



EQUIPMENT FOR WATER TREATMENT SYSTEMS

RGS3000

Controller for Reverse Osmose



■ Description

The unit type RGS3000 is universal applicable for automatic monitoring and control of reverse osmosis plants. There are seven possible stages : "Stand by", "Production", "Rinse after production", "Rinse during production", "Rinse during standby", "Maintenance " and "Regeneration" (wait for regeneration of a softner). This unit can monitor conductivity, temperature and several inputs e.g. level switches, low pressure switch, motor security switch, etc.. Adaptable to user specific requirements by built-in programmable options. The programmed configuration will be stored into non volatile memory and therefore not be affected by power loss.

■ Features

User Interface

- Monochrome graphic LCD display 128x64
- Control through four keys
- Five LEDs for process and alarm indication
- Language : English, French, German and Dutch

Inputs

- RGS3x00 : 4x Input for potential free switch
- RGS3x01 : 5x Input for potential free switch
- RGS3x12 : 5x Input for potential free switch
- 1x Conductivity meter
- 1x Temperature meter

Conductivity meter

- Automatic range switching
- Cell constants from 0,01 - 10,00 cm^{-1}
- Range from 0,5 - 100.000 $\mu\text{S}/\text{cm}$ depending on used cell
- Manual or automatic temperature compensation
- Capacitive cell

Temperature meter

- Range from 0 - 94°C (Δ 32 - 201 °F)
- PT1000

Outputs

- 1x Relay output (powered)
- RGS3x00: 2x Relay output (custom configurable between powered and dry contact)
- RGS3x01: 2x Relay output (custom configurable between powered and dry contact)
- RGS3x12: 4x Relay output (custom configurable between powered and dry contact)

Memory

- Last twenty alarm messages will be stored.
- Real time clock with battery
- Programming will be stored and not be affected by power loss.

SD Card

- Software updates
- Programming (Save and Load)
- Data log

Communication (available in type RGS3x12)

- RS485 (data log, formats : XML or CSV)
- Webservice
 - visualisation (schematic)
 - configuration
 - download log files on SD Card
- Email messages (alarm)

Enclosure

- Suitable for wall mounting, panel mounting and plate mounting
- IP65

Power supply

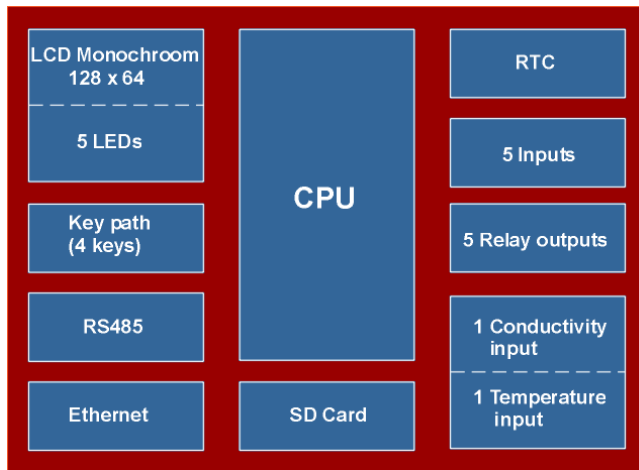
- 24 VAC input / 24 VAC output
- 115 VAC input / 115 VAC output
- 230 VAC input / 230 VAC output
- 115 VAC input / 24 VAC output
- 230 VAC input / 24 VAC output
- 240 VAC input / 24 VAC output



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■ Block diagram



RGS3x12

■ Function Table

The relay outputs and digital inputs are free programmable for the following functions :

Relay Outputs	Digital Inputs		
Inlet valve	Stop		
High pressure pump	High level switch		
Concentrate valve	Low level switch		
Permeate valve	Exceeded water pressure		
Dosing pump	Low water pressure		
Booster pump	Concentrate flow switch		
Alarm	Motor security switch		
Additional program	Remote alarm reset		
	Regeneration input		
	Pressure for membrane		
	Pressure after membrane		
	Pressure permeate		
	Level switch dosing tank		

■ Ordering Information

RGS3x00 : RGS3000 with SD Card functions, 4 digital inputs, 3 relay outputs, 1 conductivity meter and 1 temperature meter.

RGS3x01 : RGS3000 with SD Card functions, 5 digital inputs, 5 relay outputs, 1 conductivity meter and 1 temperature meter.

RGS3x12 : RGS3000 with SD Card functions, 5 digital inputs, 5 relay outputs, 1 conductivity meter and 1 temperature meter, ethernet (internet / email) and RS485.

x :
 0 = 24 VAC / 24 VAC
 1 = 115 VAC / 115 VAC
 2 = 230 VAC / 230 VAC
 3 = 115 VAC / 24 VAC
 4 = 230 VAC / 24 VAC
 5 = 240 VAC / 24 VAC

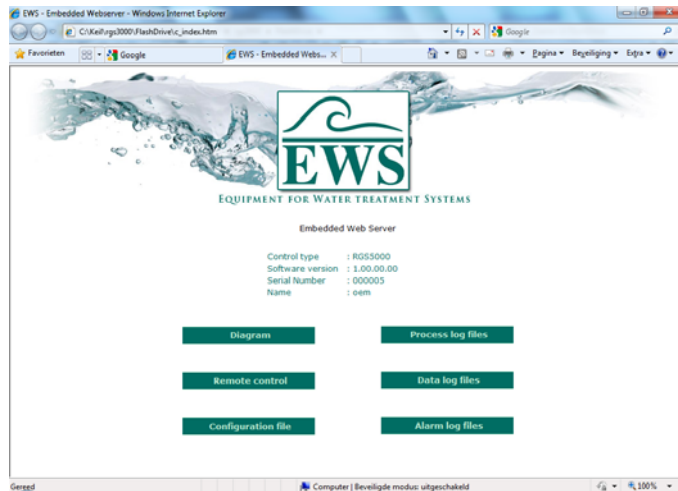
e.g. RGS3212 RGS3000 with 230VAC power supply and 230VAC power output for relay outputs with SD Card functions, 5 digital inputs, 5 relay outputs, 1 conductivity meter and 1 temperature meter, ethernet (internet / email) and RS485.



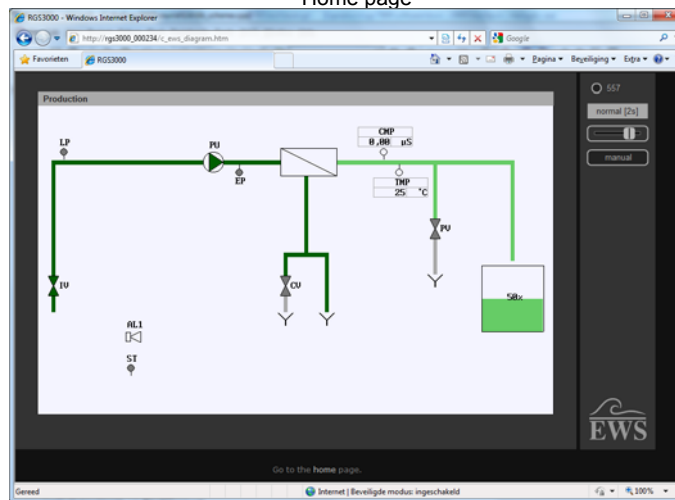
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■ Web browser screen shots



Home page



Diagram



Remote Control