

CM-INTERLOCK

Heating/Cooling Interlock for the MR-ECO-COOL-V Cooling Module

Installation and Maintenance Manual



1.0 IMPORTANT SAFETY INFORMATION

- The provision of the electrical supply and the connection of the unit to the mains must be carried out by a qualified electrician. Ensure that the mains supply (Voltage, Frequency and Phase) complies with the rating label.
- Isolate from power supply before removing any covers. During installation / maintenance ensure all covers are fitted before switching on the mains supply.
- All-pole disconnection from the mains as shown in the wiring diagram must be incorporated within the fixed wiring and shall have a minimum contact separation of 3mm in accordance with latest edition of the wiring regulations.
- When installing the unit, take care not to damage electrical or other hidden components – do not drill the unit casing.
- The unit must be installed indoors, and away from direct sources of frost, heat and water spray or moisture generation. Ambient temperature range -5 to 40 °C.
- This appliance should not be used by children or persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning the safe use of the appliance by a person responsible for their safety. Children shall not play with the appliance. Cleaning and user maintenance shall not be carried out by children. This unit contains live electrical components. Always site out of reach of children and protect from vandalism and accidental damage.
- Do not use the unit if damaged, contact after sales.



GENERAL WARNING

Signifies a general warning regarding hazard specified by supplementary information.



ELECTRIC SHOCK

This unit must be completely electrically isolated before any panels are removed. Check mains supply and control connections.



REFER TO INSTRUCTION MANUAL

Read and understand the installation and maintenance manual before installing, operating or maintaining this product.

2.0 INTRODUCTION

The **CM-INTERLOCK** has been designed to prevent the **MR-ECO-COOL-V** cooling module and heating method (supplied by others) operating simultaneously and competing against each other.

Control is via a manually operated switch. The **CM-INTERLOCK** isolates either the heating or cooling (**MR-ECO-COOL-V**) functions, preventing them from competing against each other.

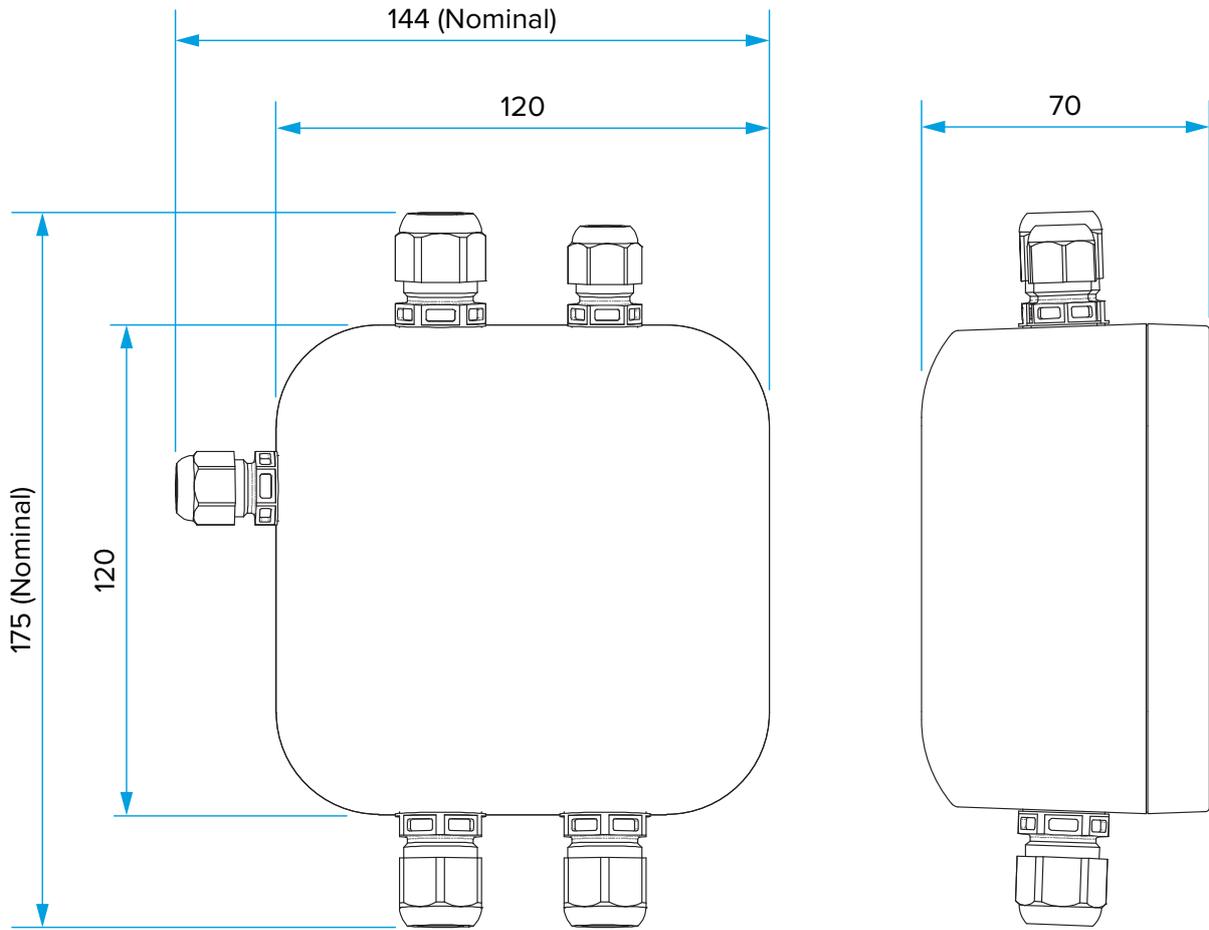
DISCLAIMER

Heating systems are not the responsibility of Nuaire and may vary from below. Qualified personnel must ensure the **CM-INTERLOCK** is appropriate for their application and applicable installation procedure are followed.

2.1 DIMENSIONS

Fig 1: CM-INTERLOCK Dimensions

View: As Installed on a surface



3.0 INSTALLATION

IMPORTANT

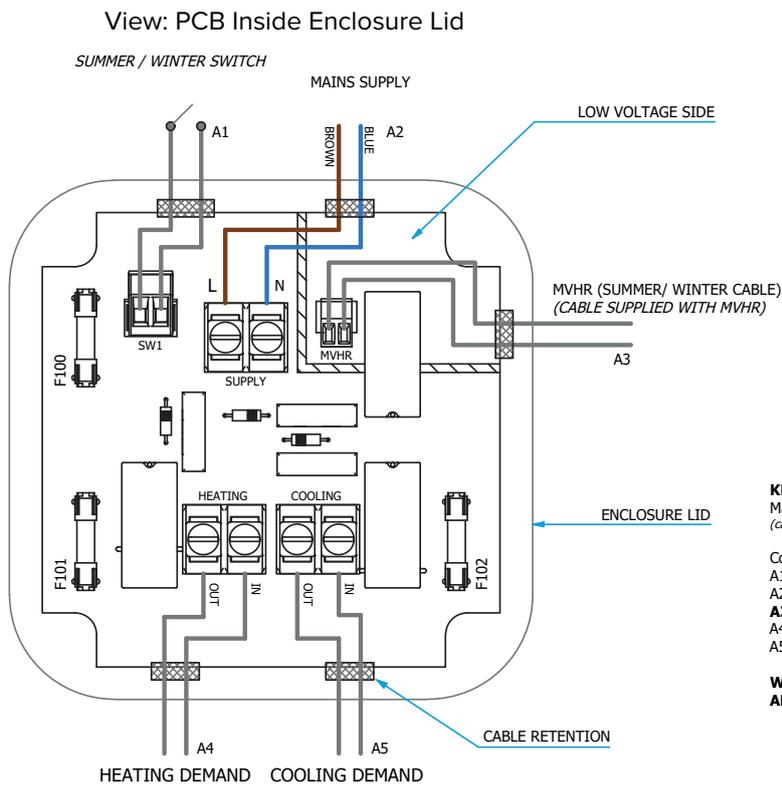
Before commencing any work, ensure all equipment is isolated from the mains supply.
Installation should be carried out by a qualified electrician or competent cooling engineer.

3.1 WIRING DIAGRAMS

IMPORTANT

CM-INTERLOCK should not be used to directly power boiler pumps.

Fig 2: CM-INTERLOCK Wiring



IMPORTANT

For additional cable retention, secure cable ties to the installed cable inside the enclosure in close proximity to cable gland aperture.

We recommend the use of UL94-V0 rated cables ties wherever possible.

Cable glands must be tightened sufficiently using an appropriate hand tool to ensure cable retention.

All cable to be mains rated with exception of the supplied summer winter cable (A3)

KEY:

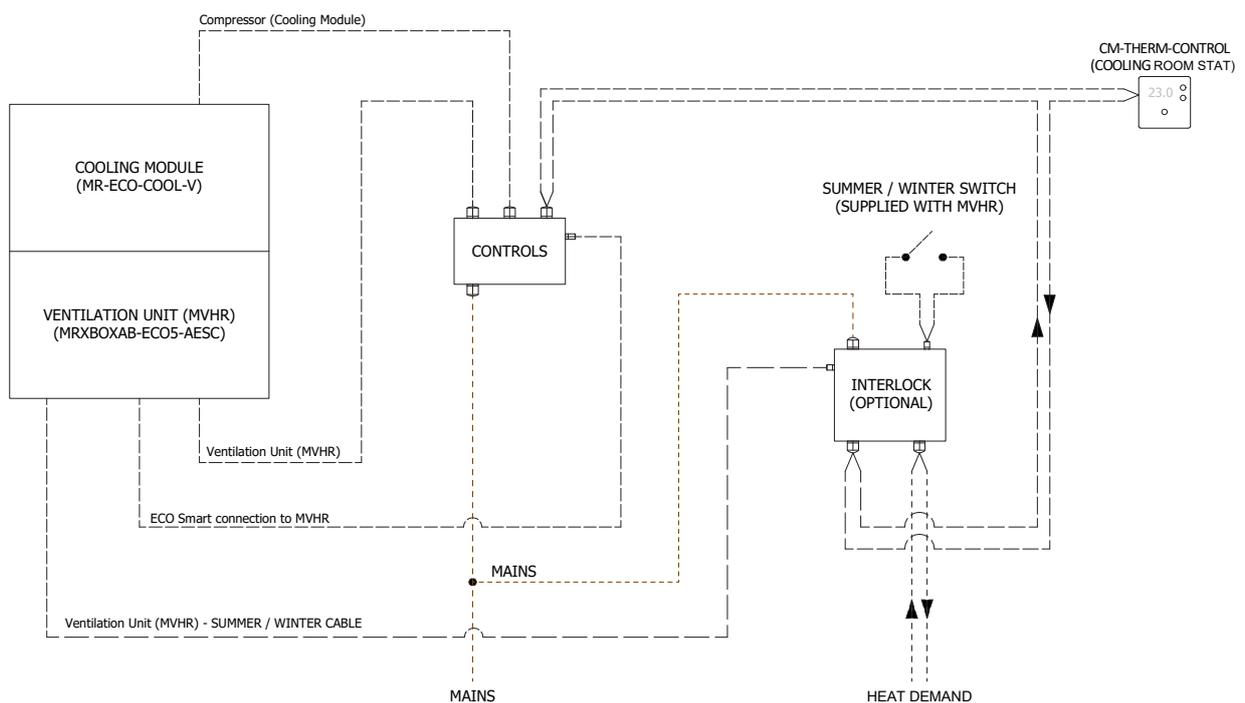
Mandatory External Connections (cable as illustrated)

Connections:

- A1 : SUMMER/WINTER SWITCH
- A2 : MAINS SUPPLY
- A3 : MVHR ONLY - SUMMER/WINTER CABLE
- A4 : HEATER CONNECTION
- A5 : CONNECTION TO MR-ECO-COOL-V

WARNING! DO NOT CROSS WIRE A1 & A3, THESE ARE DIFFERENT VOLTAGE POTENTIALS

Fig 3: System Schematic - Installation using the CM-INTERLOCK



4.0 OPERATION

The **CM-INTERLOCK** does not operate the cooling module or heater. It isolates the operation of one or the other depending on the position of the heating/cooling control switch.

When cooling is enabled (summer mode), operation of the cooling module is activated by the **CM-THERM-CONTROL** depending on the room temperature and the user defined set point. (Please refer to I&M No. 672119).

4.1 HEATING/COOLING CONTROL SWITCH:

- **Summer Position:** Cooling module (**MR-ECO-COOL-V**) is enabled, and the heating output is isolated.
- **Winter position:** Heating demand is enabled, and the cooling module (**MR-ECO-COOL-V**) is isolated.

4.2 ENCLOSURE INSTALLATION:

Ensure the unit's electrical installation is complete and both enclosure components (lid and base) are assembled using the fixings provided, before securing the enclosure to the wall.

CM-INTERLOCK is supplied with four mounting brackets to attach the enclosure to a suitable surface. The enclosure can be attached to a surface using the two methods below:

4.2.1 FLUSH TO WALL (REMOVABLE)

Secure two mounting feet within the recesses in the base plate, using fixings provided (Fig 4). Mark and drill hole positions in wall for raw plug and screws (not supplied). Offer moulding up to wall fixings and lower into position.

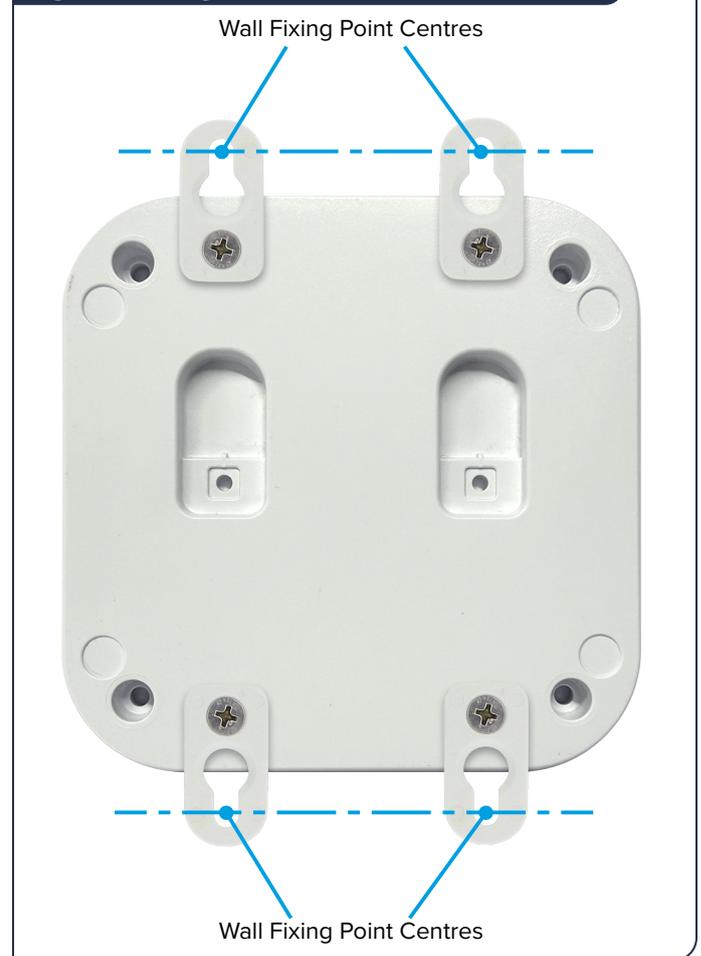
Fig 4: Mounting Feet Position - Flush Installation



4.2.2 OFFSET FROM WALL (NON REMOVABLE)

Attach the four mounting feet to base plate using the provided fixings and secure enclosure to the wall using appropriate fixings (supplied by others) as shown in Fig 5.

Fig 5: Mounting Feet Position - Offset Installation



Telephone 02920 858 400
aftersales@nuaire.co.uk

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.