

# BOSS<sup>TM</sup> Copperad<sup>®</sup>

## BOSS COPPERAD 2-PORT ON/OFF VALVE

Instruction, Operation and Maintenance Manual



OVER  
**100 YEARS**  
OF QUALITY

# Contents

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**1      GENERAL**

**2      INSTALLATION**

**2.1    VALVE**  
pg. 4

**2.2    ACTUATOR**  
pg. 5

**2.3    WIRING**  
pg. 5

**3      OPERATION**  
pg. 5

**4      MAINTENANCE**  
pg. 5

**5      FAULT FINDING**  
pg. 6

**6      DISPOSAL**  
pg. 6

# 1 | GENERAL

The 2-port on/off valve is supplied with Fan Convecter units designed to close the valve to prevent water flowing through the heat exchanger when the room reaches the setpoint. When the unit is calling for heat, the valve will open allowing water to flow through the heat exchanger.

The 2-port on/off valve is supplied as an optional extra with the Fan Convecter and is supplied loose.

The kit consists of a valve and actuator; the valve needs to be screwed into the pipework at the coil heat exchanger connection. The actuator needs to be wired as mentioned in 2.3.

## 2-port on/off valve:

- M2PV - Modulo 2-port on/off valve plus relay box
- 2PV - 2-port on/off valve for waterside controls



M2PV relay box pre-wired and fitted to the unit

## 2.1 | INSTALLATION

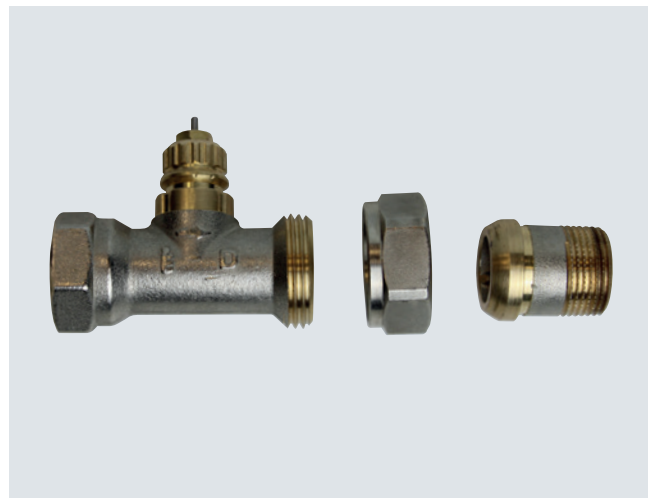
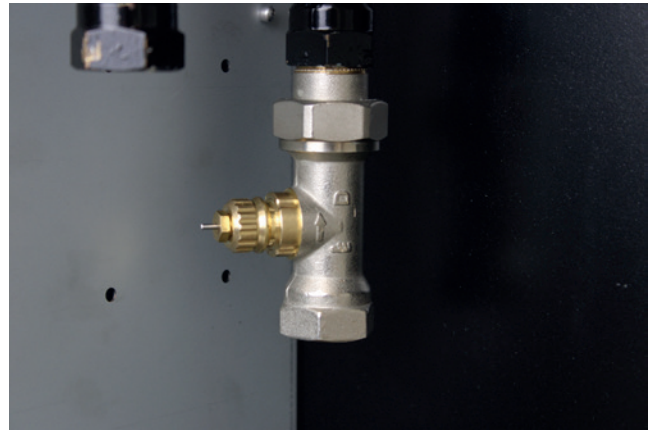
### Valve

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The valve assembly consists of a loose  $\frac{3}{4}$ " male taper tail with a spherical seat union on the other end.

The tail should be screwed directly into the  $\frac{3}{4}$ " female connection on the coil heat exchanger in line with good pipework practice i.e. using tape/hemp and jointing paste. A radiator step wrench (spud wrench) should be used for this.

After fitting the tail the valve should be attached to it by tightening the spherical seat union. The other end of the valve assembly consists of a female  $\frac{3}{4}$ " fitting and pipework or fittings, as required, should be made to this.



## 2.2 | INSTALLATION

### Actuator

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The actuator is a 230V thermal type which acts to close the valve when the surface temperature approaches the limiting temperatures. The actuator/valve is on/off and closing time is approximately 3 minutes with a maximum power draw of 2W.



The actuator clips onto the valve and is held in position by a grub screw. The grub screw is secured using a hex key.



## 2.3 | INSTALLATION

### Wiring

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#### M2PV & V2PV

The actuators are two wire and are supplied with a 1m length of cable. The two cables are pre-wired to the Fan Convactor. See wiring diagram supplied with the unit.

#### 2PV:

The actuators are two wire and supplied loose for the customer to wire as they see fit.

## 3 | OPERATION

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See the Fan Convactor operating manual. Once installed and wired appropriately the 2-port on/off valve will not require any specific user intervention.

## 4 | MAINTENANCE

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The 2-port on/off valve is maintenance free, see the Fan Convactor operating manual for general maintenance requirements. Should parts need to be replaced, then they should be removed in the reverse manner to the installation instructions above and replaced as above.

## 5 | FAULT FINDING

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See Fan Convactor unit manual; faults specific to the 2-port on/off valve are limited to the valve not opening/closing as required. If such an issue is suspected, then check the wiring is all sound and correct in line with the wiring diagram prior to

replacing any parts. The Fan Convactor unit must be electrically isolated prior to any work being undertaken on it or the 2-port on/off valve. All electrical work must be by a competent person, suitably qualified.

## 6 | DISPOSAL

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Electrical components should be disposed of separately in line with WEEE Directives. They should not be disposed of with domestic waste and should be recycled as far as possible.







# Copperad<sup>®</sup>

**For further technical support,  
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