

## Linssen Yachts Standard Equipment

### Linssen Grand Sturdy 450 AC Variotop®

Item	Description	Page
------	-------------	------

1

#### BASIC DATA

01010.05	Type code	: 27C
	Construction	: SPH®(patent pending) (Softchine Prestressed Hull
	Bottom/hull/decks/superstructure	: 6/5/4/5-4 mm.
	Weight/displacement	: ±22.500 kg / ±22,5 m <sup>3</sup>
01020.05	LOA x beam x draft	: ± 13.75 x 4.65 x 1.20 m.
	Length hull	: ± 12.80 m.
	Length over deck	: ± 12.70 m.
	Length waterline	: ± 11.75 m.
	Minimum air draft	: ± 3.49 m.
	Air draft with lowered mast to top parking frame Variotop®	: ± 4,20 m
	Headroom FC/saloon/AC/Wheelhouse	: ± 2.00/1.98/1.98/2.00 m.
01030.03	CE-classification	: B (sea)
	Number of max. recommended persons	: 10
13020.20	Engines	: 2x 4 cyl. Mercury Diesel, type MD2.0L ZF 25-H / 2,8 : 1 2x 84 kW (115 HP), 3000 rpm
	Alternator	: 2x 110A-12V
03040.01	Fuel tank capacity	: ± 2x 750 ltr.
	Water tank capacity	: ± 720 ltr.
	Holding tank capacity	: ± 400 ltr.
41001.01	Aft cabin with a free-standing double berth, toilet compartment with washbasin at SB-Side, shower compartment connected to toilet compartment, incl. wardrobes at Port and SB-side.	
42001.01	Spacious U-shaped galley at SB-side, cupboards. L-settee at SB-side, at Port side a separate dinete	
43001.01	Forward cabin with double berth and cupboards, separate toilet and shower compartment.	
44001.01	Wheelhouse with luxury steering position and helmseat at SB-side, settee at Port side	

## 1. HULL

### 1.1 EXTERIOR

11015.01	Hull constructed in accordance with the Linssen Yachts SPH® (patent pending) construction method	
11030.02	Integrated aft deck dodgers	
11040.01	Integrated deck-boxes, aft bench including lockable teak tops with gas-pressure struts, incl. joint.	
11050.01	"Linssen Variotop®: hydraulically-operated, double-lined and insulated convertible roof. Watertight wheelhouse enclosure through a unique, patented, closing system	
11055.01	Hydraulically-controlled collapsible parking frame for the Variotop®. The hydraulically controlled parking frame can be lowered to reduce the maximum air draft to approx. 342 cm.	
11080.01	Integrated stern door to bathing platform	

## Linssen Grand Sturdy 450 AC Variotop®

Item	Description	Page
------	-------------	------

### 1.2 STAINLESS STEEL

12010.01	Polished stainless steel sea rail
12020.02	Polished stainless steel hinged side ladder integrated into deck rail (Port and Starboard)
12030.02	Opening pulpit lockable incl. stainless steel bar
12050.02	6 x Original Linssen-design stainless steel cleats
12055.01	2 x Original Linssen-design stainless steel cleats at the bathing platform
12075.01	Stainless steel steps to saloon deck midships, demountable, finished with anti-slip steps incl. 2 hand grips on saloon deck
12080.01	Stainless steel handrails on saloon deck
12112.01	Polished stainless steel handrails at aft side wheelhouse
12120.01	Centerline traffic stairs on heart ship with teak deck parts, with comfortable wide steps and ergonomic handrail for safe traffic from deck to bathing platform.
12125.01	Teak step in side decks
12130.01	Polished stainless steel foldable bathing ladder at bathing platform (incl. solid teak steps with anti-slip profiles)
12145.02	Robust, stainless steel coated bathing platform, with solid teak parts (including Heavy Duty Linssen PVC fendering from bathing platform to 1/3 of the hull length)

### 1.3 TECHNICAL

13029.02	Air suction vents engine compartment with anodised aluminium grill at Port and Starboard side
13040.01	Linssen "FIS" system (patent Floor Integrated System®) for integral protected loop-up of cables and ductings in the engine compartment
13110.01	Outside shower at bathing platform, with warm and cold water tap
13135.01	Preparation for extractor hood in galley by roof fan on saloon deck for discharge outside.
13150.02	Integrated bow fitting with fixed anchor roller and stainless steel anchor holder
13155.01	Mooring facility at bow through stainless steel hawse and stainless steel protection strips

## 2. COATING

### 2.1 COATING & DECK FINISH

21010.01	Linssen 2 component Exterior Coating system
21020.01	Saloon and cabin deck in anti-slip coating
21030.01	Fore-deck and side decks in anti-slip coating
21060.01	Non-toxic antifouling suitable for fresh and salt water (Black colour)
21070.01	Additional 2-component easy-to-clean protective coating in engine compartment
21090.19	Original Linssen Sand Beige colour scheme:
	Superstructure and hull : Sand Beige
	Waterline : Dark Green
	Antifouling : Black
	Rope fender : Beige
	Cabriolet canvas : Sonnenland Java
	Glass windows saloon, wheelhouse, ventilation-/escape hatches : "summer green" tinted

### 2.2 TEAK DECKS

22020.01	Original LINSSEN teak deck on aft deck, steps on stern and ventilation/escape hatch.
----------	--

**Linssen Yachts Standard Equipment**  
**Linssen Grand Sturdy 450 AC Variotop®**

4 November 2022

Item	Description	Page
------	-------------	------

### 3. ENGINE COMPARTMENT

#### 3.1 TECHNICAL

- 31011.23 Linssen Yachts "hydrolubricated" propeller shaft installation
- 31021.21 Engine/shaft connection through homokinetic coupling and thrust bearing
- 31025.22 Low noise propellers
- 31034.02 Bow thruster 400V/7,5 kW. Powered by the generator, long switching time possible, incl. soft start. Bow thruster can deliver a permanent power of 7.5KW and a peak power of 11KW.
- 31054.02 Stern thruster thruster 400V/7,5kW. Powered by the generator, long switching time possible, incl. soft start. Stern thruster can deliver a permanent power of 7.5KW and a peak power of 11KW.
- 31080.03 Twin electronic engine controls at steering position
- 31090.03 Hydraulic steering
- 31096.02 Stainless steel steering wheel with teak rim at steering position
- 31145.21 Fuel tanks of advanced design with inspection/cleaning hatch
- 31161.03 Magnetic level gauge in fuel tanks for direct volume indication
- 31180.05 Separate second (1 x on engine) fuel filter with water separator, per engine
- 31210.02 Remote fuel supply cut-off to engines from dinette settee
- 31300.01 Linssen Yachts per cabin thermostatically controlled warm water heating with radiators in the forward cabin, dinette/saloon, aft cabin and wheelhouse.
- 31307.01 Radiator in front cabin toilet compartment. Thermostatically controlled.
- 31307.21 Radiator in aft cabin toilet compartment. Thermostatically controlled.
- 31310.02 LED Engine room lighting with switch and indicator in switch panel
- 31331.01 Entrance engine compartment by folding ladder between the engines.
- 31700.03 Automatic fire extinguishing in engine compartment
- 31750.01 Linssen super sound insulation package consisting of a sound absorbent insulation and a non vibration package.

#### 3.2 ON-BOARD WATER SYSTEMS

- 32010.13 Automatic pressurized water system (incl. solid PVC water tank with inspection/cleaning hatch), incl. level indicator
- 32020.01 2 Automatic pumps including expansion reservoir for water system
- 32050.04 Hot water system (60 litre calorifier)
- 32060.01 230 V./800W immersion heater in calorifier
- 32080.06 Holding tank toilet including Dockside-Discharge connection and level indicator
- 32095.01 All grey water outlets (sinks and shower-drainage) discharge directly overboard  
Drain pump(s) shower(s) finished with time relay
- 32110.02 Holding tank waste pump-out unit for Direct Discharge, equipped with timer, so pump switches off automatically after 10 min.
- 32150.04 Deck-wash pump, including hose and trigger nozzle with connection at bathing platform
- 32190.01 Electric bilge pump installations placed in bilges of aft cabin, forward cabin and engine room. Equipped with float switch & alarm (3x 100L/min. pumps)
- 32200.01 Additional loose electric bilge pump provided, with discharge tube and supply cable

#### 3.3 ELECTRICAL & ELECTRONICS

- 33020.01 Electric domestic 12 V. with automatic main fuse and separate fuses for all users

## Linssen Grand Sturdy 450 AC Variotop®

Item	Description	Page
33022.01	Linssen Yachts ICCCESS main switchboards, 1x in saloon and 1x at steering position, for control of key functions and reading of fluid levels	
33030.01	230V. /16Amp shore power connection, incl. galvanic insulator, earth leakage circuit breaker and automatic fuse protected end groups with indication and shore power cable (25 metres)	
33082.04	Domestic: 12V. with 4 maintenance free "Super Cycle" AGM-batteries 170 Ah.	
33140.08	2 x additional maintenance-free domestic "Super Cycle" AGM-batteries 170 Ah., including wiring & fitting	
33180.02	Starting circuit 12V. with 2 x maintenance free "Super Cycle" AGM-battery.	
33225.01	Service-net 12 V with 1 x maintenance free "Super Cycle" AGM battery 170 Ah. for anchor winch, mooring winches and hydraulic sinking bathing platform.	
33229.01	Domestic net equipped with remote-controlled main switch	
33271.03	Automatic battery charger/invertor type Victron Quattro 12/3000 with battery monitor. The battery charger has a maximum charging current of 120A, the maximum output power of the inverter is 3000W.	
33295.02	Generator ONAN 400 V/17,5 kW. Priority switch shore power/generator and reverse. Start/stop on steering position.	

### 3.4 INSTRUMENTS & NAVIGATION

34010.02	2 x engine instrument panels with rev.counter, engine hour meter and multifunction meter with voltmeter with alarm, temperature gauge with alarm and oil pressure gauge with alarm
34030.02	Compressor horn with control at steering position
34050.02	Government approved LED navigation lights: Starboard and Port side on superstructure, stern light, top light in mast and anchor light

#### 3.4.1 NAVIGATION INSTRUMENTS

34110.10	Raymarine autopilot with p70RS display at steering position (incl. course computer/rudder indicator/compass transducer) with protection in mast which disengages autopilot during AUTO operation if mast is folded.
34125.07	Raymarine Axiom+12RV, 12" multifunctional colour display with touchscreen and Wi-Fi at steering position. Including read out from echosounder, log and outside water temperature.
34132.80	Raymarine RMK-10 remote keypad for complete touch control for Axiom displays
34140.03	Navionics Gold XL9 marine chart type 46XG, West Europe

### 3.5 EXTERIOR EQUIPMENT HULL

35010.00	Magnesium or zinc anodes (depending on cruising area)
35030.01	Original Linssen synthetic-fibre rope fender, with stainless steel stretcher (Beige colour)
35040.01	Ships name on bow and stern. Port of Registry and Registration number on stern in colour of the waterline Bow letter type; Snell Roundhand. Stern letter type; VAG
35090.04	Lewmar VX-series, type VX3 Heavy Duty electric anchor winch, with integrated stainless steel anchor rolls, anchor rail and deck switches.
35120.02	20 kg. galvanized Bruce-anchor
35140.03	50m. x 10mm. anchor chain, according DIN 766

### 3.7 EXTERIOR EQUIPMENT SUPERSTRUCTURE

37020.03	Stainless steel windscreen wiper installation in wheelhouse SB, middle and port, with touch control suitable for 2 speeds, self-parking, 3- positions interval on 25, 50 and 75% and wish-wash. Incl. integrated choice for synchronise the windscreen wipers at low speed
----------	--

## Linssen Grand Sturdy 450 AC Variotop®

Item	Description	Page
37050.03	Window spray-installation wheelhouse for 3 windscreen wipers	
37070.02	Original Linssen Design mast, with double yard, on saloon deck powder coated in superstructure colour, finished with "eyes" and cleats between the yards for flag lines	
37075.02	Stainless steel mast stays with quick release system	
37245.01	Teak deck box joint table model	
37271.11	Entrance doors, varnished in superstructure colour	

### 3.8 WINDOWS

38030.01	Double-glazed "Summer Green" tinted windows in the saloon with thermal insulated profile (Thermic Line).
38040.06	Stbd front hinged window in saloon with (Thermic Line) double glass, fitted in thermal insulated aluminium profiles. Incl. mosquito screen, fitted on the outside with magnets
38230.01	Double-glazed "Summer Green" tinted windows in the wheelhouse with thermal insulated profile (Thermic Line). Front windows in plain glass.
38300.02	4x opening port-holes in the forward cabin, with plain acrylate, aluminium anodised with rain protection covers and mosquito screens
38320.01	5x opening 1x fixed port-holes in the aft cabin, with plain acrylate, aluminium anodised with rain protection covers and mosquito screens
38400.01	Aluminium ventilation/escape hatch, with "Summer Green" tinted acrylate in the forward cabin, incl. blind rouleau/curtain with integrated screen
38410.01	Aluminium ventilation/escape hatch, with "Summer Green" tinted glass in the shower and head, incl. blind rouleau/curtain with integrated screen
38420.01	Aluminium ventilation/escape hatch with tinted glass in aft cabin, incl. blind rouleau/curtain with integrated screen
38440.03	Fixed aluminium deck window integrated in saloon deck as engine hatch, profile coated in colour superstructure (Linsen Sand Beige)

## 4. INTERIOR

### GENERAL

40010.01	Linssen panels FPS® (Floating Panel System, Patented)
40020.01	Interior constructed of high-end okoumé panelling with cherry veneer
40025.14	Interior and exterior style "Classic Traditional": Classic modesty. Stylish elegance through soft beige shades.
40030.02	Deck-head lining in elegant vinyl finish panels
40040.01	Original Linssen maintenance friendly ship's floor, teak color with light striping
40050.02	High gloss stainless steel fittings in all compartments
40060.02	High gloss stainless steel door and locker furniture, with push-button catches

### 4.1 AFT CABIN

41010.01	Stylish/high quality floor covering in rear cabin on second floor level next to bed.
41021.01	Double berth, with slatted base and sprung mattress including spacious drawers underneath bed
41031.01	Bedside table at Port side
41041.01	Bedside table at Starboard side
41141.01	Cupboard at SB- and Port side in the aft cabin
41161.01	Cabinets in hall Port side with cupboards of 45 and 60 cm wide, suitable for any built-in equipment.

## Linssen Grand Sturdy 450 AC Variotop®

Item	Description	Page
41171.01	Cabinet hallway Starboard side with multifunctional hanging/cupboards and drawers	6
<b>4.1.2 SHOWER AND HEADS COMPARTMENTS</b>		
41062.02	Toilet compartment in the aft cabin in high quality Formica wall finishing	
41071.13	Integrated washbasin surface mounted in aft toilet-compartment vanity unit. Worktop finished in original corian®	
41092.02	Shower in the AC finished in high quality Formica wall finishing	
41092.91	Shower tray aft cabin in corian designed with grooves for water drainage	
<b>4.2 SALOON &amp; GALLEY</b>		
42011.90	Hatch above engine room for easy access and inspection of this room.	
42021.01	Comfortable L-shaped saloon settee with integrated storage space	
42035.03	Elegant saloon table, low model	
42037.01	Saloon and dinette table top with flush leather panels	
42041.01	Grab rail at saloon stairs, in high gloss stainless steel	
42071.03	L-shaped dinette with integrated drawers	
42081.01	U-shaped galley with cupboards and drawers	
42092.03	U-shaped galley worktop finished with original Corian®	
<b>4.3.1 FRONT CABIN A</b>		
43010.01	Stylish/high quality flooring in front cabin on second floor level next to bed.	
43021.01	Double berth with slatted base and 2 drawers	
43031.01	?	
43041.01	?	
<b>4.3.2 SHOWER AND HEADS COMPARTMENTS</b>		
43062.02	Toilet/shower walls FC in high quality Formica wall finishing	
43071.13	Integrated washbasin surface mounted in front toilet-compartment vanity unit. Worktop finished in original Corian®	
43082.02	Shower in the FC finished in high quality HPL wall finishing	
43081.11	Storage space in the toilet compartment FC	
43082.91	Shower tray front cabin in corian designed with grooves for water drainage	
<b>4.4 WHEELHOUSE</b>		
44021.01	Bench on the Port side including drawer	
44031.01	Helmseat with integrated pull-out table	
44101.01	Wetbar at SB-side incl. Corian wash basin and hot and cold mixer tap	
44081.01	Walnut wood dashboard finished in real leather, at SB side	
44091.02	Comfortable electric adjustable Linssen Design helm seat, in height adjustable, with matching leather upholstery. Horizontally electric adjustable	

**Linssen Yachts Standard Equipment**  
**Linssen Grand Sturdy 450 AC Variotop®**

4 November 2022

Item	Description	Page
------	-------------	------

## 5. FINISH

### 5.1 LIGHTING & SOCKETS

51010.05	LED interior lighting with wall switches and/or switch on light point in the compartments. Dimmable LED lighting in front cabin, guest cabin, saloon, aft cabin and wheelhouse.
51070.11	Luxurious LED reading lights (2x) in the aft cabin
51080.11	Luxurious LED reading lights (2x) in the front cabin
51100.02	Attractive indirect lighting in the FC and AC heads
51400.11	USB-connection in saloon, wheelhouse, FC and AC for charging mobil equipment.
51500.00	1 x 12 V. socket in the saloon on Port-side, aft
51601.01	230 V. sockets in the FC (2x), toilet FC (1x), dinette (1x), saloon (2x), galley (1x double), toilet AC (1x), AC (3x) and in the wheelhouse (2x)

### 5.2 GALLEY

52015.01	Bar cupboard/drawer in saloon, incl. set of Linssen Yachts glasses (comprising: 6 shot glasses, 6 highball glasses, 5 whisky glasses, 6 wine glasses and 6 champagne glasses)
52020.01	Integrated waste bucket in cupboard
52025.01	Plate holders and anti-skid mats in galley drawers
52030.01	Cutlery tray
52035.02	"Magic Corner" cupboard incl. basket set in the galley
52040.02	110 l. refrigerator with freezer compartment in the galley
52062.02	Provision for cooling drawer 30 ltr. in saloon settee, with blind panel
52100.02	230V. washer/dryer combination, fitted in the forward cabin shower compartment
52140.02	230V. induction hob, stainless steel, with touch control. 1 x 1200 W. cooking zone, 2 x 1800 W. cooking zone, 1 x 2200 W. cooking zone
52180.01	Stainless steel/corion sink
53020.03	Mixer tap in galley type Grohe Essence
52220.02	230V. stainless steel 42 l. microwave/oven/grill combination. Temperature range 30-250 degrees. 90-1000W microwave power

### 5.3 SANITARY FITTINGS

53010.01	Selected bathroom fittings (mirror, toilet paper holder, etc.), in the forward cabin head
53015.01	Selected bathroom fittings (mirror, toilet paper holder, etc.), in the aft cabin
53030.04	Build in wall mixer tap in toilet compartment FC, chrome, type Grohe Talis
53040.04	Build in wall mixer tap in toilet compartment AC, chrome, type Grohe Talis
53050.06	Build in wall mixer tap in forward shower type Grohe (Thermostatically adjustable) incl. shower rail
53060.06	Build in wall mixer tap in aft shower type Grohe (Thermostatically adjustable) incl. shower rail
53090.01	Shower door in aft cabin shower
53130.02	Electric toilet in forward cabin, with fresh water rinsing
53140.02	Electrical toilet in the aft cabin, with fresh water rinsing

### 5.4 AUDIO / VIDEO / INTERNET

54010.02	Stereo radio/MP3-player Fusion Apollo Apollo RA770 with bluetooth and touch screen, including Subwoofer and 2 speakers in the saloon and amplified radio-antenna in the mast, connected to Raymarine display. Radio can be controlled via Fusion app on smart phone or tablet
----------	---

# Linssen Yachts Standard Equipment

## Linssen Grand Sturdy 450 AC Variotop®

4 November 2022

Item	Description	Page	8
54035.04	Set speakers in wheelhouse		
54200.01	Primary TV connection at saloon under steering position, incl. extra 230V. socket		
54250.01	Glomex TV-antenna on mast, suitable for analogue & digital reception. Suitable for DVBT-T2 network.		
54400.04	49" (123cm) LED TV with integrated DVB-T & DVB-S tuner in saloon integrated on AC wall		
<b>5.6 INTERIOR UPHOLSTERY</b>			
56021.02	Dinette settees, finished in genuine leather		
56031.02	L-shaped saloon settee, finished in genuine leather		
56050.02	Dashboard finished in genuine leather		
56095.02	Steering settee in wheelhouse finished in genuine leather		
56101.11	Mattress 1x 2 pers. in front cabin type coldfoam 14 cm. with layer in foam in two hardness grades.		
56131.02	Mattress 2x 1 pers. in aft cabin type Combispring 14 cm.		
56300.01	Beautiful pleated window covering manually operated for windows and port holes throughout the ship		
<b>5.7 EXTERIOR UPHOLSTERY</b>			
57015.00	Cushions for aft deck settee in water-repellent fabric, color depending on chosen interior package		
<b>5.8 EQUIPMENT</b>			
58010.01	Spares kit including tool-kit, impeller, fuses, paint-tips and various maintenance parts		
58020.01	Complete inventory including 6 fenders, 4 mooring ropes (16 meters), boathook, life buoy, bucket, scrubbing brush, national flag, yard burgee, safety rope for anchor chain and anchor ball		
58030.01	First-aid box in saloon according to DIN13157		
58040.01	ABC fire class compliant fire extinguishers (3 x 2 kg)		
58045.01	Optical smoke detector with fixed built-in lithium battery (life span 10 years) in all sleeping compartments.		
<b>5.9 CANVAS &amp; COVERS</b>			
59150.01	Linssen Variotop® insulated cabriolet of high-grade Sonnenland Java canvas including bright inside lining		