## USER MANUAL FOR TEMPERATURE AND RH DISPLAY UNIT

#### **INTRODUCTION:**

The Temperature & RH Display Unit comes with the internal Temperature & RH Sensor. This system is used to display the temperature and RH. Connect 12 Volt / 2 Amps power supply to this system.

## **OPERATING CONDITION:**

Two set of seven displays are used to display the temperature and RH separately. Set point and Offset for both the temperature and RH can be set. Separate potential free relay output and potential output for hooter is available for both the temperature and RH. When the actual temperature or RH exceeds its set point, the system enters into the alarm condition. In the alarm condition, the following operations will be performed:

- 1. Corresponding display will be blinking
- 2. Corresponding relay and potential output for hooter will be activated
- 3. Internal buzzer will be activated

The hooter and internal buzzer can be muted by pressing the 'EXIT' key.

# To Edit Parameter:

There are four keys available to edit all the parameters.

- 1. Press 'ENTER' key to see the name of the parameters and their values.
- 2. An upper side display will show the name of the parameter. The lower side display will show the value of that parameter.
- 3. Press 'UP' or 'DOWN' key to navigate all the parameters and their values.
- 4. To edit the value of parameter, press 'ENTER' key.
- 5. The value will be blinking in the edit mode.
- 6. Press 'UP' key to increase the value. Press 'DOWN' key to decrease the value.
- 7. If desired value is reached, press 'ENTER' key to save and escape from edit mode or press 'EXIT' key to escape from edit mode without saving.

The parameters cannot be edited while the system under alarm condition.

#### Communication:

The RS485 port (MODBUS Protocol) is available to establish the connection to the BMS. Set point and the current value of the temperature and RH can be monitored by the BMS. Set point of the temperature and RH can be set through the BMS. The 'System ID' is one of the parameter and it can be edited, which is used in the RS485 – MODBUS communication.

For further information about communication, refer the MODBUS Address Specification document.