

PDS 24 CONTROLLER FOR AIR-CONDITIONING SYSTEMS AND WARM DOMESTIC WATER SUPPLY

PDS 24 is a P/PI controller for air-conditioning systems and warm domestic water supply. It can be used as a fixed set point controller or as a cascade controller (room / exhaust air compensation).

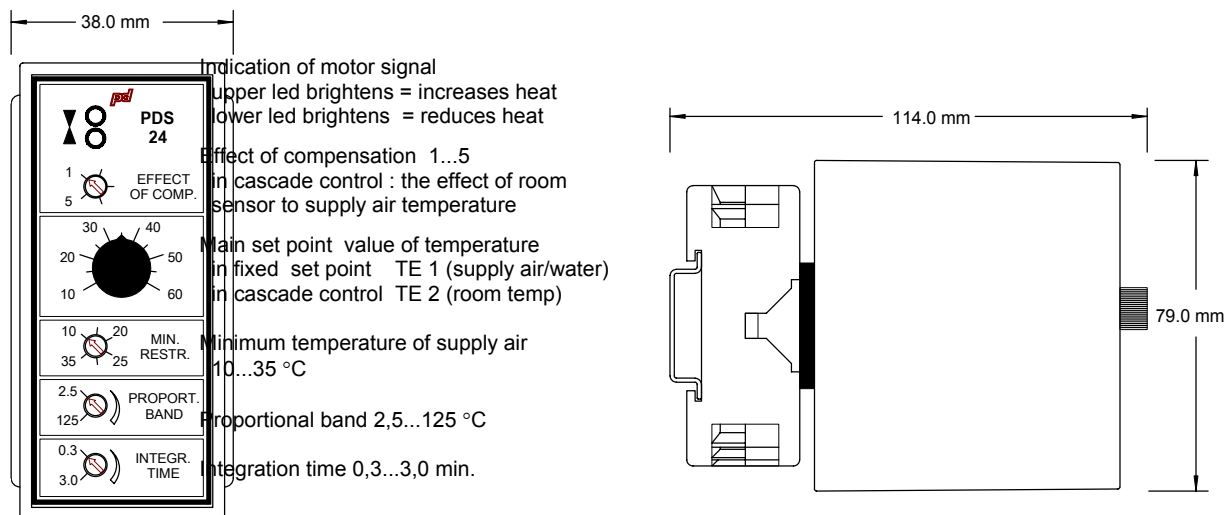
PDS 24 can also be incorporated into a multi-step circuit by using the 2-step unit PYR 4.

Fixed set point control

Use the TE 1 sensor (terminals 1 and 11). Set the desired temperature by the set point knob, range 10...60 °C. The controller adjusts the actuator in accordance with the P/PI - algorithm until the desired temperature is achieved.

Cascade control:

Activate sensors TE 1 (terminals 11 and 1) and TE 2 (terminals 3 and 1). By the set point knob set the temperature you want to reach at TE 2 . If the real temperature at the sensor TE 2 differs from the set point, the cascade control will change the set point of the sensor TE 1 in accordance with the setting of "effect of compensation" (k = 1...5). The set point can go down all the way to the "minimum restriction" setting (10...35 °C).



Connection:

10	24 Vac , supply voltage
2	0 Vac
11	TE 1 (+) supply air sensor
1	TE 1 (-)
3	TE 2 (+) room/exhaust duct sensor
1	TE 2 (-)
6	output to actuator 0...10 V
9	+ 5 Vdc, 1 mA for remote setting
8	remote setting, input (+)
4	0V

Technical data:

Supply voltage	24 Vac
Output	0...10 V
Set point	10...60 °C
Dimensions w x h x d	35 x 79 x 95 mm

Accessories:

TEK 1000	duct sensor
TEH 1000	room sensor
EJV 24 + AR 1	frost guard
TEV 1000	frost guard sensor
PYR 4	2-step unit
TENA 1000	domestic water sensor

PDS 24 CODING

Selecting the operations

Settings are located inside the casing on the card.

Select the set point

	own	other 0...10 V	separate potentiometer
S1	closed	open	open
S2	open	closed	open

Select the P/PI control

	P-control	PI-control
S3	open	closed

Controller action

	direct	reverse
S4 and S5	open	closed

