

Softmaster[®] ROE 2 / S5

Additional manual for option S5

Microprocessor controllers for reverse osmosis plants



General instructions

This supplementary sheet is an addition to the Softmaster® ROE 2 operating instructions. It only contains the additional functions or modifications of the special version Softmaster® ROE 2 S5. This supplementary sheet is only valid in combination with the standard Softmaster® ROE 2 operating instructions.

When using the remote maintenance software "Heyl Remote Control", please observe that the software only covers the standard functions of the ROE 2.

Description

The processing and programming of the low water message has been modified according to the following description. Please refer to the Softmaster® ROE 2 operating instructions for further information.

LP Low water pressure (terminals "LP" / 33, 34)

Connection for volt-free pressure switch

Install a pressure switch in front of the pump in order to protect the pressure pump. A serial or parallel connection of two pressure switches is also possible. If the pressure switch switches, the plant is switched off after a programmable test time. The fault is displayed with the red LED "Error message" and on the display. A continuous alarm occurs at output "Alarm" and an entry in the error list takes place.

Only for controller operation with the "RUN/STOP" key:

Function	Type of contact	Test time	Action
Pressure monitoring in front of the pump	programmable normally closed/ normally open	programmable 01 - 99 seconds	programmable: - Test time 1 - 99 sec Not programmable: - Switch off the plant - Continuous alarm after switch off - Entry in the error list

Only for controller operation with level transmitter:

Function	Type of contact	Test time	Action
Pressure monitoring in front of the pump	programmable normally closed/ normally open	programmable 01 - 99 seconds	Programmable: - test time 1 bis 99 sec - Up to 9 restarts - Repeat interval 1–99 min - Immediate alarm for first message Not programmable: - System switch off - Continuous alarm after switch off - Entry in the error list

It is possible to program the reaction of the controller during low water. Determine how often the plant is to be restarted. A restart occurs between 1 and 99 minutes depending on the programming. If the water is still too low, the plant is once again switched off after the test time and until the number of restarts has been reached. If you wish to generate an error message for the first low water message irrespective of the number of restarts attempts, select "Immediate alarm" in the last menu option. This does not stop the further restart attempts.

The following options activate output alarm "AL":

- the maximum number of restarts has been reached
- or
- "Immediate alarm" in the menu is setting

An entry in the error list occurs in both cases.

Programming

Function Low water pressure, Input low water pressure monitoring LP

"M" → BASIC PROGRAM → Fct.Low w.press

Normally closed/normally open

Program the desired effect of the connected contact for low pressure monitoring, normally closed or normally open.

Delay LP

Delay time in seconds after which an alarm is triggered and/or the plant should be switched off if the water/pressure is low.

Restart

Program how often the plant is to be switched on again after the switch off caused by low water pressure.

The plant can be re-started up to 9 times until the final switch off.

Interval

Select a restart interval of between 1 and 99 minutes.

Immediate alarm

Select "Immediate alarm" if you wish to generate an error message for the first low water message irrespective of the number of restart attempts.

FCT.LOW W.PRESS	
norm. closed	-
norm. open	✓
Delay LP	5s
Restart	3x
Interval	10m
Immed. alarm	-

Error message "Low water pressure"

Low water pressure 16.8µS/cm 18°C

The pressure switch in front of the pressure pump for the dry-running protection has triggered.

The plant has been switched off after the programmed delay time (Delay LP). Restart the plant with the "RUN/STOP" key. If water is still low, the plant is switched off again after the delay time.

If the system has been switched off via the dry-run switch, automatic control of storage tank refilling results in a system restart after a programmable time from period of between 1 and 99 minutes. This time period can be programmed under "Programming/Function low water pressure".

Program the number of restart attempts after low water pressure under "Switch on" in menu "Funct. low water pressure".

Confirm the fault display with the "Alarm" key.

The error display is only deleted after the fault has been eliminated.