

Beer Marie

Bain-marie with light-/heating channel



Operating Manual Installation & Technical Specifications

OPERATING MANUAL

1	Introduction.....	4
1.1	Welcome	4
1.2	Symbols and notes.....	4
2	Technical data	5
3	Operating instructions and general information.....	6
3.1	Operating instructions	6
3.2	General information.....	6
3.3	Intended use.....	6
3.4	Non-intended uses	6
3.5	Laws, standards and guidelines.....	7
4	Safety references	7
4.1	Electrical power.....	7
4.2	Fundamental safety information	7
4.3	Heating with steam.....	8
4.4	Procedure by lamp bursting and breakage of glass	8
4.5	Glazing/Danger of accident	9
4.6	Replacing the glasses	10
4.7	Risk of crushing when switching from self-serving/serving	11
5	Warranty and liabilities	11
6	Transport of Beer Marie.....	12
7	Packaging of Beer Marie	12
8	Installation of Beer Marie.....	13
8.1	Setting up and moving the device	13
8.2	Installation site and storage.....	14
8.3	Surroundings/installation site	14
8.4	Preparation at the installation site	15
8.5	Water connection (external)	15
8.6	Water drainage (external).....	15
9	Connecting of Beer Marie.....	16
9.1	Electrical connection	16
10	Start-up/Operating manual	16
10.1	General Information.....	16
10.2	Requirements for operating personnel.....	17
10.3	Overview of the presentation device Beer Marie.....	17
10.4	Operating modes.....	19
10.5	Operating of the light-/heating channel	20
10.5.1	Control.....	20
10.6	Control of the water bath	21
10.7	Water bath components	21
10.8	Put the device into operation as follows	22
10.9	Function test.....	22
10.10	Start-up Beer Marie	22
10.11	Digital thermostat	23
10.12	Display and alarms.....	24
10.13	Switch off.....	24
11	Cleaning	25
11.1	General recommendations	25
11.2	Detergents.....	25
12	Maintenance	27
12.1	Service instructions	27
12.2	Normal maintenance	28
12.3	Extraordinary maintenance	28
12.4	Possible malfunctions.....	28
12.5	Lamps and heating elements	28
13	Service and repair	31
13.1	Unauthorised copies or use of replacement parts	31
14	Exploded diagram and spare parts list	32
15	Storage.....	33
16	Disposal.....	33
17	After sales service	34
18	Appendix.....	35

We reserve the right to make technical changes

Carefully read these installation and operating instructions before installing the appliance and putting it into service, and strictly follow the notices herein, thus contributing to keeping the appliance in a perfect and functioning state. Due to ongoing development, illustrations, operating steps and technical data may slightly differ from the supplied equipment.



Warranty claims can only be forwarded if all instructions are strictly followed.

Version	Datum	Mutation
1.00	15.05.2019	create

1 Introduction

1.1 Welcome

The Beer Marie is a wet bain-marie with a Culinario glass construction with light-/heating channel. The devices are available either as a drop-in or module unit.

With the purchase of your new Beer Marie you have chosen a product that combines the highest technical standards with practical service comfort. We recommend reading these operating and maintenance instructions carefully in order to become familiar with the product quickly.

With proper treatment you will enjoy this appliance for a long time. Please keep these operating and maintenance instructions to consult in case any maintenance and repairs are needed.

We wish you successful business and much pleasure with this appliance.

This operating and installation manual contains important basic information which needs to be considered during installation, operation and maintenance. Therefore, the operations manager and the operators must read the entire manual before the unit is installed and put into operation. The manual must always be kept close to the unit and easily accessible.





Important!

Beer Grill AG cannot assume any responsibility or warranty obligations for any damage sustained due to non-adherence to the installation and operating instructions or due to improper use.

1.2 Symbols and notes

	This symbol indicates important references for the proper use of the unit. Not paying attention to these references can lead to malfunctions of the unit or adverse effects to the environment.
	Caution – hot surface! Indicates a possibly dangerous situation due to hot surfaces. Failure to observe the instruction may result in burns and/or damage to property.
	This symbol points to operation tips and especially useful information. Helps you to use all functions on your unit optimally.
	Potential equalization

	This symbol indicates references to materials or operating media that must be handled and/or disposed according to legal standards and regulations.
	This symbol indicates potential or direct danger to the life and health of persons and/or a possibly dangerous situation. Ignoring these notices may result in dire consequences for your health and/or can lead to property damages.



This appliance may be used and operated by children aged at least 8 years and persons with reduced physical, sensory or mental abilities or lacking experience and/or knowledge, provided they are supervised or have been trained and instructed in the safe use of the appliance and understand the dangers possibly resulting from misuse. Children must not be allowed to play with the equipment. Cleaning and operator's maintenance must not be performed by children without supervision.

2 Technical data

Mod.	Beer Marie 2/1	Beer Marie 3	Beer Marie 4	Beer Marie 5
External dimension mm:				
L = Length	760	1100	1440	1780
D = Depth	650	650	650	650
H = Height	270	270	270	270
H1 = Height incl. construction	380	380	380	380
Bowl mm:				
Length	630	960	1280	1605
Depth	510	510	510	510
Height	210	210	210	210
Dimensions	2 1/1	3 1/1	4 1/1	5 1/1
Diameter water inlet	3/4"	3/4"	3/4"	3/4"
Diameter water outlet	1/2"	1/2"	1/2"	1/2"
Power (kW)	2.7	3.9	4.2	6.5
Voltage	380V 3F+N	380V 3F+N	380V 3F+N	380V 3F+N
Maximum weight (Kg)	50	60	70	78

3 Operating instructions and general information

3.1 Operating instructions

Any changes or alterations of the appliance or the use of individual spare parts and especially parts essential for the functioning of the appliance that are not original Beer Grill parts as well as non-adherence to notes in the operating manual will cause the lapse of our warranty and the exclusion of liability claims.

3.2 General information

- The device is designed for commercial use and may only be operated by trained and qualified personnel.
- The operator of the device must be thoroughly instructed by the owner.
- Suitable tools are recommended for operating the device.
- The bath must not be heated without water.
- There must be no-one in the vicinity of the device who is not familiar with how the device functions.
- In case of malfunctioning or poor functioning, the device must be switched off.
- Only spare parts delivered or recommended by the manufacturer may be used.
- On no account may the safety installations be altered.
- Warning signals placed directly on the device must be strictly observed at all times.
- The device must be checked and serviced regularly, at least once per year, by qualified personnel.
- Maintenance work may only be performed by qualified specialists.

3.3 Intended use

- This device is not designed or permitted for any other uses than food presentation (e.g. chemicals, wax or living creatures).
- Long-term presentation of food for several hours depending on the food product.
- The device may only be commissioned in an upright, secured state.

3.4 Non-intended use

- The device is not suitable for cooking and regenerating food.
- Moving the devices when operating.

3.5 Laws, standards and guidelines

- Directive 93/43/EWG: Hygiene rule
- Directive 89/336 and 73/23/EWG: Low voltage directive
- Directive 2006/42 general machinery guidelines

4 Safety references

4.1 Electrical power



Switch off the appliance immediately in case of interruptions of power supply!

Any work carried out on the electrical units or utilities may only be performed in accordance with electrical regulations by a qualified electrician or by a person instructed and supervised by a qualified electrician.

Appliances and unit components which are subject to inspection, maintenance and repair work have to be completely disconnected from the power source and free of voltage. First, check as to whether the activated parts have indeed been disconnected and are voltage-free, then ground and short them out. Insulate any adjacent parts that are also energized!

4.2 Fundamental safety information



- Installation, maintenance and inspection work on the device may only be performed by authorised specialists.
- This applies particularly to work on the heaters, sensors, lighting channel, electrical installation, water connections and the mechanics.
- When using the cutting board, make sure that the two brackets (clamps) that support the surround of the cutting board are properly anchored to the frame of the device so that the cutting board fixture can be properly hung.

ATTENTION: Failure to do so may result in injury!

- Any alteration must be authorized by the manufacturer in order to maintain warranty.
- Switch off the power to the device beforehand.
- Installations and overhauls may only be performed on fixed devices.
- The manufacturer accepts no liability for damage or injury to persons caused by not observing the instructions and precautionary measures contained in this handbook.



In case of doubt, please contact the DEALER.

**Caution**

Access to the control box and to all other electrical parts during installation and/or maintenance work is only permitted for qualified specialists.

4.3 Heating with steam

- The heater produces hot steam at 100 °C.
- The bath can be very hot when cleaning (allow for waiting time).

4.4 Procedure by lamp bursting and breakage of glass

Your Beer Marie is equipped with lamp bursting alarm (see operation manual). In case of lamp bursting glass shelves, sneeze screen, front and lateral glasses, proceed immediately as follows:

- Switch off and close counter.
- Self-service counter: Avoid guests taking food contaminated with glass splinters.
- Collect and replace all plates filled with food from guests, who have been nearby when the incident happened.
- Take out all food containers of the counter. Dispose food in rubbish bin (not in bin for leftovers).
- Take off shatter protection glass of defective lamp and clean it.
- Clean the appliance and its environment (counter and floor).
- Replace broken items.
- Refit shatter protection glass with bracket.
- Refill counter.
- Counter is again ready for operation.

4.5 Glazing/Danger of accident

Beer counters are equipped with one sheet safety glass (ESG).

Incorrect, badly mounted or damaged glass may fall out and cause serious injuries. Be sure to check all glazing before opening the self-service counter, but also after cleaning the glass (especially the front-glass) if:

- The glass is placed properly e.g.: In the lower glass holders in the intended slots (not in the rack separations, nor the discontinued racks). Both sides in the above designed mounted holders.
- The glasses have no damage. The safety glass may crack or burst due to internal tension, even without contact with the damaged edge.



Damaged edges and corners = Cut risk and insufficient support

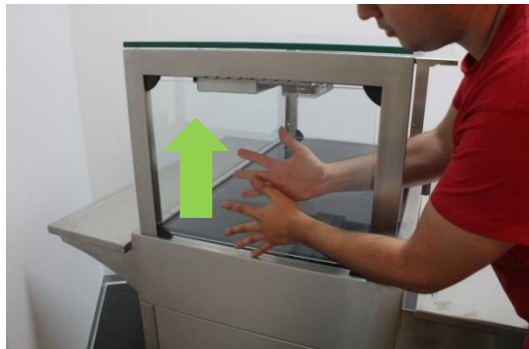
- The glass holder for damage and upper front holder (customer side) is well fitted. (Upper part must rest on the upper glass edge). These holders are glued. Loosen holders must be reglued by qualified personnel. If the glass holder moves upwards, the upper stop ridge (arrest) of the front glass may be affected and the glass can fall out by strong contrast shock.



Damaged glass panels must be replaced immediately, glass holders refitted by qualified personnel. In a pinch, continue working without the glass panels until the required spare parts arrive.

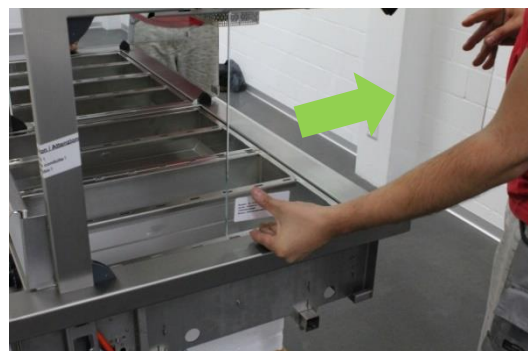
4.6 Replacing the glasses

Removing side glass panels, structure 5E



- Hold the panel with both hands, with one hand reaching from inside, the other from the outside of the side frame.
- Carefully lift the panel vertically from its holder.
- First tilt the bottom side of the glass panel towards the inside.
- Then you can carefully tilt the upper part of the pane towards the outside and finally remove the panel.

Removing side glass panels, structure 1E



- Support the panel with one hand on the front side, using your other hand to lift the panel from its holder on the back side.
- Then you can carefully pull the panel out of its holder towards the front. Take care to pull straight, **not** sideways or askew, which could damage the holder.
- To refit the panels, simply proceed in the reverse order.

4.7 Risk of crushing when switching from self-serving/serving

When lifting and lowering the front glass, always use both hands. Execute the movement slowly and in a controlled manner. Ensure that there is nothing between the glass edges and the superstructure.



- Always lift the front glass and push into position with two hands.
- Push the front glass at least as far as the first snap-in point (sneeze screen, safeguard).
- Risk of crushing, risk of glass breaking, so for this reason move it slowly and carefully.



Beer Grill take no responsibility for damage to glass panels due to improper handling during removal or replacement.

5 Warranty and liabilities

Basically, the "General Terms and Conditions" of the Beer Grill AG company, Allmendstrasse 7, CH-5612 Villmergen, apply in which the details of the guarantee claims are regulated. Claims of warranty are excluded if they result from one or more of the following causes:

- Improper use of the unit.
- Improper assembling, starting up, operating and servicing of the unit.
- Operating the unit with defective safety devices or safety devices which have not been installed properly and are not in working condition.
- Disregard of the references in the operating manual concerning transportation storage, installation, start-up, operation, maintenance and assembling of the unit.
- Unauthorized mechanical or electrical changes to the unit.
- Insufficient maintenance of wear and tear parts.
- Unauthorized repairs.
- Force majeure.

6 Transport of Beer Marie

Use special caution when transporting or moving the appliance in order to avoid damage from impact, careless loading and unloading or shock.

Immediately check the delivery after receipt for completeness and transport damage. In case of externally recognisable transport damage, do not accept the delivery or accept only with reservation. The extent of the damage must be noted on the transport documents/delivery note and a complaint started.



File a complaint immediately for hidden damage, since compensation claims can only be asserted within the existing complaint period.

For transport please note the following points:

- When transporting, ensure that the pallet is secured against slippage and tipping.
- Always transport the packaged device upright and do not tip.
- Always lift or push the device from underneath, never laterally or from the top.
- Observe the weight details on the packaging.

7 Packaging of Beer Marie

Before commissioning, completely remove the external and internal packaging material from the device.

Please note:

- The scope of delivery and execution of the elements can be taken from the respective shipping documents.
- Beer Maries are delivered on one-way pallets with cardboard wrapping.
- The device must be protected against moisture and frost.
- Observe the weight details on the packaging.
- Observe the graphical symbols placed on the cardboard.



If you wish to dispose of the packaging, observe the regulations that are in force in your country. Bring usable packaging materials to the recycling facilities.

Please check that the device and its accessories are complete. If any part should be missing, please contact our customer service.

8 Installation of Beer Marie

8.1 Setting up and moving the device

- **Solid substructure**

The devices are not self-supporting, that means, tabletop and built-in models need a solid base for transport and installation with the dimensions corresponding to those of the devices.

- **Lifting**

Lifting the device (weight) off the pallet must at all costs be carried out with suitable equipment.

- **Using a fork-lift truck**

When using a fork-lift truck, it is imperative to ensure that the electrical power-supply cable does not become wedged or damaged.

Always lift and transport the device from underneath on the longitudinal side with assisting devices.

- **Moving**

After every time the device has been moved, a visual inspection of possible damage to the electrical cable must be made. In the event of damage, the device must not be connected to the mains power supply.

- **Levelling**

The devices have to be levelled, so that water covers the whole ground of the water bins.

- **Blocking castors**

Mobile models have to be equipped with two castors with blocking system. These have to be blocked before start working.

- **Ambient-temperature**

The devices are equipped with microprocessor controls and work with forced air circulation. Therefore do not place any heat producing apparatus nearby.

- **Glasses**

Ensure that all glasses are correctly positioned and placed.

- **Freshwater connection**

Ensure that any freshwater connection has been connected correctly.

- **Water drainage connection**

Ensure that any water drainage connection has been connected correctly.

8.2 Installation site and storage

The appliances contain electronic components that may not be stored in cold and humid areas. Make sure that no condensate water can form during storage.

If an appliance has been out of service for a prolonged time and has been stored in a cool or humid area, it must be thoroughly checked before restarting.

Contact with salt water is strictly forbidden. If an appliance is installed at a swimming pool, it is essential to assure that the equipment does not get in contact with substances containing chlorine or acids that may affect the anti-corrosive protection of the metal construction.

In addition:

- Do not expose to any aggressive media
- Protect from solar radiation
- Avoid mechanical vibrations



Stainless steel is not totally resistant to substances containing chlorine or acids. These may corrode the equipment's materials. The appliances must not get in contact with such substances.

8.3 Surroundings/installation site

- For installation, select a room that is well-ventilated and free from dust.
- The floor of the installation site must be level and even.
- Locations with strong draughts or solar radiation negatively affect the heating and steam capacities.
- External interferences from other devices must be avoided.
- Observe local waterworks or public utility regulations.
- Ensure that the safety measures have been taken according to DVGW/ SVGW (DIN1988) or the local regulations respectively and that a backflow of dirty water into the drinking water unit is excluded (discharge into an open funnel with 20 mm safety distance).
- The installation site must be protected from the weather.
- Max. tolerance of the mains voltage + 6/- 10 %.



Correct installation and commissioning of the device is a prerequisite for trouble-free operation. The installation must comply with the local electrical, safety and hygiene regulations.

8.4 Preparation at the installation site

- Ensure that furniture cladding and counters are prepared according to the technical specifications.
- Compare the operating voltage on the type plate with the local voltage supplies **before** you connect the device.
- Customer fault-current circuit breaker min. 30 mA is in place.
- Ensure that all supply lines are in place according to the specific data sheets (power, water, wastewater).

8.5 Water connection (external)

A flexible water hose that is at least 1 m long must be provided by the customer for the food water connection. This is provided with an R3/4" external (male) thread for the connection. A shut-off valve must also be installed by the customer. The flexible water hose is run through the opening provided at the bottom into the device.



- Only use feed water without any chemical additives.
- The maximum water inlet temperature should not exceed 60 °C.
- Water supply pressure: Max. 4 bar.
- Only use softened water.
- Hoses should be temperature resistant up to 95 °C.

8.6 Water drainage (external)

A flexible water hose that is at least 1 m long must be provided by the customer for the residual water connection. This is provided with an R1/2" internal (female) thread for the connection. The flexible water hose is installed on the connection provided on the device.



Note
Over-tightening will destroy the screw connection.

Water drainage should not be kinked. All water inlets and outlets must be able to flow freely. Sludge water drainage must be fed into an open funnel with a safety distance of 20 mm.

9 Connecting of Beer Marie

9.1 Electrical connection

Connection and start-up have to be done by a skilled/trained person only. For connection of Beer Marie proceed as follows:

- Check up if electrical data of mains correspond with those on the rating plate of the Beer Marie.
- Connection to conform to IEC resp. CEI 335-1 and local regulations, i.e. fit the mains plug to the oil-resistant connecting cable that is heat-resistant up to 90 °C, and connect to a mains socket. For a permanent connection, an all-pole main switch with at least 3 mm contact clearance is to be provided.
- Beer Marie has to be connected to a potential-equalisation system (conform to VDE 0700, part 36/IEC 335-2-36).
- Take off adhesive label "Attention electric cable in tube" (on side bracket).
- The electric socket must be accessible after mounting or installation of the equipment. Replacement of the cable must be carried out only by the manufacturer, service technician, or authorized dealer.

10 Start-up/Operating manual

10.1 General information

This device may only be used for the intended purpose: That is to keep food warm in GN containers in a water bath. Any other type of usage is impermissible.

The bath is designed so that in each case 3, 4 or 5 GN containers can be used 1/1.

Prior to first using this device, it should be cleaned inside with lukewarm water and a neutral soap. The use of detergents containing scouring agents must be avoided. Rinse out with plenty of water and carefully rub dry.

10.2 Requirements for operating personnel

The device may only be operated by trained personnel who adhere to the current hygiene and professional association's guidelines in the gastronomy sector. The operator is responsible for the proper instruction and equipment of the personnel.

Basically there are two different classes of user:

Function	Tasks
Operating personnel	<ul style="list-style-type: none"> - Daily working with the device. - Responsible for refilling with food and water, cleaning and operating the device.
Service technician	<ul style="list-style-type: none"> - Error reports, malfunctions or damage that cannot be rectified by the maintenance personnel. - Changes in the configuration or work on the live parts may only be carried out by specialist personnel.

10.3 Overview of the presentation device Beer Marie



Illustration 1: Operator side 3/1



Illustration 2: Customer side 3/1

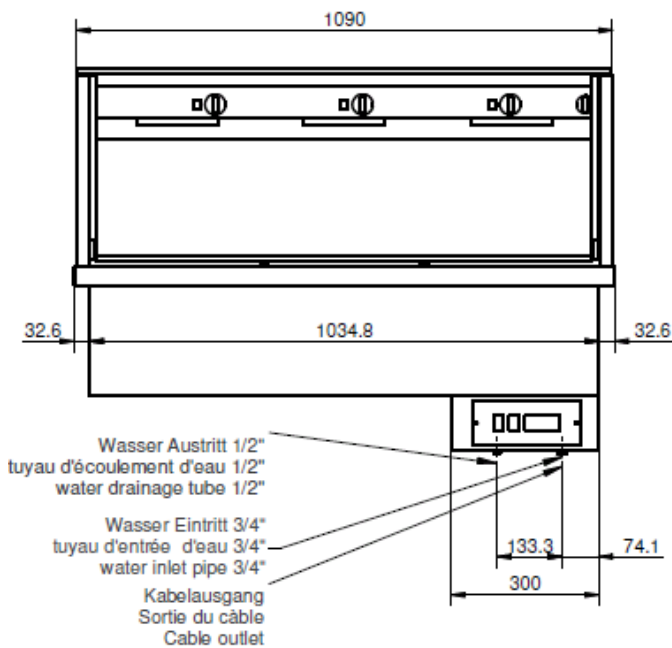


Illustration 3: Technical view with GN 3/1 dimensions (front view)

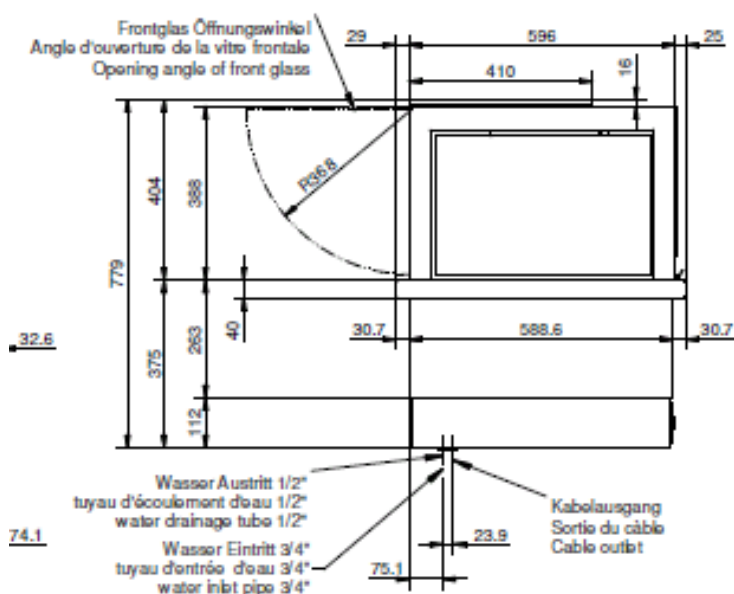


Illustration 4: Technical view with dimensions (side view)

10.4 Operating modes

Operating modes	Presentation mode	Heating dry (without water)	Heating with steam
In operation	Presentation lamp LED	Presentation lamp IR	Presentation lamp Water bath
Application range	Illumination of products that do not require keeping warm e.g. fruit	Keep products warm e.g. bakery products, quiche, etc.	Keep products warm and moist e.g. pasta

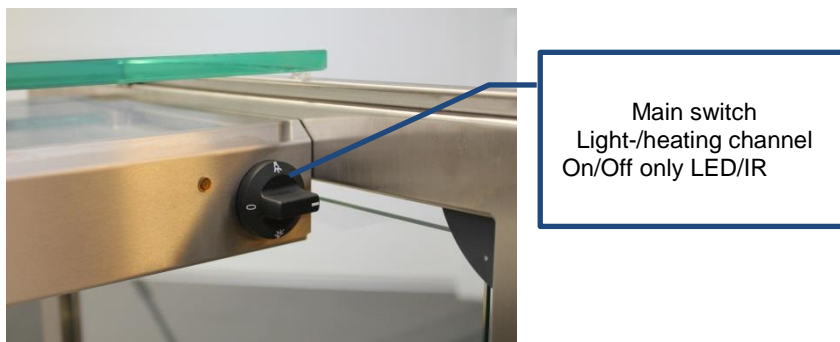


Caution

The device may only be commissioned by qualified and trained personnel. The device must be under zero potential when it is assembled, repaired and opened.

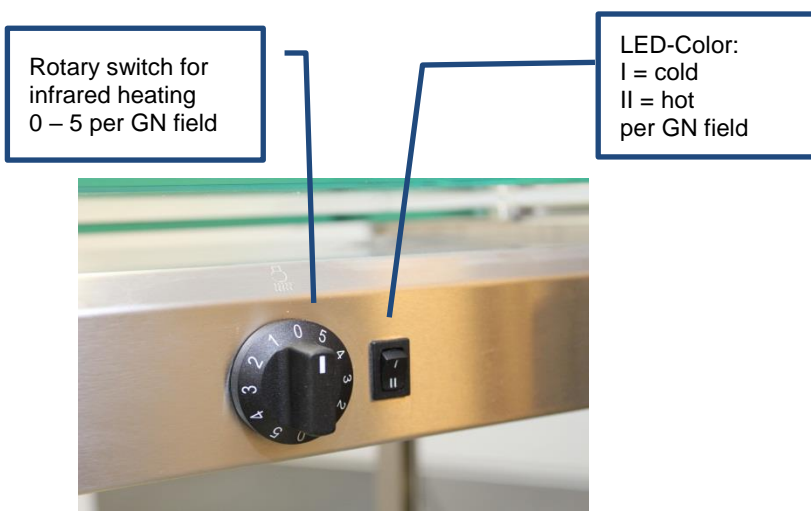
10.5 Operating of the light-/heating channel

10.5.1 Control



Main switch
Light-/heating channel
On/Off only LED/IR

Illustration 5 On/Off button light-/heating channel



Rotary switch for
infrared heating
0 – 5 per GN field

LED-Color:
I = cold
II = hot
per GN field

Illustration 6: Setting IR and switch LED

Infrared heating:

Turn the knob for the desired GN field to the required setting.

- 0 = Off
- 1 = Min. power
- 5 = Max. power

10.6 Control of the water bath

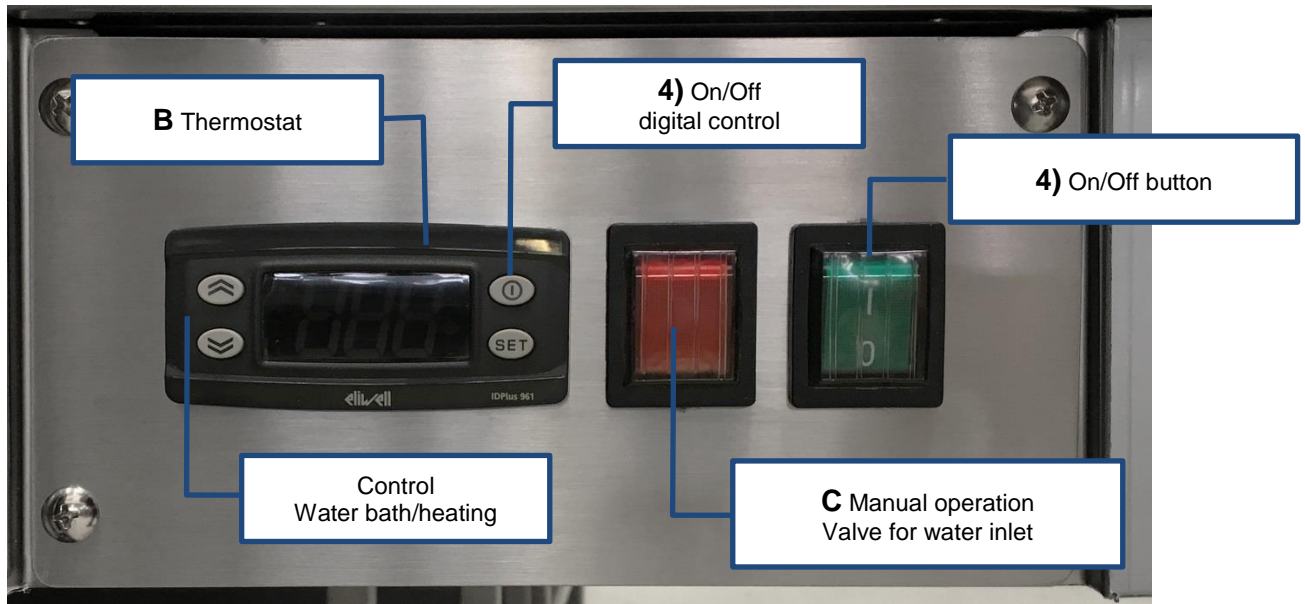
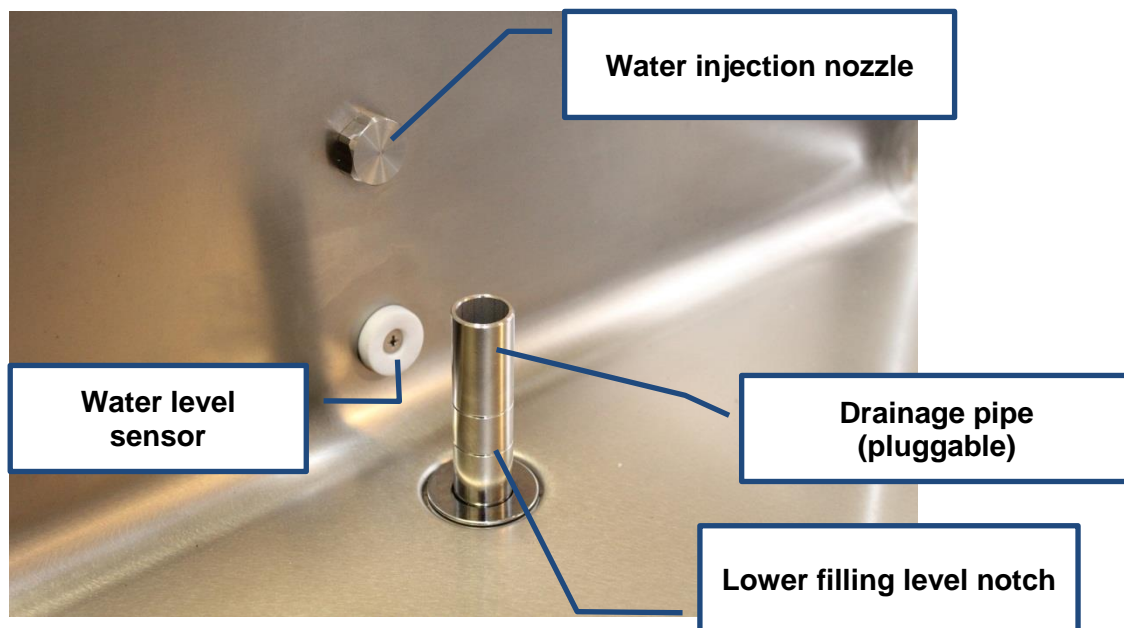


Illustration 7: Operating panel water bath

10.7 Water bath components



10.8 Put the device into operation as follows

- Open the water inlet or fill the water tank.
- Switch on the device with the selector switch.

10.9 Function test

Put the device into operation and for a few minutes run at maximum performance.

- Check the safety equipment.
- Check the hose connections for possible leaks.
- Check water drainage and inlet for correct installation (tightened, no kinks).
- Check water connection/tank contents (water present).
- All electrically-operated functions must be performed.
- As soon as the solenoid valve periodically supplies water, the operating mode with constant rated output has been reached and the cold-start process is completed. Keep a watch on the device and allow to run for 15 – 30 minutes. If there are any leakages, switch off the device.

10.10 Start-up Beer Marie

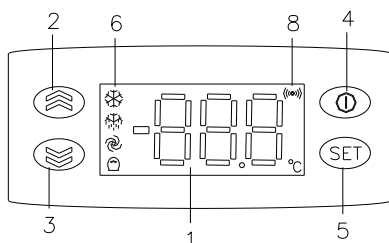
- Switch on the circuit breaker in front of the device.
- Check whether the overflow is correctly placed in the drainage.
- Press the water filling button **C** on the control panel (**fig. 5**), and fill the bath at least to the highest filling level notch on the overflow pipe (about 2 or 3 cm from the bottom).
- Press knob 4 for at least 5 seconds (see thermostat illustration), to switch on the main switch of the bath heating resistors **B (bath)**, see fig. 5.
- Set the digital thermostat **B** to the desired temperature (thermostat set to 85 °C).
- The digital thermostat **B** displays the temperature in the bath.



Caution

- **DO NOT HEAT THE TUB WITHOUT WATER!**
Over-tightening will damage the tub and the heater.
- **CHECK THE WATER LEVEL** at regular intervals. This may never be lower than the lower filling level notch of the overflow pipe.

10.11 Digital thermostat



Legend

- 1 – Display
- 2 – Button " increase the value"
- 3 – Button " reduce the value "
- 4 – When pressed for at least 5 seconds, the stand-by function is switched on
Button "exit"
- 5 – Button "Set point access", opens the menu, confirms commands and shows alarms
- 6 – Red, LED switched on, "heating resistors on"
- 8 – Red, LED switched on, activates alarm, blinks when alarm suppressed

In the case of normal operation, the instrument displays the temperature that is measured by the sensor that is in contact with the bath or is inside the cabinet.

For the visual display of the current set point: (Selected temperature), press and release button **Set**, the word "Set" appears, again press the button **Set**.

To change the operating set point, press and release the button **Set**, the word "Set" appears, again press the button **Set** and the set value appears. To change this, press the buttons ▲(2) or ▼(3) within 15 seconds to raise or lower the value; to save the value after changing, again press the **Set** button.



The set point can be set within the specified highest and lowest temperature.



Risk of burning

The heat sources (infrared lamps on the top and radiation heaters below) reach their operating temperature very quickly. Presentation plates and crockery, as well as the lamp covers and cover sheets, become hot.

10.12 Display and alarms

"E1" on the visual display means that the **thermostat sensor is faulty** and refers to one of the following malfunctions: Bath sensor is not correct, bath sensor is faulty, faulty connections. Check that the sensor is intact and that the connection instrument-sensor is correct.

"AH1": **High Temperature Alarm** on the visual display means that the measured temperature is higher than the specified highest set point. This alarm does not influence the setting. The alarm stops when the temperature falls below the specified highest set point.

"AL1": **Low Temperature Alarm** on the visual display means that the measured temperature is lower than the specified lowest set point. This alarm does not influence the setting. The alarm stops when the temperature rises above the specified lowest set point.

Changing the **CONFIGURATION PARAMETERS** of the thermostat, as specified by the manufacturer, may only be performed by qualified specialists taking account of the included instructions.

10.13 Switch off

Switch off the device with the digital thermostat **B** if present.

Turn off the switch on the front of the device and close the valves on the inlet piping (if these are connected to a permanently installed system).

THE BATH MAY ONLY BE EMPTIED WHEN THE DEVICE HAS COOLED DOWN.

If the device will not be operated over a longer period of time, the following must be observed:

- Disconnect the device from power and water supply mains.
- Empty the bath and clean carefully.
- Rub all STAINLESS STEEL parts with a cloth soaked in Vaseline oil, which then forms a protective film.

11 Cleaning

Following is some advice on maintenance, care, trouble shooting and service for your Beer Marie.

The device must be cleaned inside and outside daily according to the hygiene regulations, because only this guarantees an optimal presentation of the goods.

For cleaning purposes the unit should be turned off. Therefore, the best time for cleaning is at the end of your working day.

The unit can be switched off during the night and outside of opening hours.



Caution

The Beer Marie is an electrical appliance. Disconnect the device of the mains (pull out plug/switch off main switch).

11.1 General recommendations

- Abrasive detergents, steel wool or abrasive sponges must not be used, as these can damage the metal surfaces or covers.
- The unit has to be cleaned daily.
- Wear acid-proof gloves while cleaning the parts to prevent skin irritations.
- After cleaning with special cleaners you have to wash all parts with clear water and dry them so that there is no cleaner residue on these parts.
- Do not clean the device under running water.

11.2 Detergents

Use the following detergents:

- **Lukewarm soap water**
Use lukewarm soap water for all surfaces that are in direct contact with the goods.
- **Glass-cleaner**
Removes grease from glass-surfaces.
- **Stainless steel cleaner**
The stainless steel surfaces should be cleaned with a stainless steel cleaner only.
- **Lamps and Light-/heating channel**
The lamps are to be cleaned with soft paper or cloth only.
- **Silicone**
Painted parts have to be cleaned with silicone wax.



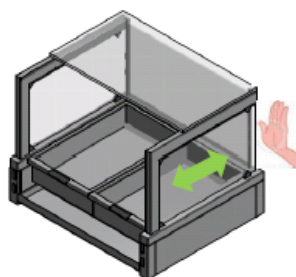
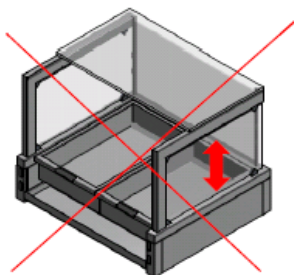
Absolutely prohibited!

- Do not use acid, bleaching or chlorine cleaners.
- Never use high-pressure, water pressure or steam jet cleaning machines.
- Do not use inflammable detergents.
- Never use sharp-edged or metallic tools like steel-wool or scrubbing cleanser for cleaning.
- The floor under the device must not be cleaned with corrosive cleaning agents, since vapours could develop from these that are damaging for the device.

- **Cleaning of glass**

Glass panes can be accidentally lifted out of their holders during cleaning. To avoid this, proceed according to the following instructions:

- Do not clean glass panes with vertical wiping motions.
- Clean glass panes with horizontal movements only, so that the panels cannot be lifted out of their holders.
- This applies to all glass structures.



Important: When cleaning a 1E cabinet, additionally retain the glass panel on the front side with your other hand.

**Caution**

After all cleaning has been completed the unit has to be returned to its original state in order to guarantee efficient operation!

**Caution**

In order to guarantee flawless operation of the water bins, only water bins may be used that are not deformed and which have a flat bottom.

**Important information**

Scale reduces heat transmission to the water in water bins. Water does not achieve the necessary temperature for creating steam. In the heating-zone a heat accumulation will be created. This can cause damage to the Ceran-glass, the silicone joint and later to the heating element!

12 Maintenance

12.1 Service instructions

In order to guarantee flawless functioning of the device and thus optimal presentation of the goods, the entire technology must be regularly checked and maintained.

The following work has to be carried out:

- Checking the thermostat setting.
- Checking and cleaning the drainage piping.
- Safety check of the system.
- Regular visual checking of all the glass.
- Cleaning the water bath.

12.2 Normal maintenance

The normal and preventative maintenance essentially consists of a weekly cleaning of all stainless steel parts, which have to be cleaned with lukewarm water and soap, then thoroughly rinsed and carefully rubbed dry. Before doing this, however, the device must be disconnected from the power supply.

If scale deposits have built up on the floor of the bath, remove these with vinegar or suitable products. Thoroughly rinse with water and rub dry.

12.3 Extraordinary maintenance

Extraordinary maintenance is carried out by specialist personnel in case of damage or malfunctions, wherever possible disconnect the device from the power supply beforehand.

Both repairs and/or exchange of components could prove to be necessary. All defective parts have to be exchanged exclusively with equivalent materials and components or those recommended by the manufacturer.

If the user exchanges components or makes changes to the device without written authorisation from the manufacturer, or uses non-authorised replacement parts, the warranty is immediately void.

12.4 Possible malfunctions

If the BATH does not heat up, the supply line must be checked. In addition, it must be checked whether the digital thermostat was set to the lowest temperature value.

If operating malfunctions continue after carrying out the above checks, the device must be switched off and the **manufacturer informed immediately**.

12.5 Lamps and heating elements

When replacing lamps and heating elements please note:

- **Infrared lamps**

Use only lamps with max. 300 Watt. Lamps with higher power ratings become hotter. This heat can destroy the electric installation and increases the danger of burning.

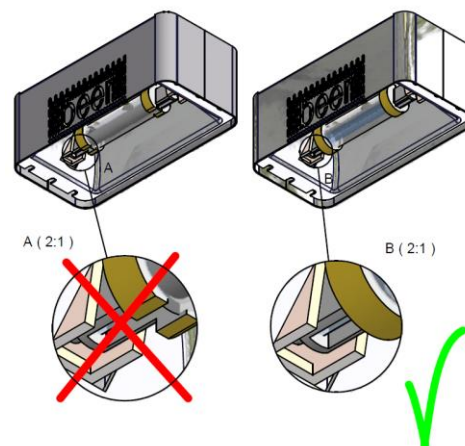
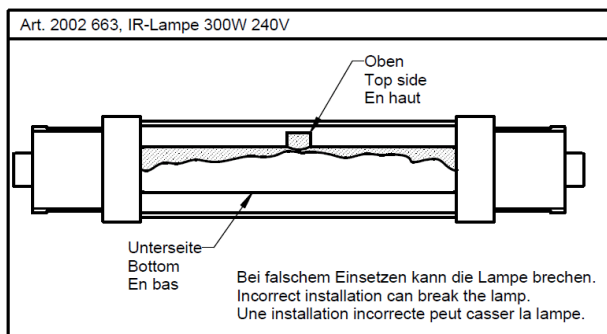


Caution

Infrared lamps with less than 300 Watt have not enough power and the food cool down very rapidly.

• **Correct insertion of the infrared heater**

Please insert the infrared heater exactly the way it is indicated on the drawings below.



Attention risk of burning!

Before requesting service, please check the mains connection and the fuses and check the following points:

If the heater does not work at all, please check the following points:

Operating light is dark:

- The power supply is interrupted..... self-checking
- A fuse has blown, check auxiliary appliances self-checking
- The plug is firmly in the socket self-checking
- Power has been switched on..... self-checking
- The electronic has been properly set..... self-checking

Status displays and error messages on the display

Label	Defect	Cause	Effects	Remedy for the problem
E1	Sensor 1 damaged (cell)	<ul style="list-style-type: none"> • Reading of values outside the working range • Sensor faulty/short-circuited/open 	<ul style="list-style-type: none"> • Visual display label E1 • Permanent alarm signal • Thermostat switches off for highest temperature and lowest temperature alarm • Compressor operation after the parameters "0nt" and "0ft" 	<ul style="list-style-type: none"> • Check sensor model (NTC) • Check wiring of the sensor • Replace sensor
E2	Sensor 2 damaged (defrosting)	<ul style="list-style-type: none"> • Reading of values outside the working range • Sensor faulty/short-circuited/open 	<ul style="list-style-type: none"> • Visual display label E2 • Permanent alarm signal • The defrosting cycle ends through timeout (parameter "dEt") 	<ul style="list-style-type: none"> • Check sensor model (NTC) • Check wiring of the sensor • Replace sensor
AH1	Alarm temperature HIGH sensor 1	<ul style="list-style-type: none"> • Value read from Pb1 > HAL after time equal to "tA0" (see ALARM for max./min. temperature) 	<ul style="list-style-type: none"> • Recording of label AH1 in the file AL • No effect on the setting 	<ul style="list-style-type: none"> • Wait for the temperature read off by sensor 1 to drop below HAL
AL1	Alarm temperature LOW sensor 1	<ul style="list-style-type: none"> • Value read from Pb1 < LAL after time equal to "tA0" (see ALARM for max./min. temperature) 	<ul style="list-style-type: none"> • Recording of label AL1 in the file AL • No effect on the setting 	<ul style="list-style-type: none"> • Wait for the temperature read off by sensor 1 to rise above LAL
EA	External alarm	<ul style="list-style-type: none"> • Activation of the digital input (H11 = +/- 5) 	<ul style="list-style-type: none"> • Recording of label EA in the file AL • Permanent alarm signal • Setting blocked if EAL = y 	<ul style="list-style-type: none"> • Check and remedy the external cause leading to the alarm in D.I.
OPd	Alarm open door	<ul style="list-style-type: none"> • Activation of the digital input (H11 = +/- 4) for a longer time as "td0" 	<ul style="list-style-type: none"> • Recording of label OPd in the file AL • Permanent alarm signal • Thermostat blocked 	<ul style="list-style-type: none"> • Close the door • Delay defined by OA0
Ad2	Defrosting through timeout	<ul style="list-style-type: none"> • End of defrosting after time, by not attaining the defrosting temperature, measured by sensor Pb2 	<ul style="list-style-type: none"> • Recording of label dAt in the file AL • Permanent alarm signal 	<ul style="list-style-type: none"> • For automatic resetting, wait for the next defrosting

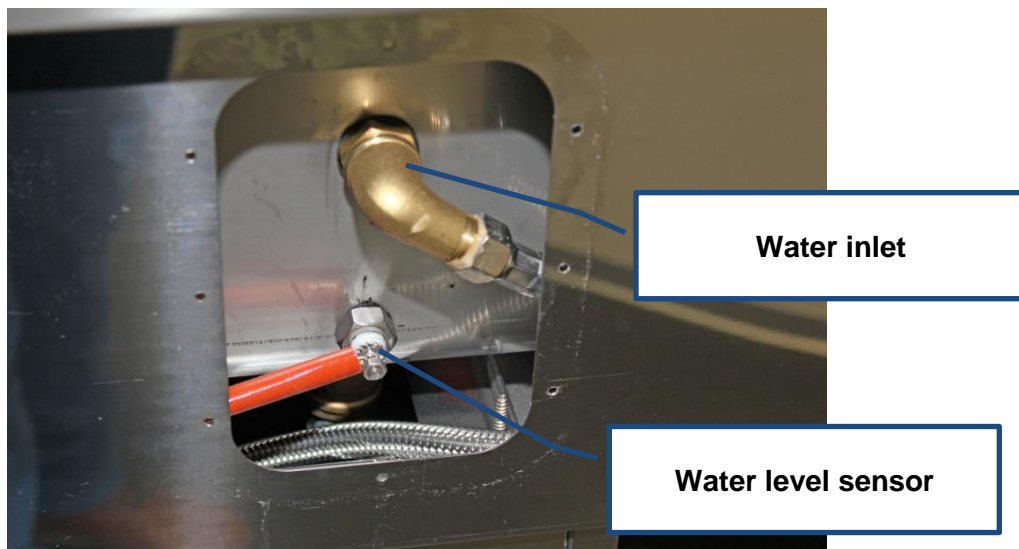
Should the options listed not be the cause of the error, please contact customer service.

i We are not liable for loss of goods, even if the appliance is still covered by warranty. It is therefore recommended that the temperature of the appliance be checked periodically.

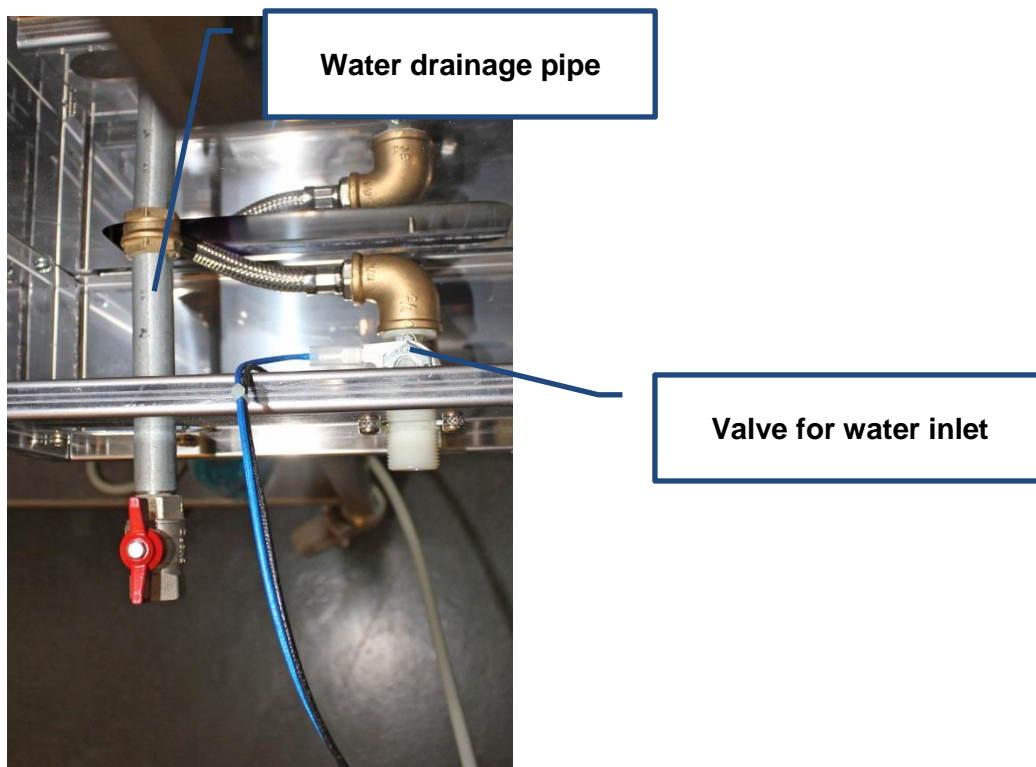
13 Service and repair

13.1 Unauthorised copies or use of replacement parts

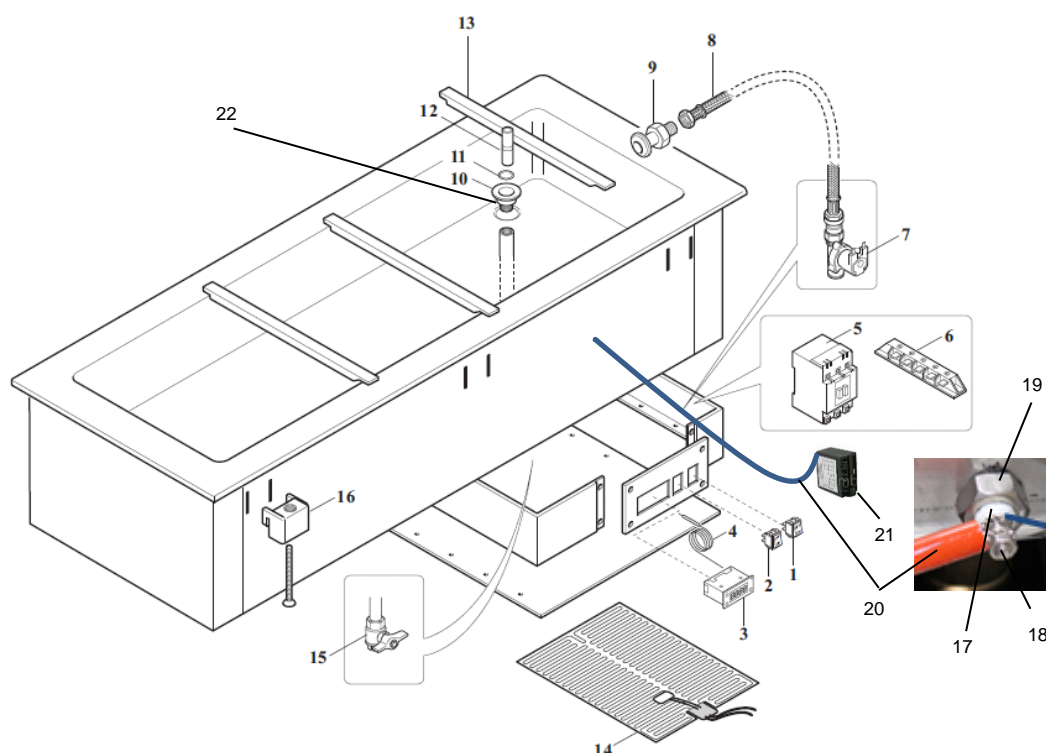
Copies or changes to the device (light-/heating channel) are not permitted. Contact the manufacturer before you make any changes to the device. To ensure safety, only use original spare parts and accessories that are approved by the manufacturer. Use of non-original components will make void any liability for subsequent costs.



Access to this service hatch is from the operator side. This access must be ensured.



14 Exploded diagram and spare parts list



Position	Description	Article
1	Main switch	3605218
2	Button to the BM solenoid valve	3605200
3	Digital control unit, thermostat Beer Marie	3605201
4	NTC temperature sensor Beer Marie	3605202
5	Protection	2029087K
6	5-pole terminal block 10 mm ² KL58/5S/1	515011
7	Solenoid valve 3/4" to Beer Marie	3605205
8	Reinforced hose 0.8 – 1 m incl. screw connection outside 1/2" -inside 3/8"	3605206
9	Water inlet valve 3/8" to Beer Marie	3605207
10	Drainage screw connection 3/4"	3605212
11	O-ring for overflow support	3605216
12	Overflow support	3605209
13	Intermediate rail with steam outlet holes	3605100
14	1000 W Silicone heating mat with Clicson	3605210
15	Drainage ball valve 1/2"	2005041
16	Fixing bracket	3605215
17	Insulation sleeve	3605214
18	Sensor countersunk screw M5x30 A2	786474
19	Nut 0.8d M12 A2 DIN934	786567
20	Braided water level sensor with ring cable lug	–
21	Water level sensor control box	3605213
22	Seal for drainage screw connection	3605208

15 Storage

- The device must be protected against moisture and frost.
- Max. ambient temperature for storage -20 °C to +70 °C.
- Max. air humidity for storage 10 % to 90 %.
- When the device is not in use, ensure that the device is switched off (pull out the mains plug, roll up the cable and store in the device).

16 Disposal

At the end of its service life, the device must be disconnected from the power supply before dismantling the individual components. Here it must be ensured that due to the form and weight of some of the components, appropriate measures are taken to prevent accidents.

The different parts (electrical components, rubber hoses, cable sheaths, etc.) have to be separated according to material. In this way, an environmentally friendly disposal will be ensured that meets the legislative regulations.

17 After sales service

The appliance may no longer be used if components have failed or no longer function properly. In this case, the appliance must be repaired by a qualified technician or by the Beer Grill customer service.

When contacting after sales service always indicate serial number and type (on power rating shield) of the Beer Marie.



Make sure you are aware of serial number and type (on power rating shield) once you call after sales service department.

Switzerland:

Beer Grill AG
Allmendstrasse 7
CH-5612 Villmergen

Service-No. +41 (0)56 618 78 28

Germany:

SERVATOR ServiceLine GmbH
Lindenweg 36 – 42
D-97999 Igersheim

Service-No. +49 (0)7931 55555

18 Appendix

Drawing No. 11Ea032-00A

wiring diagram GN 2/1

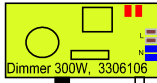
Drawing No. 11Ea030-00A

wiring diagram GN 3/1 + GN 4/1

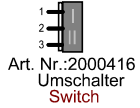
Drawing No. 11Ea035-00A

wiring diagram GN 5/1

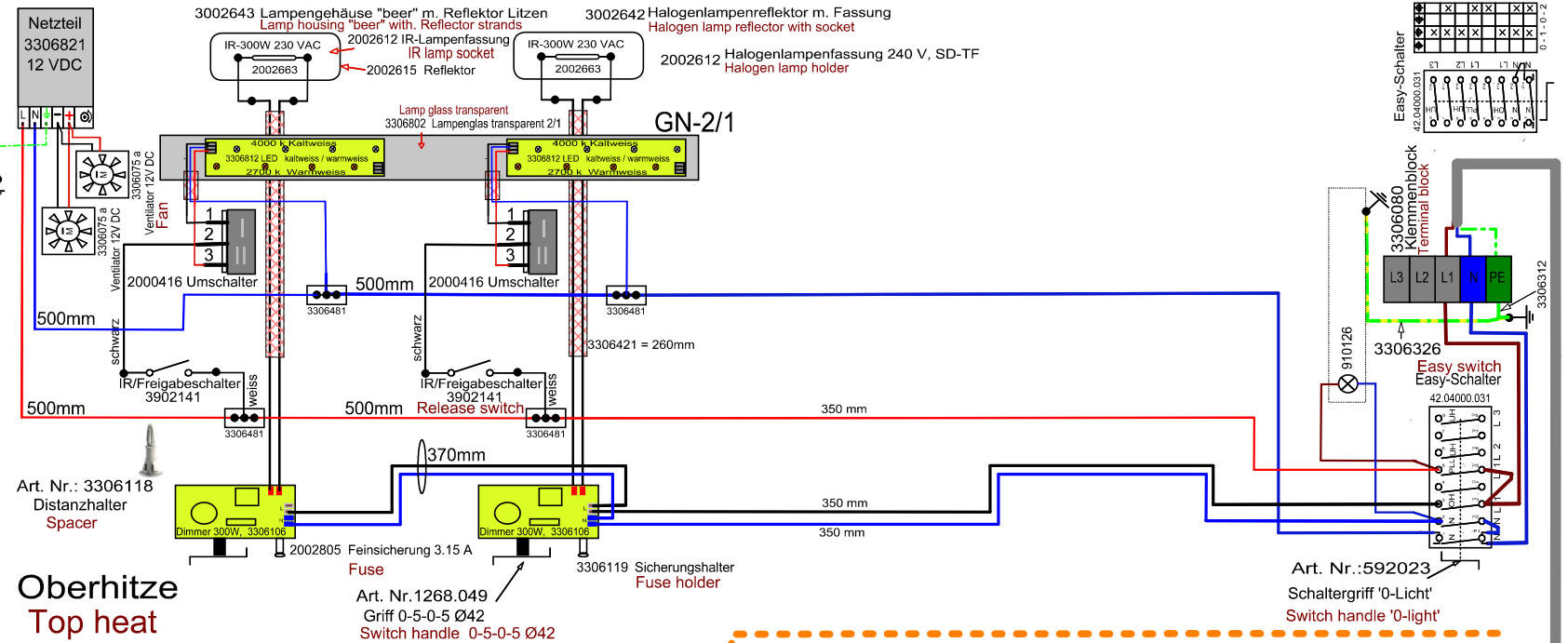
4000 k Cool White
 3306812 LED Cool White / Hot White
 2700 k Hot White
Art. Nr.: 3306814
 LED Panel Easy 2-farbt. LED Panel Easy 2-col
 230V Service-Kit, 230V service kit,
 2700K / 4000K, 2700K / 4000K



Art. Nr.: 3306106
 Dimmerprint zu Culinario Easy
 Dimmer Print to Culinario Easy

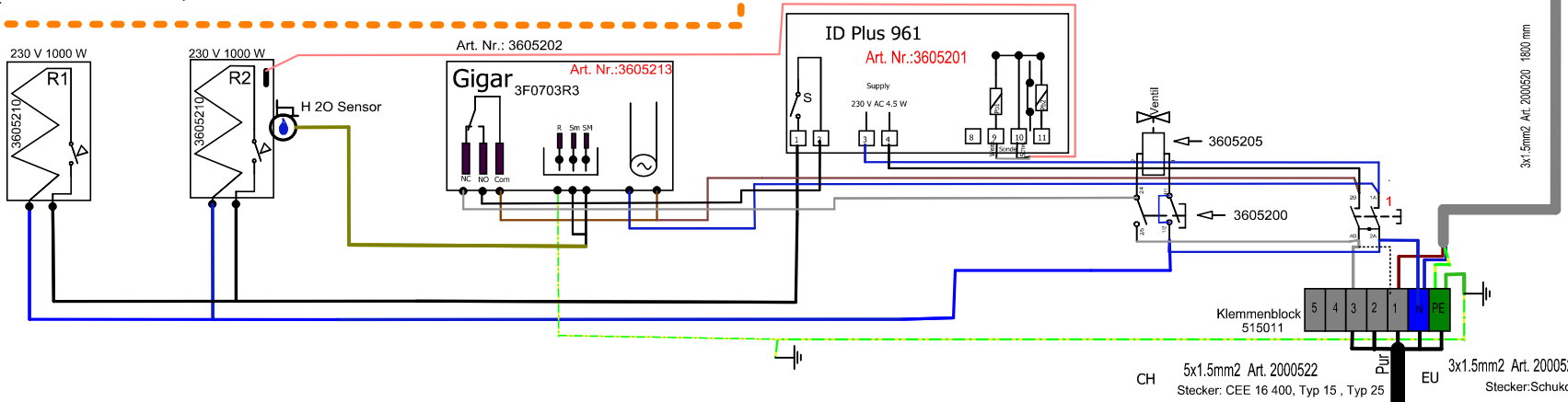


Art. Nr.: 2000416
 Umschalter
 Switch



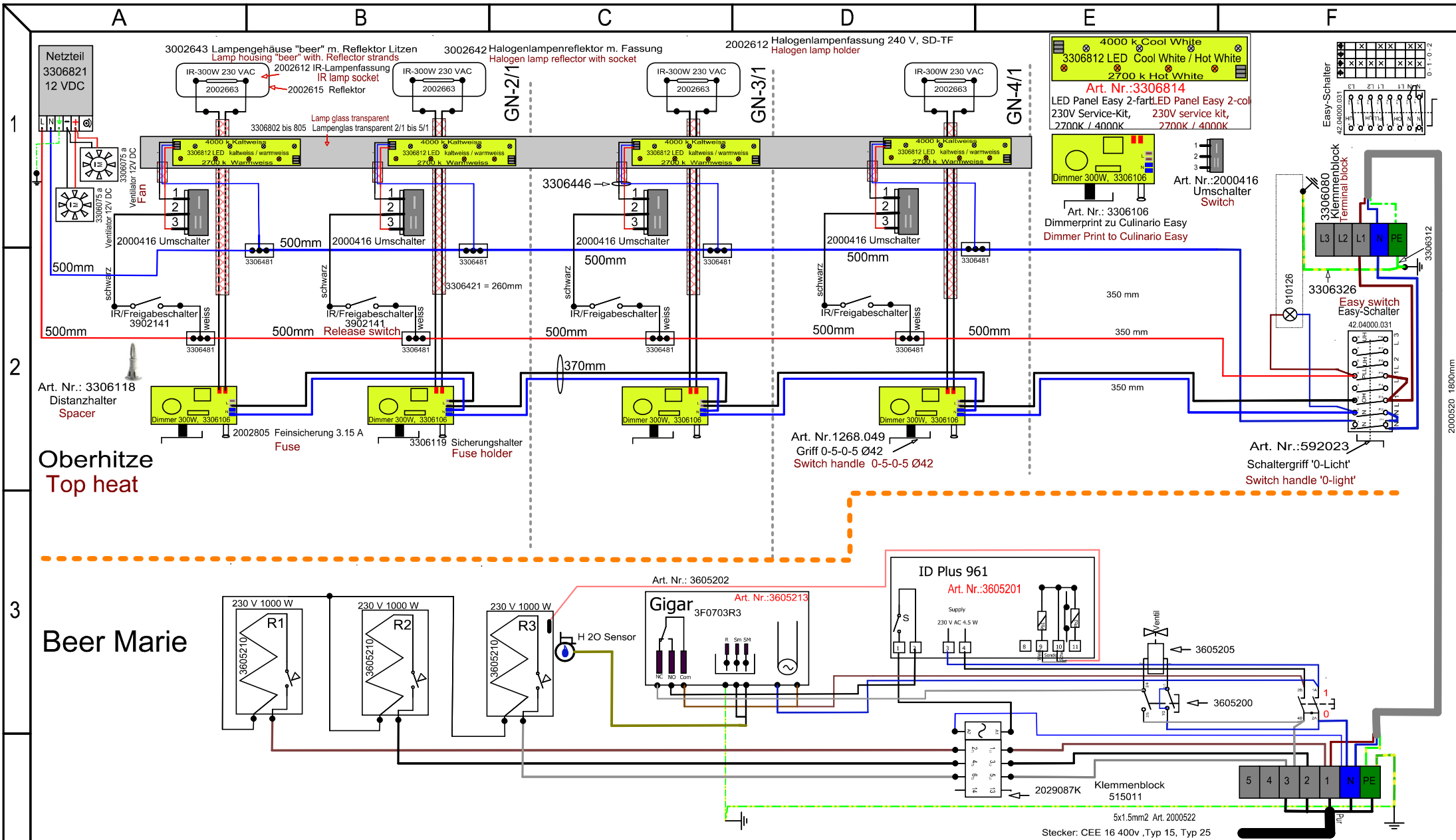
Oberhitze
Top heat

Beer Marie



2 GN: 2650 Watt	230VAC	EU 11.5A	CH 2LNPE 400VAC 2.6 / 8.6 A
-----------------	--------	-------------	-----------------------------------

Änderungen		Datum	Name	Bezeichnung: Beer Marie	Blattzahl: 01
Datum	Name	gez.: 30.06.17	CCO	Lichtkanal mit LED 230 V	Blatt-Nr.: 01
		gepr.:		Einbau GN 2/1	
BEER				Zeichnungs-Nr.:	11Ea032-00A



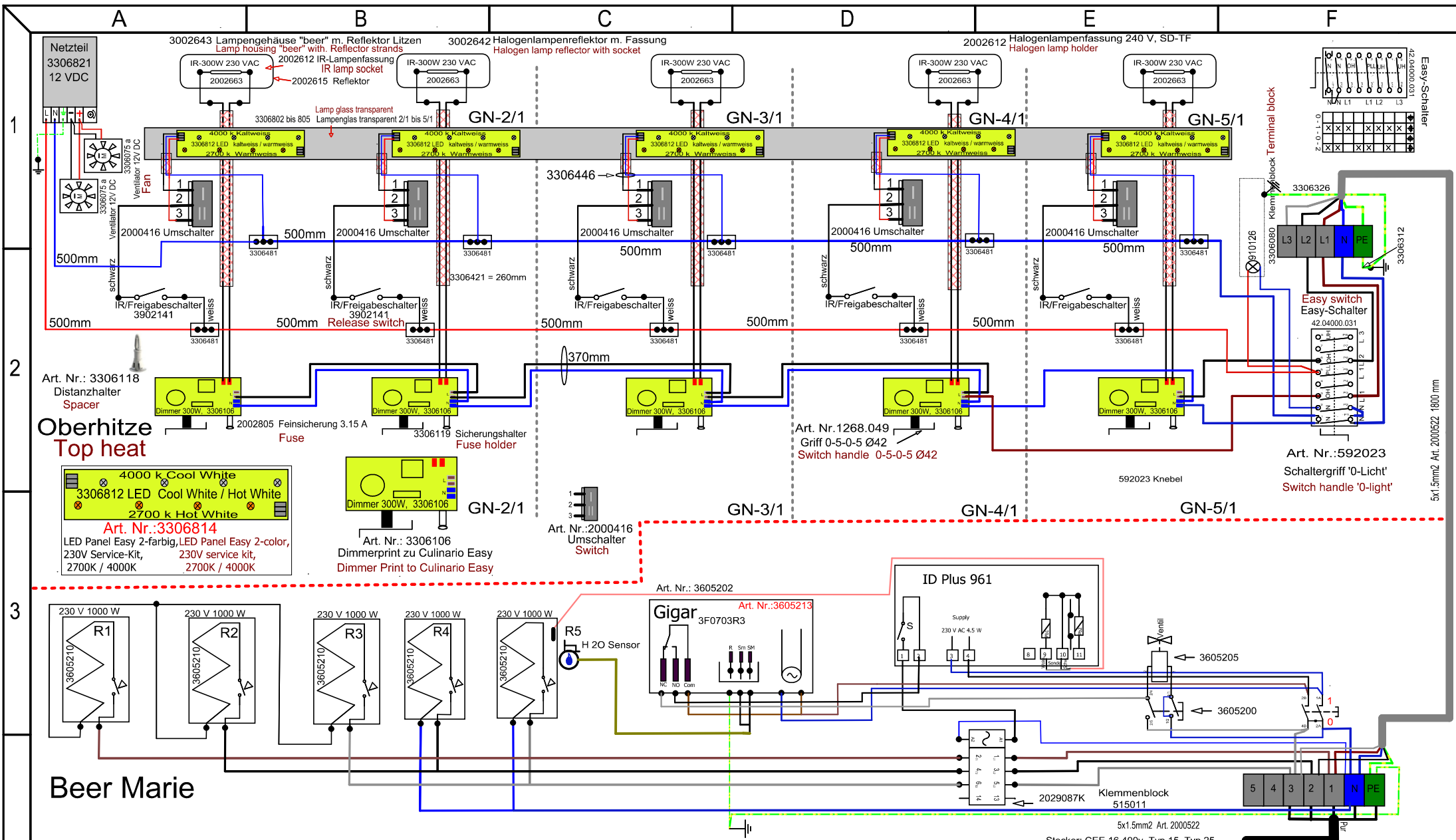
Oberhitze
Top heat

Beer Marie

Technische Daten / Technical specifications

	EU		CH	
3 GN: 3950 Watt	3LNPE 400VAC	8.5 / 4.3 / 4.3 A	3LNPE 400VAC	8.5 / 4.3 / 4.3 A
4 GN: 4250 Watt	3LNPE 400VAC	9.8 / 4.3 / 4.3 A	3LNPE 400VAC	9.8 / 4.3 / 4.3 A

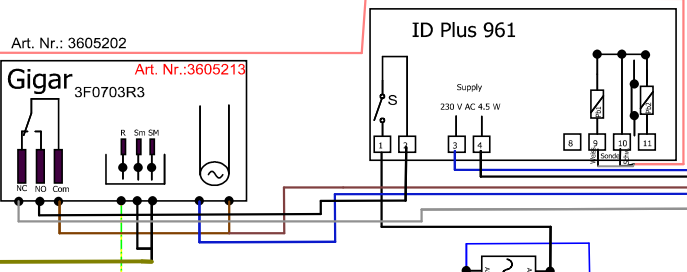
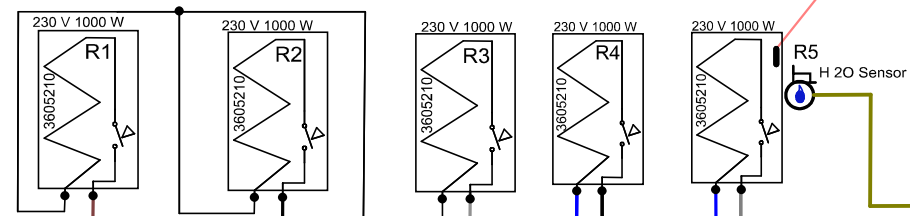
Änderungen		Datum	Name	Bezeichnung: Beer Marie	Blattzahl: 01
Datum	Name	gez.: 26.06.17	CCO	Mit Lichtkanal LED 230 V	Blatt-Nr.: 01
		gepr.:		Einbau GN 3/1 und 4/1	
BEER				Zeichnungs-Nr.:	11Ea030-00A



**Oberhitze
Top heat**

4000 k Cool White
3306812 LED Cool White / Hot White
2700 k Hot White
Art. Nr.: 3306814
LED Panel Easy 2-farbig, LED Panel Easy 2-color,
230V Service-Kit, 230V service kit,
2700K / 4000K, 2700K / 4000K

Dimmer 300W, 3306106
Art. Nr.: 3306106
Dimmerprint zu Culinario Easy
Dimmer Print to Culinario Easy



Technische Daten / Technical specifications

	EU	CH
5/1 GN: 6550 Watt	3LNPE 400VAC 9.6 / 10.0 / 8.7 A	3LNPE 400VAC 9.6 / 10.0 / 8.7 A

Änderungen		Datum	Name	Bezeichnung: Beer Marie	Blattzahl: 01
Datum	Name	gez.: 30.06.17	CCO	Lichtkanal mit LED 230 V	Blatt-Nr.: 01
		gepr.:		Einbau GN 5/1	
BEER				Zeichnungs-Nr.: 11Ea035-00A	