

Type series FTS

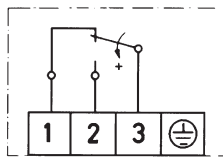
Two-phase frost protection



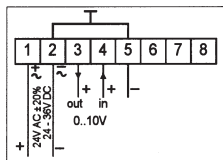
FTS

Connection diagrams

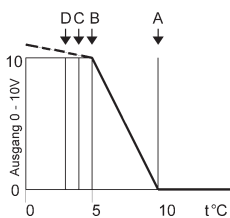
Plug connection



Terminal connection



Characteristics



1st phase

A = 10 °C
Start of the working point
(with falling temperature)
B = 5 °C
End of the constant range

2nd phase

C = 4 °C
Switching back point of the limiter
contact
D = 3 °C
Switching point of the limiter contact

with limiter contact and integrated priority selection

Analog frost protection

With falling temperature the frost protection generates a rising output signal 0–10 V.

Switching function

If the temperature drops further, a limiter contact (single-pole changeover contact) is actuated.

Maximum selection for valve signal

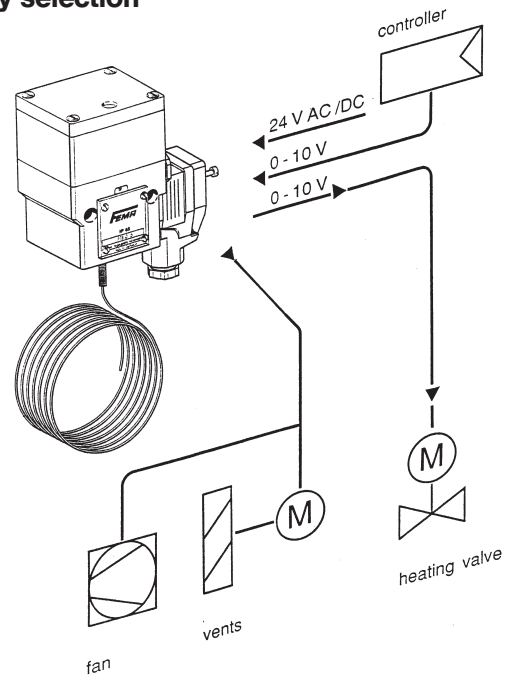
If the output signal of the controller (Y signal) is looped through the frost protection, a maximum selection of the two signals takes place. If the Y signal from the controller is larger than the output signal of the frost protection, the controller determines the position of the heating valve (normal operation). If the output signal of the frost protection is larger than the Y signal of the controller (risk of frost), then the frost protection determines the position of the heating valve.

Self-monitoring sensor

The sensor acting over the entire length is self-monitoring, i. e. in the case of breakage or damage of the capillary tube, "Risk of frost" is signaled. If the signal of the controller is not looped through, then the FTS outputs the frost control signal.

Cascades for large coils

For very large heating coils several FTS can be used in cascade.



Technical data

Supply voltage

24 VAC ± 20% or 24–36 VDC

Output signal

0–10 V + floating limiter contact (at falling temperature)

Power consumption

max. 1 W

Cable entry

2 x Pg 11 for electronic Large user friendly plug connection to DIN 43650 for limit value switch.

Degree of protection

IP 65

Installation

With 2 size 4 mm screws directly on the duct wall.

Ambient temperature

12–50 °C

Caution: at ambient temperatures below 10 °C, the unit reacts and signals "Risk of frost".

Switching capacity

8 A 250 VAC

Range of action	Capillary tube	Type
10...3 °C	6 m	FTS 015
10...3 °C	3 m	FTSB 015

Packaging includes 5 capillary tube holders Type H 3.

Block circuit diagram

