

Signal transducer (T1) for Ni1000 temperature sensor

AQA61.20

Signal transducer allowing the use of Ni1000 sensors for controllers with a T1 sensor input.

- **Converts an Ni1000 sensor signal into a T1-type output signal**
- **Transducer supply from connected controller**
- **Can be installed in control panel or mounted on a flat surface**
- **Trimming potentiometer for correcting the T1 signal by ± 2 K**

Use

The AQA61.20 transducer is used in cases where it is necessary to connect a passive Ni1000 temperature sensor to a controller with a T1 sensor interface.

Example: Use to connect the QAM22 averaging temperature sensor to a DESIGO 30 controller or the QAA... temperature sensor to a CLASSIC controller.

Function

The AQA61.20 transducer converts the signal from an Ni1000 sensor into a T1 output signal.

The supply voltage for the transducer is taken from the connected controller via its T1 input to the T1 output of the transducer.

The inbuilt trimming potentiometer is accessible from outside (see 'Dimensions') and allows correction of the line resistance on the T1 side by ± 2 K.

Ordering

When placing an order, please specify the quantity, product description and type code.

Example:

3 signal transducers, AQA61.20

Compatibility

The AQA61.20 transducer can be connected between any passive Ni1000 temperature sensor and any controller with a T1 interface.

Mechanical design

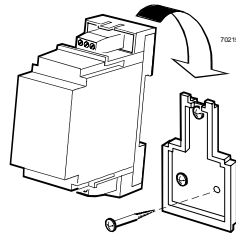
The ABS plastic housing accommodates the printed circuit board with connection terminals (screw terminals) for the Ni1000 sensor cable and the connection to the controller.

Accessories

A mounting plate is enclosed with the transducer. This must be used when the transducer is surface-mounted. The mounting plate is not required for DIN-rail mounting.

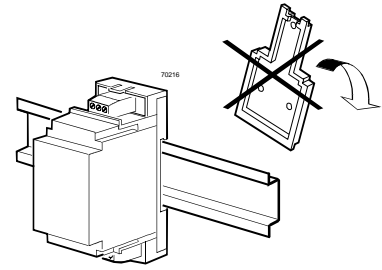
Mounting

The AQA61.20 can be installed on a DIN rail in a control panel, or mounted on a flat surface.



Surface mounting

The mounting plate supplied should be used for surface mounting. First screw the mounting plate onto the required surface (3 screws, max. diameter 4 mm). Then snap-mount the transducer onto the mounting plate.



Rail mounting

The signal transducer is designed for snap-mounting on a DIN rail (rail type EN50022–35 x 7.5). The mounting plate is not used.

Technical data

Supply voltage	Passive, from the connected controller via the T1 signal cable
Power consumption	≤ 5 mW
Primary fuse	None
Signal input	Ni1000 temperature sensor signal
Signal output	T1 temperature sensor signal
Accuracy	Measurement error ≤ 0.2 K
Trimming potentiometer	for ± 2 K compensation
Housing material	Plastic (ABS)
Connection terminals	4 Screw terminals 2.5 mm ²
Weight	0.08 kg
Dimensions (W x H x D)	36 x 90 x 61 mm
Maintenance	None required
General ambient conditions	
Ambient temperatures	
– Operation	0 ... 50 °C
– Storage / Transport	– 25 ... 70 °C
Ambient humidity	≤ 95 %rh, non-condensing
Protection class	III
Protection standard	IP20 to IEC529
Conformity	Meets the requirements for CE marking

Connection terminals

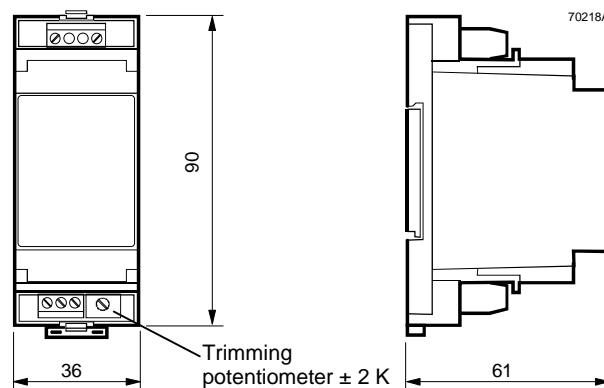
70217	
HGND	8
	9
	B
	M

To controller (T1 interface)

From Ni1000 sensor

Dimensions

All dimensions in mm



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