

Converting a Rafiki 35



Rafiki 35

Hull Type: Long keel Rigging Type: Cutter

LOA: 34.67 ft LWL: 27.5 ft Beam: 10.83 ft

Displacement: 16,500 lbs

Ballast: 6,800 lbs

Your Motor

QuietTorque 20.0™

Max input: 20kW Voltage: 48Vdc Weight: 115lbs Motor type: 3-phase

PMAC*

Construction: Stainless steel and anodized

aluminum

Plug and Play control wiring

*Permanent Magnet Alternating Current











Performance Projections:

Below is a performance projection for the Rafiki 35. A typical battery consists of a 48Vdc x 400Ah AGM or LiFePO4 battery driving an Electric Yacht 20 kW motor.



Frequently Asked Questions (FAQ):

Q: Can I regenerate power under sail?

A: Yes. The amount of power regenerated varies greatly with boat speed and the size of your propeller. In most cases, you will not regenerate enough power for all your needs. When sailing at or near hull speed, you can expect to generate anywhere from 100W to several hundred watts of power.

Q: Can I extend my range using a portable generator?

A: Yes. You would connect generator power to your shore power charger. In this case, a charger that outputs 25Adc would keep the boat moving at 3.6 knots continuously and double your range at 4.6 knots.

Q: How do I recharge my batteries?

A: In a marina, you can use shore power connected to a 48Vdc battery charger. If shore power is not available, there are other options. This ranges from onboard or portable generators to solar or wind power.

Q: Can I install the Electric Yacht system in my boat myself?

A: Yes, if you are a "DIY" type and are comfortable maintaining your own boat, you should not have difficulty installing the QT 20 system yourself.

Q: What are the steps involved in doing the installation?

A: After removal of the old engine and accessory items, we highly recommend you clean and re-paint the engine compartment. Once converted to electric, the mess and smell will be gone for good! Next, measure and locate the batteries. We recommend you build some kind of battery box to contain them. At a minimum, you will need flat surfaces to set them on and tie down straps to hold them in place. This is often the most time consuming part of the installation. Once the batteries are in place, install and connect the electric drive. We provide step by step instructions for installing and commissioning the system. connect the electric drive. We provide step by step instructions

Dimensions



