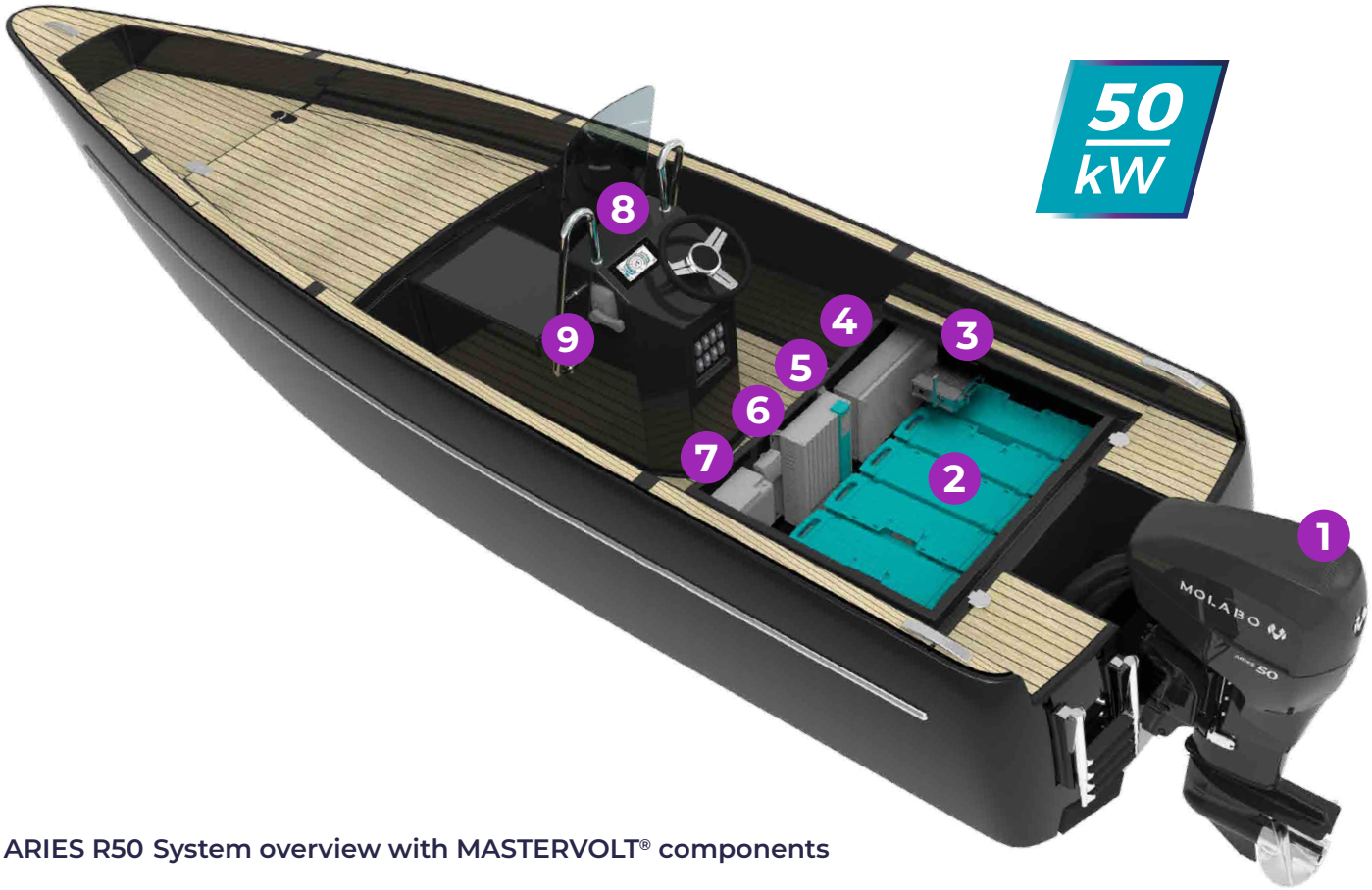
ARIES R50
ELECTRIC OUTBOARD SYSTEM

THE WORLDS' MOST
POWERFUL
48 V
ELECTRIC DRIVE
SAFE-TO-TOUCH

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 MOLA***Connect*** box



ARIES R50 System overview with MASTERVOLT® components

1. ARIES R50 electric outboard 50 kW
2. MASTERVOLT® LFP battery bank – plug & play, modular
3. MOLA*Link* (IoT gateway)
4. MOLA*Connect* (DC distribution)
5. MASTERVOLT® charger – plug & play, modular
6. MASTERVOLT® MasterBus CAN-Gateway
7. 12 V battery (not included in the scope of delivery)
8. Display
9. Throttle: side-mount or top-mount

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Specifications ARIES R50

Motor type	PM-assisted synchronous reluctance motor
Mech. rated power	50 kW
Nominal voltage	48 V (44 V – 54 V full operation)
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
Colour	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 (without supply lines)	L: 120 kg XL: 126 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
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 in 2.2 hours**
- **48 kWh battery bank in 2.9 hours**
- **60 kWh battery bank in 3.7 hours**

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

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