

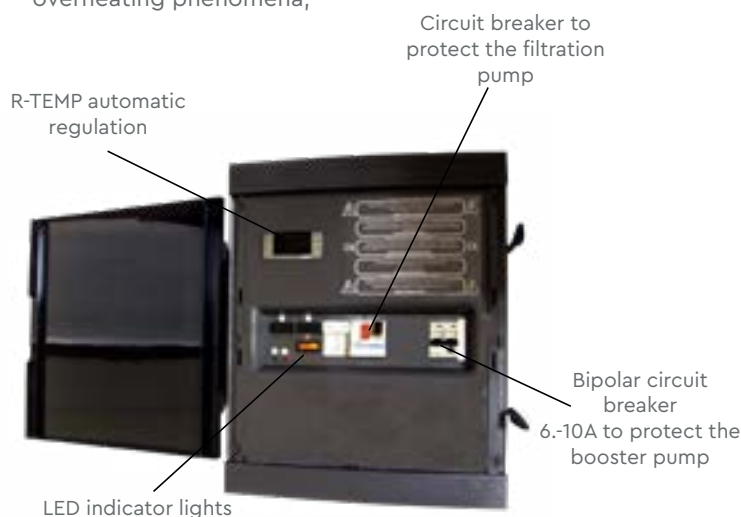
# Electrical panels



# Technical information & reminders



- Front mounted timer to facilitate programming,
- All wires are capped,
- Connection terminals for the mains,
- Connection of the transformer secondary via a fuse holder.
- The cabinets are delivered with rigid cable glands as standard,
- Removable mounting bracket to facilitate installation,
- Over-sized transformer to avoid overheating phenomena,
- Careful, colour coded wiring,
- Cabinet mounting screws and bushings are enclosed,
- Appropriate wire cross section (2.5 mm<sup>2</sup> for the power unit),
- Two seals, one on the glass door and one on the cover,
- May be recessed into the wall.



Each of our electrical panels is made of top quality components carefully selected on the basis of their excellent performance data. The injected resin casings were purpose designed to satisfy the requirements of pool builders and pool users. Electrical panels come with a wall mounting bracket and a suitably rated circuit breaker. Swimline electrical panels are fitted with high quality LEDs and components. They comply with the electrical safety standard NF EN 60335-1 and the EMC safety standards NF 55014 and NF EN 61000-6.

*The cable cross section recommendation is based on the distance in metres to the underwater light*

Cable cross section, mm <sup>2</sup> , for one 300 W underwater light	from	to
1.50	-	-
2.50	-	-
4.00	0 M	2.1 M
6.00	2.2 M	3.2 M
10.00	3.3 M	5.3 M
16.00	5.4 M	8.5 M

Cable cross section, mm <sup>2</sup> , for one 25 W underwater light	from	to
1.50	0 M	10 M
2.50	11 M	16 M
4.00	17 M	26 M
6.00	27 M	38 M
10.00	-	-
16.00	-	-

Cable with 2 wires (no yellow/ green wire).



The electrical panel is equipped with a mounting bracket to facilitate installation and hold the electrical panel away from the wall to prevent water from infiltrating into the panel by capillary.

PROCOPI uses a 700VA transformer to run two 300W underwater lights (under 12V) instead of 630VA transformers.

The decision to use a 700VA transformer instead of a 630VA transformer provides for a greater power reserve, this helps prevent the transformer from running hot and so helps limit heating within the electrical panel cabinet.



# Energy saving electrical panel – SWIMLINE

*Automatic regulation: R-Temp*  
*Automatic regulation of the filtration cycle based on the water temperature can reduce your pool's energy consumption by up to 40%.*



## Technical data:

Swimline electrical panels that feature automatic regulation of the length of the filtration cycle as a function of water temperature share the same characteristics as the standard Swimline electrical panel except that the programmable timer is replaced with a PLC.

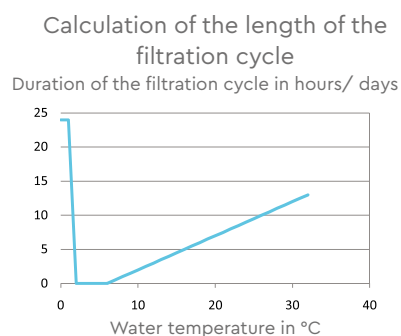
Automatic regulation comprises:

- A PLC that replaces the programmable timer,
- A manual over-ride to force the device on,
- A temperature sensor with a 6m cable,
- A titanium thermowell that is mounted on a reducing tee, 1/2", or a saddle clamp.

X	Circuit breaker
2	1 to 1.6 A
3	1.6 to 2.5 A
4	2.5 to 4 A
5	4 to 6.3 A
6	6.3 to 10 A
7	9 to 14 A

In order to select the appropriate circuit breaker, simply replace the letter X, with the number corresponding to the required rating.

The circuit breaker rating must be greater than the maximum current consumed by the filtration pump.



Depending on the region where the pool is installed, and/ or the quality of the electrical supply to the pool (end of line), it may be necessary to protect the pool's electrical installation and thus the properties of the various devices, circuit boards and components.

Code	Reference	Description
6601X0	RTEMP+CFB-1	Filtration electrical panel RTEMP
6604X0	RTEMP+CFP-050	Filtration electrical panel RTEMP, for one 50 W or LED underwater light
6609X0	RTEMP+CFP-100	Filtration electrical panel RTEMP, for two 50 W or LED underwater lights

# Filtration electrical panel – SWIMLINE



## Technical data:

- Protection rating, IP55,
- Two levels of watertight protection: an o-ring on the cover, an o-ring on the plexiglass door,
- Hinge mounted reversible smoked plexiglass door,
- All the controls are protected behind the plexiglass door,
- Rocker switches,
- Indicator lights (LEDs),
- Delivered with a circuit breaker, up to 14 Amp,
- Terminal block to facilitate connection,
- Generously proportioned for easy wiring,
- A wall mounting bracket is enclosed..

In order to select the appropriate circuit breaker, simply replace the letter X, with the number corresponding to the required rating.

X	Circuit breaker
2	1 to 1.6 A
3	1.6 to 2.5 A
4	2.5 to 4 A
5	4 to 6.3 A
6	6.3 to 10 A
7	9 to 14 A

The circuit breaker rating must be greater than the maximum current consumed by the filtration pump.

Code	Reference	Description
6600X0	CFB-1	Filtration or automatic cleaner electrical panel
660060	-	Automatic cleaner electrical panel - CFB-1 / 10 A
6603X0	CFP-050	Filtration electrical panel with transformer for one 50 W or LED underwater light
6608X0	CFP-100	Filtration electrical panel with transformer for two 50 W or LED underwater lights
6600X1	CFB-1 / BA	Filtration electrical panel, with automatic cleaner option
6603X1	CFP-050 / BA	Filtration electrical panel with transformer for one 50 W or LED underwater light, with auto. cleaner option
6608X1	CFP-100 / BA	Filtration electrical panel with transformer for two 50 W or LED underwater lights, with auto. cleaner option

# Electronic level controller with hydrostatic sensor

This device can control multiple water levels using a single hydrostatic sensor. 6 water level values can be entered into the programmable logic controller. This makes the level controller particularly suitable for controlling levels in a buffer tank.

TH : Very high limit / H: High limit / FR: End filling limit / DR: Begin filling limit / B: Low limit / TB: Very low limit

The level value can be read off the PLC screen.

Operating range: 0.10 m to 3.00 m.



## Technical data:

- The sensor is simply positioned at the bottom of the water volume to be controlled.
- Measurements are not falsified by material agglomerates, fluctuations of the water's electrical properties or by the shape of the reservoir.
- Extremely reliable
- Standard cable length is 10 m.

The client should specify the required cable length on placing the order. The maximum cable length is 40m.

Code	Description
667600	Buffer tank electronic controller (hydrostatic sensor and an electrovalve)
667610	Buffer tank electronic controller with 10 to 40 m cable for the hydrostatic sensor

# Level regulation – SWIMLINE



## Technical data:

- RED-1: Pool level regulation electrical panel, comprising an adjustable level sensor, timer, brass 20/27 electric valve. Protected by a fuse.



## Technical data:

- RED-2: Balance tank regulation electrical panel comprising 5 stainless steel sensors (ground, pump shut down, pump start up, electrovalve open and close, overflow safety) and a brass electrovalve 20/ 27. Protected by a fuse.

Code	Reference	Description
667000	RED-1	Electronic pool level controller, with electrovalve
667200	RED-2	Balance tank level controller (with 5 stainless steel sensors and 1 electrovalve)

# Electrical panel

## SR-LIGHT



### Technical data:

- Hinge mounted door,
- All the controls are mounted behind a protective plexiglass door (no controls on the outside),
- Rocker switches,
- Delivered with a circuit breaker up to 14A,
- Delivered with the necessary bushings, screws and cable glands.
- All our electrical panels are fitted with a suitably rated thermo-magnetic circuit breaker.

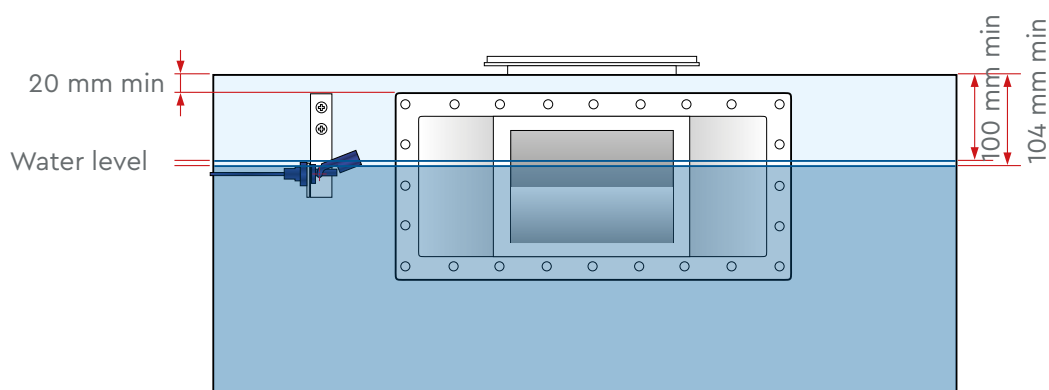
In order to select the appropriate circuit breaker, simply replace the letter X, with the number corresponding to the required rating.

X	Circuit breaker
2	1 to 1.6 A
3	1.6 to 2.5 A
4	2.5 to 4 A
5	4 to 6.3 A
6	6.3 to 10 A
7	9 to 14 A

The circuit breaker rating must be greater than the maximum current consumed by the filtration pump.

Code	Reference	Description
6700X0	SRF-1	Filtration or automatic cleaner electrical paneli
6703X0	SRF-050	Filtration electrical panel with transformer for one 50 W or LED underwater light
6708X0	SRF-100	Filtration electrical panel with transformer for two 50 W or LED underwater lights
Other electrical panels and options		
670060	SRF-1/10A	Electrical panel for automatic cleaner
677700	-	Entrapment alarm electrical panel with siren and pressure switch

### Level sensor installation diagram (RED-1)



# Level regulation

## SR-LIGHT



Code	Reference	Description
677000	RED-1	Electronic pool level controller, with electrovalve
677200	RED-2	Balance tank level controller (with 5 SS sensors & 1 electrovalve)
677300	RED-2-SEV	Balance tank level controller (with 5 SS sensors, no electrovalve)

# Transformers for Swimline – SR-Light electrical panels

Code	Description
716400	Toroidal transformer 230/12 V d, 50 VA
716450	Toroidal transformer 230/12 V, 100 VA
716500	Toroidal transformer 230/12 V, 315 VA
716600	Toroidal transformer 230/12 V, 700 VA

## Frostat & entrapment alarm



Code	Description
Frostat alarm	
688000	Frostat electrical panel
Entrapment alarm electrical panel	
677700	Entrapment alarm electrical panel with siren and pressure switch
677705	1 additional pressure switch XMLB004A1S11

## Accessories



	Code	Description
1	708100	Timer without backup power (SR-Light – Swimline Electrical panel)
	708200	Timer without backup power (to be built in)
2	708300	Timer without backup power (modular)
	708400	Timer with backup power (SR-Light – Swimline Electrical panel)
	708500	Timer with backup power (to be built in)
	709100	Thermal magnetic circuit breaker, 1.0–1.6 A
3	709200	Thermal magnetic circuit breaker, 1.6–2.5 A
	709300	Thermal magnetic circuit breaker, 2.5 to 4.0 A
	709400	Thermal magnetic circuit breaker, 4.0 to 6.3 A
	709500	Thermal magnetic circuit breaker, 6.0 to 10.0 A
	709600	Thermal magnetic circuit breaker, 9.0 to 14.0 A
4	713100	Contacteur 230 V – 9A, filtration electrical panel
5	713300	Contacteur 230 V – 18A, heating electrical panel

Back-up power: allow the timer to continue to run in the event of a power outage..

This type of equipment is necessary to protect equipment containing electronic components.

# Lightning arrestors

## Technical data:

- A lightning arrester is a device designed to protect electrical equipment against transient over-voltages triggered notably by lightning strikes.

The lightning arrester must be installed by a professional in parallel with the main circuit and no more than 30 metres distant from the equipment it is meant to protect.



	Code	Description
1	710010	Lightning arrester for three phase + neutral power supply
2	710000	Lightning arrester for single phase power supply

# Supervision relay



## Technical data:

- Automatic operation
- Timed reset
- Operating indicators
- Easily installed on a DIN rail
- NF EN 50550 compliant.

Code	Description
710050	Supervision relay, low voltage, 230 V

The relay is connected in parallel with the supply of the primary circuit. The same device may be used irrespective of the power of the equipment.

For a three phase + neutral installation, you will need three supervision relays (one for each live). Each relay should be connected between phase and neutral.

As soon as the voltage falls below or rises above the operating range of 195–270VAC, the relay opens the circuit, thus protecting the installation.



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