

## 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 $\Omega$ , 385 alpha	-58°F to 158°F (-50°C to 70°C)
	QAC2030	NTC 10K $\Omega$ , Type 2	-40°F to 158°F (-40°C to 70°C)
Active Output	QAC3161	0 to 10 Vdc signal [Platinum 1K $\Omega$ ]	-58°F to 122°F (-50°C to 50°C)
	QAC3171	4 to 20 mA signal [Platinum 1K $\Omega$ ]	-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

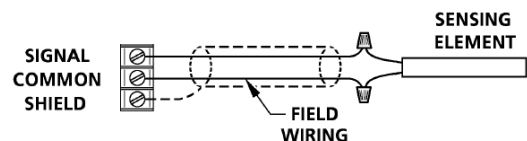


Figure 1. Passive Resistance Elements (QAC20xx).

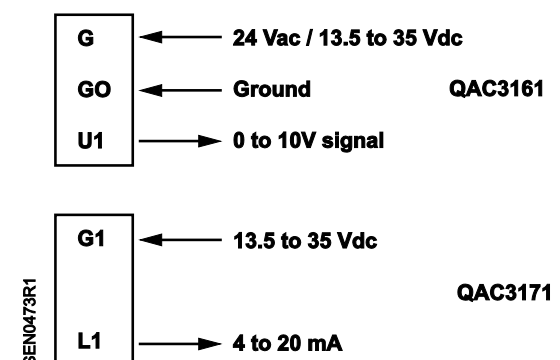


Figure 2. Active Output Sensors (QAC31x1).

## Dimensions

### In Inches (Millimeters)

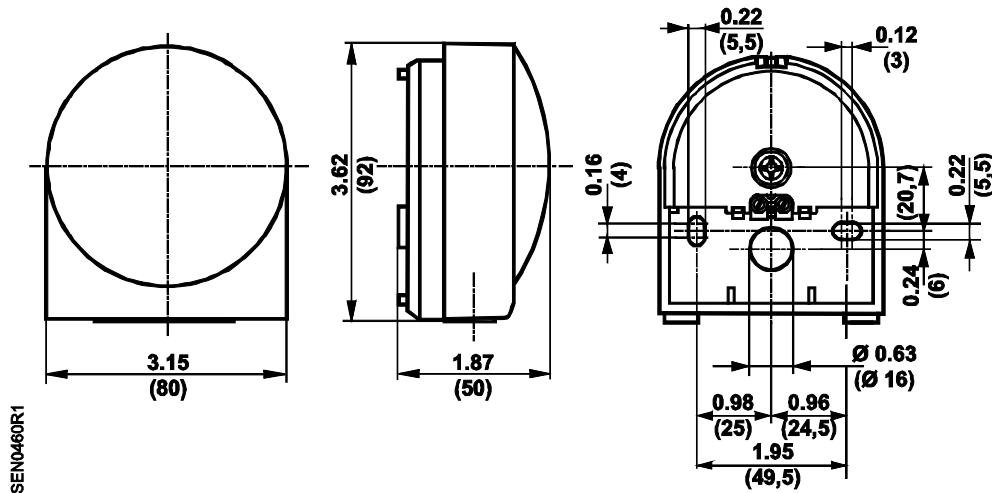


Figure 2. Passive Resistance Sensors.

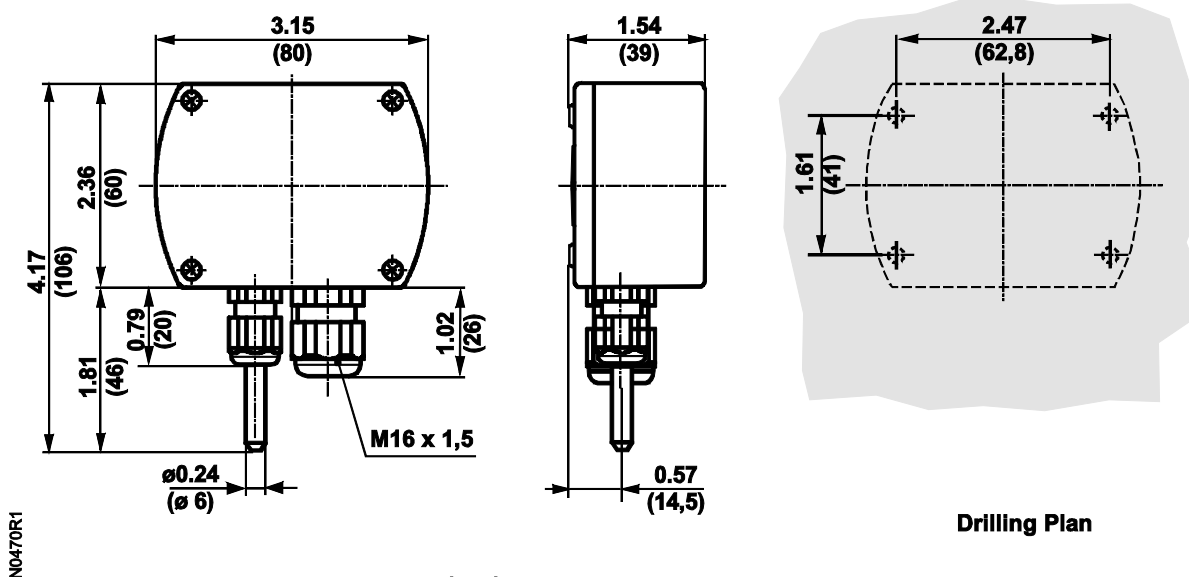


Figure 3. Active Output Sensors.

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