



Matrix-450 MKI, Outboard



TECHNICAL SPECIFICATION

VIKING Norsafe Life-Saving Equipment Norway AS

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1. REGULATION AND CERTIFICATION

Applicable rules and regulations In accordance with IMO/ SOLAS requirements, LSA Code

and European Council Directive 2014/90/EU on Marine

Equipment (MED)

Certificate MED

Other certificate Class certificate or flag acceptance on request

2. BOAT SPECIFICATION

2.1. GENERAL BOAT

Туре	Rescue Boat
Model	Matrix-450 MKI Outboard
Length overall	4,50 m
Length on fender	4,50 m
Breadth	1,96 m
Height	1,96 m
Capacity, SOLAS minimum	6 Persons
Capacity, maximum	6 Persons
Weight, fully equipped	505 kg
Davit load, with 6 pers@82,5 kg	1.000kg
Color	Orange (RAL 2004)
Operation temperature:	-15°C till +40°C
Hull/deck material	Fire retardent glass reinforced polyester (GRP)
Buoyancy material	Polyurethane foam
Self-righting frame	Fire retardent glass reinforced polyester (GRP)
Bollards/towing	Aft bollard P & S, painter hook in bow
Steering	Tiller
Deck	Self-bailing
Loose equipment	According to SOLAS

Rescue boat designed and manufactured according to latest SOLAS/IMO requirements.

The rescue boat has excellent reliability, maneuverability, and sea keeping abilities in order to fulfil its prime function - to provide an effective means of search and recovery for persons missing at sea. Design and construction fulfil the need for reliable, low maintenance standby and operation. When installed with an approved davit, the boat fulfils the requirements for rescue boats on commercial vessels.

The boat is further designed to serve the search and rescue role, with deck layout allowing the crew to operate efficiently and comfortably over long time periods. The layout and performance of the boat ensures good diving support, survey and work boat duties.

The hull is a fully planning, giving optimum sea keeping ability at all speeds in all sea conditions.



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The space between hull and inner liner is filled with polyurethane buoyancy foam. If damaged below the waterline, the boat will float at safe level in fully flooded and loaded condition. The boat is self-bailing through two drainage outlets at the stern. The deck has an anti-slip surface. Lifelines are fitted on the gunwale.

Lifting is made by three point arrangement, installed on forward point and aft each side point of the deck. There is a painter hook in bow and bollards on each side astern.

The boat has been designed to provide a protected and safe working environment for the crew, engine and equipment.

2.2 PROPULSION AND PERFORMANCE

Propulsion	Outboard Engine
Engine size	15-25 hp
Speed, with 6 persons	Minimum 6 knots
Bollard pull	Approx. 1~1.5 kN
Propeller protection frame	AISI 316
Cooling system	Sea water circuit cooling
Engine freshwater flushing	Extra flushing equipment
Fuel tank	48~50L
Fuel valves	Quick connector

Typical data – subject to variation in engine installation and specified equipment. Engines of at least 15HP and up to 25HP can be installed. Please note that boat weight, bollard pull and speed are only for reference and may vary with several factors.

2.3. RELEASE SYSTEM

Lifting hook	Three-point lifting slings with ring
Height, keel to lifting point	1.75 m

2.4. ELECTRIC SYSTEM AND NAVIGATION

Electric power supply to boat	12 VDC (Delivered from engine directly)
Electric system voltage	12 VDC
Cables type	Marine type, flame retardant halogen free
Position light	12 VDC on top of self-righting frame
Search light	12 VDC handheld
Compass light	12 VDC inside compass

2.5. DOCUMENTATION

Technical specification boat According to contract specification



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General arrangement drawing	According to contract specification
Seating plan	According to contract specification
Electrical system drawing	According to contract specification
Product certificate	According to contract specification
Lubrication oil chart	VIKING standard
Spare parts list	VIKING standard
Operation & Maintenance man.	VIKING standard
Lifting arrangement drawing	VIKING standard
SOLAS loose equipment list	VIKING standard
Preservation & storage procedure	VIKING standard

3. PACKING

Packing Secured in transport cradle



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4. OPTIONS

Note: Some options influence weight and performance, some option combinations may be incompatible. Maximum certified weight must not be exceeded.

oximes marking means to be supplied by maker, oximes marking means not supplied by maker.

GENERAL BOAT		
Spare parts for 1 year, 2 years, 5 years or 10 years		
Labelling in dual language		
Painted railings and hand rails		
Collapsible cradle		
Embarkation ladder		
Winterization/ cold climate heati	ng/ canvas solutions	
Other options		
PROPULSION AND PERFORMA		
Tohatsu 15HP, Bollard Pull		
Tohatsu 18HP, Bollard Pull	•	
Tohatsu 25HP, Bollard Pull		
	ard Pull: 1,23 kN	
	ard Pull: 1,57 kN	
Mercury 25HP, Bollard Pull	: 1,35 kN	
RELEASE SYSTEM 15kN release hook of lifeboat		
25kN release hook of liferaft		
35kN release hook of lifeboat &	illeratt	
ELECTRIC SYSTEM AND NAVIG	ATION	
Engine heated canvas		
Electrical start		
Loose el. cable for ext. power su	ıpply	
VHF equipment		
DOCUMENTATION		
Factory acceptance test proced	ıre	
Factory acceptance test report		
Inspection and test plan Shipping, handling and lifting pr	rocedure	
Packing & unpacking procedure		
Commissioning procedure		
TAG list		
Fuel system drawing		
FAR VIKING		
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Steering system drawing	
Engine, propulsion, exhaust and cooling system drawing	
Bilge system drawing	
Noise test report	
Weight and COG datasheet	
Weighing report/certificate	
Other drawings/documentation/procedures	

5. POSSIBLE DAVIT SOLUTIONS

The VIKING Norsafe Midget-500 MKII fits below davit models and variants.

NDA-16	SOLAS	
NDSC-25	SOLAS	
NDSC-34	SOLAS	
NRC-25	SOLAS	
NRC-34	SOLAS	
Others on request		

6. YARD SUPPLY / RESPONSIBILITY

Transport	Depending on contract
Fuel	Marine Gasoline according to engine manual specification
Connection cable	From starter cabinet to rescue boat supply plug



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