TAEK… Temperature Contact/Switch

1 Application

TAEK… is an explosion-proof contact.
Designed as a high/low-temperature contact especially as alarmer with two temperature switches.

2 Features

- Very solid design with aluminium housing.
- Completely encapsulated with silicone.
- Relatively accurate control if the contact with thermal feedback is installed on the monitoring device/equipment.

3 Control Accuracy

The air temperature in a heated housing is not the same everywhere. Depending on the difference between inside and outside temperature (delta T), insulation, configuration of the heater and the installed equipment etc., the temperature (e.g. between top and bottom) can fluctuate by 10 K or more.
For exact temperature control of an instrument, a proportional controller with temperature sensor, such as INTERTEC TC D ..., should be used.

4 Type designation

TA EK ## X / ## X
① ② ③ ④ ⑤ ⑥

① Temperature controller
② Subtype

③ Lower set point (°C)
④ R = opens at temperature rising
F = opens at temperature falling

⑤ Higher set point (°C)
⑥ R = opens at temperature rising
F = opens at temperature falling

Housing of TAE (picture may differ)

5 Explosion Protection

EAC certificate	RU C-DE.ME92.B.00786
Marking	1ExdIICT6 X

6 Technical Data

Protection Degree	IP66/IP68 1bar/30min
Nominal voltage	max. 250 V AC
	3,3 - 48 V DC
Rated current	1 mA - 100 mA
Operating temperature range	-60°C to +180°C
Dimensions	115 x 24 mm
Material	Seawater-proof aluminium, black anodized

TAEK	Set point	1st contact	2nd contact
5F/30R	Open	5°C	35°C
	Close	8°C	32°C
20F/50R	Open	20°C	50°C
	Close	23°C	47°C
30F/60R	Open	30°C	60°C
	Close	33°C	57°C
50F/80R	Open	50°C	80°C
	Close	53°C	77°C
Temperature tolerance			+ / - 3°C

7 Options

Other designs upon request, e.g.

- With hold-down adapter M20
- Approvals of other countries upon request
- Other set points from -10°C up to +100°C (in 5K steps) upon request

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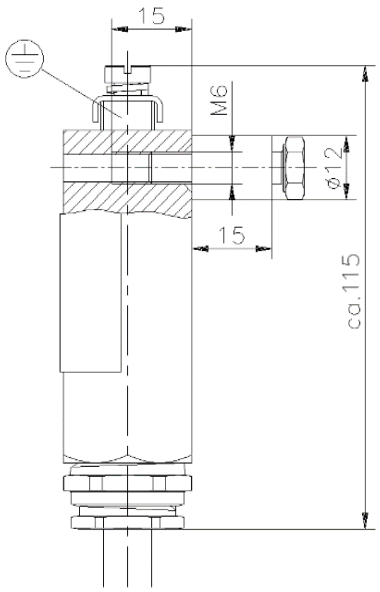
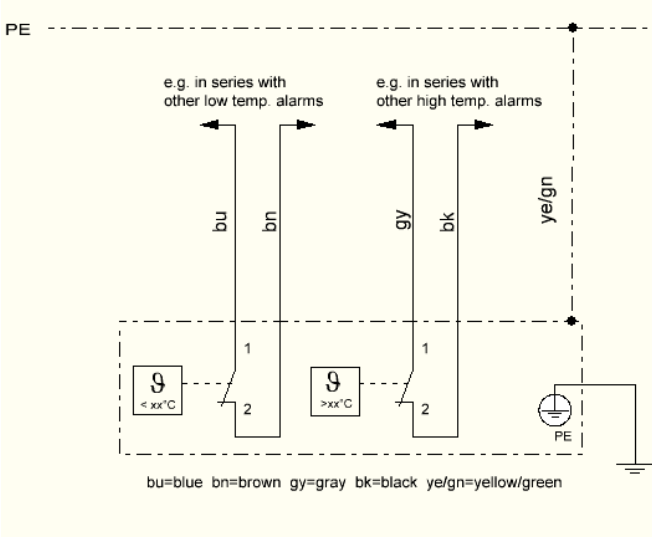
8 Installation

The TAEK has one mounting hole.



Optionally, the supplied bolt M6x25 or a smaller through-bolt can be used.
For use as a temperature alarmer the TAEK with defined thermal feedback should be installed on the device.

8.1 Electrical wiring



8.2 On MULTITHERM

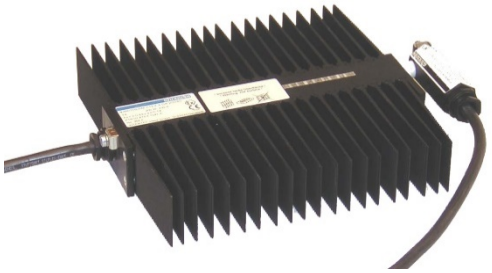
INTERTEC finned heaters such as MULTITHERM are equipped with slotted mounting rails.

- Slightly loosen the nut / bolt
- Insert head of bolt into one slotted mounting rail of the finned profile. (PTFE distance piece remains outside).
- Carefully tighten by turning the TAEK.

8.3 On VARITHERM

There are M6 holes on both sides of the block.

- Turn the threaded rod supplied with the bolt package of the VARITHERM approx. 5 mm into one of these threaded holes.
- Put on the white PTFE spacer.
- Put on the M6 thread of the TAE at the end of the threaded rod and carefully tighten by turning the TAEK.



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