

Temperature & Humidity Sensor / Transmitter



HYGROTX-3000



HYGROTX- 290

Features:

- Industrial grade design
- Input from HYGROCLIP CP sensor.
- 4-20mA proportional to T and RH.
- IP 65 ABS plastic enclosure.
- Operates on 18 to 36VDC.

Product Description:

Libratherm offers T + RH sensor with Transmitter model **HYGROTX-3000** and **HYGROTX-290** for measuring and transmitting the analogue values proportional to both T and RH Input. The signal generated by Hygroclip is of the order of 1 volt DC and cannot be transmitted over very long distance and if done so the signal is likely to drop over very long cable which will result in the inaccurate measurement of temperature and %RH. The transmitter featured here converts the low level signal to equivalent 4-20mA, which can be transmitted over a long distance without loss of accuracy in the measurement. Dual output of 4-20mA proportional to T and %RH can be used for remote measurement and indication.

To suit industrial requirement more advanced transmitters model HTX-3000 are also available with local display. To facilitate interface with PLC or DCS or with any other process controller – digital serial communication on RS485 bus with MODBUS RTU protocol in slave mode is also provided.

Technical Specification (HYGROTX-3000):

Model	HYGROTX-3000
Sensor Make	Hygroclip CP – Rotronic Swiss make
Sensor Cable	1 meter long
Sensor Dimension	L = 140 mm. & D = 15 mm.
Temp. Range	-40 to 60 °C
Temp. O/P	4 – 20 mA proportional to -40 to 60 oC or 0 to 60 oC. (Any one - As per user's requirement)
Temp. Accuracy	+/- 0.3 °C
%RH Range	0 to 100%
%RH O/P	4 – 20 mA proportional to 0 to 100%Rh.
%Rh Accuracy	+/- 1.5%
Loop Resistance	RLmax = 400 Ohms @ 24VDC
Supply Voltage	12 - 36VDC @ 50mA
Enclosure	ABS plastic IP-65 with suitable wall mounting clamps.
Enclosure Size	85 x 80 x 55 mm.

Technical Specification (HYGROTX-290):

Model	HYGROTX-290
Sensor Make	H290 – Rotronic Swiss make
Sensor Cable	1 meter long
Sensor Dimension	L = 200 mm. & D = 15 mm.
Temp. Range	-40 to 200 °C
Temp. O/P	4 – 20 mA proportional to -40 to 150oC or 0 to 150oC. (Any one - As per user's requirement)
Temp. Accuracy	+/- 0.3 °C
%RH Range	0 to 100%
%RH O/P	4 – 20 mA proportional to 0 to 100%Rh.
%Rh Accuracy	+/- 1%
Loop Resistance	RLmax = 400 Ohms @ 24VDC
Supply Voltage	12 - 36VDC @ 50mA
Enclosure	ABS plastic IP-65 with suitable wall mounting clamps.
Enclosure Size	120 x 80 x 55 mm.

Ordering Information:

Model	A - Temperature Range	B - % RH Range
HYGROTX-3000	A1 - (0 to 60 °C) A2 - (-40 to 60 °C)	B1 - (0 to 100 %)
HYGROTX-290	A3 - (0 to 150 °C) A4 - (0 to 100 °C) A5 - (-40 to 150 °C)	

Examples:

Model	A - Temperature Range	B - % RH Range
HYGROTX-3000	A1	B1
HYGROTX-3000	A2	B1

Model	A - Temperature Range	B - % RH Range
HYGROTX-290	A3	B1
HYGROTX-290	A5	B1

Example	Ordering Code	Description
1	HYGROTX-3000-A1-B1	This is T + RH transmitter giving 4-20mA proportional to 0 to 60°C and 0 to 100% RH
2	HYGROTX-3000 -A2-B1	This is T + RH transmitter giving 4-20mA proportional to -40 to 60°C and 0 to 100% RH
3	HYGROTX-290-A3-B1	This is T + RH transmitter giving 4-20mA proportional to 0 to 150°C and 0 to 100% RH
4	HYGROTX-290-A5-B1	This is T + RH transmitter giving 4-20mA proportional to -40 to 150°C and 0 to 100% RH

REMARK :