

Operating Manual

EL-400/230-N

Art. No. 3190500685

Not suitable for filter pumps with speed control

Function:

The osf control EL-400/230 enables a 400V three-phase filter pump or a 230V alternating current filter pump to be switched on and off. The connected 400V three-phase pump or 230V alternating current pump is switched on by pressing an EL button, and switched off again the next time the EL button is pressed. The internal running time limit means that the pump is switched off again at the latest after the internally set maximum running time (0 to approx. 25 minutes) has elapsed. The motor is protected against overload by a motor protection (0-8A) implemented by a microprocessor. This control unit is particularly suitable for switching countercurrent systems, waterfall showers, floor bubble systems, massage jets and similar attractions.

Technical Data:

Dimensions:	175mm x 125mm x 76mm
Operating voltage:	400V/50Hz
or	230V/50Hz
Power consumption:	ca.1,5VA
Not suitable for pumps with speed control	
Switching capacity:	max. 8A (AC3)
Protection class:	IP 40
Protection class pushbutton:	IP 68
Maximum cable length EL button:	20 m
Ambient temperature	0-40°C
Humidity	0-95% non condensing

Mounting:

The control unit must be installed in a way that is protected against moisture in accordance with its protection class.

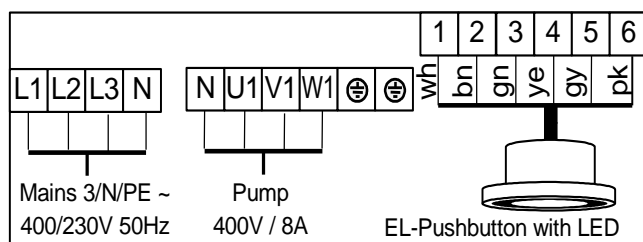
Safety notice:

All service and maintenance work may only be carried out by an authorized electrician on a voltage-free control system. Before opening the control system, it must be switched off.!

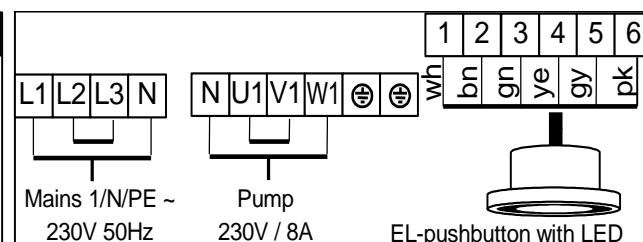
Electrical connection:

The electrical connection may only be carried out by a qualified electrician! The following connection diagram and the applicable safety regulations must be observed. All conductive components must be included in the equipotential bonding.

Connection of a 400V three-phase pump



Connection of a 230V monophase pump



In order for the electronic motor protection to work correctly with a 230V mains connection, the motor current must be routed through all 3 switching contacts of the control (terminals L2 and L3 as well as U1 and V1 are bridged). The pump is connected to terminal W1.

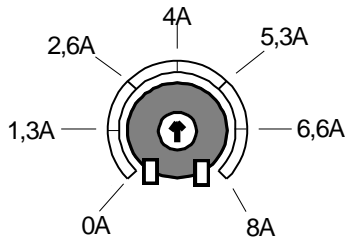
This control is not suitable for pumps with speed control

EL button

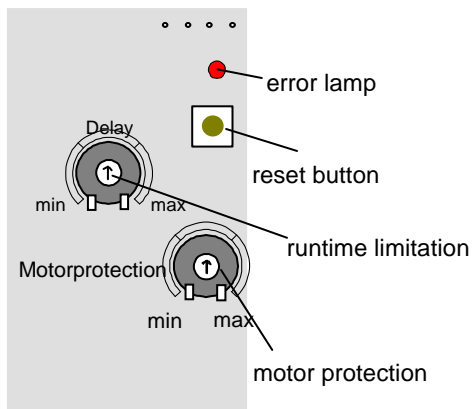
Either an illuminated EL button with red-green LED can be connected to terminals 1-6 or an unilluminated EL button can be connected to terminals 1 and 2. The connection terminals are supplied with safety extra-low voltage. The EL button can be installed in the edge of the pool below the water level. Extra-low voltage cables must not be laid in a cable duct together with three-phase or alternating current cables. The laying of extra-low voltage cables near three-phase or alternating current cables should generally be avoided.

Electronic motor protection:

Adjustment of the motor protection



Site plan



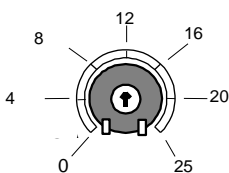
The pump is protected from damage caused by overload by a continuously adjustable electronic motor protection. To do this, the motor protection must be set to the rated current of the pump (see pump nameplate). The setting control for the motor protection is located on the right-hand side of the circuit board. If the rated current of the pump is not known, the motor protection can be set using the following procedure:

1. Turn the engine guard adjusting screw all the way to the right. ↻
2. Switch on the pump.
3. Turn the adjustment screw slowly counterclockwise ↻ until the engine protection is triggered and the red fault light comes on.
4. Turn the adjusting screw clockwise by a few degrees (approx. 10%).

Acknowledge the error message using the "Reset" button. It is located between the setting control and the error lamp.

Setting the maximum running time

Adjustment control for the running time limit



The maximum operating time of the pump can be set using a potentiometer on the circuit board in a range between 0 and approx. 25 minutes. After this time has elapsed, the pump is automatically switched off. If the setting control is turned to the left stop, no running time limit is activated. The pump is then not automatically switched off.

Further information can be found on the Internet at the following address:

<https://osf.de/download/documents/documents.php?device=EL-400>



We wish you lots of fun and relaxation in your swimming pool.

Subject to change!

OSI Juni 24