



THC-303 is a programmable temperature and humidity digital controller with dual check for both temperature and relative humidity.

Overview

THC-303 is designed to control temperature and relative humidity. The device is equipped with three external sensor inputs, four contact outputs and two digital inputs for setting threshold values. The operation settings of the contacts can be selected through the programs. It is suitable to use in different operation situations. LED indicators and 7-Segment Display are placed on the top of the device to show auxiliary voltage, temperature, relative humidity and alarm status. Owing to MODBUS helps to have a data from the device and it is possible for programming.

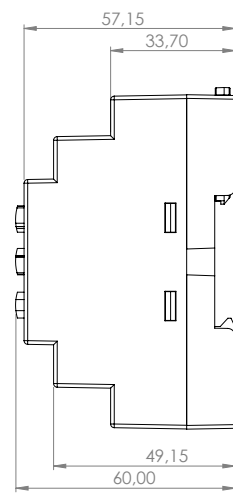
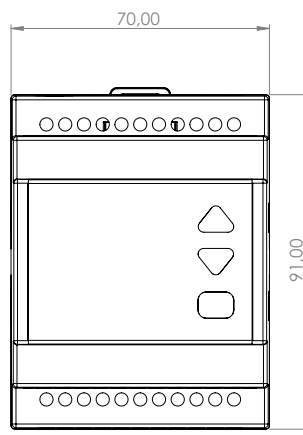
Technical Parameters

Auxiliary Power 85-265V _{AC} - 50/60 Hz / 120-370V _{DC}	Sensor Cable Length 3m - 9m **
Power Consumption max. 3W	Response Time 15s
Power Frequency Withstand Voltage 3kV / 60s	Operating Temperature / Humidity -25°C - +70°C / 10-90%RH (No Condensing)
Switching Capacity 5A / 240VAC	Storage Temperature / Humidity -40°C - +80°C / 5-95%RH
Setting Method Digital	Hysteresis 0°C - +100°C / 0-100%RH
Data Port RS-485	Tolerance ±5%RH, ±2°C
Setting Range -20°C - +80°C / 1-99%RH *	Protection Class IP20
Dimensions 70 x 91 x 60mm	Installation 35mm DIN rail EN50022
Weight 160 gr (Body)	Connection Screw Screw, 15 to 12 (AWG) wire
Sensor Connection 3 RJ12 Socket	

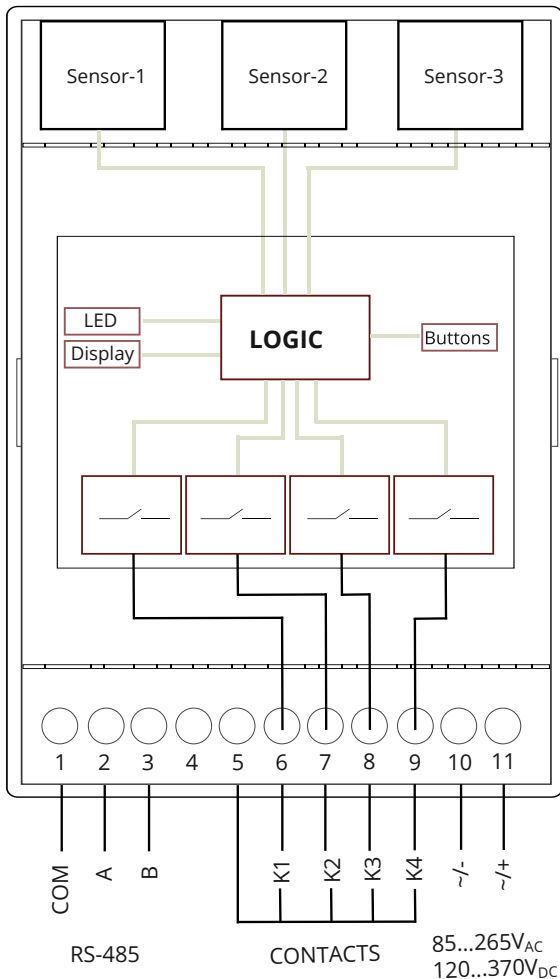
*Applies to sensor values.

**The external sensor cable is 3m as standard. Production is possible for desired values upon request.

Technical Drawings



Connection Diagram



Hysteresis

A hysteresis is defined for both temperature and relative humidity settings to prevent the relay state from changing frequently with small fluctuations. The hysteresis value can be adjusted remotely via the device or via MODBUS.

Programming

The device can be easily programmed via the buttons and 7-Segment Display on the device. There are many different combinations for relay outputs. It is installed by selecting from the list in the user manual. In addition, all these settings can be made on the computer via MODBUS.

Required data for order

✓ Sensor Cable Length



THC External Sensor Module is used to measure Humidity and Temperature in the THC Product Line.

Technical Parameters

Humidity Tolerance ±5%RH	Nominal Humidity Measurement Value 10%RH - 90%RH
Temperature Tolerance ±2°C	Maximum Humidity Measurement Value 0%RH - 100%RH
Nominal Temperature Measurement Value 0°C - +65°C	Sensor Connection RJ12 Socket
Maximum Temperature Measurement Value -40°C - +120°C	Weight 13gr
Communication Protocol I ² C	Dimensions 19 x 71 x 16mm

Technical Drawings

