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Introduction

Veria Control T45 is an advanced digital timer thermostat, which allows you to control your floor heating system by either the floor temperature, the room temperature or combined.

Please follow the instructions in this manual to ensure many years of trouble free usage.

Congratulations with your new Veria floor heating system....

!Please notice that the thermostat <u>must</u> be installed by an authorized electrician

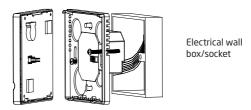
### Button and display description

### Current floor temperature

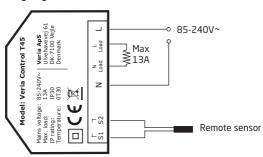


To mount the thermostat to the wall box/wall socket, first open the thermostat by gently pushing the tabs in the buttom of the thermostat. To fix the thermostat, screw in properly sized screws into the wall socket/wall box.

When proberly fastend and cables connected (see diagram below), mount the frontpanel to the backpart again.



### Wiring diagram



### POWER ON/OFF

To turn thermostat on or off press "\b"

### SELECT HOW TO CONTROL YOUR FLOOR HEATING SYSTEM

Your Veria floor heating system can be controlled either by the:

### Floor temperature - program mode 2

The heating element turns on/off around a floor temperature setpoint (the temperature shown in the display is the actual floor temperature)

### Room temperature - program modes 1 & 4

The heating element turns on/off around a room temperature setpoint (the temperature shown in the display is the actual room temperature)

### Combined floor and room temperature - program modes 3 & 5

The heating element turns on/off around a room temperature setpoint with a requested max. floor temperature (floor temperature is prioritized over room temperature)

### Change between the above floor heating modes:

With the thermostat turned off.

Press "O" and "A" for 6 seconds
Select mode 1 to 5 (see table on next page)

After choosing the desired mode do not press any further buttons and the thermostat will go back to normal standby mode.

### RECOMMENDED SETTINGS

Veria recommends the following settings for different type of floor constructions:

Top flooring Program mode	Wooden floor*	Tiled floor**
<b>1</b> (room sensor) If total effect: 0W-1840W		Х
<b>2</b> (floor sensor) If total effect: 0W-2990W	Х	Х
3 (combined floor and room sensor) If total effect: 1840W-2990W	Х	Х
<b>4</b> (room sensor) If total effect: 1840W-2990W		Х
5 (combined floor and room sensor) If total effect 0W-1840W	Х	X

<sup>\*</sup> Top flooring made of parquet, laminate, massive wood, carpet, linolium or the like.

<sup>\*\*</sup> Top flooring of tiles, concrete, marble or the like.

#### SETTING THE CLOCK

With the thermostat turned on.

- Press "O" once, hour will be flash.
- Use the Up/Down key to select the hours.
- Press "O" again, minute will be flash.
- Use the Up/Down key to select the minutes.
- Press "O" button again, till the week day flashes.
- Use the Up/Down key to select the day of the week.

After setting week day do not press any further buttons and the thermostat will go back to normal operating mode mode.

### SETTING THE FLOOR TEMPERATURE MAX. LIMIT.

This function is used for wooden floors mainly and is *only* available in program modes using the floor sensor (program mode 3 and 5)

The temperature setting should be maximum 35C, which is also the default set point of the thermostat.

If you choose to control the floor temperature solely by the floor sensor (program mode 2) the max. floor temperature is set for 35C and can't be changed.

# Change the floor temperature max. limit (program mode 3 and 5)

With the thermostat turned off.

- Hold the "M" button for 10 seconds until the display shows "\(\triangle\)".
- Now let go of the button "M" and the display will show "SET".
- You are now prompted to enter the maximum floor temperature (temperature range 20°C-45°C)

# READING THE FLOOR TEMPERATURE (only in program mode 3 and 5)

With the thermostat turned on.

Press "M" once, the "FT" will be flashed, and the display will show the floor temperature.

In program mode 2 (floor sensor) the display always shows the current floor temperature.

In program mode 1 and 4 (room sensor) the display always shows the current room temperature.

#### FROST PROTECTION MODE

To enable frost protection mode.

With thermostat turned off.

Press "M" for 3 seconds. Select 01 (00 = disabled)

When enabled and thermostat has been turned off, the heating will be activated if the room/floor temperature is lower than  $5^{\circ}$ C; the heating will be stopped if the room/floor temperature is higher than  $7^{\circ}$ C.

When frost protection mode has been enabled the display will show "\*\*".

### ACTIVATE TIMER MODE

When using the timer mode, you must first activate the timer mode:

With the thermostat turned on, hold the "M" button for 3 seconds. You can select below settings:

00 = Override (disable timer functionality)

01 = Programmable. And the display will show "O".

Leave the thermostat and it will go back to normal displaying.

### PROGRAMMING THE TIMER - Mode 01

When programming you need to select Programmable function and the display must show " $\mathbb{O}$ " (see above)

You can now set the heating programs. The thermostat must have 4 heating periods for the weekdays and 4 heating periods for the weekend.

Please notice that the programming of the whole calendar week must take place in one continuous process, so it is a good idea to have the periods written down for reference when programming the thermostat.

Note, for the weekend you will also need to program 2 periods. You can choose one of the periods to be very short or in extension of the other.

### Timer functionality

### Example, weekdays:

Period 1 starting at 07.00 - Temperature setting 22C Period 2 starting at 08.30 - Temperature setting 18C Period 3 staring at 17.00 - Temperature setting 22C Period 4 starting at 23.00 - Temperature setting 18C

### Example, weekend:

Period 1 staring at 09.00 - Temperature setting 22C Period 2 staring at 23.00 - Temperature setting 18C Period 3 staring at 23.01 - Temperature setting 22C Period 4 staring at 23.02 - Temperature setting 18C

# My settings:

man augu		
Period 1 on	 	°C
	 	°C
Period 3 on	 	°C
Period 4 on	 	°C
Weekend:		
Period 1 on	 	°C
Period 2 on	 	°C
Period 3 on	 	°C
Period 4 on		°۲

### How to progamme the timer:

Hold the "O" for 3 seconds, the number 1 and "Mo Tu We Th Fr" are displayed.

This indicates that you can program the first switching time for the week-day.

- Use Up/Down key to set the required start time.
- Press "O" to accept this setting.
- Use the Up/Down key to set the required temp.
- Press "O" to accept this setting.
- Repeat for switching times 2-4 week-day.

After you have programmed times 1-4 for the weekday, you are now able to set the switching times for weekend "Sa Su" will be displayed.

- Use Up/Down key to set the required start time.
- Press "O" to accept this setting.
- Use the Up/Down key to set the required temp.
- Repeat for switching times 2-4 for the weekend.

To disable the timer, select "Override" (Mode 01)

### How to override settings in TIMER MODE

At any time you can change the preset timer temperature settings by pressing the Up/Down key.

Your manual override will apply until the start of the next timer cycle. Thereafter the thermostat will resume your programmed settings.

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# Technical specifications

External sensor:	NTC 10 kOhm at 25° C
Sensor values: 15°C 18°C 20°C 22°C	14,8 kOhm 13,1 kOhm 12,1 kOhm 11,2 kOhm
Display:	LCD
Power consumption:	<2W
Set-point range:	Room: 5°C to 35°C Floor: 20°C to 35/45°C
Accuracy:	±1°C
Buttons:	Touch pad
Switch current rating:	<13A (resistive load)
Mains voltage:	85-240V~
Dimensions:	86 x 86 x 13 mm (WxHxD)
Fixing screw width:	60mm
Housing:	ABS + PC Flame Retardent
Operating rating:	0~30°C, 5~95% RH (non-condensing)

Name:

# Warranty certificate

Address:	
Zip code/City:	
Telephone:	
Please no In order to obtain the Veria warra installer must fill in t	nty an authorized electrician/
Electrician/installer:	Installation date:
Thermostat name:	Article number:
Stamp:	



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