



Glow•worm

Installation and Servicing

SYSTEMPRO





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USER INFORMATION

1 Safety



The CE mark shows that this appliance has been designed according to the safety techniques and rules in force.

The compliance of this appliance with the relevant standards has been certified.



You must heed the following recommendations and safety regulations:

- Do not attempt to modify the equipment or its immediate surroundings as this may affect the safe use of the appliance.
- Never perform any maintenance or repair of the equipment yourself. Only qualified engineers are allowed to work on the appliance.
- Do not allow children to operate the appliance.

Certain home improvements may adversely affect the operation of your appliance – you should consult your installer for advice before carrying out any work.



We recommend that you be careful when adjusting the temperature of hot water, water can be very hot from the tap.

2 Guarantee / Responsibility

2.1 Detailed guarantee

The control unit that you have chosen has undergone numerous quality inspections. This apparatus must be installed by a qualified professional who can verify that all the technical constraints relating to the connection of the appliance and the requirements of the installation location have been met. To obtain the maximum benefit of your control unit, it must be thoroughly checked for operation and adjustments specific to the installation it is connected to.

Glow-worm offers a two year parts and labour guarantee against defects in manufacture and defective parts.

As a result, we commit to repairing or replacing the parts recognised as defective at origin.

The repair or replacement of parts during the manufacturer's guarantee period does not have the effect of prolonging its initial duration.

The manufacturer's parts guarantee is invalidated in the case of an incorrect installation or inappropriate storage or in the case of defective operation, damage to the control unit resulting from abnormal, abusive use or inadequate maintenance.

Servicing/maintenance should be carried out by a **competent person** approved at the time by the Health and Safety Executive in accordance with the rules in force in the countries of destination.

2.2 Equipment use / manufacturer responsibility



The guarantee is applicable on the condition that:

- The equipment is installed by a qualified engineer in accordance with installation instructions.
- The equipment is used for normal domestic purposes and in accordance with the manufacturer's operating and maintenance instructions.
- The equipment is serviced, maintained and repaired only by a qualified engineer within the guarantee period.
- The repair or replacement of parts during the guarantee period does not have the effect of extending the period.



The manufacturer has no responsibility whatsoever for any damage resulting from:

- Any defects or damage resulting from incorrect or poor installation, inadequate servicing, or maladjustment of the gas or water used.
- Any defects in the system to which the appliance is connected.
- Any defects caused by inadequate frost protection.
- Any deterioration or maladjustment following changes in the nature or pressure of the gas or the water used, or a change in the characteristics of the electrical supply voltage.
- For further details, refer to your Terms and Conditions.

This control unit is not designed for use by individuals (including children) with physical, sensory or mental restrictions, or with a lack of experience or knowledge. In order to guarantee the safety of such individuals, the correct usage of this product must be explained to them by a competent individual.

- Ensure that children do not play with this equipment.

INTRODUCTION

3 Instructions guidance

3.1 Product documentation

The instructions are an integral part of the equipment and must be handed to the user on completion of the installation in order to comply with the current regulation.

- Carefully read the manual to allow for safe installation, use and servicing. No liability can be accepted in the event of damage for not complying with the guidance in this instruction manual.

3.2 Explanation of symbols



DANGER: Risk of electric shock.



ATTENTION: Risk of damage to the equipment or to its surroundings.



IMPORTANT: Important information.

4 Product description

4.1 Regulation and statutory requirements

CE Mark

The CE mark indicates that the equipment described in this manual are in compliance with the following directives:

- European Directive Num. 2004-108 of the European Parliament and the Council regarding electromagnetic compatibility
- European Directive Num. 2006-95 of the European Parliament and the Council regarding low voltage
- Directive regarding telecommunications equipment (Directive R & TTE 99/5/EEC of the Council of the European Community)
- Low Voltage Directive 72/23/EEC.

5 Safety instructions and regulations

5.1 Safety instructions



Incorrect installation can cause electric shock or appliance damage.

All electrical work performed on the equipment must be carried out by a qualified engineer or Glow-worm Group Service engineer.

This equipment must only be installed by a qualified engineer, to ensure that the applicable regulations and rules are adhered to.

Follow the basic safety instructions:

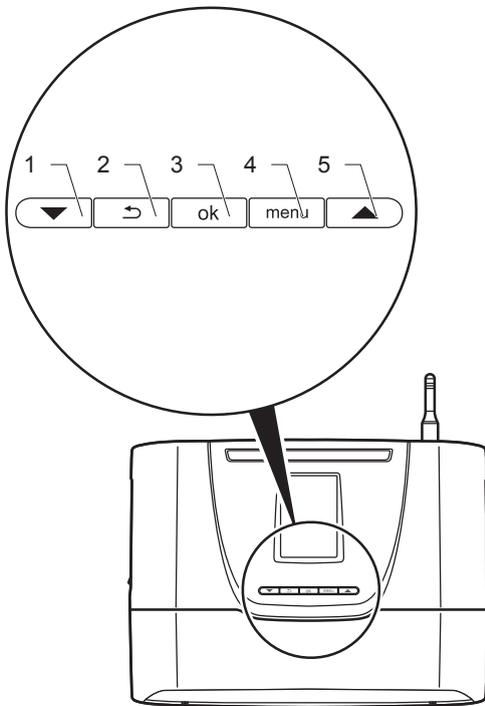
- Stop the control unit.
- Turn off the control unit's power supply.
- When work on the product is completed, perform an operational test and check for safety in accordance with BS EN 7671.

5.2 Regulations

During the installation and activation of the control unit, the decrees, directives, technical regulations, standards and clauses hereafter must be complied with in the versions that are currently in force.

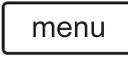
6 Instructions

6.1 Overview



- Key
- 1 «Down» arrow button
 - 2 Back button
 - 3 OK button
 - 4 Menu button
 - 5 "Up" arrow button

6.2 Description of buttons

Buttons	Description
 	Up / down buttons The buttons allow: <ul style="list-style-type: none"> - To browse menus. - To decrease / increase value to be adjusted. - To reset the control unit (factory setting by pressing simultaneously both buttons for 10 seconds).
	Back button The button allows: <ul style="list-style-type: none"> - To return to the previous menu. - To return to the previous setting.
	OK button The button allows <ul style="list-style-type: none"> - Confirmation of the selection or setting. The button allows the user to display: <ul style="list-style-type: none"> - The status of the appliances and the system. - The description of actions and possible failures of the appliances.
	Menu button The button allows: <ul style="list-style-type: none"> - To access the installation menu. - To access the maintenance menu. - To return to the installation and maintenance menus (at any time). - To return to the main user screen by pressing for 3 seconds.

6.3 Priority of the different functions

Priorities are defined as follows in the control unit:

Priority levels	Function
1	Anti-freeze protection
2	Domestic hot water
3	Central heating
4	Cooling
5	Options

The heating function cannot function simultaneously with the cooling function. The activation of one function disables the other, and vice versa.

7 Recycling

7.1 The equipment



This symbol indicates that this equipment must not be disposed of with household waste, that it should be selectively collected for energy recovery, reuse or recycling.

- Take the equipment to an appropriate collection point.



By complying with this directive, you will contribute to the preservation of natural resources and the protection of human health.

7.2 Packaging

The competent person who installed the appliance must:

- sort the waste so as to separate those which can be recycled (cardboard, plastics...) from those that cannot.
- dispose of the waste in compliance with regulations in force.

INSTALLATION



All the dimensions shown of the illustrations are expressed in millimetres (mm).

8 Control unit location

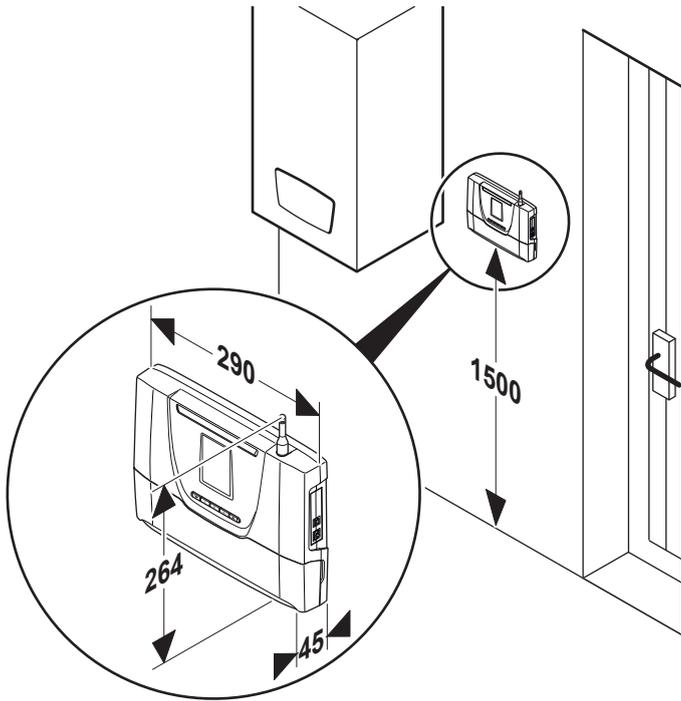
- Take all necessary precautions.

Install the system:

- in a room protected from frost,
- in a convenient location, accessible for wiring and servicing allowing for visibility of the screen.

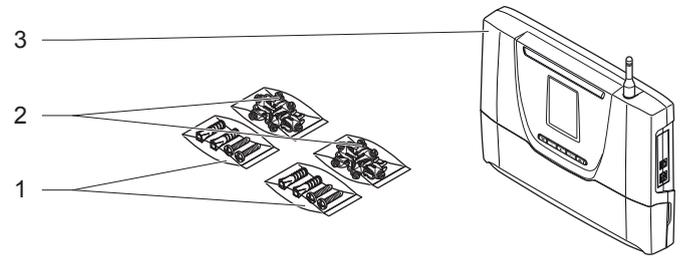
Do not install the control unit:

- close to heat sources such as radiators, chimney walls, televisions, sun rays,
- above a cooking device capable of generating steam and grease,
- in a room with a lot of dust or with a corrosive atmosphere.



9 Installation

9.1 Scope of delivery

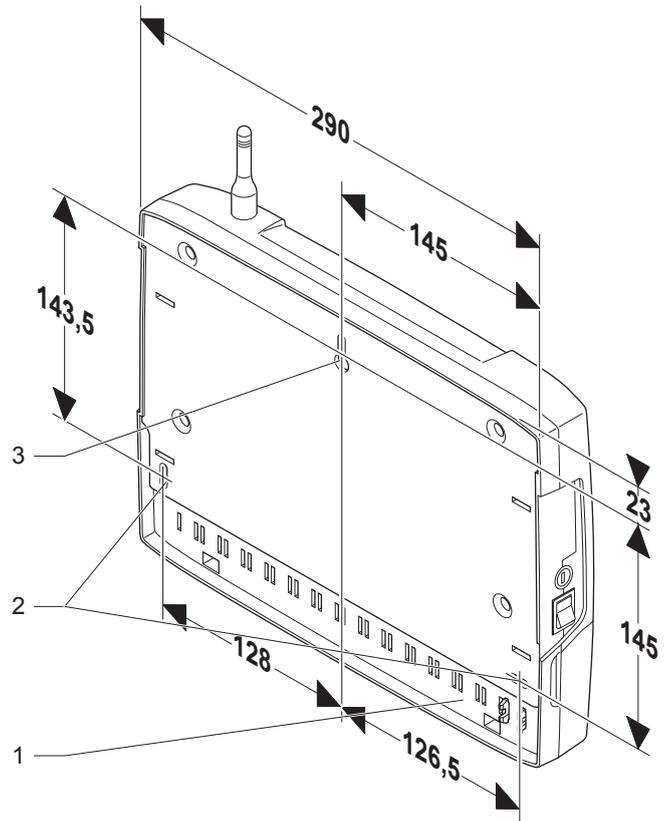


Key

- 1 2 packs with 2 screws with Ø 6 mm plugs
- 2 2 packs containing 7 anti-tamper connectors (one anti-tamper connector installed)
- 3 Control unit

9.2 Installation

- Ensure that the materials used for installation are compatible with those of the control unit.
- Determine the location of the installation. See the "Control unit location" chapter.

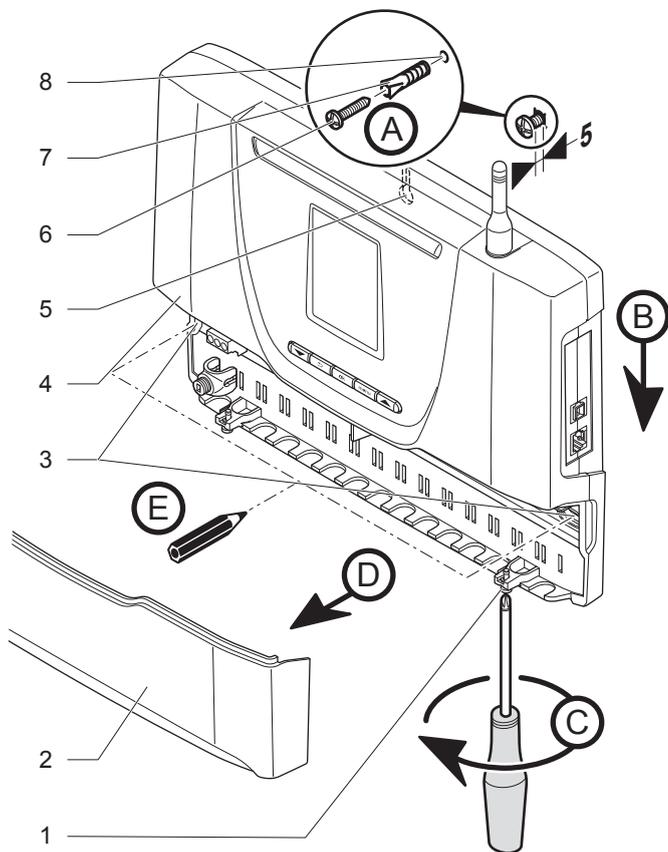


Key

- 1 Control unit
- 2 Lower attachment holes
- 3 Upper attachment holes

9.2.1 Wall mounting

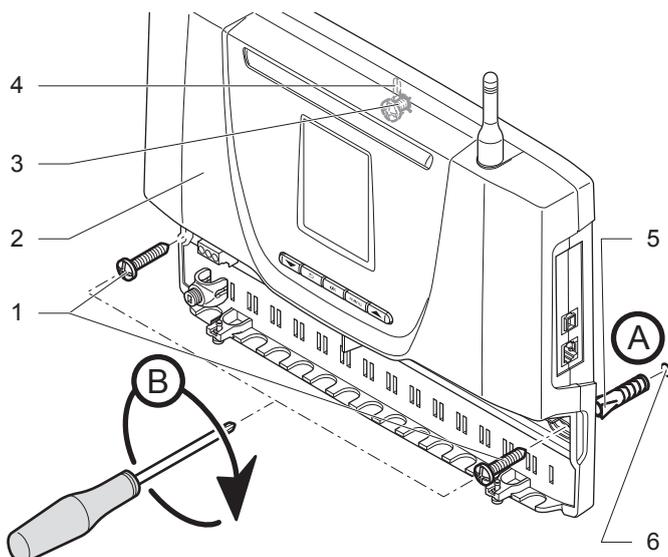
Step 1



- Key
- 1 Hatch screw
 - 2 Control unit hatch
 - 3 Lower attachment holes
 - 4 Control unit
 - 5 Upper attachment holes
 - 6 Upper screw
 - 7 Plug
 - 8 Holes

- Mount the appliance following the steps from (A) to (E).
- Remove the control unit (4) by sliding along the wall.

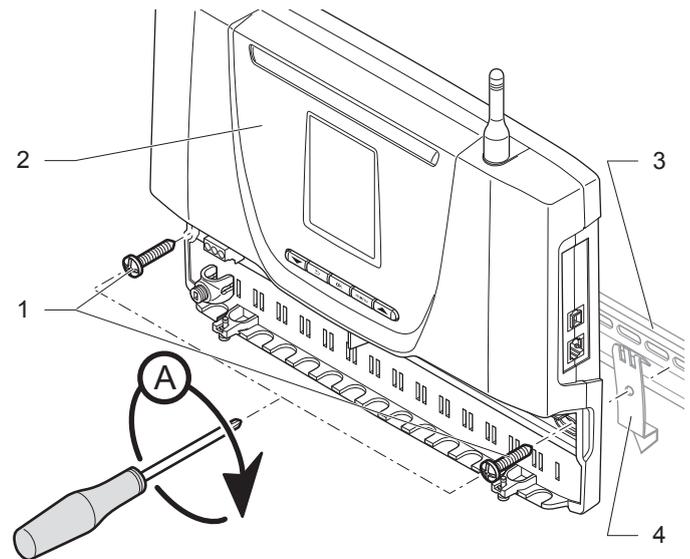
Step 2



- Key
- 1 Lower screws
 - 2 Control unit
 - 3 Upper screw
 - 4 Upper attachment holes
 - 5 Plug
 - 6 Holes

- Mount the appliance following the steps from (A) to (B).

9.2.2 Mounting on DIN rail



- Key
- 1 Lower screws
 - 2 Control unit
 - 3 DIN rail (not supplied)
 - 4 DIN mounting (not supplied)

10 Electrical connections



Incorrect installation can cause electric shock or damage to the equipment. The electrical connection must be made only by a qualified engineer.

- Ensure system is electrically isolated.
- Protect the electrical installation by following the guidance indicated in the “Technical data” chapter.



Warning! *The length of the power supply cable must not exceed 10 metres.*

- The electrical installation in the dwelling must permit the power supply to the equipment to be isolated by a double pole isolation switch and be fused. The double pole isolation switch must incorporate a gap of 3mm between the contacts.
- Use a power cable suitable for the mains connection, minimum 0.75 mm. If the cable is damaged, it must be replaced by a qualified engineer.

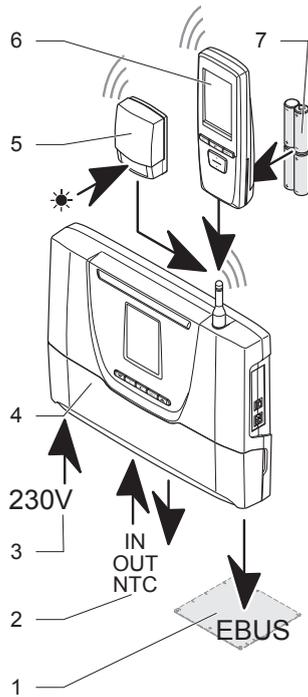
The external wiring must be earthed. The polarity must be correct and consistent with current standards.

EN

INSTALLATION

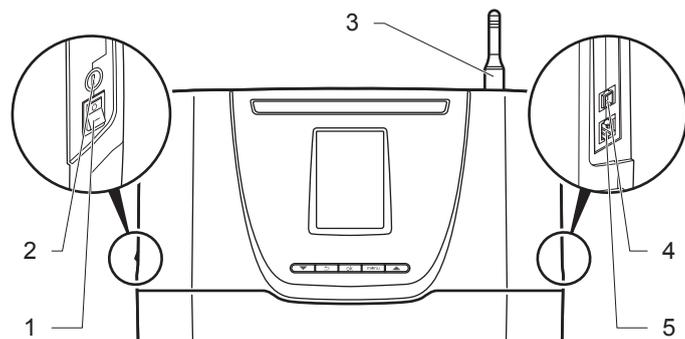
The manufacturer declines any responsibility for damages to persons or others caused by the incorrect installation of the appliance earthing. This includes failure to comply with current standards.

10.1 Connection



- Key**
- 1 EBUS connections
 - 2 Input/Output, sensors
 - 3 230 V power supply
 - 4 Control unit
 - 5 Outside wireless temperature sensor
 - 6 Wireless room thermostat
 - 7 Batteries

10.1.1 External connection



- Key**
- 1 Switch On (I) / Off (O)
 - 2 Fuse 1AT 20mm
 - 3 Antenna
 - 4 RJ9 EBUS socket
 - 5 RJ11 EBUS socket

The switch (1) is employed to cut the power supply before making any changes to the electrical connection.

The electrical circuit of the equipment is protected internally by a fuse (2).

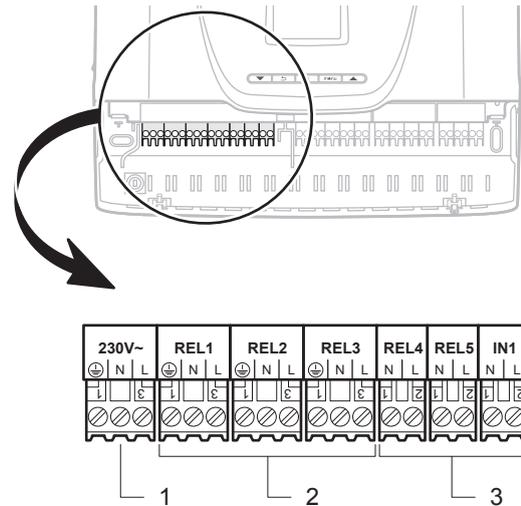
The antenna is used for wireless connection with the Climapro2 RF and the outdoor sensor.

The RJ9 EBUS (4) socket is used for diagnosing the appliance.

The RJ11 EBUS (5) socket is used for connecting the EBUS extension board.

10.1.2 Internal connection

230V connectors

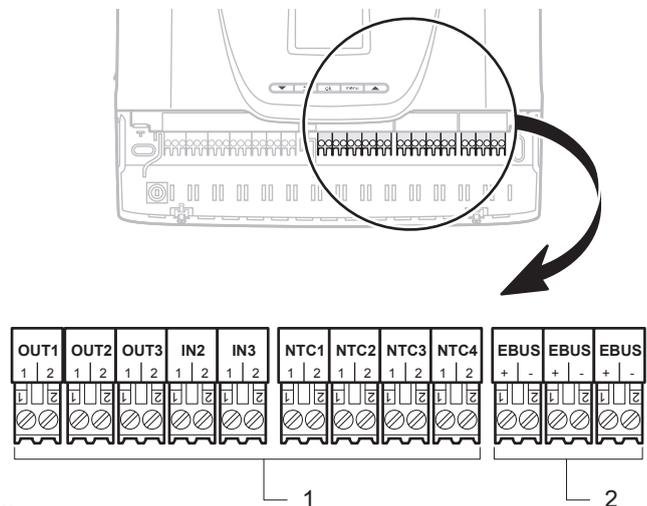


- Key**
- 1 230 V connector (3-pin: earth / neutral / live)
 - 2 Connectors (3 pins: earth / neutral / live): REL1, REL2 and REL3
 - 3 Connectors (2 pins: live / neutral): REL4, REL5 and IN1

Consult the system manual for electrical connections following installation.

The connector (1) is employed to connect the electricity supply.

24V connectors

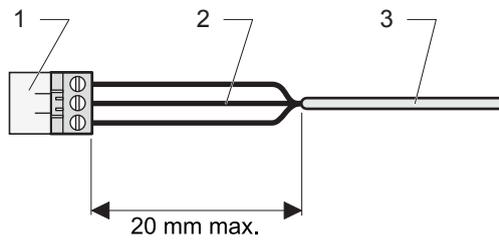


- Key**
- 1 Connectors (2 pins) OUT1, OUT2, OUT3, IN2, IN3, NTC1, NTC2, NTC3 and NTC4
 - 2 EBUS connectors (2 pins)

Consult the system manual for electrical connections following installation.

EN

10.2 Electrical connections

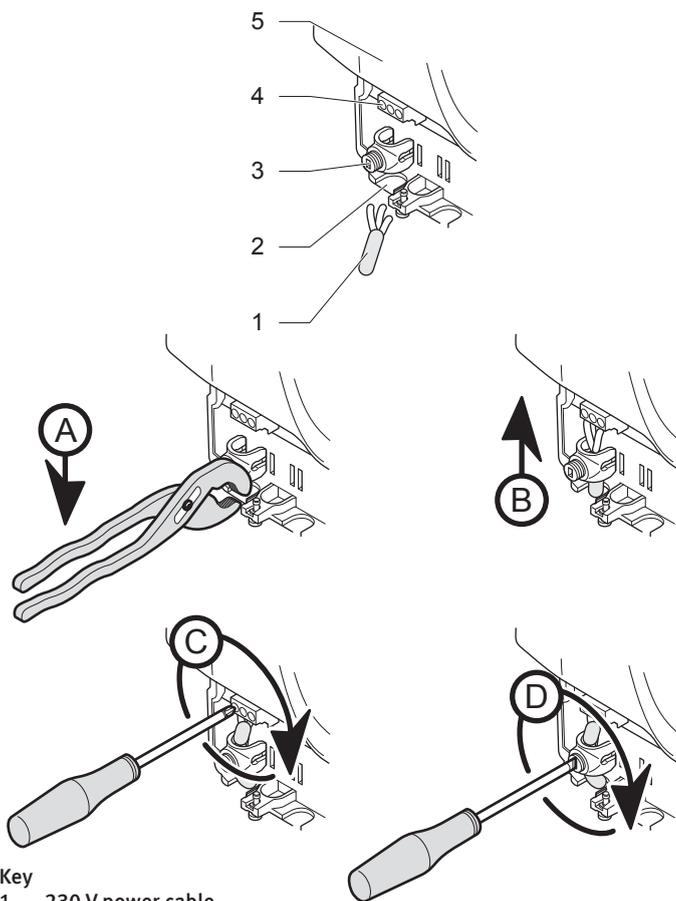


- Key
 1 Connector
 2 Electrical wires
 3 Casing

Warning! When connecting electrical cables to a connector in the control unit:

- Maintain a maximum distance of 20 mm between the connector (1) and the outer insulation (3).

10.2.1 230V power supply



- Key
 1 230 V power cable
 2 Break out tab
 3 Anti-tamper connection
 4 Power connection
 5 Control unit

- Connect the control unit following the order (A) to (D).

10.2.2 Other connections following the electrical installation diagram

Warning! Risk of electric shock.
 Break the grommets necessary for passing the cables.

- Protect access to live parts, attach all cables to the control unit with anti-tamper connectors.

Consult the system manual for electrical connections following installation.

11 Commissioning

When connected for the first time, the installation menu is displayed.

Consult the system manual in order to install and start-up the system.

12 Installation menu

The installation menu is still accessible after commissioning.

12.2.1 Access to the installation menu

- Press the button `menu` for 7 seconds.
- Enter the installer access code 96.
- Press the button `ok` to confirm.



12.2.2 Menus and functions

The available settings are different depending on the installation layout and the options selected.

Menus and functions
Installation
Modifying the installation (*) This menu allows you to change the diagram number when modifying the installation's configuration. A diagram number is assigned to each possible installation, with various options available. The number is indicated in the system manual.
Modification options (*) This menu allows you to enable or disable the options available in the selected installation diagram.
Thermostat/sensor (wireless)
Thermostat connection(s)
Sensor connection
Ext. temperature correction
Automatic test
EBUS inputs
NTC inputs
the RF connection with the Climapro2 room thermostat
the outdoor sensor radio connection
I/O card
Parameters
Heating
Max. heating outlet T°
Auto heating curve
Manual heating curve
Advance heating
Hot water
Max. domestic hot water temperature
Cooling
Cold water outlet temperature setting
Energy management
Resetting parameters
The resetting of factory settings is irreversible. Any customised configuration of the control unit will be lost.
Commissioning
This menu allows you to carry out the necessary operations on the appliances following installation (refilling, bleeding, flow rate control...).
Component information (**)
This menu enables real-time access to: - the status of the appliances responding to a demand (ON / OFF) - the reading the different information available from the appliances (temperature, pressure, flow,) - the register of last 5 faults recorded for each appliance (date, time, code and description of faults). - resetting the fault report.
Options
Date (***)
Time (***)
Automatic winter/summer time change
Languages
Screen (brightness / contrast)
About
This function is used to display the versions of the various electronic components attached to the management box.



(*) On entry into the menus installation modification and options modification, the management box warns that "the system is shutting down". "the system is currently stopped" No further heating control operations are effected. ... Setting will restart after leaving these menus. (**) Refer to the system manual to find the description of the fault code displayed on the screen. (***) The date and time are set from the room thermostat in an individual installation.

13 Specific adjustment

13.1 Wireless connections

13.1.1 Pairing with the wireless thermostat(s)

This function lets you perform the pairing between the Climapro2 RF and the radio receiver.

In the case of an individual installation which includes a low and high temperature heating zone. "Zone 1" must imperatively be allocated to a low temperature heating zone. The room thermostat in zone 1 has the "main thermostat" status.

Adjustments must be made simultaneously to the control unit and the room thermostat.

Via the control unit:

- From the installation menu in the control unit > select on the screen > thermostat/sensor > room stat(s)

Via the room thermostat:

- Via the installer room thermostat menu > select on the screen > RF > pairing

The control unit and the room thermostat will immediately indicate recognition on their respective "connection in progress" screens.

13.1.2 Pairing with wireless outdoor sensor

- Consult the outdoor sensor's installation manual in order to carry out the operation.

13.2 Resetting the control unit

This function allows you to reset the control unit (factory setting).



The resetting of factory settings is irreversible. Any customised configuration of the control unit will be lost.

- Simultaneously press the buttons   for 10 seconds.
- Confirm by pressing .

14 Re-check and restart

- Once the control unit is installed, check the operation.
- Switch the control unit on to ensure that any adjustments operate correctly and check that the appliance operates safely.

15 User information

At the end of the installation:

- explain the operation of the equipment and its safety devices to the user, if necessary provide a demonstration and answer any questions;
- give the user all the required documentation,
- fill in the documents where necessary;
- advise the user of the precautions necessary to prevent damage to the system, appliance and the building;
- inform the user of the guarantee conditions,
- explain to the user the usage envelope of the appliance and the limits of the manufacturer's responsibility,
- remind the user to service the appliance annually.

MAINTENANCE

16 Trouble-shooting

16.1 Fault diagnosis

The following checks should be performed before proceeding onto specific diagnostics:

- Ensure that it has not been disconnected from the electricity network and that the control unit is connected correctly.
- Ensure that all installation's appliances are available.
- Check the functioning of external regulatory devices (room thermostat, remote sensor,).

16.2 Maintenance menu

16.2.1 Access to the maintenance menu

- Press the "menu" button for 7 seconds.
- Enter the installer maintenance access code 35.
- Press the button  to confirm.



The maintenance menu includes the installation menu function, plus 2 additional functions:

- "System tests", within the maintenance menu,
- "After sales service Info", in the options.

16.2.2 System tests

This menu allows you to test the operation of all the appliances and the system (boiler, HP, valve,) present in the installation.

Each element can be controlled centrally by activating its normal start-up function or by individual component.



By entering the test menu, the control unit display's the following message: "the system is currently stopped" No further heating control operations are affected. Control is resumed upon exiting the menus.

16.2.3 After sales service info

This menu provides access to After sales Service information:

- date of last access to installer menus
- the name of the company which provides the after sales service, if entered during installation.
- the telephone number of the company which provides the after sales service , if entered during installation.

16.3 System failure codes



Refer to the system manual. The breakdowns described in the system manual must be handled by a qualified professional and, if necessary, by the after-sales department.

The fault status may be "inactive" (disappeared) "active" (still affects the installation).

The installation can operate partially with a fault "active". It is not necessarily "blocking". An alarm (not supplied) can be added to the installation to signal certain faults.

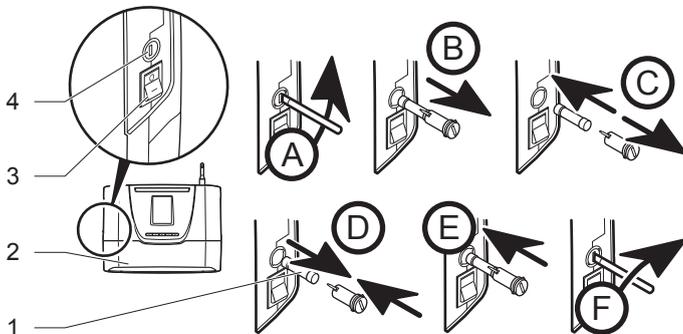
16.4 Control unit failures



Faults described in this chapter should be carried out by a qualified engineer and if needed by the After Sales Service.

Description	Cause	Solution
No display on screen	The power supply is faulty. The fuse is damaged.	Make sure that the electricity supply has not been interrupted. Check that 230V supply is turned on and present. Check the position of the control unit switch. Check the control unit's fuse.

16.5 Replacing a fuse



- Key
- 1 Fuse
 - 2 Control unit
 - 3 Switch On (I) / Off (O)
 - 4 Fuse holder

- Turn off the control unit (2) with the switch (3) in position (O).
- Turn off the power supply to the control unit (2) at the isolating switch.
- Replace the fuse following the order (A) to (F).
- Turn on the power supply to the control unit (2) at the isolating switch.
- Turn on the control unit (2) with the switch (3) in position (I).

16.6 Mains supply cable



The main supply cable must be replaced by a qualified and competent electrician.

- If the main supply cable is damaged, replace it referring to the chapter "Electrical connection".

TECHNICAL DATA

17 SYSTEMPRO

Description	Unit	Control unit
Transmission / reception frequency	MHz	868
Transmission / reception frequency with outdoor sensor	min	15
Transmission / reception frequency with room thermostat	min	10
Average radio signal range in open air (*)	m	100
Average radio signal range indoors (*)	m	25
Control unit dimensions:		
Height	mm	264
Length	mm	290
Depth	mm	45
(*) Depends on the installation's conditions and the electromagnetic environment.		
Electricals		
Power-supply voltage	VAC/Hz	230/50
Power cable gauge	mm ²	3 x 0.75
EBUS connection cable gauge	mm ²	2 x 0.75
Current	A	4.35
Delay fuse	A	1
Electrical protection		IP20
Electrical classification		I
Surge category		II
Pollution rating		2
Contact outputs fed work	A	8
	V	230
Action auto		type 1.C





Subject to engineering changes

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GLOW-WORM

Nottingham Road,
Belper, Derbyshire.
DE56 1JT

Because of our constant endeavour for
improvement, details may vary slightly
from those shown in these instructions.

Glow•worm

www.glow-worm.co.uk