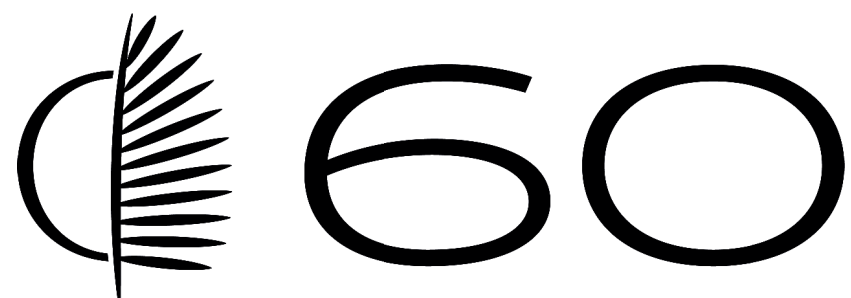


EC



## OWNER'S MANUAL

LAGOON

CONSTRUCTION NAVALE BORDEAUX



DECEMBER 2024/VERSON





# CONTENTS

## WELCOME ON BOARD

### 1. Introduction

1.1 Danger level and safety label	8
1.2 Hull valves opening/closing	9
Quarter-turn valves	
Handwheel valves and other valves On-off switch or battery cut-out switch	
Emergency Stop button	
Three-way control valve	

### 2. Specifications

2.1 Identification sheet of your boat	11
2.2 Design category	11
2.3 Technical specifications	12
2.4 Builder's plate	12

### 3. Safety

3.1 Risks of fire or explosion	
3.1.1 General information.	14
3.1.2 Fire fighting	15
3.1.3 Fire blanket	16
3.1.4 Portable fire extinguishers	17
3.1.5 Fixed fire extinguishers	20
3.1.6 Smoke detectors	22
3.1.7 Emergency exits	24
3.1.8 Fire evacuation ladders	26

3.2 Infiltration and stability	
3.2.1 Hull and deck openings	28
3.2.2 Hull holes	30
3.2.3 Drainage	36
3.2.4 Stability and buoyancy	44
3.2.5 Righting the boat after capsizing	44
3.3 Safety equipment	
3.3.1 Safety equipment	46
3.3.2 Prevention of man overboard and reboarding	50
3.3.3 Under engine manoeuvrability	52
3.3.4 Field of vision from the helm station	52
3.3.5 Navigation lights	54

### 4. Sails and rigging

4.1 Sail characteristics	55
4.2 Maintenance of the rigging	56
4.3 General deck layout	56
4.4 Reducing sail	60

### 5. Getting started before cruising

5.1 Introduction.	61
5.2 Getting started before cruising	61
5.3 Power	61
5.4 Verifications	61
5.5 Helm station	62

# CONTENTS

## 6.Engines

6.1	Tanks	64
6.2	Diesel 4JH80 Yanmar version	67
6.3	Direction for use	68
6.4	Engine starting procedure	70
6.5	Bow thruster (optional)	71

## 7.Steering system

7.1	General layout	72
7.2	Starting up	73
7.3	Maintenance	73
7.4	Back-up system	73

## 8.Electrical systems

8.1	24V / 220V warnings and recommendations	74
8.2	Procedure for switching on the on-board circuit	76
8.3	Leaving the boat	76
8.4	Emergency starting	77
8.5	General principle: AC/DC	78
8.6	principle: Multiplexing	81
8.7	principle: Audio-Video	82
8.8	General principle: Electronics	84
8.9	Equipment layout	86
8.10	Equipment layout-PORT ENGINE COMPARTMENT	88
8.11	Equipment layout-STARBOARD ENGINE COMPARTMENT	90
8.12	Equipment layout-UNDER NACELLE TECHNICAL COMPARTMENT	92

8.13	Equipment layout-PORT COMPANIONWAY	94
8.14	Equipment layout-STARBOARD COMPANIONWAY	96
8.15	Equipment layout-AFT STARBOARD COMPANIONWAY	98
8.16	Equipment layout-FLYBRIDGE	99
8.17	Generator layout	100

## 9.Systems, inside equipment

9.1	Fresh water	102
9.2	Black water	
	9.2.1 Specifications	106
	9.2.2 Electric toilet operation	108
	9.2.3 Recommendations	109
9.3	Grey water	110
9.4	Gas system	116
	9.4.1 Recommendation	116
	9.4.2 Layout	118
9.5	Fresh watermaker	120
9.6	Air conditioning	121
	9.6.1 Layout	121
	9.6.2 Operation	124

## 10. Anchoring, mooring, towing

10.1	Anchoring	126
10.2	Mooring	130
10.3	Towing	133

## 11. Transport and hoisting **134**

## 12. Charter for Inshore and Offshore **136**

## 13. The SNSM. **137**

## 14. Appended diagrams **138**



# 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 navigation schools or qualified 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 safety 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 Manual 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 manufacturer 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;
- Always adjust the speed and heading of your boat according to the sea conditions;
- 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 of the boat, as a courtesy and as a safety measure for yourself and others. Respect speed limits when zones are defined;
- Respect priority rules defined by the navigation regulations and enforced by the COLREG;
- 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. Future versions of this manual will show any possible modifications as required.

As part of our commitment to continually improving our products, Construction Navale Bordeaux reserves the right to modify our design, outfitting or equipment as we deem necessary. The specifications and information given are not contractual and may be modified without prior notice or updates.

This owner's manual is written in several languages. French is the authentic reference language.

This owner's manual has been drafted and edited by CONSTRUCTION NAVALE BORDEAUX shipyard. Any reproduction of this manual, direct or indirect, provisional or permanent, by whatever means, whether in whole or in part, as well as any modification by third parties for commercial reasons, is forbidden.

## 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.



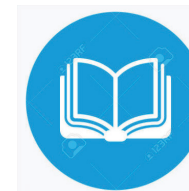
### WARNING

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.



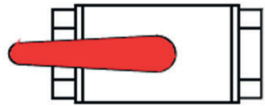
### NOTICE

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

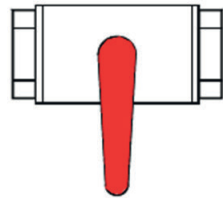
## 1.2 Hull valves opening/closing

### 1.2.2 Valves

- 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.



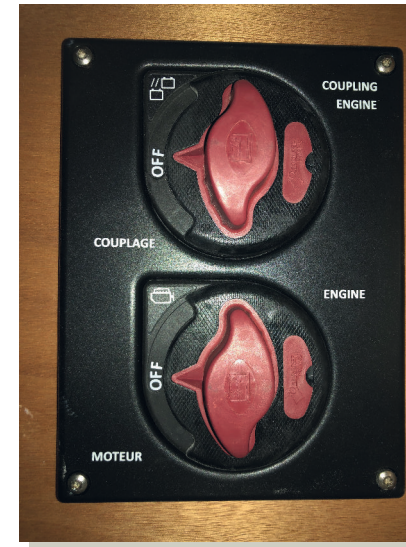
Valve open



Vanne closed

- On-off switch or battery cut-out switch

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



- Emergency Stop button

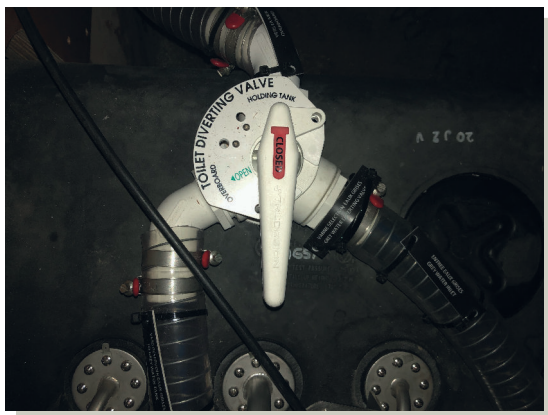
To turn off the system, hit the button.  
To restart the system, turn the knob in the direction of the arrow (clockwise) to unlock it.



# 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 LAGOON 60
- DESIGN CATEGORY A
- MAIN PROPULSION MEANS SAIL
- MAXIMUM RECOMMENDED POWER 2 x 150 HP Yanmar sail drive  
4LV150 YANMAR with SD15 ZF sail drive
- CERTIFYING ORGANISATION NUMBER CE0607
- CERTIFICATION A14 B14 C20 D20



### 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.

## 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 32m/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 4m.

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 27m/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 2m.

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 18m/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 0.3m, and occasional waves of 0.5m 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 12m/s.

# 2-SPECIFICATIONS

## 2.3 Technical specifications

• Length overall (L.O.A.)	19.77m
• Hull length (H.L.)	18.27m
• Waterline length (LWL)	18.07m
• Overall width (Bh)	9,875m
• Max width (Bm)	9,875m
• Waterline width	9.39m
• Air draught (Unladen)	30.00m
• Draught (fully laden)	1.65m
• Light Displacement (mEC)	34.6T
• Maximum Load Displacement (mLDC)	47.90T

### Main propulsion

• Battened mainsail (standard)	135m <sup>2</sup>
• Square top mainsail (optional)	143 m <sup>2</sup>
• Furling genoa	87m <sup>2</sup>
• Furling staysail (optional)	58m <sup>2</sup>
• Code 0 (optional)	160m <sup>2</sup>
• Asymmetrical spinnaker (optional)	310m <sup>2</sup>

• Fresh water capacity	960l (4x240l)
• Fuel capacity	2x650l
• Black water capacity	
• 4-cabin layout	4x110l
• 5-cabin layout	5x110l
• Port forward bow layout	50l
• Grey water capacity (optional)	4x120l

### Secondary propulsion

• Motorisation	2 x 150 HP Yanmar 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.

**CONSTRUCTION NAVALE BORDEAUX**  
162 quai de Brazza  
33100 Bordeaux FRANCE

**LAGOON**

**LAGOON 60**

Catégorie de conception Design Category	A	B	C	D
MAX  =	14	14	20	20
MAX(kg)  =	2440	2440	2440	2440

DESIGN D6387N

MAX 220 kW

CE UK CA

Callouts: 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)).

### 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 14 persons weighing 75kg each = 1,050kg. If children are part of the crew, this number can be higher. However, the total weight of 1,050kg 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 = 1,820kg).



## WARNING

Carefully secure moving parts when the boat is sailing.



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, and 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 installations.



**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 discharge ports in engine compartment;
  - \* The location of evacuation routes and emergency exits.
- Maintain fire-fighting equipment:
  - \* Check fire-fighting equipment as frequently as recommended by the manufacturer;
  - \* Replace portable fire extinguishers, if outdated or discharged, with extinguishing apparatus of equal capacity;
  - \* Have fixed fire extinguishing systems filled or replaced if they have been discharged or have expired.
- Ensure for the protection of the deck to 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 6-kg powder extinguishers, whose positions are shown in the following diagrams. Check that the fixed fire extinguishing systems have been armed before departure.



### NOTICE

We recommend installing at least one fire extinguisher 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 other fabrics near or above the cooking appliances or other equipment with a naked flame.

# 3-SAFETY

## 3.1.3 Fire blanket

When in use, this boat must be equipped with a fire blanket (not provided) to protect each cooking appliance and installed close to it.



4-cabin layout, 4 toilets, down galley

- 1 With gas plancha option (Europe and North America specifications)



5-cabin layout, 5 toilets, upper galley



## 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 installed in the recommended locations described hereafter.

1-kg ABC extinguisher:

- 8 x 5A34B fitted as standard;
- 1 x 5A34B with the starboard forward bow fitted as a cabin option;
- 1 x 5A34B with the plancha option on the aft transom.

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



4-cabin layout, 4 toilets, down galley

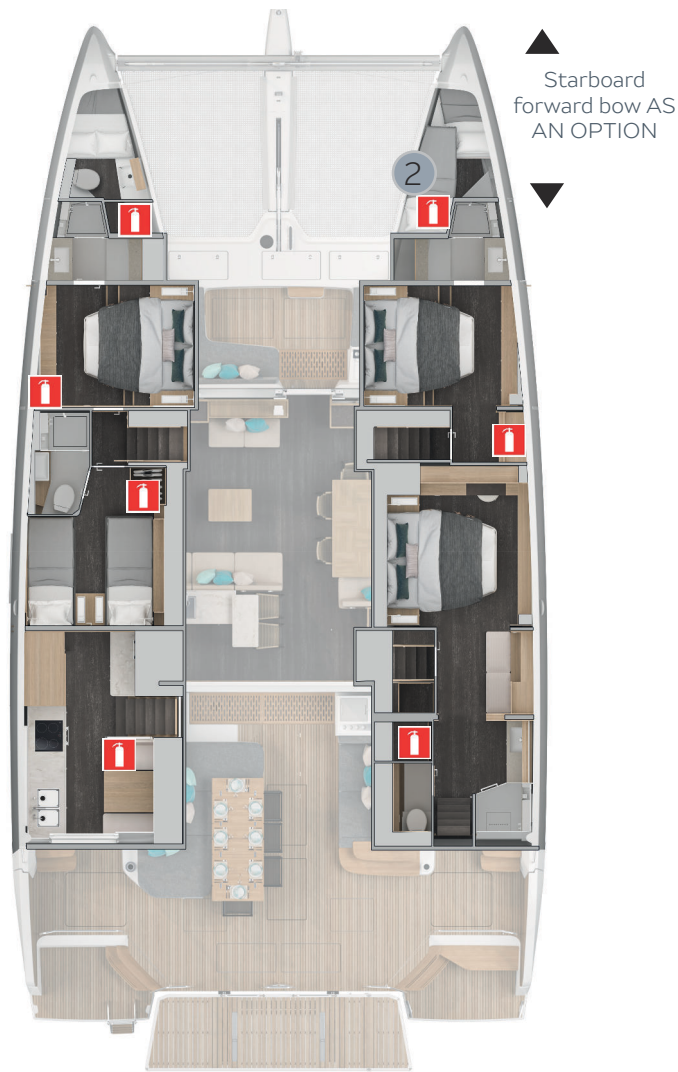


5-cabin layout, 5 toilets, upper galley

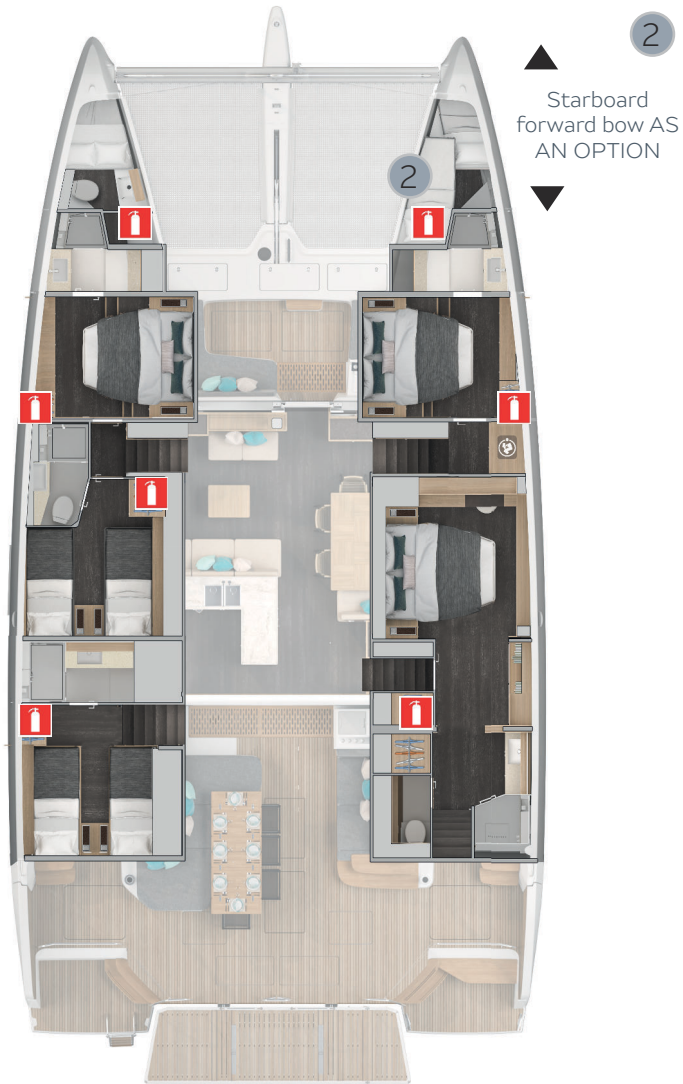
① With gas plancha option (Europe and North America specifications)

# 3-SAFETY

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



4-cabin layout, 4 toilets, down galley



5-cabin layout, 5 toilets, upper galley



Fly



## WARNING

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



## WARNING

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



## 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 6-kg ABC powder extinguishers fitted in each engine compartment.



Port engine compartment extinguisher



Starboard engine compartment extinguisher



Starboard forward bow AS AN OPTION

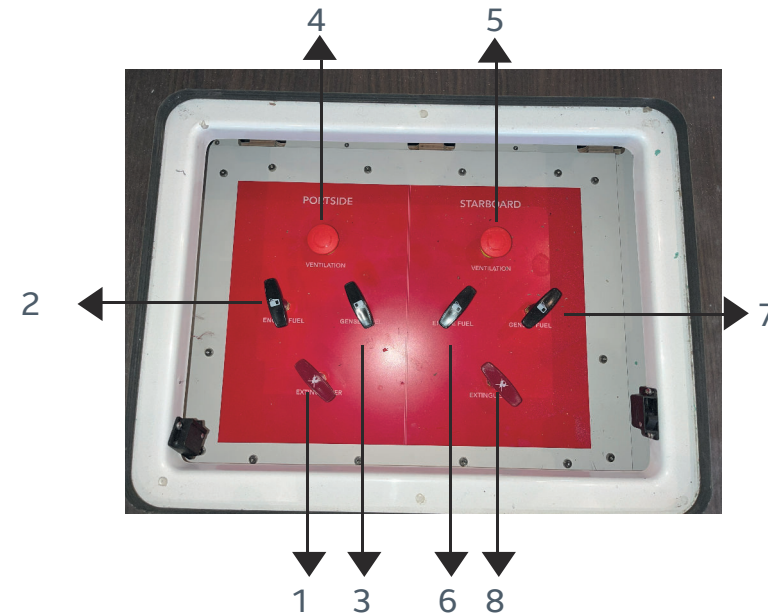


Engine compartment extinguisher



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 bay-window.



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



## NOTICE

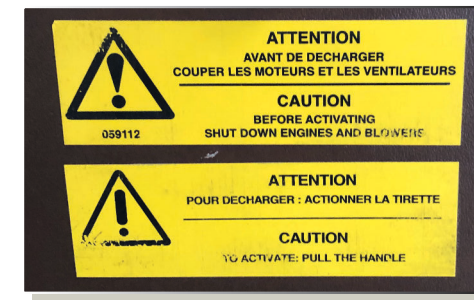
It is mandatory to have the fire extinguishers serviced annually by a certified service to comply with maritime safety regulations.



## ATTENTION

Remove the pins before you leave.

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 one of the engine compartments.

- Ensure that everyone has evacuated the affected compartment.
- Check that the accesses to this room are closed.
- Open the hatch of the lifeboat station.
- Shut down the ventilation of the compartment concerned.
- Operate the pull handles in the following order:
  1. SHUT DOWN THE VENTILATION OF THE AFFECTED ENGINE COMPARTMENT
  2. SHUT-OFF FUEL SUPPLY TO THE AFFECTED COMPARTMENT
  3. EXTINGUISH FIRE

# 3-SAFETY

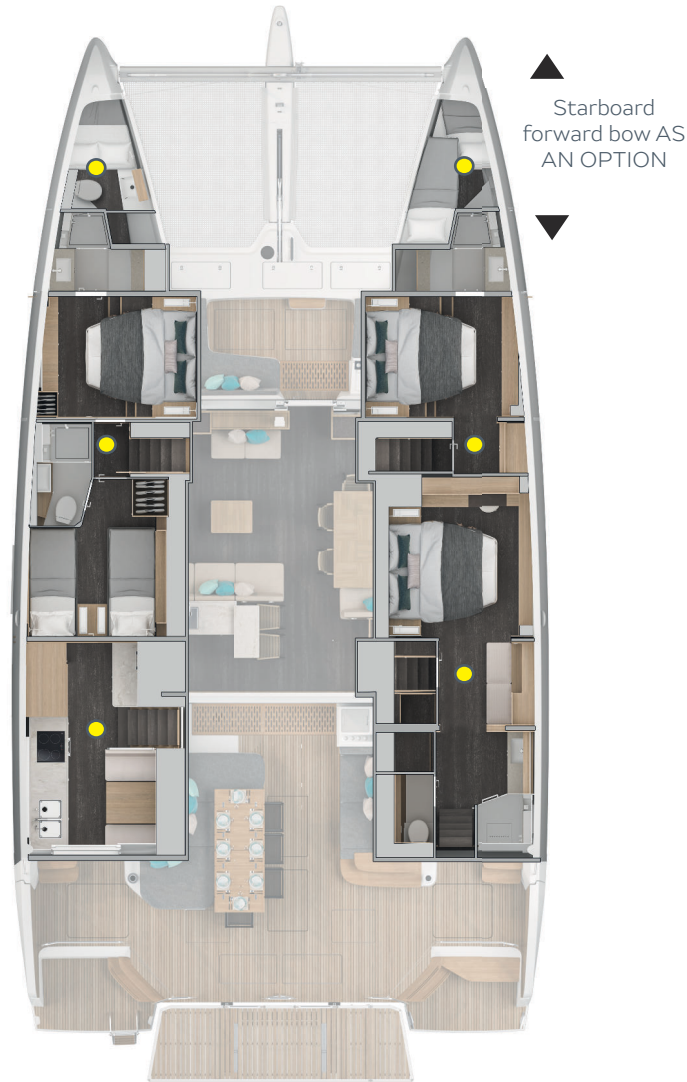
## 3.1.6 Smoke detectors

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

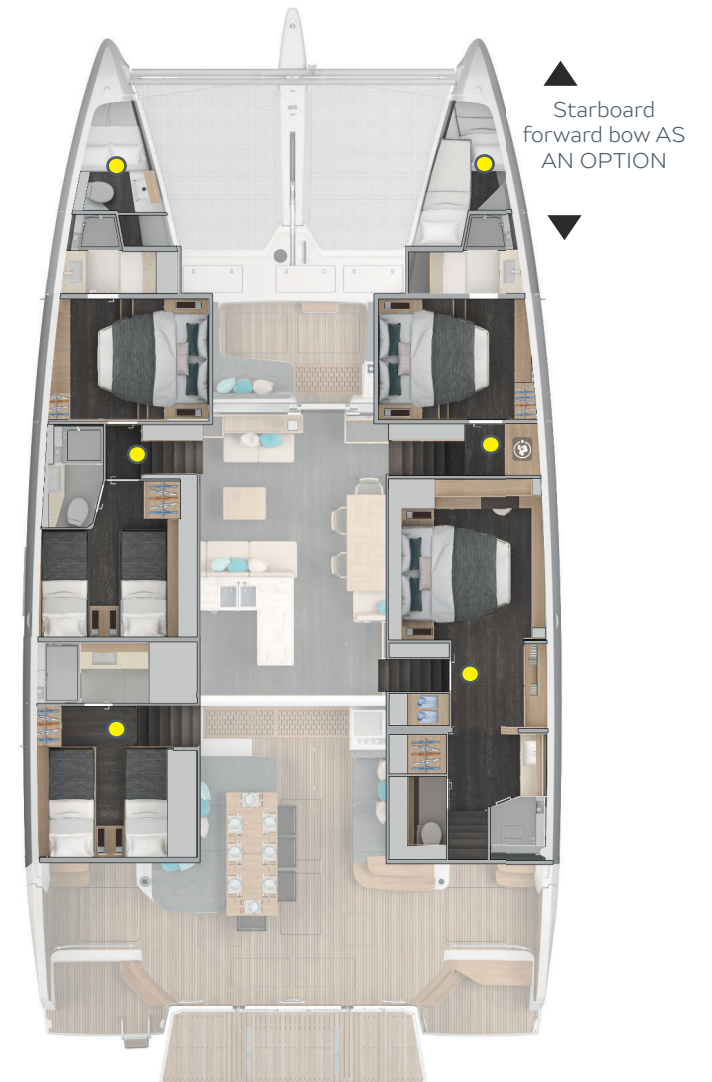


### NOTICE

Because of the limited space in the forward bow, the smoke detector can be triggered by the shower hot water streams. It is preferable to deactivate the detector beforehand and then reactivate it afterwards.



4-cabin layout, 4 toilets, down galley



5-cabin layout, 5 toilets, upper galley



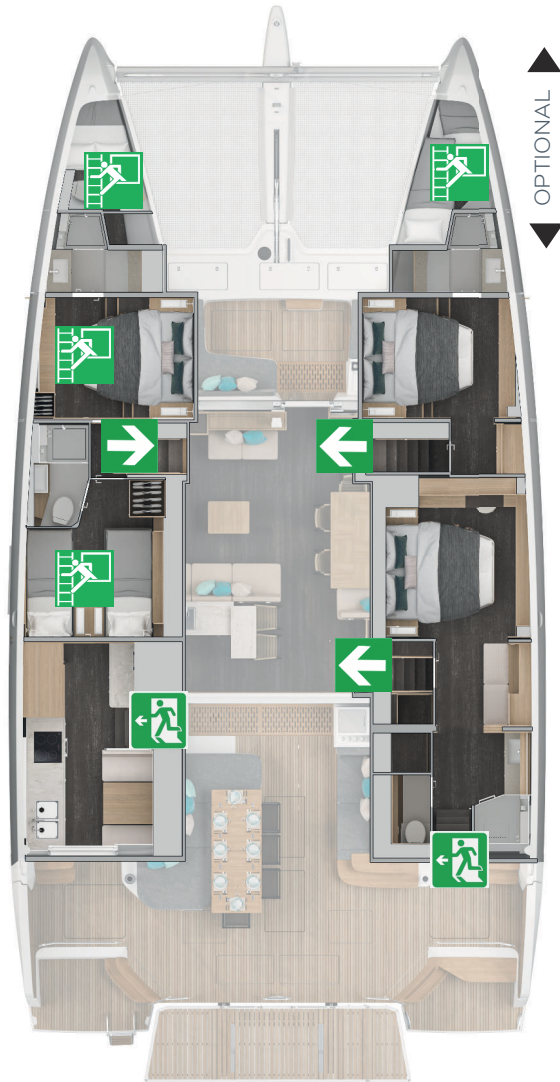
4-cabin layout, 4 toilets, down galley



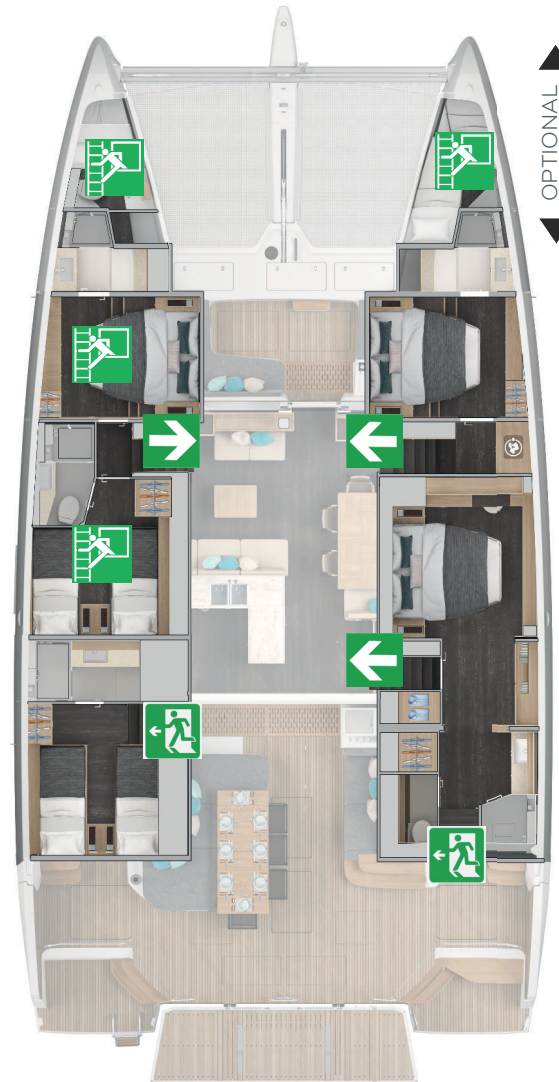
5-cabin layout, 5 toilets, upper galley

Indice C-DECEMBER 2024

# 3-SAFETY



4-cabin layout, 4 toilets, down galley



5-cabin layout, 5 toilets, upper galley

## 3.1.7 Emergency exits

Recommended emergency exits are shown in the following diagrams:



Emergency exit



Guide arrow



Emergency exit via deck hatch



4-cabin layout, 4 toilets, down galley

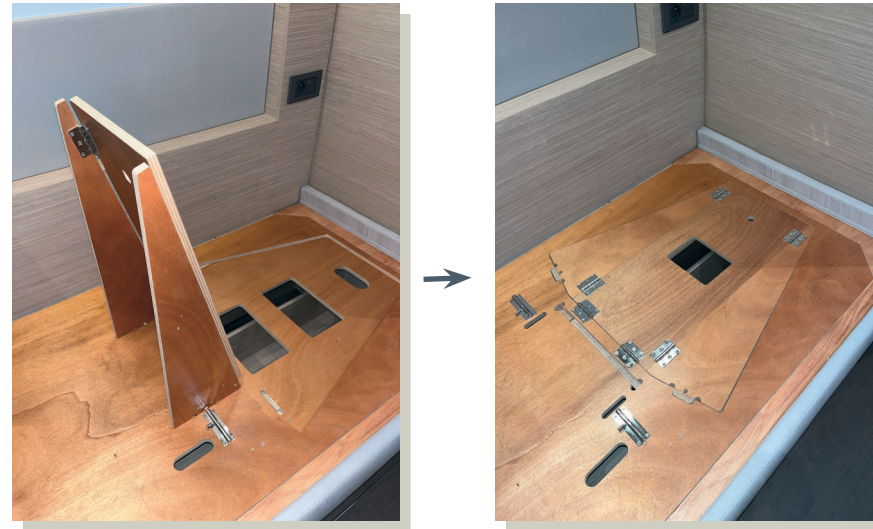
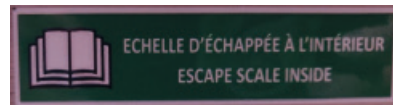


5-cabin layout, 5 toilets, upper galley

# 3-SAFETY

## 3.1.8 Fire evacuation ladders

Labels are placed under the mattresses in the cabins to indicate the presence of a fire evacuation step. The port forward cabin and port mid-ship cabin are fitted with a fold-out step under the berth mattress to allow escape through the deck hatch in the event of fire. A label is placed on the bed base opposite the cabin entrance door to indicate the presence of this step.

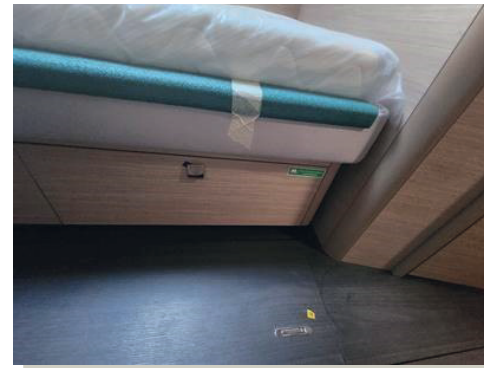


DOUBLE-BERTH CABINS



### ATTENTION

The hatches must always be unlocked from the inside when the crew is on board.



# 3-SAFETY



GUEST CABINS



# 3-SAFETY

## 3.2 Infiltration and stability

### 3.2.1 Hull and deck openings



#### ATTENTION

Keep every porthole, removable hatch, door, panel or ventilation opening closed (except the supply valves of the machine rooms).



**PANNEAU ETANCHE: DOIT ETRE FERME EN NAVIGATION  
WATERTIGHT CLOSURE: KEEP SHUT WHEN UNDERWAY**



#### ATTENTION

The access door to the forward cockpit must not be opened while underway and the top and bottom bolts must be locked to ensure that the door is watertight.



**PORTE ETANCHE : MAINTENIR FERMÉE ET VERROUILLÉE 3 POINTS EN NAVIGATION  
WATERTIGHT DOOR : KEEP CLOSED AND LOCKE AT 3 POINTS WHILE UNDERWAY**





# 3-SAFETY

## 3.2 Infiltration and stability

### 3.2.2 Hull holes

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.

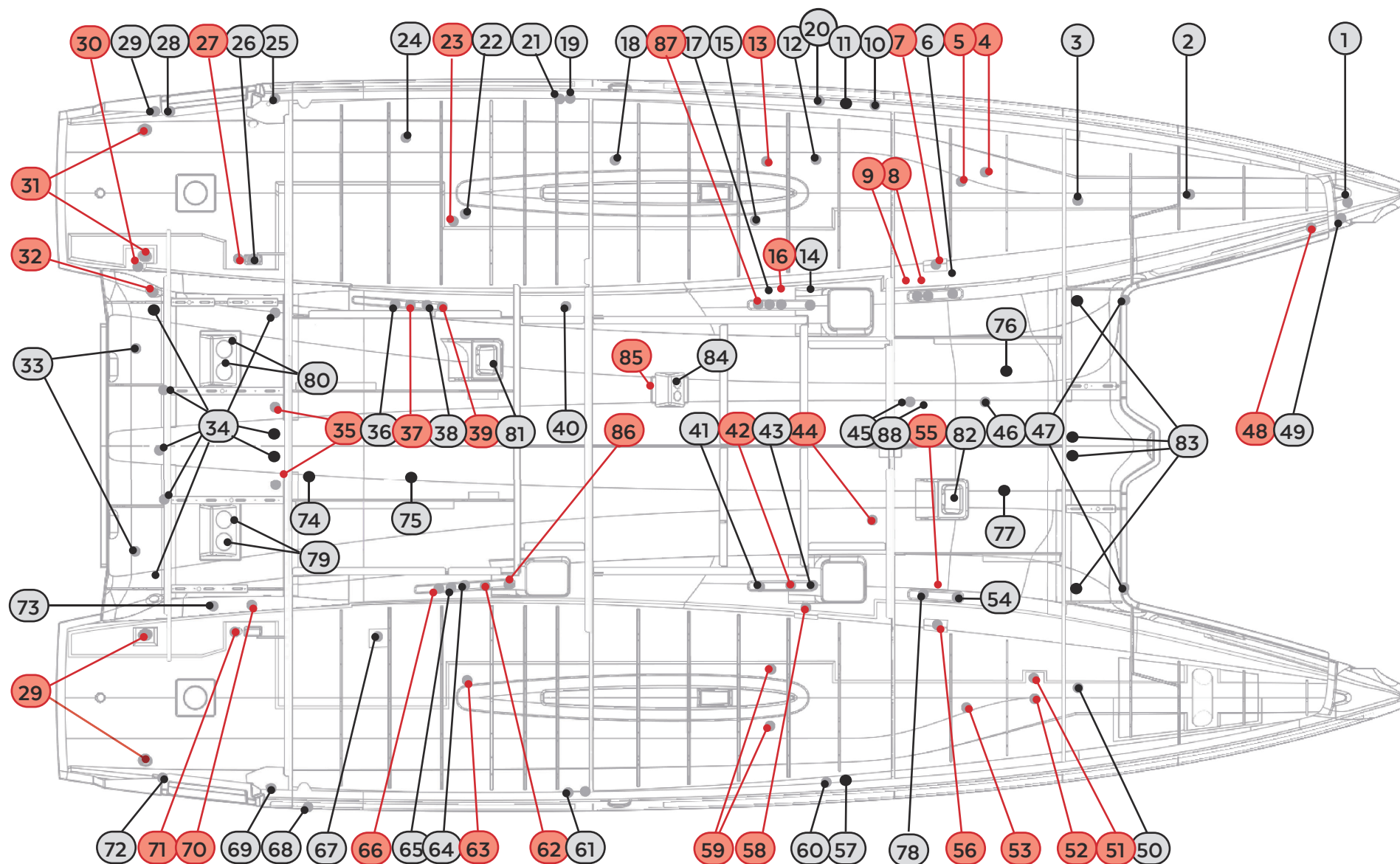


#### NOTICE

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

**STANDARD**

**OPTION**



# 3-SAFETY

NUMBER	SPECIFIC VERSION	DESCRIPTION	FUNCTION	SEA COCK Ø
1	Standard	Suction deck filler for port forward bow black water tank	DISCHARGE	Ø50
2	Standard	Drain for port forward bow black water tank	DISCHARGE	2"
3	Standard	Black water discharge for port forward head	DISCHARGE	2"
4	Option	Sea water intake for deck wash pump	SUCTION	3/4"
5	Option	Drain for port forward grey water tank	DISCHARGE	1"
6	Standard	Direct drain for port forward grey water	DISCHARGE	1"1/2
7	Option	Drain for port forward air-conditioning cooling water	DISCHARGE	3/4"
8	Option	Port forward grey water vent	VENT	1"
9	Option	Light scupper pipe	DISCHARGE	3/4"
10	Standard	Black water tank vent for port mid-ship head	VENT	1"1/4
11	Standard	Port forward fresh water tank vent	VENT	Ø16
12	Standard	Black water drain for port mid-ship head	DISCHARGE	2"
13	Option	Cooling water inlet for port air conditioning	SUCTION	1"
14	Standard	Port roof scupper pipe	DISCHARGE	1"1/2
15	Standard	Ground plate		
16	Option	Condensate drain for port side hull air conditioning units	DISCHARGE	3/4"
17	Standard	Port sump electric drainage pump	DISCHARGE	1"
18	Standard	Ground plate		
19	5 cabins - upper galley	Black water tank vent for port aft head	VENT	1"1/4
20	Standard	Port aft fresh water tank vent	VENT	Ø16
21	Standard	Port fuel tank vent	VENT	1"
22	5 cabins - upper galley	Black water drain for port aft head	DISCHARGE	2"
23	Option	Drain for port aft grey water tank	DISCHARGE	1"
24	4 cabins - side hull galley	Direct drain for port aft grey water	DISCHARGE	1"1/2
25	Standard	Port engine exhaust	DISCHARGE	Ø102
26	Standard	Anode		

# 3-SAFETY

NUMBER	SPECIFIC VERSION	DESCRIPTION	FUNCTION	SEA COCK Ø
27	Option	Generator cooling water inlet	SUCTION	1"
28	Standard	Port peak electric drainage pump	DISCHARGE	1"
29	Standard	Scupper pipe for port peak hatch	DISCHARGE	1"
30	Option	Generator wet exhaust	DISCHARGE	1"1/2
31	Option	Underwater lights		
32	Option	Generator dry exhaust	DISCHARGE	Ø25
33	Standard	Engine compartment vent (air outlet)	VENTILATION	Ø80
34	Standard	Scupper pipe for cockpit floor panels	DISCHARGE	Ø25
35	Option	Aft platform hydraulic connections		Ø38
36	5 cabins - upper galley	Direct drain for port aft grey water	DISCHARGE	1"
37	Option	Vent for port aft grey water tank	VENT	1"
38	Standard	Port sump manual drainage pump	DISCHARGE	1"
39	Option	Drain for port aft air conditioning cooling water	DISCHARGE	3/4"
40	Standard	Direct drain for saloon grey water	DISCHARGE	1"1/2
41	Standard	Starboard sump electric drainage pump	DISCHARGE	1"
42	Option	Condensate drain for starboard side hull air conditioning units	DISCHARGE	3/4"
43	Standard	Starboard roof scupper pipe	DISCHARGE	1"1/2
44	Option	Ice-maker drain	DISCHARGE	Ø20
45	Standard	Port forward bow manual drainage pump	DISCHARGE	1"
46	Standard	Scupper pipe for forward cockpit locker floor	DISCHARGE	1"1/2
47	Standard	Black water tank vent for port and starboard forward heads	VENT	1"1/4
48	Option	Drain for port forward bow air conditioning cooling water	DISCHARGE	3/4"
49	Standard	Port forward bow black water tank vent	VENT	1"1/4
50	Standard	Black water drain for starboard forward head	DISCHARGE	2"
51	Option	Speed and temperature sensor		

# 3-SAFETY

NUMBER	SPECIFIC VERSION	DESCRIPTION	FUNCTION	SEA COCK Ø
52	Option	Realvision sensor		
53	Option	Drain for starboard forward grey water tank	DISCHARGE	1"
54	Standard	Direct drain for starboard forward grey water	DISCHARGE	1"1/2
55	Option	Vent for starboard forward grey water tank	VENT	1"
56	Option	Drain for starboard forward air conditioning cooling water	DISCHARGE	3/4"
57	Standard	Starboard forward fresh water tank vent	VENT	Ø16
58	Option	Drain for starboard mid-ship air conditioning cooling water	DISCHARGE	3/4"
59	Option	Cooling water inlet for starboard air conditioning	SUCTION	1"
60	Standard	Starboard aft fresh water tank vent	VENT	Ø16
61	Standard	Starboard fuel tank vent	VENT	1"
62	Option	Drain for starboard aft air conditioning cooling water	DISCHARGE	3/4"
63	Option	Drain for starboard aft grey water tank	DISCHARGE	1"
64	Standard	Direct drain for starboard aft grey water tank	DISCHARGE	1"
65	Standard	Starboard sump manual drainage pump	DISCHARGE	1"
66	Option	Starboard aft grey water tank vent	VENT	1"
67	Standard	Black water drain for starboard aft head	DISCHARGE	2"
68	Standard	Starboard aft black water tank vent	VENT	1"1/4
69	Standard	Starboard engine exhaust	DISCHARGE	Ø102
70	Option	Fresh watermaker drain	DISCHARGE	3/4"
71	Option	Fresh watermaker sea water intake	SUCTION	3/4"
72	Standard	Scupper pipe for starboard peak hatch	DISCHARGE	1"
73	Standard	Starboard peak electric drainage pump	DISCHARGE	1"
74 and 75	Standard	Scupper pipe for aft cockpit life raft locker floor	DISCHARGE	Ø20
76 and 77	Standard	Scupper pipe for forward cockpit locker floor	DISCHARGE	Ø20

# 3-SAFETY

NUMBER	SPECIFIC VERSION	DESCRIPTION	FUNCTION	SEA COCK Ø
78	5 cabins - upper galley	Drain for utility room washing machine grey water	DISCHARGE	1"
79	Standard	Starboard peak ventilation air inlet	VENTILATION	2x Ø230
80	Standard	Port peak ventilation air inlet	VENTILATION	2x Ø230
81	Standard	Aft cockpit foot bath drain	DISCHARGE	136x147
82	Standard	Forward cockpit foot bath drain	DISCHARGE	136x147
83	Standard	Scupper pipe for forward beam cockpit lockers	DISCHARGE	Ø25
84	Standard	Ventilation for electric compartment below saloon floor	VENTILATION	2x Ø127
85	Option	Hood or washer dryer ventilation	VENTILATION	Ø127
86	Option	Drain for starboard saloon air conditioning cooling water	DISCHARGE	3/4"
87	Option	Drain for port mid-ship air conditioning cooling water	DISCHARGE	3/4"
88	Standard	Starboard forward bow manual drainage pump	DISCHARGE	1"

# 3-SAFETY

## 3.2 Infiltration and stability

### 3.2.3 Drainage

The drainage system is composed of the following equipment:

**An automatic drainage system equipped with four electric pumps (45 litres / minute).**

Each drainage circuit is composed of:

- A strainer (2) positioned in the sump located under the floors in each side hull and at the bottom of each engine compartment;
- Two float switches (3) located close to the strainer (one low level for triggering the pump and another for the warning level);
- One electric pump;
- And the sea cock, which allows the evacuation of the water.

Operation:

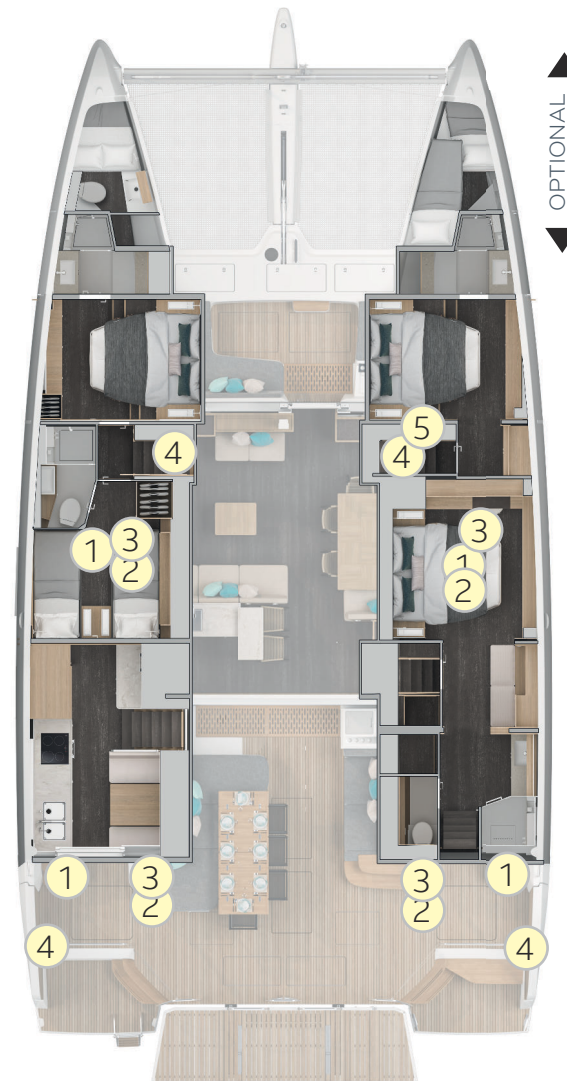
Off/on batteries: if water is detected, the pumps are automatically switched on directly (on the primary bus) and remain on until the low-level float switch returns to its initial position.

An alarm in the starboard forward companionway and at the helm station sounds if the water level rises to the high-level float switch (alert).

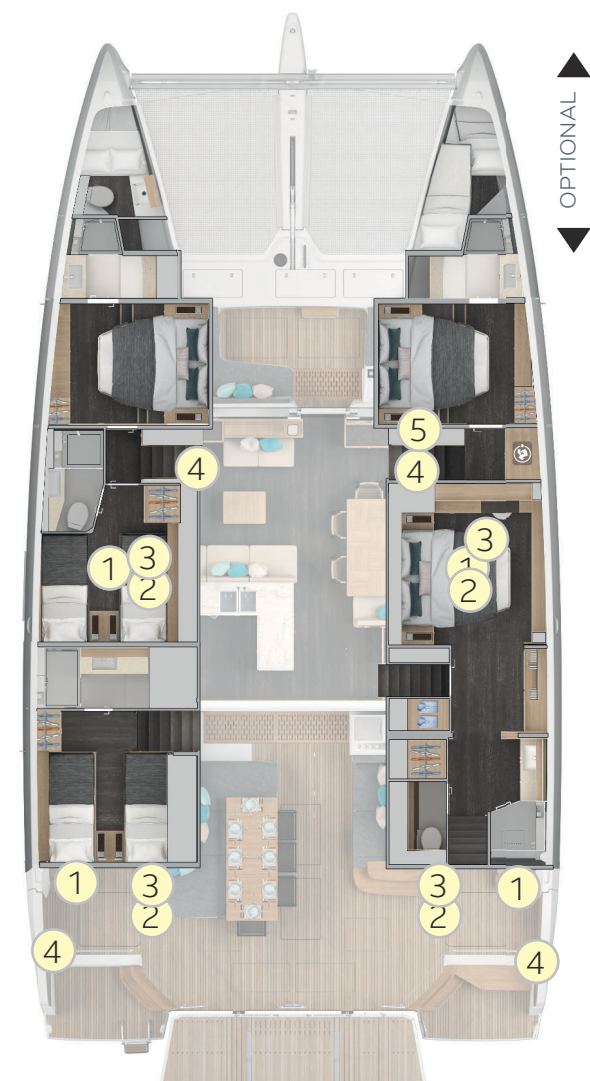


#### WARNING

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



4-cabin layout, 4 toilets, down galley



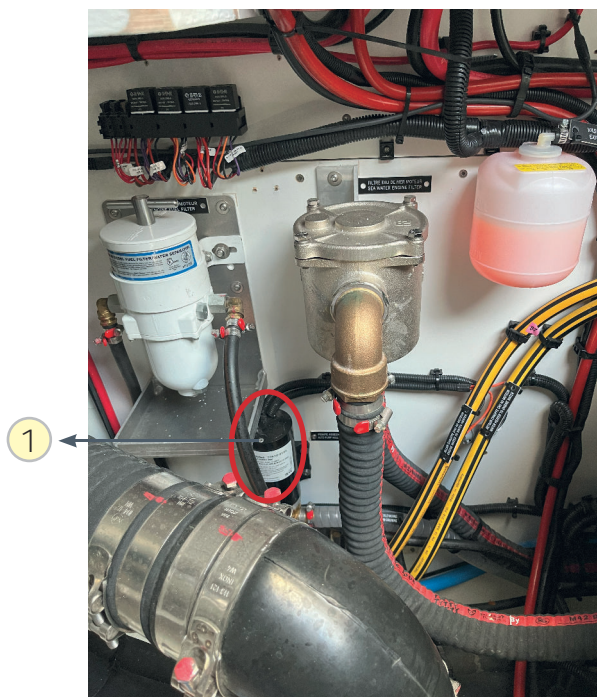
5-cabin layout, 5 toilets, upper galley

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

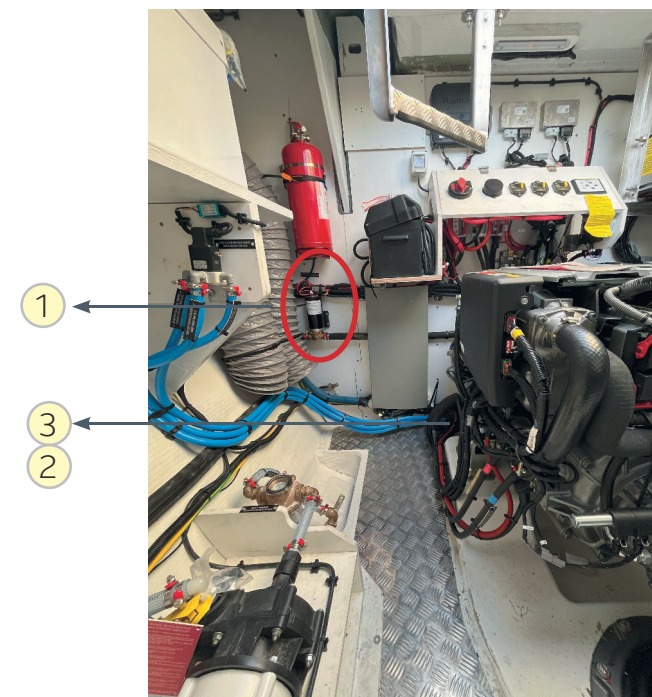


### NOTICE

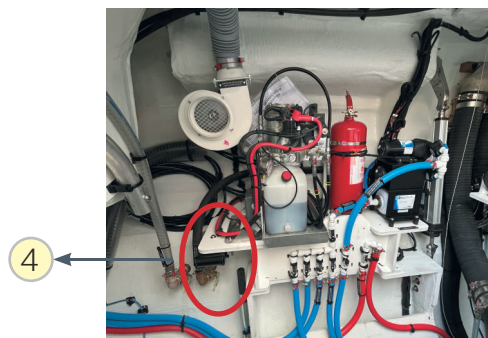
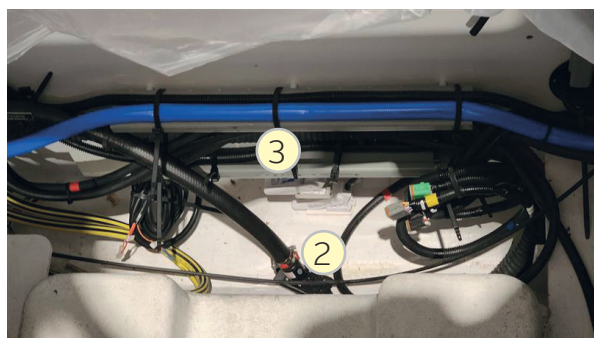
Do not let the pumps run empty as this may damage them. The water in the bilges must be kept at a minimum. Check the operation of each bilge pump visually at regular intervals.



Port engine compartment



Starboard engine compartment



Indice C-DECEMBER 2024



# 3-SAFETY



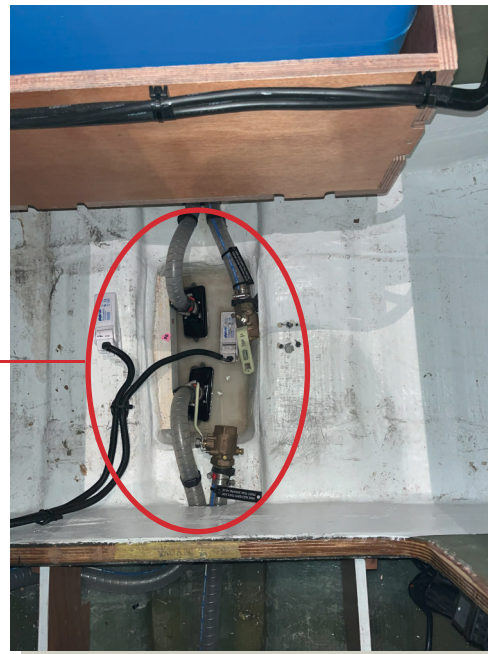
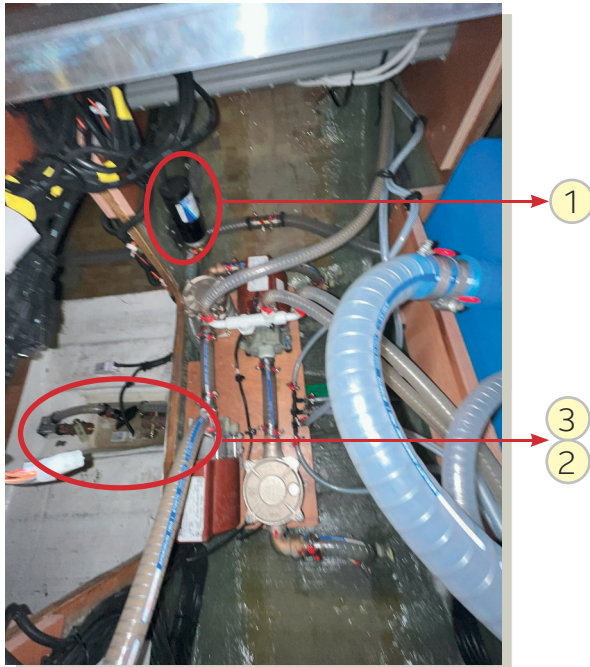
## ATTENTION

Check that each bilge pump is working at regular intervals. Clear the points and suction filters of the pumps of any debris that could clog them.

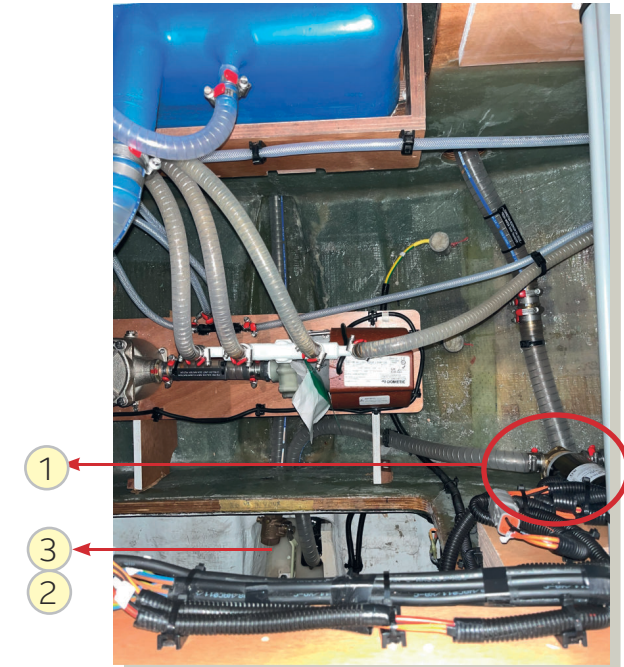
If the watertight partitions which seal off the fore and aft points are fitted with valves they must be closed at all times and only opened to drain water into the main bilge.

1. Electric pump
2. Strainer
3. Float switch
4. Pump control

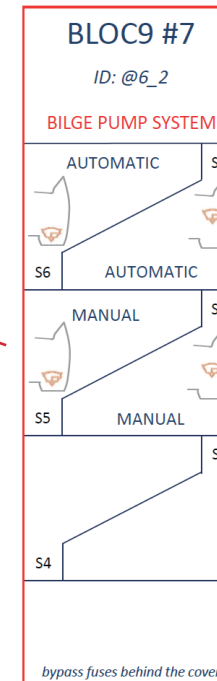
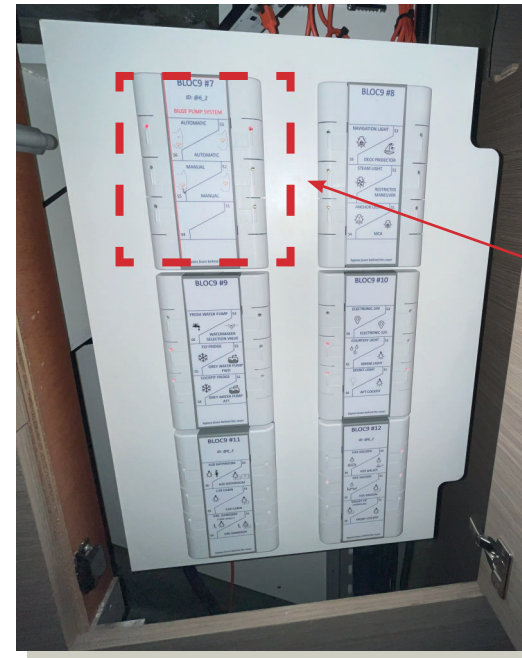
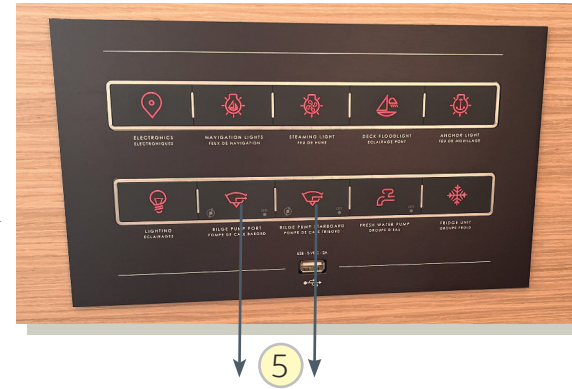
Port side hull



Starboard side hull



# 3-SAFETY



All four pumps are visible and controllable:

- Directly from the BLOC 9 outputs (4);
- On the 10-function control panel (5);
- From the Scheiber / Navicolor screen (6).

In the event of a fault on the Scheiber network, it is possible to force the output of block 9 directly with a fuse located behind the panel.

# 3-SAFETY

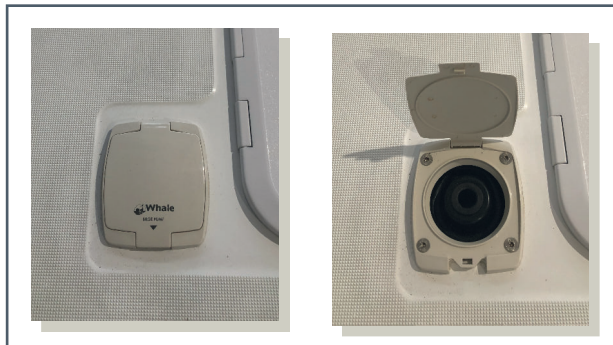
And a manual drainage system, equipped with four pumps.

Each drainage circuit is composed of:

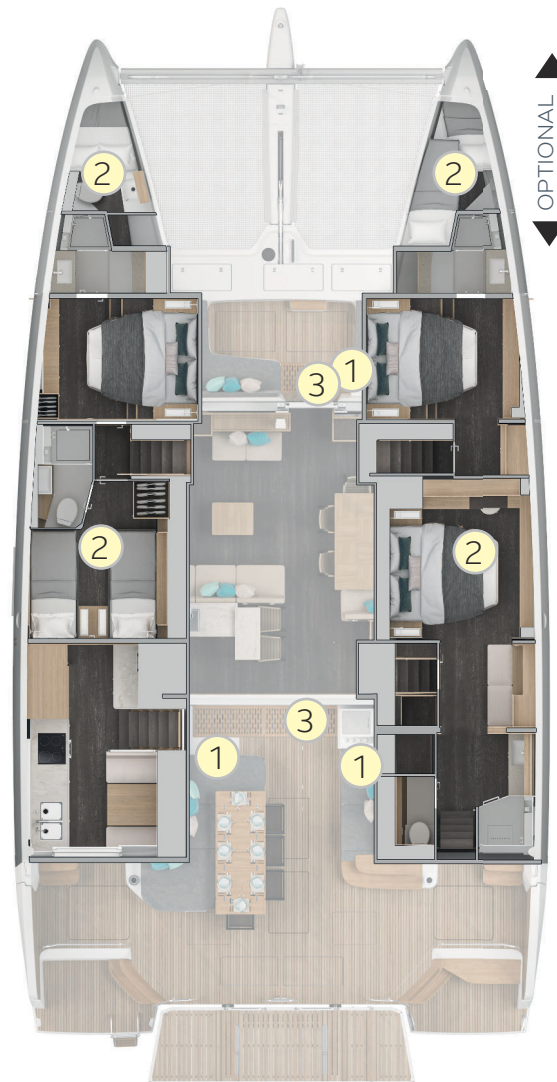
- a strainer (2) positioned in the sump located under the floors in each side hull and at the bottom of each forward bow;
- three manual pumps with its lever (1)(3).

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

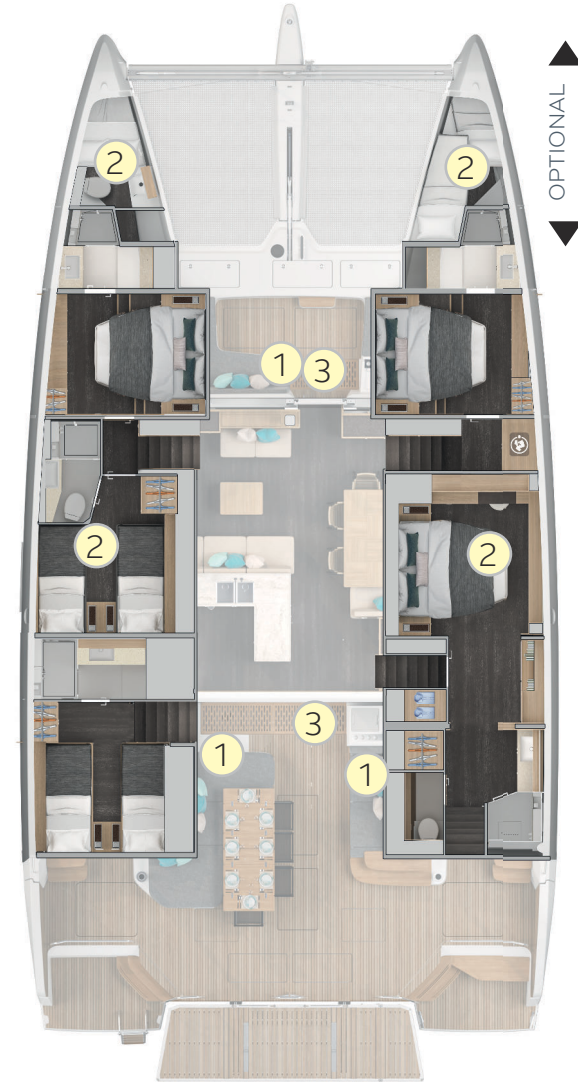
1. Manual pumps
2. Strainer
3. Lever



1



4-cabin layout, 4 toilets, down galley



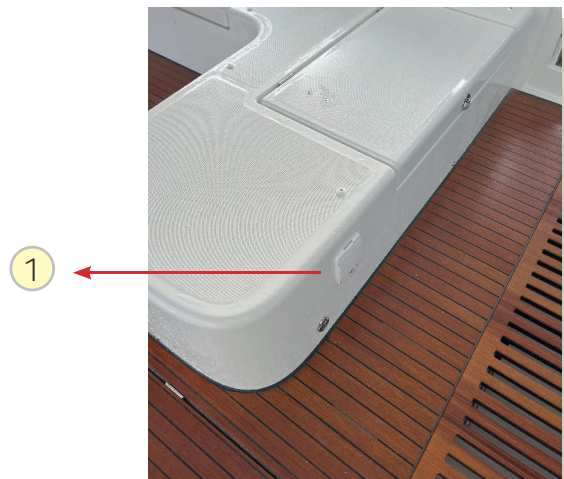
5-cabin layout, 5 toilets, upper galley

Aft cockpit Port

Side hull



2



1

Aft cockpit Starboard

Side hull



2



1



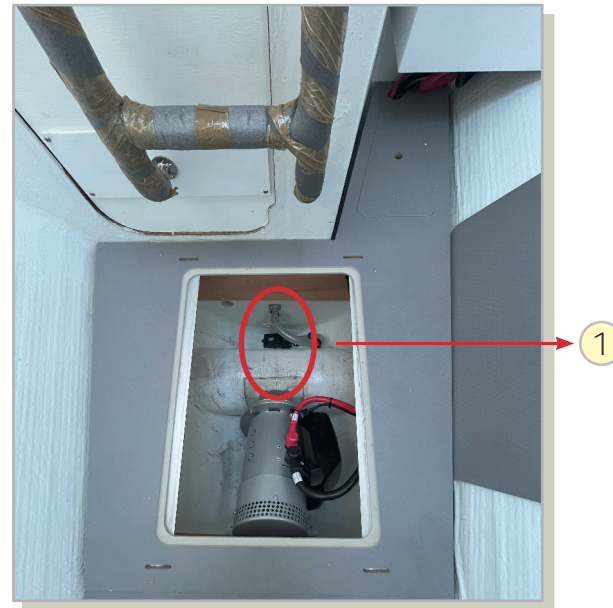
3

# 3-SAFETY

Forward cockpit

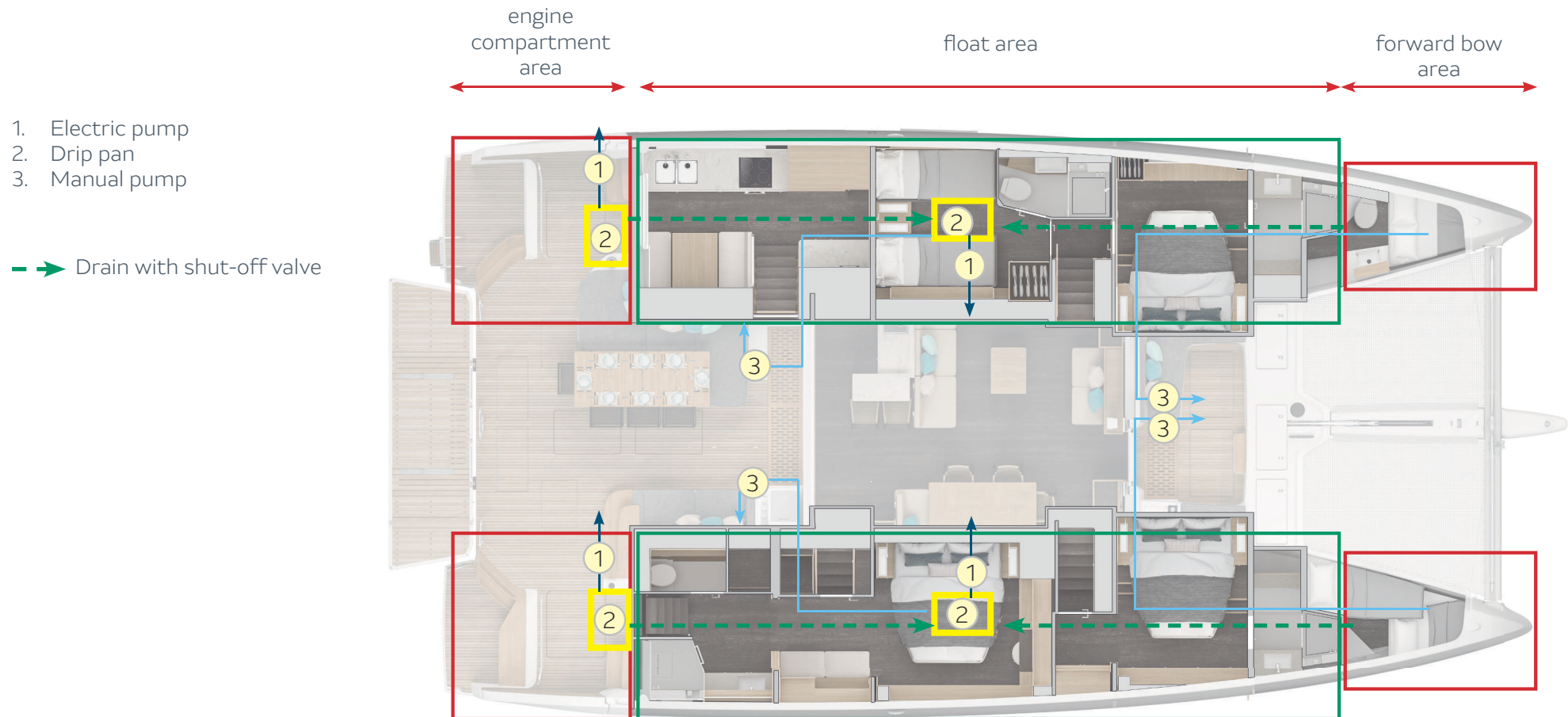


Fitted port hold



Starboard hold - standard without the fitted option

## Schematic diagram



# 3-SAFETY

## 3.2 Infiltration and stability

### 3.2.4 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 and flybridge 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

### 3.2.5 Righting the boat after capsizing

In accordance with stability report, this model is not considered «vulnerable to capsizing in its design category».

This section is therefore not applicable to this manual.

# 3-SAFETY

# 3-SAFETY

## 3.3 Safety equipment

### 3.3.1 General points

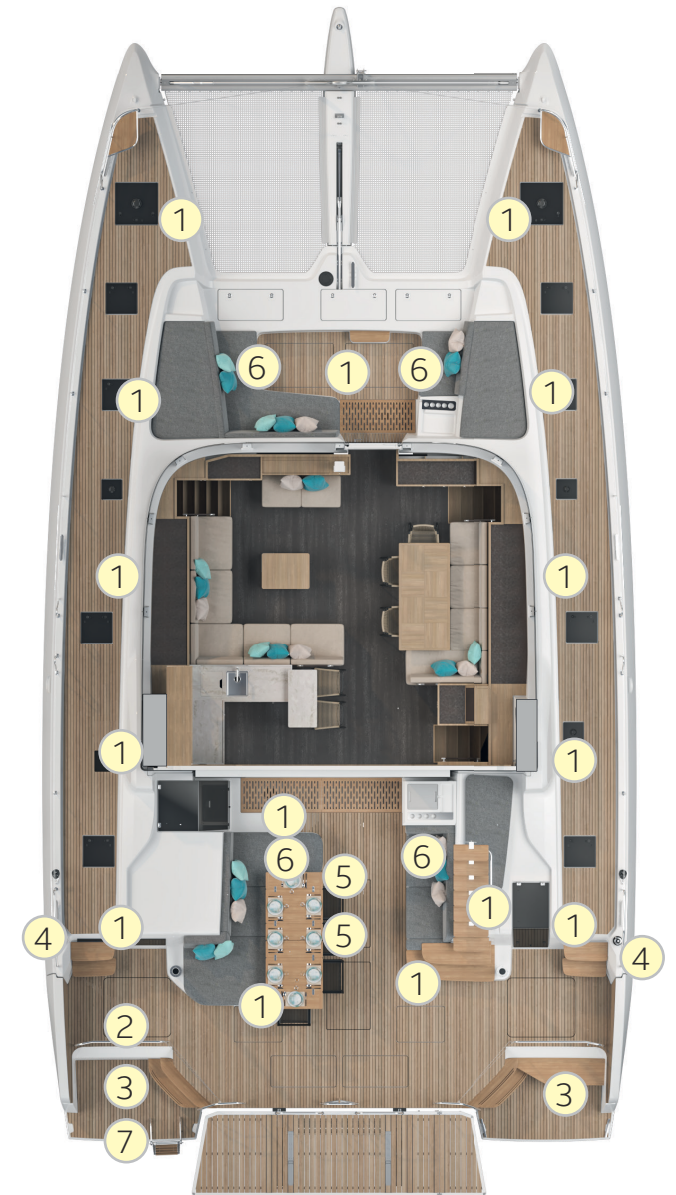
- This paragraph describes the location of emergency equipment (to be supplemented with your own safety equipment if desired).



**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	Reboarding ladder	19	.....
8	.....	20	.....
9	.....	21	.....
10	.....	22	.....
11	.....	23	.....
12	.....	24	.....



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 Life raft location



#### 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

The boat is equipped with one 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 compartment (1) and must remain easily accessible.

To deploy the emergency tiller:

- Use a winch handle to unscrew one of the emergency tiller filler caps 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 around the transverse axis (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);
- After using the by-pass, reset the rudder and visually check that the rudder on the pilot display is the same to port and starboard.



#### NOTICE

The hydraulic fluid must be non-flammable or have a flash point of at least 157°C (oil type VHM 32).



1



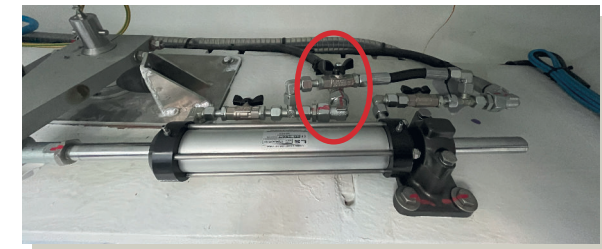
3



Standard position

4

By-pass position

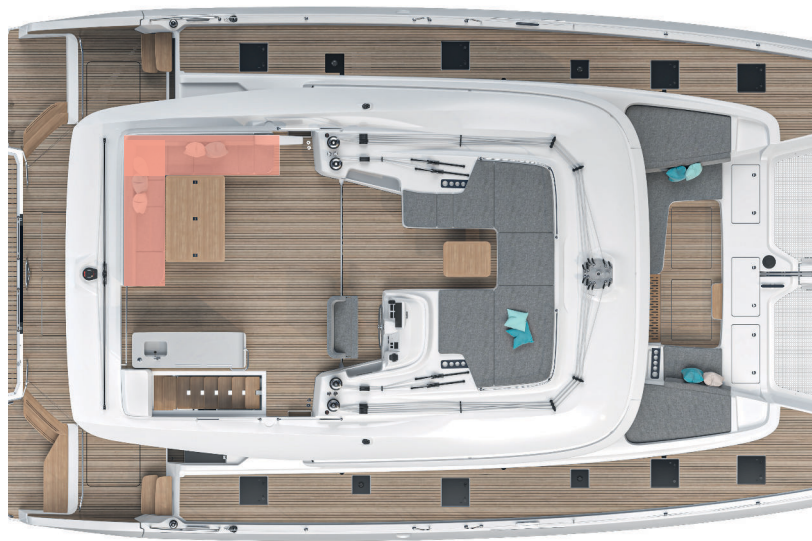


# 3-SAFETY

## 3.3 Safety equipment

### 3.3.2 Prevention of man overboard and reboarding

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



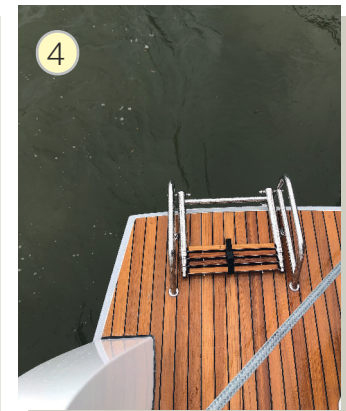
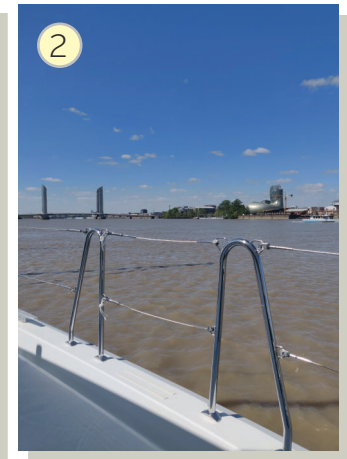
#### NOTICE

Check lifelines regularly:

With metal guardrails, look out for signs of corrosion, particularly at connecting points.

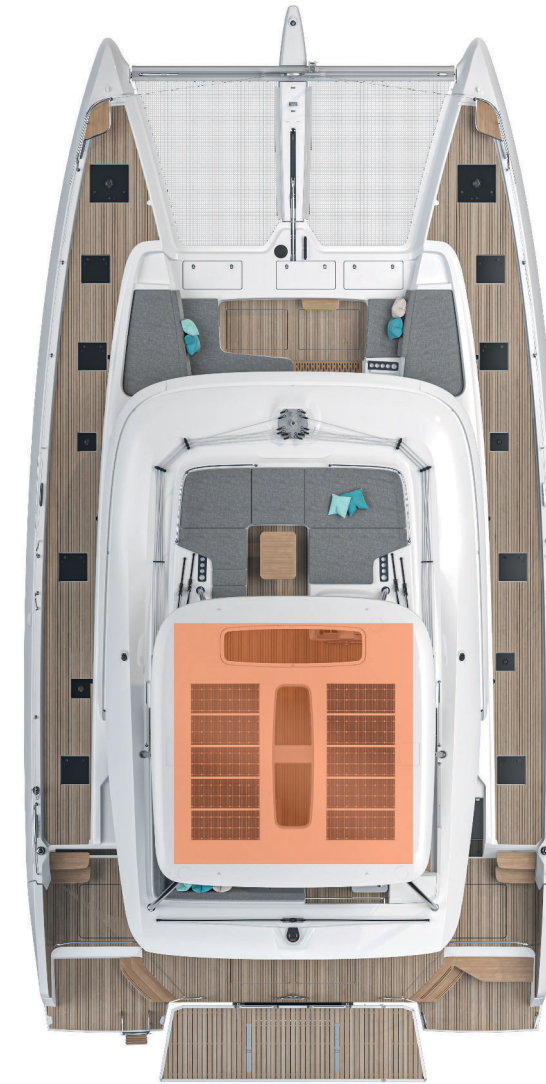
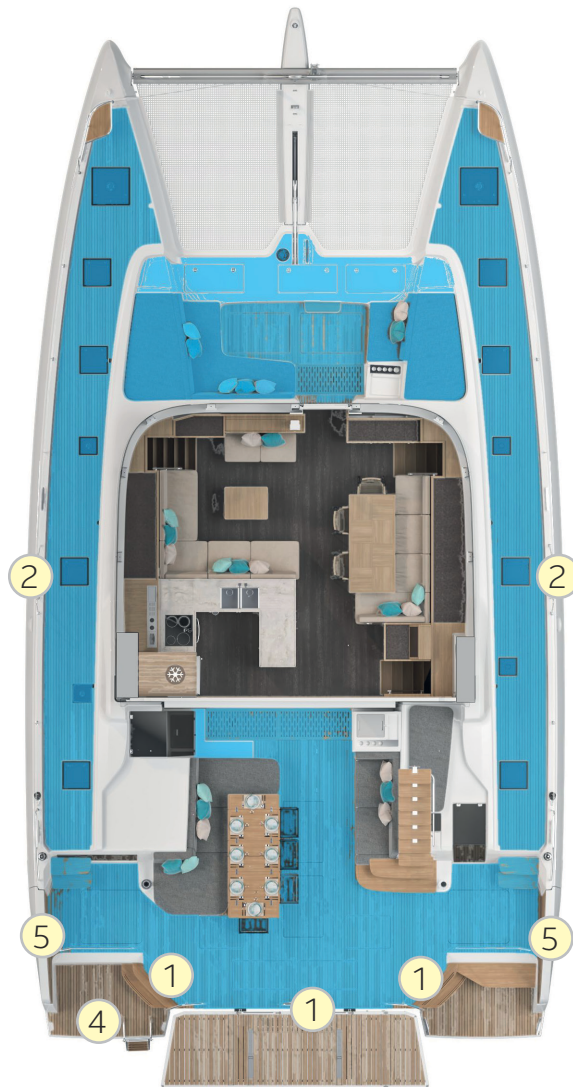
For synthetic lifelines, have them changed as soon as the first signs of wear and tear appear due to chafing or UV.

- Deck areas that are considered as part of the working deck, and which can be used when sailing, are shown cross-hatched on the diagrams below.
- The aft cockpit doors (1), the hatches (2) and the optional aft bulwarks (3) must be closed while sailing. If the aft bulwarks are not locked and the engines are started, a light at the helm station will glow.
- There is a folding ladder in the port transom for reboarding. (4)



# 3-SAFETY

- secure working area
- potentially more dangerous working area



Indice C-DECEMBER 2024

# 3-SAFETY

## 3.3 Safety equipment

### 3.3.3 Manoeuvrability of the boat under engines

- 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 of the boat, as a courtesy and as a safety measure for yourself and others. Respect speed limits when zones are defined;
- Avoid sudden manoeuvres at full speed;
- Ensure that you always maintain a sufficient distance to stop or steer the boat in order to avoid a collision;
- 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.

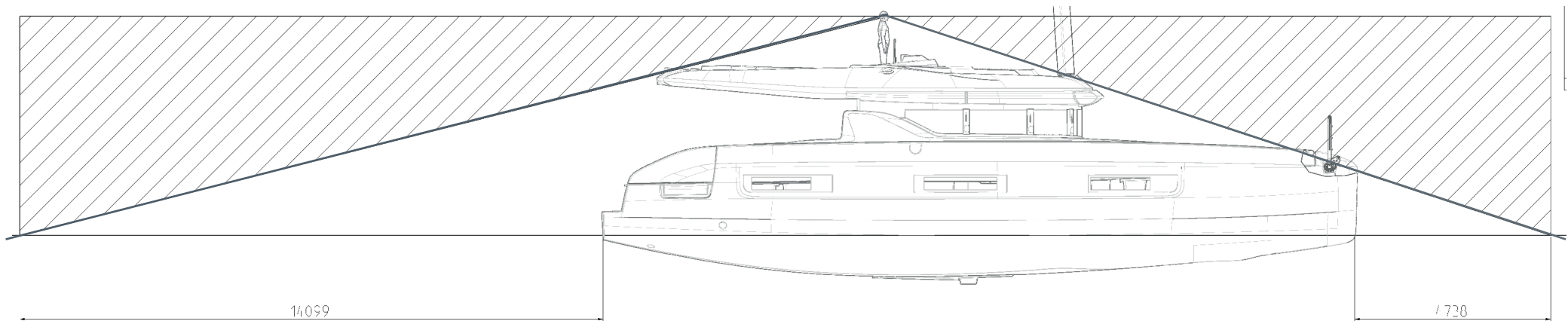
## 3.3 Safety equipment

### 3.3.4 Field of vision from the helm station

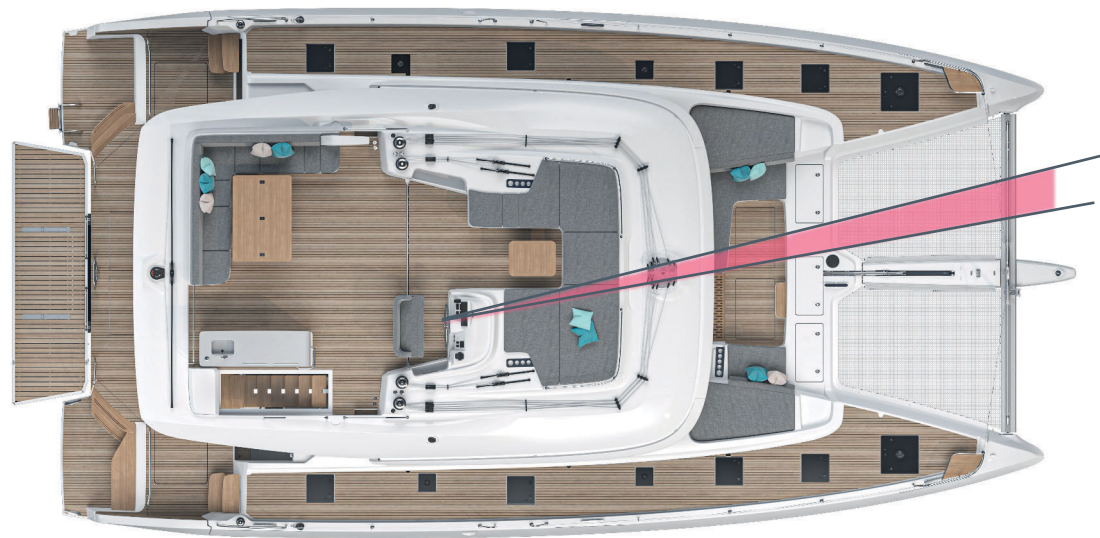
Visibility from the helm station may be obstructed due to significant angles in the ship's trim or due to other factors caused by one or more of the following conditions:

- 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 genoa/staysail, 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.



ATTENTION  
STEERING AND WATCH MUST TAKE  
PLACE AT THE HELM STATION LO-  
CATED ON THE FLYBRIDGE.

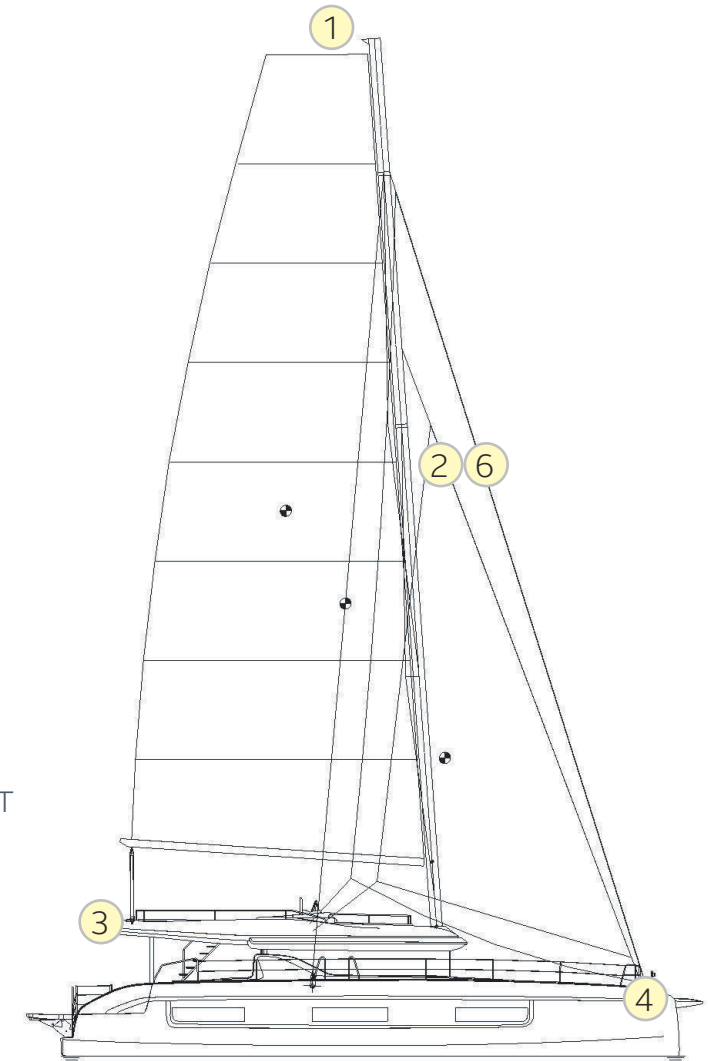


# 3-SAFETY

## 3.3 Safety equipment

### 3.3.5 Navigation lights

For details of navigation light wiring, refer to the appendices.



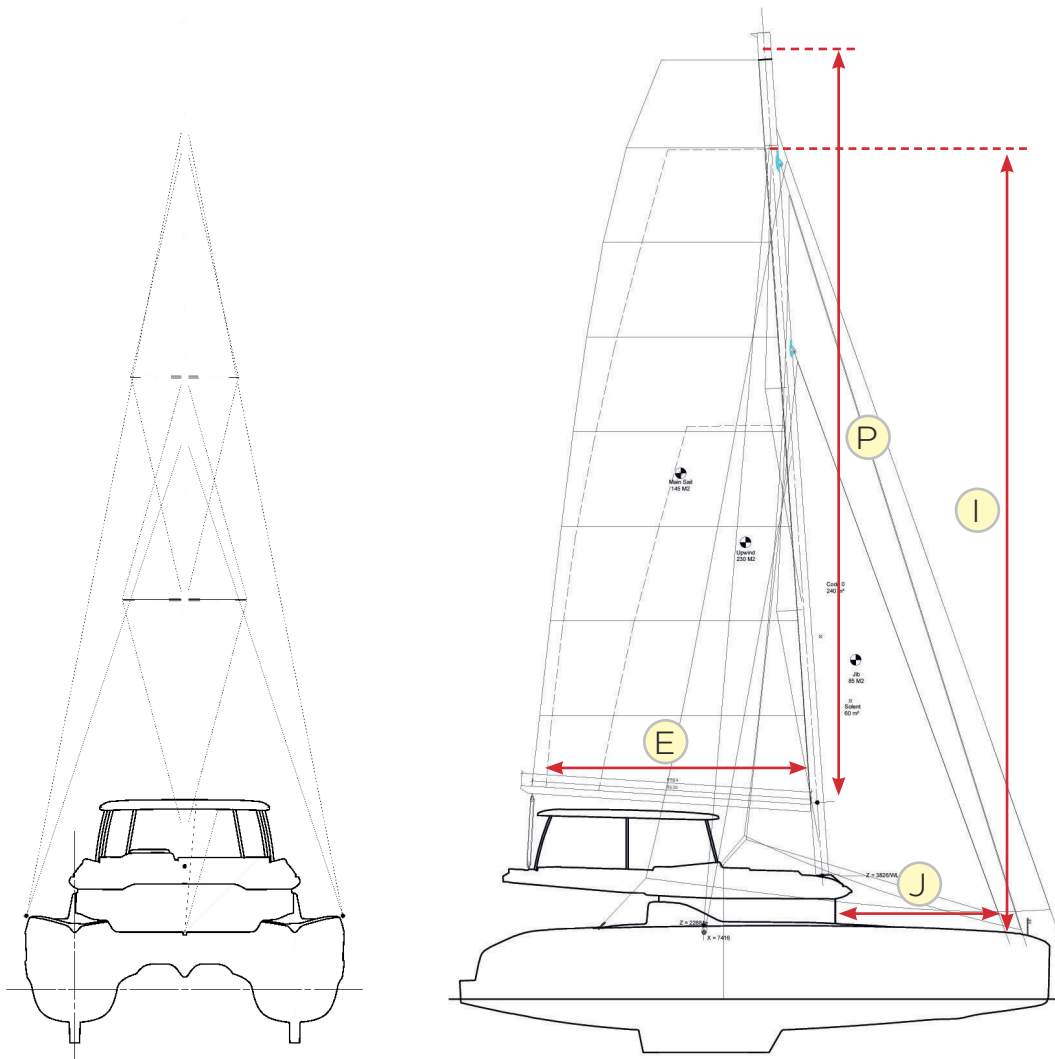
In the event of failure, replace the navigation lights with the above references or lights with equivalent characteristics.

1. Masthead / Anchor light (HELLA MARINE 2LT 980 910 157)
2. Steaming light (HELLA MARINE 2LT 998 504 057)
3. Stern light (SCI FEU NAV PPE 12V-24V LED in SCI)
4. Navigation lights (Hella marine ref 2LT 980 620-911)
5. Control panel on the front of the starboard companionway
6. Deck spotlight



# 4-SAILS AND RIGGING

## 4.1 Sail characteristics



Battened mainsail (standard)	135m <sup>2</sup>
Square top mainsail (optional)	143m <sup>2</sup>
Furling genoa (standard and optional)	87m <sup>2</sup>
Furling staysail (optional)	58m <sup>2</sup>
Code 0 (optional)	160m <sup>2</sup>
Asymmetrical spinnaker (optional)	310m <sup>2</sup>
I	22.10m
J	6.10m
P	23.10m
E	8.63m

# 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 turnbuckles;
- Check the condition of all ends and turnbuckles.

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

- Replace the cables at the first sign of any chafing or wear;
- Check them all every year and replace them if they are worn.

### RECOMMENDATIONS FOR THE REPLACEMENT OF THE STANDING RIGGING

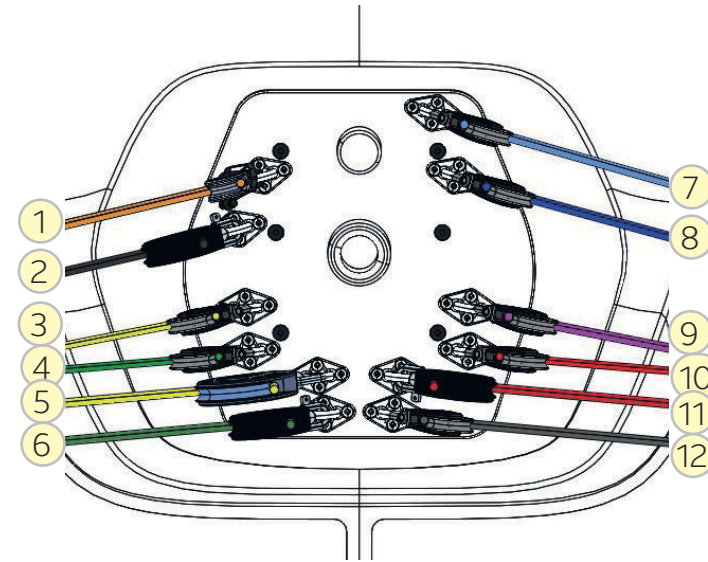
- **Rods:** Every 5 years or every 40,000 nautical miles; full replacement (rod + parts) every 10 years or every 80,000 nautical miles; mast to be adjusted by qualified professional.
- **Kevlar:** Every 6 years or every 35,000 nautical miles. Replace immediately if the fibre comes into direct contact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



#### NOTICE

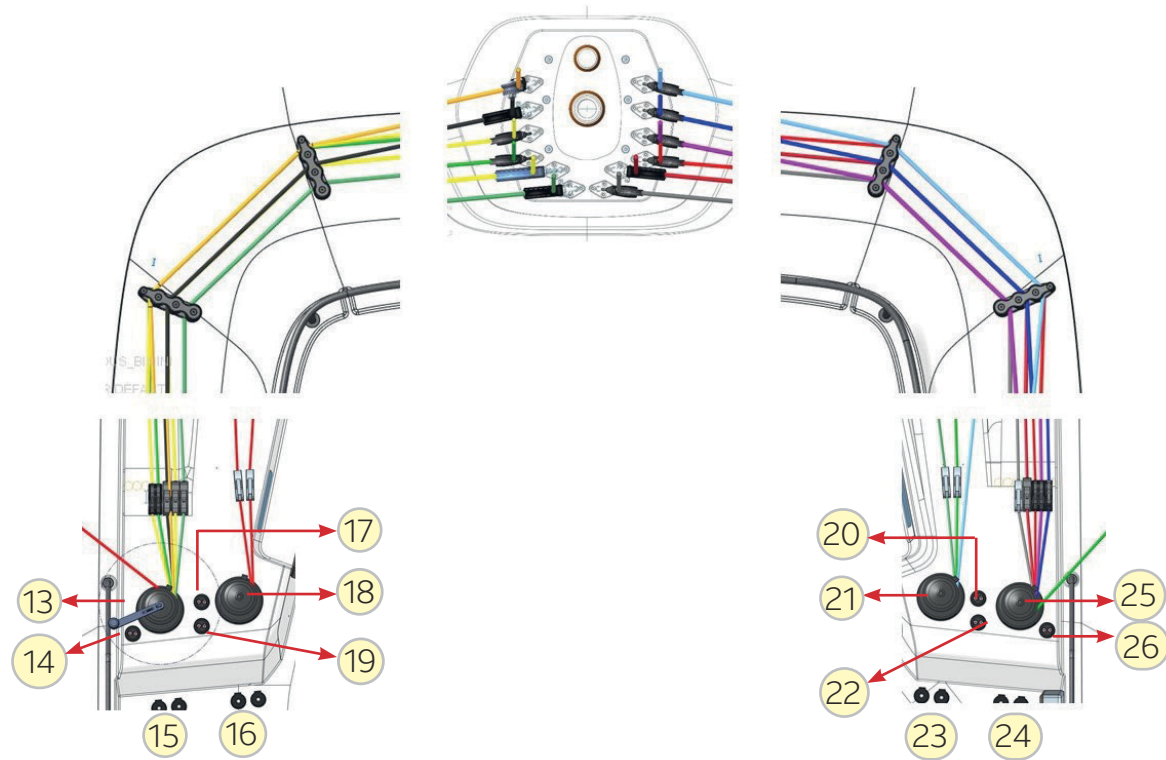
Check the standing and running rigging regularly and at least once a year.

## 4.3 Deck layout



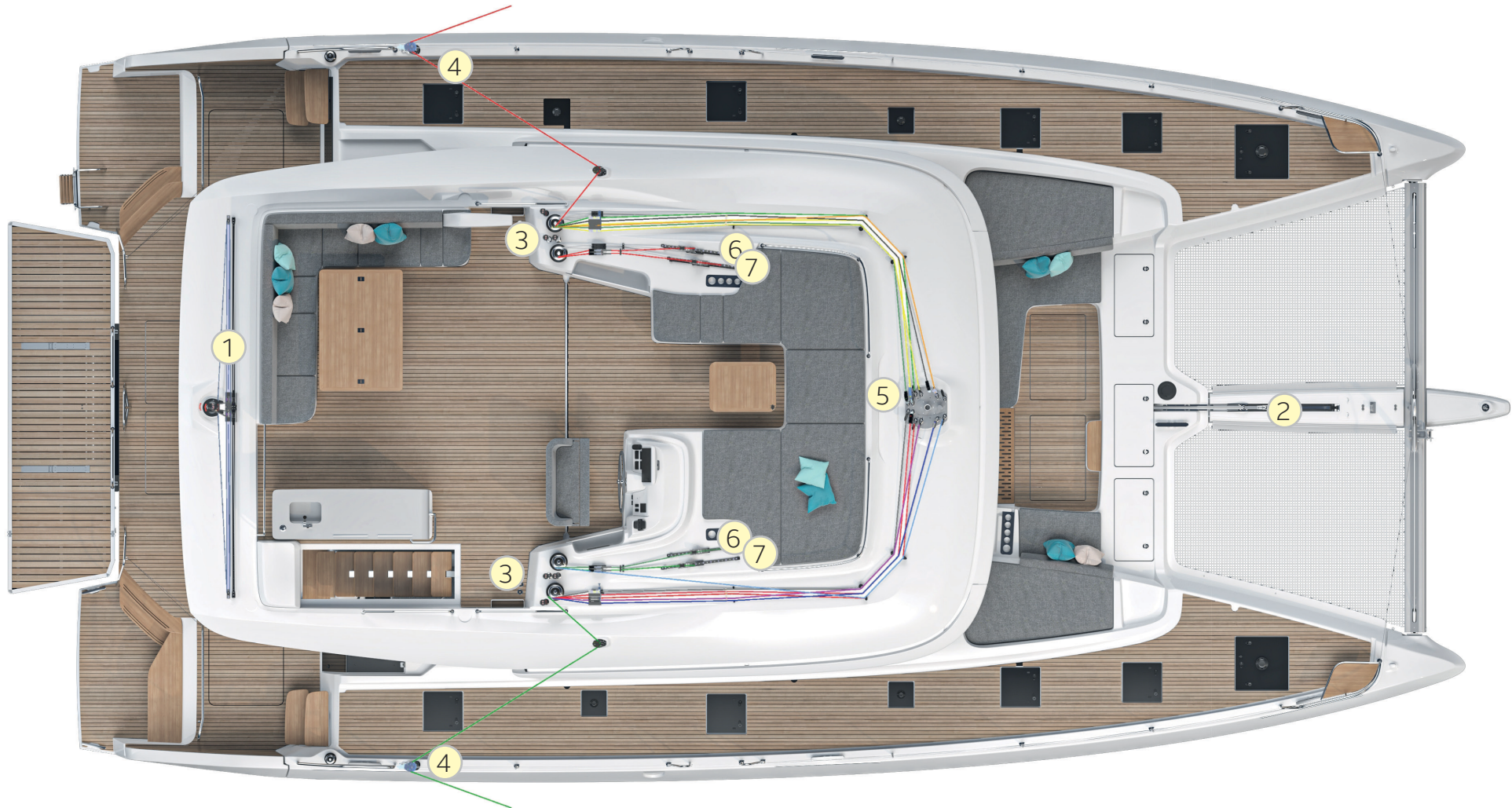
1. Hoisting headsails
2. Mainsail halyard
3. 2 reef tack
4. 1 reef tack
5. 2 reef line
6. 1 reef line
7. Free halyard
8. Spinnaker halyard (optional)
9. Topping lift
10. 3 reef tack
11. 3 reef line
12. Mainsail sheet

# 4-SAILS AND RIGGING



13. Winch 1
14. Code 0 electric furler contactor (optional)
15. Electric winch 1 contactors (optional)
16. Electric winch 2 contactors (optional)
17. Contactor for electric genoa furler
18. Winch 2
19. Staysail electric furler contactor (optional)
20. Contactor for electric genoa furler
21. Winch 3
22. Staysail electric furler contactor (optional)
23. Electric winch 3 contactors (optional)
24. Electric winch 4 contactors (optional)
25. Winch 4
26. Mainsail traveler electric flatwinder powered block contactor

# 4-SAILS AND RIGGING

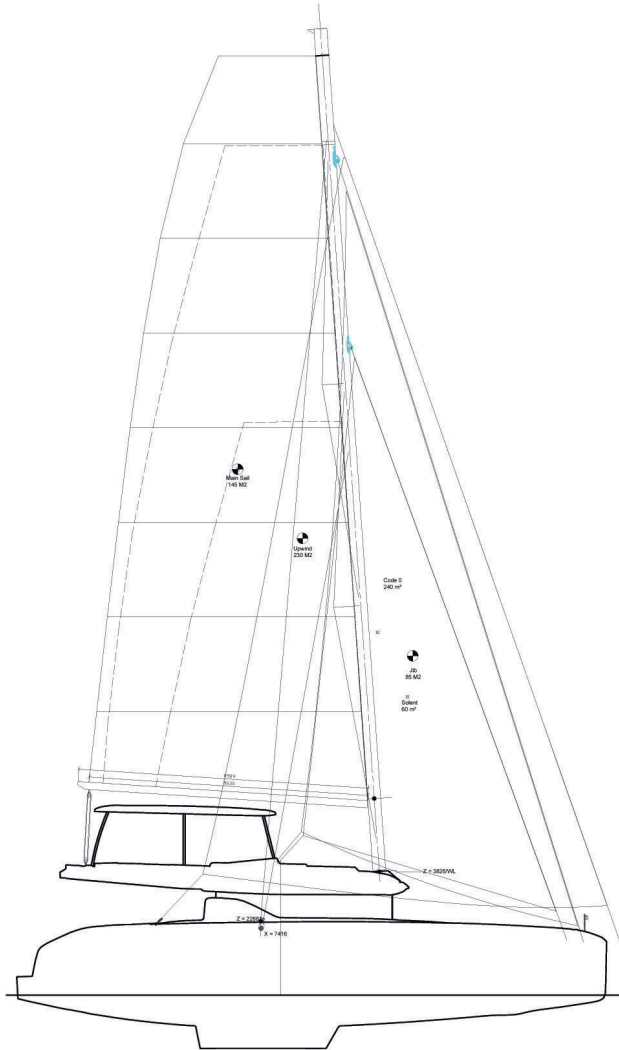


# 4-SAILS AND RIGGING

1. Mainsail traveler, flatwinder powered block, mainsail sheets
2. Compression beam and rostrum
3. Manoeuvring winches
4. Spinnaker / Code 0 sheets circuit (optional)
5. Mast foot rigging
6. Genoa traveler and sheets
7. Staysail traveler and sheets (optional)

# 4-SAILS AND RIGGING

## 4.4 Reducing sail



### 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 16 knots.
- Use of a Code 0. Do not use this sail above AWS 16 knots.

### WITH STAYSAIL OPTION

Apparent Wind Angle   AWA : 30-70°				Apparent Wind Angle   AWA > 70° # or AWA : 30-70° with $\mathcal{R} \geq 2m$			
Apparent Wind Speed   AWS (Knots)	Main	Jib	Code 0	Apparent Wind Speed   AWS (Knots)	Main	Jib	Code 0
0-10	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	Reef 3	60% **	0%
40-45	Reef 2	40% ***	0%	# 34-38	Reef 3	40% ***	0%
45-55	Reef 3	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%

It is forbidden to sail with front sail only including spinnaker, excluded stormjib  
 Never sail upwind under Code 0 with TWS exceeding 10 knots  
 Standing rigging loads must be checked every year

### WITHOUT STAYSAIL OPTION

Apparent Wind Angle   AWA : 30-70°				Apparent Wind Angle   AWA > 70° # or AWA : 30-70° with $\mathcal{R} \geq 2m$			
Apparent Wind Speed   AWS (Knots)	Main	Jib	Code 0	Apparent Wind Speed   AWS (Knots)	Main	Jib	Code 0
0-10	Full	Full	Full	# 0-16	Full	0%	Full
0-26	Full	Full	0%	# 0-20	Full	0%	Full
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	Reef 3	60% *	0%
40-45	Reef 2	40% *	0%	# 34-38	Reef 3	40% *	0%
45-55	Reef 3	0%*	0%	# 38-50	0%	25%*	0%
> 55	0	0	0%	> 50	0%	0%	0%

\* 0% IF MAINSAIL WITH 2 REEFS

It is forbidden to sail with front sail only including spinnaker, excluded stormjib  
 Never sail upwind under Code 0 with TWS exceeding 10 knots  
 Standing rigging loads must be checked every year

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.



### WARNING

The mainsheet is fitted with a fuse to prevent overloading.

# 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 make the best use of each system and to maintain them in accordance with the manufacturers' recommendations. The owner's manual and user's guide complement this documentation.

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 starter shut-off switch to ON
- Turn the service shut-off switch to ON
- Turn the bow thruster shut-off switch to ON (optional)
- Turn the thruster cut-out switch to ON (optional)
- Turn the generator cut-out switch 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 if there are no oil or water leaks;
- Check if the electrical shore power cables are disconnected;
- Check if the fresh water supply(s) on shore are disconnected;
- Check if the air conditioning sea water thru-hull valve is open (optional);
- Check if the water maker sea water thru-hull valve is open (optional).



### WARNING

Under power, fit the boom preventer.

# 5-GETTING STARTED BEFORE CRUISING

## 5.5 Steering station ①

Complete documentation of the main components fitted on board is provided upon delivery of the boat. It enables you to make the best use of each system and to maintain them in accordance with the manufacturers' recommendations. The owner's manual and user's guide complement this documentation.

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



# 5-GETTING STARTED BEFORE CRUISING



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.

1. Multifunctional navigation screen
2. VHF
3. Multifunctional keyboard for the management of exterior lighting
4. Radio control (optional)
5. Compass
6. Engine controls
7. Engine display
8. Windlass control
9. Control Bow thruster (optional)
10. USB socket
11. Engine start
12. Alarm light if the bulwark is not locked (locking cylinder engaged).

# 6-ENGINES

## 6.1 Tanks

An 650L (1) aluminum diesel tank (1) is located on each side, under the side hull floorboards with stopcocks on each tank.

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

The level of the tanks is shown on the Scheiber/Navicolor screen (3).

Filling is conducted of the aft cockpit. There is one filler per tank (4). There is no fuel transfer between the two tanks.

As part of the GENSET option: a tank selection valve is located under the floorboard, aft of the port tank (5). It is possible to control the valve from the Scheiber / Navicolor screen, from the diesel tank page. The GENSET must be on to select the tank.

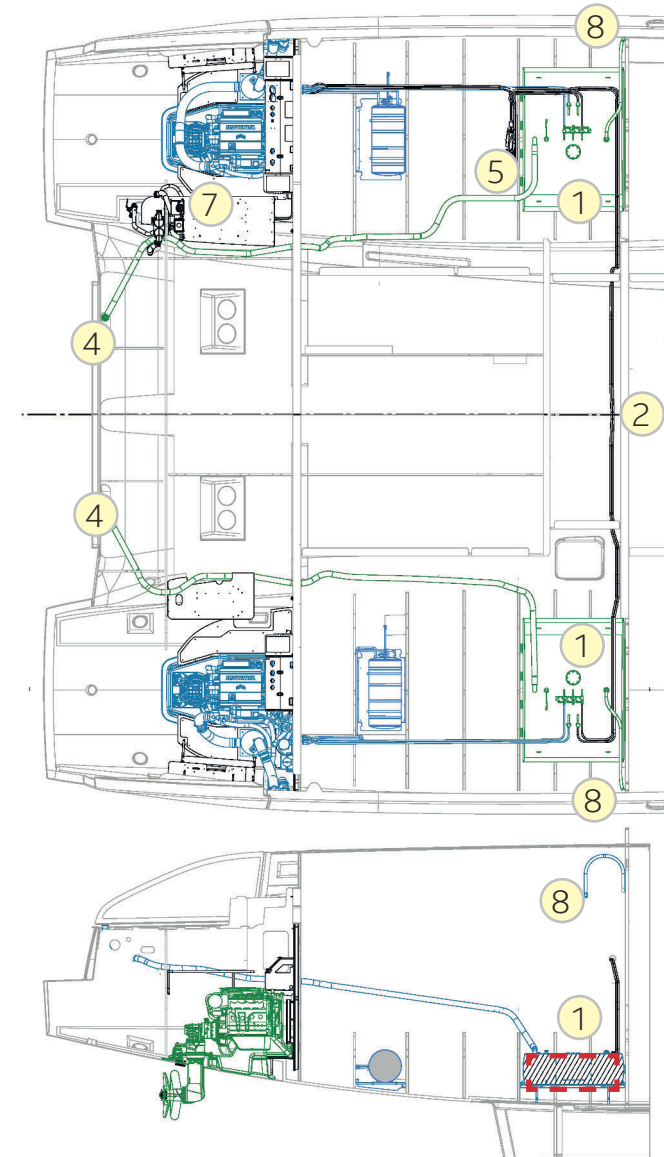
There is a fuel filter in each engine compartment on the engine (6). For the GENSET option, the fuel filter is located below the GENSET carrier (7).



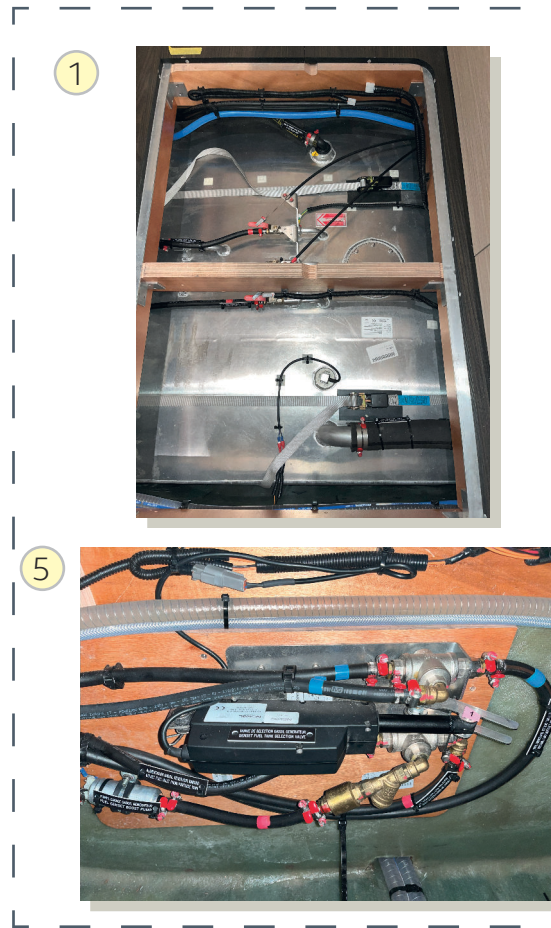
### WARNING

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.

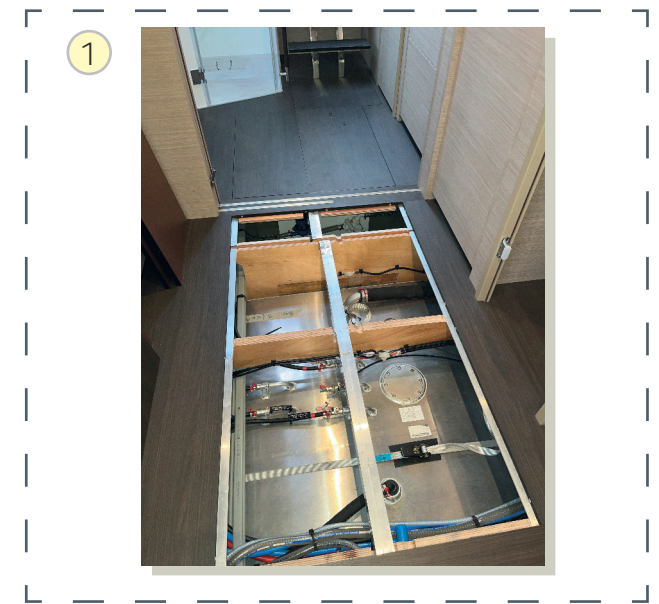
1. Tank
2. Lifeboat station
3. Scheiber/Navicolor screen in the starboard companionway
4. Filler
5. Generator selection solenoid valve
6. Engine fuel filter
7. GENSET fuel filter
8. Fuel vents



# 6-ENGINES



PORT SIDE HULL



STARBOARD SIDE HULL

# 6-ENGINES



7



6

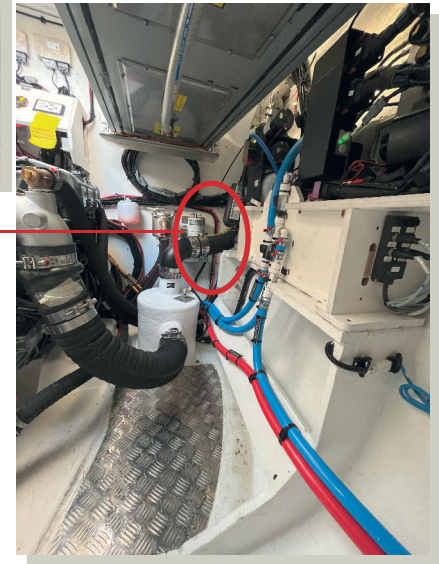
PORT ENGINE COMPARTMENT



7



6

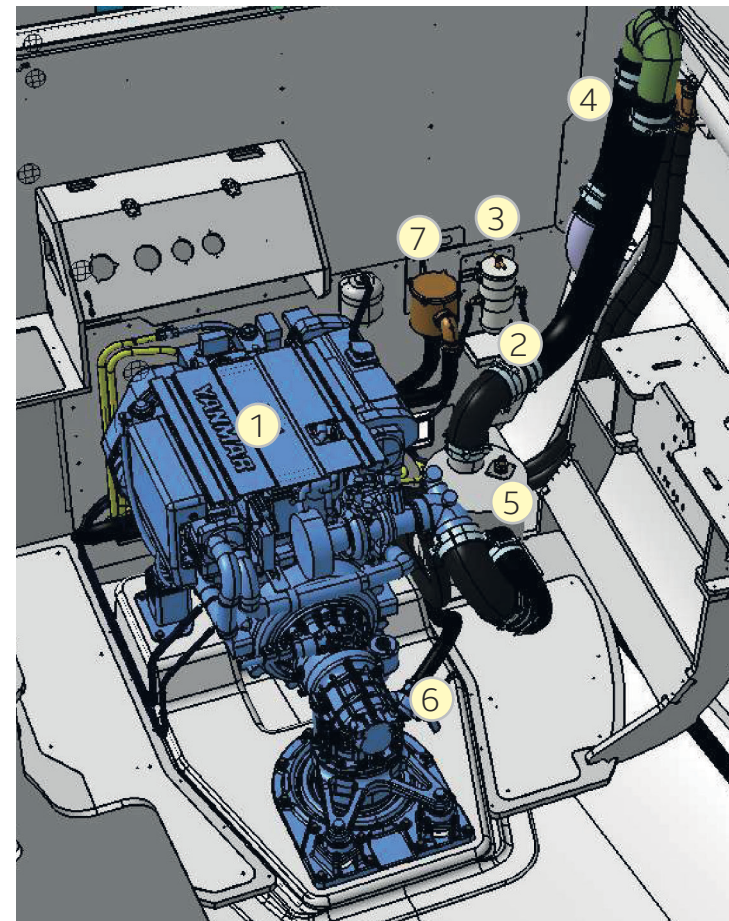
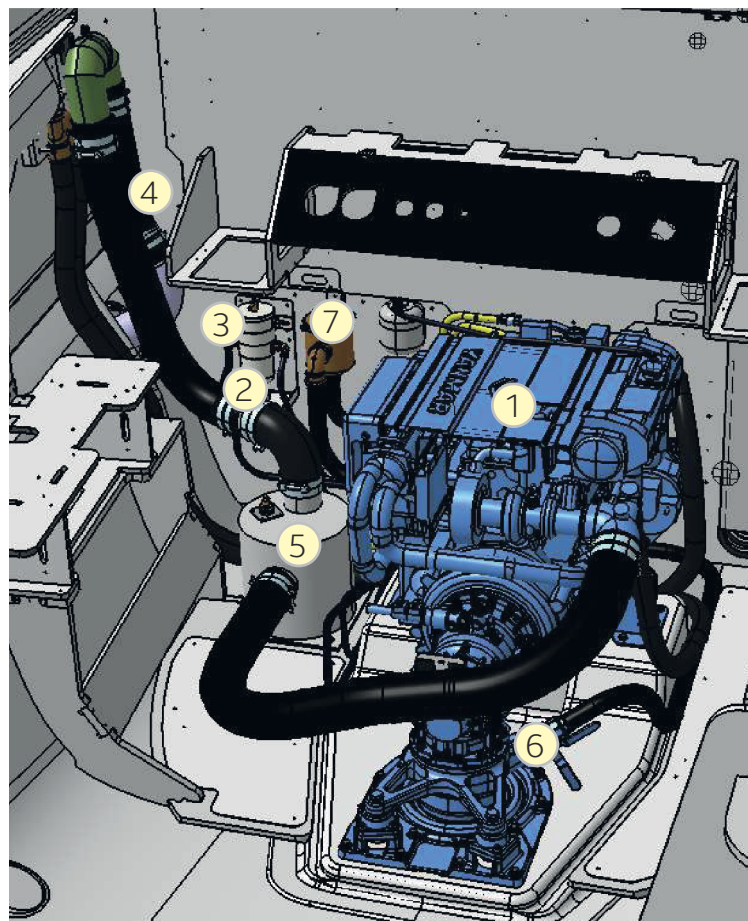


STARBOARD ENGINE COMPARTMENT

## 6.2 Diesel 4LV150 Yanmar version with SD15 ZF sail drive

1. Diesel 4LV150 Yanmar engine
2. Diesel inlet
3. Diesel filter
4. Engine exhaust
5. Muffler
6. Sea water inlet
7. Sea water filter

PORT ENGINE COMPARTMENT STARBOARD ENGINE COMPARTMENT



# 6-ENGINES

## 6.3 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.

Both engine compartments are fitted with a fixed system of fire extinguishers which are triggered remotely from the saloon floorboard (see §3.1.5). It is necessary to ventilate the engine compartment after triggering.



### WARNING

Do not store fuel-containing equipment in compartments not intended for this purpose. If no properly ventilated compartment is available, this equipment should be stored on deck.



## 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 pipes with the same characteristics.

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

# 6-ENGINES

## 6.4 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.

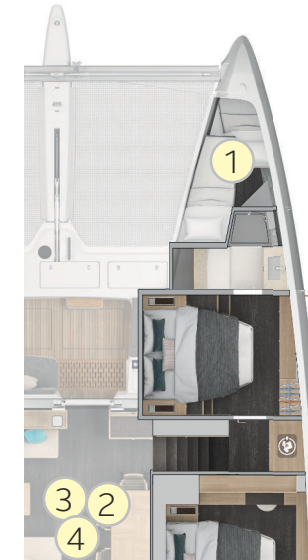
## 6.5 Bow thruster (optional)

As an option, the bow thruster is located on the forward starboard hull: SIDE POWER SE210 / 250 TC 24 V.

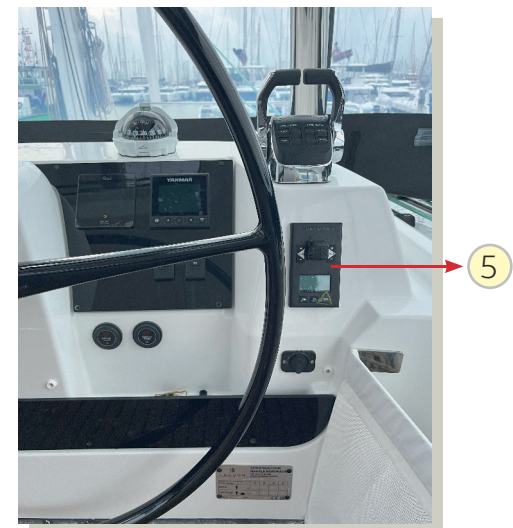
### Start up

- Turn the cut-out switch to the ON position (2) in the forward technical compartment.
- The dedicated battery bank is located under the nacelle's floor. The Scheiber / Navicolor screen displays the park voltage.
- 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.

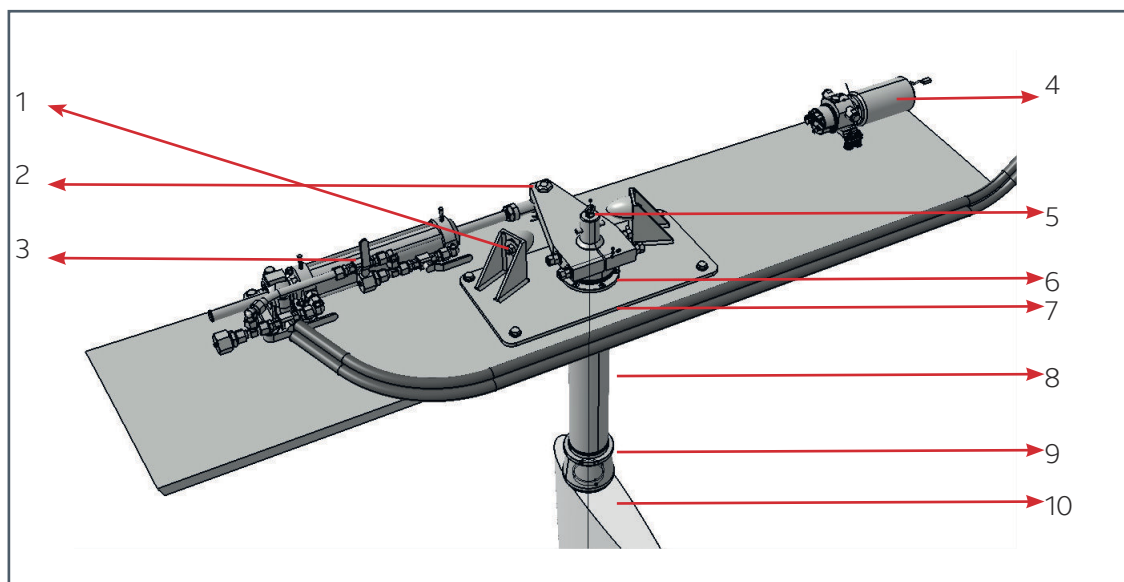


1. Bow thruster
2. Cut-out switch
3. Battery charger
4. Battery bank
5. Helm station joystick

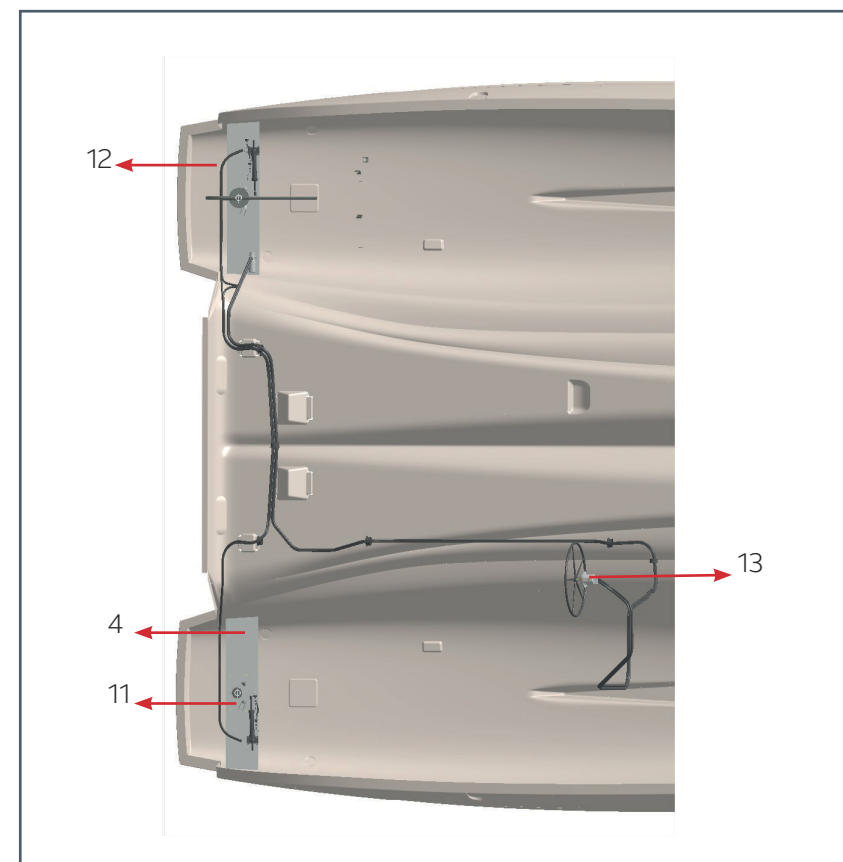


# 7-STEERING SYSTEM

## 7.1 General layout



1. Rudder angle end-stops
2. Rudder bar pin
3. VHM50 DTP hydraulic ram with by-pass
4. Autopilot pump (starboard side only)
5. Screw to lock the tiller shaft and lift the rudder
6. Upper bearing
7. Aluminum shelf with welded end-stops
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. Tiller pump

# 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. 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.
- Check that the pump oil level is full (wheel hub)
- 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 paragraph [3.3.1. Emergency tiller](#)



### NOTICE

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

# 8-ELECTRICAL SYSTEMS

## 8.1 Electrical circuits: Warnings and recommendations 24V/230V



### **DANGER**

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



### **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.



### **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.



### **ATTENTION**

The batteries must be carefully secured.



### **WARNING**

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

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.

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

## 8.3 Leaving the boat

For shutdown, refer to paragraphs [5.3 Power](#) and [5.4 Verifications](#).

# 8-ELECTRICAL SYSTEMS

## 8.4 Emergency start

If any of the engine starting batteries are damaged, a coupling system of the port and starboard 12V starting batteries is available.

To select battery coupling:

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

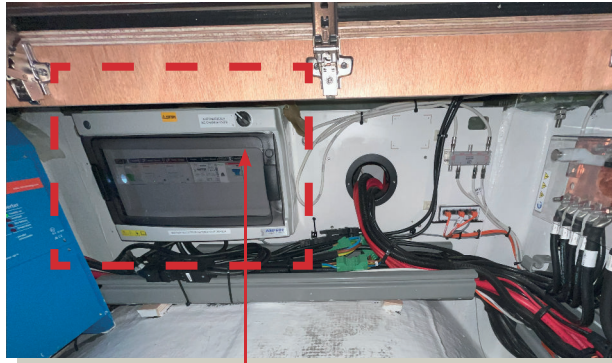
Note: In a normal configuration, the 12V engine starting batteries would then be charged by the engines' 12V alternators.  
As an option, a 230V / 12V charger can be used to recharge the batteries.

# 8-ELECTRICAL SYSTEMS

## 8.5 General principle: AC/DC



WARNING  
50Hz domestic appliances



The switch on the top of the cabinet can be used to switch off the automatic function of the source selector. When the switch is in position 1, the selector gives priority to powering the comfort and galley bus over the generator or the shore if they are powered.

Detailed diagrams of the electrical installation are provided in the appendix.

# 8-ELECTRICAL SYSTEMS

## STANDARD VERSION

STANDARD

ESSENTIAL PACK

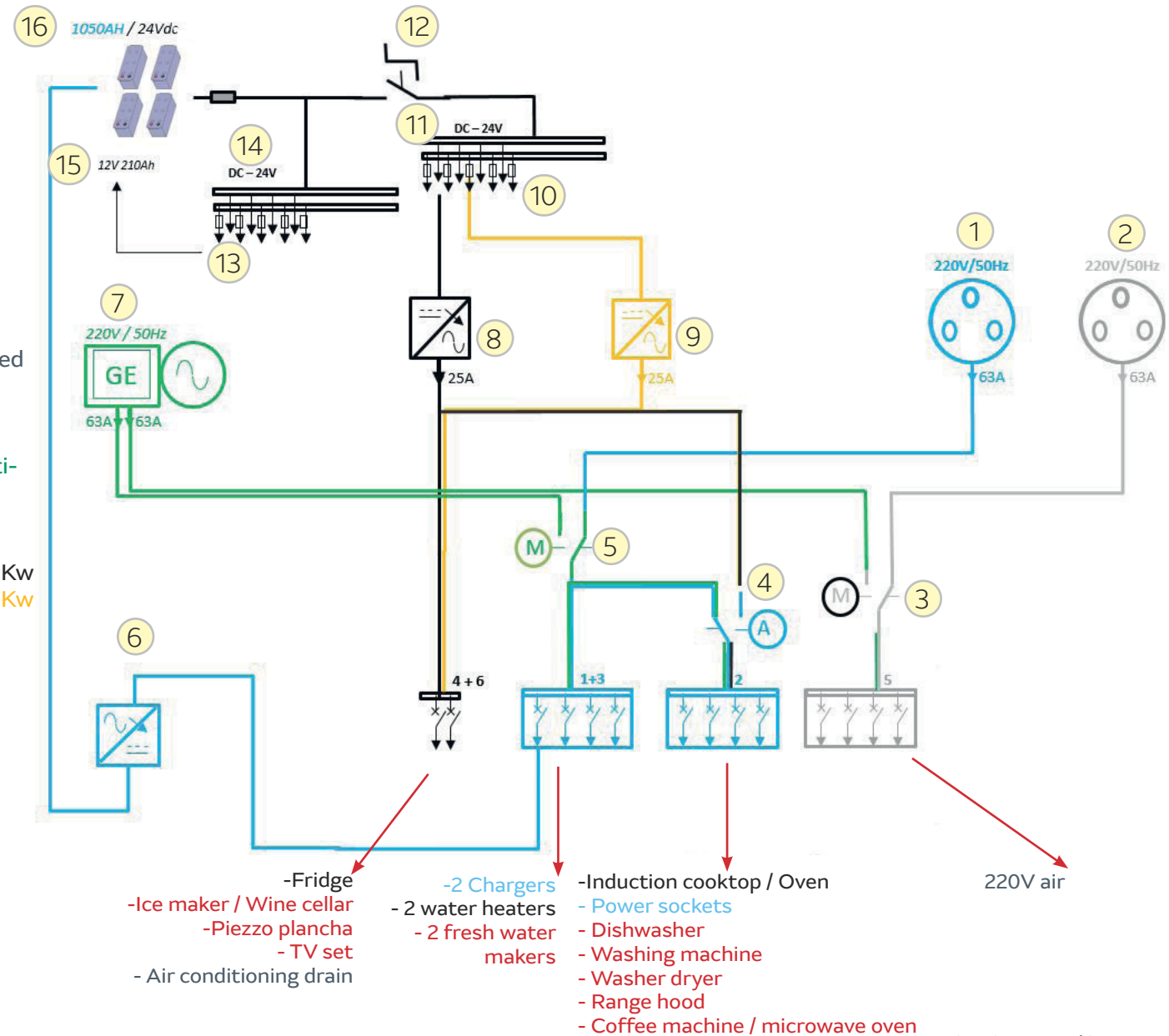
OPTIONS

ADDITIONAL CONVERTER

GENERATOR

AIR CONDITIONING

1. Service shore power outlet
2. 63A air conditioning shore power outlet
3. SCHEIBER- 80953Q Motorised multiplexed power selector
4. Automatic power transfer switch (shore priority). SUPPLIER / AMPERE
5. SCHEIBER - 80953Q 63A motorised multiplexed power selector
6. 1 x 100A charger / 1 x 100A charger
7. 17,5 KVA (76A) generator
8. 220V inverter / VICTRON-70570Q 50Hz 5Kw
9. 220V inverter / VICTRON-70570Q 50Hz 5Kw
10. - 24VDC Equipment  
- Electronic pack
11. POWER BUS
12. VIATEMIS 250A SERVICE cut-out switch
13. SERVICE alternator  
-Engine compartment ventilation  
-Drainage system
14. PRIMARY BUS
15. 10 X AGM batteries
16. AGM battery bank



Indice C-DECEMBER 2024

CE OWNER'S MANUAL

# 8-ELECTRICAL SYSTEMS

## STANDARD

### ESSENTIAL PACK



### OPTIONS

### ADDITIONAL CONVERTER

### GENERATOR

### AIR CONTIONING

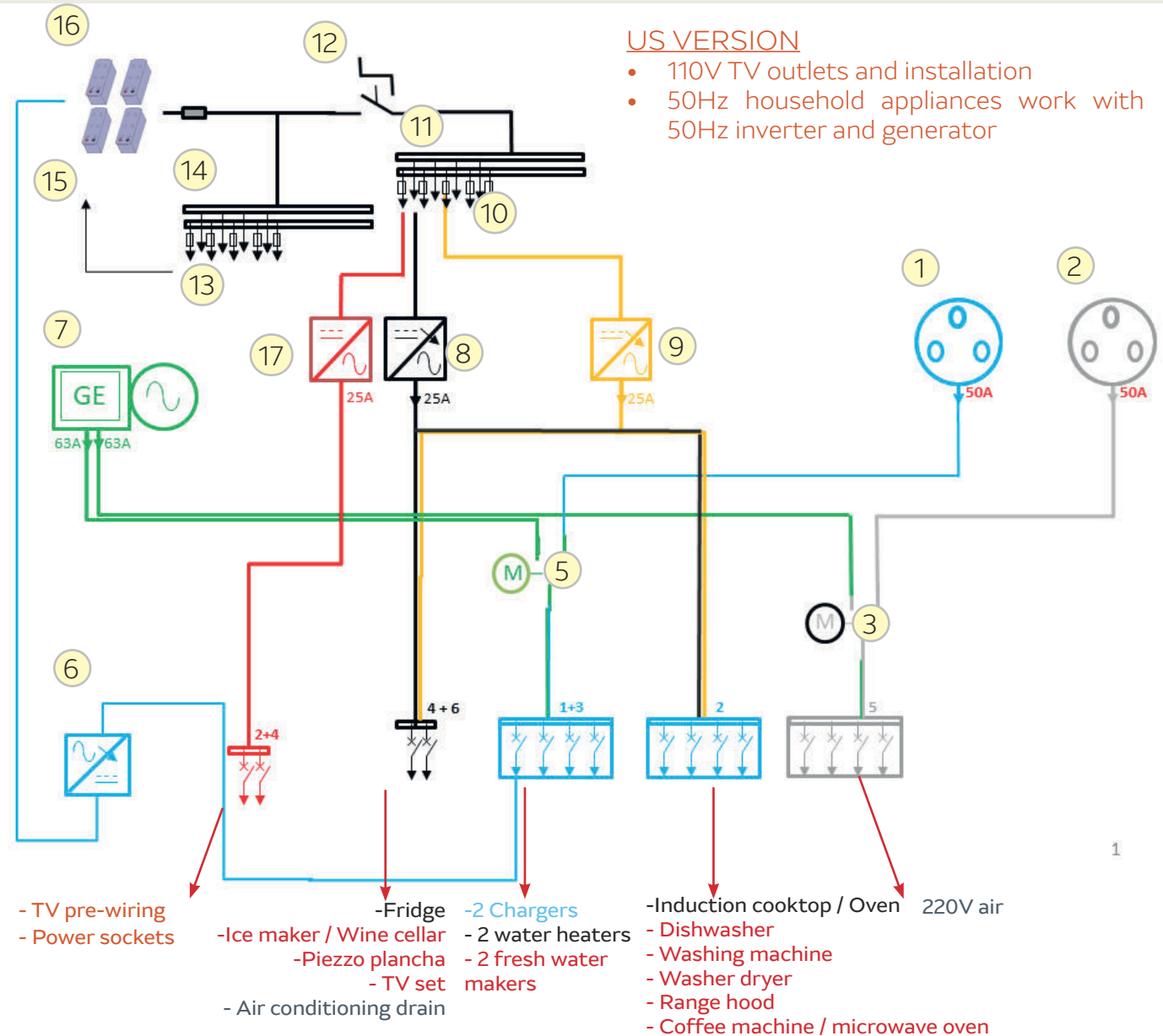
### US VERSION

-  220V pre-wiring
-  50Hz or 60Hz power source

1. 220V / 60Hz Service shore power outlet
2. 220V / 60Hz 63A air conditioning shore power outlet
3. SCHEIBER- 80953Q Motorised multiplexed power selector
4. xx SCHEIBER - 80953Q 63A motorised multiplexed power selector
5. 1 x 100A charger / 1 x 100A charger
6. 220 V / 60 Hz 17.5KVA generator (76A)
7. 220V inverter / 50Hz 5Kw VICTRON-70570Q
8. 220V / 50Hz Inverter 5Kw VICTRON-70570Q
9. - 24VDC Equipment  
- Electronic pack
10. POWER BUS
11. VIATEMIS 250A SERVICE cut-out switch
12. SERVICE alternator  
- Engine compartment ventilation  
- Drainage system
13. PRIMARY BUS
14. 10 X 12V 210Ah AGM batteries
15. AGM battery bank
16. 110V / 60Hz Inverter

## US VERSION

- 110V TV outlets and installation
- 50Hz household appliances work with 50Hz inverter and generator

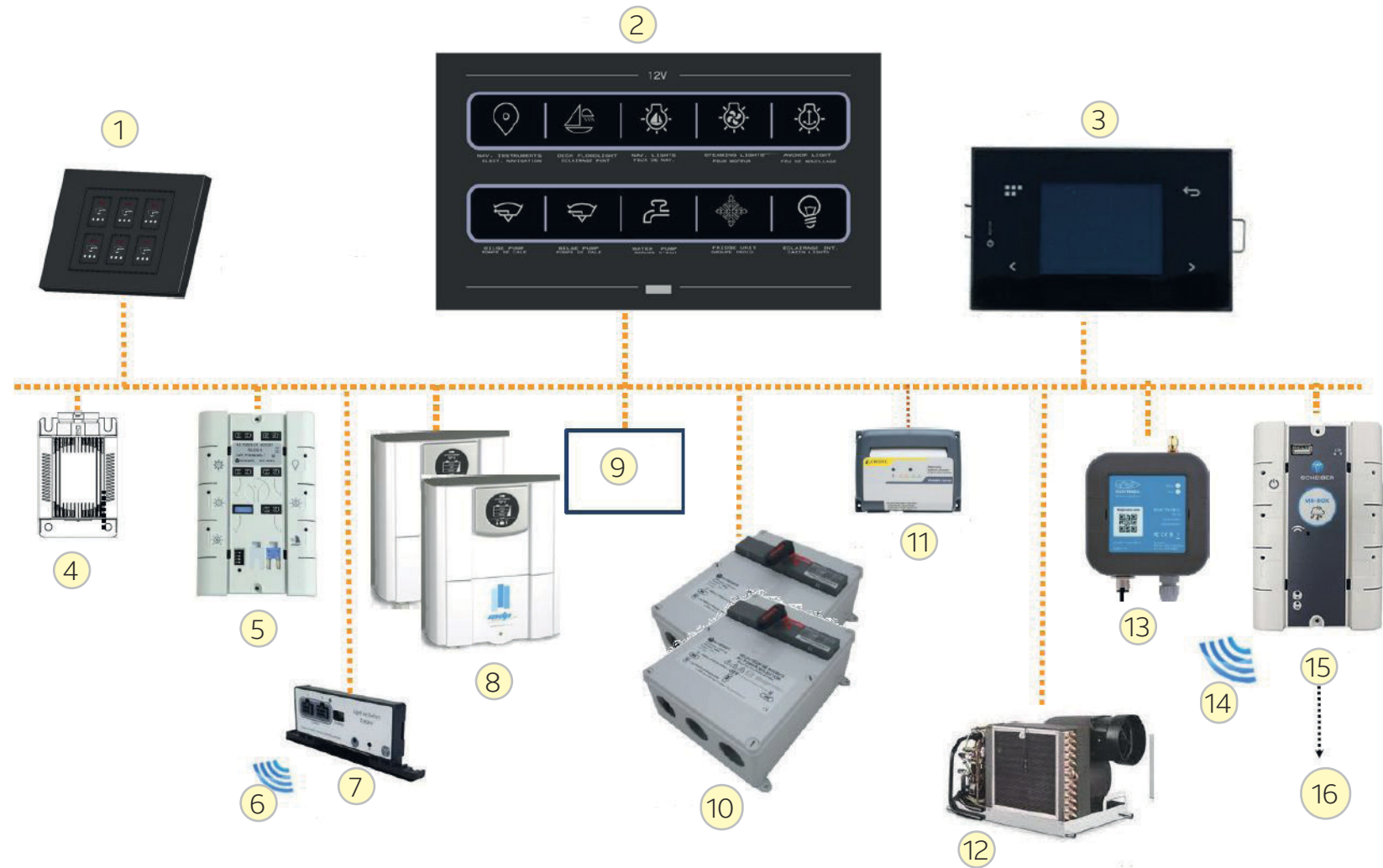


- TV pre-wiring
- Power sockets
- Ice maker / Wine cellar
- Piezzo plancha
- TV set
- Air conditioning drain
- 2 Chargers
- 2 water heaters
- 2 fresh water makers
- Induction cooktop / Oven
- Dishwasher
- Washing machine
- Washer dryer
- Range hood
- Coffee machine / microwave oven
- 220V air

# 8-ELECTRICAL SYSTEMS

## 8.6 General principle: Multiplexing

1. 6 SCHEIBER controls
  1. Bimini lights
  2. Deck spotlight
  3. Deck courtesy lights
  4. Boom lights
  5. Underwater lights
  6. Aft cockpit lights
2. SCHEIBER DC Control panel
3. SCHEIBER NAVI- COLOR Control panel
4. SCHEIBER BLOC 7
5. SCHEIBER BLOC 9
6. SFSB control
7. 2.4Ghz SCHEIBER
8. Chargers
9. Automatic AC switchover
10. SCHEIBER AC switchover
11. Battery status (engines and generators)
12. DOMETIC air conditioning
13. SEANAPPS
14. SMARTPHONE
15. SCHEIBER MBBOX
16. Navigation screen



# 8-ELECTRICAL SYSTEMS

## 8.7 General principle: Audio-Video

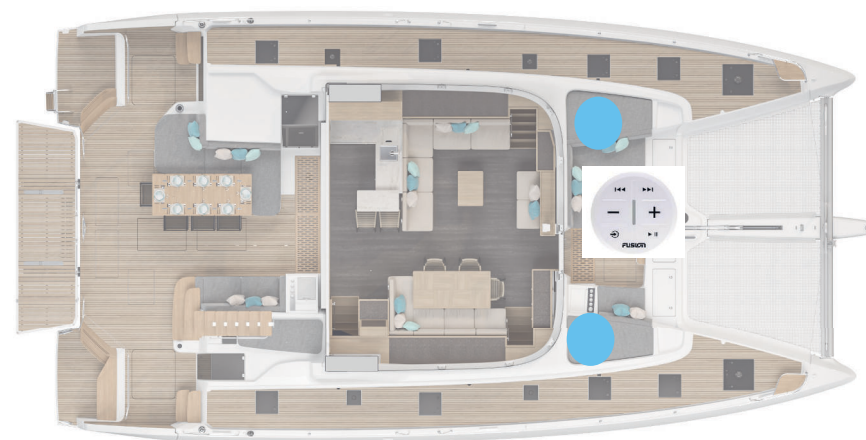
### ESSENTIAL PACK:

- RA770 radio in the saloon
- 4 B&W loudspeakers
- 1 sound source
- 2 separate volume levels
- Radio control in the cockpit



### FORWARD COCKPIT AUDIO OPTION:

- RA770 radio in the saloon
- Same source as the saloon
- 1 amplifier to manage the 3rd zone
- Radio control in the cockpit



# 8-ELECTRICAL SYSTEMS

## FLYBRIDGE AUDIO OPTION:

- SRX400 radio
- 2 B&W loudspeakers
- 1 sound source (or saloon sound source)
- 1 volume level



## SIDE HULL GALLEY AUDIO OPTION:

- RA770 radio
- 2 B&W loudspeakers
- 1 sound source 1 volume level



## OWNER CABIN AUDIO OPTION:

- RA770 radio
- 2 B&W loudspeakers
- 1 sound source (or saloon sound source)
- 1 volume level



# 8-ELECTRICAL SYSTEMS

## 8.8 General principle: Electronics

**ELECTRONIC PACK**  
HELM

Axiom Pro 16  
16" Multifunction Wifi hybridtouch display - Navionics Silver supplied

i70s Colour Instrument    i70s Colour Instrument    p70s Colour Autopilot Control Head

Ray 90 Radio VHF black box with DSC    AIS700 class B AIS transceiver with built-in antenna splitter.    Wireless VHF Handset second helm

SeaTalkNG    RayNet

**ELECTRONIC PACK (CONTINUED)**

D57810 Speed/Depth/Temp Transducer    Wind transducer and ITC5 Interface box    EV-1 9-axis compass sensor with built-in rate gyro ACU-400 actuator control unit Rudder Reference

L&S hydraulic unit drive

SeaTalkNG

**OPTIONAL RADAR**

Quantum 2 Doppler antenna using CHIRP Pulse Compression technology and Doppler collision avoidance technology.

16S Switch RayNet

RayNet

**OPTIONAL MFD\* CHART**

Axiom + 12  
12" Multifunction WIFI touchscreen display. Autopilot control integrated

RayNet

\*the MFD option removes the i70 in the Chart table

**OPTIONAL AUTOPILOT**

S100 wireless Remote control

SeaTalkNG

**OPTIONAL 3D SOUNDER**

RV-200 bronze probe to identify structures and locate the fish with clarity identical to RealVision 3D sonar reality

**OPTIONAL REAR CAM**

CAM220 Dome IP Cameras

**OPTIONAL MFD KITCHEN**

Axiom + 9  
9" Multifunction WIFI touchscreen display. Autopilot control integrated

RayNet

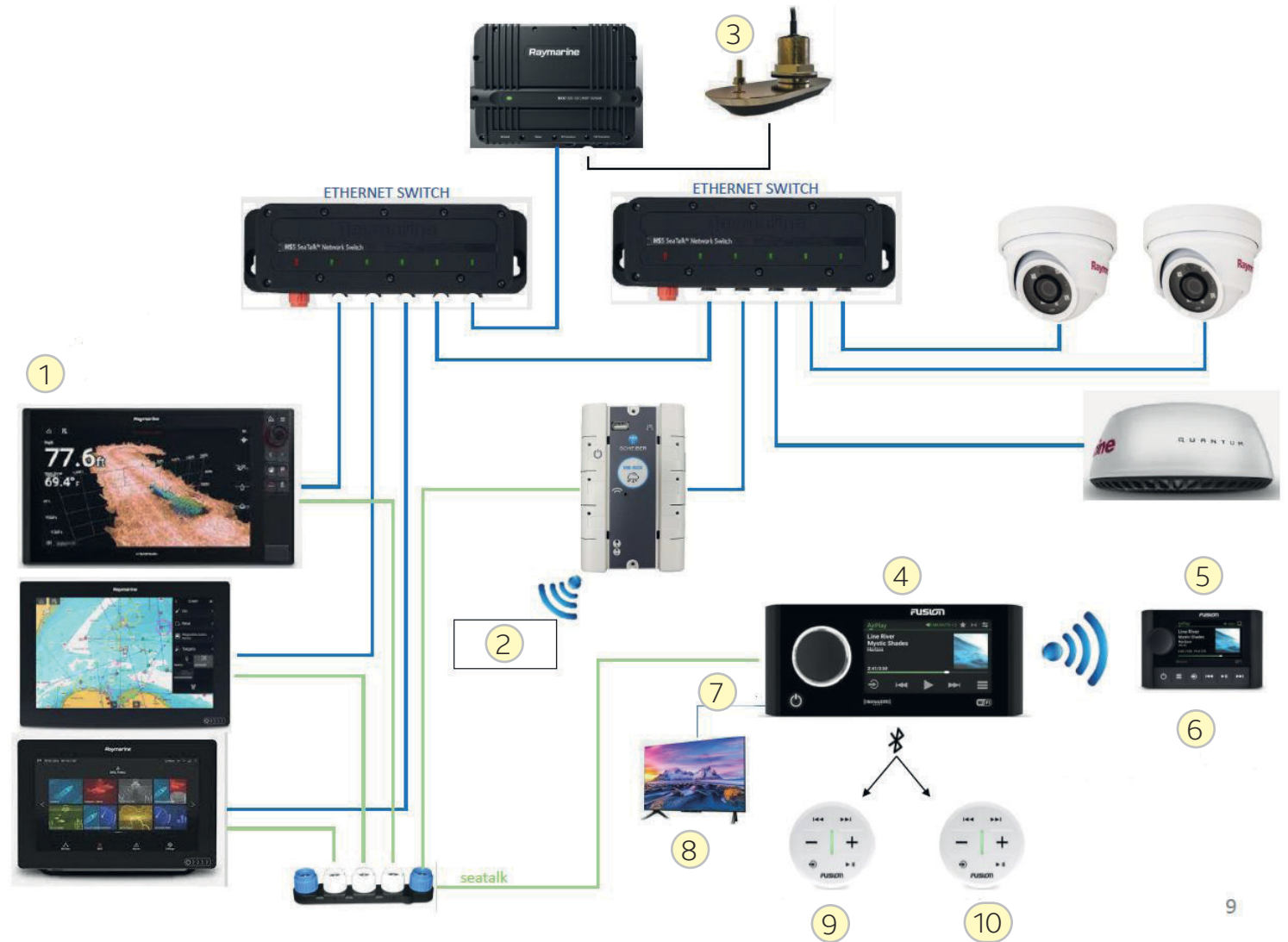
# 8-ELECTRICAL SYSTEMS

## ETHERNET NETWORK

### 1. Multifunction screens

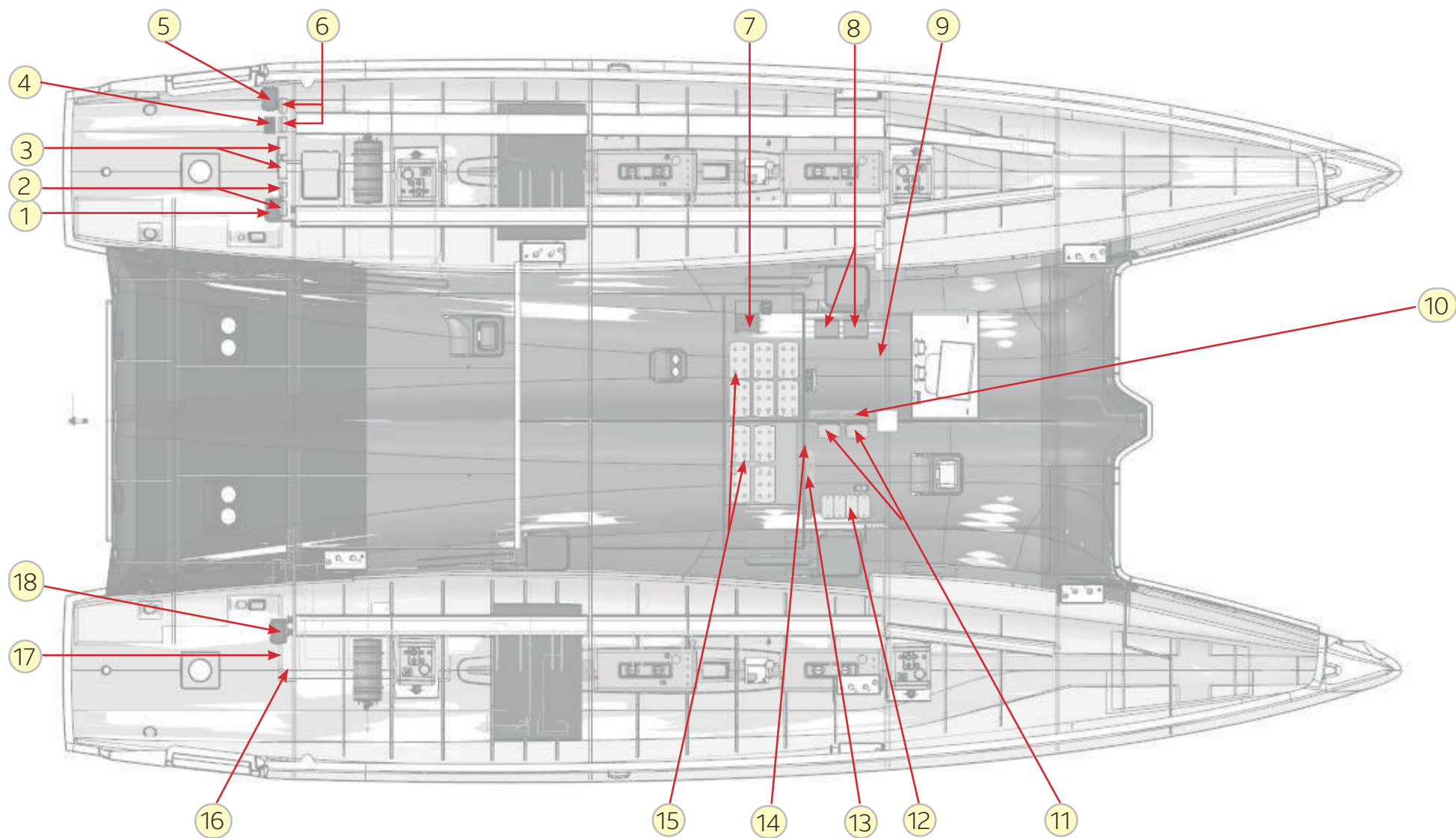
Display options: Radar, sounder, Ship control, cameras, Audio in the saloon.

2. Smartphone tablet
3. RV200 Sone
4. Saloon
5. Flybridge
6. Apollo RA770 with SRX400
7. Optics
8. Saloon TV set
9. Aft cockpit
10. Forward cockpit



# 8-ELECTRICAL SYSTEMS

## 8.9 Equipment layout



# 8-ELECTRICAL SYSTEMS

## LPORT ENGINE COMPARTMENT

1. Thruster shut-off (optional)
2. GFCI generator (optional)
3. Generator AC power selector / air conditioning AC inverter (optional)
4. Engine shut-off
5. Port engine battery
6. Onboard GFCI

## BELOW NACELLE TECHNICAL AREA

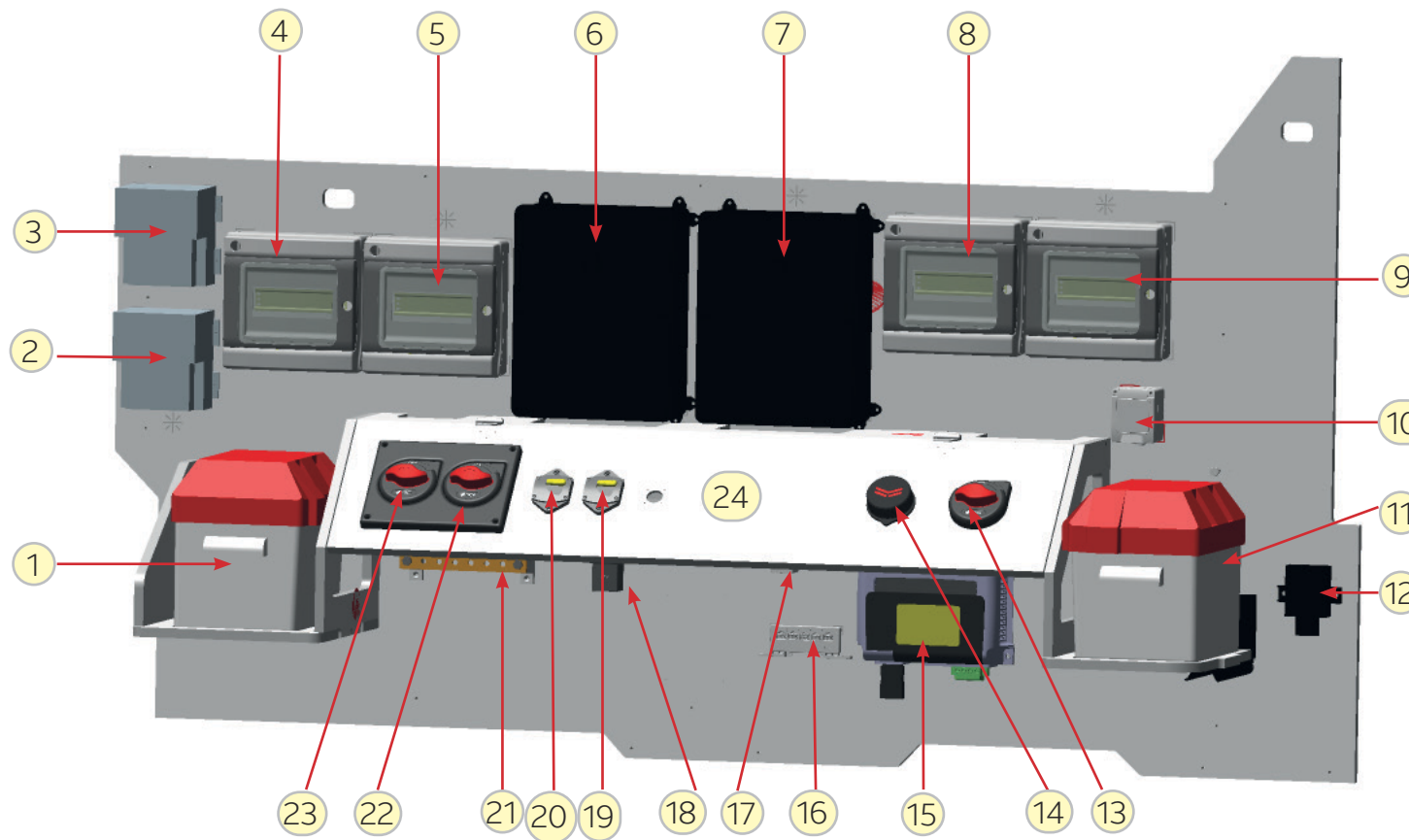
7. 3,000W 24V/110V Inverter (the US version has a different position)
7. 5,000W 24V/230V Inverter
8. Automatic AC power selector
9. DC bus power bar
10. 100A charger
11. Thruster battery (optional)
12. Primary DC bus power bar
13. Primary DC battery shut-off
14. Service batteries

## STARBOARD ENGINE COMPARTMENT

16. YANMAR ECU
17. Starboard engine shut-off
18. Engine start battery

# 8-ELECTRICAL SYSTEMS

## 8.10 Equipment layout - PORT ENGINE COMPARTMENT

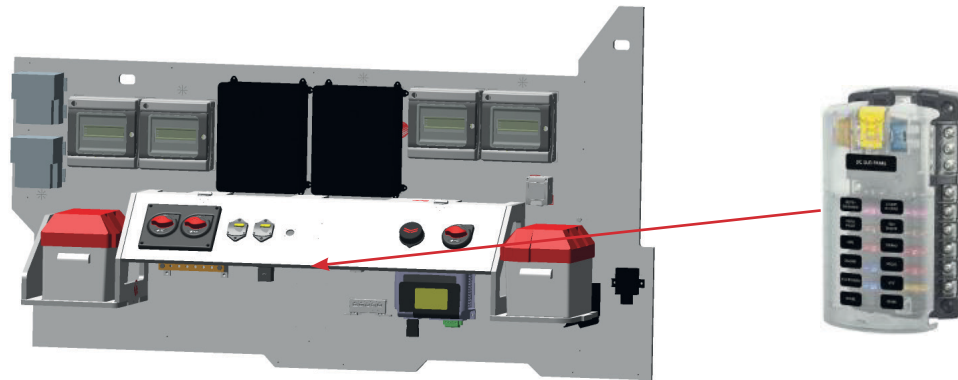


1. Engine start battery
2. Air conditioning Zinc saver shore (optional)
3. Zinc saver shore
4. Onboard GFCI
5. Air conditioning onboard GFCI (optional)
6. Generator AC power selector (optional)
7. Air conditioning AC power selector (optional)
8. GFCI generator (option)
9. GFCI air conditioning (optional)
10. Power outlet
11. Generator start battery (optional)
12. E-SHIFT Yanmar
13. Thruster shut-off (optional)
14. Yanmar back-up panel
15. Battery starter charger
16. SCHEIBER Hub
17. Thermostat button
18. Capstan relay (optional)
19. Bulwark door circuit breaker
20. Capstan circuit breaker (optional)
21. 24V DC bus power bar
22. Engine battery coupling
23. Engine shut-off
24. Tenderlift remote control (optional)

# 8-ELECTRICAL SYSTEMS

## DC FUSES

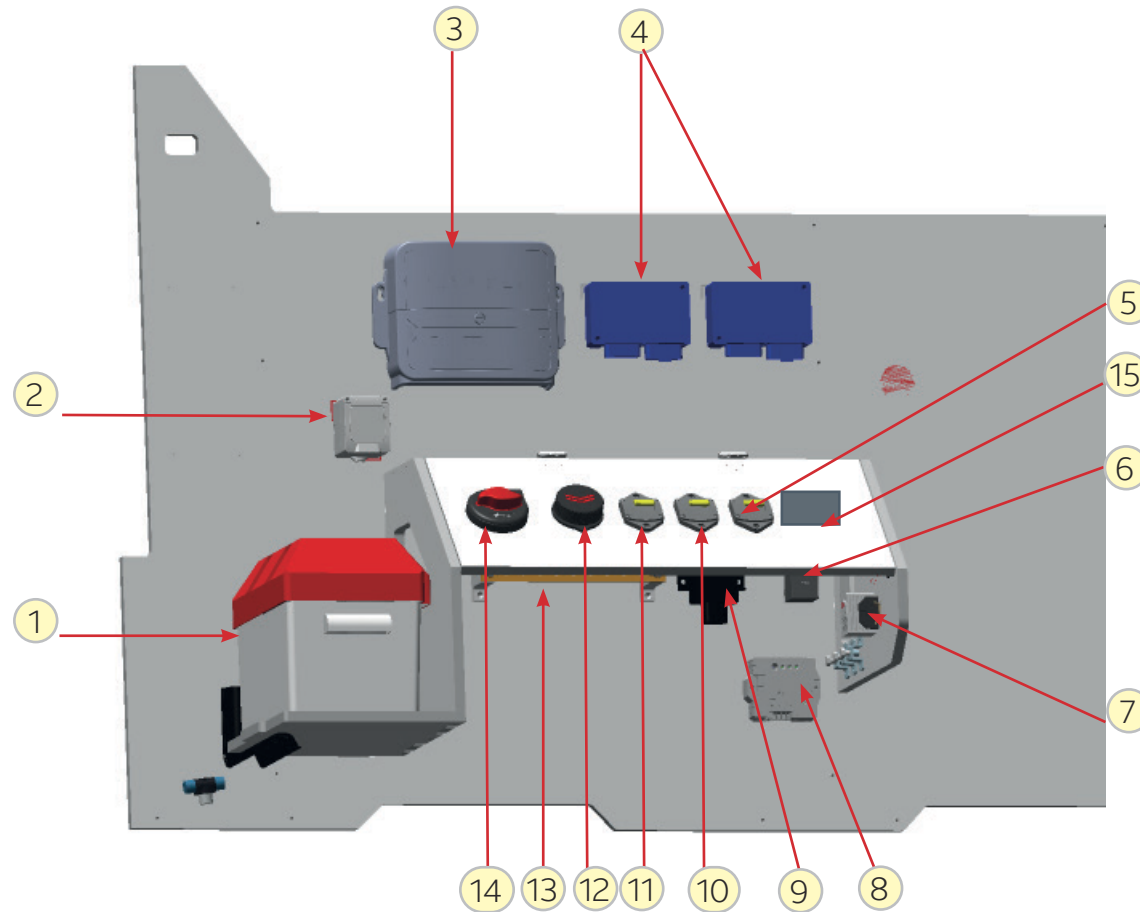
X05 JEU DE BARRES DC LOCAL MOTEUR BABORD / PORT ENGINE AREA DC POWER BAR											
WDC183		WDC170		WDC012 / 44		WDC181		WDC051		WDC147	
BATTERIE DEMARRAGE MOTEUR	ENGINE STARTING BATTERY	TENDER LIFT	TENDER LIFT	BATT DEM GE CHARGEUR BATTERIE DEM	GENSET STARTING BATTERY / CHARGER BATT	ALIMENTATION PUISSANCE F35	F35 POWER	REPARTITEUR ALIMENTATION X73	X73 POWER DISTRIBUTOR	CABESTAN BABORD	PORT CAPSTAN
WDC165 /		WDC169 FUSE : 200A				WDC180 FUSE : 300A		WDC050 FUSE : 50A		WDC017 FUSE : 125A	
ALTERNATEUR MOTEUR	ENGINE ALTERNATOR	TENDER LIFT	TENDER LIFT			ALIMENTATION PUISSANCE F35	F35 POWER	REPARTITEUR ALIMENTATION X73	X73 POWER DISTRIBUTOR	CABESTAN BABORD	PORT CAPSTAN



REP : X73 CODE ARTICLE : 000001162416 BOITIER BLUE SEA 6 FUSIBLES AVEC MASSE					
BORNE	CABLE	FIL	COULEUR	CALIBRE	ETIQUETTE
ALIM	WDC090	WDC090	ROUGE_6MM2		
FUSE1				-	-
FUSE2	W 139	W 139	ROUGE_2_5MM2	5A	EXHAUST ALARM
FUSE3	W 148	W 148	ROUGE_2_5MM2	10A	ENGINE FAN
FUSE4	W 149	W 149	ROUGE_4MM2	10A	BULKHEAD CYLINDER
FUSE5	W 192	W 192	ROUGE_2_5MM2	5A	CAPSTAN SWITCH
FUSE6				-	-

# 8-ELECTRICAL SYSTEMS

## 8.11 Equipment layout-STARBOARD ENGINE COMPARTMENT

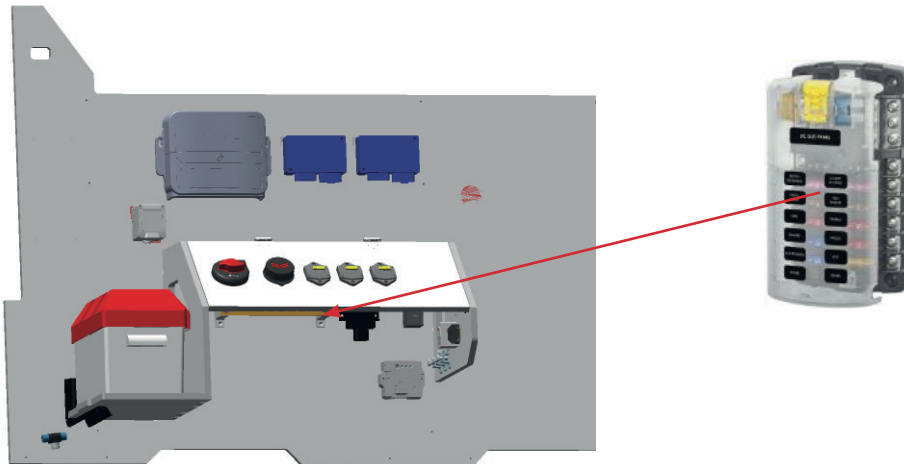


1. Engine start battery
2. Power outlet
3. Autopilot
4. YANMAR ECU
5. Hydraulic gangway circuit breaker (optional)
6. Capstan relay (optional)
7. Thermostat button
8. Alternator regulator
9. E-SHIFT Yanmar
10. Bulwark door battery shut-off
11. Capstan shut-off (optional)
12. Yanmar back-up panel
13. 24V DC bus power bar
14. Engine shut-off
15. Hydraulic gangway (optional)

# 8-ELECTRICAL SYSTEMS

## DC FUSES

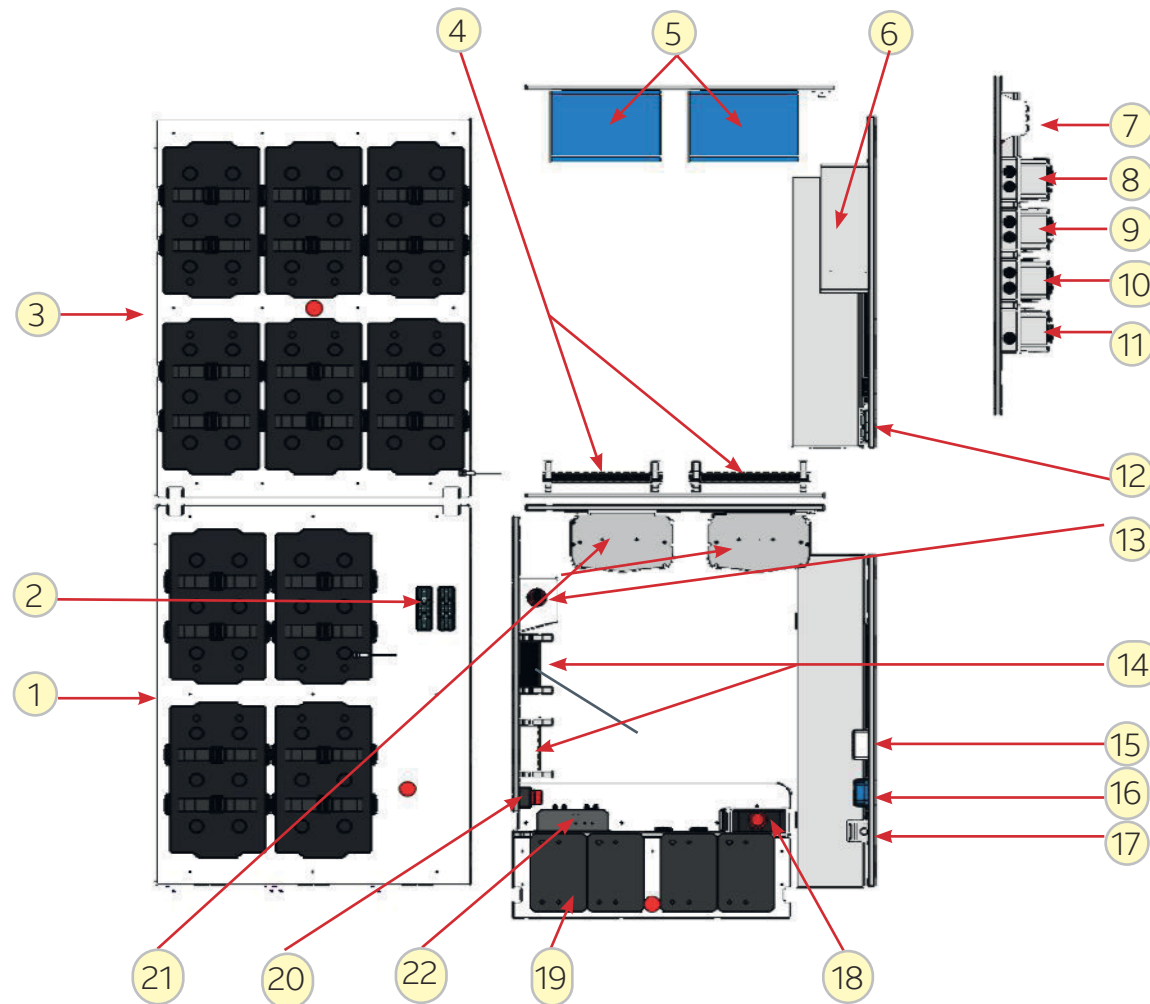
X06 JEU DE BARRES DC LOCAL MOTEUR TRIBORD / STBD ENGINE AREA DC POWER BAR										
	<b>WDC017</b>		<b>WDC176</b>			<b>WDC091</b>	<b>W216</b>	<b>WDC168</b>	<b>WDC151</b>	
	BATTERIE DEMARRAGE MOTEUR ENGINE STARTING BATTERY		ALIMENTATION PUISSANCE V60 V60 POWER			REPARTITEUR ALIMENTATION X73 X73 POWER DISTRIBUTOR	CALCULATEUR PILOTE PILOT ECU	PASSERELLE HYDRAULIQUE GANGWAY	CABESTAN TRIBORD STBD CAPSTAN	
	<b>WDC167</b>		<b>WDC177</b>			<b>WDC090</b>	<b>W215</b>	<b>WDC158</b>	<b>WDC019</b>	
	/		/			FUSE : 50A	FUSE : 40A	FUSE : 200A	FUSE : 125A	
	ALTERNATEUR MOTEUR ENGINE ALTERNATOR		ALIMENTATION PUISSANCE V60 V60 POWER			REPARTITEUR ALIMENTATION X73 X73 POWER DISTRIBUTOR	CALCULATEUR PILOTE PILOT ECU	PASSERELLE HYDRAULIQUE GANGWAY	CABESTAN TRIBORD STBD CAPSTAN	



REP : X73 CODE ARTICLE : 000001162416 BOITIER BLUE SEA 6 FUSIBLES AVEC MASSE					
BORNE	CABLE	FIL	COULEUR	CALIBRE	ETIQUETTE
ALIM	W DC 090	W DC 090	ROUGE_6MM2		
FUSE1				-	-
FUSE2	W 139	W 139	ROUGE_2_5MM2	5A	EXHAUST ALARM
FUSE3	W 148	W 148	ROUGE_2_5MM2	10A	ENGINE FAN
FUSE4	W 149	W 149	ROUGE_4MM2	10A	BULKHEAD CYLINDER
FUSE5	W 192	W 192	ROUGE_2_5MM2	5A	CAPSTAN SWITCH
FUSE6				-	-

# 8-ELECTRICAL SYSTEMS

## 8.12 Equipment layout-BELOW NACELLE TECHNICAL COMPARTMENT



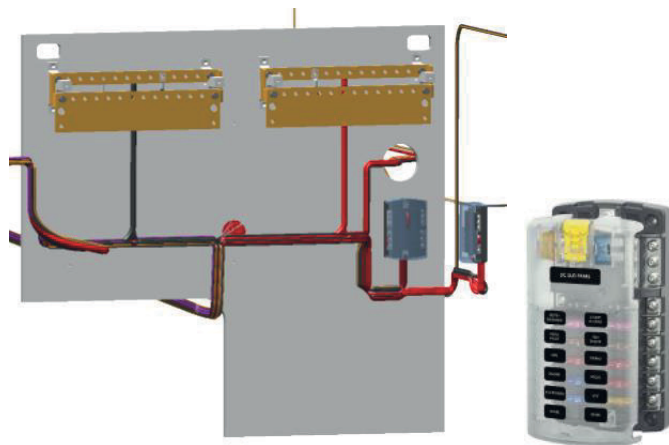
1. Service batteries
2. Battery bank fuses
3. Service batteries (standard 6 / optional 4 more)
4. DC bus power bar
5. 24V/230V inverter
6. Automatic AC power selector
7. Capstan relay / circuit breaker (optional)
8. Spinnaker furler relay / circuit breaker (optional)
9. Genoa furler relay / circuit breaker
10. Staysail furler relay / circuit breaker
11. Windlass relay / circuit breaker
12. Antenna splitter
13. Main service battery shut-off
14. Primary DC bus bar
15. Cockpit audio amplifier (optional)
16. Saloon audio inverter
17. Saloon ice maker outlet (optional)
18. Thruster shut-off (optional)
19. Thruster battery (optional)
20. Engine alternator switch
21. Charger
22. Thruster battery charger (optional)

# 8-ELECTRICAL SYSTEMS

## DC FUSES

X06 JEU DE BARRES DC LOCAL MOTEUR TRIBORD / STBD ENGINE AREA DC POWER BAR											
WDC017		WDC176		WDC091		W216		WDC168		WDC151	
BATTERIE DEMARRAGE MOTEUR	ENGINE STARTING BATTERY	ALIMENTATION PUISSANCE V60	V60 POWER	REPARTITEUR ALIMENTATION X73	X73 POWER DISTRIBUTOR	CALCULATEUR PILOTE	PILOT ECU	PASSERELLE HYDRAULIQUE	GANGWAY	CABESTAN TRIBORD	STBD CAÏSTAN
WDC167		WDC177		WDC090		W215		WDC158		WDC019	
ALTERNATEUR MOTEUR	ENGINE ALTERNATOR	ALIMENTATION PUISSANCE V60	V60 POWER	FUSE : 50A		FUSE : 40A		FUSE : 200A		FUSE : 125A	
/		/		REPARTITEUR ALIMENTATION X73		X73 POWER DISTRIBUTOR		CALCULATEUR PILOTE		PILOT ECU	
/		/		PASSERELLE HYDRAULIQUE		GANGWAY		CABESTAN TRIBORD		STBD CAÏSTAN	

X01 JEU DE BARRES DC PRIORITAIRE / PRIORITARY DC POWER BAR															
WDC022 / WDC023		WDC121		WDC009		WDC020		W482		WDC034		WDC102		WDC099 X 2	
/		FUSE : 75A		FUSE : 150A		FUSE : 150A		FUSE : 50A		FUSE : 50A		FUSE : 50A		/	
BATTERIES SERVICE	BATTERY BOARD	PANNEAUX SOLAIRE	SOLAR PANEL	CHARGEUR U01	U01 CHARGER	CHARGEUR U02	U02 CHARGER	REPARTITEUR PRIORITAIRE X105	X105 PRIORITARY PORT DISTRIBUTION	SYSTEME ASSECHEMENT BORD	PORT/BILGE PUMP SYSTEM	SYSTEME ASSECHEMENT TRIBORD	STBD/BILGE PUMP SYSTEM	CB SERVICE / B+ ALT	BATT SWITCH SERVICE / B+ ALT



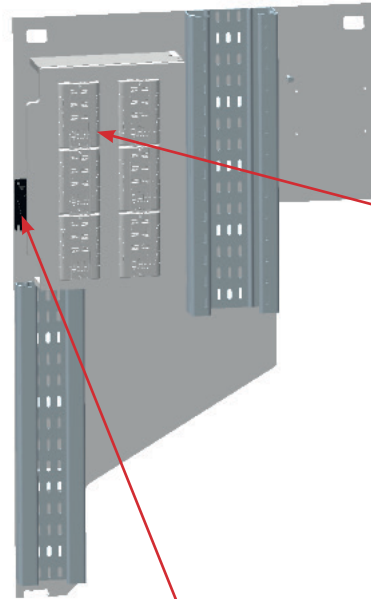
REP : X104 CODE ARTICLE : 000001162416 BOITIER BLUE SEA 6 FUSIBLES AVEC MASSE					
BORNE	CABLE	FIL	COULEUR	CALIBRE	ETIQUETTE
ALIM	W 423	W 423	ROUGE_10MM2		
FUSE1	W 431	W 431	ROUGE_1_5MM2	5A	BATTERIES FAN
FUSE2	W 457	W 457	ROUGE_2_5MM2	15A	DECK WASH PUMP
FUSE3	W 465	W 465	ROUGE_2_5MM2	15A	FUSION SALOON
FUSE4	W 475	W 475	ROUGE_2_5MM2	5A	S-LINK NETWORK
FUSE5	W 484	W 484	ROUGE_2_5MM2	10A	FUSION AMPLIFIER
FUSE6	W 492	W 492	ROUGE_1_5MM2	2A	INVERTER POWER ALARM

REP : X105 CODE ARTICLE : 000001162416 BOITIER BLUE SEA 6 FUSIBLES AVEC MASSE					
BORNE	CABLE	FIL	COULEUR	CALIBRE	ETIQUETTE
ALIM	W 482	W 482	ROUGE_10MM2		
FUSE1	W 478	W 478	ROUGE_2_5MM2	5A	FIRE SECURITY
FUSE2	W 469	W 469	ROUGE_2_5MM2	5A	SEANAPPS
FUSE3	W 479	W 479	ROUGE_2_5MM2	10A	PORT MCA STATION
FUSE4	W 470	W 470	ROUGE_2_5MM2	5A	BILGE PUMP ALARM
FUSE4	W 471	W 471	ROUGE_2_5MM2	5A	BILGE PUMP ALARM
FUSE5	W 480	W 480	ROUGE_2_5MM2	10A	STBD MCA STATION
FUSE6					

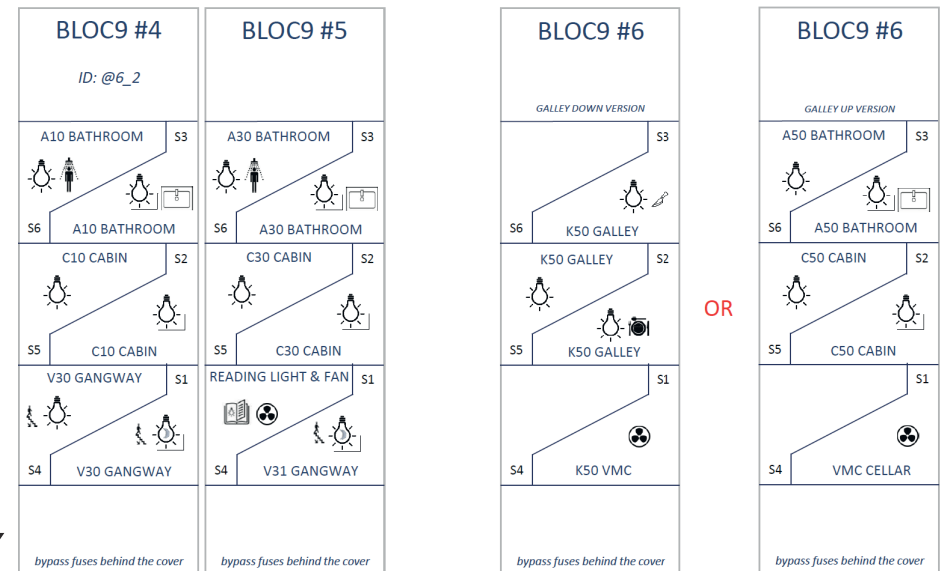
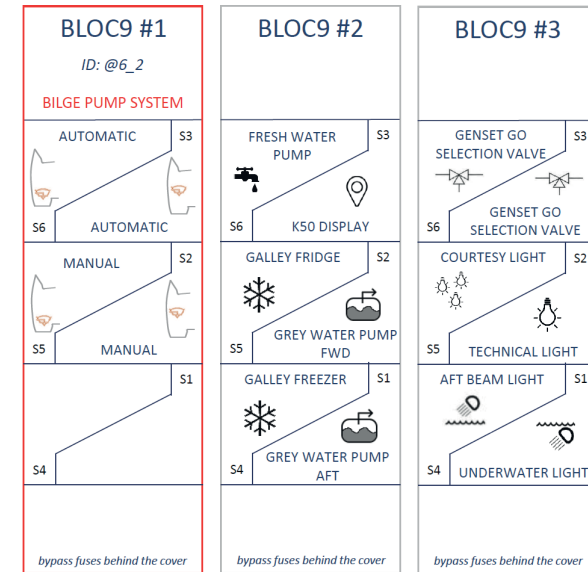
# 8-ELECTRICAL SYSTEMS

## 8.13 Equipment layout - PORT COMPANIONWAY

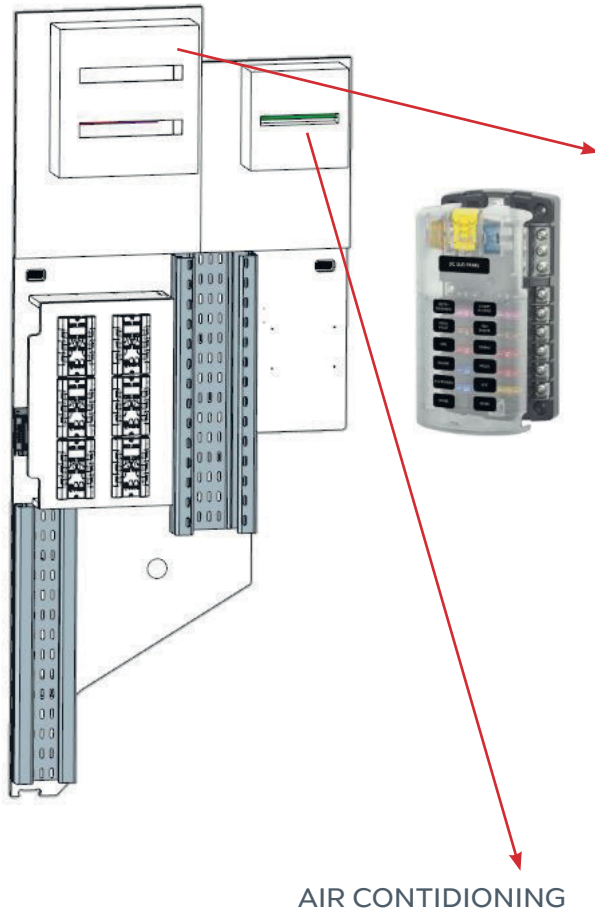
### DC FUSES



- BLOC7**  
 Fuel tank  
 Fresh water tank  
 Aft grey water tank (optional)  
 Forward grey water tank (optional)  
 Port engine start battery  
 Generator start battery (optional)



# 8-ELECTRICAL SYSTEMS



**DC FUSES**

**AIR CONTIDIONING**

Q-03	A / C DRAIN PUMP	10 A
Q-05	GALLEY FRIDGE	16 A
Q-13	ICE MAKER (optional)	16 A
Q-21	HIFI-VIDEO (optional)	16 A
Q-01	PC COMFORT	20 A
Q-07	PC COMFORT	20 A
Q-10	PC COMFORT	20 A
Q-24	PRINSTAL TV US (optional)	20 A
F17	PC 5mA	16 A 5mA
F18	PC 10mA	16 A 10mA
Q-06	WASHING MACHINE (optional)	20A
Q-08	DSIHWASHER (optional)	20 A
Q-09	COOK TOP	32 A
Q-15	OVEN	20 A
Q-16	HOOD / MICROWAVE (optional)	20 A
Q-19	DRYER (optional)	16 A

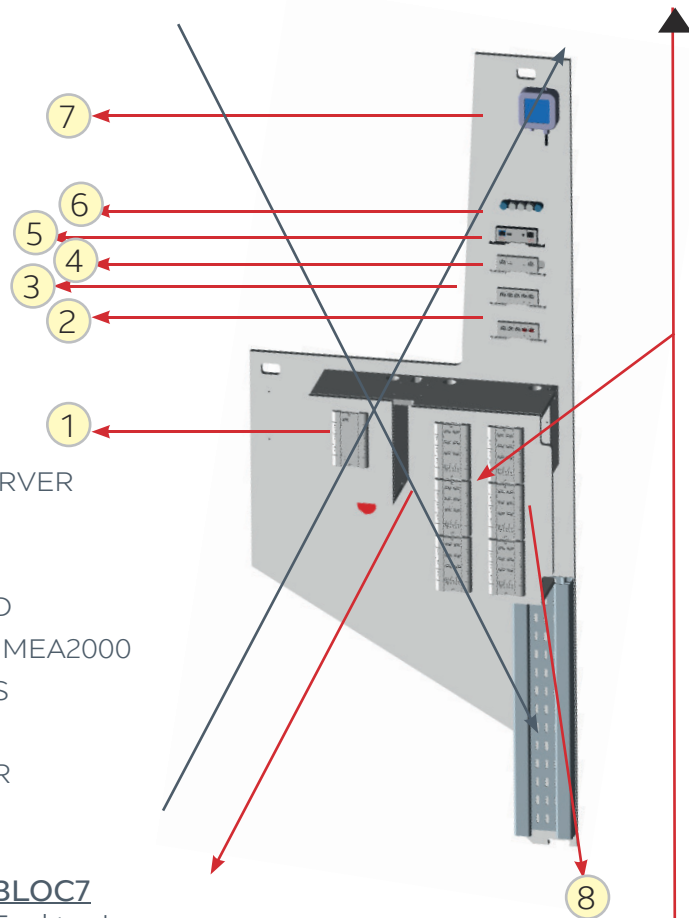
Q-25	PORT TRIGGER BOX	6 A
Q-26	PORT FORWARD BOW AIR COND (optional)	10 A
Q-27	AIR COND (optional)	10 A
Q-28	AIR COND (optional)	10 A
Q-29	AIR COND (optional)	10 A
Q-30	PORT SALOON AIR COND (optional)	16 A
Q-31	STARBOARD TRIGGER BOX	10 A
Q-32	STARBOARD FORWARD BOW AIR COND (optional)	10 A
Q-33	AIR COND (optional)	10 A
Q-34	AIR COND (optional)	10 A
Q-35	AIR COND (optional)	16A
Q-36	STARBOARD SALOON AIR COND (optional)	16 A
Q-37	STARBOARD SALOON AIR COND (optional)	16 A

Indice C-DECEMBER 2024

CE OWNER'S MANUAL

# 8-ELECTRICAL SYSTEMS

## 8.14 8.14 Equipment layout - STARBOARD COMPANIONWAY



1. MBBOX WEB SERVER
2. ISOLATED HUB
3. HUB 5 WAYS
4. HUB CAN CANSD
5. HUB CAN CAN NMEA2000
6. SEATALK 5 WAYS
7. SEANAPPS
8. DC DISTRIBUTOR

### **BLOC7**

Fuel tank  
 Fresh water tank  
 Aft grey water tank (optional)  
 Forward grey water tank (optional)  
 Starboard engine start battery  
 Solar panels (optional)

BLOC9 #7 ID: @6_2 BILGE PUMP SYSTEM	BLOC9 #8	BLOC9 #9	BLOC9 #10	BLOC9 #11 ID: @6_2	BLOC9 #12 ID: @6_2
AUTOMATIC S3 S6	NAVIGATION LIGHT S3 S6	FRESH WATER PUMP S3 S6	ELECTRONIC 24V S3 S6	A20 BATHROOM S3 S6	H35 SALOON S3 S6
MANUAL S2 S5	DECK PROJECTOR S2 S5	WATERMAKER SELECTION VALVE S2 S5	ELECTRONIC 12V S2 S5	A20 BATHROOM S2 S5	H35 GALLEY S2 S5
S1 S4	STEAM LIGHT S2 S5	FLY FRIDGE S2 S5	COURTESY LIGHT S2 S5	C20 CABIN S2 S5	H35 SALOON S2 S5
	RESTRICTED MANEUVER S1 S4	GREY WATER PUMP FWD S1 S4	BIMINI LIGHT S1 S4	C20 CABIN S1 S4	H35 SALOON S1 S4
	ANCHOR LIGHT S1 S4	COCKPIT FRIDGE S1 S4	SECRET LIGHT S1 S4	V40 GANGWAY (cellar version) S1 S4	GALLEY UP (WORKPLAN) S1 S4
	MCA S1 S4	GREY WATER PUMP AFT S1 S4	AFT COCKPIT S1 S4	V40 GANGWAY S1 S4	FRONT COCKPIT S1 S4
<i>bypass fuses behind the cover</i>	<i>bypass fuses behind the cover</i>	<i>bypass fuses behind the cover</i>	<i>bypass fuses behind the cover</i>	<i>bypass fuses behind the cover</i>	<i>bypass fuses behind the cover</i>

BLOC9 #13 4 CABIN VERSION OWNER CABIN	BLOC9 #14 4 CABIN VERSION OWNER CABIN
A60 BATHROOM S3 S6	S3 S6
A60 BATHROOM S2 S5	C60 CABIN S2 S5
A60 TOILET S2 S5	C60 CABIN S2 S5
READING LIGHT & FAN S1 S4	S1 S4
	V60 GANGWAY S1 S4
<i>bypass fuses behind the cover</i>	<i>bypass fuses behind the cover</i>

OR

BLOC9 #13 5 or 6 CABIN VERSION	BLOC9 #14 5 or 6 CABIN VERSION
A60 BATHROOM S3 S6	A40 BATHROOM S3 S6
A60 BATHROOM S2 S5	A40 BATHROOM S2 S5
C60 CABIN S2 S5	C40 CABIN S2 S5
READING LIGHT & FAN S1 S4	S1 S4
	V41 GANGWAY S1 S4
<i>bypass fuses behind the cover</i>	<i>bypass fuses behind the cover</i>

# 8-ELECTRICAL SYSTEMS

## DC FUSES

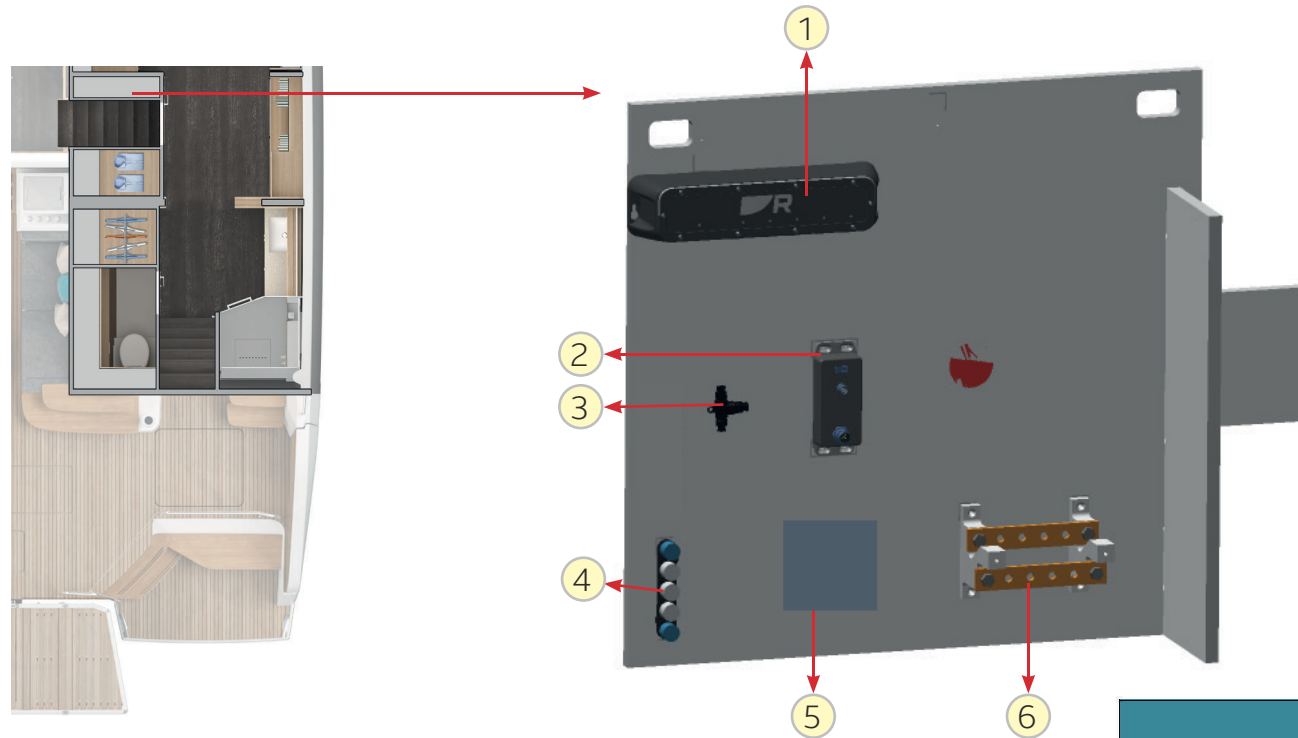


REP : X103 CODE ARTICLE : 000000913709 BOITIER BLUE SEA 12 FUSIBLES AVEC MASSE					
BORNE	CABLE	FIL	COULEUR	CALIBRE	ETIQUETTE
ALIM					
FUSE 1	W 402	W 402	ROUGE_6MM2	[20A]	BLOC9 #8
FUSE 2	W 408	W 408	ROUGE_6MM2	[20A]	BLOC9 #9
FUSE 3	W 404	W 404	ROUGE_6MM2	[20A]	BLOC9 #10
FUSE 4	W 410	W 410	ROUGE_6MM2	[20A]	BLOC9 #11
FUSE 5	W 406	W 406	ROUGE_6MM2	[20A]	BLOC9 #12
FUSE 6	W 421	W 421	ROUGE_6MM2	[20A]	BLOC9 #13
FUSE 7	W 423	W 423	ROUGE_6MM2	[20A]	BLOC9 #14
FUSE 8				unset	unset
FUSE 9				unset	unset
FUSE 10				unset	unset
FUSE 11				unset	unset
FUSE 12	W 501	W 501	ROUGE_2_5MM2	3A	WEB SERVER

REP : X250 CODE ARTICLE : 000000913709 BOITIER BLUE SEA 12 FUSIBLES AVEC MASSE					
BORNE	CABLE	FIL	COULEUR	CALIBRE	ETIQUETTE
ALIM					
FUSE 1	W 196	W 196	ROUGE_2_5MM2	5A	A20 GREY WATER
FUSE 2	W 194	W 194	ROUGE_6MM2	30A	A20 ELECTRICAL TOILET
FUSE 3	W 180	W 180	ROUGE_2_5MM2	5A	A40 GREY WATER
FUSE 4	W 178	W 178	ROUGE_6MM2	30A	A40 ELECTRICAL TOILET
FUSE 5	W 158	W 158	ROUGE_2_5MM2	5A	A60 GREY WATER
FUSE 6	W 156	W 156	ROUGE_6MM2	30A	A60 ELECTRICAL TOILET
FUSE 7				unset	unset
FUSE 8				unset	unset
FUSE 9				unset	unset
FUSE 10	W 478	W 478	ROUGE_1_5MM2	2A	USB
FUSE 11	W 200	W 200	ROUGE_4MM2	10A	C60 AUDIO
FUSE 12	W 412	W 412	ROUGE_1_5MM2	3A	BLOC 7

# 8-ELECTRICAL SYSTEMS

## 8.15 Equipment layout - AFT STARBOARD COMPANIONWAY

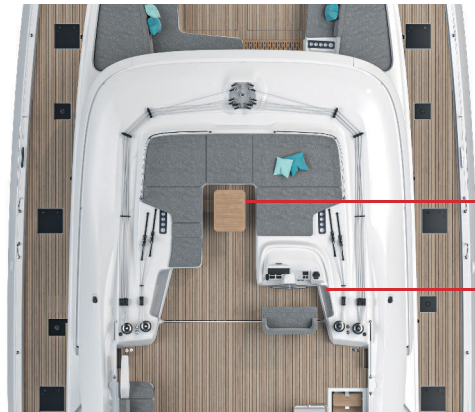


1. ETHERNET HUB
2. YANMAR / SIDE POWER JOYSTICK LINK
3. SIDE POWER S-LINK
4. HUB 5 WAYS
5. SOLAR REGULATOR
6. 24V DC BUS BAR SERVER

X07									
JEU DE BARRES DC V60 / V60 DC POWER BAR									
WDC161		WDC176			WDC072				
JEU DE BARRE F35 X03	F35 X03POWER BAR	JEU DE BARRE LOCAL MOTEUR TRIBORD X06	X06 STBENGINE AREA POWER BAR			ALIMENTATION PUISSANCE ROOF X06	POWER ROOF X17		
WDC156		WDC177			WDC065				
JEU DE BARRE F35 X03	F35 X03POWER BAR	JEU DE BARRE LOCAL MOTEUR TRIBORD X06	X06 STBENGINE AREA POWER BAR			ALIMENTATION PUISSANCE ROOF X06	POWER ROOF X17		
							FUUSE : 300A		

# 8-ELECTRICAL SYSTEMS

## 8.16 Equipment layout - FLYBRIDGE

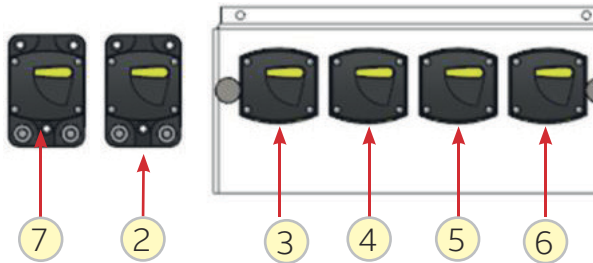


8

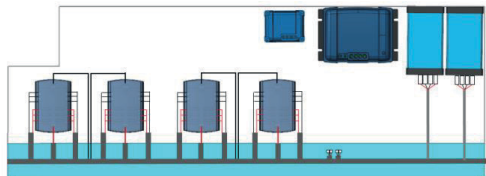
1

2. Line Driver Cut-out switch
3. Winch 1 Cut-out switch
4. Winch 2 Cut-out switch (optional)
5. Winch 3 Cut-out switch (optional)
6. Winch 4 Cut-out switch (optional)
7. Solar panel Cut-out switch (optional)

1



8



ACCESS THROUGH THE SALOON CEILING



REP : X21  
CODE ARTICLE : 000001162416  
BOITIER BLUE SEA 6 FUSIBLES AVEC MASSE

BORNE	CABLE	FIL	COULEUR	CALIBRE	ETIQUETTE
ALIM	W 032	W 032	ROUGE_4MM2		
FUSE1	W 023	W 023	ROUGE_2_5MM2	5A	VHF
FUSE2					
FUSE3	W 025	W 025	ROUGE_2_5MM2	5A	AIS
FUSE4					
FUSE5	W 027	W 027	ROUGE_2_5MM2	2A	WIRELESS VHF
FUSE6					

REP : X02  
CODE ARTICLE : 000001162416  
BOITIER BLUE SEA 6 FUSIBLES AVEC MASSE

BORNE	CABLE	FIL	COULEUR	CALIBRE	ETIQUETTE
ALIM	W 001	W 001	ROUGE_6MM2		
FUSE1	W 013	W 013	ROUGE_2_5MM2	5A	BACKBONE FLY
FUSE2	W 019	W 019	ROUGE_2_5MM2	5A	BACKBONE HULL
FUSE3	W 015	W 015	ROUGE_1_5MM2	5A	PORT CAMERA
FUSE4	W 112	W 112	ROUGE_2_5MM2	7.5A	CHART TABLE DISPLAY
FUSE5	W 017	W 017	ROUGE_1_5MM2	5A	STBD CAMERA
FUSE6				-	-

REP : X03  
CODE ARTICLE : 000001162416  
BOITIER BLUE SEA 6 FUSIBLES AVEC MASSE

BORNE	CABLE	FIL	COULEUR	CALIBRE	ETIQUETTE
ALIM	W 003	W 003	ROUGE_6MM2		
FUSE1	W 007	W 007	ROUGE_4MM2	15A	HELM DISPLAY
FUSE2	W 122	W 122	ROUGE_2_5MM2	2A	HUB ETHERNET V60
FUSE3	W 009	W 009	ROUGE_2_5MM2	5A	RADAR
FUSE4	W 159	W 159	ROUGE_2_5MM2	5A	SOUNDER
FUSE5	W 011	W 011	ROUGE_2_5MM2	2A	ETHERNET HUB
FUSE6					

REP : X01  
CODE ARTICLE : 000000913709  
BOITIER BLUE SEA 12 FUSIBLES AVEC MASSE

BORNE	CABLE	FIL	COULEUR	CALIBRE	ETIQUETTE
ALIM	W 227	W 227	ROUGE_10MM2		
FUSE 1	W 021	W 021	ROUGE_4MM2	20A	ELECTRONIC 24V
FUSE 2	W 116	W 116	ROUGE_1_5MM2	1A	AMPLI TV
FUSE 3	W 126	W 126	ROUGE_1_5MM2	3A	USB CHARGER
FUSE 4	W 118	W 118	ROUGE_2_5MM2	15A	ELECTRIC CURTAIN H35
FUSE 5	W 257	W 257	ROUGE_1_5MM2	5A	WATER PURIFIER
FUSE 6	W 120	W 120	ROUGE_2_5MM2	10A	AUTORADIO FLY
FUSE 7					
FUSE 8	W 157	W 157	ROUGE_2_5MM2	2A	SCHIEBER NETWORK
FUSE 9					
FUSE 10					
FUSE 11					
FUSE 12					

# 8-ELECTRICAL SYSTEMS

## 8.17 Generator layout



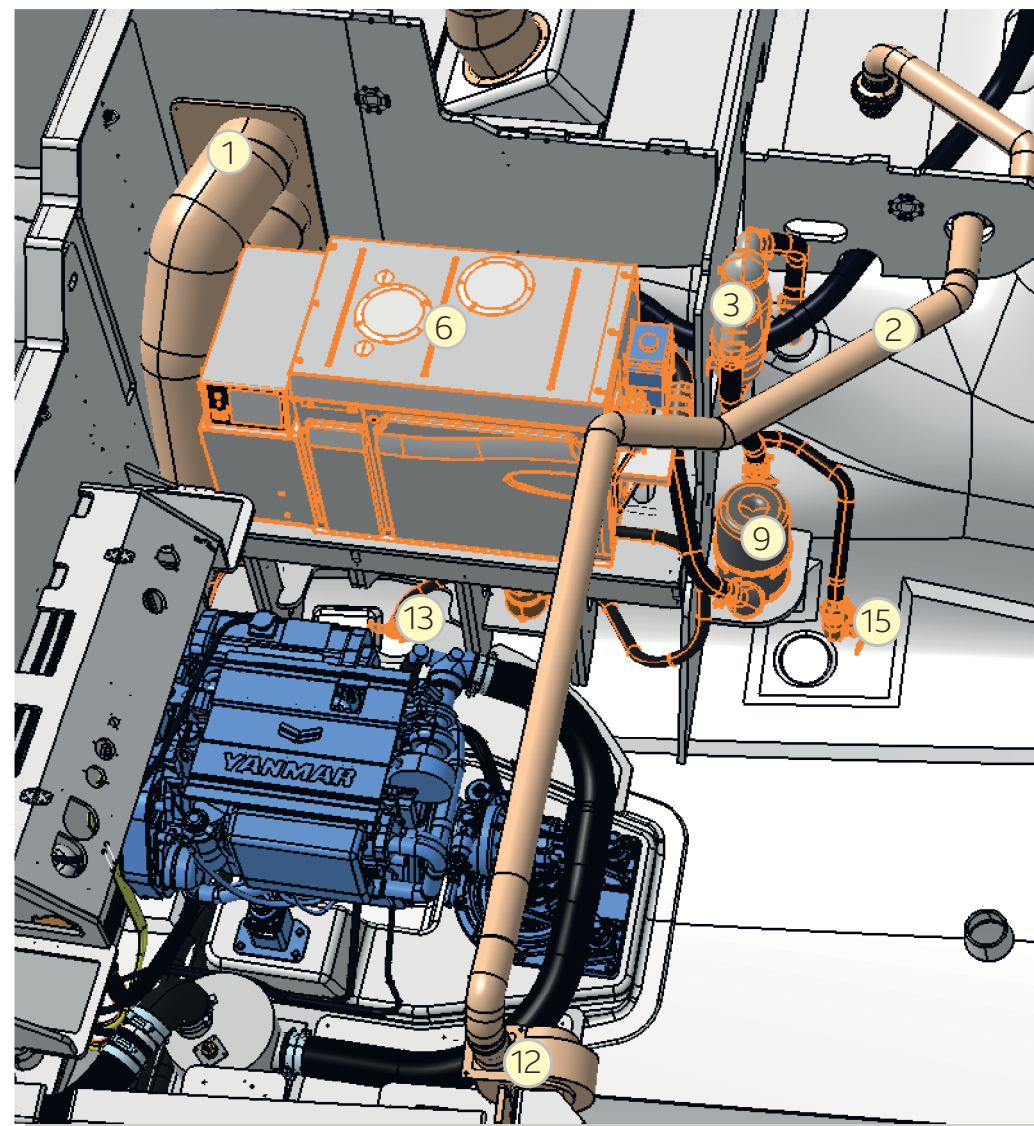
### NOTICE

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

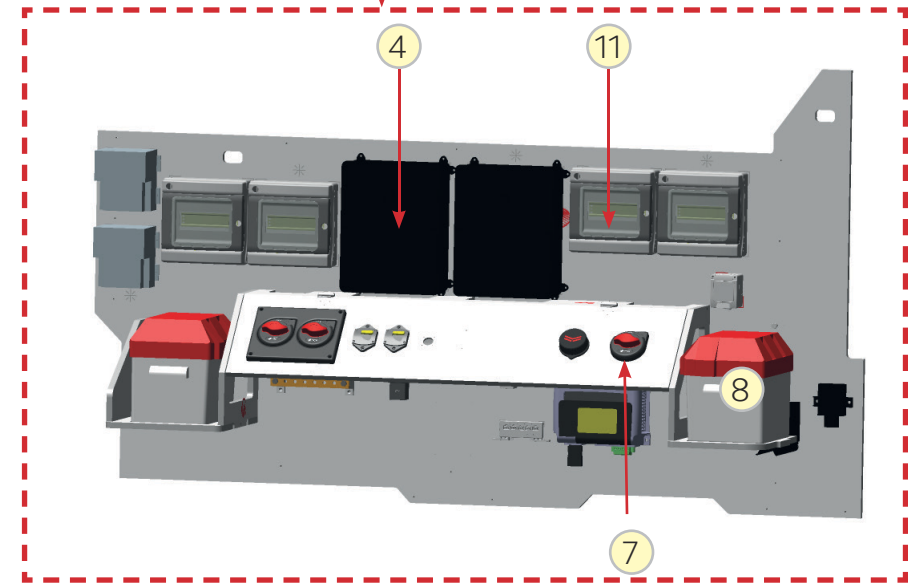
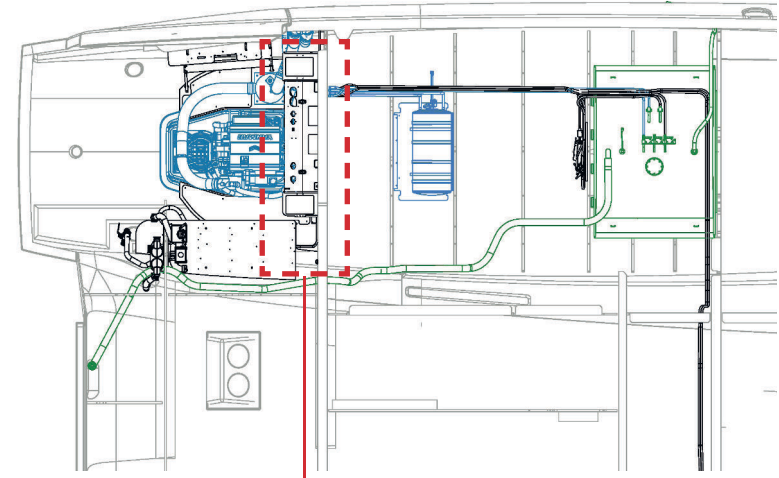
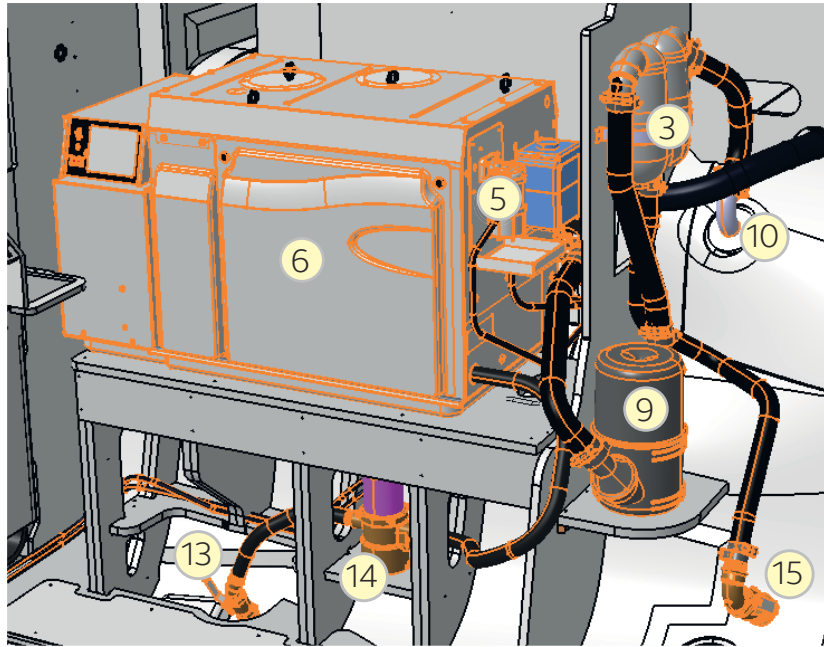
1. Ventilation air inlet
2. Ventilation air outlet
3. Water/gas separator
4. Generator AC power selector
5. Genset fuel filter
6. Port
7. Battery shut-off
8. Battery starter
9. Muffler
10. Outlet
11. GFCI generator
12. Ventilator
13. Sea water inlet
14. Sea water filter
15. Sea water discharge valve

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

- Check that the sea water intake valve is open;
- The fuel tank is selected on the tank page of the Scheiber / Navicolor screen, after switching on the 'generator' power source on the same screen;
- Check that there are no alarm codes;
- The equipment manufacturer's manual gives you detailed explanations on the operating procedure and all the steps to ensure proper function.



# 8-ELECTRICAL SYSTEMS



# 9-SYSTEMS - INSIDE EQUIPMENT

## 9.1 Fresh water

- Two 240-liter HDPE fresh water tanks positioned on starboard below the hallway floors, and two more on port side with a level indicator on Scheiber/Navicolor screen in the starboard companionway(2).
- Equipped with 1 deck filler on the port and starboard sides (3), one deck filler on starboard side (3) and a shore fresh water supply on the port side of the aft transom (4) (optional).
- The shore fresh water supply (4) enables you to use the shore pressure directly on board without using the water units (5). It also enables you to fill the tanks.
- Hot water production is ensured by two 220V, 80L-capacity water heater (6).

There are two operating modes:

- Each side hull draws from its own tank (the changeover valves (hot/cold water) are in the closed position);
- For starboard (or port) consumption only, by-pass the water unit of the opposite side hull (by closing the water unit valves) and open the changeover valves.

1. 240L tank
2. Tank levels on Scheiber/Navicolor screen
3. Deck Filler
4. Shore fresh water supply (optional)
5. Water unit
6. 80L water heater
7. Aft cockpit Fresh water/sea water deck washing supply  
Fresh water on network, sea water by dedicated pump (optional)
8. Forward cockpit sea water/fresh water deck washing supply  
Fresh water on network, sea water by dedicated pump (optional)
9. Fresh water maker (optional)
10. Cold/hot water deck shower
11. Water unit start-up panel

1



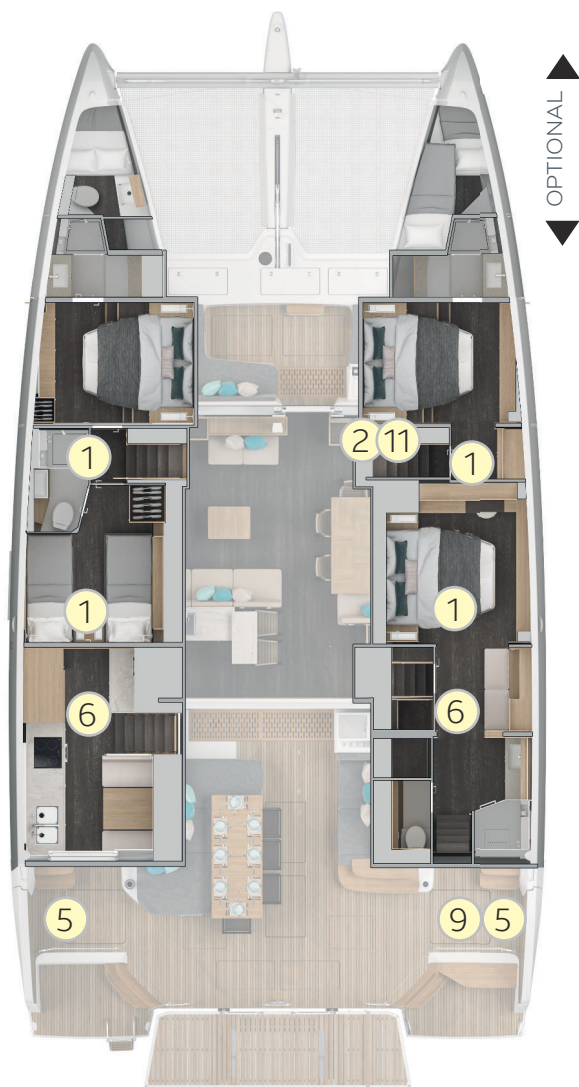
6



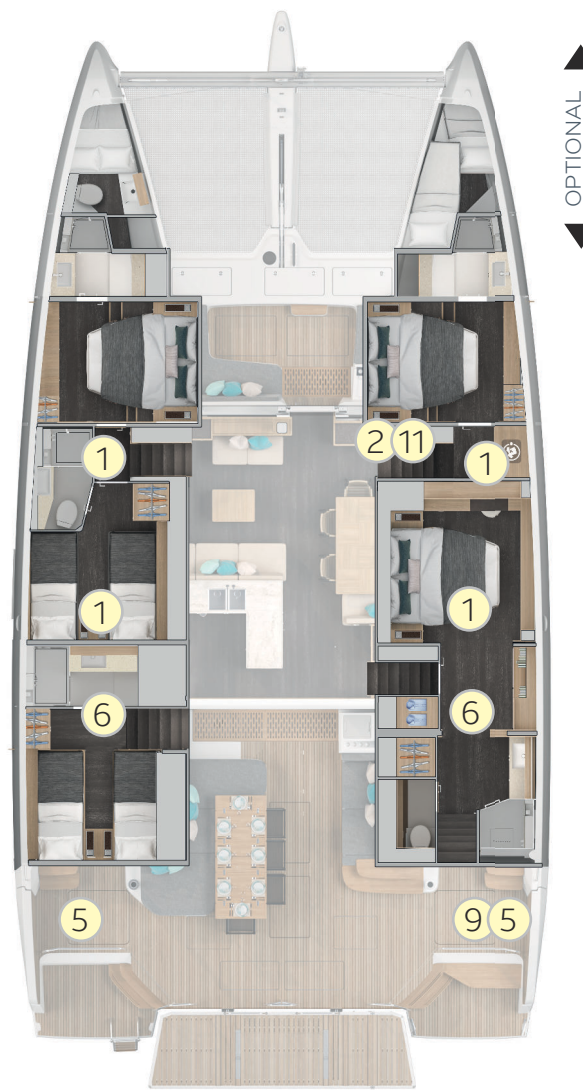
### WARNING

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 water reserve.

# 9-SYSTEMS - INSIDE EQUIPMENT



4-cabin layout, 4 toilets, down galley



5-cabin layout, 5 toilets, upper galley



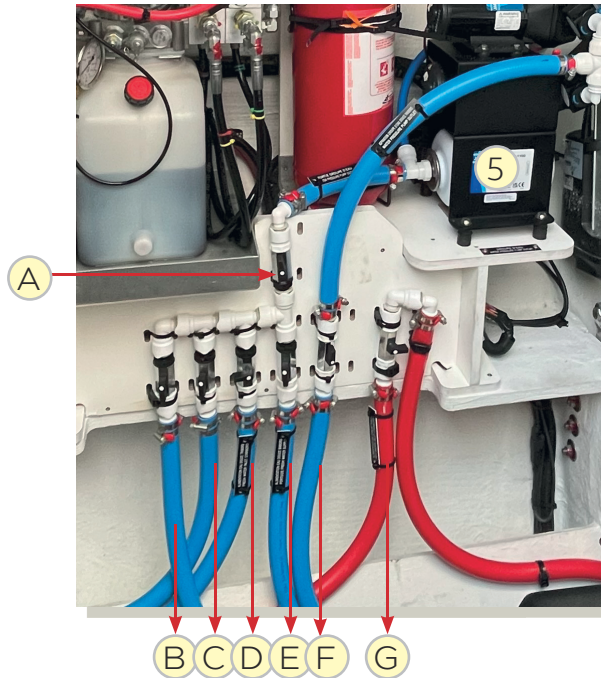
11



9 STARBOARD ENGINE COMPARTMENT

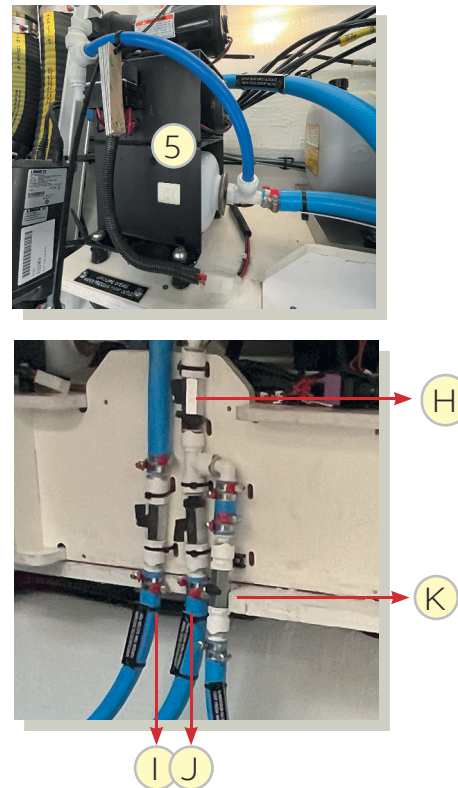
# 9-SYSTEMS - INSIDE EQUIPMENT

PORT ENGINE COMPARTMENT



- A. Water unit insulation (open position)
- B. Aft deck wash (open position)
- C. Shore fresh water inlet (open position)
- D. Port / starboard interconnection
  - Keep in closed position
  - To be opened if the shore fresh water inlet is used
- E. Fresh water supply to port side hull (open position)
  - Not useful; unless there is a fault in the port side hull network. It keeps the shore fresh water inlet and deck wash in operation.
- F. Fresh water tank suction (open position)
- G. Port / Starboard hot water interconnection (closed position)

STARBOARD ENGINE COMPARTMENT

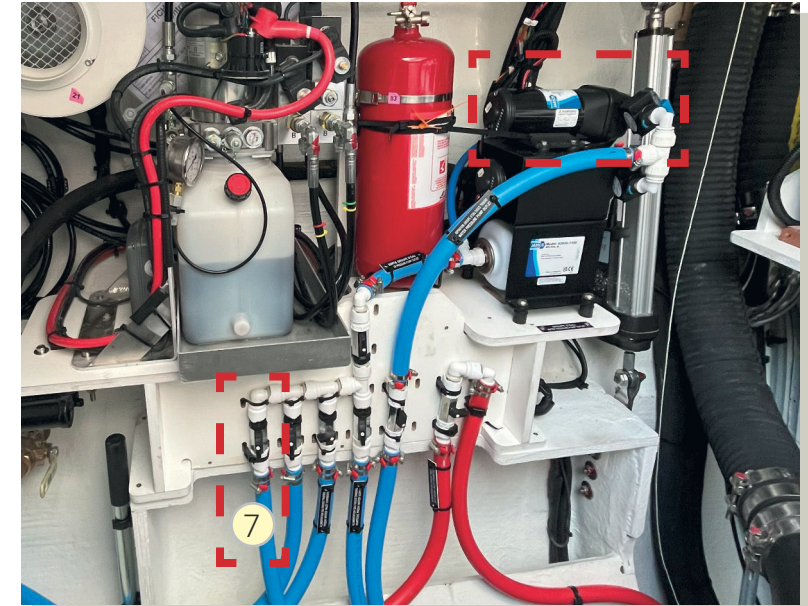
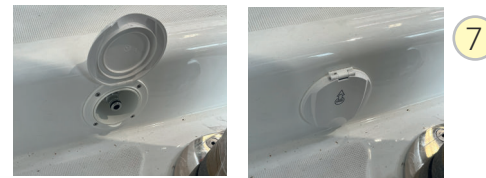


- H. Water unit insulation (open position)
- I. Fresh water tank suction (open position).
- J. Fresh water supply to starboard side hull (open position)
  - Not useful; unless there is a fault in the starboard side hull system. It keeps the shore fresh water inlet and deck wash in operation.
- K. Port / Starboard interconnection (no valve provided)

- 3. Deck filler
- 4. Shore fresh water supply (optional)
- 5. Water unit
- 6. Aft cockpit fresh water deck washing supply
- 7. Fresh water on network (optional)
- 8. Forward cockpit sea water/fresh water deck washing supply
  - Fresh water on network, sea water by dedicated pump (optional)
- 10. Cold/hot water deck shower as a standard
- 11. Start-up panel for the 2 water units
- 12. Cold/hot water deck shower (optional)



# 9-SYSTEMS - INSIDE EQUIPMENT



## Starting up

Start the water unit by turning the control to "ON" on the panel located in the starboard companionway. (11)



Indice C-DECEMBER 2024

# 9-SYSTEMS - INSIDE EQUIPMENT

## 9.2 Black water

### 9.2.1 Specifications

In the 4-cabin layout.

4 110L-tanks as a standard and one 50L-tank in the port forward bow.

In the 5-cabin layout.

4 110L-tanks as a standard and one 50L-tank in the port forward bow.

For the suction, each tank has its own filler located on deck (3).

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.



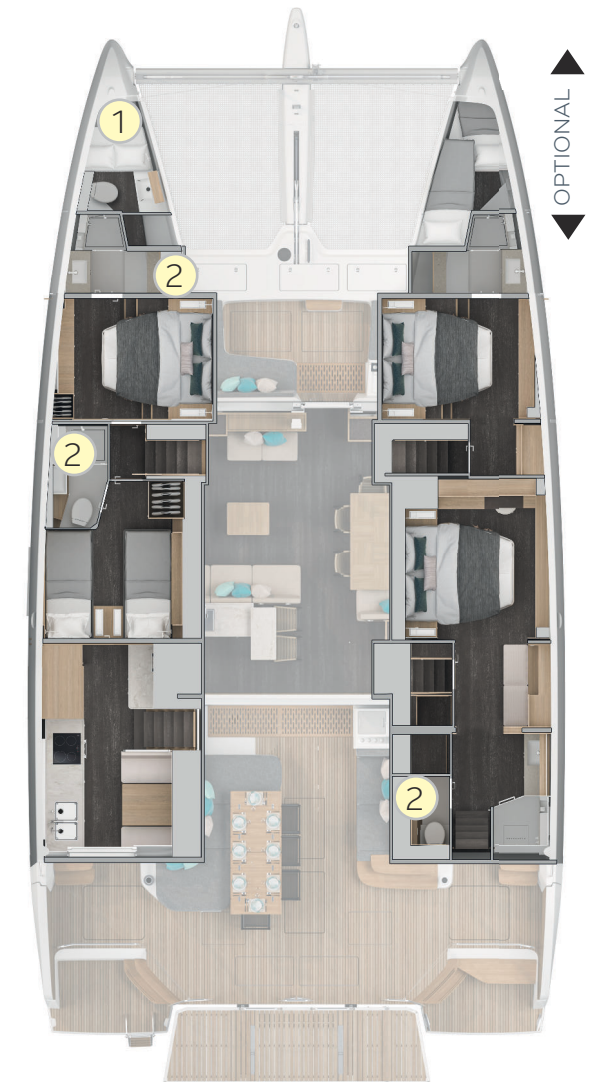
#### ATTENTION

- 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).

- 1 50L tank
- 2 110L tank

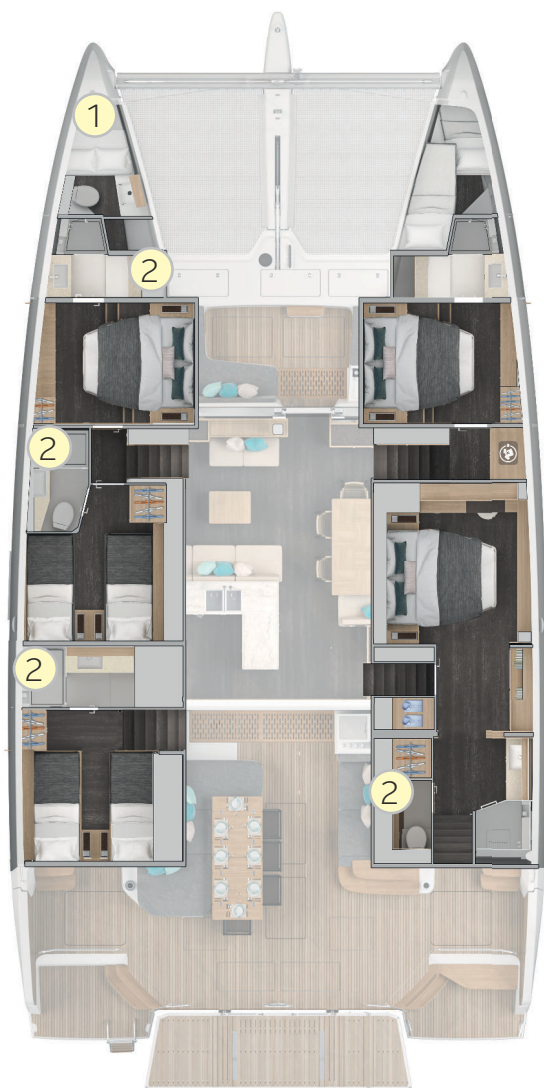


2



4-cabin layout, 4 toilets, down galley

# 9-SYSTEMS - INSIDE EQUIPMENT



5-cabin layout, 5 toilets, upper galley

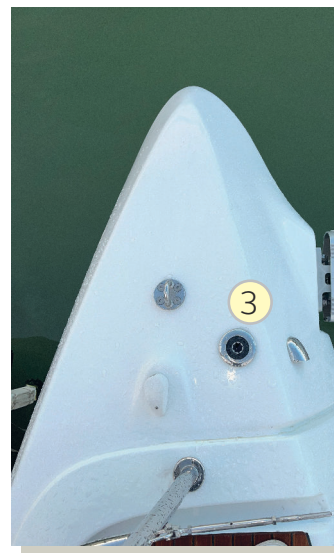


## ATTENTION

The risk of unpleasant odors 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 litres of fresh water and add an appropriate detergent additive (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.



# 9-SYSTEMS - INSIDE EQUIPMENT

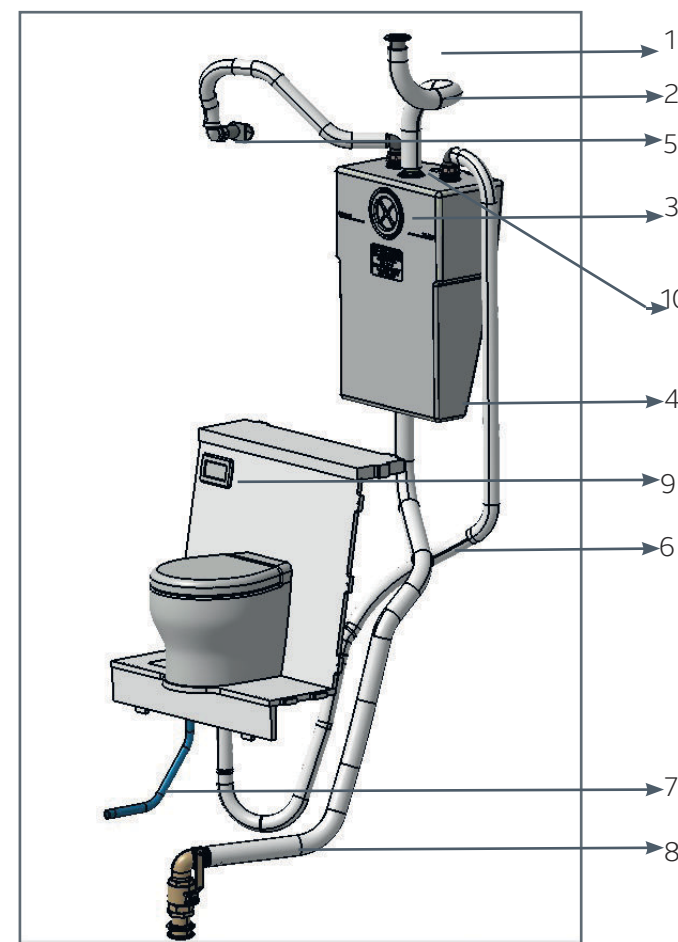
## 9.2 Black water tanks

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

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

### 9.2.2 Electric toilet operation

1. Deck draining fill on deck
2. Deck suction
3. Accessible inspection hatch
4. Black water tank
5. Vent
6. Drainage from toilets to tank
7. Fresh water suction
8. Drainage of the tank to the sea (hull valve)
9. Electrical switch and tank high-level sensor
10. Level sensor case



# 9-SYSTEMS - INSIDE EQUIPMENT

## 9.2.3 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

As an option, the vessel is equipped with four grey water tanks of 120 litres 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.

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



### 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, galleys, 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
- or by discharge to the sea: 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 tanks with fresh or sea water and empty them. 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 backside 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)

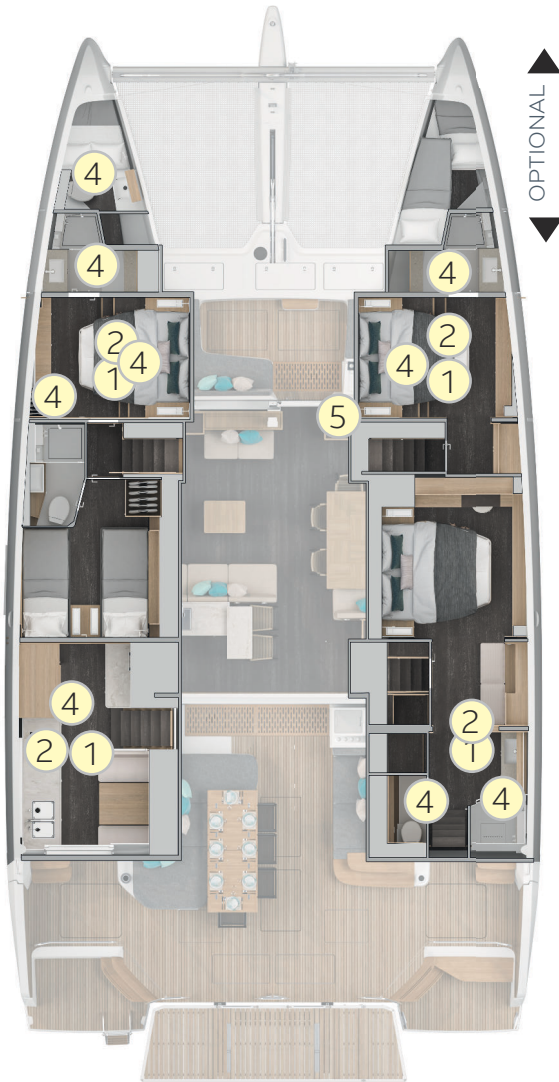


2

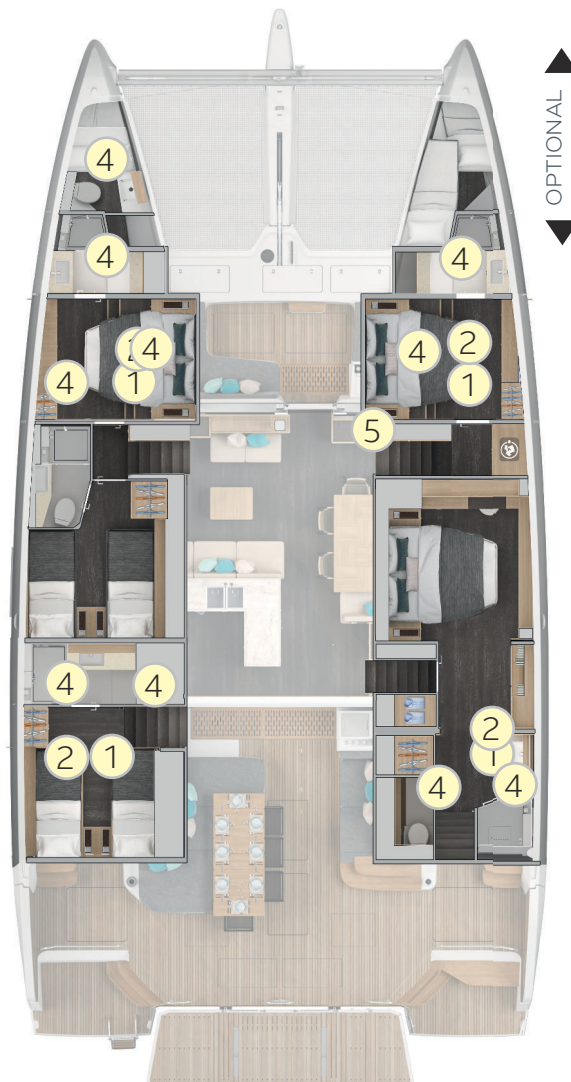


2

# 9-SYSTEMS - INSIDE EQUIPMENT



4-cabin layout, 4 toilets, down galley



5-cabin layout, 5 toilets, upper galley



## WARNING

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



## WARNING

When emptying the tank, it does not stop automatically, so it is advisable to stop emptying at around 10% - 12% of the tank capacity.

1



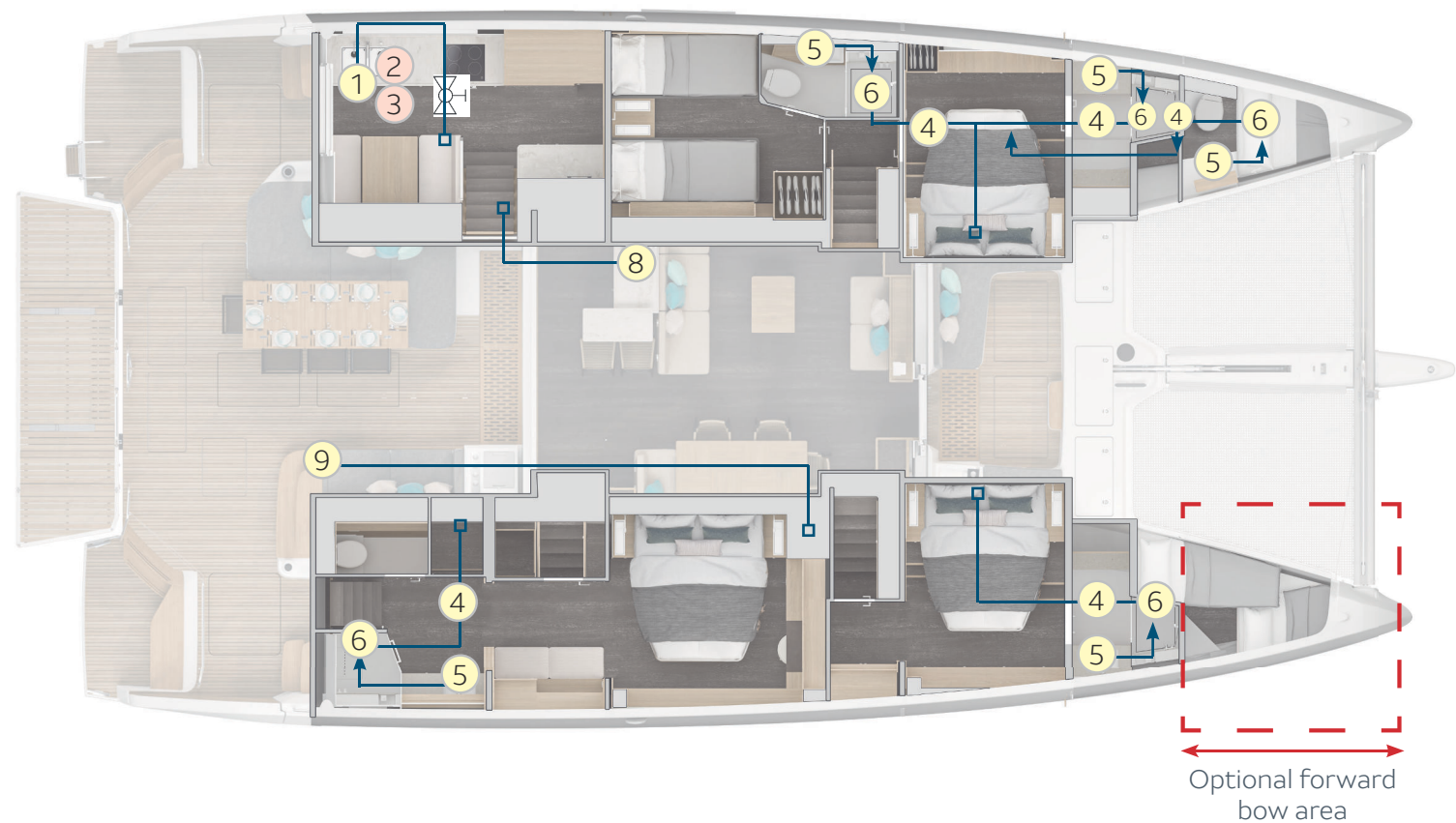
4



# 9-SYSTEMS - INSIDE EQUIPMENT

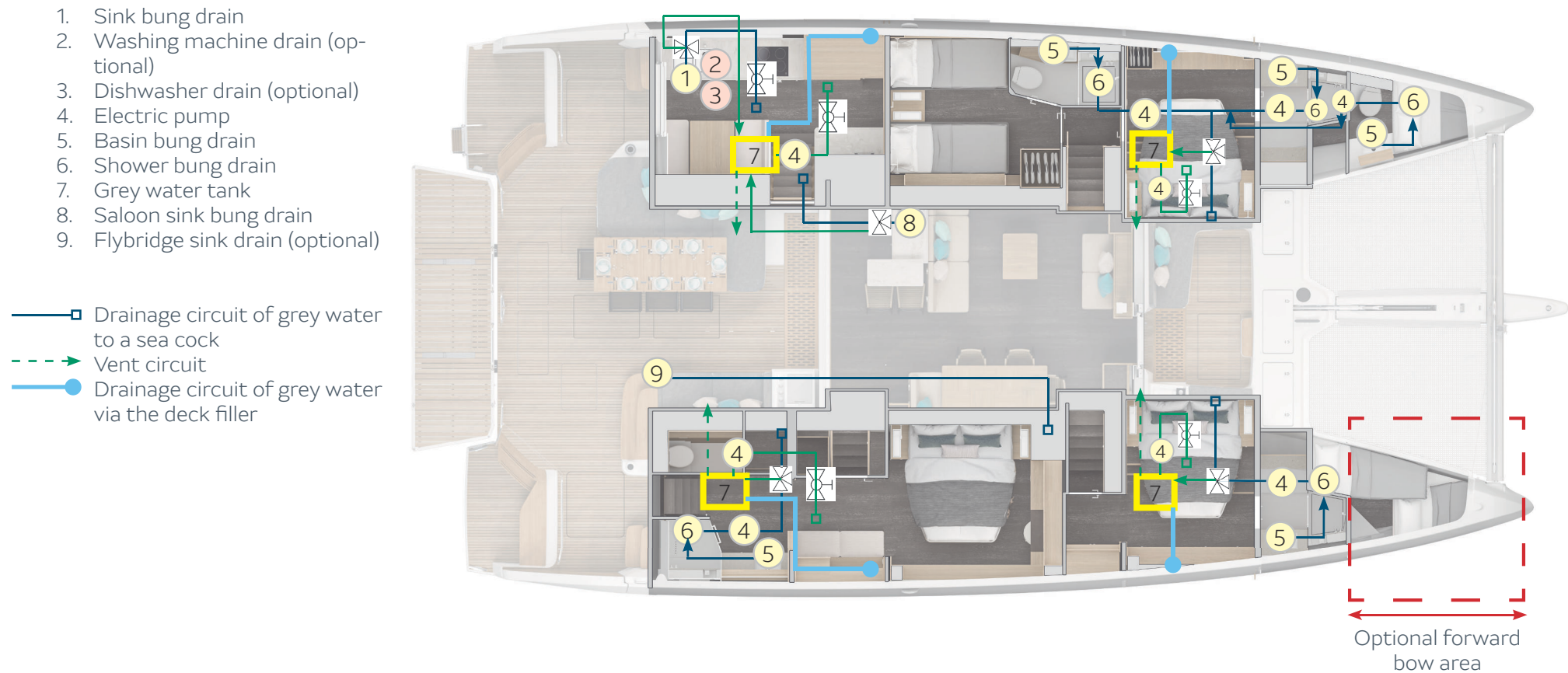
Schematic diagram of the standard grey water circuits - 4 cabins

1. Sink bung drain
  2. Washing machine drain (optional)
  3. Dishwasher drain (optional)
  4. Electric pump
  5. Basin bung drain
  6. Shower bung drain
  7. Grey water tank
  8. Saloon sink bung drain
  9. Flybridge sink drain (optional)
- □ Drainage circuit of grey water to a sea cock



# 9-SYSTEMS - INSIDE EQUIPMENT

Schematic diagram of the grey water circuits with optional grey water tanks - 4 cabins

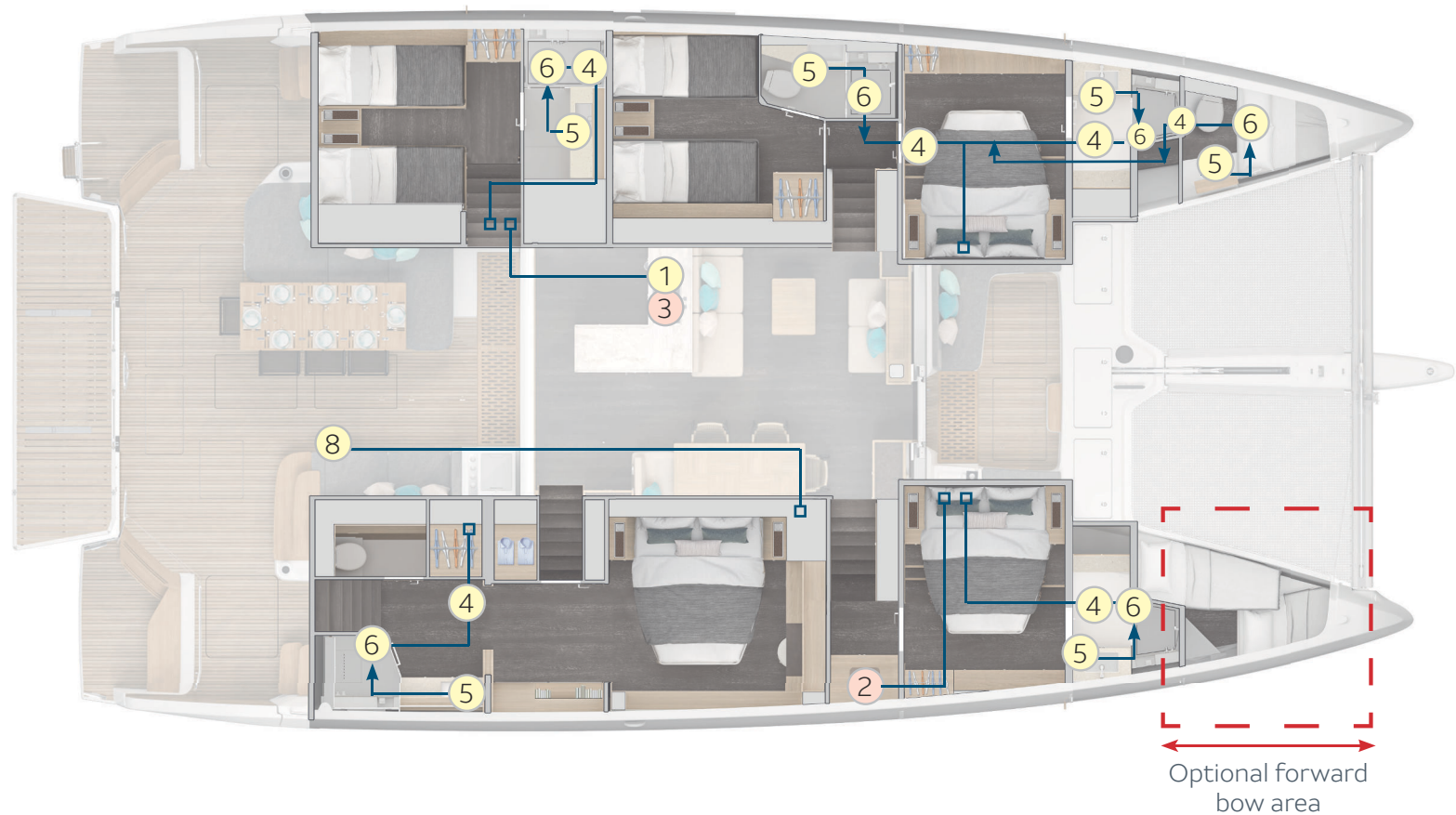


# 9-SYSTEMS - INSIDE EQUIPMENT

Schematic diagram of the standard grey water circuits - 5 cabins

1. Sink bung drain
2. Washing machine drain (optional)
3. Dishwasher drain (optional)
4. Electric pump
5. Basin bung drain
6. Shower bung drain
7. Grey water tank
8. Flybridge sink drain (optional)

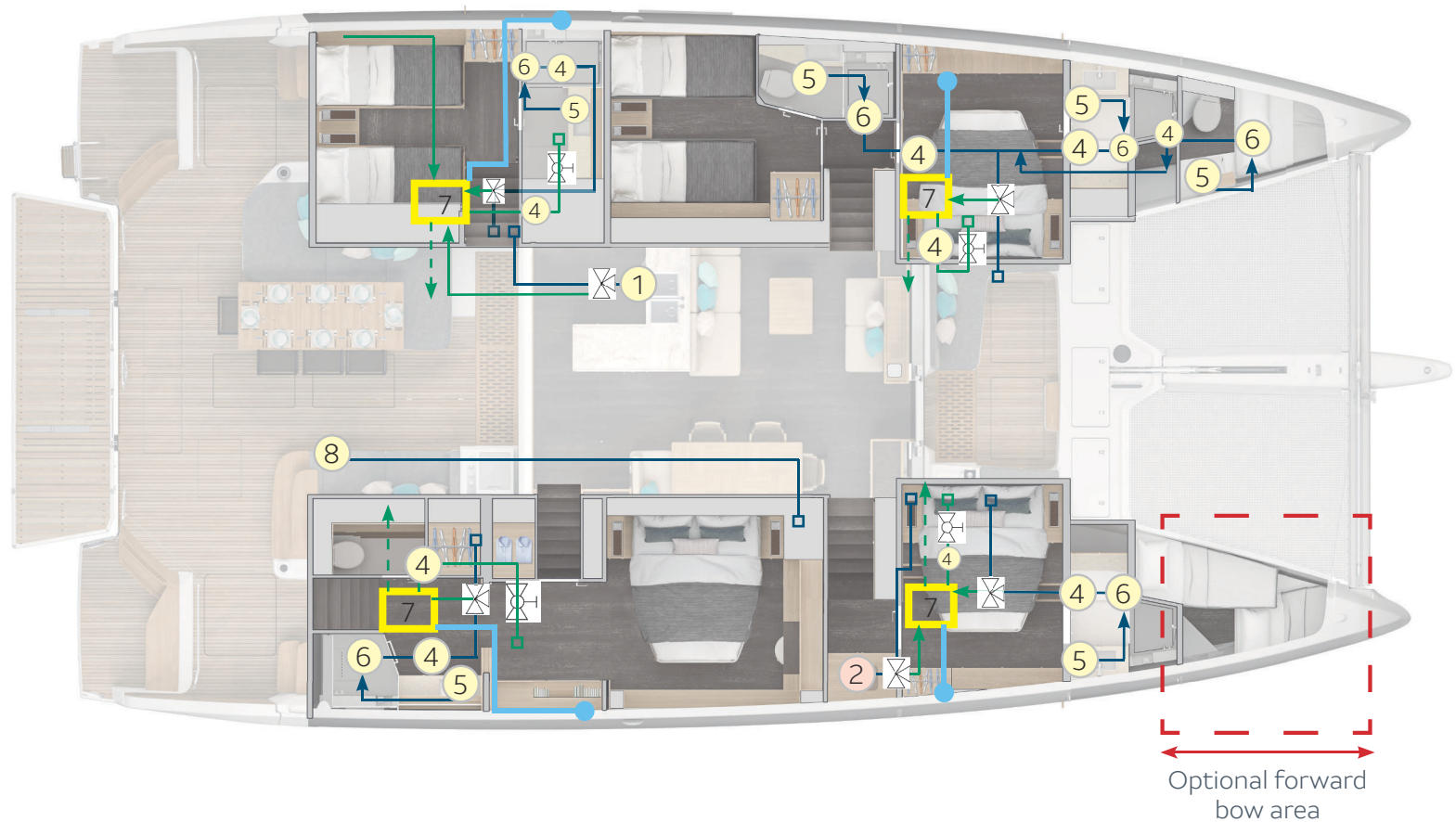
— □ Drainage circuit of grey water to a sea cock



# 9-SYSTEMS - INSIDE EQUIPMENT

Schéma de principe des circuits eaux grises avec option réservoirs eaux grises - 5 cabines

1. Sink bung drain
  2. Washing machine drain (optional)
  3. Dishwasher drain (optional)
  4. Electric pump
  5. Basin bung drain
  6. Shower bung drain
  7. Grey water tank
  8. Flybridge sink drain (optional)
- □ Drainage circuit of grey water to a sea cock  
- - - → Vent circuit  
— ● Drainage circuit of grey water via the deck filler



# 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 housings or the gas bottle lockers to store 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 three 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 Gaz system

### 9.4.2 Gas system layout

- The 'plancha' option includes a storage compartment for a 13kg gas bottle (or two 6kg bottles) on the port rear seat of the aft cockpit. The locker can accommodate two bottles.
- Type of LPG to be used: Butane or Propane, pressure 38-30/37 mbar pressure.
- 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 valve for the plancha is located directly on the bottle.



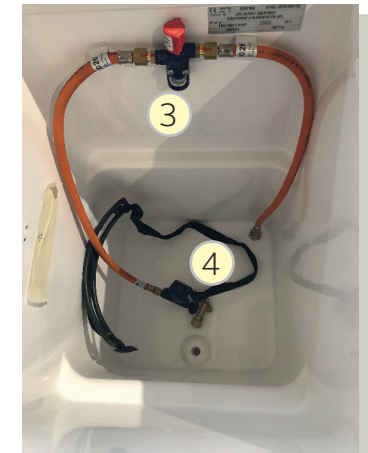
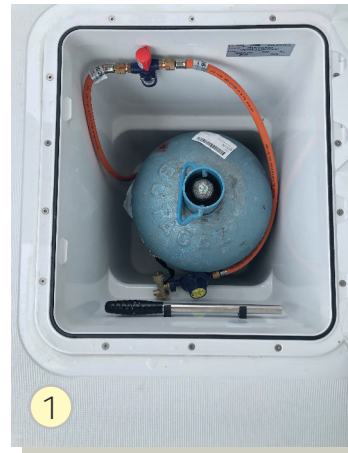
## ATTENTION

Do not obstruct access to all LPG system components in any way.

# 9-SYSTEMS - INSIDE EQUIPMENT



1. Gas bottle compartment
2. Plancha option
3. Priming system in the gas bottle locker
4. Pressure gauge
5. US plancha option with cut-out switch (6)

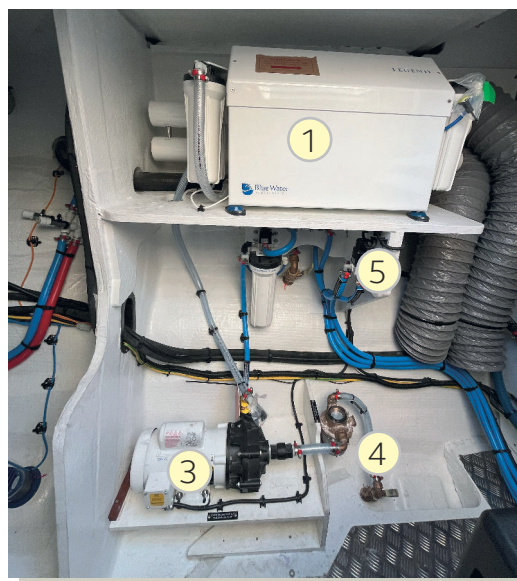


# 9-SYSTEMS - INSIDE EQUIPMENT



## 9.5 Watermaker option

- As an option, the vessel is equipped with a watermaker, with a capacity of 280L/H - 230V, located in the starboard engine room (1);
- A sea water pump (3) and a sea water intake valve (4);
- A start-up screen in the starboard companionway (2);
- A solenoid 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);
- The tank is selected on the water tank page when the watermaker is switched on.



### Start up

- Check that the sea water intake and discharge valve are;
- Check that there are no alarm codes;
- The equipment manufacturer's manual gives you detailed explanations on the operating procedure and all the steps to keep it functioning properly;
- Select the tank to be filled from the Scheiber/Navicolor screen.

# 9-SYSTEMS - INSIDE EQUIPMENT

## 9.6 Air conditioning option

### 9.6.1 Layout

#### As an option in the 4-cabin layout:

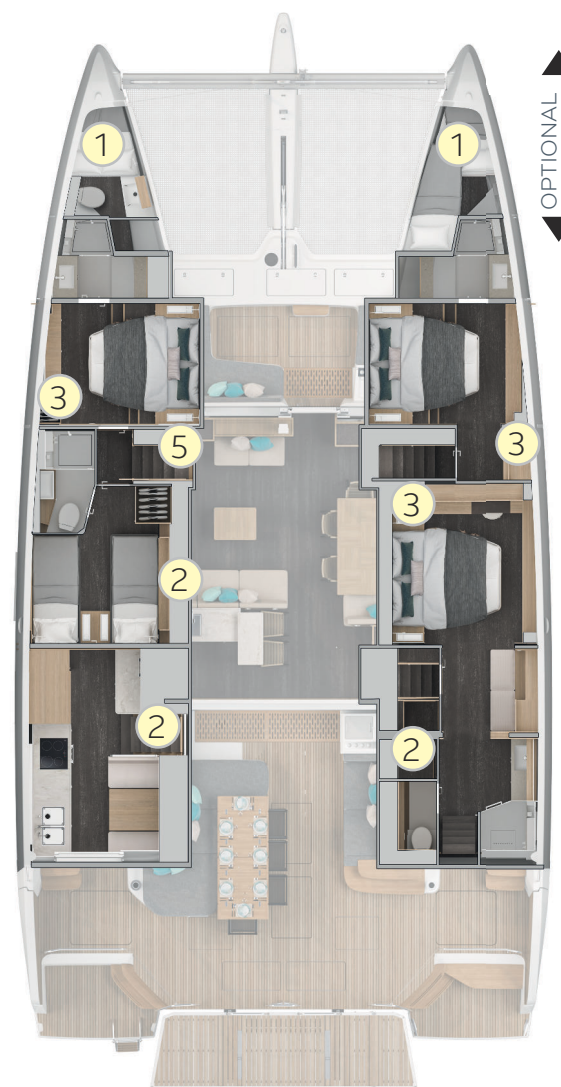
- A 12 KBTU air conditioning unit in the owner's cabin and an 8 KBTU air conditioning unit in the owner's head;
- A 12 KBTU air conditioning unit in the two forward cabins;
- An 8 KBTU air conditioning unit in the port mid-ship cabin;
- An 8 KBTU air conditioning unit in the down galley;
- Three 16 KBTU air conditioning units in the saloon's ceiling.

#### As an option in the 5-cabin layout:

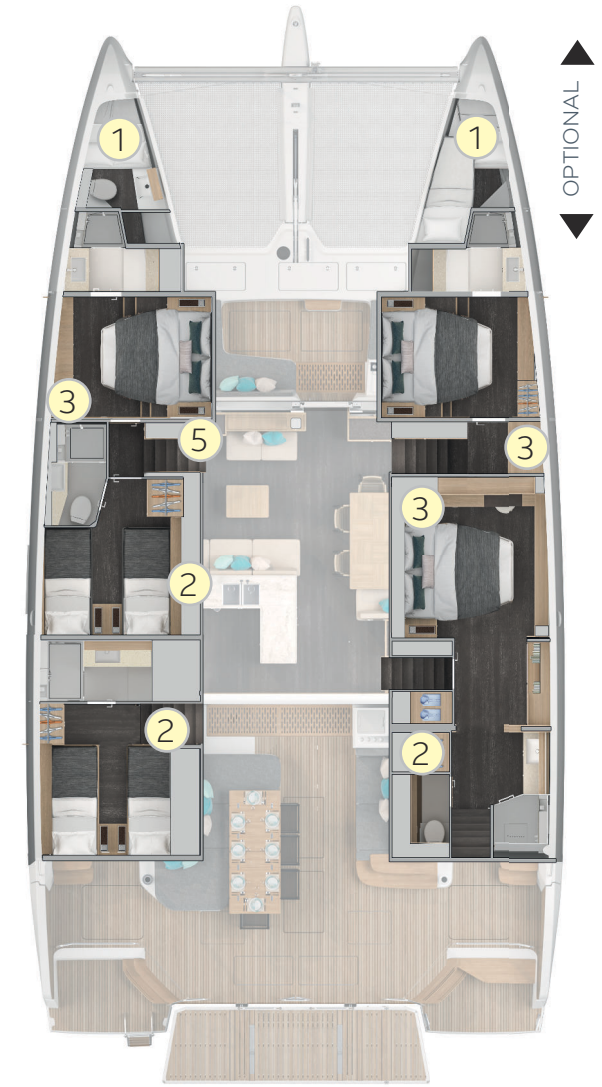
- A 12 KBTU air conditioning unit in the owner's cabin and an 8 KBTU air conditioning unit in the owner's head;
- A 12 KBTU air conditioning unit in the two forward cabins;
- An 8 KBTU air conditioning unit in the port mid-ship cabin;
- An 8 KBTU air conditioning unit in the port aft cabin;
- Three 16 KBTU air conditioning units in the saloon's ceiling.

As an option if the forward bow is fitted as a cabin, there is a 6 KBTU air conditioning unit.

- |                                  |                                              |
|----------------------------------|----------------------------------------------|
| 1. 6 KBTU air conditioning unit  | 4. 16 KBTU air conditioning unit             |
| 2. 8 KBTU air conditioning unit  |                                              |
| 3. 12 KBTU air conditioning unit | 5. AC power circuit / Air-conditioning panel |



4-cabin layout, 4 toilets, down galley



5-cabin layout, 5 toilets, upper galley

# 9-SYSTEMS - INSIDE EQUIPMENT



4-cabin layout, 4 toilets, down galley



5-cabin layout, 5 toilets, upper galley

## Setup

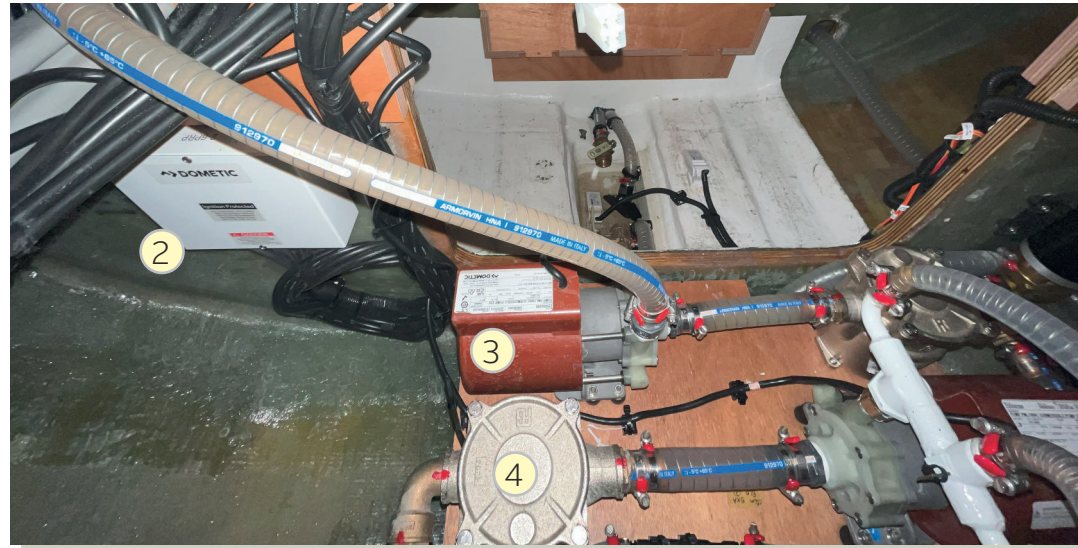
- Check that the sea water intake and discharge valve are.
- Use the switch in the starboard companionway to select the power source (shore power or generator).
- If using shore power: plug into the shore power socket.
- If using the generator: before turning on the air conditioning, leave the generator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

## Turning on the air conditioning:

- Switch the air-conditioning 220V circuit-breakers ON.
- Select the temperature of each compressor using the control units fitted in each area of the boat.

1. 6,000 BTU air conditioning unit
2. 8,000 BTU air conditioning unit
3. 12,000 BTU air conditioning unit
4. 16,000 BTU air conditioning unit
5. Air conditioning / AC circuit panel

# 9-SYSTEMS - INSIDE EQUIPMENT



1. Control panel (one per air conditioning unit)
2. Electrical box
3. Sea water pump
4. Filter
5. Air conditioning / AC circuit panel



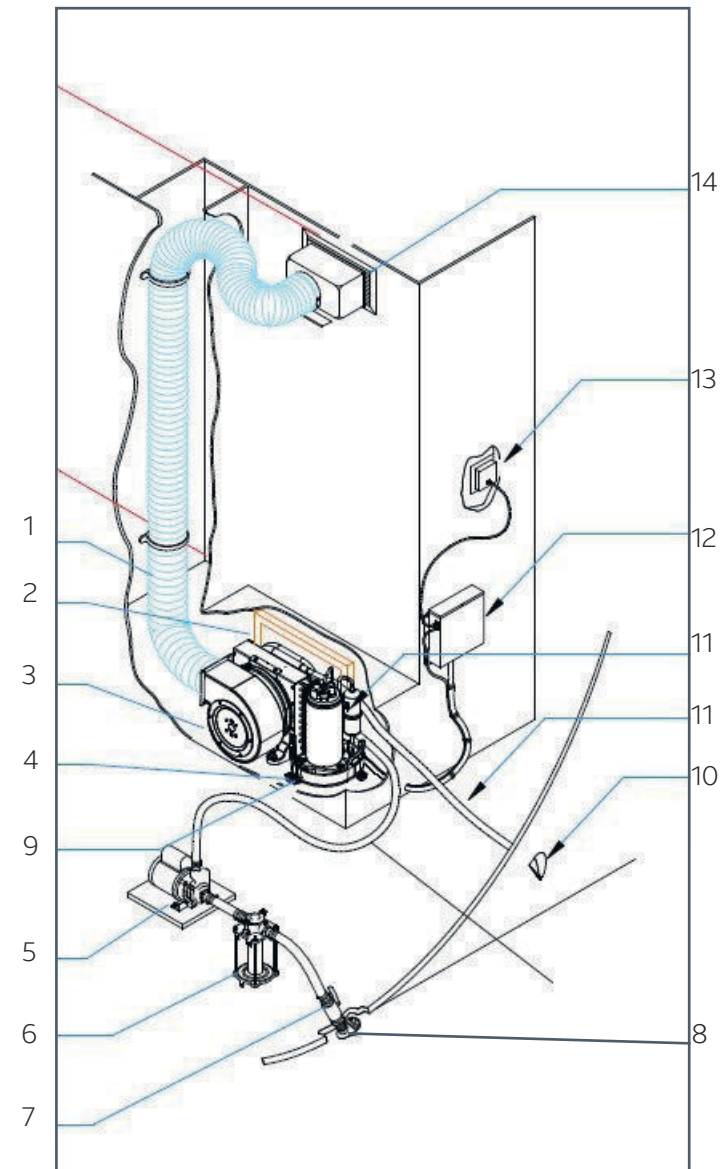
# 9-SYSTEMS - INSIDE EQUIPMENT

## 9.6 Air conditioning option

### 9.6.2 Operation

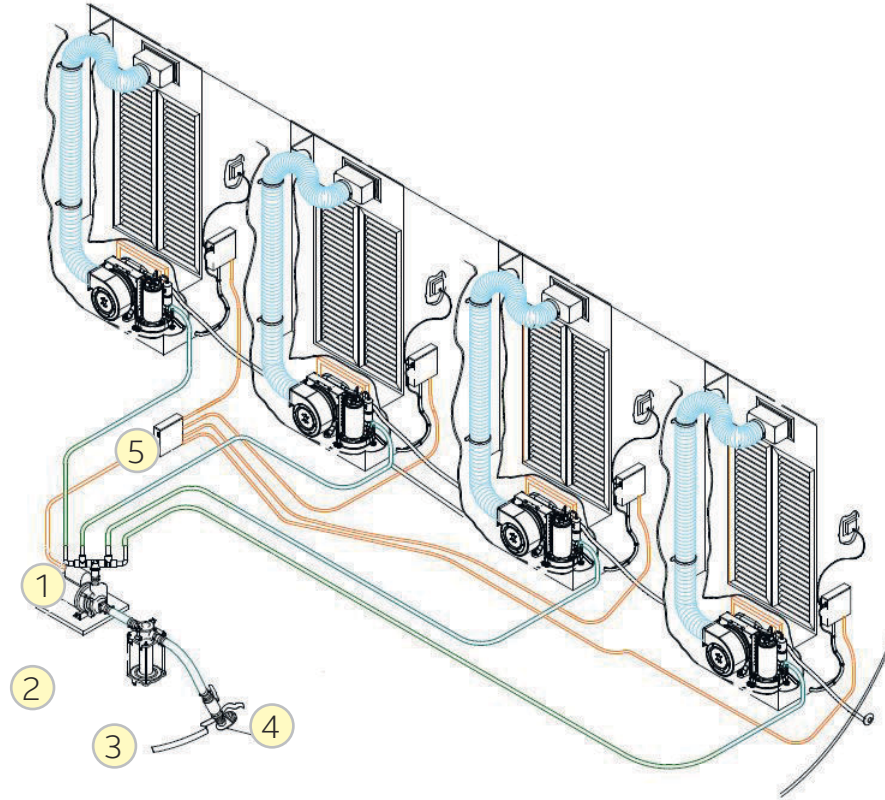
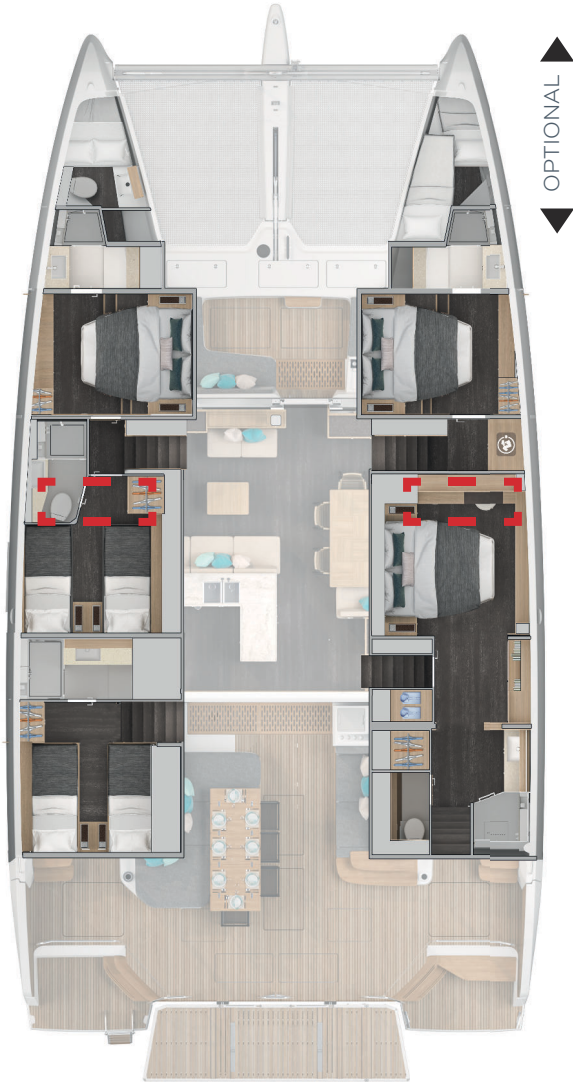
Single-block layout

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
10. Sea cock
11. Sea water discharge hose
12. Electrical box
13. Control Panel
14. Air outlet vent

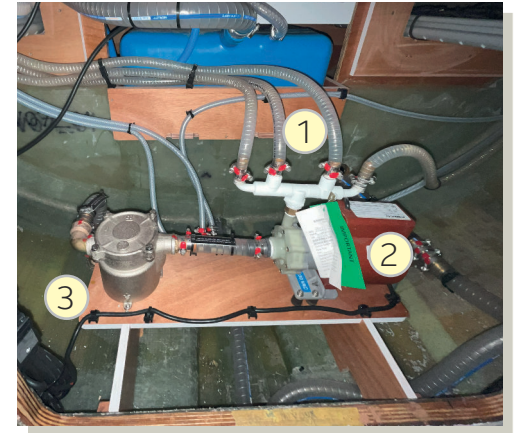


# 9-SYSTEMS - INSIDE EQUIPMENT

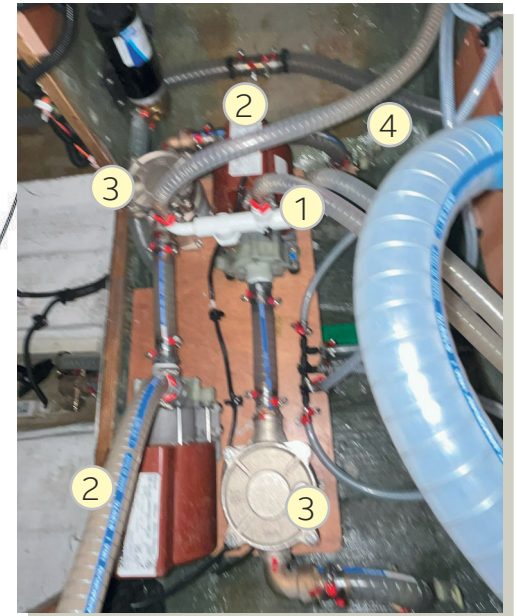
Standard layout for four monoblocks with manifold



- 1. 4-outlet manifold
- 2. Sea water pump
- 3. Filter
- 4. Valve
- 5. 6-way pump management relays



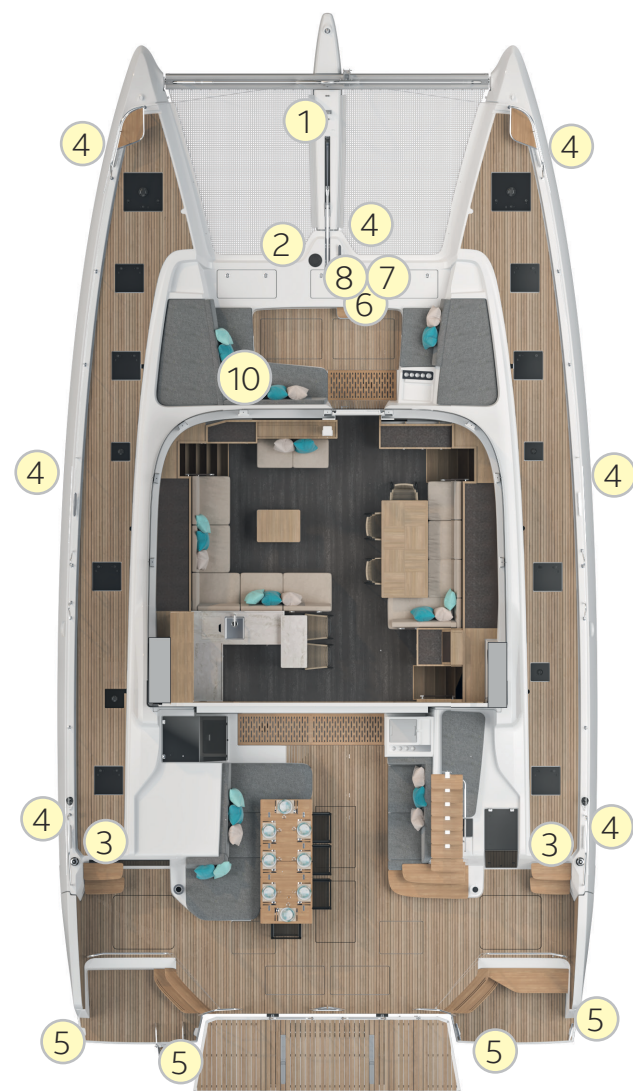
Port side hull



Starboard side hull

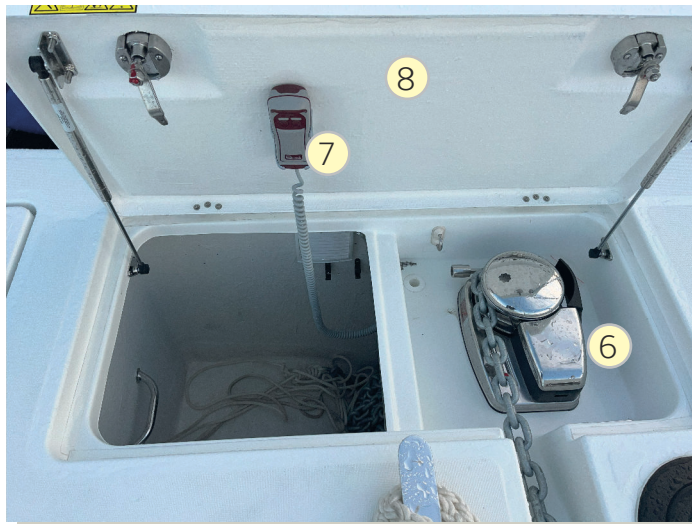
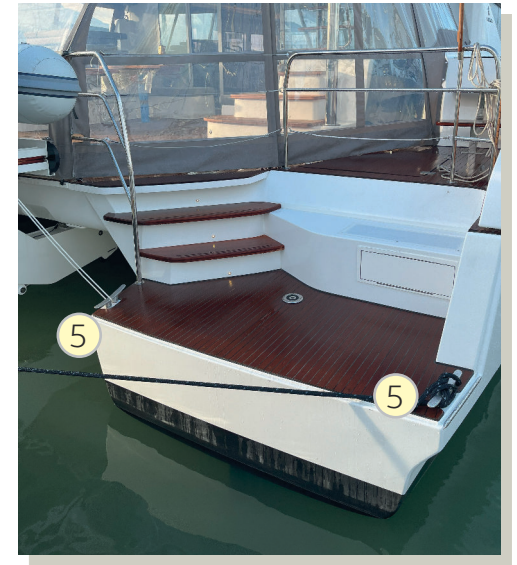
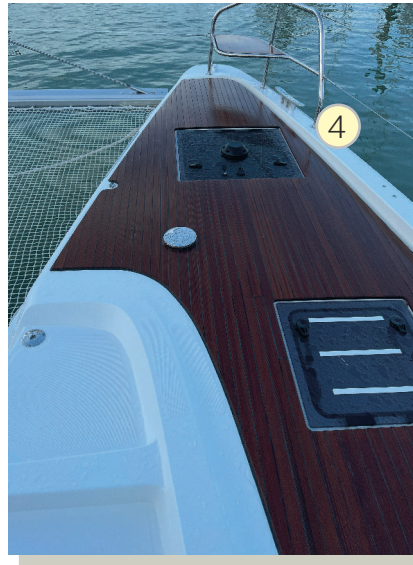
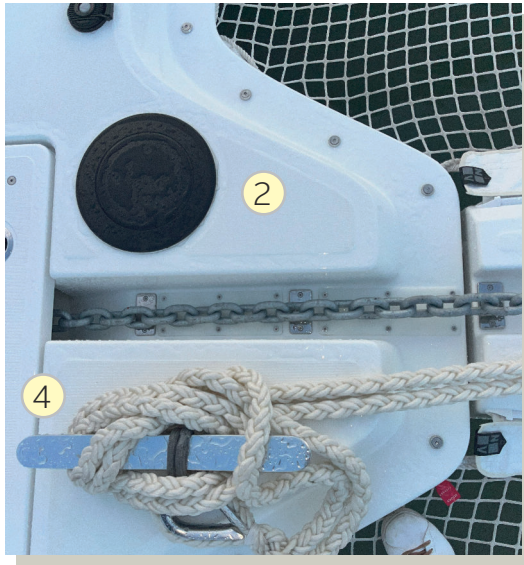
# 10-ANCHORING, MOORING, TOWING

## 10.1 Anchoring, mooring

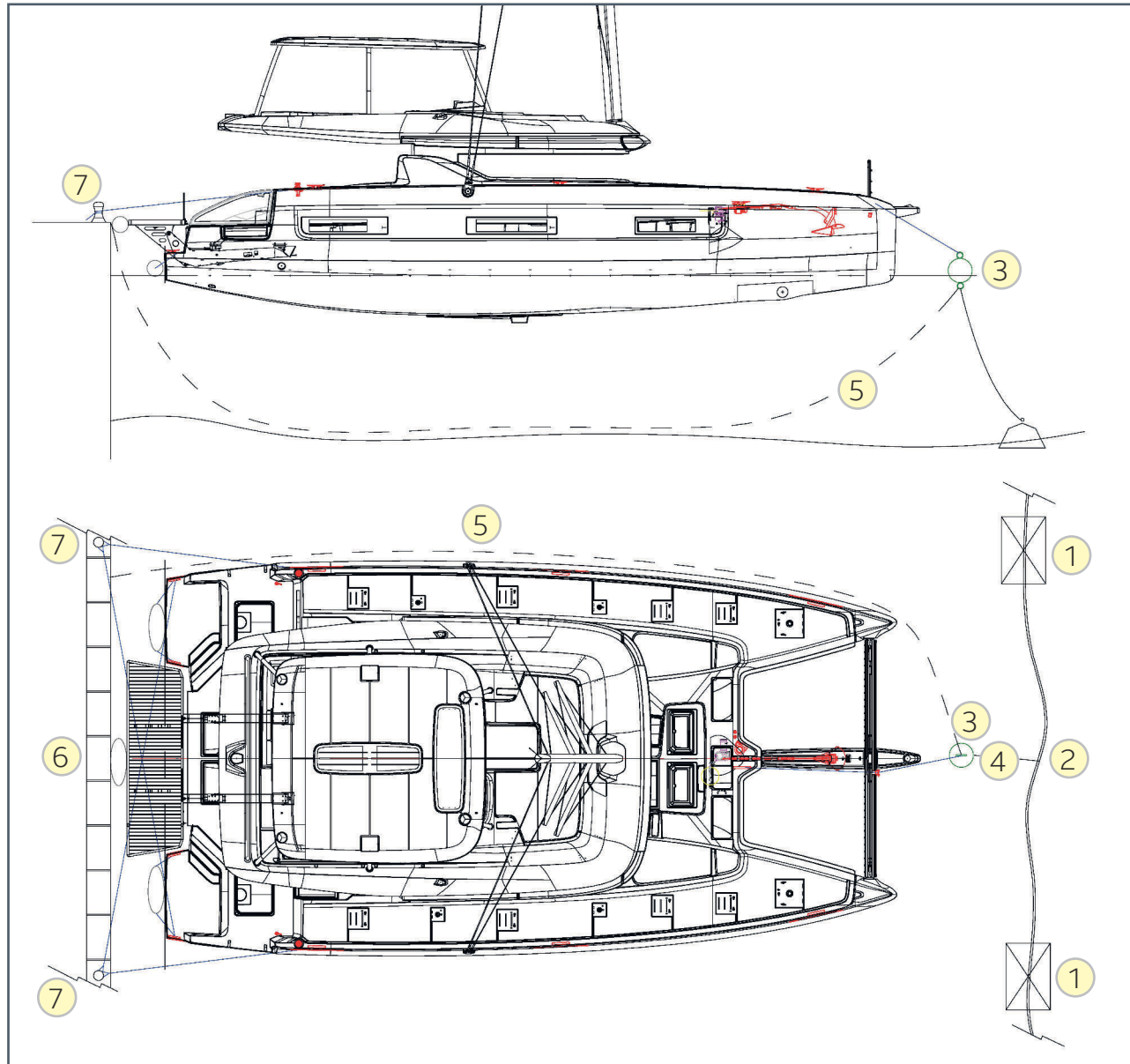


1. Composite compression beam with integrated chain run and one mooring cleat
2. Optional flush capstan
3. Optional fixed capstans
4. 450mm aluminum mooring cleat
5. 300mm aluminum mooring cleat
6. Quick DAVE 5 windlass without chain wheel
7. Windlass remote control
8. Access to the windlass and the chain locker
9. Windlass control at the helm station and chain counter
10. Access to the windlass fuse

# 10-ANCHORING, MOORING, TOWING



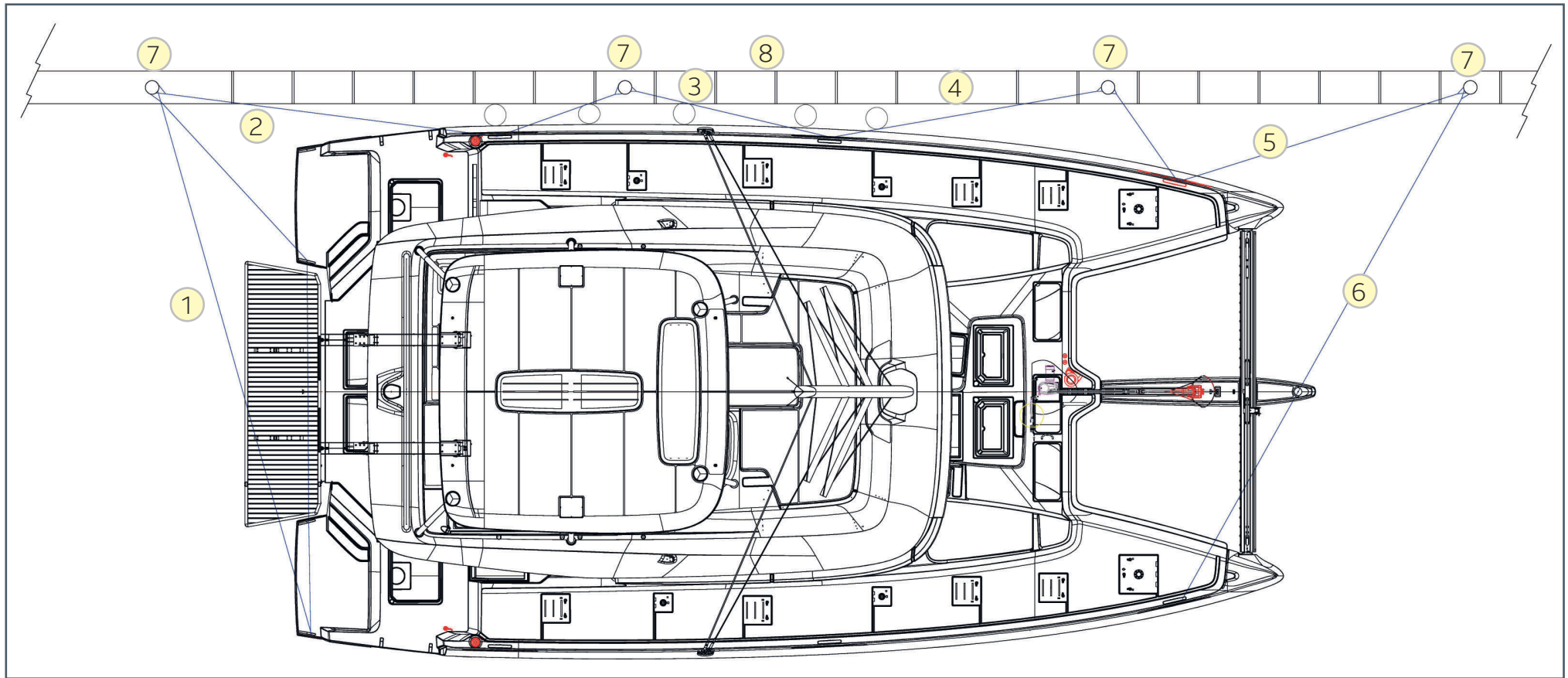
# 10-ANCHORING, MOORING, TOWING



## STERN LINE MOORING

1. Fixed mooring
2. Main chain
3. Buoy
4. Secondary chain
5. Stern line chain
6. Wharf
7. Bollard

# 10-ANCHORING, MOORING, TOWING



MOORING ALONGSIDE A WHARF

1. Aft stern line
2. Stern line
3. Aft spring line
4. Bow spring line
5. Bow line
6. Forward bow line
7. Bollard
8. Wharf

# 10-ANCHORING, MOORING, TOWING

## 10.2 Mooring

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

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

If the electric windlass does not work, check its circuit breaker and fuse located in the port side 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 75Kg anchor model should never be replaced by another model or weight. It is a model with high holding power, approved by the BUREAU VERITAS.

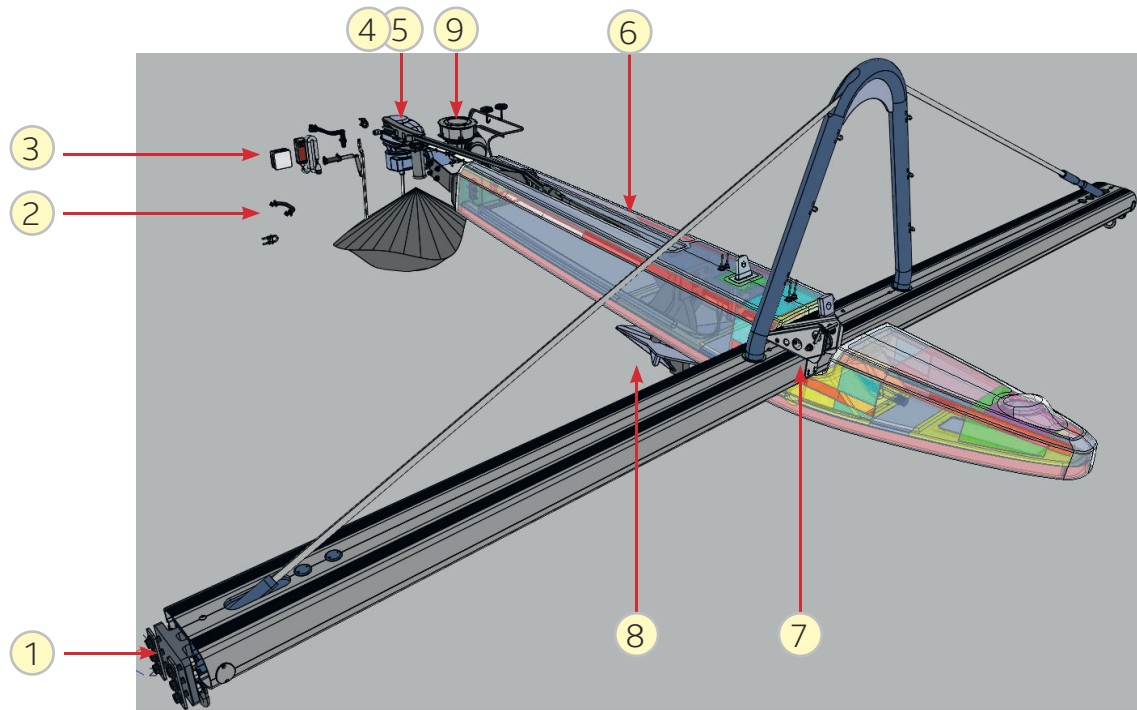
The chain must also be 14mm diameter.

### 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 trip rinse the windlass and anchor chain or rope with fresh water. Use the winch handle to loosen the windlass when anchoring.

# 10-ANCHORING, MOORING, TOWING



1. Beam chainplate for bridle
2. Clenching ring
3. Windlass control
4. Quick DAVE 5 windlass without chain wheel and capstan
5. Mooring cleat
6. 14mm Chain pitch
7. Spare bow roller
8. 75kg spade anchor
9. Flush capstan

3-strand polyamide bridle  
20mm diameter, 50lm, 1 splice, 1 thimble



## 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-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 boat's intended use.
- It is the owner's responsibility to use a lifeline 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 L450 mm cleats, breaking load of 7.9T.

- 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.

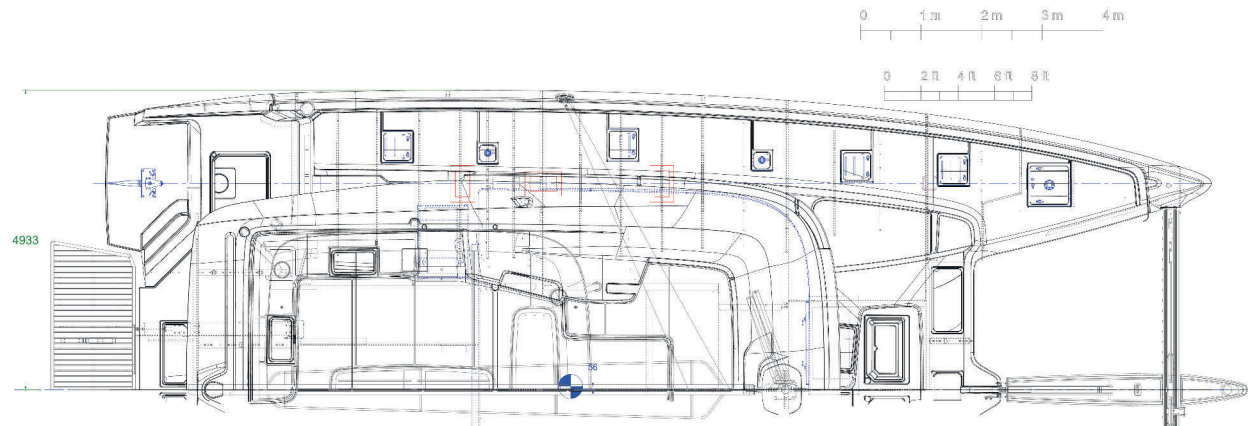


### WARNING

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

# 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.

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 = 42,3T**

Securing the boat for cargo shipping: 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

Use a trailer adapted to the boat and its weight.



### WARNING

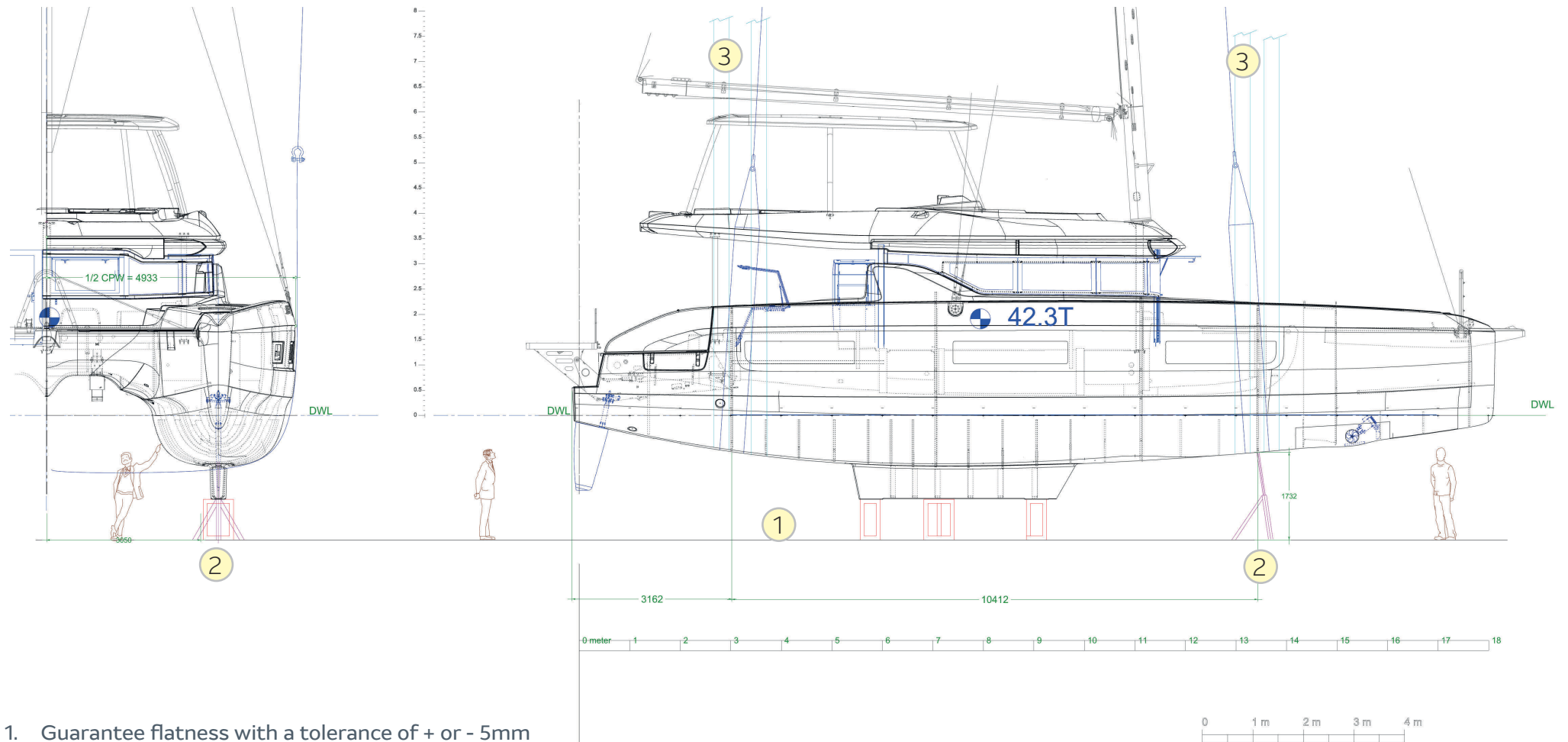
Ne pas rester à bord, ni sous le bateau pendant le grutage.



### NOTICE

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

# 11-TRANSPORT ET GRUTAGE



1. Guarantee flatness with a tolerance of + or - 5mm
2. 2X 10t work'up or parkup stanchions (cf Nautipark doc)
3. Hoisting belt

When loaded on a trailer: Tm 42,3T

# 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.

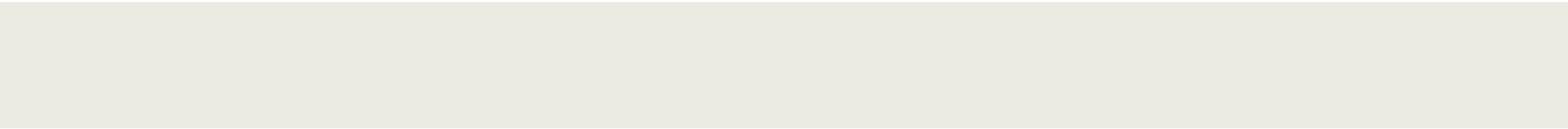
**A HUMAN LIFE IS PRICELESS..., YET A  
LIFEBOAT HAS A PRICE!**



LES SAUVETEURS EN MER (S.N.S.M.)  
Siège social : 31, cité d'Antin 75009 PARIS  
Tél. : 01 56 02 64 64 - Fax : 01 56 02 64 63 - Site internet : [www.snsm.org](http://www.snsm.org)

# 14-APPENDED DIAGRAMS

1. ELECTRICAL LAYOUT DIAGRAM 000001448835 (file SCHEMA\_INSTALLATION\_5XA\_20240722.pdf)
2. STARBOARD SIDE HULL DC WIRING DIAGRAM 000001479921 (file D3612D\_C.pdf)
3. PORT SIDE HULL DC WIRING DIAGRAM 000001476061 (file D2656S\_E.pdf)
4. ROOF DC WIRING DIAGRAM 000001528765 (file D4760X\_C.pdf)







162, quai de Brazza  
CS 81217  
33072 Bordeaux Cedex-France  
Tél. 33 + (0) 557 80 92 80  
E.mail : [info@cata-lagoon.com](mailto:info@cata-lagoon.com)

Réalisation : Atelier Florence GUENAULT

**[www.cata-lagoon.com](http://www.cata-lagoon.com)**