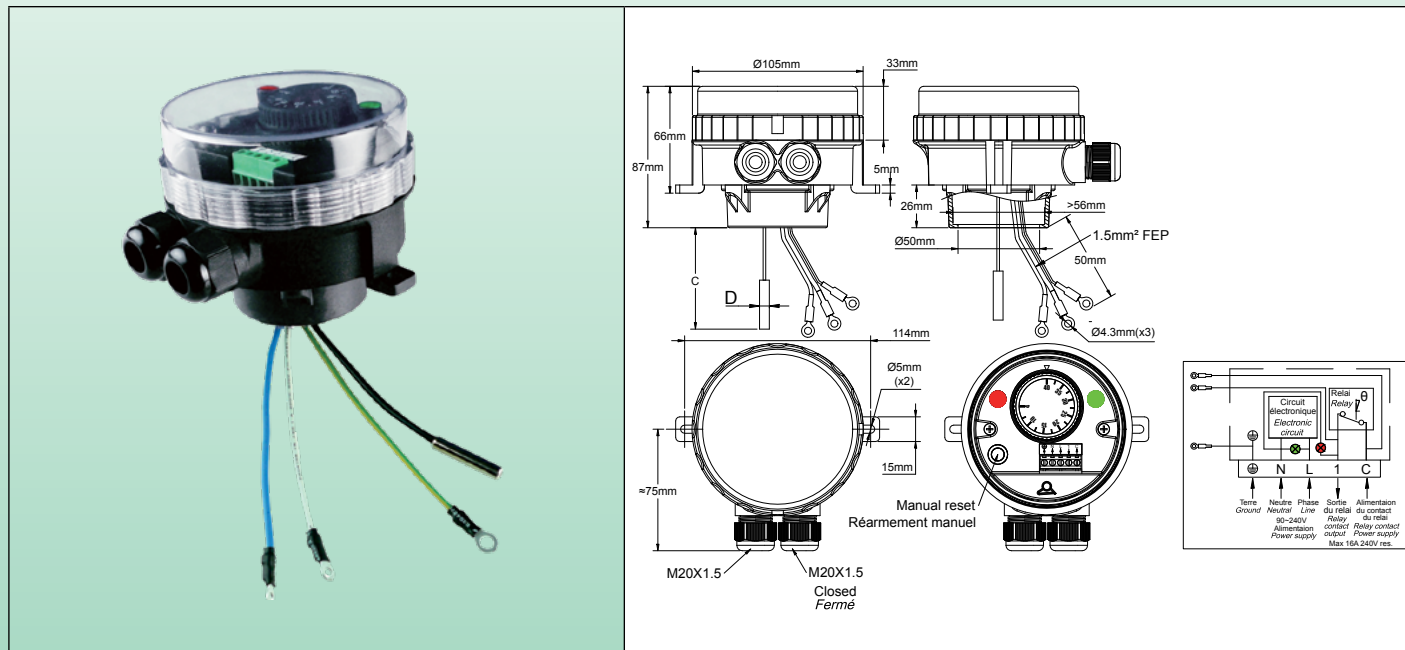




# Adjustable electronic manual reset limiters for immersion heaters

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Enclosure	Type	Operation	Contact	Measurement	Ranges °C	Models
IP66, IK10	Manual reset	Electronic	SPNC	Immersion heater		<b>YF83NC</b>
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

Fully wired electronic temperature control sub assembly for direct mounting on immersion heater elements, 1 1/2" or M45x2 with double thread or rotation ring.

Applications in high temperature safety in usual industrial applications and environments, non-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. A removable adapter is screwed at the bottom of the enclosure. It fits the usual immersion heater fittings. 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, manual reset high temperature limiter

**Set point adjustment ranges:** 4-40°C (40-105°F); 30-90°C (85-195°F); 30-110°C (85-230°F).

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

**Sensing element:** The 5 × 30mm NTC sensor (10KOhms @25°C) goes out by the bottom of the enclosure to fit in the immersion heater pocket.

**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.

**Cable input and output:** Two M20 cable glands, built-in black PA66. One of them is closed.

**Electrical connections:** Inside, on screw terminal connection block.

**Earthing:** Internal screw terminal and 1.5mm<sup>2</sup> FEP insulated wire with round hole terminals for the immersion heater.

**Mounting:** By the immersion heater thread or by 2 legs with holes for screws dia. 4 to 5mm, 114mm distance.

**Identification:** Identification label on backside.

**Contact:** SPNC. 16A (2.6), 250VAC. Contact open on temperature rise.

**Electrical life:** >100,000 cycles.

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

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

For more technical information ask 2PE2N6 thermostat technical data sheet.



## Main references

Temperature adjustment ranges °C (°F)	References with SPNC contact, open on temperature rise	NTC sensor cable length (C, mm)	Minimum differential °C (°F)
4-40°C (40-105°F)	YF83NC04040118UJ	110	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	YF83NC04040178UJ	170	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	YF83NC04040238UJ	230	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	YF83NC04040308UJ	300	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	YF83NC04040458UJ	450	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	YF83NC04040608UJ	600	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	YF83NC30090118UJ	110	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	YF83NC30090178UJ	170	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	YF83NC30090238UJ	230	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	YF83NC30090308UJ	300	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	YF83NC30090458UJ	450	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	YF83NC30090608UJ	600	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	YF83NC30110118UJ	110	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	YF83NC30110178UJ	170	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	YF83NC30110238UJ	230	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	YF83NC30110308UJ	300	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	YF83NC30110458UJ	450	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	YF83NC30110608UJ	600	0.5~0.8°C (0.9~1.4°F)

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

## Knob printings

°C Printing		
4-40°C	30-90°C	30-110°C
°F Printing		
40-105°F	85-195°F	85-230°F

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