



pool spa sauna wellness

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Installation & Operating Instructions Welldana® Pool Control Type 34-015040



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Congratulations on your new Welldana Pool Control.

Please read these instructions carefully before installing and operating the unit.

Safety instructions

- Welldana® Pool Control complies with current rules and standards on safety.
- The product has been tested and certified in accordance with the following standards: EMC 89/336/EEC, EN 50081-1, EN 61000-3-2, EN 55014, EN 55104, EN 61000-4-2, EN 61000-4-4/5/6/11, EN 60335-1/A11 and EN 60335-2-60.
- Testing and certification were performed with remote control type 34-015041 fitted.
- The product is **CE** marked.
- Do not use the control if it shows visible signs of damage or malfunction.
- Installation must only be performed by an authorised electrician.
- The control must be protected by a fuse of max. 16 A (230 V AC).

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1. Technical data

Voltage	230 V AC; 50-60 Hz; max. 16 A
Temperature sensor	Type 34-015209; KTY; 1540 ohm at 25°C
Level sensor *	Type 64-108225 capacitive sensor or type 64-200010 float sensor. Black +, Blue -, Brown ref. Float sensor black – blue.
Enclosure	IP X5
Remote control *	LED display for temperature adjustment; 10 m cable.
Dimensions	L = 14.5 cm, W = 20.5 cm, H = 8.5 cm
230 V AC relay outputs	A – B – C – D – E outputs; max. 10 A per relay; max. total 3600 W

* **not** included with control unit.

2. Functions

The unit is designed to control filtration, etc. in spa baths and swimming pools. It is equipped with relay outputs for the following functions:

- A. Filter pump with on/off switch and external timer (a timer is, however, not supplied with the control unit).
- B. Chemicals control
- C. Electric heater/heat exchanger with thermostat control
- D. Room temperature control with thermostat (extra temperature sensor)
- E. Water-level control in spa/pool
- F. External timer
- G. Mains inlet

3. Accessories

Remote control type 34-015041.



4. Function – 230 V AC outputs

A. Filter pump

The filter pump is started and stopped by means of an on/off switch on the side of the unit. If the timer function (see item F) is not used, U0 and U1 must be short-circuited. The on/off switch is the main switch on the control panel. If three-phase pump operation is required, a safety cut-out must be installed. Output A from the unit is thus used as control current.

B. Chemicals control

This output is parallel to A and is activated/deactivated via the main switch.

C. Electric heater/heat exchanger

This output is only active when the filter pump is running and nos 1 – 2 – 3 are active on the control current side. The control must also "call" for heat. Cuts in after 20 seconds. This function is dependent on the temperature sensor connected to input 7. If a 230/400 V electric heater is used, a contactor box must be installed to carry the main power. The control unit output is thus solely used as control current. (A 34-140312 contactor box for max. 12 kW electric heater should be used.)

D. Room temperature control

Room heating is activated when the temperature sensor connected to no. 8 registers a difference of $< 2-3^{\circ}\text{C}$ between the temperature in the spa/pool and the room temperature. The room temperature sensor is of the same type as the spa/pool temperature sensor.

See description of room temperature sensor below.

E. Water-level control

Output for solenoid valve. Is independent of filter pump.

F. External timer

Voltage supply L-N for external clock/timer. If the function is **not** used, terminals U0 and U1 must be short-circuited.

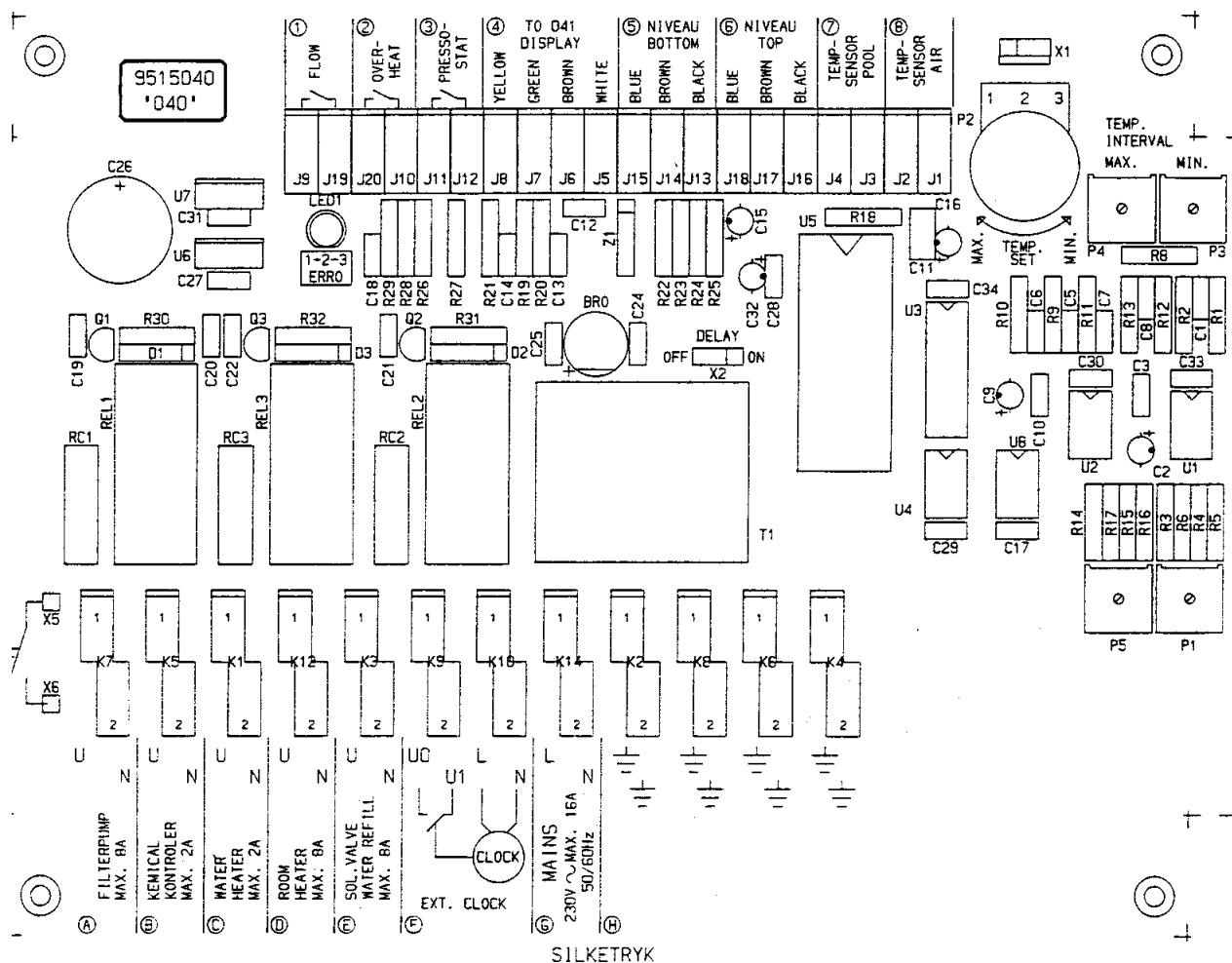
G. Mains inlet

230 V mains inlet. Max. 16 amp.

H. Earth terminals

Earth terminals for terminals A-G.

5. Printed circuit board



6. Figs 2 & 3

Fig. 3

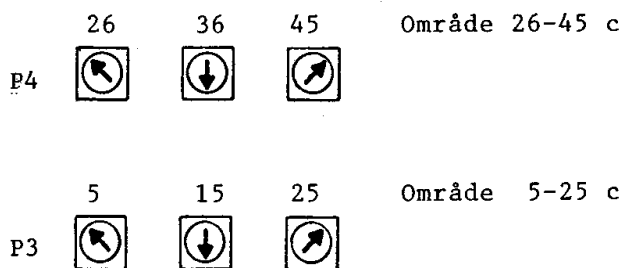
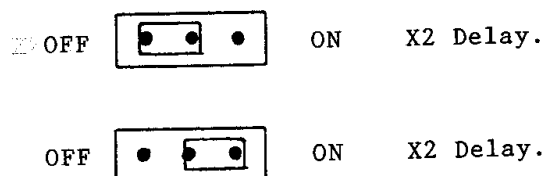


Fig. 2



7. Function – control current (inputs)

1. **Flow switch.**
2. **Overheat / hi-limit switch.**
3. **Pressostat / flow switch.**

The LED located beneath these terminals lights red if one of them is disconnected when the control "calls" for heat (the pump must run).

4. Remote control

A type 34-015041 remote control is available as an accessory. The remote control provides digital displays of actual spa/pool temperature and the current temperature setting. In addition, it allows the temperature setting to be raised or lowered.

5-6. Level sensor

Controls water level. If sensors are installed in both TOP and BOTTOM, the jumper at **X2** must be set to OFF. See fig. 2.

If only one sensor is installed, it must be connected to BOTTOM (5). In this case, the jumper at **X2** must be set to ON. **See fig. 2.** With float sensor, use black and blue terminal. There is a 30 second delay with X2 ON.

7. Temperature sensor, spa/pool

Type 34-015209 temperature sensor. (Remote control readings can be adjusted using P5.)
Note! If the room temperature is very high, the sensor may record a temperature higher than the actual spa/pool temperature.

8. Temperature sensor, room

Type 34-015209 air temperature sensor. The sensor must not be installed above a radiator or in the vicinity of any other heat source. The sensor must not be exposed to direct sunlight.

8. Temperature setting

The temperature setting point **P2** must only be used if **no** remote control unit is installed. **P2** can be set between the max. and min. temperature settings.

P3 = min. temperature setting

P4 = max. temperature setting

Fig. 3 illustrates the temperatures that correspond to trimmer positions.

Fig. 3

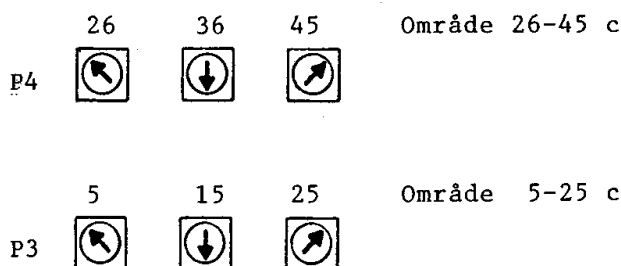


Fig. 2

