

# Electronic temperature control, rod

Enclosure	Type	Operation	Contact	Measurement	Ranges °C	Models
IP65, IK10	Control	Electronic	SPNO or SPNC	Rod		Y1S2P Y1R2P
Material						
Aluminum						

**Y1S2P: External adjustment  
(With pilot light)**

**Y1R2P: Internal adjustment  
(Without pilot light)**

## Applications:

These rod thermostats with **electronic sensor** can be installed inside pockets as immersion thermostats in pipelines and containers, and for monitoring temperature in air ducts, in usual industrial applications and environments. (Not suitable for hazardous areas).

**Very low differential. On-Off action**

**Internal adjustment is convenient for products that must not be frequently adjusted.**

**Housing:** Aluminum, IP65, IK10. Grey RAL7032 epoxy painting. Stainless steel captive cover screws. Captive aluminum lid.

**Operation:** Microprocessor electronic control thermostat.

**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).

**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. Types with external adjustment have a transparent window. This device allows seeing the pilot light and the knob position. °F values are available as an option.

**Sensing element:** NTC or Pt100 sensor located at the end of a dia.8mm stainless steel rod. An increased diameter under the thermostat head allows mounting pockets, coolers or brackets (See pockets in the accessories section)

**Cable input and output:** Two M20 cable glands, Black PA66. Internal electrical connection on screw terminals. 2 phases power supply (Line+ Neutral, 220~250V, 50Hz~60Hz) are mandatory.

**Earthing:** Internal and external screw terminal.

**Pilot light:** Allow to visualize thermostat contact output position. Standard for all models with transparent window. Non Standard and on special request only for models with plain aluminum cover.

**Identification:** Metallic identification label, riveted.

**Contact:** SPST. 16A (2.6), 250VAC. Open or close on temperature rise. (Contact action can be set on the circuit board.) Products are shipped in standard with contact open on temperature rise action, for use in heating applications.

**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 (Rod dia. 8mm)

Temperature adjustment ranges °C (°F)	References with external adjustment	References with internal adjustment	Temperature sensor	Rod length* (L, mm)	Differential °C (°F)
-35-35°C (-30+95°F)	Y1S2PN6F235035BJ	Y1R2PN6F235035BJ	NTC (10KOhms @25°C)	90	0.5~0.8°C (0.9~1.4°F)
-35-35°C (-30+95°F)	Y1S2PN6F235035CJ	Y1R2PN6F235035CJ	NTC (10KOhms @25°C)	110	0.5~0.8°C (0.9~1.4°F)
-35-35°C (-30+95°F)	Y1S2PN6F235035DJ	Y1R2PN6F235035DJ	NTC (10KOhms @25°C)	170	0.5~0.8°C (0.9~1.4°F)
-35-35°C (-30+95°F)	Y1S2PN6F235035EJ	Y1R2PN6F235035EJ	NTC (10KOhms @25°C)	230	0.5~0.8°C (0.9~1.4°F)
-35-35°C (-30+95°F)	Y1S2PN6F235035FJ	Y1R2PN6F235035FJ	NTC (10KOhms @25°C)	300	0.5~0.8°C (0.9~1.4°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



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Cat2-2-12-3

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Temperature adjustment ranges °C (°F)	References with external adjustment	References with internal adjustment	Temperature sensor	Rod length* (L, mm)	Differential °C (°F)
-35-35°C (-30+95°F)	Y1S2PN6F235035GJ	Y1R2PN6F235035GJ	NTC (10KOhms @25°C)	450	0.5~0.8°C (0.9~1.4°F)
0-10°C (32-50°F)	Y1G2PN6F2000102J	Y1R2PN6F200010CJ	NTC (10KOhms @25°C)	110	0.5~0.8°C (0.9~1.4°F)
0-10°C (32-50°F)	Y1S2PN6F200010CJ	Y1R2PN6F200010EJ	NTC (10KOhms @25°C)	230	0.5~0.8°C (0.9~1.4°F)
0-10°C (32-50°F)	Y1S2PN6F200010EJ	Y1R2PN6F200010FJ	NTC (10KOhms @25°C)	300	0.5~0.8°C (0.9~1.4°F)
0-10°C (32-50°F)	Y1S2PN6F200010FJ	Y1R2PN6F200010GJ	NTC (10KOhms @25°C)	450	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	Y1S2PN6F204040BJ	Y1R2PN6F204040BJ	NTC (10KOhms @25°C)	90	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	Y1S2PN6F204040CJ	Y1R2PN6F204040CJ	NTC (10KOhms @25°C)	110	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	Y1S2PN6F204040DJ	Y1R2PN6F204040DJ	NTC (10KOhms @25°C)	170	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	Y1S2PN6F204040EJ	Y1R2PN6F204040EJ	NTC (10KOhms @25°C)	230	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	Y1S2PN6F204040FJ	Y1R2PN6F204040FJ	NTC (10KOhms @25°C)	300	0.5~0.8°C (0.9~1.4°F)
4-40°C (40-105°F)	Y1S2PN6F204040GJ	Y1R2PN6F204040GJ	NTC (10KOhms @25°C)	450	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	Y1S2PN6F230090BJ	Y1R2PN6F230090BJ	NTC (10KOhms @25°C)	90	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	Y1S2PN6F230090CJ	Y1R2PN6F230090CJ	NTC (10KOhms @25°C)	110	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	Y1S2PN6F230090DJ	Y1R2PN6F230090DJ	NTC (10KOhms @25°C)	170	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	Y1S2PN6F230090EJ	Y1R2PN6F230090EJ	NTC (10KOhms @25°C)	230	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	Y1S2PN6F230090FJ	Y1R2PN6F230090FJ	NTC (10KOhms @25°C)	300	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	Y1S2PN6F230090GJ	Y1R2PN6F230090GJ	NTC (10KOhms @25°C)	450	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	Y1S2PN6F230090HJ	Y1R2PN6F230090HJ	NTC (10KOhms @25°C)	600	0.5~0.8°C (0.9~1.4°F)
30-90°C (85-195°F)	Y1S2PN6F230090JJ	Y1R2PN6F230090JJ	NTC (10KOhms @25°C)	800	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	Y1S2PN6F230110BJ	Y1R2PN6F230110BJ	NTC (10KOhms @25°C)	90	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	Y1S2PN6F230110CJ	Y1R2PN6F230110CJ	NTC (10KOhms @25°C)	110	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	Y1S2PN6F230110DJ	Y1R2PN6F230110DJ	NTC (10KOhms @25°C)	170	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	Y1S2PN6F230110EJ	Y1R2PN6F230110EJ	NTC (10KOhms @25°C)	230	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	Y1S2PN6F230110FJ	Y1R2PN6F230110FJ	NTC (10KOhms @25°C)	300	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	Y1S2PN6F230110GJ	Y1R2PN6F230110GJ	NTC (10KOhms @25°C)	450	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	Y1S2PN6F230110HJ	Y1R2PN6F230110HJ	NTC (10KOhms @25°C)	600	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	Y1S2PN6F230110JJ	Y1R2PN6F230110JJ	NTC (10KOhms @25°C)	800	0.5~0.8°C (0.9~1.4°F)
30-110°C (85-230°F)	Y1S2PN6F230110KJ	Y1R2PN6F230110KJ	NTC (10KOhms @25°C)	1000	0.5~0.8°C (0.9~1.4°F)
50-200°C (120-390°F)	Y1S2PP6F250200EJ	Y1R2PP6F250200EJ	Pt100	230	0.5~0.8°C (0.9~1.4°F)
50-200°C (120-390°F)	Y1S2PP6F250200FJ	Y1R2PP6F250200FJ	Pt100	300	0.5~0.8°C (0.9~1.4°F)
50-200°C (120-390°F)	Y1S2PP6F250200GJ	Y1R2PP6F250200GJ	Pt100	450	0.5~0.8°C (0.9~1.4°F)
50-200°C (120-390°F)	Y1S2PP6F250200HJ	Y1R2PP6F250200HJ	Pt100	600	0.5~0.8°C (0.9~1.4°F)
50-200°C (120-390°F)	Y1S2PP6F250200JJ	Y1R2PP6F250200JJ	Pt100	800	0.5~0.8°C (0.9~1.4°F)
50-300°C (120-570°F)	Y1S2PP6F250300FJ	Y1R2PP6F250300FJ	Pt100	300	0.5~0.8°C (0.9~1.4°F)
50-300°C (120-570°F)	Y1S2PP6F250300GJ	Y1R2PP6F250300GJ	Pt100	450	0.5~0.8°C (0.9~1.4°F)
50-300°C (120-570°F)	Y1S2PP6F250300HJ	Y1R2PP6F250300HJ	Pt100	600	0.5~0.8°C (0.9~1.4°F)
100-400°C (210-750°F)	Y1S2PP6F2A0400FJ	Y1R2PP6F2A0400FJ	Pt100	300	0.5~0.8°C (0.9~1.4°F)
100-400°C (210-750°F)	Y1S2PP6F2A0400GJ	Y1R2PP6F2A0400GJ	Pt100	450	0.5~0.8°C (0.9~1.4°F)
100-400°C (210-750°F)	Y1S2PP6F2A0400HJ	Y1R2PP6F2A0400HJ	Pt100	600	0.5~0.8°C (0.9~1.4°F)
100-500°C (210-930°F)	Y1S2PP6F2A0500FJ	Y1R2PP6F2A0500FJ	Pt100	300	0.5~0.8°C (0.9~1.4°F)
100-500°C (210-930°F)	Y1S2PP6F2A0500GJ	Y1R2PP6F2A0500GJ	Pt100	450	0.5~0.8°C (0.9~1.4°F)
100-500°C (210-930°F)	Y1S2PP6F2A0500HJ	Y1R2PP6F2A0500HJ	Pt100	600	0.5~0.8°C (0.9~1.4°F)

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

\* Above 200°C we recommend to use a rod cooler reference 66RF07015 or 66RF0701F12 between the rod and the enclosure (see accessories).  
Caution: This cooler reduces the usable rod length by 70mm.

## Knob printings

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

