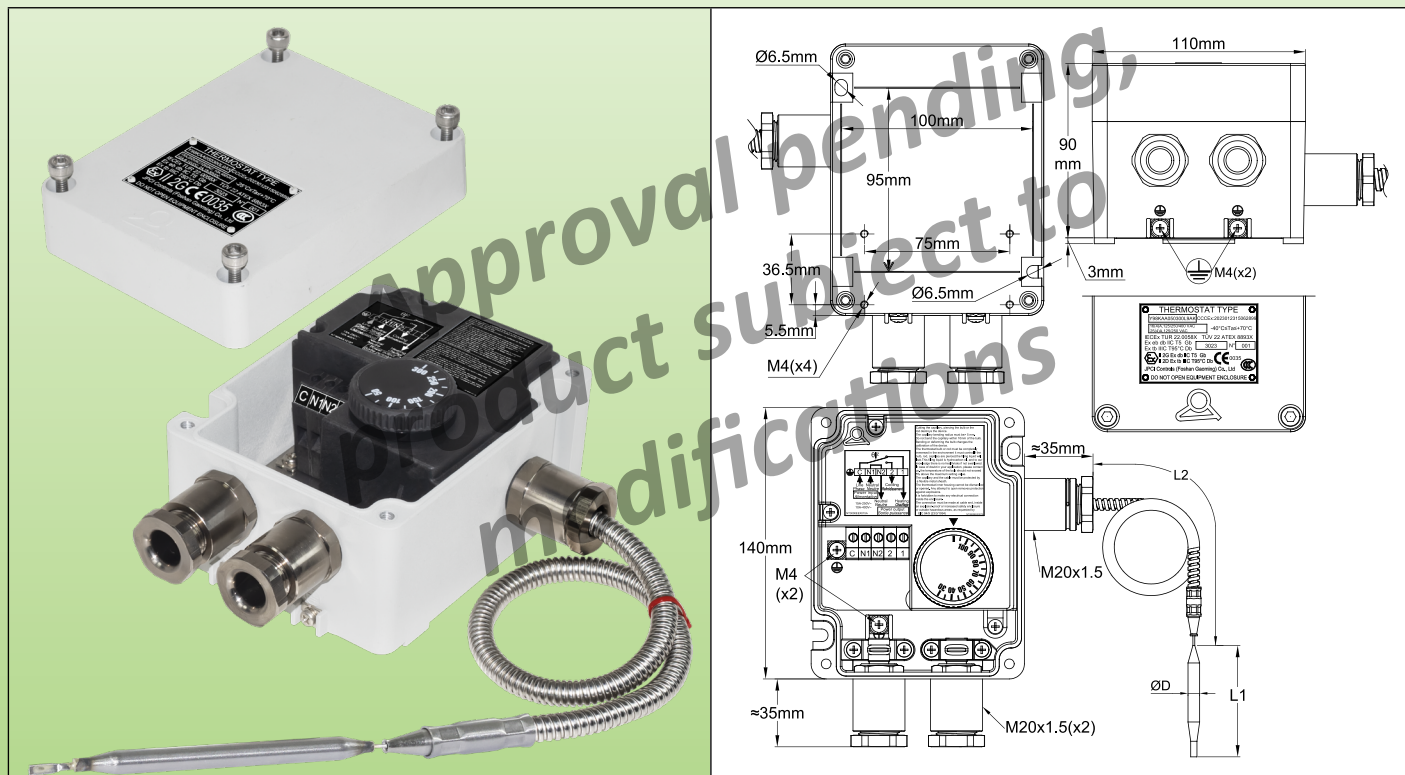


## Bulb and capillary thermostat, printed knob adjustment

Electrical connection	Set point adjustment	Mounting	Action	Contact Rating	T° range min and max limits	Type
Internal junction block	Printed knob	Bulb and capillary	Control	SPDT 16(4)A 400VAC; 25(4)A, 250VAC	-50 to +500°C	Y98KAA



### General Rules for Installation:

**Important Note:** These bulb and capillary thermostats are intended to monitor or control temperatures in gas or dust hazardous areas.

**For gas hazardous areas,** this equipment is approved as "Ex-eb db" and is suitable for use in zone 1 and zone 2, gas group IIC (Hydrogen/Acetylene, the highest protection group), with a temperature classification T6;

**For dust hazardous areas,** this equipment is approved as "Ex-tb", suitable for use in zone 21 and zone 22, the dust group is IIIC (electric conductive dust, the highest protection group), with ambient temperature limits on its body from -25°C to +80°C. The thermostat, box and terminal block assembly is an inseparable unit.

Ambient temperature on the enclosure must stay between -25 and +70°C but may also be limited by the maximum ambient temperature allowed on the temperature sensing element (See the parts numbers table).

**Approvals:** These thermostats are certified: ATEX: TÜV 22ATEX 8893 X; IECEx: TUR 22.0058X.

**Housing:** Aluminum, 140 × 110 × 90mm (Dimensions without cable glands), epoxy painting, RAL7035 (thickness less than 0.2mm).

**Temperature sensing element:** Oil filled bulb and capillary, liquid expansion principle. The capillary is protected by a flexible corrugated stainless-steel tube..

**Electrical connection:** On built-in junction block, for conductors of 0.5mm<sup>2</sup> to 4mm<sup>2</sup>, screw terminals. 5 terminals for neutral and line, including jumpers between input and output for neutral. There are also 2 ground terminals M4 inside and 2 outside the enclosure.

**Cable glands:** Two M20 metal cable glands can be used for cable from 3.5 to 12mm. There is a cable locking saddle inside the enclosure, at each cable gland input. It allows the grounding of the braid if braided cables are used.

**Adjustment:** With knob printed in °C (°F on request). Adjustment is possible only after removing the cover, and when the electrical supply is powered off.



# Thermostats and limiters, connection inside EX « e » aluminum housing with built-in connection block



**Mounting:** Wall mounting, by 2 holes dia. 6.5mm at 100mm × 95mm distance. The housing rear side also includes four M4 threaded holes 36.5 × 75mm distance for mounting metal brackets and feet providing offset wall mounting, pole or pipes mounting (see the accessories in the last part of this catalog)

**Contacts:** SPDT (snap action contact)

**Electrical rating:** Suitable for power control, remote control of relay coils or PLCs circuits, and direct power switching.

Voltage	Max rating (A)	Switch Electrical life (cycles)
400VAC	16	100000
250VAC	25	100000
125VAC	25	100000

These devices use silver contacts or silver alloy contacts. Due to the possible oxidation of the contacts in time, we do not recommend the use of AC or DC low-voltage circuits (24V or less) if the switched intensity is less than 100mA, or the switched power less than 800mW. Contact us for those applications that require gold-plated contacts. The electrical ratings given are normalized resistive circuit values.

**Mechanical life:** > 500,000 cycles

**Options:** These enclosures can receive thermostats with setpoint screw driver adjustment (Type 97KAC) or with sealed fixed setting (Type 97KAF). See pages of thermostats without enclosure for more information.

**Gas classification:**

Ex II 2G Ex eb db IIC T6 Gb

**Dust classification:**

Ex II 2D Ex tb IIIC T80°C Db

## Main references

Part numbers with two M20 cable gland	Temperature range	Capillary length (L2, mm)	Bulb diameter (D, mm)	Bulb length (L3, mm)	Differential (°C)	Max temperature on bulb	Max temperature on enclosure
Y98KAAA-35035L11K	-35+35°C (-30+95°F) **	1500	6	110	1.6±1°C (2.9±2°F)	60°C (140°F)	60°C (140°F)
Y98KAAA-10040L21K	-10+40°C (15-105°F) *	1500	6	150	1.5±1°C (2.7±2°F)	70°C (158°F)	70°C (158°F)
Y98KAAA004040L41K	4-40°C (40-105°F) *	1500	8	120	1.±0.5°C (1.8±1°F)	50°C (122°F)	50°C (122°F)
Y98KAAA000060L51K	0-60°C (32-140°F)	1500	6	125	2.5±1°C (4.5±2°F)	75°C (167°F)	70°C (158°F)
Y98KAAA030090L61K	30-90°C (85-195°F)	1500	6	100	2.5±1°C (4.5±2°F)	120°C (250°F)	70°C (158°F)
Y98KAAA030110L71K	30-110°C (85-230°F)	1500	6	80	2.5±1°C (4.5±2°F)	140°C (284°F)	70°C (158°F)
Y98KAAA050200L81K	50-200°C (120-390°F)	1500	4	120	4±2°C (7±3.6°F)	230°C (446°F)	70°C (158°F)
Y98KAAA050300L91K	50-300°C (120-570°F)	1500	4	80	10±2°C (18±3.6°F)	330°C (626°F)	70°C (158°F)

\* The filling liquid of these thermostatic assemblies has a freezing temperature below -40°C. Acceptable minimum storage temperature: -50°C. Maximum ambient temperature on these thermostats: +60°C

\*\* The set point adjustment at low end is limited to -25°C

See to the last section of this catalogue for existing accessories