



The ZDTC50 is a temperature controller intended for duct mounting with a built-in NTC 10K thermistor sensor and a 0...10V output. It is designed primarily for control of heating or cooling in HVAC-systems.

- Setpoint 0...50°C
- Change-over function
- Heating or cooling output
- Selectable 0-10VDC/2-10VDC outputs
- Adjustable P-band and selectable I-time
- P or PI-function

Function

The ZDTC50 is a compact controller for duct-mount with built-in sensor and 0...10 V output. It is intended for control of heating or cooling in ventilation and airhandling systems. It can be set to P- or PI- control and has an switch for manual change-over between heating and cooling. The P-Band is adjustable 4...8 K.

Sensor

The controller has a built-in NTC 10K sensor inside the top of the probe.

Setpoint

The setpoint is set by the potentiometer placed in front of the cover.

Setting heating/cooling function

An internal change over jumper is used to determine the heating or cooling function.

Indication

The controller has a red/green LED, indicating red for heating and green for cooling. The light intensity varies according to output voltage level. It has another LED for power indication.

Technical data

Supply voltage	24 VAC +/- 10% 50-60 Hz
Power consumption	0.5VA
Ambient temperature	-15...80°C
Storage temperature	-15...70°C
Ambient humidity	Max 90% RH
Protection class	IP54

Settings

Setpoint	0...50°C
Changeover	Heating/Cooling
Proportional band	4...8K

Output

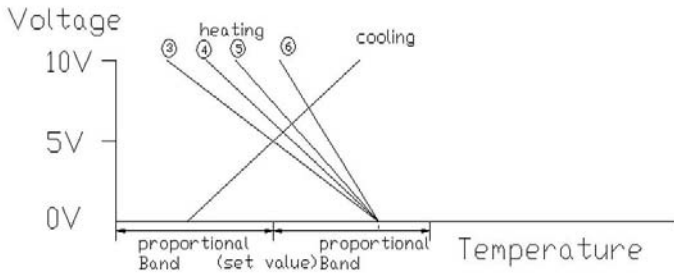
Control signal output	One, P/PI 0...10 V DC, 1 mA
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Indications

Output indication	Run LED, Power LED
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Controller Adjustment & Wiring

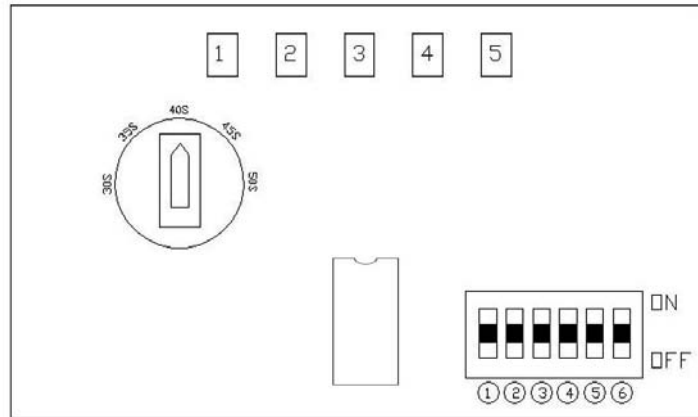
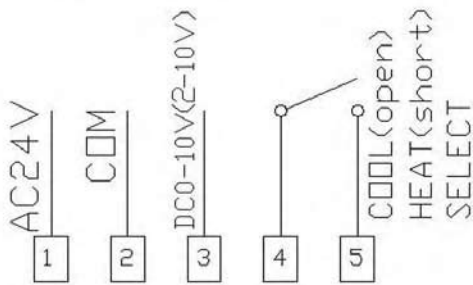
P Band



- ① 0-10V(DN) 2-10V(OFF) select
- ② Heating & Cooling select
If terminals 4&5 are connected, it should switch to OFF position
- ③ PI(DN) P(OFF) select
- ④ 8C proportional band (DN Select)
- ⑤ 6C proportional band (DN Select)
- ⑥ 4C proportional band (DN Select)

I Time

Wiring Diagram



Dimensions

