

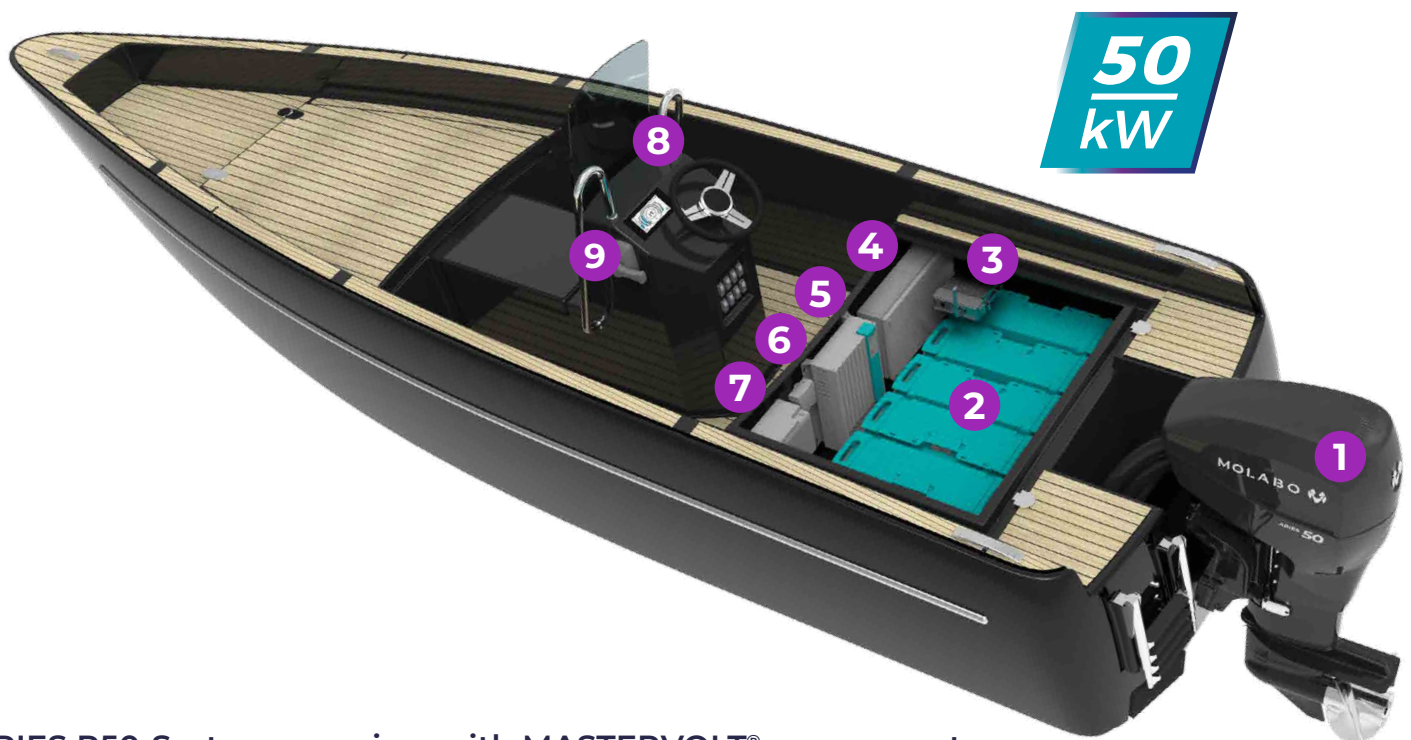
# ARIES R50

## ELECTRIC OUTBOARD SYSTEM

For recreational and work boats up to 8 m (26 ft) as a single installation, also available for larger boats as a twin installation

- No high-voltage safety measures necessary
- Motor + controller in one unit
- Modular LFP battery banks:
  - MASTERVOLT® – compact and powerful  
36 kWh | 48 kWh | 60 kWh
  - VICTRON ENERGY® – long range and lower costs  
45 kWh | 60 kWh | 90 kWh | 120 kWh | 135 kWh
- High system efficiency of 94 % (97 % motor, 97 % inverter)
- Plug & play system through prewired MOLACONNECT box
- Comprehensive service
- Extended worldwide warranty

THE WORLD'S MOST  
**POWERFUL**  
**48 V**  
SAFE-TO-TOUCH  
ELECTRIC DRIVE



### ARIES R50 System overview with MASTERVOLT® components

- |  |  |
|--|--|
| <b>1 ARIES R50</b><br>Electric Outboard (50 kW)                                | <b>5 MASTERVOLT® Charger –</b><br>Modular and easy to install                  |
| <b>2 MASTERVOLT® LFP battery bank –</b><br>Modular, plug & play lithium system | <b>6 CAN-Bus Gateway –</b><br>For system-wide communication                    |
| <b>3 MOLALink IoT Gateway –</b><br>Remote monitoring and diagnostics           | <b>7 12 V Battery –</b> Required but not included                              |
| <b>4 MOLACONNECT DC distribution –</b><br>Safe, smart power distribution       | <b>8 Display –</b> Real-time system feedback                                   |
|  | <b>9 Throttle Control –</b> Choose from side-mount or top-mount configurations |

# Specifications ARIES R50

Motor type	PM-assisted synchronous reluctance motor
Nominal power	50 kW
Nominal voltage	48 V (operating range: 44-54 V)
Max. voltage	58 V
Logic supply voltage	12 V
Shaft length	L: 20" / 51 cm XL: 25" / 63,5 cm
Dimensions (L x W x H)	L: 78 x 37 x 144,7 cm XL: 78 x 37 x 157,2 cm
Color	Black, white
Propeller standard	13 splines, (4 1/2" gear case) Evinrude/Johnson/Selva 40-140 hp
Propeller shaft torque	270 Nm
Nominal propeller shaft speed	1,767 rpm

Max. propeller shaft speed	2,640 rpm
Weight (with DC cables)	L: 150 kg XL: 155 kg
Trim / Tilt system	Hydraulic
Max. trim angle	-4° – 12°
Max. tilting angle	12° – 65°
Max. steering angle	±28°
Water cooling	Dual-circuit cooling, max. 35° C input temperature
External cooling circuit	Electric pump
Communication	CAN-Bus
Max. drive efficiency	94% (97% motor, 97 % inverter)
Protection class	IP65

## Range tables ARIES R50

Range ARIES R50 with **36 kWh**  
LFP battery bank (6 x 6 kWh modules)\*

	Speed in knots (km/h)	Running time in hh:mm	Range in nm (km)
Eco	6.0 (11.1)	07:15	up to 43.5 (80.6)
Cruise	13.5 (25)	01:20	up to 18.1 (33.5)
Full Speed	24.5 (45.4)	00:30	up to 12.6 (23.4)

\* Measured on motorboat, length: 6.05 m, weight approx. 1,350 kg.  
Depending on boat model, load, propeller and local conditions;  
speed and range information without guarantee.

Range ARIES R50 with **48 kWh**  
LFP battery bank (8 x 6 kWh modules)\*

	Speed in knots (km/h)	Running time in hh:mm	Range in nm (km)
Eco	5.8 (10.7)	09:40	up to 55.9 (103.6)
Cruise	13.1 (24.2)	01:47	up to 23.3 (43.2)
Full Speed	23.7 (43.8)	00:41	up to 16.2 (30.1)

\* Measured on motorboat, length: 6.05 m, weight approx. 1,470 kg.  
Depending on boat model, load, propeller and local conditions;  
speed and range information without guarantee.

Range ARIES R50 with **60 kWh**  
LFP battery bank (10 x 6 kWh modules)\*

	Speed in knots (km/h)	Running time in hh:mm	Range in nm (km)
Eco	5.6 (10.3)	12:06	up to 67.3 (124.6)
Cruise	12.6 (23.4)	02:13	up to 28.2 (52.2)
Full Speed	22.7 (42.1)	00:51	up to 19.5 (36.1)

\* Measured on motorboat, length: 6.05 m, weight approx. 1,590 kg.  
Depending on boat model, load, propeller and local conditions;  
speed and range information without guarantee.

**Shortest charging time 20 - 80 %  
with three chargers of 3 kW each\***

**36 kWh battery bank: approx. 2.2 hours**

**48 kWh battery bank: approx. 2.9 hours**

**60 kWh battery bank: approx. 3.7 hours**

\* Calculation of the shortest charging time refers to the charging process  
of 80 % of the nominal capacity.

