



# Matrix-450 MKI, Outboard (El-start)



**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	535 kg
Davit load, with 6 pers@82,5 kg	1.030kg
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, Electrical-Start
Engine size	Engine outboard Mercury 25ELH EFI, 4-stroke
Speed, with 6 persons	Minimum 6 knots
Bollard pull	Approx. 1.23 ~1.5 kN
Propeller protection frame	AISI 316
Cooling system	Sea water circuit cooling
Engine freshwater flushing	Extra flushing equipment
Fuel tank	50L
Fuel valves	Quick connector

Typical data – subject to variation in engine installation and specified equipment. 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	42 VAC
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
Loose el. Cable for power supply	Socket with 15m cable.

#### 2.5. DOCUMENTATION



VIKING Project No.: TBA VIKING Doc. No.: TSB-1298

Technical specification boat	According to contract specification
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

## 4. OPTIONS

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

 $\boxtimes$  marking means to be supplied by maker,  $\square$  marking means not supplied by maker.

GENERAL BOAT	
Spare parts for 1 year, 2 years	
Labelling in dual language	
Painted railings and hand rails	
Collapsible cradle	
Embarkation ladder	
Winterization/ cold climate heating/ canvas solutions	
Engine heated canvas	
Other options	
PROPULSION	
PROPULSION Engine outboard Mercury 25ELH, 2-stroke, w/P11", Solas	
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Engine outboard Mercury 25ELH, 2-stroke, w/P11", Solas  RELEASE SYSTEM	
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## 5. POSSIBLE DAVIT SOLUTIONS

The VIKING Norsafe Matrix-450 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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