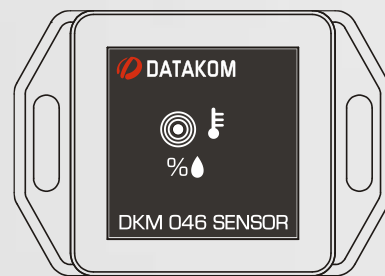


DKM-046

TEMPERATURE & HUMIDITY CONTROLLER



DESCRIPTION

DKM-046 is a DIN Rail mounted precision unit capable of measuring temperature and humidity in three different locations, provide protection with 4 relay outputs and serve data to remote monitoring and control systems.

Sensing modules are separated from the base unit, connecting with cables. One sensor comes together with the base unit. Additional sensors may be purchased separately.

The unit has universal supply input. It can be supplied with AC85-305V or DC19-400V.

The module provides data to automation and BMS systems through its isolated RS-485 Modbus port.

The programming is performed through pushbuttons on the unit.

Sensor modules incorporate SENSIRION-SHTC3 polymer dielectric planar capacitive sensors.

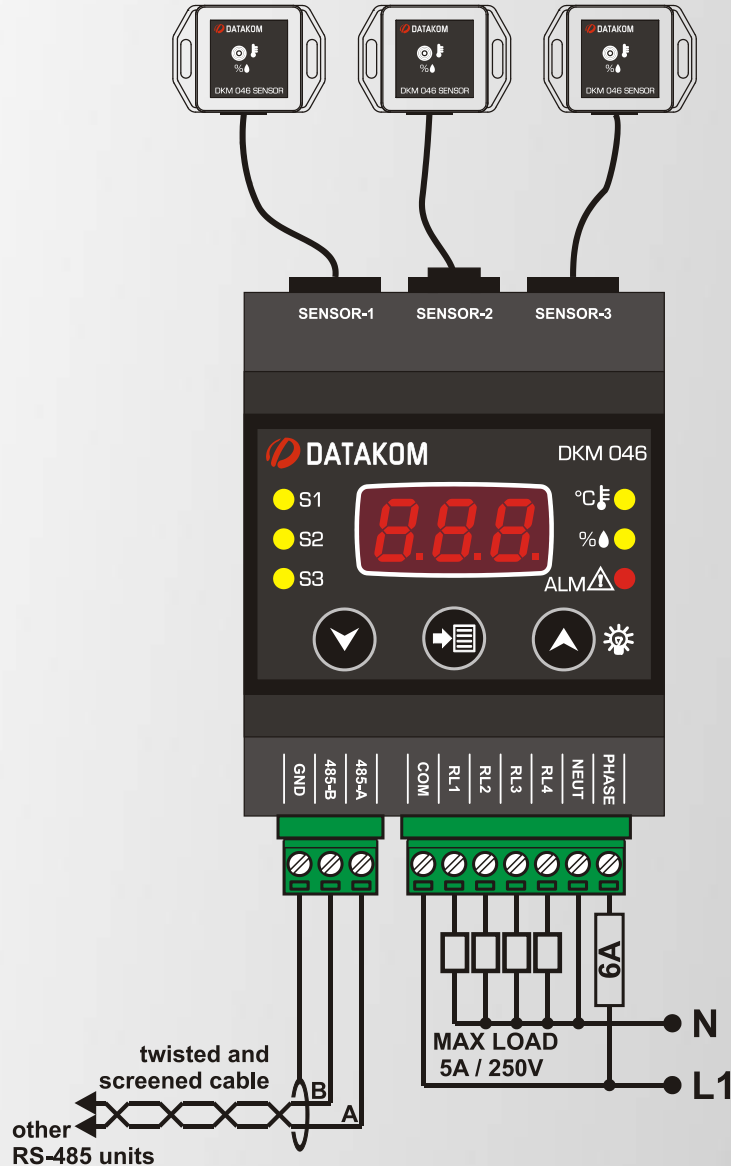
Relay functions are programmable with functions selected from a list.

FEATURES

- **Supports 3 temperature & humidity sensors**
- **Universal supply, 24VDC...305VAC**
- **Programmable relay outputs: 4**
- **Temperature and relative humidity control**
- **Independent cooling / heating / humidification / dehumidification functions for each sensor**
- **Temperature measuring range: -40...+80°C**
- **Humidity measuring range: 0% ... 100%**
- **Humidity accuracy: $\pm 2\%$, 20 ... +80%**
- **Temperature accuracy: $\pm 0.2^\circ\text{C}$, 0 ... +60 °C**
- **Factory calibrated sensors**
- **Front panel programming**
- **Supports Modbus programming**
- **DIN rail mounted, easy installation**
- **Operating temp range: -20°C ... +70 °C**
- **Two part connection system**



INSTALLATION DIAGRAM



TECHNICAL SPECIFICATIONS

Auxiliary supply:

85-305VAC, 19-400VDC

Power consumption: 2W maximum

Relay outputs: 5A @ 250V AC

Sensor: Sensirion SHTC3

Temperature measuring range: -40°C to +80°C

Temperature accuracy: $\pm 0.2^\circ\text{C}$ (0 to 60°C)

Humidity measuring range: 0% to 100%

Humidity accuracy: $\pm 2\%$ (20% to 80%)

Response delay: 15 seconds

Data port: RS-485

Data rate: 2400-115200 baud

Data type: 8 bit, no parity, 1 bit stop

Operating temp. range: -20°C to +70 °C

Max. Relative humidity: 95% non-condensing

Enclosure: Flame retardent, ROHS compliant, high temperature ABS/PC (UL94-V0)

Installation: DIN rail mounted

Dimensions: 70x115x66mm (WxHxD)

Weight: 200 g (approx.)

EU Directives:

2014/35/EC (LVD)

2014/30/EC (EMC)

Reference standards:

EN 61010 (safety)

EN 61326 (EMC)

