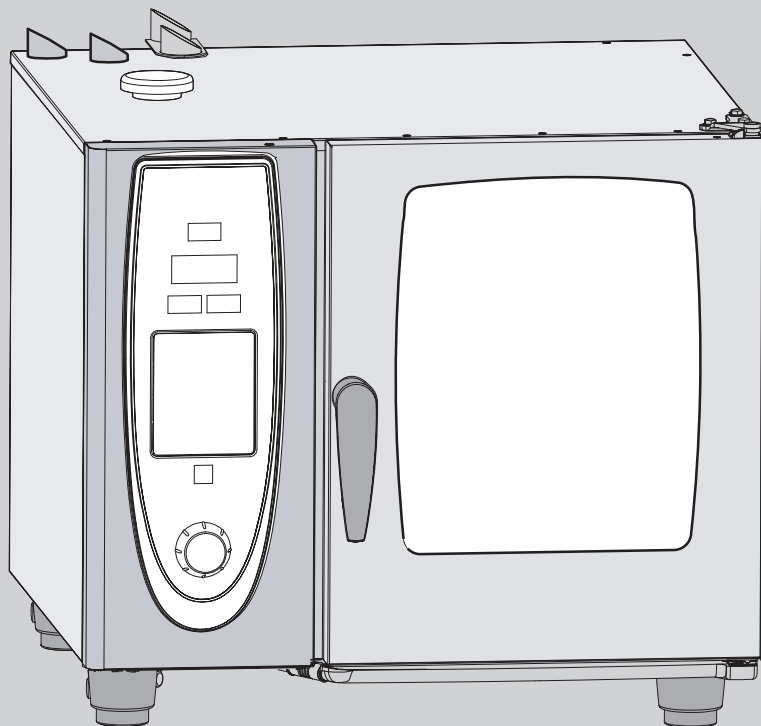


Installation Manual





Safety instructions

Explanations of the icon's



Danger!

Immediate dangerous situation, that can endanger severe injury or death



Warning!

Possibly dangerous situation, that possibly can endanger severe injury or death.



Attention!

Possibly dangerous situation, that can endanger minor injury.



Corrosive substances



Fire hazard!



Danger of burning!



Attention: Inobservance can cause material damages.



Tips and tricks for installation



Danger!

High voltage.
Caution danger of life
Inobservance can endanger severe injury or death.

Safety instructions



Warning!

Wrong installation, service, maintenance or cleaning as well as unauthorized changes on the unit can cause damages, injuries or even death. Read the installation manual carefully before installing the unit. This unit may only be used for preparing food in commercial kitchens. Every other usage is against definition and therefore dangerous.

Warning! **Only gas units**

- *If the unit is installed underneath an extraction hood, it must be made sure that the hood is switched on during operation of the unit – Waste gases!*
- *If the gas unit is connected to a chimney, it must be made sure that the exhaust line will be cleaned on a regular basis subject to local regulations – Fire hazard! (For this purpose also contact the installer)*
- *Don't put any material on the exhaust pipes of the unit – Fire hazard!*
- *The area underneath the unit may not be blocked or closed by any material– Fire hazard!*
- *The unit may only be operated in a calm environment – Fire hazard!*

Safety measures in case of smell of gas:

- *Immediately close the gas supply.*
- *Don't touch any electrical switching element*
- *ventilation of the room.*
- *Avoid open flame or sparks*
- *Use an external telephone and inform your local gas authority (in case the local gas authority can not be reached inform the operation centre of the fire brigade).*

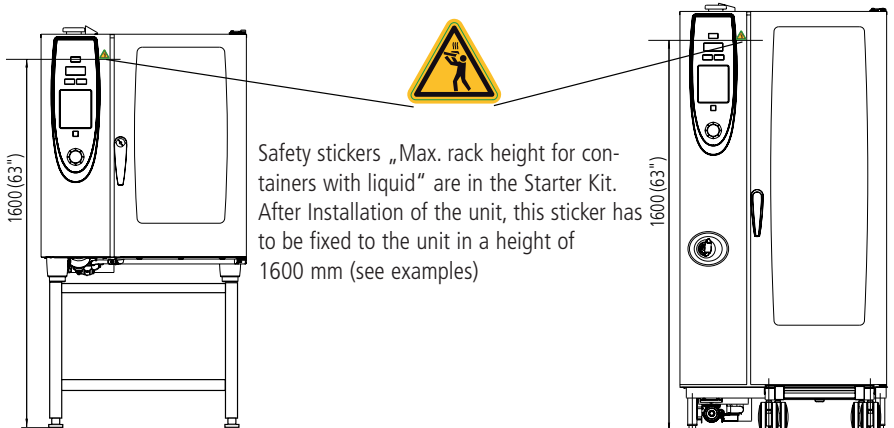


Dear customer

The warranty excludes glass damage, light bulbs and sealing material as well as damage caused by improper use, installation, maintenance, repair by untrained/unqualified personnel and scaling of components

We reserve the right to make technical changes in the interest of progress!

Dealer Installer	Quote in the event of a query:
	Appliance model: <input type="text"/>
	Appliance no.: <input type="text"/>
	Set to gas type: <input type="text"/>
	Your appliance was checked by: <input type="text"/>



Warning

To avoid scalding, do not use loaded containers with liquids or cooking goods which becomes fluid by heating in higher levels than those which can be easily observed. (DIN: IEC 60335-2-42)
Danger of scalding!

Installation instructions



Attention:

The named standards are valid for Germany. In all other countries follow the local standards and valid instructions. Damages based on installation not complying with the directives given here-under are not covered by warranty terms.

The requisite connections (water, electricity, gas) must only be carried out by suitably qualified technicians in compliance with local regulations.

Check for any transport damage.

Should there be any signs of transport damage, inform your dealer/freight forwarder immediately!

Dumping of old units.

At the end of its service life, the unit must not be disposed of with the general waste and must not be placed in the recycling containers at local authority collection points.

We will be happy to help you with the disposal of your unit.

First time commissioning

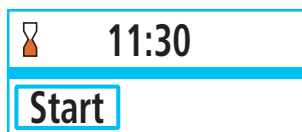
valid for SelfCooking® Center with CareControl

When commissioning your new, intelligent SelfCooking Center® for the first time, you will be asked to start an automatic self test. The duration of this self test is approximately 15 minutes and is necessary to adapt the SelfCooking Center® to the specific environmental conditions.



Fire hazard!

Remove packing material, starter kit as well as containers and grids from interior cabinet.



close cabinet door



Press Start-key, Self test is running, remaining running time is shown



Leave hinged racks respectively mobile oven racks inside the cabinet, Interior cabinet door must not be opened during the complete process of the self test. Opening the interior cabinet door interrupts the self test and when switching on the unit the next time you will be asked to start the self test again. This procedure does not apply to Combi Master units.



Table of content

Installation Manual	1
Safety instructions	2
Safety instructions	3
Dear customer	4
Installation instructions	5
Table of content	6
Table of content	7
Transport of units	8
Recommended minimum clearance	9
Installation type 6x1/1, 6x2/1, 10x1/1, 10x2/1 GN	10
Installation type 6x1/1, 6x2/1, 10x1/1, 10x2/1 GN	11
Installation Type 20x1/1 GN, 20x2/1 GN	12
Levelling mobile oven racks 20x1/1 and 20x2/1 GN	13
Electrical connection	14
Electrical connection	15
Water connection CareControl	16
Water connection	17
Selection of water filter	18
Selection of water filter	19
Gas connection pictures	20
Gas connection	21
Gas connection / Gas consumption	22
Drain connection	23
Ventilation, technical data, heat emission	24
Option	25
Option	26
Option	27
Mobile floor models 20x1/1GN and 20x2/1GN	28
Mobile floor models 20x1/1GN and 20x2/1GN	29
Mobile floor models 20x1/1GN and 20x2/1GN	30
Mobile floor models 20x1/1GN and 20x2/1GN	31
Mobile floor models 20x1/1GN and 20x2/1GN	32
Mobile floor models 20x1/1GN and 20x2/1GN	33
Connected loads in accordance with VDE Guideline	34
Conversion tables	35

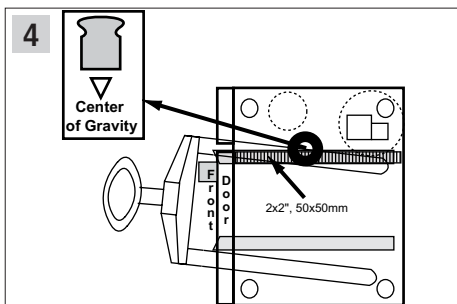
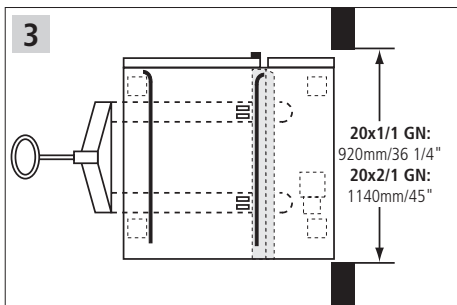
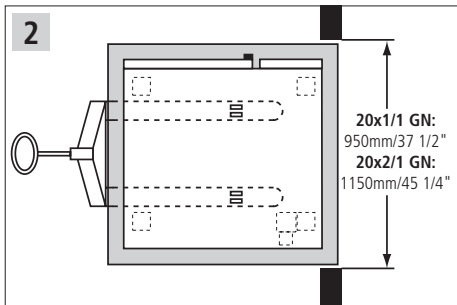
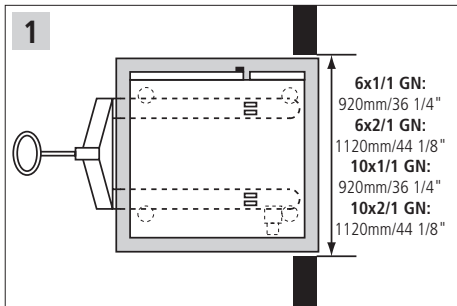
Table of content



Schematic drawing 6x1/1 GN CareControl	36
Schematic drawing 6x1/1 GN Gas CareControl	37
Schematic drawing 6x2/1 GN CareControl	38
Schematic drawing 6x2/1 GN Gas CareControl	39
Schematic drawing 10x1/1 GN CareControl	40
Schematic drawing 10x1/1 GN Gas CareControl	41
Schematic drawing 10x2/1 GN CareControl	42
Schematic drawing 10x2/1 GN Gas CareControl	43
Schematic drawing 6x1/1 GN	44
Schematic drawing 6x1/1 GN Gas	45
Schematic drawing 6x2/1 GN	46
Schematic drawing 6x2/1 GN Gas	47
Schematic drawing 10x1/1 GN	48
Schematic drawing 10x1/1 GN Gas	49
Schematic drawing 10x2/1 GN	50
Schematic drawing 10x2/1 GN Gas	51
Schematic drawing 20x1/1 GN	52
Schematic drawing 20x1/1 GN Gas	53
Schematic drawing 20x2/1 GN	54
Schematic drawing 20x2/1 GN Gas	55
Schematic drawing 20x1/1 GN Electric, mobile	56
Schematic drawing 20x1/1 GN Gas, mobile	57
Schematic drawing 20x2/1 GN Electric, mobile	58
Schematic drawing 20x2/1 GN Gas, mobile	59



Transport of units



Transport of units

Transport of units using a pallet

pic. 1,2

Transport of units without a pallet, 20x1/1 GN and 20x2/1 GN units only. Put a piece of wood between pallet jack and left guide rail of the trolley

pic. 3, 4



Attention

Make sure that the unit is secured against tilting, when transporting it.

Remove all containers/mobile oven racks from the cabinet. For floor model, remove corner mountings from the pallet. Take unit off the pallet.



Attention

**Observe the weight of the units.
Use carrying aid to avoid injuries.
Wear safety boots.**

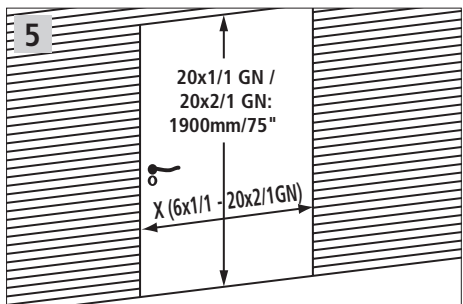
Weight see technical data on page 24

Observe door height

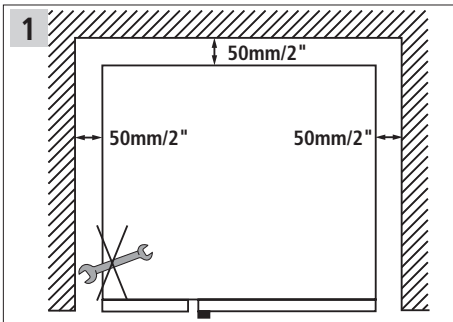
pic. 5

X= Required door width when transporting units without pallet:

- 6x1/1GN 840 mm (33 1/8")
- 6x2/1GN 1040 mm (41")
- 10x1/1GN 840 mm (33 1/8")
- 10x2/1GN 1040 mm (41")
- 20x1/1GN 920 mm (36,1/4")
- 20x2/1GN 1140-mm (45")



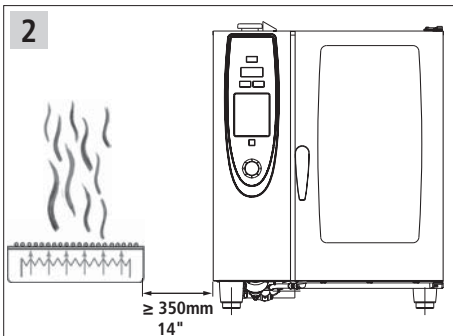
Recommended minimum clearance



Minimum clearance left/ right/ rear 50 mm (2") (except floor models). pic. 1

On floor models (20x1/1 GN and 20x2/1 GN) there must be a minimum clearance of 500 mm (approx 20") on the left side of the unit, for installing the power cable

Minimum clearance when there are heat sources on the left-hand side is 350 mm (14"). pic 2



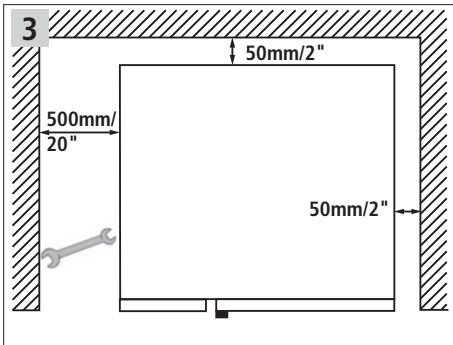
Attention:

A safety shut down can occur if the ambient temperature on the left hand side of the unit is too high.



Option:

Heat shield see page 25



We recommend a distance of 500 mm (20") on the left hand side of the unit for carrying out maintenance work. pic. 3

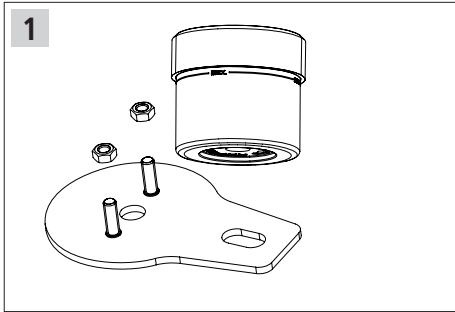


Attention:

- Do not install deep fat fryer at the rear side of the unit.
- The units must only be installed in frost-free rooms.



Installation type 6x1/1, 6x2/1, 10x1/1, 10x2/1 GN



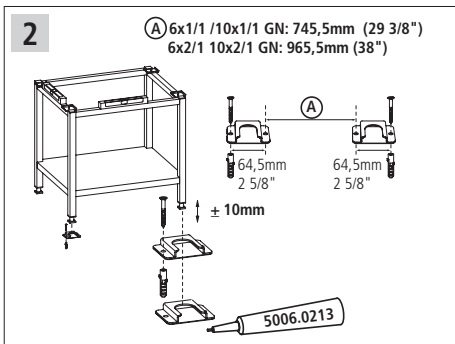
Because of safety reasons table units shall only be installed on original stands of the manufacturer. In this case the maximum rack height is 1600 mm (63")

If Gas units are installed on a table or on the kitchen floor (combi duo) then:

- press the retaining plates (ET-No.:12.00.519) into the lower part of the pedestal and fasten with the enclosed nuts.
- the plate must be fitted to the surface using either screws and dowels or studs and nuts or the special adhesive.

The retaining plates are not included in the scope of supply

pic. 1

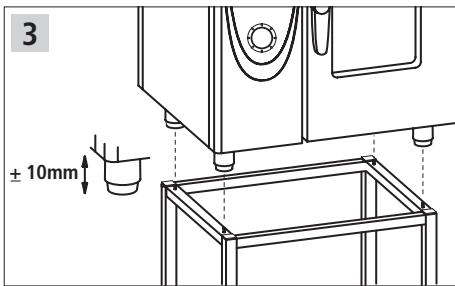


Attention: The centre height of the drain pipe is 63 mm (2 1/2"). When installing combi duo observe the drain height of the bottom unit.



Option:

Using 110 mm (4 3/8") legs and height adjustable transport trolley for extended space underneath unit. See page 25



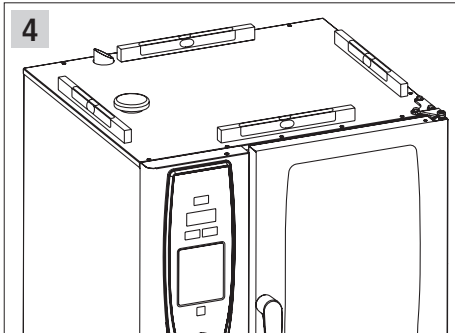
Stands for gas appliances must be fixed to the floor using the fixing set part no.: 8700.0317 either with screws and dowels, or with the special adhesive supplied.

Fixing set is not included in the scope of supply,

pic. 2

Slide the stand into the fixing brackets and level it. Place the unit on the stand. The feet of the unit must be secured by means of the locating pins of the stand

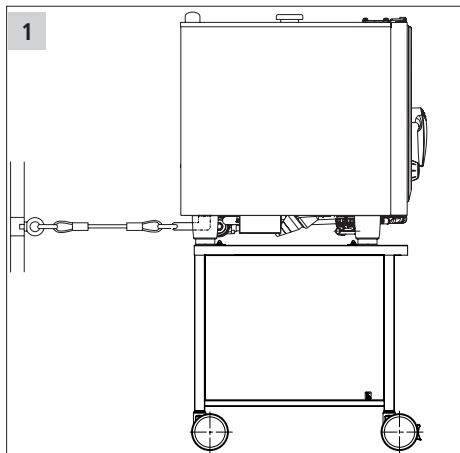
pic. 3



Ensure that the unit is level

pic. 4

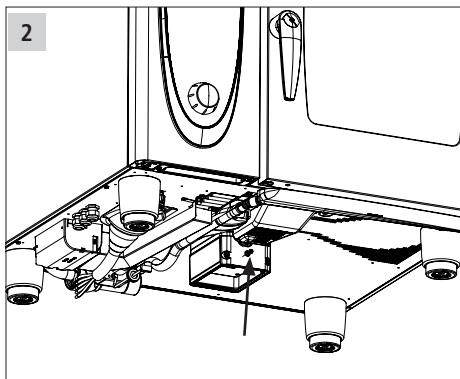
Installation type 6x1/1, 6x2/1, 10x1/1, 10x2/1 GN



Attention:

If the unit is mounted on a mobile stand or base cabinet, the unit must be additionally secured against slipping by a chain or cable in order to prevent damage to the electricity, water or gas supply line.

pic. 1



Only valid for SelfCooking Center with CareControl produced as of 28.09.2008:

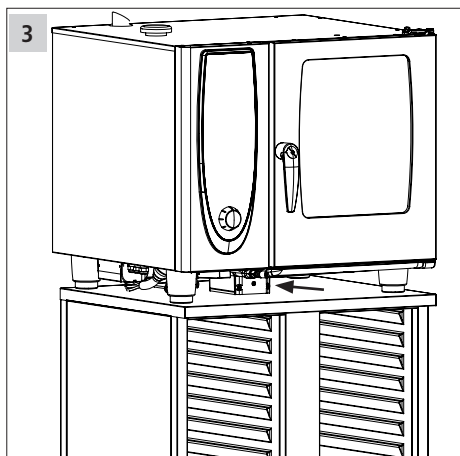
At the bottom side of the SelfCooking Center a cover over the care pump is installed. This cover is secured in the upper position during transportation. If the SelfCooking Center will be installed on a table or on base cabinet then the cover must be lowered.

- Loose the screw at the front side of this cover

pic. 2

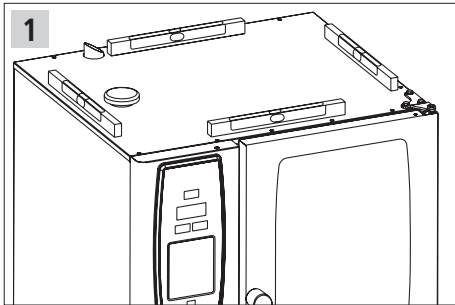
- Cover must lay on the table respectively on the top of the base cabinet.

pic. 3





Installation Type 20x1/1 GN, 20x2/1 GN



Installation type 20x1/1 GN, 20x2/1 GN
Ensure that the unit is level

pic. 1

Fix the floor locks, (supplied with the fixing set) to the floor with either screws and pins or with the special adhesive.

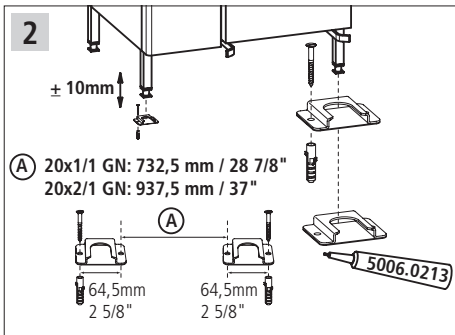
pic. 2

Next slide the unit into the floor locks

pic. 2

The mobile oven rack must be level when standing inside the unit

pic. 3



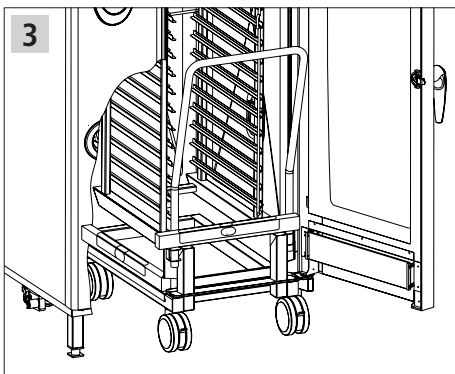
Attention: Observe height of the drain pipe



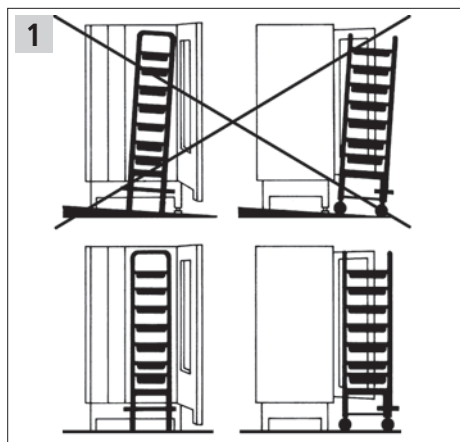
Option:

Using leg extension for more space underneath unit.

Install height extension for mobile oven rack see page 26



Levelling mobile oven racks 20x1/1 and 20x2/1 GN



If the floor is not level, an access ramp (not supplied) will be required. The incline must not exceed 4°.

pic. 1,2



Warning:

If the incline exceeds 4°, hot cooking liquid can slop out of the cooking containers.
Danger of scalding!



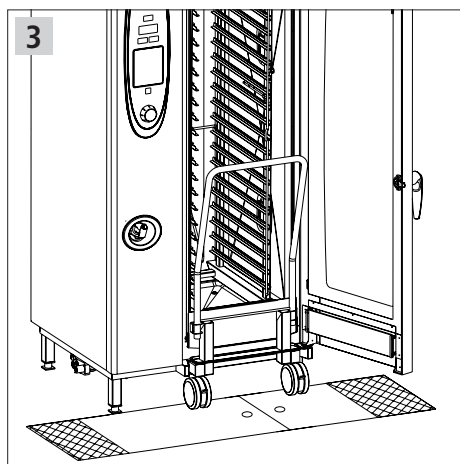
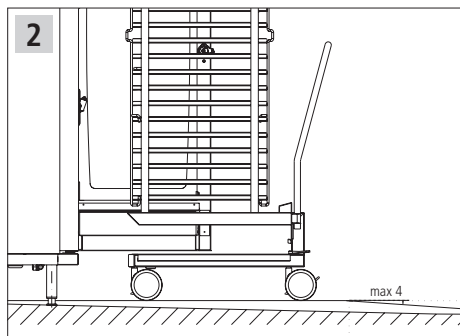
Attention:

An incorrect levelled trolley can cause malfunction during operating the unit (e. g. during Cleanjet)



Option:

Access ramp see page 26

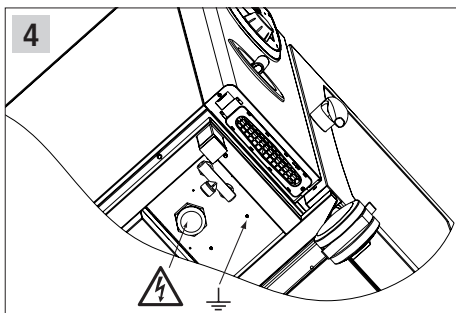
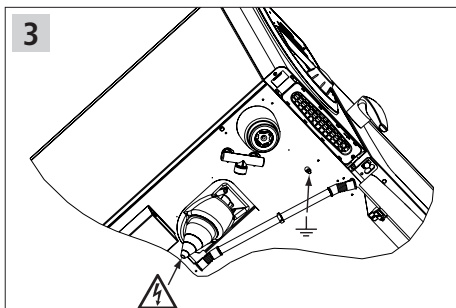
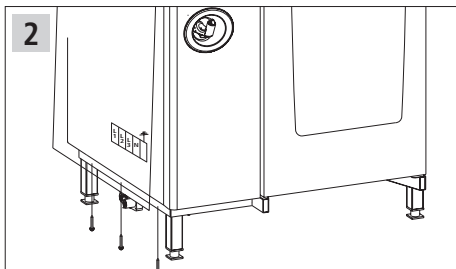
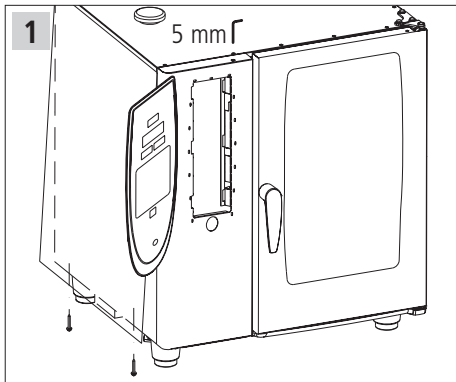


If there is a drain grill in front of the floor unit, a ramp should be placed over it to enable the mobile oven rack to be used.

pic. 3



Electrical connection



Danger

Observe local regulations and standards during installation

General information see next page

Electrical units

- Each appliance requires an independent fused power supply line
- A permanent electrical connection must be provided for the units.
Units manufactured as of 01.08.2007 can either be connected permanent or by using a plug
- Table units (6X1/1 GN - 10X2/1 GN) are equipped with a power cable, which is directly connected to the main contactor. The cable comes without plug and is approx. 2,5 m (8 ft) long.



Warning

Observe colour coding of the wires. Wrong connection can cause electric shock



Attention:

Wrong connection can cause damages (e. g. fan motor)

- Colour coding of wires:
yellow/green = earth
blue = neutral
brown, grey or black = Phase L1, L2, L3
- Floor units 20X1/1 GN and 20X2/1 GN are delivered without power cable
- The main contactor (table units) and the main terminals (floor models) are located in the electrical compartment and are accessible after removing the left side panel. pic. 1/2

Electrical connection



Gas units

- We recommend an independent fused power supply line.
- A permanent electrical connection must be provided for the units.
- All units are equipped with a power cable with-out plug, approx. 2,5 m (8 ft) long.
- The main terminals are located in the electrical compartment and are accessible after removing the left side panel. pic. 1/2
- Unit should be connected to a fused spur, observe local electrical regulations
- **Attention!**
Observe polarity of the mains!
No burner function with wrong polarity!



Warning

Observe colour coding of the wires. Wrong connection can cause electric shock



Attention:

Wrong connection can cause damages (e. g. fan motor)

- Colour coding of the power cable:
yellow/green = earth, blue = Neutral
brown, grey or black = Phase L1 (L2)

Gas and electrical units

- The stud for the earth bonding is located on the bottom side, underneath the control panel. Connect the wire for the earth bonding to this stud. pic. 3/4

General information:

- Follow the installation instructions and the information on the rating plate when connecting the unit.
- Comply with all local regulations and standards!
- We recommend an independent fused power supply line for each appliance.
- Units must be connected to an earth leakage circuit breaker.

- On-site installation: provide accessible all-pole disconnection device with a minimum of a 3 mm contact gap.
- Special voltages available on request.
- The cross-section of the power cables must be based on the current consumption and on local regulations.
- Applicable standards: EN 60335, IEC 335
- For electrical connection data, see page 34:
- Before disconnecting or reconnecting unit. Ensure electrical supply is isolated.
- The circuit diagram is located on the inner side of the left side panel.

For appliance connections, precise dimensions and connection points, see pages 36 and following.

Power cable :

- The exchange of the power cable may only be carried out by the manufacturer, his service agents or similar qualified personal

Electrical units

- Connect an H07RN-F supply cable (minimum), tighten the cable gland and the strain relief
- Connect the supply as follows:

Grey terminal:

L1, L2, L3 (non-phase-sequence-dependent)
Blue terminal: Neutral (only 3N AC)
Yellow/green terminal: Earth connection

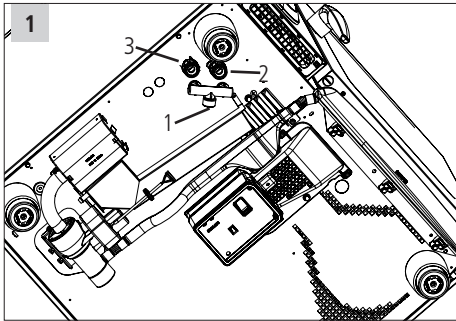
Gas:

- Units the power cable has to be exchanged a power cable with the following minimum quality has to be used:
H05 RN-F 3x2,5 mm²
- If the gas unit (20x1/1 / 20x2/1 GN) is protected by means of a safety cut-out it must observe that this cut-out is at least of characteristic "C".

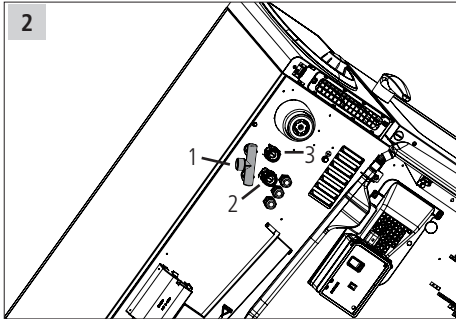


Water connection CareControl

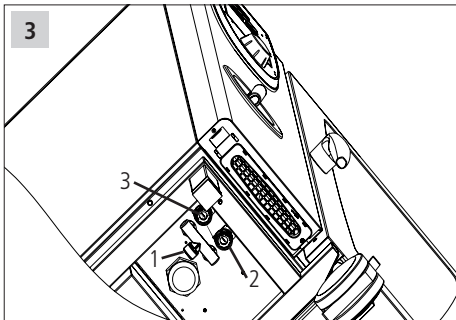
6x1/1GN - 10x1/1GN E/G



6x2/1GN - 10x2/1GN E/G



20x1/1GN - 20x2/1GN E/G



Legend to water connections valid for: pic. 1/2

- SelfCooking Center table units with CareControl manufactured as of 28.09.2008:

1 = Common water supply 3/4"
cold water 30°C/86°F

In case of split water connection

2 = Cold water supply 3/4"

(for quenching and hand shower 30°C/86°F).

3 = Treated water connection 3/4"

(steam generator, moistening, cleaning,
max. 60 °C/140°F).

Legend to water connections valid for: pic. 3

- SelfCooking Center floor units with CareControl manufactured as of 28.09.2008:

1 = Common water supply 3/4"
cold water max. 30°C/86°F

In case of split water connection

2 = Cold water, max 30°C/86°F, connection 3/4"
(quenching)

3 = Treated water connection 3/4"

(steam generator, moistening, hand shower,
max 60°C/140°F)

The appliance must be connected to the facility water supply with a supply hose that conforms to EN 61770 resp. IEC 61770 or of similar quality.

The water supply hose must fulfil the local or standard hygiene requirements for hoses in drinking water systems.

A water supply hose conform to EN 61770 with DVGW drinking water approval can be ordered at RATIONAL (# 2067.0709).

UK only:

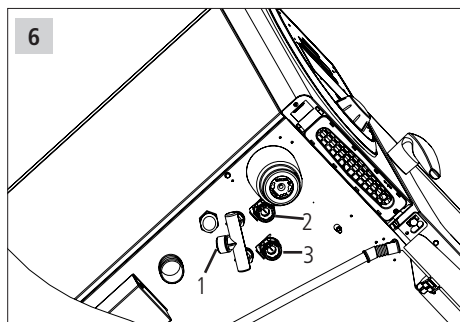
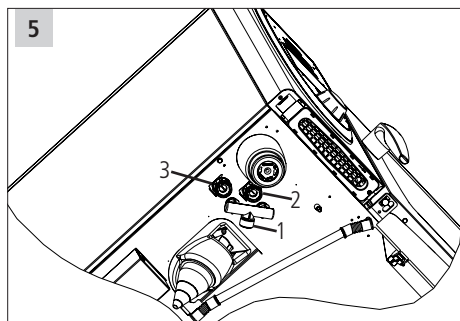
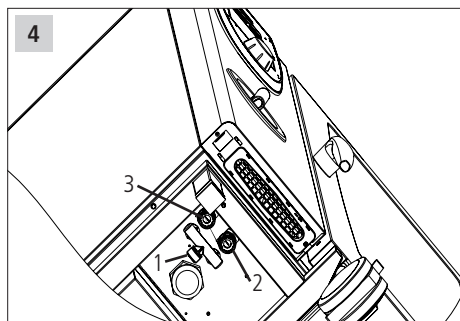
WRAS approval IRN R160

To be carried out by the installer:

An approved double check valve or some other no less effective backflow prevention device shall be fitted at the point of connection between the supply and the fitting

- Install individual shut-off valve for each appliance
- Rinse the water supply line prior to connection to the unit!
- Connected water pressure must be in the range 150 kPa - 600 kPa, recommended 300 kPa

Water connection



Maximum flow rate for each unit
 6x1/1, 10x 1/1: 20 l/min
 6x2/1, 10x2/1, 20x1/1, 20x2/1: 25 l/min

Average total water consumption is as follows (values excluding usage of hand shower)

Unit size:

6x1/1 6x2/1 10x1/1 10x2/1 20x1/1 20x2/1
 12,0 l/h 32 l/h 25,2 l/h 41,4 l/h 49,8 l/h 60,0 l/h

Note:

The manufacturer recommends especially on model Combi Master a preventive check of your equipment 6 months after installation to determine actual scale build up.

This should be done by a trained technician.

Water treatment:

For filter selection see pages 18/19

Treated water with a water hardness less than 6 °e may not be supplied, because such water can react aggressive and corrosive which can reduce the life cycle of the unit.

Connecting SelfCooking Center to water with hardness less than 8,75°e:

To avoid an excessive build up of foam the soft water switch should be set to "ON" in the basic settings. This can be done by a trained technician.

Legend to water connections valid for: pic. 4-6

- **SelfCooking Center without CareControl:**

- **Combi Master**

Floor models pic. 4

Table models electric pic. 5

Table models gas pic. 6

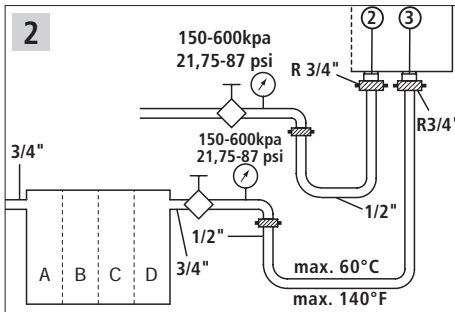
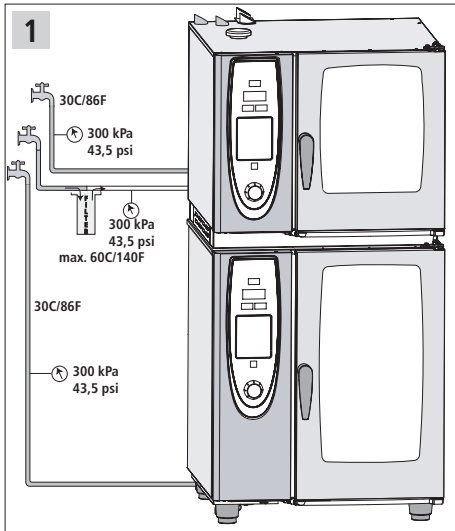
1 = Common water supply 3/4"
 cold water max. 30°C/86°F

In case of split water connection
 2 = Cold water, max 30°C/86°F, connection 3/4"
 (quenching)

3 = Treated water connection 3/4"
 (steam generator, moistening, hand shower,
 max 60°C/140°F)



Selection of water filter



In most cases it is not necessary to install a filter or water treatment for water supply. The integrated SC-automatic changes the water in the steam generator at regular intervals automatically. However under certain water conditions different filter applications (A, B, C, D) might be necessary.

Please consult your local water supply board for advise on chlorine (Cl₂), chloride (Cl⁻) and hardness of the water

A) Particle filter

pic. 1/2

When the water contains sand, iron particles or suspended matter, we recommend a 5-15 µm (micro meter) particle filter:

B) Active carbon filter

pic. 1/2

When the level of chlorine (Cl₂) in the water exceeds 0.2 mg/l (= ppm) (information available from the water company), an active carbon filter should be installed.

C) Complete De-Ionization

pic. 1/2

When the water has a chloride Cl⁻ concentration above 80 mg/l (= 80 ppm), a complete deionization system should be installed to avoid corrosion.

Note: Make sure a minimum conductivity of 50 µS/cm (micro Siemens) remains in the water.

D) Water softener:

pic. 1/2

Valid for SelfCooking Center with CareControl

These models will remove scale all by itself providing that the units are used as prescribed. These means a water softener is not needed.

Valid for SelfCooking Center without CareControl and Combi Master:

A water softener is recommended when a high level of scale (not containing chloride) is experienced.

Systems recommended: H⁺ Ion Exchanger.

Sodium ion exchangers (as used in dishwashers) must not be used.

Treated water with a water hardness less than

Selection of water filter



6 °e may not be supplied, because such water can react aggressive and corrosive which can reduce the life cycle of the unit.

Amongst others the following filter manufacturers offer adequate filter applications:

Brita, Falk.

Important for treated water connection:

Split the water supply to standard and treated water connection for each unit to extend filter capacity!

See pictures 1/2/3 page 16

Remove T-connection at water inlet

Connect cold untreated water to inlet position "2"

Connect treated water to inlet position "3"

Filter capacity:

Average treated water consumption is as follows (values excluding usage of hand shower)

6x1/1 6x2/1 10x1/1 10x2/1 20x1/1 20x2/1

3,0 l/h 8 l/h 6,3 l/h 10,4 l/h 12,5 l/h 15,0 l/h

Maximum flow rate 16 l/min

Important for filter connection:

Water supply hose / pipe size 1/2" minimum

Connection to filter : 3/4"

If a combination of filters is fitted, the sequence

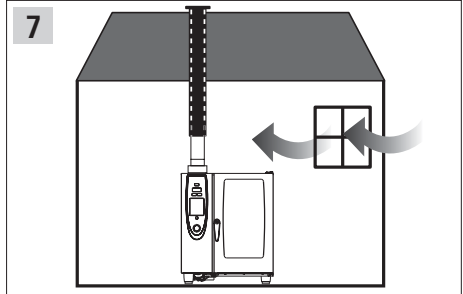
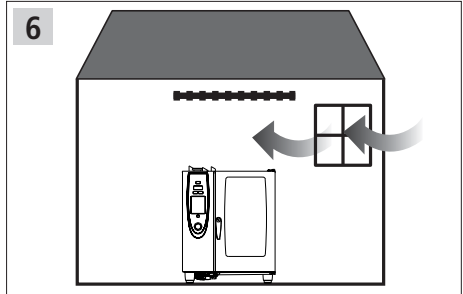
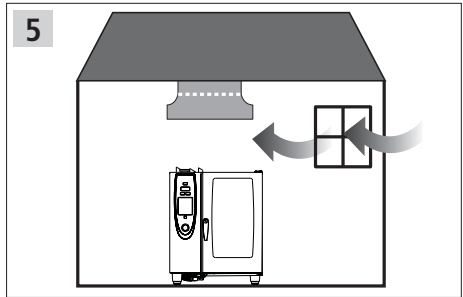
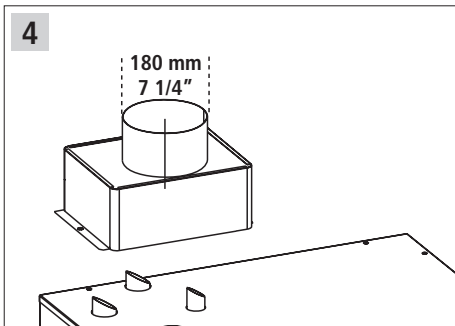
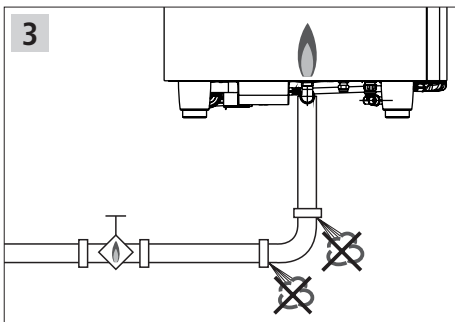
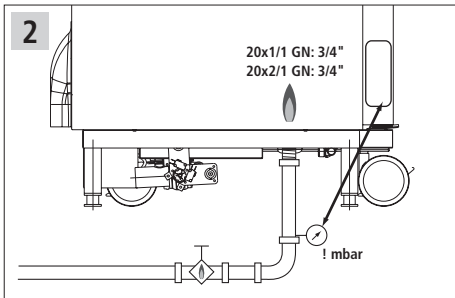
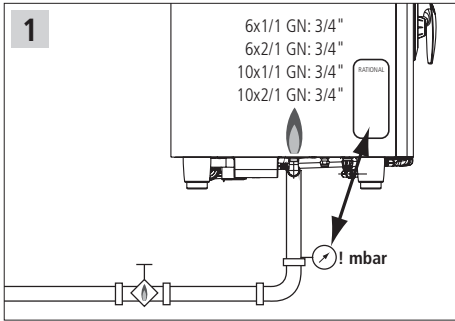
A-B and C or D of the filters in the direction of

flow must be observed

pic. 2



Gas connection pictures





Important!

To ensure that the burner settings made at the factory conform with the actual installation conditions, the waste gas (CO, CO₂) from the steam and hot-air burners must be analysed during commissioning. The corresponding values must be documented inside the unit. If the undiluted CO values are above 1000 ppm, the burner settings must be checked and if necessary adjusted by engineers trained and certified by the company.





Warning

Incorrect connection can engender fire hazard!

Comply with local gas authority regulations!

Follow installation instructions!

- Check that the gas type supplied is suitable for the unit.
- The diameter of the pipe must comply with local regulations
- Inner thread of gas connection: 
- Gas stop valve supplied for each unit.
- Gas connection with gas outlet socket is possible.
- All gas supply connectors must comply with local regulations.
- The unit must be secured against movement.
- Check the gas supply line for leakage. 

Attention:

- The unit is only to be connected to the gas supply by a locally approved gas installer. It is vital to ensure that the gas connection pipes as well as the connection pipes for the associated gas metering systems match the stipulated pipe widths.
- If the flow pressure deviates from the specified flow pressure (see table), inform the gas authorities. If the flow pressure of natural gas exceeds 30 mbar (12,04 in w. c.), the unit must not be switched on and the gas supply must be disconnected.
- Attention: The gas parts are designed for a maximum flow pressure of 65 mbar (26,09 in w. c.)

Type A3, B13, B23 gas unit

A3: Ambient-air-dependent gas-powered cooking range with fan assisted burners **without** exhaust collector.

For UK market can be used when replacing similar equipment in kitchens where instal-

lation of the air inlet/extraction was prior to September 2001 & providing there is a documented risk assessment to ensure that there will always be sufficient make-air and extraction available when running the equipment. Please observe Current Gas Regulations.

B13 Ambient-air-dependent gas-powered cooking range **with** fan assisted burners with exhaust collector.

B23 Ambient-air-dependent gas-powered cooking range with fan assisted burners **without** exhaust collector.

- Automatic direct ignition with ignition monitor.

Installation of draft diverter



The draft diverter is not shipped with the unit, but can be ordered under the following part numbers:

Unit size:	Art. Nos.:
6x1/1 GN	70.00.396
6x2/1 GN	70.00.398
10x1/1 GN	70.00.397
10x2/1 GN	70.00.399
20x1/1 GN	70.00.400
20x2/1 GN	70.00.401

Gas exhaust system

- The minimum clearance to the ceiling of the exhaust pipes is 200 mm
- Check that gas exhaust pipes are leak proof, in accordance with local regulations
- Waste gas pipes of aluminium or other materials which are not resistant to temperatures up to 200°C should not be used because of the high waste gas temperatures!

Gas exhaust system can be connected to the following:

(observe your local regulations)

1. Extractor hood
2. Fan roof
3. Directly into the flue









Gas connection / Gas consumption

Room ventilation



Warning

The rooms in which these appliances are installed must be well ventilated, in order to prevent an unacceptable build-up of harmful combustion products.

Danger of suffocation!

We recommend to service the gas units at least once a year in accordance with the specified standards

Gas consumption

Gas type	Required flow-pressure	Wobbe index (15°C, 1013mbar)		max. consumption on nominal heat load		
		Wi	Ws	6x1/1 GN	6x2/1 GN	10x1/1 GN
Nat. gas H G20	18-25 mbar	MJ/m ³	MJ/m ³	11 kW	21,5 kW	21,5 kW
Nat. gas L G25	20-30 mbar	45,67	50,72	1,2 m ³ /h	2,3 m ³ /h	2,3 m ³ /h
		37,38	41,52	1,4 m ³ /h	2,6 m ³ /h	2,6 m ³ /h
LPG G30	25-57,5 mbar	MJ/m ³	MJ/m ³	12 kW	23 kW	23 kW
LPG G31	25-57,5 mbar	80,58	87,33	1,01 kg/h	1,93 kg/h	1,93 kg/h
		74,75	81,19	1,04 kg/h	2,03 kg/h	2,03 kg/h

Gas type	Required flow-pressure	Wobbe index (15°C, 1013mbar)		max. consumption on nominal heat load		
		Wi	Ws	10x2/1 GN	20x1/1 GN	20x2/1 GN
Nat. gas H G20	18-25 mbar	MJ/m ³	MJ/m ³	32 kW	43 kW	64 kW
Nat. gas L G25	20-30 mbar	45,67	50,72	3,4m ³ /h	4,6 m ³ /h	6,8 m ³ /h
		37,38	41,52	3,9 m ³ /h	5,3 m ³ /h	7,9m ³ /h
LPG G30	25-57,5 mbar	MJ/m ³	MJ/m ³	34 kW	46 kW	67 kW
LPG G31	25-57,5 mbar	80,58	87,33	2,86 kg/h	3,86 kg/h	5,63 kg/h
		74,75	81,19	3,01 kg/h	4,05 kg/h	6,03 kg/h

Exhaust gas- and room volume

Unit size	6x1/1 GN	6x2/1 GN	10x1/1 GN	10x2/1 GN	20x1/1 GN	20x2/1 GN
Room size free ventilation	44,0 m ³	86,0 m ³	86,0 m ³	128,0 m ³	172,0 m ³	256 m ³
Room size permanent ventilation	22,0 m ³	43,0 m ³	43,0 m ³	64,0 m ³	86,0 m ³	128 m ³
Combustion air supply	17,6 m ³ /h	34,4 m ³ /h	34,4 m ³ /h	51,2 m ³ /h	68,8 m ³ /h	102,4 m ³ /h
Waste gas volume	31,4 m ³ /h	81 m ³ /h	76,6 m ³ /h	116 m ³ /h	140,6 m ³ /h	233.3 m ³ /h
Waste gas temperature	310°C	450°C	490°C	460°C	390°C	465°C

Free ventilation = Combustion air supply through windows and doors

Permanent ventilation = Combustion air supply by two openings to the outside with a free cross section of 150 cm² (one opening near the ceiling, the other opening near the floor)

Attention: Data are calculated under German standards

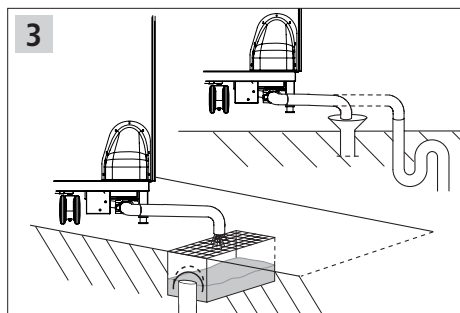
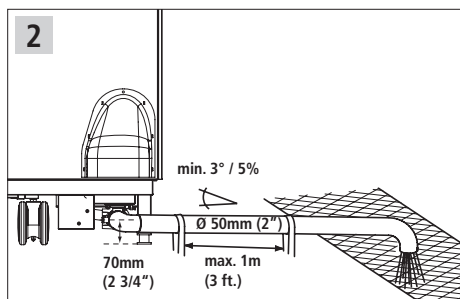
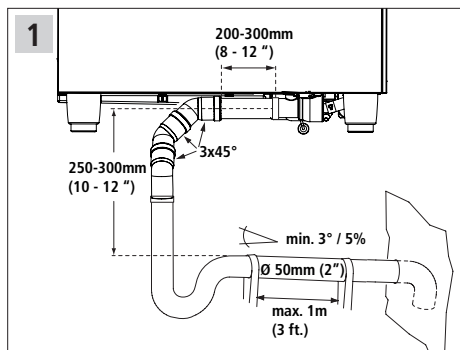
Room size free ventilation = 4 x Kilowatt power of the unit (e. g. unit 6x1/1 GN: 11KW x 4 = 44 m³)

Room size permanent ventilation = 2 x Kilowatt power of the unit (e. g. unit 6x1/1 GN: 11KW x 2 = 22 m³)

Combustion air supply = 1,6 x Kilowatt power of the unit (e. g. unit 6x1/1 GN: 11KW x 1,6 = 17,6 m³/h)

Observe local regulation/standards for calculating the values!

Drain connection



Option table models:

Using 110 mm (approx. 4") legs for extended space underneath unit. Height adjustable transport trolley, see page 25



Option floor models:

Using leg extension for more space underneath unit. Install height extension for mobile oven rack see page 26

- The appliance complies with the relevant regulations (DVGW, SVGW, KIWA, WRC)



Attention

Use pipes capable of withstanding steam temperature, don't use hoses

- **Drain/water connection set**
Art. no.: 60.70.464
- Welding of drain pipe to the units drain is not permissible (welding can cause damages to the unit)
- **DN 50 pipe** with constant gradient (min. 5% or 3°); do not reduce the diameter of the pipe.
- Fixed connection with odour lock permissible; a ventilated drain line is integral to the appliance pic. 1,2
- Where there is an existing floor drain without air trap, a clear outflow of 2 cm (1") must be provided. pic. 3
- We recommend to connect every unit to a separate drain.
- Units 6x1/1GN up to 10x2/1GN can be connected either to a wall drain or to a floor drain
- Units 20x1/1GN or 20x2/1GN can only be connected to a floor drain.



Option: For reduction of steam escape via the ventilation pipe a condensate collector or an additional ascending pipe can be used. See pages 26/27

Note drainage dimensions: short-term pumped discharge volume of steam generator 0.7 l/sec (0,18 gal/sec.)

- Average waste water temperature: 65°C
- Applicable standard: DIN 1986, Part 1

Attention: The centre height drain pipe of table models is 63 mm (2 1/2") and floor models is 70 mm (2 7/8").



Ventilation, technical data, heat emission

Ventilation:

An exhaust hood is not essential. If one is fitted, bear the following points in mind:

- Comply with all local regulations and standards;
- The hood should project 300-500 mm (1-1,6 ft) in front of the appliance;
- Install a grease filter in the projecting part of the hood;
- An exhaust hood is available as an option for 6x1/1 - 20x1/1 GN units.
- For installation of the hood, please follow the instruction of the corresponding installation manual

Technical data:

Noise emission level: <70dBA Hoseproofness: IPX5

Heat emission:

Electrical units:	6x1/1 GN	6x2/1GN	10x1/1 GN	10x2/1 GN	20x1/1 GN	20x2/1 GN
latent:	2.143 kJ/h	4.167 kJ/h	3.529 kJ/h	6.667 kJ/h	7.200 kJ/h	12.500 kJ/h
sensible:	2.727 kJ/h	5.000 kJ/h	4.615 kJ/h	9.474 kJ/h	9.000 kJ/h	14.286 kJ/h

Gas units:	6x1/1 GN	6x2/1GN	10x1/1 GN	10x2/1 GN	20x1/1 GN	20x2/1 GN
latent:	2.143 kJ/h	4.167 kJ/h	3.529 kJ/h	6.667 kJ/h	7.200 kJ/h	11.583 kJ/h
sensible:	2.571 kJ/h	5.000 kJ/h	4.286 kJ/h	9.231 kJ/h	8.780 kJ/h	13.636 kJ/h

Weight of electric units:

SCC units:

6 x 1/1 GN: 110,0 kg 6 x 2/1 GN: 142,5 kg
 10 x 1/1 GN: 135,5 kg 10 x 2/1 GN: 182,0 kg
 20 x 1/1 GN: 258,0 kg 20 x 2/1 GN: 332,0 kg
 Mobile:
 20 x 1/1 GN: 275,5 kg 20 x 2/1 GN: 352,0 kg

CM units without

6 x 1/1 GN: 99,0 kg 6 x 2/1 GN: 133,0 kg
 10 x 1/1 GN: 124,5 kg 10 x 2/1 GN: 175,5 kg
 20 x 1/1 GN: 251,5 kg 20 x 2/1 GN: 326,0 kg
 20 x 1/1 GN: 269,0 kg 20 x 2/1 GN: 346,0 kg

Weight of gas units:

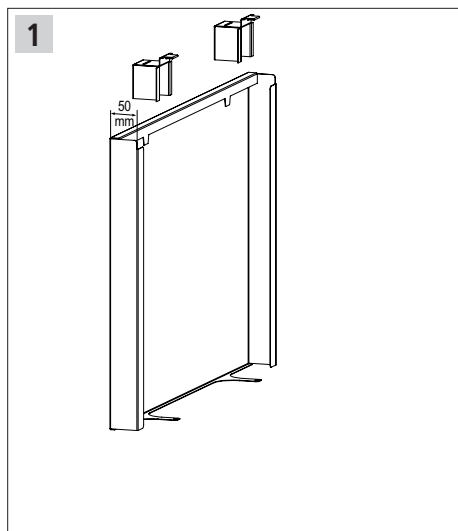
SCC units:

6 x 1/1 GN: 126,0 kg 6 x 2/1 GN: 168,0 kg
 10 x 1/1 GN: 154,5 kg 10 x 2/1 GN: 198,0 kg
 20 x 1/1 GN: 286,0 kg 20 x 2/1 GN: 370,5 kg
 Mobile:
 20 x 1/1 GN: 303,5 kg 20 x 2/1 GN: 390,5 kg

CM units without

6 x 1/1 GN: 121,0 kg 6 x 2/1 GN: 158,5 kg
 10 x 1/1 GN: 148,0 kg 10 x 2/1 GN: 189,5 kg
 20 x 1/1 GN: 261,0 kg 20 x 2/1 GN: 369,5 kg
 20 x 1/1 GN: 278,5 kg 20 x 2/1 GN: 389,5 kg

Right of technical modifications reserved.



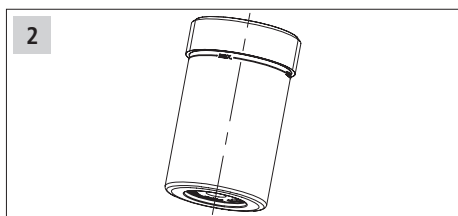
Heat shield left and right

Unit size:

6x1/1GN	Art.-No.: 60.70.390 left
6x1/1GN	Art.-No.: 60.70.736 right
10x1/1GN	Art.-No.: 60.70.391 left
10x1/1GN	Art.-No.: 60.70.743 right
6x2/1GN	Art.-No.: 60.70.392
10x2/1GN	Art.-No.: 60.70.393
20x1/1GN	Art.-No.: 60.70.394
20x2/1GN	Art.-No.: 60.70.395

If the minimum required distance to heat sources on the left or right side (right side only 6x1/1 GN and 10x1/1 GN) can not be maintained a heat shield will help to reduce the heat stress to the unit

pic 1



Height extension of table units.

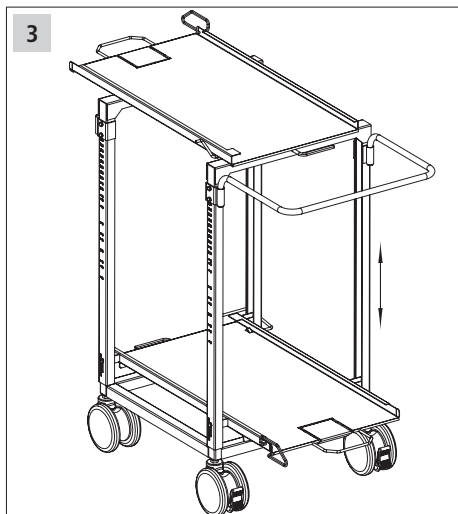
(6x1/1 GN up to 10x2/1GN)

Should the distance between floor and bottom of table units be too low (e.g. when installing combi duo), then the standard lower parts of the legs can be replaced by longer legs (110 mm).

Art.-No.: 12.00.224

pic. 2

Attention: In this case the height of the upper rail in the cooking cabinet exceeds 1600 mm (63")



When using mobile oven racks and transport trolleys the height difference can be compensated by a height adjustable transport trolley.

pic. 3

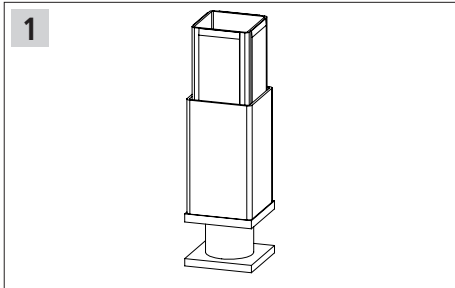
Height adjustable trolley:

Unit size:

6x1/1 and 10x1/1 GN	Art.-No.: 60.60.188
6x2/1 and 10x2/1 GN	Art.-No.: 60.70.160



Option

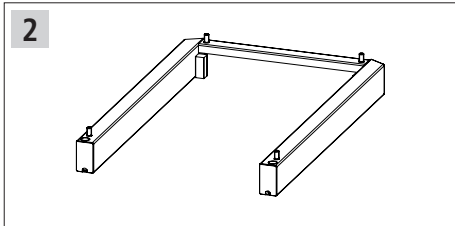


Foot extension for floor units

Art.-No.: 60.21.179

Should the distance be too low between floor and bottom of floor units, foot extensions for floor units can be used pic. 1

Attention: In this case the height of the upper rail exceeds 1600 mm (63").



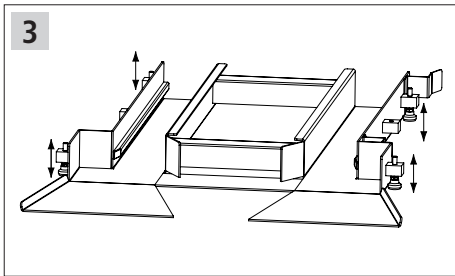
When using these foot extensions a height compensation of the mobile oven rack must be carried out by adding an additional frame. pic. 2

20x1/1GN

Art.-No.: 60.21.184

20x2/1GN

Art.-No.: 60.22.184



Ramp for mobile oven rack floor models

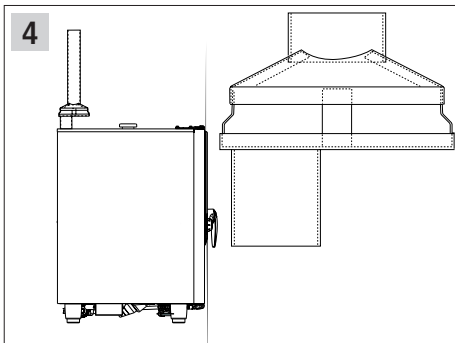
20x1/1GN

Art.-No.: 60.21.080

20x2/1GN

Art.-No.: 60.22.181

If the floor underneath the unit is not level the mobile oven rack ramp can level out this unevenness. The adjustment range of the legs is between +/- 10 mm. pic. 3



Condensation breaker

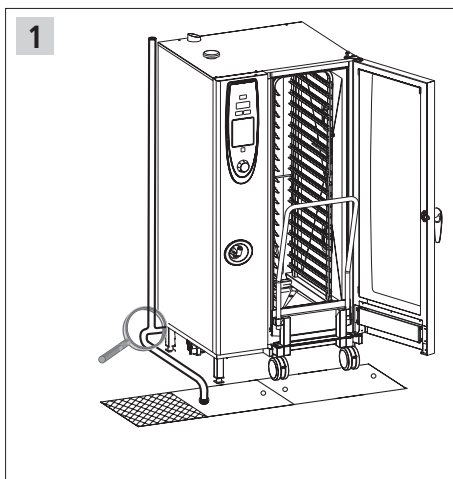
Under critical installation conditions (e.g. installation in front kitchens), escape of steam at the vent pipe can be reduced by fitting a condensation breaker pic. 4

Unit size:

6x1/1GN / 10x1/1GN

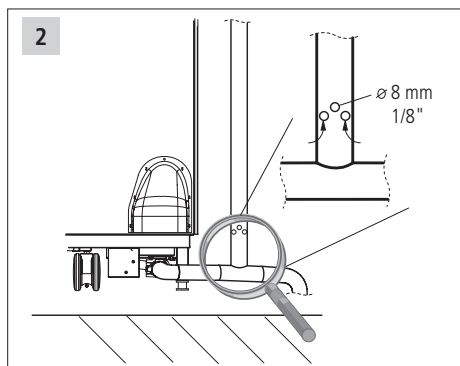
Art.-Nos.: 8710.1309

Option



Also for reducing the steam escape at the drain pipe an additional vent pipe can be fitted to the drain pipe. In this extra vent pipe holes must be drilled where air is sucked in and condensates the steam

pic 1/2



Interfaces

a) A serial interface (RS232) is not standard, but can be retrofitted into all units.

Unit size

6x1/1GN - 10x2/1GN

Art.-No.: 87.00.006

20x1/1GN - 20x2/1GN

Art.-No.: 87.00.007

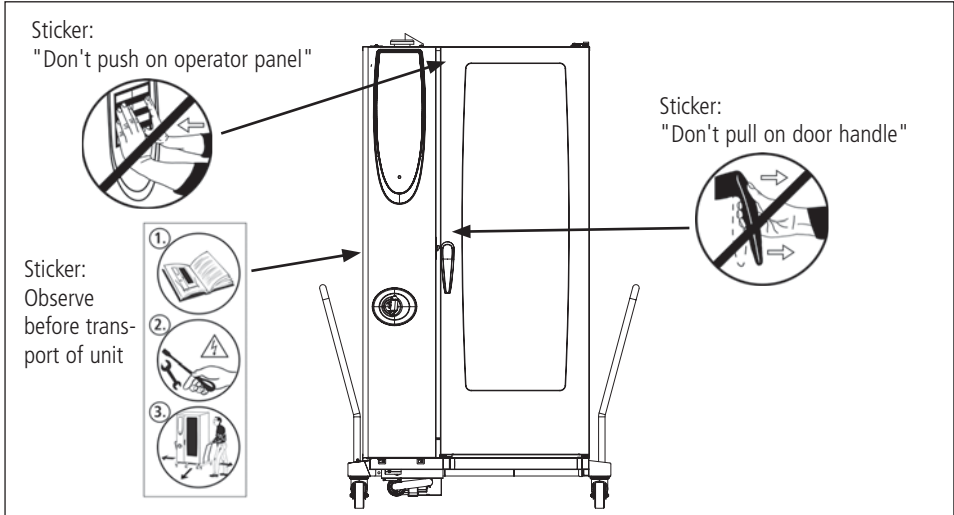
b) SCC units are equipped with USB interface as a standard.



Mobile floor models 20x1/1GN and 20x2/1GN

Attention:

The following warning stickers are affixed to the unit:



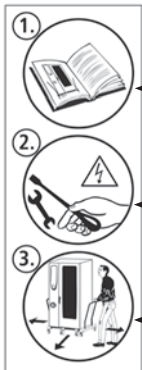
When moving the unit the following must be observed:

← 1. Don't push at the operator panel. This can destroy the control unit behind it.



← 2. Don't pull the unit using the door handle, this can damage the door lock mechanism.

Prior to the transport of the unit observe the following procedure:

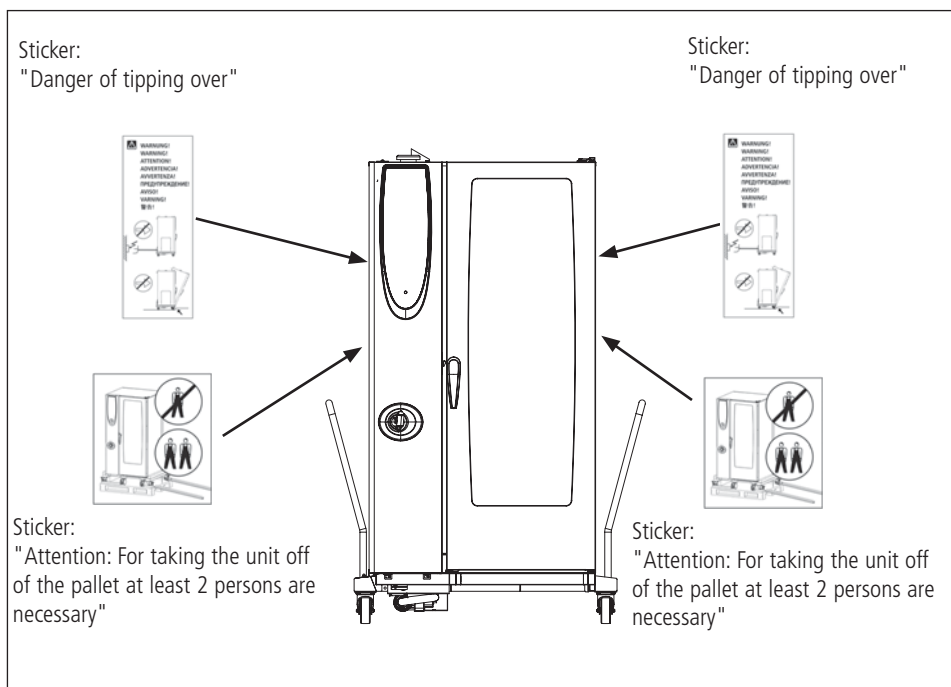


← 1. Read installation and/or user manual.

← 2. Disconnect all supply lines at the unit to avoid damages.

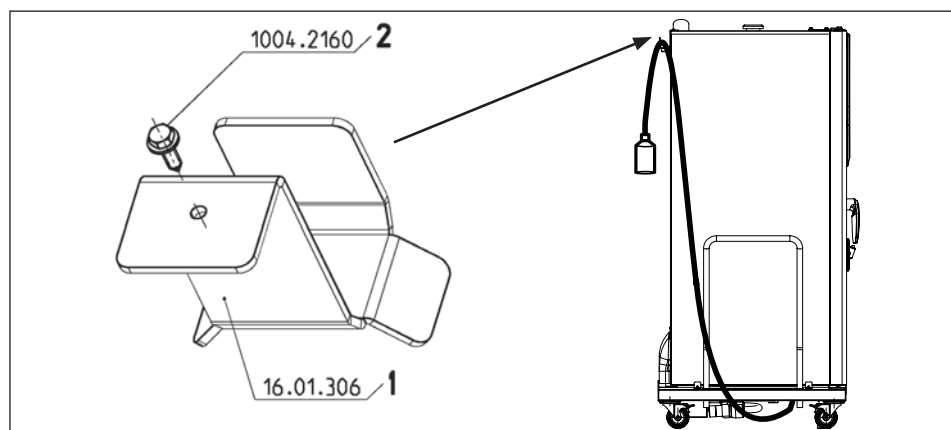
← 3. Move unit only by using the handle

Mobile floor models 20x1/1GN and 20x2/1GN



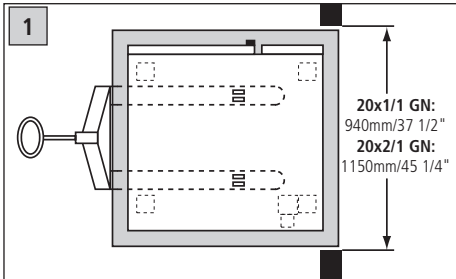
When moving the unit the power cord must be secured against damage, therefore at the top rear side of the unit the enclosed holding device must be installed.

- Undo the tapping screw at the left rear side and fasten the holding device with the screw to the top cover.





Mobile floor models 20x1/1GN and 20x2/1GN

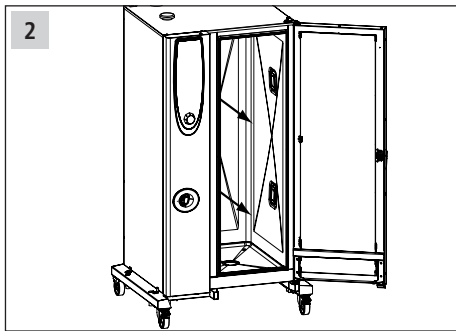


For taking the unit off of the pallet see next page.

For transport of the unit with or without pallet the following minimum measures have to be observed:

	width	height
With pallet		
20x1/1GN	940 mm (37 1/8")	1990 mm (78 3/8")
20x2/1GN	1150 mm (45 3/8")	1990 mm (78 3/8")
w/o pallet		
20x1/1GN	905 mm (35 3/4")	1840 mm (72 1/2")
20x2/1GN	1118 mm (44 1/8")	1840 mm (72 1/2")

pic. 1



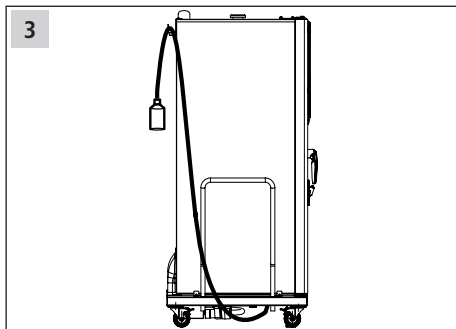
Attention:

The unit may only be moved / transported when it is switched off and all supply lines are disconnected. When moving the unit take the trolley out of the cooking cabinet.

For pulling the unit out of the site, in case there is not enough space at the left or right side:

- Cool down the unit below 40°C (100°F)
- Open cabinet door
- Pull at the interior cabinet.

pic. 2



Attention

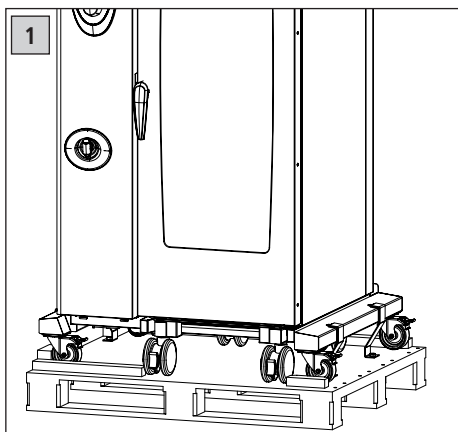
**When pulling the unit out of the site the door can close accidentally.
Crushing hazard!**

For transport of the unit:

- Empty steam generator. Procedure see operator manual.
- Disconnect water supply, drain and additionally on gas units the gas supply line at the connection points at the unit.
- Only exception is the power cord installed in electric units 3 NAC 400V and gas units. These units can be connected with plug. In this case, for transport, the power cord must be protected against damage by hooking it up in the holding device at the rear side of the unit

pic. 3

Mobile floor models 20x1/1GN and 20x2/1GN



- The unit is delivered on a special transport pallet. This pallet can be used several times. Therefore don't dispose the pallet. pic. 1

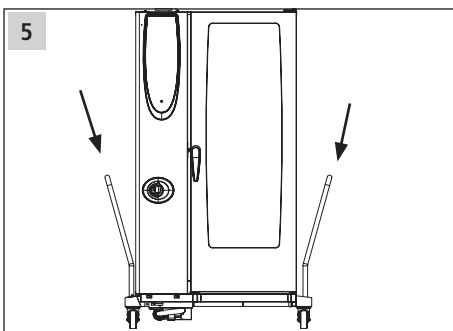
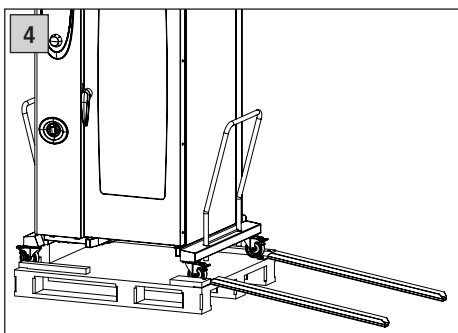
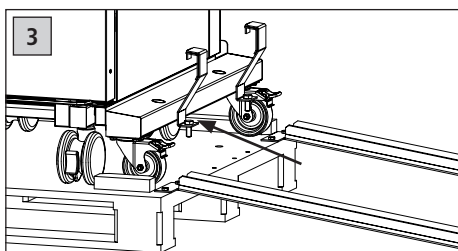
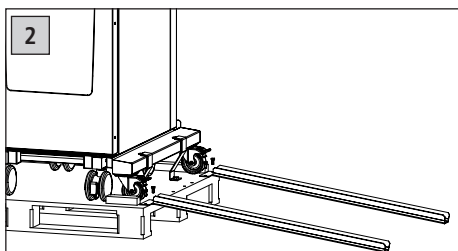


Attention:

To avoid injuries make sure that always two persons are available for taking the unit off of the pallet. Crushing hazard!

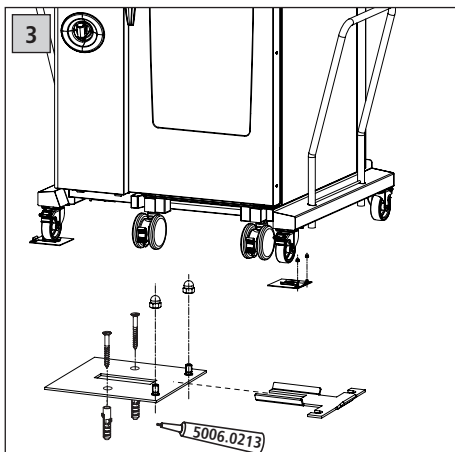
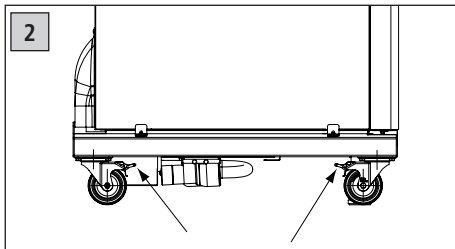
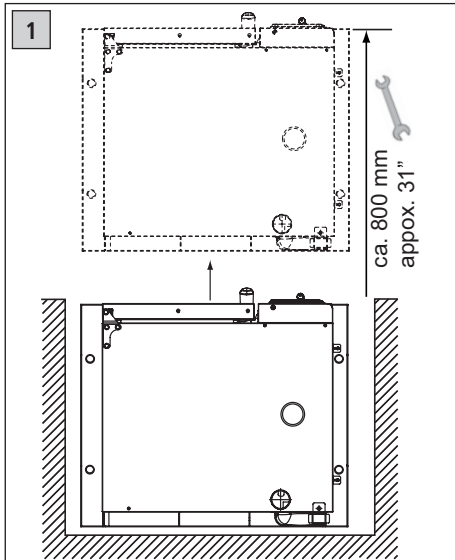
For rolling the unit off the pallet, proceed as follows:

- a) There are rails stored on the pallet underneath the unit. Fix these rails to the right side of the pallet using the enclosed screws (screw driver 13 mm) pic. 2
- b) Remove the retaining bracket at the left and right side of the base frame of the unit by loosening the corresponding screws (screw driver 19 mm). pic. 3
- c) Stick the handle, which is enclosed in the scope of delivery (handle of the trolley) into the holes of the right base frame. Take trolley out of the cooking cabinet and roll the unit down from the pallet. pic. 4
- d) When using the pallet again for transportation fix the unit to the pallet using the retaining brackets and the corresponding screws.





Mobile floor models 20x1/1GN and 20x2/1GN



- Minimum space of 50 mm (2") at the left, right and rear side of the unit must be maintained. For connecting power, gas and water we recommend a space of 500 mm (20") at the left side of the unit. At sites where not enough space is available make sure, that all supply lines are long enough for moving the unit that far forward that the supply lines can be connected and disconnected. pic. 1



Attention:

- Should the ambient temperature at the left side of the unit be too high a safety shut down can occur.
- Do not install fryer at the rear side of the unit.
- The unit's must only be installed in frost-free rooms.

- The floor at the site must be level. A height adjustment of the unit is not possible.

- The unit must be secured at the site by pressing the brakes of the casters. pic. 2

- Additionally the unit is equipped with fixing plates pic 3

These plates can either be glued to the floor with a special adhesive or with screws and dowels.

Screws and dowels are not included in the scope of delivery. Run the unit onto these plates. Secure the unit with the slider and fasten the slider with the nuts.

- Trolley must stand level inside the unit.

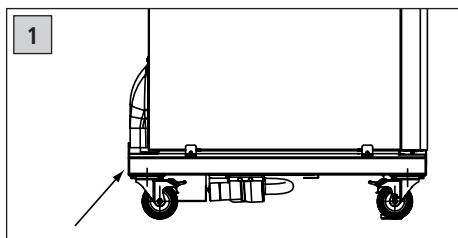


Attention:

An incorrect levelled trolley can cause malfunction during operating the unit (e. g. during Cleanjet)

Attention: Observe height of the drain.

Mobile floor models 20x1/1GN and 20x2/1GN

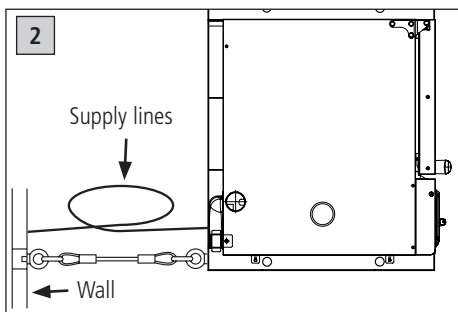


- Additionally the unit must be secured against slipping by a chain or cable in order to prevent damage to the electricity or gas supply line. Therefore a hole is in the left frame at the rear for connecting the chain or cable. pic. 1/2



Attention:

To avoid damages on the supply lines, the restraint cable must be shorter than water, gas and electrical lines



1. Electric connection

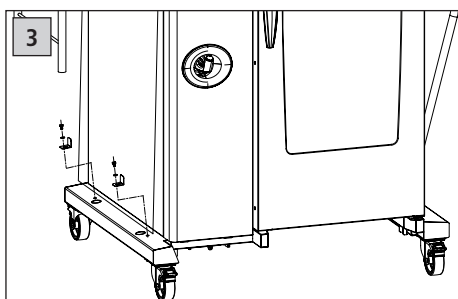
Attention:

Observe your local regulations!

Basic hints and colour coding of the wires see pages 14 and 15.

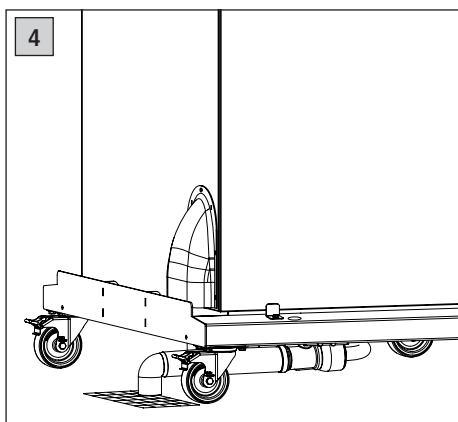
Electric units:

- Each appliance requires an independent fused power supply line
- The units 20x1/1 GN and 20x2/1 GN are delivered without power cord and without plug.
On units with voltage version 3 NAC 400V a connection with cable and plug is possible.
- The connection terminals are located in the electric compartment. To get access open left side panel pic. 3



Gas units:

- We recommend an independent fused power supply line for each unit.
- The units are delivered with a power cord approx 2,5 m (8 ft) long without plug.
- To get access to the terminals open left side panel.



2. For drain connection we suggest to have a floor drain at the rear left side of the unit. In this case a drain pipe with elbow piece can be connected to the unit. The pipe should have a clear outflow (air gap) of 2 cm (1") above the floor drain pic. 4



Connected loads in accordance with VDE Guideline

Electric units:

	Power kW						Electricity consumption A					
	6x1/1	6x2/1	10x1/1	10x2/1	20x1/1	20x2/1	6x1/1	6x2/1	10x1/1	10x2/1	20x1/1	20x2/1
3 AC 200V	10,1	19,5	17,5	34,5	34,5	57,5	24	53,5	48	100	100	166
3 AC 230V	10	21	19	37k	37	62	25	53	48	93	93	156
3 NAC 400V	10	21	19	37	37	62	14,5	30,5	27,5	53,5	53,5	89,5
3 AC 400V	10	21	19	37	37	62	14,5	30,5	27,5	53,5	53,5	89,5
3 NAC 415V	10,5	22,5	20,5	40,5	40,5	66,5	14,5	31,5	28,5	56,5	56,5	92,5
3 AC 440V	10	21	19	37	37	62	13	28	25	49	49	81,5
3 AC 480V	10	21	19	37	37	62	12	25,5	23	44,5	44,5	75

Fuse protection = A

	6x1/1	6x2/1	10x1/1	10x2/1	20x1/1	20x2/1
3 AC 200V	35	63	63	100	100	200
3 AC 230V	35	63	63	100	100	200
3 NAC 400V	16	32	32	63	63	100
3 AC 400V	16	32	32	63	63	100
3 NAC 415V	16	32	32	63	63	100
3 AC 440V	16	32	32	63	63	100
3 AC 480V	15	30	25	50	50	80

Gas units:

	Power kW						Electricity consumption A					
	6x1/1	6x2/1	10x1/1	10x2/1	20x1/1	20x2/1	6x1/1	6x2/1	10x1/1	10x2/1	20x1/1	20x2/1
1NAC 100V	0,3	0,4	0,39	0,6	0,7	1,1	3	4,0	3,9	6,0	7	11
1NAC 110V	0,3	0,4	0,39	0,6	0,7	1,1	2,7	3,6	3,5	5,5	6,4	10
1NAC 120V	0,3	0,4	0,39	0,6	0,7	1,1	2,5	3,3	3,2	5,0	5,8	9,2
1NAC 127V	0,3	0,4	0,39	0,6	0,7	1,1	2,4	3,2	3,1	4,7	5,5	8,7
1NAC 220V	0,3	0,4	0,39	0,6	0,7	1,1	1,4	1,6	1,6	2,1	3,6	4,5
1NAC 230V	0,3	0,4	0,39	0,6	0,7	1,1	1,3	1,8	1,7	2,6	3,0	4,8
1NAC 240V	0,3	0,4	0,39	0,6	0,7	1,1	1,2	1,7	1,6	2,5	2,9	4,6
2 AC 200V	0,3	0,4	0,39	0,6	0,7	1,1	1,5	2,0	1,95	3,0	3,5	5,5
2 AC 220V	0,3	0,4	0,39	0,6	0,7	1,1	1,4	1,9	1,8	2,7	3,2	5,0
2 AC 230V	0,3	0,4	0,39	0,6	0,7	1,1	1,3	1,8	1,7	2,6	3,0	4,8
2 AC 240V	0,3	0,4	0,39	0,6	0,7	1,1	1,2	1,7	1,6	2,5	2,9	4,6

The maximum allowable tolerance of the supply voltage (supply voltage see name plate) is in the range of
-15% up to +10%

Conversion tables



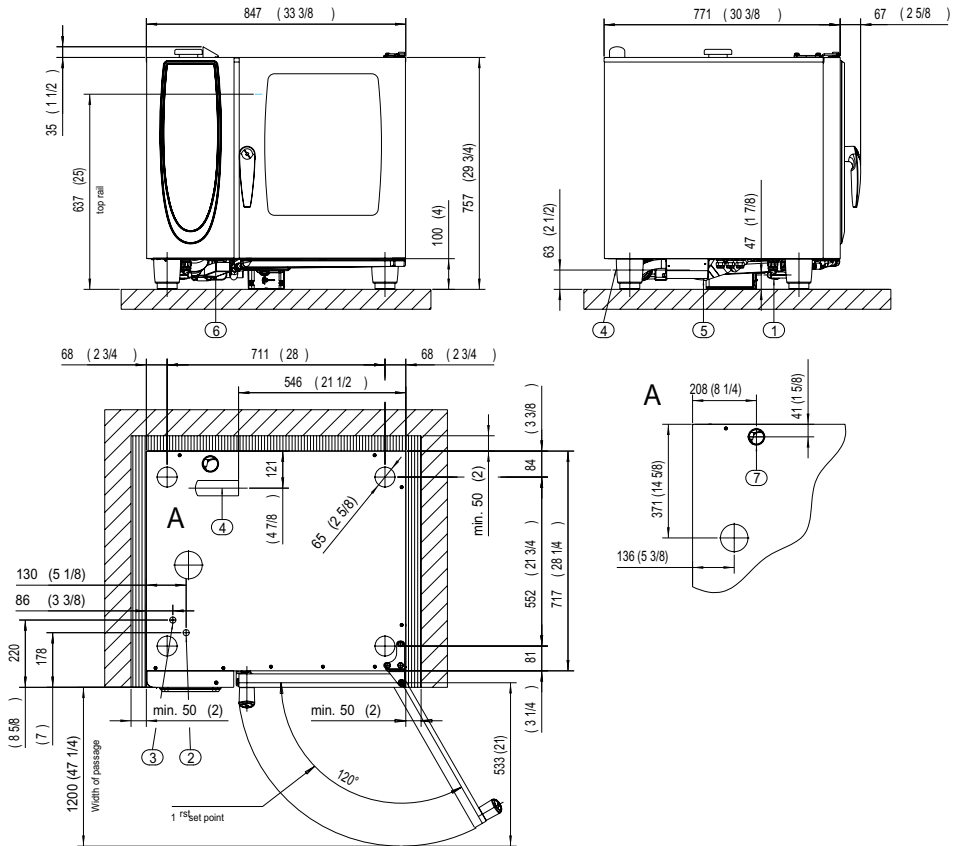
	°dH	°f	°e	ppm	mmol/l	gr/gal(US)	mval/kg
1 °dH	1	1,79	1,25	17,9	0,1783	1,044	0,357
1 °f	0,56	1	0,70	10,0	0,1	0,584	0,2
1 °e	0,8	1,43	1	14,32	0,14	0,84	0,286
1 ppm	0,056	0,1	0,07	1	0,01	0,0584	0,02
1 mmol/l	5,6	0,001	0,0007	100	1	0,00058	2
1 gr/gal (US)	0,96	1,71	1,20	17,1	0,171	1	0,342
1 mval/kg	2,8	5,0	3,5	50	0,5	2,922	1

1 °dH:	10,00 mg CaO/kg (Germany)	1 ppm :	0,56 mg CaO/kg (USA)	1 gr/gal :	9,60 mg CaO/kg (USA)
	17,86 mg CaCO ₃ /kg		1,0 mg CaCO ₃ /kg		64,8 mg CaCO ₃ /gal
	7,14 mg Ca ₂ ⁺ /kg		0,40 mg Ca ₂ ⁺ /kg		17,11 mg CaCO ₃ /kg
1 °f :	5,60 mg CaO/kg (France)	1 mmol/l :	56,00 mg CaO/kg (chem. konz.)		6,85 mg Ca ₂ ⁺ /kg
	10,0 mg CaCO ₃ /kg		100,0 mg CaCO ₃ /kg		
	4,00 mg Ca ₂ ⁺ /kg		39,98 mg Ca ₂ ⁺ /kg		
1 °e :	8,01 mg CaO/kg (GB)	1 mval/kg :	28,00 mg CaO/kg (Milliäquivalent)		
	14,3 mg CaCO ₃ /kg		50,0 mg CaCO ₃ /kg		
	5,72 mg Ca ₂ ⁺ /kg		19,99 mg Ca ₂ ⁺ /kg		

kPa	mbar	psi	inch/wc	kPa	mbar	psi	inch/wc
0,1	1	0,0147	0,4014	4	40	0,588	16,0560
0,2	2	0,0294	0,8028	4,5	45	0,6615	18,0630
0,3	3	0,0441	1,2042	5	50	0,735	20,0700
0,4	4	0,0588	1,6056	5,5	55	0,8085	22,0770
0,5	5	0,0735	2,0070	6	60	0,882	24,0840
0,6	6	0,0882	2,4084	6,5	65	0,9555	26,0910
0,7	7	0,1029	2,8098	7	70	1,029	28,0980
0,8	8	0,1176	3,2112	7,5	75	1,1025	30,1050
0,9	9	0,1323	3,6126	8	80	1,176	32,1120
1	10	0,147	4,0140	8,5	85	1,2495	34,1190
1,2	12	0,1764	4,8168	9	90	1,323	36,1260
1,4	14	0,2058	5,6196	9,5	95	1,3965	38,1330
1,6	16	0,2352	6,4224	10	100	1,47	40,1400
1,8	18	0,2646	7,2252	20	200	2,94	80,2800
2	20	0,294	8,0280	30	300	4,41	120,4200
2,5	25	0,3675	10,0350	40	400	5,88	160,5600
3	30	0,441	12,0420	50	500	7,35	200,7000
3,5	35	0,5145	14,0490	100	1000	14,7	401,4000

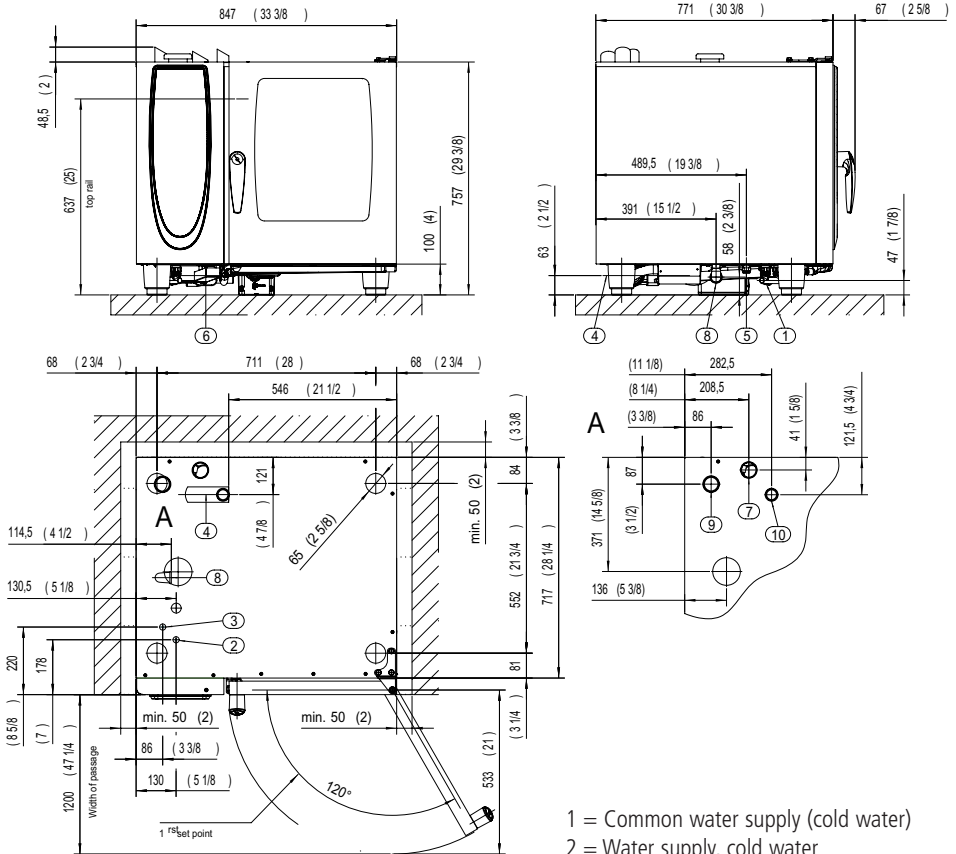


Schematic drawing 6x1/1 GN CareControl



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
- Measures in mm(inch)

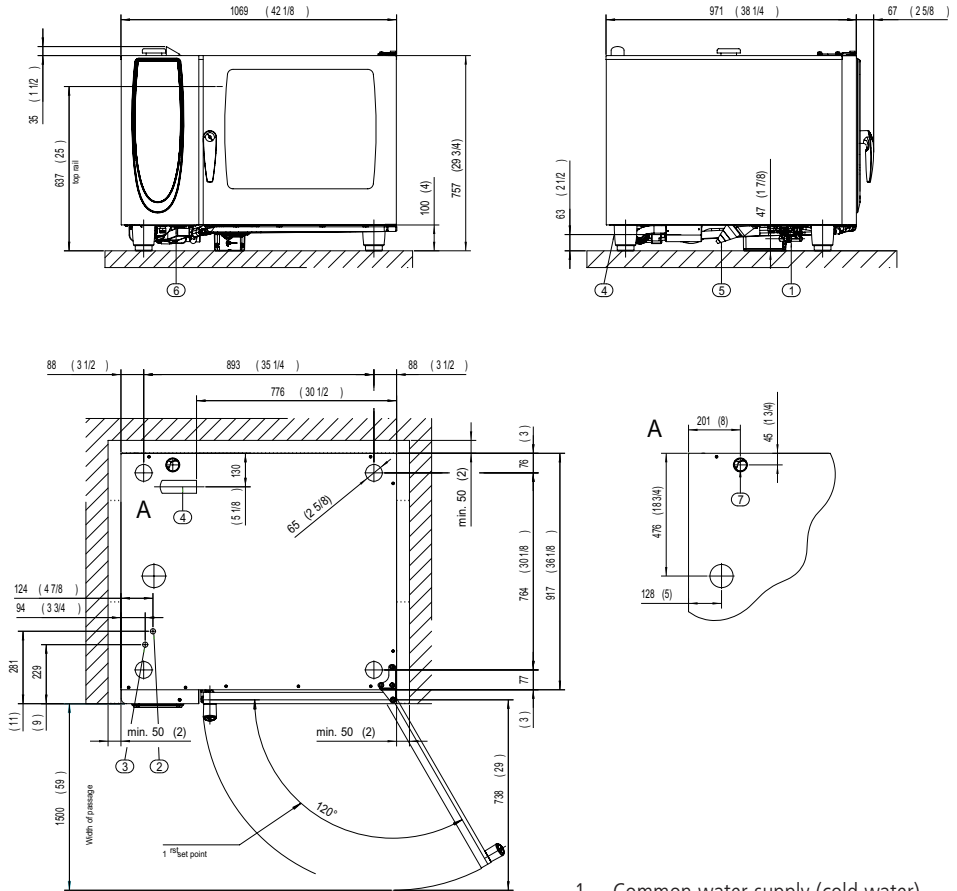
Schematic drawing 6x1/1 GN Gas CareControl



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
 - 8 = Gas supply 3/4"
 - 9 = Exhaust pipe steam
 - 10 = Exhaust pipe hot air
- Measures in mm(inch)

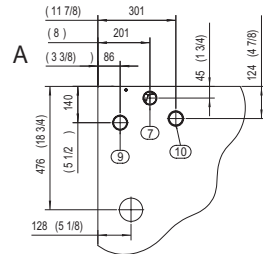
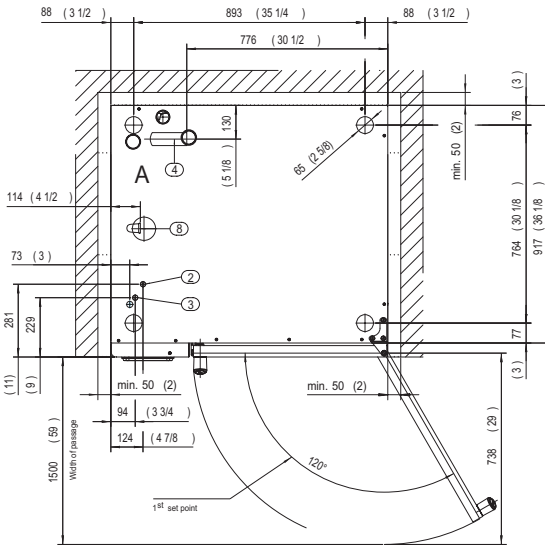
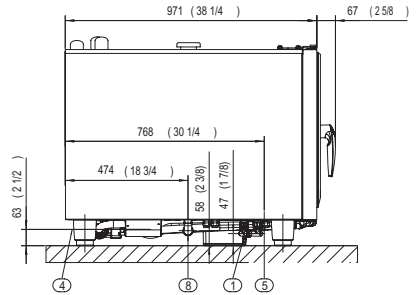
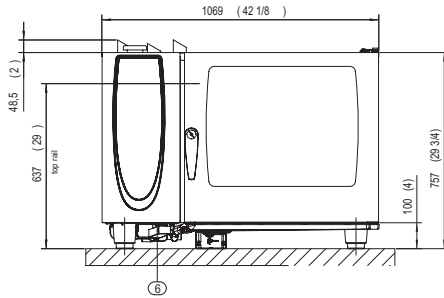


Schematic drawing 6x2/1 GN CareControl



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
- Measures in mm(inch)

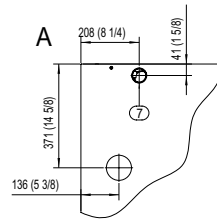
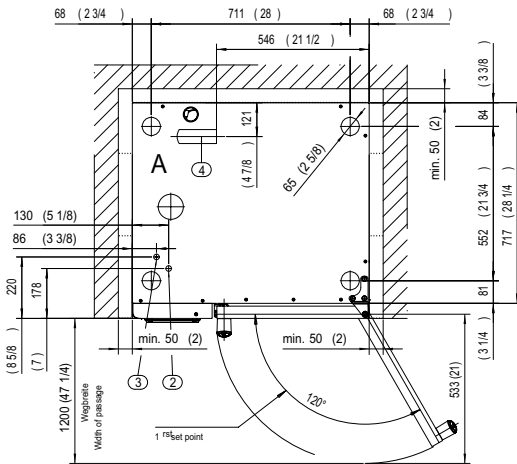
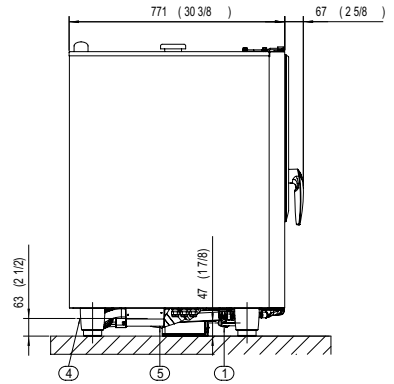
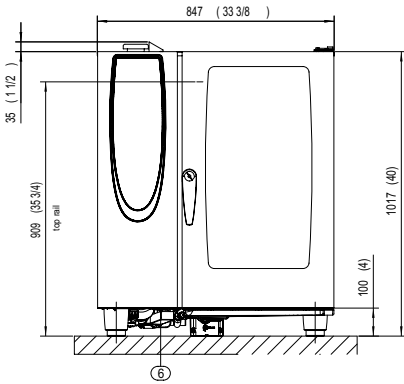
Schematic drawing 6x2/1 GN Gas CareControl



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
 - 8 = Gas supply 3/4"
 - 9 = Exhaust pipe steam
 - 10 = Exhaust pipe hot air
- Measures in mm(inch)

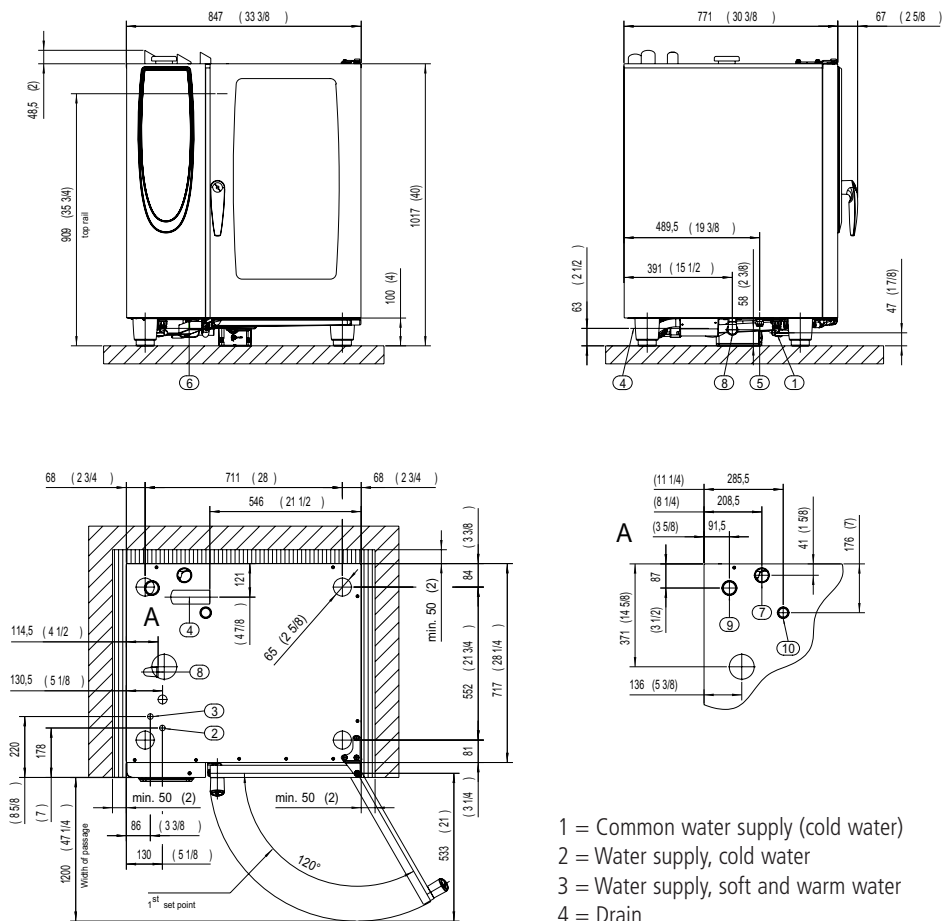


Schematic drawing 10x1/1 GN CareControl



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
- Measures in mm (inch)

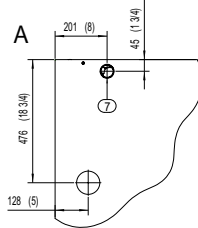
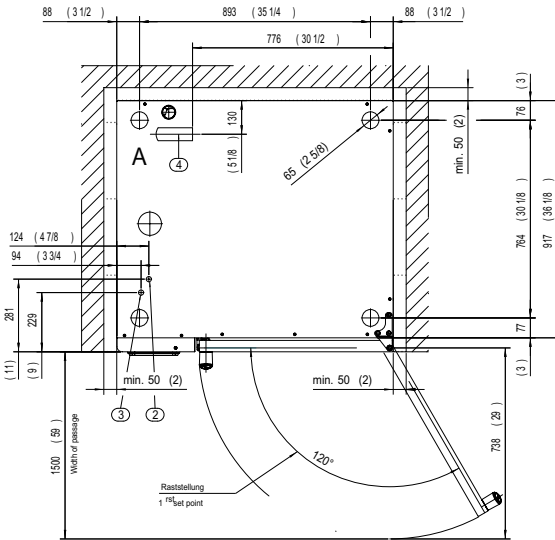
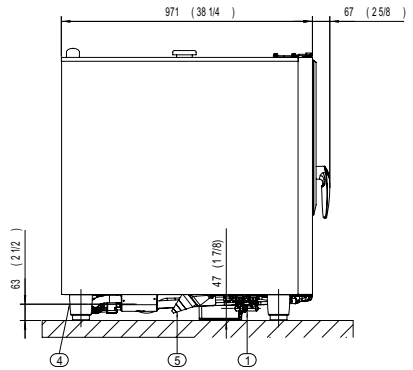
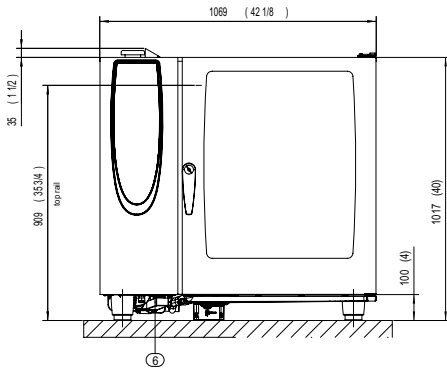
Schematic drawing 10x1/1 GN Gas CareControl



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
 - 8 = Gas supply 3/4"
 - 9 = Exhaust pipe steam
 - 10 = Exhaust pipe hot air
- Measures in mm(inch)

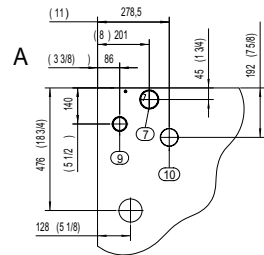
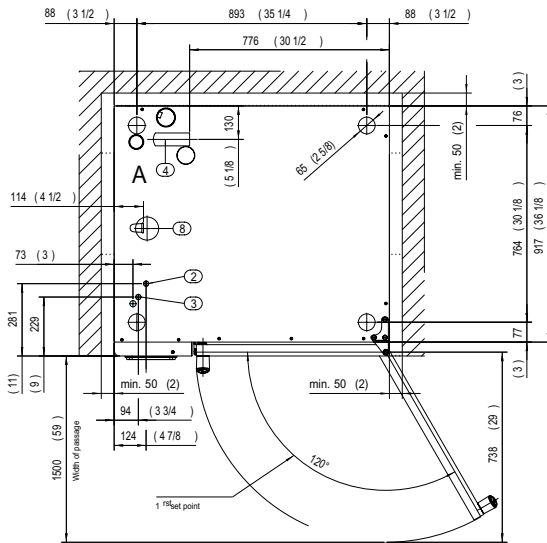
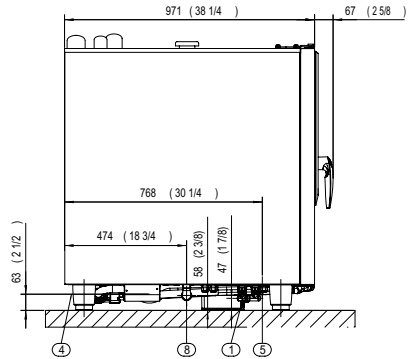
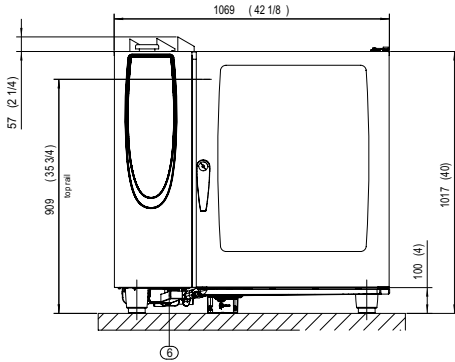


Schematic drawing 10x2/1 GN CareControl



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
- Measures in mm(inch)

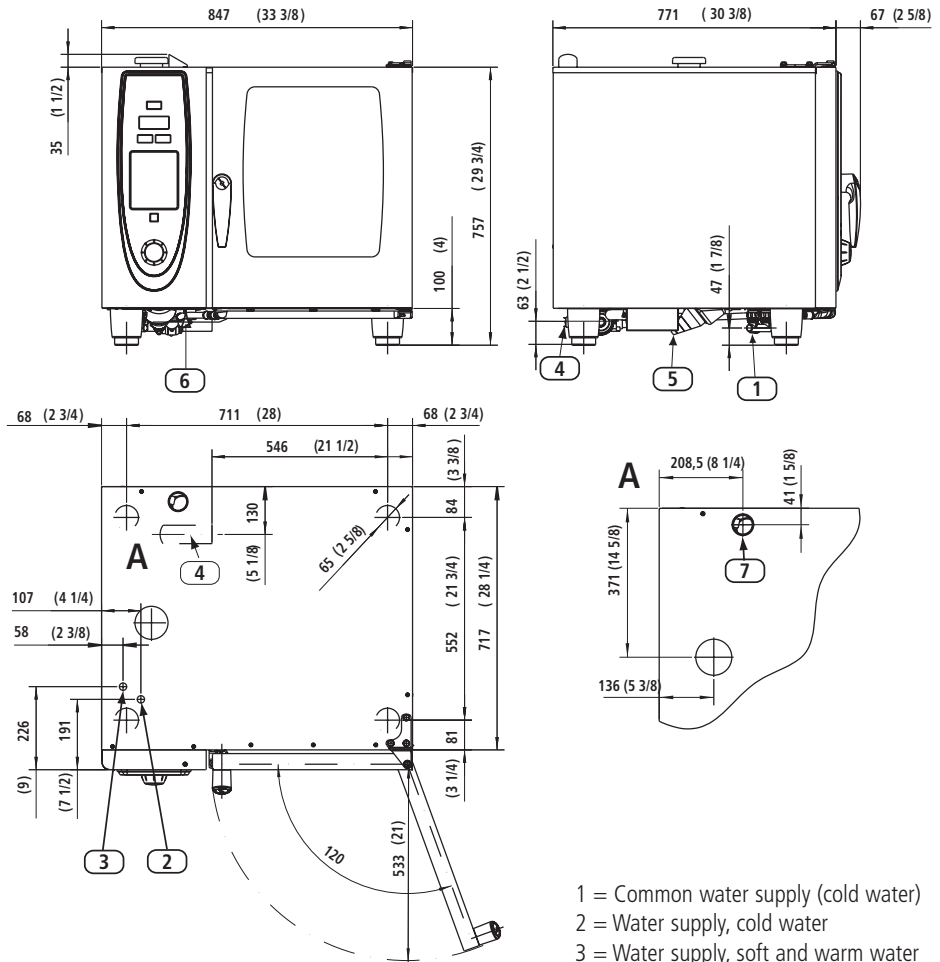
Schematic drawing 10x2/1 GN Gas CareControl



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
 - 8 = Gas supply 3/4"
 - 9 = Exhaust pipe steam
 - 10 = Exhaust pipe hot air
- Measures in mm(inch)

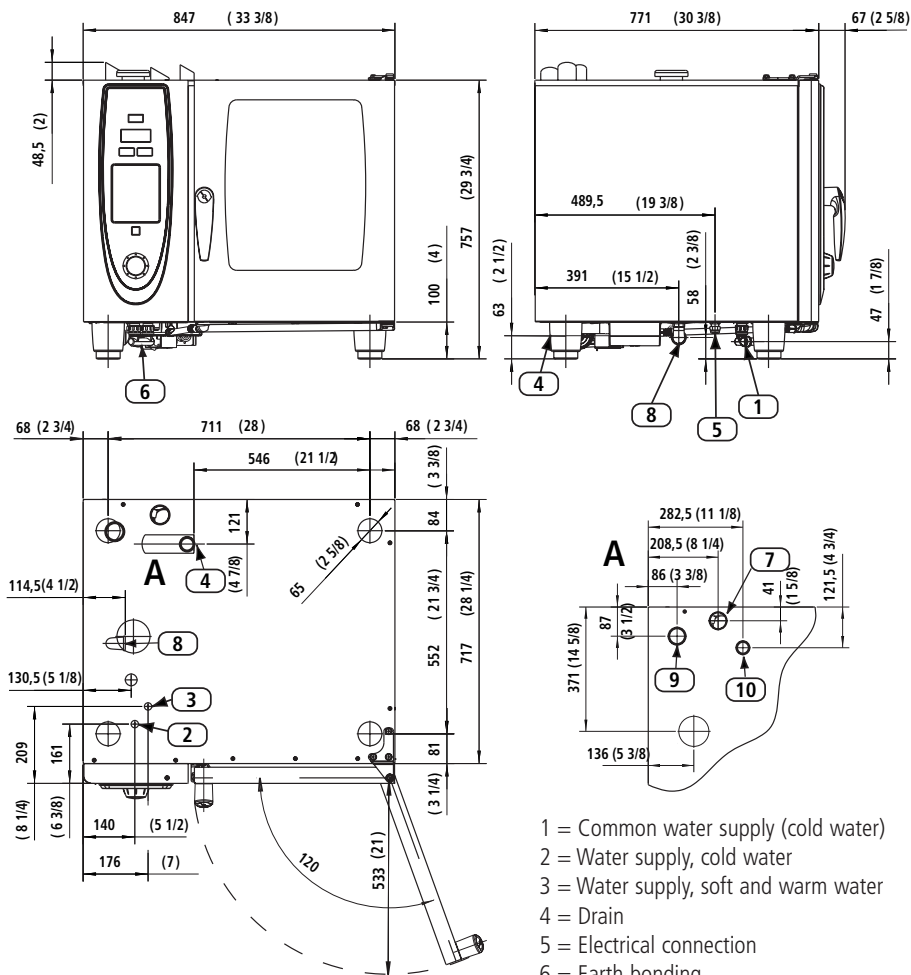


Schematic drawing 6x1/1 GN



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
- Measures in mm(inch)

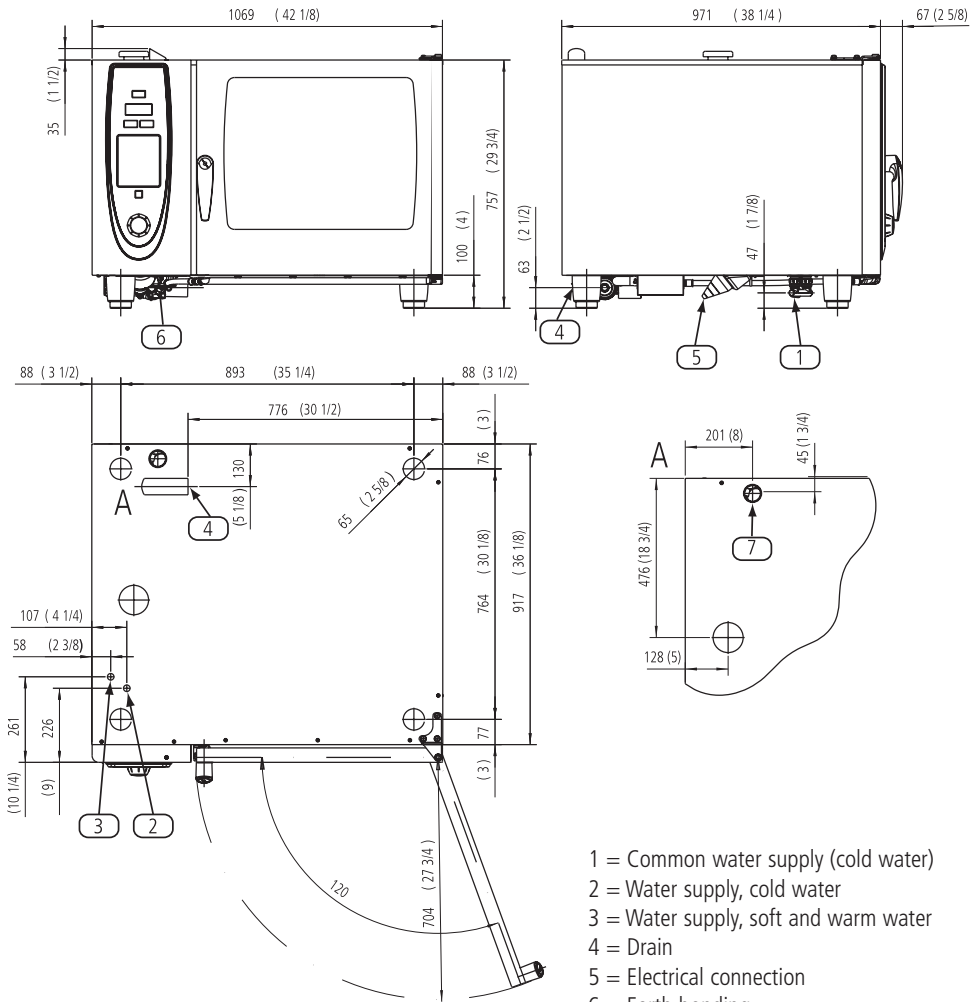
Schematic drawing 6x1/1 GN Gas



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
 - 8 = Gas supply 3/4"
 - 9 = Exhaust pipe steam
 - 10 = Exhaust pipe hot air
- Measures in mm(inch)

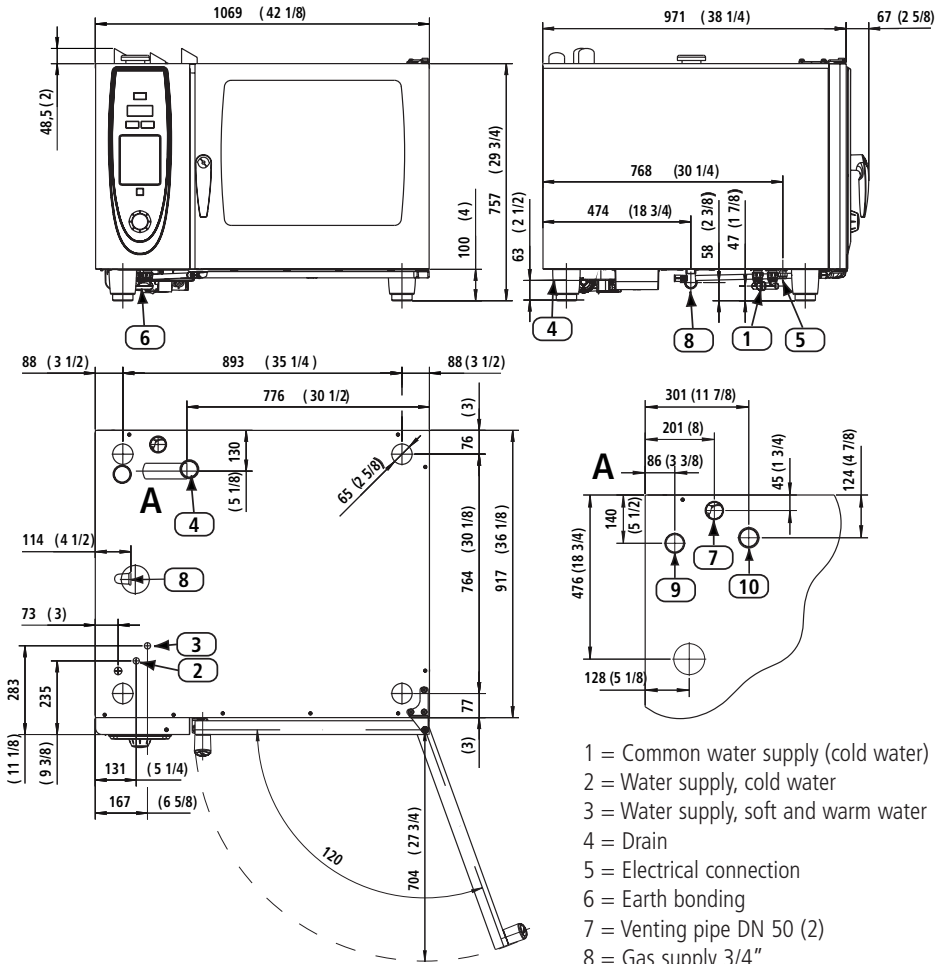


Schematic drawing 6x2/1 GN



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
- Measures in mm (inch)

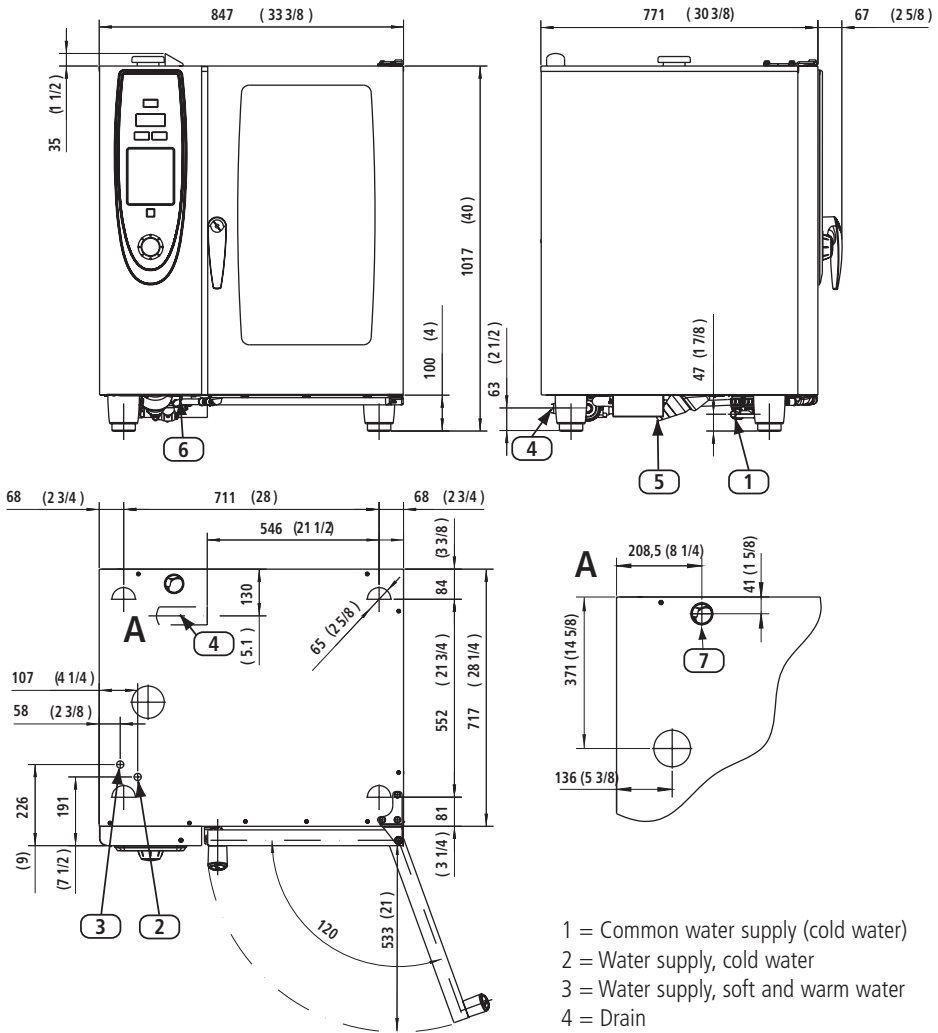
Schematic drawing 6x2/1 GN Gas



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
 - 8 = Gas supply 3/4"
 - 9 = Exhaust pipe steam
 - 10 = Exhaust pipe hot air
- Measures in mm(inch)



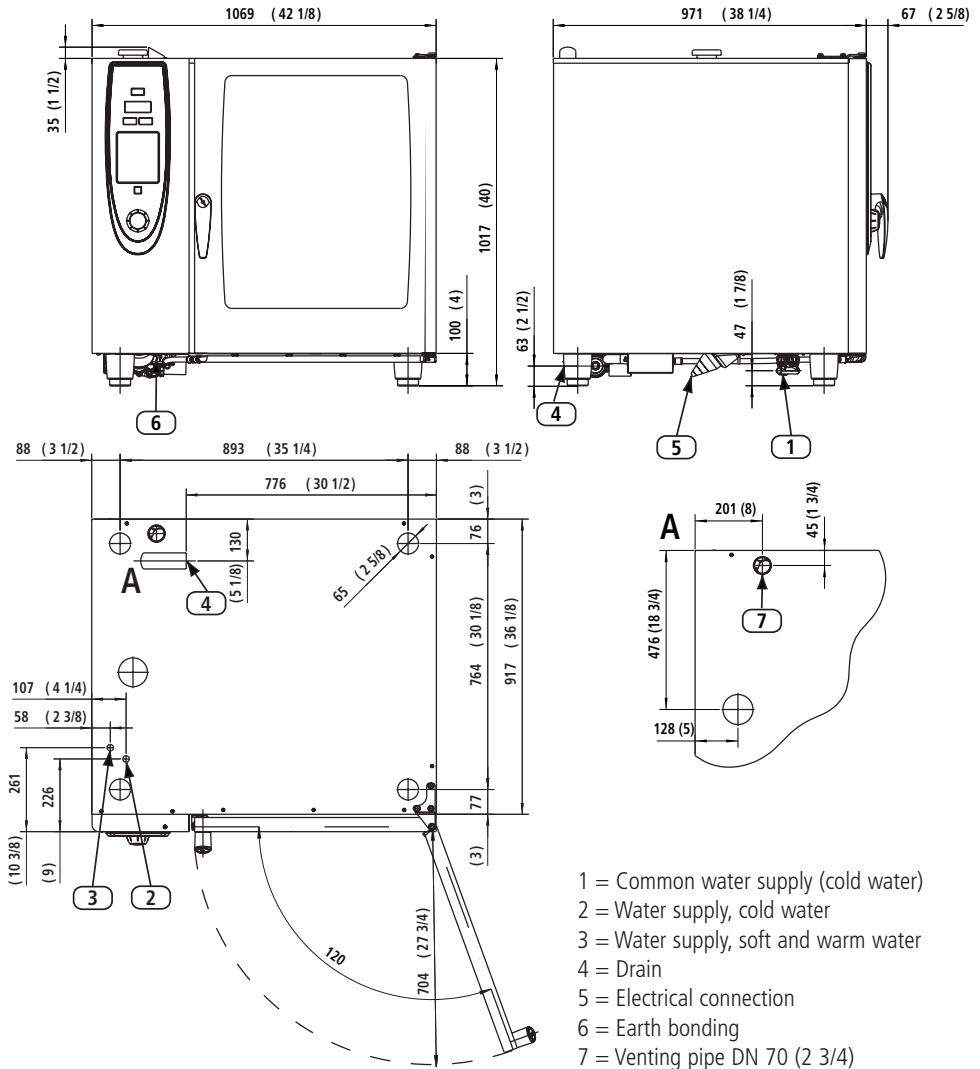
Schematic drawing 10x1/1 GN



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 50 (2)
- Measures in mm(inch)

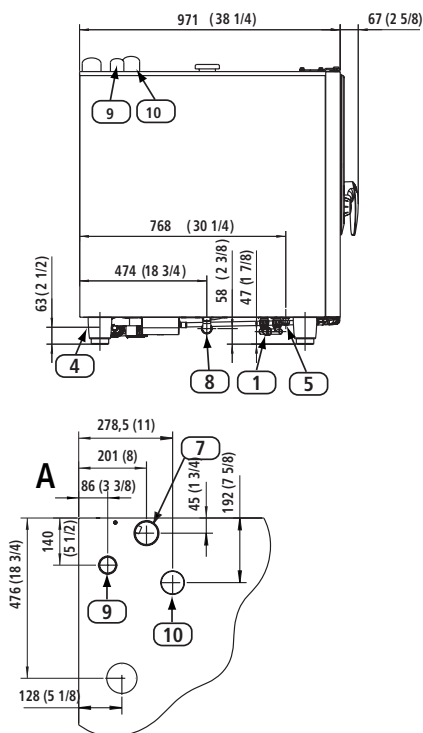
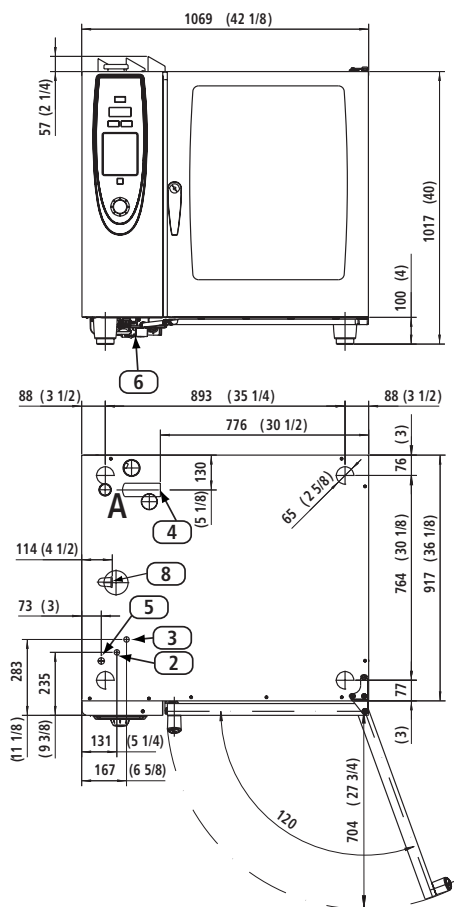


Schematic drawing 10x2/1 GN



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 70 (2 3/4)
- Measures in mm (inch)

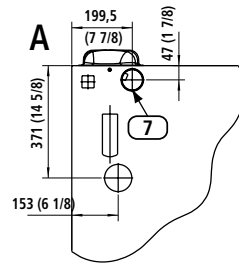
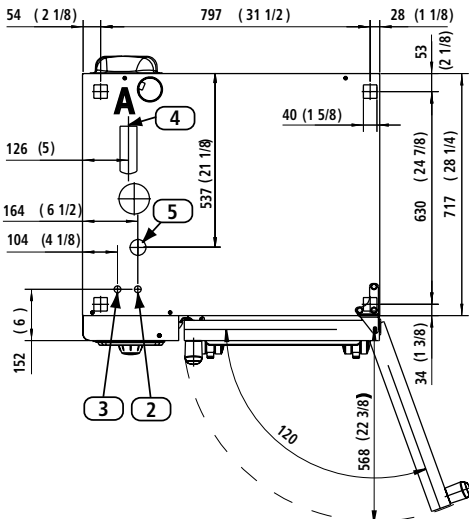
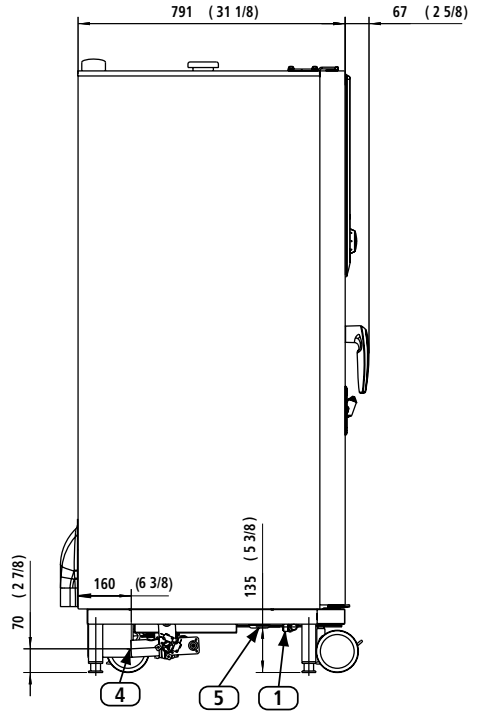
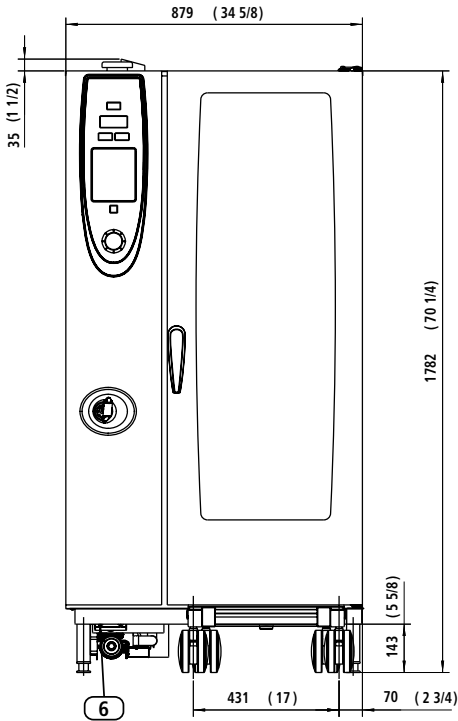
Schematic drawing 10x2/1 GN Gas



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 70 (2 3/4)
 - 8 = Gas supply 3/4"
 - 9 = Exhaust pipe steam
 - 10 = Exhaust pipe hot air
- Measures in mm(inch)

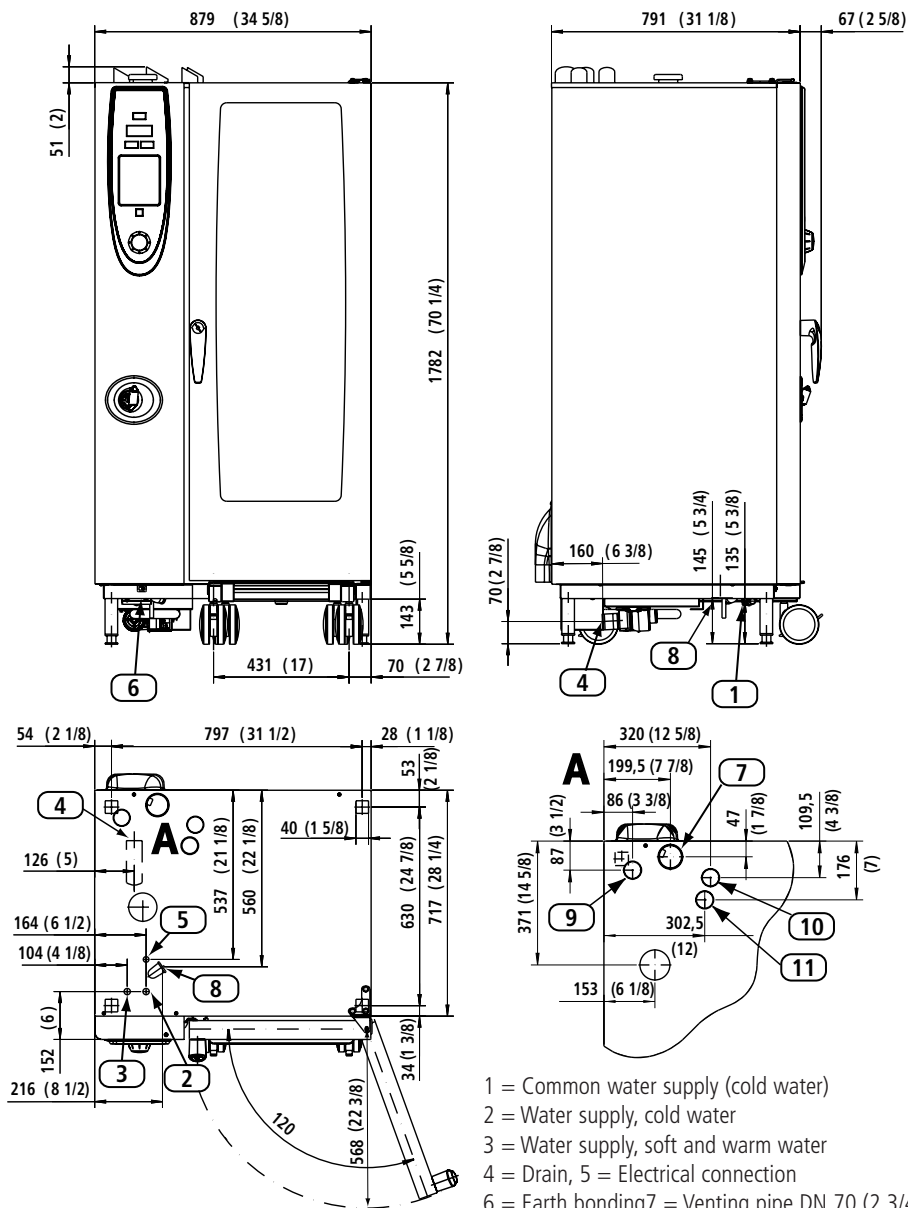


Schematic drawing 20x1/1 GN



- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain
 - 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 70 (2 3/4)
- Measures in mm(inch)

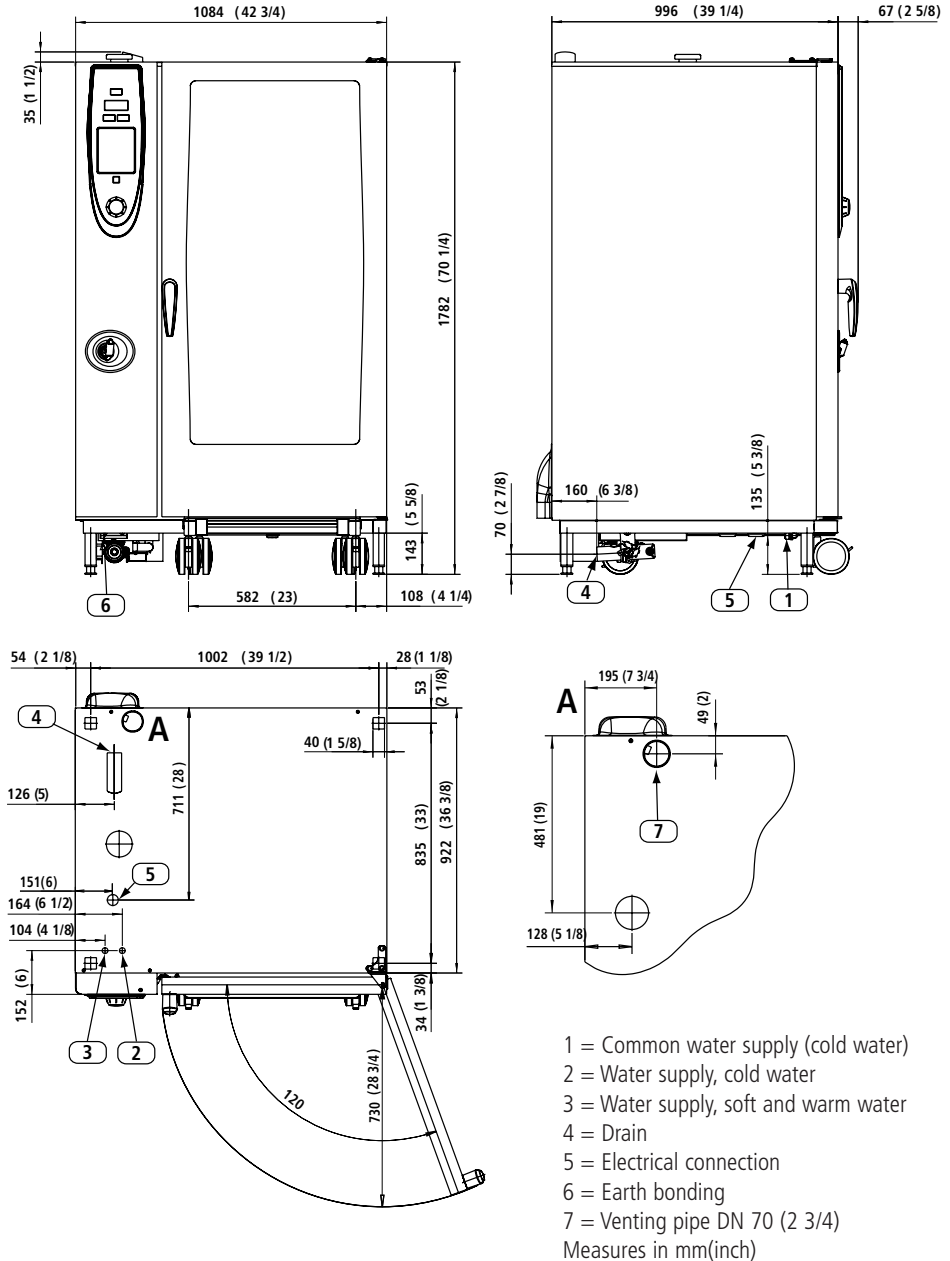
Schematic drawing 20x1/1 GN Gas



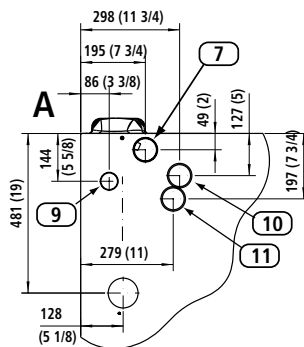
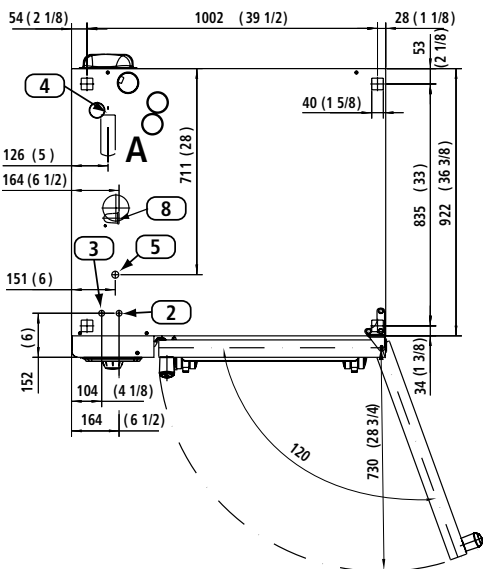
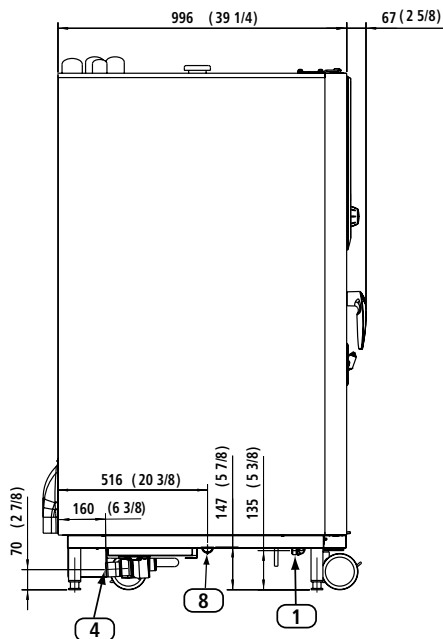
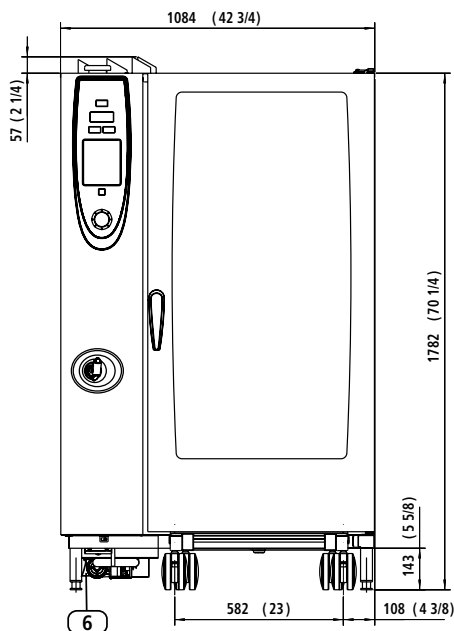
- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain, 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 70 (2 3/4)
 - 8 = Gas supply 3/4", 9 = Exhaust pipe steam
 - 10/11 = Exhaust pipe hot air
- Measures in mm(inch)



Schematic drawing 20x2/1 GN



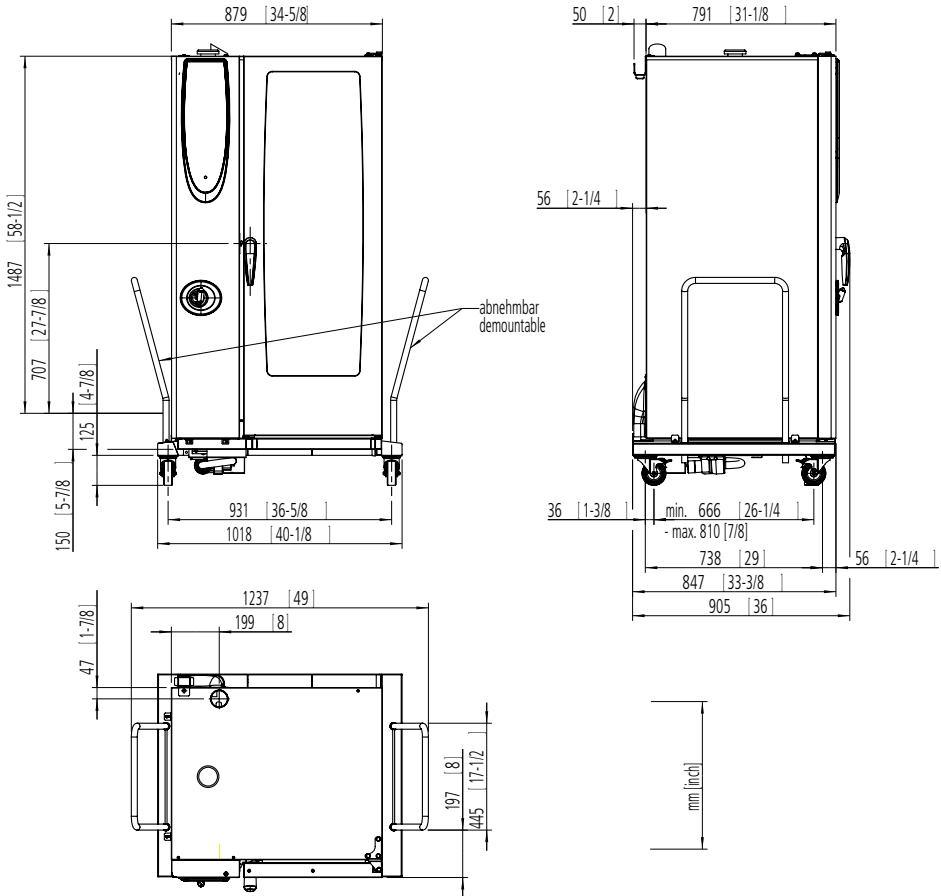
Schematic drawing 20x2/1 GN Gas



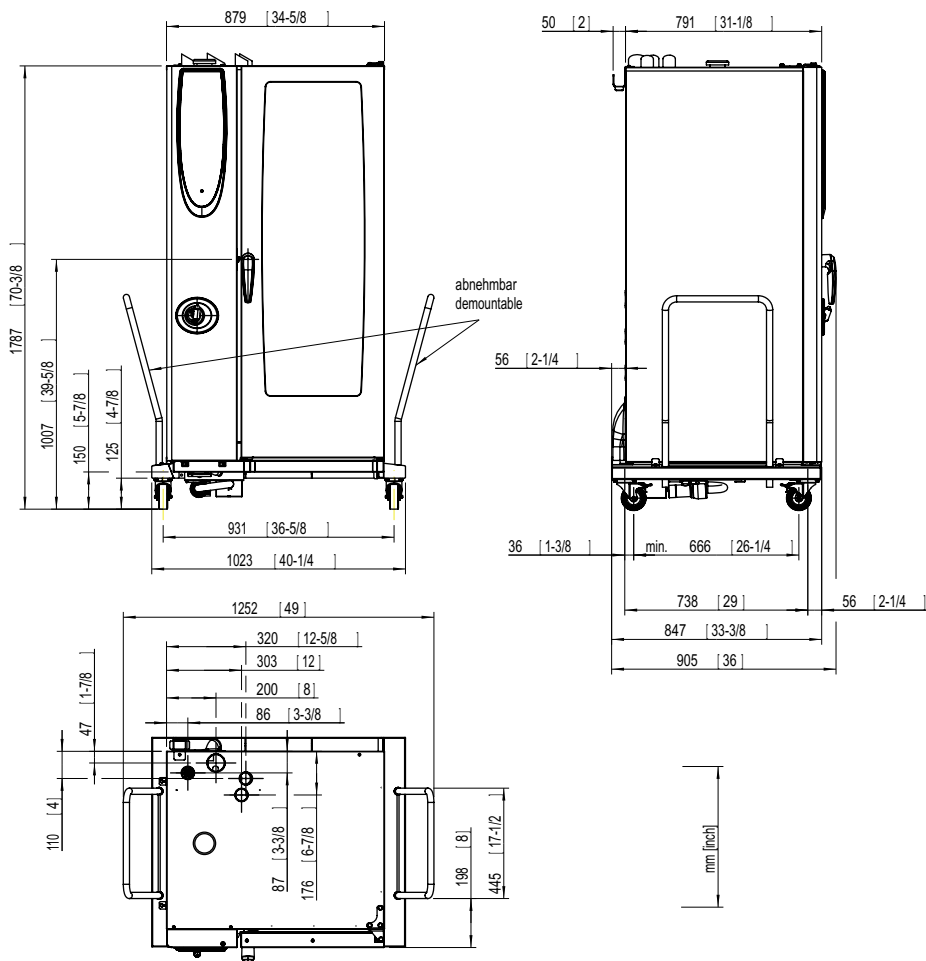
- 1 = Common water supply (cold water)
 - 2 = Water supply, cold water
 - 3 = Water supply, soft and warm water
 - 4 = Drain, 5 = Electrical connection
 - 6 = Earth bonding
 - 7 = Venting pipe DN 70 (2 3/4)
 - 8 = Gas supply 3/4", 9 = Exhaust pipe steam
 - 10/11 = Exhaust pipe hot air
- Measures in mm(inch)



Schematic drawing 20x1/1 GN Electric, mobile

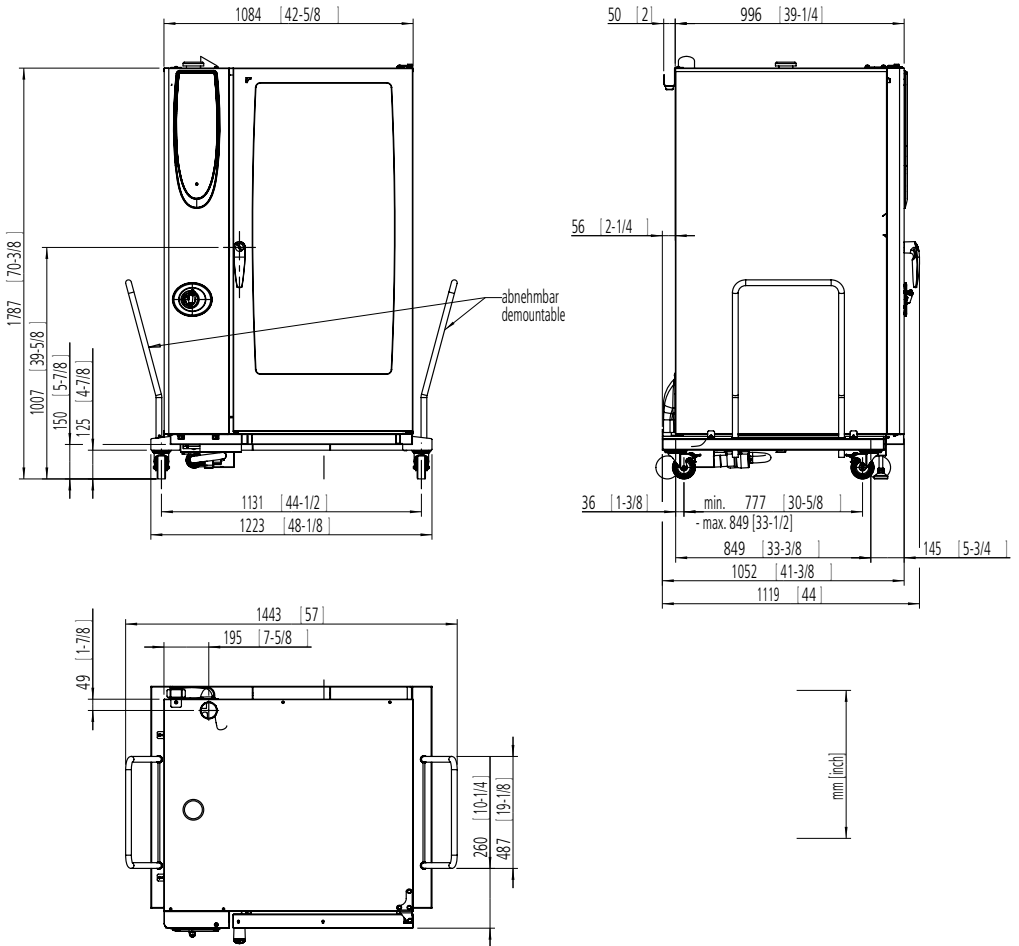


Schematic drawing 20x1/1 GN Gas, mobile

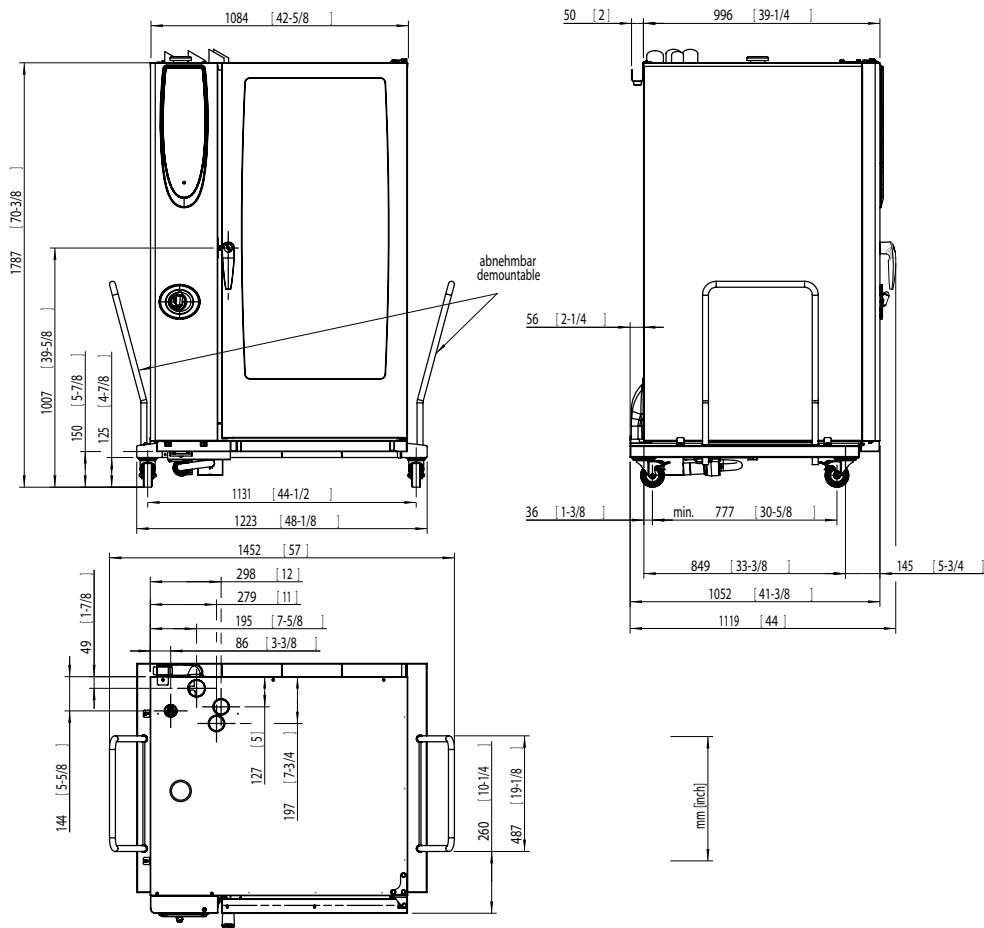




Schematic drawing 20x2/1 GN Electric, mobile



Schematic drawing 20x2/1 GN Gas, mobile



UK