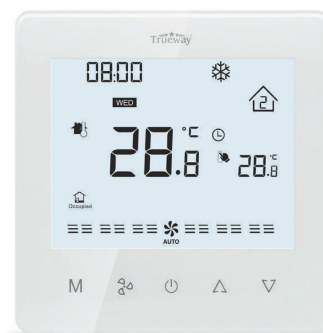


CAPACITIVE TOUCH SERIES



MODEL

TX1000 OF220-V2 ICEW

TX1000 OF220-V2EW

TX1000 OF024-V2ICW



APPLICATIONS

- ▶ TX1000 Series is touch pad thermostat with many variants suitable for 2-pipe cooling & heating fan coil units and DX single stage compressor units. Available in basic standalone and Modbus communicating variants.
- ▶ Options of back-light selection in sky blue and black VA LCD. Fitted with built-in NTC 10K sensor and optional humidity sensor. Several add-on functions like remote sensor, key card can be chosen as per site requirements.

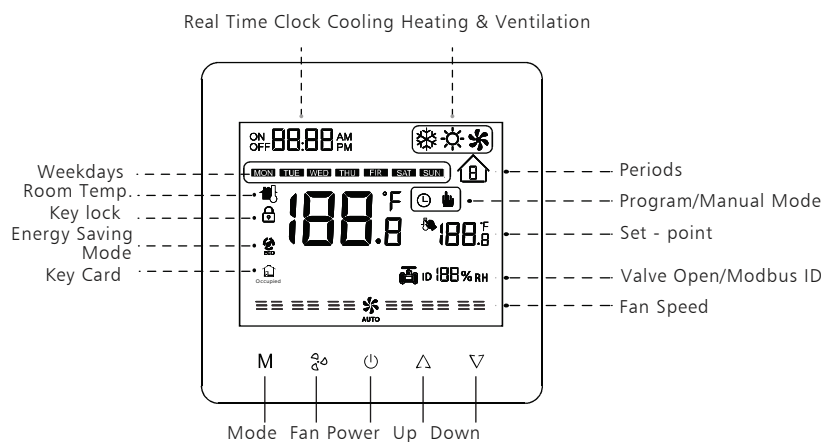
SPECIFICATION

- ◆ Power Supply: 85-240VAC / 24VAC • Frequency: 50~60Hz
- ◆ Function: Cooling/Heating
- ◆ Relay Life: 220±10% VAC, 3(5)A, 100,000 times
- ◆ Wiring Max: 16AWG
- ◆ Sensing Element: 10K(@25°C) NTC
- ◆ Display Accuracy: 1°C, Set-point accuracy: 1°C/step
- ◆ Set-point range: 10-32°C(50-90°F) • Display range: 0-50°C
- ◆ Protection Glass: IP 20 • Operation Temperature: -18~49°C
- ◆ Shipping Temperature: -35~65°C • Suitable System: 2-pipe FCU cooling&heating, simple on-off valve or compressor
- ◆ Suitable Valve: 2-line/3-line valve • Relative Humidity: 10~90%
- ◆ Installed on 75mm x 75mm box

FEATURES

- ◆ Modern touch pad design suitable for offices, hotels and residential buildings.
- ◆ Applicable for 2-pipe FCU cooling&heating, Simple on-off valve or compressor
- ◆ 7 Days 6 Periods programmable from thermostat as well as WiFi App
- ◆ Black LCD and Sky-blue LCD display selectable.
- ◆ Special colors casing upon request with RAL number can be provided.
- ◆ Both room and Set-point display
- ◆ Manual & Automatic fan functions
- ◆ User setting can be kept during power off.
- ◆ Fan load 5A resistive and inductive of 3A
- ◆ Big LCD with English display
- ◆ Temperature unit C&F
- ◆ Regular color available in Black and White body
- ◆ EC motor variants available
- ◆ Fits in 75mmx75mm electrical junction box
- ◆ Real Time clock with infinite life battery backup
- ◆ Free iOS & Android App
- ◆ Language Selection through Mobile App – **English & Arabic**
- ◆ WIFI App designed & developed by Links4engg USA  India 

LCD DISPLAY & KEYS DESCRIPTION



FUNCTION

- 2-pipe FCU cooling&heating, Simple on-off output
- 3 Speed Fan + Auto Fan Control
- Energy Save Mode and Comfort Mode Settings
- 7 Days 6 Periods Programmable Function
- Key Pad Lock
- Both Room and Set-Point Display

ORDERING PART NUMBERS






















PART NUMBERS	OPERATING VOLTAGES	APPLICATIONS	VALVE TYPE	EXT.SENSOR	WIFI CONTROL THROUGH APP
TX1000 OF220-V2 1CEW	85-240VAC	2-PIPE/ SINGLE STAGE	ON-OFF VALVE / COMPRESSOR	✓	✓
TX1000 OF220-V2EW	85-240VAC	2-PIPE	ON-OFF VALVE	✓	✓
TX1000 OF024-V21CW	24VAC	2-PIPE	ON-OFF VALVE / COMPRESSOR	✗	✓





ABBREVIATION

CASING/COVER COLOR		BACKLIGHT COLOR	
BLACK	B	Sky Blue backlight + Black letters(TN LCD)	SB
WHITE	W	Black backlight + White letters (VA LCD)	BW

*ordering example TX1000OF220-V2I-CEW-WSB


OPERATION INSTRUCTION

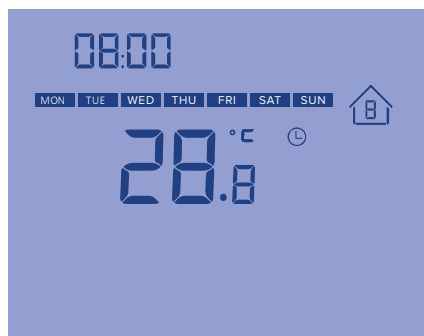
ON-OFF VALVE /COMPRESSOR CONTROL	POWER ON OR OFF	INCREASE / DECREASE
Thermostat acquires the room temperature via its integrated sensor and maintains the set-point by simple on-off output	By pressing POWER button  to change the power On/Off status.	In the ON state, press UP  or  DOWN to increase or decrease the setting parameters.
HEAT/COOL/VENT	FAN OPERATION	
Pressing the MODE button “M” to select heat  cool  or ventilation  mode.	Fan can be selected as manual or automatic 3-speed operation. In manual mode, the fan will be switched to the selected speed via control output Gh,Gm,Gl (by pressing FAN button ). In automatic mode, the fan speed will be switched upon the difference between the room temperature and the set-point. When room temperature reaches set-point, valve will be closed and meanwhile, fan turns to low speed fan will be turned off as well “(fan can be changed to low speed instead of turning OFF via ISU mode)”	
TEMPERATURE DISPLAY	KEY LOCK	
Both the room temperature and the set-point are displayed.	The default status of “Key lock” is all keys available and it can be changed in ISU mode. Key lock function includes the following settings: All keys are available (Default) Mode button is locked out. Fan and Mode button are locked out. All buttons are locked.	
COMFORT MODE	ENERGY SAVING MODE	
In the comfort mode, the set point can be changed by pressing UP  or DOWN  buttons. Different applications include cool only, heat only and manual heat/cool changeover.	By pressing MODE button “M” for 3 seconds can activate the energy saving mode with  icon appearing on the screen. If energy saving is activated by button pressed, pressing POWER  button will stop energy saving mode. For heating mode, if energy saving function is enabled, the set-point will be changed to remote setback heating set-point. The range of remote setback heating set-point is from 10 °C to 21 °C and default value is 18 °C. The value can be changed in ISU mode with step of 1 °C . For cooling mode, if energy saving function is enabled, the set-point will be changed to remote setback cooling set-point. The range of remote setback cooling set-point is from 22°C to 32°C and default value is 26 °C. The value can be changed in ISU mode with step of 1 °C .	
FREEZE PROTECTION MODE	TIME SETTING	TO SELECT MANUAL AND PROGRAMMABLE
Freeze protection can be disable(default) or enabled via ISU mode. If freeze protection is enabled (it is not available in cooling only application) and thermostat is in OFF mode while the room temperature is below 6 °C , the thermostat will open heating device before the temperature rises to 8 °C	In ON/OFF states, press “M” and  for 5 seconds, the time area “88.88” will be flashing, press “M” to select minutes, hours or week, then press  or  to adjust the relevant time, press  to confirm.	In the thermostat ON status, Press and hold “M” and  for more than 5 seconds, the icon of  or  will be flashing, press “M” to select manual  or programmable  and press  to confirm.
ADJUSTING OF WEEKLY PROGRAMMABLE		

After selected programmable mode, press  for more than 5 seconds enter into program schedule setting then press “M” to select setting item of periods, time and temp. Press  or  to adjust the relevant value, press  to confirm. The program schedule is a weekly (7days) cycle, it can be selected for 5+2 days, 6+1 days or 7 days. 5+2 is 5 workdays plus 2 days holiday a week, 6+1 is for 6 workdays plus 1 day holiday a week, 7 is for 7 workdays a week. There's 6 periods for workdays and 2 periods for holidays.

Setting sequence when enter program setting

Workdays 1st period time adjusting -> temperature adjusting -> 2nd period time adjusting -> temperature adjusting.....6th period time adjusting -> temperature adjusting -> holidays 1st period time adjusting -> temperature adjusting -> 2nd period time adjusting -> temperature adjusting

Note: the single period can be switched off by turning off the temp. setting by pressing POWER button 



PERIODS	SYMBOLS	DEFAULT TIME	DEFAULT TEMP.
WORKDAYS	1	06:00AM	26 °C
	2	08:00AM	26 °C
	3	11:30 AM	26 °C
	4	12:30PM	26 °C
	5	17:00PM	26 °C
	6	22:00PM	26 °C
WEEKEND	1	06:00AM	26 °C
	2	23:00PM	26 °C

SYMBOLS	DESCRIPTION
	1 ST PERIOD, WAKE UP
	2 ND PERIOD, LEAVE
	3 RD PERIOD, BACK FROM LUNCH
	4 TH PERIOD, LEAVE
	5 TH PERIOD, BACK FROM DINNER
	6 TH PERIOD, WAKE UP

ADJUSTING OF WEEKLY PROGRAMMABLE

IN PROGRAMMABLE MODE, SET-POINT AND TIME COULD NOT BE ADJUSTED

PERIODS DESCRIPTION

SETUP FUNCTION SETTINGS AND OPTIONS

- Press “M” and “” key for 5 seconds to enter ISU setting mode, the ISU code will be flashing.
 - Press “” or “” to select the setting items from 1-26.
 - Press “M” and the values of selected item will be flashing with icon “” on,
Press “” and “” revise the values of the setting items, press “” to confirm.
- If you want to revise the other setting items, please repeat above step b. and c. while setting, press “” to exit, the setting items and values as below form shown.

ISU CODE	DESCRIPTION	POSSIBLE OPTIONS
1	SYSTEM TYPE	0 HEAT ONLY 1 COOL ONLY 2 TWO PIPES 1H1C MANUAL(DEFAULT)
2	TEMPERATURE UNIT	F : ° F C : ° C(DEFAULT)
3	FAN CONTROL TYPE	AO : AUTO ONLY CO : CONSTANT ONLY BO : BOTH(DEFAULT)
4	KEY PAD LOCK OUT	0 : ALL KEYS ARE AVAILABLE (DEFAULT) 1 : MODE BUTTON IS LOCKED OUT 2 : FAN AND MODE BUTTON ARE LOCKED OUT 3 : ALL BUTTONS ARE LOCKED
5	REMOTE SETBACK ENABLE METHOD	NO : HOTEL CARD NO NC : HOTEL CARD NC BU : BUTTON (DEFAULT)
6	FREEZE PROTECTION	OF : DISABLED(DEFAULT) ON : ENABLED
7	DISPLAY TEMP. ADJUSTMENT	-9°C~+9°C~(-9°F~+9°F)DEFAULT IS 0°C/0°F
8	REMOTE SETBACK HEATING SET-POINT	RANGE 10-21°C DEFAULT 18 ° C(RANGE 50-70°F DEFAULT 64°F)
9	REMOTE SETBACK COOLING SET-POINT	RANGE 22-32°C DEFAULT 26 ° C(RANGE 72-90°F DEFAULT 79°F)

10		RESERVED FOR ADDITIONAL ISU SETTINGS
11		RESERVED FOR ADDITIONAL ISU SETTINGS
12		RESERVED FOR ADDITIONAL ISU SETTINGS
13	SENSOR SELECTION	IN : INTERNAL SENSOR, OU: EXTERNAL SENSOR, IF CHOOSING EXTERNAL SENSOR, THE ROOM CARD FUNCTION WILL NOT BE AVAILABLE, DEFAULT IS IN
14	BEE SOUND SETTING	ON: ON, OF: OFF, DEFAULT IS OF
15	PROGRAM SETTING	0: 5 WORKING DAYS AND 2 DAYS HOLIDAY A WEEK, 1: 6 WORKING DAYS AND 1 DAY HOLIDAY A WEEK, 2: 7 WORKING DAYS A WEEK, 3: CLOSE PROGRAM SCHEDULE ,DEFAULT IS 0
16	COMPRESSOR OFF TIME DELAY SETTING	RANGE 0-4 MINUTES, IF SETTING VALUE IS 0, WITHOUT DELAY, THIS IS FOR SIMPLE ON-OFF VALVE CONTROL, COMPRESSOR FUNCTION IS NOT AVAILABLE IF SETTING VALUE IS 1-4,THIS IS FOR COMPRESSOR FUNCTION, WHEN SETTING IS 1, WITH 1 MINUTE OFF DELAY FOR COMPRESSOR CONTROL.
17	FAN STOP/RUN SETTINGS	LO: FAN WILL BE SWITCHED TO LOW SPEED WHEN ROOM TEMP. REACHES TO SET-POINT&VALVE TURNS OFF OF: FAN WILL BE SWITCHED OFF WHEN ROOM TEMP. REACHES TO SET-POINT& VALVE TURNS OFF, DEFAULT IS OF
18	ON / OFF BACK-LIGHT SETTING	OF: OFF, THE BACK-LIGHT WILL BE OFF AFTER 30 SECONDS IF NONE KEY PRESS ON: ON, THE BACK-LIGHT WILL BE ON ALWAYS EVEN NONE KEY PRESS, DEFAULT IS OF
19	ON / OFF MEMORY SETTING	OF: OFF USER SETTING WILL NOT BE KEPT WHEN POWER OFF (WHILE ELECTRIFIED, THE THERMOSTAT WILL BE OFF) SU: ON, USER SETTING WILL BE KEPT WHEN POWER OFF (WHILE ELECTRIFIED, THE THERMOSTAT WILL BE ON), DEFAULT IS OF
20	BACK-LIGHT SETTINGS	10-60 SECONDS(DEFAULT 30 SEC.,USER CAN ADJUST BACK-LIGHT TIME ACCORDING TO ACTUAL DEMANDS)
21		RESERVED FOR ADDITIONAL ISU SETTINGS
22		RESERVED FOR ADDITIONAL ISU SETTINGS
23		RESERVED FOR ADDITIONAL ISU SETTINGS
24		RESERVED FOR ADDITIONAL ISU SETTINGS
25		RESERVED FOR ADDITIONAL ISU SETTINGS
26	RESET TO DEFAULTS	THIS FUNCTION IS RESETTNG ALL ISU SETTINGS TO FACTORY DEFAULTS, OPERATION: PRESS " △ " 0>1>2>3>4, THEN PRESS " ▽ " 4>3>2 AND PRESS " Ⓢ " TO CONFIRM DEFAULT: 0

ABOUT WI-FI CONNECTION

Before using your Wi-Fi thermostat for the first time you must configure the wifi signal and setting through your smart phone or tablet. This will allow communications between your connected devices.

STEP 1 DOWNLOAD YOUR APP (FIG 1-1)



Fig 1-1



Fig 1-2 IOS



Fig 1-3 Android

For IOS devices, search trueway controls in Apple Store and download. Alternatively, scan the relevant QR code here (fig 1-2)

For Android devices, search trueway controls in Google Play and download. Alternatively, scan the relevant QR code here (fig 1-3)

STEP 2 REGISTER YOUR ACCOUNT

Open the app Trueway controls, you will get a piece of notification (Fig 2-1)&(Fig 2-2) Click "Allow" and "Continue" to go into page of registration (Fig 2-3). For registering for the first time in sign up page input the email ID /Password and reconfirm password then continue for getting a verification code (Fig 2-5). Already registered user can sign in (Fig 2-4).

STEP 3 ADDING THE DEVICE AND CONNECT YOUR WIFI SIGNAL

After the verification (Fig 3-1) appears for adding new device, Tap the button to add a new device. You will get request for allow trueway to access the device location (Fig 3-2) click "Allow" to continue and select the desired product (Fig3-3).

Next step is to assign the network of current location (Fig3-4) Access our Network and enter the password (Fig 3-5) and thus the app assigns to Wifi network.

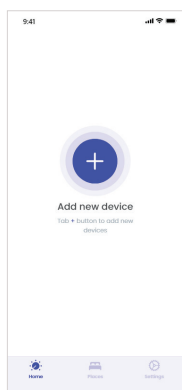


FIG 3-1

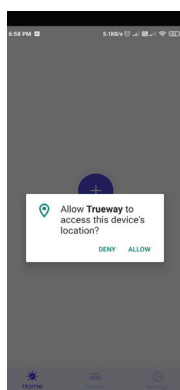


FIG 3-2

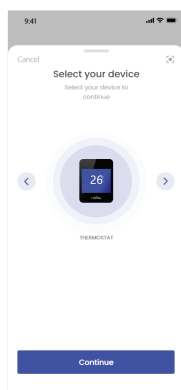


FIG 3-3

STEP 4 SETTING UP AND CONNECTING THE THERMOSTAT

After the wifi network assigned to your app proceed to reset the Thermostat which is installed in the wall. When Thermostat is in OFF state, please press button "M" and "Δ" arrow for 3 seconds to enter into network status query. After 3 seconds selection mode appears and press "M" for selection of "AP" and "SA" mode. For easy access "SA" mode is advisable. Select "SA" mode and press fan button for confirmation. Once the wifi module is confirmed "SA" mode stops flashing and only wifi icon will continue flashing. "CL" mode will be displayed after wifi is connected to cloud. Confirm the sequence by tick box and continue. refer Fig 4-1

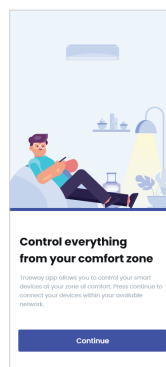


FIG 2-1

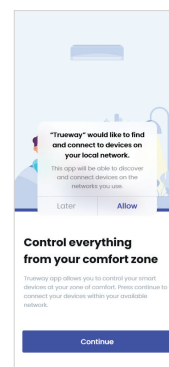


FIG 2-2

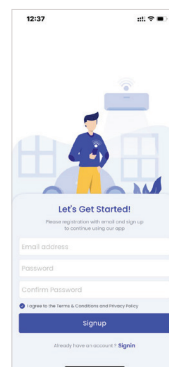


FIG 2-3

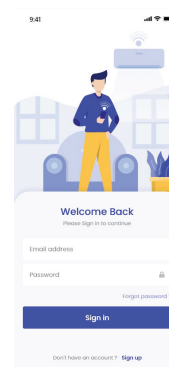


FIG 2-4

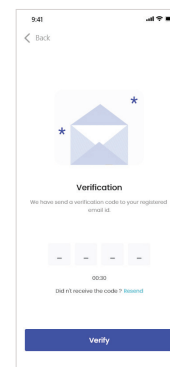


FIG 2-5

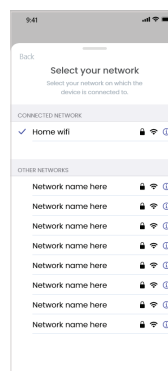


FIG 3-4

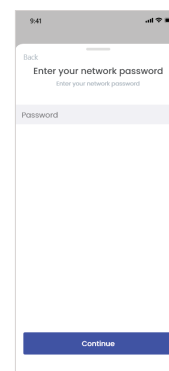


FIG 3-5

The app starts to scan for finding the device Fig 4-2. Once connection is made device will be discovered and displayed in page, device found Fig 4-3 and complete the set up by assigning the preferred room eg : living room, bed room, office room, common area etc.

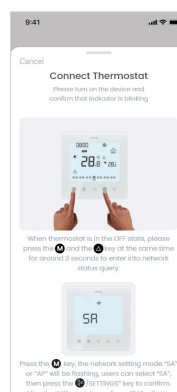


FIG 4-1

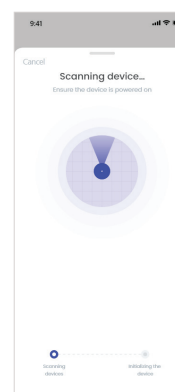


FIG 4-2

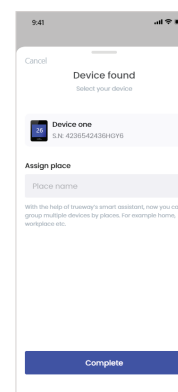


FIG 4-3

STEP 5 ASSIGNING PLACE & ROOM

Once you found device you can assign the place fig 5-1. Different places can create as per your choice Like Office,Home,Gym and Garage or create custom name as per your requirement. On Each places you can arrange according to the name of room like living room,bed room, master bed room or custom name of room Fig 5-2. Any number of rooms can add and assign thermostats of same network

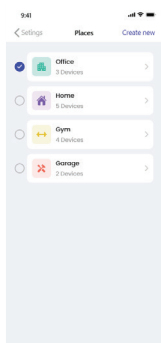


FIG 5-1

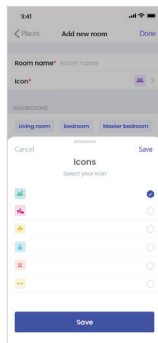


FIG 5-2

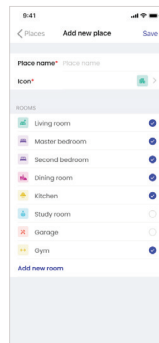


FIG 5-3

PROGRAMMING YOUR THERMOSTAT

After setting up you will launch on home screen Fig 6-1. Our homescreen is designed with user friendly Interface. Start with power button which is placed top right side of screen by clicking Power button. Power icon will be displayed largely in center of screen and the thermostat turn to ON position. Room temperature displayed on center of dial and set temperature below the dial. Also provide a plus and minus button to adjust set temperature. Fan button, lock/unlock button are arranged visibly.

Power ON/OFF button-Select power button on top right. Large display power button in red color (fig 6-2) will popup in center. By clicking the power button ON the button will be change to green color (fig 6-3).

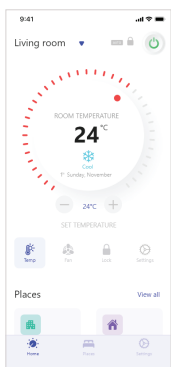


FIG 6-1

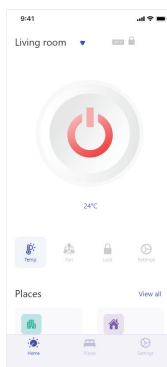


FIG 6-2

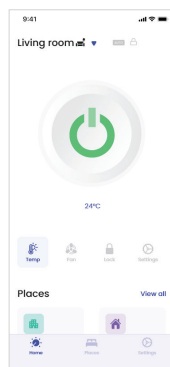


FIG 6-3

Fan Controls – When you select fan icon on dashboard, an interactive fan button will pop up and a realistic fan blade with motion will be displayed. All the three speed are indicated on the dial and on center a moving fan will rotate as per your selection. User can found in anticlockwise Low, medium, High and auto function.

User can also view fan status below the fanblade, Low, medium, high and auto will be written between (+) plus and (-) minus symbol. User can tab in dial and in Plus/minus button for changing the Fan position

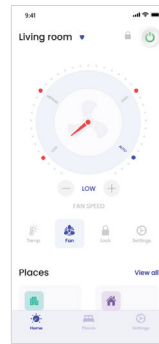


FIG 7-1

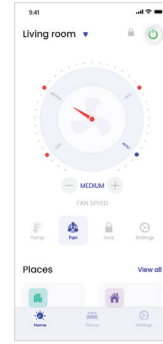


FIG 7-2

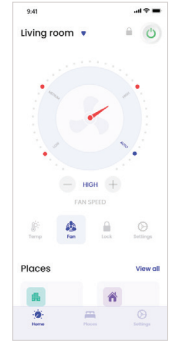


FIG 7-3

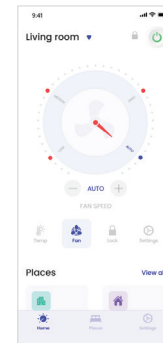


FIG 7-4

Lock/Unlock -Lock and Unlock button can access from the home screen with lock in red color Fig 8-1 and unlock in green Fig 8-2

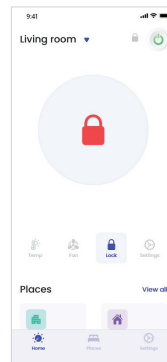


FIG 8-1

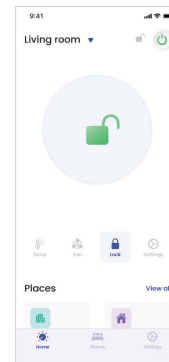


FIG 8-2

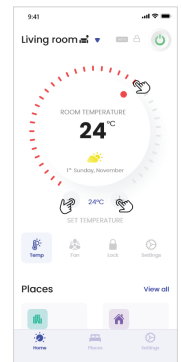


FIG 8-3

How to set the temperature in our smart app

There is two ways of setting desired temperature for our comfort. First one is by tabbing the red indicator In the dial, move clockwise to increase and move anti clockwise to decrease the temperature (Fig 8-3), alternatively By pressing + plus or - minus button below the dial. The set temperature is displayed between + plus and - minus symbols.

The large numeric in the middle of dial is current room temperature with degree or Fahrenheit as per choice.

Our smart app is designed in two types of settings one is App setting and other one is device setting. App settings consists of Manage places, temperature scale, Ambience selection, Language selection, Connected network, Privacy policy, help & support and finally logout (Fig 9-1)

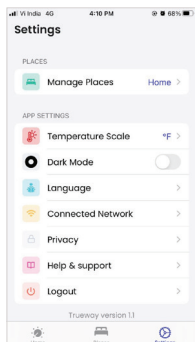


FIG 9-1

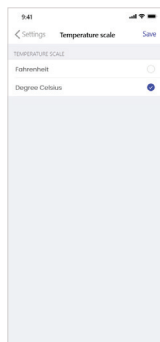


FIG 9-2



FIG 9-3

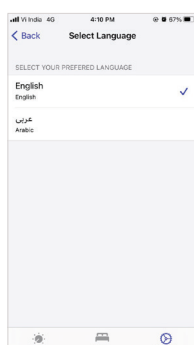


FIG 9-4

Manage places as per step 5, you can choose different places where you use the thermostat (Fig 5-3)

Temperature scales having choice of Degree Celsius and Degree Fahrenheit as you wish. (Fig 9-2)

Ambience of App having choice of Dark mode (Fig 9-3) and Light mode. Connected network can change as per location.

Language Selection English & Arabic language available.

In device setting following operations and selection can be easily made according to user requirement (Fig 10-1)

Mode selection- user can tab for three types of modes 1) cooling mode 2) Heating mode and 3) ventilation mode. Mode is displayed in home screen below room temperature in home screen (Fig 10-2)

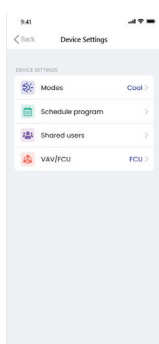


FIG 10-1

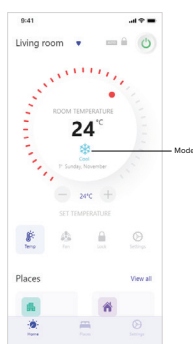


FIG 10-2

Scheduling Program 7 days 6 period

The user can schedule their program of operation throughout the week in 6 periods of intervals. In Add New Task bar, user can set temperature/switch off by giving task name, selection of Day and Time by saving (Fig 11-1). Weekend device turn off setting can be done in schedule programming.

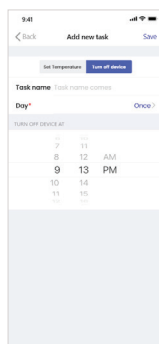


FIG 11-1

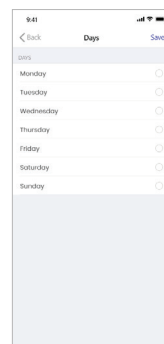


FIG 11-2

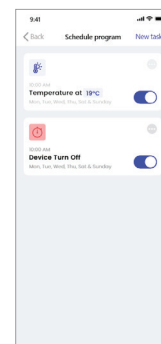


FIG 11-3

Shared users

The user can share the device with friends and family members by inputting registered email ID and can create a group. Select "Shared users" in device setting (Fig 10-1). The sharing page will open (Fig 12-1). Add email ID of member who wants to share. You can share multiple users for accessing the thermostat.

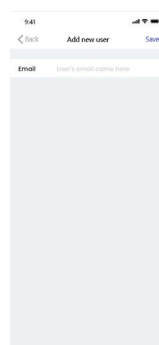


FIG 12-1

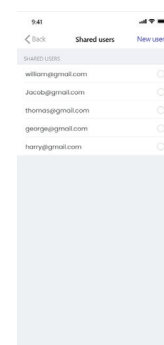


FIG 12-2

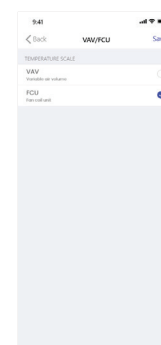
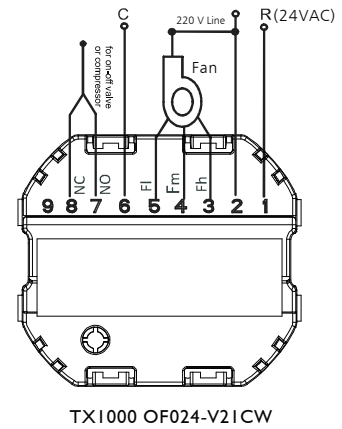
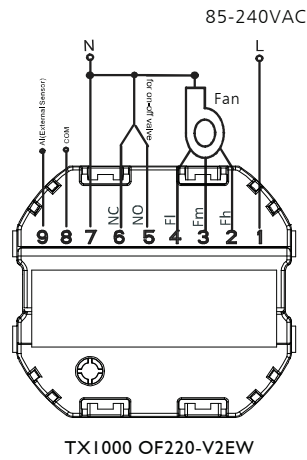
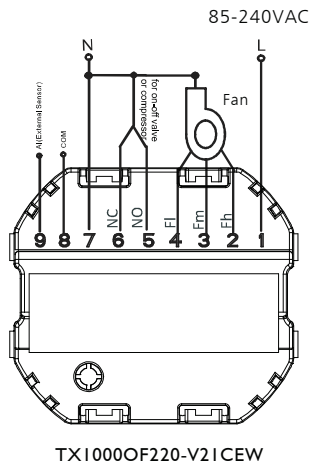


FIG 12-3

VAV/FCU

Air-conditioning types VAV (Variable Air volume) and FCU (Fan coil unit) can be selected in device setting. If you select VAV, all the fan keys in the app will be muted as VAV does not have fan controls in the system. Whereas for FCU, all keys will be operational (Fig 13-1)

WIRING DIAGRAM



NO	TERMINALS	DESCRIPTION
1	L	LIVE IN
2	FH	HIGH SPEED FAN
3	FM	MEDIUM SPEED FAN
4	FL	LOW SPEED FAN
5	NO	VALVE/COMPRESSOR OPEN
6	NC	VALVE/COMPRESSOR CLOSE
7	N	NEUTRAL IN
8	COM	COM FOR EXTERNAL SENSOR
9	AI	EXTERNAL SENSOR

NO	TERMINALS	DESCRIPTION
1	L	LIVE IN
2	FH	HIGH SPEED FAN
3	FM	MEDIUM SPEED FAN
4	FL	LOW SPEED FAN
5	NO	VALVE OPEN
6	NC	VALVE CLOSE
7	N	NEUTRAL IN
8	COM	COM FOR EXTERNAL SENSOR
9	AI	EXTERNAL SENSOR

NO	TERMINALS	DESCRIPTION
1	R	24V ACTIVE
2	LINE	220V LINE FOR 220V FAN
3	FH	HIGH SPEED FAN
4	FM	MEDIUM SPEED FAN
5	FL	LOW SPEED FAN
6	C	24V NEUTRAL
7	NO	VALVE/COMPRESSOR OPEN
8	NC	VALVE/COMPRESSOR CLOSE
9		

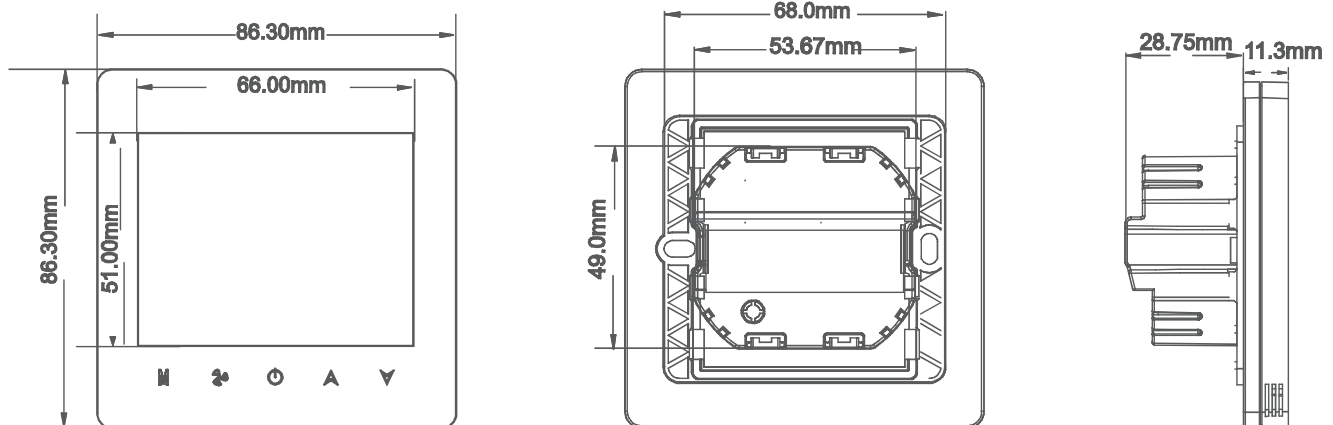
9 TERMINAL POWER BOX

*wiring is subject to change without notice based on addons

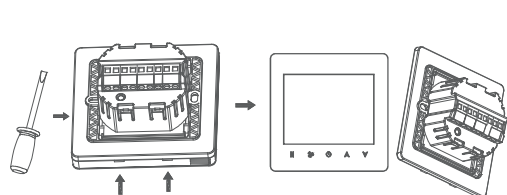
NOTE:

- ♦ The thermostat is high voltage input, please do wiring with technician.
- ♦ If the thermostat was burned by accidentally, please do not wiring it again by yourself, try to check it with a professional technician or contact with our manufacturer.

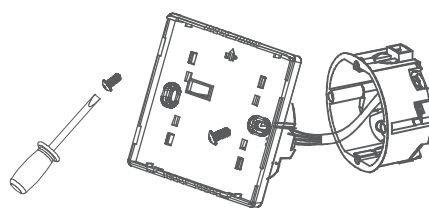
PRODUCT DIMENSION



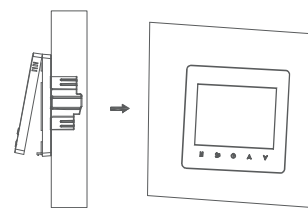
INSTALLATION AND COMMISSIONING



To take the front panel and back plate apart by screwdriver



Wiring on the terminals of the back plate according to above wiring diagram, then fix the back plate on the junction box by screw driver



Recombine the front panel and back plate by ontract pins

TROUBLE SHOOTING TIPS

IF...	THEN...
Heating system does not turn on	Set the mode to Heat by pressing the Mode button. Wait five minutes for the heating system to respond.
Cooling system does not turn on	Set the mode to Cool by pressing the Mode button. Wait five minutes for the cooling system to respond.
The fan does n't work	Ao : Auto Only Co : Constant Only bo : Both(Default)
The Mode button does not work	Check whether the Fan mode is set to Auto Check whether the heating or cooling system works well. Check whether the keypad is locked out (ISU mode item 4)
The Fan button does not work	Check whether the system is working in energy saving mode. Check whether the thermostat is off. Check whether the keypad is locked out (ISU mode item 4)
The Up or Down button does not work	Check whether the system is working in energy saving mode. Check whether the thermostat is off. Check whether the keypad is locked out (ISU mode item 4)

Touch makes you Comfortable

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