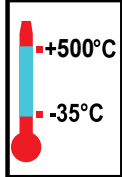
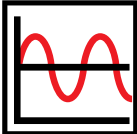
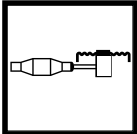


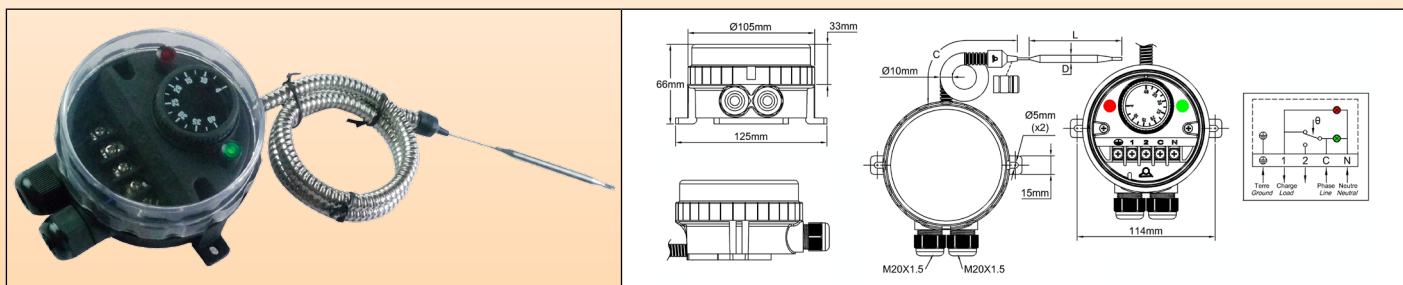


# Bulb and capillary thermostats

| Enclosure             | Type                                                                              | Operation                                                                         | Contact                                                                           | Measurement                                                                        | Ranges °C                                                                           | Models        |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------|
| IP66, IK10            | Control                                                                           | Mechanical                                                                        | SPDT                                                                              | Remote                                                                             |  | <b>YF9GNC</b> |
| Material<br>PA66 + PC |  |  |  |  |                                                                                     |               |



## Applications

- Equipment requesting a very strong resistance to water ingress. The transparent cover allows to visualize the set point and the 2 pilot lights

Remote control in usual industrial application and environment, not hazardous areas.

**Housing:** Protection class IP 66 upon EN 60529 (waterproof spray water under high pressure and sea splashes, totally dust tight). Body in black PA66, fiber glass reinforced. The transparent polycarbonate cover can be unscrewed by hand, but it is also possible to use a hook spanner. Mechanical impact resistance: IK10. High UV resistance.

**Set point adjustment:** By °C printed knob. All types have an adjustable rotation limit system located inside the knob that allows reducing the set point adjustment span. °F printed knobs available as an option.

**Action:** Temperature control. On-Off action.

**Sensing element:** Liquid expansion bulb and capillary. The capillary is protected by a stainless steel corrugated pipe terminated by a silicone tip. A plastic cap plug provided as standard accessory allows locking the flexible metal conduit inside a pocket (See pockets in the accessories section).

**Pilot lights:** One pilot light visualizes the thermostat contact output position. The other visualizes the power supply input. Phase and line electrical supply is mandatory for these pilot lights.

**Set point adjustment ranges:** -35+35°C (-30+95°F); -10+40°C (15-105°F); 4-40°C (40-105°F); 0-60°C (32-140°F); 0-90°C (32-195°F); 30-90°C (85-195°F); 30-110°C (85-230°F); 50-200°C (120-390°F); 50-300°C (120-570°F); 100-400°C (210-750°F); 100-500°C (210-930°F)

**Cable input and output:** Two M20 cable glands, built-in black PA66.

**Electrical connections:** Inside, on screw terminal connection block. It is possible to connect 2 wires 1.5mm<sup>2</sup> on each terminal.

**Earthing:** Internal screw terminal.

**Mounting:** Wall mounting, by 2 legs with holes for screws dia. 4 to 5mm, 114mm distance

**Identification:** Identification label on backside

**Contact:** SPDT

**Electrical rating, resistive loads:**

- Open on temperature rise contact (C-1)

16A 250V, 50 ~60Hz: >100000 cycles,

20A 250V, 50 ~60Hz: ≥50000 cycles,

10A 400V, 50 ~60Hz: ≥50000 cycles.

- Close on temperature rise contact (C-2): 6A 250V 50 ~60Hz: >100000 cycles

**Electrical rating, inductive loads:**

- Open on temperature rise contact (C-1): 2.6A 250V, 50 ~60Hz: >100000 cycles

- Close on temperature rise contact (C-2): 0.6A 250V 50 ~60Hz: >100000 cycles.

**Minimum storage temperature:** -35°C (-30°F)

**Maximum ambient temperature:** 60°C (140°F)

For more technical information ask 8G thermostat technical data sheet.

## Main references

| Temperature range °C (°F) | References       | Capillary length (C, mm) | Bulb diameter (D, mm) | Bulb length (E, mm) | Differential °C (°F) | Max temperature on bulb °C (°F) |
|---------------------------|------------------|--------------------------|-----------------------|---------------------|----------------------|---------------------------------|
| -35+35°C (-30+95°F)       | YF9GNC35035156ZJ | 1500                     | 6                     | 120±5               | 1.6±1°C (2.9±2°F)    | 60°C (140°F)                    |
| -10+40°C (15-105°F)       | YF9GNC10040156ZJ | 1500                     | 6                     | 107±5               | 1.5±1°C (2.7±2°F)    | 70°C (158°F)                    |
| 4-40°C (40-105°F)         | YF9GNC04040156ZJ | 1500                     | 6                     | 120±5               | 1±0.5°C (1.8±1°F)    | 70°C (158°F)                    |



Contact us

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Cat2-2-5-19

# Bulb and capillary thermostats

| Temperature range °C (°F) | References       | Capillary length (C, mm) | Bulb diameter (D, mm) | Bulb length (E, mm) | Differential °C (°F) | Max temperature on bulb °C (°F) |
|---------------------------|------------------|--------------------------|-----------------------|---------------------|----------------------|---------------------------------|
| 0-60°C (32-140°F)         | YF9GNC00060156ZJ | 1500                     | 6                     | 86±5                | 2.5±1°C (4.5±1.8°F)  | 80°C (176°F)                    |
| 0-90°C (32-195°F)         | YF9GNC00090156ZJ | 1500                     | 6                     | 98±5                | 2.5±1°C (4.5±1.8°F)  | 120°C (250°F)                   |
| 30-90°C (85-195°F)        | YF9GNC30090156ZJ | 1500                     | 6                     | 98±5                | 2.5±1°C (4.5±1.8°F)  | 120°C (250°F)                   |
| 30-110°C (85-230°F)       | YF9GNC30110156ZJ | 1500                     | 6                     | 86±5                | 2.5±1°C (4.5±1.8°F)  | 140°C (284°F)                   |
| 50-200°C (120-390°F)      | YF9GNC50200156ZJ | 1500                     | 6                     | 65±5                | 4±2°C (7±3.6°F)      | 230°C (446°F)                   |
| 50-300°C (120-570°F)      | YF9GNC50300153ZJ | 1500                     | 3                     | 145±5               | 10°C±2°C (18±3.6°F)  | 330°C (626°F)                   |
| 100-400°C (210-750°F)     | YF9GNC400153ZJ   | 1500                     | 3                     | 93±5                | 10°C±2°C (18±3.6°F)  | 430°C (800°F)                   |
| 100-500°C (210-930°F)     | YF9GNC40500144ZJ | 1400                     | 4                     | 235±5               | 10°C±2°C (18±3.6°F)  | 550°C (1000°F)                  |

\*F printing: replace last character (J) by K

## Knob printings

| °C Printing |          |           |           |           |           |
|-------------|----------|-----------|-----------|-----------|-----------|
| 0-10°C      | -35+35°C | -10+40°C  | 4-40°C    | 0-60°C    | 0-90°C    |
|             |          |           |           |           |           |
| 30-90°C     | 30-110°C | 50-200°C  | 50-300°C  | 100-400°C | 100-500°C |
|             |          |           |           |           |           |
| °F Printing |          |           |           |           |           |
| 32-50°F     | -30+90°F | 15-105°F  | 40-105°F  | 30-140°F  | 30-195°F  |
|             |          |           |           |           |           |
| 85-195°F    | 85-230°F | 120-390°F | 120-570°F | 210-750°F | 210-930°F |
|             |          |           |           |           |           |

Because of permanent improvement of our products, drawings, descriptions, features used on these data sheets are for guidance only and can be modified without prior advice

