

MI_2429: Installation energy optimisation board

 iVario Pro L, XL

 45
minutes

 Standard

 13/05/2024

Topic

The information describes the installation of the energy optimisation board.

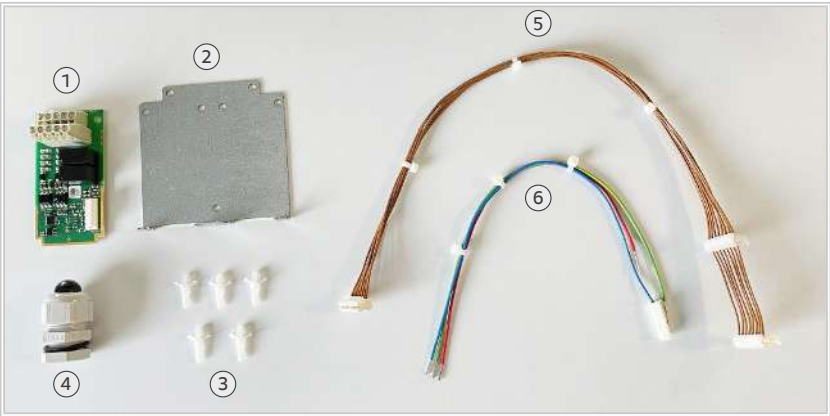
Affected product/accessories

iVario Pro

- L
- XL

Required components

Parts contained in the energy optimisation conversion kit for the units iVario Pro L and XL with a production date from 09.2023.



Energy optimisation conversion kit, article number: 87.02.030S	
1	Energy optimisation board
2	Mount energy optimisation board
3	Board retaining clips (5x)
4	Cable gland M20x1.5
5	Cable trunk W59
6	Cable trunk W32

General information

NOTICE

Enter the installation of the component on the service level ("Component replacement" tab). This is an integral part of the maintenance history.

Target group

- This document is intended for skilled technicians, who have been certified by the manufacturer after attending training and safety instructions.
- Installation, inspection, maintenance, and repair work must only be carried out by trained technicians.
- It is recommended that only technicians authorised by the manufacturer perform inspection, maintenance and repair work.
- The unit may not be used, cleaned, or maintained by children. The unit may not be used for play. This is prohibited even under supervision.
- The unit may not be used, cleaned, or maintained by people with limited physical, sensory, or mental capacity or those without the necessary experience or knowledge, unless such people are supervised by a person who is responsible for their safety and who has been informed of the hazards of the unit.
- In order to prevent accidents or damage, the manufacturer recommends that technicians attend training and safety instructions.

Safety instructions

DANGER

High voltages when connecting to the mains power

Danger to life due to high voltage.

- Disconnect from the power supply.
- Make sure the unit is disconnected from the power.

DANGER

Electric shock from incorrect connection

There is a danger to life if the wires are incorrectly connected.

Connect the wires correctly according to their colour coding.

CAUTION

Sharp edges on the housing

Risk of cuts on the housing when working in the electrical compartment.

Wear protective gloves.

NOTICE**Damage to the cable trunk and the control panel when removing the control panel**

The control panel is connected to the installation compartment by a cable trunk.

Remove the control panel carefully in order not to damage the cable trunk. Put down the control panel carefully and protect it against scratching.

NOTICE**Incorrect objects for opening the control panel**

Do not use any sharp or pointy objects to press the control panel upwards. This could damage the housing and gasket.

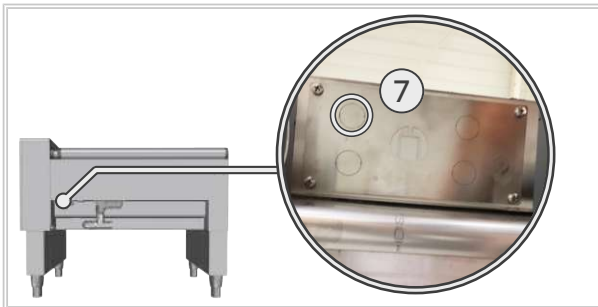
NOTICE**Observe regional and country-specific safety and testing regulations**

The relevant regional, country-specific safety and testing regulations apply to all work on RATIONAL units. These regulations may vary by region and are country-specific and are therefore not listed separately in this document. The technician is responsible for complying with these regulations.

Mounting the cable gland

The cable gland is required for the subsequent cable of the energy optimisation control.

- ✓ The unit is disconnected from the power.
 - ✓ The cable gland (4) is ready for use.
1. Remove the rear mounting plate for the cable gland on the rear of the unit.



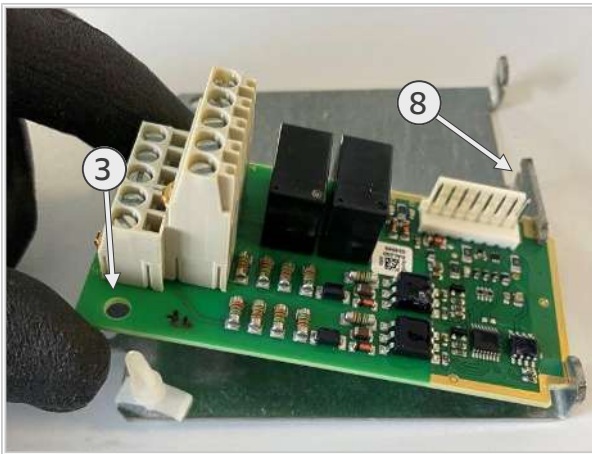
2. Pierce the marked perforation (7) with a suitable tool. If this is already in use, choose another perforation.
 3. Attach the cable gland with seal and plug to the broken out position.
 4. Screw the mounting plate on.
- >> The cable gland is mounted.

Installing the energy optimisation board

- ✓ The energy optimisation board (1) and the bracket (2) are ready.
- ✓ The cable trunk W59 (5) and W32 (6) and the 5 board retaining clips (3) are ready.
- 1. Open the electrical compartment, as described in the original installation manual for the units iVario Pro L / XL in section *Opening the electrical compartment*.
- 2. Attach 2 board retaining clips to the mount.
The nibs on the mount must point upwards.



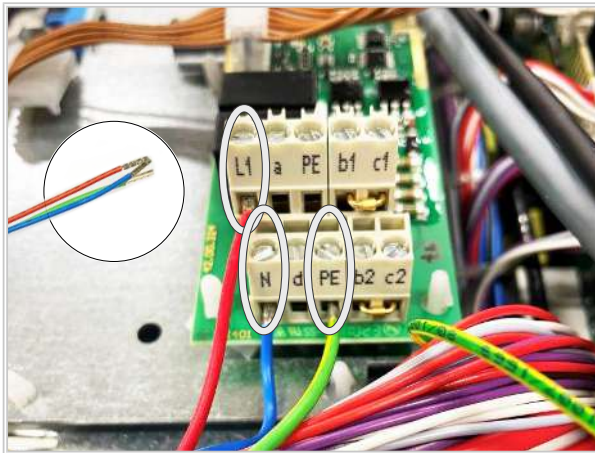
- 3. Place the board in the mounting slots (8) and place the board on the 2 board retaining clips (3).



4. Mount the energy optimisation board with the bracket on the 3 board retaining clips of the SSR carrier.



5. Insert the cables of the cable trunk W32 (6) into the energy optimisation board and screw them together.
Use the cable ends with the shorter wire end ferrules (8 mm).

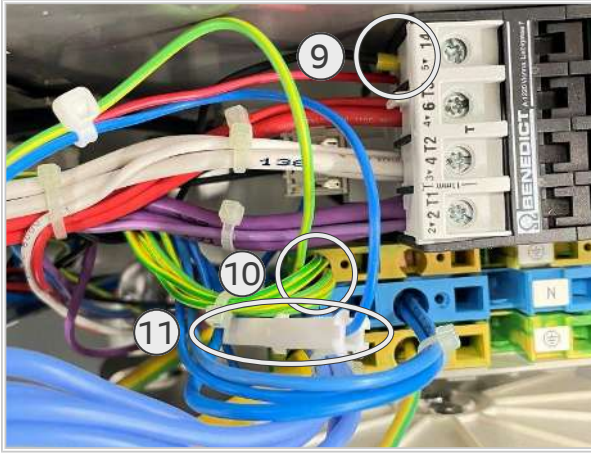


Connection	Wire colour	Connector terminal
Phase	Red	L1
Neutral conductor (neutral wire)	Blue	N
Protective conductor	Yellow/green	PE

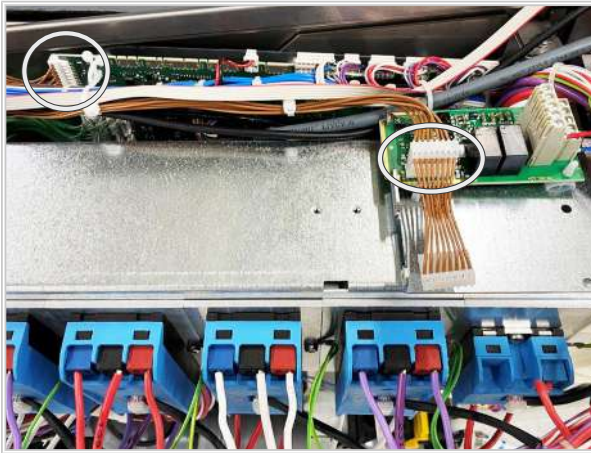
Then use the cable ends with the longer wire end ferrules (12 mm):

6. Screw the red cable to the red wire of the contactor (9).
7. Attach the yellow-green wire to the yellow-green clamp (10).

8. Connect the plug of the blue cable to the counterpart of the blue neutral wire (11).



9. Connect the cable trunk W59 (5) to connection X429 on the energy optimisation board and to connection X29 on the I/O board.

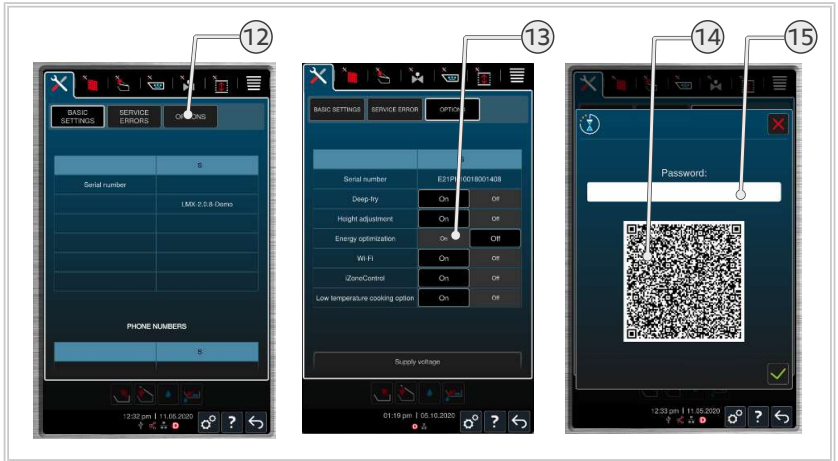


10. Fix the cable trunk W59 (5) with the main cable trunk.
 11. Close the electrical compartment, as described in the original installation manual for the units iVario Pro L / XL in section *Closing the electrical compartment*.
- >> The energy optimisation board is installed.

Activating the energy optimisation option

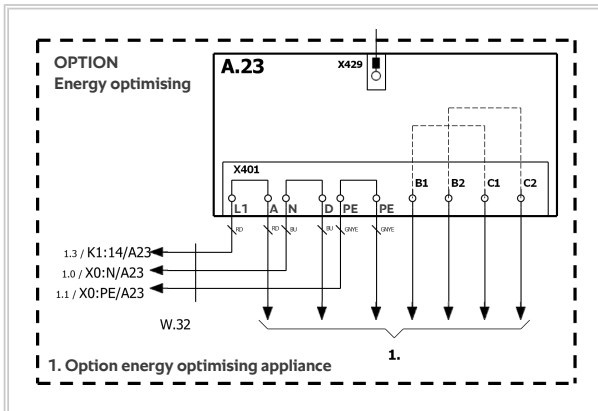
- ✓ The cable gland for the energy optimisation board is installed.
- ✓ The energy optimisation board is installed.
- 1. Switch the unit on.
- 2. Go to the service level.

3. Open the Options page under the Service settings (12).
4. To activate the energy optimisation option, press the On button (13).
5. When an option is changed, a QR code is displayed on the screen (14).
6. Scan this QR code with the TechAssistant app.
7. If the QR code has been recognised, a confirmation code will be issued in the app. Enter this confirmation code on the unit and confirm (15).
8. Restart the unit.



The energy optimisation option is activated.

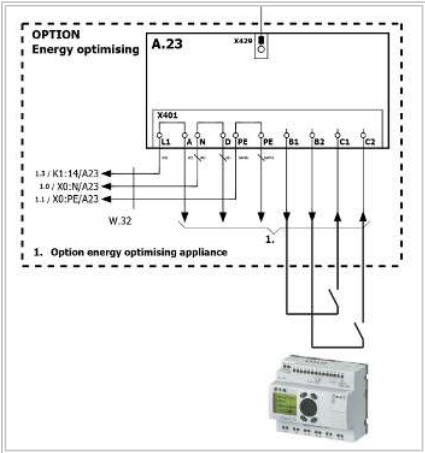
Connection to an external energy optimisation



Request for heat output of unit	Request on B1	Request on B2
0 %	0 V	0 V
50 %	230 V	0 V
100 %	230 V	230 V

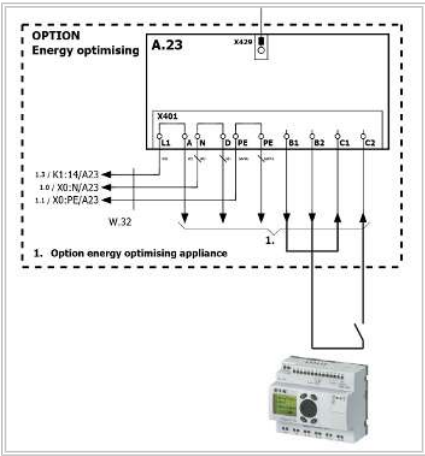
Connection possibilities

- Optimization: 0 % or 50 % or 100 %



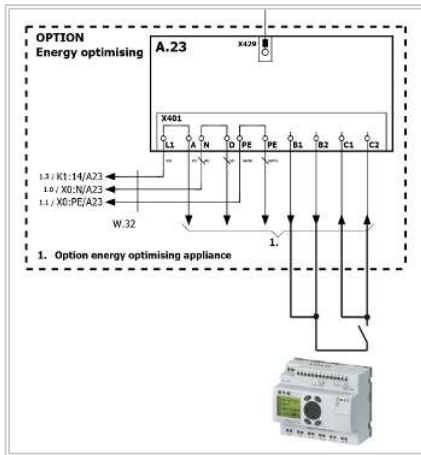
Heating output approved by the energy optimiser	Feedback on C1	Feedback on C2
0 %	0 V	0 V
50 %	230 V	0 V
100 %	230 V	230 V

- Optimization: 50 % or 100 %



Heating output approved by the energy optimiser	Feedback on C1	Feedback on C2
50 %	230 V	0 V
100 %	230 V	230 V

■ Optimization: 0 % or 100 %



Heating output approved by the energy optimiser	Feedback on C1	Feedback on C2
0 %	0 V	0 V
100 %	230 V	230 V

NOTICE

To ensure optimal cooking results, do not reduce the heating for more than 10 seconds per minute.

