Version 1.0.0(2026.06.17) WWW.CONOTEC.CO.KR

# CONOTEC

CONOTEC CO., LTD.

**DIGITAL TEMPERATURE CONTROLLER**

ISO 9001:2008

CNT-SHT2 **Instruction Manual**




- A user manual for this product is posted on the company website.
- Please download the technical document and communications manual on the company website

## 01 Safety precautions

Please read the safety precautions carefully for correct operation of the product.

※ The specifications and dimensions specified in this instruction manual may be changed without any notice for performance enhancement.

### ⚠ Warning

1. This product was not made as a safe device. Therefore, this product should be attached with dual safety devices if it is used for the control purposes (e.g. a device vulnerable to accident and property damage, etc.).
2. Do not wire, inspect or service this product while the power is being supplied.
3. You must attach this product to a panel. Otherwise, it may cause an electric shock.
4. When connecting the power, you must check the terminal number.
5. Do not ever disassemble, process, modify or repair this product.

### ⚠ Caution

1. Please make yourself familiar with all the operation instructions, safety precautions and warnings before using this product. Comply with related specifications and capacity requirements
2. Do not wire or install this product to any unit with high inductive load (e.g. motor, solenoid, etc.).
3. Use a shielded cable with a proper length when extending a sensor.
4. Do not use any part that generates an arc when used in the same power or directly switched in close proximity.
5. Keep the power cable away from a high-voltage cable and do not install this product in any place that is full of water, oil and dust.
6. Do not install this product in any place that is exposed to direct sunlight or rain.
7. Do not install this product in any place that is subject to strong magnetic power, noise, vibration or shock.
8. Keep this product away from any place that generates strong alkaline or acid substances. Use a separate pipe.
9. Do not sprinkle water onto this product for cleaning when installing it in the kitchen.
10. Do not install this product in any place where the temperature/ humidity ratings are exceeded
11. The sensor cable should not be cut or cracked..
12. Keep the sensor cable away from a signal cable, a power cable or a load cable. Use a separate pipe.
13. Keep in mind that the follow-up service will not be available if this product has been arbitrarily disassembled and modified
14. ⚠ symbol on the terminal wiring diagram indicates a safety statement that alerts a warning or caution.
15. Do not use this product near any device generating strong high-frequency noise (e.g. high-frequency welding machine high-frequency sewing machine, high-frequency radio, large-capacity SCR controller, etc.).
16. Using this product in any method other than those specified by by the manufacturer may lead an injury or a property damage
17. The product is not a toy. Keep it away from children.
18. The product should be installed only by an expert or a qualified person.
19. The company will not be liable for any damage caused by the violation of the above warnings and cautions or by a consumer's fault

### ⚠ Danger

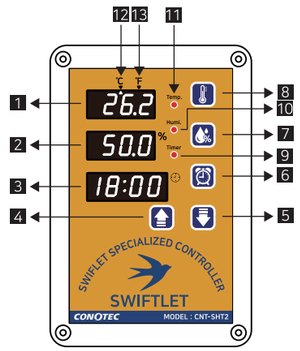
Caution: Risk of electric shock

- Electric shock - Do not touch the AC terminal while the current is flowing. It may cause an electric shock.
- You must disconnect the input power when servicing it.

## 02 Model Types

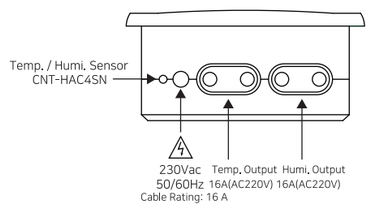
| Model | Sensor | Control method | Temp. / Humi. Range | Power | Function |
|---|---|---|---|---|---|
| CNT-SHT2 | CNT-HAC4SN | Relay Output (AC 220V)<br>1a 250VAC 16A<br>1a 250VAC 16A | Celsius Temp.: -55.0℃ to 99.9℃<br>Fahrenheit Temp.: -60℉ to 200℉<br>Humidity: 10.0% to 95.0% RH | 230 VAC<br>50/60 Hz, 3 VA<br>Cable Rating: 16 A | Temp. Control<br>Humi. Control<br>Timer Control |

## 03 Components




1 Temp. Display 2 Humi. Display 3 Clock Display 4 Increase Key 5 Decrease Key
6 Clock Setting Key 7 Humi. Setting Key 8 Temp. Setting Key 9 Timer Operation Indicator
10 Humi. Output Indicator 11 Temp. Output Indicator 12 ℃ Indicator 13 ℉ Indicator

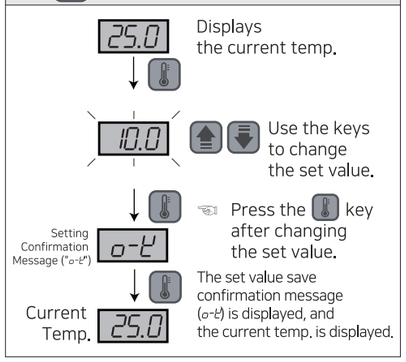
## 04 Terminal wiring diagram



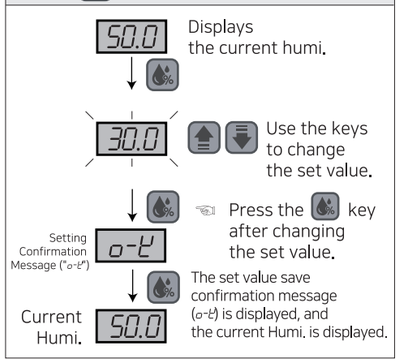

※ Caution : Since the power cable is rated at 16 A, do not connect a load exceeding the relay output rating of 16 A.
※ Using a load beyond the relay contact rating may cause contact welding, poor contact, relay damage, or other failures. Please use within the specified rating.

## 05 Setting process

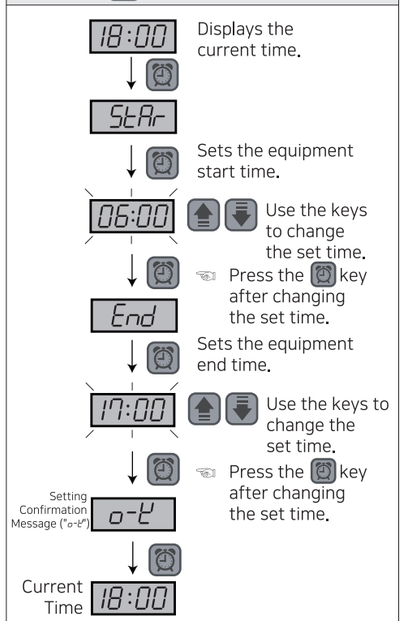
### Temperature Setting




### Humidity Setting



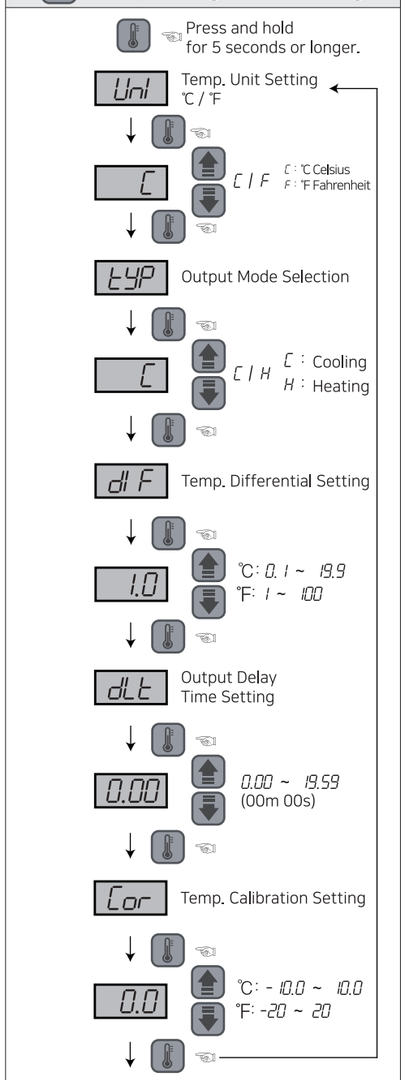

### Time Setting



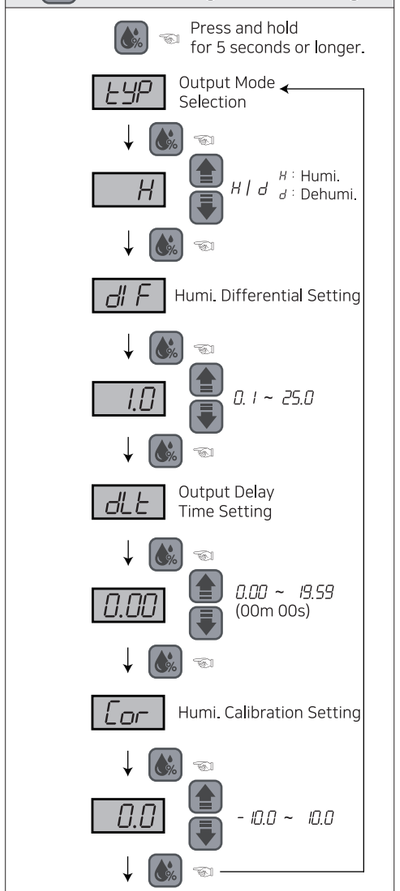

If both the (StAr) and (End) times are set to 00:00, the ON/OFF operation will function regardless of the time setting.

### ※ Program Setting (The values for each item are the factory default settings.)

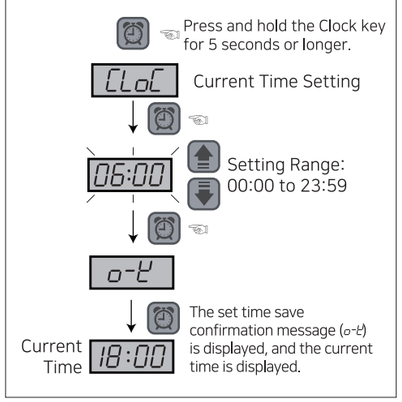
### Temp. Program Setting




### Humi. Program Setting




### Clock Adjustment



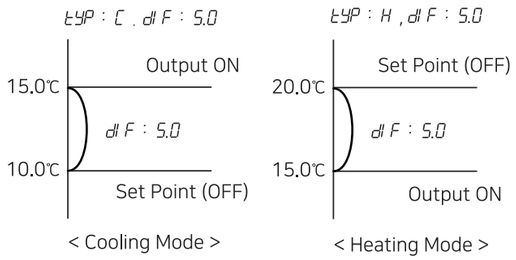
## 06 Temp. / Humi. Function Details

**Unit** : Changes the temp. display unit.
- C : Displays Celsius when °C is selected.
- F : Displays Fahrenheit when °F is selected.

※ Caution: If the unit is changed during operation, all settings except the internal Unit are reset to the factory default values. Please reconfigure all settings.

**tYP** : Output Mode Selection
- Select Cooling (C) or Heating (H).

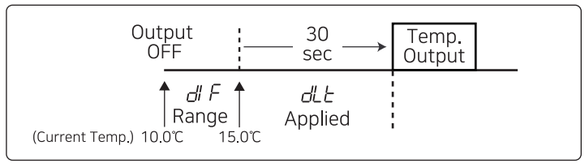
**dIF** : Temp. Differential Setting
- ON/OFF control requires a certain differential between ON and OFF
- If ON and OFF operate too frequently, the relay or output contacts may wear out quickly, or hunting (oscillation/chattering) may occur due to external noise.
- Setting the temp. differential helps prevent these problems and protects the relay contacts and other components.
- Example 1) Set Temp.: 20.0℃
- Example 2) Set Temp.: 20.0℃




< Cooling Mode > < Heating Mode >

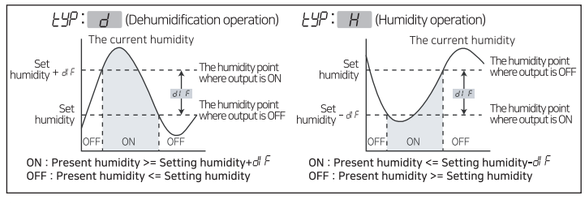
**dLt** : Output Delay Time Setting
- If ON and OFF operate too frequently, the relay or output contacts may wear out quickly, or hunting (oscillation/chattering) may occur due to external noise.
- Protects the equipment during momentary power failures or when power is restored.

Example) Set Temp.: 10.0℃, dLt: 00:30, dIF: 5.0℃
When does the output turn ON?




**Cor** : Current temperature calibration function
- There is no problem with the product itself, but if the actual humidity and the humidity displayed on the display window of the device are different, it is a function that corrects the current humidity and makes it the same as the actual humidity.
- Ex) Actual Temp.: 10.0℃ → Cor Change Cor from 0.0 to -2.0.
  Display Temp. : 12.0℃ Displayed as 10.0℃
  (Corrected Current Temp.)

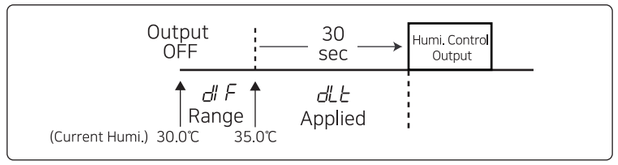
**tYP** : Output Type Settings




**dIF** : Humi. Differential Setting
- There is no problem with the product itself, but if the actual humidity and the humidity displayed on the display window of the device are different, it is a function that corrects the current humidity and makes it the same as the actual humidity.
- To prevent these problems, the ON/OFF differential is set to maintain a fixed interval between ON and OFF, helping to protect the relay contacts and extend the equipment's service life.

**dLt** : Output Delay Time Setting
- Used when frequent ON/OFF operation of the controlled equipment may cause problems (e.g., humidifiers, dehumidifiers).
- Protects the equipment during momentary power failures or when power is restored.

Example) Set Humi.: 30.0%, dLt: 00:30, dIF: 5.0%
When does the output turn ON?



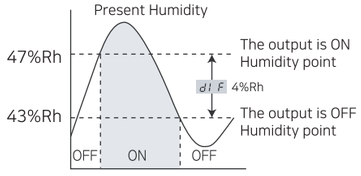

**Cor** : Current Humi. Calibration
- This function calibrates the current humi. when the displayed humi. differs from the actual humi., allowing the displayed value to match the actual humi.
- Ex) Actual Humi.: 55.0%RH → Cor If the Cor value is set to -2.0, the current humi. is displayed a s 55.0%RH.
  Displayed Humi.: 57.0%RH

※ Caution : Determine the actual humi. using calibrated equipment with verified accuracy. If calibration is performed using an actual humi. value obtained from inaccurate equipment, the product may not operate properly.

## 07 Application for humidity controller

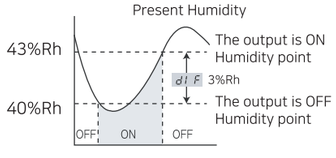
[ A Dehumidifier → turn off at 43%RH,turn on at 47%RH
How to operate(setting for the humidity&programs) ? ]

User's setting humidity changing : 43%Rh | Program setting tYP : d dIF : 4%Rh




[ A Humidifier → turn off at 43%RH,turn on at 40%RH
How to operate(setting for the humidity&programs) ? ]

User's setting humidity changing : 43%Rh | Program setting tYP : H dIF : 3%Rh




## 08 Time Function Details

**StAr** : Sets the equipment start time.
- Indicates the equipment start time and sets the controller operating time.

**End** : Sets the equipment end time.
- Indicates the equipment end time and sets the controller stop time.

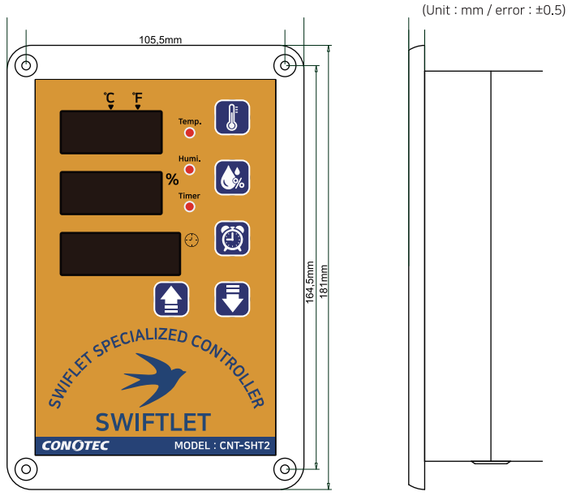
Example) The equipment operates from 06:00 to 18:00.
Setting Method: Set the StAr time to 06:00 and the End time to 18:00.

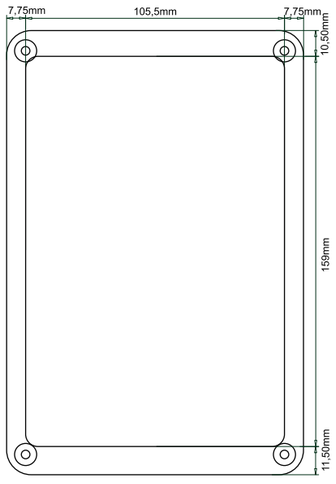
**CLoC** : Current Time Setting
- Sets the current time of the product. The equipment turns ON/OFF based on the current time.

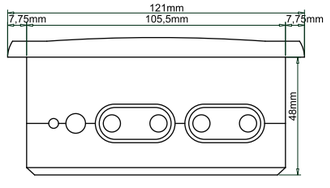
If both the (StAr) and (End) times are set to 00:00, the ON/OFF operation will function regardless of the time setting.

## 09 Diemension and panel hole sizes

(Unit : mm / error : ±0.5)






Secure the controller with screws, then attach the cap.

## 10 Easy error diagnosis instructions

※ If an error is displayed while the product is running

- **Err** : It is case where the product was subject to a strong external noise and internal data memories have been damaged
  In this case, contact us for product service.
  Although this controller was designed to withstand a certain level of external noise, it is not supposed to withstand all levels of noise.
  If the product is subject to a noise greater than 2KV, it could be internally damaged.
- If **o-E** (open error) or **S-E** (short error) is displayed, there is something wrong with a sensor. Please check the sensor.
- **o-K** If "o-k" (O-K) is displayed, the settings have been saved successfully.
- **LoCt** If "LoCt" (Lock) is displayed, the product is in the locked state.
- **H20** If "H2O" (Product Name) is displayed, it indicates the product model name.

※ The above specifications may be changed without any notice for performance enhancement. Please make yourself fully familiar with and follow the above precautions.

■ Warranty period: One year from the date of purchase

■ Address : (Street address) 56, Ballyongsandan 1-rp, Jangan-eup, Gijang-gun, Busan, ROK
(Land-lot address) 901-1, Ballyong-ri, Jangan-eup, Gijang-gun, Busan, ROK (46034)


- Product service : 070-7815-8289
- Customer service : 051-819-0425 ~ 0427
- FAX : 051-819-4562
- Email : overseas-sales@conotec.co.kr
- SNS : Facebook, Instagram, Twitter, YouTube ▶ 'Search for '**Conotec**'
- Website : www.conotec.co.kr


◈ **Installation precautions**

■ This device sholuld be connected to a protective earth terminal and a power supply in order to prevent an electric shock.

■ Do not block the air outlet.

◈ **Operation precautions**

※ An operating environment of this device is as follows.

■ Ambient temperature : 0 ~ 60℃ ■ Ambient humidity : 80%RH or less
■ Indoor uses only ■ Pollution class 2
■ Altitude under 2000m ■ Installation category : II

■ This device should be laid out in a way that its power cord is easy to handle.

■ Using this product in any method other than those specified by the manufacturer may damage its protection function

■ **Major products and development**

- Temperature/humidity controller
- Counter and timer controller
- Current and voltage panel meter
- Temperature/humidity indicator
- Oven controller
- CO2 controller
- PID controller
- Unit cooler controller
- Heat pump controller
- Chiller controller
- Thermo-hygrostat controller
- Short message alarm
- Temperature/ humidity transmitter
- Smartphone app and monitoring system

※ This manual was prepared in the Naver Nanum fonts.