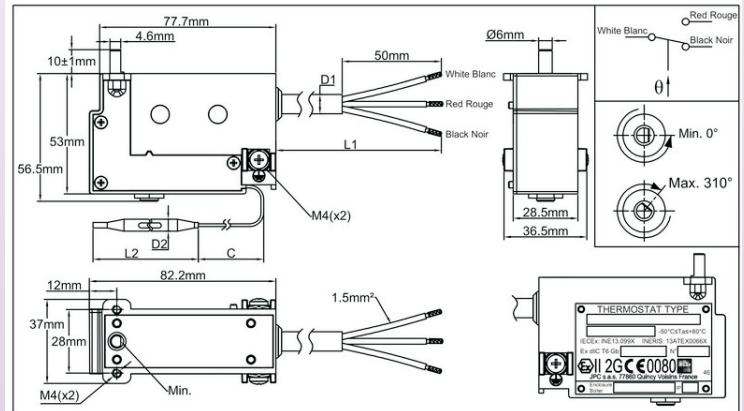




Explosion proof bulb and capillary thermostats for incorporation

Cable electrical connection (product approval)
Temperature control, front mounting

Electrical connection	Set point adjustment	Mounting	Action	Contact Rating 230V	T° range min and max limits	Types
Cable	10mm shaft	Front, 2 M4 screws	Control	SPDT 15A	-35 to +320°C	KAA-3 KBA-3



General rules for installation:

Important note: This thermostat is considered as a product by the standards of equipment for potentially explosive atmospheres. Its incorporation into equipment or inside an enclosure **does not request** the approval of the entire device by a professional competent certified body. These models with knob adjustment and front mounting allow incorporation inside most existing "Ex e" junction boxes in aluminum or polyester and inside a fitting height of 71 mm.

These thermostats are intended to monitor or control temperatures in hazardous areas.

They can be used in zones 1 or 2 with gas, smoke and fog, class IIC, surface temperature T5 or T6, and for ambient temperature on housing of -50 to +80°C (T5), or -50 to +70°C (T6).

This thermostat uses a flameproof micro-switch type II2Gb, Ex IIIC T5/T6.

Electrical connections at end of the cable must be made inside increased safety «EX-e» enclosure, or explosion proof enclosure «Ex-d» or outside hazardous area

The thermostat capillary exit must be performed by a cable gland with gasket adapted to the diameter of the capillary and providing the level of protection required by the standard. Outside housings, electrical cable and thermostat capillary must be mechanically protected.

Approvals: These thermostats are ATEX and IECEx certified.

Atex: INERIS13ATEX0066-X ; IECEx: INE13.0099-X

Housing: aluminum, 82,2 x 37 x 56,5mm (Dimensions without shaft and knob)

Bulb and capillary: Copper for temperature ranges up to 50°C, stainless steel over 50°C. Capillary length 1500 mm or 3000 mm. Capillary minimum bending radius 5mm.

Temperature sensing element: oil filled bulb and capillary.

Electrical connection: H05SS-F silicone insulated cable, 3 x 1.5 mm², standard length 3m. Wire ends with crimped terminals. Other lengths on request.

Ground terminals: Two M4 grounding terminals with saddle are located on the side.

Adjustment: Dia. 6 mm shaft with 4.6 mm flat, length 10 mm.

Other shaft lengths available on request:

-20 mm: the third character of the reference (A) becomes M;

-30 mm: the third character of the reference (A) becomes J.

Mounting: Front bracket with 2 x M4 threads, 28 mm distance

Contacts: SPDT (snap action contact)

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

Voltage	Max rating (A)	Switch Electrical life (cycles)
400VAC (KA type only)	10	500000
250VAC	15	500000
125VAC	15	500000
0-15VDC	15	500000
15-30VDC	2	500000

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

Main references with 3m cable length (L1)

References with standard differential	References with reduced differential	Temperature range (°C)	Capillary length (C, mm)	Bulb diameter (D2, mm)	Bulb length (L2, mm)	KA, standard differential*(°C)	KB, reduced differential*(°C)	Max temperature on bulb (°C)
KAA-2502522C3	KBA-2502522C3	-25+25**	1500	6.4	152	3+/-2	2+/-1	50
KAA-1001522C3	KBA-1001522C3	-10+15**	1500	6.4	152	3+/-2	2+/-1	50
KAA00005020C3	KBA00005020C3	0-50**	1500	6.4	152	3+/-2	2+/-1	60
KAA00007052C3	KBA00007052C3	0-70	1500	4.8	120	5+/-3	3+/-2	160
KAA00007012C3	KBA00007012C3	0-70	3000	4.8	120	5+/-3	3+/-2	160
KAA02009050C3	KBA02009050C3	20-90	1500	4.8	120	5+/-3	3+/-2	160
KAA02009010C3	KBA02009010C3	20-90	3000	4.8	120	5+/-3	3+/-2	160
KAA01015050C3	KBA01015050C3	10-150	1500	4.8	120	5+/-3	3+/-2	160
KAA01015010C3	KBA01015010C3	10-150	3000	4.8	120	5+/-3	3+/-2	160
KAA08020001C3	KBA08020001C3	80-200	1500	4	100	10+/-4	6+/-4	320
KAA05030001C3	KBA05030001C3	50-300	1500	4	100	10+/-4	6+/-4	320

* Reduced differential types are not suitable for 400VAC applications.

** The filling liquid of these thermostatic assemblies has a freezing temperature below -40 °C. However it is important to protect the bulb and/or the capillary against the risk of freezing if a temperature below -35 °C can be reached in operation. Acceptable storage temperature: -50 °C.

Go to the last section of this catalogue for knobs, dials, bezels and other accessories

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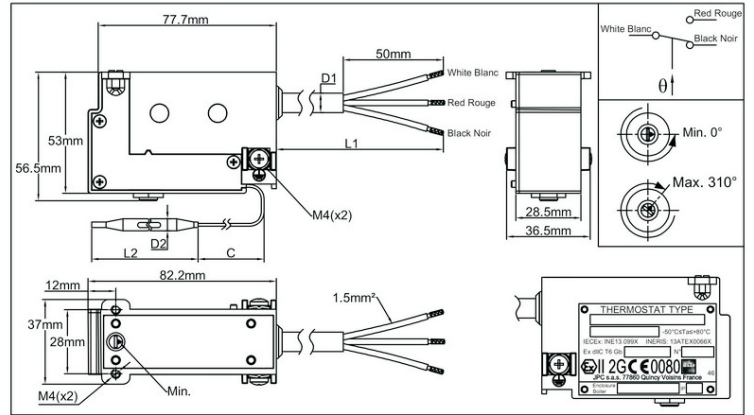




Explosion proof bulb and capillary thermostats for incorporation

Cable electrical connection (product approval)
Temperature control or high limit, front mounting

Electrical connection	Set point adjustment	Mounting	Action	Contact Rating 230V	T° range min and max limits	Types
Cable	Screwdriver	Front, 2 M4 screws	Control	SPDT 15A	-35 to +320°C	KAC-3 KBC-3



General rules for installation:

Important note: This thermostat is considered as a product by the standards of equipment for potentially explosive atmospheres. Its incorporation into equipment or inside an enclosure **does not request** the approval of the entire device by a professional competent certified body. These models with front mounting allow incorporation inside most existing "Ex e" junction boxes in aluminum or polyester and inside a fitting height of 60 mm. These thermostats are intended to monitor or control temperatures in hazardous areas. They can be used in zones 1 or 2 with gas, smoke and fog, class IIC, surface temperature T5 or T6, and for ambient temperature on housing of -50 to +80°C(T5) , or -50 to +70°C (T6).

This thermostat uses a flameproof micro-switch type II2Gb, Ex dIIC T5/T6. Electrical connections at end of the cable must be made inside increased safety «EX-e» enclosure, or explosion proof enclosure «Ex-d» or outside hazardous area. The thermostat capillary exit must be performed by a cable gland with gasket adapted to the diameter of the capillary and providing the level of protection required by the standard. Outside housings, electrical cable and thermostat capillary must be mechanically protected.

Approvals: These thermostats are ATEX and IECEx certified.
Atex: INERIS13ATEX0066-X ; IECEx: INE13.0099-X

Housing: aluminum, 82,2 x 37 x 57,5mm (Dimensions without printed dial)

Bulb and capillary: Copper for temperature ranges up to 50°C, stainless steel over 50°C. Capillary length 1500 mm or 3000 mm. Capillary minimum bending radius 5mm.

Temperature sensing element: oil filled bulb and capillary.

Electrical connection: H05SS-F silicone insulated cable, 3 x 1.5 mm², standard length 3m. Wire ends with crimped terminals. Other lengths on request.

Ground terminals: Two M4 grounding terminals with saddle are located on the side.

Adjustment: with screw driver slot. When used as a temperature limiter, this adjustment screw can be sealed with varnish or epoxy resin. For adjustable temperature set point applications, printed dials are available and must be ordered separately.

Mounting: Front bracket with 2 x M4 threads, 28 mm distance

Contacts: SPDT (snap action contact)

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

Voltage	Max rating (A)	Switch Electrical life (cycles)
400VAC (KA type only)	10	500000
250VAC	15	500000
125VAC	15	500000
0-15VDC	15	500000
15-30VDC	2	500000

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

Main references with 3m cable length (L1)

References with standard differential	References with reduced differential	Temperature range (°C)	Capillary length (C, mm)	Bulb diameter (D2, mm)	Bulb length (L2, mm)	KA, standard differential*(°C)	KB, reduced differential*(°C)	Max temperature on bulb (°C)
KAC-2502522C3	KBC-2502522C3	-25+25**	1500	6.4	152	3+/-2	2+/-1	50
KAC-1001522C3	KBC-1001522C3	-10+15**	1500	6.4	152	3+/-2	2+/-1	50
KAC00005020C3	KBC00005020C3	0-50**	1500	6.4	152	3+/-2	2+/-1	60
KAC00007052C3	KBC00007052C3	0-70	1500	4.8	120	5+/-3	3+/-2	160
KAC00007012C3	KBC00007012C3	0-70	3000	4.8	120	5+/-3	3+/-2	160
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KAC02009010C3	KBC02009010C3	20-90	3000	4.8	120	5+/-3	3+/-2	160
KAC01015050C3	KBC01015050C3	10-150	1500	4.8	120	5+/-3	3+/-2	160
KAC01015010C3	KBC01015010C3	10-150	3000	4.8	120	5+/-3	3+/-2	160
KAC08020001C3	KBC08020001C3	80-200	1500	4	100	10+/-4	6+/-4	320
KAC05030001C3	KBC05030001C3	50-300	1500	4	100	10+/-4	6+/-4	320

* Reduced differential types are not suitable for 400VAC applications.

** The filling liquid of these thermostatic assemblies has a freezing temperature below -40 °C. However it is important to protect the bulb and /or the capillary against the risk of freezing if a temperature below -35 °C can be reached in operation. Acceptable storage temperature: -50 °C.

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