

The HDT2200 series is a humidity- or a humidity/temperature- transmitter for duct mounting



# CSHDT2200

Humidity/temperature transmitter for duct mounting

The CSHDT2200 series is a humidity-or a humidity/temperature -transmitter for duct mounting

- Supply voltage 15-29 V AC or 15-35 V DC
- Accuracy +/- 2% RH
- Output signal 0-10 V DC or 4-20 mA

#### Function

The CSHDT2200 humidity transmitter is intended for duct-mounting in HVAC-applications, swimming baths, greenhouses, stables etc.

The humidity transmitter has a capacitive thin-film element which gives a signal that is proportional to the relative humidity. The measuring signal is converted by the built-in electronics to output signals, 0 - 10 V or 4-20 mA

#### Measuring element

The transmitter has an accuracy of +/- 2%RH (0...90%RH), +/-3% RH (90... 100% RH).

The measuring element has rapid response to changes in humidity. It can withstand saturation without negative effects on the accuracy. The sensor element can be subjected to 100 %RH without being damaged and has excellent long-term stability. The element also has good durability in contaminated environments.

- IP65
- Excellent long term stability
- Resistant to contamination

#### Combination transmitter

The CSHTDT transmitter has, apart from the functions included in CSHDT, a temperature sensor, which, via the built-in electronics, gives output signals 0 - 10 V DC or 4-20 mA.

#### Supply voltage

The transmitter can be supplied by either 15-29 V AC or 15 - 35 V DC. The transmitter has automatic adaptation to the connected voltage.

Transmitters with output 4-20 mA are to be supplied with 20-35 V DC

## Models

CSHDT2200	Humidity transmitter for duct mounting, 0-10V
CSHDT2200-420	Humidity transmitter for duct mounting, 4-20mA
CSHTDT2200	Humidity and temperature transmitter for duct mounting, 0-10V
CSHTDT2200-420	Humidity and temperature transmitter for duct mounting, 4-20mA

## Technical data

Supply voltage	15-29 V AC +/-20% and 15-35 V DC (versions with 4-20 mA output: 20-35 V DC)
Current consumption	15 mA (0-10 V versions)
Output charge	Max 1 mA (0-10 V) , >500 Ω (4-20 mA)
Ambient temperature electronic	-20...+50 C°
Ambient temperature sensor	-20...+80 C°
Cabel connection	Screw terminals max 1,5mm
Protection class	IP65
<b>CE</b>	These products conform with the requirements of European EMC standards CENELEC EN 50081-1 and EN 50082-1 and carry the CE mark.

### Humidity.

Sensor element	Capacitive thin-film element The sensor element can be subjected to 100 %RH without being damaged.
Working range	0...100 %RH
Accuracy at 20° C	+/-2 % RH (0...90% RH), +/-3% RH (90...100%RH)
Hysteresis 10% - 80% - 10%	<2% RH
Temperature dependance	Typical - 0,05% RH/° C at 60% RH
Outputs	0 - 10 V DC <1,0mA, 4-20 mA <500 Ohm for 0...100% RH
Sensor protection	Membrane filter, sintered brass on request

Temperature (only HTDT2200 and HTDT2200-420)	
Sensor element	KF6544 Class DIN A IEC 751
Working range	-20...+80 C°
Output signals	0 - 10 V DC or 4-20 mA for -20...+80° C
Accuracy at 20°C	+/- 0,2°C
Temperature dependence	<+/- 0,03°C / °C (for the electronic circuitry)

All other technical details as above.

## Wiring and dimensions

### CSHDT2200

1	Supply voltage
2	System neutral
3	Output humidity 0-10 V DC

### CSHDT2200-420

1	Supply voltage
2	Output humidity 4-20mA

### CSHTDT2200

1	Supply voltage
2	System neutral
3	Output humidity 0-10 V DC
4	Output temperature 0-10 V DC

### CSHTDT2200-420

1	Supply voltage
2	Output humidity 4-20mA
3	Output temperature 4-20mA

