Humidity transmitter

SPECIFICATIONS
testo 6621

Wall version with display

Duct version with display

A broad variety of the testo 6621 transmitter is available. Depending on the application in a room or in a duct, the corresponding designs can be selected. A display and an external probe are available as options. You can choose between the housing colours grey and white. The testo 6621 is persuasive in technical terms thanks to the patented humidity sensors that guarantee the highest accuracy. The sensors and the analog outputs can be adjusted, analyzed and parameterized via the external interface using the P2A software.

The testo 6621 is a high-performance transmitter for a low price. It meets the increasing requirements in automated building services in terms of accuracy, reliability and safety and thereby saves energy costs.

Areas of application:

• Industrial and commercial buildings, e.g. production and storage

• Offices and administrational buildings

• Sales areas and exhibition halls

• Museums and libraries

• School buildings, hotels, clinics etc.

PERFORMANCE FEATURES
testo 6621

● Highly accurate testo humidity sensor with long-term stability (±2.5% RH)

● Optional 2-line LCD display

● Time-saving commissioning and maintenance by means of external interface and testo P2A software

● Parameterizing, adjusting and analyzing software (P2A) for setting up, adjusting and analyzing the transmitter

● Optimum calibration concept by means of adjustment of the entire signal chain

● Adjustment without dismantling the transmitter

● 2 analog outputs (humidity/temperature), option of 1 passive humidity and temperature analog output

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Humidity transmitter

Technical data

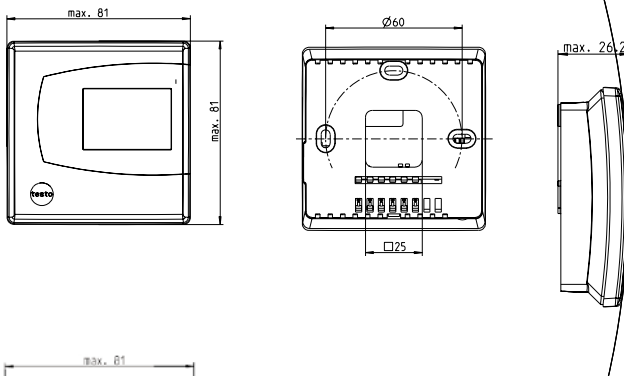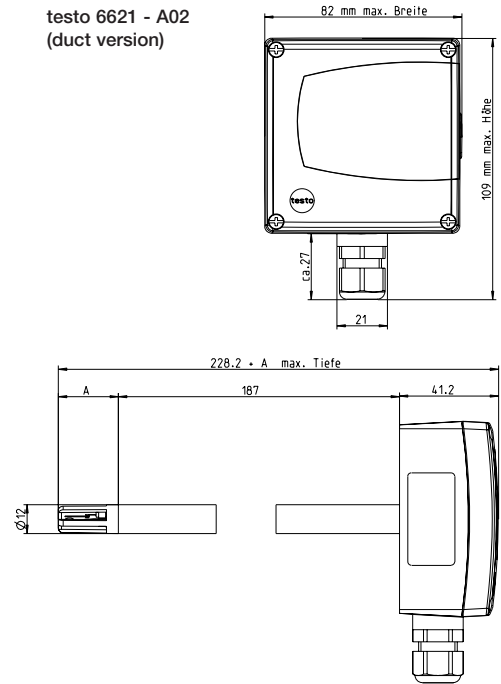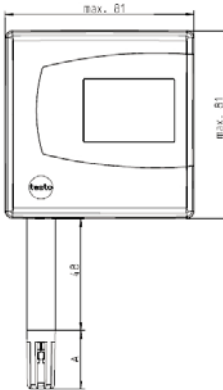|	testo 6621 - A01/A03 (wall version)	testo 6621 - A02 (duct version)
Parameters		
Humidity		
Meas. range	0 to 100% RH (> 90% RH only briefly) (not for high humidity processes)	
Accuracy	±2.5% RH (0 to 90% RH), ±4.0% RH (> 90% RH)	
Temperature dependency/coefficient	Temperature coefficient: 0.05%/K (gap of 25 °C/77 °F)	
Sensor	Testo humidity sensor	
Replaceability of sensor	Through Testo Service	Can be done by customer (s. below, Replacement sensors), subsequent 2-point adjustment required
Temperature		
Meas. range	0 to +60 °C (+32 to +140 °F)	-20 to +70 °C (-4 to +158 °F)
Accuracy	±0.5 °C/0.9 °F	
Sensor	Active signal output: NTC Passive signal output: NI1000	

Inputs and outputs		
Analog outputs		
Number of channels	2 channels (humidity and temperature)	
Output type	4 to 20 mA (2-wire) 0 to 1/5/10 V (4-wire)	
Meas. cycle	1/sec	
Accuracy of analog outputs	4 to 20 mA ±0.05 mA 0 to 1 V ±2.5 mV 0 to 5 V ±12.5 mV 0 to 10 V ±25 mV	
Supply		
Voltage supply	20 to 30 V AC/DC	
Current consumption		
Outlet	Supply voltage [V]	Current consumption [mA]
2-wire current 4 to 20 mA	20	20
	24	20
	30	30
4-wire voltage 0 to 10 V	24	7
	30	7
	20	20
	24	22
	30	28

Operating conditions		
Electronics temperature (housing) (with/without display)	0 to +60 °C/32 to +140 °F (A01/A03), With display: 0 to +50 °C/+32 to +122 °F; -20 to +70 °C/-4 to +158 °F (A02), With display: 0 to +50 °C/+32 to +122 °F;	
Storage temperature	-40 to +70 °C (-40 to +176 °F)	
Measuring medium	Air in air-conditioning systems or air-conditioned rooms	

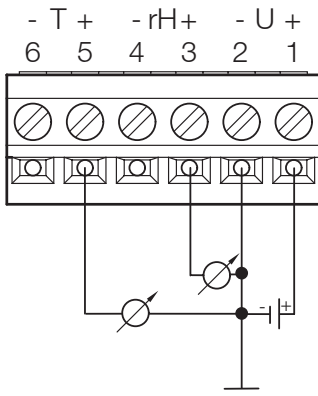|	testo 6621 - A01/A03 (wall version)	testo 6621 - A02 (duct version)
General		
Housing		
Material/colour	ABS/ pure white (RAL 9010) or light grey	
Dimensions	81 x 81 x 26 mm	81 x 81 x 42 mm, see drawing for probe
Weight	80 g/90 g (A03)	160 g
Display		
Display	2-line LCD (optional)	
Resolution	Humidity: 0.1% RH Temperature: 0.1 °C/°F	
Operation		
Parameterization	P2A software	
Assembly		
Cable screw connection	None (cable routed through rear wall opening or break-out opening on bottom)	1 x M16 x 1.5
Miscellaneous		
Protection class	IP 30	IP 65
EMC	According to EC directive 2004/108/EEC	
Interfaces	1x mini-DIN for connecting reference measuring instrument/PC	
Response time	t90: < 15 s at 2 m/s; When calibrating, make note of adjustment: The response time may be considerably higher in stagnant air	
Scaling range	-50 to 100 °C/-58 to 212 °F, -50 to 100 % RH	

Subject to misprints and change, including technical changes.

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Humidity transmitter

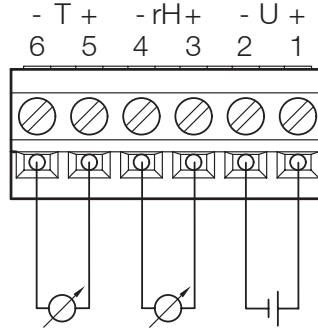## Technical drawings

testo 6621 - A01
(wall version)

testo 6621 - A02
(duct version)

testo 6621 - A03
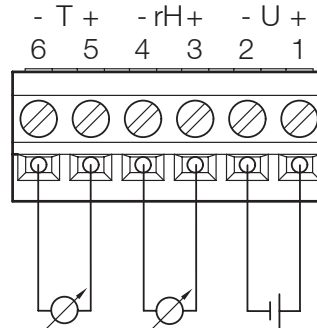**(wall version)**

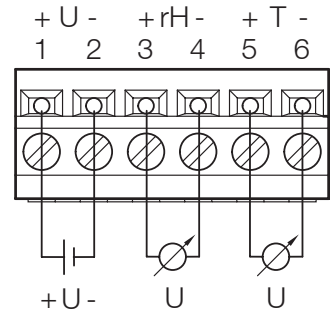
Pin assignment

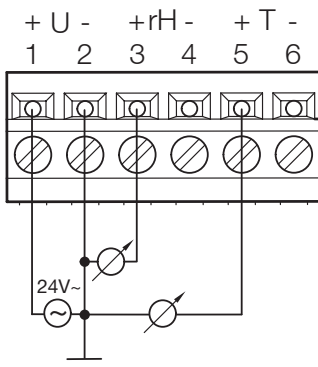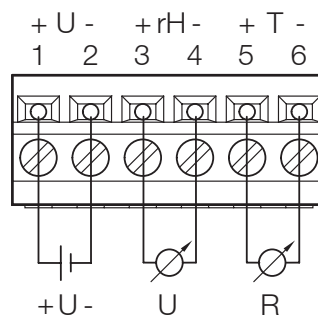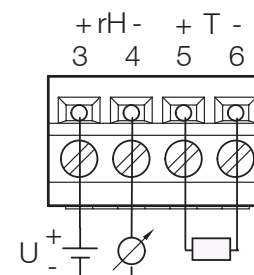A01 Wiring, 3-wire
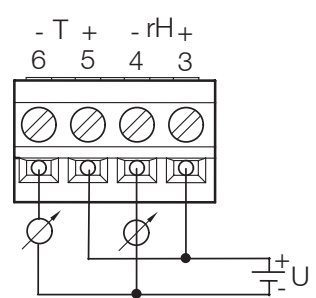

A01 Wiring, active/passive

A01 Wiring

A02 Wiring

A02 Wiring, 3-wire

A02 Wiring, active/passive

A02 Wiring, active/passive

A03 Wiring

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Humidity transmitter

The following options can be specified for the testo 6621:

AXX	Version
BXX	Analog output/supply
CXX	Display
FXX	Humidity parameter
GXX	Temperature variable
EXX	Housing colour
MXX	Protective filter
KXX	Language of the instruction manual (for bilingual paper instruction manual)

AXX Version

A01 Wall version (not with B01, B05)
A02 Duct version
A03 Wall version with external probe for 4 to 20 mA analog output (only with B01)

BXX Analog output/supply

2 analog outputs (humidity/temperature)
B01 4 to 20 mA (2-wire, 24 V DC)
B02 0 to 1 V (4-wire, 24 V AC/DC)
B03 0 to 5 V (4-wire, 24 V AC/DC)
B04 0 to 10 V (4-wire, 24 V AC/DC)
Humidity: Analog output, temperature: passive, Ni1000
B05 4 to 20 mA (2-wire, 24 V DC)
B06 0 to 1 V (4-wire, 24 V AC/DC)
B07 0 to 5 V (4-wire, 24 V AC/DC)
B08 0 to 10 V (4-wire, 24 V AC/DC)

CXX Display

C00 Without display
C01 With display

FXX Humidity parameter

F01 Relative humidity (% RH)

GXX Temperature variable
only for B01 to B04

G02 Temperature (°C)
G03 Temperature (°F)

EXX Housing colour

E01 Housing colour light grey, with testo logo (in colour)
E02 Neutral housing, pure white, without testo logo
E03 Neutral housing, pure white, with testo logo (black-and-white)

MXX Protective filter
not for A01

M01 Stainless steel sintered filter
M02 Metal wire protection cap
M03 Sintered Teflon filter
M04 Open metal protection cap
M05 ABS plastic cap (open)

KXX Language of the instruction manual (for bilingual paper instruction manual)

K01 German/English instruction manual
K02 French/English instruction manual
K03 Spanish/English instruction manual
K04 Italian/English instruction manual
K05 Dutch/English instruction manual
K06 Japanese/English instruction manual
K07 Chinese/English instruction manual

Example:

Order code for testo 6621 transmitter with the following options:

- Duct version
- 0 to 5 V (4-wire, 24 V AC/DC) 2 analog outputs (humidity/temperature)
- Without display
- Relative humidity parameter (% RH)
- Temperature parameter (°C)
- Neutral housing, pure white, without testo logo
- Metal wire protection cap
- Language of instruction manual German/English

0555 6621 A02 B03 C00 F01 G02 E01 M02 K01

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