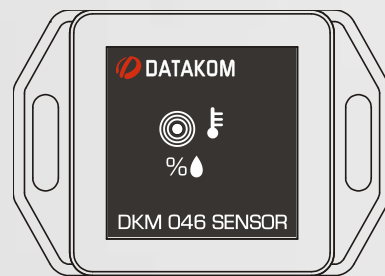


# DKM-046

## 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.

Two different auxiliary supply versions are available. The AC model accepts 85 to 305VAC and the DC model accepts 19 to 150VDC.

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 ST-HTS221 polymer dielectric planar capacitive sensors.

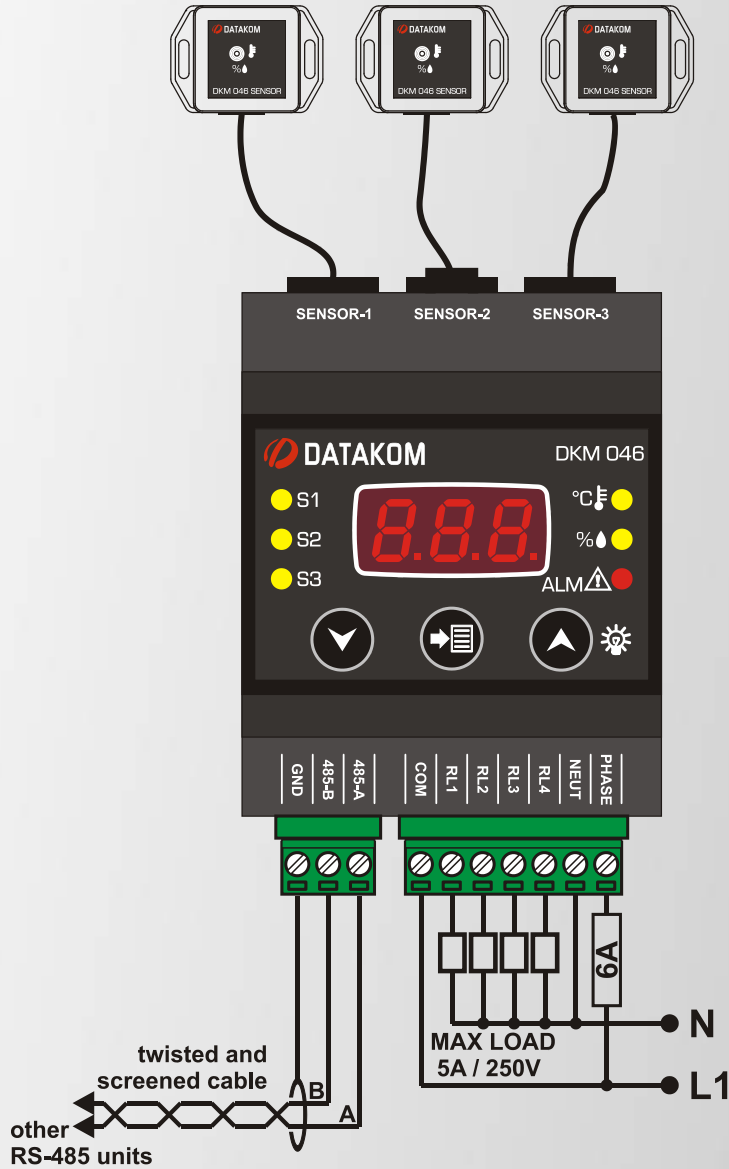
Relay functions are programmable with functions selected from a list.

### FEATURES

- **Supports 3 temperature & humidity sensors**
- **AC and DC auxiliary supply versions**
- **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: ±3.5% , 20 ... +80%**
- **Temperature accuracy: ± 1°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:

**AC model:** 85-305VAC (88-450VDC)

**DC model:** 19-150VDC

**Power consumption:** 2W maximum

**Relay outputs:** 5A @ 250V AC

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

**Temperature accuracy:** ±1°C (0 to 60°C)

**Humidity measuring range:** 0% to 100%

**Humidity accuracy:** ±%3.5 (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)

