



## USER'S MANUAL

### SPEED CONTROLLER FOR FANS WITH EC MOTORS

**VENTS R-1/010**

#### USE

R-1/010 speed controller, hereinafter the controller is used for smooth speed control of a fan equipped with an electronically commutated motor with 0-10 control input.

#### TECHNICAL DATA

Power voltage: +48V DC (input +48V) or +10V DC (input +10V)

Control voltage output:  $U_{ctr} = 0-10V$

Allowable load: 2 motors with 0-10 V control voltage

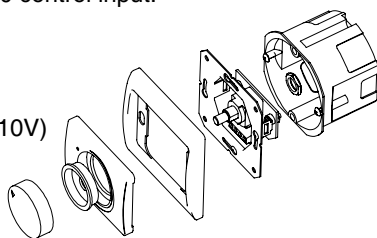
Overall dimensions: 78x78x63 mm

Weight: 120 g

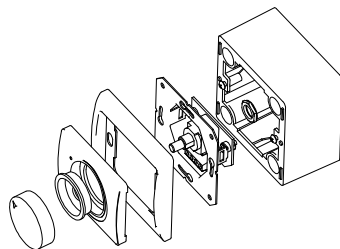
Ingress protection rating on the front side: IP 40

Ambient air temperature:

+1 °C up to +35 °C at max. RH 80% at +25 °C.



Wall flush mounting  
modification



Wall surface mounting  
modification

#### DELIVERY SET

R-1/010 speed controller - 1 item

user's manual - 1 item

fastening kit - 1 item

packing box - 1 item

#### SAFETY REQUIREMENTS

Disconnect the speed controller from power mains prior to all operations specific to connection, setup, maintenance and repair. The power mains connection must be performed by qualified personnel with valid permit for unassisted operations with electrical installations up to 1000 V after careful reading of the present operation manual.

Fig. 1. Speed controller design

#### MOUNTING

Cut off power supply to the speed controller prior to mounting and electrical connection.

**The wiring diagrams are shown in fig. 2 and 3.**

**Designations:** B - fan, R - R-1/010 speed controller

The minimum fan speed is set with the R3 potentiometer located on the speed controller circuit board, Fig. 4.

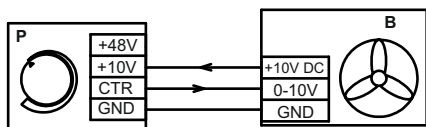


Fig. 2. Speed controller connection to 10V DC power supply

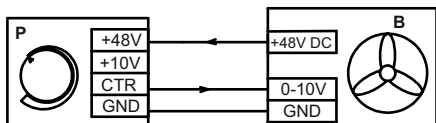


Fig. 3. Speed controller connection to 48V DC power supply

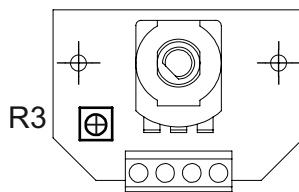


Fig. 4. Circuit board

## OPERATION REQUIREMENTS

### Warning:

Do not operate the speed controller with a damaged casing and connecting cables.  
Protect the speed controller casing against water ingress and water splashes.  
Do not install the speed controller in close proximity to heating appliances.  
Do not operate the speed controller in an explosive or aggressive environment.

## STORAGE REQUIREMENTS

Store the speed controller in the original packing in a ventilated premise at ambient air temperatures from 0 °C to +40 °C and max. RH 80% at +25 °C.

## MANUFACTURER'S WARRANTY

The manufacturer, Private Joint Company VENTS, hereby warrants normal operation of the speed controller over the period of 12 months from the retail sale date provided the user's observance of the transportation, storage, installation and operation regulations.

Warranty is not applicable for mechanically damaged products.

In case of no confirmation of the sales date the warranty period is calculated from the manufacturing date. In case of any operation malfunctions through a manufacturing fault the user is entitled for a replacement product. Contact the product Seller for warranty service.

## ACCEPTANCE CERTIFICATE

The speed controller is recognized as serviceable

We hereby declare that the product complies with the essential protection requirements of Electromagnetic Council Directive 2004/108/EC, 89/336/EEC and Low Voltage Directive 2006/95/EC, 73/23/EEC and CE-marking Directive 93/68/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

This certificate is issued following test carried out on samples of the product referred to above.

Model

**VENTS R-1/010**

V ☐

N ☐

Manufacturing date

Approval mark

Sold by

**Sales company name and stamp**

Sales date