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QUESTIONS & ANSWERS

Seldén Power Supply and SEL-Bus system
E40i
Synchronized Main Furling
Furlex Electric

SELDÉN

Q: What is SEL-Bus?

A: *SEL-Bus is a communication network similar to the Bus system NMEA2000 which is commonly used for marine elctronics. Basically, a ”backbone” is installed along the boat and various functions are connected to it. This way, we are building a system of functions that in some cases can be synchronized.*
The entire system is powered by Seldén’s 42V Power Supply System.

Q: Is it possible to use an existing NMEA2000 Canbus system?

A: *No, the signals would interfere with each other. SEL-Bus is dedicated to Seldén functions.*

Q: Why SEL-Bus and not just power the drive units straight from the battery?

A: *The 42V system makes for thinner power cables easier to install inside the boat. The SEL-Bus system is used for communication between the units, enabling a diagnostic function and allowing the system to reduce power consumption by putting the system into sleep mode when not in use.*

Q: Any other benefits converting the voltage to 42V?

A: *Reduced current consumption from the battery.*
Reduced size of the electric motor in relation to its power. This makes for compact drive units that are easy to apply on the boat.

Q: How do I know what to order?

A: *A Power Supply Unit to convert 12V or 24V to 42V is always needed. Each drive unit needs a Motor Control Unit (MCU). This is the communication central for an electric function (a drive unit) and it sends signals back and forth between the drive unit and the push buttons. The power cables from the PSU are connected to the MCU and from there further on to the drive unit. The Order Guide specifies all part numbers.*

Q: How many Amps do each drive unit consume from the battery?

A: *E40i example: hoisting a 12m mainsail with E40i takes 40 sec. Average consumption 35A from a 12V battery makes for 0,38Ah (35x40/3600).*
SMF example: unfurling the main on a 40' boat takes 30 sec and average 25A from 12V battery = 0,2 Ah.
Furling the sail = 0,08 Ah.
In sleep mode, each MCU and the PSU consume 0,1 A.

Q: Why 42V and not 48V?

A: *To avoid high voltage. Peaks over 50V is regarded high voltage in many countries.*

Q: Are there emergency operation available if I run out of power?

A: *Furlex Electric - an emergency line driver with endless line is fitted to the side of the drive unit and it is included as standard.*
SMF - use a winch handle in the original line driver.
E40i - pull the line from E40i over to a regular winch.

Q: How are possible faults diagnosed?

A: *A LED signal in each MCU/PSU will flash in specific orders that is translated in the manual.*

Q: Can a boat with 48V do without the PSU?

A: *No. SEL-Bus must be connected to either 12V or 24V.*

Q: How much will the E40i pull?

A: *Max Working load is 1100 kg, static load. Electric-Cut off load during operation is set to 600 kg.*

Q: How are the units serviced?

A: *The electric motor and the gear box are sealed and need no maintenance. Moving parts are kept clean and greased.*

Q: Can the SMF motor be installed in a stepped mast?

A: *Yes it can. However, the simplest installation is with the mast unstepped and on trestles.*

Q: How to link a set of push buttons to the specific function?

A: *Remove the lid from the MCU (Motor Control Unit) and press a button. Thereafter, go up in the cockpit and press either the IN or OUT button and the buttons are configurated for the MCU.*

Q: How many functions can you run at the same time?

A: *Basically, as many as you like but the speed may go lower than normal.*

Q: What's the length of the motor cables? (brown, grey, orange)

A: *5 meters. This is the max length and according to the CE-marking.*

Q: Can I make my motor cables longer than the length delivered?

A: *No. See above.*