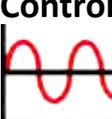
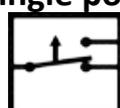
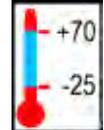
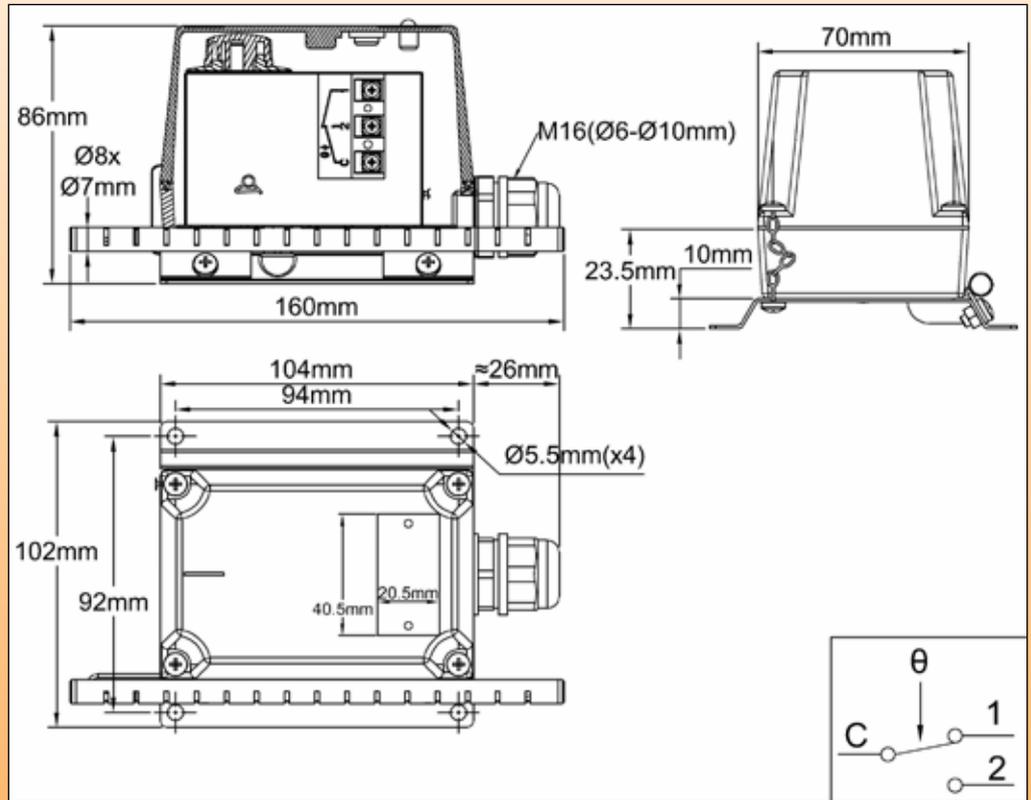


# The Y1 range of thermostats with IP65 enclosures

## Ambient and antifreeze

Type	Adjustment	Contact	Measurement	Range °C	Model
Control 	Internal 	Single pole 	Ambient 		<b>Y1A</b> <b>Thermostat</b> <b>KR, KU</b>



### Applications:

- Wall mounting for indoor temperature control of cold room
- Temperature control of industrial or commercial premises.
- Outdoor temperature control of antifreeze heaters,
- Green houses and livestock stables temperature control

*Withstand very low ambient temperatures*

**Housing:** Aluminum, IP65, IK10, 104 x 102 x 86 mm. Mounted on a SUS304 stainless steel wall mounting plate which keeps temperature sensing element away from the wall. Grey RAL7032 epoxy painting

**Set point adjustment ranges:** **-25+25°C (-15+80°F)**, **-10+15°C (15-60°F)**, **0-50°C (32-120°F)**, **0-70°C (32-160°F)**.

**Temperature adjustment:** Set point adjustable by temperature printed **internal knob**. Shipped with °C printed skirt fitted on the knob, and °F printed skirt in spare part. Printed skirt is replaceable without tool.

**Action:** temperature control.

**Sensing element:** Liquid filled bulb. Temperature measurement is made by bulb located on the side of the mounting bracket, under protection tube

**Electrical connections:** Inside, on screw terminals connection block

**Earthing:** on internal screw terminal

**Cable output:** M16 cable gland, PA66, for cables up to 10 mm dia.

**Mounting:** Wall mounting, by 4 holes for screws dia. 4 to 5 mm, 94 x 92 mm distance

**Identification:** 20 x 40 mm stainless steel identification label, riveted.

**Contact:** SPDT

**Rating:** 15A res. 230/400VAC, electrical life >500.000 cycles.

Reduced differential models cannot be used in 400VAC

**Storage minimum temperature:** -50°C (-60°F)

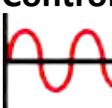
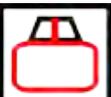
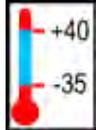
## Main references

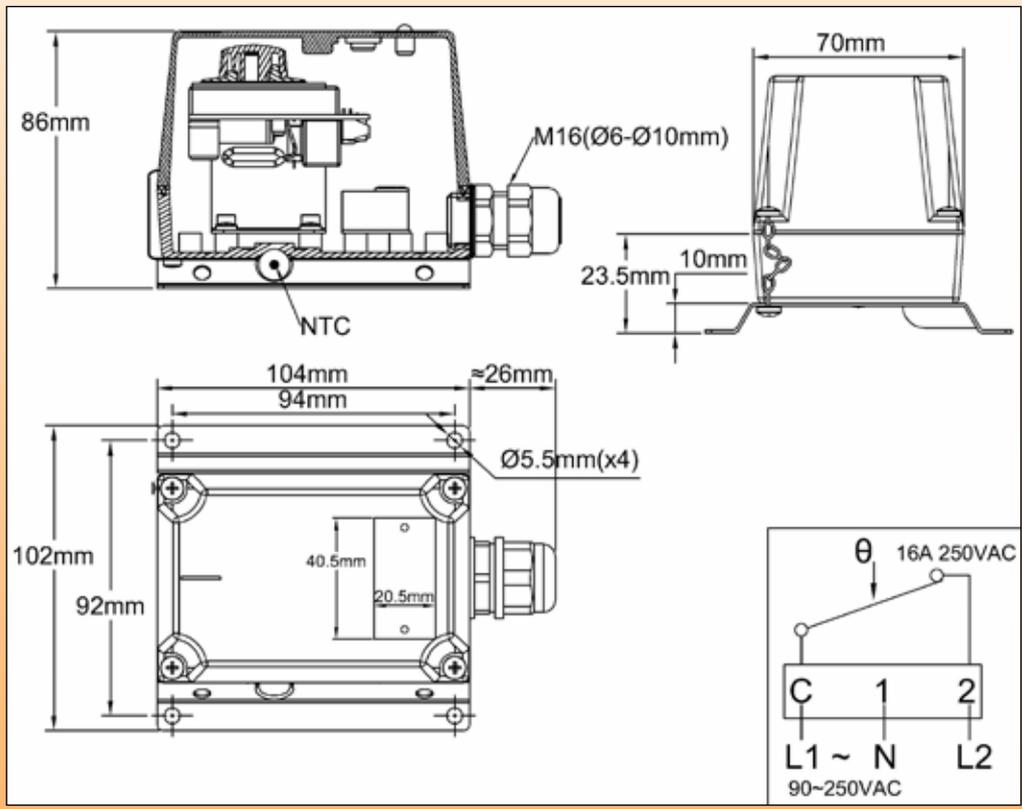
Temperature adjustment ranges °C (°F)	Standard differential		Reduced differential		Maximum ambient temperature °C (°F)
	References	Differential °C (°F)	References	Differential °C (°F)	
-25+25°C (-15+80°F)	Y1AKRA-25025220E	3±1°C (5.5±1.8 °F)	Y1AKUA-25025220E	2±1°C (3.6±1.8 °F)	60°C (140°F)
-10+15°C (15-60°F)	Y1AKRA-10015200E	3±1°C (5.5±1.8 °F)	Y1AKUA-10015200E	2±1°C (3.6±1.8 °F)	60°C (140°F)
0-50°C (32-120°F)	Y1AKRA000050200E	3±1°C (5.5±1.8 °F)	Y1AKUA000050200E	2±1°C (3.6±1.8 °F)	60°C (140°F)
0-70°C (32-160°F)	Y1AKRA000070500E	5±2°C (9±3.6°F)	Y1AKUA000070500E	3±1°C (5.5±1.8 °F)	80°C (180°F)



# The Y1 range of thermostats with IP65 enclosures

## Ambient and antifreeze

Type	Adjustment	Contact	Measurement	Range °C	Model
Control 	Internal 	Single pole 	Ambient 		<b>Y1D</b> <b>Thermostat</b> <b>2PE2N6</b>



### Applications:

- Wall mounting for indoor temperature control of cold room
- Temperature control of industrial or commercial premises.
- Outdoor temperature control of antifreeze heaters,
- Green houses and livestock stables temperature control

**This electronic model allows temperature control with smaller differential than liquid expansion**

**Housing:** Aluminum, IP65, IK10, 104 x 102 x 86 mm. Mounted on a SUS304 stainless steel wall mounting plate which keeps temperature sensing element away from the wall. Grey RAL7032 epoxy painting

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

**Temperature adjustment:** Set point adjustable by temperature printed **internal knob**. Shipped with °C printed skirt fitted on the knob, and °F printed skirt in spare part. Printed skirt is replaceable without tool.

**Sensing element:** NTC sensor located on the side of the mounting bracket, under waterproof silicone protection cap.

**Action:** **electronic temperature control**, on off action

**Differential:** **Adjustable** by potentiometer located under the internal knob

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

**Earthing:** on internal screw terminal

**Cable output:** M16 cable gland, PA66, for cables up to 10 mm dia.

**Mounting:** Wall mounting, by 4 holes for screws dia. 4 to 5 mm, 94 x 92 mm distance

**Identification:** 20 x 40 mm stainless steel identification label, riveted.

**Contact:** open on temperature rise or close on temperature rise. Selection is made with a switch, with access after removing internal knob.

**Power supply:** universal, from 90 to 240V, 50Hz or 60Hz

**Electrical rating:** 16A 250VAC res.

- Electrical life >100.000 cycles.

Cannot be used in 400VAC

**Minimum Storage temperature:** -20°C (-5°F)

### Main references

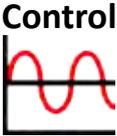
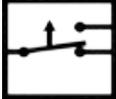
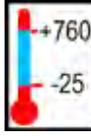
Temperature adjustment ranges °C (°F)	Differential °C (°F)	Maximum ambient temperature °C (°F)	References
-35+35°C (-30+95°F)	0.5~5.5°C (0.9~10°F)	50°C (120°F)	Y1D2PE2N6-35035E
0-10°C (32-50°F)	0.5~2.5°C (0.9~4.5°F)	50°C (120°F)	Y1D2PE2N6000010E
4-40°C (40-105°F)	0.5~2.5°C (0.9~4.5°F)	50°C (120°F)	Y1D2PE2N6004040E

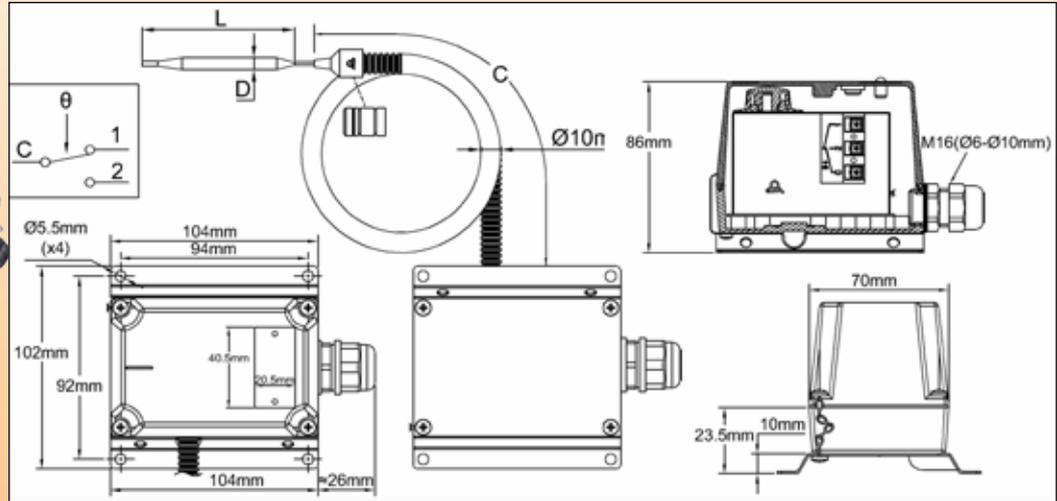


Because of permanent improvement of our products, drawings, descriptions, features used on these data sheets are for guidance only and can be modified without prior advice

# The Y1 range of thermostats with IP65 enclosures

## Bulb and capillary thermostats (Liquid expansion measurement)

Type	Adjustment	Contact	Measurement	Range °C	Model
Control 	Internal 	Single pole 	Remote 		<b>Y1G</b> <b>Thermostat</b> <b>KR, KU</b>



### Applications:

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

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

Withstand very low ambient temperatures

Long electrical and mechanical life model

**Housing:** Aluminum, IP65, IK10, 104 x 102 x 86 mm. Mounted on a SUS304 stainless steel wall mounting plate. Grey RAL7032 epoxy painting

**Set point adjustment ranges:** -25+25°C (-15+80°F), -10+15°C (15-60°F), 0-50°C (32-120°F), 0-70°C (32-160°F), 20-90°C (70-195°F), 10-150°C (50-300°F), 80-200°C (175-390°F), 50-300°C (120-570°F), 10-450°C (50-840°F), 60-500°C (140-930°F), 180-600°C (360-1110°F), 280-700°C (540-1290°F).

**Temperature adjustment:** Set point adjustable by temperature printed **internal knob**. Shipped with °C printed skirt fitted on the knob, and °F printed skirt in spare part. Printed skirt is replaceable without tool.

**Action:** temperature control.

**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)

**Electrical connections:** Internal, on screw terminal connection block

**Earthing:** on internal screw terminal

**Cable output:** M16 cable gland, PA66, for cables up to 10 mm dia.

**Mounting:** Wall mounting, by 4 holes for screws dia. 4 to 5 mm, 94 x 92 mm distance

**Identification:** 20 x 40 mm stainless steel identification label, riveted.

**Contact:** SPDT

**Rating:** 15A res. 230/400VAC, electrical life >500.000 cycles.

Reduced differential models cannot be used in 400VAC

**Storage minimum temperature:** -50°C (-60°F)

## Main references

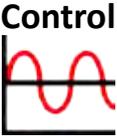
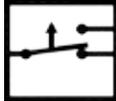
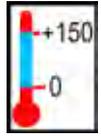
Temperature range °C (°F)	Standard differential		Reduced differential		Capillary length (C, mm)	Bulb diameter (D, mm)	Bulb length (E, mm)	Max. temperature on bulb °C (°F)
	References	Differential °C (°F)	References	Differential °C (°F)				
-25+25°C (-15+80°F)	Y1GKRA-25025220G	3±2°C (5.5±3.6 °F)	Y1GKUA-25025220G	2±1°C (3.6±1.8 °F)	1500	6.4	152	50°C (120°F)
-10+15°C (15-60°F)	Y1GKRA-10015220G	3±2°C (5.5±3.6 °F)	Y1GKUA-10015220G	2±1°C (3.6±1.8 °F)	1500	6.4	152	50°C (120°F)
0-50°C (32-120°F)	Y1GKRA000050200G	3±2°C (5.5±3.6 °F)	Y1GKUA000050200G	2±1°C (3.6±1.8 °F)	1500	6.4	152	60°C (140°F)
0-70°C (32-160°F)	Y1GKRA000070520G	5±3°C (9±5.4°F)	Y1GKUA000070520G	3±2°C (5.5±3.6 °F)	1500	4.8	130	160°C (320°F)
0-70°C (32-160°F)	Y1GKRA000070120G	5±3°C (9±5.4°F)	Y1GKUA000070120G	3±2°C (5.5±3.6 °F)	3000	4.8	130	160°C (320°F)
20-90°C (70-195°F)	Y1GKRA020090500G	5±3°C (9±5.4°F)	Y1GKUA020090500G	3±2°C (5.5±3.6 °F)	1500	4.8	130	160°C (320°F)
20-90°C (70-195°F)	Y1GKRA020090100G	5±3°C (9±5.4°F)	Y1GKUA020090100G	3±2°C (5.5±3.6 °F)	3000	4.8	130	160°C (320°F)
10-150°C (50-300°F)	Y1GKRA010150500G	5±3°C (9±5.4°F)	Y1GKUA010150500G	3±2°C (5.5±3.6 °F)	1500	4.8	130	160°C (320°F)
10-150°C (50-300°F)	Y1GKRA010150100G	5±3°C (9±5.4°F)	Y1GKUA010150100G	3±2°C (5.5±3.6 °F)	3000	4.8	130	160°C (320°F)
80-200°C (175-390°F)	Y1GKRA080200010G	10±4°C (18±7°F)	Y1GKUA080200010G	7±3°C (12.5±5.4 °F)	1500	4	100	320°C (610°F)
50-300°C (120-570°F)	Y1GKRA050300010G	10±4°C (18±7°F)	Y1GKUA050300010G	7±3°C (12.5±5.4 °F)	1500	4	100	320°C (610°F)
10-450°C (50-840°F)	Y1GKRA010450700G	20±6°C (36±11°F)	Y1GKUA010450700G	12±4°C (22±7 °F)	1500	4.8	120	760°C (1400°F)
10-450°C (50-840°F)	Y1GKRA010450900G	20±6°C (36±11°F)	Y1GKUA010450900G	12±4°C (22±7 °F)	3000	4.8	120	760°C (1400°F)
60-500°C (140-930°F)	Y1GKRA060500700G	20±6°C (36±11°F)	Y1GKUA060500700G	12±4°C (22±7 °F)	1500	4.8	120	760°C (1400°F)
60-500°C (140-930°F)	Y1GKRA060500900G	20±6°C (36±11°F)	Y1GKUA060500900G	12±4°C (22±7 °F)	3000	4.8	120	760°C (1400°F)
180-600°C (360-1110°F)	Y1GKRA180600700G	20±6°C (36±11°F)	Y1GKUA180600700G	12±4°C (22±7 °F)	1500	4.8	120	760°C (1400°F)
180-600°C (360-1110°F)	Y1GKRA180600900G	20±6°C (36±11°F)	Y1GKUA180600900G	12±4°C (22±7 °F)	3000	4.8	120	760°C (1400°F)
280-700°C (540-1290°F)	Y1GKRA280700700G	20±6°C (36±11°F)	Y1GKUA280700800G	12±4°C (22±7 °F)	1500	3	300	760°C (1400°F)

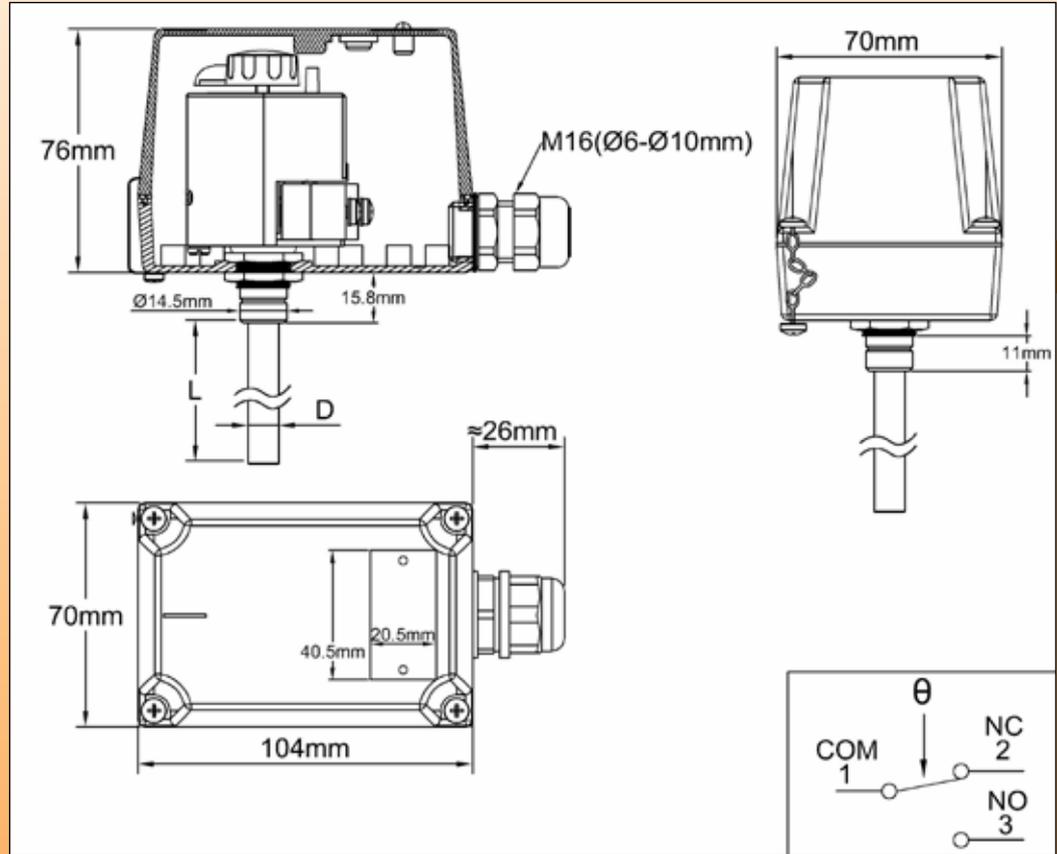
Because of permanent improvement of our products, drawings, descriptions, features used on these data sheets are for guidance only and can be modified without prior advice



# The Y1 range of thermostats with IP65 enclosures

## Rod thermostats (bimetal expansion measurement)

Type	Adjustment	Contact	Measurement	Range °C	Model
Control 	Internal 	Single pole 	Rod 		<b>Y1R</b> <b>Thermostat</b> <b>SR, SU</b>



### Applications:

These **bimetal** rod thermostats can be installed inside pockets as immersion thermostats in pipelines and containers, and for monitoring temperature in air ducts, in usual industrial application and environment. (Not suitable for hazardous areas).

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

- **Short response time**

- **Sensibility to strong vibrations**

*Long electrical and mechanical life model*

**Housing:** Aluminum, IP65, IK10, 104 x 70 x 76 mm. Grey RAL7032 epoxy painting

**Set point adjustment ranges:** 0-50°C (32-122°F), 10-60°C (50-140°F), 30-90°C (86-194°F), 0-100°C (32-212°F), 40-140°C (104-284°F), 0-150°C (32-302°F).

**Temperature adjustment:** Set point adjustable by **arrow style knob, on °C printed dial.** Consult us for °F versions

**Action:** temperature control.

**Sensing element:** Bimetal rod, stainless steel-Invar. An increased diameter under the thermostat head allows mounting pockets or brackets (See pockets in the accessories section)

**Electrical connections:** on thermostat screw terminals

**Earthing:** on internal screw terminal

**Cable output:** M16 cable gland, PA66, for cables up to 10 mm dia.

**Mounting:** on pockets for liquid immersion or flange for air ducts

**Identification:** 20 x 40 mm stainless steel identification label, riveted.

**Contact:** SPDT

**Rating:** 15A res. 230/400VAC, electrical life >500.000 cycles.

Reduced differential models cannot be used in 400VAC

**Storage minimum temperature:** -50°C (-60°F)

## Main references

Temperature range °C (°F)	Rod length (mm)	Reference with standard differential	Differential value °C (°F)	Reference with reduced differential	Differential value °C (°F)	Maximum temperature on rod °C (°F)
0-50°C (32-122°F)	450	Y1RSRA000050045C	3±1.5°C (5.4±2.7°F)	Y1RSUA000050045C	1.5±1°C (2.7±1.8°F)	70°C (158°F)
10-60°C (50-140°F)	450	Y1RSRA010060045C	3±1.5°C (5.4±2.7°F)	Y1RSUA010060045C	1.5±1°C (2.7±1.8°F)	80°C (176°F)
30-90°C (86-194°F)	380	Y1RSRA030090038C	4±2°C (7.2±3.6°F)	Y1RSUA030090038C	2±1°C (3.6±1.8°F)	110°C (230°F)
0-100°C (32-212°F)	230	Y1RSRA000100023C	6±3°C (10.8±5.4°F)	Y1RSUA000100023C	3±1.5°C (5.4±2.7°F)	130°C (266°F)
40-140°C (104-284°F)	230	Y1RSRA040140023C	6±3°C (10.8±5.4°F)	Y1RSUA040140023C	3±1.5°C (5.4±2.7°F)	170°C (338°F)
0-150°C (32-302°F)	170	Y1RSRA000150017C	8±4°C (14.4±7.2°F)	Y1RSUA000150017C	4±2°C (7.2±3.6°F)	180°C (356°F)

