

# Temperature monitoring Type 8435-PT100

# 8435



## Description

The type 8435 temperature monitor also allows the monitoring of temperatures over longer distances, such as monitoring the surface temperatures of cables, monitoring the temperature inside bundles of cables and similar tasks.

The unit consists of a temperature sensor, the evaluation unit.

The temperature sensor convert the recorded temperature into a proportional resistance.

The necessary power is supplied from the evaluation unit. Two or three cores of the cable are required for operation of the sensor and transmission of the measured value. A shielded cable must be laid to the temperature sensor for cable lengths > 25 m and to avoid possible interference.

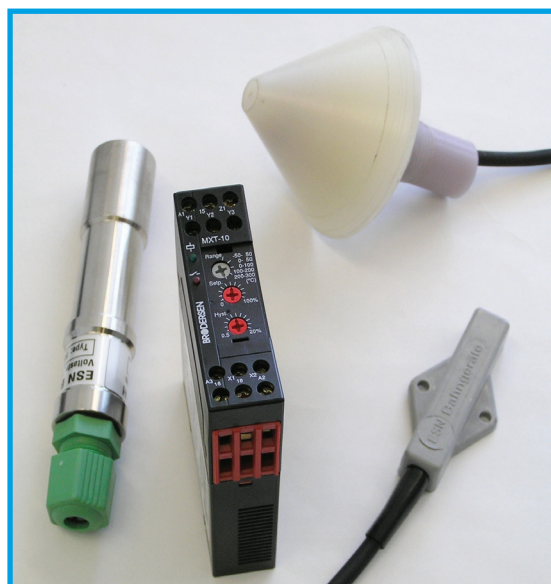
The evaluation unit converts the recorded temperature into a voltage of 0V to 10 V, corresponding to the range -50°C to 50°C. This voltage can be passed on to a voltmeter or a suitable measuring instrument that writes on paper.

Long-term monitoring can also be done in this way.

The unit also works as a limiting value monitor in addition to the display function. An output relay switches if the limit temperature (which can be set as desired) is exceeded. A zero-potential changeover contact are provided to pass on messages. The fact that the limiting value has been exceeded is indicated at the evaluation unit by a light emitting diode (LED).

A measurement voltage is provided at terminals for exact setting of the limiting values. A voltage of from 0 to 10 V = -50°C to 50°C is provided at these terminals to set the limiting value.

Additional temperature measuring monitoring equipment is available on request.



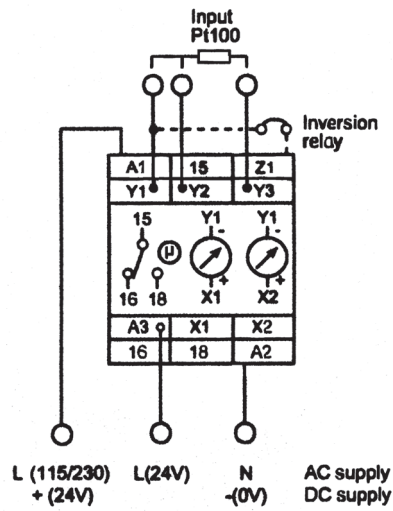
## Technical data

Dimensions	WxHxD 60/70/110 mm.	
Housing	Plastic housing	
Attachment	standard carrying rail in accordance with DIN EN 50022	
Type of protection	Housing: IP 30 terminals: IP 20	
Ambient temperature	-20°C to +55°C	
Supply voltage	DC 24V → 8435 01 AC 230 V → 8435 05	
Power consumption	approx. 2.5 VA	
Measuring range	-50°C to +50°C (range adjustable)	
Precision	±2°C	
Output		
Load	> 2 k	
Message	1 changeover contacts (zero-potential)	
	Voltage	Current
	AC 250 V	4.0 A
	DC 110 V	0.5 A
Switching point	can be set from -50°C to 50°C corresponding to 0V to 10 V	
Hysteresis	5°C	

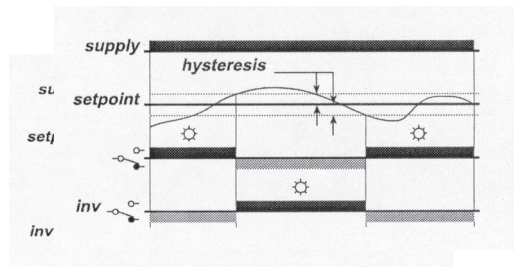
## Ordering information

Type	Part No.
8435 01	420500
8435 05	420501

connecting diagram:



switching diagram:



dimensions:

