

# ORC

BY MARSAUDON COMPOSITES

TRUE SAILING ADVENTURE®

## STANDARD TECHNICAL DESCRIPTION



# ORC 50

SEPTEMBER 2021 – SEPTEMBER 2022  
INDEX B (April 2022)



Hull length:	15.23 m
Length overall (with the crossbeam):	16.59 m
Deck beam :	8.20 m
Overall beam (incl. the two helmsman seats):	9,00 m
Empty weight (ISO standard) :	8.6 T
Light weight (ISO standard) :	9.5 T
Maximum weight (ISO standard):	13.0 T



Standard draft :	1.70 / 2.70 m
Bridgedeck clearance :	0.95 m
Air draft :	23.05 m



Mast length ::	20.00 m
Mainsail area (developed) :	87.40 m <sup>2</sup>
Genoa (J1) area (developed):	60.00 m <sup>2</sup>



Diesel engines :	2 x 40 hp, saildrives
Diesel tank	2 x 110 L
Freshwater tank :	2 x 200 L



CE Design category:	A : 12 pax / B : 12 pax / C : 16 pax / D : 16 pax
Designer :	Christophe Barreau
Interior design:	Marsaudon Composites





## STRUCTURE

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Fiberglass/vinylester resin sandwich construction on PVC foam core. Laminated omega ribband and bulkhead for structure

All the composite parts are vacuum infused and bonded by contact lamination

Hulls, deck and roof in a white gelcoat finish

Non-slip white gelcoat on the deck, the cockpit floor, the saloon floor and under the nacelle

High performance epoxy primer layer applied below the waterline

One stainless steel mast post in the saloon and two carbon roof posts in the cockpit



## APPENDAGES

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Two composite daggerboards, vinylester/glass, infused

Two suspended composite rudders on stainless steel rudder stocks, JP3 self-aligning rudder bearings

Two carbon tillers with a white gelcoat finish and direct transmission via a carbon tube. Ronstan track and ball bearing car for guidance of the carbon tube, on the aft beam



## COCKPIT

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Area: 13 m<sup>2</sup>

Two external hinged helm seats with textile windguards. Adjustable and retractable stainless steel foot-rests

Three fixed 3-person cockpit seats with cushions and Spradling Silvertex "Carbon" grey type fabric covers

Two large storage pouches for the removable plexiglass windows from the rear roof bulkhead

Four storage lockers under the seats for a total of 600 L: 2 x 215 L, plus 1 x 85 L, plus 1 x 85 L gas locker (1 x 6 Kg Butagaz "Cube" bottle, installed)

Two lighting LED stripes on the cockpit ceiling

One Sparcraft anodized aluminium fixed mast, two level spreaders for the two stainless steel diamond stays

One Facnor "Facslide+" mast track with six ball-bearing cars.

One double ball-bearing car for the headboard

One Sparcraft aluminium boom, anodized in grey.

Three slab-reefing lines, one clew line, with their Spinlock "XXA" clutches

Stainless steel standing rigging ( $\varnothing$  14 mm forestay & shrouds,  $\varnothing$  12 mm lower shrouds and diamond cables)

One 2:1 mainsail halyard, one simple solent halyard, one mast-head bosun simple halyard

One Ronstan "Stand-up" block plus two Antal opening blocks at the winch mast foot

Five Lewmar rope clutches on the mast (1 x main and 1 x J1 halyards, 1 x bosun halyard, 2 x lazy-jacks)

One masthead Windex windvane

One one-piece carbon crossbeam/bowsprit/compression beam/martingale, with one stainless steel, 1x19,  $\varnothing$ 14 mm, martingale cable. Two Dyneema® side stays

One full batten, Dacron, square top, 3-reef mainsail. Six round fiberglass battens, three trim stripes, pennons, one bag, from Incidence Sails.

Clew point attached by a Dyneema® lashing



One genoa (J1) on its Profurl manual furling device, in Dacron sailcloth, UV stripe, three trim stripes, pennons, one bag, from Incidence Sails. One Profurl furling drum with its line led to the starboard cockpit winch

One lazy-jack set, adjustable from both sides

Dyneema sheets, halyards and reefing lines from Maffioli

## 5

## TRIMMING AND MANOEUVRES

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One 4:1 mainsheet system with 5 Ronstan 60 mm blocks attached to the boom by 2 Dyneema® loops. Tuning is achieved by a Ronstan track and its ball bearing traveller car. Two Andersen "62 ST FS" 2 speed winches and four dedicated Lewmar clutches. One cam-cleat at each winch

Two custom longitudinal genoa (J1) Ronstan tracks and 2 ball bearing traveller cars, 2 sliding pinstops

Two genoa (J1) sheets accessible from the helm stations, 2 Andersen "62 ST FS" winches with their cam-cleat

Two Andersen "50 ST FS" 2 speed winches for the furler and daggerboard lines. Two Lewmar double clutches for the daggerboards and 1 Lewmar single one for the furling line

One Andersen "62 ST FS" 2 speed mast foot winch, for the halyards and reefing lines

Five Ronstan "QuickLock" winch handles with their Outils Ocean storage pocket

## 6

## OTHER EXTERNAL EQUIPMENT

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Access to the saloon from the cockpit through a white plexi/aluminium 3 panel sliding door, lockable

Two sail lockers in the fore peaks: 2 x 4.7 m<sup>3</sup> with two Lewmar "LP70" opening hatches (62 x 62 cm), two aluminium access ladders. Anti-slip apparent carbon sandwich floor boards

One 2.6 m<sup>3</sup> mast foot wet locker, accessible by two Lewmar "LP70" opening hatches (62 x 62 cm), used as a chain bay, with its bitter end bracket

One telescopic, folding, stainless steel bathing ladder, on the port swimming platform

One transom-cockpit access stainless steel handrail, each side

**GREEMENT PRESENTE :**

- Standard mât aluminium
- Standard bôme aluminium

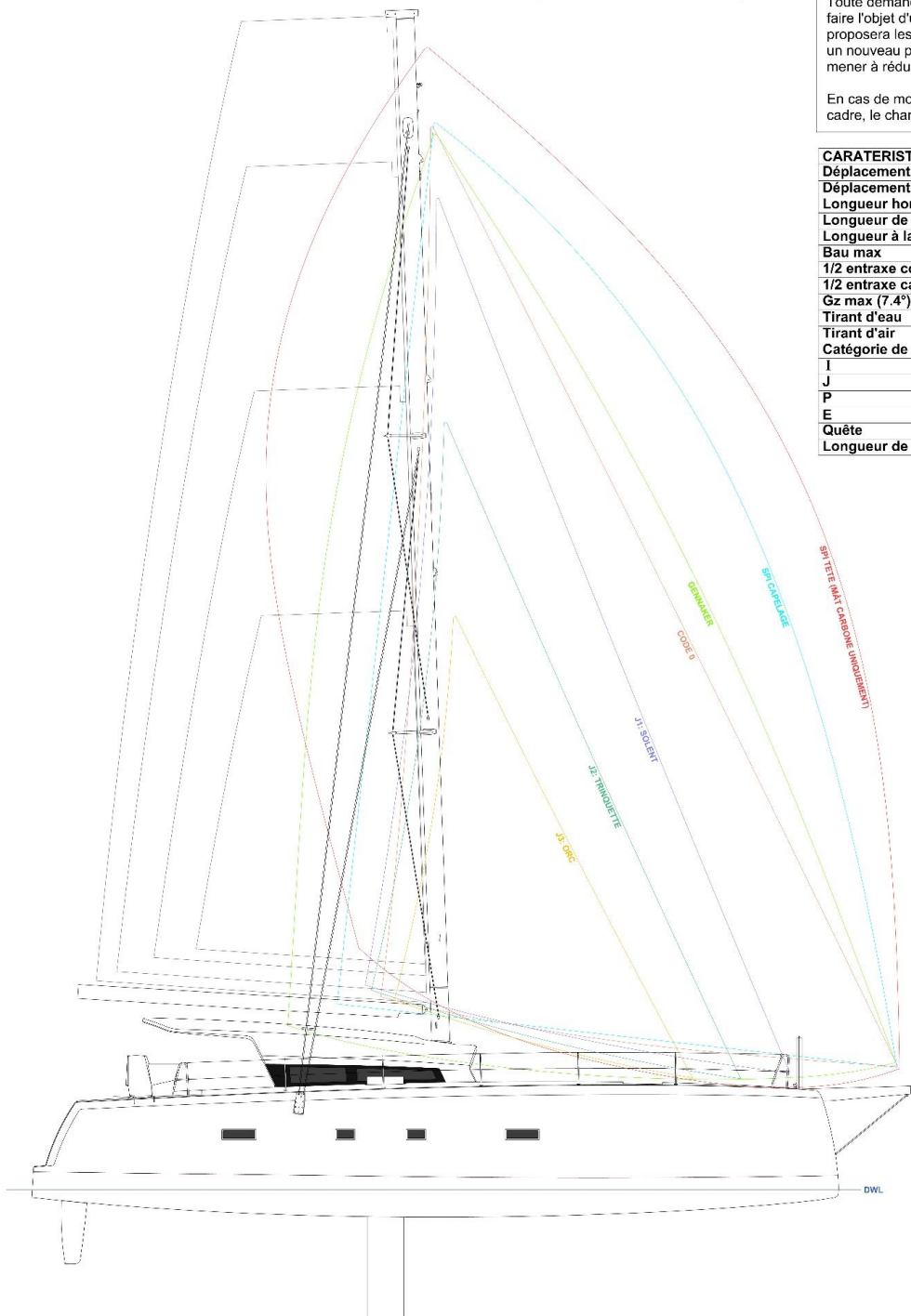
Le plan de voilure est optimisé pour la structure et les espars concernés, ainsi que pour une performance optimum du bateau.

Toute demande de modification de surface doit faire l'objet d'une étude qui, en cas de faisabilité, proposera les modifications à apporter et redéfinira un nouveau plan de réduction de voilure qui pourra mener à réduire plus tôt.

En cas de modification réalisée en dehors de ce cadre, le chantier déclinera toute responsabilité.

**CARATERISTIQUES GENERALES**

Déplacement Mini : Mmoc	9904	kg
Déplacement Maxi: Mldc	13063	kg
Longueur hors tout	16.60	m
Longueur de coque	15.23	m
Longueur à la flottaison	15.23	m
Bau max	8.20	m
1/2 entraxe coque	3.25	m
1/2 entraxe cadènes	4.10	m
Gz max (7.4°)	3.23	m
Tirant d'eau	2.85	m
Tirant d'air	22.30	m
Catégorie de conception	A	
I	17.87	m
J	6.36	m
P	18.65	m
E	6.25	m
Quête	2.0	°
Longueur de profil	19.5	m



Voilure	Angle vent apparent	PLAN DE REDUCTION DE VOILURE		Inversion possible en catégorie A
		Vitesse vent apparent conseillée par l'architecte (nds)	Vitesse vent apparent préconisée par l'ISO (nds)	
GV Haute + J1 Solent	<90°	20	22,6	OUI
GV Haute + Code 0	<90°	16	21,1	OUI
GV Haute + Gennaker	<90°	14	19,2	OUI
GV 1 Ris + J1 Solent	<90°	22	24,9	OUI
GV 1 Ris + J2 Trinquette	<90°	24	27,2	NON
GV 2 Ris + J2 Trinquette	<90°	28	32,0	NON
GV 3 Ris + J2 Trinquette	<90°	35	37,7	NON
GV 3 Ris + J3 ORC	<90°	42	43,5	NON
GV 3 Ris	<90°	50	50,3	NON
GV Haute + Spi de capelage	>55°	13*	N/A	NON
GV Haute + Spi de tête	>55°	11*	N/A	NON

\* valeur LORIMA pour la tenue du mât

TOUTE CONFIGURATION NON DECRITE AVEC CE JEU DE VOILES EST PROSCRITE

**SURFACES DE VOILES STANDARDS V2**

Surfaces Architecte	
Grand voile haute: GV haute	87.6 m² développés
GV Ris 1	71 m² développés
GV Ris 2	46.8 m² développés
GV Ris 3	24.4 m² développés
J1: Solent	59.8 m² développés
J2: Trinquette	39.2 m² développés
J3: ORC	20.4 m² développés
Code 0	87.3 m² développés
Gennaker	131.0 m² développés
Spi de capelage	170.0 m² développés
Spi de tête (mât carbone seulement)	220.0 m² développés



ORC50

PLAN DE VOILURE

### 1

## INTERIOR DESIGN

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Lacquered white finish

Saloon floors in white non-slip gel-coat

Shower floors in composite, white, non-slip gelcoat

Cabin, toilet and passage way floors in visible non-slip carbon sandwich boards

Teak fiddles along the galley cabinets, the surface next to the chart table and on the port-side companionway cabinet. Same fiddles on all the shelf ends in the cabins and passage ways

Interior composite panelling in "circé" blue and white, along the inner sides of the aft and fore cabins

### 2

## EXTERIOR

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ORC 50 logo, behind the waterline, in blue sticker, on the outer side. On the front inner side, a reminder of this blue waterline strip. Blue wave sticker on the back on the outer sides

"MC" stickers on aft beam, each bow and each side of bowsprit. "ORC" stickers on each outer side. Stickers "ORC 50" on the aft beam and on each side of the roof



### 3

## SALOON AND LIVING SPACES

18.5 m<sup>2</sup> area and 2.10 m standing headroom

One composite 180 x 90 cm saloon table, white gelcoat finish, on 2 aluminium legs

One fixed 5-person "L" shaped saloon seat, Sunbrella "shootey" grey type fabric. Storage (745 L) and a technical space under the seat cushions

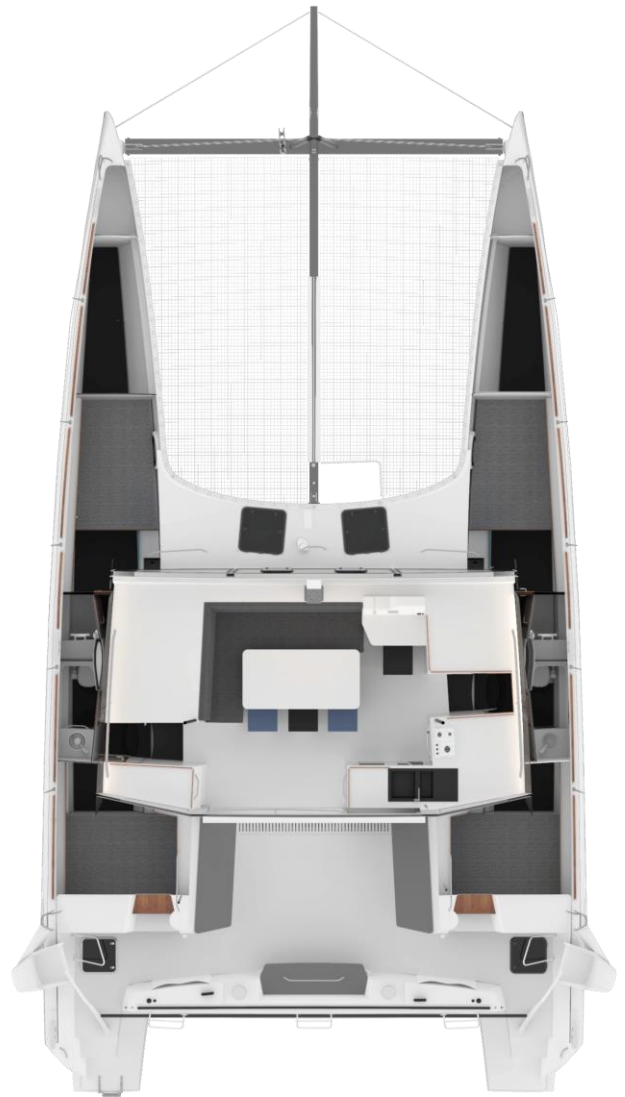
Three sliding seats, Casal Enoa Perfect fabric (2 "blue orange" + 1 "noir ébène"). Storage under the cushions (3 x 36 L)

One double day-berth (200 x 130 cm), one 35 Kg/m<sup>3</sup>, 10 cm thick, foam mattress, plus 2 cm of shape memory foam on top. Cover in Sunbrella « lead chiné » grey type fabric

Ventilation done by two Lewmar "LP10" opening hatches (25 x 25 cm) in the roof, two Lewmar "LP44" opening hatches (44 x 44 cm) opening hatches in the front Plexiglas window and two big detachable panels in the aft bulkhead

One LED spotlight each side of the sliding doors

Four stainless steel handrails (1 each side of the entrance, 1 in front of the sink, 1 long one above the entrance)



### 4

## CHART TABLE

One console for the electronics, integrated desk storage with lid. All in composite with white gelcoat finish

One sliding cushioned stool with Casal Enoa Perfect "noir ébène" fabric type fabric cover, storage under the cushion (36 L)

### 5

## GALLEY

One Eno "Kos" 3 burner gas stovetop with pan-holders, one Eno "Perigord" gas oven

One 150 L, two-drawer type, Vitrifrigo DRW180A fridge/freezer, air cooled, in the starboard companionway

One double mineral composite sink with mixer faucet

Storage lockers with grey plexi doors (1 cutlery drawer + 2 cupboards with shelf)



**6**

## FURNISHED HULL

One aft cabin, one fore cabin, one bathroom and one toilet in each hull, closed by 4 white plated plywood doors, white finish. "Afromosia" wood doorframes

**7**

## FORE CABINS

One double berth (195 x 140 x 12 cm) with one 35 Kg/m<sup>3</sup>, 10 cm thick, foam mattress, plus 2 cm of shape memory foam on top. Cover in Sunbrella « lead chiné » grey type fabric. One 160 L open storage volume underneath

One Lewmar "LP10" deck opening hatch (25 x 25 cm) plus one Lewmar hull opening porthole (62 x 16 cm)

One longitudinal shelf along the outer side, one open cupboard on the inner side. All shelves with fiddles

**8**

## PORT PASSAGE WAY

One single berth in the port hull (195 x 106 cm) with one 35 Kg/m<sup>3</sup>, 10 cm thick, foam mattress, plus 2 cm of shape memory foam on top. Cover in Sunbrella « lead chiné » grey type fabric. Three storage spaces underneath. One LED reading light

One shower cabin with door, shower column, mixer faucet, direct drainage by a dedicated pump. One Lewmar "LP10" deck opening hatch (25 x 25 cm) plus one Lewmar hull opening porthole (34 x 16 cm).

One toilet cabinet: one manual sea toilet with its black water tank, one stainless steel round sink (Ø 26 cm) with its mixer faucet. One mirror, one cupboard with a grey Plexiglas door. One Lewmar hull opening porthole (34 x 16 cm)



9

## STARBOARD PASSAGE WAY

Two long shelves

One shower cabin with door, shower column, mixer faucet, direct drainage by a dedicated pump. One Lewmar "LP10" deck opening hatch (25 x 25 cm) plus one Lewmar hull opening porthole (34 x 16 cm)

One toilet cabinet: one manual sea toilet with its black water tank, one stainless steel round sink (Ø 26 cm) with its mixer faucet. One mirror, one cupboard with a grey Plexiglas door. One Lewmar hull opening porthole (34 x 16 cm)

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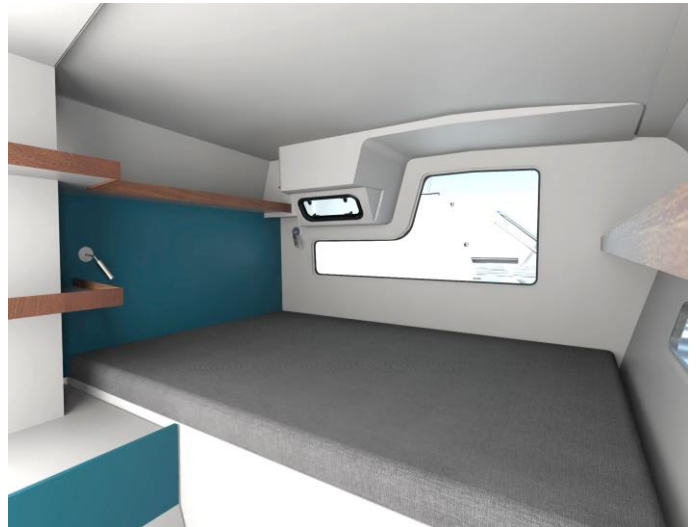
## AFT CABINS

One double berth (200 x 160 cm) across the cabin, one 35 Kg/m<sup>3</sup>, 10 cm thick, foam mattress, plus 2 cm of shape memory foam on top. Cover in Sunbrella « lead chiné » grey type fabric

One large "L" shape rear plexiglass window

One Lewmar aft hull opening porthole (42 x 16 cm), one Lewmar "LP10" deck opening porthole (25 x 25 cm), one Lewmar hull opening porthole (62 x 16 cm)

Two 1 m selves in front of the bed and 1,5 m shelf above the bed along the inner side and 2,5m shelf along the outer side. All shelves with fiddles



**1 SAFETY**

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Two stainless steel pulpits plus 5 stainless steel stanchions with a double line of stainless-steel cable guardrails on each side

Three stainless steel pushpits along the aft beam with a double line of stainless-steel cable guardrails

Eight stainless steel handrails on the rooftop

One "Olympic 95" Plastimo horizontal, flushmount, lighting, navigation compass in front of each helm seat

Two white trampoline nets, 35 mm mesh, with a dedicated stainless steel liferaft storage space

One round (Ø 45 cm) BSI escape hatch in each fore cabin

One teak toe rail along each deck-edge

Four electric automatic bilge pumps plus 4 manual ones

Emergency backup drainage pumps using the engine's sea water cooling pump

Two safety padeyes in the cockpit and two next to the escape hatches

Two lifelines on the catwalks, one across the front of the rooftop, plus one along the longitudinal beam

All the deck hatches are fitted with non-slip stripes

**2 DOCKING AND ANCHORING**

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One Quick "Prince DP3", 1 500 W, vertical axis windlass, without drum, half flush mounted, 10 mm chain wheel, with remote controls accessible from the chart table

One carbon bow-roller, integrated to the front beam, with roller and stainless-steel side plates

Six aluminium docking cleats

**3 PLUMBING**

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Two polyethylene freshwater tanks (2 x 200 L), with a bypass valve. Two deck fillers on the deck

One 25 L, polyethylene, black water tank, with gravity and deck discharge drainage in each hull

Pressurised hot/cold water system with one 20 L water boilers in each hull

## 4

## ELECTRICITÉ

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12 V electrical circuit with one digital « Scheiber » command and control panel at the chart table

One Victron AGM (2 x 230 Ah) battery bank, charged by one 125 Ah alternator on each engine

One AGM (55 Ah) engine battery in each engine room with possible coupling

Navigation lights (tip of the bowsprit and aft beam), one deck light, one motor light and one anchor light, all in LED technology

USB sockets: 2 single ones in each cabin and at the port passage way single berth, 1 single one at the saloon berth on the reading light and 1 double one at the chart table

Dimmable LED stripes interior lighting with wireless switches: along the sides of the lateral saloon plexi windows, along the outer sides of the aft and fore cabins, in the bathrooms and on the ceiling of the passage ways. Two LED reading lights in each cabin, plus one at the saloon berth

## 5

## MOTORISATION

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Two Yanmar "3JH40" common-rail, 40 hp inboard diesel engines with saildrive transmission

Engine controls by the starboard helm station

Two 110 L diesel polyethylene independent tanks, one in each hull, two deck fillers on the fore deck

Two engine room access opening hatches, Lewmar "LP60" (50 x 50 cm)

Two dual folding propellers (Flexofold)

**ORC 50 STANDARD**, delivered at Lorient La Base, afloat, masted, ready to sail (+/- 160 L diesel). Handover including half a day of sea trial

**775 500 €**

*Ex VAT and ex « écotaxe » (3 347 € in 2022)*

by  **marsaudon  
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