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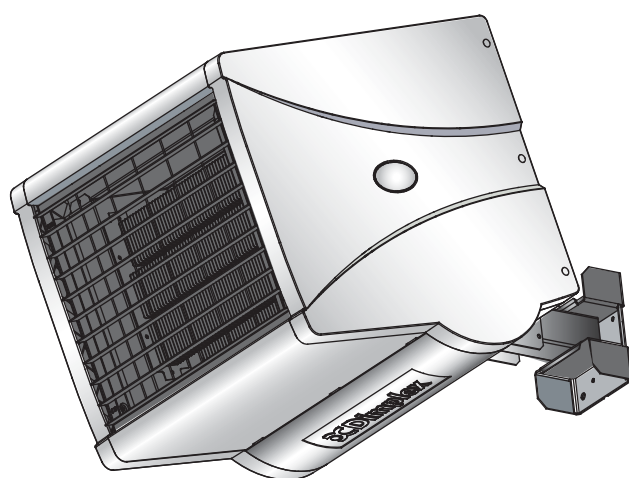
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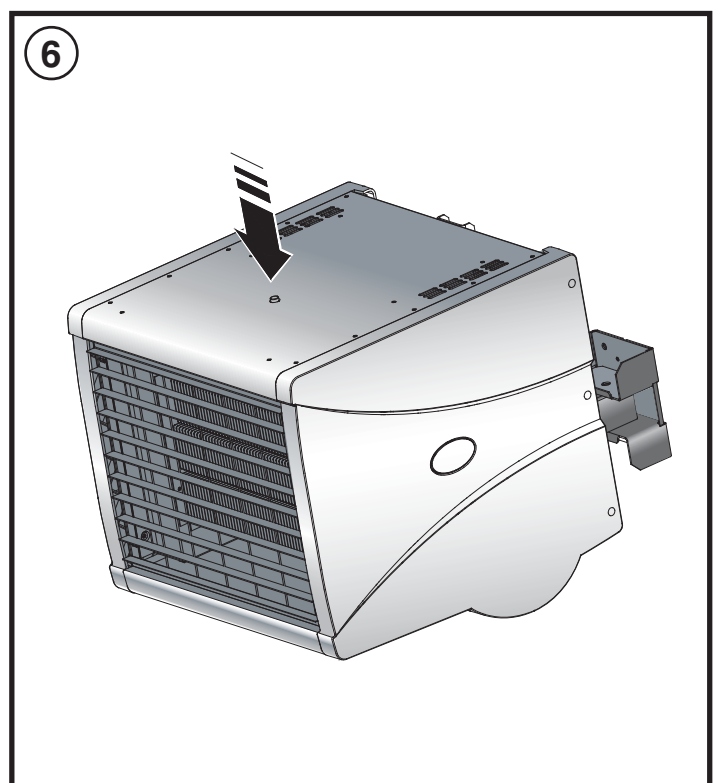
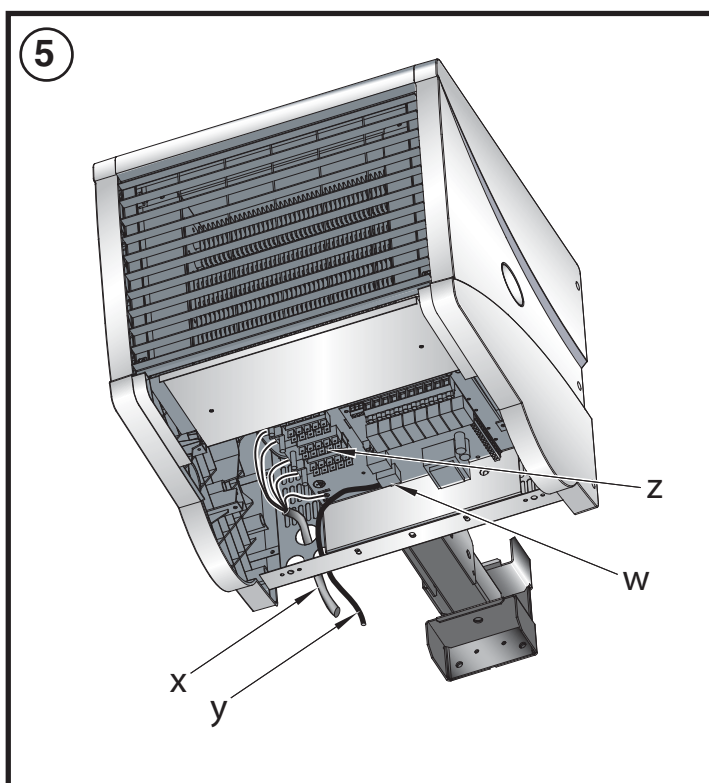
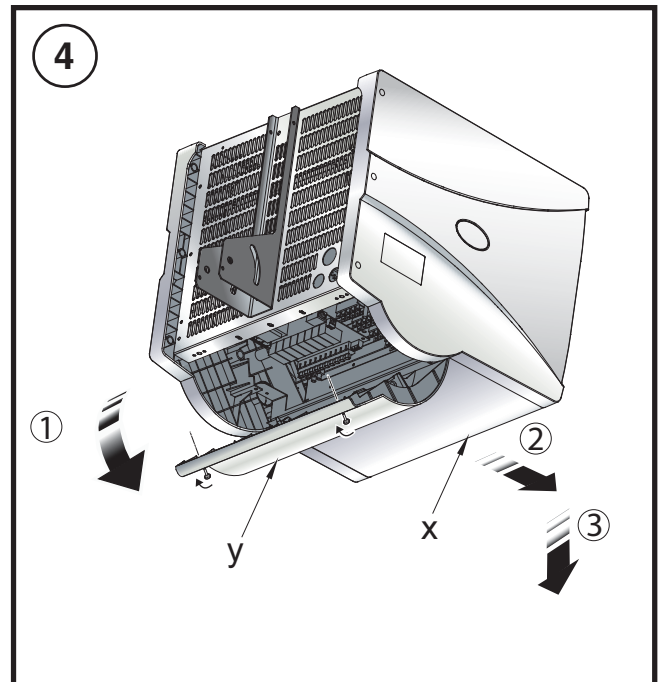
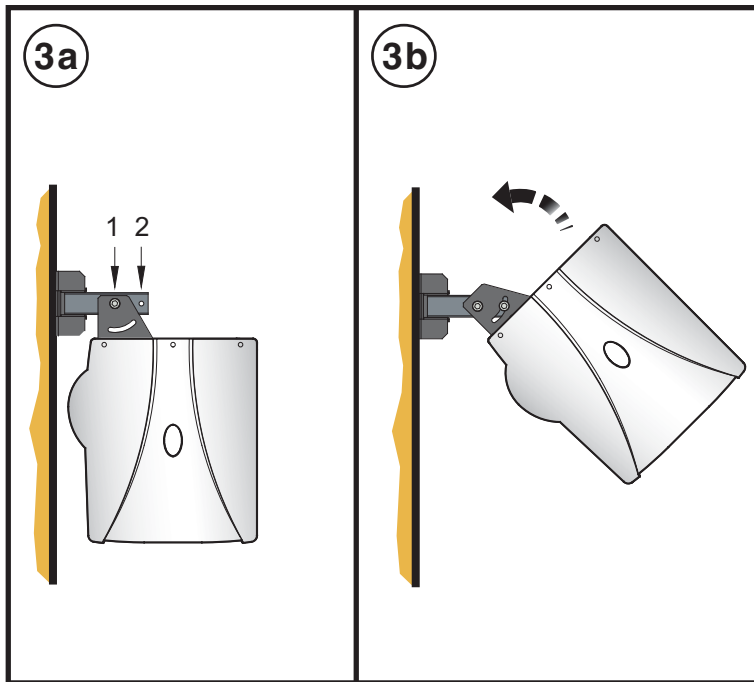
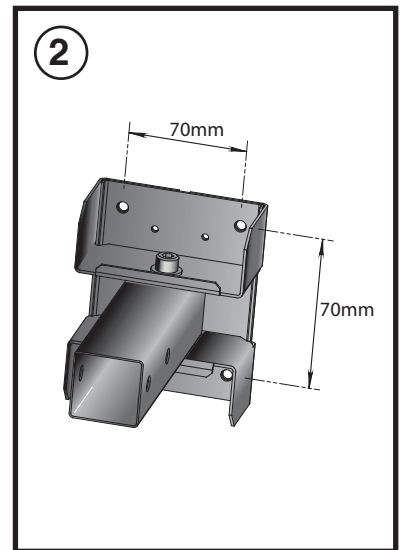
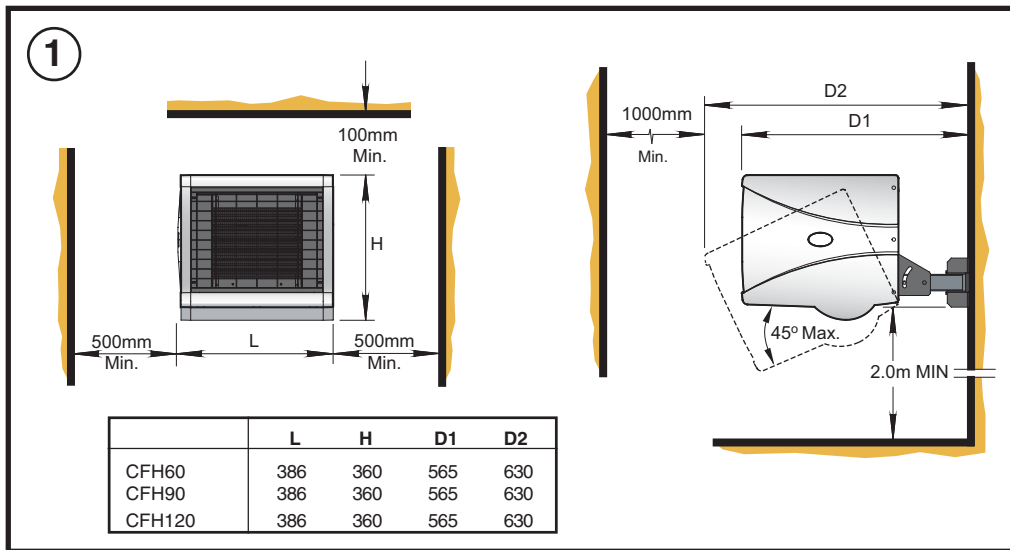
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- Literature downloads
- Heating requirement calculator

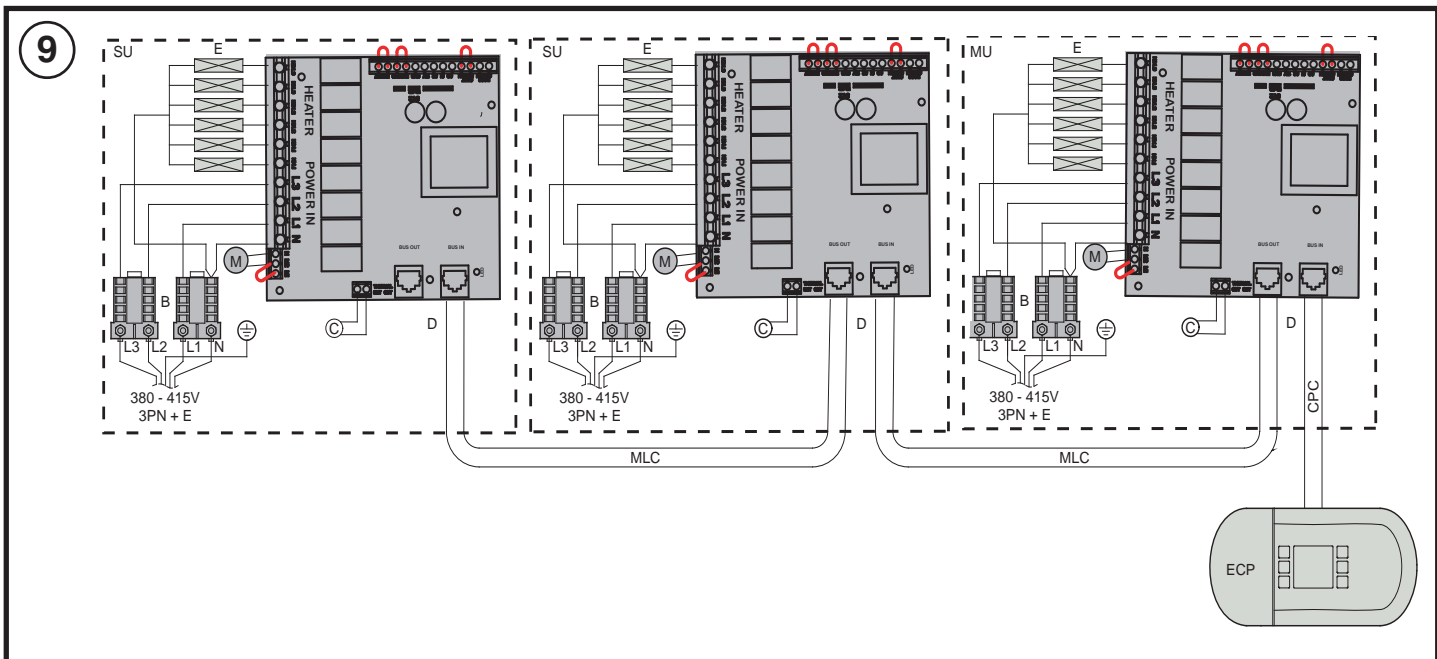
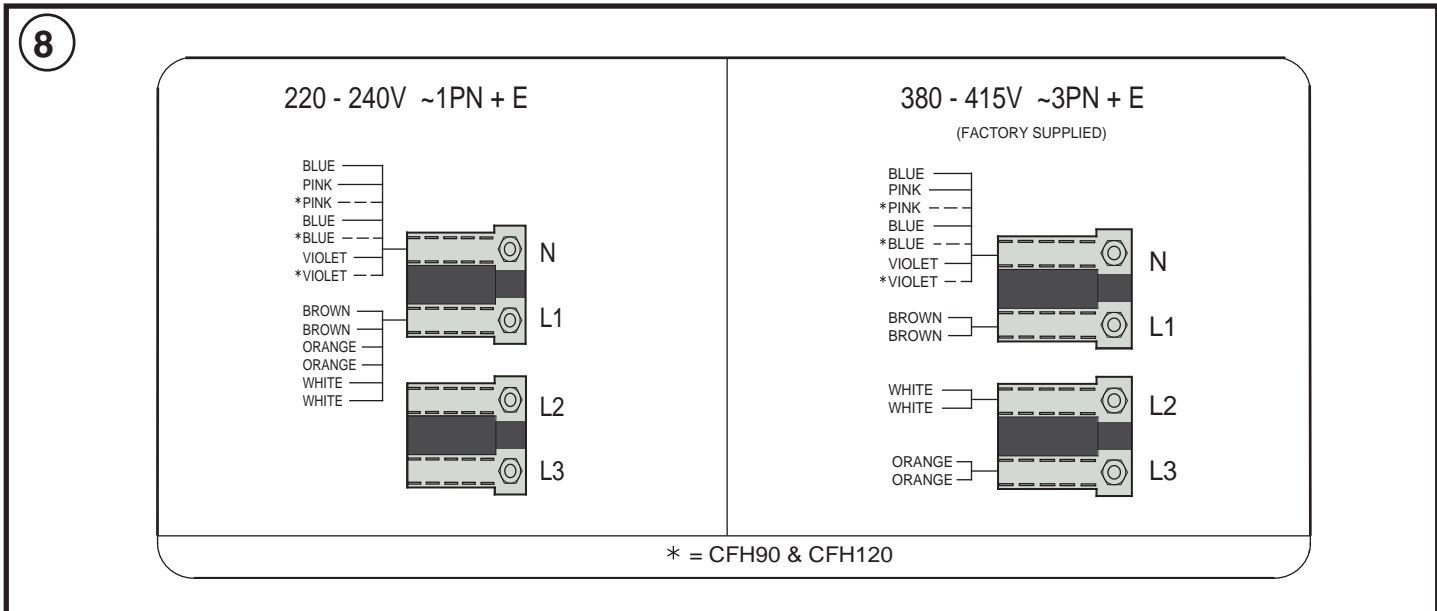
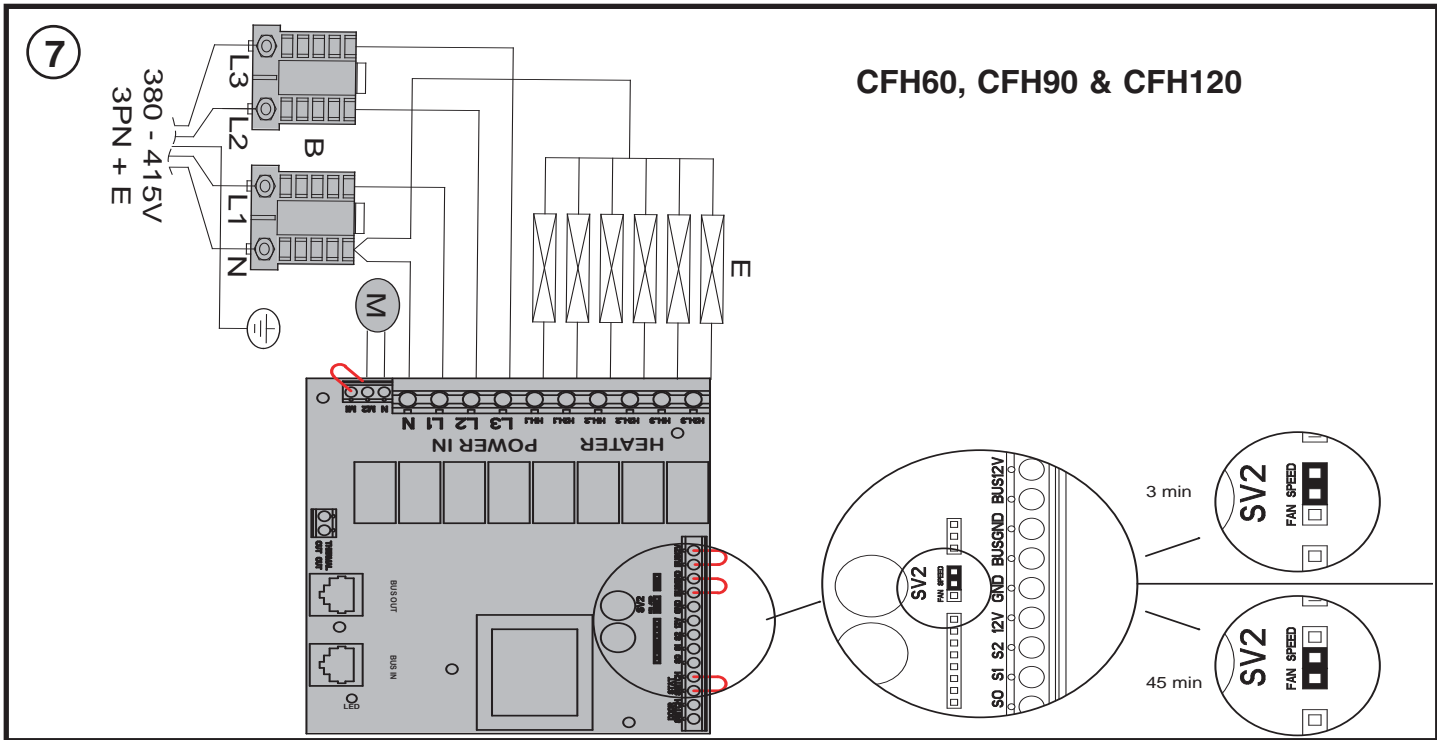
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## CFH60, CFH90 & CFH120 Electronic Wall Mounted Fan Heater

08/19511/1 (UK) Issue 1





## IMPORTANT SAFETY ADVICE

**DO NOT COVER OR OBSTRUCT** the air inlet or outlet grille.

**ENSURE THE APPLIANCE IS EARTHED.**

**Always disconnect supply before working on the product.**

**Do not use this heater in areas where excessive dust exists.**

**This heater must not be located immediately above or below a fixed socket outlet or connection box.**

**This product should be mounted safely to a solid wall.**

**Ensure the supply cables are of adequate current carrying capacity and are protected by a suitable fuse.**

**This appliance should only be connected to the fixed wiring of the premises by means of conduit.**

**This product must not be subjected to water spray or immersion.**

**If the appliance is mounted in a toilet or washroom, the appliance should be mounted such that no part of it can be touched by a person using a fixed bath or shower.**

**If the appliance is mounted in a toilet or washroom an isolating switch must be provided outside the washroom adjacent to the entrance door.**

**WARNING: Isolate electrical supply to ALL modular linked units when carrying out maintenance.**

## General

A range of robust, high power wall mounting fan heaters designed to coordinate with the Dimplex range of Air Curtains, providing environmental heating in commercial and light industrial environments.

The heaters work by gradually raising the air temperature in the building and should be positioned so as best to achieve an even temperature distribution.

The product range has outputs of 6kW, 9kW and 12kW, and each product contains on-board electronics that enables 'daisy-chain' linking to an electronic control panel (CFCH) or building energy management system.

Connectivity between heater and control panel is achieved using LAN (Local Area Network) cable i.e. CAT5, CAT5E or CAT6, pin configuration is straight through 1 to 1.

The electronic controller has a number of features including thermostatic control. For more details on these refer to the CFCH instruction leaflet.

Model	Heat Output kW	Electrical Supply	Electrical Load (per phase) A	Weight kg	Min installed height m
CFH60	3 / 6	220-240V~ 1PN	26.0	13	2
		380-415V~ 3PN	9.0		
CFH90	6 / 9	220-240V~ 1PN	38.8	14	2
		380-415V~ 3PN	13.3		
CFH120	6 / 12	220-240V~ 1PN	51.6	14	2
		380-415V~ 3PN	17.5		

## Wall Mounting

Remove the wall mounting bracket from the back of the heater and using it as a guide (see **Fig. 2**) mark off the hole positions on a suitable wall (a minimum height of 2 meters is required from the floor level to the bottom of the bracket). Solid brick or concrete block walls must be drilled and plugged. Fix the wall mounting bracket to the wall and assemble the heater to the extension tube using a bolt and wing nut fitted into hole 1 shown in **Fig. 3a**. Rotate the heater as shown in **Fig. 3b**, and fix the heater into position using the remaining bolt and wing nut in hole 2. Pivot and rotate the heater into the desired position and tighten all three wing nuts. A 6mm Allen key can be used as an aid to tightening the bolts.

## Electrical and Control connections

**Note: The installation of this appliance should be carried out by a competent electrician and be in accordance with the current IEE wiring regulations.**

All products are fitted with a microprocessor control. Electrical power and control connections for all CFH models are made by removing the control housing and bottom panel. The control housing ('y' in **Fig. 4**) is detached by removing the two quick release fasteners and hinging the housing as shown (see step 1 in **Fig. 4**). The bottom panel ('x' in **Fig. 4**) is detached by removing two screws and lifting off as shown (see steps 2 & 3 in **Fig. 4**).

**Note:** A suitable local isolating switch must be provided in the electrical supply circuit as close as possible to the heater with at least 3mm clearance on each pole.

## Wiring Diagrams - see Fig. 7

- A - PCB
- B - Mains in terminal blocks
- C - Cut-out circuit
- D - LAN Sockets
- E - Elements
- M - Motor

Remove the large knock-out from back panel of heater and feed appropriate supply cable (see 'x' in **Fig. 5**) to terminal blocks 'z'. Make electrical connections as shown in **Fig. 7** and fix the cable in back panel using suitable cable gland (not supplied). By removing one of the smaller knock-outs and using LAN cable (see 'y' in **Fig. 5**) make the control connection to the BUS IN socket 'w' also shown in **Fig. 5**. Fix this cable in the back panel using a suitable cable gland (not supplied) and feed back to the electronic control panel (CFCH) using suitable conduit if required. Refer to CFCH Instructions for installation and connections of electronic control panel. Replace the bottom panel and control housing and switch on power to heater and installed electronic control panel. Ensure that all control settings function correctly.

**Note:** The factory supplied unit can accept three phase voltage of ~380-415V. For single phase ~220-240V refer to the electrical wiring label (see **Fig. 8**) fixed to the underside of the bottom panel. To change between different voltage systems, rearrange the push on connections as per the required wiring diagram.

## Operation using Control Panel - CFCH

Switch on electrical supply to the fan heater and the electronic control panel. When all units are powered up and there is a connection between the controller and the master unit, an LED will turn on in the controller to indicate the units are functioning. Refer to the CFCH instruction leaflet on the operation of the electronic control panel.

### Delayed Shutdown

**Door Switch (3min Runback):** By wiring in a normally open contact to the door switch connections shown in **Fig. 7**, the following operation is achieved:

- Up to 1 minute after contact closed, unit runs at set condition.
- Between 1 & 2 minutes. unit runs half & half settings.
- Between 2 & 3 minutes. unit runs fan only settings.
- Over 3 minutes. unit enters stand-by mode.

**PIR Sensor (45min Runback):** By changing the PCB mounted links shown in **Fig. 7** the runback timer will operate as follows:

- Up to 15 minutes after contact closed, unit runs at set condition.
- Between 15 & 30 minutes. unit runs half & half settings.
- Between 30 & 45 minutes. unit runs fan only settings.
- Over 45 minutes. unit enters stand-by mode.

### Modular Linking

A number of fan heaters can be connected together in a 'daisy chain' fashion. A total of ten units can be controlled from a single electronic control panel. The required connections can be made in a daisy chain fashion as shown in **Fig. 9**. (References shown below).

- ECP - Electronic Control Panel
- MU - Master Unit
- SU - Slave Unit
- MLC - Modular Linking Cable
- CPC - Control Panel Cable

To make these connections remove one of the small knock-outs and feed an appropriate LAN cable (not supplied) to the BUS OUT control socket ('D' in **Fig. 9**) of the Master Unit. Fix this cable in the back panel using suitable cable gland (not supplied). Continue this process for all linked heaters. Replace the control housing of each heater and power up all units. Ensure that all control settings function correctly.

### Thermal Safety Cut-out

The power supply to the heating elements will be interrupted if one or a combination of the following abnormal events occurs:

1. Air inlet or outlet grilles are obstructed.
2. Internal ventilation is impaired due to build up of dust and fluff.
3. Blower unit stalls.

**Note:** Before re-setting the cut-out, the reason for activation must be determined and corrective action taken.

To reset the thermal safety cut-out, access reset button as shown in **Fig. 6** and push in direction of arrow.

## Maintenance

**WARNING: Disconnect electrical supply to all connected units prior to carrying out maintenance.**

Optimum performance and long service from this product will only be realised if regular maintenance is carried out. Dimplex recommends regular checks dependant on normal use or more frequent checks where the unit is installed in arduous conditions or used continually for more than 10 hours per day.

### Standard Maintenance

**Where the product is subject to use not exceeding 10 hours per day:**

Every 3 months the fan wheels, impellers, heating elements, air inlet and outlet grilles should be cleaned, removing dust and debris with a suitable soft brush.

Every 12 months all moving parts should be checked for free running with appropriate remedy/adjustment made where necessary.

### Extended Maintenance

**Where the product is subject to arduous conditions or is used continually for more than 10 hours per day:**

Each month the fan wheels, impellers, heating elements and air inlet and outlet grilles should be checked and cleaned, removing dust and debris with a suitable soft brush.

Every 6 months all moving parts should be checked for free running with appropriate remedy/adjustment made where necessary.

### Recycling

For electrical products sold within the European Community.



At the end of the electrical products useful life it should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice in your country.

### Cleaning

**WARNING: DISCONNECT SUPPLY before carrying out maintenance.**

External appearance can be maintained by wiping occasionally with a damp cloth. For stain removal, a weak soap solution can be applied with a cloth and the surface wiped dry. Care must be taken to avoid any moisture ingress into the product.

### After Sales Service

Your product is guaranteed for one year from the date of purchase. Within this period, we undertake to repair or exchange this product free of charge (excluding element & subject to availability) provided it has been installed and operated in accordance with these instructions.

Your rights under this guarantee are additional to your statutory rights, which in turn are not affected by this guarantee.

Should you require after sales information or assistance with this product please go to [www.dimplex.co.uk](http://www.dimplex.co.uk) where you will find our self help guide by clicking on "After Sales" or ring our helpdesk on 0845 600 5111 (UK) or 01 842 4833 (R.O.I.) .

Spare parts are also available on the website

[www.dimplex.co.uk](http://www.dimplex.co.uk)

Please retain your receipt as proof of purchase.







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