

TRHU ATEX2

Atex Humidity & Temperature Sensor

Ref : 3450

Rev : C



DESCRIPTION

With "ATEX" certificate for areas at risk of gas explosion or with flammable dust.

For applications with atmospheric conditions.



Humidity / Temperature Sensors in this series are designed to measure relative humidity alone or temperature, or relative humidity and temperature in air and other non-aggressive gases, in explosive areas as well as in areas with combustible dust.

The sensors consist of a probe part with sintered filter (both stainless steel) on a robust die-cast aluminum housing (converter part). For humidity sensors and temperature sensors, connection to non-intrinsically safe circuits is carried out by a single-channel transmitter power supply. For combined temperature/humidity sensors, the connection is made either by a dual-channel transmitter power supply or by two single-channel transmitter power supplies with galvanic separation between input/output circuit and supply voltage.

MESUREX is a sensor manufacturer, we can adapt most sensors according to your needs. Please [contact us](#).

TECHNICAL CHARACTERISTICS

Output 1: relative humidity	
Measuring range 1	0...100%hr
Output signal	4...20 mA
Precision (PM 5...95%hr à 10...40 °C)	±2%hr
at T<10 °C; T>40°C	0,1%/K more
Output 2: temperature	
Probe (under DIN IEC 751)	Pt 100 B class
Measuring range 2	-20...+80 °C
Output signal	4...20 mA
(Special models with special measuring range on request)	
Precision à 23°C	±0,2 K
Other ranges	±0,3 K
at T<10°C, T>40°C	±0,007 K/K more
Storage temperature	-40...+80°C
Admissible operating temperature	-40...+80°C
Maximum surface temperature of the housing	95°C
Operating voltage the sensor	13...24V CC (intrinsic)
Maximum input voltage	24V CC
maximum input current	100 mA
Maximum input power	780 mW
Maximum internal capacity	Negligible
Maximum internal inductance	Negligible
Protection index	IP 65
Class II electrical equipment by housing protection	
Housing material:	
Probe part	Inox
Converter part	alu die-casting
Cable connection M16 x 1,5	
Clamping area	3...7 mm
Initial starting torque (for recommended cable type)	4,0 Nm
Cable between sensor and transmitter power supply	Clipped
Recommended type	NF14
Maximum conductor length	200 m
Maximum cable capacity	20nF/100 m
End of the conductor	plastic ring lug

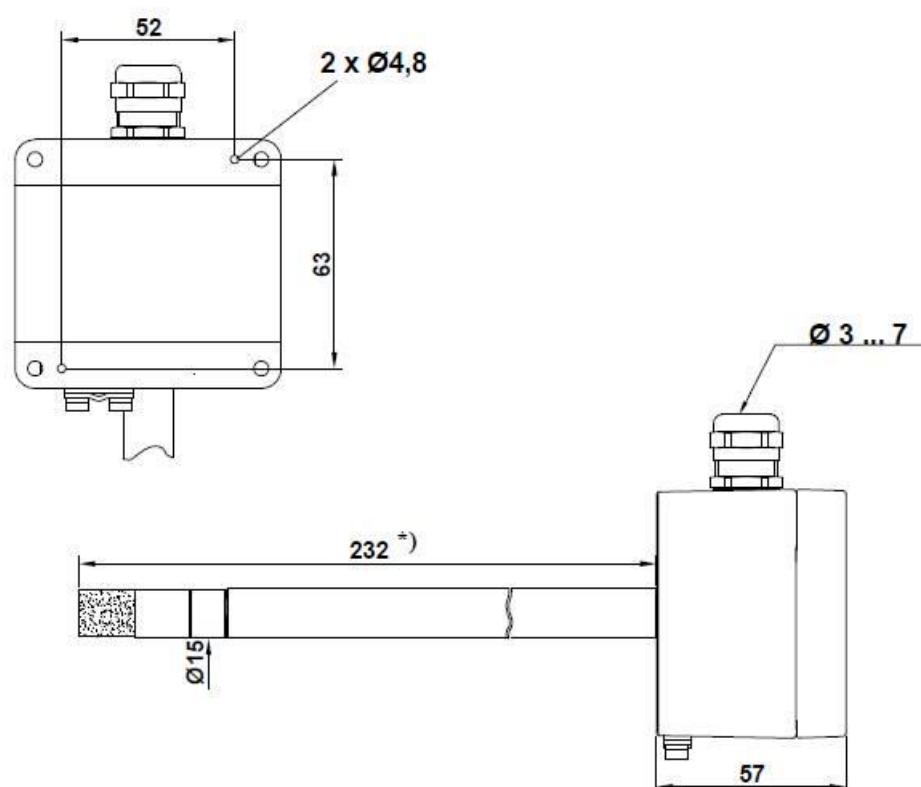
 II 1/2G Ex ia IIC T4
 II 2D Ex tb IIIC T95°C
 -40°C ≤ T_a ≤ +80°C

Homologation pour utilisation en zones explosibles:

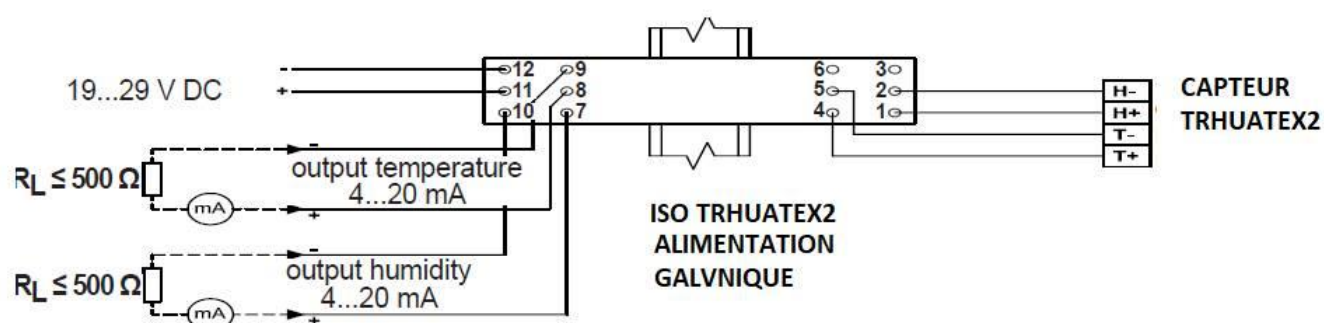
Certificat d'essai CE de type
IBEXU 07 ATEX 1114

Conformité aux normes européennes
 Directive sur la protection contre les explosions 2014/34/EU
 Exigences générales EN 60079-0:2012
 Sécurité intrinsèque „i“ EN 60079-11:2012
 Appareils de classe 1G EN 60079-26:2007
 Protection du matériel contre les poussières
 par enveloppe „t“ EN 60079-31:2014
 Directive compatibilité électromagnétique 2014/30/EU
 Exigences générales EN 61326-1:2013
 Exigences spéciales EN 61326-2-3:2013

DIMENSIONS



CONNECTION WITH INSULATED POWER SUPPLY



CONTACT

MESUREX

13 Rue des Corroyés
78730 Saint Arnoult en Yvelines (France)

Tel : +33 (0) 1 30 41 23 62

Mail : mesurex@mesurex.fr

Web : www.mesurex.fr