

Installation- and Operating Instructions



PC-400

Art.No.3002700000

Not suitable for filter pumps with speed control

Functioning:

The **OSI** filter control system PC-400 enables time-controlled connection and disconnection of a 400V A.C. filter pump. Setting of the daytime and the individual response times can be noted from the corresponding operating instructions of the automatic switch which is enclosed. By means of the selector switch in the front cover it is possible to:

- a) Switch on and off the functioning of the unit. **Attention, the control system is thus not disconnected from the mains supply at all poles!**
- b) to switch the unit to permanent operation or automatic operation (automatic switch) of the filter pump.

Also during the working time of the filter pump through an external thermostat (e.g. **OSI**-PTR-045, art.-no.3182600001) it is possible to control the heating of the pool. During interruptions of the filtering process, the heating is automatically switched off by the internal locking system.

Connection terminals for an electronic level control **OSI**NR-12-TRS-2 (art.No. 3030000020) ensure a comfortable automatic control of the water level in the pool. Additionally, the filter pump is protected against damage which may arise due to operation of the filter unit without water.

Connection terminals for an **OSI**-EUROTRONIK-10 ensure an enlargement of the filter control to an automatic filter- and re-flushing control.

A further terminal connection enables the connection of supplementary instruments, e.g. dosage system. The terminals D/D are potential-free and can therefore be individually used. During the filtering times, the relay point between the terminals D/D is closed, out of the filtering times, this relay contact point is open. This contact can be loaded with a tension of a maximum of 230V and a power of a maximum of 400W ($\cos \varphi 1$).

The connection terminals for the winding earthing contact (WSK 'Wicklungsschutzkontakt') ensure connection of a winding earthed switch which is integrated in the motor winding of the filter pump. If this contact opens, e.g. due to excessive heating of the motor winding, the filter pump and automatically the heating and dosage system are switched off. As soon as the winding earthing contact closes after cooling-down of the motor winding, the units are automatically re-activated. Manual re-setting is not necessary. The connection terminals „WSK“ are supplied with 230V.

Operation of the filter pump and the heating are displayed by the control lamps in the front cover - thus, a control is possible at any time.

The filter pump is protected against overloading by a plug-in electronic protective motor switch (power supply can be continuously adjusted up to 8A).

Technical Data:

Dimensions:	220mm x 219mm x 100mm	
Operating voltage:	400V/50Hz	
Power consumption of the control system:	abt. 1,5VA	
Not suitable for filter pumps with speed control		
Capacity:	Pump:	max. 3,0 kW (AC3)
	Heating:	max. 0,4 kW (AC1)
	Additional output:	max. 0,4 kW (AC1)
Type of protection:	IP 40	

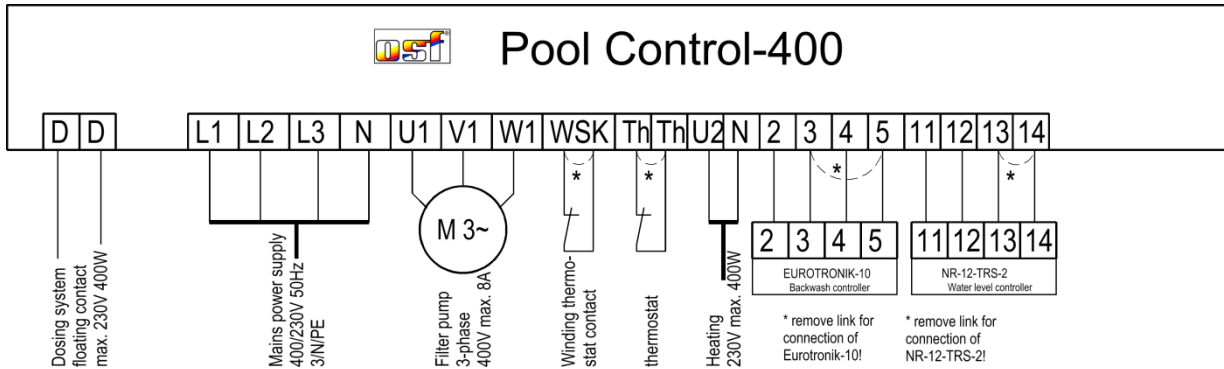
Installation:

For installation, the control unit has to be protected against humidity, according to its type of protection. The power supply of the unit has to be effected by an all-pole main switch with a contact gap width of a minimum of 3mm. **Before opening the housing, the unit has to be switched free of electrical tension by all means.**

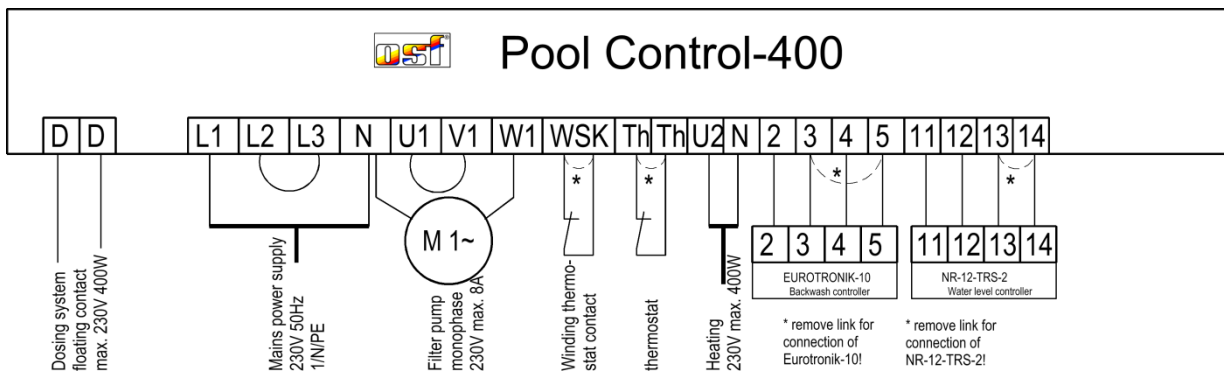
Electrical connection:

The electrical connection as well as alignment- and service works shall only be carried out by a qualified specialist electrician! The following cable arrangement and the corresponding safety instructions in force shall be observed.

For use of a 400V threephase pump:



For use of a 230V monophas pump:



The bridge which is installed by the manufacturer between the terminals 13 and 14 has to be removed if a level control unit NR-12-TRS-2 is connected. If a level control unit is not connected, the bridge has to remain bolted between these terminals. In this case, the terminals 11 and 12 shall not be used.

The bridge which is installed by the manufacturer between the terminals 3 and 5 has to be removed, if an EUROTRONIK-10 is connected. If an EUROTRONIK-10 is not connected, the bridge between these terminals has to remain in place. In this case, the terminals 2 and 4 shall not be used.

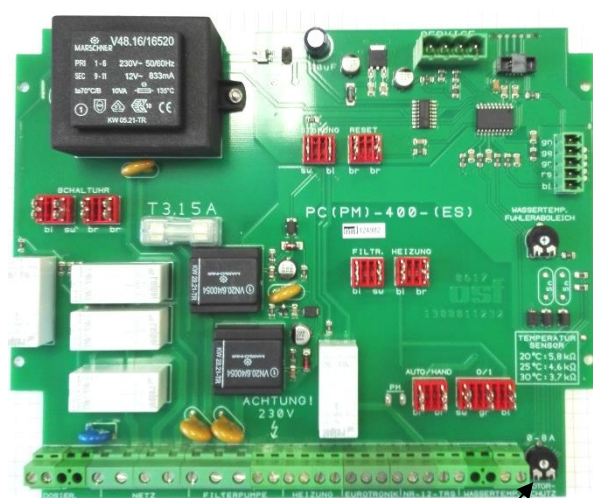
The bridge which is installed by the manufacturer between the terminals designated as WSK has to be removed when connecting the winding earthing contact. If this contact is not connected, it has to remain in place.

Opening of one of the contacts between the terminals 13 and 14 or 3 and 5 involves an immediate disconnection of the filter pump, the dosage system and the heating.

Closing of one of the contacts between the terminals 2 and 4 or 11 and 12 involves a forced connection of the filter pump.

The electronic control together with the EUROTRONIK-1, the heating and the level control system are protected by a 3.15A fine-wire-fuse inside the unit.

Electronic motor protection:



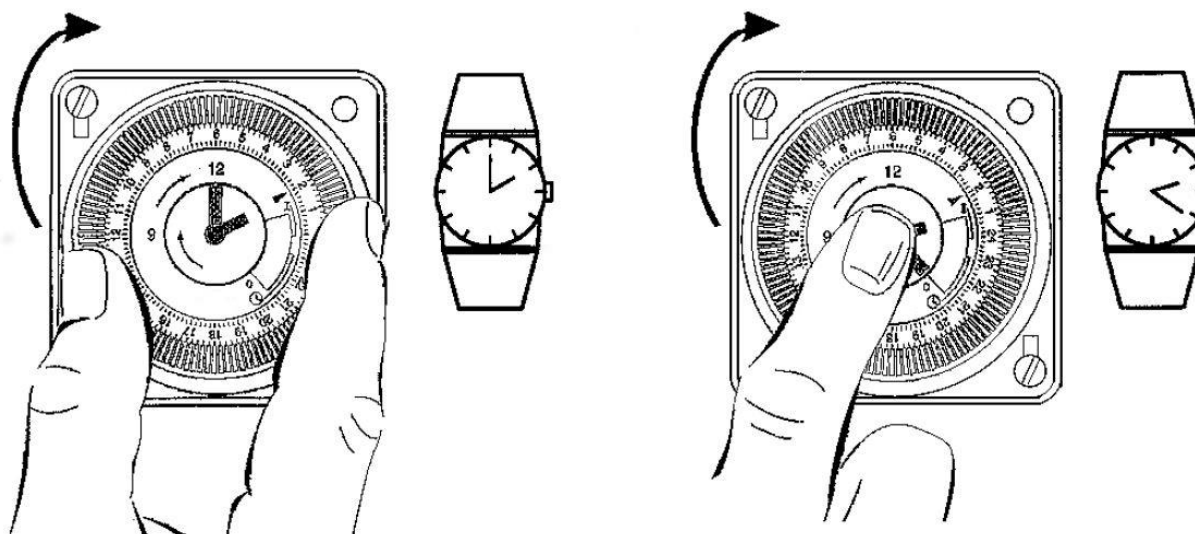
Adjust motor protection

The 3-phase filter pump is protected from damage resulting from overload by an electronic motor protection. To do so the motor protection needs to be set to the nominal current of the filter pump (see name plate of the pump). If the nominal current of the filter pump is not known, the motor protection can be set using the following procedure:

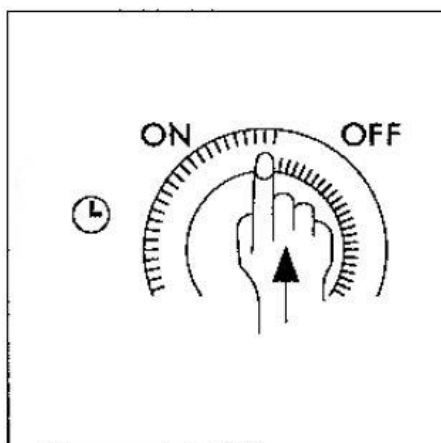
1. Turn the adjustment screw of the motor protection in the terminal box clockwise up to the stop.
2. Switch the pump on
3. Turn the adjustment screw slowly counter clockwise until the motor protection trips and the red fault message comes on.
4. Turn the adjustment screw clockwise by some degrees (approx. 10%).
5. Release the motor protection with the black key: the fault message goes off and the filter pump runs.

Operation of the timer

Setting the time



Setting the switching times



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

<https://osf.de/download/documents/doclist.php?device=PC-400&subdir=none>



We wish you much joy and recreation in your pool.