

**BOSS™**

**Copperad®**

**BOSS COPPERAD  
ACTIVE LST**

Instruction, Operation and Maintenance Manual



**OVER  
100 YEARS  
OF QUALITY**

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# 1 | GENERAL

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The active LST kit is supplied with Fan Convectors units designed to operate against high hot water flow and return temperatures. The LST kit will provide a limit on the waterflow so as to ensure that the surface temperature of the casing stays at or below a limit of 43°C. It is intended for use on floor mounted heaters only to ensure that any vulnerable occupants who could roll against the casing and be unable to roll away are not burned.

The LST kit is supplied as an optional extra with the Fan Convectors and apart from the pre-fitted temperature switch, is supplied loose. The kit

consists of a valve and actuator; the actuator needs to be wired to the Fan Convectors via the Fan Convectors' CCB (customer connection box) and the valve needs to be screwed into the pipework at the coil heat exchanger connection.

A thermal switch is included in the unit which senses the leaving air temperature and if above the preset limit, it will act to close the valve to reduce the air and surface temperatures.



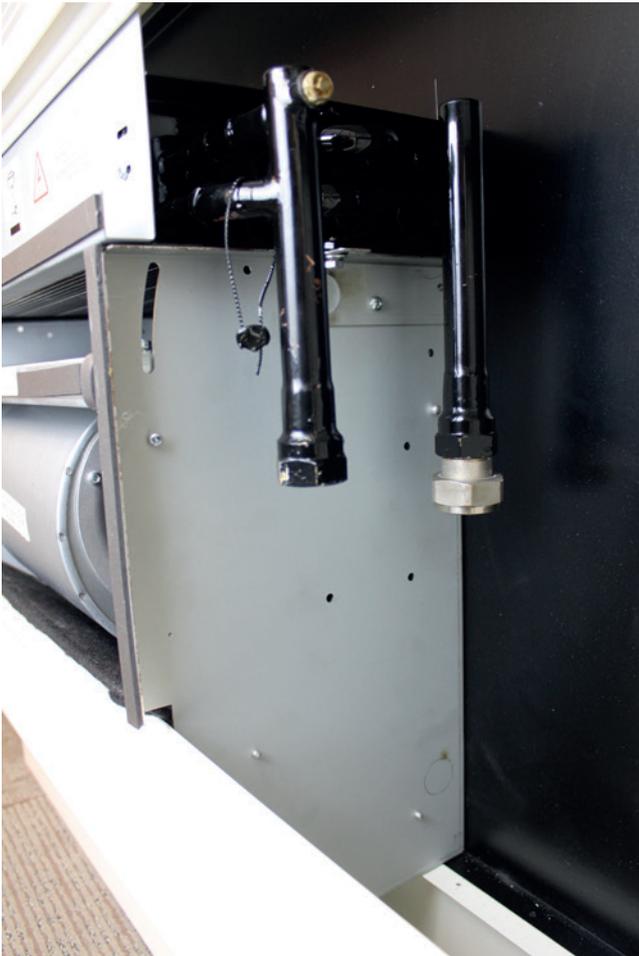
## 2.1 | INSTALLATION

### Valve

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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The actuators are two wire and are supplied with a 1m length of cable. The two cables need to be wired into the Fan Convector via the knock-out box (CCB) found on the inside of the unit casing, see wiring diagram supplied with the unit.

## 3 | OPERATION

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See the Fan Convector operating manual. Once installed and wired appropriately the active LST kit will not require any specific user intervention.

## 4 | MAINTENANCE

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The LST kit is maintenance free, see the Fan Convector 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 Convector unit manual; faults specific to the LST kit 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 Convector unit must be electrically isolated prior to any work being undertaken on it or the active LST kit. 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.





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**For further technical support,  
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