

# **DIGITAL BUTTON SERIES**

### **MODEL**

TX8920F220-V2E

TX8920F220-V2K

TX8920F024-V2





#### **APPLICATIONS**

- ▶ TX892 Series is digital button type thermostat with many variants suitable for 2-pipe cooling & heating fan coil units Available in basic standalone and Modbus communicating variants.
- ▶ Back-light is available for sky blue TN LCD. Fitted with built-in N TC 10K sensor and optional humidity sensor. Several addon functions like remote sensor, key card can be chosen as per site requirements.

### **FEATURES**

- Classic button type design suitable for offices, hotels and residential buildings
- Applicable for 2-pipe FCU cooling&heating,
- Sky-blue LCD display
- Special colors casing upon request with RAL number can be provided

- Either room temperature or set-point is displayed.
- 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

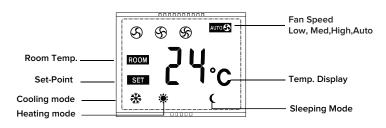
- Regular color available in Black and White body
- ◆ EC motor variants available
- Fits in 75mmx75mm electrical junction box

### **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<sup>^</sup>65°C Suitable System: 2-pipe FCU cooling&heating,
- Suitable Valve: 2-line/3-line valve Relative Humidity: 10~90%
- Installed on 75mm x 75mm box

### **LCD DISPLAY & KEYS DESCRIPTION**



Icon	Description	Icon	Description
М	Mode key	ψ	Power key
24	Fan key	Δ∇	UP/DOWN Key

## **FUNCTION**

- 2-pipe FCU cooling&heating, Simple on-off output.
- 3 Speed Fan + Auto Fan Control
- Energy Save Mode and Comfort Mode Settings
- Key Pad Lock
- Either Room Temperature or set-point is Displayed

### **ORDERING PART NUMBERS**

PART NUMBERS	OPERATING VOLTAGES	APPLICATIONS	VALVE TYPE	ADDON FUNCTIONS
TX892OF220-V2E	85-240VAC	2-PIPE	ON-OFF VALVE	EXTERNAL SENSOR
TX892OF220-V2K	85-240VAC	2-PIPE	ON-OFF VALVE	HOTEL KEYCARD
TX892OF024-V2	24VAC	2-PIPE	ON-OFF VALVE	N/A

### **ABBREVIATION**

CASING/COVER COLOR		BACKLIGHT COLOR	
BLACK	В	Sky Blue backlight + Black letters (TNLCD)	SB
WHITE	W		

\*ordering example TX892OF024-V2-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" ப்" to change the power On/Off status.	In the ON state, press UP "A" or
HEAT/COOL/VENT	FAN OPERATION	
Pressing the MODE button "M" to select heat "♠" cool "₩"	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	
TEMPERATURE DISPLAY	Gh,Gm,Gl (by pressing FAN button ** ( ). In automatic mode, the fan speed be switched upon the difference between the room temperature and set-point. When room temperature reaches set-point, valve will be closed meanwhile fan will be turned off as well.	
Noted: When pressing UP or Down button, the set-point will be displayed, When no operation (button pressed) after a few seconds, the room temperature will be display instead.		
COMFORT MODE	KEY LOCK	
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.	The default status of "Key lock" is all ke ISU mode. Key lock function includes available (Default) Mode button is loc locked out. All buttons are locked.	s the following settings: All keys are



# SETUP FUNCTION SETTINGS AND OPTIONS

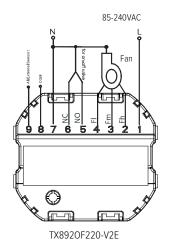
- 1 .Press " M " and " $\circlearrowleft$ " key for 5 seconds to enter ISU setting mode, the ISU code will be flashing. 2.Press " $\bigtriangleup$ " or " $\nabla$ " to select the ISU setting items from 1-10 .
- 3.Press "M" and the symbol of " $\blacksquare$  " will be displayed, press " $\Delta$ " or " $\nabla$ " to revise the values of the setting items, press "M" to confirm.

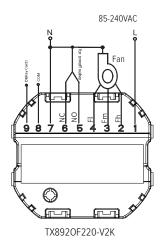
If want to revise the other setting items, please repeat above step 2 and step 3. while setting, press "U" to exit, the setting items and values as below form shown.

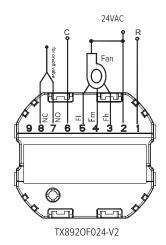
ISU CODE	DESCRIPTION	POSSIBLE OPTIONS
1	SYSTEM TYPE	0 HEAT ONLY 1 COOL ONLY 2 TWO PIPES 1H1C MANUAL(DEFAULT)
2	TEMPERATURE UNIT	F : °F C : °C(DEFAULT)
3	FAN CONTROL TYPE	AO: AUTO ONLY CO: CONSTANT ONLY BO: BOTH(DEFAULT)
4	KEYPAD LOCK OUT	<ul> <li>O: ALL KEYS ARE AVAILABLE (DEFAULT)</li> <li>1: MODE BUTTON IS LOCKED OUT, AFTER LOCKED OUT, WHEN YOU PRESSING MODE KEY, IT WILL DISPLAY "LOC"</li> <li>2: FAN AND MODE BUTTON ARE LOCKED OUT, AFTER LOCKED OUT, WHEN YOU PRESSING FAN OR MODEBUTTON, IT WILL DISPLAY"LOC"</li> <li>3: ALL BUTTONS ARE LOCKED, AFTER LOCKED OUT WHEN YOU PRESSING ANY KEYS, IT WILL DISPLAY"LOC"</li> </ul>
5	DISPLAY TEMP. ADJUSTMENT	-9°C/°F ~ + 9°C/°F
6		RESERVED FOR ADDITIONAL ISU SETTINGS.
7		RESERVED FOR ADDITIONAL ISU SETTINGS.
8	SENSOR SELECTION	IN: INTERNAL SENSOR, OU: EXTERNAL SENSOR, IF CHOOSING OU EXTERNAL SENSOR, THE ROOM CARD FUNCTION WILL NOT BE AVAILABLE (DEFAULT IN)
9	BACK-LIGHT TIME SETTING	10-90 SECONDS(DEFAULT 30 SEC., USER CAN ADJUST BACK-LIGHT TIME ACCORDING TO ACTUAL DEMANDS)
10		RESERVED FOR ADDITIONAL ISU SETTINGS.



### **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 OPEN
6	NC	VALVE CLOSE
7	N	NEUTRAL IN
8	СОМ	COM FOR EXTERNAL SENSOR
9	Al	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 KEY CARD
9	DI	KEY CARD

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	С	24V NEUTRAL
7	NO	VALVE OPEN
8	NC	VALVE CLOSE
9		

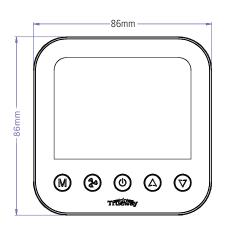
### 9 TERMINAL POWER BOX

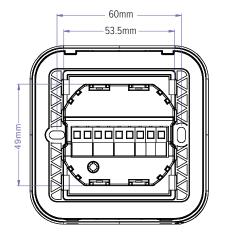
\*wiring is subject to change without notice based on addons

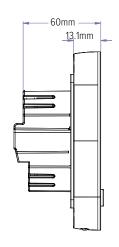
#### NOTE

- $\ensuremath{\bullet}$  The thermostat is high voltage input, please do wiring with technician.
- If the thermostat was burned by accidently, please do not wiring it again by yourself, try to check it with a professional technician or contact with our manufacturer.

### **PRODUCT DIMENSION**

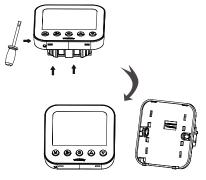




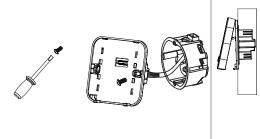




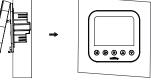
### **INSTALLATION AND COMMISSIONING**



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 contact 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 doesn't work	Check whether the fan mode is set to Auto Check whether the heating or cooling system works well or not
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 key pad 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 key pad is locked out (ISU mode item 4)



# Touch makes you Comfortable

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