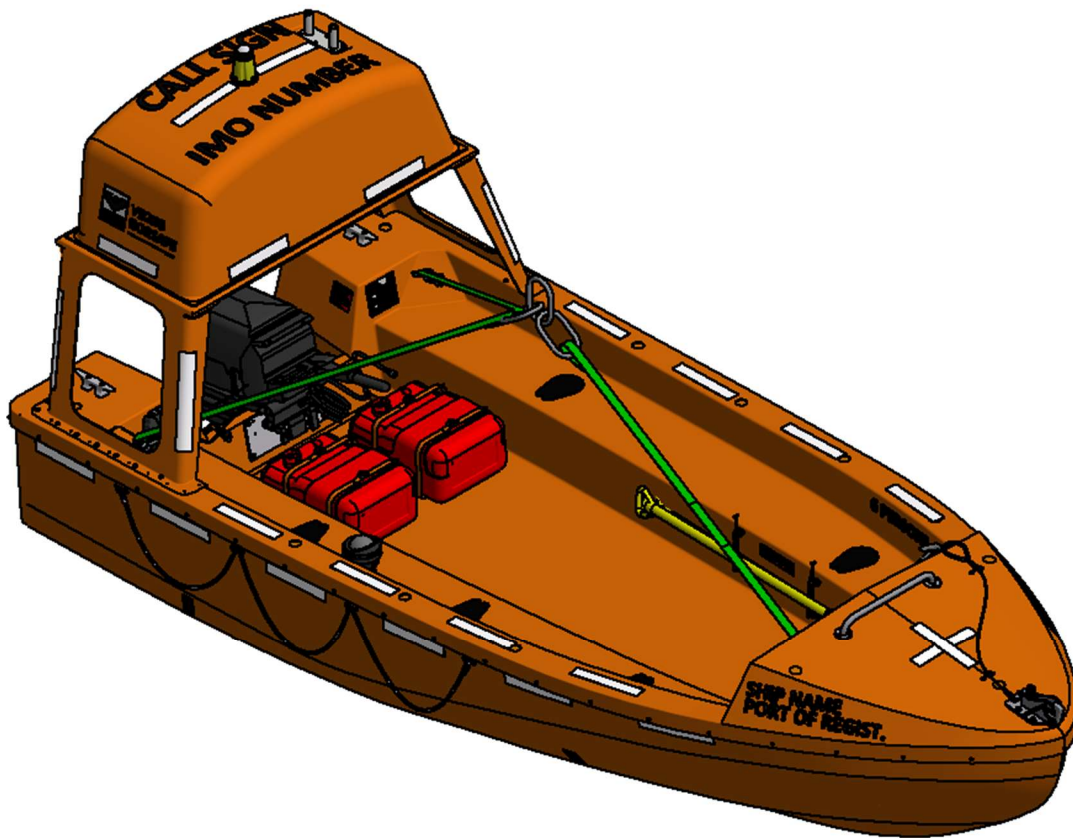




**VIKING
NORSAFE**
Boats and davits

Enterprise No.: NO940411696
www.VIKING-life.com

Matrix-450 MKI, Outboard



TECHNICAL SPECIFICATION

VIKING Norsafe Life-Saving Equipment Norway AS
Tybakken 90, N-4818 Faervik
P.O. Box 115, N-4852 Faervik
Arendal, Norway

VIKING Project No.:
STANDARD
Rev. Date: 30.12.2022

VIKING Doc. No.: TSB-0015
Rev. No: 5

Tel: +47 37 05 85 00
Fax: +47 37 05 85 01
E-mail: VIKING-Norsafe@VIKING-life.com

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 certificates	Class certificate or flag acceptance on request

2. BOAT SPECIFICATION

2.1. GENERAL BOAT

Type	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 retardant glass reinforced polyester (GRP)
Buoyancy material	Polyurethane foam
Self-righting frame	Fire retardant 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.



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	Norsafe Marine 25HP
Speed, with 6 persons	Minimum 6 knots
Bollard pulls	Approx. 1.57 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. 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
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.

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

GENERAL BOAT	
Spare parts for 1 year, 2 years, 5 years, or 10 years	<input type="checkbox"/>
Labelling in dual language	<input type="checkbox"/>
Collapsible cradle	<input type="checkbox"/>
Embarkation ladder	<input type="checkbox"/>
Winterization/ cold climate heating/ canvas solutions	<input type="checkbox"/>
Other options	<input type="checkbox"/>

PROPULSION AND PERFORMANCE		
Norsafe Marine 15HP	Bollard Pull: 1,23 kN	<input type="checkbox"/>
Tohatsu 15HP	Bollard Pull: 1,1 kN	<input type="checkbox"/>
Tohatsu 18HP	Bollard Pull: 1,22 kN	<input type="checkbox"/>
Tohatsu 25HP	Bollard Pull: 1,5 kN	<input type="checkbox"/>
Mercury 25ML	Bollard Pull: 1,35 kN	<input type="checkbox"/>
Mercury 25ELH (E-START)	Bollard Pull: 1,35 kN	<input type="checkbox"/>
Mercury 25ELH EFI, 4S (E-START)	Bollard Pull: 1,35 kN	<input type="checkbox"/>
Mercury 25MLH EFI, 4S	Bollard Pull: 1,35 kN	<input type="checkbox"/>

RELEASE SYSTEM	
25kN release hook of liferaft	<input type="checkbox"/>
35kN release hook of lifeboat & liferaft	<input type="checkbox"/>
RCH 36 release hook of lifeboat & liferaft	<input type="checkbox"/>



VIKING Project No.: STANDARD

VIKING Doc. No.: TSB-0015

Rev. Date:30.12.2022

Rev. No: 5

ELECTRIC SYSTEM AND NAVIGATION

Engine heated canvas	<input type="checkbox"/>
Electrical start	<input type="checkbox"/>
Loose el. cable for ext. power supply	<input type="checkbox"/>
VHF equipment	<input type="checkbox"/>

DOCUMENTATION

Factory acceptance test procedure	<input type="checkbox"/>
Factory acceptance test report	<input type="checkbox"/>
Inspection and test plan	<input type="checkbox"/>
Shipping, handling, and lifting procedure	<input type="checkbox"/>
Packing & unpacking procedure	<input type="checkbox"/>
Commissioning procedure	<input type="checkbox"/>
TAG list	<input type="checkbox"/>
Fuel system drawing	<input type="checkbox"/>
Steering system drawing	<input type="checkbox"/>
Engine, propulsion, exhaust, and cooling system drawing	<input type="checkbox"/>
Bilge system drawing	<input type="checkbox"/>
Weighing report/certificate	<input type="checkbox"/>
Other drawings/documentation/procedures	<input type="checkbox"/>

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

