

## Controller for HDE duct electric heaters

# PULSER



### Description

The PULSER controller is designed for operating HVAC ducted heaters using separate room temperature control. The HDE ducted electric heaters operated using the PULSER controller, installed as an accessory for a heat exchanger and wired to a room temperature sensor or a ducted air temperature sensor help maintain the indoor temperature settings.

The PULSER controller has an integrated air temperature sensor. It also supports the TG-K300 external air temperature sensor, which can be installed in a ventilation duct.

The PULSER controller is very easy to install. The device requires a serial connection between the wiring of the power supply and that of the HDE ducted electric heater. The PULSER controller automatically detects the supply voltage and the external air temperature sensor (if connected).

#### Control method:

The PULSER controller features P and PI microprocessor-based control units. When monitoring slow temperature variations, the PULSER uses the P control unit; whenever a dynamic temperature variation is detected, the PULSER switches to the PI control unit.

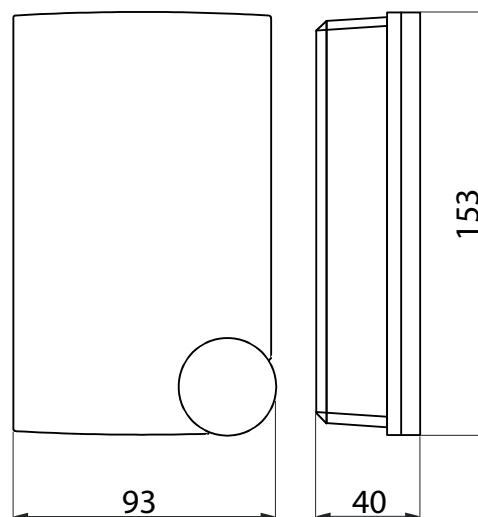
The indoor air temperature is regulated by switching the total heating power output on and off, as required. The power supply is switched by a thyristor module. The switching cycle time is preset at 60 s. As a result, the ON time of 30 s and the OFF time of 30 s is equal to 50% of the total heating power output.

#### Product code example

Product code: \_\_\_\_\_ **PULSER**

type \_\_\_\_\_

### Dimensions



### Technical specifications

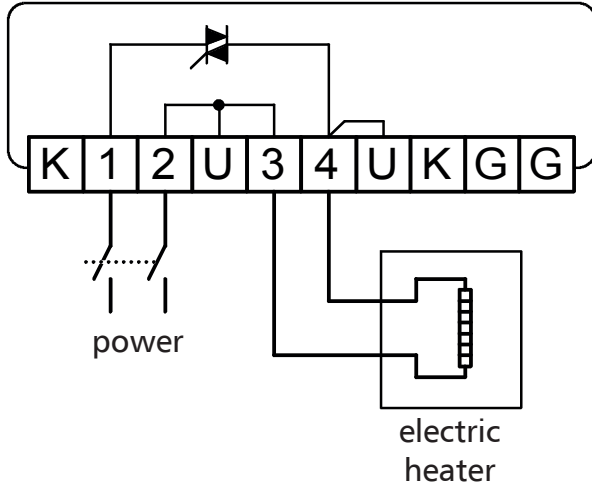
**Power supply:** 230 V / 50-60 Hz or 400 V / 50-60 Hz  
**Max. power load:** 3.6 kW at 230 V or 6.4 kW at 400 V  
**Protection rating:** IP20  
**Max. operating temperature:** +30°C  
**Storage temperature:** -40 to +50°C  
**Max. ambient humidity:** 90% RH  
**Temperature control range:** 0 to +30°C  
**Max. current:** 16 A  
**Max. heating power generated:** 20 W

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### Connection diagram

Connection of the PULSER controller to an HDE duct electric heater



Connection of the PULSER controller to an HDE ducted electric heater and a TG-K330 external ducted air temperature sensor

