

Digital Temperature & Humidity Controller

FX Series

Contents

FX3H : Humidity Controller
FX3DH : Temp. and Humidity Controller
FX3D : Temp. or Humidity Controller
Sensor :
HTX20-FTS-502
HTX3515 / DPR-TH1-ET



FX Series

Digital Temperature & Humidity Controller

From now on, make it easy to control Humidity!

Economical Price , Excellent Function



It can be used for humidity control, temperature control, temperature & humidity simultaneous Control, and humidity control / temperature display according to user settings. In addition, it is possible to do control output for temperature and humidity respectively. And it has many functions like alarm, selection of dehumidification / humidification output, humidity correction and output delay.

Main Features



Easy Control & Reasonable Price



FREE VOLTAGE : AC100~240V, 50/60Hz



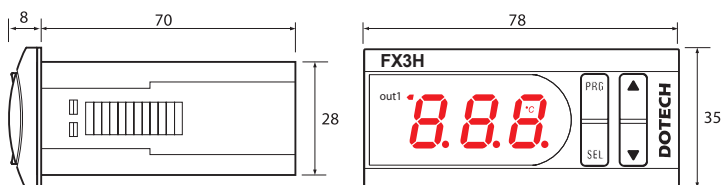
Built in RS485 Communication Function
(Modbus RTU / ASCII Protocol)



Compatibility for Various Sensors



Standardized Dimensions



Panel Cut Size
71×29mm

Use like this

☐ In case of used for humidity controller <1 Relay>

☐ In case of used for humidity controller <2 Relay>



☐ In case of used for temp. & humidity controller <2 Relay>

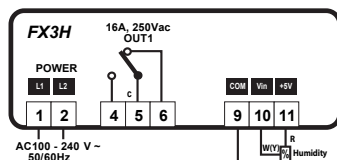
☐ In case of used for humidity controller <2 Relay>



Model for digital temp. & humidity controller

FX3H

<Exclusive model for humidity control>



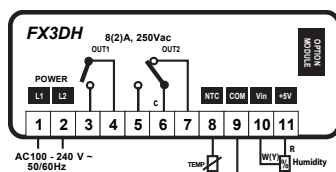
OUT1: Dehumidification/Humidification
#1 ON/OFF output
COM: Signal input common terminal
Vin: Humidity sensor input
+5V: Power Supply for humidity
sensor (5Vdc)

Humidity

Main Function	Dehumidification/Humidification output High, low limit alarm output Min. On/Off maintaining time setup Select for On, Off output at sensor error Sensor correction, Sensor error detection, Decimal Point Display
Power supply	AC100-240V~, 50/60Hz, Max 4VA
Input & Output	Relay output: 1 point (OUT1: 250Vac/16A) Humidity 1~4V, input: 1 point
Sensor Spec	HTX20-FTX-502 (Voltage output type humidity sensor), HTX3515
Details of the model	FX3H-00 (Basic model)

FX3DH

<Humidity control> <Humidity & Temp. control> <Humidity control, Temperature display>



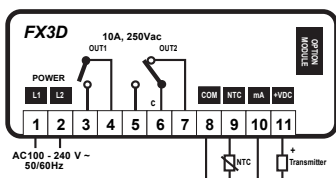
OUT1: Dehumidification/Humidification
#1 ON/OFF output
OUT2: Dehumidification/Humidification
#2 ON/OFF output
COM: Signal input common terminal
Vin: Humidity sensor input
NTC: Temperature sensor input
+5V: Power supply for humidity
sensor (5Vdc)

NTC Heating Cooling Thermometer Humidity

Main Function	Dehumidification(cooling) / Humidification (heating) output High, low limit alarm output, Min. On/Off maintaining time setup Select for On, Off output at sensor error Sensor correction, Sensor error detection, Manual control for relay output Transmission output, Communication (RS485 MODBUS)
Power supply	AC100-240V~, 50/60Hz, Max 4VA
Input & Output	Relay output: 2 points (OUT1,2: 250Vac/8(2)A) Humidity 1~4V, input: 1 point
Sensor Spec	HTX20-FTS-502 (Voltage output type humidity sensor), HTX3515
Details of the model	FX3DH-00: (Basic model) FX3DH-R4: RS485 Comm. Model (Modbus) (Comm. cable is provided basically) FX3DH-R2: RS-232 Comm. Model (Comm. cable is provided basically) FX3DH-A1: 4~20mA Transmission output Model (Connection cable is provided basically)

FX3D

<Humidity control> <Temperature control>



OUT1: Cooling / Heating
#1 ON/OFF output
OUT2: Cooling / Heating
#2 ON/OFF output
COM: Signal input common terminal
NTC: Temperature sensor input
mA: 4~20mA signal input
+VDC: Power Supply for 4~20mA
sensor (12Vdc)

NTC Heating Cooling Defrost 4~20mA RS485 Retrans Humidity

Main Function	Heating/cooling output, Independent timer output, Defrost output, precise temperature control Sensor correction, Sensor error detection Min. on/off maintaining time setup, High / Low alarm output Auto-output operation cycle setttable in case of sensor error Transmission output, RS485 communication (Modbus)
Power supply	AC100-240V~, 50/60Hz, Max 4VA
Input & Output	Relay output: 2 points (250Vac/10A) Temp. sensor input 1 point 4~20mA input 1 point (including power supply)
Sensor Spec	NTC sensor DPR-TH1, DPR-TH2
Details of the model	FX3D-00: Basic model (Including temp. sensor - DPR-TH1-ET) FX3D-R4: RS485 Comm. Model (Modbus) (Comm. cable is provided basically) FX3D-R2: RS-232 Comm. Model (Comm. cable is provided basically) FX3D-A1: 4~20mA Transmission output Model (Connection cable is provided basically)

Accessories for temperature and humidity sensor

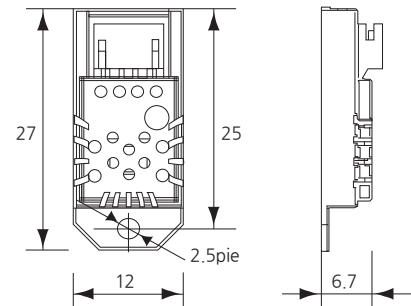
HTX3515

- Humidity sensor

- Measurement range for humidity : 0~100%RH
- Humidity output : 1~4Vdc
- Including connection cable kit – 3m
- Power Supply : 5V

▼ Cable

1	Black	Humidity sensor power supply 0V
2	Red	Humidity sensor power supply +5V
4	White	Humidity measurement signal output



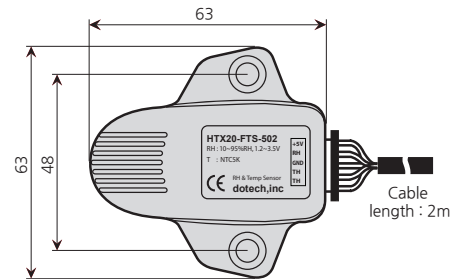
HTX20-FTS-502

- Temperature and humidity sensor

- Measurement range for humidity : 0~100%RH
- Measurement range for temperature : -10~60°C
- Humidity output : 1~4Vdc
- Temperature output : NTC5K B3324K
- Power supply : 5V

▼ Cable

Red	Humidity sensor power supply +5V
Yellow	Humidity measurement signal output
Black	Humidity sensor power supply 0V
White	Temperature sensor(NTC5K)
Blue	Temperature sensor(NTC5K)

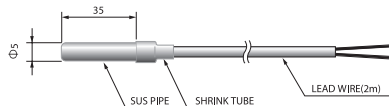


DPR-TH series

- Temperature sensor

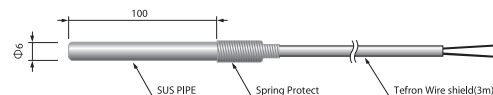
DPR-TH1-ET

- Sensor type : NTC 5K Ω
- Accuracy : $\pm 0.3^{\circ}\text{C}$ at 25°C
- Cable length : 2C $\times$ 0.5mm
- Measurement range : -50 ~ 105°C
- Sheath : $\Phi 5 \times 35\text{mm}$, SUS



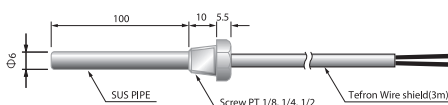
DPR-TH2-P6D100L

- Sensor type : NTC 5K Ω
- Accuracy : $\pm 1.5^{\circ}\text{C}$ at 25°C
- Protection : IP67
- Measurement range : -50~250°C
- Sheath : $\Phi 6 \times 100\text{mm}$, SUS
- Cable length : 2C $\times$ 0.5mm, sus-mesh shield tefron



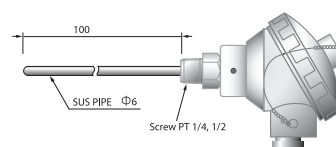
DPR-TH1-S6D100L

- Sensor type : NTC 5K Ω
- Accuracy : $\pm 0.3^{\circ}\text{C}$ at 25°C
- Protection : IP67
- Measurement range : -50 ~ 105°C
- Sheath : $\Phi 3 \times 100\text{mm}$, SUS
- Cable length : 2C $\times$ 0.5mm, sus-mesh shield tefron



DPR-TH1-H6D100L

- Sensor type : NTC 5K Ω
- Accuracy : $\pm 0.3^{\circ}\text{C}$ at 25°C
- Protection : IP67
- Measurement range : -50~105°C
- Sheath : $\Phi 6 \times 100\text{mm}$, SUS



Some contents could be changed without prenotification / Edition 02/2010