

Installation / Initial Start-Up / Safety



Document: Installation startup and security

SECTION 2

Modification journal

Revision:	Date:	Modifications	Initials:
0	2011-06-15	Basic document, first edition	SO
1	2011-08-30	Different modifications	RE
2	2013-11-11	Revision for US market	SO
3	2014-11-18	New machines added (B, CTMC, CTM-RU) added, layout changes	MST
4	2015-06-01	New section added: „Handling of electronic components“	MST
5	2016-02-26	Added installation instructions of UT (under counter) refrigerator	RZ
6			
7			
8			
9			
10			

Index

SECTION 2

Installation	2.4 - 2.5
Installation refrigerator	2.6 - 2.7
Start-up	2.8
The way to perfect coffee enjoyment	2.9
Safety in operation	2.10

Installation and putting into operation

SECTION 2

Important indications

GENERAL
SAFETY NOTES

- In case of an emergency, immediately remove the plug from the power socket.
- The hot water tube, steam, hot water and coffee are very hot. Avoid direct contact with the skin (danger of burning / scalding)!
- Remove the plug from the mains socket if you will not be using the machine for an extended time (holidays). Also close the water connection under the drip tray.
- Do not use the machine if it is not operating perfectly or if it shows any sign of damage.
- Do not put any objects on the machine.
- Shocks to the machine and its components must be avoided.

INSTALLATION AND
POSITIONING

Only an instructed service-engineer may install the unit. The manufacturer is not liable for injuries caused by an improper mounting of the unit.

- The machine has to be installed on a solid, level and heat-resistant base.
- The unit may not have a direct contact to the customer. The only exception are automated coffee machines which are made for self-service use.
- The machine must be free standing for optimal ventilation.
- Do not install the machine in a warm or humid location.
- The surrounding temperature must be between 16 °C (60 °F) and 32 °C (90 °F).
- The machine is made for indoor use only.
- Never place the machine on a hot surface, e.g. a heating plate. Never use it around an open flame.

⚠ CAUTION**Risk of fire!**

The machine is to be installed in noncombustible surroundings only, with noncombustible material within 50 cm (18 inches) of the sides, front or rear of the machine and within 100 cm (40 inches) above the machine.

The appliance is to be mounted on floors of noncombustible construction with noncombustible flooring and surface finish.

ELECTRICAL
CONNECTIONS

- The power supplies have to correspond with the rating plate.
- This appliance is electrically safe only when properly grounded as set forth in the current electric safety specifications. Check for compliance and, when in doubt, have the wiring thoroughly inspected by skilled personnel. The manufacturers shall not be liable for any damage caused by faulty grounding.
- Using adapters, multiple plugs and cable extensions are not recommended. Should they be indispensable, use simple or multiple adapters and extensions that comply with the current safety regulations, take care not to exceed the limit current load shown on simple adapters and extensions, and the limit power load shown on multiple adapters.
- When the unit is permanently connected to a field terminal, a disconnect switch must be installed at the field terminal. The disconnect switch shall disconnect all lines from power net, except grounding.
- To prevent dangerous overheating, uncoil the power cord to its full length.
- When the power cord or plug is damaged, you may not use the machine. In order to avoid danger, have the defective part repaired or replaced by a service technician.
- Never leave the power cord near or in contact with hot parts of the machine, a source of heat, or a sharp edge.

⚠ CAUTION**Risk of fire and electric shock!**

Replace only with Thermoplan's cord set (for details see spare parts list in the Thermoplan Online Shop).

Installation and putting into operation

SECTION 2

Important indications

HANDLING OF
ELECTRONIC
COMPONENTS

When handling electronic components, the following safety indications must be considered:

- The tools used must be intact and approved by Thermoplan (see Technical Manual section „Tools and Accessories“).
- The electronic components must be kept away from moisture, dust, low-resistance materials, chemicals or lipids of any kind.
- The electronic components must be protected from electrostatic discharge at any time (ESD-packaging).
- The workplace area must be fitted with a ESD-conform protection with a protective resistor of $1M\Omega$.
- To avoid damage due to static charge, the service technician must be grounded with a protective resistor of $1M\Omega$ when working with electronic components.

WATER
CONNECTION

- The unit requires a cold drinking water connection.
- The distance between the machine and the water connection should not be more than 100 cm (40 inches).
- To connect the unit, use only the supplied original hose.
- The water pressure must be between 2 und 4 bar (29 - 58 psi) If the water pressure is more than 4 bar (60 psi), you have to install in a pressure reducing valve. Use an according booster pump if the net water pressure is very low or if there is no net water pressure (water from water tank).
- All national and regional rules and directives are to be followed. Contact an expert if you have questions.

WATER QUALITY

- The water quality has a big impact on the quality and the taste of a coffee.
- Use a drinking water supply only!
- The optimal total water-hardness is 5-8 dH° / 8-14 fH°. In most cases, the use of an active-coal filter is necessary. Contact an expert if you have questions.

WATER DRAIN

- The distance between the water drain and the machine should not be more than 100 cm (40 inches).
- It is important that the water drain (tube) does not hang down to allow proper draining.
- Make sure there is no back pressure in the drain system.

CLEANING

For hygenic reasons the equipment must be cleaned before the start-up.

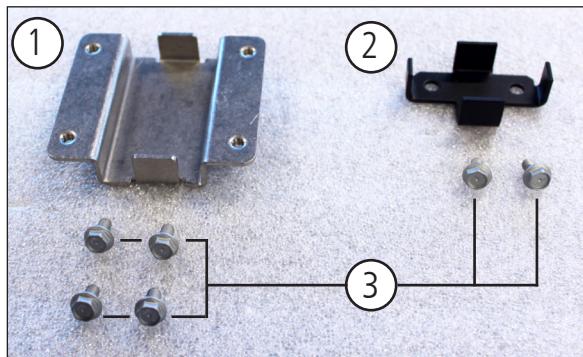
Caution:

- Do not clean the milk tank, bean hopper, grounds drawer or drip tray in high concentration alcohol based cleaners, such as cleaning alcohol, ethanol, methanol or other strong detergents. Also prohibited to use for cleaning are acetic acid etc.
- Only use commercially available detergents.
- Do not put plastic parts, (polyamids), into microwave ovens at any time as the microwaves will affect and deteriorate the plastic material.
- Do not clean the machine with a jet of water.

DISPOSAL

- The packaging material (cardboard, plastic, styropor) must be disposed of in compliance with statutory regulations.
- In order to avoid any accidents caused by inappropriate use, or in particular by playing children, the machine must be put out of operation and disconnected by an authorized service agent. Subsequently cut off plug from power cord.
- The correct disposal of the machine helps to prevent negative consequences for the environment. Dispose of the equipment according to the local rules and regulations. The manufacturer highly recommends the recycling of old machines.

Connection parts set



- ① 1x 117.233 Connection front BW3-RF
- ② 1x 117.235 Connection rear BW3-RF
- ③ 6x 106.256 Hexagon head cap screw M5x10 ripped



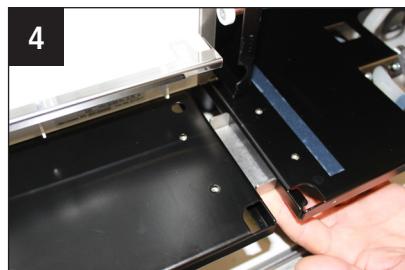
Install part 2 (see set above) at the back of the machine.



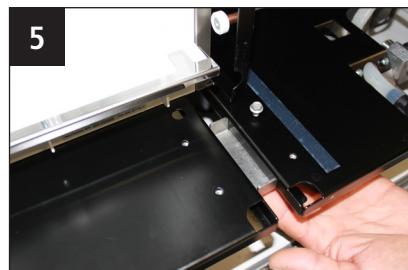
Use a socket wrench to fix it with two (2) screws (part 3 of the set).



The part correctly mounted is flush between the refrigerator and the machine.



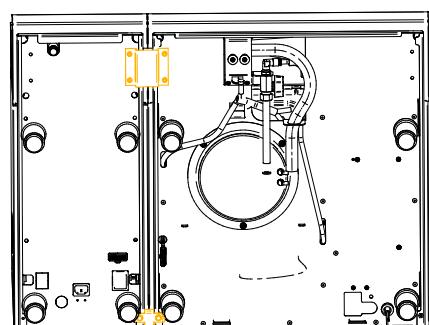
Install part 1 of the set under the drip trays between refrigerator and machine.



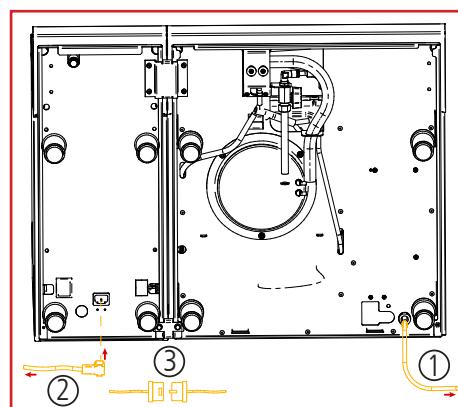
Hold it and insert the four (4) remaining screws one by one.



When all screws are inserted fix them with a socket wrench.



This drawing shows how the correctly installed connection looks like when looking from below.



This drawing shows how the cables are plugged correctly to connect machine and refrigerator.

1. Power cord coffee machine
2. Power cord refrigerator
3. Connection cable

Installation refrigerator UT (under counter)

SECTION 2

Connection parts set



- ① 1x 123.966 Milk hose undercounter ø6/4x1700mm
- ② 1x 123.969 FEP pipe ø4/2x2700mm
- ③ 1x 118.035 Connect. cable ext. CTM-UT-RF BW2/BW3



Connect the milk hose (part 1, see set above) to the available elbow connector on the left side of the refrigerator and ...



... the other end of the tube to the connector at the bottom back of the coffee machine.



Connect the FEP pipe (part 2) at the bottom back of the refrigerator and ...



... the other end of the pipe to the connector at the bottom of the coffee machine.



Plug-in the connection cable (part 3) at the bottom back of the refrigerator and ...



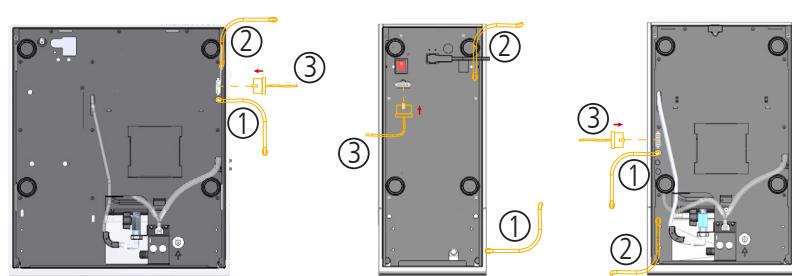
... the other end of the cable at the bottom back of the coffee machine.



Adjust the milk rinse times in the service menu according to the tube lengths used.

Recommended settings for milk hose length of 1700mm:

Rinsetime after milkproduct	2.5 sec
Rinsetime after milkbeverage hot	6.0 sec
Milksucktime after milkrinse	9.0 sec
Coldmilksucktime	6.0 sec



BW3-CTMC

BW3-RF-UT

BW3-CTM

This drawing shows how the tubes and the cable are plugged correctly to connect a BW3.

Start-up

SECTION 2

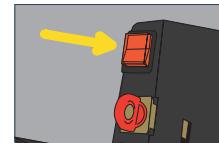
Preparation

- Check the expiry date of the beans.
- Make sure that you have enough beans.
- Preheat the cups.

Start-up

- Switch on the Coffee machine

Remove the grounds drawer and press the red button on the left and above the tablet holder. Reinsert the grounds drawer.



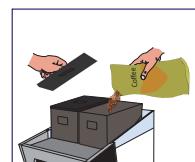
- Cold start rinse

The machine requests a rinse. Press the cleaning button on the display to start it. Rinse time approx. 50 sec.



- Coffee boiler heats up.

- Fill the bean hopper with fresh coffee beans.



- Coffee products can now be dispensed.

For machines with chocolate module (BW3-CTMC)

- Fill chocolate hopper with chocolate powder for gastro machines.

NOTICE

If the powder is too fine, it can damage the machine!

The BW3 chocolate module can become blocked if the chocolate powder is too fine. If the chocolate product is too watery, the chocolate module must be cleaned. Should this happen, use a coarser chocolate powder.

If this does not resolve the problem, contact our service partner.

**For machines with milk system (BW3-CTM / CTMS)**

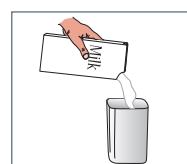
- Switch on refrigerator (main switch on the bottom of RF).

- Fill the milk container with milk.

⚠ CAUTION

Ensure hygiene!

- The milk container has to be clean and dry.
- Only use heat-treated (e.g. pasteurised or UHT) milk.
- Only fill the milk container using milk already refrigerated (under 5 °C).
- After opening the milk use it within 24 hours to prevent any health risks.



- All products can now be dispensed.

Ready

The way to the perfect coffee enjoyment

SECTION 2

COFFEE

- Only use quality coffee. The type, roasting, mixture and strength should meet the wishes of your customers.
- Always seal your supplies of coffee and close the bean hopper immediately.
- Do not fill the bean hopper if the machine is not going to be used for a longer period of time (overnight, days off, etc.).
- After not using the machine for a longer period of time, we recommend that you dispense a double coffee and pour it away. The next coffee will then be of good quality.
- Store your coffee supplies in a cool and dry area. By deep-freezing the coffee beans, you can keep them for several months without quality loss.

In addition to being able to select the quantity of coffee powder, the coffee machine also offers special setting options for each type of product. The parameters of the three following steps in the brewing process can be adjusted:

FOR COFFEE LOVERS

Prebrew time

This parameter defines how long the coffee-powder will be moistened in the brew chamber. This time is set optimally if no water drips into the cup.

Relax time

During the relax time it is possible for the coffee powder to expand. During this process, the water already absorbs some of the flavour in the coffee powder. For the ristretto and espresso, the relax time has to be longer than for a long coffee, for which only a short or no prebrew and relax time should be set. The relax time is about the same or slightly higher than the prebrew time.

Press after

„Press after“ is the most important factor in the prebrew-cycle. Here, the expanded coffee powder will be pressed again. For shorter coffee products like Ristretto and Espresso the press after time is set higher to reach the right dispensing time. The basic rule is, that the brewing time should be the same for all products. That means, if the water quantity is low (Ristretto, Espresso), the outlet time is shorter.

COFFEE AROMA

User

As an exclusive feature for the user, the machine offers the programm „Coffee Aroma“. This programm contains all the brewing steps mentioned above, already preset and adjusted.

Service-Engineer

The trained service engineer and coffee specialist can adjust these steps separately.

Safety in operation

SECTION 2

Important indications

OPERATION

- The machine must be serviced only by trained personnel.
- The machine must not be used to produce other products than described in the manual.

General safety notes

Strictly observe the following general safety notes.

SCALDING HAZARD

- Do not handle underneath the product outlets.
- Coffee-, milk-, tea- and steam products may cause scalding.
- Do not touch any of these outlets during or after dispensing a product.
- Be careful if you handle milk in a unit with a milk-heater: risk of scalding!

VENTILATION / WATER PROTECTION

- Do not cover the ventilation slots.
- Make sure that no water enters into the ventilation slots.

CLEANING OF THE UNIT

Cleaning the machine on a daily basis is not only an absolute must, but also guarantees the necessary hygiene and neutral taste as well as a longer service life of the machine.

AFTER-SALES SERVICE

- A message will appear on the display if the machine requires a service.
- In any case, the machine has to be serviced every six months or after 50'000 brewing cycles by a trained technician. Unplug the power-supply before servicing the machine.

MOVING

- Before moving the machine, the milk container has to be emptied.
- Move the machine with a lifting device or with the help of other people.
- Use gloves and safety boots when moving the machine.

MODIFICATIONS / MANIPULATIONS

- It is forbidden to modify or manipulate the machine. The manufacturer is not liable for accidents caused by changes made inside or outside the machine.
- Only trained technical personnel is allowed to work on the inside of the machine.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.