



# Ecosmart Boxer Air Handling Units

## Connection of Heat Exchanger Bypass Damper

### HX Damper Control

This damper control box has been designed to be compatible with the ECOSMART system.

The unit is supplied with a pre-plugged 10-metre length of communications cable. Longer lengths are available if required.

The unit operates with safe extra low voltage (SELV) with power supplied from the fan unit via the communications (data) cable.

The Ecosmart Heat Exchanger forms an integral part of a system comprising Ecosmart extract and supply fans. The Heat Exchange block consists of the flat plate heat exchanger and an electrically driven bypass damper. When neither heating or cooling is selected the damper drives open to divert the supply air around the Heat Exchanger.

### Installation - Connectivity

Electrical connection is made via a mains terminal box and an Ecosmart control box situated in the Heat Exchanger chamber. The boxes are interconnected at works.

Connect a 230V 50Hz IPh supply to terminals L N E of the mains box via a local isolator.

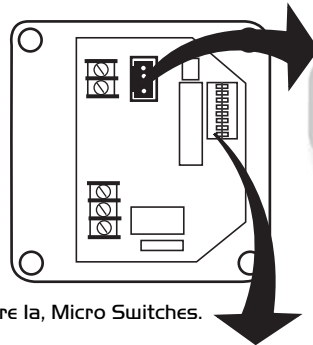
Connect the data cable from the socket in the Ecosmart box to one of the four sockets on the control of either supply or extract fan, complete the circuit by linking the fan controls with data cable.

### Data cable

Do not run the data cable in the same conduit as the mains cables and ensure that there is a 50mm minimum separation between the data cable and other cables. The maximum cable run between any two devices is 300m when it is installed in accordance to the instructions.

**Note:** this system consists of 2 connection boxes (Fig 1. the Ecosmart Box and Fig 2. the local mains box).

Figure 1. The Ecosmart Box.



#### IMPORTANT

The SELV socket must be connected to the fan control with the data cable supplied.

Figure 1a, Micro Switches.

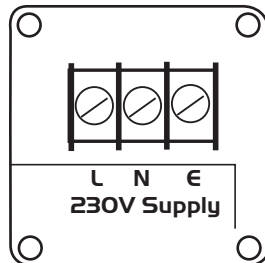


#### IMPORTANT

The mains terminal are internally connected to the adjacent mains box (fig 2). The mode of operation is set at works but ensure only switches 3 and 4 are on.

DII switches OFF = No response

Figure 2. Mains Connections - at separate local mains box.



#### IMPORTANT

Connect incoming single phase supply here.

### Maintenance

The unit does not require any maintenance. However, for optimum performance, it is advisable to remove any accumulated dust with a low power vacuum cleaner.

**NOTE:** Installation and Maintenance of the equipment must be as directed in the instructions provided with the unit.

### Warranty

The 3 year warranty starts from the day of delivery and includes parts and labour for the first year.

The remaining 2 years covers replacement parts only.

The labour element is subject to full, free and safe access to the equipment as recommended by CDM regulations.

### Service Enquiries

Nuaire can assist you in all aspects of service. Our service department will be happy to provide any assistance, initially by telephone and If necessary arrange for an engineer to call.

**Telephone 029 2085 8585  
Fax 029 2085 8586**

Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.