Installation plan

PLW 7111

EXX, EXE, EEX, EEE version

To avoid the risk of accidents or damage to the machine, it is essential to read these instructions as well as the service documents before it is installed, commissioned and used for the first time.

EN

Rev. 04

Installation notes

Installation requirements

This machine must be installed by a suitably qualified person with the appropriate electrical and plumbing qualifications in accordance with the installation instructions supplied.
This machine must be installed in accordance with all applicable standards and guidelines, including legal requirements and health and safety regulations.

The machine must be commissioned and operatives trained in its use by Miele Service or by an approved Miele Service Partner only

Environmental requirements

In order to reduce the risk of water damage, the area around the machine should be limited to furniture and fittings that are designed for use in commercial environments.

Installation

The machine must be installed on a level surface. The machine must be positioned horizontally with a maximum inclination of 1–2°.

Water connection

The machine can be connected to the cold water, hot water, demi water and drainage points without a backflow protection device.
Connection to water supply must be carried out in accordance with local and national safety regulations.
The absence of hot water or demi water must be set on the machine by a technician.
The stopcock to the water supply must be easily accessible.

Hot water connection

The machine can be operated with both cold water and hot water. For reducing cycle time, the machine should be connected to the hot water supply. In case of high water hardness please consider that hot water is not softened. The usage of non-softened water can cause the build-up of lime scale.

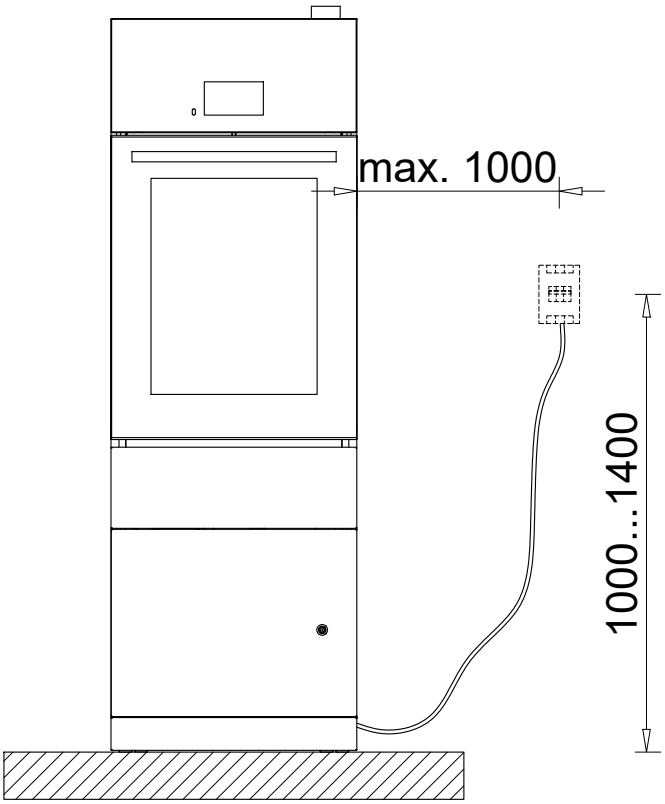
Electrical connection

Connection to the electrical supply must be carried out in accordance with local and national safety regulations. The power cord must be protected from the risk of thermal damage.
It is recommended to make electrical connection via a plug and socket so that electrical safety checks can be carried out easily.

For hard-wired machines, connection must be via a main switch to be provided on site, which must completely isolate the machine from the power supply with a contact gap of at least 3 mm.
The plug and socket as well as the main switch must be easily accessible after the machine has been installed.
Faulty components must only be replaced by genuine Miele original spare parts. Only when these parts are fitted can the safety standards of the machine be guaranteed. If the connection cable is faulty it must only be replaced by a Miele approved service technician to protect the user from danger.

Position of the main switch

The machine can be hardwired as an option. The main switch must be installed no more than 1000 mm away from the laboratory washer. It must be installed at a height of between 1000 mm and 1400 mm above the floor.
The main switch need to be clearly identified by a label, as the disconnecting device for the equipement.



Equipotential bonding and earthing

The electrical supply of each machine must be protected with a disconnecting device (30 mA, "B" type). Equipotential bonding should be carried out if required. The screw connection point for equipotential bonding (size M8) is located at the back of the machine. Equipotential bonding and earthing must be carried out before the machine is commissioned

Communication modules

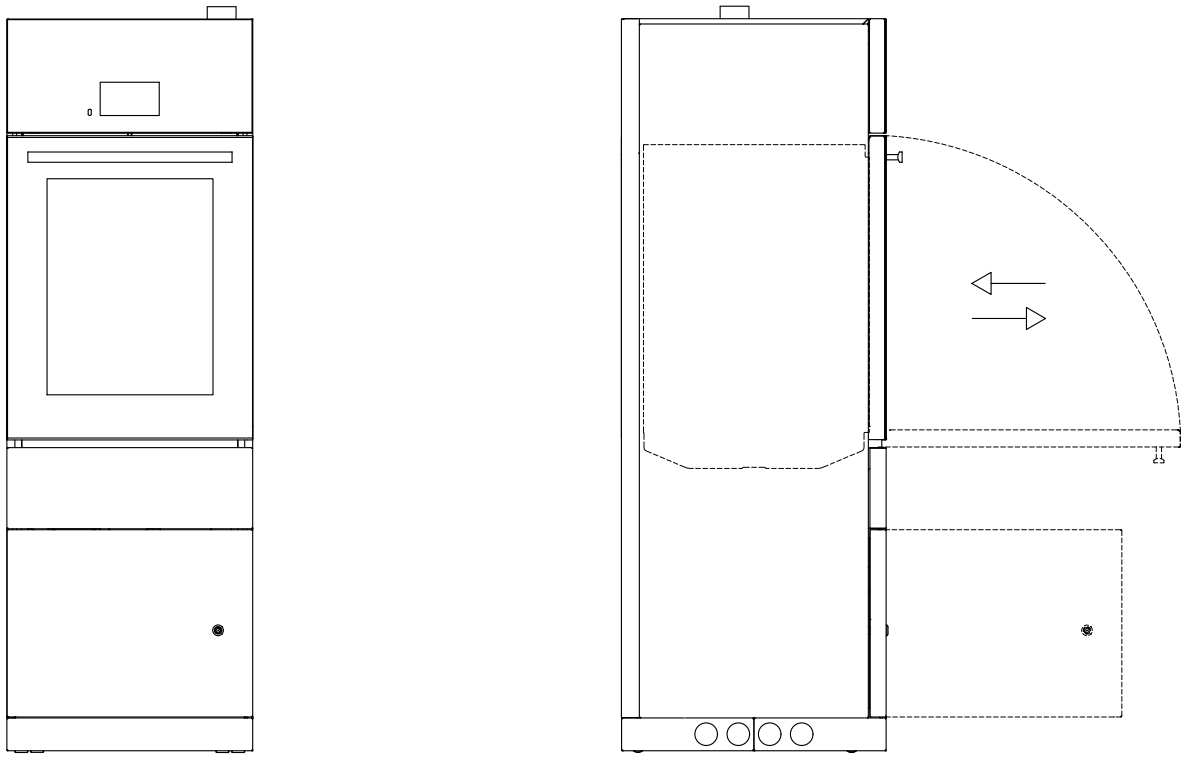
Wi-Fi
The machine is equipped with a Wi-Fi connection that allows to connect the device to the traceability system or the cloud platform MIELE MOVE.
RJ45
Connection cable not included. RJ45 plug provided.
Fit RJ45 connection box above machine. Connections/installation must comply with IEC 60950-1.
RS232
An RS232 serial interface is provided in order to transfer process data to a printer or external process documentation software.
The cable is not included as standard. It must be connected and installed in accordance with IEC 62368-1.

Installation notes

Vented air connection

Air extracted from the "loading" side of the operation should be replenished by ensuring sufficient air intake.
Prevent condensate backflow into machine. Pitch vent ducting and discharge condensate at lowest point.
In order to improve room climate as far as temperature and humidity is concerned the chamber vent can be connected to an external venting conduit. In case of connection with an external system, provide the air break.
The conduit must be in stainless steel A304 (V2S) or in a plastic material suitable for high temperatures (constant 95 °C) or in polipropylene (PP).

Machine versions



PLW 7111

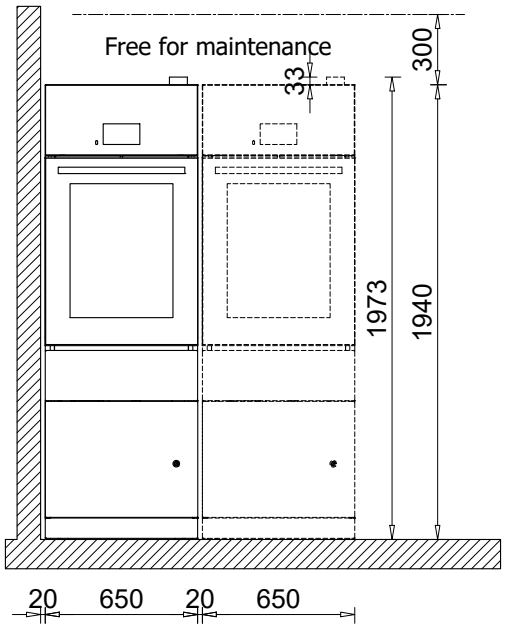
Abbreviations

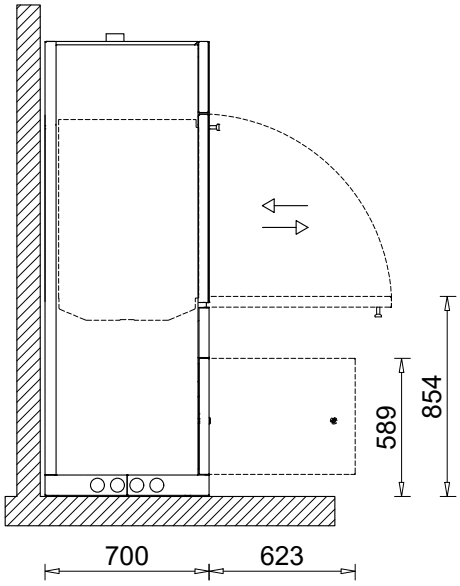
EL	Electrical connection	AL	Exhaust air
NW	Network and printer connection	F	Machine feet
KW	Cold water connection	R	Wheels
WW	Hot water connection	CV	Steam condenser
VE	Demineralized water	ST	Printer
AW	Drain with drain pump	PA	Equipotential bonding
AW	Drain without drain pump	TH	Tank
HR	Heat recovery unit	FAP	Floor anchor points

Illustrations

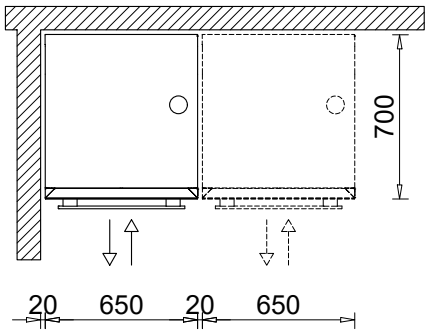
Dimensions

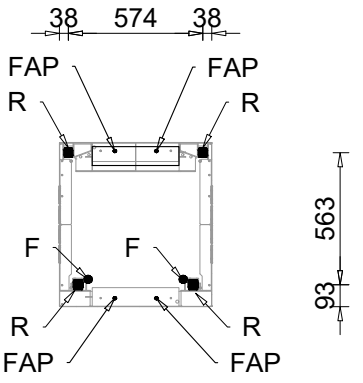
All routine maintenance operations can be performed by accessing from the front. Limited extraordinary maintenance operations may require the extraction of the machine facilitated by the base equipped with rollers.





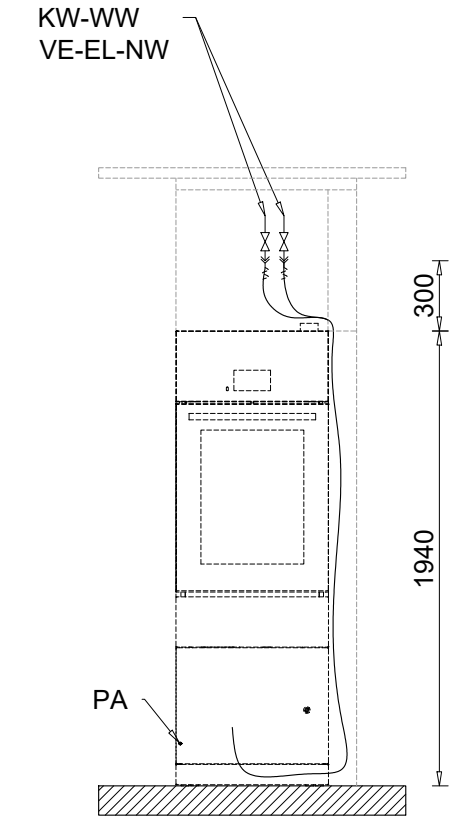
Mandatory floor anchor points or counterbalancing weights

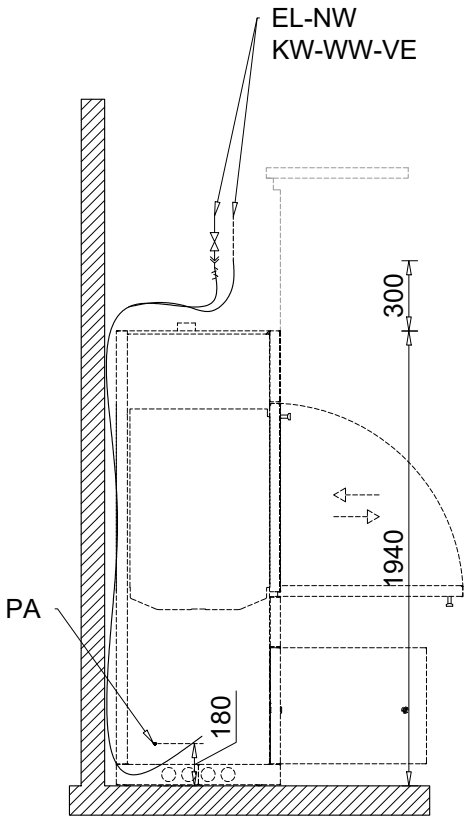


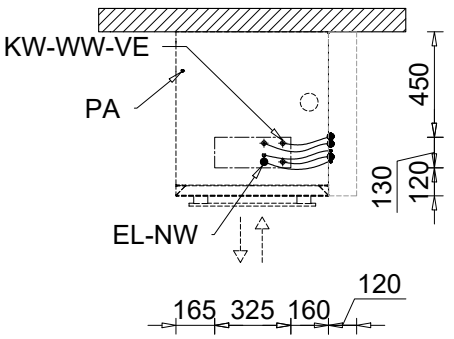


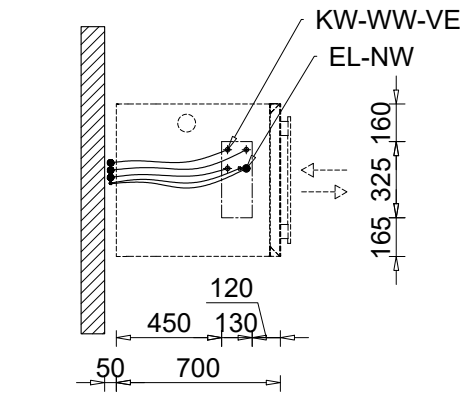
Top supply connection (provided by customer)

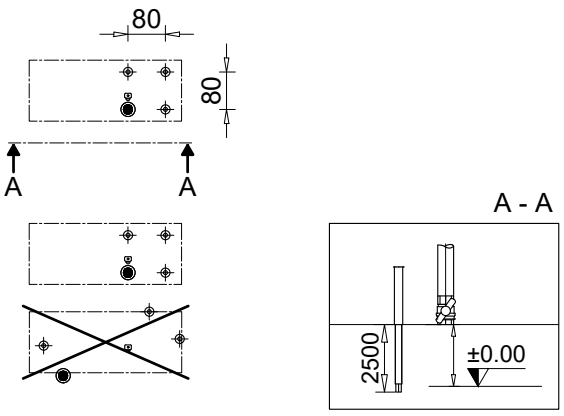
Abbreviations with dashes: connection optional or required depending on model version

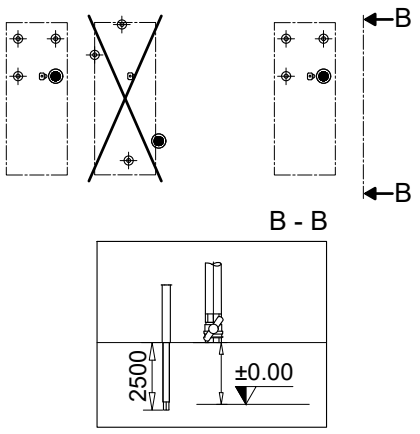






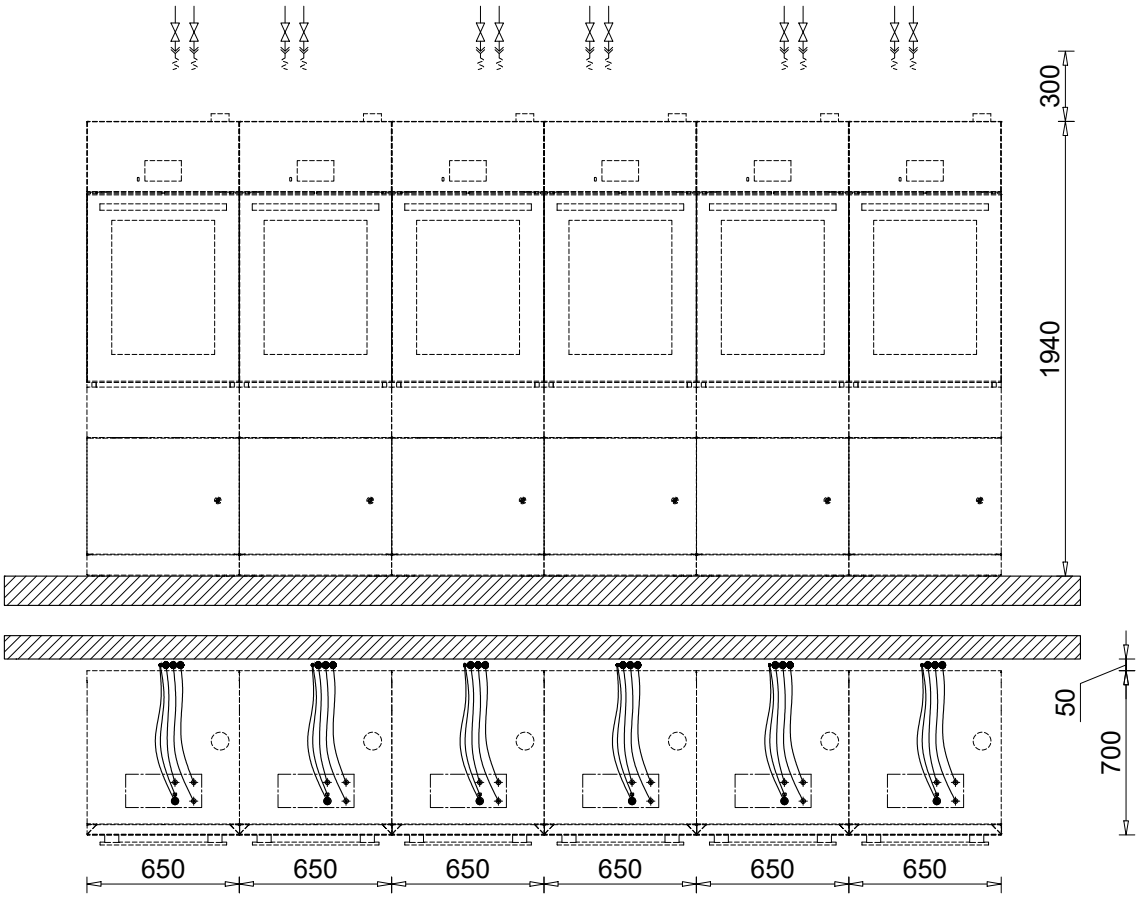


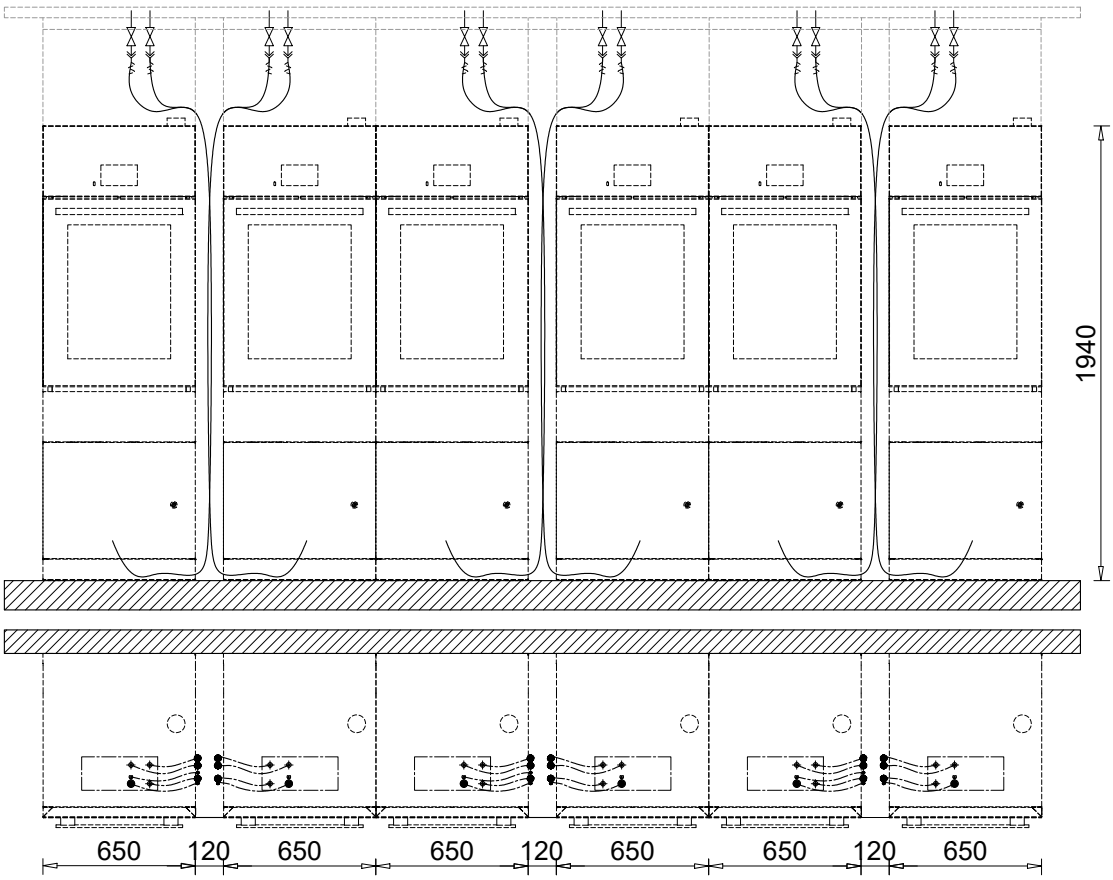




Illustrations

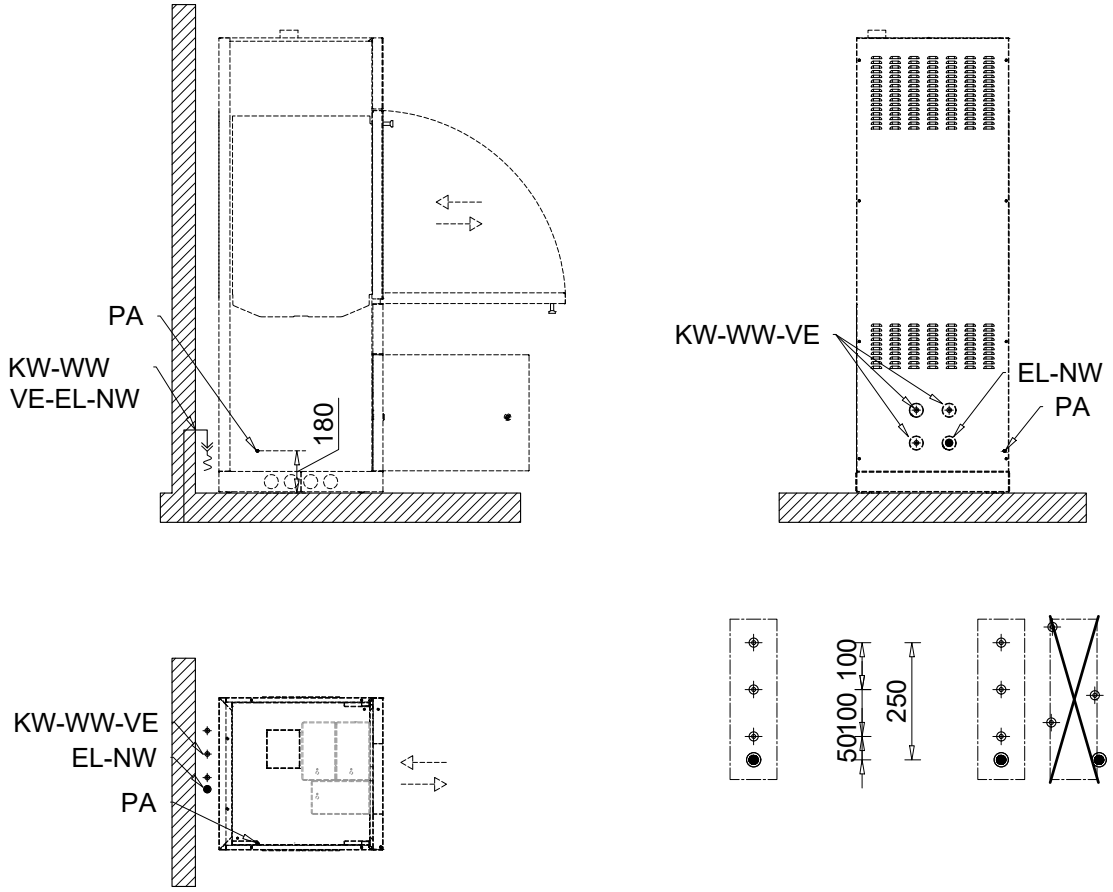
Top supply connection (provided by customer)

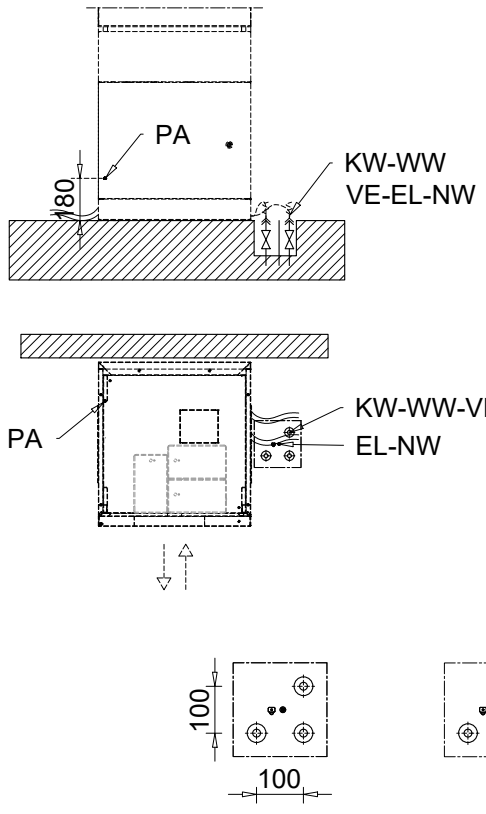




Bottom supply connetion (provided by customer)

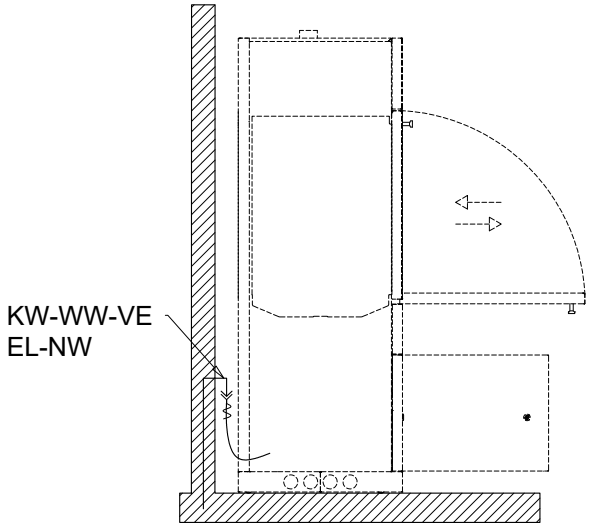
Abbreviations with dashes: connection optional or required depending on model version

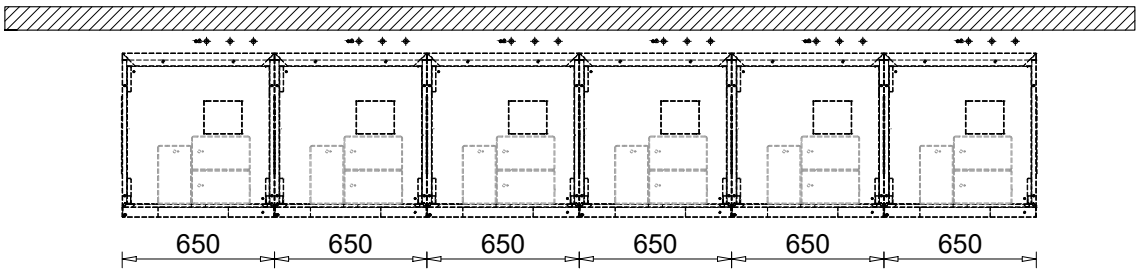


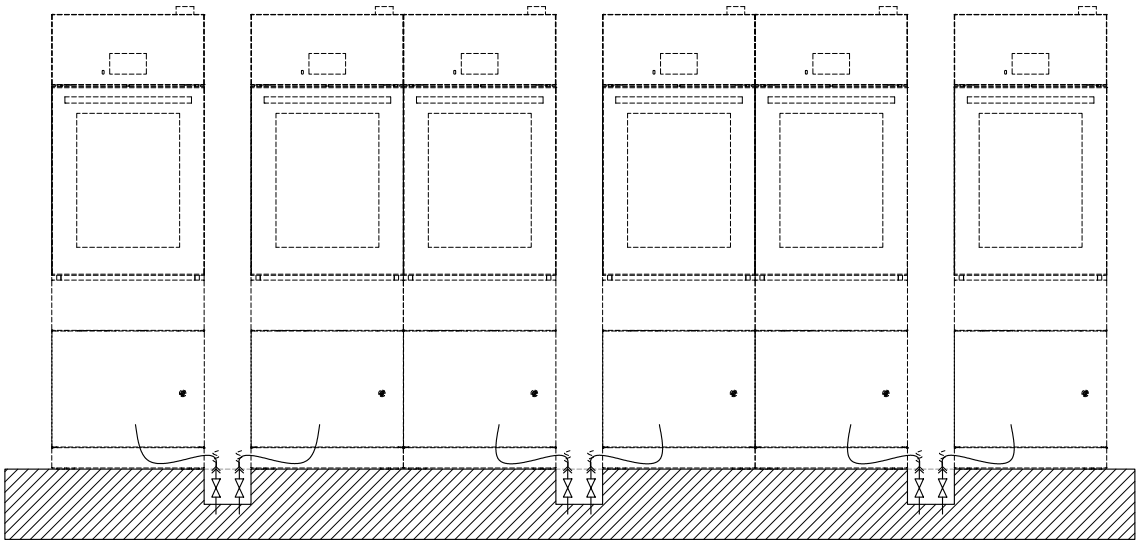


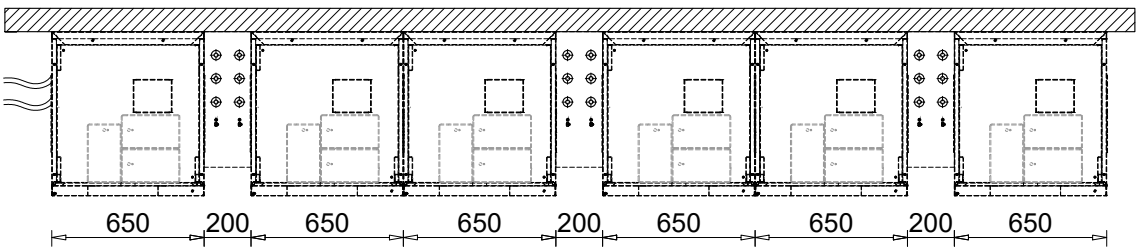
Illustrations

Bottom supply connetion (provided by customer)





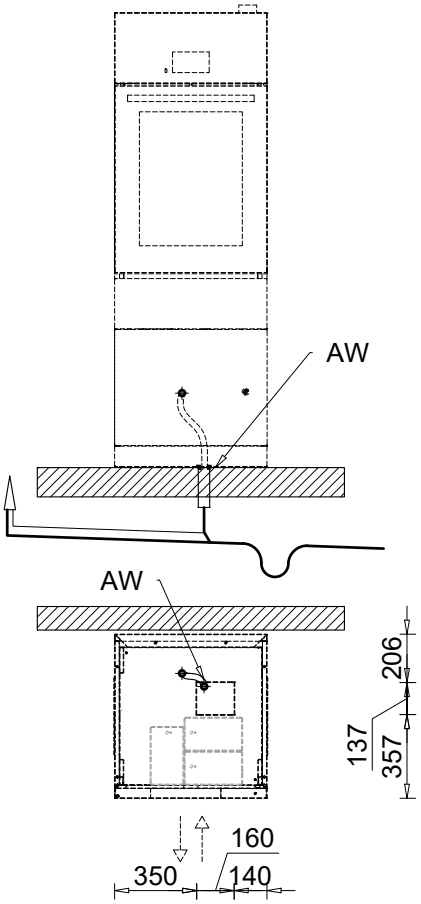


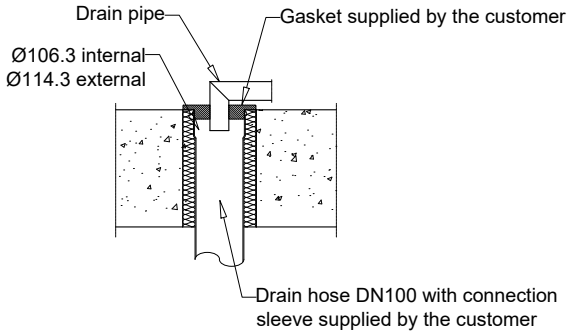


Illustrations

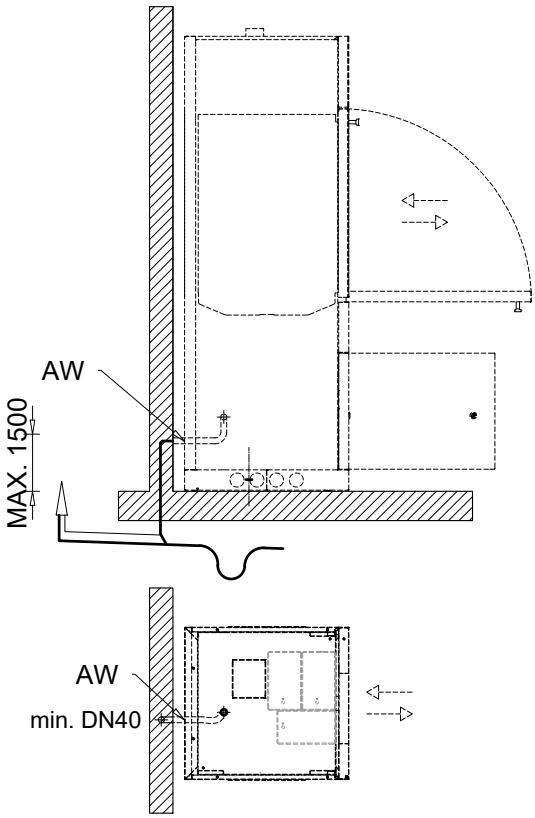
Drain

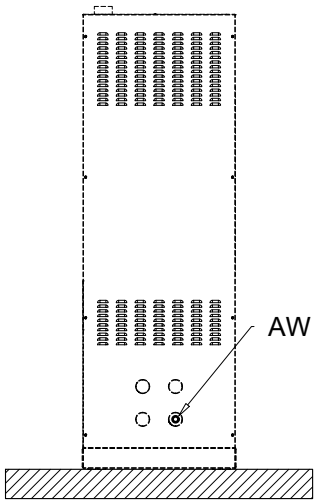
AW Drain without drain pump



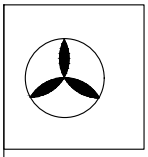


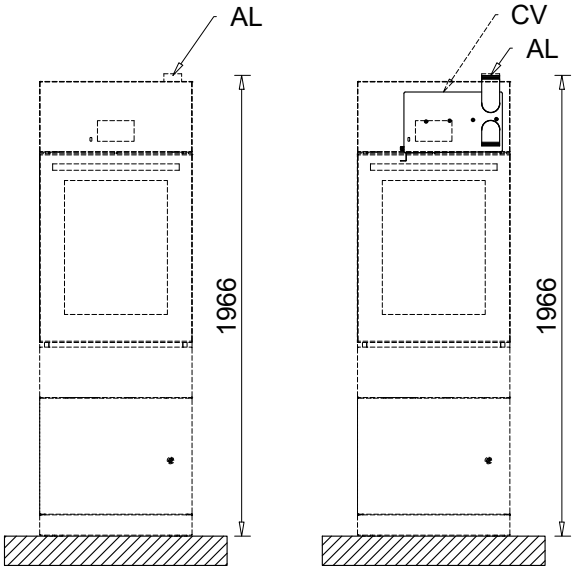
AW Drain with drain pump

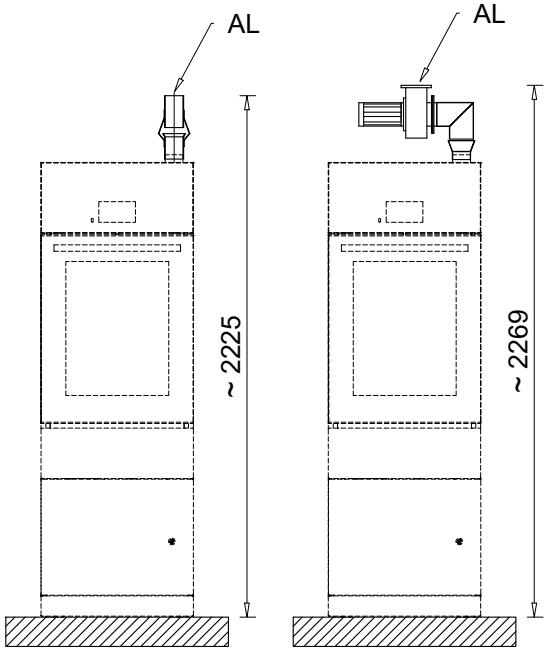


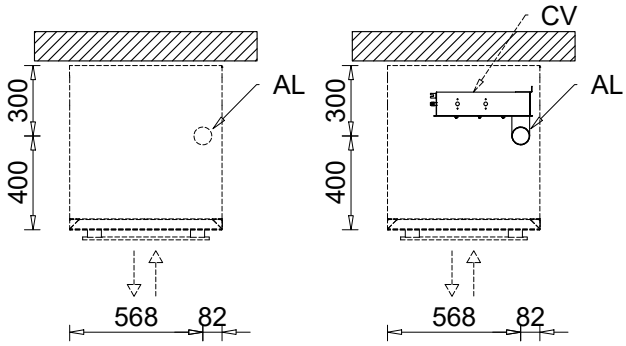


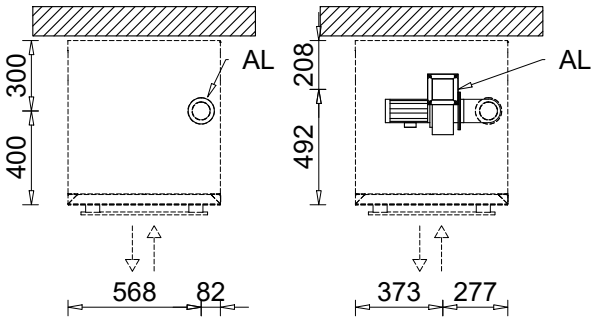
Air exhaust




AL
1966
CV
AL
1966


AL
~ 2225
AL
~ 2269

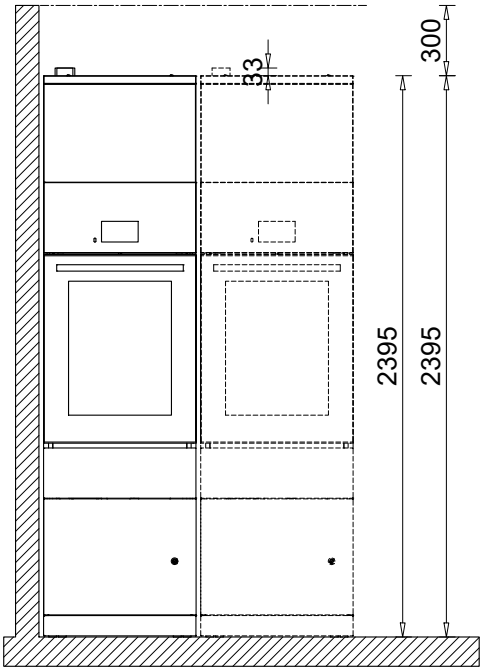

300
400
AL
568
82
CV
300
400
AL
568
82

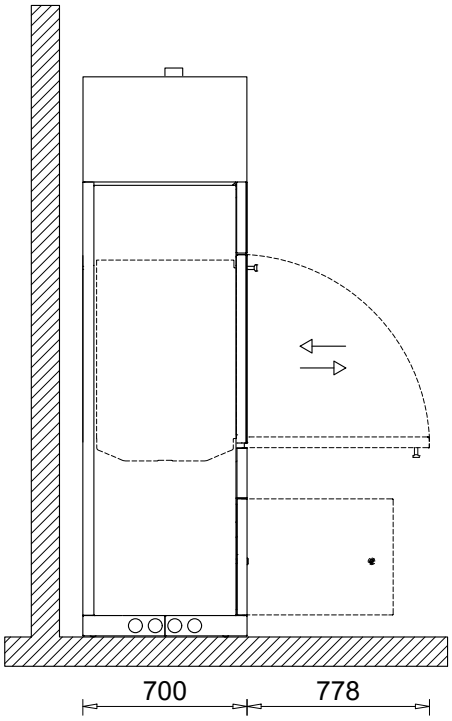

300
400
AL
568
82
208
492
AL
373
277

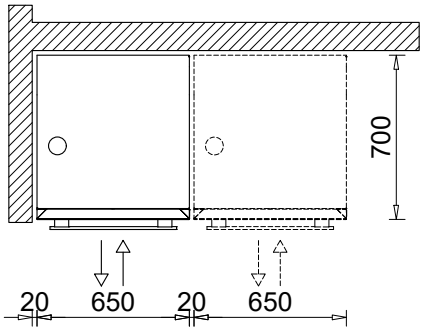
Illustrations

Dimensions HEAT RECOVERY

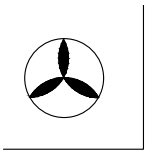
All routine maintenance operations can be performed by accessing from the front. Limited extraordinary maintenance operations may require the extraction of the machine facilitated by the base equipped with rollers.

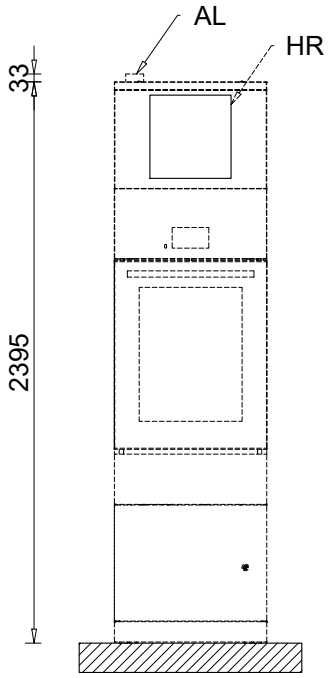


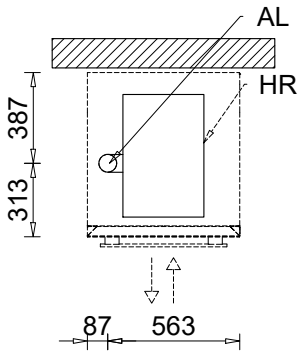




Air exhaust HEAT RECOVERY







Technical data

PLW 7111 EXX, EXE - PLW 7111 EEX, EEE

Electrical connection - 380-415V-50/60Hz

Voltage (standard version)	3N AC 380-415V-50/60Hz
Power rating	10,1 kW
Current intensity	15,8 A
Fuse rating	3 X 16 A
Connection cable, min. cross-section	5 X 2,5 mm²
Connection cable length	4 m
Voltage fluctuation, max. permitted	±10 %

Electrical connection - 220-240V-50/60Hz

Voltage (standard version)	3 AC 220-240V-50/60Hz
Power rating	10,2 kW
Current intensity	27,5 A
Fuse rating	3 x 32 A
Connection cable, min. cross-section	4 x 10 mm²
Connection cable length	4 m
Voltage fluctuation, max. permitted	±10 %

Electrical connection - 200V-50/60Hz

Voltage (standard version)	3 AC 200V-50/60Hz
Power rating	7,2 kW
Current intensity	23,5 A
Fuse rating	3 x 32 A
Connection cable, min. cross-section	4 x 10 mm²
Connection cable length	4 m
Voltage fluctuation, max. permitted	±10 %

Connection module output signals (optional)

Potential-free contacts (Normally Open contacts) suitable for both conditions (AC-DC)	
Voltage AC max	AC250V 50/60Hz
Current AC max	6 A
Voltage DC max	DC 30 V
Current DC max	6 A

According to cycle/phase status
V Drying - Contact closed during drying block
On cycle - Contact closed while machine is running
Alarm on cycle - Contact closed when fault occurs
End cycle - Contact closed between end of program and door opening
Norm. Drain valve - Contact closed during drainage
Spec. Drain valve - Contact closed during drainage (water recycling drain pump)
Cold - Contact closed during cold water intake
Hot - Contact closed during hot water intake
Demi - Contact closed during cold demineralised water intake

Chemical dosing	
Product 1 pump - Control signal for external dispenser pump 1	
Product 2 pump - Control signal for external dispenser pump 2	
Product 3 pump - Control signal for external dispenser pump 3	
Product 4 pump - Control signal for external dispenser pump 4	
Free contacts programable by the technician and usable during each the cycle.	4 Nr.

Cold water

Length of water inlet hose	2 m
Maximum temperature	30 °C
Max temperature when cooling steam condenser with open circuit	15 °C
Water hardness, max. permitted without water softener (If the water hardness is more than 4 °dH, a water softener must be used)	4 °dH / 7 °fH
Water hardness max. with water softener	36 °dH / 65 °fH
Minimum flow pressure	40 kPa
Minimum flow pressure with steam condenser open circuit	200 kPa
Maximum flow pressure	600 kPa
Max. flow rate	8 l/min.
On-site threaded union in accordance with DIN 44991 (flat sealing)	3/4 male inches

Hot water

Length of water inlet hose	2 m
Maximum temperature	60 °C
Maximum water hardness (If the water hardness is more than 4 °dH, a water softener must be used. Connection for liquid dispensing system is available.)	4 °dH / 7 °fH
Minimum flow pressure	40 kPa
Maximum flow pressure	600 kPa
Max. flow rate	8 l/min.
On-site threaded union in accordance with DIN 44991 (flat sealing)	3/4 male inches

Demineralized water

Length of water inlet hose	2 m
Maximum temperature	60 °C
Maximum water hardness	0,8 °dH
Minimum flow pressure	40 kPa
Maximum flow pressure	600 kPa
Max. flow rate	8 l/min.
On-site threaded union in accordance with DIN 44991 (flat sealing)	3/4 male inches
H.ion.concentration (pH)	5…8 pH
Max conductivity	10 µS/cm
Min./Max. pressure with optional increase pressure pump	2 - 40 kPa

Technical data

Waste water (Drain by gravity)

Drainage temperature	93 °C
Max. temperature with cooling valve (optional)	60 °C
Connection diameter	40 mm
Max. transient flow rate	25 l/min

Waste water (Drain with pump)

Drainage temperature	93 °C
Max. temperature with cooling valve	60 °C
Connection diameter	25 mm
Max. transient flow rate	55 l/min
Lift at max transiet flow rate	1,5 m

Exhaust air

1. Vent to atmosphere without steam condenser. :	
Connection diameter	76 mm
Flow rate	130 Nm³/h
Temperature - Mean value / peak max.	70/95 °C
Rel. humidity - Mean value / peak max.	70/100 %
Max. permissible pressure loss in vent duct	400 Pa
Min. room air exchange	10 ch/h
2. Vent to atmosphere with steam condenser.	
Connection diameter	76 mm
Flow rate	130 Nm³/h
Temperature - Mean value / peak max.	60/90 °C
Rel. humidity - Mean value / peak max.	50/100 %
Max. permissible pressure loss in vent duct	400 Pa
Min. room air exchange	10 ch/h
3. Connection without steam condenser to air extraction system; provided with air break. 3a. Exhaust fan 3b. Air extraction system on site (refers to standard data without extraction)	
Connection diameter	76 mm
Flow rate	-
Temperature - Mean value / peak max.	70/95 °C
Rel. humidity - Mean value / peak max.	70/100 %
Max. permissible pressure loss in vent duct	-

Machine feet

Number of machine feet	2
Height adjustment	0-30 mm
Diameter of machine feet	33 mm
Number of rollers	4

Installation requirements

Permitted ambient temperature	5-35 °C
Relative humidity	Max 80% (5 ÷ 31°C); 80…50% (31…40°C)
Max. installation altitude above sea level. If the installation is made to higher altitude, notify the manufacturer.	2000 m

Machine data

Height	1940 mm
Height with steam condenser	1940 mm
Height with top extension (see drawings)	2395 mm
Width	650 mm
Depth	700 mm

One door machine	
Net weight	336 Kg
Max weight on working	436 kg
Maximum floor load	958 daN/m2
Floor load in operation	3292,8 N

One door machine with top extension	
Net weight	392 Kg
Max weight on working	492 kg
Maximum floor load	1081 daN/m2
Floor load in operation	3841,6 N

Min. access width, incl. transport pallet	945 mm
Min. access depth, incl. transport pallet	840 mm
Min. access height, incl. transport pallet. Excessive dimensions are disassembled before packing	2100 mm
Noise emissions	< 70 dB(A)

Weight of drain pump	5 Kg
Weight of steam condenser	5 Kg

Heat dissipation

From exhaust air	0,97 kW
Max. from trolley/items	0,35 kW