

Technical Information Bulletin

Date: 13.11.2017

Concerning: Modifications 1" Rotary control valves

Dear Customer,

In our continuous efforts to further improve the quality of our products, we are implementing the following modification on our 1" Rotary control valves that are ordered separately:

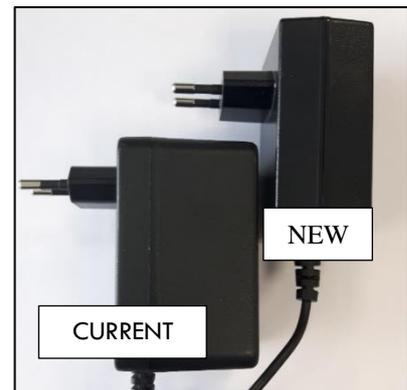
1. Electronic controller:

We have developed a brand new PCB platform that combines state-of-the-art design and components (like ARM processors). The new PCB platform offers us a lot of possibilities for future upgrades with regards to hardware (different displays, addition of WiFi, larger memory, more outputs, etc), as well as software. This changes has already been implemented for our residential products with a diaphragm control valve.

With the implementation of this upgraded PCB, we have added the following features to the electronic controller:

1. **Buzzer:** the new PCB has an integrated buzzer, that is used as:
 - an audible alarm for the salt level reminder and maintenance reminder functions;
 - a sound-signal whenever a button is pressed.The buzzer function can be enabled or disabled by the end-user in the Basic Settings programming mode.
2. **2nd line on display:** on the 2nd line of the display, the total volume of water used since start-up is displayed.
3. **SuperCap for power backup:** the larger SuperCap keeps the clock running in the background for 15-20 hours in case of a power failure.
4. **Auxiliary relay/contact;** all valves will be standard equipped with 2 auxiliary relays/contacts; their function can be programmed independently; the output voltage is 24 VDC, max. 500mA
5. **Transformer:** because of pending Energy Efficiency regulations we are switching from the current AC/AC transformer to a new AC/DC transformer. Advantages are:
 - higher efficiency / lower energy loss (< 0.5 watt)
 - light weight;
 - more compact.

Note: The connection plug on the outlet cord of the new AC/DC transformer is SMALLER than on the current AC/AC transformer, although it is similar model. This is done intentionally to avoid use of an incorrect transformer.



Transformer	Part Number Transformer	
	AC/AC (current version)	AC/DC (new version)
EuroT plug	28/298/11	74312
UK plug	28/298/18	74313

6. **Printed Circuit Board:** the PCB is modified to operate on DC current.

Note: This also implicates that the auxiliary contacts now output 24V DC instead of 24V AC; please keep this in mind when connecting any external devices to the auxiliary contact(s).

Note: The PCB will not get damaged when an incorrect transformer (AC instead of DC, and vice versa) is connected; it will simply not function.

Important remarks:

1. the new PCB (24 VDC) is **NOT** interchangeable with the current PCB (24 VAC); therefore new Part Number have been created.
2. the user interface of the software itself doesn't change at all.
3. because the auxiliary relay/contact is now a standard feature (even 2x aux. relays/contacts!) and no longer an option, it is no longer necessary to add the suffix '.../AUX' to the Part Number if you want to have an auxiliary contact.

4. The AUX connections changed, so you will need an additional cable with '[PN 74372: Cable AUX contact](#)' to easily establish this connection.



Image 1: Old AUX connection

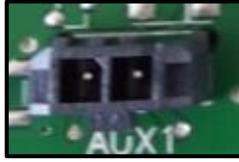


Image 2: New AUX connection



Image 3: Cables for new AUX contact

Below you can find an overview of the new 24 VDC PCB's:

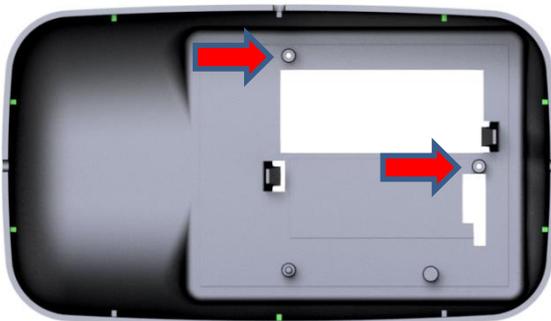
Valve configuration:	Part Number PCB	
	24 VAC (current version)	24 VDC (new version)
2400TS	72628	74355
2400VS	72627	74354
2400TF	72629	74356

2. Drain connection

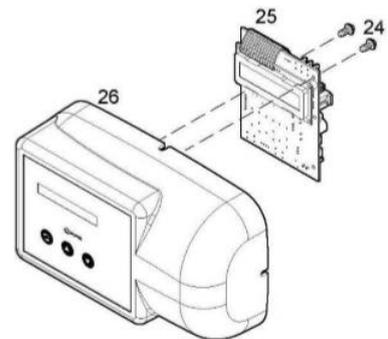
The current 13 mm drain elbow connection will be replaced by a larger 19 mm drain elbow connection; this allows the use of a larger 19 mm drain hose; the result of these changes is a significant increase in backwash flow rate (+15% at same pressure drop). Especially for large filter systems that may occasionally run at lower inlet pressure (a typical problem on private wells with booster pumps) this will provide an improvement of the backwash.

3. Timer cover:

The timer cover has been modified by adding 2 extra alignment pins for the PCB; as a consequence, the PCB can now simply be 'snap-fitted' in place, without the need of any fixation screws:



New version with 'snap fit' fixation



Current version with fixation screws

This upgrade is introduced in our production as of 15 November 2017. So all valves ordered separately with a production date as of 15/11/2017 are equipped with the new electronic controller and all above mentioned modifications.

Please do not hesitate to contact us if you need any additional information on this topic.

Sofie Redig
Technical Support