

## Description

EC Pot S is intended for controlling the speed of EC-motors, frequency inverters or other equipment with a 10V reference output and a 0-10V control signal.

The speed is adjusted on the knob on the front.

EC Pot S only requires connection to the 10V output and signal wires of the EC-motor.

It is possible to also use the EC Pot S to switch on/off the power for the EC-motor. This requires that the supply power is going through the potentiometer. Please refer to below description of terminal connection. Using this function you turn off the power to the EC-motor by turning the knob counter clockwise till you hear a small click as the potentiometer switches off the power (knob in 'off' position).

## Warning

 ESD-Sensitive when the lid is removed. Make sure to be ESD discharged before installation.

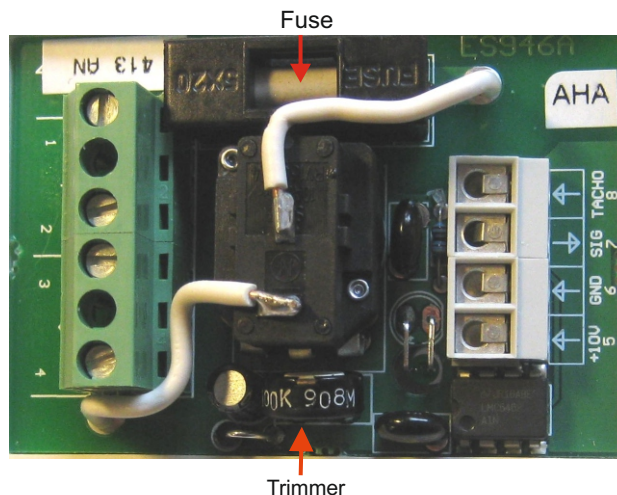
## Mounting

Must be mounted on a non-vibrating surface in a non-condensing environment. Do not place in direct sunlight and must be protected from all types of UV-light.

## Terminal Connection

The terminals on this side of the PCB are only used if you want to turn supply voltage of the EC-motor off and on using the knob on the potentiometer.

If so, the main supply (max 230V) is connected to terminal 1 and 2. And the supply voltage for the EC-motor max 6A is connected to terminal 3 and 4.



## Primary function

The terminals on this side of the PCB accounts for the primary function of the potentiometer - namely to regulate the speed of an EC-motor up and down.

Signal wires from the EC-motor is connected to terminal 5 to 8 (Note; Terminal 8 Tacho has no function in the potentiometer, the wire should however be connected or removed completely to avoid making disturbances).

The color codes for signal wires are different for each EC-motor but can be found in the data sheet of the selected EC-motor.

## Adjustment

Minimum speed can be adjusted on an internal trimmer within the box.

It is adjusted, so the motor has the speed required when the knob is turned to minimum just before the click.

After having finished the adjustment it is recommended to control that the motor starts up smoothly when the knob is turned from 'off' to minimum. If the motor is turned on but not running the motor might get damaged.

## Technical Specifications

Enclosure: Depending on model. 41640: IP40 / 41840: IP54

Dimensions (HxWxD): Depending on model. 41640: 85x85x54mm / 41840: 80x82x54mm

Build-in switch: max. 230V 6A  
Internal fuse: 6.3A

### Terminal 5-8:

Supply Voltage: 10V DC, min 1.1mA  
input impedance: 10VDC:500 - 600 Kohm  
Output voltage: 0-10V DC  
Output Load: Depending on 10V DC supply Max. 10mA  
Minimum adjustment: 0-1.6V DC

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