

isar HE24, HE30, HE35

(Natural Gas Only)

Destination Countries: GB, IE

HE24 G.C. Appliance No. 47-348-31

HE30 G.C. Appliance No. 47-348-30

HE35 G.C. Appliance No. 47-348-29

Introduction

The **isar** is a wall mounted, room sealed, condensing combination boiler, featuring full sequence automatic spark ignition and fan assisted combustion.

Due to the high efficiency of the boiler, condensate is produced from the flue gases and this is drained to a suitable disposal point through the plastic waste pipe at the lower rear of the boiler. A condensate 'plume' will also be visible at the flue terminal.

The **isar** is a combination boiler providing both central heating and instantaneous domestic hot water.

Safety

Current Gas Safety (Installation & Use) Regulations or rules in force.

In your own interest, and that of safety, it is the law that this boiler must be installed by a CORGI registered installer, in accordance with the above regulations.

In IE, the installation must be carried out by a Competent Person and installed in accordance with the current edition of I.S. 813 "Domestic Gas Installations", the current Building Regulations and reference should be made to the current ETCI rules for electrical installation.

It is essential that the instructions in this booklet are strictly followed, for safe and economical operation of the boiler.

Electricity Supply

This appliance must be earthed.

Supply: 230 V ~ 50 Hz. The fusing should be 3A.

Connection must be made in a way that allows complete isolation of the electrical supply such as a double-pole switch, having a 3mm (1/8") contact separation in both poles, serving only the boiler and system controls. Alternatively, a 3-pin UNSWITCHED socket may be used. The means of isolation must be accessible to the user after installation.

Important Notes

- This appliance must not be operated without the casing correctly fitted and forming an adequate seal.
- If the boiler is installed in a compartment then the compartment MUST NOT be used for storage purposes.
- If it is known or suspected that a fault exists on the boiler then it MUST NOT BE USED until the fault has been corrected by a CORGI registered installer or in IE a competent person.
- Under NO circumstances should any of the sealed components on this appliance be used incorrectly or tampered with.

In cases of repeated or continuous shutdown a CORGI registered installer or in IE a competent person should be called to investigate and rectify the condition causing this and carry out

an operational test. Only the manufacturers original parts should be used for replacement.

Minimum Clearances

Clearances of **165mm (6 1/2")** above, **100mm (4")** below, **5mm (1/4")** at the sides and **450mm (17 3/4")** at the front of the boiler casing must be allowed for servicing.

The minimum front and bottom clearance allowed when built into a cupboard is 5mm.

To light the boiler. Refer to Frame 1

If a programmer is fitted refer to separate instructions for the programmer before continuing.

1. CHECK THAT THE ELECTRICITY SUPPLY TO THE BOILER IS OFF.
2. Set the mains ON/OFF switch (A) to OFF and the DHW thermostat knob (J) and CH thermostat knob (F) to maximum.
3. Ensure that all DHW taps are turned off.
4. Switch ON the electricity supply to the boiler and check that all external controls, e.g. programmer, room thermostat etc., are ON.
5. Set the mains ON/OFF switch to ON.

The boiler will commence the ignition sequence, first supplying heat to preheat the domestic hot water and then to the central heating, if required.

Note. In normal operation the control unit display (C) will show codes:

- 0 Standby - no demand for heat.
- c CH being supplied.
- d DHW being supplied.
- £ DHW preheat.

During ignition, the LED (E) will flash.

During normal running the LED (E) will remain illuminated.

Note. If the boiler fails to light after 3 attempts the fault code L-F will be displayed.

Press the reset button (D) for 2 seconds then release. The boiler will repeat the ignition sequence. If the boiler still fails to light consult a CORGI registered installer or in IE a competent person.

Operation

Winter conditions - i.e. CH and DHW required.

The boiler will fire and supply heat to the radiators but will give priority to DHW on demand.

The DHW preheat will operate as described under 'Summer conditions' during periods when there is no call for CH.

All CORGI registered installers carry a CORGI ID card, and have a registration number. Both should be recorded in the **Benchmark** Commissioning Checklist. You can check your installer by calling CORGI direct on 01256 372300.

Ideal Stelrad Group is a member of the Benchmark initiative and fully supports the aims of the programme. Benchmark has been introduced to improve the standards of installation and commissioning of central heating systems in the UK and to encourage the regular servicing of all central heating systems to ensure safety and efficiency.



Summer conditions - i.e. DHW only required.

Set the CH external controls to OFF, or turn the CH thermostat knob (F) to minimum.

The boiler will fire periodically for a few seconds to maintain the DHW calorifier in a preheated condition. The average time period between firing is 90 minutes. This may vary considerably due to the surrounding ambient temperature of the boiler. The boiler will fire whenever there is a demand for DHW.

Note. The pump will operate briefly as a self-check once every 24 hours, regardless of system demand.

Control of water temperature Domestic Hot Water

The DHW temperature is limited by the boiler controls to 65°C maximum at low draw-off rate, adjustable via the DHW thermostat knob (J).

Due to system variations and seasonal temperature fluctuations DHW flow rates/temperature rise will vary, requiring adjustment at the draw off tap : the lower the rate the higher the temperature, and vice versa.

Central Heating

The boiler controls the central heating radiator temperature to a maximum of 82°C, adjustable via the CH thermostat knob (F).

Approx. flow temperatures for the boiler thermostat settings are:

Knob Setting	Flow Temperature	
	°C	°F
Minimum	30	86
Maximum	82	180

To shut down the boiler

1. For short periods

Set the mains ON/OFF switch (A) to OFF

2. For longer periods

Set the mains ON/OFF switch (A) to OFF, and switch the electricity supply to OFF. For longer periods the entire system should be drained.

To relight the boiler

Repeat the procedure detailed in 'To light the boiler'.

Frost protection

If no frost protection is provided and frost is likely during a short absence from home, leave the heating controls (if fitted) at a reduced temperature setting. For longer periods, the entire system should be drained.

If the system includes a frost thermostat then, during cold weather, the boiler should be turned OFF at the time switch (if

fitted) ONLY. The mains supply should be left switched ON, with the boiler thermostat left in the normal running position.

Boiler overheat thermostat

This thermostat will shut down the boiler in the event of overheating. Should this occur a fault code **L R** will be displayed. Press the reset button (D) and the boiler will relight.

If the fault recurs, turn off the boiler and consult a CORGI registered installer or in IE a competent person.

Flame failure

Should this occur a fault code **L-F** will be displayed. Press the reset button (D) and the boiler will relight.

If the fault recurs, turns off the boiler and consult a CORGI registered installer or in IE a competent person.

Loss of system water pressure

The gauge (H) indicates the central heating system pressure. If the pressure is seen to fall below the original installation pressure of 1-2 bar over a period of time then a water leak may be indicated. In this event conduct the re-pressurising procedure (see Trouble Shooting - Problem 4). If unable to do so or if the pressure continues to drop a CORGI registered installer or in IE a competent person should be consulted.

DO NOT FIRE THE BOILER IF THE PRESSURE HAS REDUCED TO ZERO FROM THE ORIGINAL SETTING.

Condensate Drain

The condensate drain (G) must not be modified or blocked.

Blockage of the condensate drain, caused by debris or freezing, can cause automatic shutdown of the boiler.

If freezing is suspected and the pipe run is accessible an attempt may be made to free the obstruction by pouring hot water over the exposed pipe and clearing any blockage from the end of the pipe. If this fails to remedy the problem the assistance of a CORGI registered installer or in IE a competent person should be sought.

Escape of gas

Should a gas leak or fault be suspected contact your local gas supplier without delay.

Do NOT search for gas leaks with a naked flame.

Cleaning

For normal cleaning simply dust with a dry cloth.

To remove stubborn marks and stains, wipe with a damp cloth and finish off with a dry cloth.

DO NOT use abrasive cleaning materials.

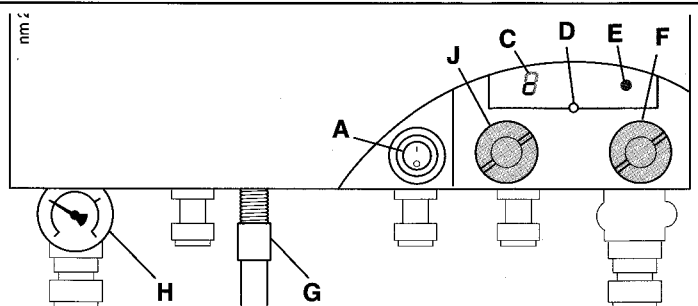
Maintenance

The appliance should be serviced at least once a year by a CORGI registered installer or in IE a competent person.

1 BOILER CONTROLS

Legend

- | | |
|--------------------------|-------------------------|
| A. Boiler ON/OFF switch. | F. CH thermostat knob. |
| C. Display. | G. Condensate drain. |
| D. Reset button. | H. Pressure gauge. |
| E. LED. | J. DHW thermostat knob. |



CAUTION. To avoid the possibility of injury during the installation, servicing or cleaning

POINTS FOR THE BOILER USER

Note. In line with our current warranty policy we would ask that you check through the following guide to identify any problems external to the boiler prior to requesting a service engineers visit. Should the problem be found to be other than with the appliance we reserve the right to levy a charge for the visit, or for any pre-arranged visit where access is not gained by the engineer.

TROUBLESHOOTING - TYPICAL NON PRODUCT FAULTS

Problem	Solution
Boiler is not working for central heating or hot water.	<ul style="list-style-type: none"> Check there is power to the boiler – switch (A) in the ON position and 'O' displayed on the controls. If 'O' not displayed then not a boiler fault – contact your installer/service company.
Boiler is not working for central heating or hot water but attempts to fire by going through 3 ignition attempts. Display shows 'L.F' (flashing).	<ul style="list-style-type: none"> Press reset button (D) for 2 seconds to repeat ignition sequence. Check gas supply (try another appliance – cooker/fire etc.) – If no gas supply then not a boiler fault – contact gas supplier. Check condensate pipe is not blocked or frozen. If blocked clear blockage – if not possible to check contact your installer.
Boiler is not working for central heating or hot water and the display shows 'L.R' (flashing).	<ul style="list-style-type: none"> Press reset button (D) for 2 seconds, the boiler should then re-light. If fault recurs this indicates an overheat condition. The boiler should be turned off and your installer contacted. Check if ALL radiators have thermostatic radiator valves fitted. If they have contact your installer.
Boiler is not working for central heating or hot water and the display shows 'H.R' (flashing).	<ul style="list-style-type: none"> Check pressure gauge on boiler shows a minimum of 1 bar. If not re-pressurise via the filling loop to 1 bar (if unsure contact your installer), turn off the tap on the filling loop and turn the on/off switch (A) off and then back on again to reset the boiler. If unable to do so or if the pressure continues to drop after filling then contact your installer. Check if ALL radiators have thermostatic radiator valves fitted. If they have contact your installer.
Boiler will not fire for central heating.	<ul style="list-style-type: none"> Check external programmer is set to an 'ON' period. If already set to an 'ON' period then check the programmer by setting to continuous if boiler then fires – Contact your installer to rectify the programmer. Check room thermostat by turning fully up, If 'O' is not displayed on the user controls then contact your installer.
Boiler comes on for domestic hot water without a tap being opened - the display shows 'D'.	<ul style="list-style-type: none"> Check for dripping / dribbling taps or showers – turn fully off. Check for leaks from the domestic hot water pipework and if found contact your installer.
Boiler fires occasionally for approx. 2 minutes - the display shows 'I'.	<ul style="list-style-type: none"> This is a normal function of the boiler to periodically pre heat the plate heat exchanger to optimise delivery time for domestic hot water to taps or showers.

The nature of all combination boilers is to heat up water directly from the incoming mains water supply directly through the boiler to supply domestic hot water at the stated flow rates, (as shown in the boiler installation instructions), to achieve a 35°C temperature rise. As the ambient temperature of the cold main varies during the summer and winter months it is likely in the colder winter months that the flow rate will need to be reduced at the outlet taps to achieve the same temperatures achieved in the warmer summer months. **This is not a fault with the appliance but is relevant to the varying temperature of the incoming cold mains water supply.**



HORSTMANN

Horstmann CentaurPlus - Single Channel Programmers Offer up to three programmed operating periods per day, seven days a week, with Hot water Boost and Heating Advance control on a fully pumped system.

The following are some of the easy to operate features:-

1 Hour Boost

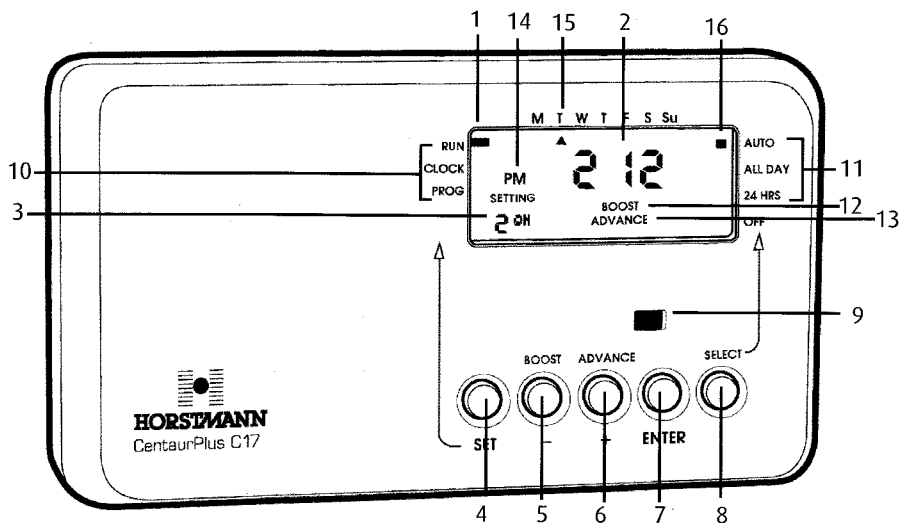
Flexible 7 Day Control

Advance gives instant On/Off override

Up to 3 On/Off periods per 24 Hour operation.

Programme options: Auto / All day / 24 Hours / Off

FRONT VIEW OF PROGRAMMER



1.SET indicator

2.Time of day

3.Switch Period symbol

4.SET Button

5.BOOST or adjust (-) button

6.ADVANCE or adjust (+) button

7.ENTER Button

8.SELECT or COPY button

9.System ON indicator

10.SET positions

11.PROGRAMME positions

12.BOOST symbol

13.ADVANCE symbol

14.AM/PM symbol

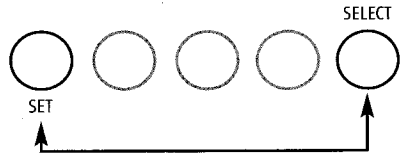
15.Day of week indicator

16.PROGRAMME indicator

RESETTING THE PROGRAMMER

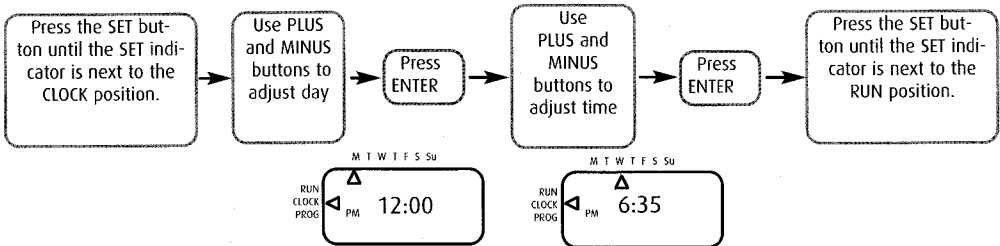
Electronic equipment can in some circumstances be affected by electrical interference. If the programmer's display becomes frozen or scrambled; or if you wish to revert back to the default time settings please use the following procedure.

Press the SET and SELECT buttons together then release the buttons and the programmer will return to preset factory settings.



The simple instructions below are designed to help with the programming of the unit.

SETTING DAY AND TIME OF DAY

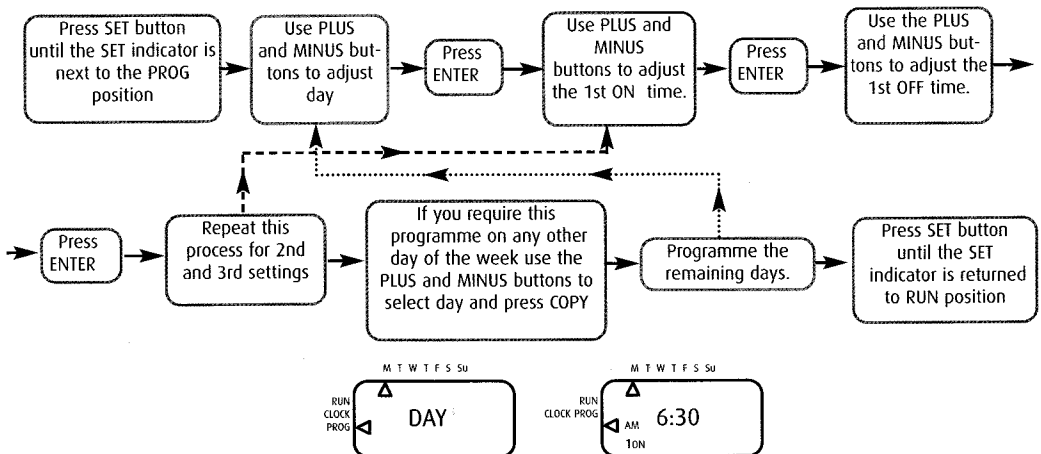


DEFAULT TIME SETTINGS

The default factory settings are shown, however if you wish to change these proceed as instructed below.

	1st ON	1st OFF	2nd ON	2nd OFF	3rd ON	3rd OFF
MON-FRI	6:30 AM	8:30 AM	12:00 PM	12:00 PM	4:30 PM	10:30 PM
SAT/SUN	7:30 AM	10:30 AM	12:00 PM	12:00 PM	5:00 PM	11:00 PM

SETTING THE ON AND OFF TIMES



Should you encounter any problems, please refer to the **Question and Answer** section located on page 4.

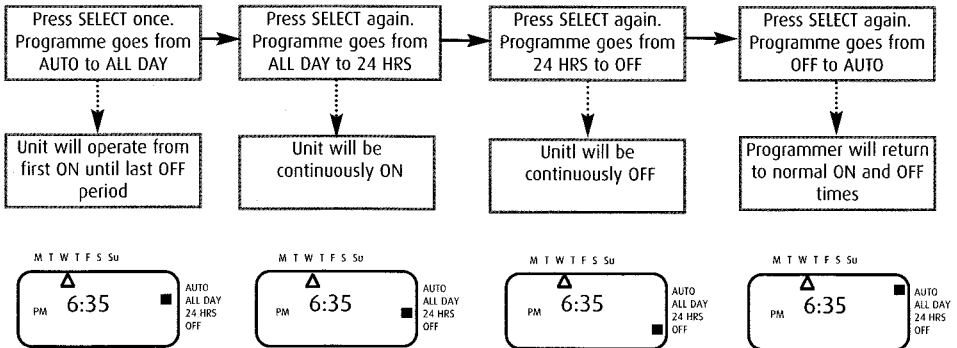
INFORMATION AND ADVICE

Programming ON/OFF times

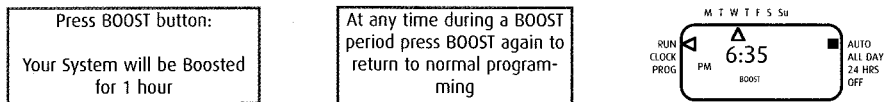
If a period is not required it can be cancelled by setting the ON and OFF settings to the same time. Example ON 10:00am OFF 10:00am

SPECIAL FEATURES

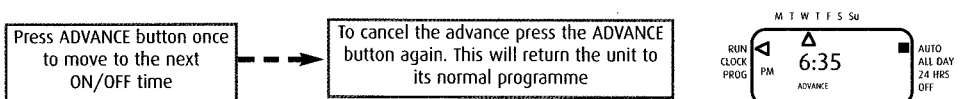
The SET indicator must remain in the RUN position for the following instructions.



BOOST FUNCTION - 1 hour temporary override



ADVANCE FUNCTION - Brings forward next on or off operation



BATTERY

The programmer is fitted with a non-rechargeable, long life battery, which will maintain the programmed time settings for a minimum of ten months with the supply disconnected. THIS SHOULD BE SUFFICIENT TO COVER POWER INTERRUPTIONS DURING THE LIFE OF THE UNIT. During power interruptions the display will be blank, after 3 days the current time of day will be lost. These measures are to prolong the battery life.

SERVICE AND REPAIR

This programmer is NOT user serviceable. Please do not dismantle the unit. In the unlikely event of a fault developing please refer to the **RESETTING THE PROGRAMMER** section of this user guide located on page 2. If this fails to resolve the problem please contact a local heating engineer or a qualified electrician.

QUESTIONS AND ANSWERS

The unit display has become frozen	This could be due to local electrical interference. Using the RESET procedure may rectify the fault.
The indicator neon fails to illuminate	Using the RESET procedure may rectify the fault. If the problem persists the programmer will need replacing.
The indicator neon will illuminate but the pump and/or boiler fails to operate	This may indicate a problem elsewhere in your system; E.g. A zone valve, etc. please contact a registered installer for advice.
There is no display on the programmer	Try the RESET procedure on page 2, if this fails to rectify the problem please have the mains supply checked
How do I know if the programmer is still under warranty	The CentaurPlus range comes with a 2 year guarantee from the date of manufacture. This date is located on the rear of the unit, indicated by a month over a year
How is the programmer removed from the wall	WARNING: The CentaurPlus programmer must only be removed from it's backplate by either a qualified electrician or heating engineer; The programmer plugs in to a 6 pin backplate located on the rear of the unit and is secured using 2 screws located on the bottom surface of the unit. Undo these screws and pull forward and up in an arc motion

Email: sales@horstmann.co.uk
Website: www.horstmann.co.uk

Horstmann Controls Limited
Bristol
BS4 1UP



LEAFLET No P60496
ISSUE 5