



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

¹⁾ QAC21 at 0 °C, QAC31/101 and QAC34/101 at -10...+20 °C

²⁾ QAC21 is not supplied any more

Ordering

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

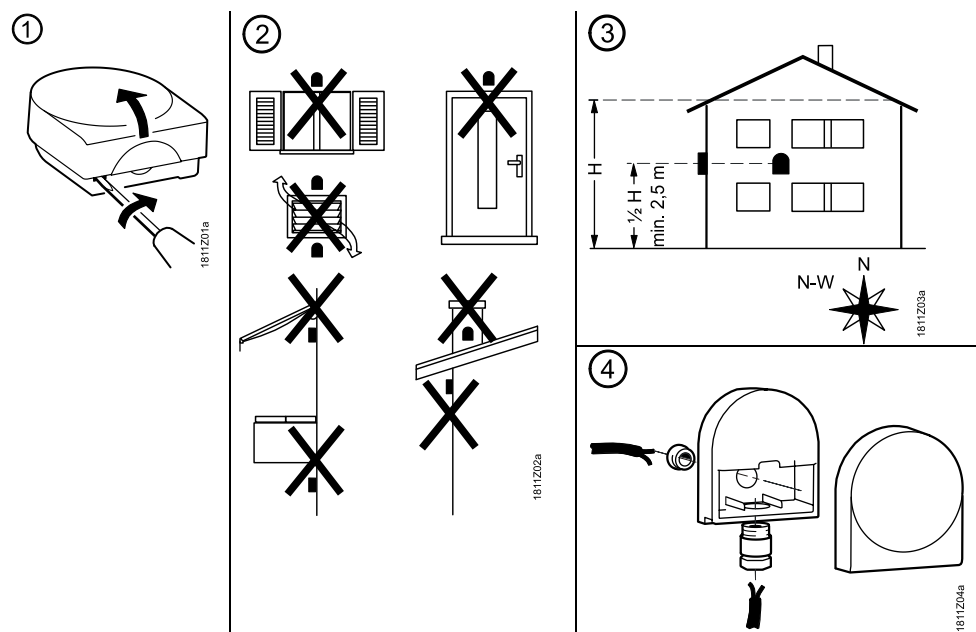
Technical design

QAC21	The sensing element is a thin-film LG-Ni element with a resistance of 1000Ω at $0 \text{ }^\circ\text{C}$. The resistance rises as a function of the temperature at about 5Ω per Kelvin.
QAC31/101	The sensing element is an NTC resistor with a linearized characteristic and a resistance of 575Ω at $20 \text{ }^\circ\text{C}$.
QAC34/101	The sensing element is an NTC resistor with a resistance of 1000Ω at $25 \text{ }^\circ\text{C}$. 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



Disposal



The device is considered electrical and electronic equipment for disposal in terms of the applicable European Directive and may not be disposed of as domestic garbage.

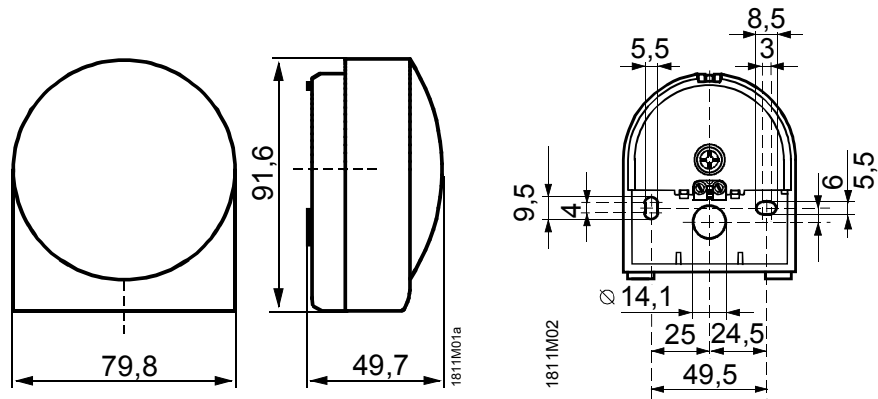
- Dispose of the device via the channels provided for this purpose
- Comply with all local and currently applicable laws and regulations.

Technical data

Directives and Standards	Product standard	EN 60730-1 Automatic electrical controls for household and similar use
	EU conformity (CE)	8000073890 *)
Degree of protection	Protection degree of housing	IP 54 according to EN 60529
	Protection class	III according to EN 60730-1
General device data	Electrical connections	
	Connection terminals	interchangeable
	Cable entry for	cable gland (e.g. M16 x 1.5)
	Color	
Cover	RAL 9003	
Base	RAL 7001	

*) The documents can be downloaded from <http://siemens.com/bt/download>.

Dimensions



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