



Dear client,

Congratulations on your purchase of this **FLOTEC** product. Like all **FLOTEC** products, it has been developed with the help of the latest technologies and manufactured with the most advanced electrical/electronic parts.

Take the time to read the instructions carefully before using this appliance.

Thank you!

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## Safety symbols

**Warnings for the safety of individuals and objects.**

**Carefully follow the instructions marked with the following symbols.**



**DANGER**  
Electric shock  
risk

**Warns that the failure to follow the directions given may cause electric shock.**



**DANGER**

**Warns that the failure to follow the directions given could cause serious risk to individuals or objects.**



**WARNING**

**Warns the operator that the failure to follow an instruction may damage the pump and/or the system.**



### Chap. 1 - Safety rules

Before installation, carefully read this manual and keep in a safe place. The guarantee will not cover any damage resulting from failure to comply with the instructions provided by this manual.

On receiving the pump, check that the pump has not been damaged during transportation. If the pump is damaged, immediately inform the dealer within 8 days from the date of purchase.

**Keep the equipment out of reach of children under 16.**

Do not transport the pump using the cable or use the cable to remove the plug from the socket.

Before using the pump, always inspect it visually (especially power cable and plug). Do not use the pump if it is damaged.

If the pump is damaged, have it inspected by the specialised assistance service only.

Verify that the voltage and frequency of the electropump shown on the nameplate correspond to those available on the mains.

Make sure that electric connections are protected from inundation.

Make sure that the level of water is below the minimum start level referred to in the "Technical Data".

Before starting the pump, make sure that the delivery pipe is free from obstructions.

Supply cables and extensions should have a section below that of H05 RN-F. The plug and connections should be protected by water splashes. All extensions must comply with DIN VDE 0620 standard.

For safety reasons, the pump must always be connected to a safety circuit breaker (FI) with a rated leakage current of  $\leq 30$  mA, in accordance with standards DIN VDE 0100-702 and 0100-738. Contact a specialised electrician.

Regulation OVE B/EN 60555 Part 1-3 establishes that pumps for swimming pools and ponds with fixed connections installed in Austria must be powered with an insulated OVE transformer at a secondary rated voltage below 230V.

In Switzerland, all electrically-powered equipment for outdoor use must be connected to an automatic safety switch.

Make sure people do not come into contact with water when the pump is connected to the mains.

Verify that the pump is installed on a flat and solid surface. Never place the pump directly on a stone or sand surface.

Always make sure that the pump is placed in a stable and vertical position.

Verify that the pump never runs without liquids. It can cause serious damages.

Always use a rope and fix it to the handle to immerse the pump in water.

Protect the plug and the power cable from heat, oil or sharp edges.

Make sure the machine is disconnected from electric power supply, before performing maintenance operation.



**DANGER**

**This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.**

**Children should be supervised to ensure that they do not play with the appliance.**

## Chap. 2 Limitations



**The pump cannot be used for sea water and inflammable, corrosive, explosive or dangerous liquids.**



**Verify that the pump never runs without liquids.**

The pump can be used with clean and non aggressive fluids or with fluids containing suspended particles with a maximum diameter of 5 mm.

Sand or other abrasive substances in the pumped fluid will cause the pump to deteriorate and will affect its performances.

**FLOTEC ComPac** electropumps are designed for private use in residential environments and are therefore suited to drain rain water, infiltrated water, to pump water out of flooded areas, and to transfer clean or moderately dirty fluids. The pump can be completely or partially submersed.

## Chap. 3 Technical data

	<b>ComPac 150</b>	<b>ComPac 200</b>
Mains voltage / frequency	230 V ~ 50 Hz	230 V ~ 50 Hz
Absorbed power	300 Watt	650 Watt
Type of protection / Insulation class	IP 68 / F	IP 68 / F
Delivery fitting	41,90 mm (1"1/4 M)	41,90 mm (1"1/4 M)
Maximum flow rate	8.500 l/h	11.500 l/h
Maximum head	7 m	10 m
Maximum depth of immersion	7 m	7 m
Power cable	10 m H05 RNF	10 m H05 RNF
Weight (without power cord)	3,6 Kg	4,8 Kg
Maximum dimension of pumped solid particles	5 mm	5 mm
Maximum temperature of the pumped fluid (in continuous mode)	40° C	40° C
Maximum number of starts per hour (uniformly distributed)	30	30
Minimum priming level (A)*	15 mm	15 mm
Minimum suction level (B)* (manual mode)	3 mm	3 mm
Start level (C)* (automatic mode)	140 mm	140 mm
Stop level (D)* (automatic mode)	30 mm	30 mm

Sound pressure level (Lpa) equal to or less than 70 dB(A)

Sound emission values obtained in conformity with the EN 12639 standard

(\*) These data refer to Fig. 1, Pag. 91. Measurements are expressed in millimetres.

The maximum flow rates given are reached if the pump is used without the check valve supplied.

The pumps of this series are not suitable for table fountains or aquariums. In these cases, it is necessary to use a H07 RN-F cable. If these pumps are used in continuous mode for ponds with fish, it is necessary to check them at regular intervals of 6 months (if the water contains aggressive substances). It is also advisable to check the maximum dimension of particles recommended for the pump and take the necessary measures to prevent the fish from being sucked into the pump.

## Chap. 4 Installation (see Fig. 1-3)



**DANGER**  
Electric shock  
risk

**When installing, please ensure electropump is disconnected from electrical supply. Pumps in this series are not suitable for use in a swimming pool and the relevant cleaning and servicing operations.**



**DANGER**

**To prevent possible injuries to people, avoid inserting hands into the mouth of the pump if this is connected to the mains.**

**FLOTEC ComPac** pumps come with a check valve that prevents the delivery pipe from being drained and the fluid from recirculating.

If the pump is fixed in a permanent location with rigid pipes, it is advisable to install a quick closing fitting in the most convenient location to facilitate cleaning and maintenance.

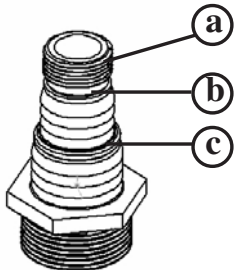
The dimensions of the collection chamber should allow the insertion of the pump and reduce to the minimum the start-up operations per hour (see LIMITATIONS - Technical data).

Use the handle provided to transport or lift the pump.

To use the pump for temporary applications, install a flexible pipe and connect it to the pump using a pipe holder. To immerse the pump, use a rope and fix it to the handle.

The pumps used in ponds, small lakes, fountains or similar installations or close to them should have a safety switch. Contact a specialised electrician.

### Connection of the delivery pipe



The fitting supplied with **FLOTEC ComPac** pumps can be adapted to the dimensions of the pipe used.

To connect a threaded pipe or a 3/4" (19 mm) quick closing fitting, tighten it directly on the threaded part (location **a**).

When using a Ø 25 mm (1") pipe, cut the stage that is not being used at the correct height (up to point **b**).

When using a Ø 32 mm (1 1/4"), cut the stages that are not being used at the correct height (up to point **c**).

1. Remove the part that is not being used from the standard fitting cutting it with a knife.
2. Tighten the standard fitting on the pump.
3. Connect the pipe to the standard fitting.

## Chap. 5 Electric Connection



**Verify that the voltage and frequency of the electropump shown on the nameplate correspond to those available on the mains.**



**The installer must make sure that the electric system is grounded in accordance with the law in force.**



**Make sure that the electric system has a high-sensitivity circuit breaker  $\Delta \leq 30$  mA (DIN VDE 0100T739).**



**The power cable must be replaced by qualified personnel only.**

### Grounding

The plug of the power cable has a double grounding contact, so that grounding can be performed by simply inserting the plug.

### Overload protection

**FLOTEC ComPac** series pumps have a built-in thermal protection switch. The pump stops if an overload condition occurs. The motor restarts automatically after it has cooled down (see chap 7 of the Troubleshooting section for information on causes and corrective actions).

## Chap. 6 Start-up (see fig. 1 pag. 91)



**Use the pump for the applications listed on the nameplate.**

### Instructions for a safe pump start

The power cable should have a minimum section equivalent to that of H05 RN-F. To be able to use the pump outdoors, it is necessary to use cable with a length of 10 m. The plug and connections should be protected by water splashes.

The maximum suction level of 3 mm can be reached in manual mode only. If the level of the fluid to suck is below 20 mm, maximum suction, up to a residual level of 3 meters, can be attained more quickly by starting and topping the pump 2 or 3 times.

### Automatic mode

**FLOTEC ComPac** pumps have an integrated floating switch. When the water reaches the start-up level, the integrated floating switch automatically starts the pump.

When the water falls below the stop level, the integrated floating switch stops the pump.

1. Lower the front lever and place it in location "AUT" (see Fig. 1).
2. Place the pump in a stable and straight position so that the integrated floating switch is able to move freely.
3. To start the pump, insert the plug in a 230 V current socket.

### Manual mode:

The integrated floating switch is disabled so that the pump can run in continuous mode:

1. Lift the front lever and place it in position "MAN" (see Fig. 1).
2. To start the pump, insert the plug in a 230 V current socket.

## Chap. 7 Maintenance and troubleshooting (see fig. 2 pag. 91)



**Make sure the machine is disconnected from electric power supply, before performing maintenance operation.**

In ordinary conditions, **FLOTEC ComPac** series electropumps do not require any maintenance. It may be necessary to clean the hydraulics or replace the impeller.

### Cleaning the hydraulic components

Disassemble the suction filter (Fig. 2 ref. A) by removing the screws provided (Fig. 2 ref. B)

Clean the impeller (Fig. 2 ref. C) and its chamber (Fig. 2 ref. D)

Reassemble the suction filter (Fig. 2 ref. A) by tightening the screws (Fig. 2 ref. B) and making sure that the O-ring (Fig. 2 ref. E) is correctly positioned in its housing (Fig. 1 ref. E).

### Cleaning the floating switch.

Disassemble the suction filter (Fig. 2 ref. A) by removing the screws provided (Fig. 2 ref. B).

Remove the rubber stop (Fig. 2 ref. F) supporting the guide rod (Fig. 2 ref. G)

Remove the floating switch.

Clean the floating switch (Fig. 2 ref. H) and the related chamber (Fig. 2 ref. I).

Insert the floating switch in the guide rod (G) making sure it is inserted in the correct direction (tapered side pointing upwards).

Insert the rubber stop (Fig. 2 ref. F) on the side of the guide rod.

Reassemble the suction filter (Fig. 2 ref. A) by tightening the screws (Fig. 2 ref. B) and making sure that the O-ring (Fig. 2 ref. E) is correctly positioned in its housing (Fig. 1 ref. E).

### Pump storage instructions

Store the pump in a dry place and protect it from frost.

Flotec declines all responsibility for damages originating from an incorrect cleaning. If failures occur, please contact an authorised Service Center.

PROBLEM	POSSIBLE CAUSE	REMEDY
<b>1) THE ELECTROPUMP DOES NOT PUMP WATER, THE MOTOR DOES NOT RUN</b>	1) No electricity. 2) Plug inserted incorrectly. 3) Enabled safety switch. 4) Blocked impeller. 5) Damaged motor or condenser.	2) Verify that voltage is present and that the plug is correctly inserted. 3) Reset the safety switch. If the safety switch is once more enabled, contact a specialised electrician. 4) Contact the Customer Assistance Service. 5) Contact the Customer Assistance Service.
<b>2) THE PUMP DOES NOT SUPPLY WATER BUT THE MOTOR IS RUNNING</b>	1) Obstructed suction grid. 2) Blocked check valve. 3) Air in impeller body (air bubbles). 4) The water level is below the start-up level.	1) Clean the grid. 2) Clean or replace the valve. 3) Perform several start-ups in order to remove all the air. 4) Fill the pump with water using the quick closing standard fitting.
<b>3) THE PUMP SUPPLIES A LIMITED AMOUNT OF WATER</b>	1) Partially obstructed suction grid. 2) Obstructed pipe. 3) Worn impeller.	1) Clean the grid. 2) Remove the obstructions. 3) Contact the Customer Assistance Service.
<b>4) INTERMITTENT OPERATION</b>	1) Solid particles prevent the free rotation of the impeller. 2) The temperature of the fluid is too high. 3) Voltage out of range. 4) The fluid is too dense. 5) Faulty motor.	1) Remove the foreign particles. 3) Supply the pump in accordance with nameplate data. 4) Dilute the pumped fluid. 5) Contact the Customer Assistance Service.
<b>5) THE PUMP DOES NOT START AND STOP IN AUTOMATIC MODE</b>	1) The pump is not placed in a vertical position. 2) The integrated floating switch is blocked.	1) Place the pump in a straight position. 2) Clean the floating switch.

If, after performing these operations, the problem persists, contact your retailer (customer assistance service).