



SAIL & SHAFT DRIVES

www.eptechnologies.dk

**EPT**echnologies

Hanse A

## **EPTechnologies SD Racing Saildrive**

## Efficient, compact and powerful

EPTechnologies Saildrive propulsion systems are designed to enhance your sailing experience by combining performance, efficiency and reliability. EPT Saildrive optimises the connection between the motor and the propeller, reducing drag and improving thrust for smoother, quieter operation.

EPT's Saildrive leg delivers all the power you need with zero emissions, low maintenance, and minimal noise. It also provides instant torque for smooth, responsive handling in all conditions, whether you're cruising or manoeuvring in tight spaces in the marina. Saildrive is perfect for modern sailboats and represents the latest in drive technology. It minimises oil resistance in the lower leg, allowing you to move freely on the water with a lower environmental impact.

## **SD RACING 40**

#### **Technical specifications**

Standard length: 400 mm Suitable for: 10 – 40 kW

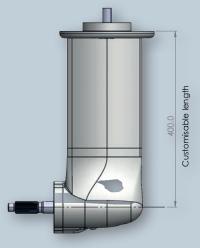
## **SD RACING 80**

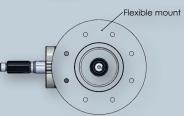
#### **Technical specifications**

Standard length: 400 mm Suitable for: 40 – 80 kW

The length of the Saildrive leg can always be adjusted before installation

Flexible mounting flange available on request.





#### Flange adaptable options:











# SHAFT DRIVE

Power: 10, 30, 40, 60 kWRPM: 500-2000 rpmVoltage: 48 -800 VDC

• Adaptable flanges available on request

• Heat exchanger, pumps, filter, controller and PLC pre-mounted

• 3 level leg height adjustment

CE certified



# SAILDRIVE SD RACING

• Power: 10, 25, 30, 40, 60 kW

RPM: 500-2000 rpmVoltage: 48-800 VDC

• EPT SD racing leg pre-mounted

• Adaptable flanges available upon request

• Heat exchanger, pumps, filter, controller and PLC pre-mounted

CE certified



# TURNABLE SAILDRIVE SD RACING

• Power: 25, 30, 40, 60 kW

• RPM: 500-2000 rpm

• Voltage: 48-800 VDC

• 360°-degree full rotation in 5 seconds with 120 Nm

• EPT SD Racing leg pre-mounted

• Adaptable flanges available upon request

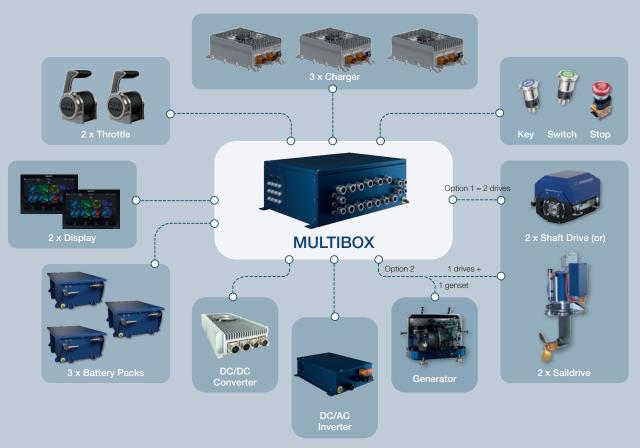
• Heat exchanger, pumps, filter, controller and PLC pre-mounted

CE certified

## Multibox system

Multibox is a compactible box designed for marine applications, offering flexible configurations to meet various requirements for propulsion, energy control, generation, monitoring and auxiliary systems.

#### Connection possibilities



**Input options:** 2 propulsion units (2 x sail drive or 2 x shaft drive) OR:

1 propulsion unit (sail drive or shaft drive) + 1 generator

**Battery system:** 3 x 18.2 kWh battery units (100 VDC each, total capacity 55 kWh)

**Chargers:** 3 x 3.3 kW charger

Converter: 1 x DC/DC Converterconverter: 100 VDC to 14 VDC or 24 VDC

**Inverter:** 1 DC/AC inverter: 100 VDC to 230 VAC

**Power outputs:** Electric motor: ilndividual maximum output 40 kW

Generator: mMaximum oOutput 20 kW

**Connection options:** 2 throttle units

2 display units

Switches, emergency stops and push buttons

Functionality: Suitable for sailing boats and catamarans. Up to two Multibox units

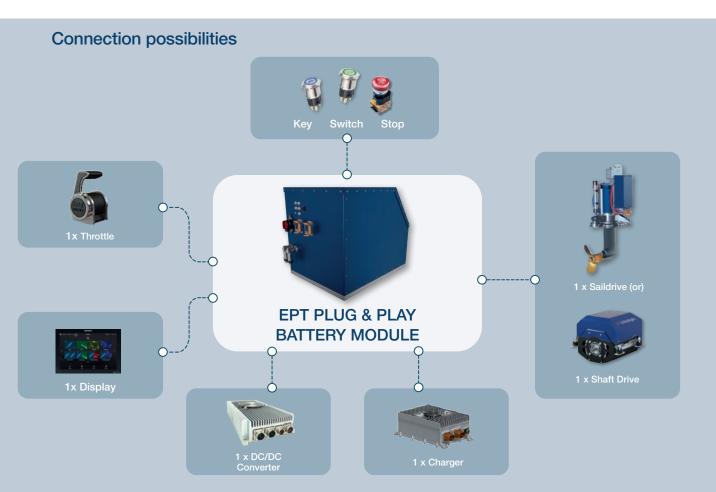
can be installed for larger applications. This configuration supports up to

two propulsion systems and generators, doubling the battery size

(total capacity 110 kWh).

# EPT's plug & play system is a complete solution

EPT's plug and play system is a complete solution designed specifically for sailboats with limited space. This compact, customisable system fits perfectly into an engine room. The housing has been designed with essential components for the power unit and energy storage, including electronics, PLC and controls.



Input possibilities: 1 propulsion unit (1 x saildrive or 1 x shaftdrive)Battery system: 18.2 kWh or 36.7 kWh battery units with 100 VDC

**Chargers:** 1 x 3.3 kW charger unit

**Converter:** 1 x DC/DC converter: 100 VDC to 14 VDC or 24 VDC

**Inverter:** Cannot be connected

**Power outputs:** Electric motor: maximum individual output 30 kW

Generator: cannot be connected

**Connection options:** 1 x throttle units

1 x display units

Switches, emergency stops and push buttons

Functionality: Suitable for sailboats only. Quick and easy installation.

The complete package and the drive system are manufactured in-house.



## EPT BOATCONTROL APP

- Option to connect 14 channels in parallel
- Global access and monitoring
- Intelligent automation and effortless control
- Compactable with Android, iOS and web.
- Insight into boat performance via real-time data
- Multi-device control for additional boxes



## **DUCAN**

#### Advanced vessel monitoring and support system

Optimise your fleet management with our specialised monitoring and support system, specifically designed to meet the rigorous demands of the maritime industry. Gain comprehensive insights into your customer's vessels, enabling precise fault detection, system analysis and efficient troubleshooting—all without the need for boarding.



- Maximise uptime Access complete vessel system data to reduce downtime and optimise performance
- Automated data logging and trend analysis capture, log and analyse critical data to identify patterns and anticipate maintenance needs
- Real-time error reporting and alarms receive instant alerts and notifications in the event of faults or malfunctions, enabling quick remote management of issues
- Comprehensive vessel overview get a complete, actionable overview of each vessel's operational status, so you can proactively address potential issues

This service is provided for B2B customers only. Private customers may access this support on request **Platform availability:** fully compatible with Windows, Android, and iOS.

Leverage our enhanced support to optimise your operations, protect your assets, and strengthen your client relationships.



## DC MINI GENERATOR

- Power 12- 17 kW
- Voltage 48 800 VDC
- Ultra kompact
- Light weigt, under 110 kg
- Variable speed
- With or without sound enclosure
- Fast fix fire extinguish hole
- Customisable air intake and exhaust openings.

# NORMAL DIESEL V/S EPT ELECTRIC SYSTEM



The **50 hp diesel engine** is comparable to the **40 kW EPT electric system**, which has the same power and capacity. Here, we are using a 37 kWh battery system for this combination.

The key advantage of this approach is that the **battery box can be accommodated in the engine room itself**, eliminating the need for additional storage space.

This arrangement shows how easy it is to install our system while replacing the diesel engine, as the battery module contains most of the electrical components in the box itself and only needs a few connections to complete the installation. We guarantee good electrical performance while sailing, as well as a larger battery capacity for a fantastic sailing experience.



## **EPT PLUG & PLAY BATTERIES**

The EPT plug and play batteries are self-contained units. They consist of electronic circuit boards, controllers and power connections in a compact battery housing. They can be used as a single unit, requiring only a charger and control modules.

They a're designed to be completely airtight and take up minimal space when installed.

- Power 18, 37 kWh
- Voltage 100 VDC
- CE certified



## EPT HV SOLIDSTATE BATTERY

- The worlds safest marine batterie passes 5mm nail test with no fire
- Extrem tolerance to overcharge factor 6, de-charge 0V and heat
- Voltage up to 900 V
- IP 65, 67 on request
- With pre-charge, fuses, main relays and sate of the art BMS
- Parallel strings can have optional redundant slave master pack controller SMPC
- DNV in progress propagation test passed DNV 4.4.1 option 1.
  No propagation
- CE certified



# Powered by **EPTechnologies**Energy Power Technologies

#### **GERMANY**

## **EPTechnologies GmbH**

Senefelder Ring 51 21465 Reinbek Germany

Sales: +45 30 209 694 sales@eptechnologies.de www.eptechnologies.de

#### **DENMARK**

## **EPTechnologies Aps**

Jyllandsgade 17 6400 Sønderborg Denmark

Sales: +45 30 209 694 sales@eptechnologies.dk www.eptechnologies.dk



The copyright for published objects created by the author himself remains solely with the author of the pages. Any duplication or use of such graphics, sound documents, video sequences and texts in other electronic or printed publications is not permitted without the express consent of the author.

© EPTechnologies GmbH 2024 11.24