



SF300 Thermostat

Index:

1. User Manual
 - 1a. Buttons
 - 1b. Mode (thermostat operating functions)
2. General Information
 - 2a. Explanation of text/symbols on the main screen
 - 2b. Locking and Unlock the controller
 - 2c. Time setting
 - 2d. standard automatic and custom automatic program
 - 2e. Back up Battery
 - 2f. Advanced settings
 - 2g. Sensor Selection
3. Electrical installation Manual
 - 3a. Attention
 - 3b. Installer instructions
 - 3c. Connection schedule
 - 3d. Technical data
4. Technical support

1. User Manual

1a. Buttons:



= On/off Button:

- Turns the Screen on and off



= Mode

- Changes if Thermostat is in manual, automatic or Holiday mode
- Used to confirm selection



= - Key (Down arrow)

- Used to scroll down through options
- Used to lock the screen



= + Key (Up arrow)

- Used to scroll up through options

1b. Mode (thermostat operating functions)

A. Automatic:

The thermostat will switch on according to the programmed settings. This can be the Factory default settings of the Custom settings.

B. Manual Control:

This permanently override the automatic program.
To cancel the manual mode, select automatic program.

C. Temporary Temperature:

This overrides the current automatic program and allows it to go to a higher or lower temperature

D. Holiday:

This will override both the automatic and manual program for a set amount of time at a set temperature.

2.General Information

2a. Explanation of text/symbols on the main screen

- Auto symbol = In Automatic Mode
- Hand symbol = In Manual Mode
- Hand Luggage/duffel bag symbol = In Holiday Mode
- 4 wavy lines symbol = System is Heating up / Heating active
- Number 1 – 7 symbols = Indicates day of the Week 1 = Monday and 7 = Sunday
- Temperature in middle of the Screen = Current Floor / Room temperature
- Time in bottom left = Time set on the controller
- Snowflake symbol = frost protection mode active
- Window open symbol = Open Window Active
- Padlock symbol = Key Lock Active
- House/ person symbol = What program period the controller is in
- E1 / E2 CODE = Sensor is wrongly connected or broken

2b. Unlocking the Screen

- 1) To Lock the Screen long press the  and until the following symbol will appear on the screen  in the bottom right-hand corner
- 2) To Unlock the screen long press the  and the lock symbol will disappear.

2c. Time Setting

To set the time and date do the following:

- 1) When the temperature is in the middle of the screen, Long press the  until "01" appears in the middle of the screen
- 2) When "01" appears in the middle of the screen press the  ONCE
- 3) The minutes will flash first press the  or  until it's the correct minutes and then press the  to confirm
- 4) The hour will flash press the  or  until its set to the correct hour and then press the  to confirm
- 5) The Number next to the "Weekly" will flash, (please note 1=Monday, 2 =Tuesday, 3=Wednesday, 4=Thursday, 5=Friday, 6=Saturday and 7=Sunday).
- 6) Press the  or  until the Number is the correct weekday and then press  to confirm.

2d. standard automatic program and custom automatic program

Standard Program: Please see the standard program schedule below, this is what the controller default setting.

					
Wake up (On)	Away (Off)	Home (On)	Away (Off)	Home (On)	Sleep (Off)
Setpoint 1	Setpoint 2	Setpoint 3	Setpoint 4	Setpoint 5	Setpoint 6
06:00 20°C	08:00 15°C	11:30 20°C	13:30 15°C	17:00 20°C	22:00 15°C

Custom Program: If you are wanting to set your own custom program then please follow the steps below:

- 1) Firstly, decide how you want to setup the program.
0: Mon – Friday at one time and then Saturday - Sunday at another time
1: Mon – Saturday at one time and another time on Sunday
2: Same time for Monday – Sunday
 - 2) To now select how the program is set up, you need to Press the  ONCE, The screen will now be blank
 - 3) Long press the  and then “A1” will appear in the bottom left-hand corner
 - 4) Press the  until “A6” appears in the bottom left-hand corner
 - 5) To select the different program types, do the following:
Press the  or the  until it says “0” in the middle
Press the  or the  until it says “1” in the middle
Press the  or the  until it says “2” in the middle
 - 6) Once selected press the  TWICE
 - 7) When the temperature is in the middle of the screen, Long press the  until “01” in the middle of the screen.
 - 8) Press the  ONCE, when “02” on the screen and press the  ONCE.
 - 9) Setpoint 1 “Wake up (On)”, Hours will flash first to change it use the  or the  to change it and then press  to confirm.
 - 10) The minutes will flash use the  or the  to change it and then press  to confirm.
 - 11) The temperature will flash use the  or the  to change it and then press  to confirm.
 - 12) Then repeat instructions 9 – 11 for the other setpoints
- note that setpoints 2, 4 and 6 are when the programs end and the temperature it will maintain it at. Setpoints 1, 3 and 5 are when the heating comes on.
 - If you’re not wanting it to come on at a set time then set the temperature the same, i.e. Setpoint 3 is set to 15 degrees and Setpoint 4 is set to 15 degrees.

2e. Battery Back up

The battery backup work as follow, when the power supplied to the controller is turned off and disconnected or etc, the controller will retain the data inputted into the controller for 24 hours on a full charge.

2f. Advanced Settings

Below is the Advanced settings table

No.	Item	Parameters	Default
A1	Measured temp. calibration	-9°C to +9°C	-1 °C
A2	Differential	0.5°C to 2.5°C	1°C
A3	Key lock	0: Half lock 1: Full lock	0
A4	Power with memory function	0: Power with memory function 1: Shutdown power after power off 2: Shutdown power after power on	0
A5	Backlight time	5 to 30 seconds	10 sec
A6	Programmable	0: 5+2 (Week 1-5 and weekend 6-7) 1: 6+1 (Week 1-6 and sunday 7) 2: 7 (Week 1-7)	0
A7	Lowest temp. setting	1 - 10°C	5°C
A8	Highest temp.setting	20-70°C	35°C
A9	Low temp.protection	1: 1°C - 10°C Function off: > 10°C Display (—)	5°C
AA	High temp.protection	1: 35°C-70°C 2: Function off: < 35°C Display (—)	45°C
AB	High temp. protection differential	1-9	2
AC	Running temp. of open window function	1: 10 - 20°C, 2: Function off: < 10°C Display (—)	1
AD	Running time of open window function	10 - 20 min	10
AE	Reset to factory settings	Long press  until display goes blank	-

A1= Changes the temperature read by the controller
A2= Built in room sensor temperature difference of when the controller will turn on
A3= When the lock symbol is active it either lock all buttons or half the buttons on the controller
A4= Used to store data on the programmer or if you don't want any data stored on the controller
A5= The timer which activates when none of the buttons have been pressed
A6= This determines how the programming on the controller is setup
A7= Lowest point on which you can set your temperature
A8= The highest you can set your temperature to
A9= Stops the underfloor heating going below this temperature
AA= Stops the underfloor heating going above this temperature
AB= Floor sensor difference in the temperature of when the controller will turn on
AC= What the temperature will maintain at when a window is open
AD= How long the open window function keeps on before turning off
AE= To perform a factory reset on the controller

2g. Sensor Selection

When the controller is installed for the first time it will be set to Room sensor (N1), please see the table below to further expand the different sensor options:

No.	Item	Parameters	Default
BN	Options of sensor	N1 : Built-In Room sensor N2: Floor sensor N3: Built-In Room sensor with floor sensor as limiter	N1 (Change to N2 when using floorsensor with underfloor heating.)
BC	Descaling	0: Disable descaling function 1: Enable descaling function	0
Bo	Product information	Can't be changed	-

1) How to change the sensor please follow the instructions below

2) When the temperature is in the middle of the screen press the  Once.

- 3) When the screen is blank hold down the  until "BN" appears in the bottom left Hand corner of the screen
- 4) Use the  or  until you get to the sensor you want to use as per the table
- N1 = "Built-In Room sensor"
- N2 = "Floor sensor"
- N3 = "Built-In Room sensor with floor sensor as limiter"
- 5) When you have the desired sensor input selected, please press the  Once.

3a. Attention:

Before installation or re-installation of the thermostat always isolate the power to the thermostat. Installation needs to be done by a qualified electrician in accordance with all current wiring and building regulations.

3b. Installer Instructions:

Check the power is off. Remove the display by gently using a slotted screwdriver in the middle hole on the underside of the controller. The display should then click off and allow you to remove it. Position the Back plate in line with the standard lighting backing box and screw it in at the provided screw holes do this after wiring the controller up.

ATTENTION: When the power is put on for the first time make sure that 5 minutes is allowed for the backup battery to recharge first.

3c. Connection schedule

Terminal 1 = Power supply (Live)
Terminal 2 = Power supply (Neutral)
Terminal 3 = Heating cable wire 1*
Terminal 4 = Heating cable wire 2*
Terminal 5 = N/A
Terminal 6 & 7 = Floor sensor connection

*The Order heating wire 1 and 2 does not apply.

PLEASE NOTE = EARTH: Connect the **Earth** of the heating cable and the **Earth** of the power supply outside the thermostat

3d. Technical Details

Power:	90-240Vac 60/60Hz
Max. Load:	16A/250V
Floor sensor type:	12k NTC 1%
Temp. range:	5°C-35°C
Accuracy:	0.5°C

Cover: IP21
Warranty: 2 years

4. Technical Support

If you require any assistance or have questions or enquiries about the controller, then please contact us via phone or email or ask questions on our website.

Phone: 01887 822020

Email: Technical@klima.co.uk

Website: www.klima.co.uk

4.A FAQ

Q: How do I program this controller?

A: This can be found in section 2d of this guide

Q: How do I change the controller to read floor temperature?

A: If you refer to section 2f of this guide it will take you through a step-by-step guide on what needs to be done