

## **USERS GUIDE**

### **GROUNDTHERM**

Ground Source Heat Pump 3.5 & 5

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.

## Groundtherm 3.5 & 5 Ground Source Heat Pump



### INTRODUCTION

Your ground 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 ground 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 hot water 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  $1\frac{1}{2}$  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.

### **OPERATING THE HEAT PUMP**

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

On/Off	Heating	Hot water
On		4.00 am
Off		5.30 am
On	5.30 am	
Off	12.00 am	
On		12.00 pm
Off		2.00 pm
On	2.00 pm	
Off	10.30 pm	

### **SHUTDOWN**

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.

### LOSS OF SYSTEM WATER PRESSURE

The system pressure gauge indicates the central heating system pressure and 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.

### **SAFETY PRECAUTIONS**

- 1. Minimum clearances distances to be maintained.
- 2. Do not stand on the heat pump for any reason.
- 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.

### **SERVICING**

No regular servicing of the groundtherm heat pump is required. Minimum service distances must always be maintained around the unit as stated in the installation instructions.

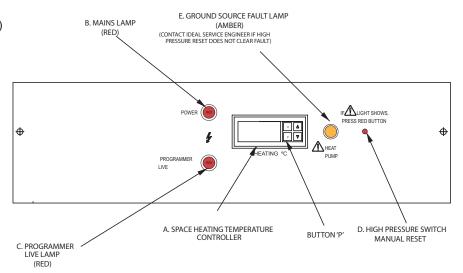
### TROUBLE SHOOTING

- The red mains lamp (B) confirms that mains power is connected
- The red programmer live lamp (C) 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 (E) 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.

### **LEGEND**

- A Space Heating Temperature Controller
- Mains Lamp (red)
- Programmer Live Lamp (red) С
- D High Pressure Switch Manual Reset
- Ε Fault Lamp (amber) (contact service engineer if high pressure reset does not clear fault)





# Ideal heat pump

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.
- commissioning sheet, the guarantee period will be taken to commence from the date of manufacture of the serial 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 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.
- 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
- 5. The heat pump unit has suffered voltage spikes or lightning strikes.



## 2 Year Guarantee Registration Form

CUSTOMER DETAILS (Please complete in BLOCK CAPITALS)

NITIALS

SURNAME



TELEPHONE (please include the STD code)  MOBILE TELEPHONE (please include the STD code)	BER ADDRESS	is essential to fill in your postcode)  Do you live in a newly built home under 12 months old?  (please mark with an x)  Yes  Date of installation  Tenant	A'S DETAILS (If known)  NAME  ADDRESS	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. Groundtherm 3.5)  Model (e.g. Groundtherm 3.5)  Did you purchase a maintenance contract from your Installer?  Ves No
HOME TELEPHONE (please incl WORK/MOBILE TELEPHONE	HOUSE NUMBER ADDR	ODE (it is ess	INSTALLER'S DETAILS (If known) INSTALLER'S NAME INSTALLER'S ADDRESS	POSTCODE (it is essential to fill in your postcode)	SUPPLIER'S NAME (if not an In	PRODUCT DETAILS  Model (e.g. Groundtherm 3.5)  Model (e.g. droundtherm 3.5)  Did you purchase a maintena (please mark with an x)  Yes  No



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





