



EQUIPMENT FOR WATER TREATMENT SYSTEMS

# OS3050 / OS3051

## Controllers for Reverse Osmose



OS3050



OS3051

### ■ Description

The unit type OS3050 (OS3051) is universal applicable for automatic monitoring and control of reverse osmosis plants. There are five possible stages : "Stand by", "Production", "Rinse after production", "Rinse during standby" and "Maintenance". This unit can monitor conductivity, temperature (optional) 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 LCD display (16x2 characters)
- Control through six keys
- Ten LEDs for process and alarm indication
- Language : English, French, German, Dutch, Spanish and Italian

#### Inputs

- 7x Input for potential free switch
  - 1x Conductivity meter
- Optional circuit board for:
- 2<sup>nd</sup> Conductivity meter + 1x Temperature meter

#### Conductivity meter

- Automatic range switching
- Cell constants from 0,01 - 10,00 cm<sup>-1</sup>
- Range from 0,5 - 100.000 µS/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

- 4x Relay output (powered)
  - 3x Relay output (dry contact)
- Optional circuit board for:
- 2x Analogue output (0-20mA) for recorder

#### Memory

- Programming will be stored and not be affected by power loss.

#### Enclosure

- OS3050 : Suitable for wall mounting, IP65
- OS3051 : Suitable for panel mounting, IP42

#### Power supply

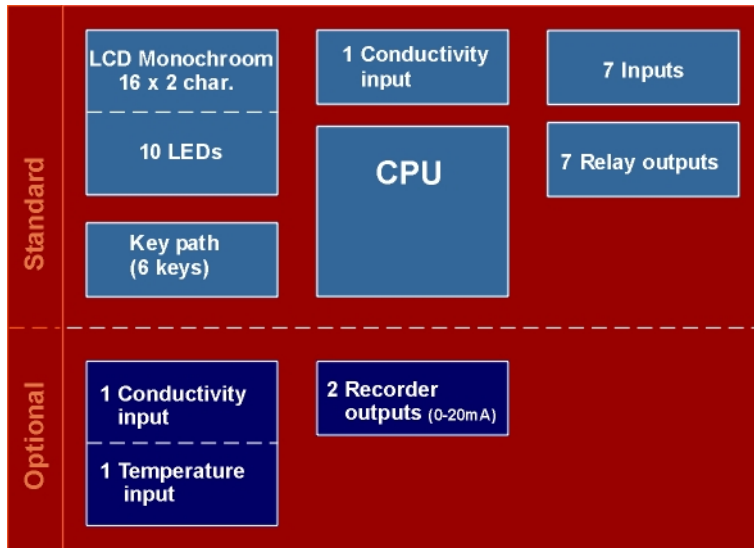
- 24 VAC input / 24 VAC output
- 115 VAC input / 115 VAC output
- 230 VAC input / 230 VAC output



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## ■ Block diagram



## ■ Function Table

The relay outputs and digital inputs are related to 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		
Alarm	Concentrate flow switch		
Malfunction	Motor security switch		
	Remote alarm reset		

## ■ Ordering Information

### Wall mounted :

- OS3050/1 with 1 conductivity meter
- OS3050/2 with 2 conductivity meter and 1 temperature input
- OS3050/1/I with 1 conductivity meter and 2 recorder outputs
- OS3050/2/I with 2 conductivity meter and 1 temperature input and 2 recorder outputs

### Panel mounted :

- OS3051/1 with 1 conductivity meter
- OS3051/2 with 2 conductivity meter and 1 temperature input
- OS3051/1/I with 1 conductivity meter and 2 recorder outputs
- OS3051/2/I with 2 conductivity meter and 1 temperature input and 2 recorder outputs

Add power supply to codes as mentioned above :

- 24V 24 VAC / 24 VAC
- 115V 115 VAC / 115 VAC
- 230V 230 VAC / 230 VAC