



Explosion proof Heaters Bi-Standard

1 Background

There are two different paradigms for electrical installations in hazardous areas worldwide:

- In North America CSA (Canada and USA) electrical leads may only be installed inside rigid conduits. **Exception:** inside flame-proof enclosures like electric motors normal cables may be used. (3)
- Almost all other countries, IEC, ATEX (EU), GOST(GUS), GB3638 (China) etc: cables may be used, if they are installed mechanically protected.

2 BI-Standard

INTERTEC heaters for hazardous areas are build in a modular system. Many modules of this systems are the same for heaters with IEC certificate and American certificate (CSA C US).

Therefore bi-standard heaters, that comply to both standards are possible. These heaters can be recognized by the letters BI in the type code.

They have two tags, each with the data due to the referring certificate.

These heaters can be practically **used world-wide**.

3 Connection

IEC / ATEX heaters have an EEx d cable gland, (KLE) that completes the flame proof enclosure.. This KLE can be optionally equipped with a 1/2 NPT Adapter to be connected to a conduit. (2) The TS thermostat option integrated in the cable does not fit inside a 1/2" conduit. (1) Versions ...THERM Cxx and BI (with 1/2" NPT) are shipped with a red silicone plug to prevent the cable from damage.. This plug has to be removed to install a 1/2 NPT conduit.

...THERM	...Dxx TS	...Dxx BI KLE (1)	... Dxx..BI (1),(2)	... Cxx ... (1)
Connection type	With KLE cable gland and TS thermostat	With KLE cable gland	With KLE cable gland and 1/2" NPT Adapter	with 1/2" NPT thread in the heater block
Certificate:				
IEC / ATEX	Standard	Special	Special	Not certified
CSA C US	Special (3)	Special (3)	Special	Standard
BI-Standard	Special (3)	Special (3)	Standard	Not certified

(1) the heater is shipped without thermostat at this versions. It has to be installed with an adequate temperature control, otherwise it can be damaged irreparable.

(2) The version **BI** is also available with other connections on request: 1/2" NPT male and female, M20 male , M20D male certified for direct connection to an EEx d flame proof enclosure, hose nozzle or with an armoured protection hose.

(3) Only for use inside an approved enclosure.