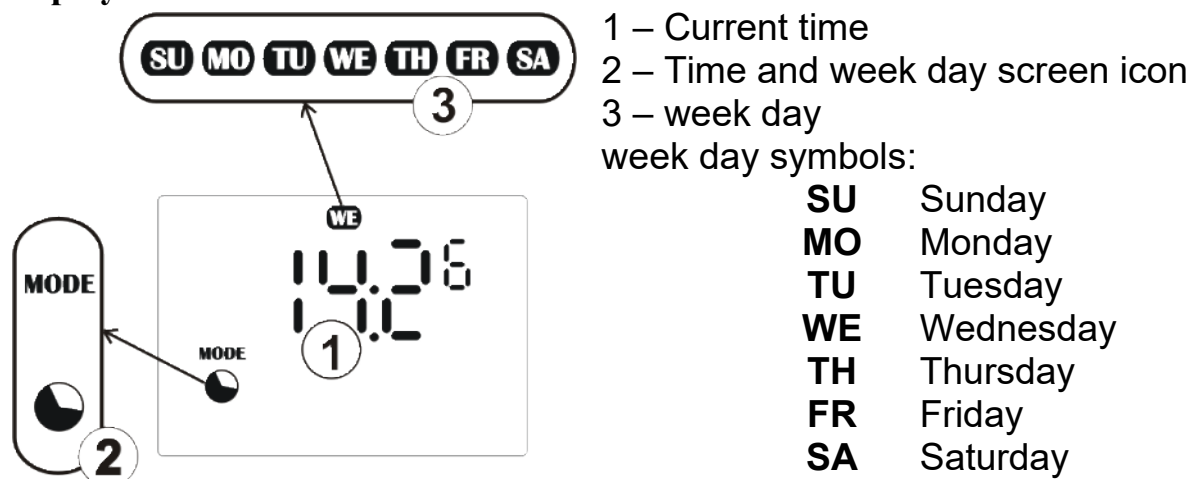
This function is not available in BASIC functional mode.

Press button **[2, M]** to select between hour, minutes and week day field to edit.

The selected field blinks.

Adjust the value use buttons **[1, ▼]** & **[4, ▲]**

Display:



Long press button **[2, M]** for 2-3 sec to exit to home screen

Short press button **[2, M]** will exit time/weekday screen and will display schedules screen.

Note: If the device has a valid Internet connection the time/weekday will automatically adjust. Please check time zone field in system parameters.

SCHEDULE

The schedule has 6 separate time intervals (T1 to T6). These time intervals are active all week long and repeat for each week day.

The user can set the temperature mode (ECO) or (COMF) for each time interval (T1 to T6) individually for a given week day. See schedule example table below.

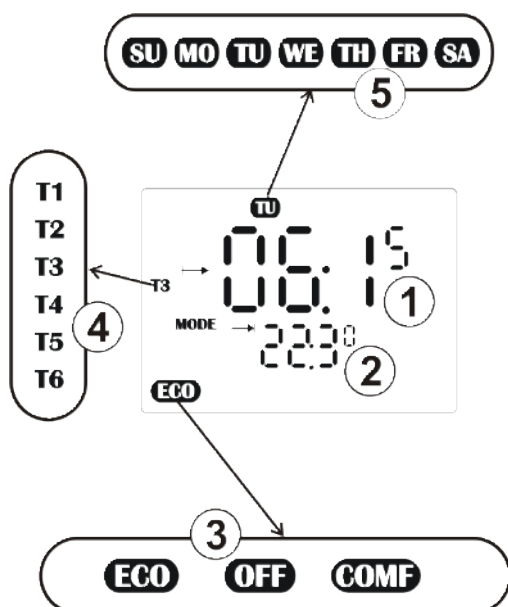
If the current time is outside of a time interval with active (ECO) or (COMF) for the current day, the system will remain not active (OFF).

To access Schedule, while on home screen long press button **[2, M]** for about 2-3 sec.

The time/weekday screen will display.

Press button **[2, M]** to enter schedule screen

Display:



- 1 – Time interval, start time
- 2 – Time interval, end time
- 3 – Temperature to use (ECO) or (COMF) or (OFF) for selected week day and time interval
- 4 – Time interval sequential number (T1..T6)
- 5 – Day of week.

VIEW / EDIT THE SCHEDULE

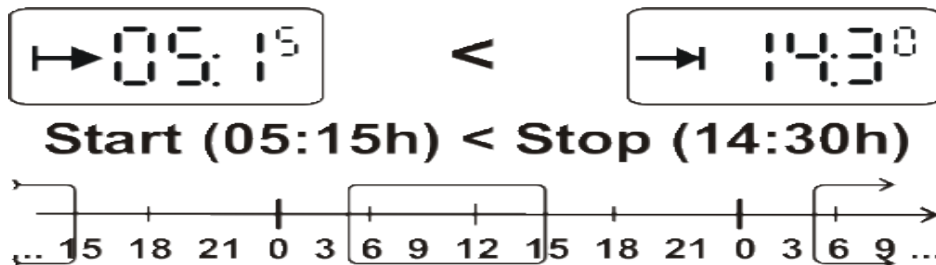
- Use buttons [1, ▼] or [4, ▲] to choose which time interval to view / edit T1..T6 (pos.4). The corresponding start / end time will display. It will not display it's week day settings.
 - To view or edit interval or week day settings short press button [3, ⌚]. This will bring the device to edit mode. Start time will start flashing.
 - Use button [3, ⌚] to move and edit consequentially (start time, end time, shift trough each of week days and temperature mode for each). Buttons [1, ▼] & [4, ▲] will edit. During edit mode, the selected field starts to flash.
 - Once interval start or end time field is selected, button [1, ▼]&[4, ▲] will change the time value. Use button [3, ⌚] to confirm and move to next value. Choose operating temperature mode (COMF) or (ECO) or (OFF) for each day of the week:
 - to set to (ECO) temperature or (OFF) short press button [1, ▼]
 - to set to (COMF) temperature short press button [4, ▲].
 - short press button [3, ⌚] to confirm selection and move to the following day.
- Repeat the above procedure for each day of the week.
- To stop editing press button [2, M]
 - to return to home screen press and hold button [2, M] for about 2-3 sec.
- * time value can be set in 15 min interval.

Operation flow chart is bellow:

Example 1:

START = [05:15];

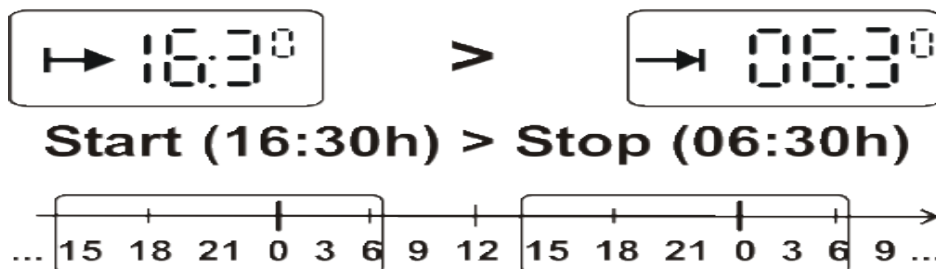
END = [14:30]



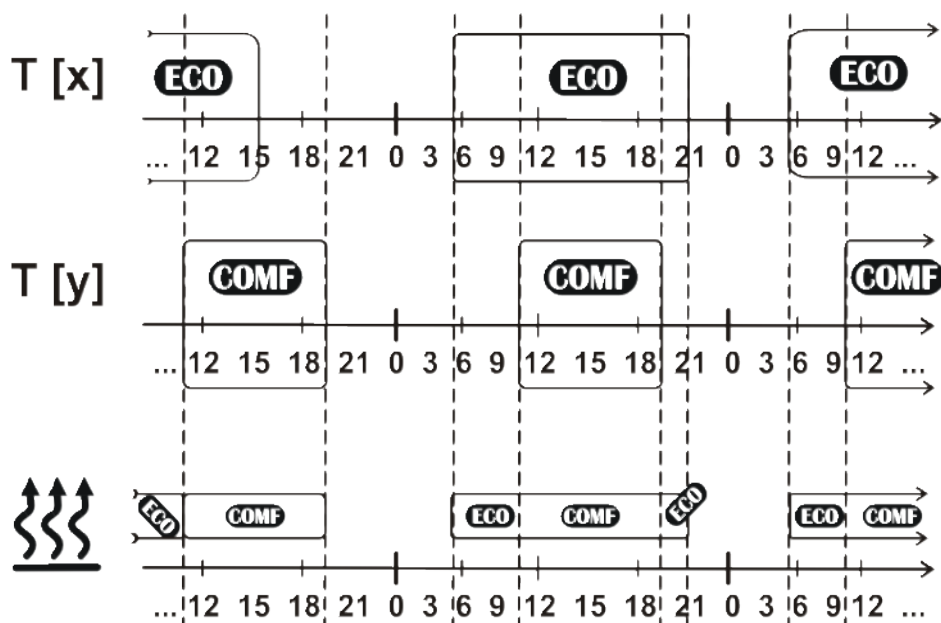
Example 2:

START = [16:30];

END = [06:30]

**PRIORITY**

If two or more intervals [Tx], [Ty] overlap within certain time for some day, then a priority will apply.



Important!.

- (COMF) has a priority over (ECO) if time intervals overlap.
- (ECO) has a priority over (OFF)

Schedule example:

	Interval	MO	TU	WE	TH	FR	SA	SU
T1	06:30 – 08:30	COMF		COMF		COMF		
T2	12:00 – 14:15		COMF		COMF	COMF		
T3	18:30 – 21:45	COMF	COMF	COMF	COMF	COMF	COMF	COMF
T4	05:30 – 23:45	ECO	ECO	ECO	ECO	ECO	ECO	ECO
T5	23:45 – 01:30	ECO	ECO	ECO	ECO	ECO	ECO	ECO
T6	09:00 – 22:00						COMF	COMF

If temperature set points are COMF = 24°, ECO = 20°, the action of the schedule will be such:

- MO till FR from 05:30h to 06:30h will apply 20° - as of T4.
- MO, WE & FR from 06:30h to 08:30h will apply 24° - as of T1. Priority

- MO till FR from 08:30h to 12:30h will apply 20° - as of T4.
from 12:30h to 14:15h will apply 24° - as of T2. Priority
from 14:15h to 18:30h will apply 20° - as of T4.
from 18:30h to 21:45h will apply 24° - as of T3. Priority
from 21:45h to 23:45h will apply 20° - as of T4.
- for each day of the week from 23:45h to 01:30h will apply 20° - as of T5.
- SA and SU from 09:00h to 22:00h will apply 24° - as of T6
- SA and SU from 22:00h to 23:45h will apply 20° - as of T4

SYSTEM SETUP / SERVICE PARAMETERS

An important part of the system's operation is the set of service parameters that enable fine-tuning of temperature comfort and the overall feeling of the user.

Parameters include: selectable hysteresis, locking of heating and/or cooling, selection of basic or advanced functional mode, correction of measured temperature, setting the low and high margins of temperature change for (ECO) and (COMF), time zone, fan speeds and mode of operation and other additional conditions. It is possible to lock the screen against unauthorized access: children's type - by a combination of buttons and "hotel" type - by a PIN code.

To access system parameters long press buttons [2,M] & [3,🌀] for about 10 s.

Display:



Pos. 1 – parameter value

Pos. 2 – P XX, where XX is parameter number.

If a parameter lock is applied, the system will prompt you to provide correct pin. If pin provided is not correct, the system will remain locked for certain time.

To move around parameters use [1,▼] & [4,▲]

To start / stop edit of selected parameter press button [3,🌀]. During edit, the value of the parameter flashes. Now change the value using [1,▼] & [4,▲]

Long press button [2,M] to exit to home screen.

Note, changes will not be saved immediately, but after a minute since back to main screen.

Parameter table:

Number	Description	step	default
PR.01.	Hysteresis [0.5°C~3.0°C]	0.5°	0.5°
PR.02.	Freeze protection [-9°C ~ +15°C] - „--“ function is not active Action: If T.room <PR02 system will activate	1°	10°
PR.03.	ADVANCED / BASIC functionality selector, Heat/Cool mode selector = 0: ADVANCED -----if 4 pipe system----- [PR20 > 0] - Automatic Heat/Cool -T.room<=T.COMF – 0.5°C. mode=Heat -T.room>=T.COMF +0.5°C mode=Cool -----при 2/4 тръбна система----- [PR20 = 0] – manual Heat/Cool - if T.ECON <= T.COMF mode=Heat - if T.ECON >= T.COMF mode=Cool =1: ADVANCED, „Heat“ - available set points T.ECON, T.COMF, AUTO , MAN*** =2: ADVANCED, „Cool“ - available set points T.ECON, T.COMF, AUTO , MAN*** =3: BASIC, „Heat“ - T.COMF set point only is used =4: BASIC, „Cool“ - T.COMF set point only is used	1	3
PR.04.	Pause / Not implemented		
PR.05.	Time zone [-12h ~ +14h] step 1h	1h	2
PR.06.	Temperature reading correction [-5°~ +5°C]	0.5°	0°
PR.07.	PIN lock, 0 – no pin lock; = 1 parameter access PIN required >1 parameter access PIN required, temperature change locked (T.ECON, T.COMF, MAN***), mode change locked, schedule access disabled. ON/OFF, fan speed function is available.	1	0
PR.08.	Duration of temperature override MAN [0 ~ 4h], if set to 0, MAN timer never expires	1h	1h
PR.09.	Low margin of T.ECON value [15°~45°]	0.5°	15°
PR.10.	Low margin of T.COMF value [15°~45°]	0.5°	15°
PR.11.	High margin of T.ECON value [15°~45°]	0.5°	45°
PR.12.	High margin of T.COMF value [15°~45°]	0.5°	45°
PR.13.	System type selector 2 pipe /4 pipe; FCU / FCU + UFH	1	12
Legend: PAUSE: set temperature is reached. VF.H&C = FCU valve, 2 pipe system, activated for Heat or Cool VF.H = FCU valve, Heat open valve (4 pipe system) VF.C = FCU valve, Cool open valve (4 pipe system) P1 = Fan keep at Low speed if system is PAUSE, active at Heat and Cool P1COOL= Fan keep at Low speed if system is PAUSE , active at Cool only UFH = under floor output (zone 2) H & C = zone 2 (UFH) active both for Heat and Cool modes HEAT = zone 2 (UFH) active at Heat mode, disabled at Cool mode Note: FC22 do not implement R2 output, thus related functionality of R2 will not apply.			

N	Output R1	Output R2	Fan speed at PAUSE	FAN SPEEDS	Zone 2 (UFH/C)	2/4 pipe
0	VF.H&C	-	stop	4	--	2
1	VF.H&C	-	P1	4	--	2
2	VF.H&C	UFH	stop	4	H & C	2
3	VF.H&C	UFH	P1	4	H & C	2
4	VF.H	VF.C	stop	4	--	4
5	VF.H	VF.C	P1	4	--	4
6	VF.H&C	UFH	stop	4	HEAT	2
7	VF.H&C	UFH	P1	4	HEAT	2
8	UFH	-	stop	4	H & C	2
9	UFH	-	P1	4	H & C	2
10	UFH	-	stop	4	HEAT	2
11	UFH	-	P1	4	HEAT	2
12	VF.H&C	Fan.H	P1COOL	4	--	2
13	VF.H&C	UFH	P1COOL	4	H & C	2
14	VF.H	VF.C	P1COOL	4	--	4
15	VF.H&C	UFH	P1COOL	4	HEAT	2
16	UFH	-	P1COOL	4	H & C	2
17	UFH	-	P1COOL	4	HEAT	2
PR.14.	Auxiliary sensor use and function NTC.2				1	0
= 0: NTC.2 is not used, Fan is activated with [PR18] delay after “valve” commands ON = 1: NTC.2 – used for FCU fluid temperature - Fan is enabled / disabled with respect to fluid temperature, Fan is enabled if: * „Cool mode“: T.NTC.2 < [PR16] * „Heat mode“: T.NTC.2 > [PR15]			= 2: NTC.2 – used to enable/disable Zone 2 operation. - Fan is activated with [PR18] delay - zone 2 is enabled if : * „Cool mode“: T.NTC.2 < [PR16] * „Heat“ mode: T.NTC.2 > [PR15] = 3: Sensor NTC.2 reading is used instead of internal sensor. - Fan is activated with [PR18] delay			
PR.15.	Temperature threshold to compare “NTC.2 “ while in Heat mode [+25°C~+70°C]				1°C	45°
PR.16.	Temperature threshold to compare “NTC.2 “ while in Cool mode [+1°C~+24°C]				1°C	16°
PR.17.	Hysteresis for fan speed change [0.5°C~3.0°C]				0.5°	0.5°
PR.18.	Delay of fan enable (fan operates with time delay) if PR14 = 0 or 2; * The minimal fan delay time is 90 sec * if mode is „Cool“ – set FCU dehumidify interval, fan remain on after system goes OFF or PAUSE; * set time delay between fan speed change if FAN MODE = AUTO [1 ~ 20 min]				1 min	1
PR.19.	NTC.2 temperature reading (if available)					

PR.20.	Automatic adjust of T.ECON as T.COMF is changed - 0 : T.ECON is freely set - 0.5 ~ 5 : T.ECON is automatically fixed to T.COMF * „Heat mode“ T.ECON = T.COMF – [PR20] * „Cool mode“ T.ECON = T.COMF + [PR20]	0.5°	0°																																	
PR.21.	Temperature difference between set point and reading to activate/de-activate FCU if FCU+UFH mode is used [0°C~5.0°C] mode is „Cool”, activates the dedicated output till: - FCU : T.room > T.set point + [PR21] - UFH : T.room > T.set point mode is “Heat”, activates the dedicated output till: - FCU :T.room < T.set point - [PR21] - UFH :T.room < T.set point	0.5°	0°																																	
PR.22.	Voltage of Fan speed 1 [0 ~100%]	5	25																																	
PR.23.	Voltage of Fan speed 3 [25~100%]	5	75																																	
PR.24.	Cyclic fan activation while system is “paused” / temperature is reached. Set a cyclic operation of the fan as a forced ventilation function while system is in PAUSE and [PR13] is set to P1 or P1COOL. If [PR13]=stop, this function is disabled.	0	1																																	
	<table><tr><td>N</td><td>Fan “ON “ period</td><td>Delay</td></tr><tr><td>0</td><td colspan="2">NONSTOP, fan never stop</td></tr><tr><td>1</td><td>1,5 min</td><td>30 min.</td></tr><tr><td>2</td><td>3 min</td><td>30 min.</td></tr><tr><td>3</td><td>5 min</td><td>30 min.</td></tr><tr><td>4</td><td>1,5 min</td><td>20 min.</td></tr><tr><td>5</td><td>3 min</td><td>20 min.</td></tr><tr><td>6</td><td>5 min</td><td>20 min.</td></tr><tr><td>7</td><td>1,5 min</td><td>10 min.</td></tr><tr><td>8</td><td>3 min</td><td>10 min.</td></tr><tr><td>9</td><td>5 min</td><td>10 min.</td></tr></table>	N	Fan “ON “ period	Delay	0	NONSTOP, fan never stop		1	1,5 min	30 min.	2	3 min	30 min.	3	5 min	30 min.	4	1,5 min	20 min.	5	3 min	20 min.	6	5 min	20 min.	7	1,5 min	10 min.	8	3 min	10 min.	9	5 min	10 min.		
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9	5 min	10 min.																																		
PR.25.	Not used	0	0																																	
PR.26.	Not used	0	0																																	
PR.27.	Not used	0	0																																	
PR.28.	System type and software version	R4.17	-																																	
PR.29.	Not used																																			

Notes:

Check version FC22 or FC222 for correct functionality and output availability.

Technical data of model FC22xV/P:	
- Power supply SELV	170-230V / AC / 50Hz
- Consumption	<2VA
- Relay outputs 1- pcs (FC22) or 2pcs - (FC222)	4A Max/ 230V AC
- Voltage output 0-10V	RL min 3kOhm
- Overall dimensions of the front panel	90x90x17 mm
- Measured temperature range	-10° .. +45° step 0.5°C
- Set temperature range	+15°C .. +45°C step 0.5°C
- Degree of protection	IP20
Working environment	-5T45, RH80%
Transport and storage	-20T60, RH90%
Current time	Online automatic adjustment
Mounting on a panel or in a wall box D80	60 mm ±3 или 80mm ±1
Overall dimensions of the rear part (for installation)	62x51x23.5mm mm
WiFi link, WEP/WPA-PSK/WPA2-PSK	2.4 GHz/802.11b/g/n

Model versions:	Outputs				WiFi
	Relay R1	Relay R2	0-10V	PWM /10V	
Thermob.FC.22V.W	Yes	x	Yes	x	Yes
Thermob.FC.22P.W	Yes	x	x	Yes	Yes
Thermob.FC.222V.W	Yes	Yes	Yes	x	Yes
Thermob.FC.222P.W	Yes	Yes	x	Yes	Yes

System type		Outputs		Fan speeds 0-10V / PWM	Fan start		Sensor NTC.2	Zones #/ circuits
		R1	R2					
1	2 pipes	Valve Heat/Cool	-	4	Yes	Yes	FCU start/stop	1
2	4 pipe system	Valve Heat	Valve Cool	4	Yes	Yes	FCU start/stop	1
3	Combined Fan Coil + Floor Heating	Valve FCU	Valve UFH	4	Yes	-	UFH start/stop	2
					-	Yes	Fan start/stop	
4	Combined Fan Coil + Floor Heating	Valve UFH	-	4	Yes	-	UFH start/stop	2
					-	Yes	Fan start/stop	

CONNECTION TO HOME WIFI

The WiFi pairing procedure is started by a long press of the hidden button located on bottom right side of the device.

Insert a paper clip or similar in the hole where the hidden button is located and long press for about 10 sec.

A fast blinking hidden light on front right side of the device is proof that the device is in WiFi pairing mode. This light is visible trough the device's shell.

To continue the WiFi pairing procedure use the dedicated mobile app and follow the instructions.

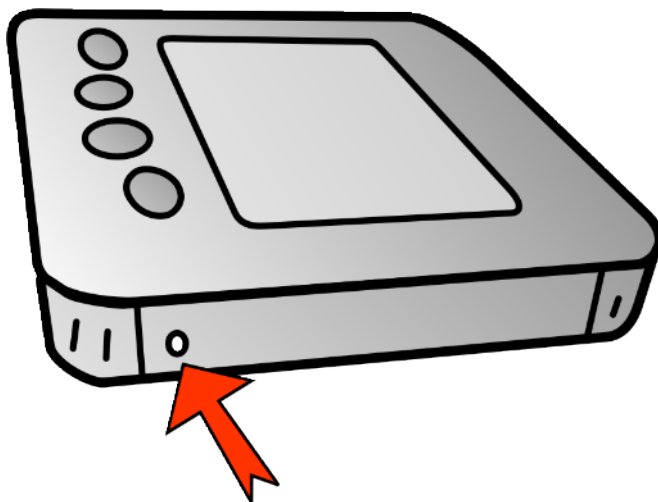
You need to download the mobile app or use a device with WiFi connectivity and a web browser to continue.

In general the procedure is such:

- once the device is in WiFi pairing mode it establishes a temporary WiFi access point (AP) with name **"THERMOB-SETUP"**.

- Once device is in AP mode, the user must connect a device with WiFi capability to this network **"THERMOB-SETUP"** and keeps it connected to it. Then use the mobile app to continue or use a web browser to access the address **192.168.4.1** to open a device's simple web page which helps user browse trough available WiFi networks, select user's home WiFi, type in the password and save it.

Once connected to the home WiFi the user must create an account to our cloud service at web.proxel-bg.com and add the device to it. This can be done both via our Mobile App or a web browser, whichever is available.



MOBILE APP

Please follow the links bellow to download the mobile app "Proxel Connect" available both for Android OS and iOS.



Proxel Connect APP



If Google Store is not accessible for your device or the app is not visible for your device, you can download it directly from our web site.

Scan the QR code or download from the link below

http://www.proxel-bg.com/uploads/Android_APK/proxelconnectapp.apk



Instructions how to complete the setup of WiFi and connect to your device and be downloaded found on the link below or scan the QR code.

https://proxel-bg.com/uploads/ThermoB/ThermoB_WiFi_setup_EN.pdf

Web browser access to the system:

<https://web.proxel-bg.com>



COMPLIANCE:

This product complies with European directives on electromagnetic compatibility 2004/108/EC, low voltage equipment 2006/95/EEC, RoHS 2011/65/EU and marking 93/68/EEC.

SAFETY:

This manual applies only to the ThermoB.FC22X V/P.W thermostat model described and illustrated above. The installation of this appliance must be carried out only by a competent person (installer) in accordance with local standards, requirements and regulations for electrical and general safety. The installation of the appliance and its connection to the rest of the system is entirely the responsibility of the installer.

	Attention!! Risk of electric shock. There is life-threatening voltage in the device if opened!!! Always disconnect the device from the power supply, also disconnect from the power supply this device to which the device is connected: before opening the box and while the box is open, carry out work on the external electrical connections, install, disassemble, move the device Do not leave children and/or people with limited or reduced sensory or mental abilities with the appliance, risk of electric shock if opened! Do not entrust the installation of this appliance to persons with low, not sufficient or no qualifications.
	Use in a hazardous environment Do not use the device in an environment with an explosive atmosphere. Do not use the device near fuels and easily flammable raw materials and materials Do not use the device in areas where the air may accidentally be saturated with a conductive or explosive mixture, either in powder or gaseous phase.
	Keep the device away from water and extreme moisture! If in doubt about the correct operation of the appliance, immediately disconnect it from the power supply. Also switch off this device to which the appliance is connected.

Please keep these instructions for future reference!

This is a RED device!.

Manufacturer:

Proxel Engineering EOOD

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www.proxel-bg.com

office@proxel-bg.com

ThermoB is a trade mark of Proxel Engineering.

This instruction manual applies for the following models:

ThermoB.FC.22V.W

ThermoB.FC.22P.W

ThermoB.FC.222V.W

ThermoB.FC.222P.W

Your device information:

- ID: identifier
- key
- serial number



www.proxel-bg.com

Thank you!
The ThermoB team