MI_2135: Unit connection to UPS 3AC400V_Modification_iCombi Pro

see affected devices

35 min.

Standard

23 July 2024

Topic

Unstable power supply can lead to the destruction of components (e.g. fan motor, boards). For this reason, we recommend that a voltage stabilizer be connected upstream in the event of an unstable grid or an uninterruptible power supply (UPS) in the event of additional short-term grid failures.

With this modification, the fan motor(s) and boards are supplied with power separately.

Affected product/accessories

iCombi Pro Electric

- 6-1/1
- 6-2/1
- 10-1/1
- 10-2/1
- 20-1/1
- 20-2/1

Required tool

- Standard

Required components

- Kit numbers (where available) for this manual are as follows:
  - 40.07.559S 3AC 400/415/440/480V 6 1/1 6 2/1
  - 40.07.560S 3AC 400/415/440/480V 10 1/1 10 2/1
  - 40.07.561S 3AC 400/415/440/480V 20 1/1 20 2/1
- With these conversion kits, the fan motor(s) and boards are supplied with power separately. The UPS must be procured locally as it is not included in the conversion kits.
  Use a UPS that provides at least the following power and fuse:

Unit size	Power	Fuse
6-1/1	1KW	16A
6-2/1	1KW	16A
10-1/1	1KW	16A
10-2/1	1.5KW	16A
20-1/1	1.5KW	16A
20-2/1	2KW	16A

- In addition, the output voltage of the UPS must output at unit voltage: 3AC 400/415/440/480V corresponding to 3AC 400/415/440/480V (identical to the voltage on the type plate).

Components included in delivery:

Each kit contains the following components:

Component	Article number
Cable ties (6x)	4005.0101
Protective conductor terminal 4mm² (1x)	40.04.638
WGO terminal	---

General information

- With this modification, the fan motor(s) and boards are supplied with power separately.
- Several motors can be connected to the UPS. The instructions describe the conversion for a motor.

NOTICE

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

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.

⚠ CAUTION

Sharp edges on the housing

Risk of cuts on the housing when working in the unit.

Wear protective gloves.

Revision Log

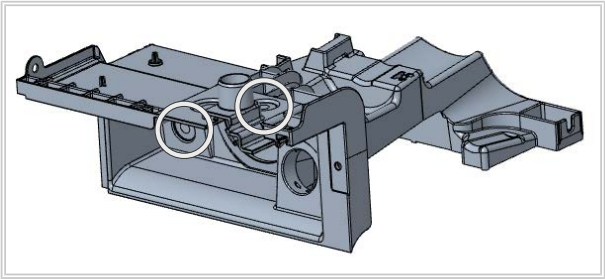
Changes from previous version of this manual:

- Additional notes have been added to the item numbers in the chapter “Required components”.

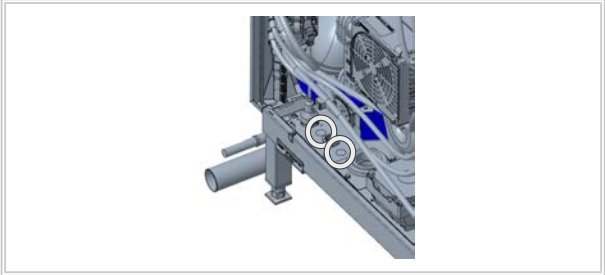
Work steps – Installation of connection cable

- ✔ The unit is voltage-free and the electrical compartment is open.
- ✔ The UPS is located outside the unit.

1. An opening must be created for the connection cable. The following opening options are available:



Pict. 1: Cable opening for tabletop units

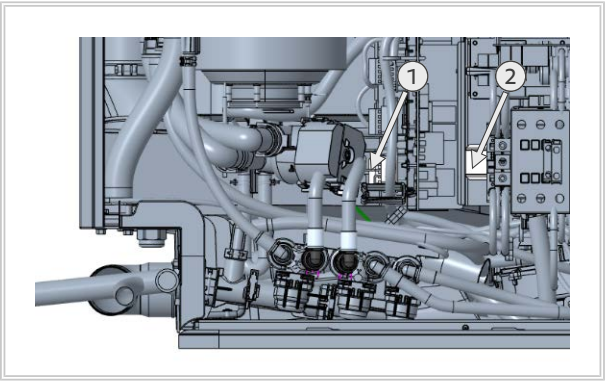


Pict. 2: Cable opening for floor unit

2. Loosen the cable gland from the connection cable.
3. Screw the cable gland to the opening provided.
4. Pull the connection cable through the cable gland from the inside to the outside and tighten.
5. Attach the sticker to the connection cable.
6. Remove the power supply from the fan motor and securely tie the cable into the wiring harness. The number of plugs varies depending on the unit size.
7. Install the motor plug of the UPS connection cable on the fan motor.

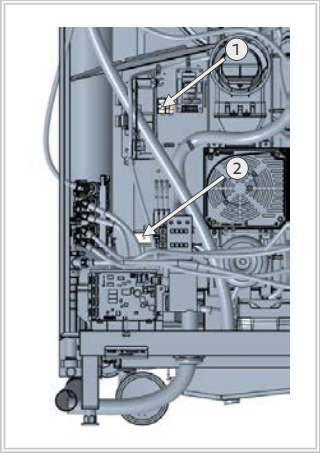
8. Remove the cables from fuse F1 and F2 on the input side and insulate them with WAGO terminals.

9. Connect the UPS connection cable to fuses F1 and F2.
   Insert the protective conductor terminal and connect the yellow/green wire.



Pict. 3: Table-top unit

1	Connection fuse F1 and F2
2	Protective conductor connection



Pict. 4: Floor unit

1	Connection fuse F1 and F2
2	Protective conductor connection

10. Connect the connection cable to the UPS (uninterruptible power supply).
11. Connect the unit to the mains and perform a test run.
12. Attach the voltage-specific stickers to the left side panel.
13. Perform appropriate electrical tests in accordance with local regulations.

>> Installation is complete. The unit is ready for use again.