

EC



OWNER'S MANUAL

LAGOON

CONSTRUCTION NAVALE BORDEAUX



VERSION 1-MARS 2022





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# WELCOME ON BOARD

Dear Sir, Madam,

You have just taken delivery of your new LAGOON, and, first of all, we thank you for the trust you have demonstrated in our brand.

A LAGOON is made to last: from its design to its construction, and finally to its launch, every boat is considered with care, down to the smallest detail, to ensure you years of enjoyment.

This manual is intended to help you enjoy your boat in safety. It includes many details about the boat's specifications, the provided or installed equipment, its systems and also information on their use, adjustment and maintenance, as well as on risk prevention and management. Please read it carefully and familiarize yourself with the boat before sailing.

This owner's manual is not in any way a navigation or mariner's training manual. If this is your first boat, or if you have changed to a type of boat with which you are not familiar, make sure that you learn how to use and handle it safely and with ease before taking the helm. Your dealer, national sailing or motorboat association, or yacht club will be very happy to tell you about qualified sailing schools or instructors in your area.

Make sure that the wind and sea conditions forecast are appropriate for the design category of your boat, and that you and your crew are capable of handling the boat safely in these conditions.

Even with a boat that is well-adapted to these categories, the wind and sea conditions that correspond to the design categories A, B, and C range from strong gale, for category A, to severe conditions at the upper end of category C, prone to the dangers of abnormal waves or gusts. These are dangerous conditions in which only an experienced, fit and well-trained crew, handling a well-maintained boat, will be able to navigate with sufficient skill.

This owner's manual is not intended as a detailed maintenance or service manual. If you encounter any problem, contact the boat manufacturer or his representative. If a maintenance manual is provided, please use it to maintain the boat.

Always use the services of an experienced and qualified professional for maintenance, repair, or modifications. Any alterations which may affect the safety features of the boat must be assessed, carried out, and documented by persons qualified to do so. The boat manufacturer cannot be held responsible for any modifications not expressly approved.

Some countries require you to hold a Certificate of Competency or other such qualifications, where special regulations are in force. Local road transport requirements may also apply.

Always maintain your boat well and make note of any deterioration over time, or, where applicable, to heavy or inappropriate use.

Any boat – no matter how well-built – could suffer serious damage if not used properly. Inspect the boat regularly, especially after any damage is suspected. Always adjust the speed and heading of your boat according to the sea conditions.

If your boat is equipped with a life raft, read the instruction manual carefully. The crew should have all the safety equipment on board (life jackets, harnesses, etc.) corresponding to the type of boat, the weather conditions, etc. In some countries it is mandatory to have this equipment onboard. The crew should be familiarised with the use of the safety gear and with emergency safety manoeuvres (man overboard recovery, towing, etc.). Sailing schools and clubs regularly run training sessions for these skills.

All crew members should wear appropriate personal flotation devices (life jackets/flotation aids) while on deck. Be advised that in some countries, it is mandatory to wear a flotation device that meets the national regulations at all times.

Keep this manual and the user's guide in a safe place and pass them on to the new owner when you sell your boat. You are advised to keep all instructions issued by the manufacturers of any equipment for your boat (accessories, etc.), and the user's guide together with this manual.

# 1 - INTRODUCTION

The users of this boat should note that:  
All crew members must be properly trained.

Any boat, however solid, may be severely damaged if not sailed properly.  
This is not compatible with a safe sailing experience.  
Always adapt the speed and the direction of the boat to the sea conditions.

Do not sail at maximum speed in areas of dense traffic or in case of reduced visibility, strong winds or high waves. Reduce the speed and wake of the boat, as a courtesy and as a safety measure for yourself and others. Respect speed and wake limits when zones are defined.

Respect priority rules as defined by cruising regulations and enforced by the COLREG.

Always maintain a sufficient distance to stop or steer the boat in order to avoid a collision.

Some information or drawings in this manual may show details that differ slightly from your own boat; all the essential information, however, remains the same. Any changes, should they be required, will appear in the manual's later editions.

As part of our commitment to continually improving our products, CNB LAGOON reserves the right to modify our design, outfitting or equipment as we deem necessary. For this reason, boat characteristics and details are not contractual and may be modified at any time, with no prior notice and no updating obligation.

This owner's manual has been produced in several languages. French is the language of reference.

This owner's manual has been drafted and edited by CNB-LAGOON. Any full or partial copy, direct or indirect, permanent or temporary, produced by any means or in any format, and/or any change made to this manual by a third party for commercial gain, is formally prohibited.

## 1.1 Danger levels and safety labels

Various warning statements used throughout this guide are indicated as follows:



### DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



### WARNING

Indicates a danger which could lead to injury or death if the appropriate precautions are not taken.



### ATTENTION

Either indicates a reminder of safety procedures or alerts you to dangerous manoeuvres or operations, which could result in injuries to those onboard, damage to the boat and its components or damage to the environment.



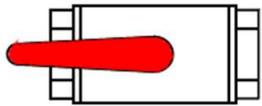
### NOTICE

Indicates information that is considered important, but not related to a hazard, such as equipment damage.

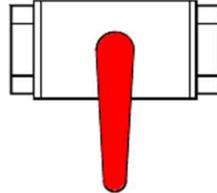
## 1.2 Hull valves opening/closing

- Quarter-turn valves

To open the valve, place the handle in the flow direction of the fluid.  
To close the valve, place the handle perpendicular to the flow direction of the fluid.



Valve open



Valve closed

- On-off switch or battery shut-off

POSITION ON or 1 = electric current flows.  
POSITION OFF or 0 = electric current is off.



- Emergency Stop button

To turn off the system, hit the button.  
To restart the system, turn the knob in the direction of the arrow (clockwise) to unlock it.



# 1 - INTRODUCTION

- Three-way control valve

Point the valve handle (where it says "CLOSE") towards the outlet to be closed. Let the "OPEN" indication appear on the outlet to be used.



# 2 - SPECIFICATIONS

## 2.1 Identification sheet

- NAME OF THE BUILDER Construction Navale Bordeaux
- MODEL L55
- DESIGN CATEGORY A
- MAIN PROPULSION MEANS SAIL
- MAXIMUM RECOMMENDED POWER 2 x 80 CV Yanmar sail drive  
2 x 115 CV Nanni sail drive
- CERTIFYING ORGANISATION NUMBER CE0607
  
- CERTIFICATION A:14 B:14 C:20 D:30



### WARNING

Do not exceed the recommended maximum number of people onboard. Regardless of the number of people on board, the total weight of people and equipment must never exceed the recommended maximum load. Always use the seats/seating area provided.

## 2.2 Design categories

1) A boat given a design category of A is considered to have been designed to sail in winds below Beaufort force 10 and the associated significant wave heights.

NOTE: Such conditions can typically be encountered during extensive cruises, for example across oceans, but can also occur close to the coast when the area is not protected from wind and waves for several hundred nautical miles. Depending on the weather conditions, winds can gust up to 32 m / s.

2) A boat given a design category of B is considered to have been designed to sail in winds of Beaufort force 8 or less and associated waves of significant height, up to 4 m.

NOTE: Such conditions can typically be encountered during offshore sailing, but can also occur near the coast when shelter may not be immediately available. These conditions can also be encountered on sufficiently large inland water bodies and can generate the wave heights mentioned above. Depending on the weather conditions, winds can gust up to 27 m / s.

3) A boat given a design category of C is considered to have been designed to sail in established winds typically less than or equal to Beaufort force 6 and associated waves of significant height, up to 2 m.

NOTE: Such conditions can typically be encountered on exposed inland waters, estuaries, and coastal areas during moderate weather. Depending on the weather conditions, winds can gust up to 18 m / s.

4) A boat given a design category of D is considered to have been designed to sail in winds typically established at less than or equal to Beaufort force 4, and associated waves of significant height up to 0.3 m, and occasional waves of 0.5 m high.

NOTE: Such conditions can be encountered on sheltered inland waters and coastal areas in good weather. Depending on the weather conditions, winds can gust up to 12 m / s.

# 2 - SPECIFICATIONS

## 2.3 Technical specifications

- Length overall (L.O.A.) 16.56 m
- Waterline length 16.39 m
- Overall width 9.00 m
- Waterline width 8.60 m
- Air draught (Unladen) 30.08 m
- Draught (fully laden) 1.60 m
- MEC Displacement (mLC) 29.2 T
- Maximum Load Displacement 42.2 T

### Main propulsion

- Upwind sail surface 178 m<sup>2</sup>
- Square top mainsai 109 m<sup>2</sup>
- Self-tacking jib 69 m<sup>2</sup>
- Code 0 (optional) 154 m<sup>2</sup>
- Asymmetrical spinnaker (optional) 272 m<sup>2</sup>

- Fresh water capacity 960 L (4 x 240 L)
- Fuel capacity 2 x 550 L
- Black water capacity
  - 4-cabin version 3 x 75 L + 125 L
  - 5-cabin version 3 x 75 L + 155 L
  - 6-cabin version 2 x 75 L + 2 x 155 L
  - Optional forward layout with 50 L per cabin
- Grey water capacity 2 x 120 L optional

### Secondary propulsion

- Motorisation
  - 2 x 80 HP Yanmar sail drive
  - 2 x 115 HP Nanni sail drive

- Architects VPLP Design
- External design Patrick Le Quément
- Interior design Nauta Design
- Number of berths 8 to 14

## 2.4 Builder's plate

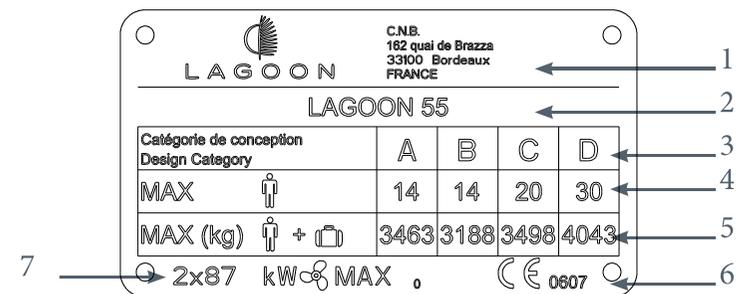
The maximum load marked on the builder's plate includes:

- The crew, depending on the sailing category;
- Personal equipment;
- Food, drink and cooking utensils;
- Waste water stored on board.

The plate does not show:

- Fuel in the fixed tanks;
- Fresh water in the fixed tanks;
- All the options offered to the customer.

Based on a boat fitted out with all the options on offer. The user can load his/her boat beyond the value shown on the builder's plate by taking account of the weight of the options that were not fitted.



### Legend

- 1 Builder's name and address
- 2 Model name
- 3 Design category
- 4 Maximum number of people recommended per build category
- 5 Maximum recommended load in Kg per design category
- 6 EC Marking
- 7 Maximum power (kW)

# 2 - SPECIFICATIONS



## WARNING

When loading the boat, do not exceed the maximum recommended load. Always load the boat carefully and distribute the loads appropriately to maintain the theoretical trim (approximately horizontal). Avoid placing heavy loads high up in the boat.

NOTE 1: Maximum load authorized by the builder, expressed in kilograms (people + provisions + miscellaneous loads), including liquids (fresh water, fuel) in permanent tanks filled to their maximum capacity.

NOTE 2: The maximum capacity of persons is given by the example of 4 persons weighing 75 Kg each = 300k Kg. If children are part of the crew, this number can be higher. However, the total weight of 300 Kg must not be exceeded.

NOTE 3: The maximum recommended load is the sum of the actual weight of the people on board plus the weight of the equipment carried. If there are fewer people on board than the maximum allowed, the weight of the equipment carried may be increased. The total sum must not exceed the specified total limit (example: maximum load = 620 Kg).



The builder's plate is located at the helm station on the flybridge.

# 3 - SAFETY

## 3.1 Risks of fire or explosion

### 3.1.1. General information

The main risks are related to the engine and the electrical system. Please see the sections referring to these.

Check that the bilges are clean, and check frequently to ensure that there are no fuel/gas vapours or fuel leaks.

Do not store combustible materials in the engine compartment



**WARNING**  
Do not obstruct the passages leading to the exits and the hatches.



**WARNING**  
Do not block the access to the portable extinguishers stored in the cupboards.



**WARNING**  
Do not block safety controls, such as fuel shut-off valves, gas valves, or electrical system switches.



**WARNING**  
Do not modify any of the boat's installations (especially the electrical, fuel, or gas installations), or allow unqualified personnel to proceed with modifying these.



**WARNING**  
Do not fill fuel tanks while the engine is running.



**WARNING**  
Do not smoke when handling fuel or gas.



**ATTENTION**  
If non-combustible materials are stored in the engine compartment, they must be secured so that there is no danger of them falling on machinery, and they must not obstruct access to and from the compartment.



**ATTENTION**  
When replacing components of the fire-fighting equipment, use only appropriate components of the same code designation or with the equivalent technical capacity and fire resistance.

## 3.1.2 Fire fighting

It is the responsibility of the owner/yacht operator to:

- Ensure that firefighting equipment is immediately accessible when the boat is occupied.
- Show the members of the crew:
  - The location and use of the fire-fighting,
  - Location of fire ports in the engine compartment,
  - The location of evacuation routes and emergency exits.
- Maintain fire-fighting equipment:
  - Check fire-fighting equipment as frequently as indicated,
  - Replace portable fire extinguishers, if outdated or discharged, with extinguishing apparatus of an identical extinguishing capability;
  - Have fixed fire extinguishing systems filled or replaced if they have been discharged.
- For the protection of the roof, provide at least one fire bucket with a lanyard, in a readily accessible place.
- Portable fire-extinguishers are to be provided by the owner. You are responsible for enforcing compliance with the national legislation of the flag under which you are sailing. The boat, when sailing, must be fitted with portable extinguishers.
- The boat is delivered with two 4 Kg ABC powder extinguisher in each engine compartment and one optional 4 Kg ABC extinguisher in the generator compartment. Their location is specified on the following diagrams. Check that the fixed fire extinguishing systems have been armed before departure.



### NOTICE

It is recommended that at least one fire extinguisher be installed within 5 meters of each berth, within 2 meters of any open flame appliance, and within 1 meter of the helm station.



### DANGER

- Do not leave the boat unattended when a stove or heater is in use.
- Do not use gas lamps in the boat.
- Do not fill up a tank or change a gas bottle when an engine is running, or a stove or heater is on.
- Do not smoke when handling fuels or gas.
- Do not install free-hanging curtains or any other textile next to, or over, cooking appliances or any other open-flame appliances.

# 3 - SAFETY

## 3.1.3 Fire blanket

When in use, this boat must be equipped with a fire blanket (not provided) to protect the cooking equipment and / or the galley, installed in the following place : close to the cooking appliance.



6 cabin layout



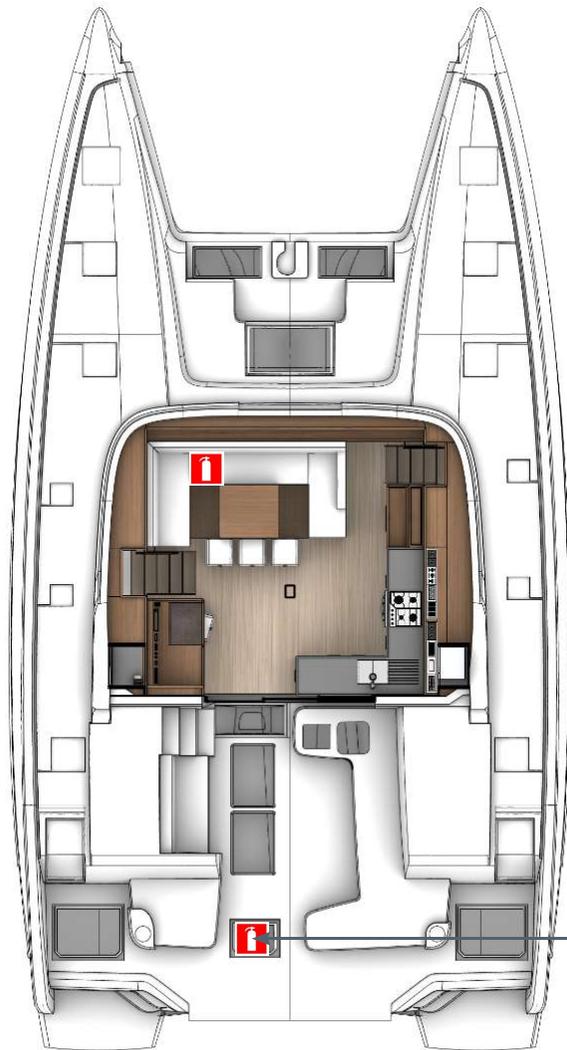
4 / 5 cabin layout

## 3.1.4 Portable fire-extinguishers

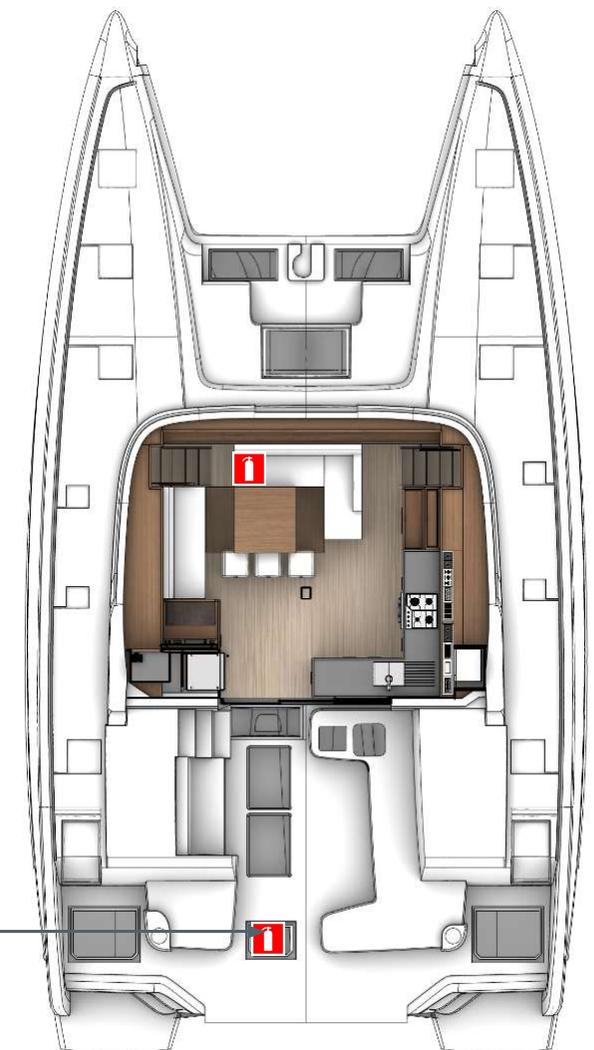
When in use, this boat must be equipped with portable fire extinguishers (not provided) of the following extinguishing capacities and located in the designated locations.

5 x 1 Kg ABC fire-extinguishers (5A34B).

The location of the portable fire extinguishers is shown by the following pictogram:



with plancha option



4 cabin layout / 5 cabin layout

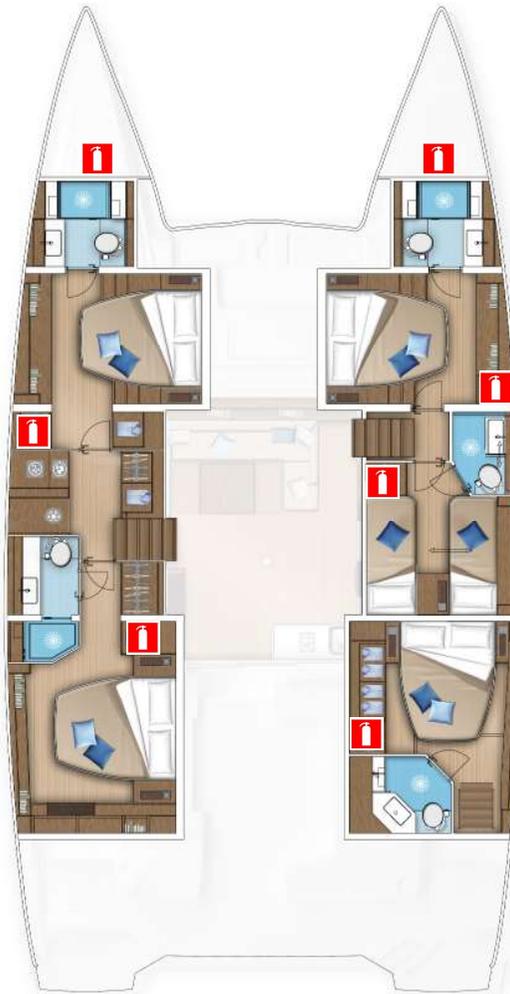
6 cabin layout

# 3 - SAFETY

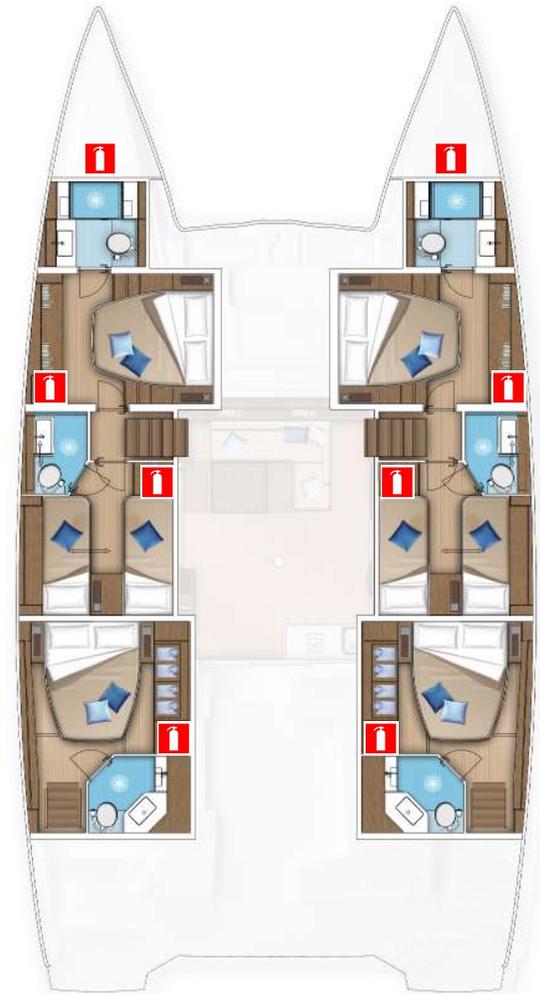
Fire extinguishers in the forward bow area are recommended if the space is fitted as a cabin.



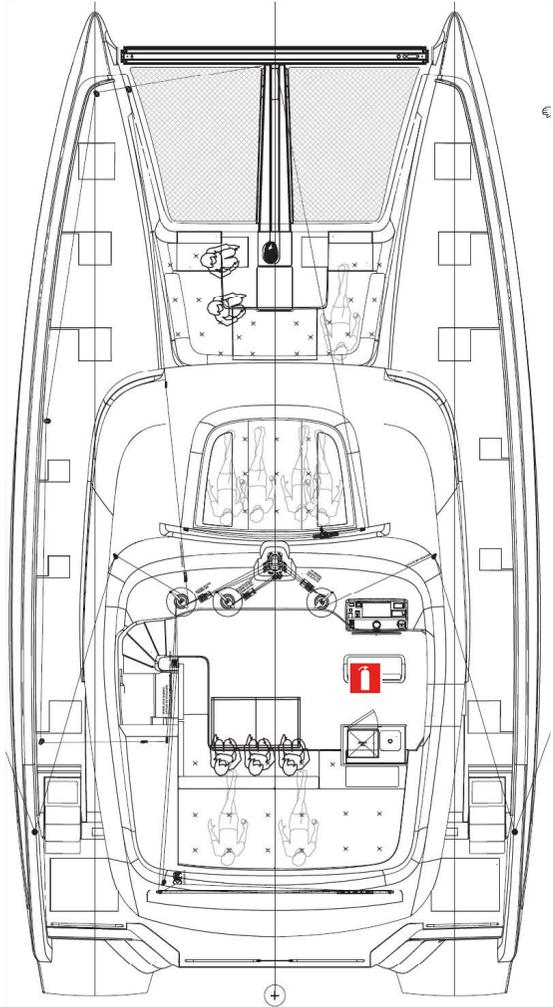
4 cabin layout



5 cabin layout



6 cabin layout



Fly



## WARNING

After a fire, thoroughly ventilate the premises to remove all toxic gases.



## WARNING

The CO2 extinguishers must only be used to fight electrical fires. Evacuate the area immediately after discharge to avoid asphyxiation. Ventilate before entering..



## ATTENTION

After a fire, keep a fire extinguisher on hand in case the fire breaks out again.

# 3 - SAFETY

## 3.1.5 Fixed fire-extinguishers

The boat is delivered with two 4 Kg ABC powder extinguishers in each engine compartment, and an optional 4 Kg ABC fire extinguisher in the GENSET compartment.



-  Engine compartment extinguisher
-  Manual control of fixed fire extinguishers and ventilator shut-off

Access via the pull-handles located under the floor of the saloon at the level of the chart table.



Engine compartment extinguisher



GENSET compartment extinguisher



- 1 Port extinguisher
- 2 Port compartment ventilation
- 3 Port engine fuel shut-off
- 4 Port generator fuel shut-off
- 5 Starboard generator fuel shut-off
- 6 Generator extinguisher
- 7 Generator ventilation
- 8 Starboard engine fuel shut-off
- 9 Starboard compartment ventilation
- 10 Starboard extinguisher



## DANGER

Do not activate the extinguisher until all crew members are on deck.



## ATTENTION

Since the handles of the extinguishers are equipped with springs, it is imperative to keep the control lever in the «pulled» position for more than 10 seconds to ensure complete discharge.



## AVIS

It is mandatory to have the fire extinguishers serviced annually by a certified service to comply with maritime safety regulations.

When a space protected by a fixed extinguishing system is considered separate from adjacent habitable spaces, the following information must be posted near the discharge control:



Procedure to be followed in case of fire in the machine compartment and/or in the GENSET compartment.

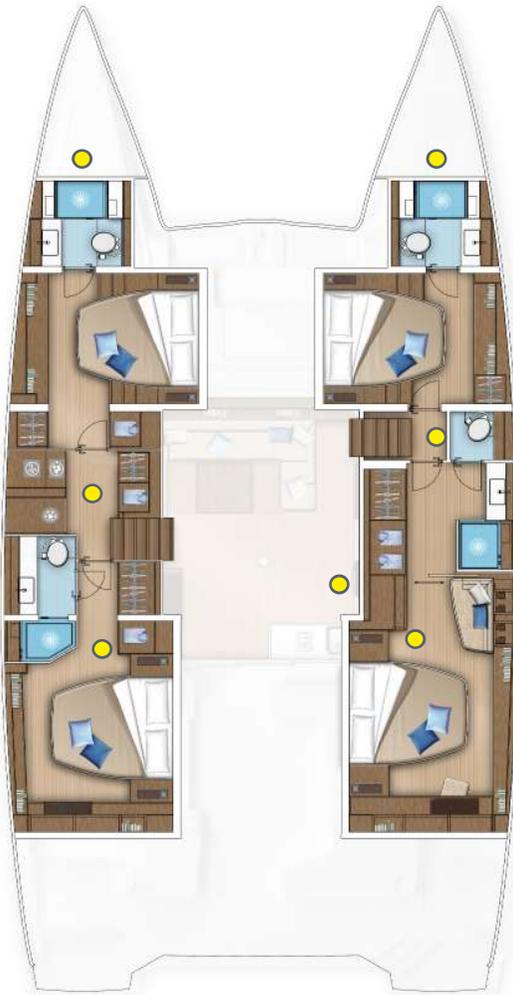
- Ensure that everyone has evacuated the affected compartment.
- Check that the accesses to this compartment are closed.
- Remove the cover from the lifeboat station.
- Shut down the ventilation of the compartment concerned.
- Operate the pull handles in the following order:
  1. SHUT-OFF FUEL SUPPLY TO THE AFFECTED COMPARTMENT
  2. EXTINGUISH FIRE

# 3 - SAFETY

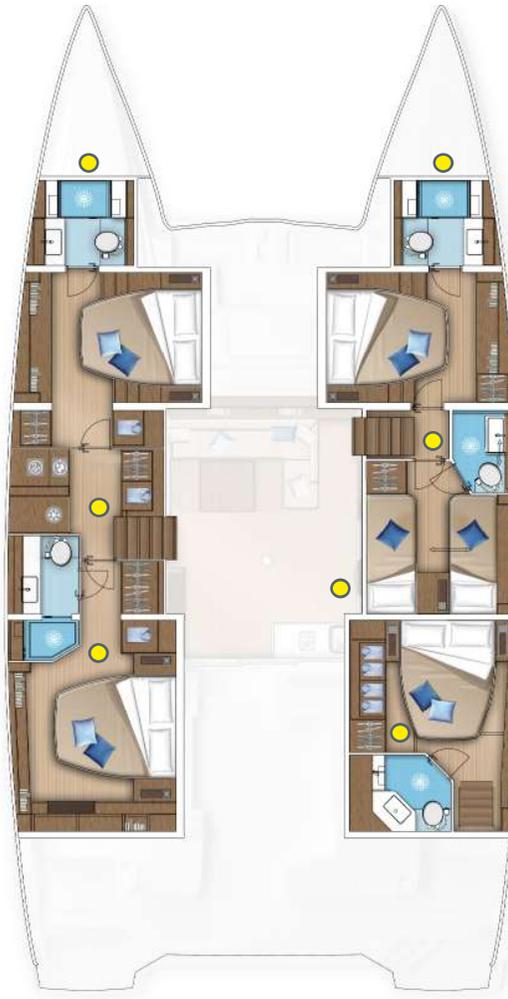
## 3.1.6 Smoke detectors



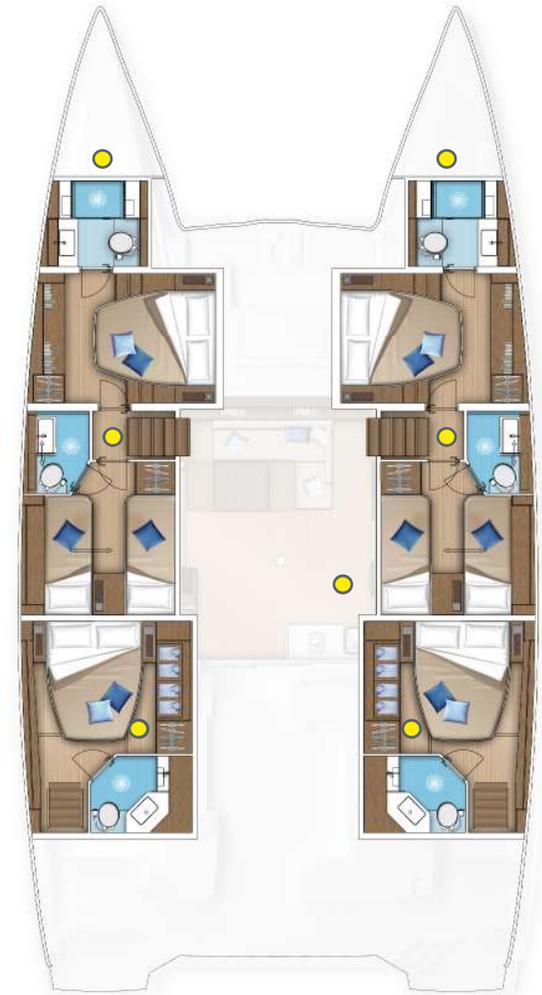
The boat comes with smoke detectors. Autonomous smoke detector fitted to the ceiling. The detectors are battery operated, so check their charge status regularly. The detector in the forward bow is recommended if the space is fitted as a cabin.



4 cabin layout



5 cabin layout



6 cabin layout

## 3.1.7 Emergency exits

Recommended emergency exits are shown in the following diagrams:



Emergency exit



Guide arrow



Emergency exit via the deck panel



4 cabin layout

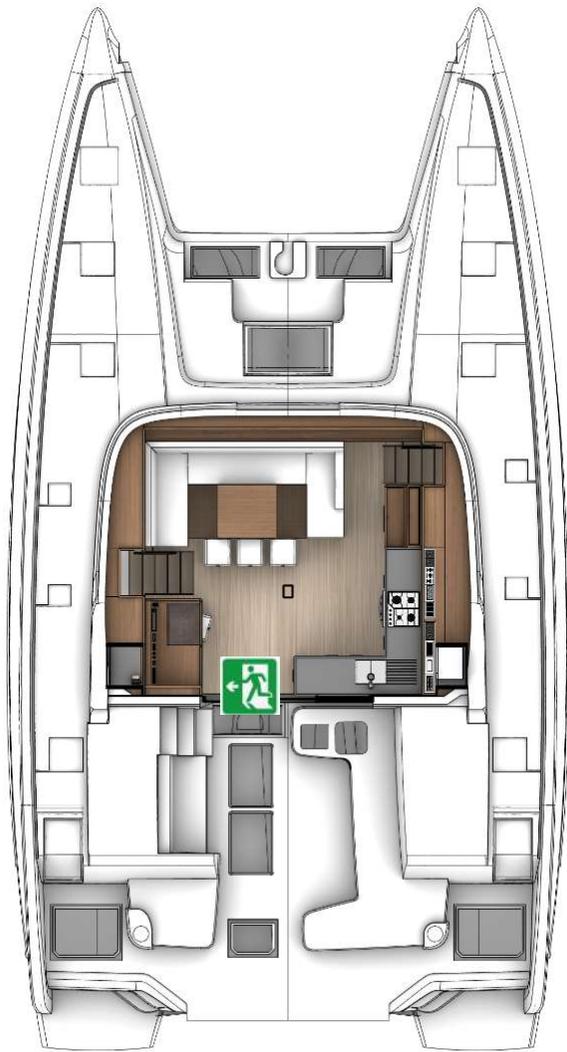


5 cabin layout



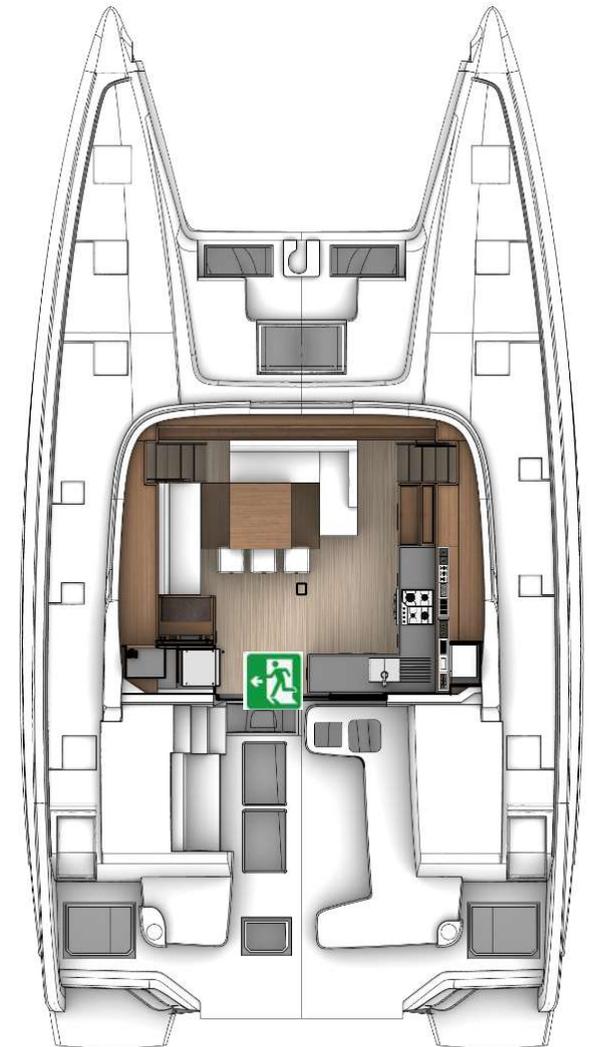
6 cabin layout

# 3 - SAFETY



4 cabin layout / 5 cabin layout

-  Emergency exits
-  Emergency exit via the deck panel
-  Guide arrow



6 cabin layout

## 3.1.8 Fire evacuation ladders

Labels are placed under the mattresses in the cabins to indicate the presence of a fire evacuation ladder.



### ATTENTION

It is imperative that the panels are always unlocked from the inside when the crew is on board.



# 3 - SAFETY

## 3.2 Infiltration and stability

### 3.2.1 Hull openings



#### ATTENTION

Keep every porthole, removable hatch, door, panel, and/or ventilation opening closed (except the supply valve of the machine room).

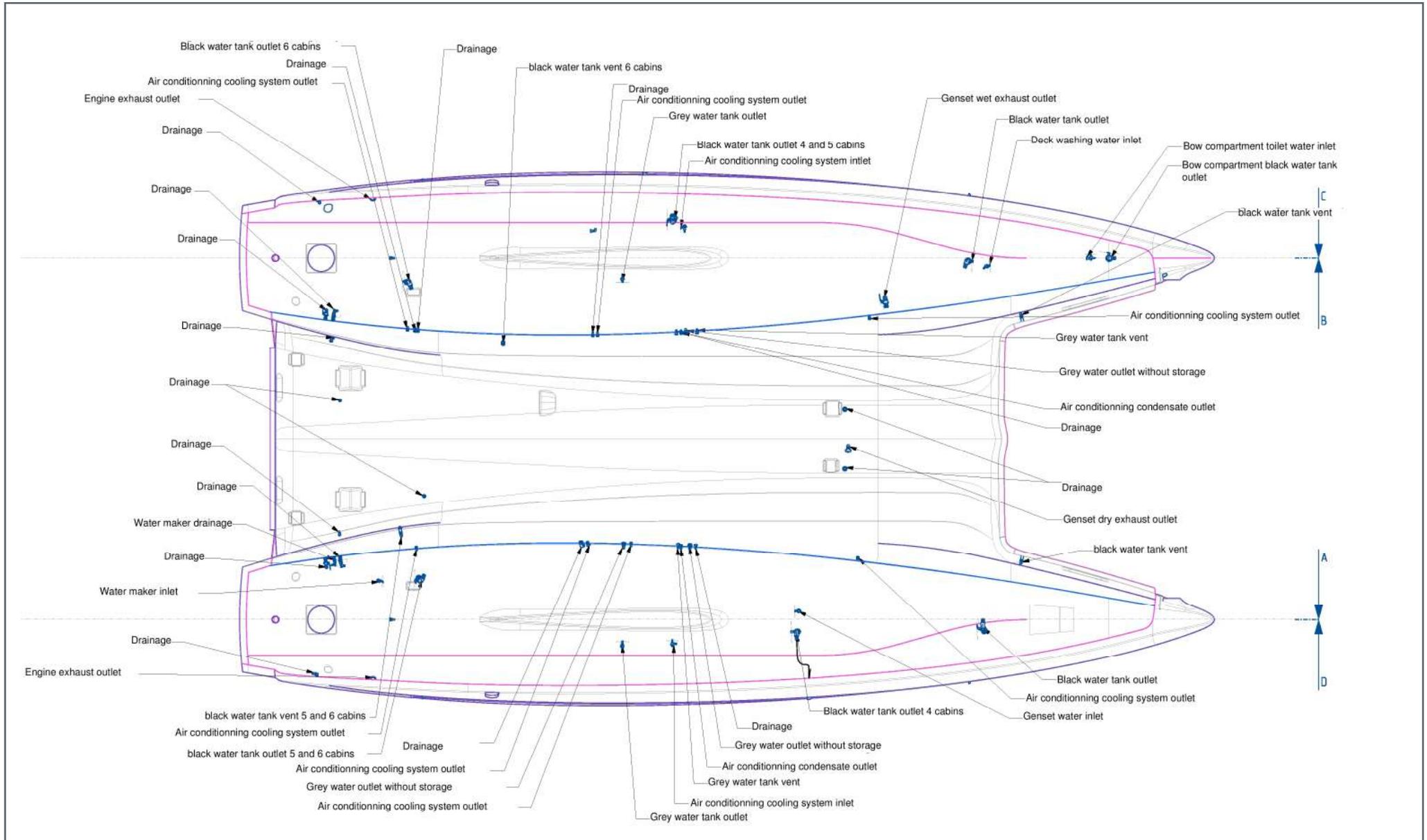
All sea cocks positioned below the waterline at 7° are made of bronze with a valve.

All valves are directly accessible, without tools and within 700mm of any obstacle preventing access.

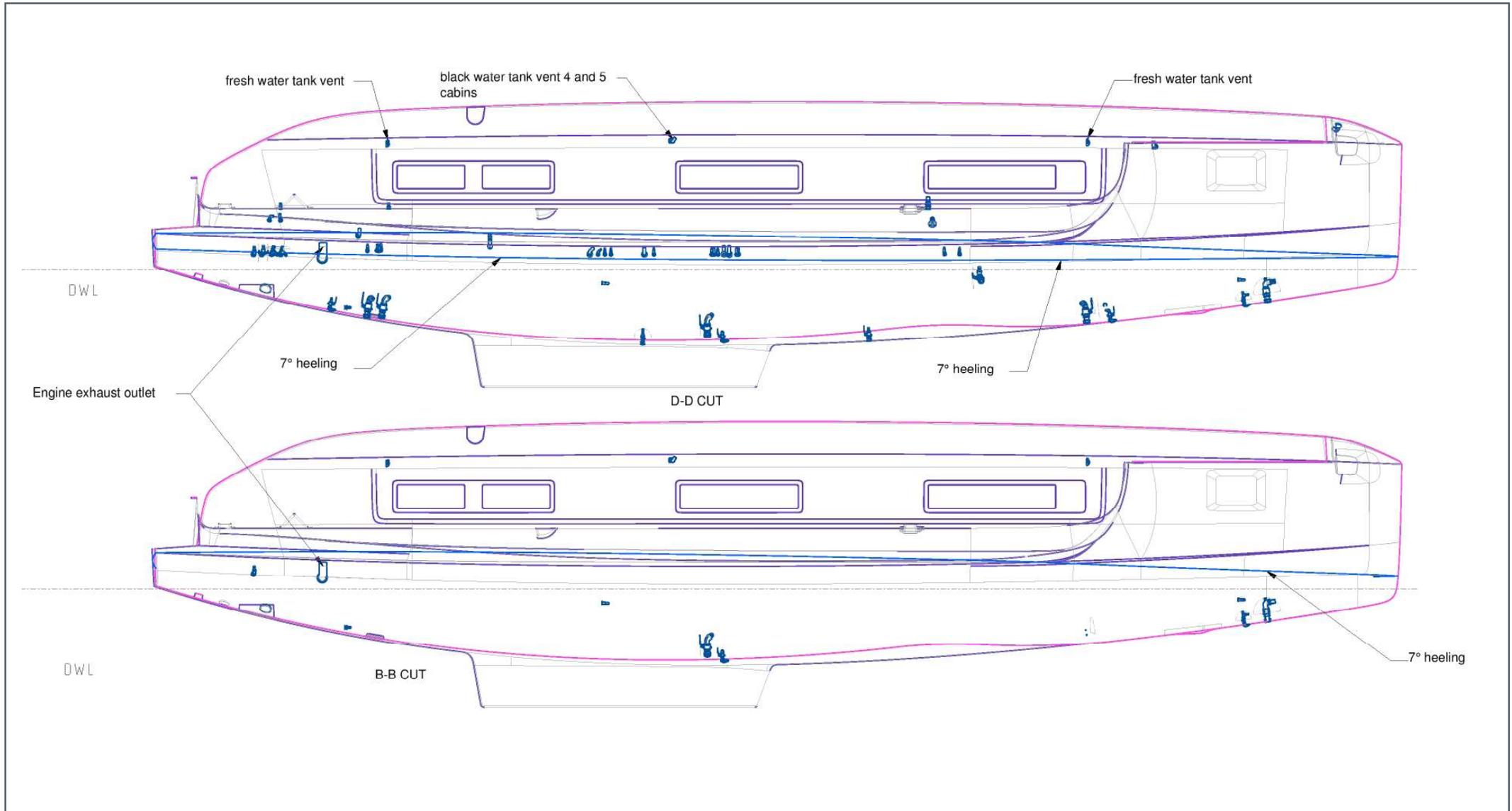


#### NOTICE

Keep hull valves, drain holes, and other opening/closing mechanisms in the closed position while underway, for non-essential systems, in order to minimize risks of infiltration.



# 3 - SAFETY





# 3 - SAFETY

## 3.2 Infiltration and stability

### 3.2.2 Drainage

The drainage system is composed of the following equipment :

- An automatic drainage system equipped with 4 electric pumps (45 liters / minute).

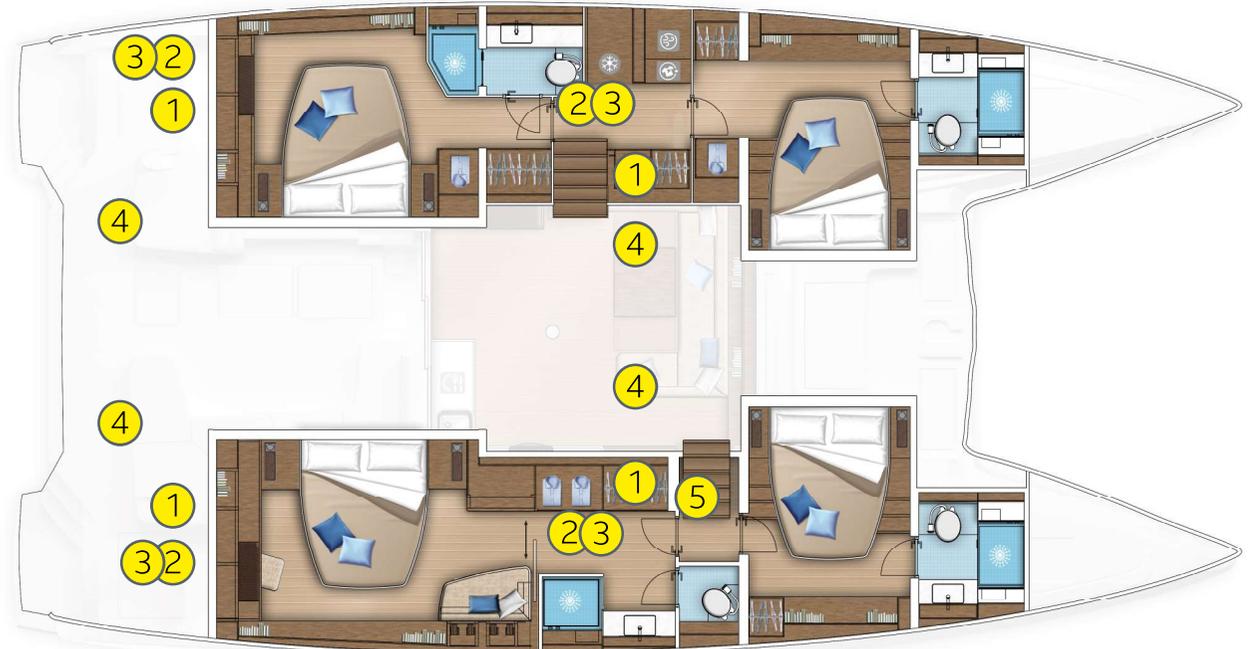
Each drainage circuit is composed of :

- a strainer (2) positioned in the sump located under the floors in each passageway/cabin and at the bottom of each engine room ;
- 2 float switches (3) located near the strainer; (One to trigger the pump and one for the warning level) ;
- One electric pump ;
- and the sea cock, which allows the evacuation of the water.

Operation :

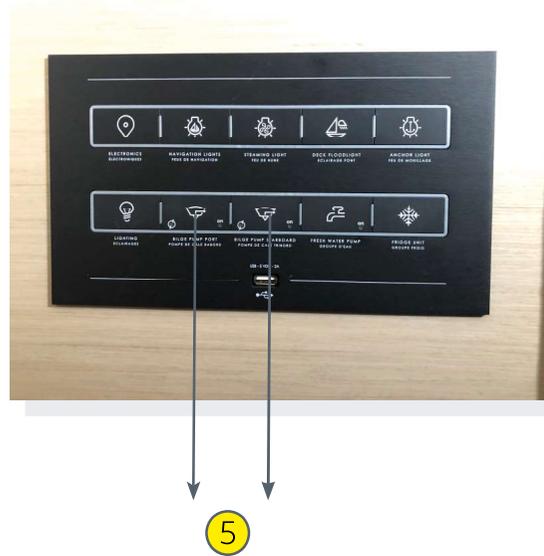
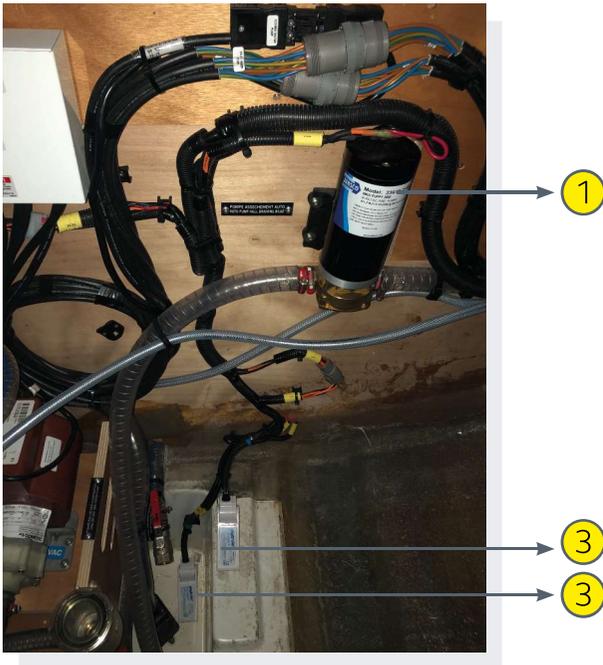
Off / on batteries : if water is detected, the pumps are automatically switched on directly and remain on until the float returns to its initial position.

- 1 Electric pump
- 2 Strainer
- 3 Float switch
- 4 Sea cock
- 5 Pump control



#### WARNING

The bilge pump system is not designed to control water coming from breaches in the hull.



## NOTICE

Do not let the pumps run empty. This may cause damage to them.  
The water in the bilges must be kept at a minimum. Check each bilge pump visually on a regular basis to ensure that they are in proper working order.



## ATTENTION

Check on a regular basis that each bilge pump is operating correctly. Clear the points and suction filters of the pumps of any debris that could clog them. If the watertight partitions that seal off the fore and aft points are fitted with valves, they must remain closed at all times, and only opened to drain water into the main bilge.

# 3 - SAFETY



- A manual drainage system, equipped with 2 manual bilge pumps in the aft cockpit.

Under the floors in passageways/cabins, positioned in the sump as shown in the diagram, there is a strainer that allows the aft area to drain.

The pumping is done by activating the lever located next to the manual pumps.

- 1 Manual pump
- 2 Strainer
- 3 Lever



1



1



3

## 3.2 Infiltration and stability

### 3.2.3 Stability and buoyancy

- Any changes in the distribution of loads onboard (for example by adding a raised structure for fishing, a radar, changing the engine, etc.) can significantly affect the boat's stability, trim, and performance.
- It is important to keep water in the bilges to a minimum.
- Adding weight above the main deck/flybridge will affect stability.
- In heavy weather, it is important to close all the hatches, lockers, and doors to minimize the risk of water pouring in.
- The boat's stability can be reduced when towing a boat, or when using a davit or boom to lift a heavy weight.
- Breaking waves are a serious threat to stability.
- Following a grounding, verify that there is no water ingress, as well as the integrity of the hull, and the proper function of the underwater equipment (steering, propulsion, etc.).

## 3.2 Infiltration and stability

### 3.2.4 Righting the boat after capsizing

In accordance with stability report PV B STAB 20021 VC, this model is not considered "vulnerable to capsizing in its design category".

This section is therefore not applicable to this manual

# 3 - SAFETY

## 3.3 Safety equipment

### 3.3.1 General points

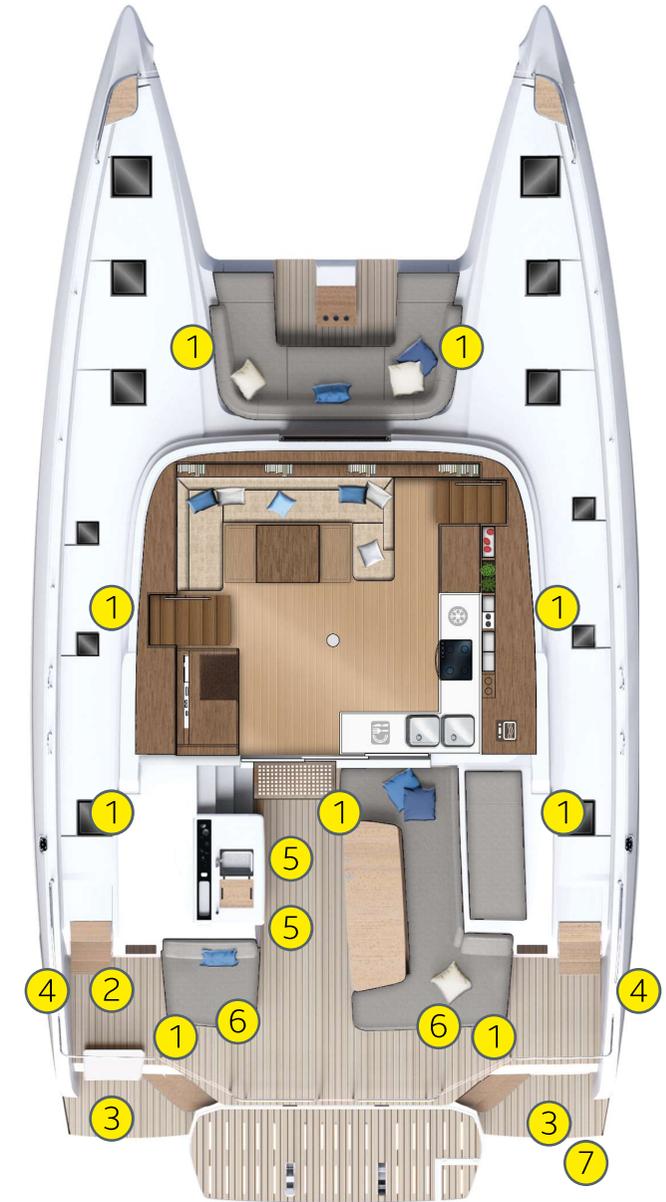
This paragraph describes the location of emergency equipment (to be supplemented with your own safety equipment if desired).



**WARNING**

The inventory of mandatory safety equipment corresponds to an approval category, a design category and to the regulations of the country where the boat is registered.

1	Padeyes for lifeline attachment	13	.....
2	Emergency tiller	14	.....
3	Emergency tiller filler cap access	15	.....
4	Horseshoe lifebuoy support brackets	16	.....
5	Life raft location	17	.....
6	Manual bilge pump	18	.....
7	Emergency ladder	19	.....
8	.....	20	.....
9	.....	21	.....
10	.....	22	.....
11	.....	23	.....
12	.....	24	.....



EC Owner's Manual

1	Padeyes for lifeline attachment	11	.....
2	.....	12	.....
3	.....	13	.....
4	.....	14	.....
5	.....	15	.....
6	.....	16	.....
7	.....	17	.....
8	.....	18	.....
9	.....	19	.....
10	.....	20	.....



**WARNING**

Before each boat trip, make an inventory of the mandatory safety equipment. Regularly check that safety equipment is operating properly. Follow its maintenance program scrupulously.



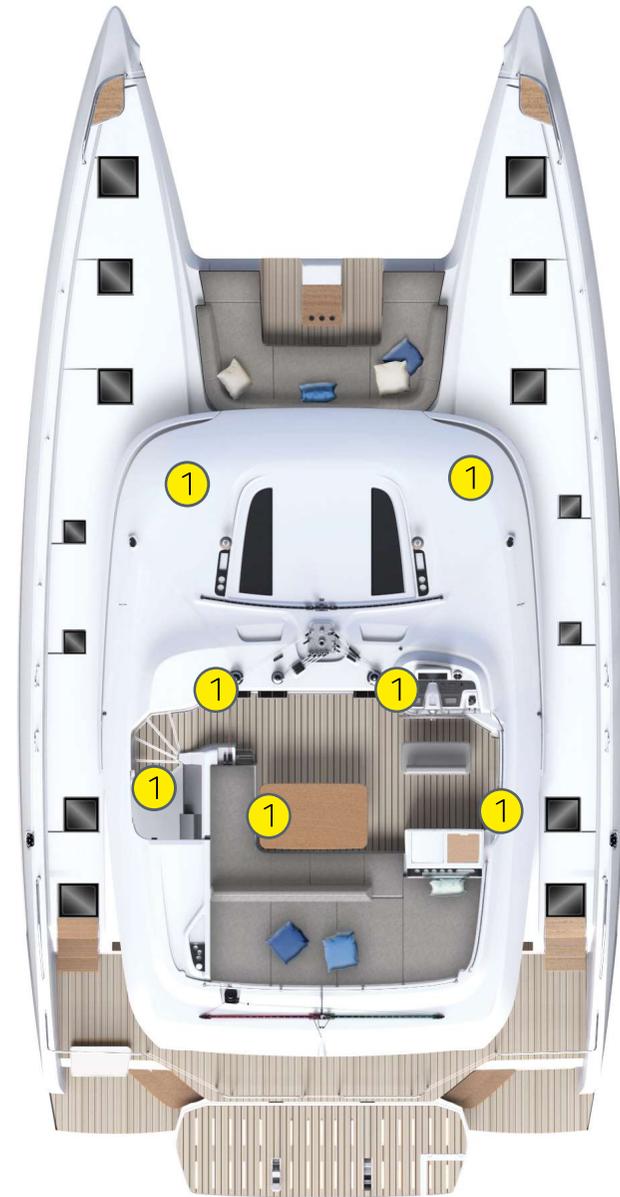
**WARNING**

The crew should be familiarized with the use of the safety gear and with emergency safety manoeuvres (man overboard recovery, towing, etc.).



**WARNING**

It is strongly advised that everyone wear an appropriate flotation device (life jacket or personal buoyancy aid) when on deck. Be advised that in some countries, it is mandatory to wear a flotation device that meets national regulations at all times.



# 3 - SAFETY

## 3.3 Safety equipment

### 3.3.1 Location of the life rafts



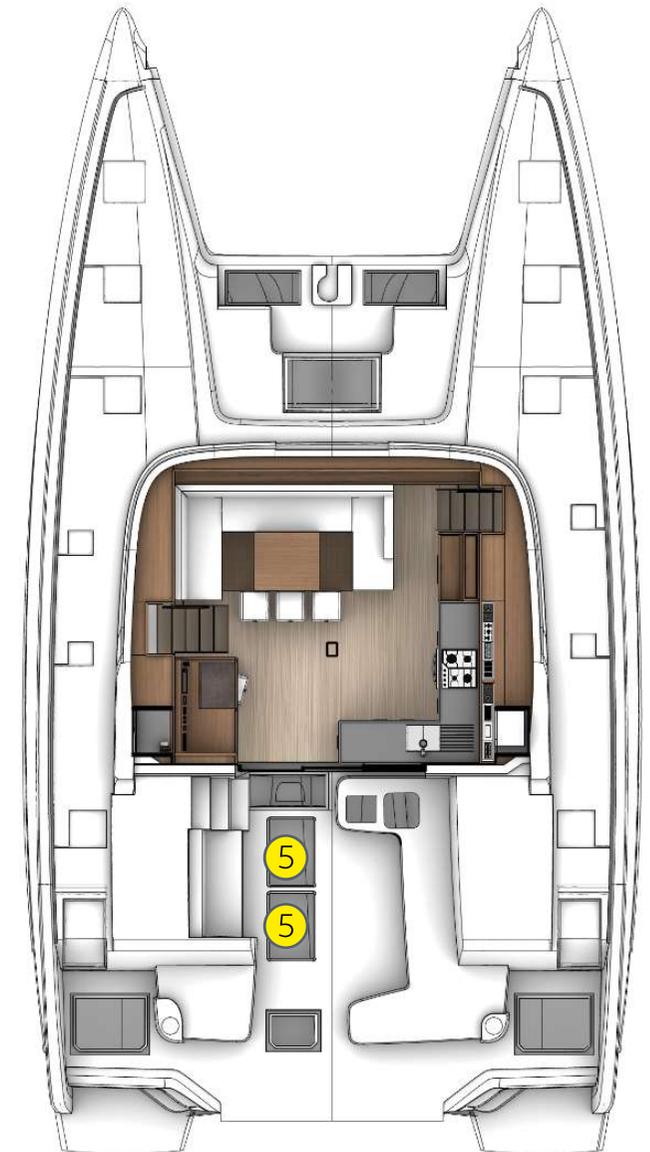
#### WARNING

- Ensure that two people are available to handle the life rafts to the aft transoms.
- Leave a life raft on deck when sailing short-handed.
- Always attach the lanyard to the boat before sliding the raft onto the transoms and launching it.



#### NOTICE

Read the launching procedure indicated on the life raft carefully before launching it.



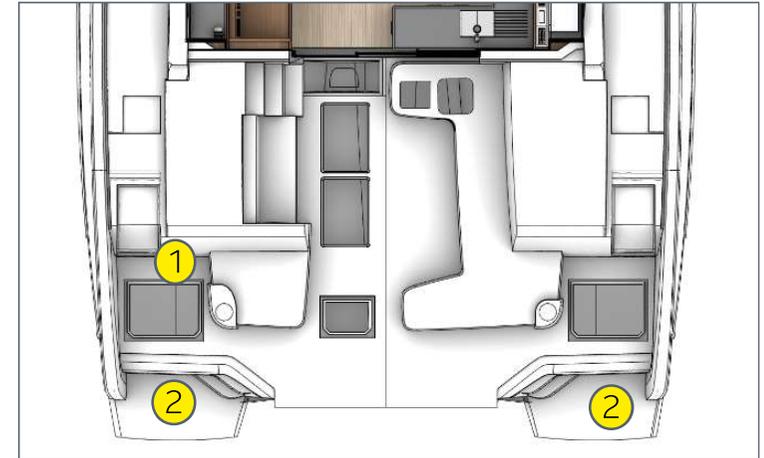
## 3.3 Safety equipment

### 3.3.1 Emergency tiller

Boats equipped with a steering wheel are provided with an emergency tiller. Ensure that it is accessible at all times.

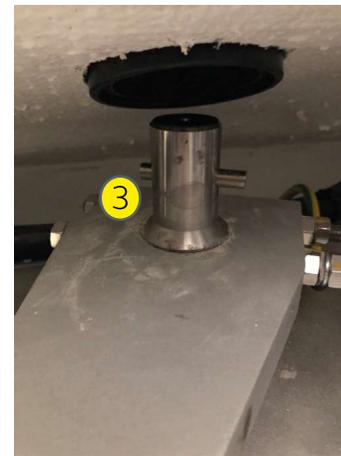
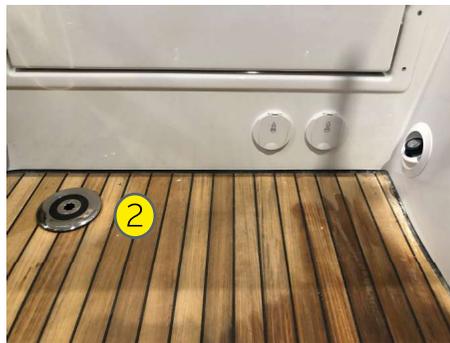
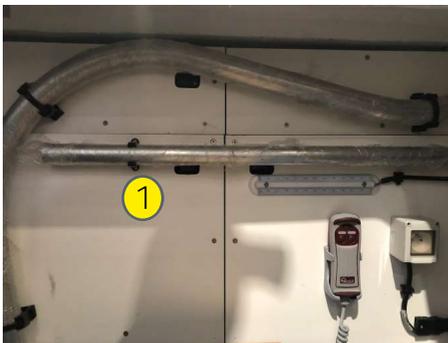
The emergency tiller (1) is designed only to enable navigation at a reduced speed in case of steering gear failure.

- The emergency tiller is stored on the front of the port engine room (1) and must remain easily accessible.
- To deploy the emergency tiller:
- Use a winch handle to unscrew one of the emergency tiller fillers found on one of the aft transoms.(2)
- Fit the emergency tiller into the rudder shaft, making sure that it is pushed properly and snugly into place.(3)
- Insert the attachment screw through the shaft and tighten the nut (access via the engine compartment).(3)
- Place the ram valve in the engine compartment on the relevant side in the by-pass position. This isolates the rudder from the helm system.(4)



#### NOTICE

The hydraulic fluid must be non-flammable or have a flash point of at least 157 °C.



Standard position

By-pass position

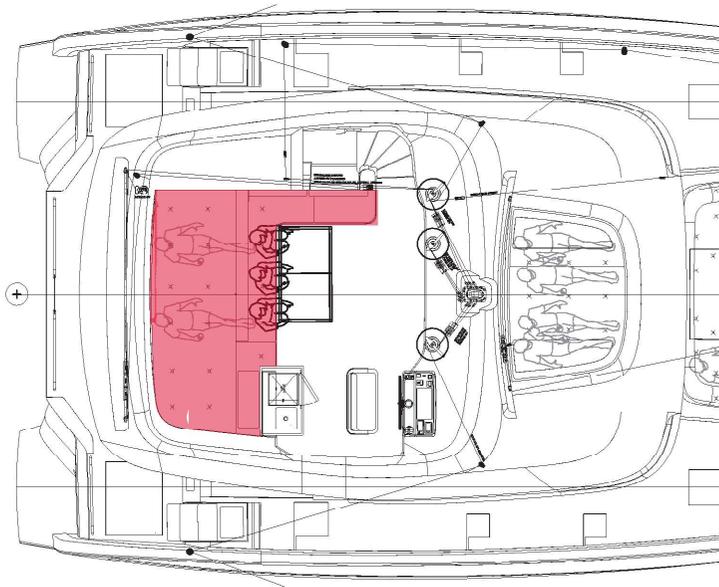


# 3 - SAFETY

## 3.3 Safety equipment

### 3.3.2 Prevention of man overboard and reboarding

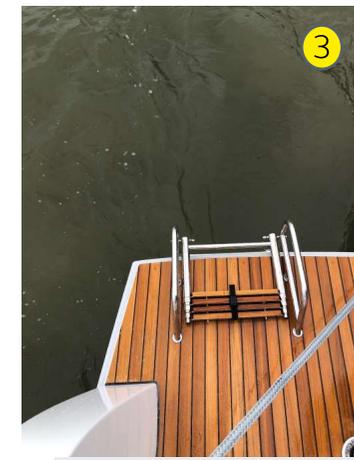
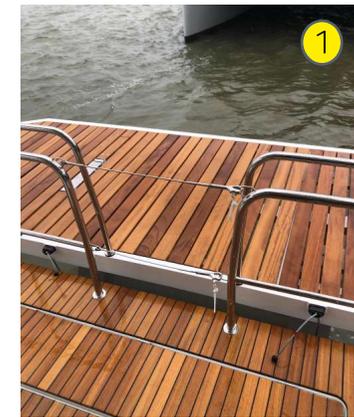
- Standing on the red hatched areas while sailing is prohibited.



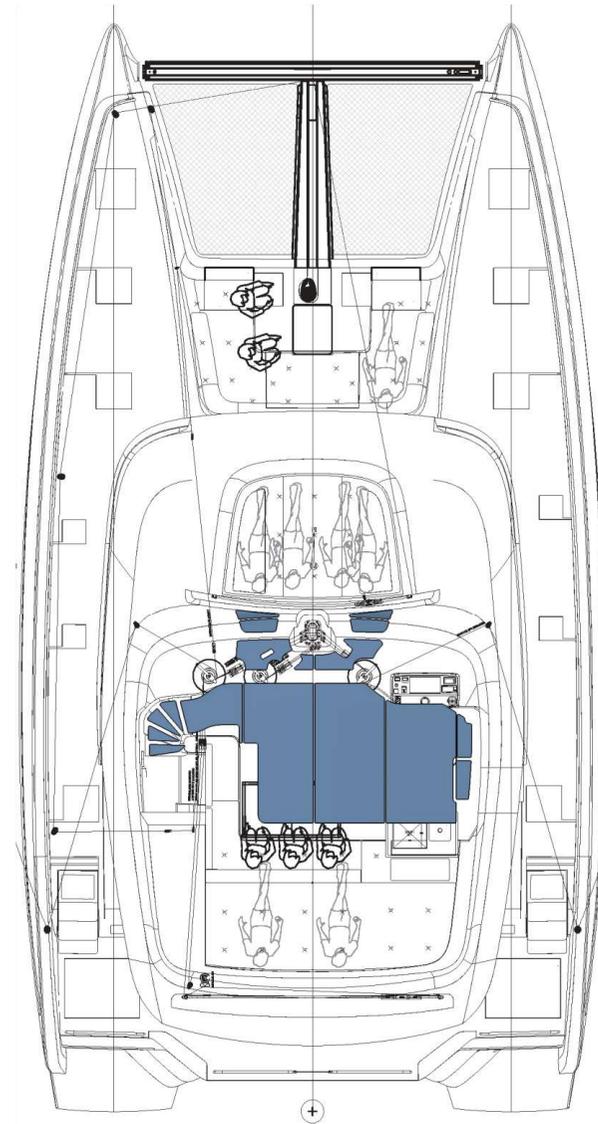
#### NOTICE

Check lifelines regularly :  
With metal guardrails, look out for signs of corrosion, particularly at connecting points.  
For synthetic lifelines, have them changed as soon as the first signs of wear and tear appear due to chafing or UV.

- Deck areas that are considered as part of the working deck, and which can be used when sailing, are shown cross-hatched on the diagram below.
- The aft cockpit doors (1) and the hatches (2) must be closed while sailing.
- A fixed swim ladder is located on the starboard side in order to get back on board. (3)



- Working area in blue



# 3 - SAFETY

## 3.3 Safety equipment

### 3.3.3 Power and manoeuvrability

- Do not cruise at maximum speed in areas of dense traffic or in case of reduced visibility, strong winds or high waves. Reduce the speed and the wake of the boat as a courtesy, and as a safety measure for yourself and the others. Respect the speed and wake limits when zones are defined ;
- Avoid sudden manoeuvres at full speed ;
- For comfort and safety, reduce speed in waves ;
- Ensure that you always maintain a sufficient distance to stop or steer the boat in order to avoid a collision ;
- Do not sit on the forward cockpit when the boat is moving at higher speeds ;
- Respect priority rules defined by the navigation regulations and enforced by the COLREG ;
- In the event of damage to a propeller (blade breakage, off balance, etc.), it is imperative to reduce the speed of the engine concerned as much as possible to prevent any risk of further damage.

## 3.3 Safety equipment

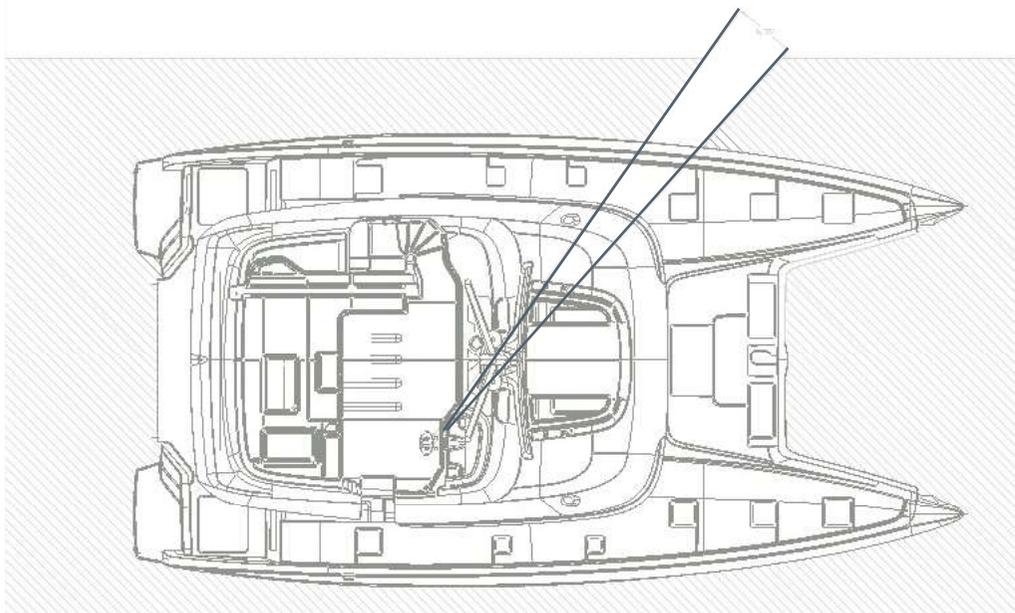
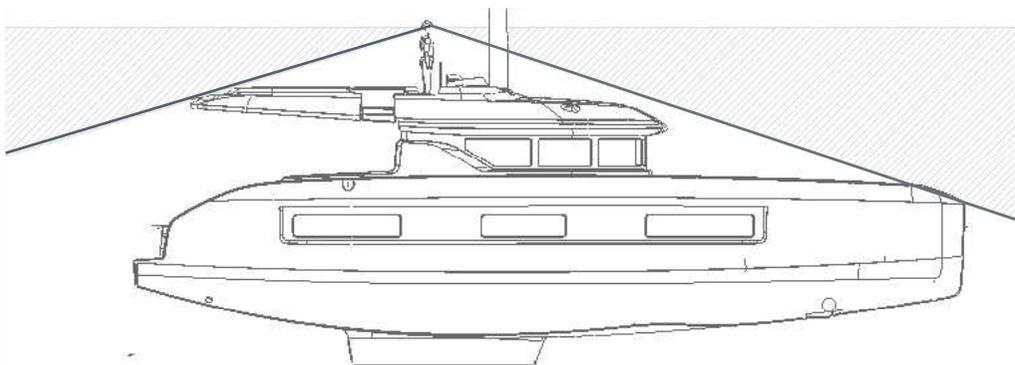
### 3.3.4 Field of vision from the helm station

Visibility from the helm station may be obstructed due to significant angles in the ship's trim or due to other factors caused by one or more of the following conditions :

- Load and load distribution
- Speed
- Sea conditions
- Rain and mist
- Darkness and fog
- Lights inside the boat
- Position of the upper or lateral awnings
- People or mobile equipment located in the helmsman's field of view
- When sailing under Jib, Code 0, or asymmetric spinnaker.

The international rules and regulations for avoiding collisions at sea (COLREG) require a vigilant and constant lookout and the observance of the rules of right-of-way. Observance of these rules is essential.

# 3 - SAFETY

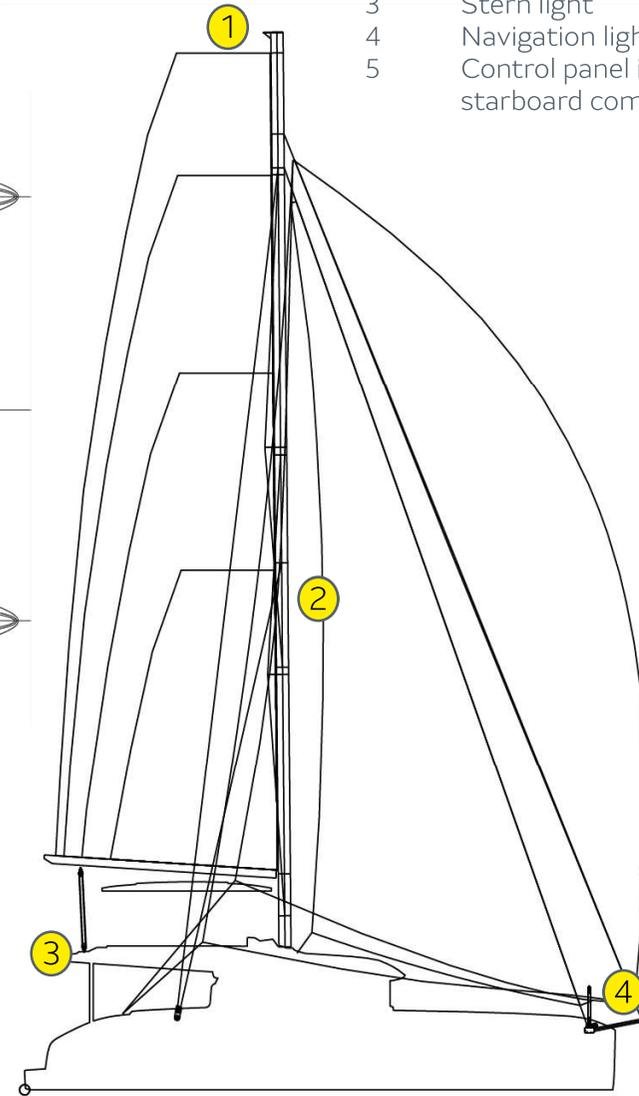
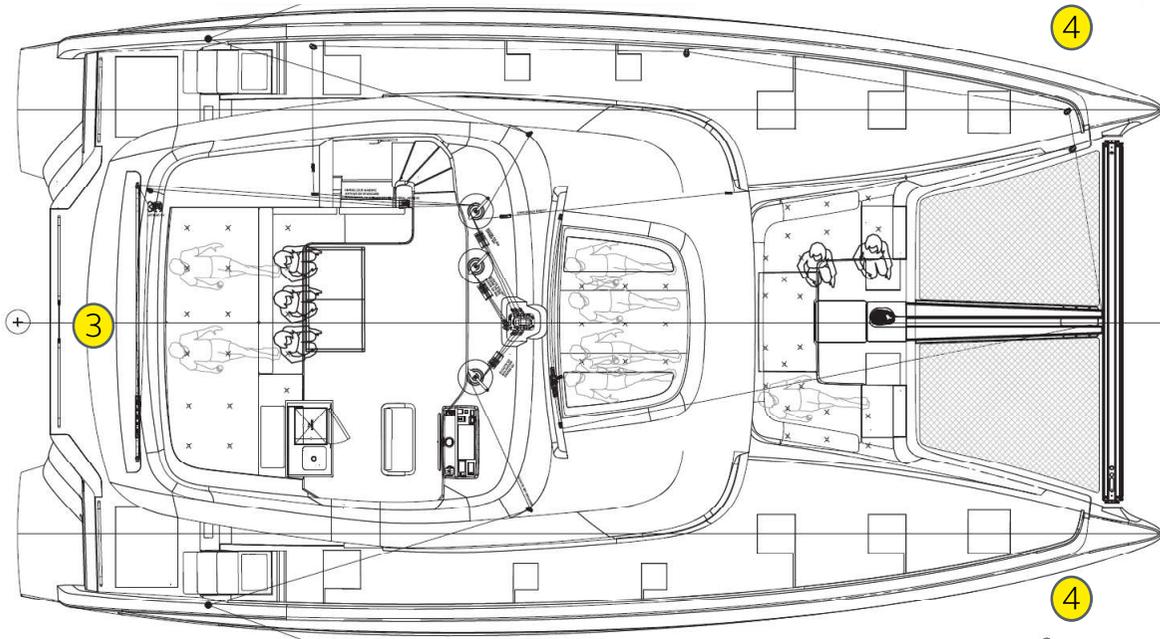


ATTENTION  
STEERING AND WATCH MUST TAKE PLACE AT THE  
HELM STATION LOCATED ON THE FLYBRIDGE.

# 3 - SAFETY

## 3.3 Safety equipment

### 3.3.5 Navigation lights

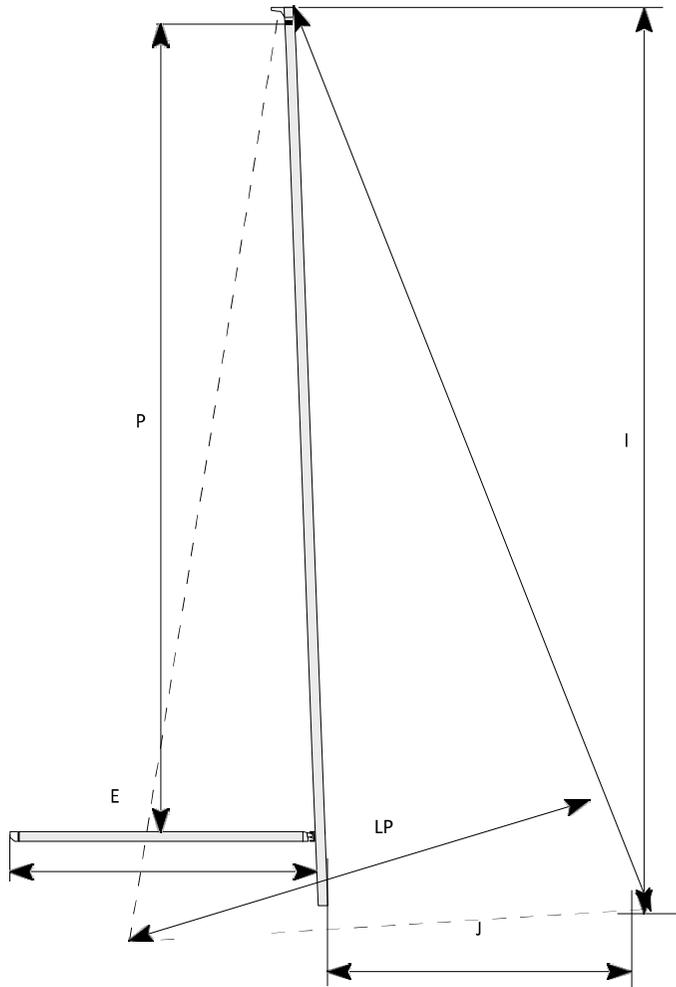


- 1 Masthead / Anchor light
- 2 Steaming light
- 3 Stern light
- 4 Navigation lights
- 5 Control panel in the starboard companionway



# 4 - SAILS AND RIGGING

## 4.1 Sail characteristics



Square top mainsail	109 m <sup>2</sup>
Self-tacking jib	69 m <sup>2</sup>
Code 0 (optional)	154 m <sup>2</sup>
Asymmetrical spinnaker (optional)	272 m <sup>2</sup>
I	21,84 m
J	8,31 m
P	21,19 m
E	6,09 m

# 4 - SAILS AND RIGGING

## 4.2 Maintenance of the rigging

Metal cables:

- Replace the cables at the first sign of any frayed wires.
- Check cables for rust, especially at the junction with the turn buckles.
- Check the condition of all ends and turnbuckles.

Synthetic cables for runners, halyards, sheets, mooring lines, etc.:

- Replace the cables at the first sign of any chafing or wear.
- Regularly check all other components of rigging, sheets, mooring lines, etc.; replace them if they are showing signs of wear and tear.

### RECOMMENDATIONS FOR THE REPLACEMENT OF THE STANDING RIGGING

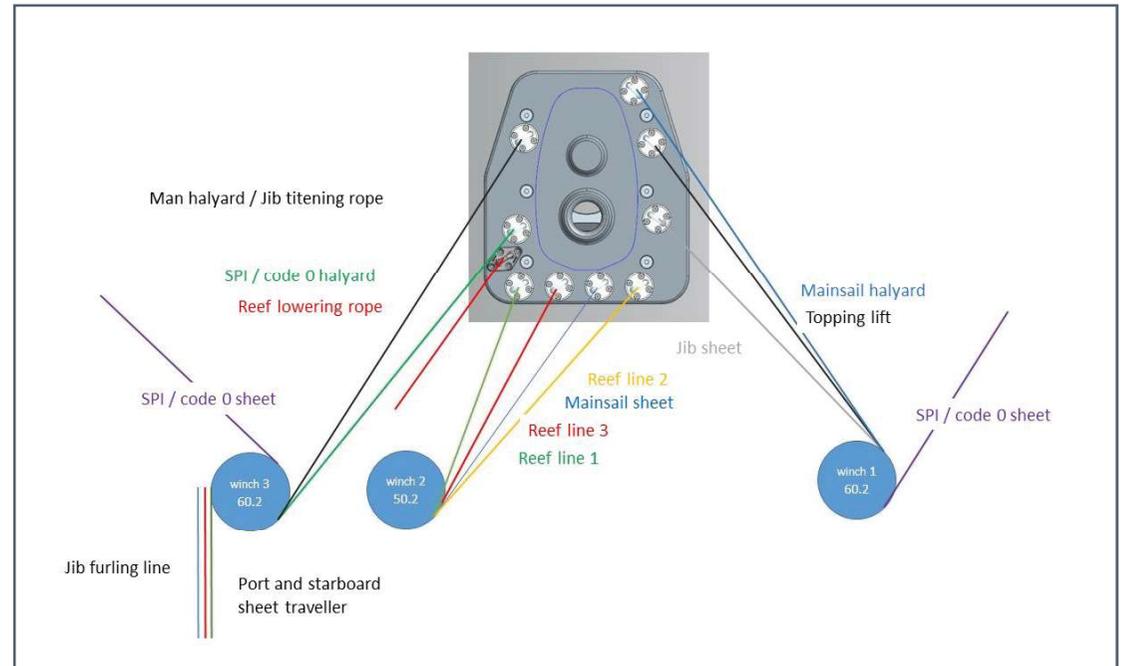
- **Rods:** Every 5 years or every 40,000 nautical miles; full replacement (rod + parts) every 10 years or every 80,000 nautical miles; mast to be adjusted by qualified professional.
- **Kevlar:** Every 6 years or every 35,000 nautical miles. Replace immediately if the fibre comes into direct contact with UV rays.
- **Diamond spreader rigging:** Every 10 years with the mast adjusted by a qualified professional.



#### NOTICE

Check the standing and running rigging regularly, and at least once a year.

## 4.3 Deck layout

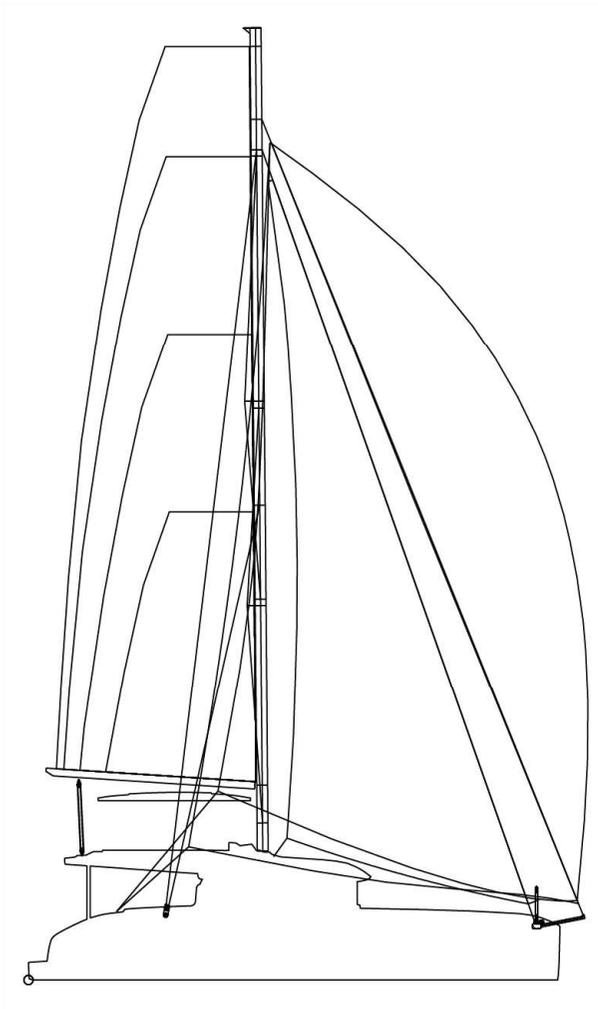


- 1 Aft platform (optional)
- 2 Mainsail running rigging
- 3 Furling genoa running rigging
- 4 Coach roof winch
- 5 Forward beam rigging
- 6 Spinnaker running rigging
- 7 Genoa sheets
- 8 Mast foot rigging
- 9 Chainplates rigging



# 4 - SAILS AND RIGGING

## 4.4 Sail reduction



### ATTENTION

Any adjustments that do not comply with these recommendations may result in fracture or breakage of the mast.  
**IN PARTICULAR, THE USE OF A FULL GENOA WITH 2 REEFS IN THE MAINSAIL IS PROHIBITED.**

- Use of an asymmetrical spinnaker  
Do not use this sail above AWS 15 knots.
- Use of a Code 0  
Do not use this sail above AWS 15 knots.

Apparent Wind Angle I AWA : 30-70°				Apparent Wind Angle I AWA>70°			
Apparent Wind Speed I AWS (knots)	Main	Jib	Code 0	Apparent Wind Speed I AWS (knots)	Main	Jib	Code 0
0-5	Full	0%	Full	0-16	Full	0%	Full
0-26	Full	Full	0%	0-20	Full	Full	0%
26-31	Reef 1	Full	0%	20-24	Reef 1	Full	0%
31-36	Reef 1	75%	0%	24-30	Reef 2	75%	0%
36-40	Reef 2	60%*	0%	30-34	Reef3	60%*	0%
40-45	Reef 2	40%**	0%	34-38	Reef3	40%**	0%
45-55	Reef3	0%***	0%	38-50	0%	25%***	0%
>55	0%	0%	0%	>50	0%	0%	0%

*	OR STAYSAIL	100%
**	OR STAYSAIL	75%
***	OR STORM JIB	100%

This data is given for information only and may vary depending on weather conditions.

- A label at the helm station indicates the sail plan recommended by the manufacturer.
- To avoid any risk of demasting or capsizing, the skipper must refer to it.
- The skipper has sole responsibility for set-up of the sails based on the apparent wind and the sea state, to ensure safe sailing.
- It is possible to sail close-hauled supported by the engine but it is forbidden and dangerous to sail into the wind under engine power only.

# 5 - GETTING STARTED BEFORE CRUISING

## 5.1 Introduction

Complete documentation of the main components fitted on board is provided upon delivery of the boat. It enables you to use and maintain each system according to the manufacturers' recommendations. The owner's manual and the user's guide are provided to compliment this information.

The instructions for starting the equipment assume that the energy source necessary for operation is active.

## 5.2 Getting started before cruising



### NOTICE

The manufacturer's manuals for the engines, the generator and all the equipment used for cruising give detailed explanations of their operating procedure and all the steps required to ensure their proper function.



### WARNING

Check that the bilges are clean and regularly check and before starting the engine that there are no fuel/gas vapours or fuel leaks.

Any non-flammable products kept in the engine compartment must be securely fastened in such a way that they cannot fall on the machinery components.



### WARNING

Never:

- Smoke when handling fuel or gas
- Store fuel tanks or tanks containing fuel in any area not specifically designed for storing fuel.

## 5.3 Power

- Turn the battery shut-off switch to ON.
- Turn the service battery shut-off switch to ON.
- Turn the bow thruster battery shut-off switch to ON.
- Turn the thruster circuit breaker to ON.
- Turn the generator circuit breaker to ON.

## 5.4 Verifications

- Check if the fuel valves are open.
- Check the fuel level.
- Check if the engine seawater thru-hull valves are open.
- Check if the generator sea water thru-hull valve is open(optional).
- Check for oil or water leakage.
- Check that the electrical shore power cable(s) are disconnected.
- Check that the fresh water supply(s) on shore are disconnected.
- Check if the air conditioning sea water thru-hull is open (optional).
- Check if the water maker sea water thru-hull is open (optional).

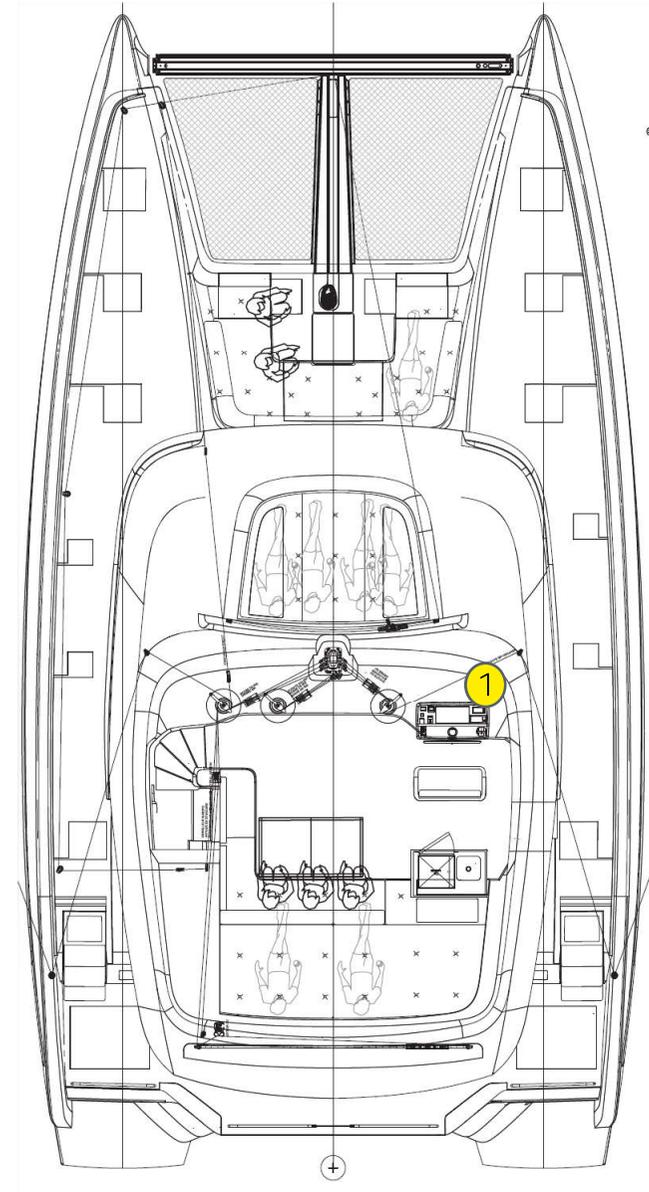
# 5 - GETTING STARTED BEFORE CRUISING

## 5.5 Helm stations

①

Complete documentation of the main components fitted on board is provided upon delivery of the boat. It enables you to use and maintain each system according to the manufacturers' recommendations. The owner's manual and the user's guide are provided to compliment this information.

The instructions for starting the equipment assume that the energy source necessary for operation is active.



# 5 - GETTING STARTED BEFORE CRUISING



- |   |  |    |                            |
|---|--|----|----------------------------|
| 1 | Multifunctional keyboard for the management of exterior lighting | 9  | Engine controls            |
| 2 | Auto radio control (optional)                                    | 10 | Starboard engine display   |
| 3 | Autopilot control  | 11 | Bow thruster control       |
| 4 | Port engine display  | 12 | USB socket                 |
| 5 | Multifunctional navigation screen                                | 13 | Engine start               |
| 6 | Compass  | 14 | Exhaust temperature alarms |
| 7 | Multifunctional navigation screen                                | 15 | VHF                        |
| 8 | Windlass control   |    |                            |

Procedures for operating each station, programming information displayed on the engine displays and the nature of the alarms are indicated in the engine manufacturer's manuals supplied with the boat.



# 6 - ENGINES

## 6.1 Engines-Tanks

A PE diesel tank (1) of 550 L is located on each side, under the floorboard of the hallways with stopcocks on each tank.

The emergency stop pull of the fuel tanks is located under the floorboard of the saloon, as explained in paragraph [3.1.5 fixed extinguishers](#) (2).

The level of the tanks is shown on the Scheiber / Navicolor screen (3). Filling is conducted of the forward cockpit. One filler per tank (4).

As part of the GENSET option: a tank selection valve is located under the floorboard at the bottom of the forward starboard companionway. (5)

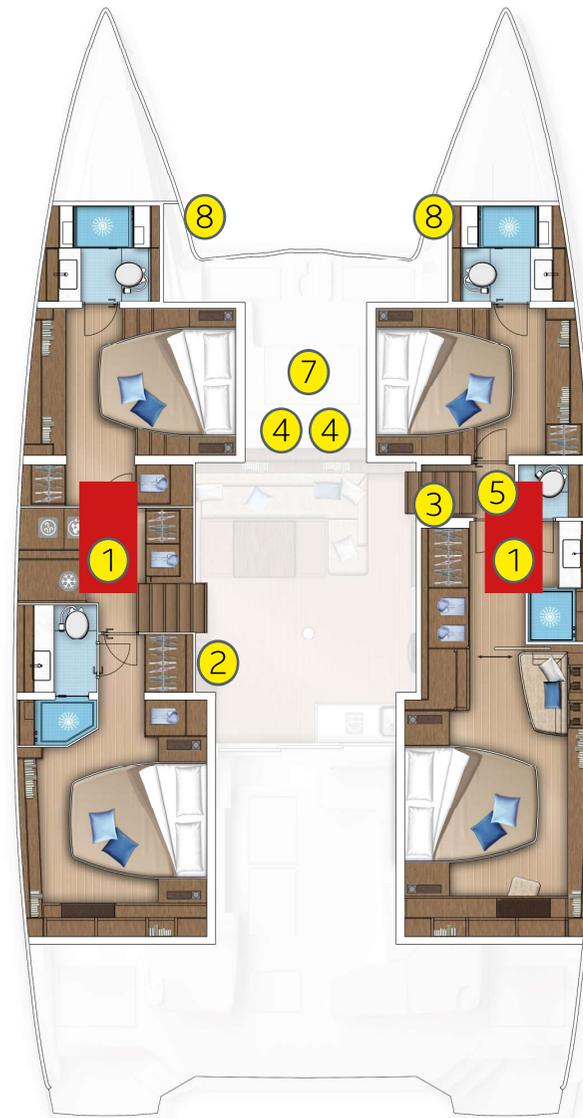
There is a fuel filter in each engine compartment on the engine (6). For the GENSET option, the diesel filter is located in the front cockpit locker on the GENSET (6).



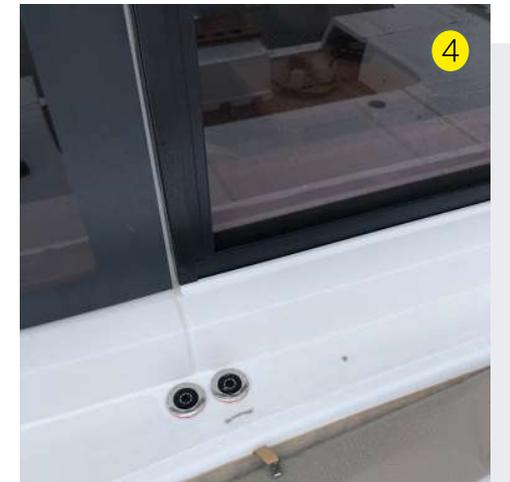
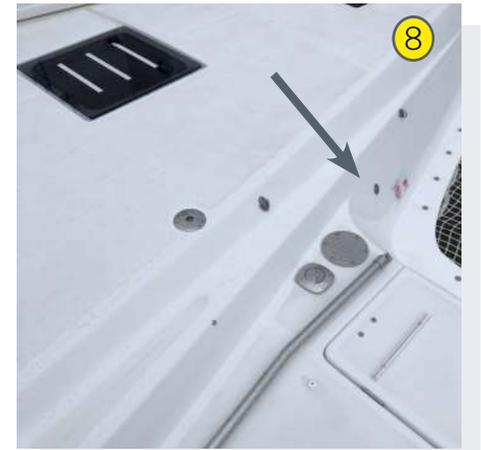
### WARNING

The tanks may contain leftovers that the pumps cannot reach due to the boat's trim or the design of pick-up tubes. You are advised to maintain a 20% fuel reserve.

- 1 Tank
- 2 The emergency area is below the chart table
- 3 Scheiber/Navicolor screen in the starboard companionway
- 4 Cap
- 5 GENSET selection valve
- 6 Engine filter
- 7 GENSET filter
- 8 Fuel vents



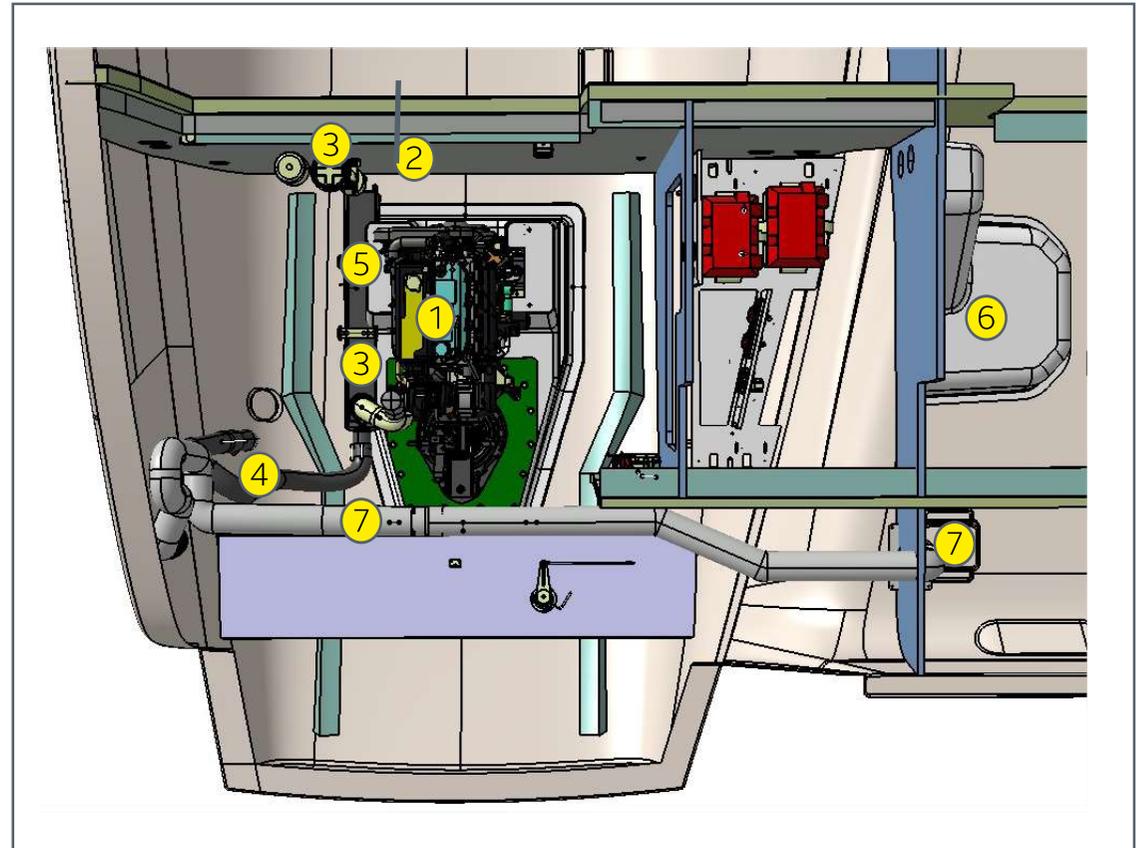
# 6 - ENGINES



# 6 - ENGINES

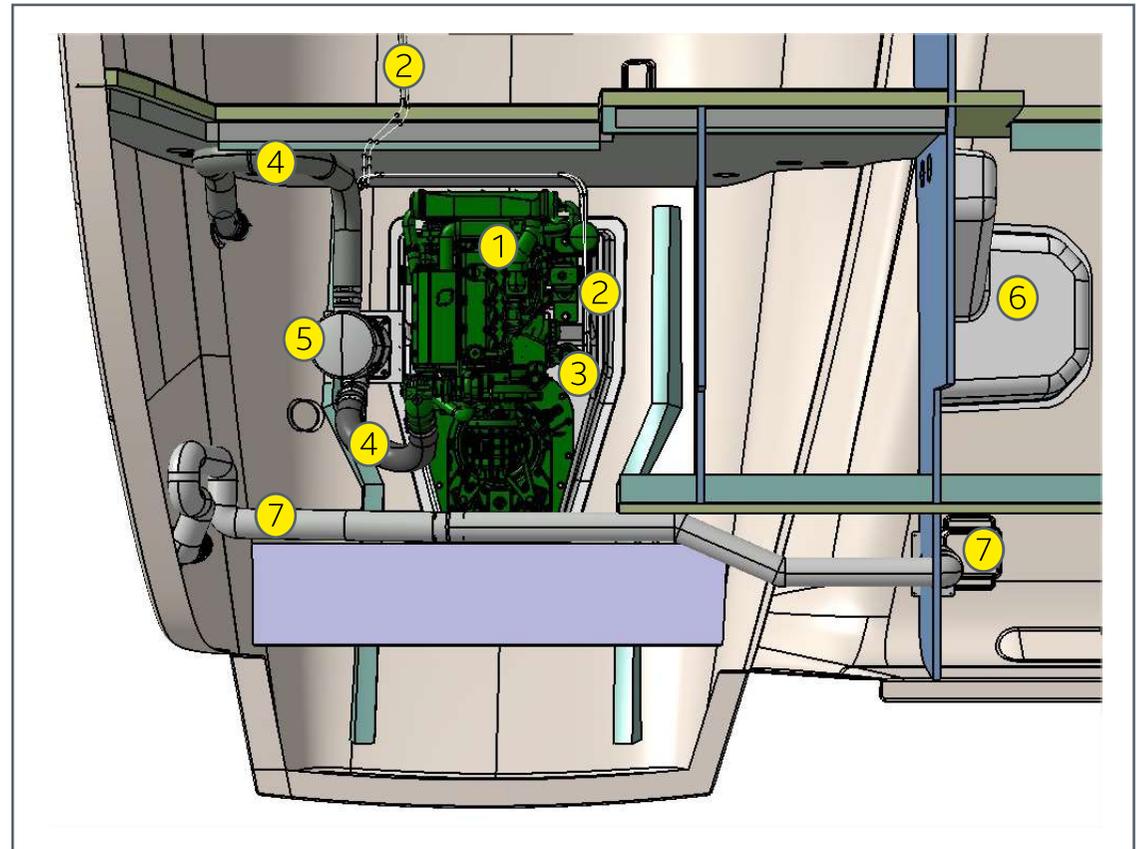
## 6.2 Diesel Yanmar 4JH80 engine version

- 1 Diesel 4JH80 Yanmar engine
- 2 Diesel inlet
- 3 Diesel filter
- 4 Engine exhaust system
- 5 Waterlock
- 6 Engine room ventilation: fresh air intake
- 7 Engine room ventilation: hot air vent



## 6.3 115 HP Nanni Diesel engine version

- 1 115 HP Nanni Diesel engine
- 2 Diesel inlet
- 3 Fuel filter
- 4 Engine exhaust system
- 5 Waterlock
- 6 Engine room ventilation: fresh air intake
- 7 Engine room ventilation: hot air vent



# 6 - ENGINES

## 6.4 Direction for use



### WARNING

Keep away from moving mechanical parts of the engine, shaft lines, etc.



### WARNING

Avoid any contact between flammable materials and hot sections of the engine.



### WARNING

Stop the engine and refrain from smoking while the fuel is being filled in the tanks. Beware of loose-fitting clothing, hair, or jewelry, which may get caught up. Wear appropriate clothes (gloves, hat, etc.).

If equipped with a petrol engine, beware of the danger of falling asleep due to carbon monoxide fumes.



### ATTENTION

Do not install a more powerful and heavier engine than recommended for this boat, since doing so may compromise the boat's stability.

Avoid any contact between flammable materials and hot sections of the engine.

It is not recommended to work on or next to moving parts (engine, line shaft, etc.).

If work is needed, stop the engine and or the rotation of the line shaft before working on one of these elements.



### NOTICE

For outboard engines fitted with a jerrican, fill up the portable tank outside the boat in a well-ventilated area, well away from any fire hazard. Fuel stored somewhere other than in the tanks (jerricans, feed tanks, etc.) must be stored in a ventilated area.



### NOTICE

Before starting, ensure that the engine compartment is clean and dry. Any trace of fuel in the bilges should cause you to postpone your departure.

Locate the extinguisher access port, which would allow you to put out a fire in the engine compartment.

For boats equipped with a petrol engine, ventilate the engine compartment using the engine blower for 4 minutes to evacuate any possible petrol fumes.

Some models come with a fixed extinguisher system that can be used to put out a fire in the engine compartment. Check the location of its trigger switch and make sure you know how it works (see 3.1.5). It is necessary to ventilate the engine compartment after triggering.



## NOTICE

Check that ventilation openings are clear of any obstruction.

Check that the sea water cooling system is circulating correctly.

Check the condition of fuel pipes on a regular basis.

Do not block or modify the ventilation system.

Before starting, make sure that:

- the engine control is not engaged;
- the cooling system's water inlet valve is open, and check that there is some water actually coming out of the exhaust when the engine has started (water may be mixed with exhaust gas in case of wet exhaust).

Before starting, clean up any fuel spills on the deck that may have occurred while filling up.

Watch for deterioration in fuel pipes.

Flexible fuel hoses must be replaced by hoses bearing the same markings.

The manufacturer's recommended maximum temperature for the fuel in the return pipe is 100 °C.

# 6 - ENGINES

## 6.5 Engine starting procedure

To start up the engines, refer to paragraphs [5.3 Power and 5.4 Verifications](#)



### NOTICE

The engine manufacturer's notes provide detailed explanations on how to operate the engine and keep it running well.

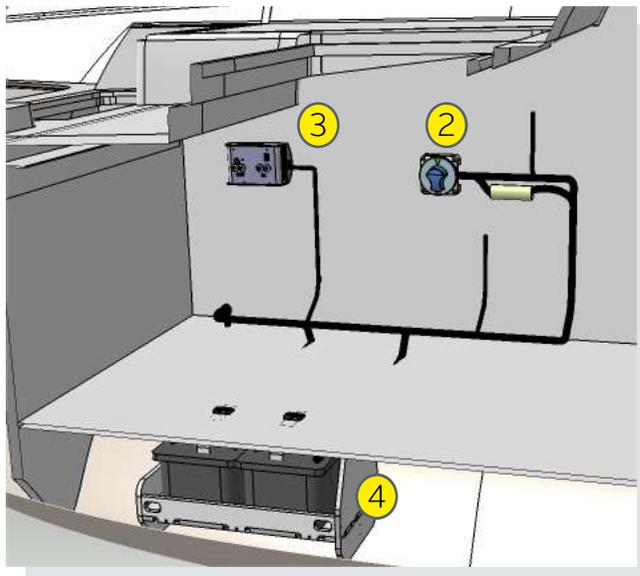
## 6.6 Bow thruster (optional)

As an option, the bow thruster is located on the forward starboard hull : SIDE POWER SE170 24 V .

### Start up

- Turn the circuit breaker to the ON position (2) in the forward technical compartment.
- The dedicated battery bank is located under the floor of the GENSET compartment (4).
- Use the joystick at the helm station located on the flybridge (5).

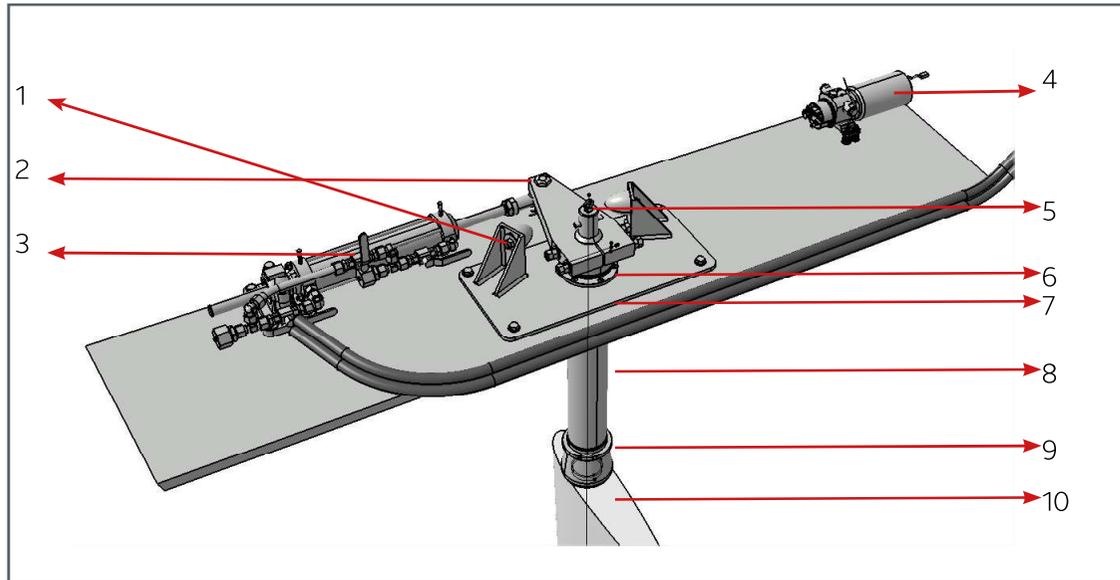
The equipment manufacturer's manual gives you detailed explanations on the operating procedure and all the steps to keep it functioning properly.



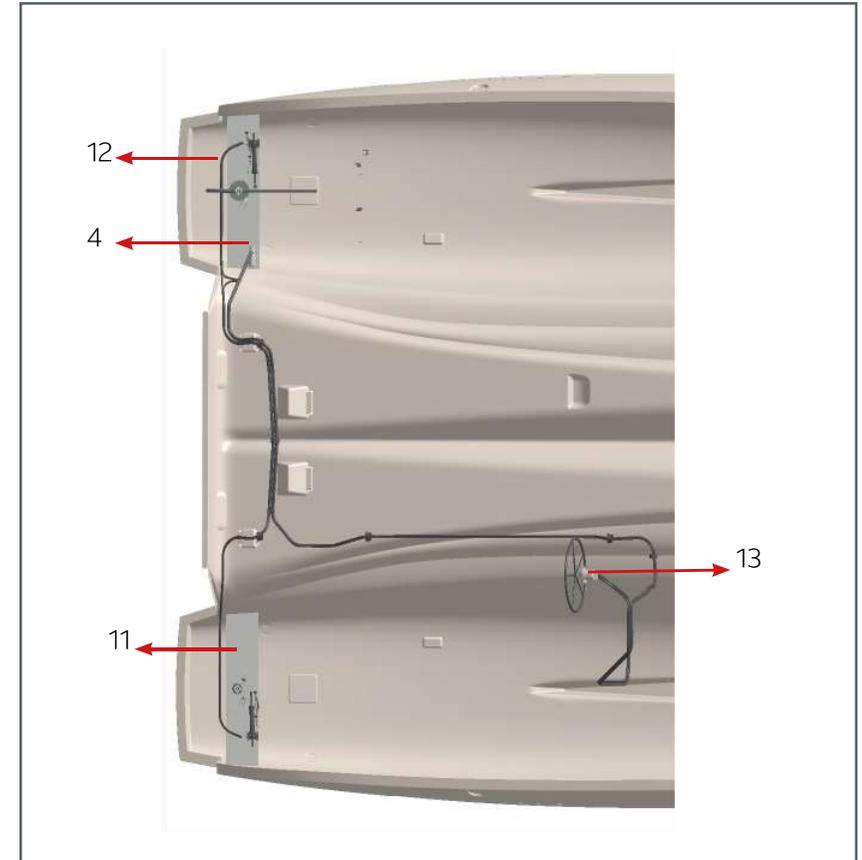
- 1 Bow thruster
- 2 Circuit breaker
- 3 Battery charger
- 4 Battery bank
- 5 Helm station joystick

# 7 - STEERING SYSTEM

## 7.1 General layout



- 1 Rudder angle end
- 2 Rudder bar pin
- 3 VHM50 LS hydraulic ram with by-pass
- 4 Autopilot pump (port side only)
- 5 Screw to lock the tiller shaft and lift the rudder
- 6 Upper bearing
- 7 Aluminium shelf with welded end
- 8 Rudder stock tube/rudder shaft
- 9 Lower bearing with rudder stock tube
- 10 Rudder blade



- 11 Starboard rudder system
- 12 Port rudder system
- 13 Steering gear

# 7 - STEERING SYSTEM

## 7.2 Starting up

- Check that the valves are open.
- Check that the by-pass is closed, see paragraph 3.3.1. **Safety equipment: emergency tiller**

## 7.3 Maintenance

- Make sure that there are no leaks at the level of the connections, or anywhere else in the circuit as a whole.
- VHM32 oil grade.



### NOTICE

Check fastening systems on a regular basis, especially those connecting the rudder pin to the rudder shaft bar and those connecting the rudder pin to the ram bar.

## 7.4 Emergency system

See chapter 3.3.1. **Safety equipment: emergency tiller**



### NOTICE

It is recommended to always use the oil supplied by the supplier or, at least, an ISO 22 viscosity oil.

## 7.5 Bleeding procedure for a hydraulic steering system

### 1. Preparing the system for bleeding:

- Fit out the steering pump(s) with bleed plugs on the top of the pump.
- Mount a bar (or wheel) on each steering pump so that it can be operated during the bleed.
- Place on each bleeder (ram, steering pump, steering group), a translucent hose connected to a container, which will be fitted out with an air vent.
- Uncouple the ram from the rudder rod to free the ram stroke.
- Position the ram horizontally with the bleeders turned upward.
- If the system is equipped with a steering group, provide a direct power supply with a double pole triple throw switch for "left-hand rotation, right-hand rotation, and neutral".

### 2. Bleed by using the LS power unit:

- Connect the power unit to the highest steering pump in the boat (the connection is made on the top of the pump).
- Place a bleed plug on the topmost steering pump, next to the bleed unit connection.

First phase: fill the volumes of the pump bodies, drains, and steering group.

- Open the bleeders on the lower pumps (if fitted).
- Open the bleeder of the steering group (if fitted).
- Close the by-pass valve (if fitted).
- Switch on the LS power unit, and operate the valve to send the pressurised hydraulic oil (grade 22) into the circuit.
- Do not turn the bars during this phase.
- When the oil flows clear and without air bubbles from the bleed hoses on the pumps and the steering group, close the corresponding bleeders.

# 7 - STEERING SYSTEM

- During this phase, open and close the bleeder on the upper pump to purge the trapped air.

Second phase: filling of the pump cylinders, hoses, and ram.

- Manually position the ram rod at the bottom of the cylinder.
- Open the ram's bleeder corresponding to the small chamber (on the side of the extended rod).
- Turn (slowly but steadily) the topmost steering pump bar in the direction that enables oil to flow into the small chamber.
- When the oil flow coming out of the ram bleeder hose is clear and without air bubbles, open the by-pass valve (if fitted) and continue rotating the bar in the same direction.
- After turning the bar twice, close the by-pass valve.
- Turn (slowly but steadily) the bar of the lower steering pump, still in the direction that enables oil to flow into the small chamber.
- When the oil flow coming out of the ram bleeder hose is clear and without air bubbles, power up the steering group (if fitted) in order to send oil into the small chamber.
- When the flow of oil coming out of the ram bleeder hose is clear and without air bubbles, stop activating the steering group, and close the small chamber bleeder.
- Open the bleed of the opposite chamber (large chamber), and turn the bar of the highest pump, still in the same direction. The ram rod will perform a total shift in the body of the cylinder which will enable the volume of the large chamber to be bled.
- When the ram rod reaches the bottom of the cylinder, the bar should become stiff. The small chamber has become the large chamber and vice versa.
- Then turn the highest pump bar in the opposite direction, until the oil flow to the bleeder (the new small chamber bleeder being still open) is clear.
- Then turn the lower steering pump bar in the same direction as before to proceed with the operation.

- When the oil flow coming out of the ram bleeder hose is clear and without air bubbles, power up the steering group (if fitted) in order to send oil into the small chamber.
- Reminder: the small chamber is the former large chamber.
- Close the ram bleeder when the oil flow is clear and free of air bubbles.
- Disconnect the bleed unit from the upper pump, and top up the oil level.
- Wait 24 hours before reusing the emulsified oil collected in the containers under the bleeders.
- Place a sealed plug in place of the higher pump bleeder and fill the port.
- Turn the pump bars in both directions and check that the system is operating properly.

### 3. Manual bleed:

- Place a funnel on the fill port of the highest steering pump in the boat (the connection is done on the top of the pump, beside the bleed plug).
- Open the bleeders on the lower pumps (if fitted).
- Open the bleeder on the steering group (if fitted).
- Close the by-pass valve (if fitted).
- Fill the funnel with DEXRON II D oil, then operate the steering pumps using the bars, in one direction and then the other, to ensure the chambers of each pump are well filled.
- Open the bleeders on the pumps to remove any residual air in the pump body.
- Be careful to maintain the oil level in the funnel so that no air is drawn into the system.
- Continue the operation until the oil flow coming out of the hoses connected to the pump bleeders and to the steering group is free of bubbles.
- Close the bleeders.
- Manually position the ram rod at the bottom of the cylinder.
- Open the ram's bleeder corresponding to the small chamber (on the side of the extended rod).

# 7 - STEERING SYSTEM

- Turn (slowly but steadily) the topmost steering pump bar in the direction that enables oil to flow into the small chamber.
- When the oil flow coming out of the ram bleeder hose is clear and without air bubbles, open the by-pass valve (if fitted) and continue rotating the bar in the same direction.
- After turning the bar twice, close the by-pass valve.
- Turn (slowly but steadily) the bar of the lower steering pump, still in the direction that enables oil to flow into the small chamber.
- When the oil flow coming out of the ram bleeder hose is clear and without air bubbles, power up the steering group (if fitted) in order to send oil into the small chamber.
- When the flow of oil coming out of the ram bleeder hose is clear and without air bubbles, stop activating the steering group, and close the small chamber bleeder.
- Open the bleed of the opposite chamber (large chamber), and turn the bar of the highest pump, still in the same direction. The ram rod will perform a total shift in the body of the cylinder which will enable the volume of the large chamber to be bled.
- When the oil flow coming out of the ram bleeder hose is clear and without air bubbles, power up the steering group (if fitted) in order to send oil into the small chamber.
- Reminder: the small chamber is the former large chamber.
- Close the ram bleeder when the oil flow is clear and free of air bubbles.
- Disconnect the bleed unit from the upper pump, and top up the oil level.
- Wait 24 hours before reusing the emulsified oil collected in the containers under the bleeders.
- Place a sealed plug in the place of the higher pump bleeder, and fill the port.
- Turn the pump bars in both directions and check that the system is operating properly.

## 4. Checks to perform:

- When turning the bar, the ram rod should extend evenly and smoothly.
- When a manual effort is placed on the ram rod to try to extend or retract it, it must not be possible to move the rod by more than 0.5mm.
- When you pinch the ram rod between two fingers at the exit of the cylinder, and then move the bar by very small oscillating movements, you should be able to feel the movements of the ram rod at the least movement of the bar.
- When you stop turning the bar, the ram rod must lock instantly and in no case should continue its travel, not even by one millimeter.

# 8 - ELECTRICAL SYSTEMS

## 8.1 Electrical circuits: Warnings and recommendations 24 V / 220V



### DANGER

To avoid a short-circuit between the two poles of the battery, do not store conductive objects near the batteries (metal tools, etc.).



### ATTENTION

The batteries must be carefully secured.



### ATTENTION

Never work on a live electrical system.

Never alter the ship's electrical system or the relevant diagrams: installation, alterations and maintenance should be carried out by a technician skilled in marine electricity.

Never change or modify the amperage rating of overcurrent protection devices. Never install or replace electrical equipment or appliances by components that exceed the current intensity of the circuit.

Never leave the boat unsupervised when the electrical circuit is live, apart from when the automatic bilge pump and the boat's fire protection and alarm systems are in use.



### WARNING

Do not block the ventilation vents of the batteries, as some batteries release hydrogen, which presents a risk of explosion.

Do not leave the boat unsupervised when the electrical system is live, apart from when the automatic bilge pump and the boat's fire protection and security system are in use.

Never install or replace electrical equipment or appliances by new components that exceed the circuit's amperage.

When charging, connecting or disconnecting the batteries, switch off the battery shut-off switch.

Batteries must be handled with care.

In the event of electrolyte projection, abundantly rinse the part of the body which has been in contact, and consult a doctor.



### NOTICE

It is recommended that a residual current device (RCD) trip test be performed once a month. A RCD is fitted at the level of the converter, generator, and shore power. To perform the test, press the test button on the equipment with the "active" power source.

# 8 - ELECTRICAL SYSTEMS



## **DANGER**

### **RISK OF ELECTRIC SHOCK**

Avoid risks of electric shocks (electrocution).

Disconnect the AC shore supply and the DC supply from the battery to the converter before opening the panel.



## **DANGER**

### **RISK OF ELECTRIC SHOCK**

The boat is fitted with a converter that converts direct current (DC) to alternating current (AC).

Avoid risks of injury or death due to electric shocks. Disconnect the AC shore supply and the converter's DC supply before opening the electric panel or working on the circuits.



## **DANGER**

Disconnect the ship/shore supply cable first at the shore power outlet.

Turn off the shore supply with the onboard shut-off switch before connecting or disconnecting the boat/shore supply cable.

Do not let the end of the boat/shore supply cable hang in water.

Do not work on a live electrical system.



## **DANGER**

When the shore supply socket is plugged, there could be a difference between the «ground» on the boat and the one of the power grid. This could create a danger of electrical short circuits, and therefore electrocution (particularly for nearby swimmers).

Connect the boat/shore power cable on the boat before plugging it into the socket onshore.

# 8 - ELECTRICAL SYSTEMS



## ATTENTION

Deactivate the boat's power when the system is not in use. This is to prevent fire risks.

Do not modify the boat's electrical installations or the relevant diagrams.

It is important that installation, maintenance, and any modifications be carried out by a technician skilled in marine electricity.

Have the system checked at least twice a year.

Do not modify the connections of the boat / shore supply cable; only use compatible connections.

If the reverse polarity indicator is on, unplug the cable immediately.

Correct the polarity error before using the boat's electrical system.



## NOTICE

Use double-insulated or grounded appliances.

Connect the electrical appliances' metallic covers or boxes to the boat's protective conductor (green conductor with yellow stripes).

Close the shore socket cover carefully.

## 8.2 Procedure for switching on the on-board circuit

To start up, refer to paragraphs [5.3 Power](#) and [5.4 Verifications](#)

## 8.3 Leaving the boat

To start up, refer to paragraphs [5.3 Power](#) and [5.4 Verifications](#)

## 8.4 Emergency start

If the engine batteries are not available, a coupling system of the port and starboard 12 V starting batteries is available.

Note: The motor start-up can be in 24 V when the boat is equipped with the Nanni engine option .

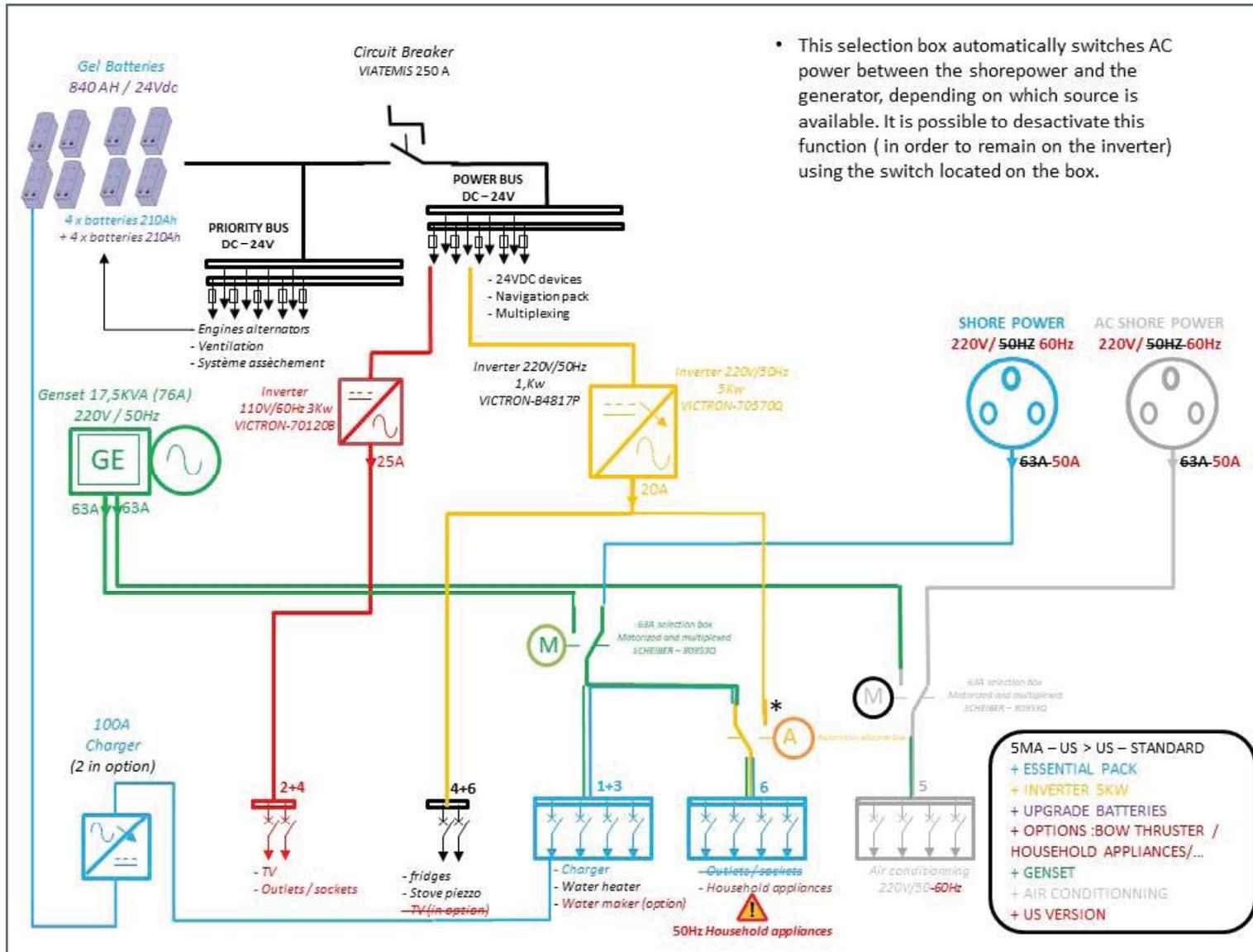
To select the battery coupling:

- Activate (ON position) the general shut-off, the port and starboard engine shut-offs, and then the coupling shut-off, located in the port engine compartment.
- Start the port and starboard engines.
- Once the engines are running, close (position OFF) the coupling cut-out.

Note: In a normal configuration, the 12 V engine starting batteries would then be charged by the engines' 12 V alternators.

# 8 - ELECTRICAL SYSTEMS

## 8.5 General principle : AC / DC

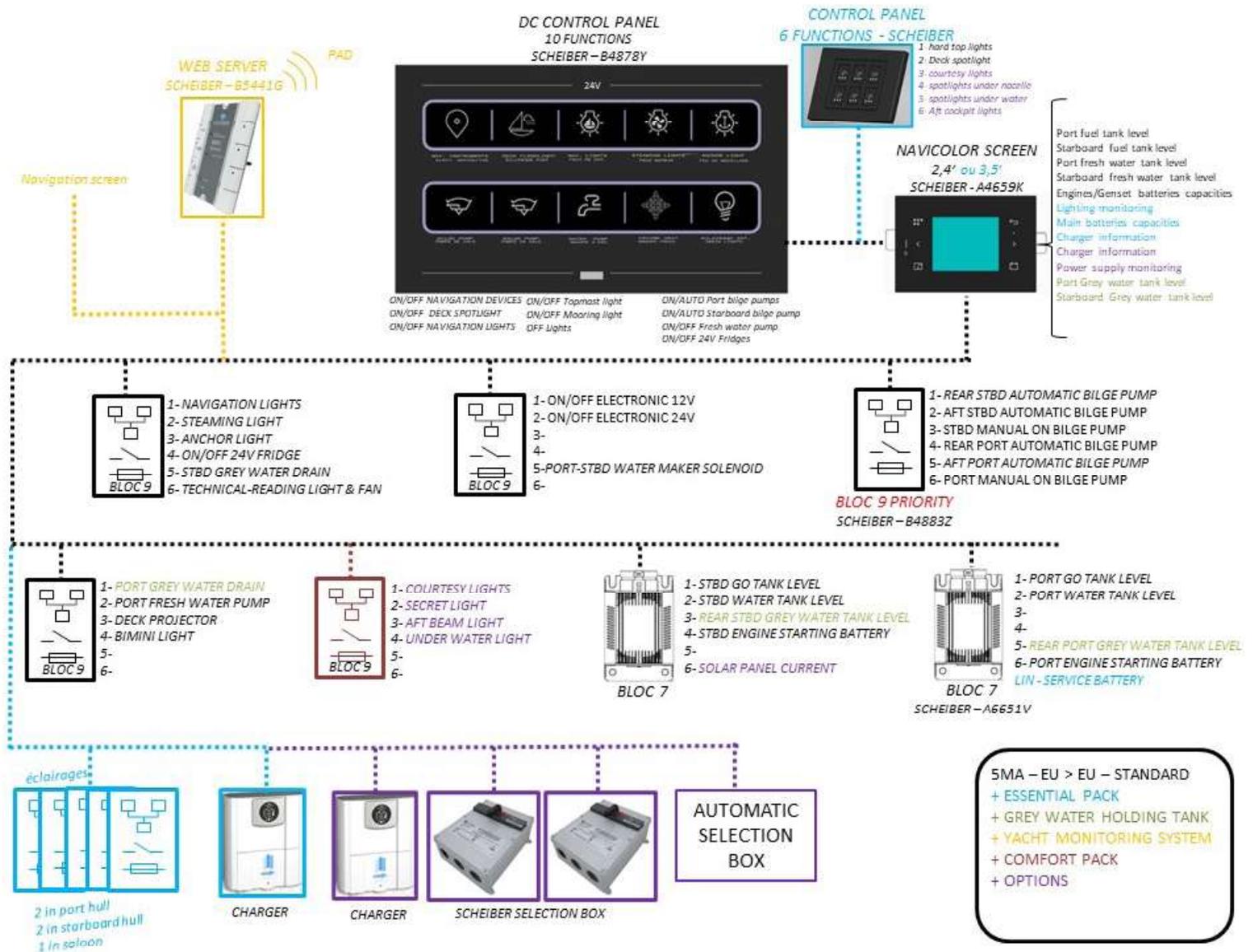


**WARNING**  
50Hz domestic appliances



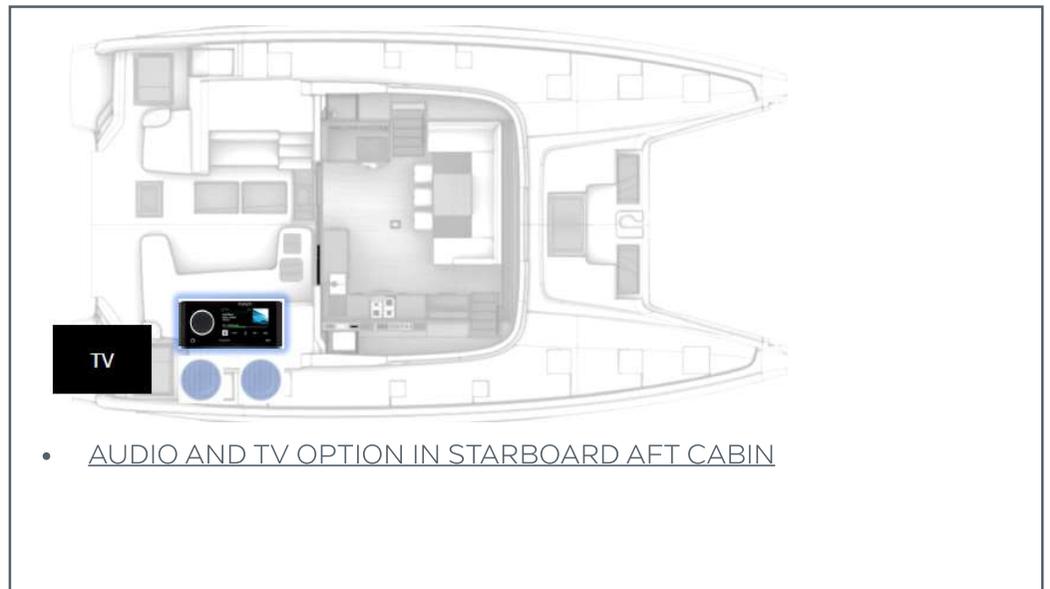
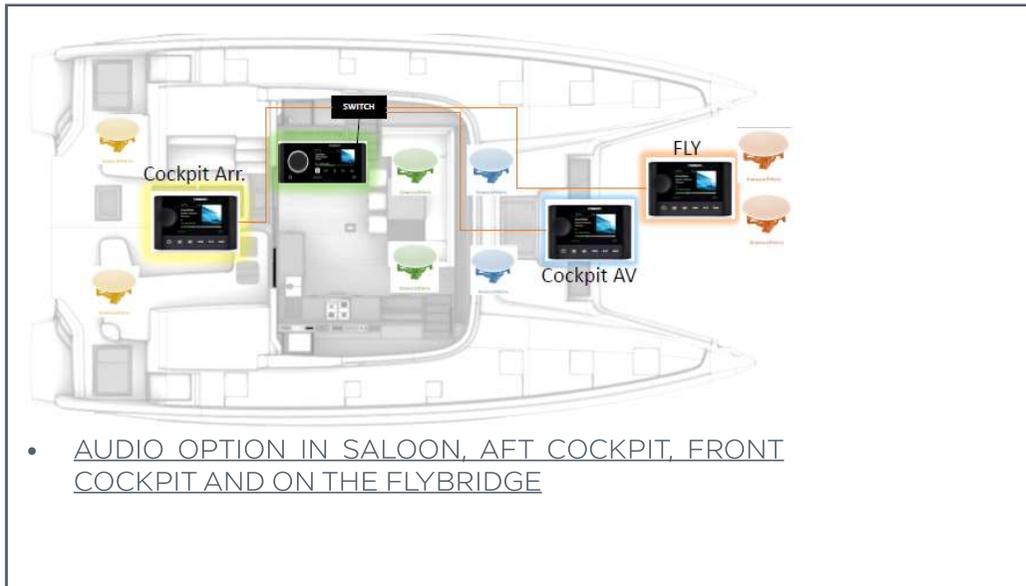
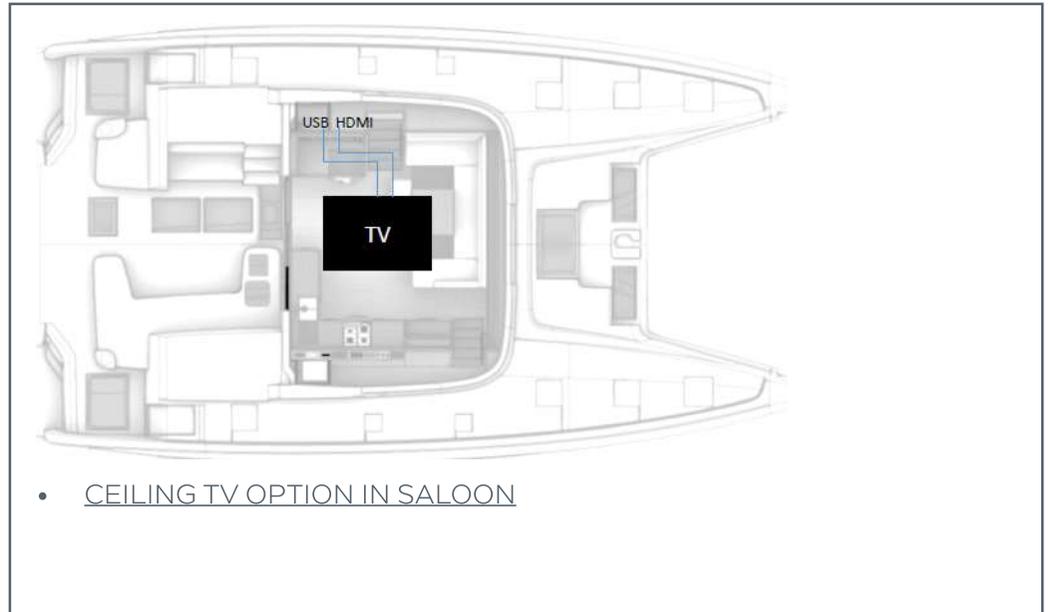
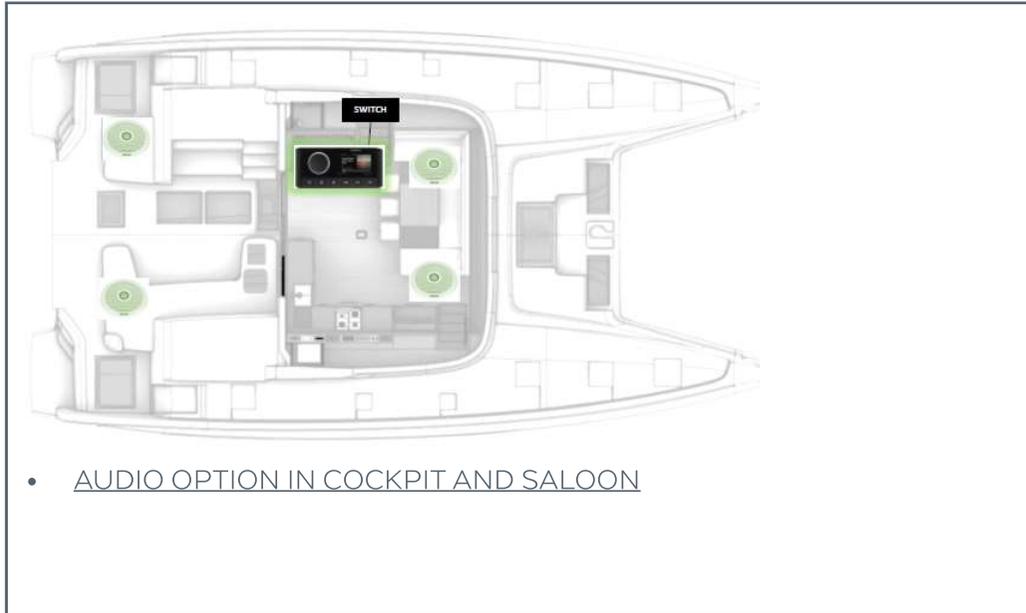
# 8 - ELECTRICAL SYSTEMS

## 8.6 General principle : Multiplexing



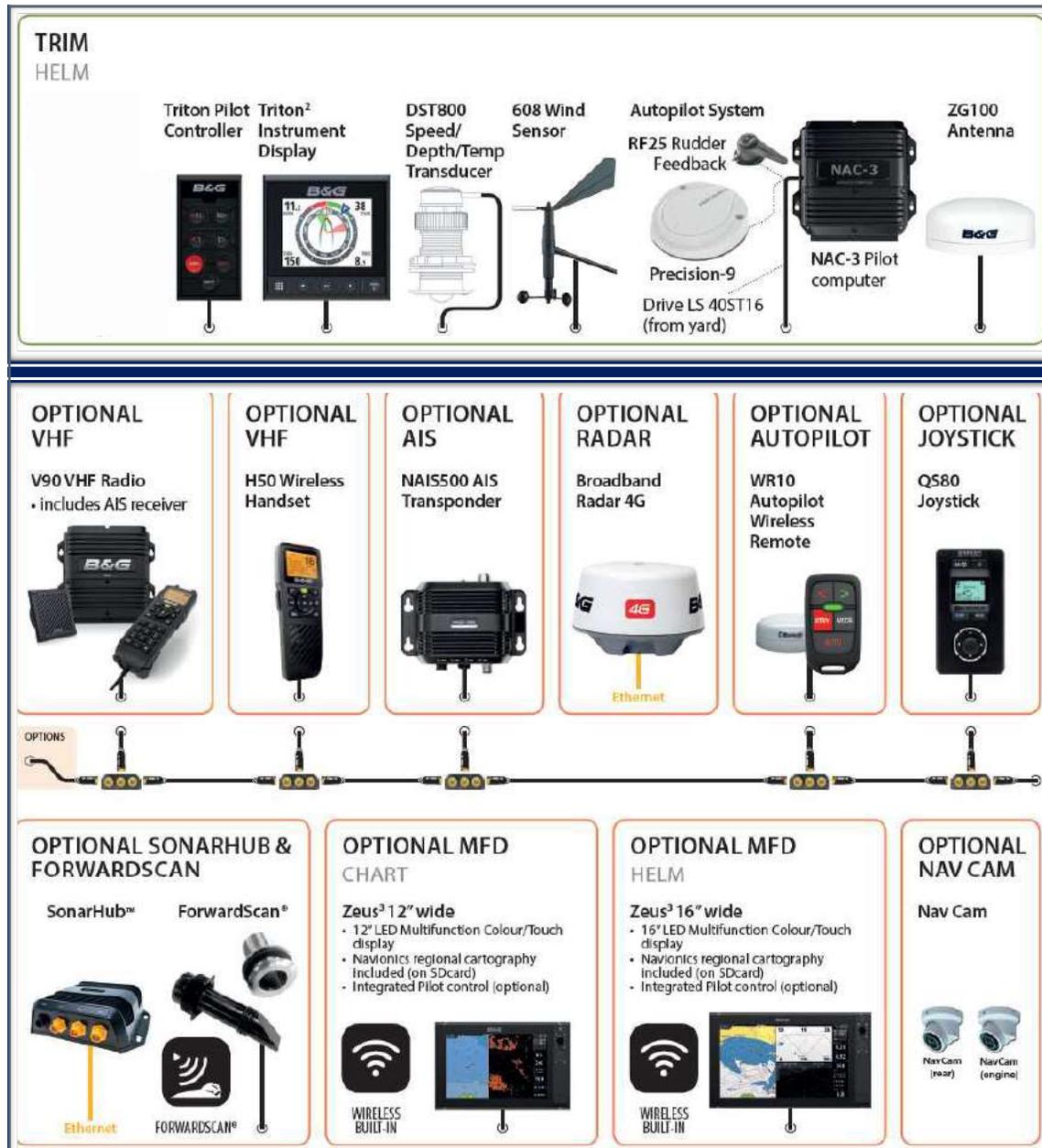
# 8 - ELECTRICAL SYSTEMS

## 8.7 General principle: Audio-Video



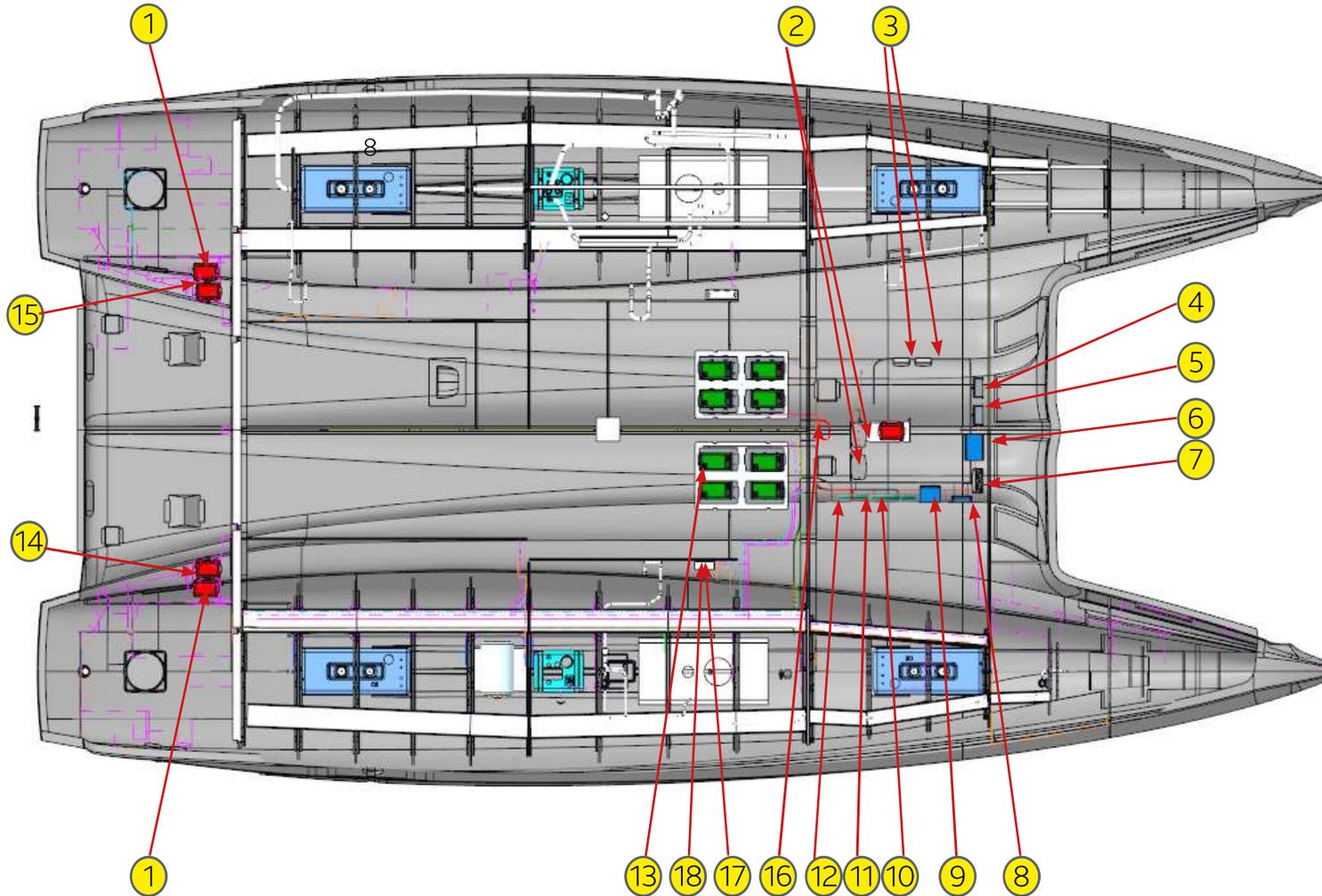
# 8 - ELECTRICAL SYSTEMS

## 8.8 General principle : Electronics



# 8 - ELECTRICAL SYSTEMS

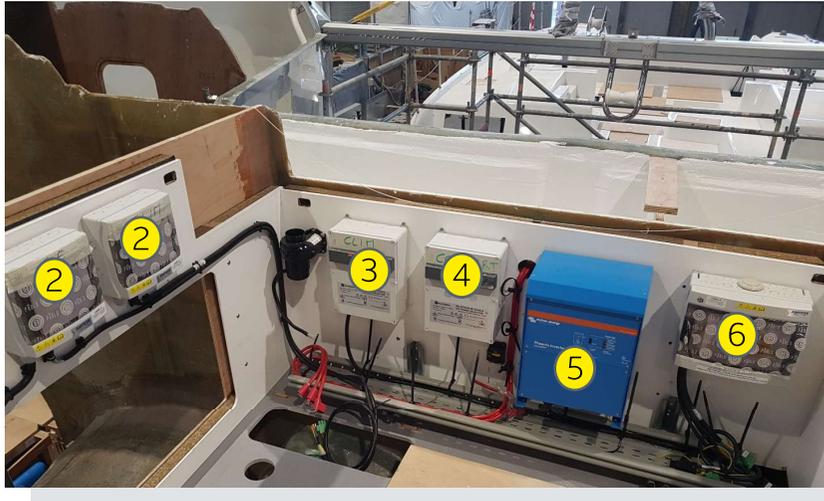
## 8.9 Equipment layout



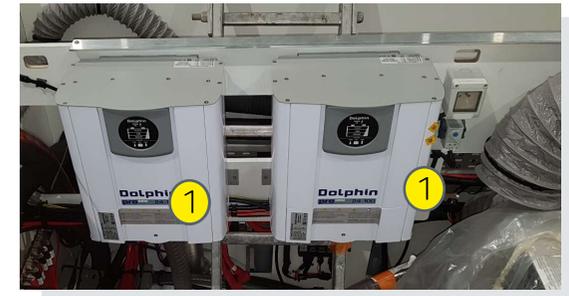
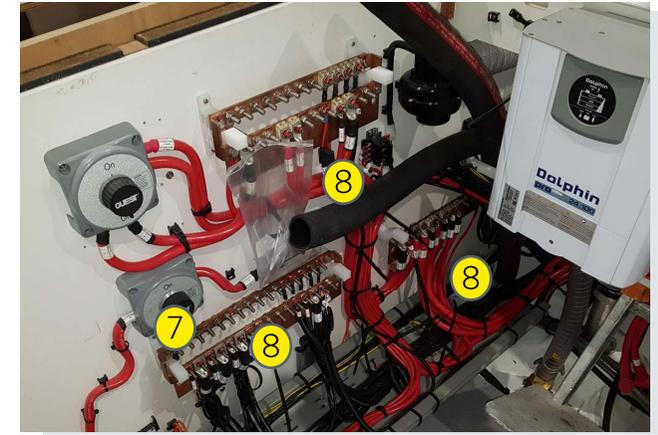
- 1 Engine start battery
- 2 100 A charger
- 3 63 A differential circuit breaker box
- 4 GENSET SCHEIBER power selector
- 5 Air cond. SCHEIBER power selector
- 6 VICTRON 5000W inverter (as an option to replace the VICTRON 1 200 W inverter (8))
- 7 5 000 W inverter protection box and automatic selector
- 8 VICTRON 1 200 W inverter
- 9 VICTRON 3 000 W inverter (110 V US version)
- 10 Service battery shut-off
- 11 Thruster shut-off (optional)
- 12 Busbar set
- 13 Service batteries (AGM, gel, or Lithium)
- 14 Engine shut-off
- 15 Engine shut-off and coupling
- 16 Class T 400 A fuse
- 17 Comfort AC circuit panel
- 18 Air conditioning AC circuit panel

# 8 - ELECTRICAL SYSTEMS

## 8.10 Equipment layout - GENSET room



- 1- 100 A charger
- 2- 63 A differential circuit breaker
- 3- Box GE SCHEIBER source selector
- 4- Air cond. SCHEIBER power selector
- 5- VICTRON 5 000 W inverter
- 6- 5 000 W inverter protection box and automatic selector
- 7- Thruster shut-off (optional)
- 8- Busbar set
- 9- CLASS T 400 A fuse



X03												
JEU DE BARRES DE SERVICE LOCAL GE / GENSET AREA SERVICE DC POWER BAR												
WDC024 FUSE : 150A		WDC039 FUSE : 300A						WDC146 FUSE : 100A	WDC147 FUSE : 100A	WDC049 FUSE : 100A	WDC142 FUSE : 100A	
GUINDEAU WINCH/CLASE		CONVERTISSEUR US 3000W 3000W/GE INVERTER						ALIMENTATION REPARTITEUR DC BACKBOARD POW POWER DISTRIBUTION	ALIMENTATION REPARTITEUR DC BACKBOARD POW POWER DISTRIBUTION	ALIMENTATION REPARTITEUR THROBOARD STRO POWER DISTRIBUTION	ALIMENTATION REPARTITEUR DISTRIBUTION STRO POWER DISTRIBUTION	
WDC114 X 2		WDC036 FUSE : 100A	WDC029 X 2 FUSE : 200A	FUSE : 200A	FUSE : 200A			WDC086 FUSE : 100A	WDC176 FUSE : 200A	W423 FUSE : 50A	WDC156 FUSE : 300A	
COURE BATTERIE SERVICE	BATT SWITCH SERVICE	CONVERTISSEUR 1200W 1200W/INVERTER	CONVERTISSEUR 5000W 5000W/INVERTER	CONVERTISSEUR 3000W 3000W/INVERTER	CONVERTISSEUR 5000W 5000W/INVERTER			ENHUILEUR GRUWER	JEU DE BARRE LOCAL MOEUR ANVORCE ALARA POWER BAR	ALIMENTATION REPARTITEUR LOCAL GE GENSET AREA POWER DISTRIBUTION	ALIMENTATION REPARTITEUR LOCAL POW DISTRIBUTION	
X01												
JEU DE BARRE PRIORITAIRE / PRIORITY DC POWER BAR												
WDC051	HARNESS FUSE : 2A	WDC099 X 2	WDC022	WDC009 FUSE : 150A	WDC025	WDC020 FUSE : 150A	WDC182 - FUSE : 100A	WDC177 FUSE : 100A			WDC041 FUSE : 50A	
PROPULSEUR DETRAVE	BOU FRAU/ATER	BUIZES ALARME ASSEMBLEMENT	BUIZES PUMP ALARM	ALIMENTATION JEU DE BARRE SERVICE	SERVICE POWER BOU BAR	BATTERIE SERVICE SERVICE BATTERY	CHARGEUR CHARGER	BATTERIE SERVICE SERVICE BATTERY	CHARGEUR CHARGER	CHARGEUR CHARGER	ALT. MOTEUR BACKBOARD POW ALVORCE ENGINE	ALT. MOTEUR THROBOARD STRO RENGE
												SYSTEME ASSEMBLEMENT BUIZES PUMP SYSTEM

# 8 - ELECTRICAL SYSTEMS

## 8.11 Equipment layout - FORWARD STARBOARD COMPANIONWAY



FUSE1	ROUGE_6MM2	20A	BLOC 9 X10
FUSE3	ROUGE_6MM2	20A	BLOC 9 X11
FUSE5			
FUSE6			
FUSE4	ROUGE_6MM2	20A	BLOC 9 X13
FUSE2	ROUGE_6MM2	20A	BLOC 9 X12

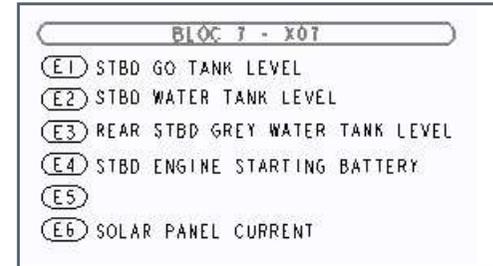
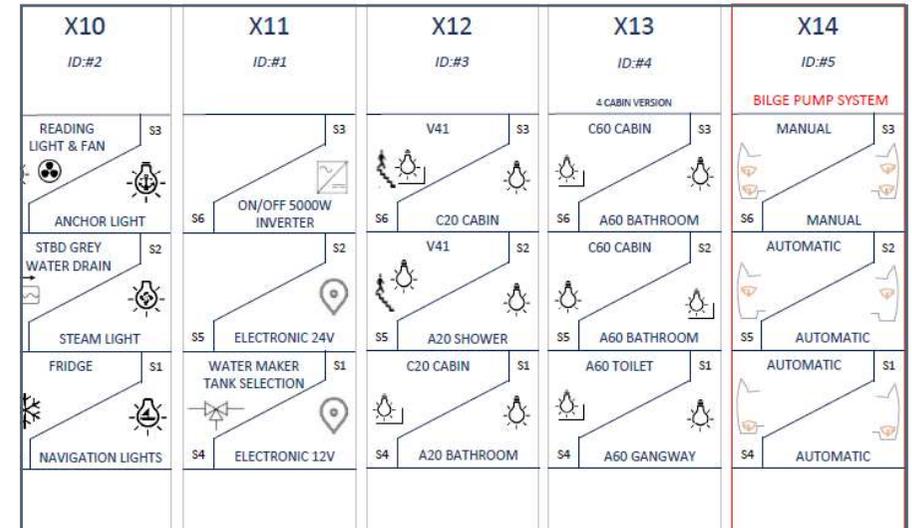
1



4

2

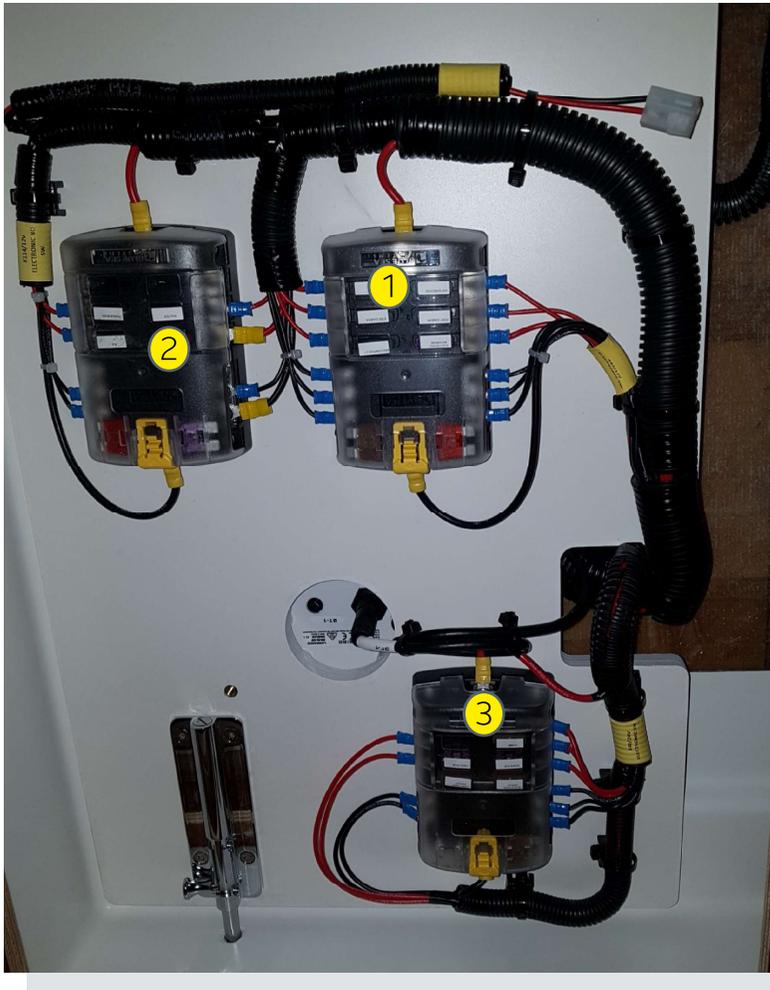
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FUSE 12	W 102	W 102	ROUGE_6MM2	7.5A	STBD FRIDGE SALOON
FUSE 6	W 132	W 132	ROUGE_2_5MM2	5A	A40 GREY WATER
FUSE 11	W 134	W 134	ROUGE_4MM2	10A	C60 AUDIO
FUSE 5	W 128	W 128	ROUGE_6MM2	30A	A40 ELECTRIC TOILET
FUSE 10	W 161	W 161	ROUGE_1_5MM2	3A	BLOC 7
FUSE 4	W 131	W 131	ROUGE_2_5MM2	5A	A20 GREY WATER
FUSE 9					
FUSE 3	W 127	W 127	ROUGE_6MM2	30A	A20 ELECTRIC TOILET
FUSE 8	W 133	W 133	ROUGE_2_5MM2	5A	A60 GREY WATER
FUSE 2	W 130	W 130	ROUGE_2_5MM2	5A	P20 GREY WATER
FUSE 7	W 129	W 129	ROUGE_6MM2	30A	A60 ELECTRIC TOILET

# 8 - ELECTRICAL SYSTEMS

## 8.12 Equipment layout - SALOON CEILING ELECTRONICS AREA



①	FUSE1	W 379	W 379	ROUGE_2_5MM2	3A	ELECTRONIC BACKBONE
	FUSE3	W 381	W 381	ROUGE_1_5MM2	2A	PORT CAMERA
	FUSE5	W 383	W 383	ROUGE_1_5MM2	2A	VHF WIRELESS
	FUSE6	W 385	W 385	ROUGE_2_5MM2	5A	NEP2
	FUSE4	W 387	W 387	ROUGE_1_5MM2	2A	STBD CAMERA
	FUSE2	W 501	W 501	ROUGE_1_5MM2	1A	MAG COMPASS LT

②	FUSE1	W 467	W 467	ROUGE_4MM2	10A	VHF
	FUSE3	W 491	W 491	ROUGE_1_5MM2	3A	ROUTER
	FUSE5					
	FUSE6					
	FUSE4	W 493	W 493	ROUGE_1_5MM2	3A	WEBSERVER
	FUSE2	W 469	W 469	ROUGE_1_5MM2	2A	AIS

③	FUSE1	W 363	W 363	ROUGE_2_5MM2	5A	HELM STATION DISPLAY
	FUSE3	W 367	W 367	ROUGE_2_5MM2	3A	SONAR HUB
	FUSE5	W 449	W 449	ROUGE_2_5MM2	5A	RADAR
	FUSE6					
	FUSE4	W 369	W 369	ROUGE_2_5MM2	3A	FISCH FINDER
	FUSE2	W 365	W 365	ROUGE_2_5MM2	5A	CHART TABLE DISPLAY

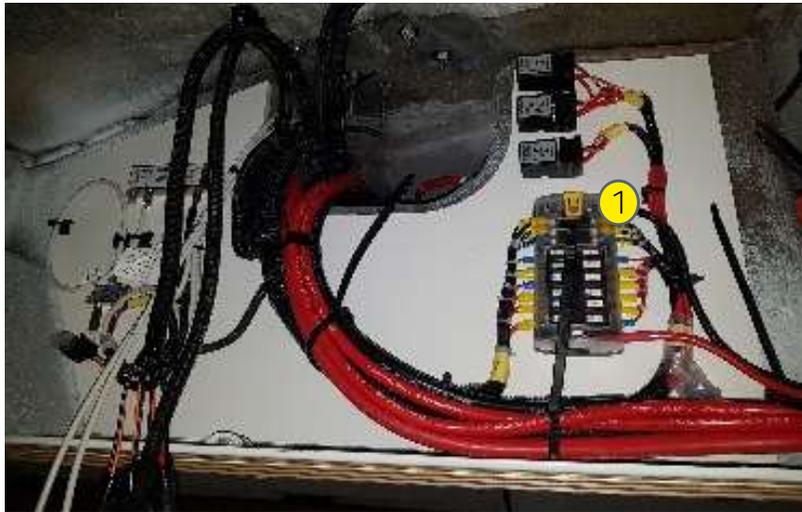
# 8 - ELECTRICAL SYSTEMS

## 8.13 Equipment layout- MAST FOOT AREA

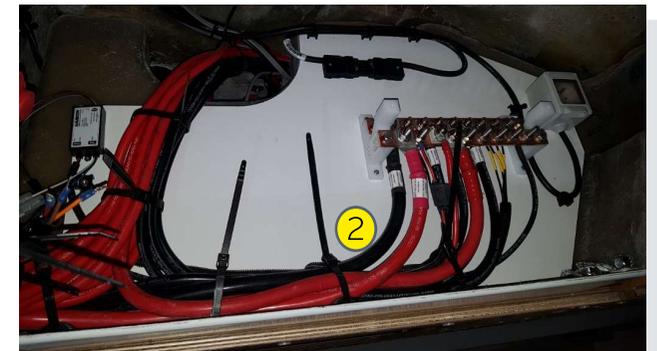
FUSE 12	W 019	W 019	ROUGE_2_5MM2	3A	USB CHARGER
FUSE 6	W 453	W 453	ROUGE_4MM2	10A	AUDIO SALOON
FUSE 6	W 037	W 037	ROUGE_1_5MM2	10A	AUDIO SALOON
FUSE 11	W 435	W 435	ROUGE_6MM2	7.5A	COCKPIT FRIDGE
FUSE 5	W 029	W 029	ROUGE_2_5MM2	7.5A	SAT BOX
FUSE 10	W 473	W 473	ROUGE_4MM2	10A	AUDIO FLY
FUSE 4	W 465	W 465	ROUGE_4MM2	10A	AUDIO AFT COCKPIT
FUSE 9	W 428	W 428	ROUGE_6MM2	7.5A	FLY FRIDGE
FUSE 3	W 359	W 359	ROUGE_6MM2	15A	12V ELEC VAV EQUIP
FUSE 8	W 469	W 469	ROUGE_4MM2	10A	AUDIO FWD COCKPIT
FUSE 2	W 413	W 413	ROUGE_2_5MM2	10A	TV LIFT
FUSE 7	W 420	W 420	ROUGE_6MM2	7.5A	PORT SALOON FRIDGE
FUSE 1	W 442	W 442	ROUGE_1_5MM2	2A	WINDLASS COUNTER



1



3- Harken winch relay  
(accessible from the hatches on the flybridge)



2-Busbar set

X04 JEU DE BARRES DC ROOF / ROOF AREA DC POWER BAR															
WDC161	HARNES			WDC074	WDC075	WDC076	WDC081	HARNES		WDC175					
AUMENTATION JEU DE BARRE LOCAL GE	GENSET POWER BAR	BOITIER DE COMMANDE ENROULEUR	GENMAKER FURLEUR GENMAKER SWITCH	WINCH TRIBORD (GV)	STRD WINCH	WINCH EXTERIEUR BABBORD	PORT EXTERIOR WINCH	WINCH FLAT WINDER	WINCH FLAT WIND	WINCH INTERIEUR BABBORD	PORT INTERIEUR WINCH	NEGATIF FASCEAU ROOF	ROOF GROUND HARNES	AUMENTATION REPARTITEUR DC ROOF	ROOF POWER DISTRIBUTION
WDC156		HARNES		WDC174	WDC082										
AUMENTATION JEU DE BARRE LOCAL GE		GENSET POWER BAR		AUMENTATION REPARTITEUR DC ROOF		REPARTITEUR DISTRIBUTION WINCH									
				FUSE : 100A		FUSE : 300A									
				ROOF POWER DISTRIBUTION		WINCH BREAKER DISTRIBUTION									

# 8 - ELECTRICAL SYSTEMS

## 8.14 Equipment layout - ENGINE ROOM

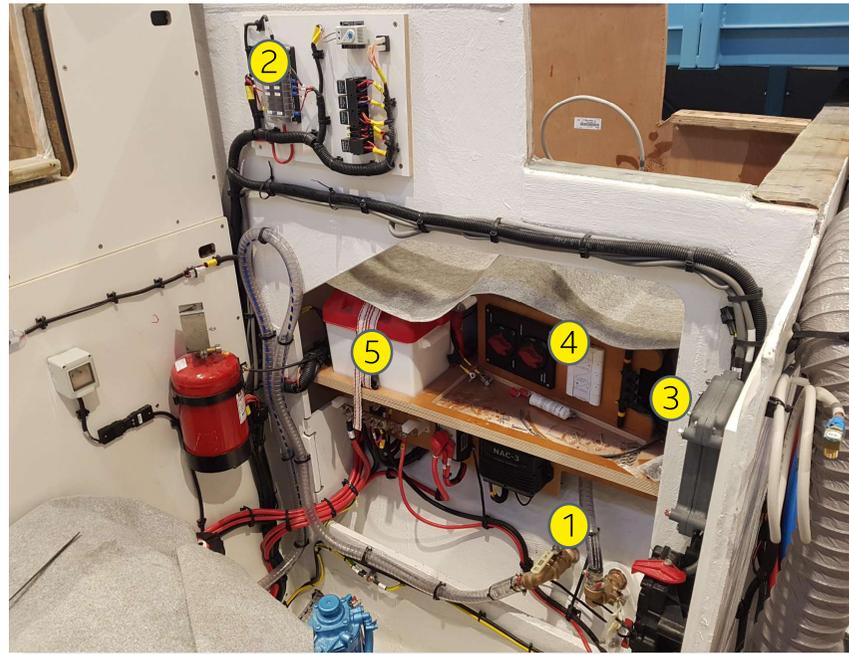
X04 JEU DE BARRES DC LOCAL MOTEUR BABORD / STBD ENGINE AREA DC POWER BAR													
1	WDC017			2 x WDC018		WDC051		W021		WDC172		WDC170	
	ALIMENTATION JEU DE BARRE LOCAL GE GENSET POWER BAR	BATTERIE DEMARAGE BABORD	PORT STARTING BATTERY	BATTERIE DEMARAGE TRIBORD	STBD STARTING BATTERY	REPARTITEUR ALIM. LOCAL MOTEUR	ENGINE AREA POWER DISTRIBUTOR	CALCULATEUR PILOTE	AUTOPILOT HYDRAULIC	BOSSOIR ELECTRIQUE	ELECTRICAL DAVIT	TENDER LIFT	TENDER LIFT
	WDC176 FUSE : 200A					WDC050 FUSE : 30A		W054 FUSE : 30A	WDC171 FUSE : 100A		WDC169 FUSE : 100A		
ALIMENTATION JEU DE BARRE LOCAL GE GENSET POWER BAR					REPARTITEUR ALIM. LOCAL MOTEUR	ENGINE AREA POWER DISTRIBUTOR	CALCULATEUR PILOTE	AUTOPILOT HYDRAULIC	BOSSOIR ELECTRIQUE	ELECTRICAL DAVIT	TENDER LIFT	TENDER LIFT	

FUSE 12	W 066	W 066	ROUGE_1.5MM2	1A	FIRE SECURITY URGENCY
FUSE 6	W 006	W 006	ROUGE_1.5MM2	1A	KITCHEN GAZ VALVE
FUSE 11	W 162	W 162	ROUGE_4MM2	15A	BLOC 9 MODULE
FUSE 5	W 078	W 078	ROUGE_1.5MM2	1A	PLANCHA GAZ VALVE
FUSE 10					
FUSE 4	W 017	W 017	ROUGE_2.5MM2	3A	STBD ENGINE ROOM FAN
FUSE 9					
FUSE 3	W 014	W 014	ROUGE_2.5MM2	3A	PORT ENGINE ROOM FAN
FUSE 8					
FUSE 2	W 040	W 040	ROUGE_1.5MM2	1A	STBD EXHAUST ALARM
FUSE 7					
FUSE 1	W 011	W 011	ROUGE_1.5MM2	1A	PORT EXHAUST ALARM

2

4 Battery shut-off board for starting and coupling

5 50 AH 800 A Start AGM ORBITAL battery



3



# 8 - ELECTRICAL SYSTEMS

## 8.15 Generator layout



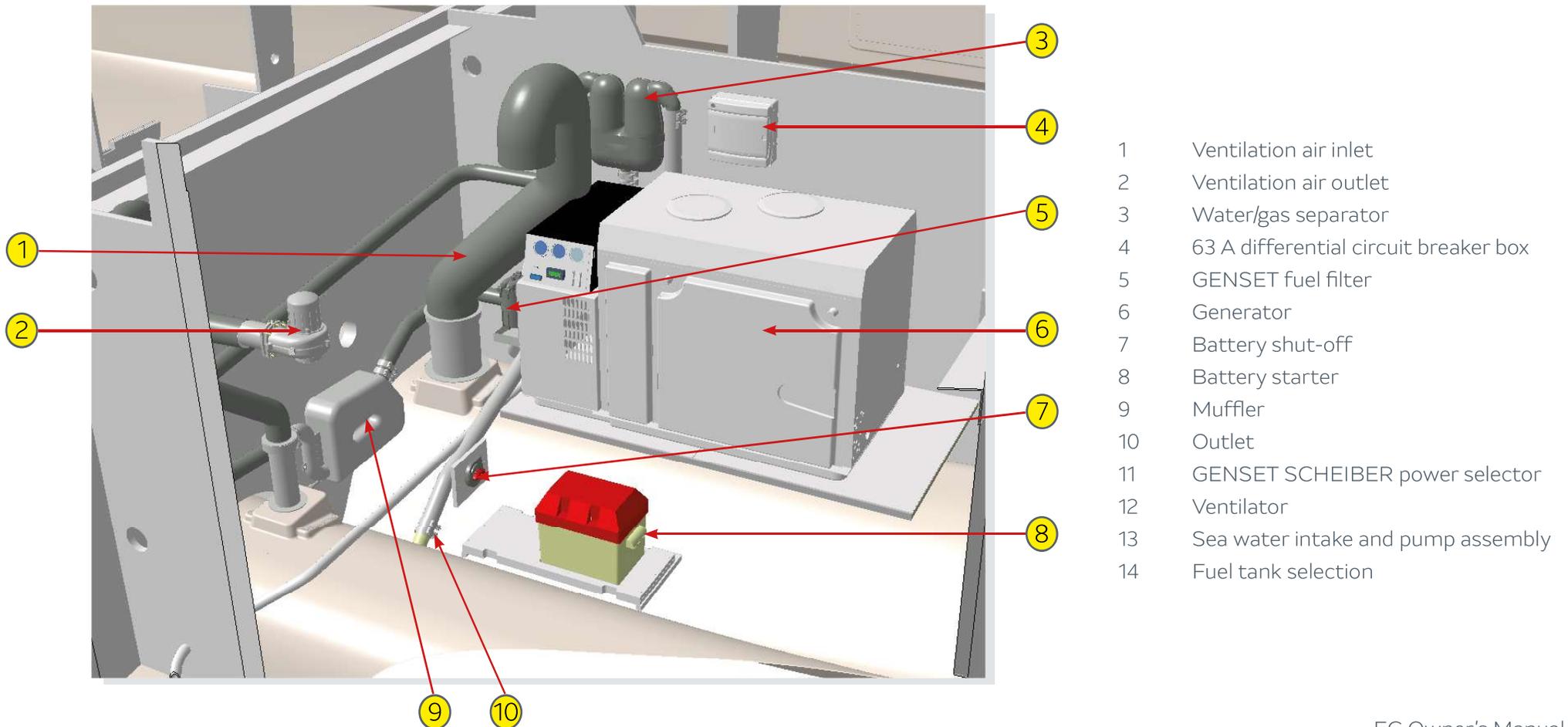
### NOTICE

When starting up the generator, check that the cooling water is circulating.

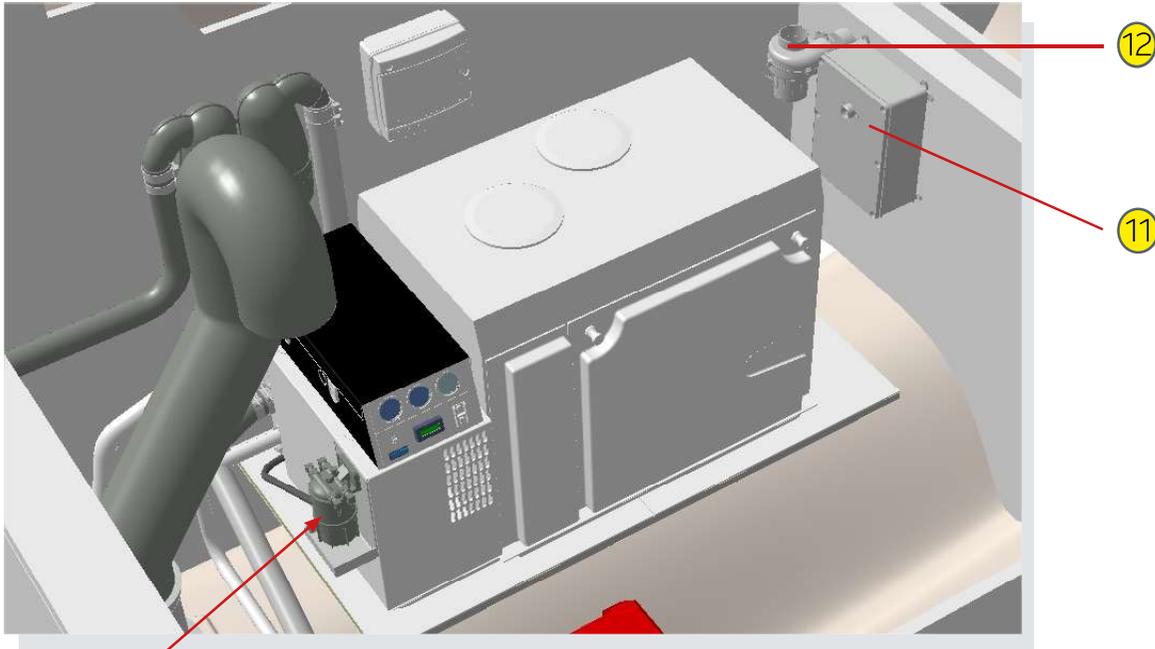
As an option, the boat is equipped with a 17.5 Kva 230 V / 50 Hz generator.

### Setup

- Check that the sea water intake valve is open.
- Check that there are no alarm codes.
- The equipment manufacturer's manual gives you detailed explanations of the operating procedure and all the steps to ensure proper function.



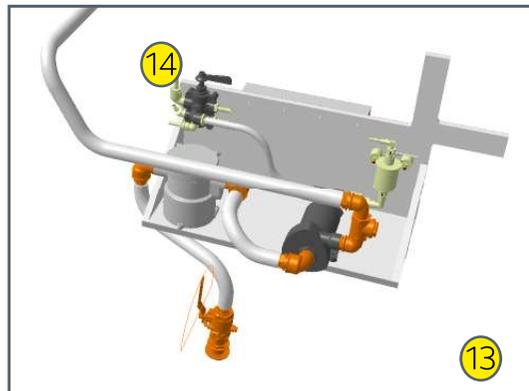
# 8 - ELECTRICAL SYSTEMS



5

12

11



14

13

Below-floorboard access in the forward cabin



13

# 9 - SYSTEMS, INSIDE EQUIPMENT

## 9.1 Fresh water system

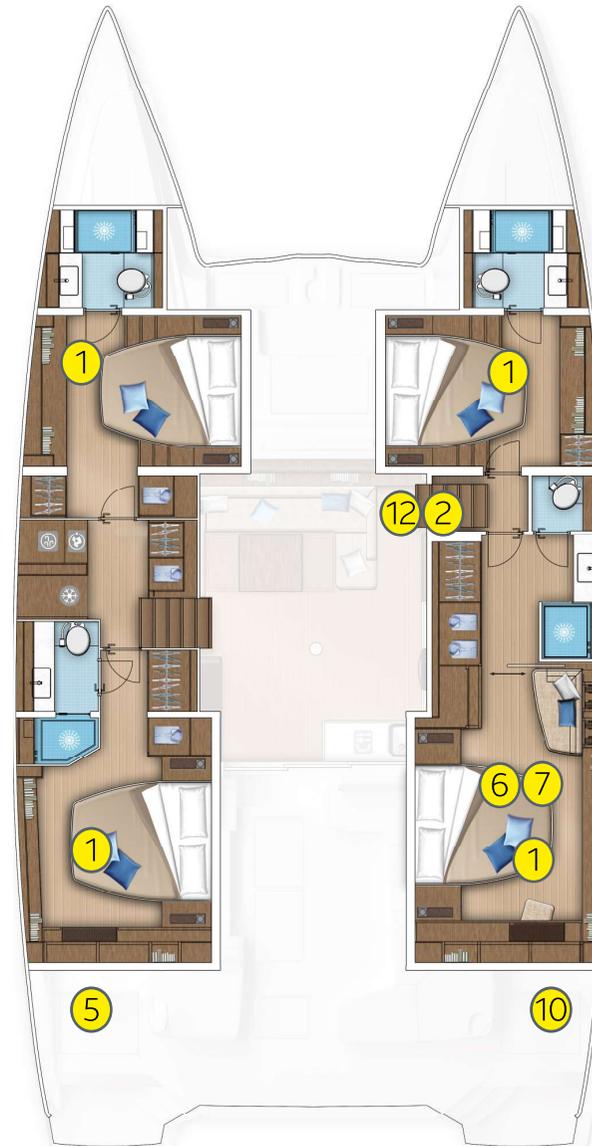
- Four 240 liter HDPE fresh water tanks(1) positioned below the hallway floors, with level indicators on Scheiber/Navicolor screen in the starboard companionway(2).
- Equipped with 2 deck fillers on the port and starboard sides (3) and a shore fresh water supply on the port side of the swim platform (4) (optional).
- The shore fresh water supply (4) enables you to use the shore pressure directly on board without using the water unit (5). It also enables you to fill the tanks.
- Hot water production is ensured by a 220 V, 60 L capacity water heater (6).
- In the 6 cabin layout, the 60L hot water tank is replaced by a 100L hot water tank (7) positioned under the floorboards of the hallways.

- 1 240 L tank
- 2 Tank levels on Scheiber screen
- 3 Deck filler
- 4 Shore fresh water supply (optional)
- 5 Water unit
- 6 60 L water heater (starboard)
- 7 100 L water heater to replace the 60L on starboard (6 cabin layout)
- 8 Fresh water deck washing supply (optional)
- 9 Sea water / fresh water deck supply Fresh water on network, sea water by dedicated pump (optional)
- 10 Fresh water maker (optional)
- 11 Cold / hot water deck shower
- 12 Water unit start-up panel

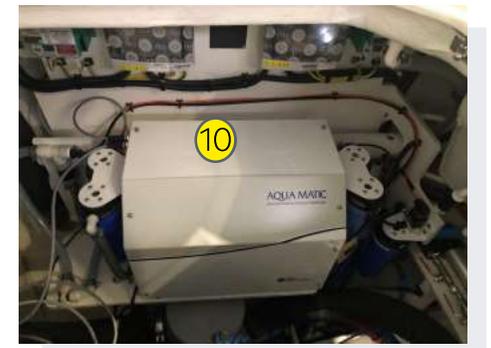
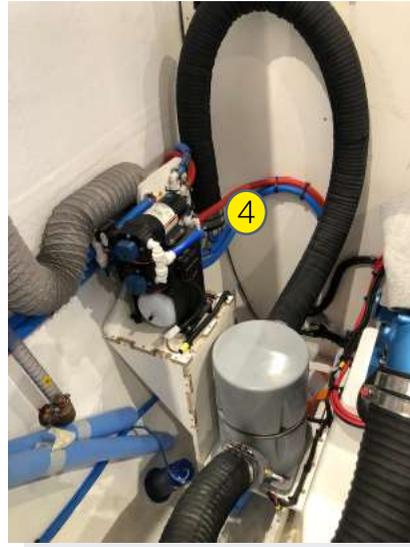
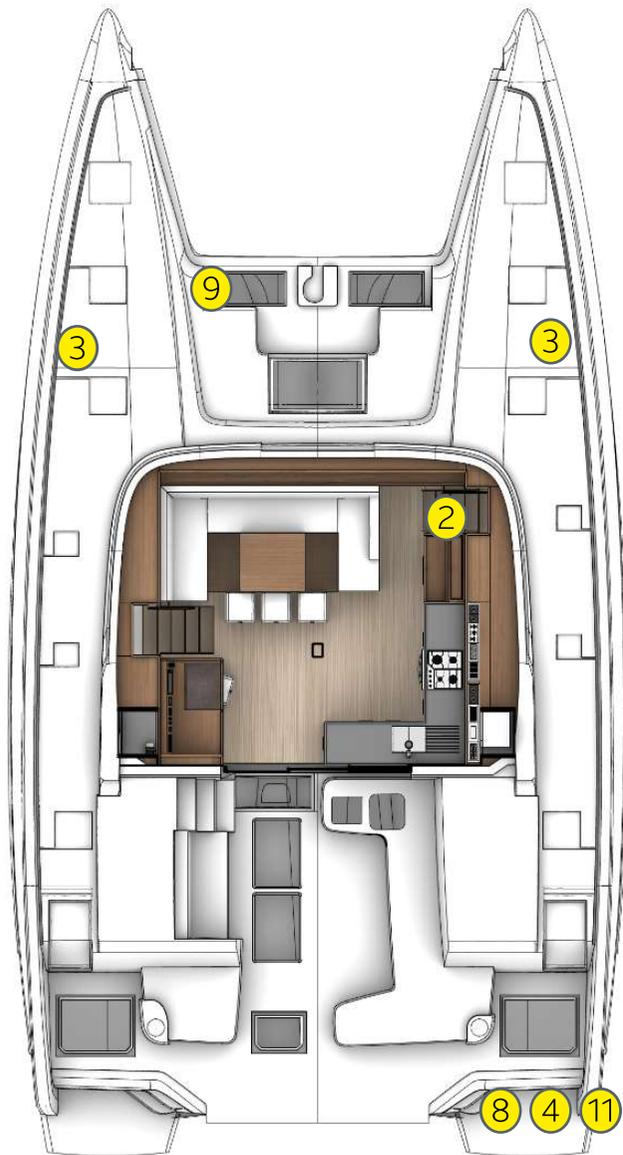


### WARNING

The tanks may contain leftovers that the pumps cannot reach due to the boat's trim or the design of pick-up tubes. You are advised to maintain a water reserve.



# 9 - SYSTEMS, INSIDE EQUIPMENT



## Starting up

Start the water unit by turning the control to "On" on the panel located in the starboard companionway. (12)

# 9 - SYSTEMS, INSIDE EQUIPMENT

## 9.2 Black water system

### 9.2.1 Characteristics

In the 4 cabin layout,  
three standard tanks of 73 L  
and a 125 L tank in the owner's cabin are located  
along the hull sides.

In the 5 cabin layout,  
three 73L tanks per head  
and one 155L tank per head.

In the 6 cabin layout,  
two 73 L tanks per forward head,  
one 155 L tank for the aft starboard  
and midship starboard heads,  
and one 155 L tank for the aft port and midship port  
heads are located along the hull sides.

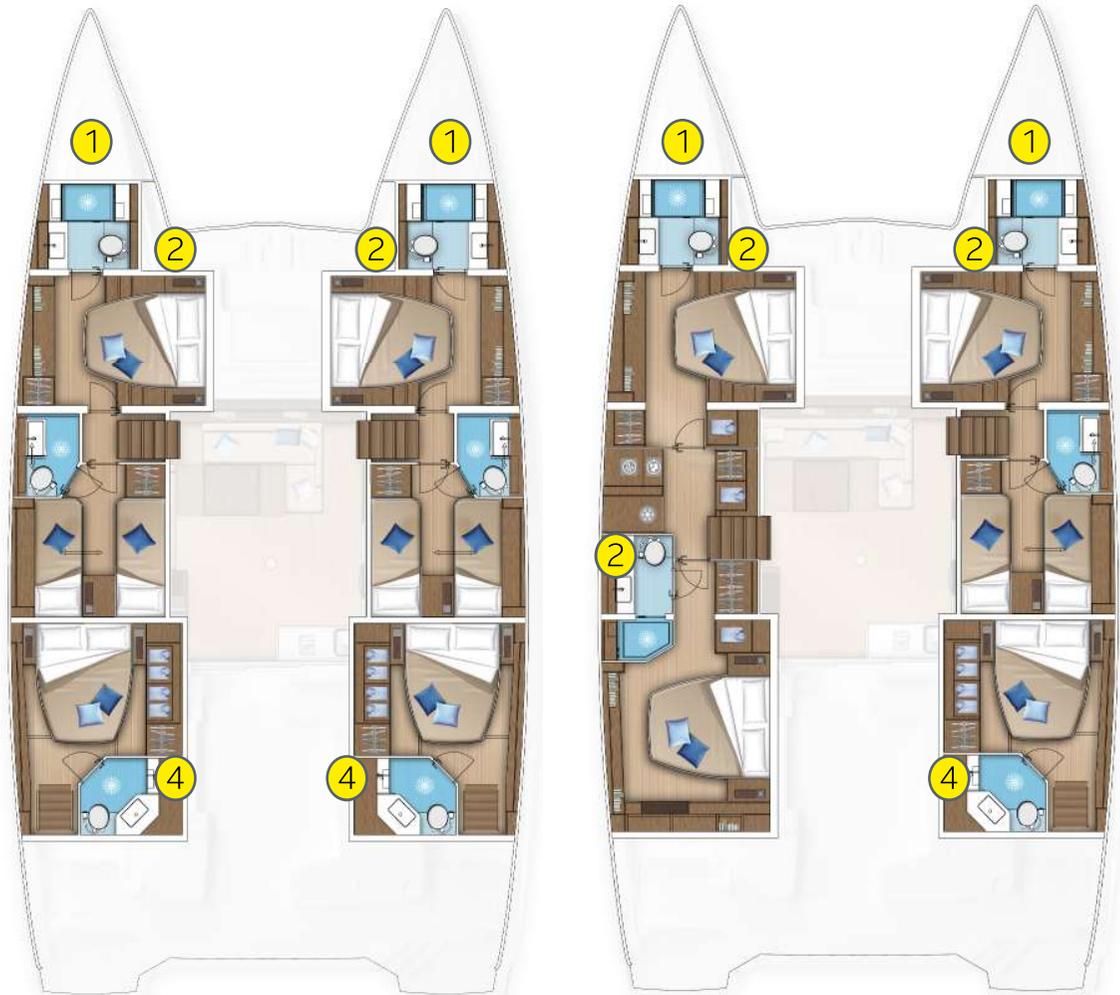
As an option, when the front bow is fitted, it is possible to  
have an additional 50 L tank.

For the suction, each tank has its own filler located on deck.

It may not be possible to use these capacities fully, depending  
on the trim, the load, and the position of the possible draining points  
of the boat.

In the manual version, direct access allows you to visualize  
the fill level of the tank.

In the electric version, a high black water level is sent back to  
the electric toilet control (optional).

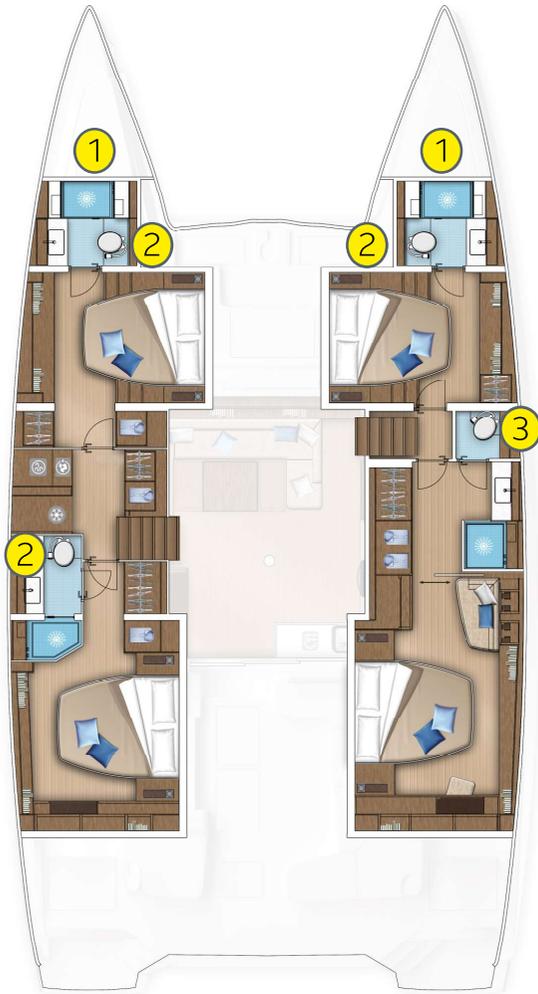


6 cabin layout

5 cabin layout

- |   |                      |
|---|----------------------|
| 1 | 50 L tank (optional) |
| 2 | 73 L tank            |
| 3 | 125 L tank           |
| 4 | 155 L tank           |

# 9 - SYSTEMS, INSIDE EQUIPMENT



4 cabin layout



## ATTENTION

The risk of unpleasant odours forming increases when the black water remains in the tank for a long time.

- Empty the tank whenever possible, and regularly, before it is full.
- Every time the tank is emptied put in about 5 liters of fresh water and add an appropriate additive detergent (available from chandleries).
- A very simple method is to add baking soda, which cleans and disinfects at the same time.

Before winterising, flush the tank with copious amounts of fresh water, filling it through the 'WASTE' deck filler, and then empty it completely.



## ATTENTION

- Keep yourself informed of the local regulations regarding the respect for the environment, and always follow rules of best practice.
- Follow the international rules against marine pollution (Marpol).

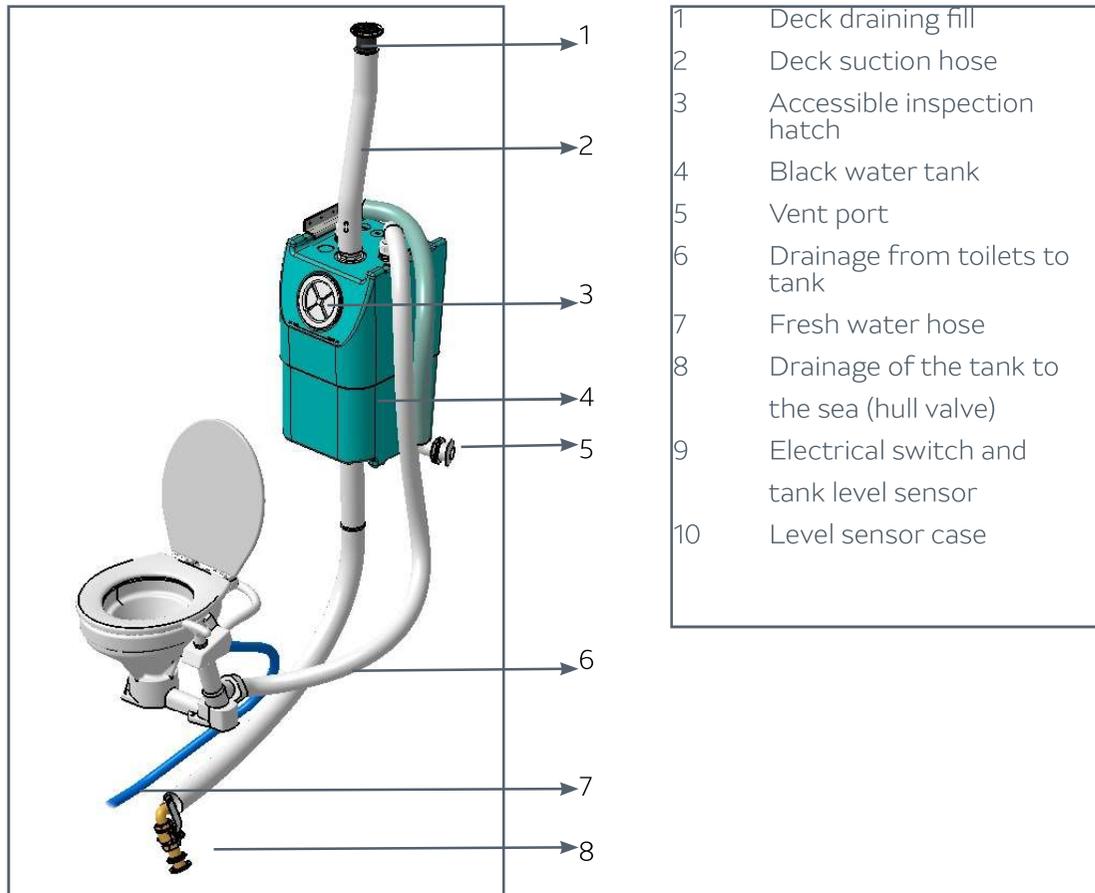
# 9 - SYSTEMS, INSIDE EQUIPMENT

## 9.2 Black water system

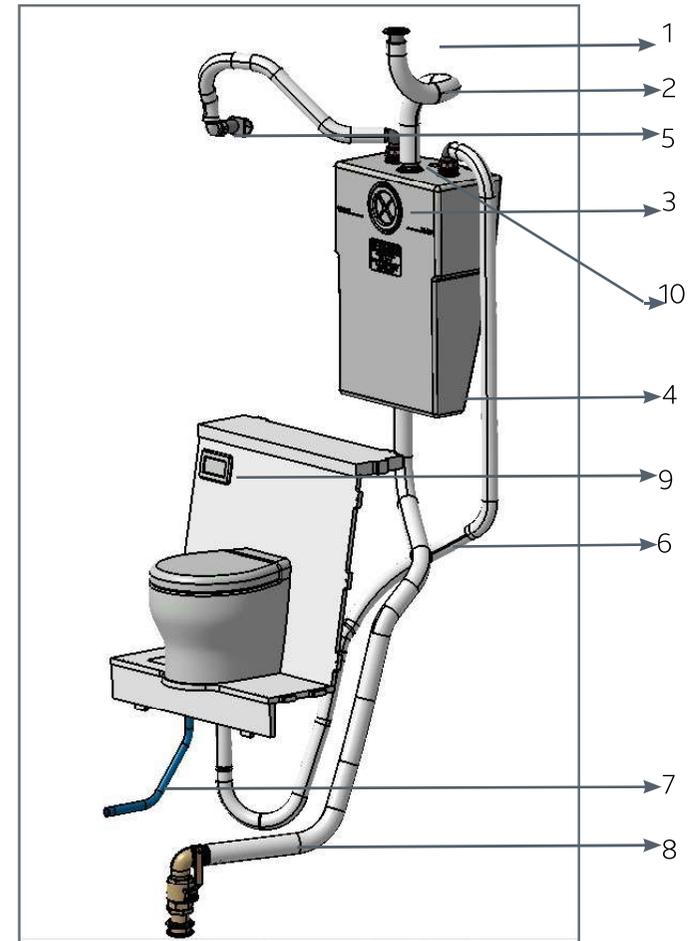
The WCs are emptied only into the black water tanks, which are in turn evacuated:

- either by pumping through the deck filler
- or by draining into the sea by gravity, through the valve.

### 9.2.2 Manual toilet operating operation



### 9.2.3 Electric toilet operation



# 9 - SYSTEMS, INSIDE EQUIPMENT

## 9.2.4 Recommendations



### NOTICE

Do not discharge the toilets or the retention tanks close to the coasts or in restricted areas. Use the pumping systems provided by harbors or marinas to empty the holding tanks before leaving.



### NOTICE

To avoid unloading the contents of the tanks near the coasts or in prohibited areas, it is possible to seal the discharge valve (on the backside behind the tank) with a hose clamp.



Fix the valve handle in the closed position to the sea cock with a plastic or metal clamp.

# 9 - SYSTEMS, INSIDE EQUIPMENT

## 9.3 Grey water tanks

As an option, the vessel is equipped with a grey water tank of 120 liters per hull (1) with a selector valve (storage or discharge). (2)

It may not be possible to use these capacities fully depending on the trim, the load, the position of the possible filling, and/or draining points of the boat.



### NOTICE

Make sure you know the local environmental regulations and follow the codes of best practice.



### NOTICE

Follow the international rules against marine pollution (Marpol).

Grey water from heads, kitchens, and other water points is emptied (except the flybridge sink) directly by gravity into the sea, or into the grey water tanks, using the 3-way valve (2).

The grey water tanks are in turn emptied:

- either by pumping: deck fill (3),
- by discharge to the sea, or drainage pump (4) that can be managed from the Scheiber / Navicolor screen.
- the level of the tanks is shown on the Scheiber / Navicolor screen.

Rinse the system after each use: fill the tank with fresh or sea water and empty it. Use domestic cleaning products.

The whole system has to be drained when the boat is stopped and the temperature is negative.



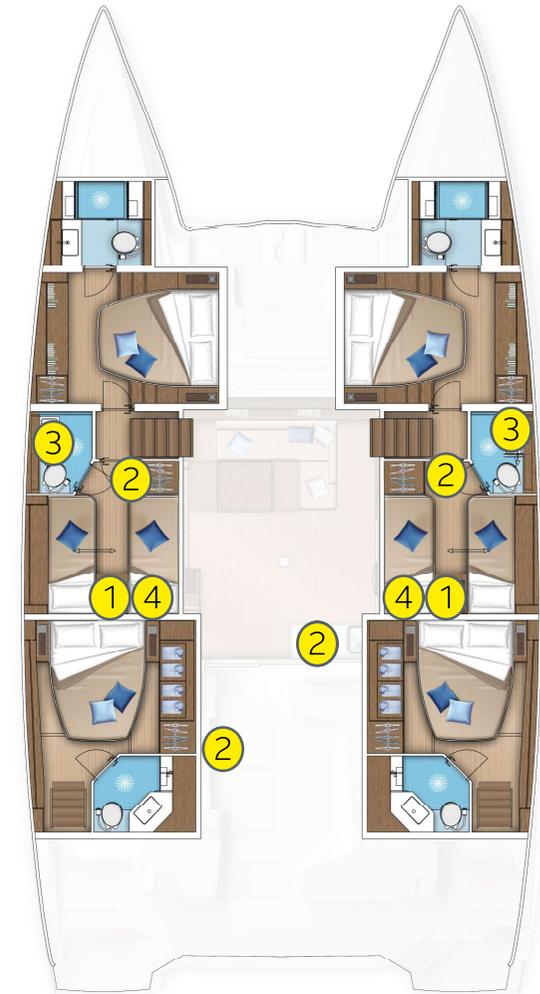
### NOTICE

Do not pump out the toilets or the contents of the black water tank near the coast or in areas where this is forbidden. Use the pump-out facilities available in ports or marinas to empty the contents of the black water tanks before leaving port.



### NOTICE

To avoid unloading the contents of the tanks near the coasts or in prohibited areas, it is possible to seal the discharge valve (on the back behind the tank) with a hose clamp. See the principle illustrated in the previous chapter. It is also possible to seal the selector valve.(2).



# 9 - SYSTEMS, INSIDE EQUIPMENT

- 1 Grey water tank
- 2 Selector valve
- 3 Deck filler
- 4 Drain pump
- 5 Scheiber/Navicolor screen



## WARNING

When emptying the tank, make sure the dedicated valve is in the open position (the one closest to the pump).

# 9 - SYSTEMS, INSIDE EQUIPMENT

## 9.4 Gas system

### 9.4.1 Recommendation

- Close gas supply line and bottle valves when devices are not in use, before filling, and immediately in case of emergency.
  - Close valves before changing bottles, and immediately in case of emergency.
  - Make sure the device's valves are closed before opening the bottle's valve.
  - Perform regular leak tests on the gas system. Check all connections for leaks using manual leak detection, using soapy water or a detergent (with the burner taps closed and the installation and gas bottle taps left open).
  - Should a leak occur, close the bottle valve and repair the system before putting it back into service. Repairs should be made by a qualified person.
  - Do not obstruct access to any part of the gas system in any way.
  - Make sure that empty bottle valves are closed and disconnected. Protective covers, lids, or caps must be held in place. Spare gas bottles must be stored in LPG bottle lockers or compartments with a ventilation system to the outside, or stored outside the boat, protected from weather and mechanical damage, and from which escaping gases can only be vented towards the outside of the boat.
- Do not use the lockers or the gas bottle lockers to store any other equipment. Check the vent pipes at least once a year. Replace them if they have deteriorated or split.
  - Be careful not to damage the bottle thread on which the regulator valve is mounted. Check the condition of the regulator valve every year and change it if necessary. Use regulator valves that are identical to those installed.



#### **DANGER**

TO AVOID ANY RISK OF ASPHYXIATION, PROVIDE ADEQUATE VENTILATION WHEN THE COOKING APPLIANCE IS IN USE. DO NOT USE AS A HEATER.



#### **WARNING**

Never leave the boat unattended when open flame appliances using LPG are in use.



#### **WARNING**

Do not smoke or use a naked flame when replacing LPG bottles. Close empty bottle valves before disconnecting them for replacement.



#### **WARNING**

Do not modify the boat's LPG system. Installation, modification, and maintenance should be carried out by a qualified individual. Have the system checked at regular intervals, or as prescribed by national requirements.

# 9 - SYSTEMS, INSIDE EQUIPMENT



## WARNING

Fuel-burning equipment with a naked flame consumes the oxygen in the cabin and release residue in the boat. Do not use a hotplate or an oven to heat the living areas. Ventilation is necessary when this equipment is used. Open the designated vents when using this equipment. Ventilation requirements have been calculated for LPG appliances as installed. Additional vents can be necessary if other appliances are used simultaneously.



## WARNING

If a leak is detected, close the main LPG supply valve and do not use LPG. Do not use ammonia-based solutions when manually testing for leaks.



## WARNING

Never use a naked flame to check for leaks.



## WARNING

Do not use an installation with a leak before it has been inspected and repaired by a qualified professional.



## ATTENTION

Do not use gas lamps in the boat.



## ATTENTION

When using the appliances, it is recommended that the aft bay or side door be ajar to ventilate the space.



## ATTENTION

Do not install free-hanging curtains or other fabrics near or above the cooking appliances or other equipment with a naked flame.



## ATTENTION

Regular inspections of the hoses and connections in the LPG system should be carried out at least annually, and they should be replaced if signs of deterioration are found.



## ATTENTION

If the stove is not suspended, it should not be used when significant heeling or continuous listing are likely.



## ATTENTION

Please note that the above tests performed by the user do not replace a check of the LPG system by a qualified professional.

# 9 - SYSTEMS, INSIDE EQUIPMENT



## ATTENTION

The LPG system should be leak tested before each use as follows:

a) **If the LPG system is equipped with a pressure gauge, before each use**

- Close the appliance valve,
- Open the LPG bottle valve,
- Allow the pressure gauge to stabilize,
- Close the LPG bottle valve
- Observe the pressure indicated by the pressure gauge near the LPG bottle for 3 minutes,

The pressure indicated by the pressure gauge should be constant if there is no leak in the system.

The pressure gauge only indicates vapour pressure, which is a constant at a given temperature. It gives no indication of the amount of LPG remaining in the bottle.

b) **If there is a bubble leak detector, use it according to the manufacturer's instructions.**

If an LPG leak is detected or suspected, immediately take the following measures:

- Disconnect the LPG supply from the main supply valve(s).
- Extinguish all naked flames and other sources of ignition (heaters, cooking appliances, pilot lights, etc.).
- Do not operate electrical switches.
- Evacuate the area if possible.

## 9.4 Gas system

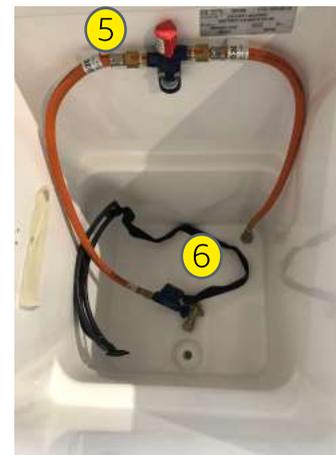
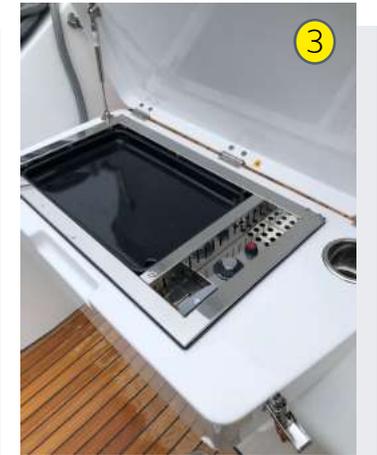
### 9.4.2 Gas system layout

- The storage locker for a gas bottle (6Kg or 13Kg) is accessible on the starboard rear seat of the aft cockpit. The locker can accommodate one bottle.
- Type of LPG to be used: Butane or Propane, pressure 38-30/37 mbar pressure.
- In the «plancha» option, a second locker is accessible on the portside bench seat of the aft cockpit. This locker can also hold a bottle.
- The empty bottle cannot be refilled. It must be replaced.
- Close the gas valve, and disconnect the pressure gauge from the bottle to be replaced.
- Replace the new full bottle, making sure that it is securely in place in the locker to avoid any risk of rolling while sailing.
- Replace the pressure gauge gasket at the slightest sign of wear or crushing (according to the regulator model).
- Reconnect the pressure gauge to the bottle head and open the valves (circuit and bottle insulation).
- Prime the gas system by pressing the valve on the pressure gauge.
- The shut-off valves for the kitchen are accessible behind the drawer, behind the gas hob in the kitchen.
- The shut-off valve for the plancha is located directly on the bottle..

# 9 - SYSTEMS, INSIDE EQUIPMENT



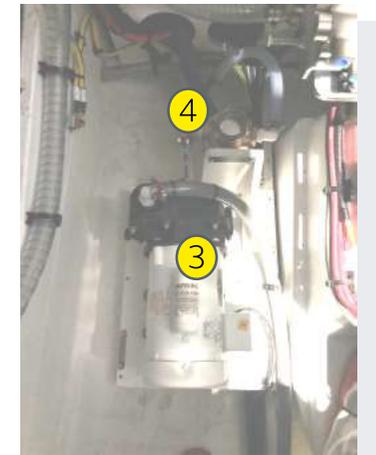
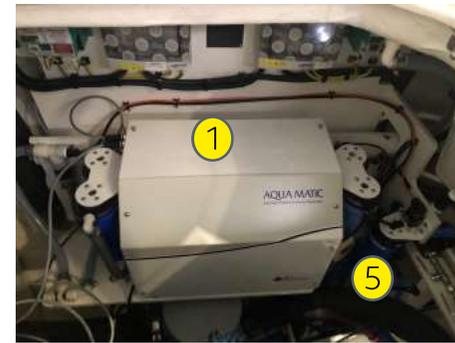
- 1 Gas bottle compartment
- 2 Gas bottle compartment with plancha option
- 3 Plancha option
- 4 Galley shut-off valve
- 5 Priming system in the gas bottle locker
- 6 Pressure gauge



# 9 - SYSTEMS, INSIDE EQUIPMENT

## 9.5 Watermaker option

- As an option, the vessel is equipped with a watermaker, with a capacity of 280 L / H - 230 V, located in the starboard engine room (1);
- A sea water pump (3) and a sea water intake valve (4);
- Start-up screen in the starboard companionway (2);
- A valve for selecting the tank to be filled (5) (port or starboard) that can be controlled from the Scheiber / Navicolor screen (6) (only when the watermaker is powered).



### Setup

- Check that the sea water intake and discharge valve are open.
- Check that there are no alarm codes.
- The equipment manufacturer's manual gives you detailed explanations on the operating procedure for proper function.
- Select the tank to be filled from the Scheiber / Navicolor screen.

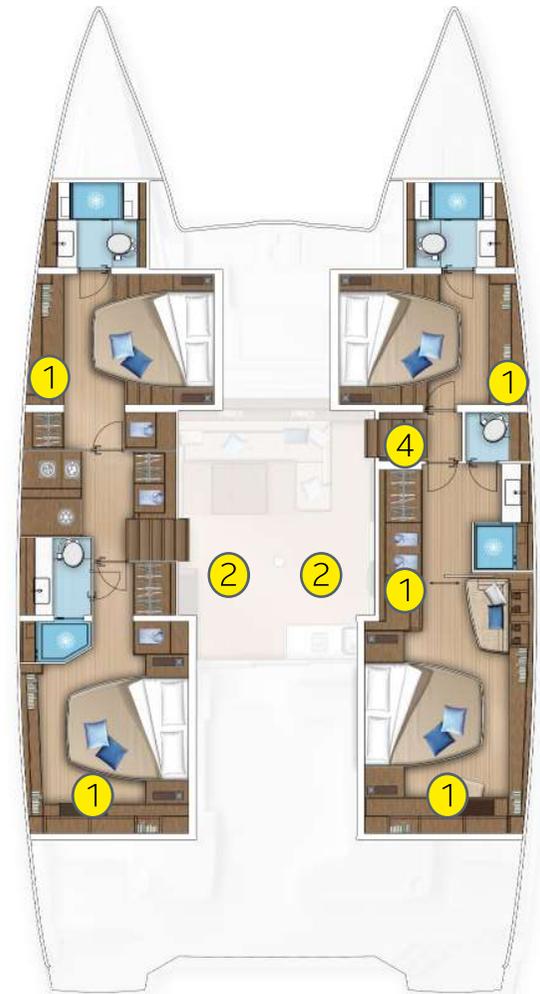
# 9 - SYSTEMS, INSIDE EQUIPMENT

## 9.6 Air conditioning option

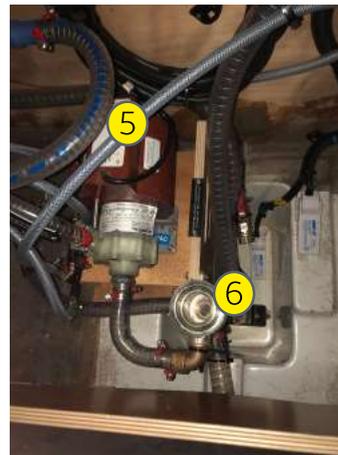
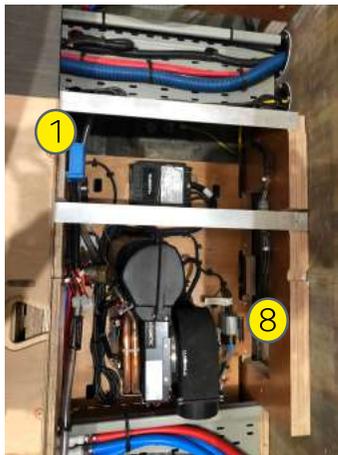
### 9.6.1 Layout

- In the 4-cabin layout, a total air conditioning unit of 76 K BTU
- In the 5-cabin layout, a total air conditioning unit of 76 K BTU
- In the 6-cabin layout, a total air conditioning unit of 84 K BTU
- As an option, the forward bow can also be air-conditioned.

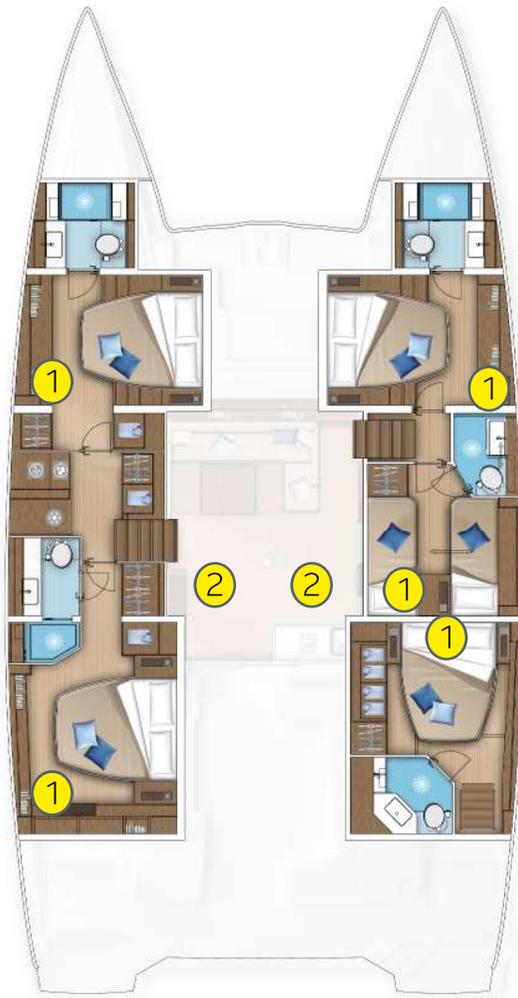
1	8 000 BTU unit heater
2	18 000 BTU unit heater
3	Control panel (one per unit heater)
4	Electrical box
5	Seawater pump
6	Filter
7	Air conditioning / AC circuit panel
8	Condensate discharge pump to sea cock



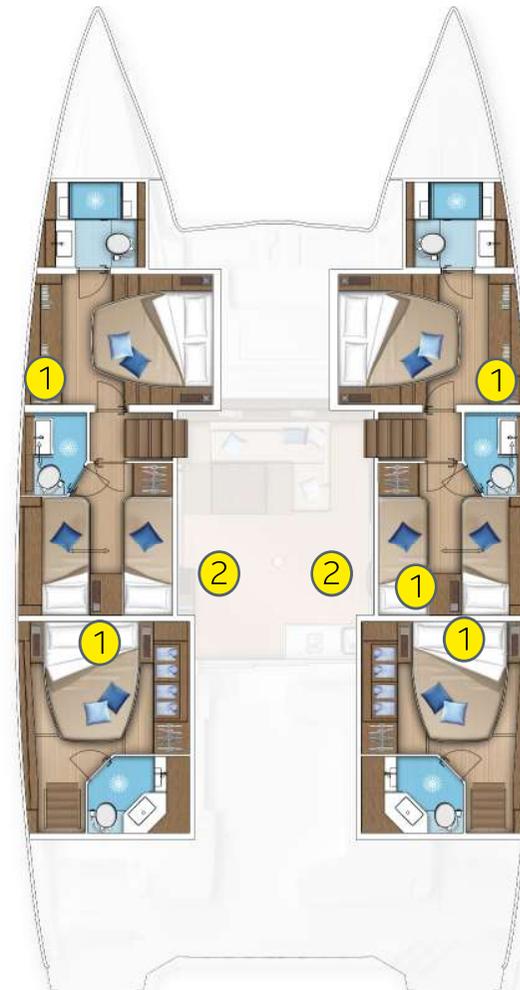
4 cabin layout



# 9 - SYSTEMS, INSIDE EQUIPMENT



5 cabin layout



6 cabin layout

- |   |                        |
|---|------------------------|
| 1 | 8 000 BTU heater unit  |
| 2 | 18 000 BTU heater unit |

## Setup

- Check that the sea water intake valve is open.
- Use the switch in the starboard companionway to select the power source (shore power or generator).
- If using shore power: plug into the shore power socket;
- If using the generator: Before turning on the air conditioning, leave the generator running for about 3 minutes.
- The equipment manufacturer's manual gives you detailed explanations on the operating procedure and all the steps to ensure proper function.

## Turning on the air conditioning:

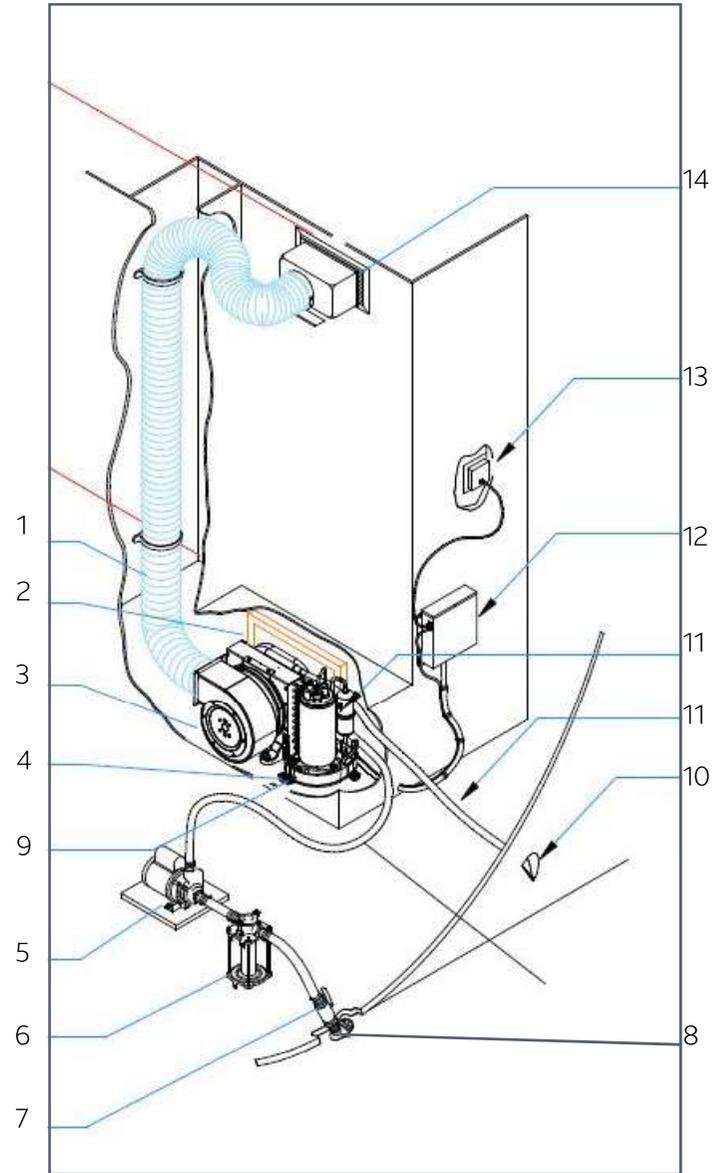
- Switch the air-conditioning circuit-breakers ON.
- Select the temperature of each compressor using the control units fitted in each area of the boat.

# 9 - SYSTEMS, INSIDE EQUIPMENT

## 9.6 Air conditioning option

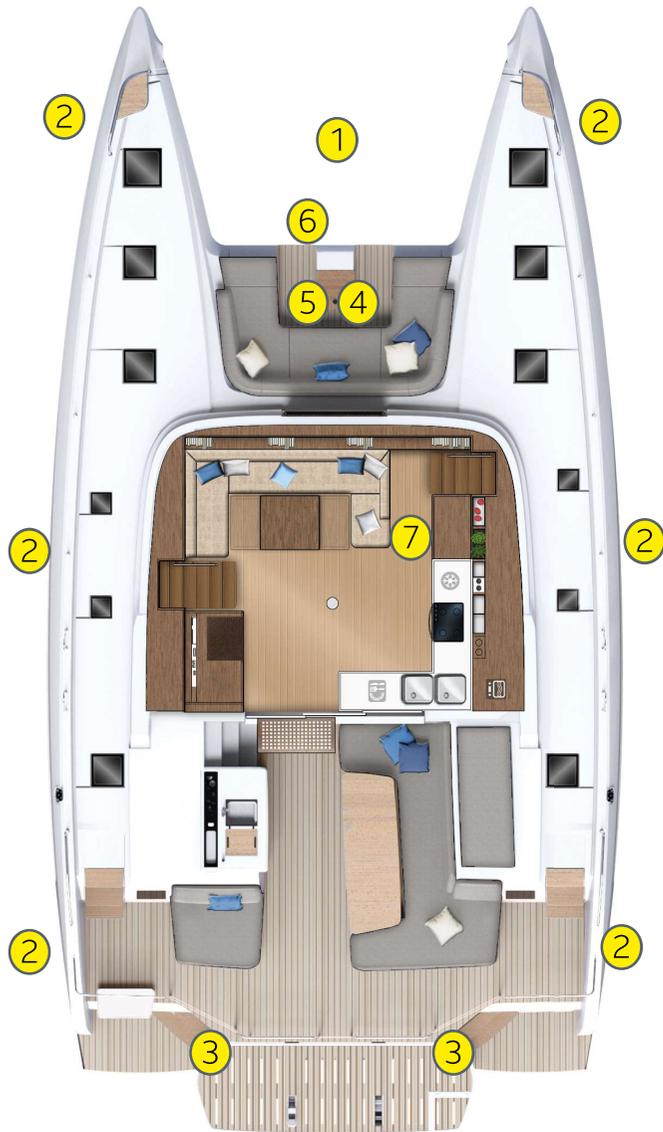
### 9.6.2 Operation

- |    |                            |
|----|----------------------------|
| 1  | Insulated housing          |
| 2  | Air intake vent/filter     |
| 3  | Compressor unit            |
| 4  | Mounting bracket           |
| 5  | Sea water pump             |
| 6  | Sea water filter           |
| 7  | Valve                      |
| 8  | Strainer sea cock          |
| 9  | Sea water intake hose </td |
| 10 | Sea cock                   |
| 11 | Sea water discharge hose   |
| 12 | Electrical box Control     |
| 13 | Panel                      |
| 14 | Air outlet vent            |

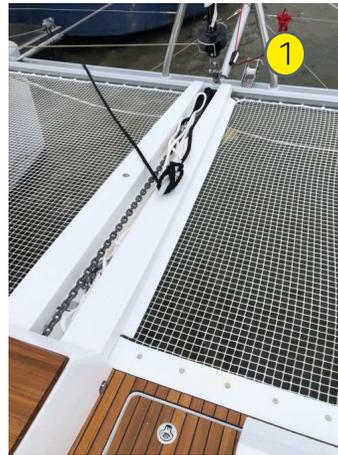


# 10 - ANCHORING, MOORING, TOWING

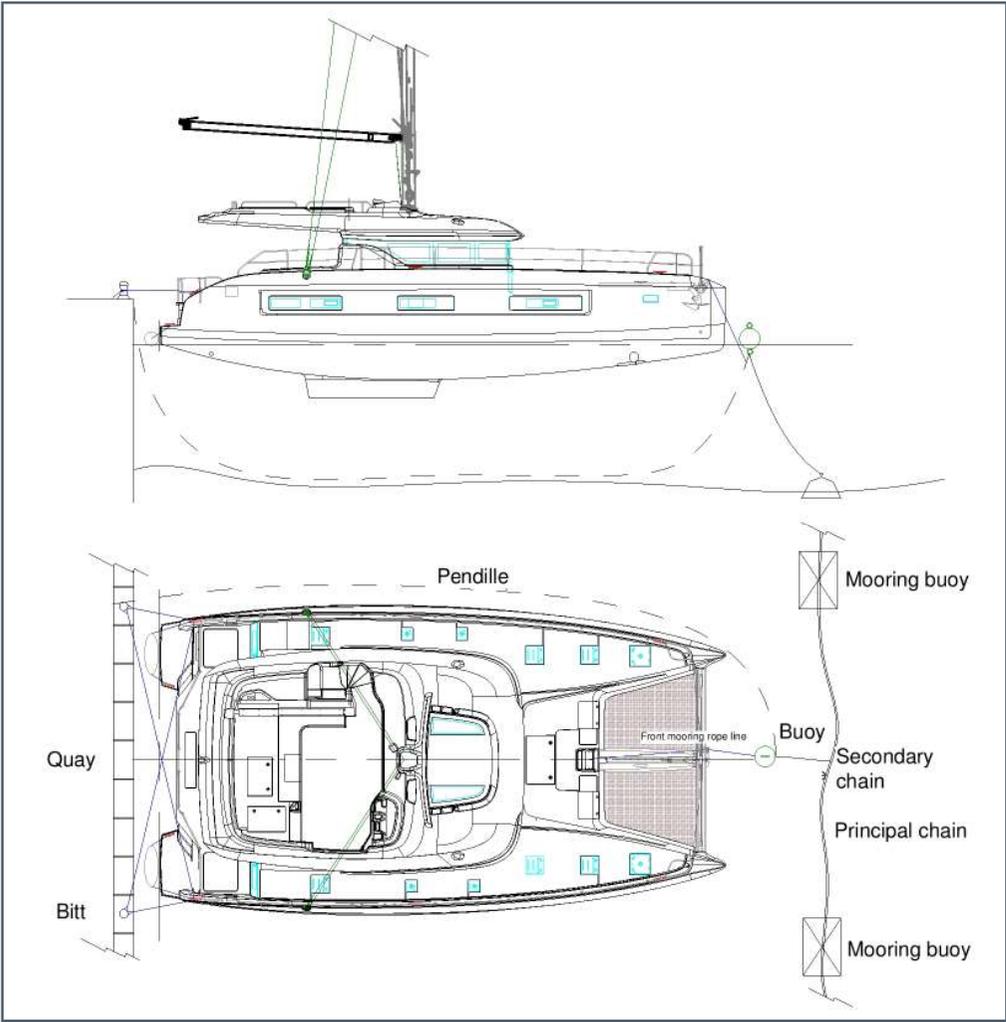
## 10.1 Anchoring, mooring



- 1 Composite compression beam with integrated chain run and 1 mooring cleat
- 2 400 mm aluminum mooring cleat
- 3 300 mm aluminum mooring cleat
- 4 24 V 2000 W electric vertical windlass, on-deck, 12 mm chain wheel
- 5 Windlass remote control
- 6 Access to the windlass and the chain locker
- 7 Windlass control at the helm station and chain counter

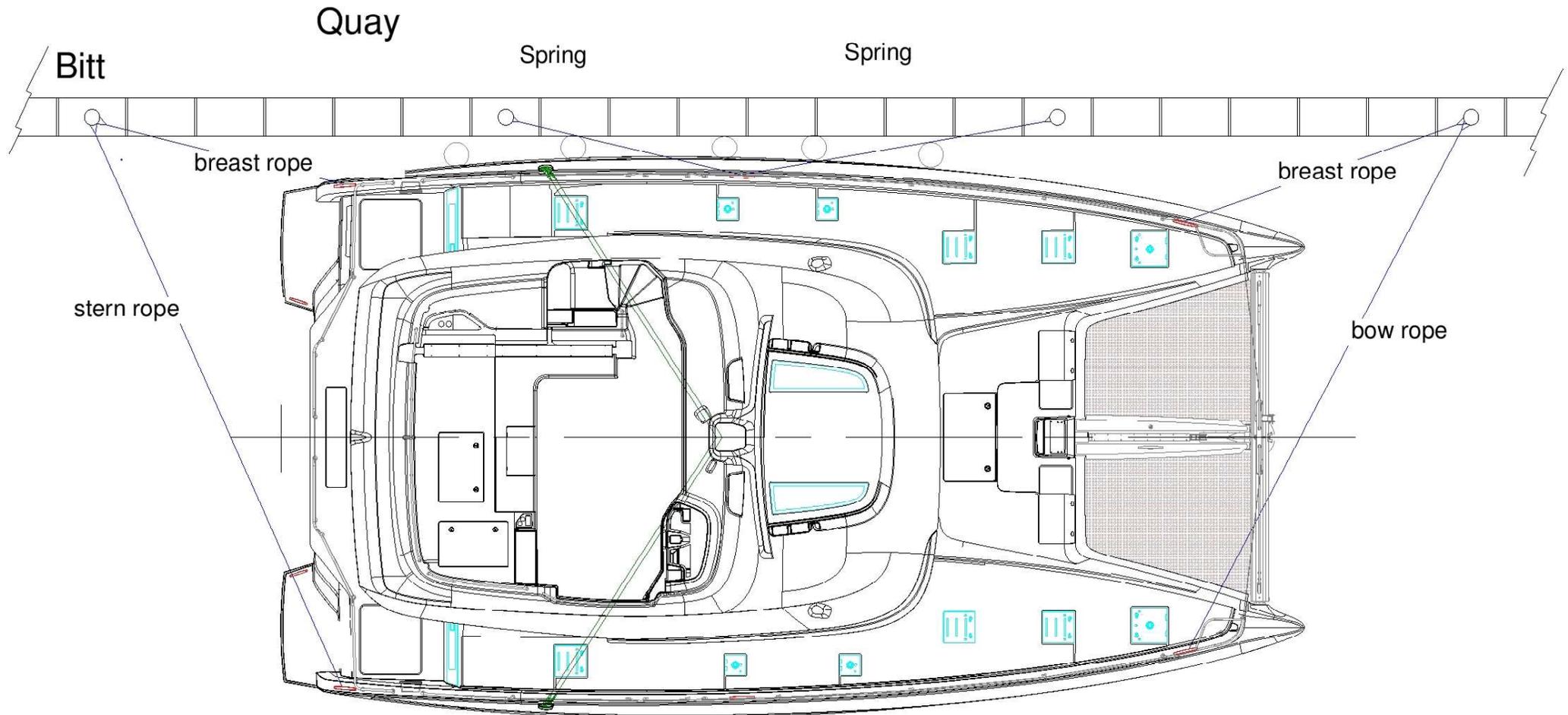


# 10 - ANCHORING, MOORING, TOWING



Stern line mooring

# 10 - ANCHORING, MOORING, TOWING



Dockside mooring

# 10 - ANCHORING, MOORING, TOWING



## 10.2 Anchoring

The electric windlass runs on 24 V on-board batteries.

Operate the windlass from the helm station (chain counter option) or by its control in the portside locker of the forward cockpit.

If the electric windlass does not work, check its circuit breaker and fuse located in the portside locker of the forward cockpit. Refer to the manufacturer's manual for windlass maintenance.

The instructions for starting the equipment assume that the energy source necessary for operation is active.

### **Preparation for anchoring**

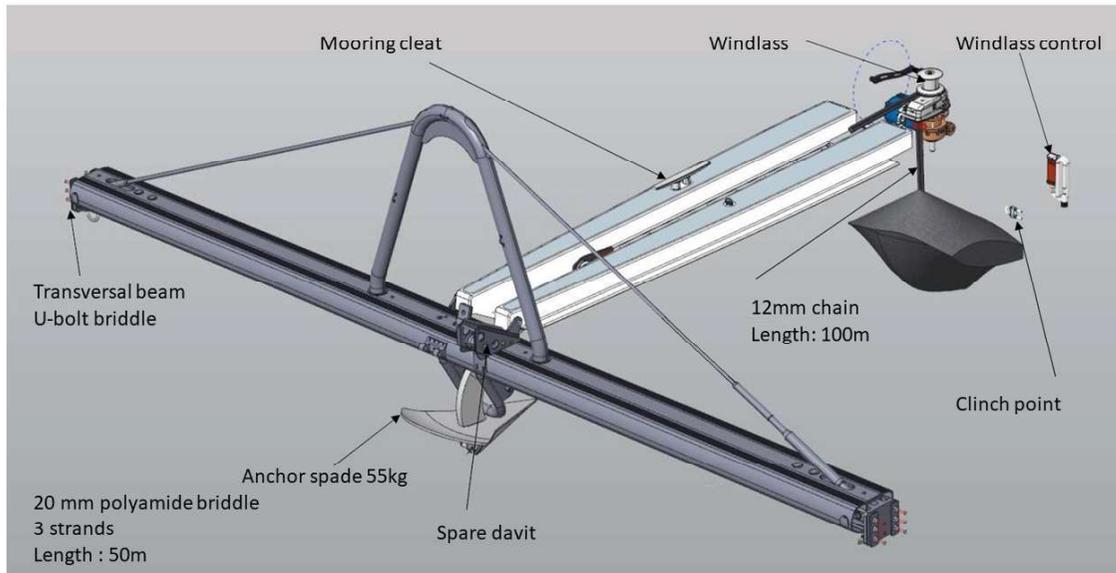
- Install the bridle by fixing it to the chain plates located at each end of the fore beam.
- Put the bridle through the compression beam roller.
- Shackle the bridle to the central cleat while lowering the anchor chain.

### **MOORING**

- Before anchoring, check the depth of water, the power of the current, and the nature of the seabed.
- Position the boat into the wind and stopped.
- Let the chain go slowly in reverse.
- Secure the chain on the bridle.
- Release the chain until the bridle is under tension.
- Check the swing radius once the boat is at anchor.

The 55kg anchor model should never be replaced by another model or weight. It is a model with high holding power, approved by the BUREAU VERITAS. The chain must also be 12 mm diameter.

# 10 - ANCHORING, MOORING, TOWING



## Raising the anchor

- Check that the chain is in position on the wheel.
- Turn the windlass to the up position.
- Use the boat's engine to move slowly towards the position of the anchor (do not use the windlass as a winch to move the boat forward).
- Unhook the bridle.
- Visually check the last few meters until the anchor makes contact with the anchor roller.
- Check the position of the anchor on the beam fitting.

After each cruise rinse the windlass and anchor chain or rope with fresh water.

Use the winch handle to loosen the windlass when anchoring.



## NOTICE

Adding a marker in the last few meters of the chain (paint, rubber band, etc.) facilitates the manoeuvre and prevents an abrupt rise of the anchor.



## NOTICE

Secure the chain with a shackle or a line attached to the cleat if the anchor is not moored along its entire length. The windlass chain wheel must not be used to tie up the mooring.



## ATTENTION

Windlass operations are dangerous:

- Keep the mooring line free at all times and manoeuvre carefully, wearing gloves and shoes.
- Make sure that no one is leaning against the windlass when using the control.

# 10 - ANCHORING, MOORING, TOWING

## 10.3 Towing

- It is the owner/operator's responsibility to ensure that mooring and towing lines, anchor chains and lines, and anchors are suitable for the vessel's intended use.
- It is the owner's responsibility to use a life line when manoeuvring at bow and stern mooring posts.

Indeed, the breaking load of lines and chains must not exceed 80% of the breaking load of the corresponding attachment point:

For L 400 mm cleats, breaking load of 7.9 T.

- or 6.3 Tons for towing, and bow and stern mooring (80 % of 7.9 T).

- **Towing and mooring must not be performed using the swim platform cleats (7.1T strength)**

In terms of rope diameter, according to suppliers for a 3-strand polyamide or polyester ropes:

8.5 Tons breaking load corresponds to a rope of approximately 20 mm.

- In addition, it is important that the owner considers the actions required when securing a towing cable onboard.
- For towing another boat in need of assistance, the attachment points on the stern are the mooring cleats. The owner will benefit from using a long bridle between the port and starboard cleats, to distribute the forces of the tow on both sides.
- The attachment points for being towed are the forward mooring cleats and the windlass. The owner will use a bridle to distribute the forces on the port and starboard cleats, as well as a rope on the windlass drum.



### WARNING

Always tow or be towed at low speed. Never exceed the maximum hull speed during a tow.



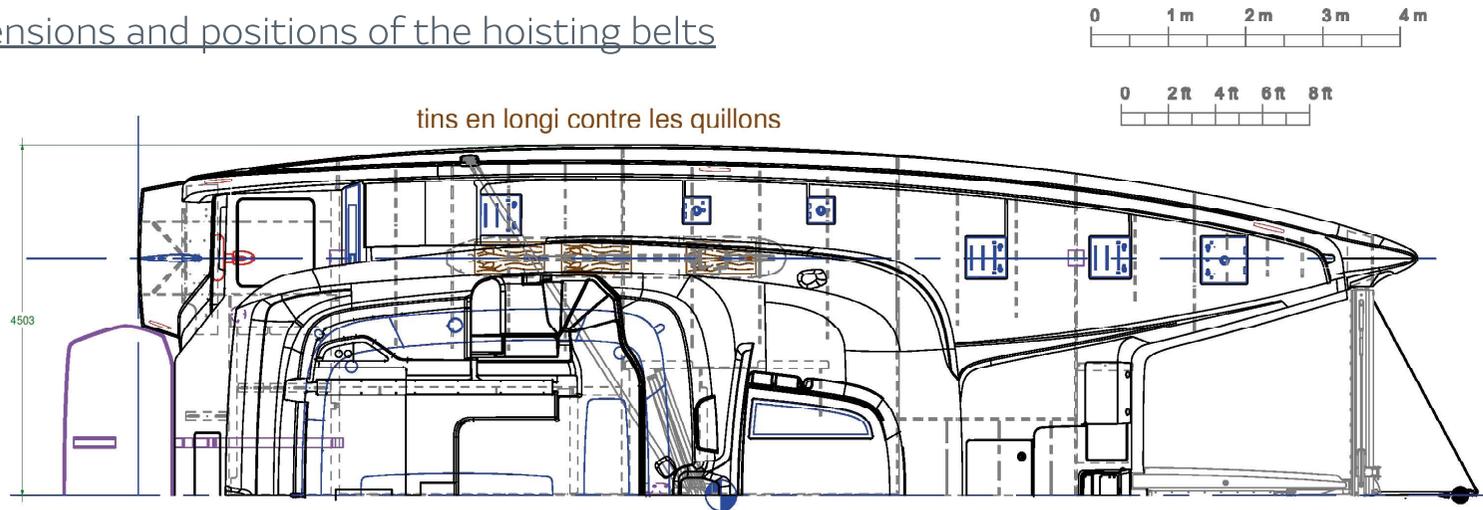
### WARNING

A towing cable must always be secured in such a way that it can be released under load.

- It is the owner/operator's responsibility to ensure that mooring and towing lines, anchor chains and lines, and anchors are suitable for the boat's intended use.

# 11 - TRANSPORT AND HOISTING

## 11.1 Diagram, dimensions and positions of the hoisting belts



### Grounding procedure :

Place the lifting belts in the indicated positions.

Add guys taken on the cleats to prevent the belts from slipping. Lift while controlling the front-back balance.

Place the boat on its keels (on towlines). Maintain the boat in its belts.

Place hold pillars at the front and at the back to secure the boat. Release the belts completely.

Securing the boat for cargo shipping: 2 x 20m width min 300 mm.

Tighten the belts at the level of the supports (use the mooring cleats).



### ATTENTION

Make sure that the boat is stable on its tow lines, both in length and width



### WARNING

Do not stand onboard or beneath the boat during hoisting.



### WARNING

Use a trailer adapted to the boat and its weight.



### NOTICE

Get a diver to intervene for the strainers and sea cocks.

Weights deducted for cargo loading

Fresh water + black water + grey water - 0 Fuel : remains 50 %

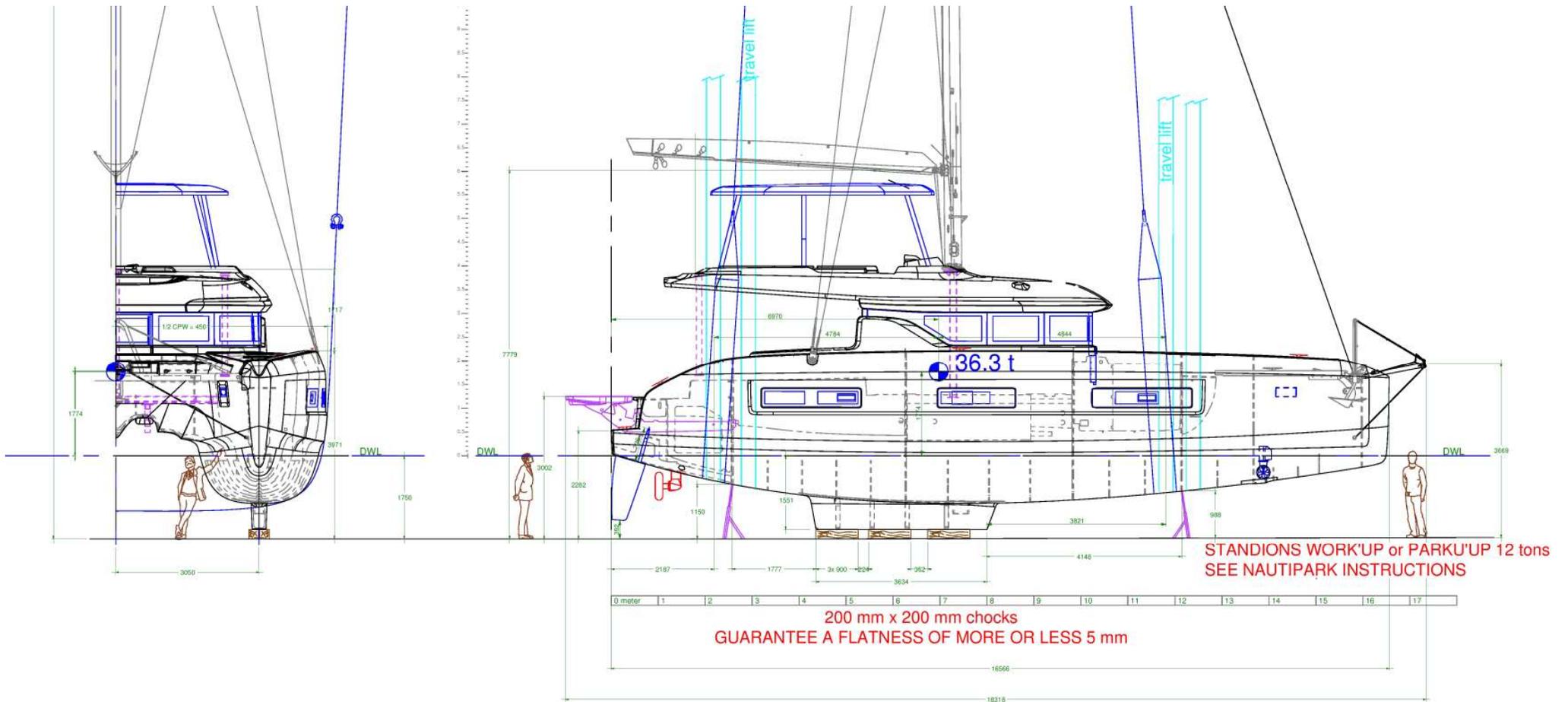
Personal belongings cabins - 0 Crew - 0

Supplies - 20 %

Freezer content - 0

**ESTIMATED MASS TO BE HOISTED = 36,3 T**

# 11 - TRANSPORT AND HOISTING



In trailer transport conditions: Mt 36.3T

# 12 - CHARTER FOR INSHORE AND OFFSHORE

## CHARTER FOR INSHORE AND OFFSHORE

Water is a living, fragile environment. It is also a valuable resource.

To protect this environment,

- I respect the sea and the rivers, I do not approach the protected sites, I limit my fishing activities to the authorized species and sizes, I watch the animals without touching them or disturbing them.
- Before mooring, I inquire about the nature of the bottom to avoid its degradation. I preferably use mooring buoys.
- I dispose of my household waste in containers, and my toxic waste, both solid and liquid, at the harbour waste disposal centre.
- I use the harbour sanitary facilities. I empty my black water tank in the pumping stations. I use the most environmentally friendly detergents.
- I make sure that all maintenance operations (boat, material, equipment) are carried out in an environmentally friendly manner. I handle all liquids that are likely to pollute with care when pouring..



## Serving boaters and marine professionals

The SNSM are on watch...

All sailors know that you can't fool around with the big blue sea... Despite the tremendous progress made by boat builders in terms of safety, an incident at sea is always possible, and you may one day need the "sauveteurs en mer"(SNSM).

Any time of the day or night, 7 days a week, 3,500 volunteers are ready to embark within half an hour to help those who are in trouble, and sometimes at the risk of their own lives!

It is thanks to the very tight network of its 255 stations in France and in the French overseas territories that the SNSM now provides nearly 50% of the rescue services in France.

At sea, you may need them, on land they need you...

Saving human lives is free, but the means used to do so can be expensive. The SNSM, who are increasingly recruited from among recreational boaters, need your help to maintain, upgrade, and replace their vessels (1 all-weather boat costs 5 million euros!).

So please lend your support, or even join these dedicated sailors, discreet and efficient men and women, men and women: contact the station manager closest to your boat's home harbour, or our head office in Paris.



### BETWEEN SAILORS...

- Before going to sea, inform your family and friends of your intentions.
- Find out about local conditions (weather, current, etc.).
- Have reliable VHF radio equipment and check it.
- Have children wear life jackets.

**A HUMAN LIFE IS PRICELESS..., YET A LIFEBOAT HAS A PRICE!**



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