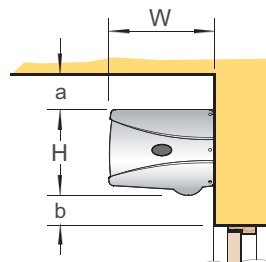
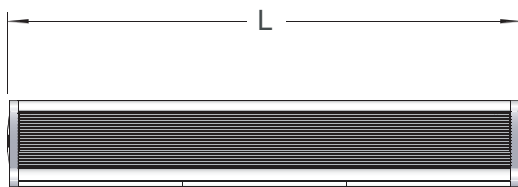


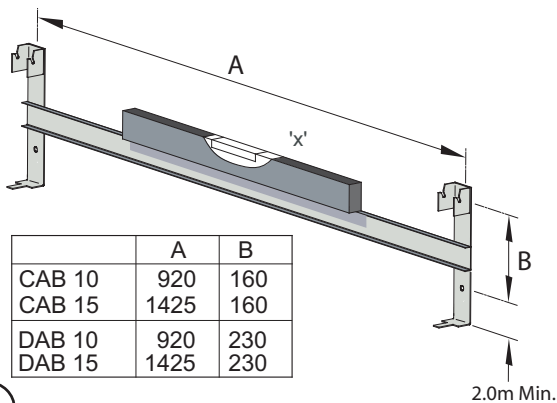
CAB & DAB

CAB10A, CAB10E, CAB10W, CAB15A, CAB15E & CAB15W
DAB10A, DAB10E, DAB10W, DAB15A, DAB15E & DAB15W

1

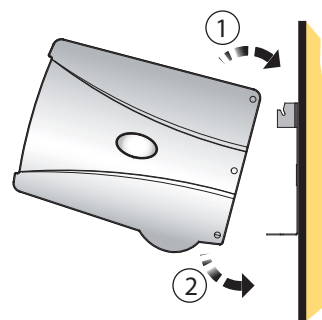


	L	W	H
CAB 10 E/W/A	1065	320	262
CAB 15 E/W/A	1569	320	262
DAB 10 E/W/A	1057	391	361
DAB 15 E/W/A	1557	391	361

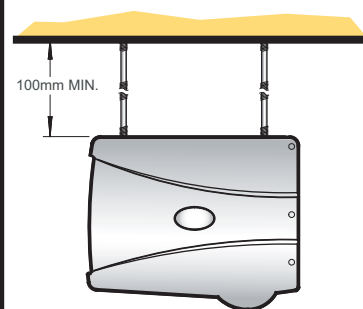


	A	B
CAB 10	920	160
CAB 15	1425	160
DAB 10	920	230
DAB 15	1425	230

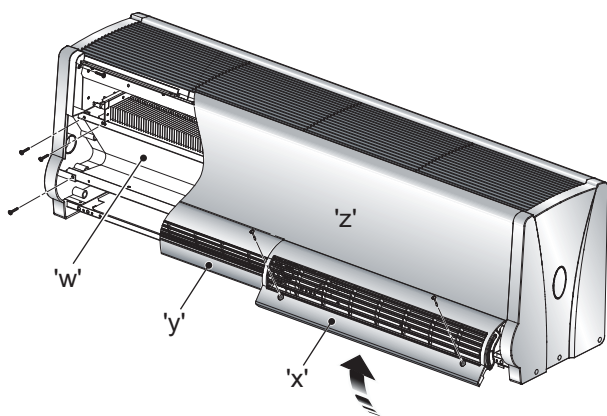
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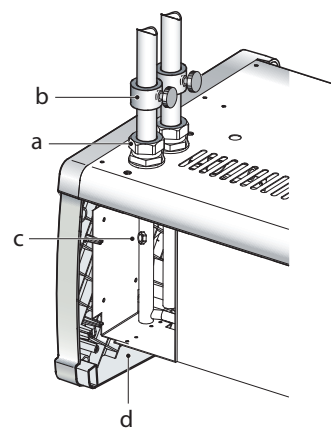
3a



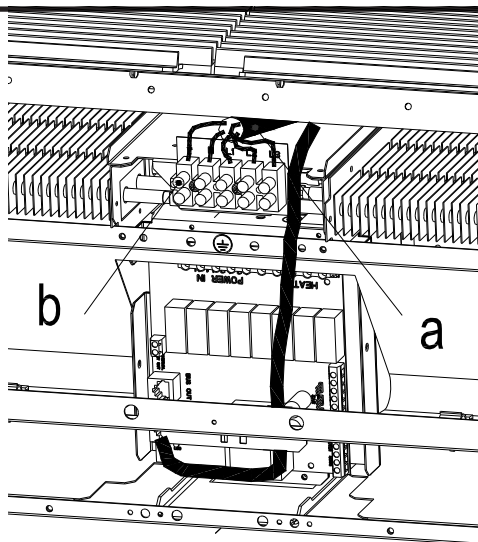
3b



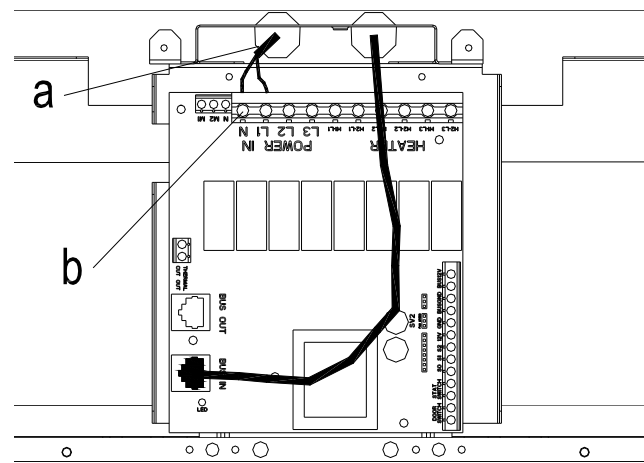
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5

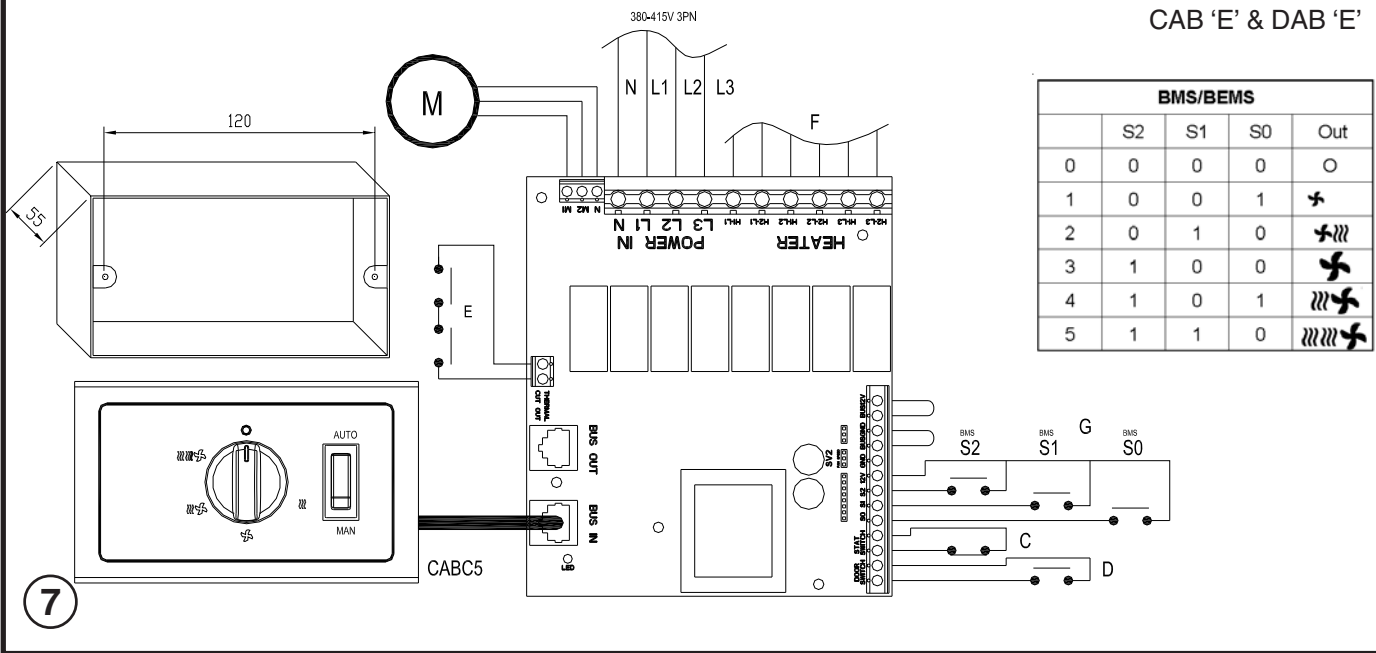


6A CAB E & DAB E

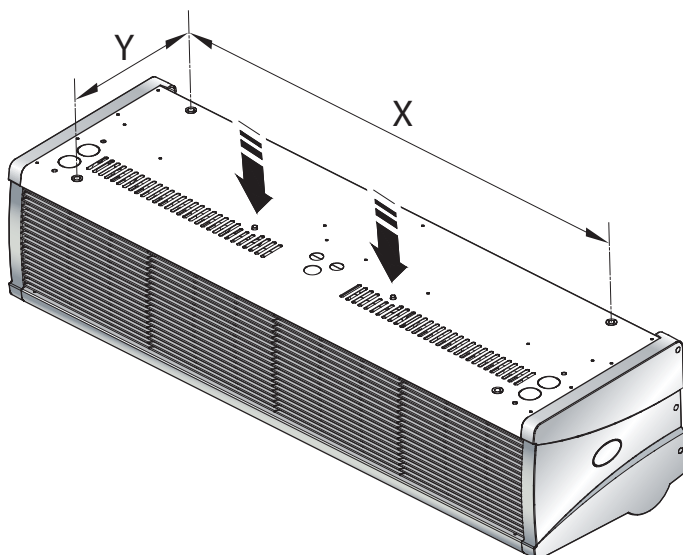
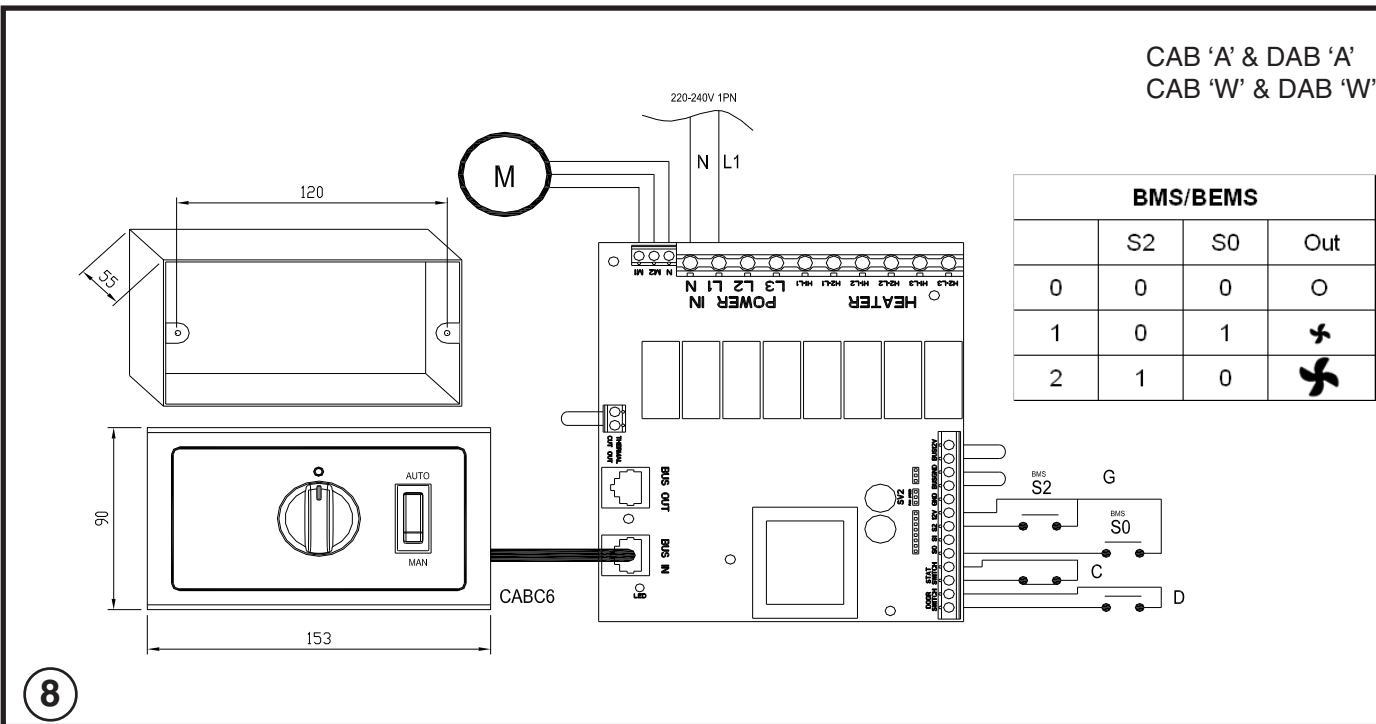


6B CAB W/A & DAB W/A

CAB 'E' & DAB 'E'



CAB 'A' & DAB 'A'
CAB 'W' & DAB 'W'



	X	Y
CAB 10	840	240
CAB 15	1260	240
DAB 10	800	300
DAB 15	1300	300

Dimplex Compact Air Curtains

Models : CAB10E, CAB15E, CAB10W, CAB15W, CAB10A, & CAB15A
DAB10E, DAB15E, DAB10W, DAB15W, DAB10A, & DAB15A

IMPORTANT: THESE INSTRUCTIONS SHOULD BE READ CAREFULLY AND RETAINED FOR FUTURE REFERENCE

IMPORTANT SAFETY ADVICE

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

ENSURE THE APPLIANCE IS EARTHED.

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.

Always disconnect supply before working on the product.

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

This product should be mounted safely to solid wall or ceiling surfaces only.

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

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

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.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of appliance by a person responsible for their safety.

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

Models

Model	Heat output kW	Electrical Supply	Electrical load (per phase)	Weight kg	Max Installed height m
AMBIENT / COLD STORE					
CAB10A	n/a	220-240V ~1PN	0.3	15.5	3.0
CAB15A	n/a	220-240V ~1PN	0.5	21.5	3.0
DAB10A	n/a	220-240V ~1PN	1.5	21.5	4.0
DAB15A	n/a	220-240V ~1PN	2.3	27.5	4.0
ELECTRICALLY HEATED					
CAB10E	4.5 / 9.0	380-415V ~3PN	14	20.5	3.0
CAB15E	6.75 / 13.5	380-415V ~3PN	20	29	3.0
DAB10E	6.0 / 12.0	380-415V ~3PN	18	26.5	4.0
DAB15E	9.0 / 18.0	380-415V ~3PN	27	35	4.0
WATER HEATED (at 82/71 °C - LPHW)**					
CAB10W	9.0	220-240V ~1PN	0.3	17.7	3.0
CAB15W	13.5	220-240V ~1PN	0.5	24.6	3.0
DAB10W	12.0	220-240V ~1PN	1.5	24.7	4.0
DAB15W	18.0	220-240V ~1PN	2.3	31.9	4.0

Electrical

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

Fixing Positions

This appliance may be either wall-mounted or fixed to a ceiling - see Fig. 3a & 3b for fixing positions and 'Mounting' sections below for fixing details.

A minimum distance of 100mm is required from the top of the appliance to ceiling - see 'a' in Fig. 1.

The distance between the bottom of the appliance and the top of a door should be kept to a minimum - see 'b' in Fig. 1.

This appliance should not be mounted less than 1.8m from the floor.

Wall Mounting

Using the wall mounting bracket as a guide (see Fig. 2) mark off hole positions on the wall (a minimum height of 2.0 metres is required from the floor level to the bottom of the bracket). Position the bracket such that the air outlet of the installed air curtain will be as close to the top of the doorway as possible but will remain unobstructed when installation is complete.

Solid brick or concrete block walls must be drilled and plugged (using a spirit level as a guide - see 'x' in Fig. 2 - to ensure the bracket is level) with rawplug No. 8 size fibre inserts. The plug must be located in the solid part of the wall and not just in the plaster layer.

When fixing to 'panel' walls, the wall bracket should be attached to the stud-work using No. 8 wood screws or by an alternative, equally secure method of fixing.

Once the wall bracket has been fitted, the air curtain can be clipped in place as shown in Fig. 3a.

Ceiling Mounting

By using threaded inserts in the top panel of the air curtain, attachment to a ceiling over the product can be achieved using suitable M8 threaded steel rod or similar supports of sufficient strength - see Fig. 3b.

Electrical connection

All products are fitted with a microprocessor control. Electrical power and control connections are made as shown in Fig. 6. A suitable local isolating switch must be provided in the electrical supply circuit with at least 3mm clearance on each pole.

In order to access the electrical connections, remove the outlet grilles ('x' and 'y' in Fig. 4) by releasing the quick release fasteners and hinging the mouldings as shown and then remove the bottom panel ('z' in Fig. 4).

For the Water Heated and Ambient models only, the pressure plate ('w' in Fig. 4) must also be removed.

All Electric Models - Having removed a 'knock out' in the top panel, feed an appropriate supply cable (see 'a' in Fig. 6A) through a suitable cable gland (not supplied) fitted in the top panel and attach to the terminal block (see 'b' in Fig. 6A).

All Water heated and Ambient Models - Having removed a 'knock out' in the top panel, feed an appropriate supply cable (see 'a' in Fig. 6B) through a suitable cable gland (not supplied) fitted in the top panel and attach to the PCB (see 'b' in Fig. 6B).

All Models - A suitable cable (CAT5 or equivalent) for a switch panel (kit ref. - CAB5 for electrically heated models or CAB6 for water heated/ambient models) can be similarly introduced through the top panel and plugged into the circuit board as shown in Fig. 6A & 6B. If the unit is to be operated in conjunction with a door switch, a normally open switch should be wired as per Fig. 7 & 8 as appropriate.

Note: If using a door switch, an additional 2 core (low Voltage) cable is required between the door switch and the air barriers.

If the unit is to be connected to a Building Energy Management System, connections are made as per **Fig. 7 & 8** as appropriate. Ensure that the air curtain is securely fastened in position and that the supply cables are firmly clamped before operating the appliance.

Water connection

Models designed for use in conjunction with a low pressure hot water supply should be individually connected (in a parallel circuit) to the flow and return pipe-work. Connections (see 'a' in **Fig. 5**) are: ½" BSPT (CAB series) and ¾" BSPT (DAB series) and isolation valves (see 'b' in **Fig. 5**) should be fitted as close to the air curtain connection points as possible. For commissioning, air bleed valves (see 'c' in **Fig. 5**) are fitted to the coil, which can be accessed by removal of the bottom panel and intake grille assembly - see **Fig. 4**. The drain (see 'd' in **Fig. 5**) can also be accessed when the intake grille assembly and bottom panel are removed.

Maximum water supply conditions are 125°C and 8 bar (0.8MPa).

To aid installation, the water coil connections may be moved to either side of the appliance. By removing the water coil and appropriate knockouts the water coil can then be re-inserted into the required orientation. This procedure should be carried out before mounting the appliance.

Switch Panel Installation

The backing box (standard double gang) should be rebated into a suitable wall. The box should be fitted so that the switch panel will be flush with the wall. Suitable conduit should be used where applicable to carry the cable between the heater and the switch. A CAT5 LAN cable with straight through connections should be used to connect the switch panel to the appliance PCB.

Warning: Ensure cable is secure and the cable path does not come into contact with heater element or other moving parts.

Test all switch settings once installation is complete.

Electrically heated variants

Operation using switch box - CABC5

Switch on electrical supply to the air curtain. Rotate the switch to the desired heat setting. Settings available are;

OFF - Low Fan - Low Fan with Low Heat &

High Fan - High Fan with Low Heat - High Fan with Full Heat

The rocker (auto / manual) switch allows for manual over-ride of a door switch if fitted. Manual allows the appliance to run at the desired setting, while Auto provides an energy saving feature by shutting down the appliance while the door is closed.

The unit should always be switched OFF using the switch box control, and not by mains power supply interruption.

When the unit is switched off (via the switch box) the fan will run on for 1 minute without heat to discharge any residual energy from the heating elements.

When first turned on the control will run through a system check. The selected settings will be reached and maintained after a 30 second period.

Thermostatic control

A capillary type thermostat is factory fitted within the unit, as per 'C' in **Fig. 7**, giving a selection scale of 0-40°C. When the thermostat operates, the power output will reduce depending on the switch setting.



- Fan only - No effect



- Half Heat - Heater will reduce to Fan only



- Full Heat - Heater will reduce to Half Heat

To override the thermostat, first Isolate the supply to the heater. Remove the connection on terminal '1' of the thermostat and reconnect it onto the piggy back connection on terminal 'C'.

Door switch control (Electric models)

By including a door switch in the circuit (as per 'D' in **Fig. 7**) the air curtain will respond to door openings as follows:

- (1) Door opening will energise the air curtain at the set conditions (switch box settings).
- (2) On door closure operation will continue at the set conditions for a further 1 minute.
- (3) Between 1 minute and 2 minutes from door closure, set back operation, ½ heat (if heat selected) and ½ fan will activate.
- (4) Between 2 minutes and 3 minutes, the fan only (½ speed) shut down cycle will be engaged.
- (5) After 3 minutes, the air curtain will return to a dormant state until the door is re-opened.

If the door re-opens during this 3 minute run on cycle, the process will restart at (1).

Thermal Safety cut outs

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

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.

To reset the thermal safety cut-outs, access reset buttons as shown in **Fig. 9**. Before re-setting the reason for activation must be determined and corrective action taken.

Low pressure hot water heated / Ambient (fan only) variants

Operation using switch box - CABC6

Switch on electrical supply to the air curtain. Rotate the switch to the desired heat setting. Settings available are;

OFF - Low Fan - High Fan

The rocker (auto / manual) switch allows for manual over-ride of a door switch if fitted. Manual allows the appliance to run at the desired setting, while Auto provides an energy saving feature by shutting down the appliance while the door is closed.

The unit should always be switched OFF using the switch box control, and not by mains power supply interruption.

When first turned on the control will run through a system check. The selected settings will be reached and maintained after a 30 second period.

Thermostatic control (optional)

- 1) A thermostatic regulation valve with a remote sensing bulb (not supplied) can be positioned in the supply water pipe-work to regulate the heat output.
- 2) An electrical 3-Port Solenoid Valve can also be connected into the system. Please contact your service agent using the contact details for more details.

Door switch control (Water heated & Ambient models)

By including a door switch in the circuit (as per 'D' in **Fig. 8**) the air curtain will respond to door openings as follows:

- (1) Door opening will energise the air curtain at the set conditions (switch box settings).
- (2) On door closure operation will continue at the set conditions for a further 1 minute.
- (3) Between 1 minute and 2 minutes from door closure ½ fan set back operation will activate.

- (4) After 2 minutes, the air curtain will return to a dormant state until the door is re-opened. If the door re-opens during this 2 minute run on cycle, the process will re-start at (1).

Wiring Diagrams

CAB & DAB 'E' - Electric models - see Fig. 7

CAB & DAB 'W' / 'A' - Water heated & Ambient models - see Fig. 8

- C - Thermostat
- D - Door Switch (Optional)
- E - Thermal Safety Cut-out Circuit
- F - Elements
 - BMS Switches (Optional)(S,S1,S2)
- M - Motor

Remote (BMS / BEMS) Operation

Connection to Building Energy Management Control Systems (BEMS) is possible so that remote control of the air curtain can be carried out in conjunction with other equipment. Please refer to the table in **Fig. 7 & 8** to make the appropriate connections to the PCB.

Modular Connection

Refer to instructions provided with the modular linking kit.

Recessed Installation

Refer to instructions provided with the recess installation kit.

De-rating the unit to operate at 1/2 heat setting

Please contact your sales or service agent using the contact details provided.

Operation on a Single Phase Supply

Please contact your sales or service agent using the contact details provided.

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 three years from the date of purchase.

Within this period, we undertake to repair or exchange this product free of charge 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 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

Please retain your receipt as proof of purchase.

 The product complies with the European Safety Standards EN60335-2-30 and the European Standard Electromagnetic Compatibility (EMC) EN55014, EN60555-2 and EN60555-3. These cover the essential requirements of EEC Directives 2006/95/EC and 2004/108/EC

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