

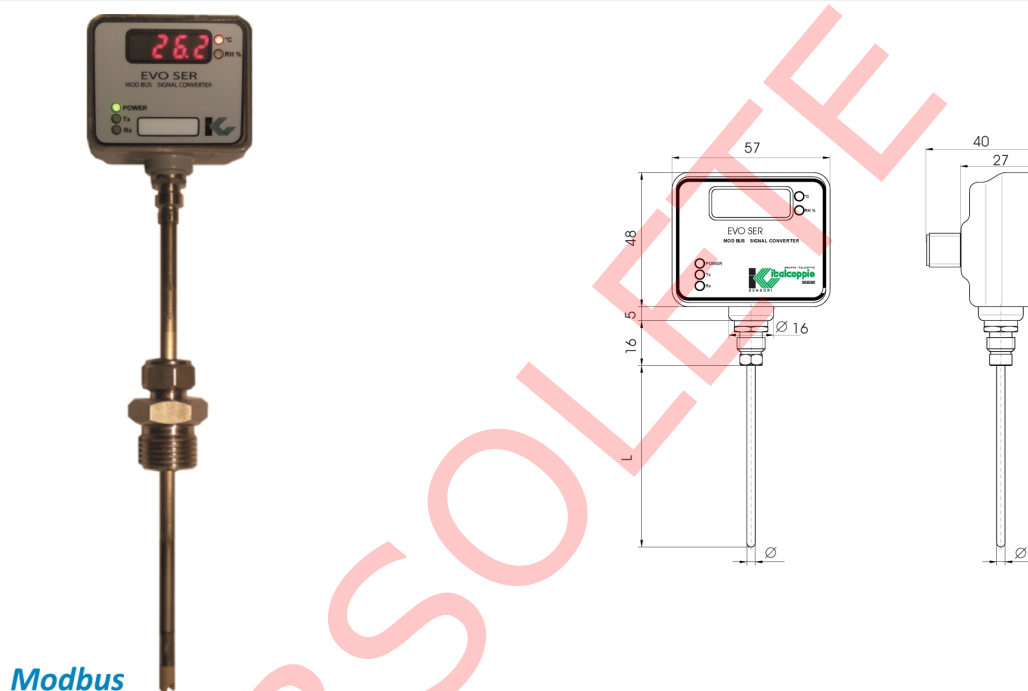
EVO SERUI

Rev. 0 - 17/06/2021

EVO SERUI TEMPERATURE AND HUMIDITY SENSOR WITH RS-485 SERIAL OUTPUT (MODBUS RTU)

Temperature and humidity sensor with RS-485 MODBUS RTU serial output (Duct version). Programmable parameter

By a single cable, it is possible create a sensors network and interfacing them directly to a PLC or a PC equipped with a supervisory software (SCADA). The connection between the devices is realized with M12 connectors for rapid installation without errors and with degree of protection IP67. The stem realized with flexible compact mineral insulated cable ($\varnothing 6\text{mm}$) it is available in different lengths and is ideal for critical mechanically applications ; in additions are available various types of process connection welded to the stem and also sinterized filters.



Modbus

TECHNICAL SPECIFICATION

Supply voltage	12 \pm 30 Vdc (polarity protected)
Accuracy	refer to the specific graphs
Power consumption	0,25 W (without display) 0,5 W (with display)
Communication protocol	Modbus RTU (max. baud rate 38.400)
Serial interface	RS-485 (not insulated)
Input/Output insulation	None
Indicator LED	1 green led for the power supply 1 red led for the serial communication Tx 1 red led for the serial communication Rx
Range configurations	modifiable using the special EVO SER SET configuration kit (a PC with Windows operating system is required)
PCB operating temperature	-40 \pm 65 °C
EMC	According to EN 61326-1:2013
Sensing element operating temperature range	-40 \pm 120°C
Sensing element	SENSIRION STH75 model digital sensor

TECHNICAL SPECIFICATION

Response time (*) (* test in water in accordance with IEC 751. Time taken to reach 63.2% of temperature step)	less than 30 seconds (without filter)
M.I.C. min. bending radius	3 times the outer diameter (except the sensing tip which length is ~30 mm)
Sheet material	AISI 316L
Realizable sheath lengths L= (subject to feasibility check)	50 mm \pm 10 m
Sheath diameter d=	\varnothing 6 mm
Connector	2 male M12 x 5 connectors in accordance with IEC 61076-2-101 STANDARDS
Maximum connection distance	1200 meters, this distance depends on the power supply voltage and the type of cable used to connect the various devices
Maximum devices on network	maximum 32 (over is required to add a serial repeater)
Material body	Grey thermoplastic
International protection marking (*) (* According to IEC 60529)	IP65/67
Main device design parameters	Temperature °C Relative humidity %RH Maximum and minimum temperature and humidity peak measured Temperature and humidity offset for measurement correction Dewpoint °C Serial communication and power-on watch-dog
Option	4 digit display Wall mounting bracket connection cable with M12 connector various type of sintered steel protective filters are available.
Variant	null

OBSOLETE