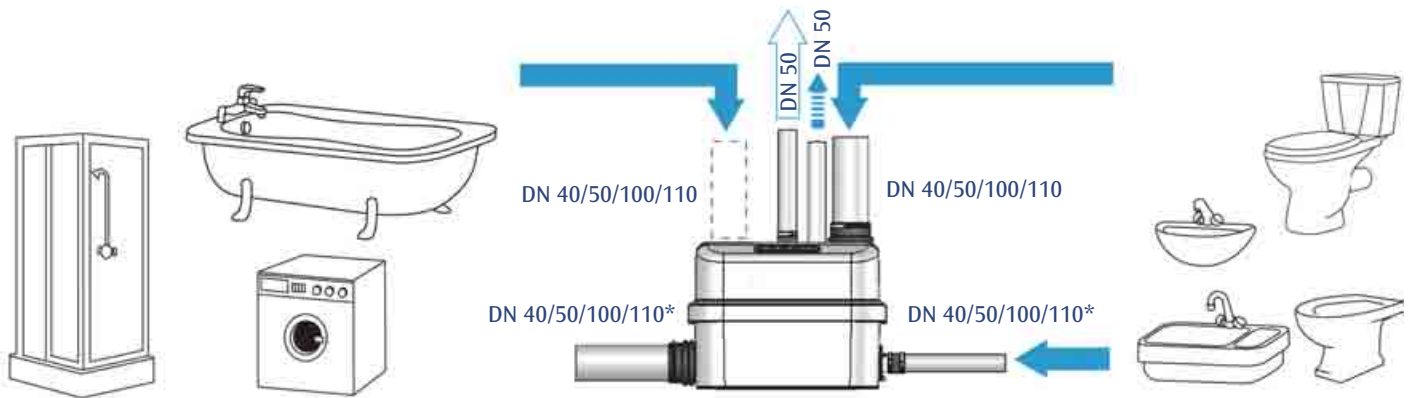


## 1. Description



The **SANICUBIC® Pro** is a lifting station designed to evacuate effluent from small private or commercial units.

Please comply with all the installation and maintenance specifications set out in these instructions, and especially the information marked with the following signs:



Failure to comply with this information could entail safety hazards for personnel



Information warning of the presence of an electrical hazard



**WARNING - Failure to comply with this information could affect the normal operation of the equipment.**













Instructions only for qualified professional specialists

### SANICUBIC OPERATING PRINCIPLE

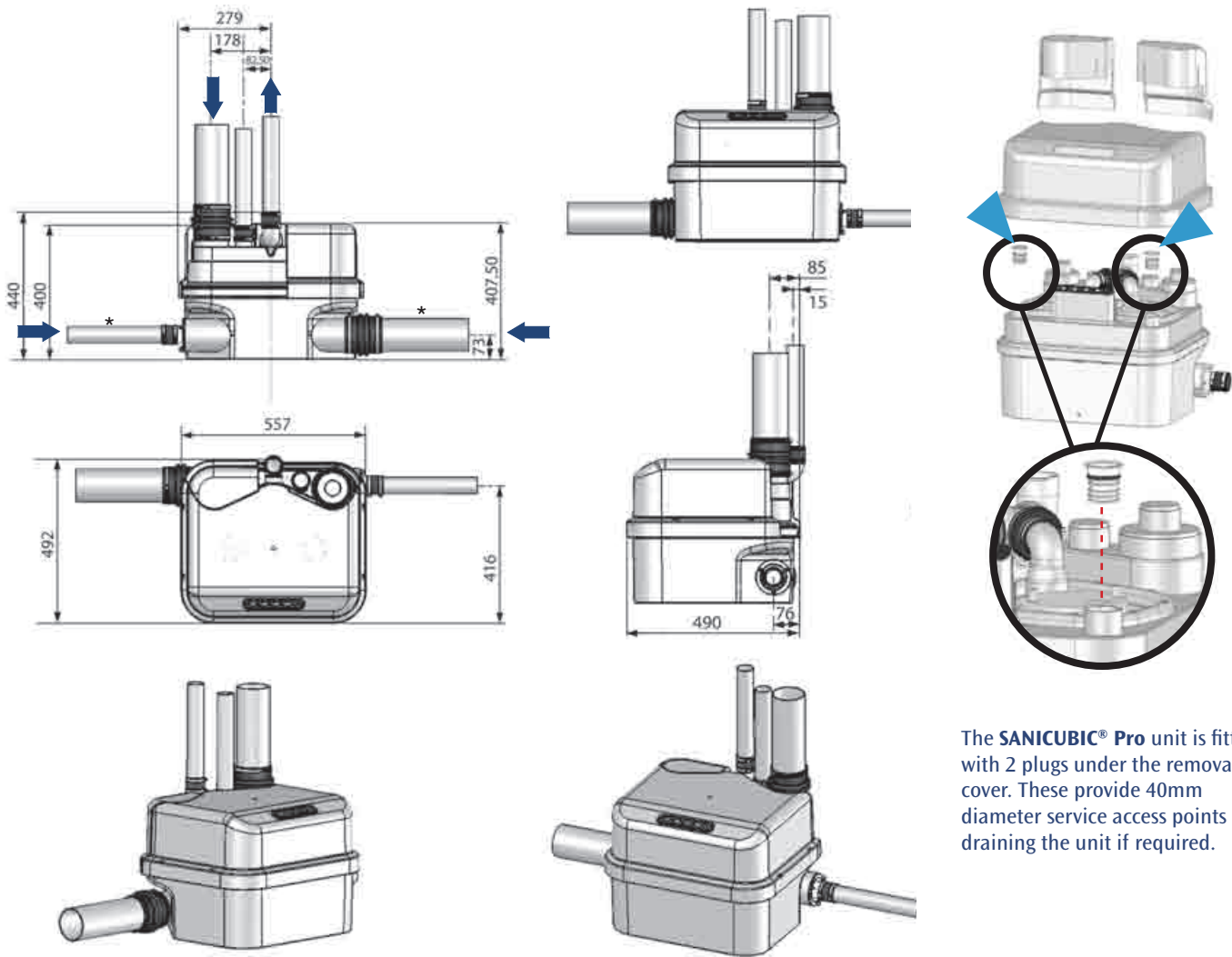
**SANICUBIC® Pro** contains 2 separate pumps. Each of the pumps is fitted with a high-performance maceration system. The 2 pumps operate alternately. In the event of inflow overload, both motors run at the same time (or if one of the pumps is faulty, the other one takes over). The **SANICUBIC® Pro** tank is fitted with 2 dip tubes; one tube controls motor operation, and the other one controls the alarm system.

- **Long pickup tube** (normal operation): as soon as the waste water level in the tank reaches the triggering point in the long tube, the pumping system starts up.
- **Short pickup tube** (inflow overload operation): if the waste water level in the tank reaches the upper point, a contact is closed and the auxiliary pumping system is triggered. The contact also sets off an audible and visual alarm. The general alarm LED on the **SANICUBIC® Pro** control panel switches to red. The system sends a high-frequency malfunction signal to the remote alarm unit. The **SANICUBIC® Pro** is fitted with a remote alarm module that transmits a visible and audible alarm (HF link).

## 2. List of Accessories included

 <p><b>A</b> x2</p> <p>wall plug</p>	 <p><b>B</b> x2</p> <p>screw</p>	 <p><b>C</b> x8 40/60</p> <p>collar</p>	 <p><b>D</b> x4</p> <p>sleeve</p>
 <p><b>E</b> x2 32/50</p> <p>collar</p>	 <p><b>F</b> x2</p> <p>sleeve</p>	 <p><b>J</b> x4 100/120</p> <p>collar</p>	 <p><b>K</b> x1</p> <p>sleeve</p>
 <p><b>L</b> x2</p> <p>bracket</p>	 <p><b>M</b> x1</p> <p>remote alarm module</p>		

## 3. Dimensions and overall measurements



The SANICUBIC® Pro unit is fitted with 2 plugs under the removable cover. These provide 40mm diameter service access points for draining the unit if required.

## 4. Technical Data

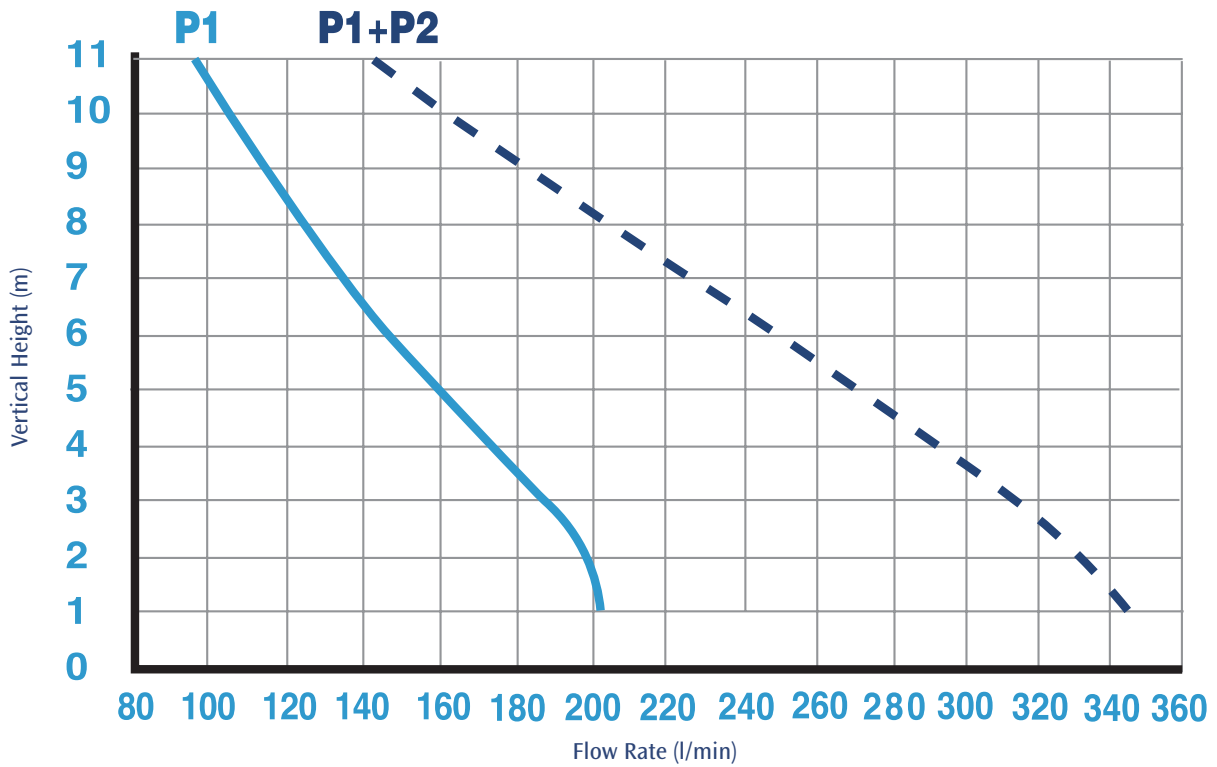
Type	R300	Maximum current input	13A
Maximum discharge head	11m	Electrical classification	I
Voltage	220-240V	Ave water temp for optimum performance	35°C
Frequency	50Hz	Maximum temperature (intermittent)	70°C*
Volume	47 l	Protection index	IP67
Maximum power input	3000w	Net weight (including accessories)	30kg

\*Hot water drain cycles from dishwashers or washing machines

## 5. Field of Application

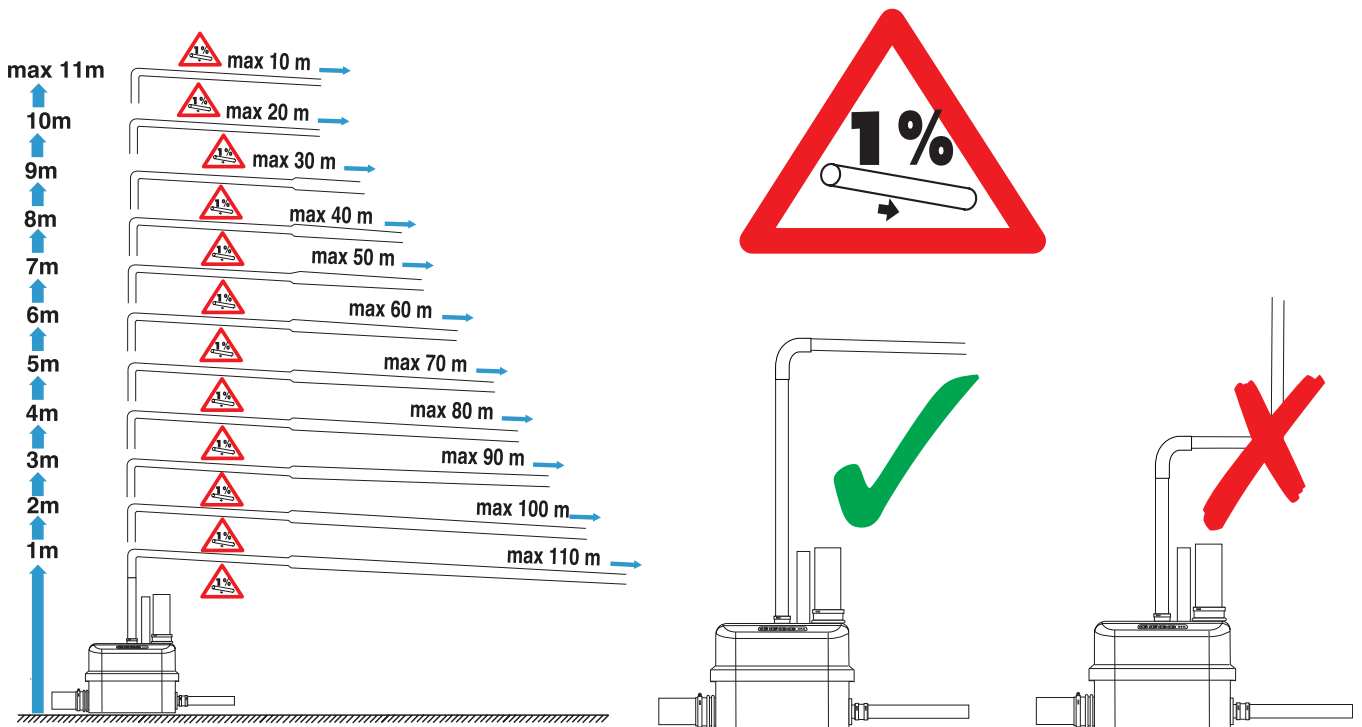
Waste from multiple WCs and other wastewater producing appliances. (The combined inputs must not exceed 80% of those shown in the graph in Section 6)

## 6. Performance Curve



**Example:** Pump **P1** is operating normally. It discharges 160 l/min at a pumping height of 5 m. If pump **P1** shows any signs of weakness or if the waste water inflow is too great, pump **P2** starts up. The output is then increased to about 275 l/min, until the situation returns to normal.

## 7. Ratio of Height / Length for Discharge



## 8. Installation

The **SANICUBIC® Pro** must be installed in compliance with standard **EN12056**. The equipment must be commissioned and maintained by a qualified professional specialist.

Please refer to installation standard **EN 12056**.

### 8-1. Important Installation Specifications

1. **Attention:** the space in which the **SANICUBIC® Pro** is to be installed must be large enough to leave at least 600 mm of working room around and above the unit to facilitate such maintenance work as may be required. There must be sufficient lighting and it must be sufficiently well ventilated and protected from freezing.

2. **Isolation valves must be fitted on the 50mm discharge pipe work and on all inlet pipe work including WCs and other sources. This is required by the standard EN 12056 and to allow any possible maintenance work to be carried out without serious flooding.**

**Note:** **If isolation valves are not fitted service/maintenance may be impossible and any associated costs will not be covered by the Saniflo warranty. 4"/110mm and 2"/50mm isolation valves are available on the market but you may also purchase a suitable isolation valve kit direct from Saniflo Ltd. Please call 0208 842 0033'**

3. The discharge pipe must be fitted so as to avoid all back flow from the drainage system (see the example drawings in **Section 8-2**). Back flow can be avoided by installing an anti-back flow riser reaching a high point above the maximum back flow level.

**Comment:** In the absence of local information to the contrary, the maximum back flow level corresponds to street level (roadway, pavements, etc.). Continue the discharge pipework after the anti-backflow riser using a larger diameter pipe.

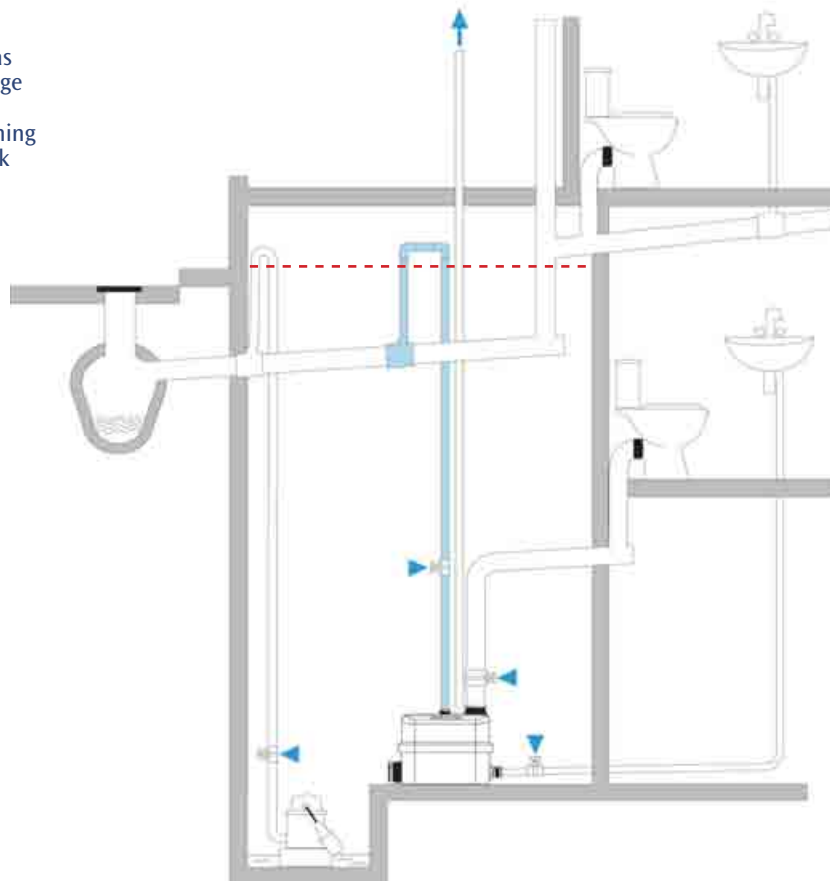
4. If the Sanicubic is installed in a space such as a pit for example, we would recommend the fitting of a bilge pump in case of flooding.

5. **The Sanicubic must be vented with an outlet at roof level. The vent should be taken from one of the two 40mm connections located either side of the 50mm discharge outlet. The Sanicubic will not be able to operate at all if this vent connection is not opened up! Do NOT fit air admittance valve on the top of the air vent pipe. The vent must be an open vent or the unit will not operate.**

6. The lifting station must be fixed to the floor (see paragraph in **Section 8-8**).

### 8-2. Installing the anti backflow loop

The discharge pipe must be fitted so as to avoid all back flow from the drainage system. Back flow can be avoided by installing an anti-back flow riser reaching a high point above the maximum back flow level.

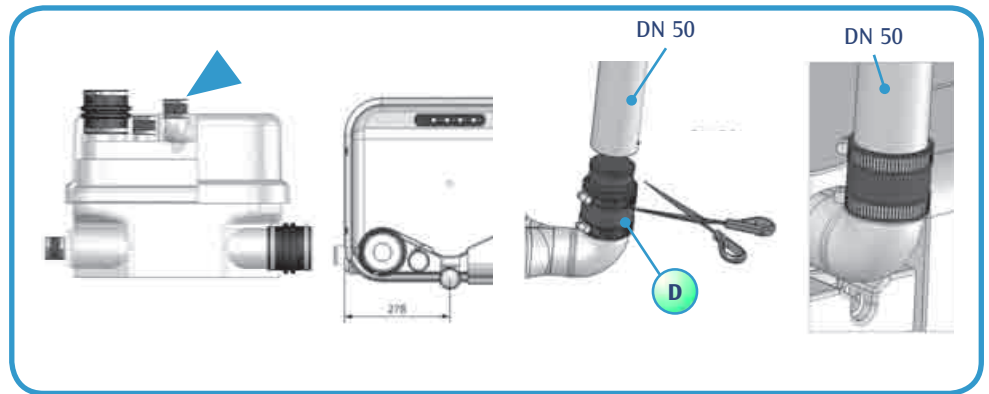


## 8-3. Connecting the Discharge Pipe

Remove the end cover or covers from the back of the unit, see **Section 8-2 (1)**. As each pump is fitted with a macerator system, a **DN50 mm** discharge pipe can be used.

The discharge bend is at the centre of the unit, at the back, see diagram to the right. Use the sleeve (**D**) to connect it to the riser pipe and fix it in place with the collars.

Each pump in the **SANICUBIC® Pro** unit is fitted with check valves. See paragraph in **Section 8-3** regarding control valves and back flow.



## 8-4. Connecting Sanitary Equipment to the Lower Inlets



**If you want to install a shower or a bath at the same level as the SANICUBIC® Pro, you must make sure that the upper parts of the plugholes on the sanitary equipment are at least 250 mm above the lower inlets. It is also very important that you fit an in-line non return valve between the shower tray and the Sanicubic inlet.**

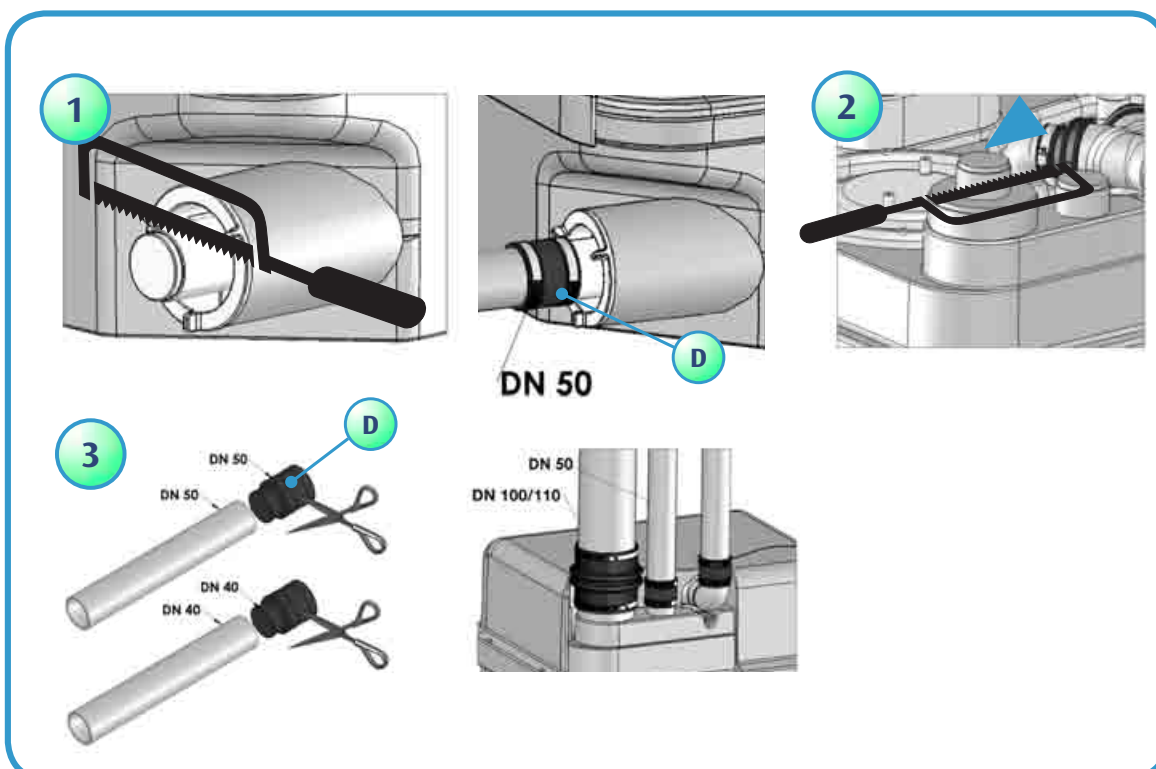
**Sanicubic is not suitable for disposal of waste containing grease and fat. It is likely to cause blockages in the activation pressure tubes unless a full grease trap is installed. For kitchen waste please use Sanispeed or Sanicom.**

## 8-5. Connecting the Inlets DN 40/50

Lower inlets (dia.1)

Upper inlets (dia.2)

- Cut off the end of the DN 50 inlet with a saw.
- Cut the sleeve (**D**) to suit the pipe diameter: DN 40 or DN 50 (**dia.3**).
- Fix the sleeve on the inlet and on the pipe, using the collars.



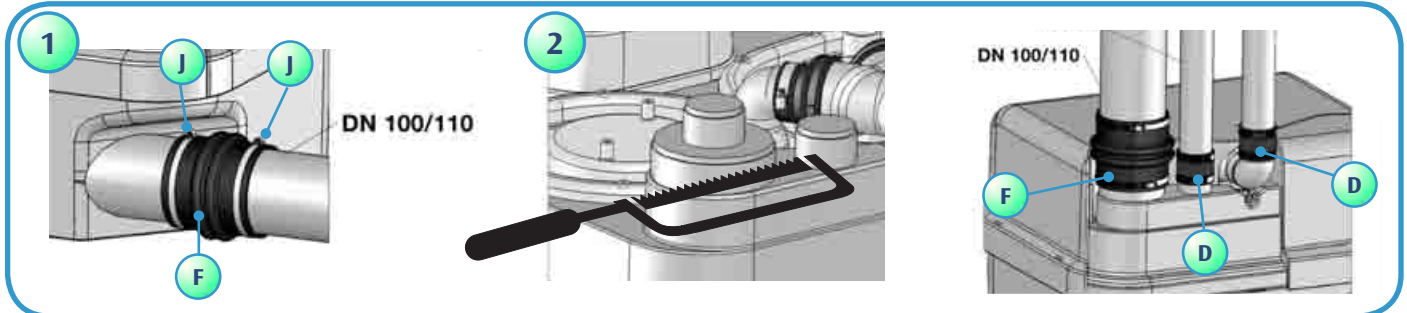
## 8-6. Connecting the DN 100/110 Inlet

### Lower inlets (dia 1)

- Remove the plug from the side inlet.
- Fix the sleeve (F) in place using the collar (J).
- Fully insert the DN 100/110 tube in the other end of the sleeve and fix it in place using the other collar (J).

### Upper inlets (dia 2)

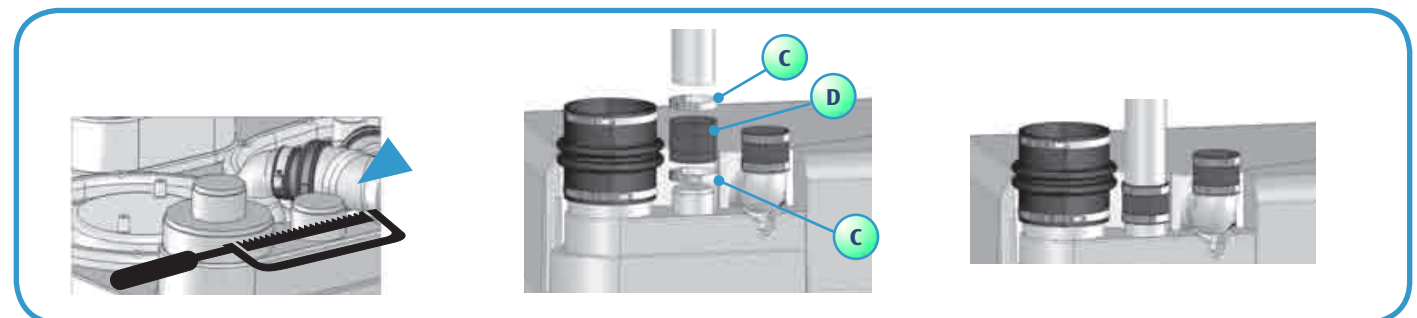
- Cut off the upper end of the DN 100 inlet with a saw.
- Fix the sleeve (F) in place using the collar (J).
- Fully insert the DN 100/110 tube in the other end of the sleeve and fix it in place using the other collar (J).



## 8-7. Connecting the Vent

One of the upper DN50 inlets must be used for the vent. The vent pipe must be fitted up to roof level. Cut off the end of the one of the DN50 inlets with a saw.

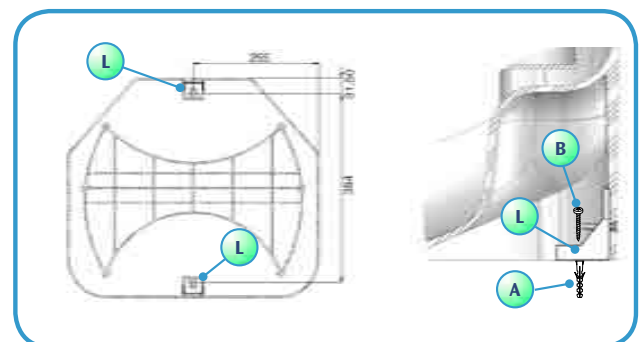
Then fix the sleeve (D) in place using the collar (C). Fully insert the DN40 tube in the other end of the sleeve and fix it in place using the other collar (C).



## 8-8. Fixing the SANICUBIC® Pro to the floor

The SANICUBIC® Pro unit is equipped with fittings to hold it on the floor and prevent it from turning or moving.

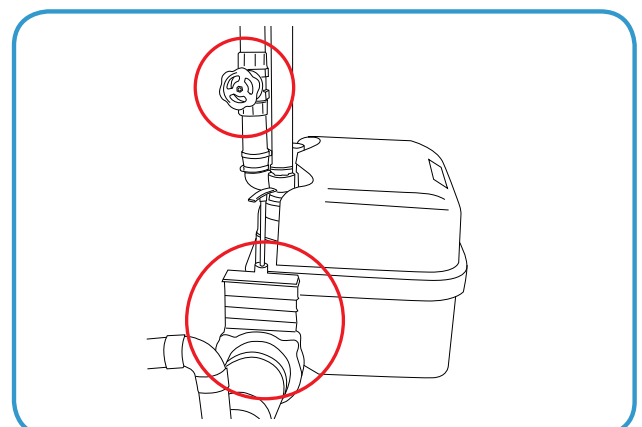
- 1 Place the unit on the desired spot.
- 2 Draw the outline of the unit.
- 3 Position the brackets and fix them to the floor as shown on the template diagram to the right.
- 4 Put the unit back in place.
- 5 Fix the unit in place with the screws.



## 8-9. Isolation valves

Service /maintenance is only possible if all inlets can be isolated.

**4"/110mm and 2"/50mm isolation valves are available on the market but you may also purchase a suitable isolation valve kit direct from Saniflo Ltd. Please call 0208 842 0033.**



## 8-10. Electrical Connections



The electrical installation should be carried out by a qualified person.

All wiring must conform to BS7671, 1992 requirements for electrical installations. The Sanicubic Pro requires a 220/240V single phase AC 50 Hz supply (UK specification). Do not connect the Sanicubic Pro to a conventional plug and socket. It must be wired into a fused, unswitched, fixed wiring connector fitted with a 13 amp fuse. The Saniplus has an earth wire. The wires in the mains lead are coloured in accordance with the following code:

The Sanicubic should also be protected by a high sensitivity 30mA residual current detector.

Brown – Live Blue – Neutral Green/Yellow – Earth

**Warning:** Ensure the electricity is turned OFF at the main switchboard before wiring to connector.

All work on cable, pressure chamber and motor should only be carried out by a qualified Saniflo servicing agent, as special tools are required.

UK – 230/240V 50Hz.

The unit should be installed so it is easily accessible/removable for possible maintenance.

The unit should not be exposed to splashing in normal use.

Once the power supply to the Sanicubic has been switched on, then switching it off again will set off the corresponding alarm. To re-set this alarm press the third button along on the control panel (marked with triangle)



CANADA  
USA



EUR



CH



GB

## 9. Alarm Operation

**SANICUBIC® Pro**  
**Société Française d'Assainissement**  
**EN 12050-1**

**R300**  
**220-240 V - 50 Hz**  
**3000 W - ⚡**



### 9-1. General Alarms

#### High level alarm:

If the water level in the unit is abnormally high: the buzzer is triggered and the red LED comes on; the other motor starts up 3 seconds later (see the illustration showing the control keyboard).

#### Temporary alarm :

If one of the 2 motors runs for more than 1 minute : the buzzer is triggered and the red alarm LED comes on; the other motor starts up 3 seconds later.

#### Mains power supply alarm:

In the event of a mains power failure (or if the unit is unplugged) : the buzzer is triggered and the red alarm LED comes on; the yellow mains power LED also flashes.

### 9-2. Resetting General Alarms

If the problem that has triggered one of the alarms referred to above ceases, the buzzer stops, but the red alarm LED stays on to memorize the fact that there has been an operational problem.

The “Reset alarm” key on the keyboard is used to switch the buzzer off in all cases, but it only switches the red LED off if the problem that triggered the alarm has been dealt with. The alarm lights on the remote control box also stay on until the problem has been dealt with. This avoids the risk of the unit being left operational without attention being given to a potential cause for failure.

The electronic system measures the current input (I a) to each motor and enables detection of 2 types of fault:

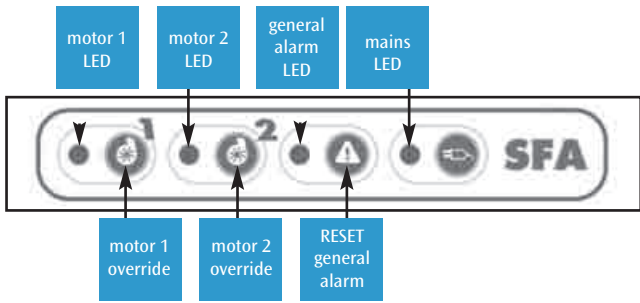
- I a < I minimum threshold, which can be due to: a fault in the motor power supply (short-circuit), a capacitor fault, disconnected internal pipes (eg. through blockage) (turbine / macerator system).
- I a > I maximum threshold, because the macerator system is blocked.

Both of these cases lead to the following results: the motor in fault status stops, the corresponding red LED comes on, the alarm is triggered and the second motor is started. If the power consumption of the second motor is also outside the limits: that motor also stops and the corresponding red LED comes on.

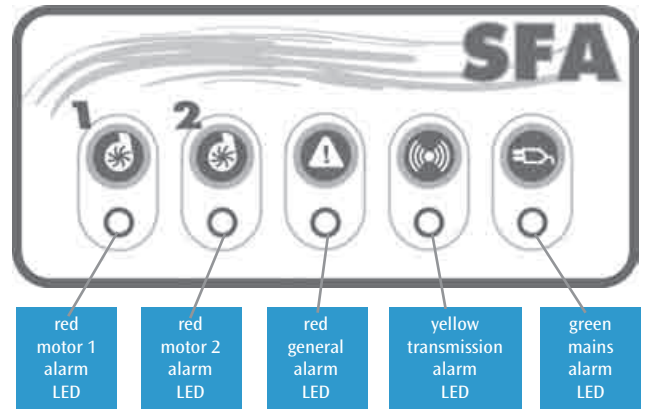
The buzzer can be stopped by pressing the “Reset alarm” key, but the red motor LED stays on. When the “override” key for the corresponding motor is pressed the green LED comes on if the fault is no longer present. Until the “override” key for the motor is pressed the unit continues to operate on one motor. The “override” key is used to re-initialise the program. The unit then attempts to operate using both motors (alternately).

## 9-3. Resetting General Alarms

### UNIT ALARM

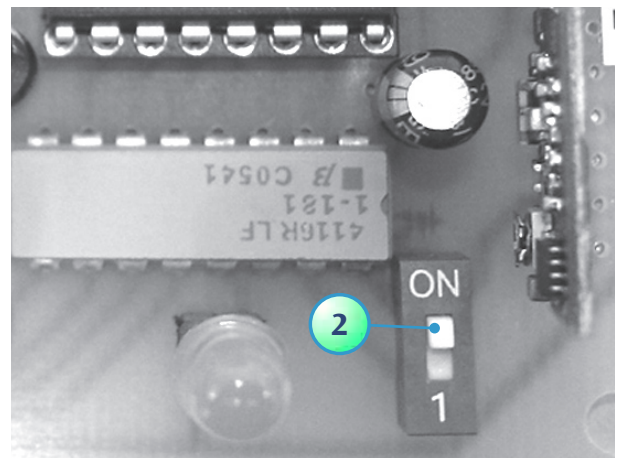
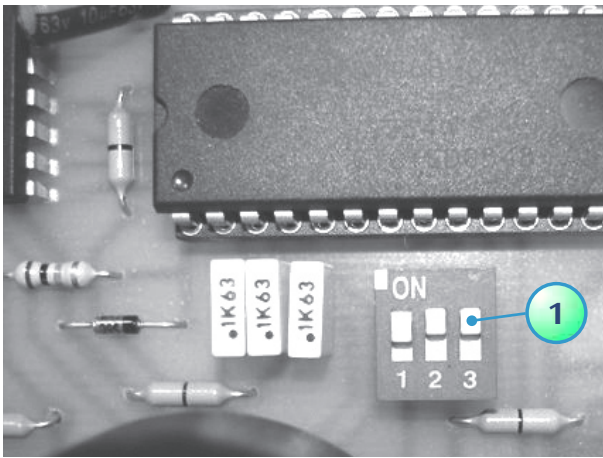


### REMOTE ALARM MODULE

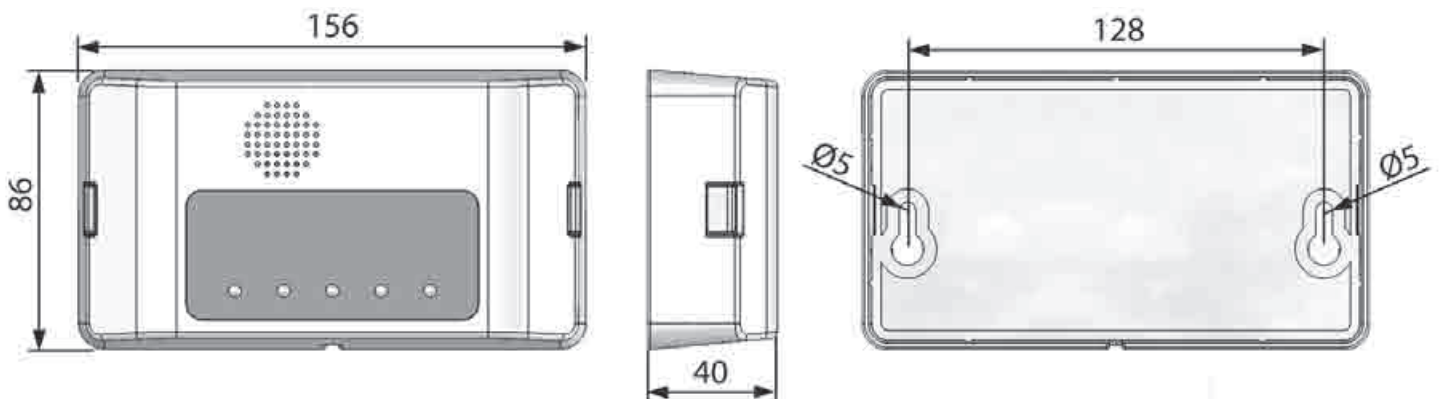


The remote alarm module is connected to the **SANICUBIC® Pro** via an HF link. It receives the various types of alarm information from the unit. If other HF appliances interfere with the system, a switching system is fitted for the HF code linking the base board with the remote alarm module. The code can be changed using the switches located on the 2 boards.

In the event of interference with other HF equipment, unplug the unit and the remote module, flip the third switch on the unit board, see (1) below and do the same on the remote unit board (a single switch) see (2) below.



To install the module on a wall, see illustration :





## 9-4. Resetting General Alarms

The alarm module has 5 LEDs and a buzzer .  
The LEDs only come on if a fault has been detected.

- 1 The 3 red “motor alarm” and “general alarm” LEDs mirror operation of the corresponding LEDs on the base board.
- 2 The yellow “HF reception” LED mirrors operation of the yellow mains power supply LED on the base board:
  - On steadily = transmission OK, base board powered by the mains supply
  - Flashing = transmission OK, but mains power supply fault on the base board (which is thus operating on its battery power supply)
  - Off = no HF reception from the base board = loss of HF signal, or base board battery flat, or base board failure.
- 3 The green “mains” LED shows the status of the power supply for the remote alarm module:
  - On steadily = module powered by the mains supply
  - Flashing = mains supply fault for the module (which is thus operating on its battery power supply)
  - Off = module failure or module battery flat
- 4 The buzzer stays on continuously when the alarm is on. It stops when the alarm status is no longer on or if you can press the “Reset” General Alarm button.

## 10. Conformity with standards

- **SANICUBIC® Pro** complies with standard EN 12050-1 (lift station for household waste containing faeces) and with the European directives covering construction products, electrical safety and electromagnetic compatibility

This unit must be installed and used in compliance with European installation standard EN12056 and with local requirements.

## 11. Commissioning

- 1 Once the plumbing and electrical connections have been made, check that the connections are watertight by letting water flow successively through each inlet used. Make sure that the unit is operating correctly by carrying out at least two start cycles with water to test the system.
- 2 **Warning!** Do not operate the motors in override status (by pressing the pushbuttons on the control box) until the Sanicubic is full of water. Running the pumps dry will damage the macerator system.

## 12. Use

- 1 **The SANICUBIC® Pro** unit is designed to drain off household waste water. Any other use will invalidate the guarantee. Do not dispose of sanitary towels, condoms, hygiene articles, oils, solvents, acids, or any other potentially corrosive or explosive liquids etc, via the unit.
- 2 **Warning!** In the event of a power failure, stop draining any water from the equipment connected to the **SANICUBIC Pro** unit.
- 3 Do not install or use the unit in a zone where there is a risk of explosion.

## 13. Maintenance

A visual check of the lift station must be made once a month to make sure it is operating correctly, and the installation must be inspected regularly (once a year) by a qualified person. Meanwhile, if any technical problems are experienced, please call our after sales service.

## 14. Guarantee

The **SANICUBIC® Pro** unit is guaranteed for two years (parts and labour) provided that it has been installed and used in compliance with the present instructions.

**Saniflo Ltd, Howard House, The Runway, S Ruislip. Middx HA4 6SE**

For technical advice or service please call 0208 842 0033 or service linkline 08457 650011 from a landline to connect to your nearest local service engineer.