

Outdoor Air Temperature Sensor

Product Description

Passive resistance and active output sensors with plastic housing for acquiring outdoor air temperature and to a lesser degree, solar radiation, the wind effect and the temperature of the wall.

Product Number

Type	Product Number	Sensing Output	Range of Use
Passive Resistance	QAC2012	Platinum 1K Ω , 385 alpha	-58°F to 158°F (-50°C to 70°C)
	QAC2030	NTC 10K Ω , Type 2	-40°F to 158°F (-40°C to 70°C)
Active Output	QAC3161	0 to 10 Vdc signal [Platinum 1K Ω]	-58°F to 122°F (-50°C to 50°C)
	QAC3171	4 to 20 mA signal [Platinum 1K Ω]	-58°F to 122°F (-50°C to 50°C)

Required Tools

- Drill
- Screwdriver
- 3/16-inch mounting screws

Expected Installation Time

30 minutes

Installation

Depending on the use, the outdoor air temperature sensor must be located as follows:

- For control:
The QAC31x1 units may be used as room sensors where the normal conditions in the room would be too harsh for a normal room sensor (for example: animal labs, storage facilities requiring periodic wash-downs, and so on).

- For optimization:
Always on the coldest wall of the building (normally the wall facing north). The sensor must never be exposed to the morning sun.

Mounting Height

Mount the unit in the middle of the building, or heating zone, and at least 8 feet (2.5 m) above the ground.

Do not mount the sensor at the following locations:

- Above windows, doors, air exhausts or other heat sources.
- Below balconies or eaves.

Mounting Notes

- To prevent measuring errors due to air circulation, seal the cable conduit at the sensor.
- Do not paint over the sensor.
- Mounting instructions are printed on the packaging.

The installation is now complete.

Wiring Diagrams

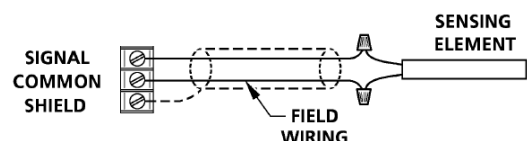


Figure 1. Passive Resistance Elements (QAC20xx).

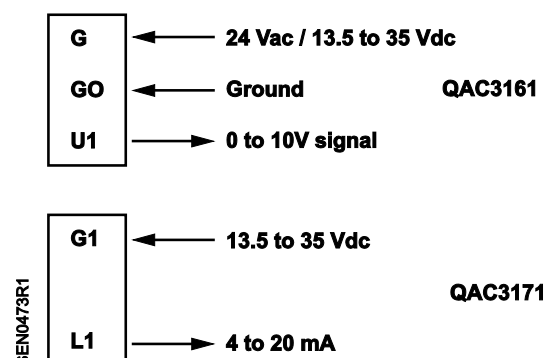


Figure 2. Active Output Sensors (QAC31x1).

Dimensions

In Inches (Millimeters)

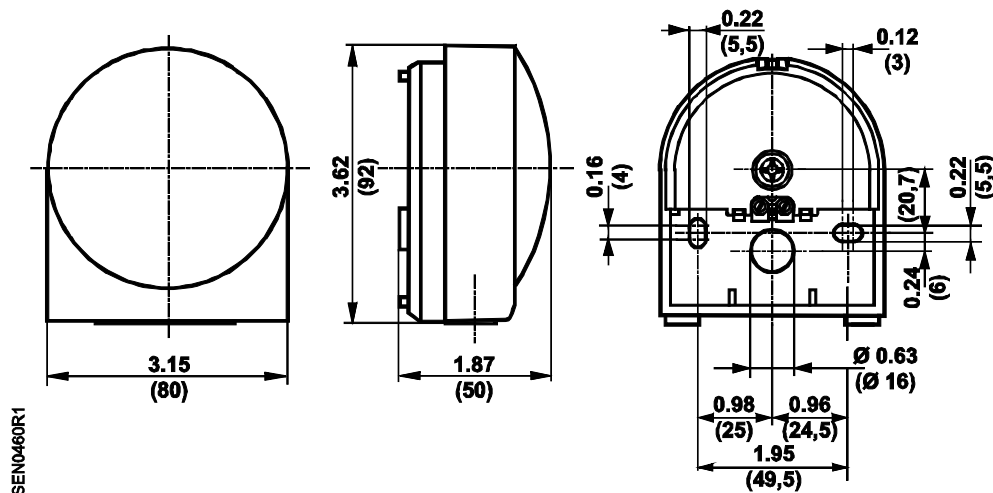


Figure 2. Passive Resistance Sensors.

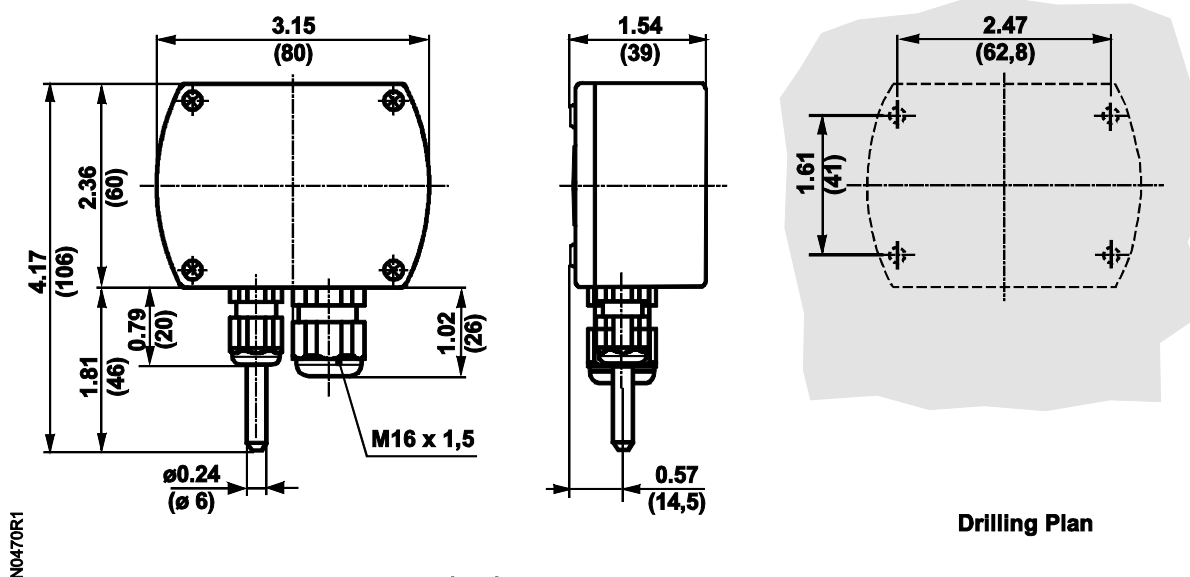


Figure 3. Active Output Sensors.

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