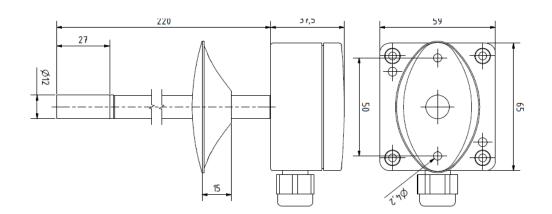
# **Technical Drawing**



# **Type Selection**

Article No.	Output Temp.	<b>Output Humidity</b>	Display
D-HTT-A-1010	0-10V	0-10V	no
D-HTT-A-2020	4-20mA	4-20mA	no
D-HTT-A-10PT1000	passiv	0-10V	no
D-HTT-A-1010D	0-10V	0-10V	yes
D-HTT-A-2020D	4-20mA	4-20mA	yes
D-HTT-A-10PT1000D	Passiv	0-10V	yes

# **DDCtech**

°C Temperatur % Feuchte CO<sup>2</sup>Luftqualität Pa Druck



### Application

Device for measuring the relative humidity/temperature in ducts or indoor areas subject to high requirements. The measuring transducer records the temperature and humidity via an internal sensor and coverts the value into a standardized analogue output signal in the range between 0-10V/4-20 mA. Optional with display.

# **Accessoires (optional)**



Plastic-Filter

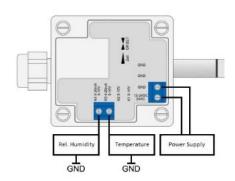
## **Technical Data**

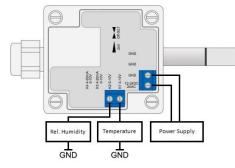
Power supply at 0-10 V:	1636 V / DC, 12-24 V / AC
Power supply at 420mA:	1636 V / DC
Sensor element humidity:	capacitive Sensor
Sensor element temperature:	capacitive Sensor
Sensor element temperature with passive sensor:	According to customer
Measuring range humidity:	0100% r. h.
Output humidity:	010V or 420mA
Tolerance humidity at 35%70% r. h.:	± 2% (2590% r. h.)
Measuring range temperature:	0°C +50°C
Output temperature active:	010V or 420mA
Tolerane temperature:	± 0,5K
Analog output load 0-10V:	10100 kOhm
Analog output load 420mA:	3001000 Ohm
Operating temperature:	-30°C +50°C
Operating humidity:	098% r. h.
Response time r. h.:	8 sec. (63% dew)
Connection:	Screw-In terminals 1,5 mm <sup>2</sup>
Casing:	Material ABS, color RAL9010
Measuring range dew point:	-50°C to +100°C
Measruing range absolut humidty:	0-30g/m³
Power supply at 0-10 V:	1636 V / DC, 12-24 V / AC
Power supply at 420mA:	1636 V / DC
Case Size (L x B x H):	65 x 60 x 38 mm
Dew Point range:	-50°C bis 100°C

## **Electrical Connection**

# 4-20mA







Important: parallel operation with the 24VAC -phase connection is required otherwise a short circuit may occur. The units are designed to operate at low voltage protection. When connecting the equipment , the technical data apply . Data acc. To data sheet. Especially with passive sensors (eg PT100, ... ) in two-wire version, the wire resistance of the lead is taken into account. Maybe it has to be corrected in the evaluation electronics . Due to the self-heating of the wire current affects the accuracy of the measurement . Therefore, this should not be chosen larger than 1mA .

#### Notes:

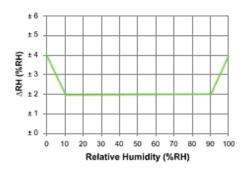
The sensor is designed only for normal ambient conditions (room air), aggressive gases can destroy him. The installation has a decisive effect on the measurement accuracy. Window (cold outer wall) or door close (draft) should be avoided.

# **DDCtech**

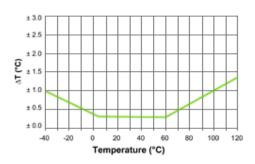
# °C Temperatur % Feuchte CO<sup>2</sup>Luftqualität Pa Druck

# **Accurancy**

#### Relative Feuchte



#### Temperatur



### **DIP-Switch**



Relative Humidity (0-100%):

DIP 1 = Off

DIP 2 = Off



Absolute Humidity (0-30g/m³):

DIP 1 = Off

DIP 2 = On



Dew Point (-50°C bis 100°C):

DIP 1 = On

DIP 2 = Off

# **General Information**

- Installation of the equipment must be performed by qualified personnel.
- The units may be connected with the power off .
- The safety of the VDE, the states , the TÜV and the local energy supply company must be observed.
- The EMC guidelines must be observed . It can be used shielded connecting lines, laying parallel with current-carrying
- Lines should be avoided
- The operating near devices that do not comply with EMC directives may adversely affect the operation of
- The buyer is responsible for ensuring compliance with the applicable building and safety guidelines
- This product should not be used for safety-related tasks , such as for the protection of persons and emergency stop switch on equipment
- Improper use of any defects and damages are excluded from the warranty and liability .
- Consequential damages caused by a fault in this device are excluded from warranty or liability.
- It Only the technical data and connecting conditions of installation and operating instructions supplied with the instrument. Changes are always possible in terms of technical progress and the improvement of the products.
- Changes of the device by the user, all warranty claims .