

# MODEL TH132-AF (230 VAC)

#### SUMMARY

#### OPTIONS SELECTION

At the back of the thermostat, there are 2 selection switches to set at your preferences.

- Temperature in °C or °F and Early Start function.
- TO SET TIME AND DAY

Press on DAY, HOUR and MIN buttons to adjust time and day.

TO RECORD THE - (COMFORT) SETPOINT TEMPERATURE

Select chosen setpoint temperature by using ▲ or ▼ button. Press on 

TO RECORD THE (( (ECONOMY) SETPOINT TEMPERATURE

Select chosen setpoint temperature by using ▲ or ▼ button. Press on (button (2 to 3 seconds) until (icon appears on display.

TO RECORD THE 🎃 (VACATION) SETPOINT TEMPERATURE

Select chosen setpoint temperature by using ▲ or ▼ button. Press on button (2 to 3 seconds) until ■ icon appears on display.

**OPERATING MODES** 

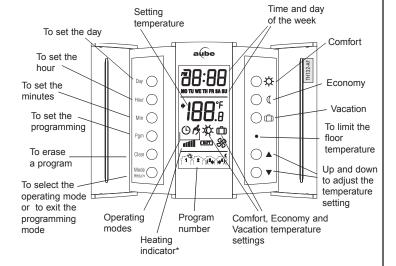
To select an operating mode, use Mode/Return button.

AUTO: Runs the programs. ▲ or ▼ shows temperature setting and

can override temporarily your programming up to the next pro-

MAN: Maintains the selected temperature. ▲ or ▼ changes the

temperature setting.



\* Percentage (%) of energy sent to the heating system to maintain the desired

**?** = 0 to 20%

**)))** = 40 to 60%

))))) = 80 to 100%

**))** = 20 to 40%

**))))** = 60 to 80%

### **INSTALLATION**

This thermostat is designed to use a floor-heating sensor to regulate room tem-

The TH132-AF has two temperature sensors. The first one, installed in the box, controls the ambient temperature. The second one, installed in the floor, limits the temperature of the latter (the default setting of this limit is 28 °C). Electricians or experienced technicians should install the thermostat.

This thermostat should be connected on a circuit equipped with a fuse or a circuit breaker. It must be installed on a certified electrical box.

For a new installation, choose a location about 1.5 meters above the floor, with

Avoid locations where there are air drafts (top of a staircase, air outlet), dead air spots (behind a door), direct sunlight or concealed chimneys or stove pipes.

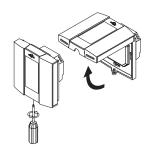
TURN OFF POWER TO THE HEATING SYSTEM AT THE MAIN POWER PANEL TO AVOID ELECTRICAL SHOCK. Keep air vents of the thermostat clean and free from obstructions.

# PARTS INCLUDED

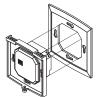
- One (1) TH132-AF (230 VAC) thermostat
- One (1) temperature sensor with a 3 meter extension
- One (1) wall plate (in certain countries)

#### 1. Installation of thermostat

Turn off power to the heating system at the main power panel to avoid electrical shock.



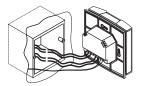
Unscrew and remove the front part of the thermostat from the base. Please take note that the screw cannot be completely retracted.



If your thermostat is equipped with a wall plate

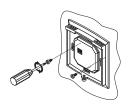
Before making the connections, make sure that the base covers the electrical box entirely. If not, insert the wall plate on rear of the base.\*

\*The wall plate can be used to cover the plate for aesthetics.



Connect the wires. (see section 1.1)

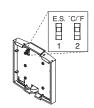
Connect the sensor. (see section 1.2)



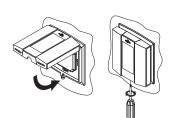
Secure the base to the electrical box

anchorage.

(The head of the screw must be less than 2mm of thickness.)



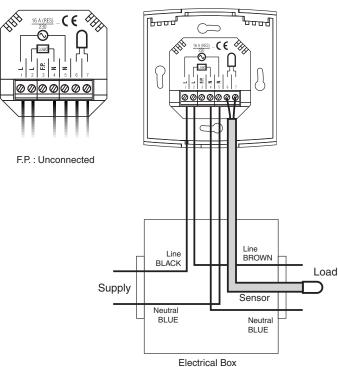
Set the switches located at the back of the front part of the thermostat before replacing it in the base. (see section 1.3)



Affix the front part of the thermostat to the base using the enclosed screw.

You can now turn the power back on.

# 1.1 Wire connections



### 1.2 Connecting temperature sensor wire

Connect the temperature sensor wires to the sensor terminals located at the back of the thermostat (no polarity needs to be respected).

Note: Do not place the sensor probe directly next to an element but rather, for maximum performances, the sensor probe should be centered between the wires in the mat (80  $^{\circ}\text{C}$  max.). The temperature sensor wire cannot lay across any heater wires.

#### Adjusting the floor's maximum temperature

When the floor sensor is installed, the temperature of the floor will automatically be limited to 28 °C, regardless of the ambient setpoint. To adjust the floor's maximum temperature, press on the adjustment button (see drawing for its position) using a pointed object, and use the  $\blacktriangle$  and  $\blacktriangledown$  buttons until the desired setpoint appears.

# 1.3 Configuration of switches

a) Early Start function



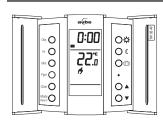
The thermostat is providing a built-in function enabling it to calculate the optimum time to start the heating system to achieve the desired temperature setting at the programmed time. To enable this function, set the switch E.S. (#1) to "ON".

b) Temperature in °C or °F



The default configuration of the TH132-AF is in °C. If you wish to change the temperature to °F, push the switch #2 upward. Please note that if you change from °C to °F, your Comfort and Economy settings will need to be reconfigured as well.

#### **POWER-UP**



When power is applied for the first time, the display must show the time 0:00, the floor temperature and the Manual mode icon ( // ). Other information might show up on the display if installation is defective or does not comply with the instructions.

The message L0 or HI will appear on the display if the temperature sensor is defective or the temperature is below 0 °C or higher than 60 °C. Also, if the LO message is displayed, the heating indicator will be present on display and the relay will be closed (current going in the load)

# **OPERATING MODES**

The TH132-AF has two (2) operating modes.

### MANual ( M )

This mode allows you to maintain a constant temperature.

- 1-To activate this mode, press on Mode/Return button to display the 🥠 icon.
- 2-Set the desired temperature using the lacktriangle buttons or select the predetermined  $-\mbox{$\dot{}\dot{$\dot{}\dot{$\dot{}\dot{$\dot{}\dot{$\dot{$\dot{$\dot{$\dot{$\dot{$\dot{}\dot{$\dot{}\dot{$\dot{}\dot{$\dot{$\dot{$\dot{$\dot{$\dot{}\dot{$\dot{}\dot{}\dot{}\dot{}\dot{}\dot{$\dot{}\do$

# AUTOmatic ( (L) )

This mode executes your own programming

To activate this mode, press on Mode/Return button to display the ( ) icon. The ÷; or ( icon indicates which temperature setting is used. Also, the icon of the program number will be shown.

### Vacation function

This function sets your thermostat to your specified Vacation temperature.

You can switch to the Vacation setting for a prolonged absence by pressing on the button. The display will show the icon. The temperature will remain at this setting until it is returned to the normal operating mode by selecting the Mode/Return button. The Vacation function is also accessible through the CT240 telephone controller. If you wish to immediately return to the programmed settings, press on Mode/Return button.

### **PROGRAMMING**

# Programming the time and day

- 1- Set the time using the Hour and Min buttons. 2- Set the day using the Day button.

# Programming the Comfort, Economy and Vacation settings

The Comfort  $\overset{.}{\not{\otimes}}$ , Economy  $\overset{.}{\not{\otimes}}$  and Vacation  $\overset{\blacksquare}{\blacksquare}$  settings respectively represent the temperatures that you wish to have during the day  $\overset{.}{\not{\otimes}}$ , at night or while you are away at work  $\overset{.}{\not{\otimes}}$ , or while you are away for an extended period 📠

### To program your settings:

- To program the Comfort temperature, select the desired setpoint using the buttons and press the 🌣 button until the 🌣 icon is displayed (app. 3 seconds).
- To program the Economy temperature, select the desired setpoint using the  $\blacktriangle$   $\blacktriangledown$  buttons and press the  $\P$  button until the  $\P$  icon is displayed (app. 3 seconds).

- To program the Vacation temperature, select the desired setpoint using c) buttons and press on the button until the icon is displayed (app. 3 seconds).
- Press the Mode/Return button to exit this function and return to the normal operating mode.

#### Schedule programming

The TH132-AF allows 4 setting changes for each day of the week. There are no pre-set programs. The programs are tailored to perfectly adapt to your life style. The principle is very simple. For each day, enter the time at which you wake up (P1), the time you leave for work (P2), the time you arrive back home (P3) and the time you go to bed (P4).

Program	Mode	Time	
{î <sup>†</sup>	- ☆ Comfort	Wake-up time	
(2) ⅓ ♦	( Economy	Leaving time	
(3) ♦ ₺	-¦ċ- Comfort	Return time	
{î <sup>†</sup>	( Economy	Bed time	

For savings to be obtained, you must lower the temperature for a period of at least 2 times the delay required to bring the temperature back to your comfort

Example: if your system takes one hour to go from your saving temperature level to your comfort temperature level, it is useless to lower the temperature for a period less than 2 hours.

#### a) To Program your Schedule

- 1-Press on Pgm button to access the programming mode.
- 2-Press on Day button to select the day to be programmed. You can select all days of the week by pressing on Day button for 3 seconds
- 3-Press on Pgm button to select program 1, 2, 3 or 4.
- 4-Press on Hour and Min buttons to program the time.
- 5-When you have completed your programming, press on Mode/Return button to exit this function.

#### b) To Erase a Program :

Select the program using Pgm and Day buttons, and press on Clear button. The time field displays -:- when the program is inactive.

Comfort period from 7:00 AM to 10:30 PM Economy period from 10:30 PM to 7:00 AM Identical schedule for all days of the week.

Schedule/	Day	MON.	TUES.	WED.	THU.	FRI.	SAT.	SUN.
PROG. 1	-\ <del>'</del> \;-	7:00 AM						
PROG. 2	C							
PROG. 3	-¦¢-							

- 1-Press on Pgm button to access the programming mode
- 2-Press on Day button 3 seconds to select every day of the week.
- 3-Press on Hour button to enter 7:00 AM, Prog. 1 (-o-).
- 4-Press 3 times on Pgm button to select Prog. 4 ( (()), and press on Hour and Min buttons to enter 10:30 PM.
- 5-Press on Mode/Return button to exit this function.
- d) Example 2:

Comfort period : Monday to Friday from 6:15 AM to 8:15 AM and from 5:00 PM to 10:00 PM Saturday and Sunday from 7:30 AM to 11:00 PM.

Schedule/Day		MON.	TUES.	WED.	THU.	FRI.	SAT.	SUN.
PROG. 1	☆	6:15 AM	7:30 AM	7:30 AM				
PROG. 2	$\mathbb{C}$	8:15 AM						
PROG. 3	-ķ-	5 PM						
PROG. 4	$\mathbb{C}$	10 PM	11 PM	11 PM				

NOTE: It is faster to program the same schedule for every day and then modify the exception days.

- 1-Press on Pgm button to access the programming mode.
- Press on Day button 3 seconds to select every day of the week
- 3-Press on Hour and Min buttons to enter 6:15 AM Prog. 1 (-\(\doc)-\).
- 4-Press on Pgm button to select Prog. 2 ( (()) and Hour and Min buttons to enter 8:15 AM.
- 5-Repeat step 4 to enter Prog. 3 (5:00 PM) and Prog. 4 (10:00 PM).

NOTE: When making modifications, make sure you are in the right program.

### To modify the Saturday and Sunday schedules :

- 6- Press on Day button until SA or SU is displayed.
- 7- Press on Pgm button to select Prog. 1 (-b-) and Hour and Min buttons to enter 7:30 AM.
- 8- Press on Pgm button to select Prog. 2 ( (( ) and then Clear button to erase it.
- 9- Press on Pgm button to select Prog. 3 (-☆-) and then Clear button to erase it.
- 10- Press on Pgm button to select Prog. 4 ( 🧷 ) and then Hour and Min buttons to enter 11:00 PM.
- 11- Press on Mode/Return button to exit this function.

#### Memory back-up

In the event of a power failure, an internal circuit will maintain the programming and the time. The time would have to be reset if the power failure exceeds 2 hours

#### Temporary or permanent temperature bypass

This operation allows you to temporarily modify the temperature while you are in the Automatic mode. Simply press on  $\blacktriangle$  or  $\blacktriangledown$  button to select the desired temperature, or the  $\mbox{\ensuremath{\%}}$  or  $\mbox{\ensuremath{\emptyset}}$  button to select the Comfort or Econo settings you have programmed. This temperature will be maintained until the beginning of the next programmed schedule.

If you wish to immediately return to the programmed settings, press on  $\mathsf{Mode}/\mathsf{Return}$  button twice.

# **CHARACTERISTICS**

• Model : TH132-AF• Supply : 230 VAC 50 Hz

• Load : 16 A max. (resistive only) • Power : 3680 W (NI) @ 230 VAC

• Approvals : EN60730-2-9

EN50081-1 / EN50082-2

• Display range : 0 to 60 °C • Setting range, ambient temp. : 5 to 30 °C 5 to 40 °C • Setting range, floor temp. : • - 'c'- default setting : 20 °C • ( default setting : 18 °C • default setting : 10 °C Floor temp. limit default : 28 °C -20 to 50 °C • Storage : · Software: Class A · Controller: Electronic Class 2 • Protection : • Protection degree : IP20 Automatic action: Type 1B

Automatic action: Type 1B
 Environment: Normally polluted
 Programming protection: Memory back-up
 Clock protection: 2 hours

The terminals are designed to handle a cross-section of wire measuring 0.33 to 3.1 mm²in diameter.

#### **WARRANTY**

#### AUBE TECHNOLOGIES INC. ONE (1) YEAR LIMITED WARRANTY

This product is warranted against material defects and workmanship in normal use for a period of one year, from the date of the original purchase from authorized dealers. During this period, AUBE technologies inc. will repair or replace the product with a new or of equivalent quality at AUBE'S option, without charge, any product proven defective in normal use.

Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage. This warranty does not cover the cost of installation, removal or reinstallation.

This limited warranty is in lieu of all other warranties, obligations or liabilities expressed or implied by the company. In no event shall AUBE technologies inc. be liable for consequential or incidental damages resulting from installation of this product. Some states or provinces do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

If you have any questions concerning the installation or programming of this product, please call our technical assistance.

The defective product and the original sale receipt must be returned to the original dealer or shipped pre-paid to one of the following addresses :



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