

May 19, 2021

Sub: Circular letter No: 010

Page 1 of 2

Dear partners!

Some of our clients ask us if the CRYSTAL station is able to dose the reagent not with one, but with several dosing pumps.

We inform you that our CRYSTAL M station can dose the reagent with several pumps. Synchronous operation of several pumps for one reagent is achieved by splitting the control signal for dosing, as shown in Fig. 1.

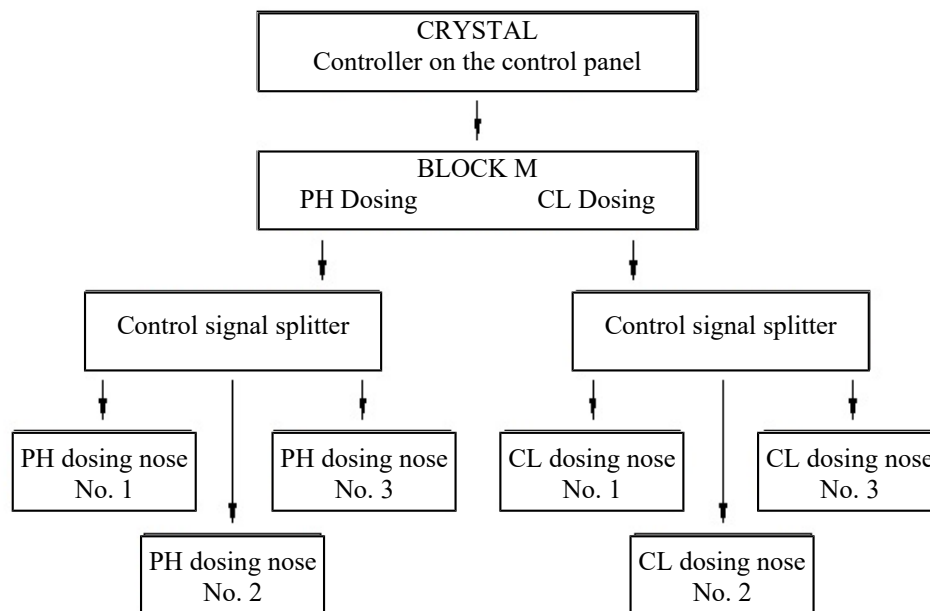


Fig. 1 - Splitting of the control signal for several dosing pumps.

The use of several pumps for one reagent has the following limitations:

1. NO MORE THAN 5 DOSING PUMPS should be used for each type of reagent.
2. Dosing pumps must have a PULSE type of control signal. The function is not available for other types of control (4-20 mA current or 0-10 V voltage).
3. The pump control unit (UNIT M) to activate the function must be UPDATED before the sale, therefore it is necessary to inform us IN ADVANCE about the use of several pumps.
4. To split the control signal from UNIT M to dosing pumps, it is recommended to purchase ready-made splitter boxes from us (art. 50-70-006-00 for 5 pumps and art. 50-70-004-00 for 2- x pumps).
5. When turning on the CRYSTAL station for the first time and performing the initial setup (menu item "Settings/System/Dosing pumps"), it is necessary to indicate the following in the "Prod.max, l/h:" field:
  - in the "Pump 1 / PH:" window indicate the total factory capacity of the dosing pumps for the PH reagent;
  - in the "Pump 2 / CL:" window indicate the total factory capacity of the dosing pumps for the CL reagent.

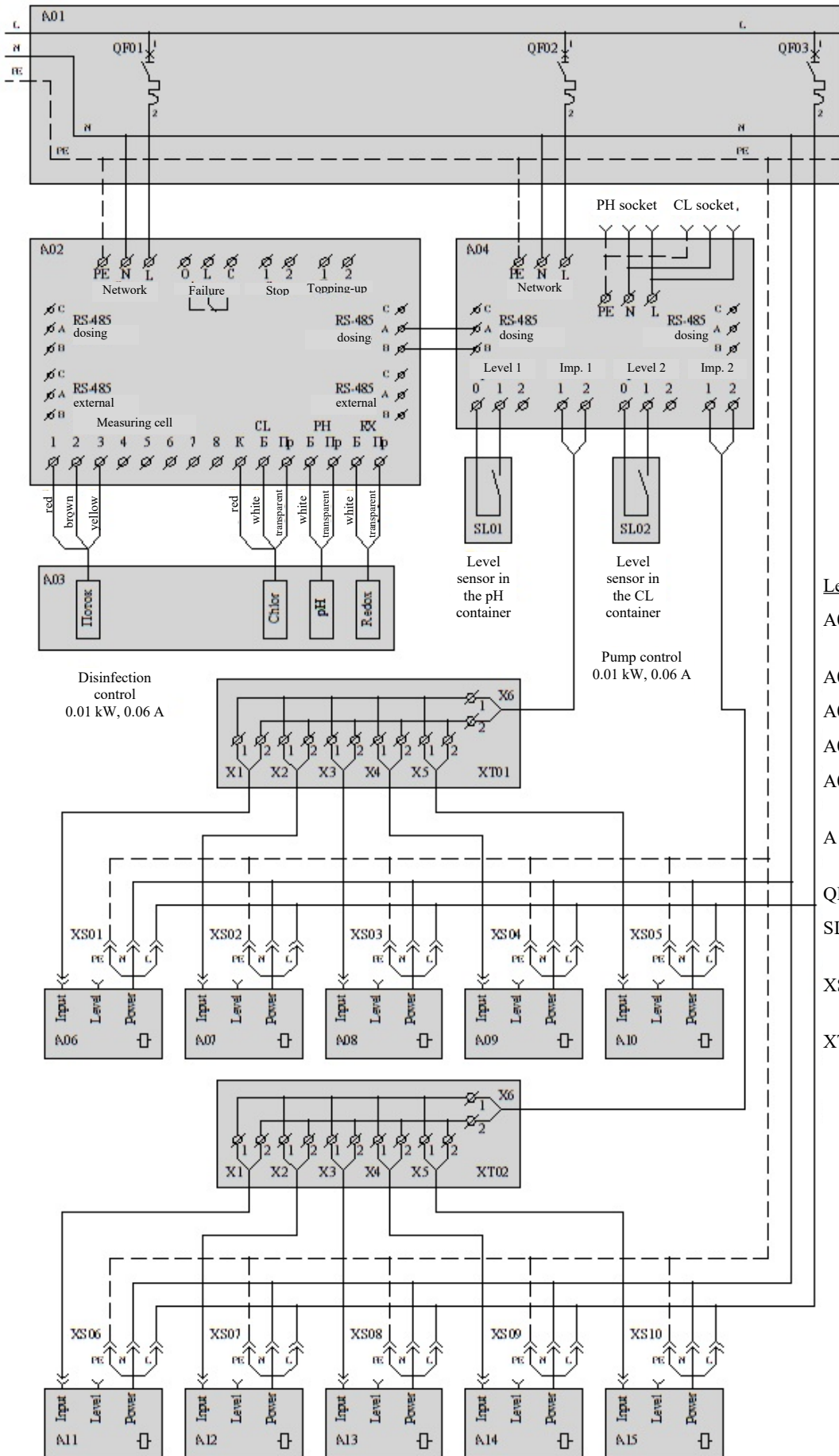
The attached Fig. 2 shows an example of electrical connections in the CRYSTALL M station when five PH dosing pumps and five CL dosing pumps are connected to it.

Best regards, DARIN

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Page 2 of 2



Legend:

- A01 - Input distribution device (fragment)
- A02 - CRYSTAL controller
- A03 - Measuring cell
- A04 - BLOCK M (modified)
- A06...A10 - Dosing pump for PH reagent
- A11.. A15 - Dosing pump for CL reagent
- QF01...QF03 - Circuit breaker 6 A
- SL01... L02 - Suction fittings with level sensor
- XS01...XS10 - 220 V socket for dosing pumps
- XT01...XT02 - Splitter for control signal.

Fig. 2 - Electrical diagram of connection to the CRYSTAL M system of five pumps for PH-reagent and five pumps for CL-reagent.