

+ BOILER PUMP KIT INSTRUCTIONS

IMAX XTRA EL

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.

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UIN 213987 A02

This Boiler Pump Kit is suitable for the following boilers listed:

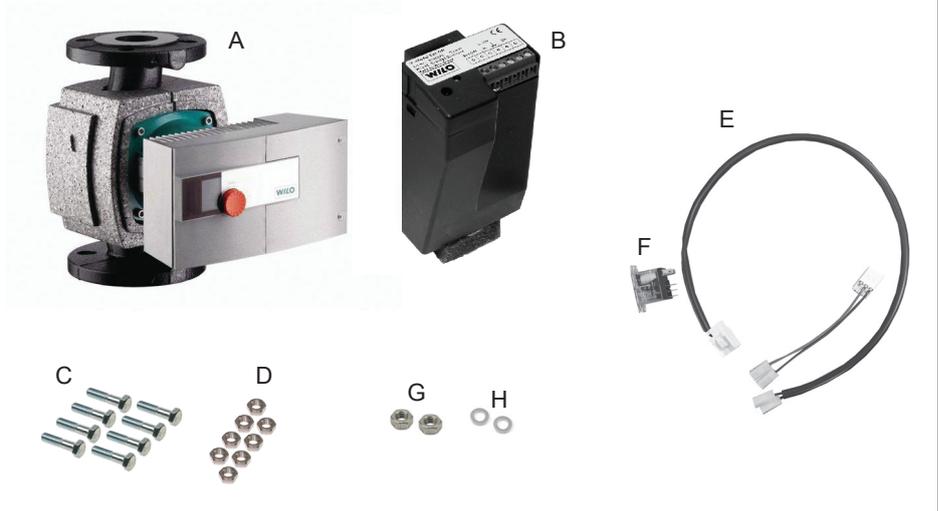
IMAX XTRA EL RANGE

These instructions must be read in conjunction with the Installation & Servicing Instructions supplied with the boiler.

The Boiler Pump Kit should be fitted onto the return flange of the boiler. Ideally it would be fitted in conjunction with a low loss header or heat exchanger, to provide hydronic separation of the boiler to the system.

KIT CONTENTS

- A. Stratos 80 Pump - 1 off
(c/w flange gaskets & insulation)
- B. IF Module - 1 off
- C. M16 x 65 Bolts - 8 off
- D. M16 Nuts - 8 off
- E. Pump Control Lead Set - 1 off
- F. 230V Relay - 1 off
- G. M3 Nuts - 2 off
- H. M3 Washer - 2 off
- J. Installation Instructions - 1 off

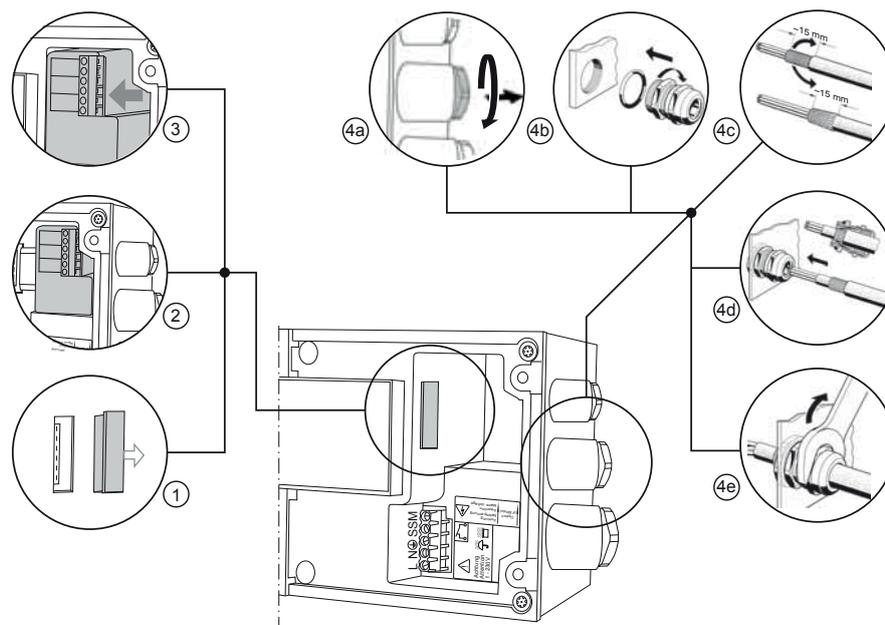


The hydraulic resistance and nominal flows for the boiler range are given in the Installation Manual and should be looked at when specifying a pump. A table showing the available head at nominal flow are shown below for each boiler in the range

	Boiler Size				
	320	395	470	545	620
Available Head (m)	1.2	1.6	2.1	3.1	4
Nominal Flow (m ³ /h)	13.8	17.0	20.2	23.5	26.7

The manufacturer's instructions are provided and should be read fully to understand the operation of the pump. The pump should be fitted to the return manifold using the flange gaskets, bolts and nuts provided.

INSTALLING THE IF MODULE



INSTALLING

To ensure immunity in industrial environments (EN 61000-6-2) the data and control cables must be shielded cables and must be used with an EMC compliant cable gland (included with the module).

WARNING! Danger of electric shock!

The pump should be electrically isolated and secured against unauthorised switch-on before beginning installation of the IF-Module.

Installation steps in accordance with Diagram above:

- Remove the lid of the pump's terminal box
- Remove the cover (1)
- Install the IF-Module in the pump's terminal box (2)
- Push the connection plug in all the way (3)
- Remove the existing PG9 screwed connections (4a)
- Install the accompanying metal EMC cable glands (4b)
- Strip and prepare the shield and the core wires (4c)
- Insert the cable (4d)
- Screw the cable gland into place (4e)

ELECTRICAL CONNECTION

WARNING! Danger of electric shock!

Electrical connection must be carried out by an electrician authorised by the local electricity supply company and in accordance with the applicable Wiring Regulations, BS7671.

- Carry out installation as described in the previous section.
- Carry out electrical installation of the pump as specified in the relevant installation and operating instructions.
- The electrical connection must be established via a fixed power cable (3 x 1.5mm² minimal cross-section), equipped with a plug and socket connector or an all-pole switch with a minimum contact opening width of 3mm.
- The following minimum requirements are to be met if shutdown takes place by means of an on site network relay: nominal current \geq 10A, nominal voltage 250 VAC.
- Fuse protection: 10/16A, slow-blow or automatic fuse with C characteristic.

- Check the technical specifications of the electric circuits being connected to ensure they are compatible with the electrical specifications of the IF-Module Terminal numbering as shown in Pos. (3) from bottom to top.

IF-MODULE Stratos Ext. Off

Terminal No.	Terminal
*1	Ext. Off
*2	Ext. Off
3	0-10V
4	GND (for 0-10V)
5	DP
6	DP

* Remove link and connect control cable wires here.

- Check that the Ext. Off wires are free of interference voltage.

FINAL WORK - ALL MODULES

- Check the terminal box seal for any visible damage.
- Close the terminal box lid with the screws provided so that the seal is tight all around.
- Carry out commissioning / functional test in accordance with the following section.

COMMISSIONING

The following section describes testing the functioning of the inputs/outputs. It is recommended to test together with the connected system. The pump's installation and operating instructions are needed for some settings.

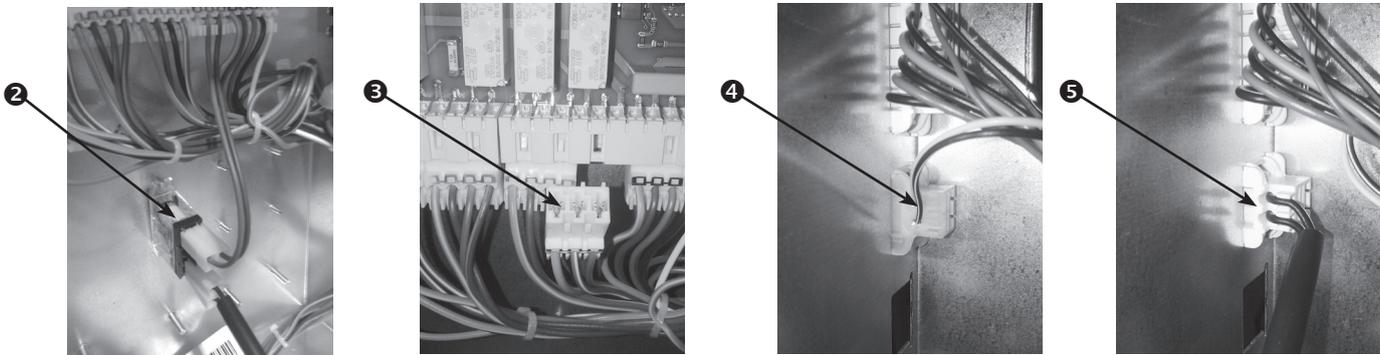
EXT. OFF INPUT

- Contact via Ext. Off terminals is closed.
- Switch on the pump via the menu: symbol for "On" appears.
- Contact via Ext. Off terminals is opened: pump switches off, symbol disappears.

PUMP KIT INSTALLATION

On completion of installing the IF module onto the pump, take the Pump Control Lead and install into the control box on the RH, front upper side of the boiler.

1. To access controls box on RH side, remove boiler panels. Refer to Installation Instructions
2. Mount the relay onto the left most M3 studs and secure using the two washers and nuts provided.
3. Remove the pump connection from the burner control PCB and replace with the connector on the pump control lead.
4. Remove the plug located in the PWM installer connection. Place this to one side as it will be used later. Unclip the PWM installer connector from the front panel installer connection area
5. Replace with the connector on the pump control lead.
6. Using a suitable 2 core cable, as specified for the IF module, connect the pump control cable between the IF module and the pump control plug, routing the cable connector through the SELV conduit from the back of the boiler and securing at the boiler with the cable clamps.
7. Power up the pump and follow the commissioning instructions.
8. Finally plug in the pump control plug into the installer pump control connection, labelled "Pump PWM".
9. Check that the pump starts when the boiler pump signal is on.
10. Replace and secure all boiler panels in reverse order.



Technical Training

The Ideal Boilers Technical Training Centre offers a series of first class training courses for domestic, commercial and industrial heating installers, engineers and system specifiers. For details of courses please ring: 01482 498 432

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