



Outside Sensors

QAC...

- Outside sensor for acquiring the outdoor temperature and – to a lesser extent – solar radiation, wind influence and the temperature of the wall
- The QAC... and this Data Sheet are intended for OEMs which use the outside sensors in connection with their products

Use

- Reference sensor for weather-compensated flow temperature control
- Measuring sensor for optimization functions

Type summary

Type reference	Sensing element	Measurement range °C	Tolerance K*	Time constant min	Weight	Packing size	Copper cable mm ² / cable dia. mm	Perm. cable length m
QAC21	LG-Ni 1000 Ω at 0 °C	-50...70	± 0.4	14	73 g	48 pieces individually packed in multipacks	0.6 / 5.5	20
QAC31/101	NTC 575 Ω at 20 °C	-50...60	± 1	12			1 / 6.6	80
QAC34/101	NTC1000 Ω at 25 °C	-50...70	± 1	12			1.5 / 7.2	120

* QAC21 at 0 °C, QAC31/101 and QAC34/101 at -10...+20 °C

Ordering

When ordering, please give type reference according to "Type summary", e.g. **QAC31/101**

Technical design

QAC21

The sensing element is a thin-film LG-Ni element with a resistance of 1000 Ω at 0 °C. The resistance rises as a function of the temperature at about 5 Ω per Kelvin.

QAC31/101

The sensing element is an NTC resistor with a linearized characteristic and a resistance of 575 Ω at 20 °C.

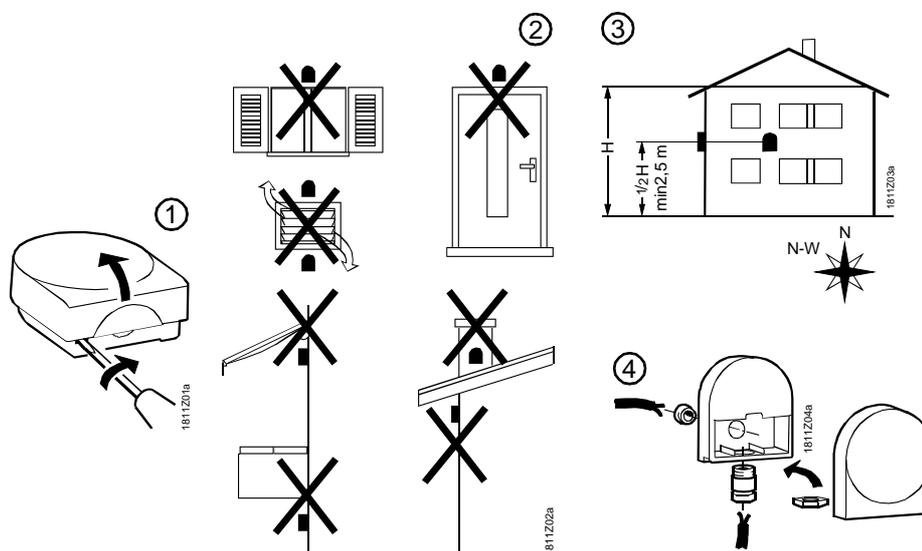
QAC34/101

The sensing element is an NTC resistor with a resistance of 1000 Ω at 25 °C. The resistance drops at about 4 % per Kelvin.

Mechanical design

The outside sensor consists of plastic housing with a removable cover. The sensing element is embedded in synthetic resin. The connection terminals are accessible after removal of the cover. To introduce the cable through the wall, a grommet, cable gland or sealing compound is required (also refer to illustration below). For wall mounting, a cable entry gland can be screwed into the bottom of the housing.

Mounting and installation



Technical data

Norms and standards	Climatic conditions	to IEC 721-3
	Mechanical conditions	to IEC 721-3
Product safety	Degree of protection of housing	IP 54 to EN 60 529
	Safety class	III to EN 60 529
	Electrical connections	
	Connection terminals	interchangeable
	Cable entry for	cable gland (e.g. M16 x 1.5)
Color	Cover	RAL 9003
	Base	RAL 7001

Dimensions

