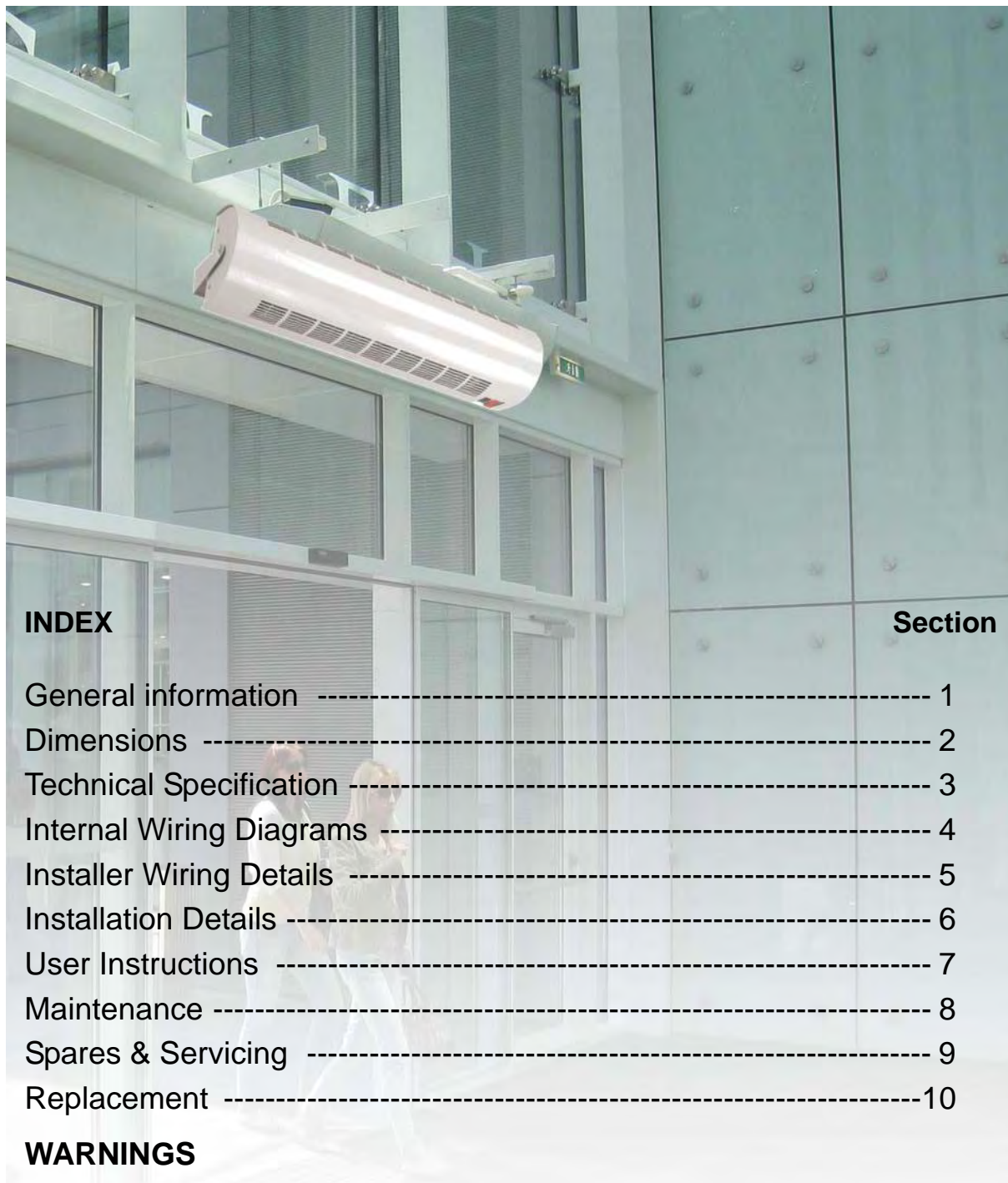


AC MINI SERIES

MINI600SE3; MINI800SE4-5 & MINI1000SE6 INSTALLATION AND OPERATING MANUAL



INDEX

Section

General information -----	1
Dimensions -----	2
Technical Specification -----	3
Internal Wiring Diagrams -----	4
Installer Wiring Details -----	5
Installation Details -----	6
User Instructions -----	7
Maintenance -----	8
Spares & Servicing -----	9
Replacement -----	10

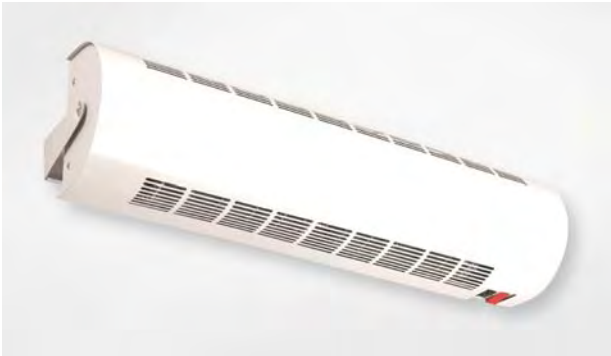
WARNINGS

- 1 This appliance must only be installed by a competent person in accordance with the requirements of the Codes of Practice or the rules in force.
- 2 All external wiring MUST comply with the current IEE wiring regulations.
- 3 Warning this appliance must be earthed.

1. General Information.

Introduction

This instruction manual describes the Airbloc Mini range of air curtains. Models range from 600mm in length rated at 3kW, 800mm rated at 4.5kW and 1000mm rated at 6kW. They are designed for mounting above doorways and similar entrances, and may be used as space heaters.



The MINI600SE3 air curtain is supplied with rocker switches attached to the underside of the front face (see photo above). These switches give ambient airflow, 1kW, 2kW & 3kW heater control.

Both the MINI800SE4.5 AND MINI1000SE6 air curtains are supplied with remote control boxes which houses 3 rocker switches. These switches give ambient airflow, 1, 2 and 3kW heater control.



For further details please refer to section 6 - User instructions in this manual.

General

All installations must be in accordance with the regulations in force in the country of use.

These instructions must be handed to the user on completion of the installation.

Installers and service engineers must be able to demonstrate competence and be suitably qualified in accordance with the regulations in force in the country of use.

To ensure continued and safe operation it is recommended that the appliance is serviced annually.

The manufacturer, offers a maintenance service. Details are available on request.

Electrical

This unit is suitable for connection to 230/240V 50Hz supplies.

The MINI600SE3 has full heating load of 3kW.
The MINI800SE4-5 has full heating load of 4.5kW.
The MINI1000SE6 has full heating load of 6kW.

The connection to be made between the heater and the remote control box (MINI800 and MINI1000 only) are shown in figures 2 and 3. An earth terminal is adjacent to the terminal block and is clearly marked with the symbol.

Warning

! For safety reasons a good earth connection must ALWAYS be made to the heater and control box.

The unit must be wired in accordance with I.E.E regulations for the Electrical Equipment of Buildings and the installer should ensure that a suitable isolating switch is connected in the mains supply.

Location

Airbloc units should be installed horizontally directly over the door opening. It is recommended that the air curtain is installed on the inside of the building, within the open room space against a wall or ceiling. Care must be taken to allow complete free air movement into the inlet grilles of the unit to ensure correct working operation of the air curtain. The discharge opening should be as close to the top of the door as possible and to cover the entire door width.

When mounted over a standard shop doorway the unit should be fitted as low as possible and not more than 2.5 meters or from ground level.

A single unit MINI600SE3 will provide reasonable coverage for an internal doorway, a single MINI800SE4-5 unit will provide coverage for an invalid doorway width up to 800mm, and a MINI1000SE6 unit is suitable for door widths up to 1m wide. Units can be interlinked across wider entrances.

The unit shall be mounted so that the airflow is not obstructed by any part of the doorframe. With a

minimum clearance distance to ceiling of 300mm.

These units are designed for surface mounting and should not be placed into a ceiling void, due to possible obstruction of airflow and difficulty in routine cleaning and maintenance.

protective safety wear such as hand, eye, ear and head protection is used during installation of the product.

Do not rest anything especially ladders against the product.

Health and Safety

Sole liability rests with the installer to ensure that all site safety procedures are adhered to during installation.

Sole liability rests with the installer to ensure that

Standards

Units conform to the European electrical standard BS EN 60335-2-30:1997 and to the following European CE directives. 73/23/EEC low voltage; 89/336/EEC and 98/68/EEC electromagnetic compatibility.

2. Dimensions.

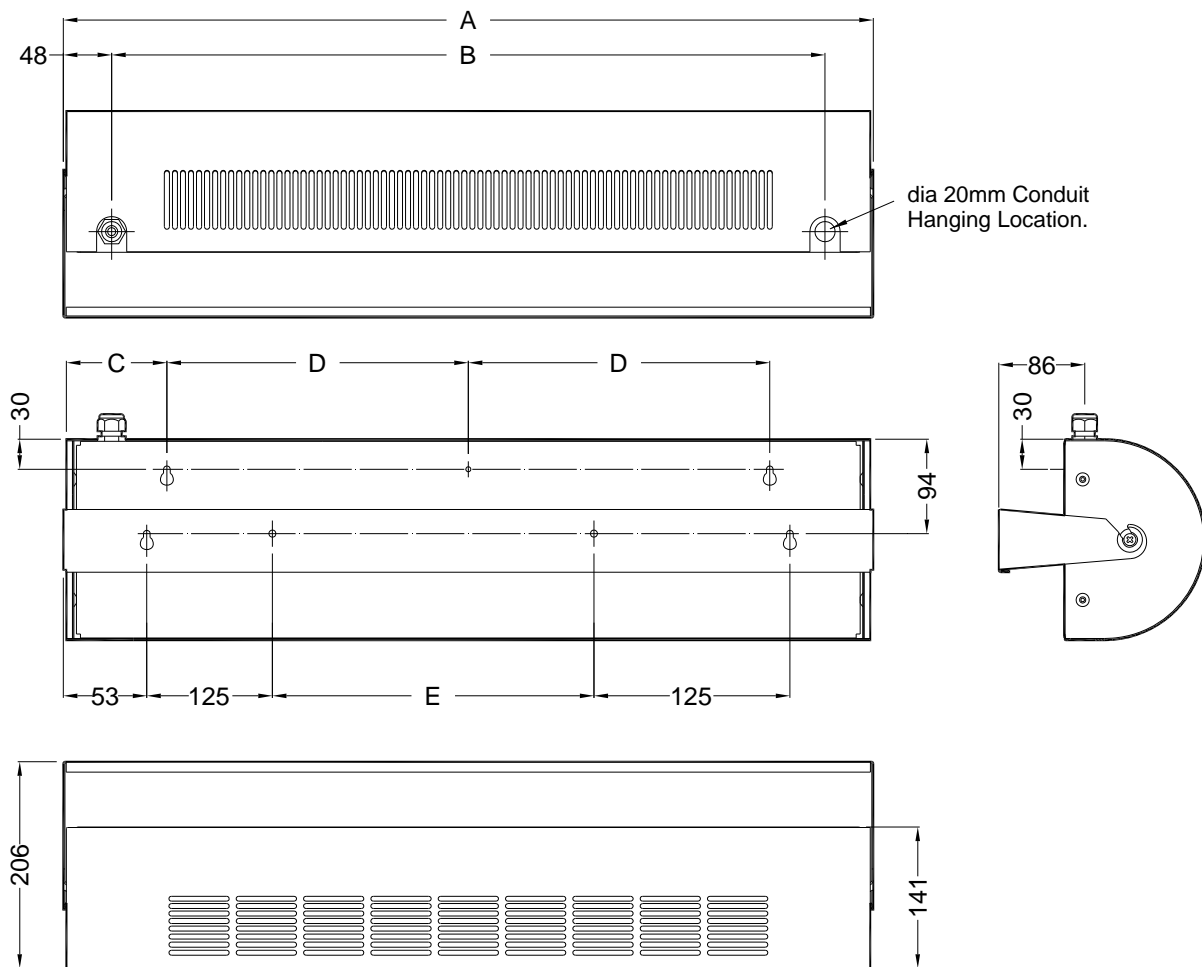


Figure 1. Mini (size 1000 shown)

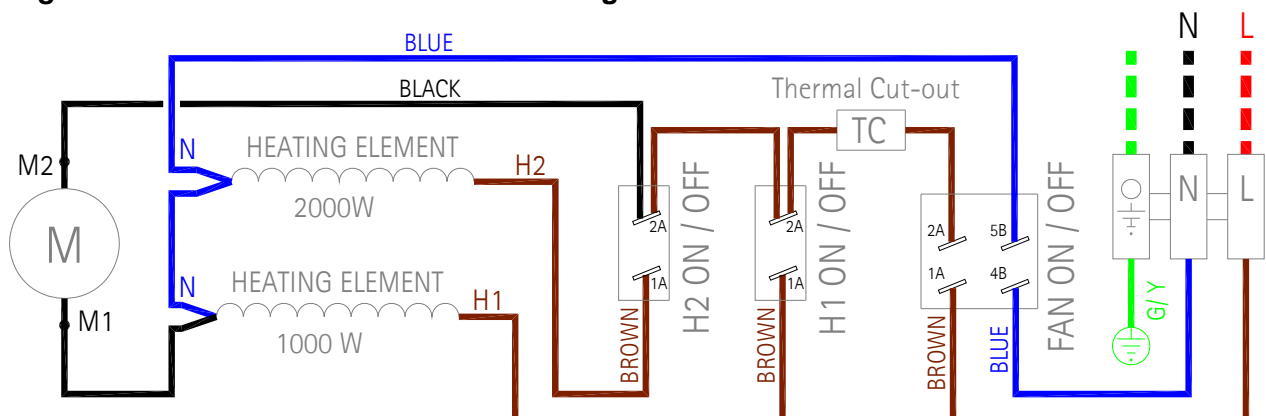
Model	A	B	C	D	E
MINI600SE3	606	510	70	230	250
MINI800SE4-5	806	710	100	300	450
MINI1000SE6	996	900	95	400	640

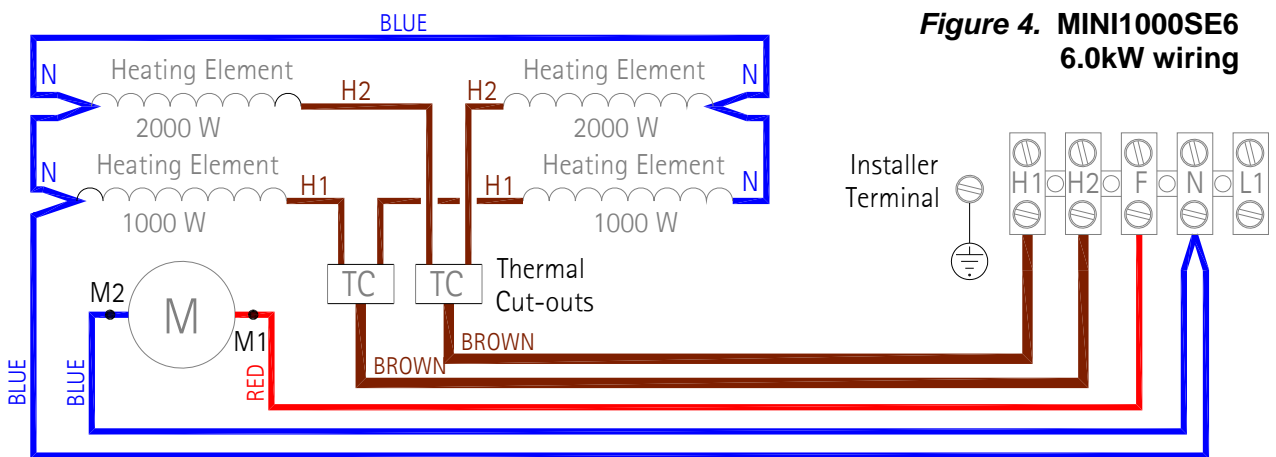
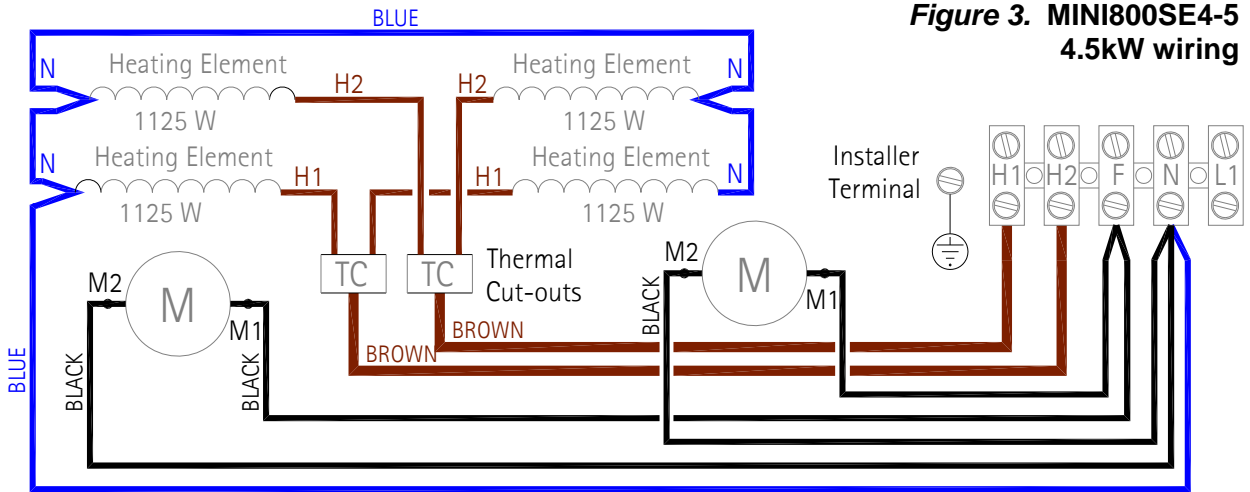
3. Technical Specification.

		MINI600SE3	MINI800SE4-5	MINI1000SE6
General Data				
Maximum height	M	2.3	2.5	
Door width	mm	600	800	1000
Heat medium		Electric heated		
Maximum heat capacity	kW	3.0	4.5	6.0
Heat setting		3	2	3
Heat setting	kW	1 / 2 / 3	2.25 / 4.5	2 / 4 / 6
Fan type		Crossflow		
Fan dia	mm	60		
Fan settings		1		
Air outlet		Fixed vent		
Switching type		Front switches	Remote switchbox	
Weight	kg	6	8	10
Electrical Data				
Maximum heat capacity	kW	3.0	4.5	6.0
Supply voltage		230V 1ph 50Hz		
Total load	amps	12.5	18.8	25.0
Cable size		2.5mm ²	4.0mm ²	6.0mm ²
External fuse size amps	amps	13.0	25.0	32.0
Switch box wiring		n/a	4 x 4.0mm ² + E	4 x 6.0mm ² + E
Mains terminal block position		On Switchbox		
Control terminal block position		Front right of centre		
Air Data				
Fan setting		2		
Air volume	<i>High speed</i>	m ³ /h	273	382
Delta T		°C	35	49
Noise level @ 3M	<i>Free field</i>	dBA	42	48
Dims Data				
Length	mm	600	800	1000
Depth (width) including swivel bracket	mm	205		
Depth wall mounted	mm	140		
Height	mm	200		
Swivel bracket centres on length	mm	500	700	890
Wall mounting bottom to centres	mm	170		
Wall mounting centres on length	mm	460	600	800

4. Internal Wiring Diagrams.

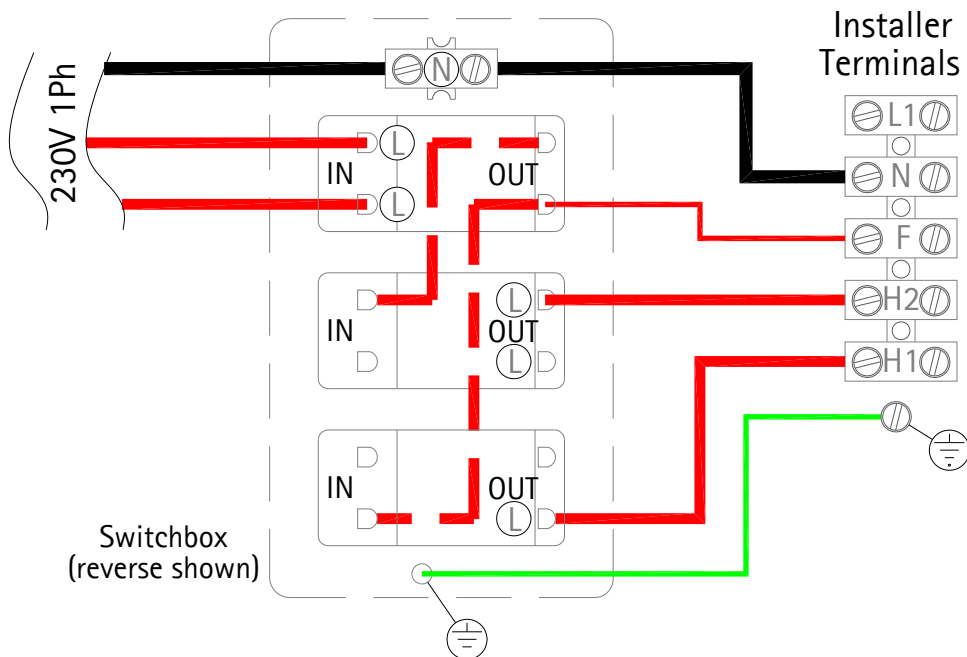
Figure 2. MINI600SE3 3.0kW internal wiring.





5. Installer Wiring Details.

Figure 5. MINI800SE4-5 4.5kW & MINI1000SE6 6kW Switchbox Interconnecting Wiring



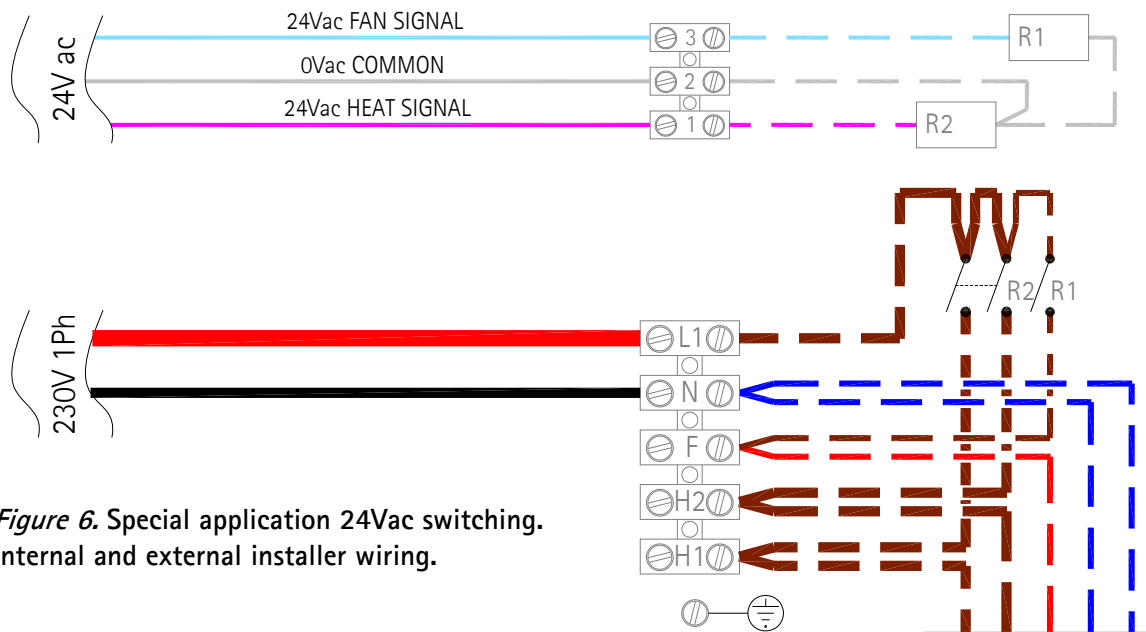


Figure 6. Special application 24Vac switching. Internal and external installer wiring.

6. Installation Details.

Mounting

Airbloc units should be installed horizontally directly over the door opening. It is recommended that the air curtain is installed on the inside of the building, within the open room space against a wall or ceiling.

Care must be taken to allow complete free air movement into the inlet grilles of the unit to ensure correct working operation of the air curtain.

The discharge opening should be as close to the top of the door as possible and to cover the entire door width.

When mounted over a standard shop doorway the unit should be fitted as low as possible and not more than 2.5 meters or from ground level.

A single unit MINI600SE3 will provide reasonable coverage for an internal doorway, a single MINI800SE4-5 unit will provide coverage for an invalid doorway width up to 800mm, and an MINI1000SE6 unit is suitable for door widths up to 1m wide. Units can be interlinked across wider entrances.

The unit shall be mounted so that the airflow is not obstructed by any part of the doorframe. With a minimum clearance distance to ceiling of 300mm.

These units are designed for surface mounting and should not be placed into a ceiling void, due to possible obstruction of airflow and difficulty in routine cleaning and maintenance.

Installation

Carefully unpack the unit. The heater may be mounted in three alternative ways:

- Direct to a suitable wall or bearer with appropriate fixings either using the holes in the swivel mounting bracket or the key hole slots in the back plate of the product. See Figure 1 for mounting centres.
- Suspended by 10mm drop rods through the holes provided in the top of the swivel mounting bracket.
- For use as an air curtain the air outlet should be directed down to the floor. For use as a heater the air outlet should point into the room.

Note The air outlet is opposite the face where cable entry holes are provided.

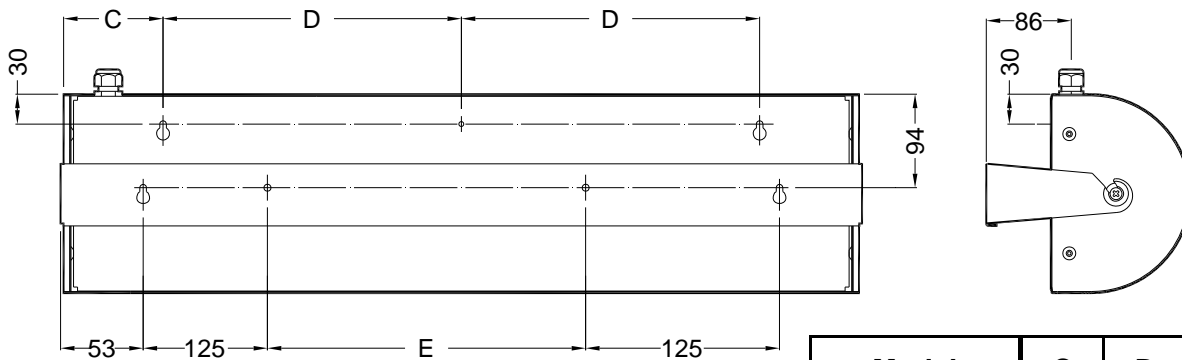
Electrical Connections

These units are suitable for connection to a 230/240 Volt 50 Hz single phase ac supply. The heaters consume 3.0kW, 4.5kW & 6kW respectively at 240 Volts when switched to the full heat position.

The appliance shall be connected to the supply via a circuit, in which there is an all-pole switch. Test for correct operation and refit the cover.

For connection to the mains supply it will be necessary to remove the outer cover from the unit. After removing the cover you will note the mains terminal block and it will be necessary to connect the mains supply and the lead from the remote switch box prior to refitting the cover. Wire in accordance to Figures 2, 3 and 4. (or fig.6 where applicable)

For safety reasons, a sound earth connection must always be made to the unit before it is put to use. The unit should be wired in accordance with IEE Regulations for the Electrical Equipment of Buildings.



Model	C	D	E
MINI600SE3	70	230	250
MINI800SE4-5	100	300	450
MINI1000SE6	95	400	640

Figure 7. Fixing centres

7. User Instructions.

MINI600SE3 Operation

The MINI600SE3 air curtain is supplied with rocker switches attached to the underside of the front face.



Figure 8. MINI600 switches

The right hand switch marked with 4 dots switches the blower on to give ambient airflow.

With the right hand switch in the ON position the heat controls can be selected.

When the centre switch (marked with a single black line) is depressed the heat output is 1kW.

When the left hand switch (marked with two black lines) is depressed the heat output is 2kW.

When both switches are depressed the heat output is 3kW.

Both the MINI800SE4.5 AND MINI1000SE6 air curtains are supplied with remote control boxes which houses 3 rocker switches.

The remote control box houses 2 switches, a double pole and a single pole, and gives the following functions:

- Switch 1 Off/Fan only to provide circulation of room air.
- Switch 2 Half Heat

- Switch 3 Full Heat.



Figure 9. Remote Control Box

Protection

The unit is protected in the event of fan failure, or an obstruction of the free air flow, by a thermal PTC Self Hold Cut Out.

Having tripped the PTC Cut Out remains open, effectively switching off the heating elements, as long as mains power is available inside the appliance.

The PTC Cut Out will only reset when the appliance is switched OFF and allowed to cool for at least 20 minutes.

To reset the PTC Self Hold Cut Out

- The cut-out is reset by switching OFF mains power to the appliance.
- Allow the appliance to cool for 20 minutes.
- Restart, switch on the appliance. If the cut-out trips again a qualified electrician should be consulted.

8. Maintenance

! ALWAYS ENSURE THAT THE MAIN EXTERNAL ELECTRICITY SUPPLY IS SWITCHED OFF BEFORE COMMENCING ANY MAINTENANCE ON THIS HEATER.

To obtain the best results from the heater, it is essential to avoid the accumulation of dust and dirt within the unit on the air inlet and discharge grilles. For this reason regular cleaning is neces-

sary, paying particular attention to the removal of dirt build up on the rotor blades.

Cleaning of the fan is best carried out with a soft brush.

A single drop of light oil should be applied to the motor bearing from time to time.

9. Spares & Servicing

It is essential when ordering spares or replacement parts to state the model number and the serial number on the rating label adhered to the rear of the unit.

The Air Curtain should be serviced annually. Airbloc offer a service facility, call 01384 489700. Servicing shall be undertaken by a competent person.

Any repair or alteration carried out to this product without the prior authority from AmbiRad will invalidate warranty.

Refer to Air Curtain Installation and Operating Instruction manual for details.

! Ensure electrical power is isolated from the product.

10. Replacements

! ALWAYS ENSURE THAT THE MAIN EXTERNAL ELECTRICITY SUPPLY IS SWITCHED OFF BEFORE COMENCING ANY ALTERATIONS THIS HEATER.

MINI600SE03

TO REPLACE THE FAN HEATER ASSEMBLY

- Isolate the unit from the electric supply.
- Remove the outer cover after disconnecting from the swivel mounting bracket where fitted.
- Disconnect the internal wiring from the main terminal block and earth stud.
- Release the fixings and wiring that secure the fan assembly to the rear panel.
- Remove the four nuts and washers fixing the fan heater assembly to the back of the case.
- The fan heater assembly can now be eased forward and removed from the heater case.
- Fit replacement fan heater and re-assemble in reverse order.

TO REPLACE A SWITCH

- Isolate the unit from the electric supply.
- Remove the top cover.
- Release the three fixings which secure the switch bracket to the right hand side of the main case.
- Remove the push-on connectors, noting

their position.

- Remove by compressing the plastic retaining tabs, and lifting out the switch.
- Insert the new switch, refit and push on connectors in the correct order, test and reassemble.

MINI800SE4-5 & MINI1000SE06

TO REPLACE THE FAN HEATER ASSEMBLY

- Isolate the unit from the electric supply.
- Remove the outer cover after disconnecting from the swivel mounting bracket where fitted.
- Disconnect the internal wiring from the main terminal block and earth stud.
- Release the fixings and wiring that secure the fan assembly to the rear panel.
- Fit replacement fan heater and reassemble in reverse order.
- Test product for correct operation.

TO REPLACE A SWITCH IN THE CONTROL.

- Switch off the mains supply
- Remove the switch box cover
- Disconnect the wiring to the switch
- Remove the appropriate fixing screw(s) and push out the switch
- Fit the replacement switch, reconnect the wiring and replace the cover.

An AmbiRad Group brand



AmbiRad Limited Fens Pool Avenue
Brierley Hill West Midlands DY5 1QA
United Kingdom.

Telephone 01384 489700
Facsimile 01384 489707
Email marketing@airbloc.co.uk
Website www.airbloc.co.uk
Technical Support www.s-i-d.co.uk

AIRBLOC
ENERGY SAVING AIR CURTAINS

Airbloc is a registered trademark of AmbiRad Limited. Because of continuous product innovation, AmbiRad reserve the right to change product specification without due notice.