

- Temperature range from -40 °C to 125 °C
- 0 ... 100 %RH measurement
- 4-20 mA analog current output
- Remote stainless-steel probe
- Sintered porous metal filter
- Harsh environment applications



THT125 measures temperature and relative humidity and transmits them as 4-20 mA current output. Remote stainless-steel probe with 1-meter cable includes a sintered porous metal filter to protect the sensor against dust, lint and other contaminants. A removable flange is also supplied for duct mounting. THT125 can be used in standard environments for condition-monitoring and HVAC applications or harsh environments such as textile batch dryers.

TEMPERATURE

Measuring range	-40 ... 125 °C
Accuracy	± 0.2 °C (typical) ± 0.5 °C (max)
Repeatability	0.1 °C

RELATIVE HUMIDITY

Measuring range	0 ... 100 %RH
Accuracy	± 2 %RH (typical) ± 2.5 %RH (max)
Repeatability	0.2 %RH

ANALOG OUTPUTS

Resolution	12-bit
Temperature, Relative humidity	4 - 20 mA
Accuracy	± 0.1%
Sampling time	500 ms
Maximum load impedance	600 Ω

GENERAL

Ambient temperature	0 °C ... +55 °C
Storage temperature	-25 °C ... +85 °C
Enclosure protection rating	IEC 60529, IP65
Electromagnetic compatibility	IEC 61326-1, Class B
Weight (including probe)	450 gr
Environmental testing	IEC 60068-2

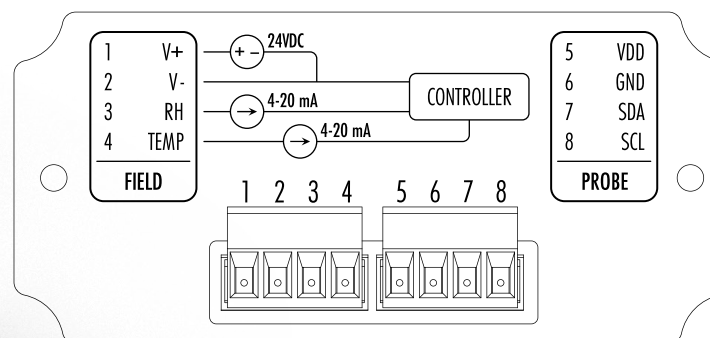
POWER

Supply	18 ... 30 VDC
Maximum power consumption	1.2W @24VDC
Reverse polarity protection	Yes

Maintenance

- Especially in harsh environments, probe filter should be checked regularly. If it is dirty, change it with a new one. A clogged filter limits the air transfer resulting to misleading measurements.
- If the connection between the transmitter and the probe is lost, analog output is set to 3 mA as a fault indicator. Check the connection or replace the sensor.

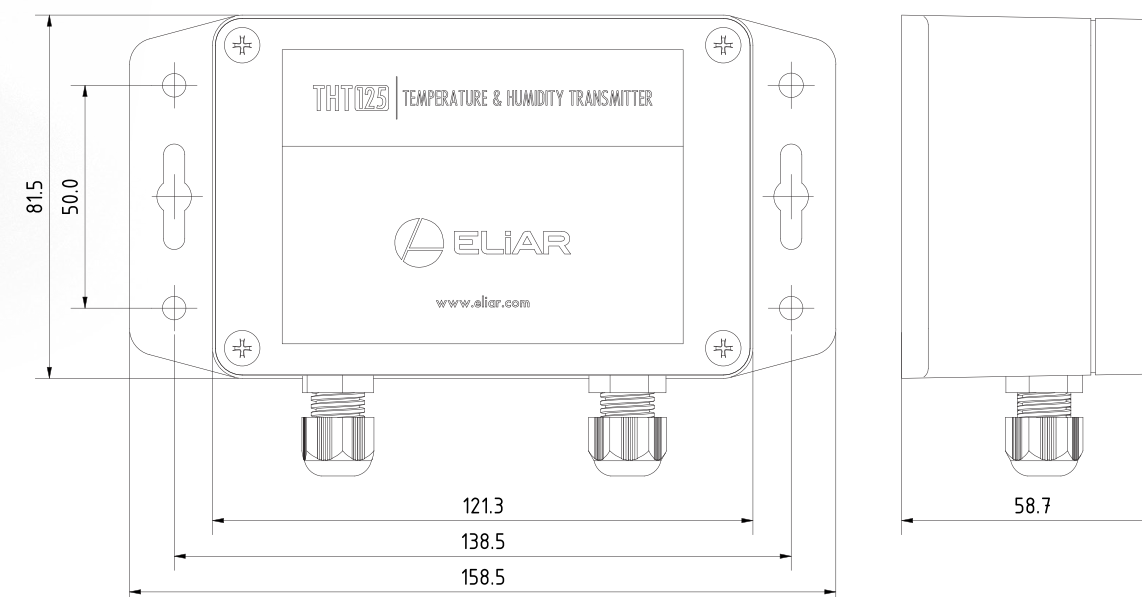
CONNECTION DIAGRAM



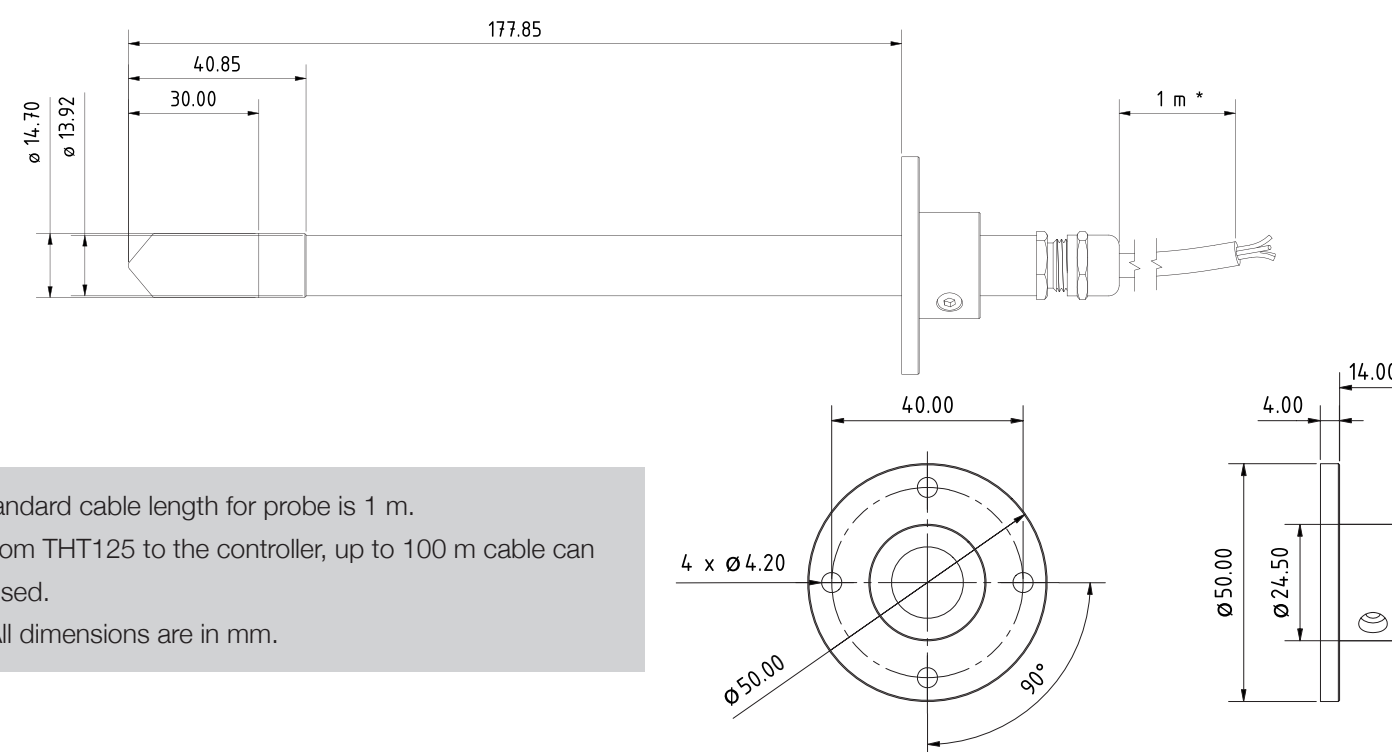
! Attention

The shield of the probe cable should be connected to the GND (pin 6) of the probe connector.

ENCLOSURE



PROBE & MOUNTING



* Standard cable length for probe is 1 m.

** From THT125 to the controller, up to 100 m cable can be used.

*** All dimensions are in mm.