

MOTOR CATAMARAN YACHT 'Maison Marine 72' HYBRID



TECHNICAL SPECIFICATIONS

MAIN	Length overall	22.00 m
	Beam overall	10.50 m
	Draft	1.60 m
	Light displacement	40 tons
	Engines	2 X Cummins, Volvo or Perkins 300kW w TEMA PM Electric Motors
	Fresh Water	2.000 Liter- 530 gal (structurally integrated tank)
	Waste Water	2 x 1000 Liter - 2 x 264 gal (structurally integrated tank)
	Fuel tank	TBD 2000-5000 liters
	Certification	CE -RecreationalCraft

ENGINEERING	Designer	DR. ORHAN E. ÇELİKKOL
	Project Management	ARC YACHTS

Serbest Bölge Hangar No. 11,
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07130 Antalya, Turkey

	Engineering - Internal	ARC YACHTS
	Engineering - External	ARC YACHTS
	Classification	DCI (Dutch Certification Institute)– CE Recreational Craft certified (EMS Med. Marine Survey).

STRUCTURAL	Main	Multiaxial fiberglass with reinforced carbon fiber / UV resistance epoxy gel coat and Carbon or fiber epoxy and foam sandwich composite construction.
	Epoxy	Sicommin Laminating resin or equivalent
	Fiber reinforcements	Multiaxial fiberglass with reinforced ultra light weight multiaxial Glass and Carbon fibre
	PVC foam	Divynicell 100 D 30mm foam for the hull and 80 D 20mm for decks and superstructure or similar.
	Core bond	340 Epoxy core bonding system

STEERING	Main	In house hydraulic system
	Autopilot	Ray Marine or Garmin

WIND GENERATOR	Main	TBD (optional)
	Electrical equipment	TBD (optional)

DECK HARDWARE	Fairleads / Bollards	S.steel high polished mooring equipments (8 mooring points)
	Stanchions / Pulpits	S.steel high polished rails with safety lines.
	Deck hatches	BOFOR weather tight aluminium hatches
	Escape Hatches	BOMAR white epoxy coated aluminium hatches
	Pantograph doors	BOFOR weathertight aluminium door
	Sliding salon door	Aluminum electric sliding door
	Windshields & Glazing	Tempered laminated flat glass sections as per Class rules(12 mm. thick)
	Portlights	BOMAR - S.steel polished
	Anchoring	LEWMAR Anchor Windlass w. ULTRA Anchor and galvanized steel, chain length TBD by Class rules.
	Capstans	LEWMAR C4 model 24 V (2 sets)
	Jackline & hooking points	These parts will be located according to the rules for safety line

ENGINES & PROPULSION	Main engines	300kW Diesel +50 kW TEMA PMG Electric Drives
	Controls	Integrated TEMA Electronic Vessel Controls (EVC)
	Drive Train System	Straight Shaft w Bronze propellers.
	Generator	Fischer Panda 2 x 30kWh
	Bow thruster	LEWMAR 250 TT

HYDRAULICS	Aft platform	Up&down : S.steel hydraulic piston with hydraulic power pack.
	Gangway	Gangway - in & out : Electric drive system - Up&down :

ELECTRICALS	24 VDC Circuit	House battery group: 1- 24VDC/30kW, Emergency battery group: 24VDC/3.8kW,
	220 VAC Circuit	220 VAC 50Hz Dual phase system
	Batteries	Main Drive batteries 2 X 96kW LiO Pack built by IMECAR at 400 V with BMS and fast charge capacities. House batteries:Li-ion type 30kW Emergency batteries:Gel type Starting batteries: AGM type
	Chargers	High voltage battery chargers forhousegroup,solar chargecontrollers, Emg.battery charger, Starting battery chargers
	Inverter	2x inverters of each 345VDC/15kW dual phase (Make: CET Power)
	Solar panel capacity	About 100m2 solar panels Sun PowerMonochromcrystalsby CWEnergy
	Interior Lighting	24VDC LED type cabin downlights, reading lights, step lights, strip lights, shower lights (waterproof) and technical area lights (waterproof)
	Exterior Lighting	24VDC LED type downlights, step lights and hull lights (all waterproof), 3x searchlight of each 24VDC/54W remote controlled
	Navigation Lights	LED type navigation lights (Make: Hella Marine)
	Shore Power	2x shore connections of 40 AMPs 20 meters.
	AC/ DC Distrub. And Junction boxes	AC main breaker panel, AC distribution panels, 24VDC distribution panels
	Fire Detection System	Control panel with 4 zones, smoke detectors for accommodation areas, heat detector for galley, multisensor detectors for engine rooms and technical areas, 6x sounders

ELECTRONICS	Navigation & Communication	Ray Marine or Garmin navigation & communication electronics package consisting of: 2x 19" touchscreen multifunction displays at bridge console, 2x 12" touchscreen multifunction displays at flybridge console, 24" Radome radar, GPS receiver, Autopilot with controller at flybridge station, AIS, VHF with controller at flybridge station, Deep sounders with sonar functionality, wind transducer, 4 x IP CCTV cameras, 19" satellite TV antenna with controller, internet connection over Wifi and GSM networks or similar
	Alarms & Monitoring system	PLC based alarm monitoring system consisting of: 15" touchscreen control station at bridge console, 7" touchscreen control station at flybridge console, main PLC panel in system room, backup control panel at bridge console
	Entertainment	TBD optinal

GALLEY EQUIPMENTS	Refrigerators	Siemens
	Deepfreeze system	Siemens
	Icemaker	Siemens
	Cooker	Siemens

	Microwave	Siemens
	Extractor fans	Siemens
	Compactor	Wüsth
	Dishwasher	Siemens
	Clothes washer	Siemens
	Dryer	Siemens
	Countertops	TBD

CLIMATE CONTROL	Chiller	WEBASTO model : V50M Compact chiller - 120.000 BTU capacity
	Fan coils	Salon : 24.000 BTU x 2 units / Guests : 9.000 BTU each cabin Crews : 6.000 BTU each cabin, Mess area and Galley,

PIPING & PLUMBING	Fresh and hot water	Marine grade polypropylene pipes (PP-R pipe)
	Sewage systems	Marine grade high density polyethylene pipes (HDPE pipes)
	Fuel System	CuNiFe pipes
	Outlets / Inlets	Bronze type materials (Resistant to sea water)
	Valves & Seacocks	Marine grade type valves

OTHER SYSTEMS	Fresh water press. Syst.	2,8 bar press - 19 lt tank cap. - 24 V hydrophor
	Water heater system	LPG heater- Thermo Pro 90 D - 24 V with 80 lt. cap. tank.
	Watermaker	Daily flow rate 1.680 lt - 220 V - 50 Hz
	Bilge System	Gianneschi 24 V pumps with float switch - Gianneschi Excelsior manuel bilge pump
	Grey & Black water system	Sewage tanks(2 pcs.) - Discharge system from sewage tanks
Engine & Lazerettes ventilation	Gianneschi blowers with fire damper for engine room - Vetus 24 V. Blower systems for lazerettes	

WOOD JOINERY EXTERNAL	Teak imitation decks	48 mm width / Caulking and glues with SIKAFLEX (on aft deck and platform)
	Tables	TBD
	Cushions	TBD

WOOD JOINERY INTERNAL	Cabins	Owner Cabin (1) Guest cabins (2) - Crew cabins (2+1)
	Furniture / Cushions	TBD
	Wall	Vinyl leather
	Ceiling	Suede imitation leather
	Floors	Guest and crew :Carpets or Synthetic wood , Salon : Synthetic wood or carpet. Bathroom: Flexystone or wood gratings.
	Bathrooms	Walls covered by Flexystones, Sinkbase : Corian , Accessories: TBD

		according to the client's request
	Toilets	TECMA Elegance 2G 24V (7 pcs.) or Grohe

COATINGS & COVERINGS	Interior paint	Bilges&Engine room: High gloss paint
	Exterior paint	Top coatPoliAcrylUrethanepaintorequal - Colour: TBD but Light colors only
	Varnish	SAYERLACK Satin and high gloss polyurethane based varnish
	Interior Insulation	Ceeling frames: NOFIRE fire retardent paint
	Engine room insulation	MASCOAT Sound insulation paint / Sound insulation panels covered with Aluminium bondal plates

SAFETY EQUIPMENT	Life raft	Container type (2 X 12 persons) included hydrostatic realising system
	Life jackets, flares, first aid kit, etc	TBD according to the rules
	Detection system	BETEX gas / fire / smoke detection sys.
	Cathodic & Lightning	Dynaplates for electronics, propeller shaft groundingbrush, Anodes
	Searchlight	OSCULATI Searchlights - LED electric spotlight 24 V
	EPIRB / SART	Epirb : ACR RLB-37 with GPS 406 mHz , Sart : ACR Pro type
	Fire station	Fire pump 24 V - with hydrant system on the deck
	Fire extinguishers	Dry powder 2 kg extinguishers for cabins, FIREPRO automatically activated for engine room

LEISURE EQUIPMENT	Tender	JOKERBOAT 420 ST - YAMAHA 30 HP
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OWNER'S SUPPLY

1. Tenders, Water toys, Diving Gear or other sport equipment		
2. All Decorative accessories		
3. Loose or Foldable Chairs, Cushions, Carpets and Rugs		
4. Bone china crockery		
5. Crystal glasswork, decorative lighting and decorative statues or other ornaments.		
6. Pots, pans and cooking utensils		
7. Cutlery and serving pieces		
8. Table accessories, linens		
9. Toilet accesories		
10. Bed linens, blankets and pillows		
11. Towels and robes		
12. Stationary		

13. Guest booklets		
14. Artworks and Decorative items		
15. Uniforms for Captain and Crew		
16. Computers and IT equipment		
17. Miscellaneous leisure equipment		