N 121
07.09.05 MC

OUTSIDE TEMPERATURE SENSORS WITH "DEGREE DAYS METERING"

SGE - SGG Eng.

- **NTC or Pt temperature sensing element**
- **Measurement range:**
  – SGE 001 (– 40...+ 40 °C) NTC.
  – SGG 001 (– 50...+ 40 °C) Pt.
- **Installation:**
  – on external wall

CE

1. APPLICATION

In combination with the appropriate instrumentation measure the external temperature and permit metering degree-days.

2. MODELS AVAILABLE

Code	Description	Range	Sensing element	Cables up to max.: 1mm²	1.5 mm²	2.5 mm²
SGE 001	In 45 x 80 x 35 wall-mount waterproof enclosure	– 40... 40 °C	NTC 1 kΩ	350 m	500 m	1000 m
SGG 001	In 45 x 80 x 35 wall-mount waterproof enclosure	– 50... 40 °C	Pt 1 kΩ	70 m	100 m	200 m

3. TECHNICAL DATA

Temperature sensing element:	
Type	see table in 2 above
Time constant	1 minute
Measurement range	see table in 2 above
Protection	IP 54
Cable entry	PG 11
Sensing element protective cover	ø 7 x 60 mm

Materials:	
Enclosure	NYLON
Sensing element protective cover	nichel-plated brass
Dimensions	see table in 2 above
Installation	on wall
Construction standards	Italian Electr. Committee (CEI)
Weight	100 g

4. INSTALLATION

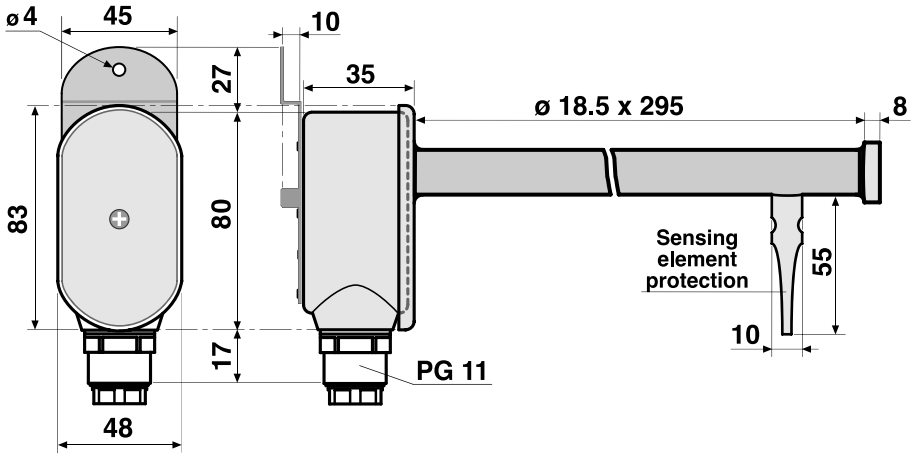
The sensor must be installed at a height of 2.5 …3 metres from the ground, on an external wall of the building, facing **NORTH** or **NORTH-WEST**, at a point that best represents the temperature .
The sensor must be sited be as far as possible from windows and heat sources in general; it must **NOT be located in corners**, underneath balconies and near to chimneys and kitchen aeration grilles.
The sensor is not influenced by the thermal conditions of the wall on which it is mounted since it is provided with a spacing collar which keeps it at a distance from the wall.

- Install the wall plug supplied **(ø 9 mm)**.
- Screw up the spacing collar as far as it will go and secure it (**by hand only – NO tools**).
- Separate the cover from the enclosure by loosening the screw holding these parts together.
- Attach the enclosure to the spacing collar using the screws provided.
- Carry out the electric wiring in strict accordance with the diagram and with the safety regulations in force, using cables of the appropriate diameter (**NOT telephone or similar cables**) – see table in 2 above.
- Replace the cover on the enclosure and tighten up the screw holding together the two components.

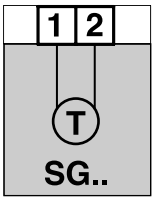
Warning:

- **If the sensor is to be connected using a bipolar cable, the distances shown in the table in 2 above must be strictly adhered to in order to ensure correct operation.**
- **If several sensors are to be connected by a single multicore cable, all the sensors must be of COSTER manufacture.**
- **For correct temperature measurement, the installation must be carried out following these instructions to the letter.**

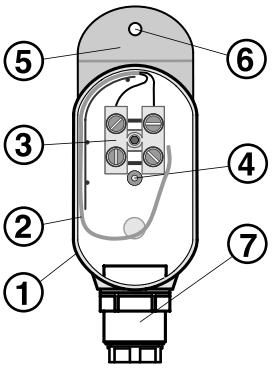
5. OVERALL DIMENSIONS



6. WIRING DIAGRAM

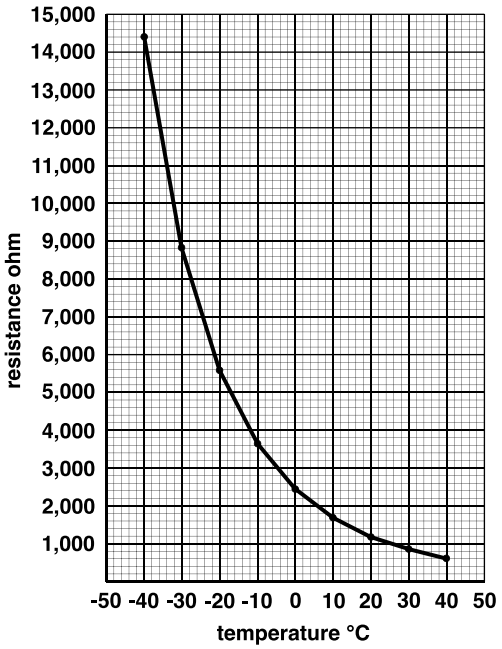


7. ENCLOSURE

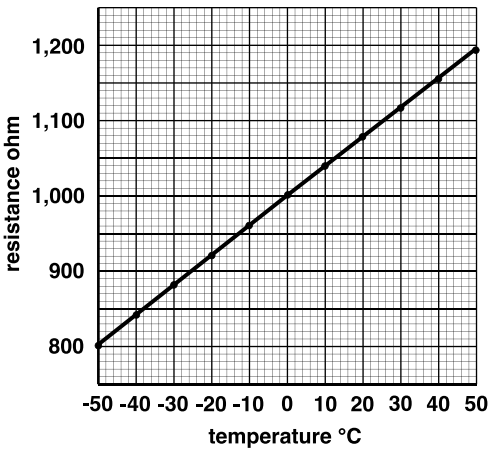


1 – Enclosure
2 – Sensing element cable
3 – Connection terminals
4 – Cover securing screw
5 – Sensor holder
6 – Hole for fixing sensor
7 – PG 11 cable entry

8. NTC 1KΩ SENSING ELEMENT : TEMP./RESISTANCE



9. Pt 1KΩ SENSING ELEMENT:TEMP./RESISTANCE



Amendments to version dated 17.03.05 Rev.: MC 07.09.05

Page	Section	Amendments
1	General	New photograph.
2	5	New overall dimensions diagram
	7	New enclosure diagram

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