

IPSO - LSG n.v.



IPSO

Instruction manual

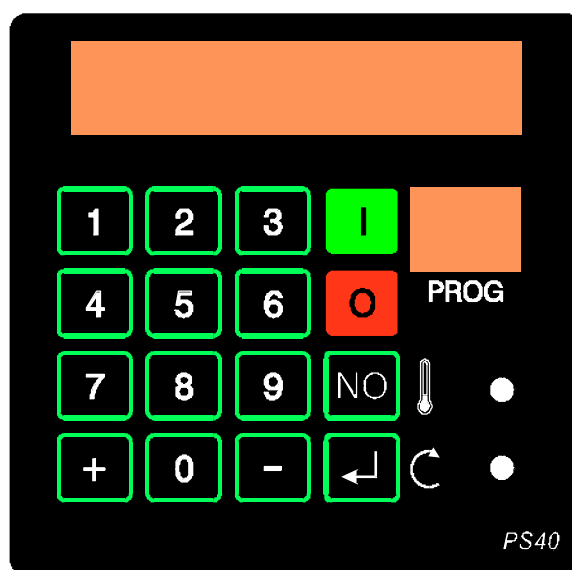
HF455, HF575

Technical specifications

Installation instructions

Operating instructions

Maintenance



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26/02/2003

General safety instructions



Ignoring any of the safety instructions can cause serious personal injury and can also cause damage to the linen or the machine

- ☐ Read the installation and instruction manual carefully before connecting the machine.
- ☐ It is recommended that the machine be installed by qualified technicians.
- ☐ The machine should be installed according to the installation instructions. (See chapter 3)
- ☐ The machine should be grounded according to the instructions in order to eliminate the risk of electrocution.
- ☐ Do not expose the machine to high humidity or extreme high or low temperatures.
- ☐ Cut off all main water inlets, steam and electrical supplies at the end of each operating day.
- ☐ Before starting repairs or maintenance, shut off all power and water supplies.
- ☐ To prevent fire and explosion:
Keep the area around the machine free from inflammable or combustible products.
Do not put fabrics that are treated with inflammable products into the machine.
These fabrics should be hand-washed or air-dried first.
- ☐ Always carefully read and follow the instructions on the packing of detergents.
Store these products out of the reach of children.
- ☐ Always take into account the instructions on the labels of clothes.
- ☐ Never allow children to play in the surroundings of a machine.

Remark:

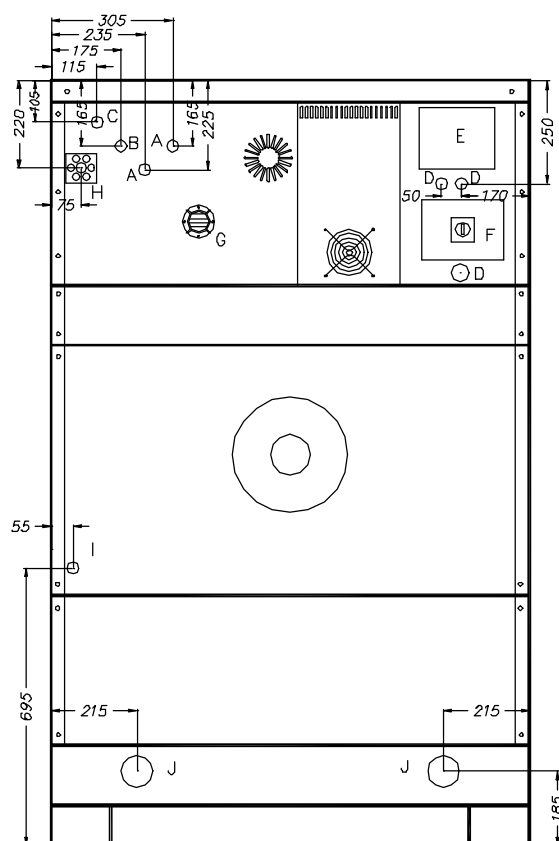
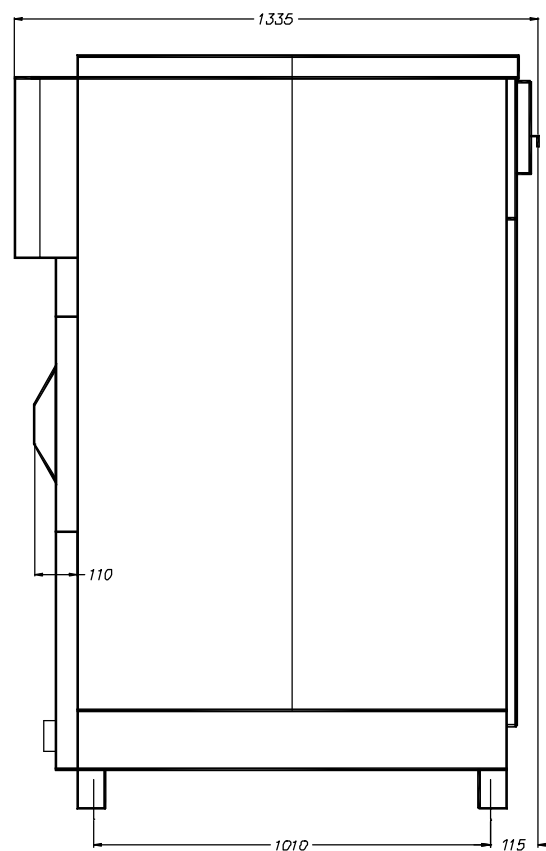
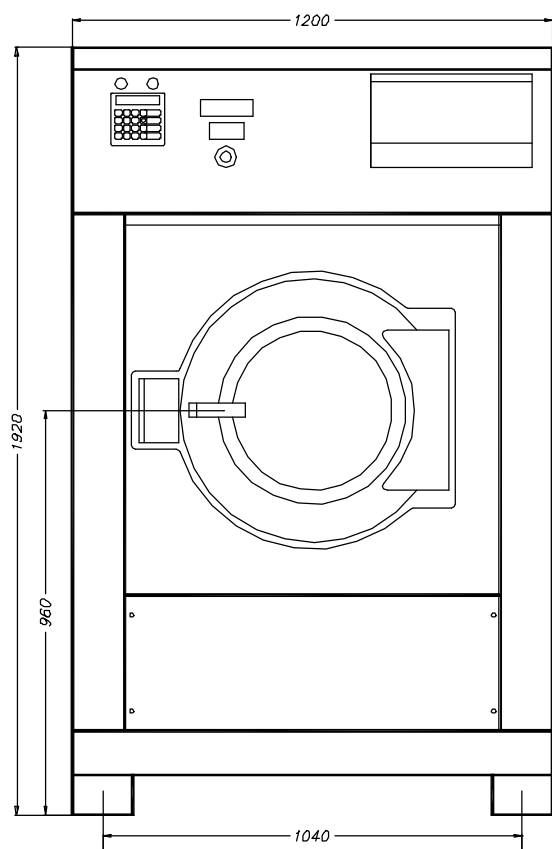
- ☐ These instructions surely cannot prevent all risks of accidents. It is up to the user to act with the utmost precaution.
- ☐ Do not hesitate to contact the dealer in case of a problem.

Technical data and dimensions

Technical data

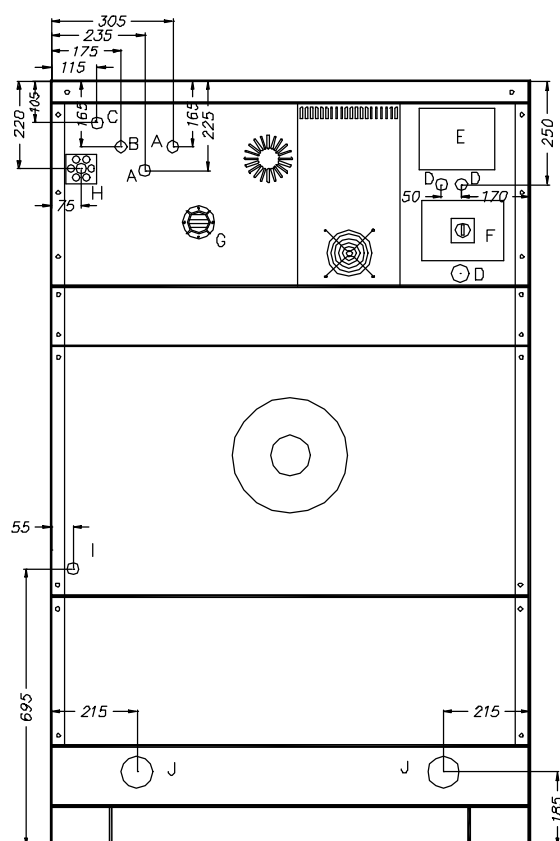
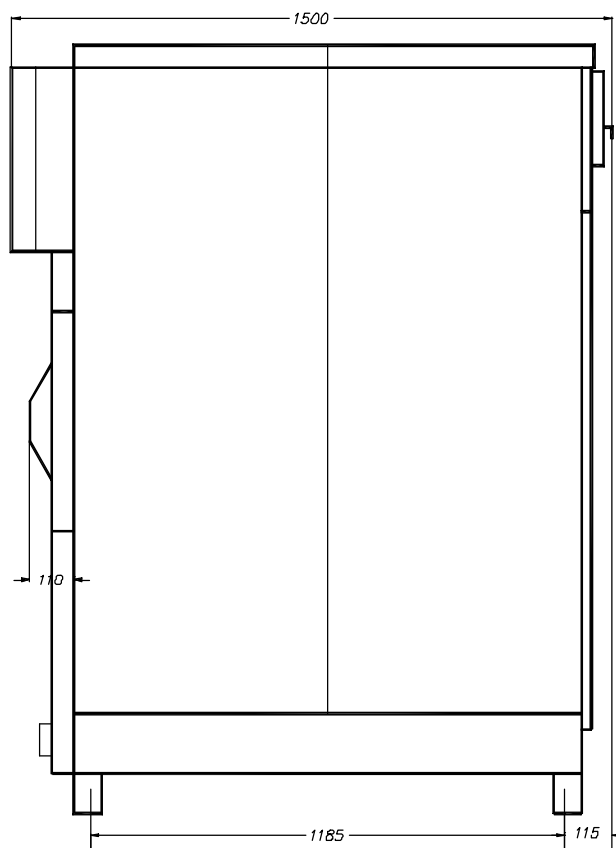
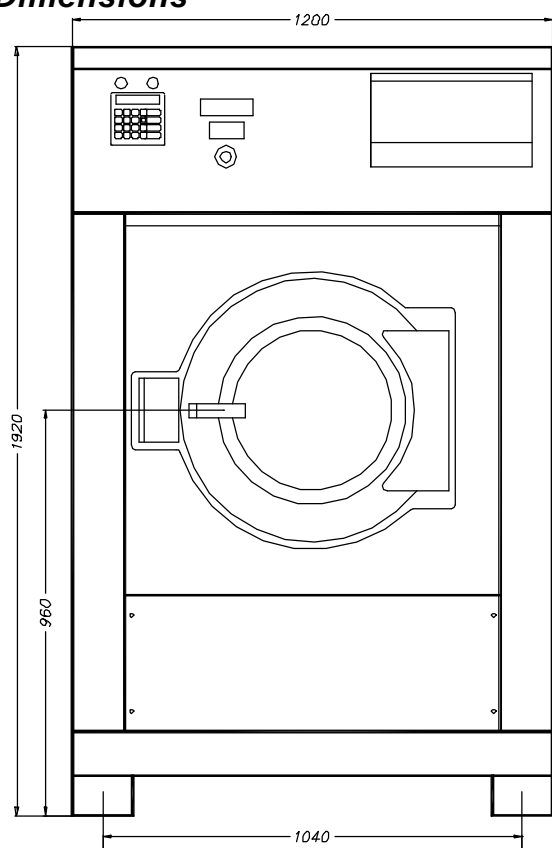
	HF 455	HF 575
Capacity (dry weight)		
1/11	40,9 kg	51,8 kg
1/10	45 kg	57 kg
1/9	50 kg	63,3 kg
Cylinder		
Diameter	980 mm	980 mm
Depth	597 mm	775 mm
Volume	450 Lit.	570 Lit.
Cabinet		
Height	1950 mm	1950 mm
Width	1200 mm	1200 mm
Depth	1190 mm	1405 mm
Front loading		
Diameter door opening	395 mm	
Door height - lower edge	800 mm	
Door height - center	1000 mm	
Speed		
Wash	10--50 tr/min.	
Distribution	100 tr/min.	
Spin	250--400 tr/min.	
High spin	500--800 tr/min.	
G-force		
Spin	87	
High spin	350	
Motors (3-phase)		
4p. 1470 rpm	7500W	
Drain		
Depend-O-Drain	3	
Water-inlet		
Hard, soft, hot water	3/4"	
Steam connection		
Steam connection	1/2"	
Heating		
Electric 220/380 V	27 kW	
Electric 380 V	36 kW	
Steam	X	
Boiler fed	X	
Boiler fed (with auxiliary heating)	X	
Packing dimensions		
(H x W x D)	2100x1350x1430	2100x1350x1630
With liquid soap pumps	2100x1550x1430	2100x1350x1630
Weight		
Net	1000 kg	1100 kg
Gross	1200 kg	1300 kg

Afmetingen 455



- ☐ A. Soft water connection 3/4"
- ☐ B. Warm water connection 3/4"
- ☐ C. Hard water connection 3/4"
- ☐ D. Electrical connection
- ☐ E. Electrical connection soap pumps
- ☐ F. Main switch
- ☐ G. Ventilation tub
- ☐ H. Connection of the liquid soap hoses
- ☐ I. Steam connection 1/2"
- ☐ J. Water drain

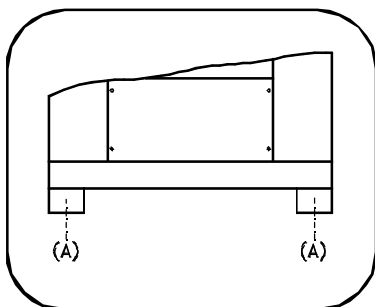
Dimensions



- ☐ A. Soft water connection 3/4"
- ☐ B. Warm water connection 3/4"
- ☐ C. Hard water connection 3/4"
- ☐ D. Electrical connection
- ☐ E. Electrical connection soap pumps
- ☐ F. Main switch
- ☐ G. Ventilation tub
- ☐ H. Connection of the liquid soap hoses
- ☐ I. Steam connection 1/2"
- ☐ J. Water drain

Installation and connection

Ground

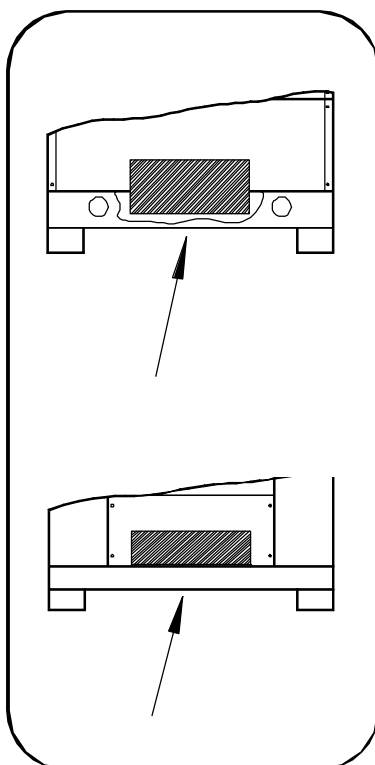


The machine must be placed on a flat, solid surface (metal base, concrete or solid ground). It is **recommended that the machine be anchored** (M16) on the provided places (A) in the base, especially in case of a plinth (see Dimensions 2).

The machine must be placed entirely level. For easy maintenance it is recommended to keep a minimal distance of 600 mm between the wall and the back of the machine.

If several machines are placed next to each another, there should be a minimal distance of 30 mm between each machine.

Removing the transport brackets



To prevent damage during transportation, the machine has been equipped with **four red transport brackets** (D) to eliminate every possible movement of the tub. After the machine has been placed level, take off the service- and the back panel to remove these transport brackets.

Important

The machine must never be activated **before removing these transport brackets**.

Water connection

The machine is delivered with hoses with 3/4" connections. These hoses fit the water inlet valves of the machine and the main water inlet taps. To ensure the optimal functioning of the water inlet valves, the water pressure on the inlet should be between 0,5 and 10 kg/cm² (7 and 145 psi). If the pressure is too low, the cycle time will increase considerably.

In case of boiler fed machines, a minimum of hot water of 90°C should be available: For the HFP455: 350l. HFP575: 445l.

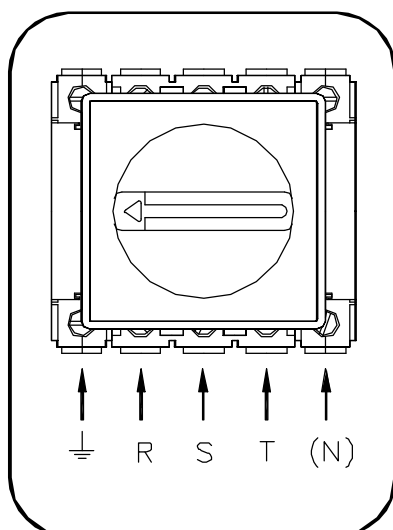
Water drain

The machine is equipped with a drain valve with 3" outer diameter (80 mm). This drain valve should be connected to the drain by means of the drain elbow which is delivered with the machine.

- ☐ The diameter of the main drain should be adapted to the water flow and the number of machines. It should be sufficient to handle at least 160L/min. per machine.
- ☐ It is necessary to connect the main drain at least on one side to an open air-brake to allow ventilation.
- ☐ When the main drain has not been sufficiently deodorized, every machine should be installed separately with a deodorizer.

Electrical Connection

- ☐ Remove the cover plate at the back of the machine (see dimensions).
- ☐ Connect the power cable to the connectors R,S,T (3 x 220V) or R,S,T and N (3 x 380V + N) and the ground wire.



Machine without electrical heating

Power of the breaker plugs:

220V 3AC	380V 3AC+N
20 A	20 A

Machine with electrical heating

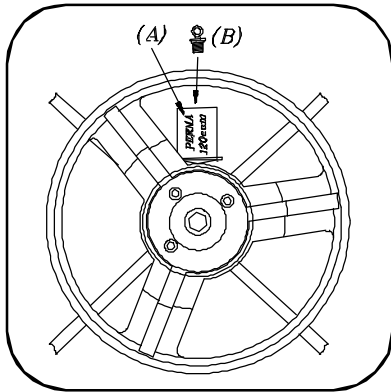
Power of the breaker plugs:

	220V 3AC	380V 3AC+N
27kW	80 A	63 A
36kW	---	80 A



After having connected the machine, check the **spin direction** of the drum. The drum should spin **in the direction of the arrow** indicated on the door glass (**clockwise**). If the drum spins in the wrong sense, it can cause damage to the motor and can cause water to splash out through the soap dispenser.

In **case of a wrong spin direction**, switch the position of the connectors of the motor circuit from R to S and vice versa.

Automatic lubricator

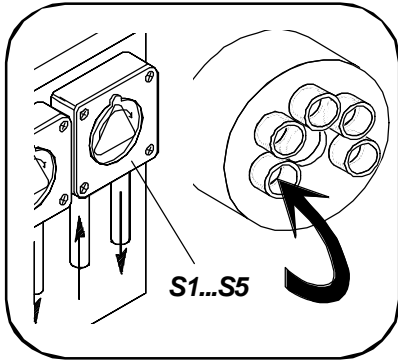
The bearing house of the machine is equipped with a lubricating device (A) which automatically lubricates the bearing during one year. Upon delivery of the machine, this lubricator has not been brought into use. To this effect, please put on the matching screw (B) in the foreseen opening of the lubricator.



Ignoring this instruction will inevitably cause damage to the bearings!

Liquid soap connection (option)

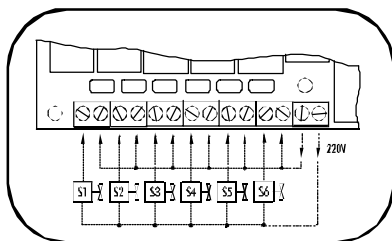
Connection of the liquid soap hoses



A rubber connection has been placed over the air break opening at the back of the machine. There are **5 holes** in this rubber connection, through each of which a liquid soap hose can be driven (**S1...S5**). Press the hoses until they appear well *inside the soap dispenser*.

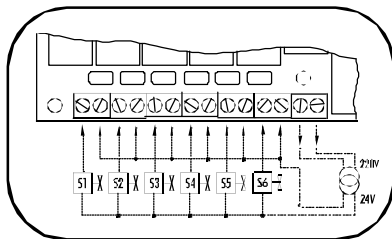
The central gap in the rubber connection remains and serves as air breaker.

Electrical connection of the liquid soap pumps



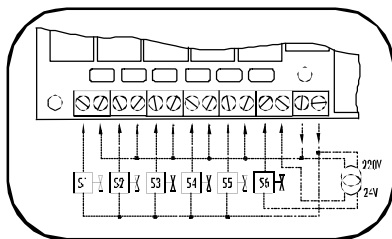
On machines equipped with a liquid soap connection, connect the wires **directly on the print board** next to the ground wire connection (option). Connect as indicated on the wiring diagram.

The two connectors on the right give a tension of 220V ~ (max. 4A) which ~~can be applied to drive 220V ~ soap pumps. If more than 4A~~ is required, ~~an~~ **external tension** will have to be used. **6** connections have been provided, of which one (**S6**) can be used to drive a waterproofing pump (e.g. for rain coats, etc.).



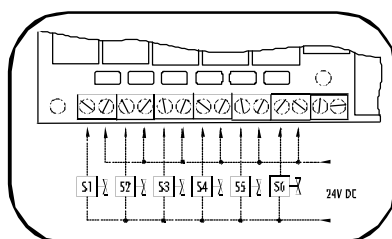
The 220V can be transformed to other values to drive other type soap pumps.

Example: pumps 24V ~.



Also, pumps with different operating tension can be combined.

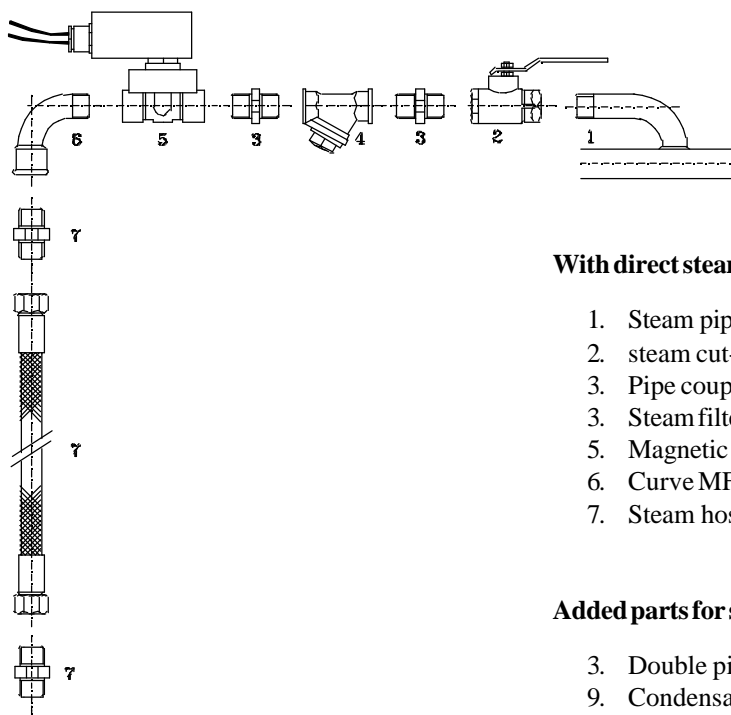
Example: 5 pumps 220V ~ and 1 pump 24V ~.



With an external tension 24V DC

Steam connection

Machines with steam heating must have a steam valve between the steam installation and the machine.



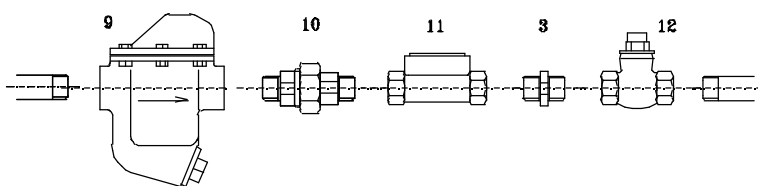
With direct steam injection into the machine

1. Steam pipe
2. steam cut-off valve 3/8"
3. Pipe coupling 3/8"
3. Steam filter 3/8"
5. Magnetic steam valve 3/8"
6. Curve MF 3/8"
7. Steam hose with appropriate pipe coupling 3/8"

Added parts for steam heating with heat exchanger

3. Double pipe coupling 1/2"
9. Condensation accumulator with filter 1/2"
10. Conical coupling MM 1/2"
11. Single window 1/2"
12. One-way valve 1/2"

M = inner wire, F = outer wire

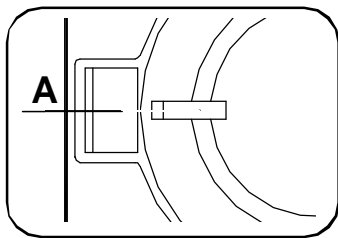


The manufacturer is not responsible for damage or accidents caused by not following the installation instructions!

Operating instructions

Open the door

Press "A" and open the door.



Fill the drum

The machines have 5 wash programs. Sort the linen according to the quality and the allowed wash temperature. Remove all nails, coins, etc. that can damage the linen or the machine during the wash cycle. Turn sleeves of overcoats, shirts and blouses inside out. To increase the wash action and thus the quality of the wash, it is recommended to mix large and small pieces.

If the machine is filled **less than 80%** of the capacity, this could prevent a good operation and can even **damage** the machine.

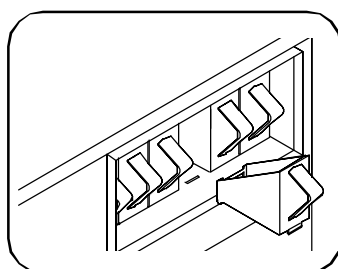
Overloading the machine can be the cause of low wash quality.

Close the door

Select program

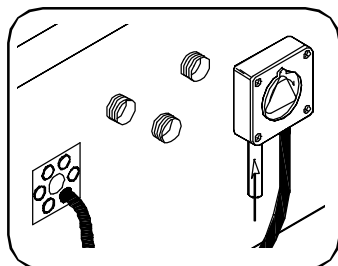
Press the button of the desired program: (1-5)

Add detergent



Take the necessary soap compartments out of the soap dispenser and fill them with the required detergents in function of the chosen program. Then put them back into the soap dispenser, leaning against the axle of the drop valves.

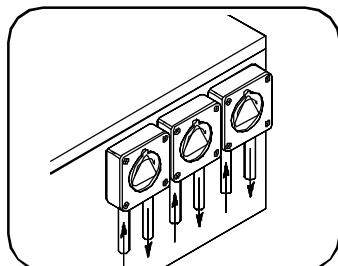
See instruction manual PS 40 : "6 : Operating mode".



Remark :

Bleach may never be added through the soap compartments. Use the external pump at the back side of the machine for this purpose.

The dosing is to be programmed through soap inlet 4 (soap 4). See instruction manual PS 40 : "4 : Programming mode".

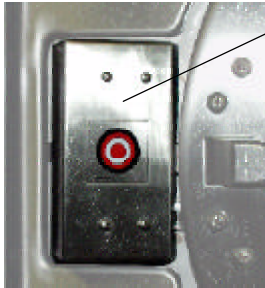


Liquid detergents can also be added through the external soap pumps. These soap pumps are available as an option. Some machines are not equipped with a soap dispenser, so that detergents can only be added this way.

Machines equipped with soap pumps do not have the bleach pump at the back of the machine, but have it included in the group of pumps. See instruction manual PS 40 : "4 : Programming mode".

For more detailed information on the operation : see instruction manual PS 40.

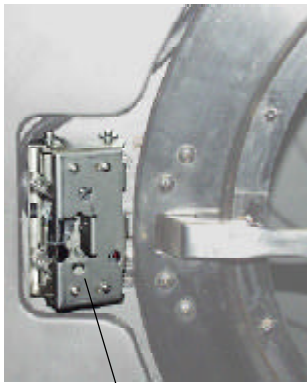
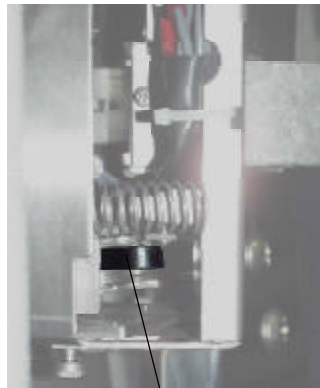
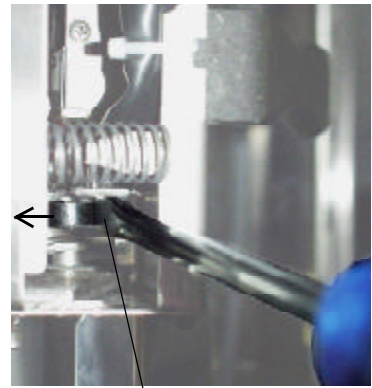
Opening the door in case of an emergency

**A**

To open the door in case of emergency (malfunction, etc.), remove the lock cover plate (A). Subsequently, insert a screwdriver from the left-hand side behind the lock mechanism (B) and push back the black handle (C) while opening the doorhandle.

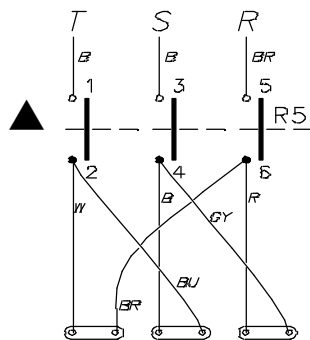


Before opening the door, be sure there is no water left in the tub, and that the drum has come to a complete stop.

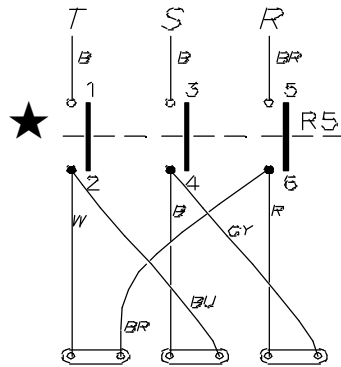
**B****C****C**

Technical remarks

Internal connections of the electrical heating

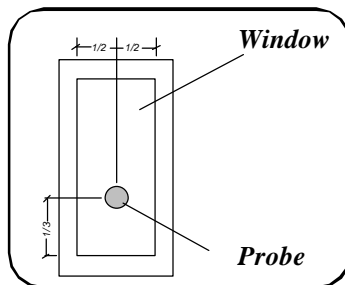


Heating		3x220V	R5	3x380V	R5
27kW	3x3kW	▲	LC1D1810	★	LC1D0901
	3x3kW	▲	LC1D1810	★	LC1D0901
	3x3kW	▲	LC1D1810	★	LC1D0901
36kW	3x4kW	-----	-----	▲	LC1D1810
	3x4kW	-----	-----	▲	LC1D1810
	3x4kW	-----	-----	▲	LC1D1810



B=Black Bu=Blue
 Br=Brown R=Red
 Gy=Grey W=White

Tilt switch



The tilt switch is mounted on the solid part of the machine. There is a window around the probe of the tilt switch that is mounted on the movable part of the machine. When the machine goes out of balance by overloading or uneven distribution of the linen, the tilt switch will interrupt this action to prevent damage to the machine.

Important

To guarantee good functioning, the probe should be centered horizontally and vertically at 1/3 from the bottom of the tilt window (when machine drum is empty).

Maintenance of the machine

General maintenance

- ☐ Clean the entire cabinet of the machine regularly and remove all traces of soap, etc....
- ☐ Remove all detergent residue in the soap dispenser with hot water.
- ☐ Clean the door gasket and remove all detergents and other products.
- ☐ Shut off the main water, steam and power connections at the end of each day. Do not change the setting of the water inlet taps on boiler fed machines once these have been installed.
- ☐ It is recommended to leave the door and the soap dispenser open after use, to ventilate the machine.

Periodical maintenance

- ☐ The V-belts of the motors should be retightened after two to three months when first used. This is necessary because these belts are subject to a one-time stretching when first used. **By ignoring this instruction**, the belt starts to slip after a few months and will brake shortly afterwards.
- ☐ Check regularly if the filters of the water inlet are not blocked by calcification.
- ☐ If a machine frequently skips the final spin, check whether the probe of the out of balance switch is still in the appropriate position, that is horizontally centered and vertically 1/3 from the bottom inside the window. (When the drum is empty).
- ☐ An obstructed drain can cause frequent interruption of spinning for safety reasons.
- ☐ The automatic lubricator needs to be replaced each year. (Order number: 212/00002/00)

Repair and after-sales service

- ☐ In case of important malfunctions and deficiencies which you cannot resolve yourself, do not hesitate to contact the technical service of your distributor.

Data distributor:

Name:
 Address:
 Tel.:

Data machine:

Type:
 Program:
 Date of installation:
 Installed by:
 Serial number:
 Operation voltage and frequency:



The manufacturer reserves the right to change the content of this instruction manual, at all times and without previous notice.