



CONRAD 133

MOTOR YACHT

Viatoris

AS BUILT SPECIFICATION

EDITION 10/2018

DESIGN

Exterior Design: REYMOND LANGTON

Naval Architect: DIANA YACHT DESIGN

Interior Design / GA: CONRAD SHIPYARD

Production - Design / Ship- Engineering: CONRAD SHIPYARD



1. THE YACHT

1.1. INTRODUCTION

CONRAD 133/VIATORIS is a modern twin screw full displacement tri-deck motor yacht with steel hull and aluminium superstructure. This Lloyd's class and MCA compliant vessel is designed as a luxurious yacht for far and demanding cruising, capable of safe and comfortable ocean passages. Expressing dynamic and elegant lines, custom designed by REYMOND LANGTON and DIANA YACHT DESIGN exclusively for Conrad Shipyard, the design represents a timeless and graceful concept, promising outstanding cruising experiences in Luxury, Comfort and Safety.

1.2. MAIN PARTICULARS

Builder	CONRAD SHIPYARD		
Design/naval architecture	DIANA YACHT DESIGN		
Exterior design	REYMOND LANGTON		
Interior design	CONRAD SHIPYARD		
Type	Full displacement motor yacht		
Classification society	LLOYD'S REGISTER		
Class notation	✱ 100A1 SSC Yacht Mono G6, [✱] LMC Compliant to MCA LY3 code for yachts < 500 GT		
Flag state	Jersey (Red Ensign Group)		
Vessel duty	Private/(optionally Commercial)		
Hull material	Steel		
Superstructure material	Aluminium		
Overall length	LOA	40,00	m
Length at waterline	LWL	35,50	m
Beam	B	8,30	m
Draft @ 100% load	T	2,65	m
Displacement @ 10% load	D	355	t
Gross tonnage	GT	393	
Tanks	Fuel	48,6	m ³
	Fresh water	10,5	m ³
	Sewage	7,2	m ³
	Lubricating oil	1,0	m ³
	Waste oil	1,0	m ³
Cruising speed		11.0	kts.
Maximum speed		13.0	kts.
Range		4.000	NM @ 10.5 kts.

1.3. CLASS, REGULATIONS, SURVEY

C133/VIATORIS including her construction, machinery and essential equipment was built according to and under survey of LLOYD'S REGISTER with class notation ✱100A1 SSC Yacht Mono G6, [✱] LMC and in compliance with MCA LY3 for vessels of less than 500GT.

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1.4. COMPLEMENT

The Yacht was designed and outfitted to accommodate the following complement:

Cabin	Area	No. of berths	Capacity
Owner	Main deck	1x double berth	2
Guest 1	Cabin deck	1x double berth	2
Guest 2	Cabin deck	1x double berth	2
Guest 3	Cabin deck	1x double berth	2
Guest 4	Cabin deck	1x double berth	2
Crew 1	Cabin deck	2x single berth	2
Crew 2	Cabin deck	2x single berth	2
Captain	Bridge deck	2x single berth	2
Total Owner and guest			10
Total crew			6
Total complement			16

2. THE HULL

2.1. GENERAL REMARKS

Steel and aluminium alloy used for construction of CONRAD 133 are of the highest quality materials from EU located mills, always provided with quality certificates. Hull and superstructure construction built by qualified workers and under supervision of LLOYD'S REGISTER. Hull and superstructure construction sandblasted from outside and inside in areas where the paint will be applied. INTERNATIONAL/AWLGRIP paint system applied according to instructions of paint manufacturer.

2.2. HULL LINES

The hull is full displacement round bilge hull, with integrated swim platform, straight keel and bulbous bow, optimized for best performance.

2.3. HULL & WEATHER DECK CONSTRUCTION

Hull and weather deck welded throughout steel construction. Unless specified otherwise, grade A shipbuilding steel used in hull construction and designated areas of superstructure. Reference shall be made to relevant regulations of Classification Society for manufacturing and testing of the steel. Plates and sections sandblasted and protected with the primer. Prefabricated steel sections sandblasted to SA2.5. Engine room situated under salon separated with watertight bulkheads. Hull equipped with integral fuel, fresh water, sewage and oil tanks as per contract GA plan and associated drawings. Tank interior construction executed in such a way that any liquids will run freely to the deepest point. Tanks equipped with manholes and proper connections. The hull divided into watertight compartments according to governing regulations. Two units of sliding watertight doors fitted on cabin deck between the subdivision compartments of the yacht, according to governing regulations. Sliding doors are elegantly concealed in surrounding decorative interior furniture.

2.4. FIXED BALLAST

Builder will be allowed to install lead ballast to trim the vessel. Such ballast will be properly installed in the hull at location agreed upon with Naval Architect.

2.5. SUPERSTRUCTURE

Superstructure construction above the steel deck fabricated of 5083 H111 aluminium alloy and applicable extruded profiles of 6082 T6 aluminium alloy. Connection with steel hull structure with use of bimetallic explosion bond strip, TRICLAD or equivalent.

3. MAIN ENGINES & PROPULSION

C133/VIATORIS is powered by two diesel main engines CATERPILLAR C18 ACERT B-rated 500kW@2100 rpm, equipped with ZF W650 gearboxes, working in twin propeller installation. Two oil and water lubricated propeller shaft installations, make RUBBER DESIGN, with 5-blade 1300mm fixed pitch type propellers, make VAN VOORDEN.

4. STEERING GEAR

4.1. RUDDER MACHINE

JASTRAM hydraulic steering system, 35 degrees rudder angle in both directions; one independent hydraulic power unit located in aft tech space; one steering pump for manual servo hydraulic and one for manual emergency steering.

4.2. THRUSTERS

The vessel has been equipped with bow and stern tunnel thrusters, make VERHAAR OMEGA. Each thruster provided with 4-blade propellers and rated at 55kW, operated by squirrel cage electric motor 400V/3ph/50Hz. Such arrangement provides very good manoeuvrability even under less favourable weather conditions. Thrusters controls installed in the wheelhouse and on both wing stations.

5. AIR-CONDITIONING, HEATING & VENTILATION

All living accommodations are air-conditioned, supplied from the central WEBASTO chiller of capacity of 448.000 BTU installed in the engine room. System includes mechanical ventilation system with fresh air make-up where fresh air is pre-cooled or pre-heated before supply to accommodations. Heating function performed by AC fan coil units that supplied with hot water from in-line electric heaters.

Air-conditioning was designed to meet following design conditions:

Summer outside air:	35°C	or	90%
Summer inside air:	22°C	and	55%
Winter outside air:	0°C		
Winter inside air:	22°C	and	55%



Summer sea water temperature: 32°C
Winter sea water temperature: 0°C

6. SYSTEMS

6.1 FRESH WATER SYSTEM

Pressurized fresh water system, based on two water pressure pumps and circulation pumps, supplying cold and hot water to all fresh water consumers. Cold fresh water supplied to water heaters, toilets and bidets flushing, fuel separator (by means of faucet in ER), windscreen wipers, watermakers flushing system, deck washing and domestic equipment. Access for routine maintenance provided to all main components of the system. Two electrical water heaters, each of capacity of 200 litres, provide hot water supply. Two SEA RECOVERY AQUAMATIC 1400-2 watermakers installed, each of capacity of 1.400 gallons (5.300 liters) per day. Fresh water produced by watermakers transferred directly to one of two integrated fresh water tanks. Watermakers supplied from dedicated raw water intake. Fresh water installations: GEORG FISCHER system.

6.2 RAW WATER INSTALLATION

Raw water installation fed from two central intakes located in the engine room, equipped with sea valves and strainers, connected by means of manifold. Main raw water consumers are: main engines, generators, air-conditioning system, sewage treatment system, and ER heat exchangers. Raw water pipelines made of galvanised steel or CuNiFe depending on salinity, fittings made of stainless steel, steel or cast iron.

6.3 SEWAGE SYSTEM

Sewage system consists of three integrated sewage tanks and one sludge tank. All sewage is discharged to sewage tanks, from which it is transferred to sewage treatment plant make: HAMANN HL-Cont PLUS 02 Slim. Grey water from galley sinks led via local grease separators. Electric toilets in each bathroom. Sewage installations made of PVC-U, make GEORG FISCHER or equal.

6.4 BILGE & FIRE FIGHTING SYSTEM

Bilge and firefighting system, serving all watertight compartments of the vessel, with capacity meeting Class Regulations, installed in accordance with good shipbuilding practice. System operated by three pumps: electric bilge pump, electric firefighting pump, and Diesel emergency pump. Main bilge pump and pump servicing main firefighting line interchangeable through the use of valves. Anchors flushing carried by use of firefighting line. Chain lockers drained directly overboard. Bilge and firefighting pipelines built of galvanised and stainless steel.

6.5 COMPRESSED AIR SYSTEM

Central compressed air system with a service pressure of 8 bar supplies vessel horn and transom gate inflatable gasket. Additionally, there are provided connections of pneumatic tools in the engine room, garage and forepeak. System supplied from compressor installed in aft tech space,

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make: GIANNESCHI. Optional independent diving air compressor installed in aft peak, make: BAUER JUNIOR-II.

6.6 FUEL SYSTEM

Fuel system, supplying main engines and generators, arranged and installed in accordance with good marine practice and Class Regulations. In general, there are seven integrated fuel tanks and one day tank installed; fuel transfer shall be by means of fuel transport pump (or emergency hand pump), through fuel manifold. Fuel will be serviced by ALFA LAVAL fuel separator and transported to day tank, from which it will be transferred by local fuel pumps to Diesel consumers. System shall be equipped with remote cut-off valves installed on day tank. Two bunker stations, one on each side. System pipelines made of steel.

6.7 LUBRICATING OIL SYSTEM

Pressurized oil fill and discharge system. Lubricating oil consumers onboard are main engines, gearboxes and generator - all consumers use the same type of lubricating oil. Lubricating oil distributed by means of electric transport pump (or emergency hand pump) to oil line with quick release connection. Used lubricating oil will be transferred through quick release connections from consumers and transported to waste oil tank by means of oil pump. Using valves, waste oil pump shall operate also as waste oil tank discharge pump.

6.8 EXHAUST SYSTEM

Two dry/wet exhaust lines for main engines including dry silencers, by-pass above waterline and water mixers, make TIO BV. Dry silencers installed on a dedicated frame connected to the engine room bottom structure. Two dry/wet exhaust lines for generators, including dry silencers, water mixers and separators, make HALYARD.

6.9 HYDRAULIC SYSTEM

One dedicated hydraulic unit, make FEEBE, installed in aft tech space to supply following hydraulic consumers:

- gangway
- transom gate
- folding bulwarks
- folding balconies

Apart from above, following equipment is operated by independent hydraulic power packs:

- steering gear, make JASTRAM, equipped with independent hydraulic power pack powered by 400 VAC driven hydraulic pump and manual hydraulic steering in aft peak for emergency manoeuvring
- deck crane, make BESENZONI, equipped with independent power pack

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7. EXTERIOR

7.1 MAIN DECK

Between port and starboard stairs to the bathing platform, integrated bench seat with a fixed dining table are built as an integral part of the hull in main deck stern area. One sink on port side, under mounted into counter top. Access to main deck saloon through sliding door installed aft, make: OPACMARE 2T11 or equal. Custom built glazed stainless manual doors in saloon on both sides installed to reveal the descending bulwarks. Owner's stateroom features custom built manual stainless doors with adjoining folding parts of bulwark on both sides forming small side balconies.

7.2 BRIDGE DECK

On aft bridge deck under the roof and against bulwark on PS there is L-shaped service bar built in aluminium with composite countertop and barstools. Integrated seating built as an integral part of the superstructure in bridge deck aft area on SB. Access to bridge deck skylounge through sliding door installed aft, make: OPACMARE 2135.05. Integrated bench seat with fixed tables constructed in front of wheelhouse as an integral part of superstructure. Raised sunbathing pads in port and starboard forward of the wheelhouse, with a walkway in between leading to bow area. Hydraulic tender crane, make: BESENZONI G.711, installed in bow area.

7.3 SUN DECK

Antenna mast construction with an arch installed on sun deck serving as antenna support structure, with integrated provisions for vent pipes, cable ducts, inspection hatches, etc. Underneath the arch separated glass-enclosed areas with fitness centre equipped with training wall and running mill on port side and glass-walled cozy sauna, custom built on starboard side. In front of the arch C-shaped integrated sofas with fixed coffee tables constructed on both sides. Forward of the sofas steps leading to built-in hydrospace, make: TEUCO.

8. INTERIOR

Custom designed and custom made interiors of highest quality, configured to accommodate 10 guests in 5 cabins, comprising Owner's cabin and 4 double guest cabins. Classic warm interiors are finished with various kinds and colours of wood including Rosewood, Makassar ebony, Mahogany and Oak. Sumptuously furnished lower deck provides four double guest cabins offering multiple layout options - separate double bed cabins, twin cabins or VIP cabins with suite. Main deck embraces luxurious open plan saloon comprising dining area and comfortable relax zone, where glazed doors and folding bulwarks on both sides create space nicely open to ocean breeze. Comprehensive galley and pantry are richly equipped with GAGGENAU household appliances. Automatic dumbwaiter connecting pantry and skylounge completes practical comforts of this high-end interior. Finished with Oak and Rosewood Owner's area in bow part includes small office, walk-in wardrobe, spacious bathroom with separate entrance for him and her, as well as nicely sized full beam cabin with stainless glazed doors and folding balconies on each side. Kept in darker colours scheme and richly finished with Rosewood, Mahogany and stained Oak, situated on bridge deck skylounge offers truly welcoming ambience and entertainment facilities. Aft sliding door opens wide creating one space with outside deck.

Bow part of lower deck contains entirely independent crew quarters - two double cabins and crew mess, while the captain's cabin has been located on bridge deck, adjacent to the wheelhouse connected with crew area by means of separate crew lobby.

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9. ELECTRIC SYSTEM

Electric system is three-phase 230V/400V 50Hz system supplied from two 400VAC 50Hz CATERPILLAR C4.4 99kW generators with automatic parallel system and 90kVA shore power converter, make ASEA. Electrical consumers are based on 230/400VAC power supply from generators and shore power, 24VDC from battery banks, and 12VDC for individual consumers by means of dedicated transformers. Whole electrical equipment, wiring and complete installation is in accordance with good marine practice and governing regulations.

10. ELECTRONICS

10.1 NAVIGATION & COMMUNICATION

Complete package of navigation and communication electronics based on FURUNO and SIMRAD equipment, meeting requirements of IMO, Flag and MCA LY3 for navigation Area 3, has been installed on the bridge, captain's cabin and in crew mess. INTELLIAN TV and VSAT dome antennas installed on the mast.

10.2 ENTERTAINMENT

CONRAD 133 will be equipped with entertainment electronics in accordance with interior and exterior GA. Entertainment system will be based on Owner's preferences according to Addendum A Allowances.

11. DECK EQUIPMENT

11.1 ANCHORING EQUIPMENT

Two high holding type stainless MANSON anchors, each with a weight of 300kg and two galvanized stud link 17,5mm anchor chains, operated by electric windlasses installed in bow area, make MAXWELL VWC8000. Anchors stored in stainless steel anchor pockets on both sides.

11.2 MOORING EQUIPMENT

Vessel equipped with custom built stainless steel tubular bollards and stainless fairleads. Two electric mooring capstans aft, make MAXWELL VC6000, installed aft. Ropes on the bow operated with mooring capstans installed on windlasses.

11.3 WINDOWS

Vessel equipped with highest quality glazing delivered and installed by TILSE, including nicely shaped windshield supporting stainless handrail on sun deck. Glass thickness calculated according to requirements of the Class. All windows of non-opening type, glued to frames according to Builder standards, approved by the Class.



11.4 RAILINGS & BULWARKS

Closed sections of bulwark around the deck shall be welded watertight. On top of the bulwark sockets for hand railings should be welded. Stainless steel railings made of elliptical and round pipes, equipped with PMMA or tempered glass panels on bridge deck aft and sun deck. Salon area bulwarks on both sides and Owner cabin on both sides to be equipped with folding bulwark parts.

11.5 TEAK DECK

Main deck, bridge deck and sun deck covered with 15mm teak planks, 12mm planks installed bathing platform and balconies. 20mm teak planks installed in bow part. Teak planks glued and sealed with SIKAFLEX system.

11.6 STERN AREA

Custom FEEBE electric gantry crane with SWL of 1400kg installed in the garage for operation of the tender (1000kg, Owner's delivery). One fully retractable hydraulic FEEBE gangway. Stern area equipped with a hydraulically operated garage door forming swimming platform when opened.

11.7 WINDSCREEN WIPERS

Front windows in the wheelhouse equipped with five electric wipers with spray nozzles, controlled from the wheelhouse. Make: EXALTO.

12. INSULATION

Insulation system as required to meet noise, vibration and thermal requirements according to good marine practice, Class and the Contract Specifications. Anti-drumming system in garage and engine room, thermal and acoustic insulation throughout the yacht. Structural fire protection provided in accordance with Classification Society and Flag Administration requirements. Fire-insulating properties govern the choice of material where more than one type of insulation is required,.

12.1 SIDES AND ACCOMMODATIONS

Thermal insulation provided throughout the hull and superstructure, in all living spaces, service spaces and working spaces, etc. Thermal insulation of hull, weather deck and superstructure based on mineral wool panels with proper density and thickness, approx. 80mm for hull and weather deck, reduced for superstructure. Aluminium foil film applied on the final layer of mineral wool in all areas. Acoustic insulation designed and applied to prevent transmission of structural and airborne noise. Acoustic insulation based on acoustic panels, mineral wool and other materials fitted to achieve noise requirements. Acoustic insulation applied to the surface of bulkheads and decks which separate noise sources from accommodation spaces and also between accommodation spaces when they are divided by a bulkhead or deck.

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12.2 ENGINE ROOM

Engine room insulation carried out with particular care and, wherever possible, before the installation of any auxiliary equipment such as pumps, cabling, piping and other equipment. Lower edges of insulation properly sealed to prevent water ingress. Shell plating and frames, bulkheads and stiffeners insulated according to good practice as per insulation system manufacturer and Class requirements and covered with aluminium panels for better comfort and aesthetics.

13. PAINT SYSTEM

- 13.1 Hull above waterline: AWLGRIP Blue Steel Pearl
- 13.2 Hull below waterline: INTERNATIONAL
- 13.3 Main deck (surface under teak planks): INTERNATIONAL
- 13.4 Superstructure: AWLGRIP Insignia White/Panther Black Pearl
- 13.5 Fresh water tanks: INTERNATIONAL
- 13.6 Sewage tanks: INTERNATIONAL
- 13.7 Hull inside painted with INTERNATIONAL system

14. SAFETY

Vessel is equipped with complete safety package, in accordance with MCA LY3 requirements. All equipment easy accessible. Four life rafts, make: ZODIAC SOLAS A-pack, installed in bulwark lockers on sun deck, two on each side. The yacht is equipped with the tender stowed on the bow and launched by dedicated hydraulic crane. While underway, the rescue tender shall be stowed on a dedicated cradle on the aft sundeck and launched by means of a davit.

Optional Ultra Fog extinguishing system for accommodations available upon request.

Medical kits, medicines, resuscitation equipment, etc. is considered to be Owner's Supply.

15. EQUIPMENT SPECIFICATION

HULL		
Hull		Grade A steel construction, according to plans approved by the Class. Welding work X-rayed according to class requirements.
Superstructure		Aluminium construction, according to plans approved by the class society. Welding work X-rayed according to class requirements.
Ballast		Fixed lead ballast

MAIN SYSTEMS		
Main engine	2	CAT C18 ACERT B-rated @ 500kW
Gearbox	2	ZF W650 ratio 5.138:1
Generator	2	CAT C4.4 99ekW, sound shields
Shaft line	2	RUBBER DESIGN, oil lubricated
Propeller	2	VAN VOORDEN 5-blade
Steering gear	1	JASTRAM

Exhaust system: main engines	2	TIO dry/wet
Exhaust system: generators	2	HALYARD dry/wet
Stabilisers	2	CMC Stabilis Electra 120
Thrusters	2	VERHAAR OMEGA 55kW electric
Waste treatment system	1	HAMANN HL-Cont PLUS 02 Slim
Air conditioning	1	WEBASTO 448k BTU
Mechanical ventilation	1	WEBASTO
ER ventilation	2	GIANNESCHI
Fuel separator	1	ALFA-LAVAL MIB 303
Watermaker	2	SEA RECOVERY 1400-2
Cathodic protection	1	set of zinc anodes
Hydraulic system	1	FEEBE custom
Pumps		GIANNESCHI
Paint system		INTERNATIONAL/AWLGRIP

DECK EQUIPMENT		
Windlass	2	MAXWELL VWC 8000
Mooring winch	2	MAXWELL VC 6000
Chain	2	stud link 17,5mm galvanized
Anchor	2	MANSON HHP stainless 300kg
Mooring equipment		CONRAD custom stainless steel bollards and fairleads
Gantry crane	1	FEEBE electric
Deck crane	1	BESENZONI G.711
Manual tender davit	1	FEM STRUTTURA
Gangway	1	FEEBE hydraulic 6,5m rotating
Stern gate	1	FEEBE hydraulic
Folding bulwarks/balconies	4	FEEBE hydraulic
Balcony side door	4	CONRAD custom stainless
Aft sliding door main deck	1	OPACMARE 2135
Aft sliding door bridge deck	1	OPACMARE 2T11
Superstructure side doors	4	NEWTHEX
Watertight doors	2	NEWTHEX
Deck hatches		RONDAL
Windows & windshield		TILSE
Pilot seat	2	BESENZONI G.711
Windscreen wipers	5	EXALTO
ER grilles	2	CONRAD custom
Teak deck		CONRAD custom
Deck jacuzzi	1	TEUCO Mirror 630, customized
Sauna	1	CONRAD custom
Running machine	1	TECHNOGYM Spazio Forma
Training wall	1	TECHNOGYM Kinesis Heritage
Loose deck furniture		Owner's delivery

ELECTRICS & ELECTRONICS		
Entertainment electronics		Custom system based on media server
Navigation & communication		FURUNO/SIMRAD/INTELLIAN
230VAC main switchboard		CONRAD custom
24V panels		CONRAD custom
Synoptic panels		CONRAD custom
Service batteries		MASTERVOLT, 2V cells
GMDSS batteries		MASTERVOLT
Start batteries		MASTERVOLT
Shore converter	1	ASEA AC90SV-3
Interior lighting		FORESTI&SUARDI, MASIERO, PIETER ADAM
Exterior lighting		SAVAGE LIGHTING

DOMESTIC EQUIPMENT		
Dumbwaiter	1	LIFT EMOTION
Household equipment		GAGGENAU/MIELE

SAFETY		
ER fire extinguishing	1	NOVEC1230
Life raft	4	ZODIAC SOLAS A-pack 10-person
Safety equipment		According to MCA LY3 (Owner's delivery)
Main tender	1	CASTOLDI JT16 (Owner's delivery)
Crew tender	1	WILLIAMS TurboJet 385 (Owner's delivery)

Owner's deliveries and/or PC Sums shall include but not be limited to the following positions:

PC SUMS		
Plumbing fixtures		50.000 EUR net
Interior hardware		70.000 EUR net
Audio-video/Entertainment		150.000 EUR net
Navigation & communication		250.000 EUR net
Domestic appliances		80.000 EUR net
Interior lighting		80.000 EUR net
Blinds & curtains		40.000 EUR net
Marble & stone		100.000 EUR net
Fabrics, leather & carpets		50.000 EUR net
Interior designer and decorator of Owner's choice		Paid by Owner

Equipment specification is believed to be correct at the time of writing. The builder reserves the right, in agreement with the Client, to amend specifications, materials or equipment in case any of equipment is not offered any longer - in such case specified equipment will be replaced with equal equipment of the same or other brand.

General arrangement plan of the yacht is an integral part of this specification.