

## Description

Bundle with ES 10 Constant pressure regulator and PressureBox E 2500 (0-500) / ES 1088.

ES 10 is designed for use in ventilation plants and has a 0-10V DC output and a start/stop relay, which can control an inverter or a voltage regulator.

ES 10 can be set for 3 different operating modes, day mode, night mode and max mode. Each operating mode have their own corresponding set points. If a NTC-temperature sensor is connected it is also possible to set outside temperature compensation. Also ES 10 can be connected to CTS equipment or other alarming equipment by using the potential free alarm output.

PressureBox E 2500 (0-500) comes with the possibility to set 4 different pressure areas depending on the task (0-2500Pa, 0-1500Pa, 0-500Pa or 0-250Pa).



## Warning



ESD Sensitive when lid is off. Make sure to be ESD discharged before touching the push-buttons.

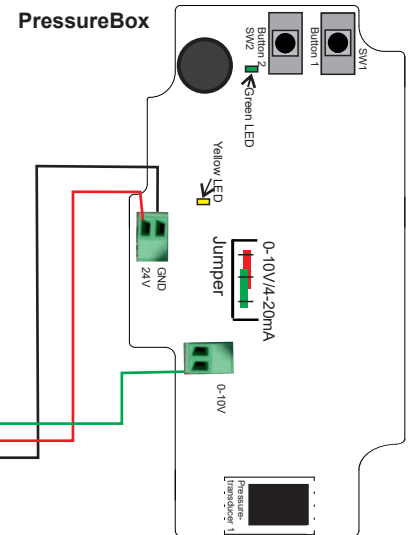
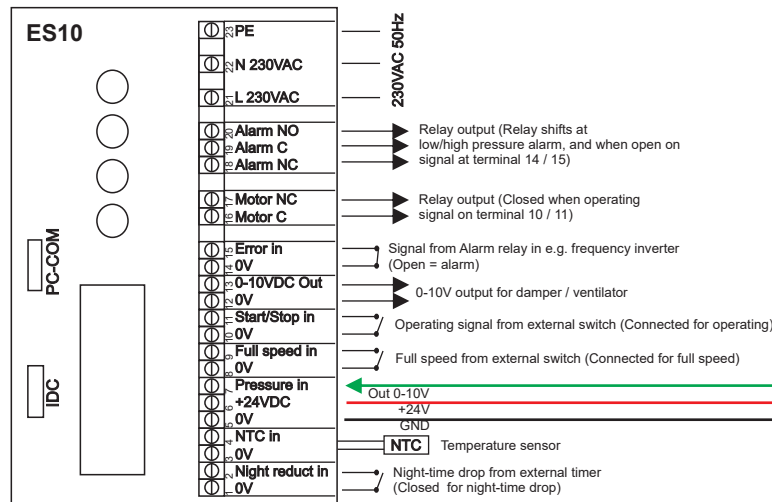


CONTACT HAZARD  
Take care of live parts (230V AC) in the device during installation and setting.

## Mounting

Must be mounted on a plane, stable, non-vibrating or moving surface in a non-condensing environment where not exposed to direct sunlight.

## Terminal Connection



## Factory Setting of ES 10

ES 10 is set to keep a constant pressure according to below set points.

Day mode: 200Pa, Night mode 150Pa, Max mode: 450Pa

Pressure for alarm: ±100Pa, Time for alarm: 300sek.

Outside temperature compensation is OFF

Motor out max at 10V = 100%, Motor out min at 0V = 0%

Sensor max: 500Pa (10V out of sensor), Sensor at 0Pa measured: 0.0V

Inverted 0-10V motor output: OFF, Language: Danish

For further options or changing of the set points please refer to the ES 10 manual which can be downloaded by scanning the QR-code or from our website.

## Technical Specifications

Supply Voltage ES 10: 230V AC ±10%

Enclosure, both: IP54

Dimension ES 10 (HxWxD): 120x170x60mm

Dimension PressureBox (HxWxD): 65x145x40mm

Pressure Tube Connection: Ø 4-5mm

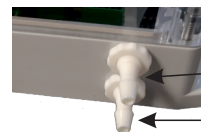
Pressure Area: 0-2500Pa (factory setting 0-500Pa)

Pressure Accuracy: ±1,5% of measured value  
±3Pa

Humidity: 0-97% RH non-condensing

Operating Temperature 0°C til +50°C non-condensing

## Connecting Pressure Tubes



Pressure +

Suction -

## Changing Pressure Area for PressureBox

To change the pressure range of the transducer press button 1 so the yellow LED is constantly lit.

Press button 1 number the number of times required to get the wanted pressure range.

- 1 time for 0-250Pa
- 2 times for 0-500Pa
- 3 times for 0-1500Pa
- 4 times for 0-2500Pa.

Press button 2 to save the selected pressure range. Also the selected setting is saved if no buttons are pushed for 10 seconds. The yellow LED turns off when pressure area is saved.

PressureBox is now ready to be used as pressure transducer where the pressure is read through the analogue output as 0-10V or 4-20mA signal.

The green LED will repeatedly flash the number of times corresponding to the selected pressure range.

If wrong pressure area has been chosen, the procedure needs to be repeated from the beginning.

Date: 23-04-2024

Drawn by DF

Document No.: 949-208825 PressureRegulator Complete ES10+ES1088

Rev.: 1.3

Manufacturer: LS Control A/S, Industrivej 12, DK-4160 Herlufmagle  
www.lsccontrol.dk tel. +45 5550 5550 lsc@lsccontrol.dk



QR-code for download of ES 10 manual