SIEMENS



QAZ21.. and QAZ36..

Cable Temperature Sensors

QAZ..

with different types of sensing elements

Cable temperature sensors for acquiring the medium temperature in boilers, DHW storage tanks, heat exchangers and solar plants. For use with protection pockets.

The QAZ.. and this Data Sheet are intended for use by OEMs which integrate the temperature sensors in their products.

Use

- QAZ21.. standard sensors: With LG-Ni 1000 sensing element for control or limitation of the temperature in boilers, DHW storage tanks or heat exchangers. Suited for use with controllers capable of handling resistance values delivered by this type of sensor
- QAZ21.681/101 solar collector sensor: With LG-Ni 1000 sensing element for control of the medium temperature in solar plants. Suited for use with controllers capable of handling resistance values delivered by this type of sensor
- QAZ36.481/101 and QAZ36.581/109 solar collector sensor: With NTC 10 kΩ sensing element for control of the medium temperature in solar plants. Suited for use with controllers capable of handling resistance values delivered by this type of sensor
- QAZ36.. sensors for Boiler Management Units (BMUs): With NTC 10 kΩ sensing element for control of the DHW temperature in gas-fired heating appliances. Suited for use with all BMUs type LMU..

Type summary

Type reference	Sensing element	Measuring range	Toler- ance *	Approx. time con- stant**	5.	Cable length x	Weight /pcs	Packing size/pcs
QAZ21.5120	LG-Ni 1000 Ω at 0 °C	-30200 °C ***	± 0.4 K	30 s	Silicone	2000 mm	80 g	200
QAZ21.5220	LG-Ni 1000 Ω at 0 °C	095 °C	± 0.4 K	30 s	PVC	2000 mm	66 g	200
QAZ21.5240	LG-Ni 1000 Ω at 0 °C	095 °C	± 0.4 K	30 s	PVC	4000 mm	126 g	100
QAZ21.5260	LG-Ni 1000 Ω at 0 °C	095 °C	± 0.4 K	30 s	PVC	6000 mm	186 g	50
QAZ21.681/101	LG-Ni 1000 Ω at 0 °C	-30180 °C ***	$\pm 0.4 \text{ K}$	30 s	Silicone	1500 mm	51 g	20
QAZ21/0120 ****	LG-Ni 1000 Ω at 0 °C	095 °C	$\pm 0.4 \text{ K}$	30 s	PVC	800 mm	30 g	500
QAZ21/0220 ****	LG-Ni 1000 Ω at 0 °C	095 °C	$\pm 0.4 \text{ K}$	30 s	PVC	1500 mm	51 g	250
QAZ21/0720 ****	LG-Ni 1000 Ω at 0 °C	095 °C	± 0.4 K	30 s	PVC	900 mm	33 g	500
QAZ21/0820 ****	LG-Ni 1000 Ω at 0 °C	095 °C	$\pm 0.4 \text{ K}$	30 s	PVC	1700 mm	57 g	200
QAZ36.481/101	NTC 10 kΩ at 25 °C	-30200 °C ***	$\pm 0.5 \ K$	30 s	Silicone	1500 mm	51 g	1
QAZ36.522/109	NTC 10 kΩ at 25 °C	095 °C	± 0.5 K	30 s	PVC	2000 mm	66 g	200
QAZ36.524/109	NTC 10 kΩ at 25 °C	095 °C	± 0.5 K	30 s	PVC	4000 mm	126 g	100
QAZ36.526/109	NTC 10 kΩ at 25 °C	095 °C	± 0.5 K	30 s	PVC	6000 mm	186 g	50
QAZ36.526/101	NTC 10 kΩ at 25 °C	095 °C	$\pm 0.5 \text{ K}$	30 s	PVC	6000 mm	186 g	1
QAZ36.581/109	NTC 10 kΩ at 25 °C	-30200 °C ***	$\pm 0.5 \text{ K}$	30 s	Silicone	1500 mm	51 g	200

Tolerance band QAZ21.. at 0 °C and QAZ36.. at 25 °C

Time constant QAZ21.. and QAZ36.. with protection pocket

Measuring range short-time QAZ21.681/101: 220 °C; QAZ21.5120, QAZ36.481/101 and QAZ36.581/109: 260 °C

**** Product is not supplied any more

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Ordering

When ordering, please give type reference according to "Type summary". Example: **QAZ21.5220**

Mechanical design

The standard version of the cable temperature sensor consists of stainless steel sleeve (6 mm diameter, 40.5 mm long), sensing element and connecting cable with ferrules. The sensing element is accommodated in the sleeve to which the connecting cable is attached. The sensor is not suited for direct immersion in liquid media (without using a protection pocket).

Other types of sensing elements, connecting cables and connectors are available on request.

Disposal



The devices are considered electronics devices for disposal in term of European Directive 2012/19/EU and may not be disposed of as domestic waste.

- Dispose of the device via the channels provided for this purpose
- Comply with all local and currently applicable laws and regulations.

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Technical data

For general sensor data,	Ambient temperature (PVC cable)	max. 95 °C			
also refer to	Ambient temperature (PE cable)	max. 125 °C			
"Type summary"	Ambient temperature (silicone cable)	max. 180/200 °C (short-time 220/260 °C)			
	Electrical strength	500 V			
	Electrical connections	interchangeable			
Directives and	Product standard	EN 60730-1			
Standards		Automatic electrical controls for household			
		and similar use			
Degree of protection	Climatic and mechanical requirements	According to EN 60721-3			
	Rel. humidity	<95 % r.h.			
	Protection class	III to EN 60730-1			

Connection diagram

QAZ21../ QAZ36..



Dimensions

QAZ21.. and QAZ36..



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