

Technical Specification

Parameter	Specification
Model	BKC – MT RS485-MB
Interface	RS485
Sensor Element & Type	Pt1000, RTD (Resistance Temperature Detector)
Operating Range	-50°C to 120 °C
Supply Voltage	24VDC (5 to 36Vdc)
Accuracy	Class A
Sensor Housing	Self-adhesive aluminium block (30x12x6mm)
Sensor Cable	Teflon-coated 3 meters,
Case material	Powder Coated Aluminium
Module temperature sensor	Sensor element -50°C to 600 °C (Fluke Calibration 9144 Metrology Well (Fluke 724 Temperature Calibrator))
Case size / protection level	80mm x 75 mm x 57 mm / IP 67

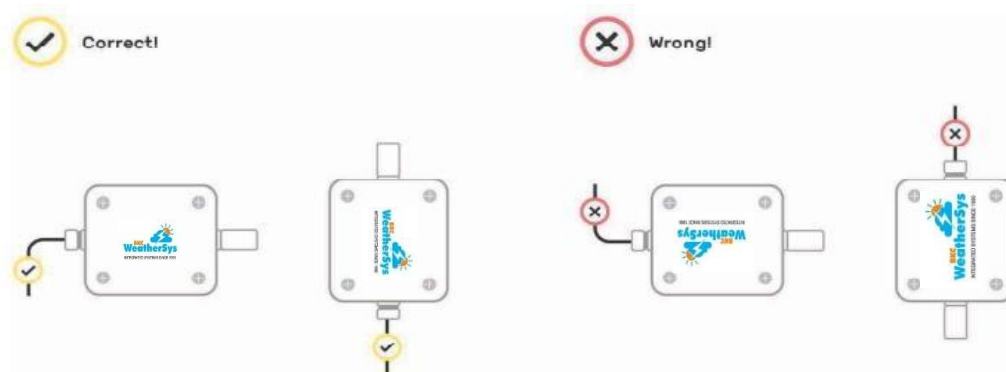
Safety Instructions:

- Installation and assembly of electrical equipment must be performed only by personnel who are electrically qualified.

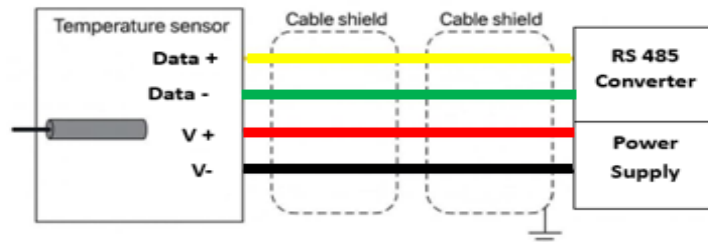
Warranty and Liability:

One year standard warranty applied excludes physical damage

Mounting and Installing Instruction:



Wiring Diagram:



BKC – MT RS485-MB

Wiring Instructions:

RS-485 Communication:

- **Yellow Wire** → Connect to **RS-485 D (+)**
- **Green Wire** → Connect to **RS-485 D (-)**

Power Supply:

- **Red Wire (V⁺)** → Connect to the **positive terminal** of the power supply
- **Black Wire (V⁻)** → Connect to the **negative terminal** of the power supply

NOTE: DC Supply Voltage Range from 5 VDC to 36 VDC .

Communication Protocol

The BKC-MT RS485- MB Sensor is following **factory default settings**:

- ❖ **Modbus Address:** 1
- ❖ **Modbus Baud Rate:** 9600
- ❖ **Data Bit :** 8
- ❖ **Parity :** None
- ❖ **Stop bit :** 1
- ❖ **Register Address :** Input Register (30001)

NOTE: If the data $\geq 0*8000$, for example: $0*FFXX$, according to the following method to calculate:

- If the data MSB is zero then ,
Temperature Value = Data/10
- Otherwise ,
Temperature Value = Data – FFFA