

Installation and operating manual



230V filter control unit with solar control

Item No.: 310.000.0530

Not suitable for filter pumps with speed control

Function

The **osfi** PC-30 filter control unit allows time-dependent switching on and off of a 230 V alternating current filter pump in accordance with a freely-programmable switching program.

heater of the swimming pool is controlled by the electronic temperature regulation system while the filter pump is running. The heater is automatically switched off by the internal interlock during filter pauses. The required swimming pool water temperature can be selected on the front panel, or the heater can be switched off. A floating contact (terminals 22 + 23) and a 230 V output (terminals U2 and N) are available for connecting the heating. Terminals for **osfi** solar actuating drive are available for operation with solar absorbers through which the swimming pool water flows directly.

The integrated frost protection function makes the swimming pool winter break easier to deal with.

Terminals for electronic level regulation NR-12-TRS-2 or NR-121-TRS-3 enable convenient automatic regulation of the swimming pool water level. The filter pump is also additionally protected against damage which could be caused by filter unit operation without water.

Bar valves for backwashing and rinsing can be connected directly to the PC-30 so that separate backwashing control units are not necessary. If a 6-way valve is to be used for backwashing, additional terminals for an **osfi** EUROTRONIK-10 enable extension of the filter control unit to an automatic filter and backwashing control unit for 6-way valves.

Extra terminals enable the connection of additional devices such as a dosing system. Terminals 20 + 21 are floating, and can therefore be used individually. The relay contact between terminals 20 and 21 remains closed during the filter periods, the relay contact is opened outside these periods. This contact can be loaded with a voltage of maximum 230 V and a current of maximum 4 A.

Operation of filter pump and heater is displayed by indicator lamps in the front panel, which means that checks can be made at any time.

Contents

Function	1
Contents	2
Specifications.....	3
Mains connection and filter pump connection	3
Heater connection.....	4
Level regulation and backwashing control.....	4
Further connection facilities	5
Temperature sensor	5
Frost protection.....	5
Front panel displays and controls:	6
LCD display.....	6
Selecting operating mode	6
Pump indicator lamps	6
Heater indicator lamps.....	7
Solar heating.....	7
Backwashing.....	7
Selecting the temperature.....	7
Switching on frost protection mode.....	7
Setting the time.....	7
Programming the timer	8
Programming backwashing	9
Info key	9
Balancing the temperature controller.....	9
Fuses.....	10
Service terminal	10
Filter unit operating mode	10
Heater operating mode	11
Water temperature.....	11
Solar temperature	11
Set temperature	12
Solar difference.....	12
Solar additional temperature.....	12
Limit temperature.....	12
Additional heater minimum time	13
Solar heater minimum time.....	13
Filter pump run-on time	14
Pump operation time.....	14
Heater operating time	14
Solar operating time.....	14
Backwashing counter (internal)	14
Backwashing counter (external)	14
Forced switch-on of NR-12-TRS-2	14
EUROTRONIK-10 backwashing signal	14
Interlocking	15
Heater priority circuit.....	15
Solar heater priority circuit	15
Filter pump.....	16
Solar operation	16
Heater	16
Dosing unit.....	17
Backwashing valve	17
Rinsing valve.....	17
Language.....	18

Specifications

Dimensions:	220mm x 219mm x 100mm	
Operational voltage:	230V/50Hz	
Control system power consumption:	ca. 10VA	
Not suitable for filter pumps with speed control		
Switching capacity:	Pump:	max. 1.1 kW (AC3)
	Heater:	max. 230V/4A
	Dosing system:	max. 230V/4A
Protection class:	IP 40	

Electrical connection:

The control unit must be mounted such that it is protected from moisture in accordance with its degree of protection. The ambient temperature must lie between 0°C and + 40°C and should vary as little as possible. The relative humidity at the installation position must not exceed 95% and there must not be any condensation. Avoid exposing the unit to direct heat or sunlight.

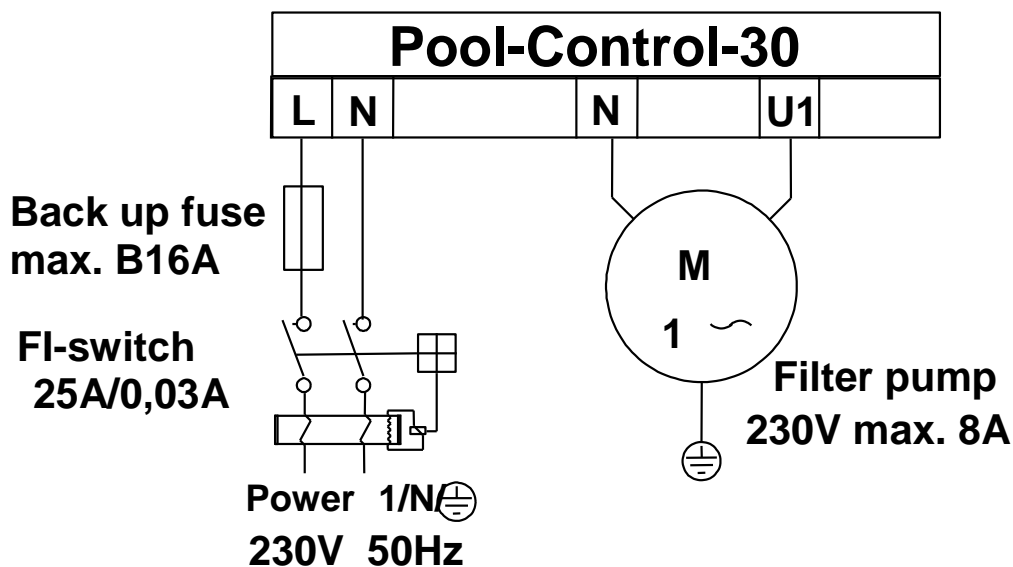
The power supply for the unit must be provided via an all-pole disconnection switch with a minimum contact gap of 3mm and via a residual-current circuit breaker with a fault current $IFN \leq 30\text{mA}$.

Always disconnect the unit from the power supply before opening the case. All electrical wiring and calibration and servicing work must be performed solely by an approved electrician. The attached wiring diagrams and all applicable safety regulations must be observed.

Low voltage lines:

Low-voltage lines must not be laid along with three-phase or AC power cables in the same cable conduit. In general, always avoid routing low-voltage lines close to three-phase or AC power cables.

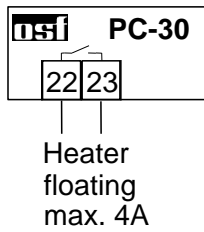
Mains connection and filter pump connection



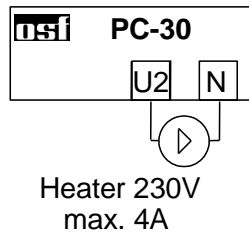
This control is not suitable for connecting a filter pump with speed control. We have other controls in our delivery program for such pumps.

Heater connection

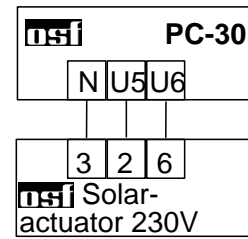
Floating contact (e.g. for boiler control)



230V heater (e.g. circulation pump)



Solar heating

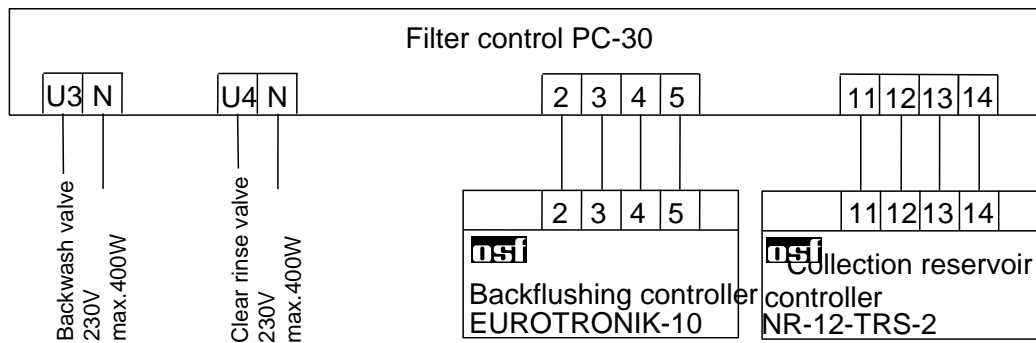


The floating relay contact between terminals 22 and 23 can be loaded with a voltage of maximum 230 V and a current of maximum 4 A.

If the heater requires 230 V, it can be connected to terminals U2 and N.

A 230 V **nsf** solar actuating drive can be connected to terminals U5 and U6 for operating the solar heater. When operating solar heating, terminal U5 carries the mains voltage and terminal U6 is voltage-free. If the solar heater is not being operated, terminal U5 remains voltage-free and terminal U6 carries the mains voltage. These contacts may be loaded with a maximum 230 V/1.5A.

Level regulation and backwashing control



Bar valves (230V) can be connected for backwashing and rinsing to terminals U3, U4, and N.

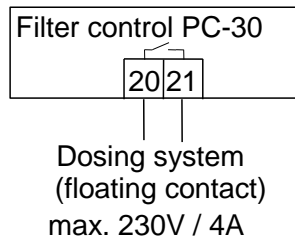
The bridge fitted in the works between terminals 13 and 14 must be removed if level regulation system NR-12-TRIS-2 is connected. The bridge can remain between these terminals if no level regulation system is connected. Terminals 11 and 12 remain unused in this case. These terminals carry mains voltage!

The bridge fitted in the works between terminals 3 and 5 must be removed if a EUROTRONIK-10 system is connected. The bridge can remain between these terminals if no EUROTRONIK-10 system is connected. Terminals 2 and 4 remain unused in this case. These terminals carry mains voltage!

Opening any of the contacts between terminals 13 and 14 or 3 and 5 causes filter pump, dosing systems and heater to be turned off immediately.

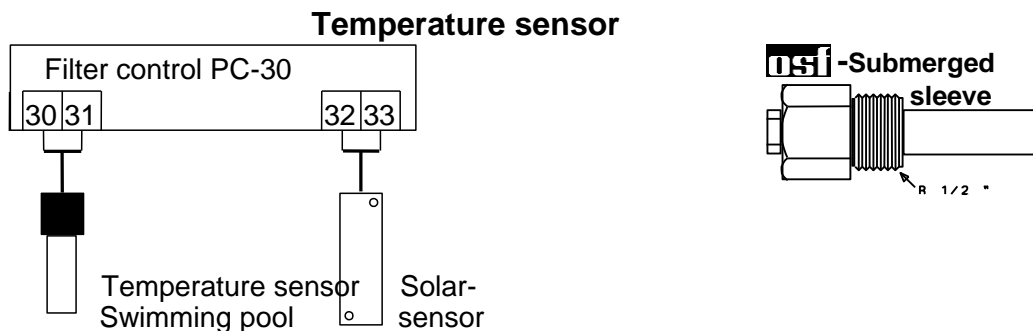
Closing any of the contacts between terminals 2 and 4 or 11 and 12 causes forced switching on of the filter pump, whereas heater and dosing systems are switched off.

Further connection facilities



There is a floating relay contact between terminals 20 and 21. This can, for example, be used for activation of the dosing system (the contact remains closed during filter operation).

This contact can be loaded with a maximum of 230 V/4A.



The swimming pool temperature sensor is connected to terminals 30 and 31. The temperature sensor is supplied with a cable length of 1.5 m as standard. If required, this can be lengthened to maximum 20 m (cross-section minimum 0.5 mm²) with a 2-core cable. You should avoid routing the sensor cable near power cables to prevent possible interference.

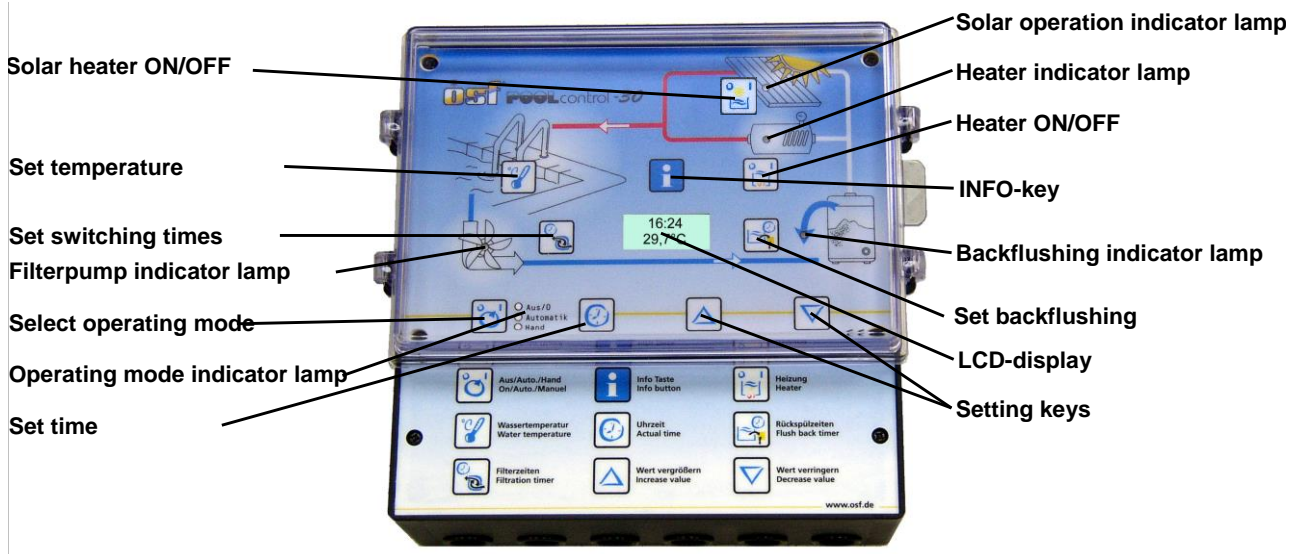
Since precise temperature control can only be achieved with good heat transfer between temperature sensor and swimming pool water, an **OSI** immersed sleeve R ½" (Art. No. 3200200003) should be built into the piping system. The sensor polarity is as required.

A solar temperature sensor (Art. No. 3100000030) can additionally be connected to terminals 32 and 33 (optional). The temperature sensor is supplied with a cable length of 20 m as standard. If required, this can be lengthened to maximum 50 m (cross-section minimum 0.5mm²) with a 2-core cable. You should avoid routing the sensor cable near power cables to prevent possible interference. The solar temperature sensor should be connected at the solar collector output and must have good heat contact to the returning water flow. The temperature at the temperature sensor installation site may not exceed 80 °C.

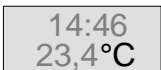
Frost protection

If the frost protection function has been switched on, a temperature sensor connected to terminals 32 and 33 serves as the air temperature sensor for frost protection. The solar temperature regulation is switched off during frost protection operation. If the swimming bath does not have solar heating, this sensor is also installed in a suitable location outside. As soon as the temperature at the temperature sensor falls below 0 °C, the filter unit is activated. The temperature regulation system then controls the heater with a set temperature of 3°C.

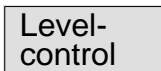
Front panel displays and controls:



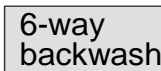
LCD display



Normal operating display with current water temperature and time.



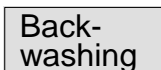
The filter pump is switched on by the NR-12-TRS-2 or NR-12-TRS-3 level regulation system.



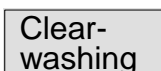
The filter pump is switched on by the EUROTRONIK-10 backwashing control system.



The filter pump is switched off by the EUROTRONIK-10 or the NR-12-TRS-2 / NR-12-TRS-3 level regulation system.





The filter pump is switched on because backwashing is taking place using the bar valve connected.



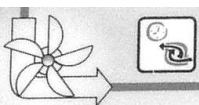
The filter pump is switched on because rinsing is taking place using the bar valve connected.

Selecting operating mode



The control system can be switched off or you can select between manual and automatic operating mode using the  key. **Caution!** This does not mean that the control system has been switched to voltage-free! The operating mode selected is displayed using the indicator lamps next to the  key.

Pump indicator lamps



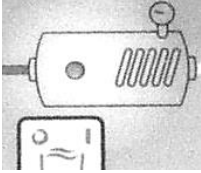
This indicator lamp displays filter pump operation. You can see the pump operating mode from the lamp colour:

Off: the filter pump is switched off

Green: the filter pump is in operation

Red: The pump is switched off temporarily by the EUROTRONIK-10 backwashing controller or the NR-12-TRS-2 level regulation system.

Heater indicator lamps




This indicator lamp displays heater operation. You can see the heater operating mode from the lamp colour:

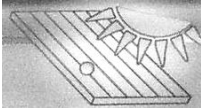
Off: the heater is off

Green: the heater is in operation

Red: the additional heater is blocked.

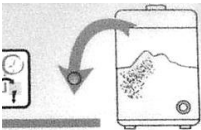
Use the  key to block or release the heater.

Solar heating



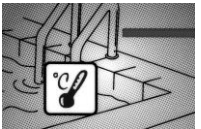
If a solar sensor has been connected to the control system, this indicator lamp is used to show the current operating status of the solar heater.

Backwashing


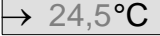





This indicator lamp shows whether backwashing using the bar valve is currently taking place.

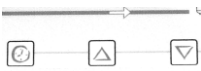
Selecting the temperature






Use the  key to select the swimming pool water temperature.




1. Press the  key \Rightarrow the display shows 
2. Use the  and  keys to set the required temperature between 0 °C and 40 °C.
3. Press the  key again to save the required temperature. If no key is pressed for more than 30 seconds during temperature setting, the last temperature selected is saved automatically and the normal operating display will be shown again.

Switching on frost protection mode




If you press the , , and  keys simultaneously, frost protection mode is selected and the display shows

freeze.
off


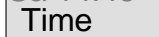





1. Use the  and  keys to switch frost protection mode on or off.
2. Press the  key again to save the required operating mode. When the frost protection mode is switched on, the air temperature then appears in the display.




a 16,3°C
w 23,9°C


Setting the time

Use the  key to set the current time:

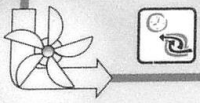



1. Press the  key \Rightarrow the display shows , the minute display blinks.
2. You can now use the  and  keys to set the minutes.
3. Press the  key \Rightarrow the hour display blinks.
4. You can now use the  and  keys to set the hours.


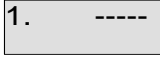


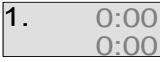
















5. Press the  key ⇒ the weekday display blinks.
6. You can now use the  and  keys to set the weekday.


Press the  key again to save the time. If no key is pressed for more than 30 seconds during setting, the last time displayed is saved automatically and the normal operating display will be shown again.





Programming the timer



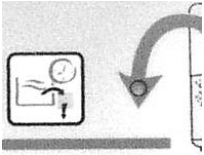
Use the  key to program the built-in timer, whereby the switch-on time and the associated switch-off time must always be entered as pairs.

1. Press the  key ⇒ the display shows  , if no switching time has yet been programmed.
2. If you press one of the  or  keys, or if a switching time has already been programmed, the display shows  , the minute display of the top time (switch-on time) blinks. Note: if you press the  key, the current time will be taken over.
3. You can now use the  and  keys to set the required switch-on time minutes.
4. Press the  key again ⇒ the hours in the switch-on time blink
5. You can now use the  and  keys to set the required switch-on time hours.
6. Press the  key again ⇒ the minutes in the switch-off time blink
7. You can now use the  and  keys to set the required switch-off time minutes. Note: if you press the  key, the current time can be taken over, if you press the  and  keys simultaneously the switch-on time set previously will be taken over.
8. Press the  key again ⇒ the hours in the switch-off time blink
9. You can now use the  and  keys to set the required switch-off time hours.
10. Further switching times can now be programmed as in points 1-9.
11. Press the  key again to save the switching time. If no key is pressed for more than 30 seconds during setting, the last switching time displayed is saved automatically and the normal operating display will be shown again.




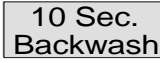



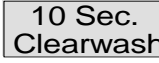




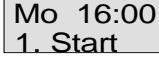




If switching times have already been programmed, you can use the  key to delete them.

1. Press the  key as often as required until the switching time to be deleted is displayed  .
2. The switching time is deleted if you press the  and  keys simultaneously.

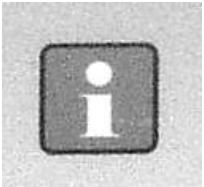
Programming backwashing

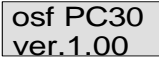




Use the  key to program backwashing using the bar valve.

1. Once the  key has been pressed the first time, you can use the  and  keys to set the backwashing duration .
2. Once the  key has been pressed the next time, you can use the  and  keys to set the rinsing duration .
3. Once the  key has been pressed again, you can use the  and  and  keys to set the time of the rinsing process . Note: if you press the  key, the current time can be taken over, if you press the  and  keys simultaneously the rinsing time will be deleted.
If the  key is pressed for longer than 5 seconds, backwashing will be triggered.

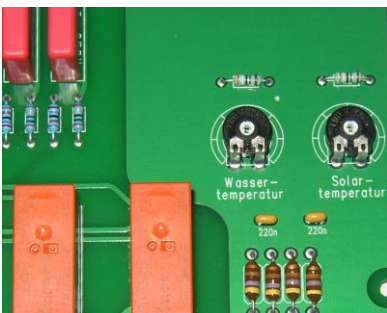
Info key



When you press the INFO key, the program version number will be displayed first. . After this you can press the INFO key again to call up the following information:

1. Time
2. Solar temperature
3. Water temperature
4. Filter pump operating status
5. Solar heater operating status
6. Additional heater operating status
7. Filter pump operating hours counter
8. Additional heater operating hours counter
9. Solar heater operating hours counter
10. Language (you can switch between languages by pressing the  and  keys simultaneously).

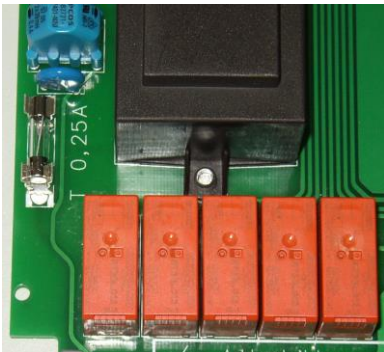
Balancing the temperature controller



The electronic temperature regulator and the temperature centre are balanced with one another in the works. If one of the sensors is replaced, or if a sensor cable is extended, a new balance must be carried out if necessary using the potentiometers in the controller. Turning the water temperature sensor potentiometer clockwise causes an increase in the water temperature displayed. If the solar sensor potentiometer is turned clockwise, a higher collector temperature is displayed. Since the solar temperature

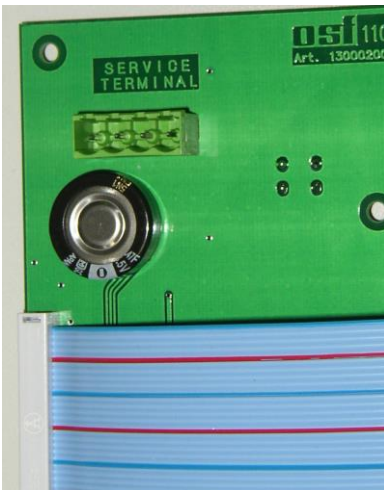
regulation only works correctly with precisely balanced sensors, this balance should only be carried out by a trained service technician.

Fuses



The electronic control system is protected by a 0.25A fine-wire fuse on the PCB in the inside of the device. The short-circuit protection for the filter pump must be provided by a backup fuse of maximum 16A on site.

Service terminal



An osf service terminal (Art. No. 3010000900) can be connected to this control system for optimum control system settings for a wide range of swimming pool equipment and for assisting in initial startup and fault diagnosis. The socket for this is located on the PCB inside the device. **Before opening the housing and plugging in the service terminal, you must ensure that the control system has been isolated from the mains!** Once the control system has been switched on, the service terminal display shows the first 4 lines of the diagnosis text, e.g.:

Filter operation	Filter unit operation mode
Temp. reached	Heater operation mode
Water: 23,0°	Measured water temperature
Solar: 38,4°	Measured collector temperature

Further lines can be called up using the \triangle and ∇ keys. Values in the **top** line can be changed by pressing the \square key if necessary.

Filter unit operating mode

This line displays the current filter unit operating mode.

The following displays are possible:


- Control system off* Use the \square key to switch the control system off.
- Filter unit off* The filter unit is switched off.
- Filter operation* The filter unit is switched on using the timer or the \square key on the front cover.
- Run-on time* The filter pump continues running when the heater is switched off.
- Forced switching* The filter pump is either switched on by the EUROTRONIK-10 backwashing controller or the NR-12-TRS-2 level regulation system.

<i>Priority circuit</i>	Outside the set filter times, the filter pump is switched on by the temperature regulation system because this works in the priority circuit.
<i>Pump blocked</i>	The filter pump is switched off temporarily by the EUROTRONIK-10 or the NR-12-TRS-2 level regulation system.
<i>Backwashing</i>	The filter pump is switched on because backwashing is taking place using the bar valve.
<i>Rinsing</i>	The filter pump is switched on because rinsing is taking place using the bar valve.
<i>Frost protection mode</i>	The filter pump is in frost protection operating mode.

Heater operating mode

This line displays the current temperature regulation operating mode.

The following displays are possible:

<i>Controller off</i>	Use the  key to switch the heater off.
<i>Add. heater off</i>	The heater is switched off outside the filter times.
<i>Heater blocked</i>	The heater is switched off because the EUROTRONIK forced switching has occurred.
<i>Temp. reached</i>	The heater is switched off because the set temperature has been reached.
<i>Add. heater on</i>	The heater is switched on because the water temperature is below the set temperature.
<i>Solar heater on</i>	The solar heater is switched on because the water temperature is below the set temperature and the collector is warmer than the swimming pool water.
<i>Frost hazard</i>	The heater is switched on in frost protection operating mode.


Water temperature

The current water temperature is displayed in this line. If the display does not agree with the actual temperature, it can be readjusted using the adjuster on the printed circuit board (see temperature regulation section). Turn the adjuster in a clockwise direction to increase the displayed value. "Sensor break" will be displayed if the temperature sensor is defective. **Caution: If both temperature sensors are at the same temperature, the solar sensor must never display a higher value than the water temperature sensor otherwise the solar heater will not switch off.**

Solar temperature

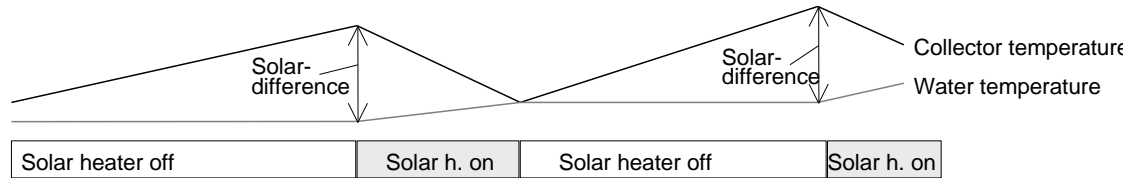
The current collector temperature is displayed in this line. If the display does not agree with the actual temperature, it can be readjusted using the adjuster on the printed circuit board (see temperature regulation section). Turn the adjuster in a clockwise direction to increase the displayed value. "-----" will be displayed if the temperature sensor is defective. **Caution: If both temperature sensors are at the same temperature, the solar sensor must never display a higher value than the water temperature sensor otherwise the solar heater will not switch off.**

Set temperature


The set temperature is displayed in this line, and this is set using the  key in the front cover.

Solar difference




This line displays how much warmer the solar collector needs to be than the swimming pool water before the solar heater is switched on.



This value can be adjusted to meet the requirements of the relevant solar equipment if it is displayed in the **top** line of the service terminal.

1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:


Solar diff.: 3°
Difference temp. between water and collector

2. Now use the  and  keys to change the temperature difference. The smallest adjustable value is 0.5°, the largest 10°.
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate. The adjusted value will be saved automatically.




A temperature difference of 3° is set at the works.

Solar additional temperature

This line displays by how much the swimming pool set temperature may be exceeded during solar heating in order to make optimal use of solar energy during the day. This value can be adjusted to meet the requirements of the relevant swimming pool if it is displayed in the **top** line of the service terminal.

1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:


Solar add.: 5,0°
Overheating of water at solar operation

2. Now use the  and  keys to change the temperature difference. The smallest adjustable value is 0°, the largest 15°.
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate. The adjusted value will be saved automatically.




A temperature difference of 5° is set at the works.

Limit temperature

This line displays at which maximum temperature the solar heater is to be switched off automatically for safety reasons independent of the nominal value set. This value can be adjusted to meet the requirements of the relevant swimming pool if it is displayed in the **top** line of the service terminal.

1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:


Limit temp.: 40,0° Maximum possible water temperature at solar operation

2. Now use the  and  keys to change the limit temperature. The smallest adjustable value is 30°, the largest 50°.
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate. The adjusted value will be saved automatically.




A temperature difference of 40° is set at the works. This limit temperature influences the solar heater **only**.

Additional heater minimum time

This line displays the minimum switching on or off durations for the additional heater by the temperature regulation to avoid too short switching periods. This value can be adjusted to meet the requirements of the relevant heater equipment if it is displayed in the **top** line:

1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:


Min.heating: 120 s Minimum heater switch on time

2. Use the  and  keys to change the minimum time in stages of 10s. The smallest adjustable value is 10s, the largest 1800s
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate. The adjusted value will be saved automatically.




The time set here only influences the temperature regulator behaviour. If the filter pump is switched off, the additional heater is switched off without delays irrespective of the holding time set. A minimum duration of 2 minutes is set at the works.

Solar heater minimum time

This line displays the minimum switching on or off durations for the solar heater by the temperature regulation to avoid too short switching periods. This value can be adjusted to meet the requirements of the relevant solar equipment if it is displayed in the **top** line:

1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:


Min. Solar: 120 s Minimum solar heater switch- on time

2. Use the  and  keys to change the minimum time in stages of 10s. The smallest adjustable value is 10s, the largest 1800s
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate. The adjusted value will be saved automatically.




The time set here only influences the temperature regulator behaviour. If the filter pump is switched off, the heater is switched off without delays irrespective of the holding time set. A minimum duration of 2 minutes is set at the works.

Filter pump run-on time

This line displays for how long the filter pump runs on after the additional heater has been switched off. This value can be adjusted to meet the requirements of the relevant filter unit if it is displayed in the **top** line:

1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:

Run-on: 16s
Filter pump run on time after add. heater

2. Now use the  and  keys to change the warm-up time. The smallest adjustable value is 0s, the largest 1800s
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate. The adjusted value will be saved automatically.

Filter pump run-on is switched off at the works (run-on time = 0).

Pump operation time

This line displays the total operating hours for the filter pump.

Heater operating time

This line displays the total operating hours for the additional heater.

Solar operating time

This line displays the total operating hours for the solar heater.

Backwashing counter (internal)

This line displays how often a backwashing process has been started by bar valves.

Backwashing counter (external)

This line displays how often a backwashing process has been started by the EUROTRONIK-10.

The following lines enable the service technician to carry out an examination of the input signals and filter control unit output relay.

Forced switch-on of NR-12-TRS-2

This line displays whether the NR-12-TRS-2 level regulation system is subject to forced switch-on.

The following displays are possible:

Forced switch-on OFF No forced switch-on, or terminals 11 and 12 not connected.

Forced switch-on ON Forced switch-on requested, or terminals 11 and 12 connected.

EUROTRONIK-10 backwashing signal

This line displays whether the EUROTRONIK-10 switches the filter pump on during backwashing or rinsing.

The following displays are possible:

EUROTRONIK OFF no switch-on command from EUROTRONIK-10
EUROTRONIK ON The EUROTRONIK-10 has switched the filter pump on

Interlocking

This line displays whether the filter unit has been switched off either by the EUROTRONIK-10, NR
 -12-TRS-2 or the coil earthing contact.

The following displays are possible:

Interlock OFF The pump is switched off (one of the contacts is open).
Interlock ON Pump operation has been enabled (all interlock contacts are closed)


Heater priority circuit

This line displays whether the temperature regulation system has priority over the filter time settings. Using the priority circuit, the filter pump can be switched on by the temperature regulation system even outside the set filter times. The temperature regulation only works during the filter times without the priority circuit.




The following displays are possible:

Priority OFF The additional heater only works during the filter times.
Priority ON The temperature regulation also works outside the filter times. If the water temperature falls below the set temperature, the filter pump and the additional heater are switched on automatically.

If the priority circuit is displayed in the **top** line of the service terminal it can be switched on or off.

1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:

Priority:	OFF
Priority switch for add.- heater	

2. Use the  key to switch the priority circuit on, and the  key to switch it off.
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate.

The additional heater priority is switched off at the works.


Solar heater priority circuit

This line displays whether the solar heater has priority over the filter time settings. Using the priority circuit, the filter pump can be switched on by the temperature regulation system even outside the set filter times. The temperature regulation only works during the filter times without the priority circuit.




The following displays are possible:

Prior.Solar OFF The solar heater only works during the filter times.
Prior. Solar ON The solar heater also works outside the filter times. The filter pump and solar heater are switched on automatically in sunshine.

If the priority circuit is displayed in the **top** line of the service terminal it can be switched on or off.

1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:

Prior.solar	ON
Priority switch for solar heater	


2. Use the  key to switch the priority circuit on, and the  key to switch it off.
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate.

The solar heater priority is switched on at the works.




The following lines are used for manual activation of the output relay.

Filter pump

When the filter pump operating status is displayed in the **top** line of the service terminal, the pump can be switched on or off manually.


1. Once the  key has been pressed, the filter unit is switched off and the the following is displayed:

Filter pump:	OFF
Pump can be manually switched!	



2. Use the  key to switch the filter pump on, and the  key to switch it off.
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate.

Solar operation


When the solar heater operating status is displayed in the **top** line of the service terminal, it can be switched on or off manually.

1. Once the  key has been pressed, the filter unit is switched off and the the following is displayed:


Solar unit	
MANUAL OPERATION	
Actuator:	OFF
Pump:	OFF

2. Use the  key to switch the solar heater on, and the  key to switch it off.
When the solar heater is switched on, the following is displayed:

Solar unit	
MANUAL OPERATION	
Actuator:	ON
Pump:	OFF


3. Now you can use the  key to switch the filter pump on additionally. Once the filter pump is switched on, the following is displayed:

Solar unit	
MANUAL OPERATION	
Actuator:	ON
Pump:	ON




4. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate.

Heater

When the heater operating status is displayed in the **top** line of the service terminal, it can be switched on or off manually.


1. Once the  key has been pressed, the filter unit is switched off and the the following is displayed:

Heater	
MANUAL OPERATION	
Heater:	OFF
Filter pump:	OFF




2. Use the  key to switch the additional heater on, and the  key to switch it off. The filter pump is automatically switched on as well.
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate.

Dosing unit

When the dosing unit operating status is displayed in the **top** line of the service terminal, it can be switched on or off manually.


1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:

Dosing unit:	OFF
Filter pump:	OFF




2. Use the  key to switch the dosing unit on, and the  key to switch it off. The filter pump is automatically switched on as well.
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate.

Backwashing valve

When the backwashing valve operating status is displayed in the **top** line of the service terminal, it can be switched manually.


1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:

Backf.valve:	OFF
Filter pump:	OFF




2. Use the  key to switch the backwashing valve on, and the  key to switch it off. The filter pump is automatically switched on as well.
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate.

Rinsing valve

When the rinsing valve operating status is displayed in the **top** line of the service terminal, it can be switched on or off manually.


1. Once the  key has been pressed, the filter unit is switched off and the display shows the following:

Backfl. valve:	OFF
Filter pump:	OFF



2. Use the  key to switch the rinsing valve on, and the  key to switch it off. The filter pump is automatically switched on as well.
3. If you press the  key again, the normal diagnosis display appears and the filter unit continues to operate.


Language

If the language is displayed in the **top** line of the service terminal it can be switched over.

1. If you press the  key, the following is displayed:

Language selection <u>German</u> English
--

2. Now use the  and  keys to change the selected language.

3. If the  key is pressed once again the normal diagnosis display is shown.

We hope you have a lot of enjoyment and relaxation in your swimming pool

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

<https://osf.de/download/documents/documents.php?device=PC-30>

