

Washer Extractors

HC60, HC65, HC75, HC100
HC135, HC165

for corresponding “CHC” and “IHC” models,
see page 6 for complete model list.

Technical specifications
Installation instructions
Maintenance



Instruction manual

Part No. D0285R9
Code: 249/00306/20

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Model Numbers

Build-up

xHC060yyHyyyyyy	HC60
xHC065yyHyyyyyy	HC65
xHC075yyHyyyyyy	HC75
xHC100yyHyyyyyy	HC100
xHC135yyHyyyyyy	HC135
xHC165yyHyyyyyy	HC165
xHC012yyHyyyyyy	HX25
xHC014yyHyyyyyy	HX35
xHC018yyHyyyyyy	
xHC025yyHyyyyyy	
xHC030yyHyyyyyy	
xHC035yyHyyyyyy	

Model numbers

IHC012ANH	IHC025ANH	IHC035ANH
IHC012MNH	IHC025MNH	IHC035MNH
IHC012MCH	IHC025MCH	IHC035MCH
IHC012MDH	IHC025MDH	IHC035MDH
IHC012MEH	IHC025MEH	IHC035MEH
IHC012MLH	IHC025MLH	IHC035MLH
IHC012MXH	IHC025MXH	IHC035MXH
IHC012MYH	IHC025MYH	IHC035MYH
IHC012SCH	IHC025SCH	IHC035SCH
IHC012SDH	IHC025SDH	IHC035SDH
IHC012SEH	IHC025SEH	IHC035SEH
IHC012SRH	IHC025SRH	IHC035SRH
IHC012SLH	IHC025SLH	IHC035SLH
IHC012SXH	IHC025SXH	IHC035SXH
IHC012SYH	IHC025SYH	IHC035SYH
IHC018ANH	IHC030ANH	IHC060ANH
IHC018MNH	IHC030MNH	IHC060MNH
IHC018MCH	IHC030MCH	IHC060MCH
IHC018MDH	IHC030MDH	IHC060MDH
IHC018MEH	IHC030MEH	IHC060MEH
IHC018MLH	IHC030MLH	IHC060MLH
IHC018MXH	IHC030MXH	IHC060MXH
IHC018MYH	IHC030MYH	IHC060MYH
IHC018SCH	IHC030SCH	IHC060SCH
IHC018SDH	IHC030SDH	IHC060SDH
IHC018SEH	IHC030SEH	IHC060SEH
IHC018SRH	IHC030SRH	IHC060SRH
IHC018SLH	IHC030SLH	IHC060SLH
IHC018SXH	IHC030SXH	IHC060SXH
IHC018SYH	IHC030SYH	IHC060SYH

IHC060ZNH
IHC065ANH
IHC065MNH
IHC065MCH
IHC065MDH
IHC065MEH
IHC065MLH
IHC065MXH
IHC065MYH
IHC065SCH
IHC065SDH
IHC065SEH
IHC065SRH
IHC065SLH
IHC065SXH
IHC065SYH
IHC065ZNH
IHC075ANH
IHC075MNH
IHC075MCH
IHC075MDH
IHC075MEH
IHC075MLH
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IHC075MYH
IHC075SCH
IHC075SDH
IHC075SEH
IHC075SRH
IHC075SLH
IHC075SXH
IHC075SYH
IHC075ZNH
IHC100ANH
IHC100MNH
IHC100MCH
IHC100MDH
IHC100MEH
IHC100MLH
IHC100MXH
IHC100MYH
IHC100SCH
IHC100SDH
IHC100SEH
IHC100SRH
IHC100SLH
IHC100SXH

IHC100SYH
IHC100ZNH
IHC135ANH
IHC135MNH
IHC135MCH
IHC135MDH
IHC135MEH
IHC135MLH
IHC135MXH
IHC135MYH
IHC135SCH
IHC135SDH
IHC135SEH
IHC135SRH
IHC135SLH
IHC135SXH
IHC135SYH
IHC135ZNH
IHC165ANH
IHC165MNH
IHC165MCH
IHC165MDH
IHC165MEH
IHC165MLH
IHC165MXH
IHC165MYH
IHC165SCH
IHC165SDH
IHC165SEH
IHC165SRH
IHC165SLH
IHC165SXH
IHC165SYH
IHC165ZNH
CHC012ANH
CHC012MNH
CHC018ANH
CHC018MNH
CHC025ANH
CHC025MNH
CHC030ANH
CHC030MNH
CHC035ANH
CHC035MNH
CHC060ANH
CHC060MNH

CHC060MCH
CHC060MDH
CHC060MEH
CHC060MLH
CHC060MXH
CHC060MYH
CHC065ANH
CHC065MNH
CHC065MCH
CHC065MDH
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CHC135MYH
CHC165ANH
CHC165MNH
CHC165MCH
CHC165MDH
CHC165MEH
CHC165MLH
CHC165MXH
CHC165MYH

Safety and Environmental Informations

Safety

CAUTION LABELS

Please familiarize yourself with the following standard warning symbols. They are used throughout this manual and on the equipment to alert you to possible hazards. Anyone operating or servicing this equipment must understand these symbols and must follow all safety rules in this manual.



ELECTRICAL HAZARD

This symbol alerts you to the presence of a dangerous voltage, which could cause a serious shock resulting in personal injury or death.



CONSULT MANUAL

This symbol warns you to consult the manual for important instructions concerning the machine and possible hazards.



MOVING PARTS HAZARD

This symbol alerts you to the presence of possible dangerous moving parts within the machine. Guards should always be in place when the machine is in operation. Be very careful when servicing the drive system.



PINCHING HAZARD

This warning symbol indicates the presence of a pinch point on the machine. This is a place where your hand might be pinched or crushed, resulting in a severe injury. Make sure you understand these hazards and keep all body parts clear of them.



HOT SURFACE HAZARD

This symbol indicates the presence of a potentially hot surface. Some machine surfaces and parts may become extremely hot during normal operation and should not be touched.



ATTENTION

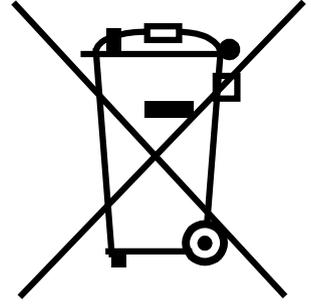
This symbol identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss.

Environmental

Disposal of Unit

This appliance is marked according to the European directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. Ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local distributor resources.



Explanation of Safety Messages

Throughout this manual and on machine decals, you will find precautionary statements (“DANGER,” “WARNING,” and “CAUTION”) followed by specific instructions. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

	DANGER
Indicates an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.	
	WARNING
Indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.	
	CAUTION
Indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.	

Safety Decals

Safety decals appear at crucial locations on the machine. Failure to maintain legible safety decals could result in injury to the operator or service technician.

To provide personal safety and keep the machine in proper working order, follow all maintenance and safety procedures presented in this manual. If questions regarding safety arise, contact the manufacturer immediately.

Use manufacturer-authorized spare parts to avoid safety hazards.

Additional precautionary statements (“IMPORTANT” and “NOTE”) are followed by specific instructions.

IMPORTANT: The word “IMPORTANT” is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE: The word “NOTE” is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

Important Safety Instructions

	WARNING
<p>To reduce the risk of fire, electric shock, serious injury or death to persons when using your washer, follow these basic precautions:</p>	

1. Read all instructions before using the washer.
2. Refer to the GROUNDING INSTRUCTIONS in the installation Manual for the proper grounding of the washer.
3. Do not wash textiles that have been previously cleaned, washed, soaked, or spotted with gasoline, dry-cleaning solvents, or other flammable or explosive substances as they give off vapors that could ignite or explode.
4. Do not add gasoline, dry-cleaning solvents, or other flammable or explosive substances to the wash water. These substances give off vapors that could ignite or explode.
5. Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, before using a washing machine or combination washer-dryer, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. The gas is flammable, do not smoke or use an open flame during this time.
6. Do not allow children to play on or in the washer. This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
7. Before the washer is removed from service or discarded, remove the door to the washing compartment.
8. Do not reach into the washer if the wash drum is moving. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.
9. Do not install or store the washer where it will be exposed to water and/or weather.
10. Do not tamper with the controls.
11. Do not repair or replace any part of the washer, or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that the user understands and has the skills to carry out.
12. To reduce the risk of an electric shock or fire, DO NOT use an extension cord or an adapter to connect the washer to an electrical power source.
13. Use a washer only for its intended purpose, washing textiles.
14. ALWAYS disconnect the washer from the electrical supply before attempting any service. Disconnect the power cord by grasping the plug, not the cord.
15. Install the washer according to the INSTALLATION INSTRUCTIONS. All connections for water, drain, electrical power and grounding must comply with local codes and be made by licensed personnel when required.
16. To reduce the risk of fire, textiles which have traces of any flammable substances such as vegetable oil, cooking oil, machine oil, flammable chemicals, thinner, etc., or anything containing wax or chemicals such as in mops and cleaning cloths, must not be put into the washer. These flammable substances may cause the fabric to catch on fire.
17. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
18. Keep washer in good condition. Bumping or dropping the washer can damage safety features. If this occurs, have washer checked by a qualified service person.
19. Replace worn power cords and/or loose plugs.
20. Be sure water connections have a shut-off valve and that fill hose connections are tight. CLOSE the shut-off valves at the end of each wash day.

21. Loading door **MUST BE CLOSED** any time the washer is to fill, tumble, or spin. **DO NOT** bypass the loading door switch by permitting the washer to operate with the loading door open.
22. Always read and follow manufacturer's instructions on packages of laundry and cleaning aids. Heed all warnings or precautions. To reduce the risk of poisoning or chemical burns, keep them out of the reach of children at all times (preferably in a locked cabinet).
23. Always follow the fabric care instructions supplied by the textile manufacturer.
24. Never operate the washer with any guards and/or panels removed.
25. **DO NOT** operate the washer with missing or broken parts.
26. **DO NOT** bypass any safety devices.
27. Failure to install, maintain, and/or operate this washer according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.
28. It is recommended that the machine be installed by qualified technicians.
29. Before starting repairs or maintenance, shut off all power and water supplies.
30. To prevent fire and explosion:
Keep the area around the machine free from inflammable or combustible products.

NOTE: The WARNINGS and IMPORTANT SAFETY INSTRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution, and care must be exercised when installing, maintaining, or operating the washer.

Any problems or conditions not understood should be reported to the dealer, distributor, service agent, or the manufacturer.

SAVE THESE INSTRUCTIONS

Operator Safety

	WARNING
NEVER insert hands or objects into basket until it has completely stopped. Doing so could result in serious injury.	

To ensure the safety of machine operators, the following maintenance checks must be performed daily:

1. Prior to operating the machine, verify that all warning signs are present and legible. Missing or illegible signs must be replaced immediately. Make certain that spares are available.
2. Check door interlock before starting operation of the machine:
 - a. Attempt to start the machine with the door open. The machine should not start with the door open.
 - b. Close and lock the door and start a cycle. Attempt to open the door while the cycle is in progress. The door should not open.

If the door lock and interlock are not functioning properly, call a service technician.

3. Do not attempt to operate the machine if any of the following conditions are present:
 - a. The door does not remain securely locked during the entire cycle.
 - b. Excessively high water level is evident.
 - c. Machine is not connected to a properly grounded circuit.

Do not bypass any safety devices in the machine.

	WARNING
Never operate the machine with a bypassed or disconnected balance system. Operating the machine with severe out-of-balance loads could result in personal injury and serious equipment damage.	

SAVE THESE INSTRUCTIONS

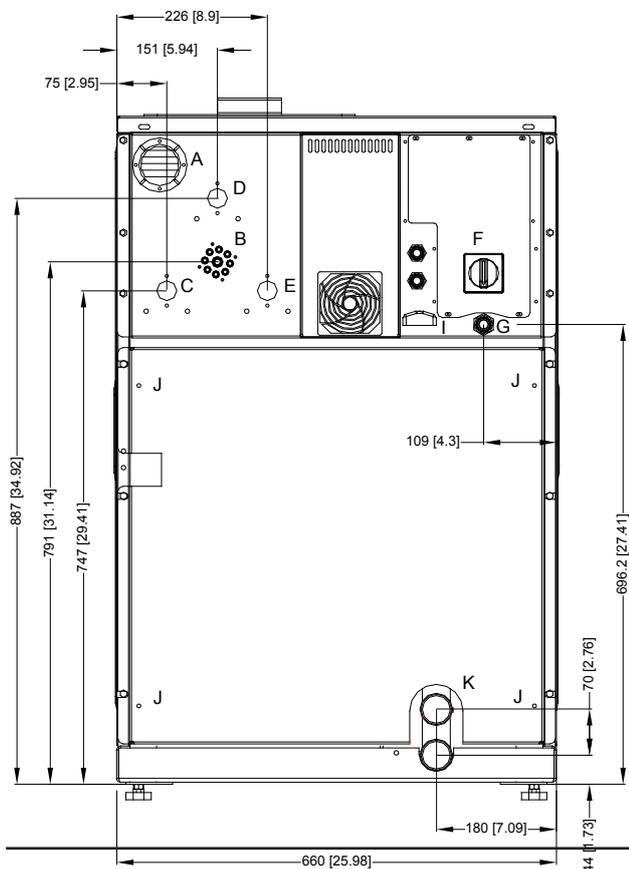
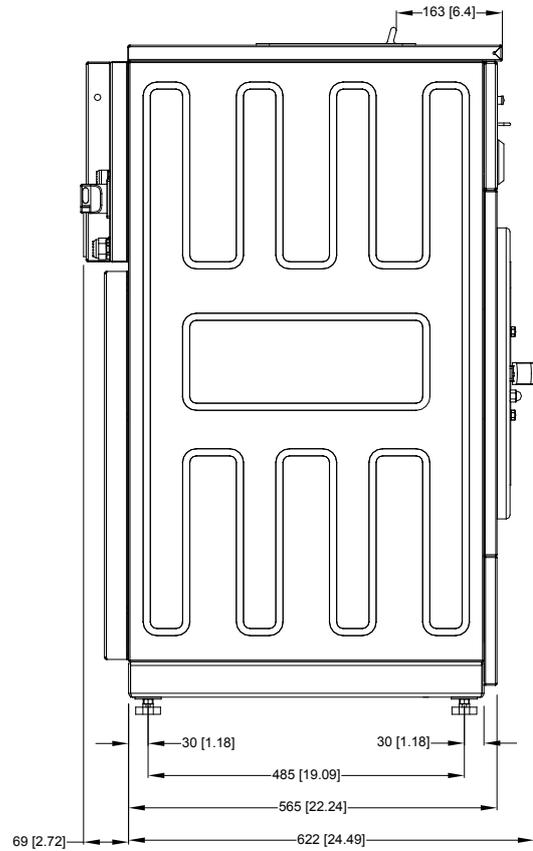
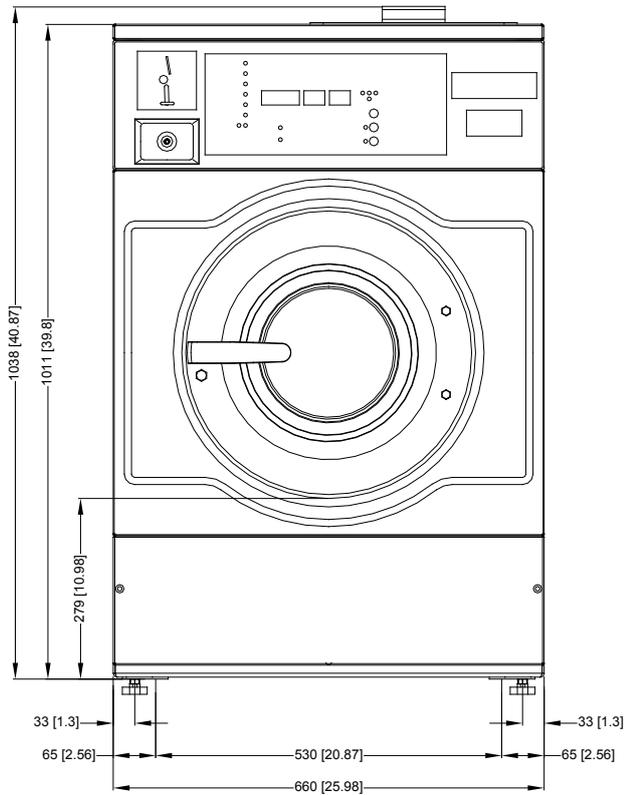
Technical data and dimensions

Technical data HC60, IHC012, IHC060

	METRIC	US
Capacity (dry weight) Ratio [kg/Lit]		
1:11	5 kg	11.02 lb.
1:10	5,5 kg	12.13 lb.
1:9	6,1 kg	13.45 lb.
Cylinder		
Diameter	530 mm	20.87 inch
Depth	250 mm	9.84 inch
Volume	55 Lit	1.94 ft ³
Cabinet		
Height	1038 mm	40.87 inch
Width	660 mm	25.98 inch
Depth	575 mm	22.64 inch
Front loading		
Diameter door opening	300 mm	11.81 inch
Height under door	279 mm	10.98 inch
To center	505 mm	19.88 inch
Speed		
Wash	10 - 50 tr/min - RPM	
Distribution	85 tr/min - RPM	
Spin	250 - 1250 tr/min - RPM	
G-factor		
High spin	462	
Dynamic bottom load (N/Hz)		
	570/16	
Motor (3-phase)		
4p. 1470 tr/min	0,55 kW / 0,74 HP	
Drain valve		
	2"	
Water supply		
Hard, soft, warm water	3/4"	
Heating		
Electrical 230/400 V	4,2 kW	
Electrical 400V	6 kW	
Steam	X	
Warm water (without additional heating)	X	
Warm water (with additional heating)	X	
Packing dimensions		
(H x W x D) mm - inch	1140x740x840 mm - 44.88x29.13x33.07 inch	
Weight		
Net	184 kg	405.65 lb.
Gross	198 kg	436.52 lb.

Dimensions HC60, IHC012, IHC060

Legend: metric mm [inches]



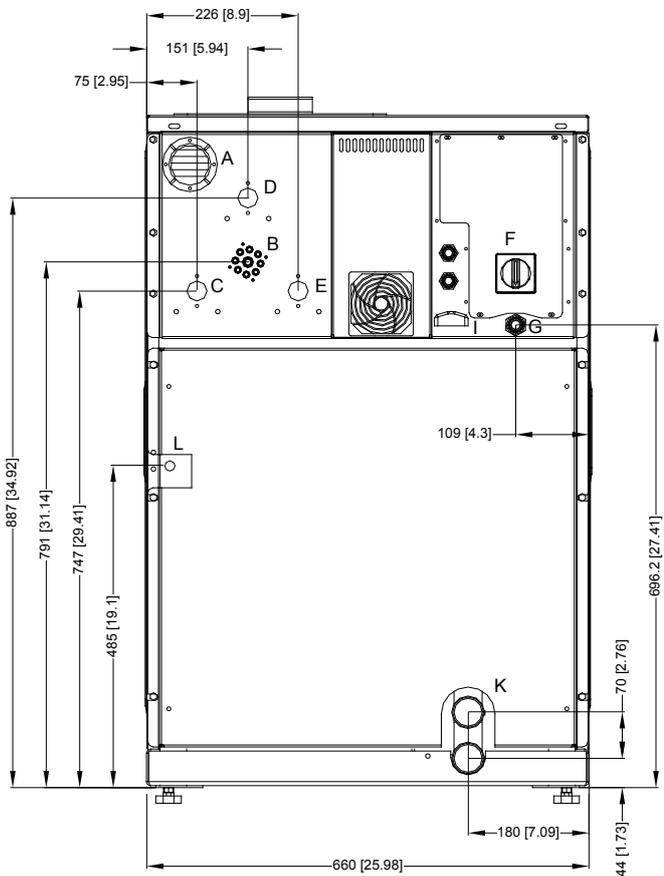
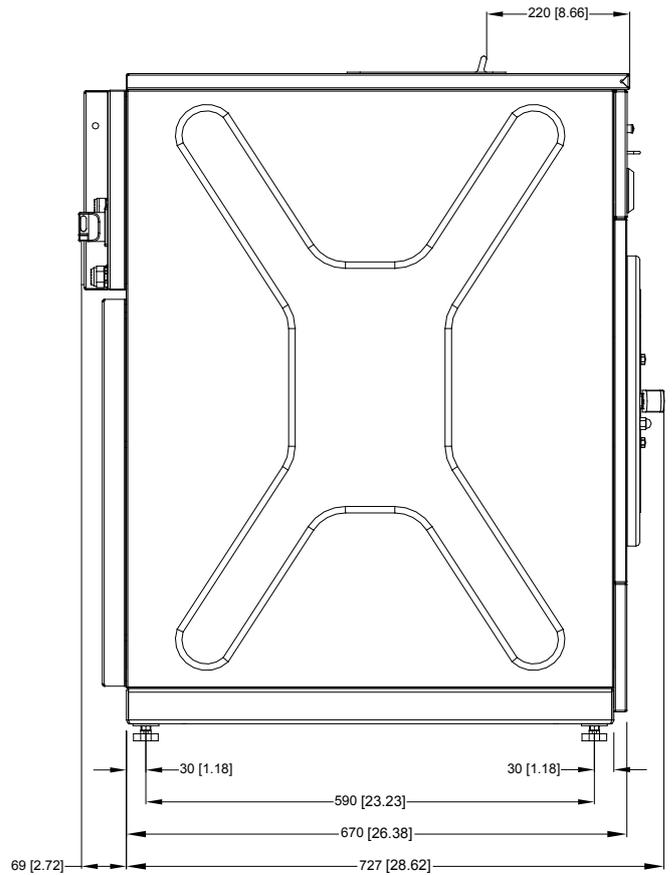
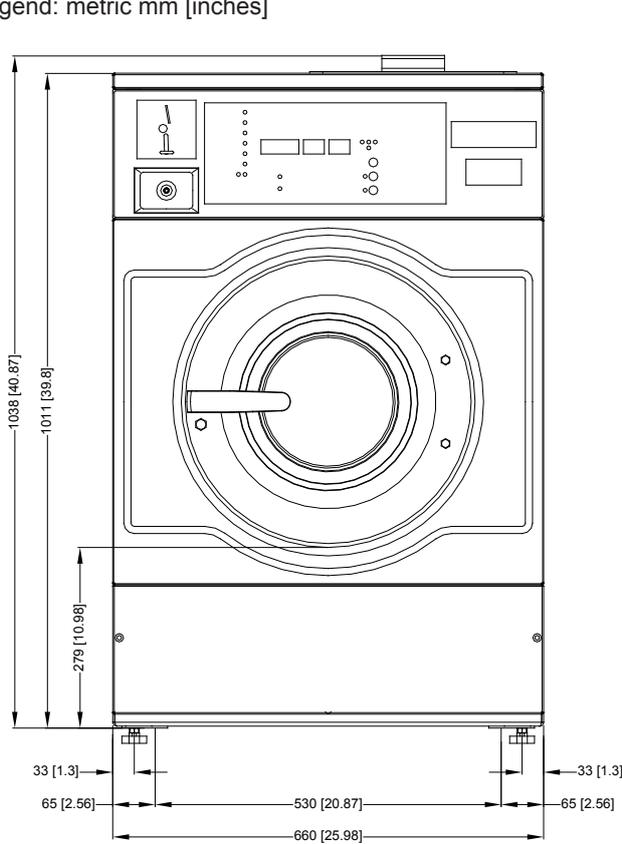
- A. Ventilation soap dispenser
- B. Liquid soap connections
- C. Hard water connections 3/4"
- D. Warm water connections 3/4"
- E. Soft water connections 3/4"
- F. Main switch
- G. Electrical connections
- I. Ventilation tub
- J. Bolt pattern for fixation of the machine
- K. Drain valve

Technical data HC65, IHC014, IHC065

	METRIC	US
Capacity (dry weight) Ratio [kg/Lit]		
1:11	5,9 kg	13.01 lb.
1:10	6,5 kg	14.33 lb.
1:9	7,2 kg	15.87 lb
Cylinder		
Diameter	530 mm	20.87 inch
Depth	295 mm	11.61 inch
Volume	65 Lit	2.30 ft ³
Cabinet		
Height	1038 mm	40.87 inch
Width	660 mm	25.98 inch
Depth	739 mm	29.09 inch
Front loading		
Diameter door opening	300 mm	11.81 inch
Height under door	279 mm	10.98 inch
To center	505 mm	19.88 inch
Speed		
Wash	10 - 50 tr/min - RPM	
Distribution	85 tr/min - RPM	
Spin	250 - 1000 tr/min - RPM	
G-factor		
High spin	296	
Dynamic bottom load (N/Hz)		
	570/16	
Motor (3-phase)		
4p. 1470 tr/min	0,75 kW / 1,01 HP	
Drain valve		
	2"	
Water supply		
Hard, soft, warm water	3/4"	
Steam connection		
Steam connection	3/8"	
Heating		
Electrical 230/400 V	4,2 kW - 6 kW - 9 kW	
Electrical 400V	12 kW	
Steam	X	
Warm water (without additional heating)	X	
Warm water (with additional heating)	X	
Packing dimensions		
(H x W x D) mm - inch	1140x740x840 mm - 44.88x29.13x33.07 inch	
Weight		
Net	207 kg	456.36 lb.
Gross	229 kg	504.86 lb.

Dimensions HC65, IHC014, IHC065

Legend: metric mm [inches]



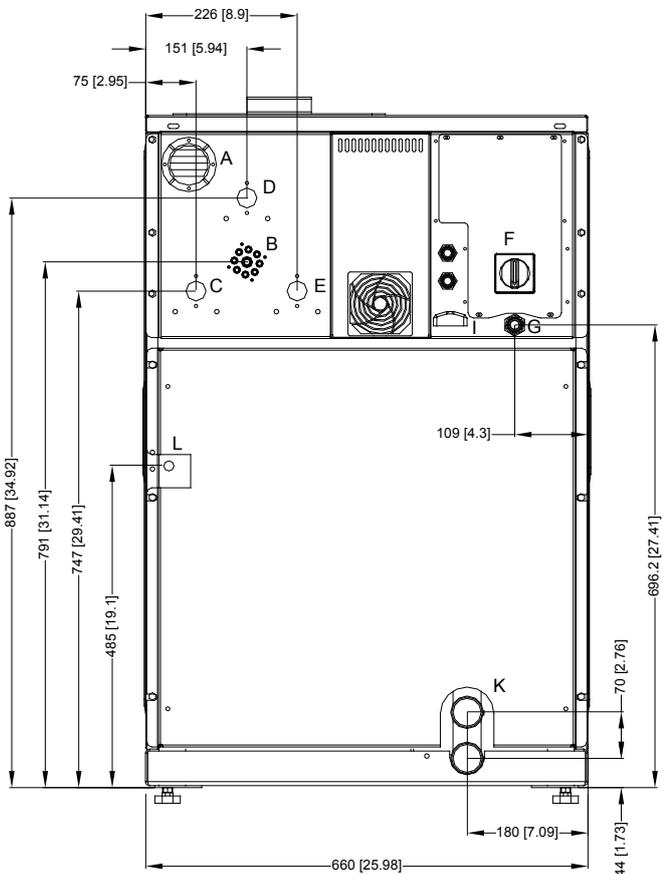
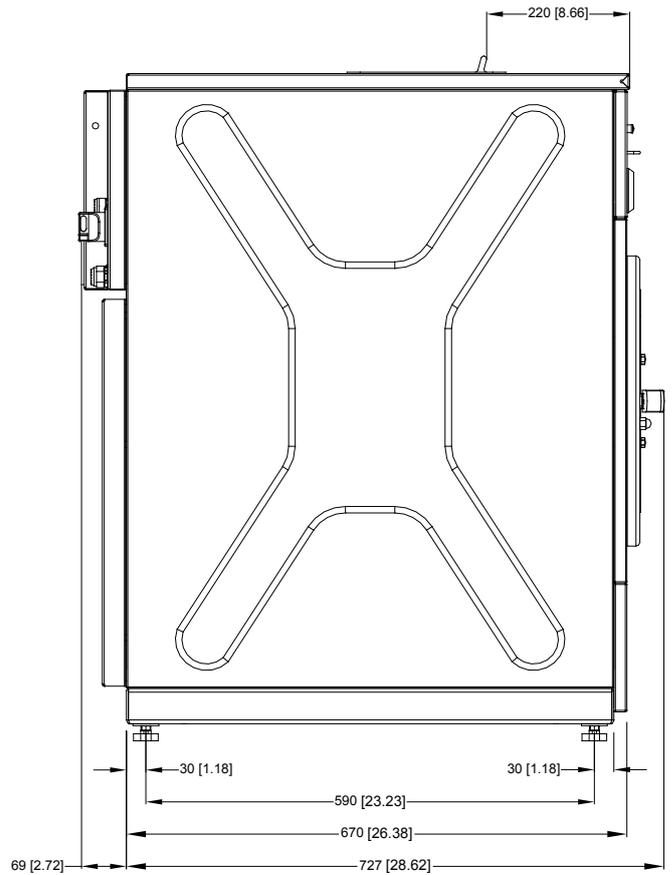
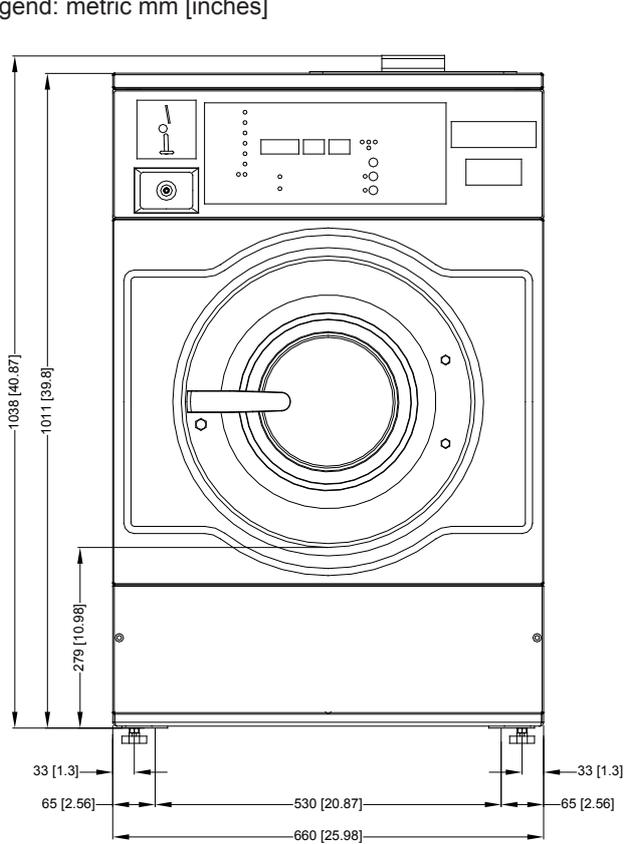
- A. Ventilation soap dispenser
- B. Liquid soap connections
- C. Hard water connections 3/4"
- D. Warm water connections 3/4"
- E. Soft water connections 3/4"
- F. Main switch
- G. Electrical connections
- I. Ventilation tub
- K. Drain valve
- L. Steam connections

Technical data HC75, IHC018, CHC018, IHC075

	METRIC	US
Capacity (dry weight) Ratio [kg/Lit]		
1:11	6,9 kg	15.21 lb.
1:10	7,6 kg	16.76 lb.
1:9	8,4 kg	18.52 lb.
Cylinder		
Diameter	530 mm	20.87 inch
Depth	345 mm	13.58 inch
Volume	76 Lit	2.68 ft ³
Cabinet		
Height	1038 mm	40.87 inch
Width	660 mm	25.98 inch
Depth	739 mm	29.09 inch
Front loading		
Diameter door opening	300 mm	11.81 inch
Height under door	279 mm	10.98 inch
To center	505 mm	19.88 inch
Speed		
Wash	10 - 50 tr/min - RPM	
Distribution	85 tr/min - RPM	
Spin	250 - 1000 tr/min - RPM	
G-factor		
High spin	296	
Dynamic bottom load (N/Hz)		
	550/16	
Motor (3-phase)		
4p. 1470 tr/min	0,75 kW / 1,01 HP	
Drain valve		
	2"	
Water supply		
Hard, soft, warm water	3/4"	
Steam connection		
Steam connection	3/8"	
Heating		
Electrical 230/400 V	4,2 kW - 6 kW - 9 kW	
Electrical 400V	12 kW	
Steam	X	
Warm water (without additional heating)	X	
Warm water (with additional heating)	X	
Packing dimensions		
(H x W x D) mm - inch	1140x740x840 mm - 44.88x29.13x33.07 inch	
Weight		
Net	211 kg	465.18 lb.
Gross	233 kg	513.68 lb.

Dimensions HC75, IHC018, CHC018, IHC075

Legend: metric mm [inches]



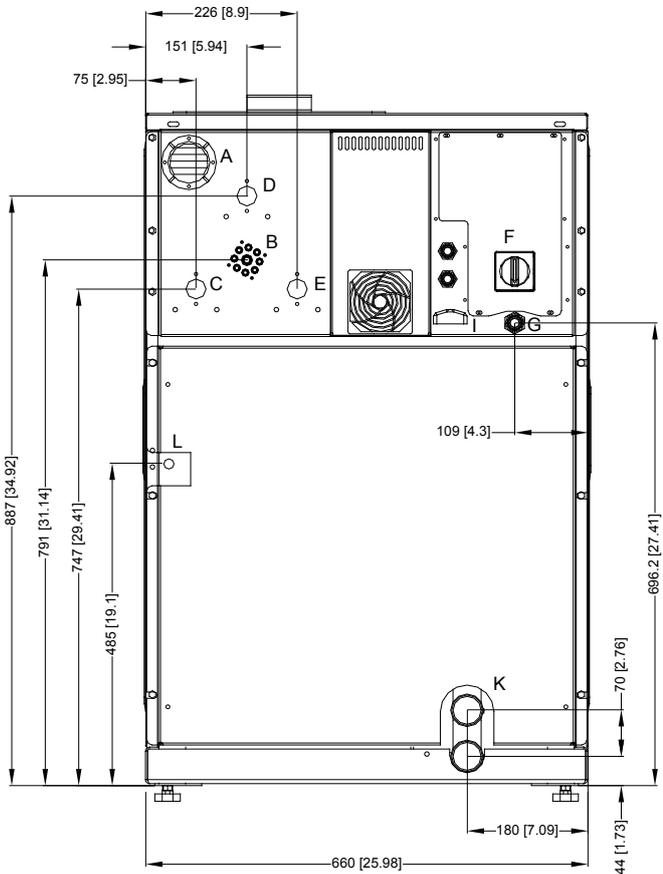
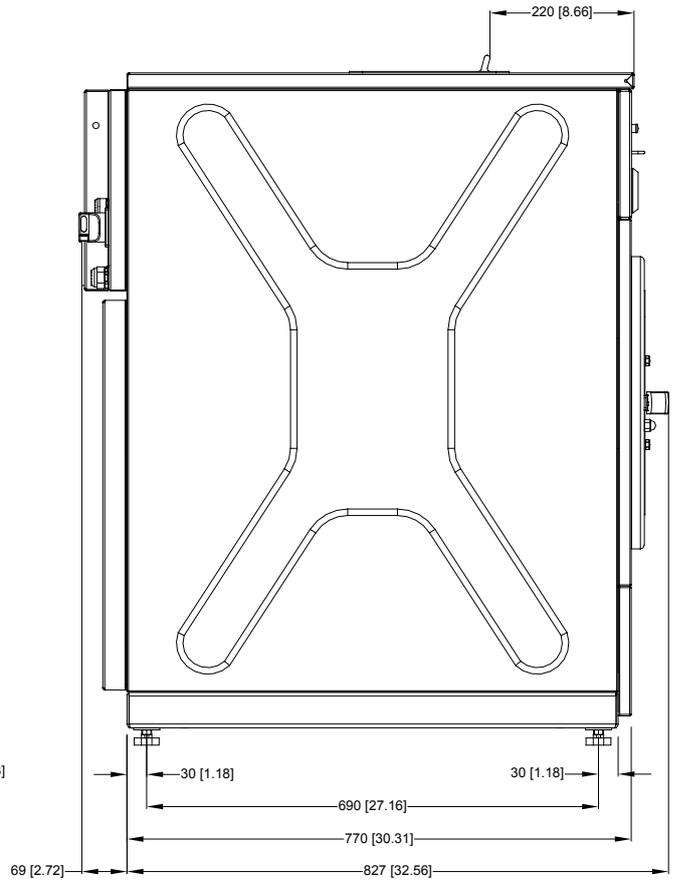
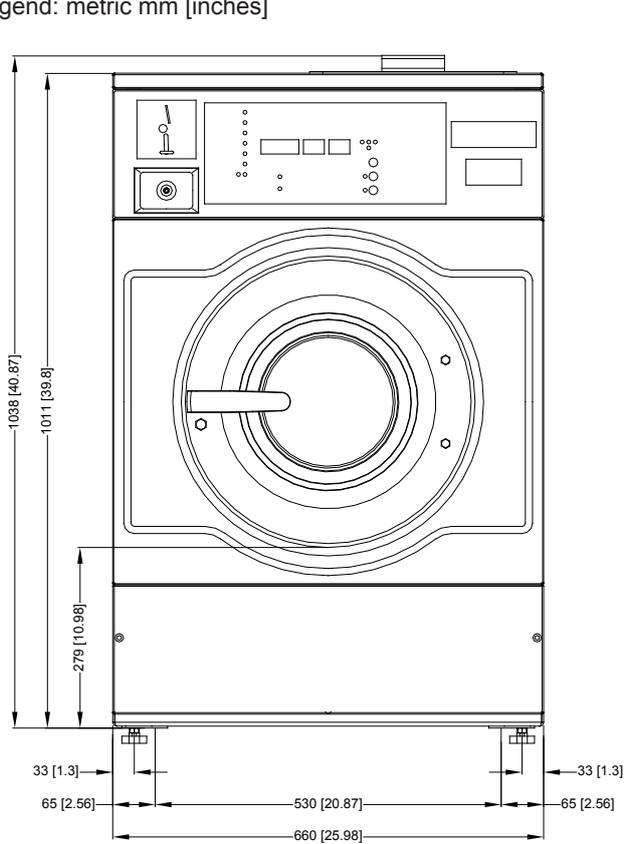
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- B. Liquid soap connections
- C. Hard water connections 3/4"
- D. Warm water connections 3/4"
- E. Soft water connections 3/4"
- F. Main switch
- G. Electrical connections
- I. Ventilation tub
- K. Drain valve
- L. Steam connections

Technical data HC100, IHC025, CHC025, IHC100

	METRIC	US
Capacity (dry weight) Ratio [kg/Lit]		
1:11	8,6 kg	18.96 lb.
1:10	9,5 kg	20.94 lb.
1:9	10,5 kg	23.15 lb.
Cylinder		
Diameter	530 mm	20.87 inch
Depth	440 mm	17.32 inch
Volume	95 Lit	3.35 ft ³
Cabinet		
Height	1038 mm	40.87 inch
Width	660 mm	25.98 inch
Depth	839 mm	33.03 inch
Front loading		
Diameter door opening	300 mm	11.81 inch
Height under door	279 mm	10.98 inch
To center	505 mm	19.88 inch
Speed		
Wash	10 - 50 tr/min - RPM	
Distribution	85 tr/min - RPM	
Spin	250 - 1000 tr/min - RPM	
G-factor		
High spin	296	
Dynamic bottom load (N/Hz)		
	538/16	
Motor (3-phase)		
4p. 1470 tr/min	0,75 kW / 1,01 HP	
Drain valve		
	2"	
Water supply		
Hard, soft, warm water	3/4"	
Steam connection		
Steam connection	3/8"	
Heating		
Electrical 230/400 V	4,2 kW - 6 kW - 9 kW	
Electrical 400V	12 kW	
Steam	X	
Warm water (without additional heating)	X	
Warm water (with additional heating)	X	
Packing dimensions		
(H x W x D) mm - inch	1250x740x950 mm- 49.21x29.13x37.40 inch	
Weight		
Net	236 kg	520.29 lb.
Gross	258 kg	568.79 lb.

Dimensions HC100, IHC025, CHC025, IHC100

Legend: metric mm [inches]



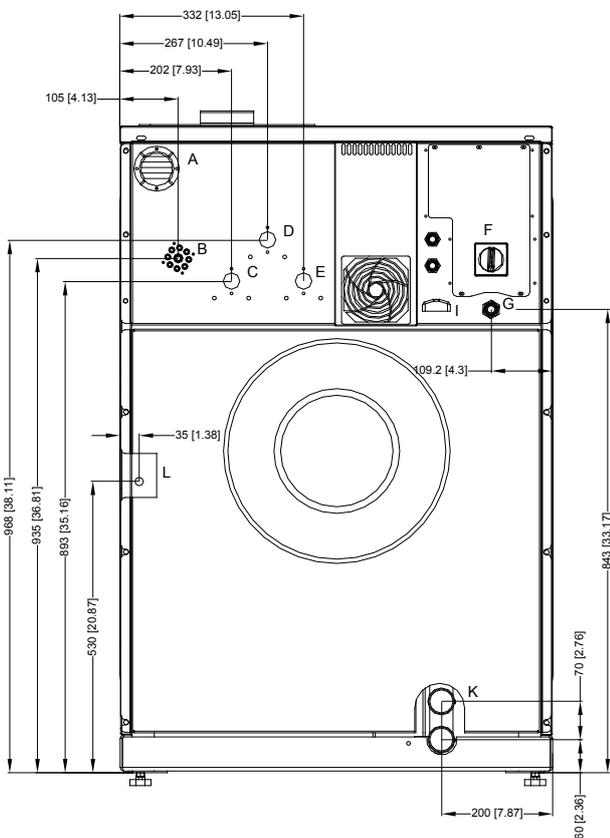
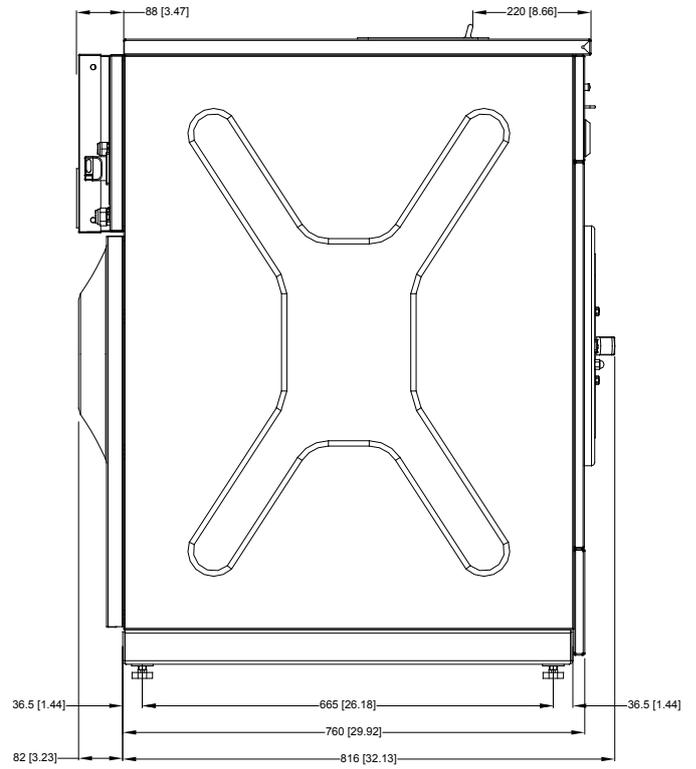
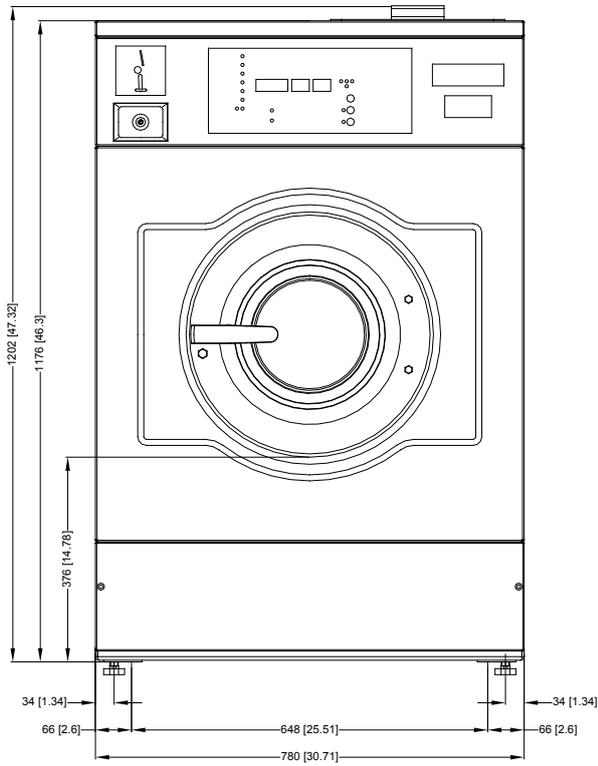
- A. Ventilation soap dispenser
- B. Liquid soap connections
- C. Hard water connections 3/4"
- D. Warm water connections 3/4"
- E. Soft water connections 3/4"
- F. Main switch
- G. Electrical connections
- I. Ventilation tub
- K. Drain valve
- L. Steam connections

Technical data HC135, IHC030, IHC135

	METRIC	US
Capacity (dry weight) Ratio [kg/Lit]		
1:11	12 kg	26.46 lb.
1:10	13,2 kg	29.10 lb.
1:9	14,5 kg	31.97 lb.
Cylinder		
Diameter	650 mm	25.59 inch
Depth	400 mm	15.75 inch
Volume	132 Lit	4.66 ft ³
Cabinet		
Height	1202 mm	47.32 inch
Width	780 mm	30.71 inch
Depth	842 mm	33.15 inch
Front loading		
Diameter door opening	300 mm	11.81 inch
Height under door	376 mm	14.78 inch
To center	605 mm	23.82 inch
Speed		
Wash	10 - 50 tr/min - RPM	
Distribution	85 tr/min - RPM	
Spin	250 - 1000 tr/min - RPM	
G-factor		
High spin	363	
Dynamic bottom load (N/Hz)		
	1100/16	
Motor (3-phase)		
4p. 1470 tr/min	1,5 kW / 2,01 HP	
Drain valve		
	2"	
Water supply		
Hard, soft, warm water	3/4"	
Steam connection		
Steam connection	3/8"	
Heating		
Electrical 230/400 V	12 kW - 15 kW - 18 kW	
Electrical 400V	21 kW - 24 kW	
Steam	X	
Warm water (without additional heating)	X	
Warm water (with additional heating)	X	
Packing dimensions		
(H x W x D) mm - inch	1310x850x940 mm- 51.57x33.46x37.01 inch	
Weight		
Net	325 kg	716.50 lb.
Gross	355 kg	782.64 lb.

Dimensions HC135, IHC030, IHC135

Legend: metric mm [inches]



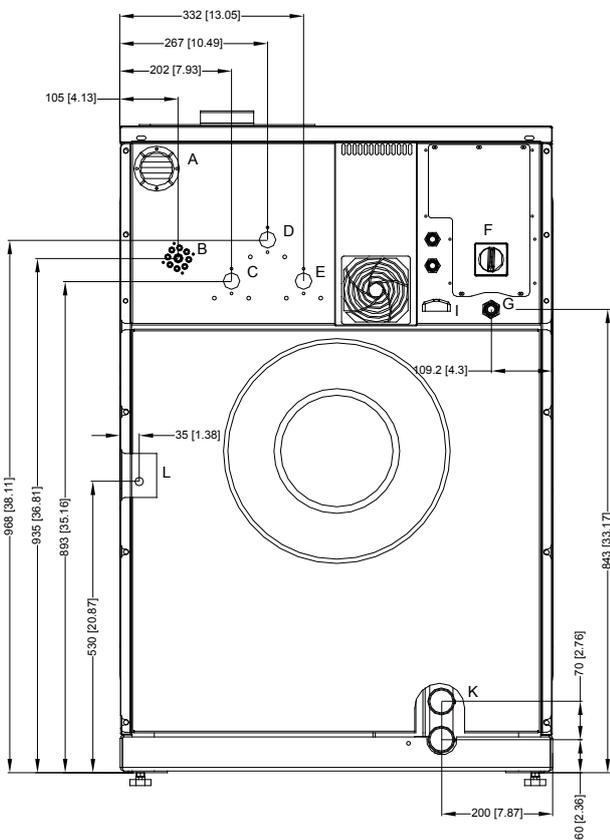
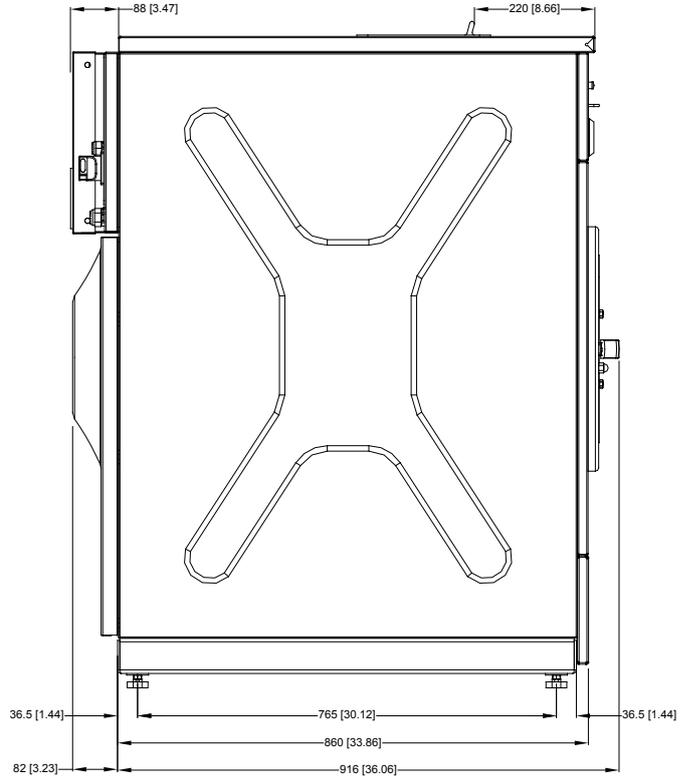
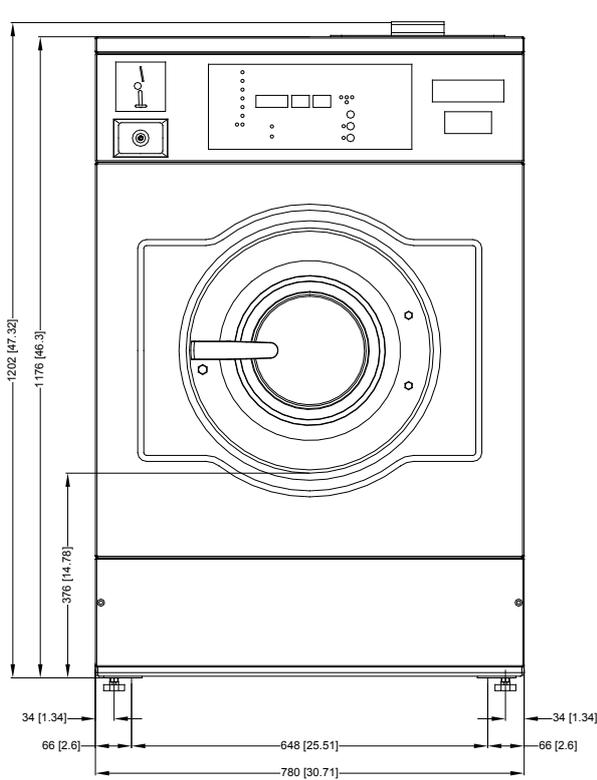
- A. Ventilation soap dispenser
- B. Liquid soap connections
- C. Hard water connections 3/4"
- D. Warm water connections 3/4"
- E. Soft water connections 3/4"
- F. Main switch
- G. Electrical connections
- I. Ventilation tub
- K. Drain valve
- L. Steam connections

Technical data HC165, IHC035, CHC035, IHC165

	METRIC	US
Capacity (dry weight) Ratio [kg/Lit]		
1:11	15 kg	33.07 lb.
1:10	16,5 kg	36.38 lb.
1:9	18,3 kg	40.34 lb.
Cylinder		
Diameter	650 mm	25.59 inch
Depth	500 mm	19.69 inch
Volume	165 Lit	5.83 ft ³
Cabinet		
Height	1202 mm	47.32 inch
Width	780 mm	30.71 inch
Depth	942 mm	37.09 inch
Front loading		
Diameter door opening	300 mm	11.81 inch
Height under door	376 mm	14.78 inch
To center	605 mm	23.82 inch
Speed		
Wash	10 - 50 tr/min - RPM	
Distribution	85 tr/min - RPM	
Spin	250 - 1000 tr/min - RPM	
G-factor		
High spin	363	
Dynamic bottom load (N/Hz)		
	1450/16	
Motor (3-phase)		
4p. 1470 tr/min	1,5 kW / 2,01 HP	
Drain valve		
	2"	
Water supply		
Hard, soft, warm water	3/4"	
Steam connection		
Steam connection	3/8"	
Heating		
Electrical 230/400 V	12 kW - 15 kW - 18 kW	
Electrical 400V	21 kW - 24 kW	
Steam	X	
Warm water (without additional heating)	X	
Warm water (with additional heating)	X	
Packing dimensions		
(H x W x D) mm - inch	1310x850x1080 mm- 51.57x33.46x42.52 inch	
Weight		
Net	358 kg	789.25 lb.
Gross	388 kg	855.39 lb.

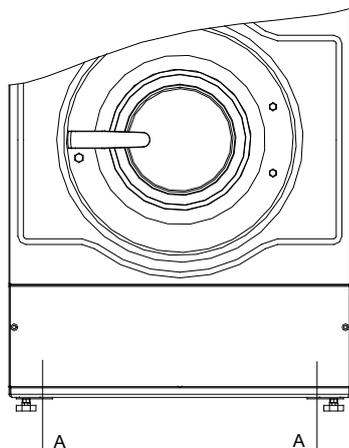
Dimensions HC165, IHC035, CHC035, IHC165

Legend: metric mm [inches]



- A. Ventilation soap dispenser
- B. Liquid soap connections
- C. Hard water connections 3/4"
- D. Warm water connections 3/4"
- E. Soft water connections 3/4"
- F. Main switch
- G. Electrical connections
- I. Ventilation tub
- K. Drain valve
- L. Steam connections

Installation and Connection Instructions



Label 1

CAUTION

Ensure that the machine is installed on a level floor of sufficient strength and that the recommended clearances for inspection and maintenance are provided. Never allow the inspection and maintenance space to be blocked.

Surface

The machine (with rubber feet) must be placed on a flat, solid bottom (concrete or fixed ground). When using a metal base or with machines with steam heating, **the machine (without feet) must be anchored** on the 4 provided locations (A) (See Label 1) in the base (bolts M10). (See Mounting Bolt Hole Locations). The height of the pad should not exceed 203 mm - 8 inch.

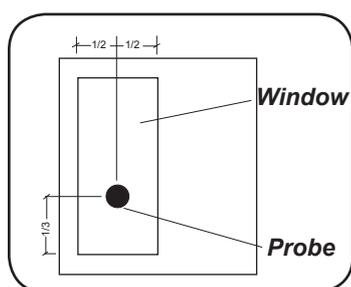
The machine must be placed entirely level. For easy maintenance it is recommended to keep a minimal distance of 600 mm - 23.62 inch between the wall and the back of the machine.

If several machines are placed next to each another, there should be a minimal distance of 30 mm - 1.18 inch between each machine.

Important

The bolt pattern for the fixation of the HC60 machine is located in the back panel of the cabinet. Put this panel on the floor and mark the holes (see page 15, reference point J).

Out of balance switch



Label 2

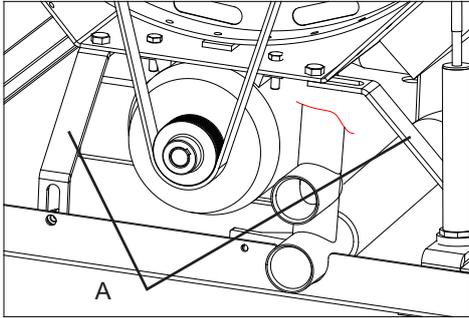
The out of balance switch is mounted on the solid part of the machine. There is a window around the probe of the out of balance switch that is mounted on the movable part of the machine.

When the machine goes out of balance by overloading or uneven distribution of the linen, the out of balance 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 out of balance window (when machine drum is empty). (See Label 2)

Removal of the transport safety



Label 3

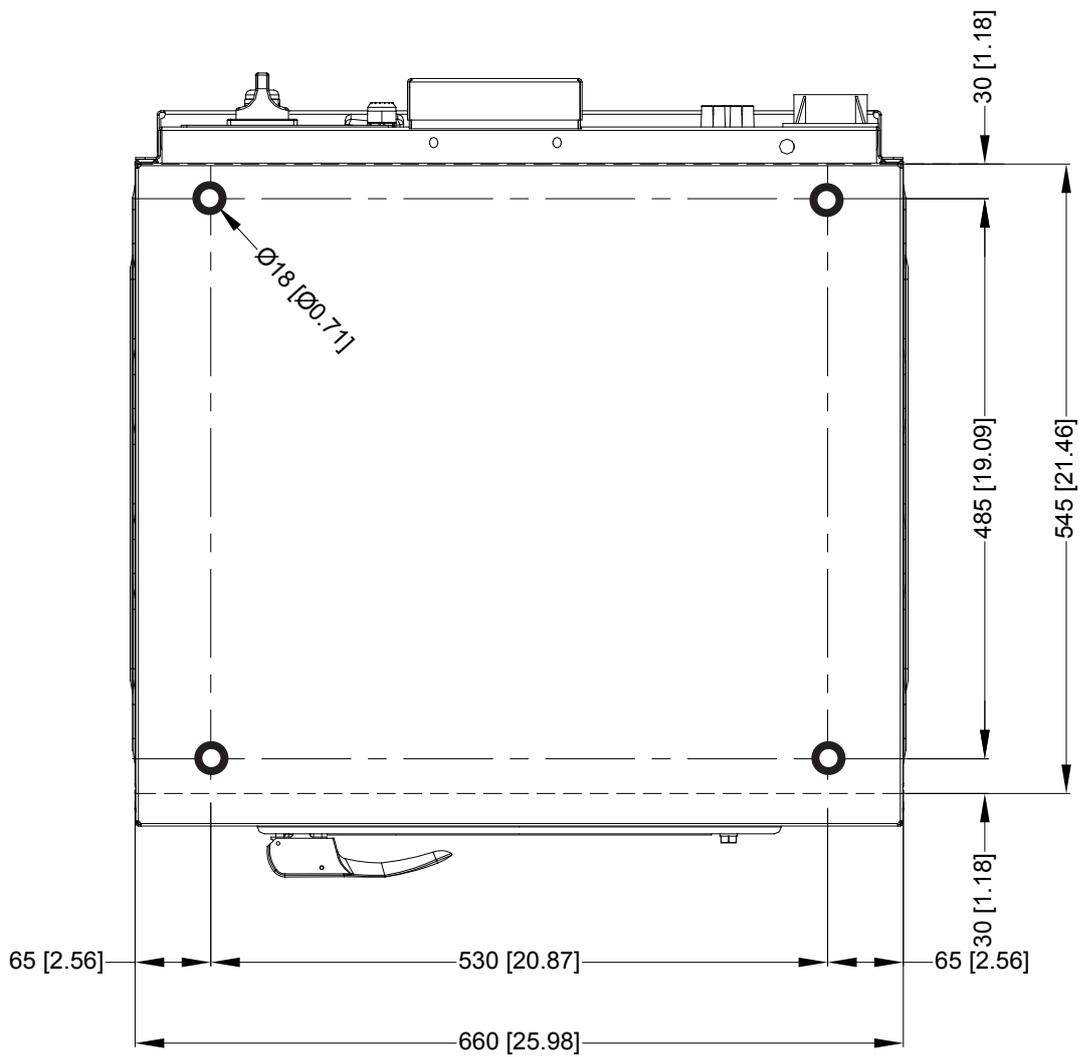
To prevent damage during transportation, the machine has been equipped with two red transport brackets (A) to eliminate every possible movement of the tub. (See Label 3)
After the machine has been placed level, take off the back panel and remove these transport brackets.

Warning

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

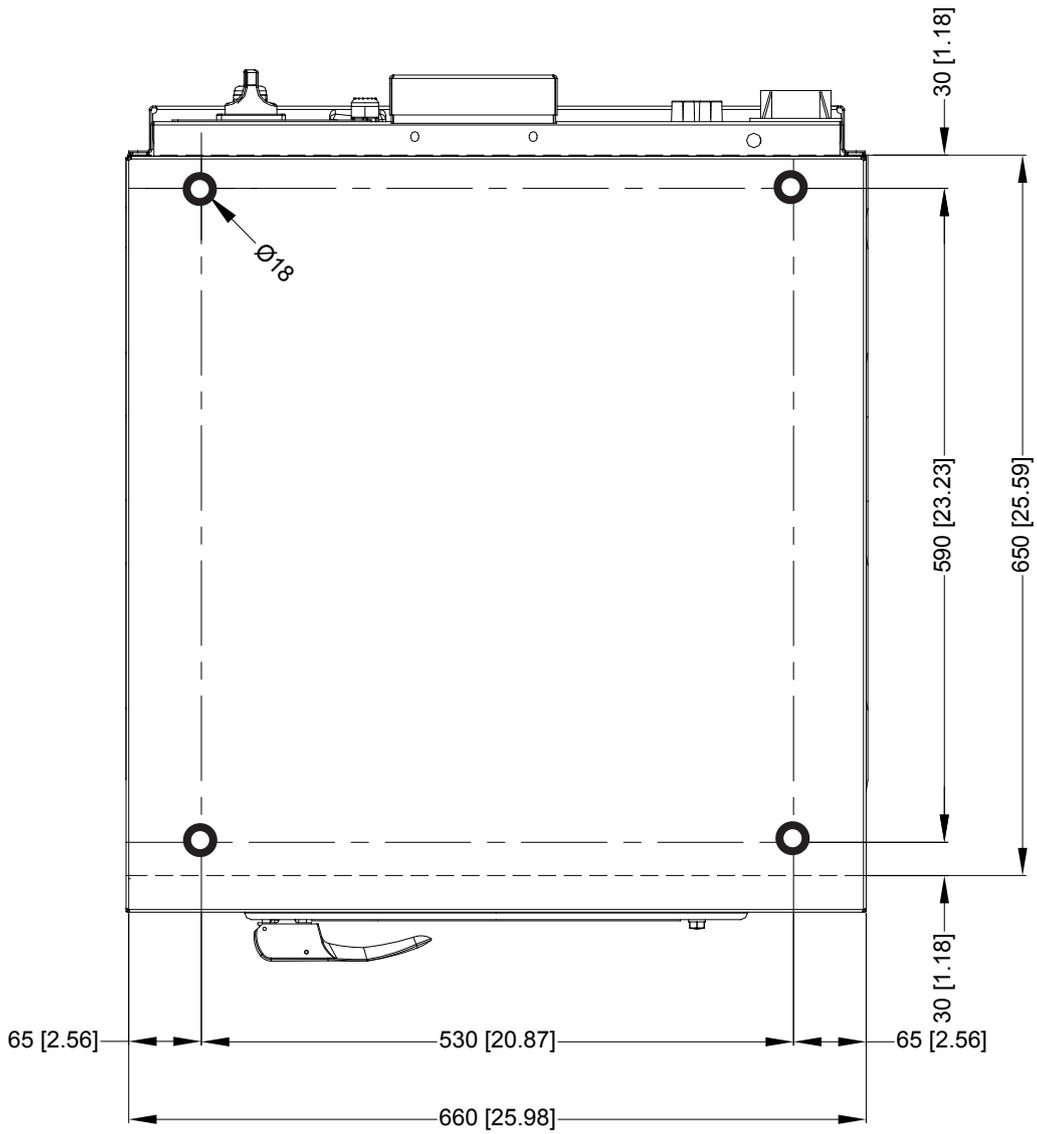
Mounting Bolt Hole Locations for machines, HC60, IHC012, IHC060

Legend: metric mm [inches]



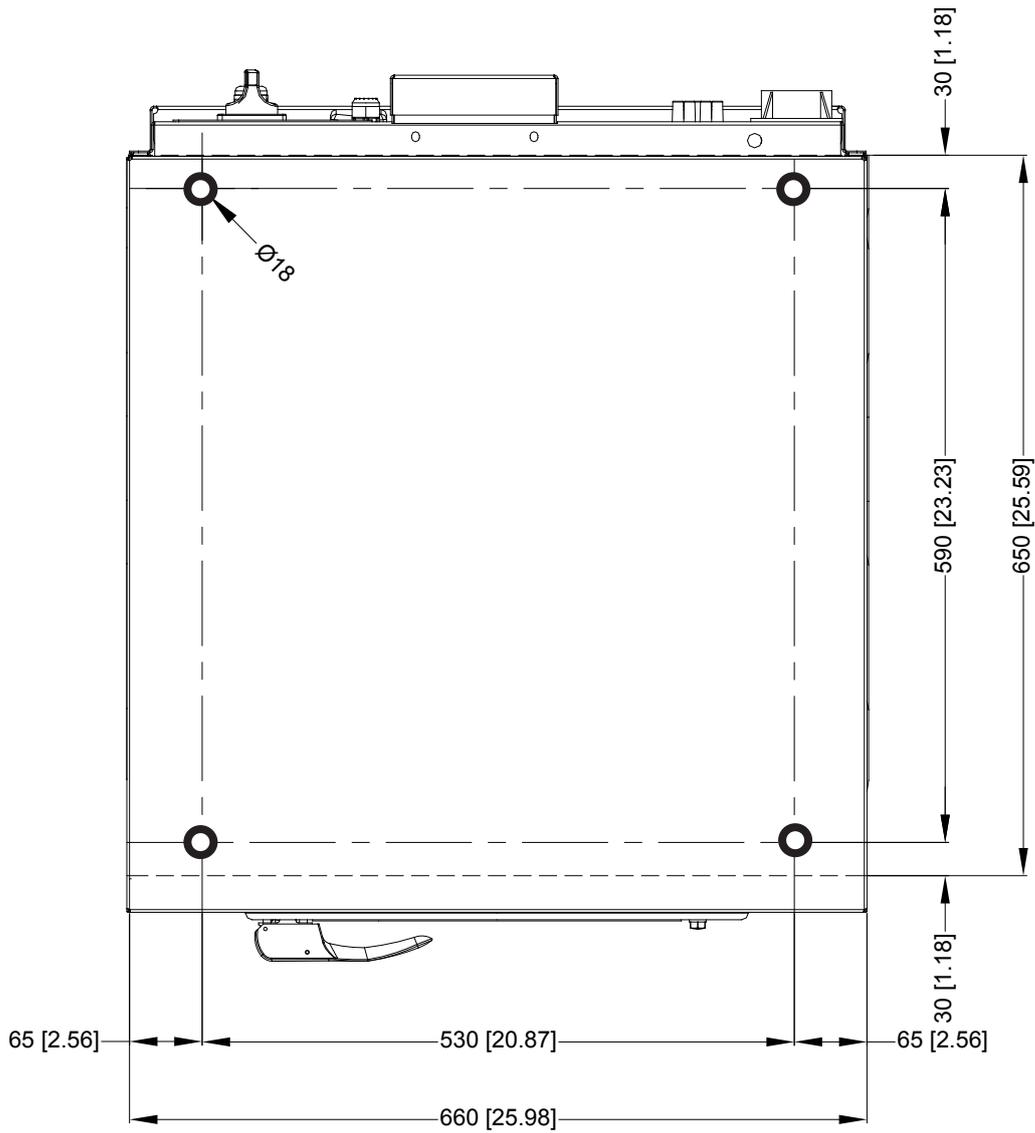
Mounting Bolt Hole Locations for machines, HC65, IHC014, IHC065

Legend: metric mm [inches]



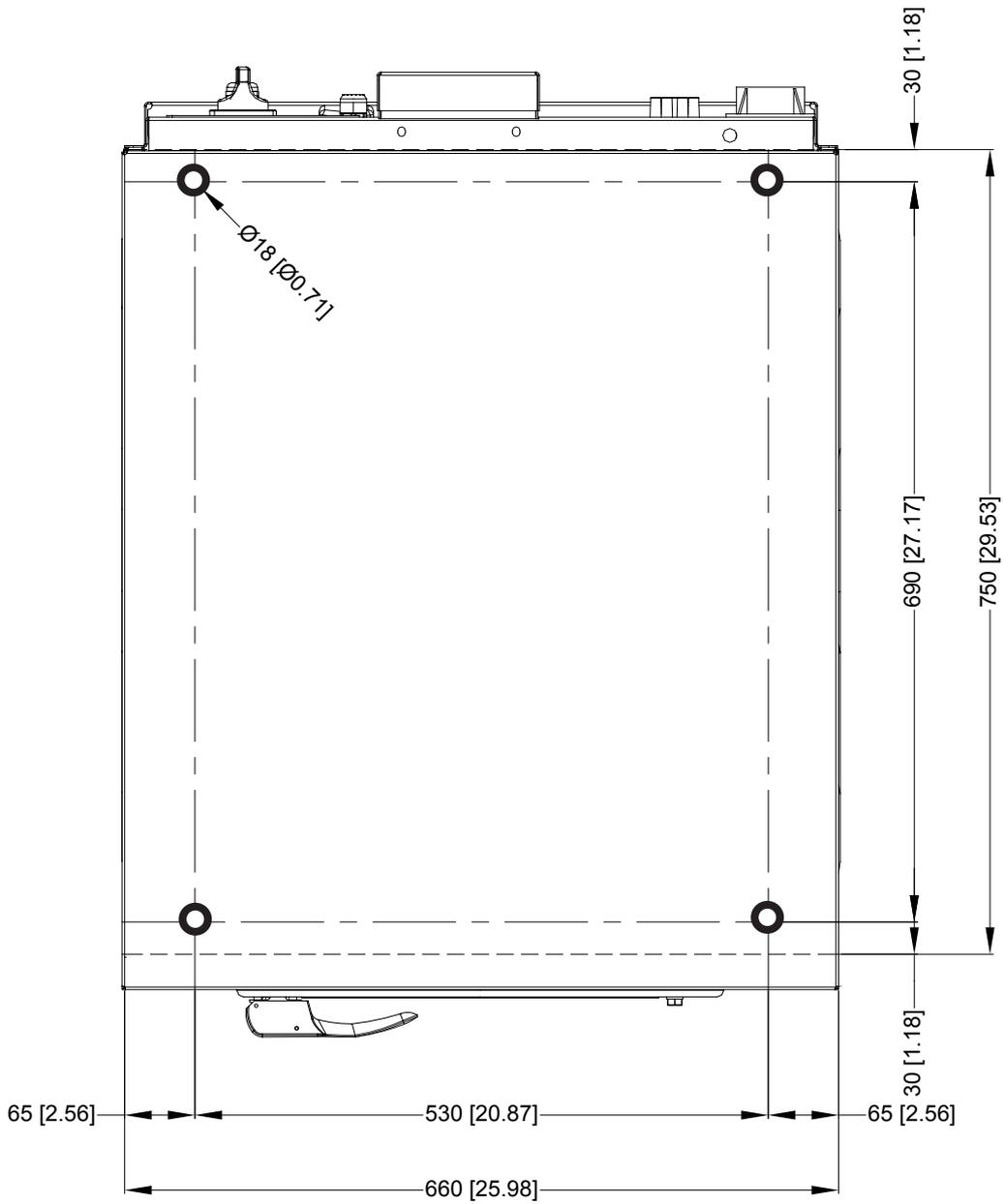
Mounting Bolt Hole Locations for machines, HC75, IHC018, CHC018, IHC075

Legend: metric mm [inches]



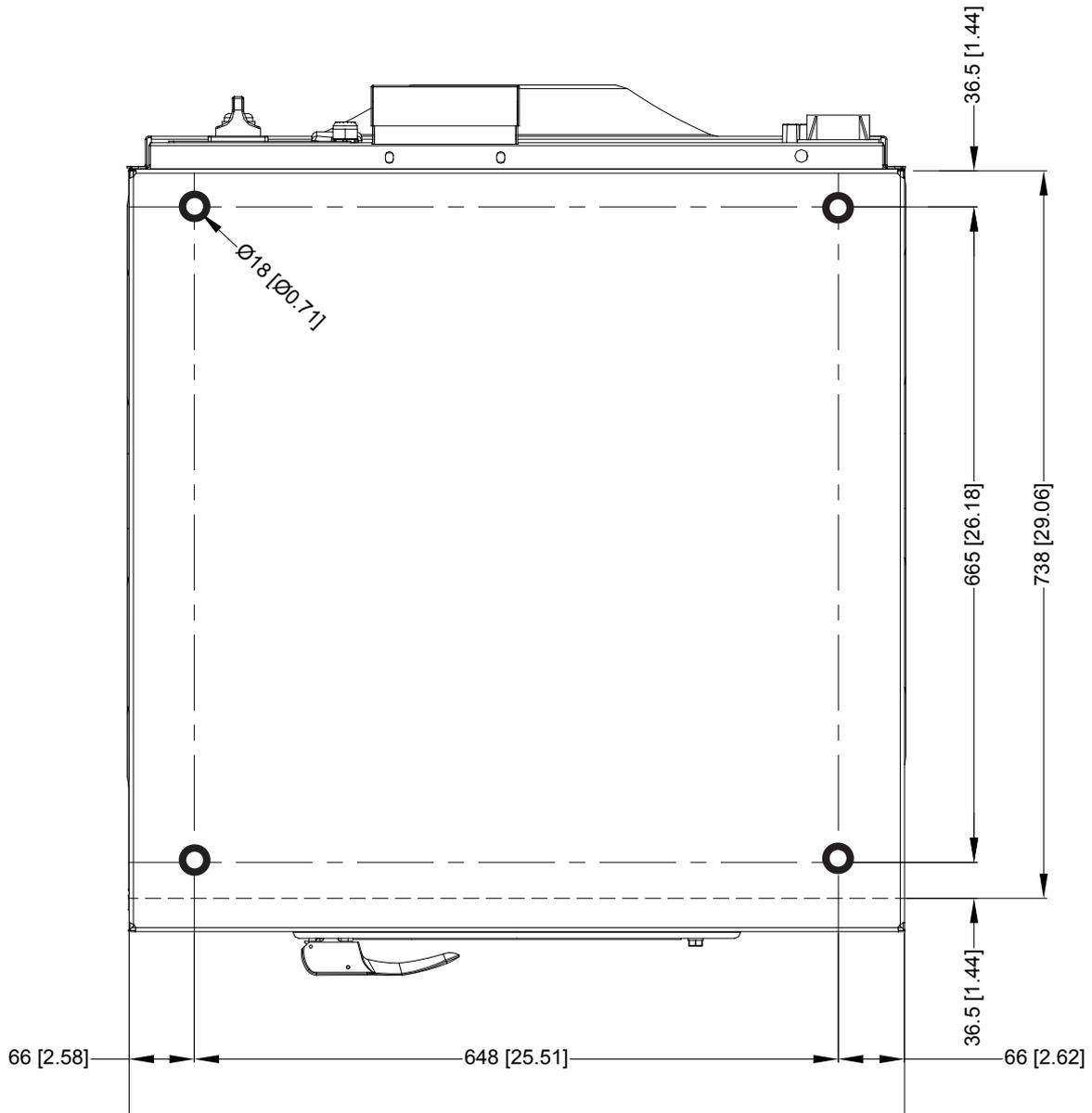
Mounting Bolt Hole Locations for machines, HC100, IHC025, CHC025, IHC100

Legend: metric mm [inches]



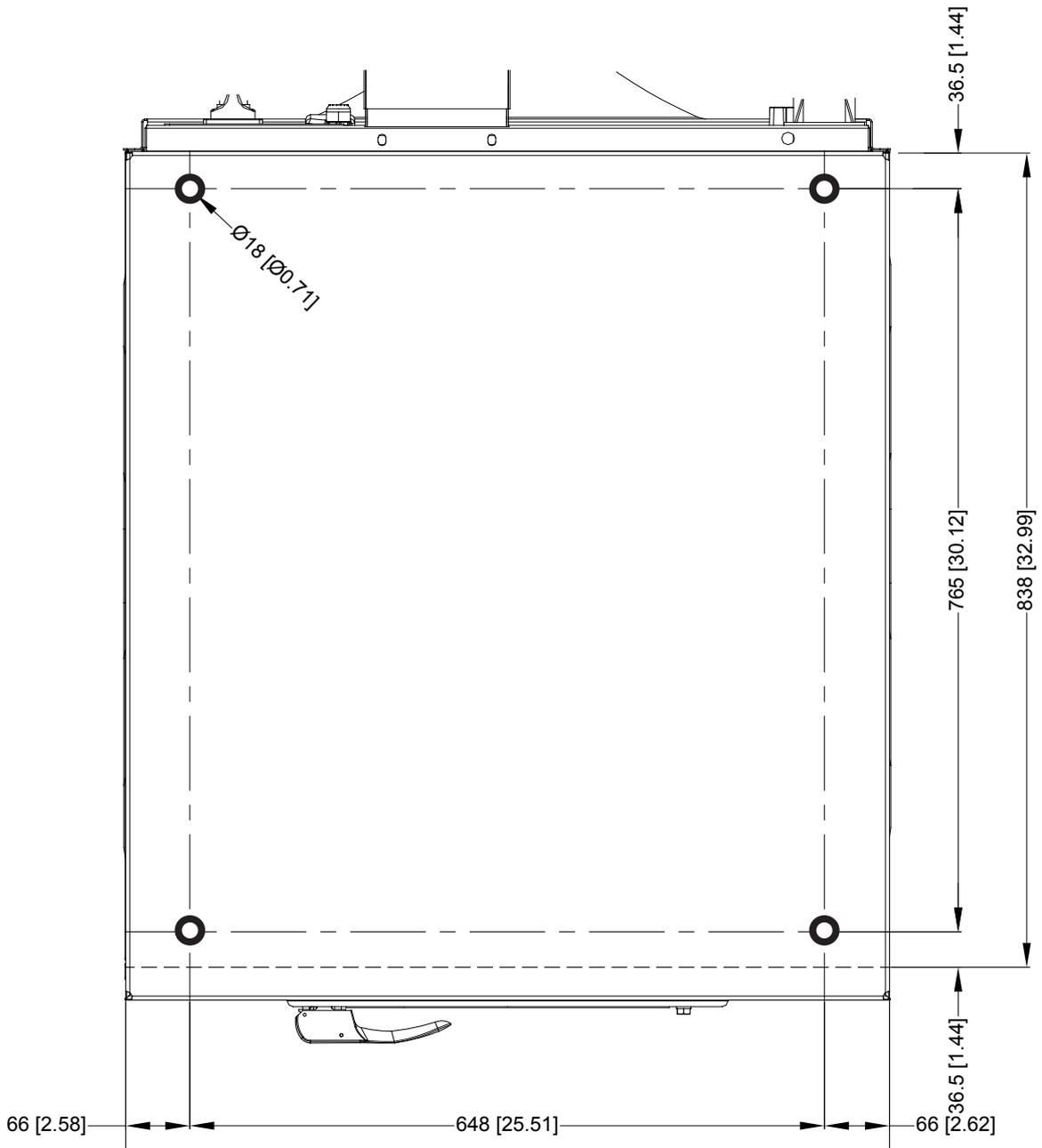
Mounting Bolt Hole Locations for machines, HC135, IHC030, IHC135

Legend: metric mm [inches]



Mounting Bolt Hole Locations for machines, HC165, IHC035, CHC035, IHC165

Legend: metric mm [inches]



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. All the inlet valves have to be connected. To ensure the optimal functioning of the water inlet valves, the water pressure on the inlet should be between 3 and 5 bar (40 and 80 psi). If the pressure is too low, the cycle time will increase considerably.

International inlet flow capacity per minute (gallons / liters): 4.23 / 16.

US inlet flow capacity per minute (gallons / liters): 5.28 / 20.

In case of boiler fed machines, a minimum of hot water of 90°C - 194°F should be available per unit. (See Table 1)

MODEL	Min Contents Boiler	
	METRIC	US
For the HC60, IHC012, IHC060	46 l.	1.62 ft ³
For the HC65, IHC014, IHC065	55 l.	1.94 ft ³
For the HC75, IHC018, CHC018, IHC075	65 l.	2.29 ft ³
For the HC100, IHC025, CHC025, IHC100	80 l.	2.82 ft ³
For the HC135, IHC030, IHC135	100 l.	3.53 ft ³
For the HC165, IHC035, CHC035, IHC165	120 l.	4.23 ft ³

Table 1

To comply with the WRAS water regulations: an 'approved' single check valve or some other no less effective backflow prevention device shall be fitted at the point of connection(s) between the supply and the fitting (IRN R150).



Water drain

The machine is equipped with a drain valve with 2" outer diameter (50 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 80 l/min - 21.13 gal./min per machine.
- It is necessary to connect the main drain at least on one side to an open air-brake to allow ventilation.

Electrical Installation

Important

Electrical ratings are subject to changes. Refer to serial plate decal for electrical ratings information specific to your machine.

	WARNING
Hazardous Voltage. Can cause shock, burn or cause death. Allow machine power to remain off for two minutes prior to working in and around AC inverter drive.	

	WARNING
Hazardous Voltage. Can cause shock, burn or death. Verify that a ground wire from a proven earth ground is connected to the lug near the input power block on this machine.	

The AC inverter drive requires a clean power supply free from voltage spikes and surges. If a transformer or generator is connected to the building's power supply, always install line reactors before the terminal block connections to the machine. A voltage monitor should be used to check incoming power. The customer's local power company may provide such a monitor.

If input voltage measures above 240V for a 220V drive or above 480V for a 400V drive, ask the power company to lower the voltage. As an alternative, a step-down transformer kit is available from the distributor.

The AC drive provides overload protection for the drive motor. However, a separate single or three-phase circuit breaker must be installed for complete electrical overload protection. This prevents damage to the motor by disconnecting all legs if one should be lost accidentally. Check the data plate on the back of the washer-extractor or consult Table 2 through 7 for circuit breaker requirements.

IMPORTANT: Do NOT use fuses in place of a circuit breaker.

For installation in the United States or Canada, branch circuit protection must be provided according to National and Local Codes. The branch circuit breaker must be of the inverse time or instantaneous trip type at the values given in the technical specifications for each machine. Use a circuit breaker of the minimal type of 10kA interrupt current.

CAUTION
Do not use a voltage or phase converter on any variable speed machine.

The washer-extractor should be connected to an individual branch circuit not shared with lighting or another electrical device.

- In accordance with legal regulations, every machine must be protected with an earth leakage circuit breaker of 30mA.
- The earth leakage circuit breaker, which one uses, must be of the type SI.
- For countries outside the European Community, the usual safety instructions must be observed.

The connection should be shielded in a liquid tight or approved flexible conduit with proper conductors of correct size installed in accordance with the National Electric Code or other applicable codes. The connection must be made by a qualified electrician using the wiring diagram provided with the washer-extractor, or according to accepted European standards for CE-approved equipment.

Use wire sizes indicated in Table 2 through 7 for runs up to 50 feet.

Use next larger size for runs of 50 to 100 feet. Use two sizes larger for runs greater than 100 feet.

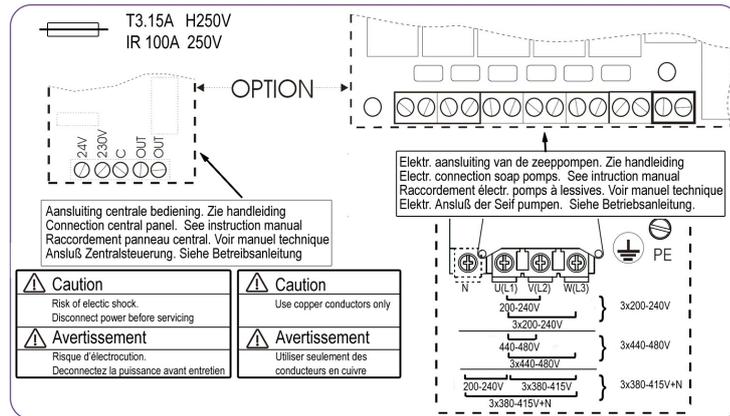
For personal safety and proper operation, the washer-extractor must be grounded in accordance with state and local standards. If such standards are not available, grounding must conform to the National Electric Code, article 250-95. The ground connection must be made to a proven earth ground, not to a water pipe, gas pipe, or another metal pipe. Provide the necessary equipotential connections according to the local electrical prescriptions.

GROUNDING INSTRUCTIONS

This appliance must be connected to a grounded metal, permanent wiring system; or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance.

IMPORTANT: Alliance Laundry Systems Warranty does not cover components that fail as a result of improper input voltage.

Main power connection



Label 4

Connection label:

Machine power connections are made at the back of the machine. Three or four conductor power cable is the recommended method (See chapter electrical specs for minimum cable requirements, if local electrical codes exceed these requirements, follow local codes). The number of conductors in this cable and the proper connection points for the cable wires shall be determined by the machine and power requirements. All machines must have a ground wire and be properly grounded. The ground wire must be insulated with a green/yellow color. This wire is normally within the power cable but can also be a separate wire run along side the power cable if properly sized.

Never run a machine that does not have a ground wire. This ground wire must be connected to the machine grounding lug found near the main switch. This lug is identified with the international "protective earth" symbol and the letters "PE". Failure to connect this ground wire can lead to an unsafe machine condition leading to machine damage and/or operator injury or death. This wire must be connected to earth ground at far end.

Machine Power Cable Connections:

Remove main switch cover plate at back of machine (see chapter dimensions part (F)). Run power cable through the cabinet knock-out located directly below the cover plate. Before installing, obtain and install a cord-grip to hold the cable in place. Never rely upon the electrical connections to hold cable in place. Allow some slack in this cable outside of the machine to form a drip-loop between the supply power circuit breaker and the machine knock-out. Connect power cable wires as directed below. Always connect the ground wire first and remove last.

Wiring based on the supply power and machine design (voltage/frequency):

440-480 Volts, 3-Phase, 3-wire or 4-wire + PE, 50 or 60 Hertz Configuration (Named: N-Voltage):

With supply power of: 440-480 Volts, 3-phase, 3-wire, after connecting the green/yellow PE ground wire, connect one wire to each of the bottom terminals of the power contactor switch marked: "L1,L2,L3". When this supply power has four wires, connect this 4th wire, identified as a neutral wire, to the bottom terminal of the auxiliary contactor on the power contactor switch marked: "N". Connect the remaining power wires as first noted.

380-415 Volts, 3-Phase, 4-wire + PE, 50 or 60 Hertz Configuration (Named: P-Voltage):

With supply power of: 380-415 Volts, 3-phase, 4-wire, after connecting the green/yellow PE ground wire, follow the directions of the four wire system for 440-480 Volt configuration.

200-240 Volts, 3-Phase, 3-wire + PE, 50 or 60 Hertz Configuration (Named: Q-Voltage or 3-phase X-Voltage):

With supply power of: 200-240 Volts, 3-phase, 3-wire, after connecting the green/yellow PE ground wire, connect one power wire to each of the terminals at the bottom of the power contactor switch marked: "L1,L2,L3".

200-240 volts, 1-Phase, 2-wire + PE, 50 Hertz (called 1-phase, 50 Hz X-voltage):

With supply power of: 200-240 Volts, 1-phase, 2-wire, 50Hz, after connecting the green/yellow PE ground wire, connect the power wire to the "L1" bottom terminal of the power contactor switch and the other wire, identified as the neutral wire, to the bottom terminal of the auxiliary contactor on the power contactor switch marked: "N".

200-240 volts, 1-Phase, 2-wire + PE, 60 Hertz (called 1-phase, 60 Hz X-voltage):

With supply power of: 200-240 Volts, 1-phase, 2-wire, 60Hz, after connecting the green/yellow PE ground wire, connect one power wire to the "L1" and power wire to the "L2" of the bottom terminals of the power contactor switch.

- After connection, check the **spin direction**. The cylinder must spin in the **clockwise direction**.
A wrong spin direction can damage the motor and can also cause water to spurt from the soap dispenser.
- In case of **wrong spin direction**: switch the terminal clamps of the motor circuit "R" and "S" of the connecting cable or change the connection at the terminal block switching the L1 and L2 wires.

	WARNING
The washer-extractor should be connected to an individual branch circuit not shared with lighting or other equipment.	

Electrical Specifications HC60, IHC012, IHC060

60 liters / 12 pounds													
						Boiler Fed/Steam Heat			Electric Heat				
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm2	KW Standard Heating Elements	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm2
						US	NON-US				US	NON-US	
N	440-480	50/60	3	3+PE	3	10	10	14/2.5	3x2 kW	12	15	16	14/2.5
P	380-415	50/60	3	3+N+PE	7	15	16	14/2.5		16	20	20	12/4.0
Q	200-240	50/60	3	3+PE	7	15	16	14/2.5		23	30	32	10/6.0
X	200-240	50/60	1/3	2/3+PE	7	15	16	14/2.5		N/A	N/A	N/A	N/A
									Alternative Electric Heat Options				
N	440-480	50/60	3	3+PE					3x1.4 kW	N/A	N/A	N/A	N/A
P	380-415	50/60	3	3+N+PE						13	15	16	14/2.5
Q	200-240	50/60	3	3+PE						18	20	20	12/4.0
X	200-240	50/60	1/3	2/3+PE						N/A	N/A	N/A	N/A

Table 2

	WARNING
The washer-extractor should be connected to an individual branch circuit not shared with lighting or other equipment.	

Electrical Specifications HC65, IHC014, IHC065

65 liters / 14 pounds													
						Boiler Fed/Steam Heat			Electric Heat				
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm ²	kW Standard Heating Elements	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm ²
						US	NON-US				US	NON-US	
N	440-480	50/60	3	3+PE	4	10	10	14/2.5	3x2 kW	13	15	16	14/2.5
P	380-415	50/60	3	3+N+PE	12	15	16	14/2.5		21	30	25	10/6.0
Q	200-240	50/60	3	3+PE	12	15	16	14/2.5		27	30	32	10/6.0
X	200-240	50/60	1/3	2/3+PE	12	15	16	14/2.5		N/A	N/A	N/A	N/A
									Alternative Electric Heat Options				
N	440-480	50/60	3	3+PE					3x1.4 kW	N/A	N/A	N/A	N/A
P	380-415	50/60	3	3+N+PE						18	20	20	12/4.0
Q	200-240	50/60	3	3+PE						23	30	25	10/6.0
X	200-240	50/60	1/3	2/3+PE					N/A	N/A	N/A	N/A	
N	440-480	50/60	3	3+PE					3x3 kW	N/A	N/A	N/A	N/A
P	380-415	50/60	3	3+N+PE						25	30	32	10/6.0
Q	200-240	50/60	3	3+PE						35	40	40	8/10.0
X	200-240	50/60	1/3	2/3+PE						N/A	N/A	N/A	N/A
N	440-480	50/60	3	3+PE					3x4 kW	21	30	25	10/6.0
P	380-415	50/60	3	3+N+PE						29	40	32	8/10.0
Q	200-240	50/60	3	3+PE						N/A	N/A	N/A	N/A
X	200-240	50/60	1/3	2/3+PE						N/A	N/A	N/A	N/A

Table 3

	WARNING
The washer-extractor should be connected to an individual branch circuit not shared with lighting or other equipment.	

Electrical Specifications HC75, IHC018, CHC018, IHC075

75 liters / 18 pounds													
						Boiler Fed/Steam Heat			Electric Heat				
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm2	kW Standard Heating Elements	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm2
						US	NON-US				US	NON-US	
N	440-480	50/60	3	3+PE	4	10	10	14/2.5	3x2 kW	13	15	16	14/2.5
P	380-415	50/60	3	3+N+PE	12	15	16	14/2.5		21	30	25	10/6.0
Q	200-240	50/60	3	3+PE	12	15	16	14/2.5		27	30	32	10/6.0
X	200-240	50/60	1/3	2/3+PE	12	15	16	14/2.5		N/A	N/A	N/A	N/A
									Alternative Electric Heat Options				
N	440-480	50/60	3	3+PE					3x1.4 kW	N/A	N/A	N/A	N/A
P	380-415	50/60	3	3+N+PE						18	20	20	12/4.0
Q	200-240	50/60	3	3+PE						23	30	25	10/6.0
X	200-240	50/60	1/3	2/3+PE						N/A	N/A	N/A	N/A
N	440-480	50/60	3	3+PE					3x3 kW	N/A	N/A	N/A	N/A
P	380-415	50/60	3	3+N+PE						25	30	32	10/6.0
Q	200-240	50/60	3	3+PE						35	40	40	8/10.0
X	200-240	50/60	1/3	2/3+PE						N/A	N/A	N/A	N/A
N	440-480	50/60	3	3+PE					3x4 kW	21	30	25	10/6.0
P	380-415	50/60	3	3+N+PE						29	40	32	8/10.0
Q	200-240	50/60	3	3+PE						N/A	N/A	N/A	N/A
X	200-240	50/60	1/3	2/3+PE						N/A	N/A	N/A	N/A

Table 4

	WARNING
The washer-extractor should be connected to an individual branch circuit not shared with lighting or other equipment.	

Electrical Specifications HC100, IHC025, CHC025, IHC100

100 liters / 25 pounds															
						Boiler Fed/Steam Heat			Electric Heat						
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm ²	kW Standard Heating Elements	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm ²		
						US	NON-US				US	NON-US			
N	440-480	50/60	3	3+PE	4	10	10	14/2.5	3x2 kW	13	15	16	14/2.5		
P	380-415	50/60	3	3+N+PE	12	15	16	14/2.5		21	30	25	10/6.0		
Q	200-240	50/60	3	3+PE	12	15	16	14/2.5		27	30	32	10/6.0		
X	200-240	50/60	1/3	2/3+PE	12	15	16	14/2.5		N/A	N/A	N/A	N/A		
									Alternative Electric Heat Options						
N	440-480	50/60	3	3+PE					3x1.4 kW	N/A	N/A	N/A	N/A		
P	380-415	50/60	3	3+N+PE						18	20	20	12/4.0		
Q	200-240	50/60	3	3+PE						23	30	25	10/6.0		
X	200-240	50/60	1/3	2/3+PE						N/A	N/A	N/A	N/A		
N	440-480	50/60	3	3+PE					3x3 kW			N/A	N/A	N/A	N/A
P	380-415	50/60	3	3+N+PE								25	30	32	10/6.0
Q	200-240	50/60	3	3+PE								35	40	40	8/10.0
X	200-240	50/60	1/3	2/3+PE								N/A	N/A	N/A	N/A
N	440-480	50/60	3	3+PE					3x4 kW			21	30	25	10/6.0
P	380-415	50/60	3	3+N+PE								29	40	32	8/10.0
Q	200-240	50/60	3	3+PE								N/A	N/A	N/A	N/A
X	200-240	50/60	1/3	2/3+PE								N/A	N/A	N/A	N/A

Table 5

	WARNING
The washer-extractor should be connected to an individual branch circuit not shared with lighting or other equipment.	

Electrical Specifications HC135, IHC030, IHC135

135 liters / 30 pounds													
					Boiler Fed/Steam Heat				Electric Heat				
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm ²	kW Standard Heating Elements	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm ²
						US	NON-US				US	NON-US	
N	440-480	50/60	3	3+PE	6	15	10	14/2.5	6x2 kW	23	30	32	10/6.0
P	380-415	50/60	3	3+N+PE	18	20	20	12/4.0		36	40	40	8/10.0
Q	200-240	50/60	3	3+PE	18	20	20	12/4.0		49	60	60	6/16.0
X	200-240	50/60	1/3	2/3+PE	18	20	20	12/4.0		N/A	N/A	N/A	N/A
									Alternative Electric Heat Options				
N	440-480	50/60	3	3+PE					3x3 kW + 3x2 kW	28	40	40	8/10.0
P	380-415	50/60	3	3+N+PE		40	50	50		8/10.0			
Q	200-240	50/60	3	3+PE		56	60	60		6/16.0			
X	200-240	50/60	1/3	2/3+PE		56	60	60		6/16.0			
N	440-480	50/60	3	3+PE					6x3 kW	32	40	40	8/10.0
P	380-415	50/60	3	3+N+PE		44	50	50		8/10.0			
Q	200-240	50/60	3	3+PE		63	70	70		4/25.0			
X	200-240	50/60	1/3	2/3+PE		63	70	70		4/25.0			
N	440-480	50/60	3	3+PE					3x3 kW + 3x4 kW	36	40	40	8/10.0
P	380-415	50/60	3	3+N+PE		49	60	60		6/16.0			
Q	200-240	50/60	3	3+PE		N/A	N/A	N/A		N/A			
X	200-240	50/60	1/3	2/3+PE		N/A	N/A	N/A		N/A			
N	440-480	50/60	3	3+PE					6x4 kW	41	50	50	8/10.0
P	380-415	50/60	3	3+N+PE		53	60	60		6/16.0			
Q	200-240	50/60	3	3+PE		N/A	N/A	N/A		N/A			
X	200-240	50/60	1/3	2/3+PE		N/A	N/A	N/A		N/A			

Table 6

	WARNING
The washer-extractor should be connected to an individual branch circuit not shared with lighting or other equipment.	

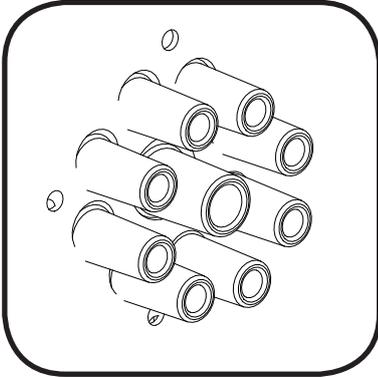
Electrical Specifications HC165, IHC035, CHC035, IHC165

165 liters / 35 pounds																
						Boiler Fed/Steam Heat			Electric Heat							
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm ²	kW Standard Heating Elements	Full Load Amps	Recommended Circuit Breaker (US-market)		AWG/mm ²			
						US	NON-US				US	NON-US				
N	440-480	50/60	3	3+PE	6	15	10	14/2.5	6x3 kW	32	40	40	8/10.0			
P	380-415	50/60	3	3+N+PE	18	20	20	12/4.0		44	50	50	8/10.0			
Q	200-240	50/60	3	3+PE	18	20	20	12/4.0		63	70	70	4/25.0			
X	200-240	50/60	1/3	2/3+PE	18	20	20	12/4.0		63	70	70	4/25.0			
									Alternative Electric Heat Options							
N	440-480	50/60	3	3+PE					6x2 kW	23	30	32	10/6.0			
P	380-415	50/60	3	3+N+PE						36	40	40	8/10.0			
Q	200-240	50/60	3	3+PE						49	60	60	6/16.0			
X	200-240	50/60	1/3	2/3+PE						N/A	N/A	N/A	N/A			
N	440-480	50/60	3	3+PE					3x3 kW + 3x2 kW			3x3 kW + 3x4 kW	28	40	40	8/10.0
P	380-415	50/60	3	3+N+PE									40	50	50	8/10.0
Q	200-240	50/60	3	3+PE									56	60	60	6/16.0
X	200-240	50/60	1/3	2/3+PE									56	60	60	6/16.0
N	440-480	50/60	3	3+PE					3x3 kW + 3x4 kW			6x4 kW	36	40	40	8/10.0
P	380-415	50/60	3	3+N+PE									49	60	60	6/16.0
Q	200-240	50/60	3	3+PE									N/A	N/A	N/A	N/A
X	200-240	50/60	1/3	2/3+PE									N/A	N/A	N/A	N/A
N	440-480	50/60	3	3+PE					6x4 kW				41	50	50	8/10.0
P	380-415	50/60	3	3+N+PE									53	60	60	6/16.0
Q	200-240	50/60	3	3+PE									N/A	N/A	N/A	N/A
X	200-240	50/60	1/3	2/3+PE									N/A	N/A	N/A	N/A

Table 7

Liquid soap connection (option)

Connection of the liquid soap hoses



Label 5

The liquid soap connection consists of **8 connections for liquid soap** (See Label 5).

The central opening is used for ventilation.

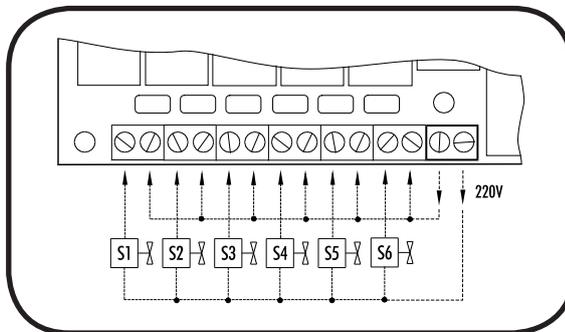
	WARNING
<p>Dangerous Chemicals. May damage eyes and skin. Wear eye and hand protection when handling chemicals; always avoid direct contact with raw chemicals. Read the manufacturer's directions for accidental contact before handling chemicals. Ensure an eye-rinse facility and an emergency shower are within easy reach. Check at regular intervals for chemical leaks.</p>	

CAUTION
<p>Drill out plugs and nipples before making supply hose connection. Failure to do so can cause buildup of pressure and risk a tubing rupture.</p>

Electrical connection of the liquid soap pumps

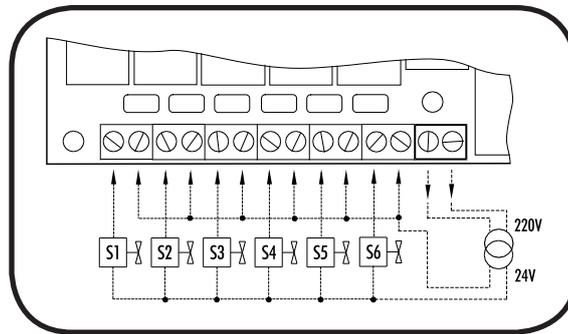
On machines equipped with a liquid soap connection, connect the wires **directly on the print board** next to the ground wire connection (option). Connect as indicated on the wiring diagram.

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.). (See Label 6)



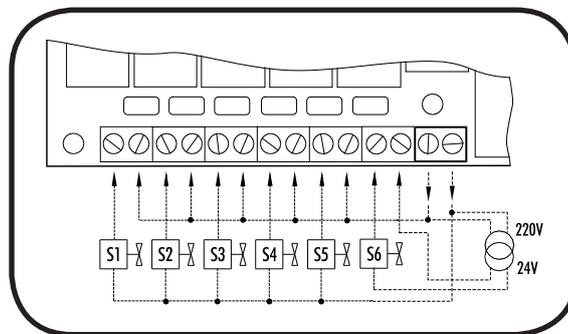
Label 6

The 220V can be transformed to other values to drive other type soap pumps.
 Example: pumps 24V ~. (See Label 7)



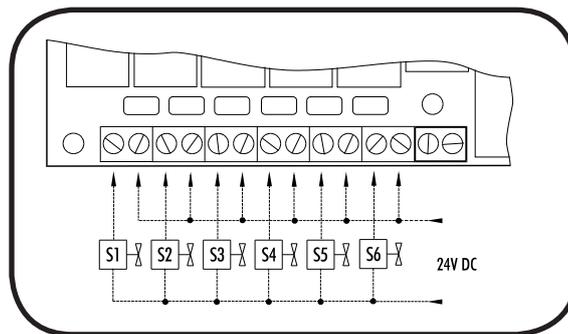
Label 7

Also, pumps with different operating tension can be combined.
 Example: 5 pumps 220V ~ and 1 pump 24V ~. (See Label 8)



Label 8

With an external tension 24V DC (See Label 9)



Label 9

Connection of a central operating panel for coin machines (option)

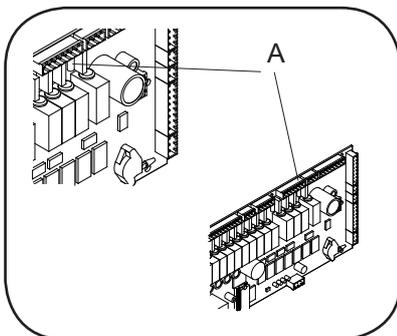
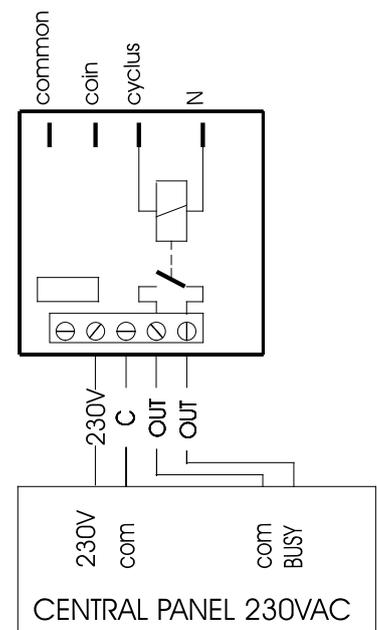
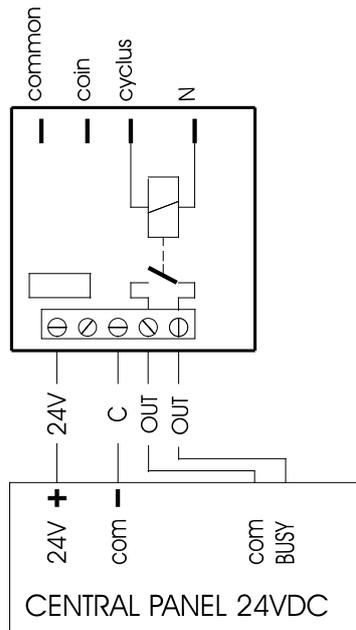
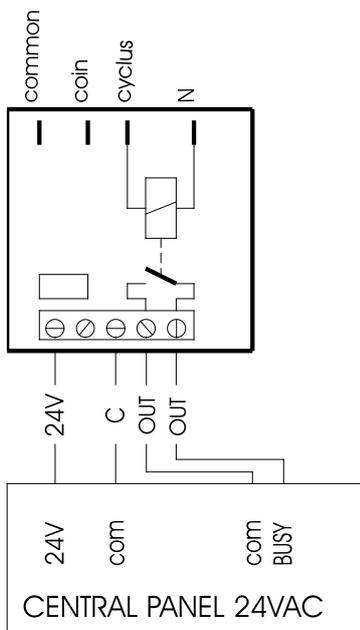
	WARNING
<p>To reduce the risk of electric shock, disconnect this appliance from the power supply before attempting any user maintenance. Turning the controls to the OFF position does not disconnect this appliance from the power supply.</p>	

At the backside above the main connectors, you find a printboard, to which the central operating panel for coin machines can be connected.

The right connectors form a potential free output contact as a result of which the operating panel detects when the machine is activated or not.

The left connectors receive the signal, by means of which a machine is chosen through the operating panel.

There are 3 different variations possible according to the output voltage of the operating panel. (See Labels 10, 11 and 12)



IMPORTANT:

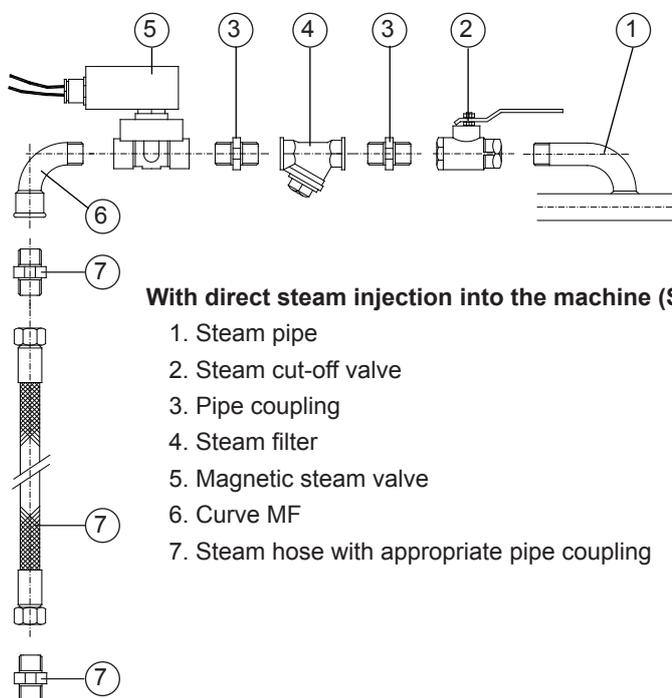
If a machine is equipped with this kind of printboard or if a printboard has been built in, the **resistance of the cycle contact (A) may no longer be present** on the main printboard. (See Label 13)

When this resistance is present, it has to be cut out of the main printboard.

Steam connection

	WARNING
<p>Never touch internal or external steam pipes, connections, or components. These surfaces can be extremely hot and will cause severe burns. The steam must be turned off and the pipe, connections, and components allowed to cool before the pipe can be touched.</p>	

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



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

Steam Supply Information							
MODEL	Steam inlet connection, inch	Number of steam inlets	Recommended pressure, bar	Recommended pressure, psi	Maximum pressure, bar	Maximum pressure, psi	
For the HC60, IHC012, IHC060	3/8	1	2.0 - 5.5	30 - 80	5.5	80	
For the HC65, IHC014, IHC065	3/8	1	2.0 - 5.5	30 - 80	5.5	80	
For the HC75, IHC018, CHC018, IHC075	3/8	1	2.0 - 5.5	30 - 80	5.5	80	
For the HC100, IHC025, CHC025, IHC100	3/8	1	2.0 - 5.5	30 - 80	5.5	80	
For the HC135, IHC030, IHC135	3/8	1	2.0 - 5.5	30 - 80	5.5	80	
For the HC165, IHC035, CHC035, IHC165	3/8	1	2.0 - 5.5	30 - 80	5.5	80	

Table 8

Technical remarks

Internal connections of the electrical heating

1 AC

Heating	R5
3kw	LC1D0901
4,2 / 6 / 9kw	LC1D1810

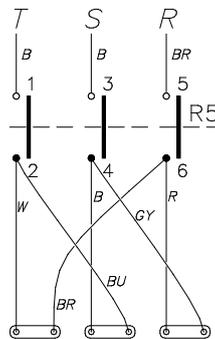
Table 9

3 AC

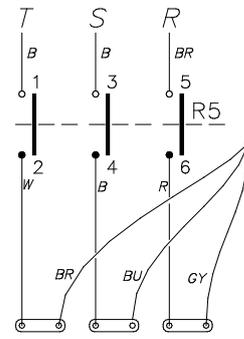
Heating		3x230V	R5	3x400V	R5
4,2kw	3x1,4kw	See Label 14	LC1D0901	See Label 15	LC1D0901
6kw	3x2kw	See Label 14	LC1D0901	See Label 15	LC1D0901
9kw	3x3kw	See Label 14	LC1D1810	See Label 15	LC1D0901
12kw	3x4kw	-----	-----	See Label 14	LC1D0901
12kw	3x2kw 3x2kw	See Label 14 See Label 14	LC1D1810 LC1D1810	See Label 15	LC1D0901
15kw	3x2kw 3x3kw	See Label 14 See Label 14	LC1D1810 LC1D1810	See Label 15	LC1D1810
18kw	3x3kw 3x3kw	See Label 14 See Label 14	LC1D1810 LC1D1810	See Label 15	LC1D1810
21kw	3x3kw 3x4kw	-----	-----	See Label 15 See Label 14	LC1D1810 LC1D1810
24kw	3x4kw 3x4kw	-----	-----	See Label 14 See Label 14	LC1D1810 LC1D1810

Table 10

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



Label 14



Label 15

NOTE:

Other executions are available as options.

Maintenance instruction of the machine

	WARNING
<p>To reduce the risk of electric shock, disconnect this appliance from the power supply before attempting any user maintenance. Turning the controls to the OFF position does not disconnect this appliance from the power supply.</p> <p>Before starting wiring or inspection, power must be switched OFF, check to make sure that the operation panel indicator is off. Any person who is involved in wiring or inspection shall wait for at least 10 minutes after the power supply has been switched OFF and check that there is no residual voltage using a tester or the like. The capacitor of the inverter or the EMC filter is charged with a high voltage for some time after power OFF, and it is dangerous.</p>	

End of day

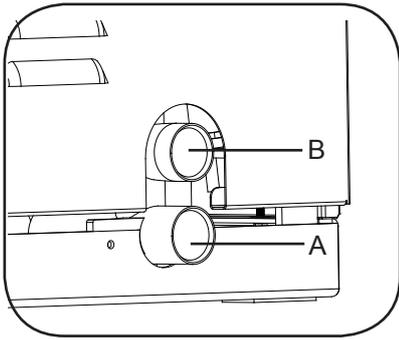
- Clean AC drive filter:
 - a. Snap off external plastic cover which contains filter.
 - b. Remove foam filter from cover.
 - c. Wash filter with warm water and allow to air dry. Filter can be vacuumed clean.

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 soap dispenser open after use, to ventilate the machine.
- Check for proper door lock operation on a daily basis.

Periodical maintenance

- Two to three months after the first use, the V-belts of the motors should be checked whether they still have the correct tension. This is necessary because these belts are subject to a one-time stretching when first used. **If this is not done**, the belt starts to slip after a few months and will break shortly afterwards.
- Check the water inlet filters to make sure they are not blocked by calcification.
- Check the drain valve for obstructions.
- 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).



Important

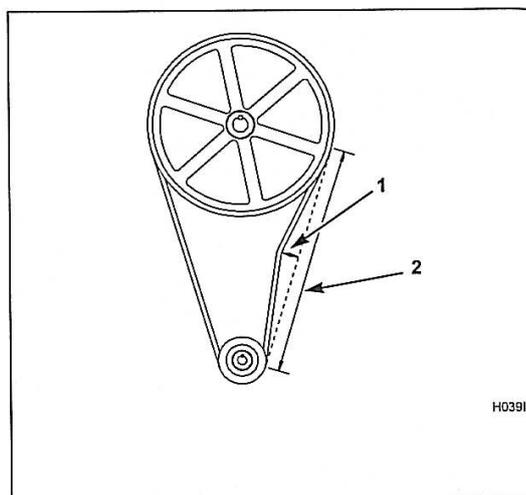
- Clean the drainpipe every 6 months in case drain (B) is used.
- The water still being in the drain needs to be drained using drain (A) before cleaning the drainpipe or replacing the exhaust valve.

Annual maintenance

Belt tension:

- Verify that the belts are running in the middle of the basket pulley.
- Verify the belt tension according to the table below. Belt tension measurements should be taken as close as possible to the center of the belt span (see figure).

Belt tension testing table								
Model	Belt	Frequency (Hz)		Tension force (N)		Deflection (mm)		Deflection force MAX
		MIN	MAX	MIN	MAX	at MIN tension	at MAX tension	
HC60	8PJ 1355	107	137	470	766	7	4	40
HC65	8PJ 1355	107	137	470	766	7	4	40
HC75	8PJ 1355	107	137	470	766	7	4	40
HC100	8PJ 1355	107	137	470	766	7	4	40
HC135	10J 1473	75	105	316	618	10,5	6,4	40
HC165	10J 1473	75	105	316	618	10,5	6,4	40



- 1 Deflection
- 2 Span length

Contact Information

Nameplate

Nameplate Location

The nameplate is located at the rear of the machine. Always provide the machine's serial number and model number when ordering parts or when seeking technical assistance. See Labels 16 and 17.

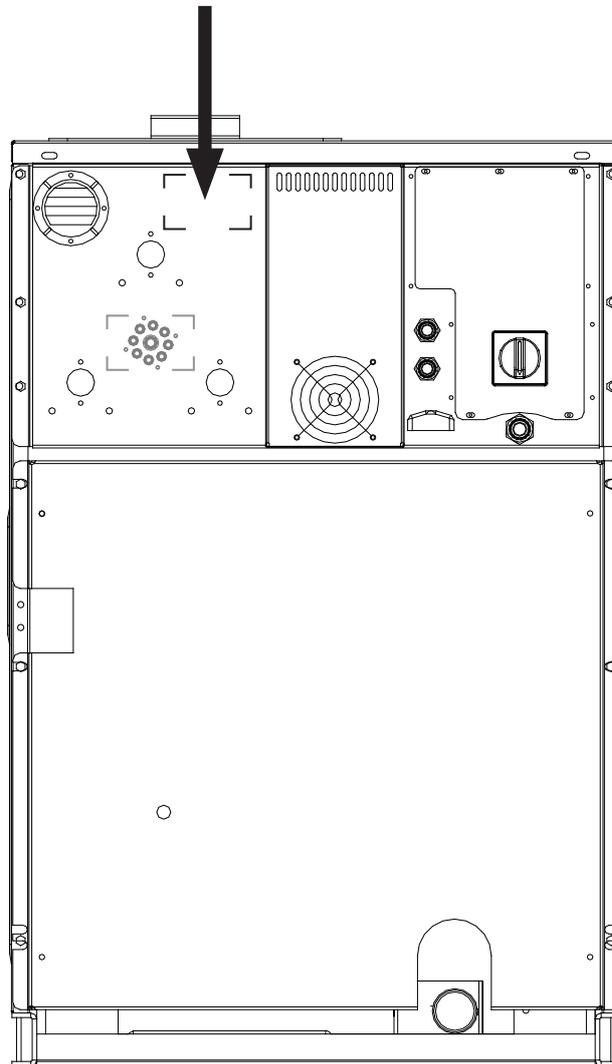
Type:	HC 60C	No:	07110H11029
Voltage:	1 ~ 220V 50Hz	Poids:	189 kg
Moteur:	0.55kW 2.5A	Capacité:	55 L
Chauffage:	eau chaude	Linge sec:	5 Kg
Total:	0.55 kW	Tambour:	530 mm
Energie cinétique:	1186 N/m	Vitesse:	1250 rpm
Fabriquée en:	2007		
Water pressure: min 4 - max 6 bar		IPX4	
s/c: 741608			
 Alliance International BVBA Nieuwstraat 146 8560 Wevelgem Belgium Tel: +32 56 41 20 54 Fax: +32 56 41 86 74 www.ipso.be			
			

Label 16

Model No:	IHC025ANHX10U03	Serial No:	0803H40291
Volts Hertz:	200-240 50/60	Type:	HC100C
Phase:	1/3	Capacity:	25/9,5 lbs/kg
Amps:	12 amps	Water	30-85 psi
Recommended		Pressure:	2.07-5.86 bar
Circuit Breaker:	15 amps	Max Speed:	1000 rpm
Interrupt Current:	10 kA	Net	524 lbs
Motor:	1 hp	Weight:	238 kg
	0.75 kW		
Elec Heat:	N/A kW		IPX4
Steam	N/A psi		
heat:	N/A bar		
		s/c: 747731	
Alliance International BVBA Made in Belgium		 C LISTED US 100740 Conforms to ANSIUL STD.2157 Certified to CANCSA STD. C22.2 NO.109-04	
		TEL 1-920-748-3121 www.comlaundry.com	

Label 17

Position of the Serial plate



Replacement Parts

If literature or replacement parts are required, contact the source from which the machine was purchased or contact the phone numbers or websites shown on the nameplate.

Repair and after-sales service

- In case of important malfunctions and deficiencies, which you cannot resolve yourself, contact your distributor.

Distributor : Name:.....

Address:

Tel.:.....

Machine : Type:.....

Program:.....

Date of installation:

Installed by:

Serial number:

Operation voltage and frequency:

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 Ripon, WI 54971-0990
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