

Electronic thermostats, remote sensor, IP66 enclosure in PA66 and PC

Enclosure	Type	Operation	Contact	Measurement	Ranges °C	Models
IP66,IK10	Control	Electronic	SPNO or SPNC	Remote		YF92NC & YF94NC
Material						
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.

Temperature control with reduced differential, on-off action, in usual industrial applications and environments, not hazardous areas. Use of electronic sensor allows **measurement at long distances**, which is not possible with bulb and capillary types.

-Very small differential

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.

Operation: Microprocessor electronic thermostat,

Sensing element: NTC or Pt100 sensor, diameter D= 5mm. The sensor cable 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). Standard cable length 2m. Other lengths on request.

Pilot lights: One pilot light visualizes the thermostat contact output position. The other visualizes the power supply input. Phase and line 230V power supply is mandatory for these pilot lights.

Set point adjustment ranges: -35-35°C (-30+95°F) ; 0-10°C (32-50°F) ; 4-40°C (40-105°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).

Differential: Differential is preset at the minimum value, but can be increased with a potentiometer located under the set point adjustment knob.

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 1.5mm² on each terminal.

Earthing: Internal screw terminal.

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

Identification: Identification label on backside

Contact: SPST. 16A (2.6), 250VAC. Open or close on temperature rise. Model with contact closing on temperature rise is used for refrigeration. Version with contact opening on temperature rise is used for heating.

Electrical life: >100.000 cycles.

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

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

For more technical information see 2PE2N6 thermostat technical data sheet

Main references

Temperature adjustment ranges°C (°F)	Temperature sensor	References with SPNC, open on temperature rise contact	References with SPNO, close on temperature rise contact	Differential °C (°F)
-35+35°C (-30+95°F)	NTC (10KOhms @25°C)	YF92NC350352051J	YF94NC350352051J	0,5~0,8°C (0.9~1.4°F)
0-10°C (32-50°F)	NTC (10KOhms @25°C)	YF92NC000102051J	YF94NC000102051J	0,5~0,8°C (0.9~1.4°F)
4-40°C (40-105°F)	NTC (10KOhms @25°C)	YF92NC040402051J	YF94NC040402051J	0,5~0,8°C (0.9~1.4°F)
30-90°C (85-195°F)	NTC (10KOhms @25°C)	YF92NC000902051J	YF94NC000902051J	0,5~0,8°C (0.9~1.4°F)
30-110°C (85-230°F)	NTC (10KOhms @25°C)	YF92NC301102051J	YF94NC301102051J	0,5~0,8°C (0.9~1.4°F)
50-200°C (120-390°F)	Pt100	YF92NC502002051J	YF94NC502002051J	0,5~0,8°C (0.9~1.4°F)
50-300°C (120-570°F)	Pt100	YF92NC503002051J	YF94NC503002051J	0,5~0,8°C (0.9~1.4°F)
100-400°C (210-750°F)	Pt100	YF92NCA04002051J	YF94NCA04002051J	0,5~0,8°C (0.9~1.4°F)
100-500°C (210-930°F)	Pt100	YF92NCA05002051J	YF94NCA05002051J	0,5~0,8°C (0.9~1.4°F)

°F printing: replace last character (J) by K

Character 12 gives the sensor cable length (2m)

Knob printings

°C Printing					°F Printing				
-35+35°C	0-10°C	4-40°C	30-90°C	30-110°C	-30+95°F	32-50°F	40-105°F	85-195°F	85-230°F
50-200°C	50-300°C	100-400°C	100-500°C		120-390°F	120-570°F	210-750°F	210-930°F	