
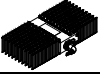
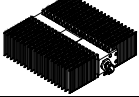



GUIDELINES FOR THE INTERTEC ATEX HEATER PROGRAM

3 For Freeze Protection or Temperature Control

Freeze protection to +20°C

For these applications use the standard convection heaters with TS thermostat option

Type		preferred application
MULTITHERM		Vertical next to the transmitter
MINITHERM		Horizontal under the transmitter
VARITHERM		Horizontal under the transmitter
MICROTHERM		Vertical if there is no room for Multitherm

Calculation of power according to the data sheet Heater Selection for INTERTEC Enclosures

3.2 Temperature Control from +20 to +40 °C

For this application heaters with a protection thermostat integrated in the heater cable are available.

Enclosure temperature are controlled by

TAE External Thermostat (s. 4.2)

TC Electronic Temperature Controller (s.4.3)

3.3. Temperature Control over +40 °C

For this application we do recommend

SMART HEATER

Regarding to 3.2 and 3.3.

The higher the control temperature the more accurate the temperature control must be as the maintain temperature approaches the T rated temperature.

FOR THESE APPLICATIONS PLEASE CONTACT THE FACTORY.

In many applications a combination of conduction and convection heaters can be used to meet desired temperatures:

(E. g.: [Cabinet to maintain +120°C with EXP heater](#))

4 Temperature Control

Controlling temperatures has different goals:

- Energy savings
- Constant surrounding air temperature control for accurate instrument measurement
- Plant safety considerations

4.1 TS Thermostat integrated into cable

Option: Integrated thermostat inside the heater cable

The TS thermostat must not touch the outer wall of the housing.

Temperatures above +5 °C would be maintained inside enclosure.

4.2 TAE External Thermostat

If attached to heater with the bracket supplied, accurate control is achieved through temperature feedback.

Temperature control available:

+20, +30, und +40 °C

4.3 TC Electronic Temperature Controller

These electronic controllers have several advantages over standard thermostats:

- solid state, no thermostat contact that may wear out
- Better control through proportional range
- No hysteresis
- Adjustable or fixed setpoint

- Temperature sensor integrated into the housing

TC should be used always with heaters with the option TS40 to protect the heater against over-temperature.

Option J: integrated junction box to save extra terminal box

4.4 SMART HEATER

These heaters are specifically designed for high temperature maintenance. They are controlled by an integrated electronic controller that

- controls enclosure temperature
- limits the temperature below T rating
- monitors the operation