

USERS GUIDE

AIRTHERM

Air Source Heat Pump

4.5, 9, 12

For installation guide see reverse of book

When replacing any part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require.
Do not use reconditioned or copy parts that have not been clearly authorised by Ideal.

Ideal airtherm 4.5, 9 & 12 Air Source Heat Pump



INTRODUCTION

Your air source heat pump is designed to heat your home and to provide domestic hot water (DHW). Your installer will have ensured that your heat pump has sufficient heating output to provide these services without any supplementary heating being required. The heat pump uses refrigeration technology to extract heat from the outside air at temperatures down to -15°C, producing as much as four times as much heat energy as the electrical input required to drive it. This results in an efficient low cost, low carbon, heating system.

HEATING SYSTEM CONTROLS

The heat pump is designed to operate with a standard heating programmable controller linked to a room thermostat, providing space heating or DHW according to demand. The unit has two modes of operation, one for space heating through under floor heating or radiators adjustable between 35°C and 55°C and a second for DHW preset at 65°C. We recommend that you review the electricity tariffs from all suppliers in your area and select that which will give you the optimum economy in relation to your lifestyle and heating demand. Timings appropriate to your heating and hot water demand and to the selected tariff should be programmed into the controller.

We recommend that you set your programmer to heat the hot water for 1 ½ to 2 hours before you require it first thing in the morning or later in the day. A typical winter heating programme is illustrated below.

On/Off	Heating	Hot water
On		5.00 am
Off		6.30 am
On	6.30 am	
Off	9.00 am	
On		2.00 pm
Off		4.00 pm
On	4.00 pm	
Off	10.30 pm	

OPERATING THE HEAT PUMP

When setting the programmer, allow extra time for the heat pump to raise the water temperature when first switching on, as it will take longer than a traditional boiler to reach the full operating temperature.

Because a heat pump operates in heating mode at a temperature up to 55°C, radiators will feel cooler than those linked to a gas or oil boiler traditionally supplying water at 80°C. Your installer will have ensured that your radiators are correctly sized for operation with a heat pump but you may also notice that they remain warm for longer periods rather than cycling on and off as is the case with traditional boilers.

The heat pump supplies domestic hot water at 65°C. This is stored in the special hot water cylinder provided with your heat pump to ensure that you always have hot water on tap. The temperature of the stored hot water is controlled by the cylinder thermostat and you should set this at a level which gives you hot water at a temperature which suits you.

WINTERISING/START UP

If the heat pump is being left for a short period of time AND has adequate frost protection, i.e. frost protection stat and/or antifreeze, the heat pump can be left in the same way as you would leave a conventional central heating boiler.

If the heat pump is to be shut down over the winter period follow the Winterising Procedure below.

WINTERISING PROCEDURE

WARNING. Isolate machine before entering! As the heat pump embodies electrical and rotational equipment, it is recommended for your own safety that a competent person carries out the following procedure.

(Drain Down Procedure)

ALL MODELS

Object

To provide frost protection
To eliminate corrosion problems
To inhibit electrical components

1. Switch off electric supply to heat pump
2. Remove external fuses and keep in safe place away from heat pump to prevent accidental operation of heat pump
3. Ensure water circulation pump is switched off.
4. Drain water from heat pump by
 - a. drain valve if fitted
 - b. disconnecting pipework to and from heat pump.

Ensure Heat Pump is completely drained.

5. Flush through water circuit in heat pump by using CLEAN TAP WATER (NOT POOL WATER) via hose into inlet connection - run for 10 minutes minimum; use spray nozzle if available.
6. Drain completely - fit plastic bags secured by elastic bands over water connections.
7. Unhinge electrical enclosure and liberally spray interior of unit, with moisture-repellent aerosol WD-40 or similar; reseal enclosure.
8. If heat pump located outside, protect from weather by covering with VENTILATED cover. Do not use plastic sheet as condensation can occur within unit.

N.B. If this procedure is not adopted and frost or corrosion damage results then the warranty will become invalid.

START UP PROCEDURE AFTER WINTERISATION

1. Remove covers (if fitted).
2. Remove front panel - clean air filter and using soft brush clean finned surfaces of heat pump. Replace panel.
3. Remove plastic covers on water connections and reconnect water piping or close drain valve.
4. Start up water circulating pump and leave running for at least 1/4 hour to establish flow and enable any air in piping to escape.

LOSS OF SYSTEM WATER PRESSURE

The system pressure gauge indicates the central heating system pressure and that if the normal COLD pressure of the system is seen to decrease over a period of time then a water leak is indicated. Re-pressurise the system, if unable to re-pressurise or if the pressure continues to drop a registered local heating installer should be consulted.

AUTOMATIC DEFROST

Automatic defrosting is a normal part of heat pump operation in colder weather and normally takes place for about 4 minutes per hour. When in defrost the mode fan will stop and water vapour may be seen rising from the heat exchanger. This is normal and is not a cause for concern.

CONDENSATE DRAIN

Ensure condensate drain is kept free from any blockage/debris.

SAFETY PRECAUTIONS

1. Minimum clearances - distances to be maintained.
2. Do not stand on the heat pump for any reason.
3. Do not allow children to poke sticks or other objects through the front grille into the fan as this could cause them harm and will damage the fan.
4. Outer panels should only be removed by a qualified service engineer.

CLEANING

The painted surfaces of the Heat pump can be cleaned with warm soapy water using a soft non abrasive cloth.

Do not use alcohol based cleaners. Diluted washing up liquid is probably the strongest cleaner that should be used.

The fins of the evaporator should not be allowed to become clogged as this will affect the performance of the Heat pump.

Having removed the panel covering the evaporator, the fins can be cleaned with a brush.

SERVICING

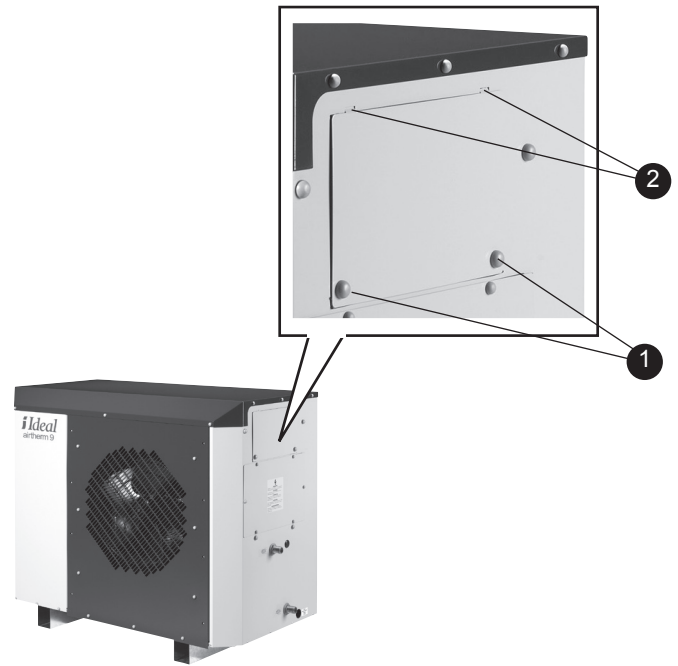
No regular servicing of the airtherm 4.5 or 9 heat pumps is required. However, you are advised to check occasionally that there is no debris around the heat pump which may get drawn into or obstruct the heat exchanger. The area around the heat pump should always be kept clear to avoid obstructing the air passage through the unit.

The airtherm 12 requires an annual gas leak test to comply with EU F-Gas regulations. It is the owner's responsibility to ensure that this test is carried out. Any qualified local refrigeration engineer should be able to do it for you. However, if you have encounter any problem, please call the Ideal Service Department who will be able to help.

TROUBLE SHOOTING

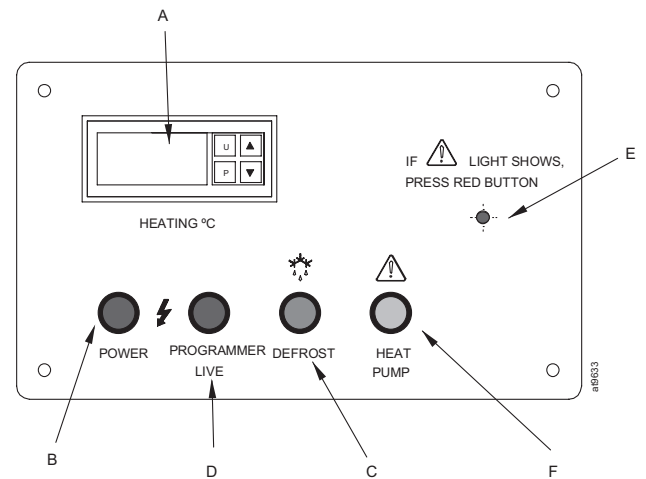
The control panel for the air source heat pump is located under a secure cover on the right hand side of the machine. Access should only be required in the event of a problem as the installer will set the water flow temperature appropriate to the heating - see diagrams.

- The red mains lamp (B) confirms that mains power is connected
- The red programmer live lamp (D) confirms that the unit is connected to the heating system controller
- The space heating temperature controller (A) is used to adjust the return water temperature from the space heating system. For maximum economy, this should be set to the lowest acceptable level. The setting is adjusted by first pressing and then releasing button P followed by pressing the up or down arrow buttons to display the required temperature. After 5 seconds the display will revert to the actual water temperature
- The amber fault lamp (F) indicates a possible problem in the system. This may be cleared by the manual reset of the high pressure switch. However, if this does not clear the fault, you should contact your service engineer.
- The green defrost lamp (C) is illuminated when the heat pump evaporator is defrosting.



LEGEND

- A** Space Heating Temperature Controller
- B** Mains Lamp (red)
- C** Defrost Lamp (Green)
- D** Programmer Live Lamp (red)
- E** High Pressure Switch Manual Reset
- F** Fault Lamp (amber)
(contact service engineer if high pressure reset does not clear fault)



Ideal heat pump guarantee

During the period of guarantee we will, at our option, repair or replace your Ideal heat pump free of charge where it suffers a mechanical or electrical breakdown resulting from defective workmanship or materials, subject to the following conditions and exclusions

1. Your Ideal heat pump is guaranteed by Ideal Stelrad Group, P.O. Box 103, National Ave., Hull HU5 4JN.
2. The guarantee period commences from the date of commissioning which must be recorded on the completed commissioning sheet supplied by the installer. Without proof of purchase i.e. an invoice or completed commissioning sheet, the guarantee period will be taken to commence from the date of manufacture of the serial number as detailed on the appliance data plate.
3. The guarantee period for your heat pump is 24 months.
4. If the heat pump suffers a mechanical or electrical failure, you should telephone Ideal on 01621 878549 between 9.00 am and 5.30 pm, Monday to Friday. If the problem cannot be solved over the phone, they will arrange a visit by an authorised Ideal service agent to inspect and repair or, where in our sole opinion repair is not economic, arrange to replace your Ideal heat pump.
5. Your Ideal heat pump must not be removed from its place of installation at your property without our prior consent.
6. We reserve the right to charge a call-out fee.
 - a. Where the problem is found to have been caused by part of your heating system other than the heat pump
 - b. Failure to cancel an agreed appointment prior to our engineers visit.
 - c. The heat pump is outside the guarantee period.
7. The guarantee does not cover over costs or expenses caused or arising as a result of the failure of your heat pump.
8. The guarantee does not apply to any costs incurred during delays in fixing reported faults.
9. The guarantee applies to Ideal heat pumps installed in the UK.

The guarantee does not apply if:

1. The heat pump and associated equipment has been incorrectly sized for the application.
2. The heat pump and associated equipment has not been installed and commissioned in complete accordance with the procedures defined in the Ideal installation manual.
3. The heat pump and associated equipment has been worked upon or has been adjusted by anyone other than a person authorized to do so by Ideal Stelrad Group.
4. The heat pump and associated equipment has suffered frost, flood or malicious damage.
5. The heat pump unit has suffered voltage spikes or lightning strikes.



2 Year Guarantee Registration Form

RETURN WITHIN 30 DAYS

CUSTOMER DETAILS (Please complete in BLOCK CAPITALS)

TITLE

INITIALS

SURNAME

HOME TELEPHONE (please include the STD code)

WORK/MOBILE TELEPHONE (please include the STD code)

HOUSE NUMBER

ADDRESS

TOWN

POSTCODE (it is essential to fill in your postcode)

Do you live in a newly built home under 12 months old? Yes No

Date of installation

Are you the houseowner? Owner Tenant

INSTALLER'S DETAILS (if known)

INSTALLER'S NAME

INSTALLER'S ADDRESS

POSTCODE (it is essential to fill in your postcode)

TELEPHONE (please include the STD code)

SUPPLIER'S NAME (if not an Installer e.g. British Gas, Housebuilder etc.)

PRODUCT DETAILS

Model (e.g. Airtherm 4.5)

Did you purchase a maintenance contract from your installer? Yes No

If yes, please give expiry date

We may also share your information with carefully selected third parties, who may contact you by post or telephone with offers of interest. If you do not wish your information to be used for this purpose, please tick this box.

Your Ideal Boilers Free Guarantee is arranged and administered by Ideal Stelrad Group Ltd



Ideal Consumer Helpline
Tel: 01621 878549
www.idealboilers.com

Ideal Stelrad Group pursues a policy of continuing improvement in the design and performance of its products. The right is therefore reserved to vary specification without notice.

Ideal Boilers, P.O. Box 103, National Ave, Kingston Upon Hull, HU5 4JN. Tel. 01482 492251 Fax. 01482 448858. Registration No. London 322 137.

