

PULSER-X/D

Electric heating controller for
external signal 0-10 V, 230/400 V
AC, DIN-rail mounting



Electric heating controllers intended for control of radiators or electric heating coils. They can be mounted on a DIN-rail in a cabinet. The electric heating controllers utilise time-proportional triac control and operate on an external 0...10 V input signal.

- ✓ For loads up to 3.6 kW (230 V) or 6.4 kW (400 V)
- ✓ Input signal 0...10 V
- ✓ Automatic supply voltage adaption 230/400 V
- ✓ DIN-rail mounting
- ✓ Protection class IP20
- ✓ Manual mode 0...100 % with TBI-100

Application

This is an electric heating controller with triac control for single phase (230 V) or two phase (400 V) electric heating.

Since the current is switched by a semiconductor (triac) there are no moving parts that can wear out. The current is switched at zero crossing, to eliminate network disturbance.

Function

The electric heating controller utilises time-proportional control, the ratio between On-time and Off-time is varied to fit the prevailing heating requirement e.g. when using control signal 5 V and pulse period 60 sec (ON = 30 s and OFF = 30 s) gives 50 % output power. The pulse period, i. e. the sum of on-time and off-time, is adjustable to 6, 60 or 120 seconds.

The control accuracy is better when using triac control and it also contributes to reduced energy costs. Increased comfort due to an even temperature is another benefit.

Installation

The electric heating controller is intended primarily for DIN mounting and is connected in series between power supply and an electric heater, for example an electric heating battery or electric panel.

Technical data

Supply voltage	230 V ~ (207...253 V ~ 50/60 Hz 16 A) or 400 V ~ (360...440 V ~ 50/60 Hz), automatic adaption to supplied voltage
Pulse period	6/60/120 s, adjustable
Mounting	DIN-rail
Power dissipation	20 W as heat at full load
Protection class	IP20
Ambient temperature	0...40 °C
Ambient humidity	Max. 90 % RH, non-condensing
Storage temperature	-40...+50 °C
Number of modules	6.6
Dimensions (WxHxD)	115 x 88 x 59 mm
Cable connection	Cage clamp
Weight (incl. packaging)	0.42 kg

Output load	Resistive load, max 16 A, min 1 A
Input signal	0...10 V DC

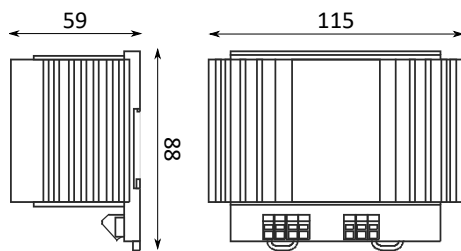


This product carries the CE-mark. More information is available at www.regincontrols.com.

Accessories

Article	Description
TBI-100	Setpoint device for panel mounting

Dimensions



[mm]

Wiring

Terminal 1...2 = Supply voltage (not polarity sensitive)

Terminal 3...4 = Load

Terminal 5 = Signal neutral

Terminal 6 = 0...10 V DC

Terminal 7 = +10 V DC output signal

The signal input terminals are galvanically separated from the supply voltage

The wiring should be as short as possible (25 m), to minimize the risk for external disturbance.

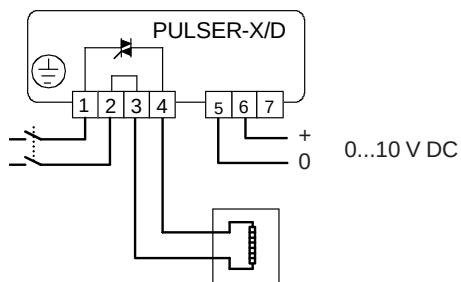


Fig. 1 External control signal

PULSER-X/D can be used with manually settable modulation. By connecting a TBI-100 according to Fig. 2, it can be set to 0...100 % modulation by means of the knob on the TBI-100.

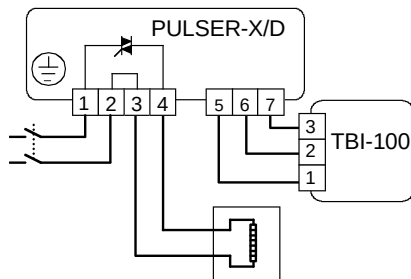


Fig. 2 Manually settable modulation

Product documentation

All documentation can be downloaded from www.regincontrols.com.