

CONOTEC[®] Digital Temperature Controller

CONOTEC CO., LTD.

www.conotec.co.kr

Digital Temperature Controller



FOX-1004



FOX-E1004



FOX-S1004

※ Thank you for selecting our products. Please read carefully this instruction to reduce any damages or operation mistakes.

3. Simple terminology

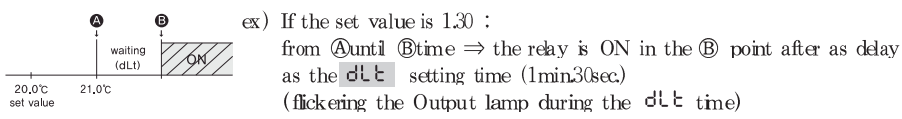
TYP : Selection of the Cooling(C) & Heating(H)

dIF : Setting for Temperature deviation

- In the ON/OFF control, it needs at regular interval between ON and OFF.
- By operating the ON/OFF control frequently, the relay or its output contact can be damaged quickly and it also occurs the hunting(oscillating, chattering) by virtue of external noise. You can make use of the temperature deviation in order to protect its relay or contact and so on.

dLT : Delay time of the output

- It is widely used as the followings
- in case of operating the ON/OFF control very often,
- to protect the operation machinery when re-input of the power supply or momentary stoppage of power supply

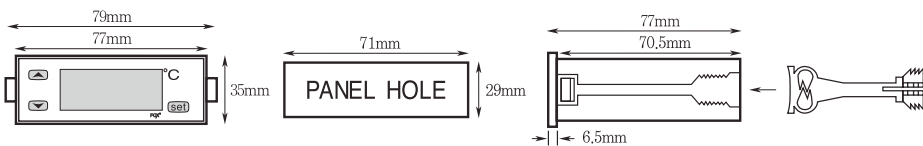


Cor : Correction function of the present temperature

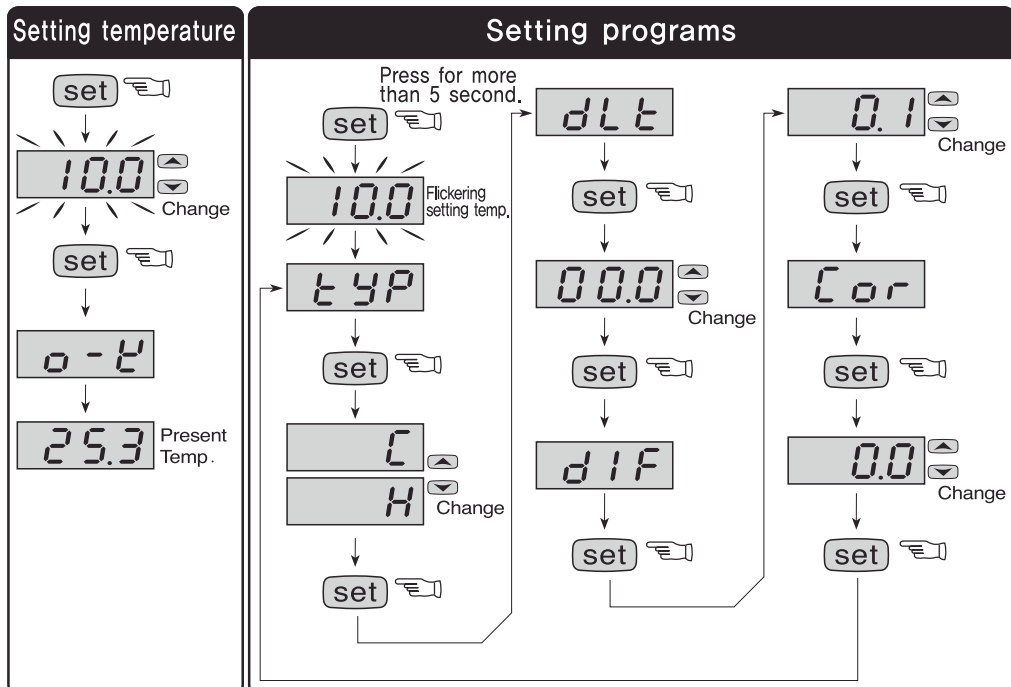
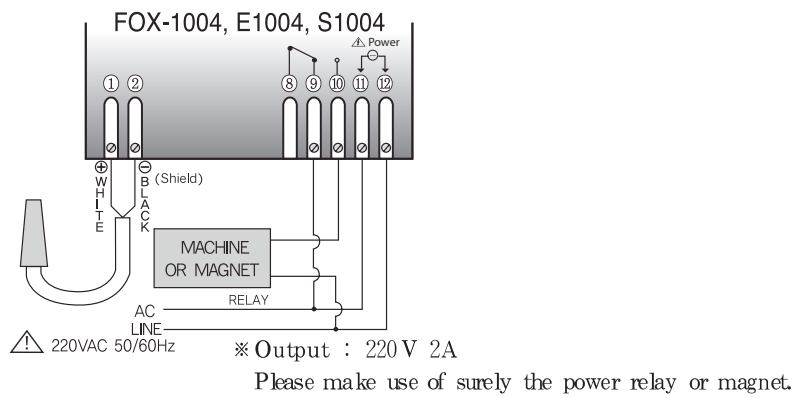
- Correction function for a discrepancy between the present's display value and the actual value(accurate value)

ex) An actual temperature value 10.0°C only, but the present temperature's display value was 12.0°C
⇒ You may use this function and can correct the display's temperature value by -2.0°C

4. Dimension



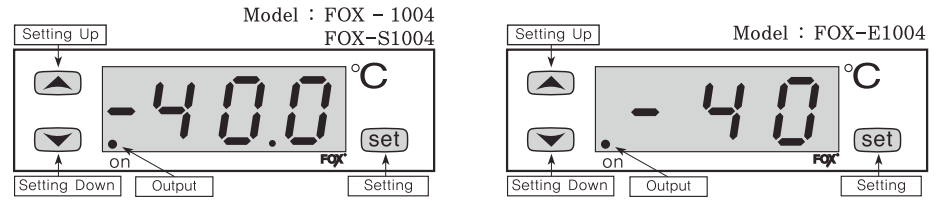
5. Connection



Operating Manual

MODEL	TEMP. RANGE	SENSOR TYPE
FOX-1004	-40.0°C ~ +90.0°C	Diode
FOX-E1004	-40°C ~ +90°C	Diode
FOX-S1004	-40.0°C ~ +90.0°C	Diode

1. Part name



FOX1004, FOX-E1004 : use both Cool & Heat
FOX-S1004 : only Cool

2. Setting temperature & programs

• Setting temperature

The present temperature shall be displayed after power supply. If (set) key is pressed softly, 10.0 will be flicked. Press (▲) (▼) key to change the setting value. If (set) key is pressed again, (o - t) letter shall be showed and the setting temperature value shall be saved and the present temperature shall be displayed.

• Setting programs

If (set) key is pressed for more than 5 second, the program mode will be proceeded as following sequences : TYP->DLT->DIF->COR (refer to left side : setting program)

The setting value of each mode should be changed by pressing (▲) (▼) key and then press (set) key to move to next mode.

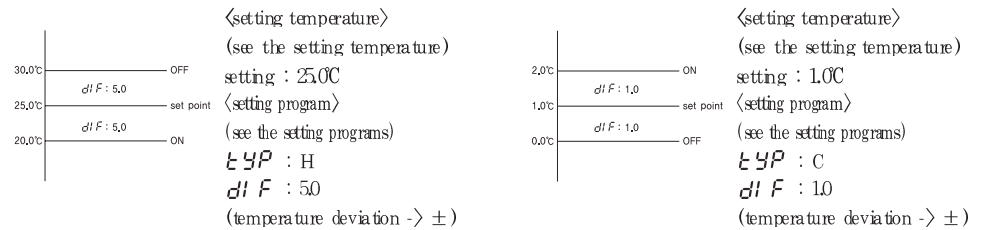
The set or programming mode is terminated, if you press the (set) key for more than 2 second, parameters(set values) are saved after displaying (o - t) letter or return to the present temperature automatically after 10 seconds.

Model	FOX-1004	Setting value when drive	FOX-S1004	Setting value when drive	FOX-E1004	Setting value when drive
TYP	Cooling/Heating	C / H	C	Cooling	×	C / H
dLT	Delay Time	0 ~ 19min, 59sec.	o	0 ~ 19min, 59sec.	o	0 ~ 19min, 59sec.
dIF	Temp. Deviation	±0.1°C ~ ±19.9°C	1.0°C	+0.1°C ~ +19.9°C	1.0°C	±1°C ~ ±19°C
Cor	Correction of Temperature	±5.0°C	0.0°C	±5.0°C	0.0°C	±5°C

※ Application of FOX-1004

Heater -> turn off at 30.0°C, turn on at 20.0°C. How to operate (setting for the temperature & programs)?

Cooler -> turn off at 0.0°C, turn on at 2.0°C. How to operate (setting for the temperature & programs)?



6. Safety and Hazard Instructions

⚠ Safety

Pls use this item after installing the duplex safety device in which is applied at dangerous factors such as serious human injury or serious damages of property & important machine because this item is not designed as safety device

⚠ Safety Instruction and Hazard Warnings

- Please read the operating manual through completely before putting the device into operation.
- We will not assume any responsibility for damage to assets or persons caused by improper handling or failure to observe the safety instructions or hazard warnings.
- For safety and licensing reasons, unauthorized conversion and/or modification of the device is not permitted.
- Do not exceed the maximum permissible current - in case of higher loads, use a contactor of adequate power. Make sure that the supplied voltage matches the values specified for the instrument.
- The device must be adequately protected from water and dust as per the application and must be accessible via the use of appropriate tools.
- The device must not be exposed to extreme temperature, sunlight, strong vibrations or high levels of humidity.
- Operation or installation is not permitted under unfavorable ambient conditions such as wetness or excessive induction loads or solenoid and dust, combustible gases, vapors or solvents, especially high-frequency noise.
- Avoid operation or installation close to high-frequency fields such as welding devices, sewing machines, wireless transmitter, radio systems, SCR controller, etc.
- Do not install the sensor cable nearby signal cable, power cable, load cable.
- Please use the shield cable when the sensor cable's lengthen, however do not make it too much longer.
- Please use the sensor cable without any cutting or flaw, blemish.
- The device is not a toy and should be kept away from children.
- Installation work must only be carried out by suitably qualified personnel who are familiar with the hazards involved and with the relevant regulations.
- You shouldn't tinker with anything or the product may not be opened or disassembled unless you know what you're doing. Please ask us about this questioning.

⚠ Danger

Attention ! Never work on electrical connections when the machine is switched on

Error message

- E r 1 Memory error. Turn the power off and turn it on again. If the error message persists, please request us A/S by return.
- G - E Sensor error. The sensor is interrupted. Check the cable.
- S - E Sensor error. The sensor is short-circuited. Check the cable.

※ This device's specification can be changed without any notification to improve its quality

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※ This device works proper operation with:
Surrounding Temp. : 0°C ~ 60°C
Surrounding Humi. : below 80%RH
Regular power : 220VAC