

-Data Sheet—

Series 100

Reverse Osmosis Controller



Key Features

- Visual status LED
- TDS monitor w/ sensor (range 0-1000 PPM)
- Three-digit LED display
- Jumper-selectable flush type
- Jumper-selectable switch inputs
- TDS calibration and setpoint adjustment
- Quick disconnect high voltage terminals
- Panel mountable enclosure

Application

The Advantage Controls Series 100 Microprocessor Controller is an ideal solution for the monitoring and control of light commercial reverse osmosis units. This economical controller provides relays for the RO pump, inlet solenoid valve, and membrane flush solenoid valve.

The dry contact switch inputs monitor storage tank level, low and high pressure switch signal, and system lockout for pretreatment backwash or regeneration for on/off operation. All inputs and outputs are controlled with time delays for proper operation.

Additionally, the TDS value incorporates a field-adjustable setpoint for water quality threshold, allowing the unit to produce a system warning if the water quality threshold is exceeded.



Build a Model

Model

Base Control Selection -

\$100 = Inlet solenoid, flush, pressure

switch, and TDS

S101 = Inlet solenoid, flush, pressure switch, and wiring harness kit

Controller Supply Voltage -

1 = 120 VAC

2 = 220 VAC

3 = 120 VAC with UL labeling

4 = 220 VAC with UL labeling

Permeate Conductivity Scale -

X = No conductivity

 $\mathbf{A} = 0.50 \text{ PPM}$

B = 0.100 PPM

C = 0.250 PPM

D = 0.500 PPM

E = 0-1,000 PPM

 $J = 0.50 \, \text{uS}$

K = 0-100 uS

 $L = 0.250 \, \text{uS}$

 $M = 0.500 \, uS$

N = 0-1,000 uS

Enclosure -

 $A = 8.25" \times 5" \times 3"$

 $\mathbf{B} = 8" \times 6" \times 4"$ poly

 $X = 10" \times 8" \times 6"$ poly

 $4 = 12" \times 10" \times 6"$ poly

9 = Enclosure defined in Motor Control model number, or no enclosure

Specifications

Power

120 VAC or 240 VAC - 15+10%, 50/60Hz

Enclosure

8.25"x5"x3" ABS plastic

Environment

-22°F (-30°C) to 140°F (60°C), 0-95%RH, Non-condensing

Display

3-digit red LED

Front Panel

Overlay with LED window, status LED, water quality LED, power and setpoint switches

Switch Inputs, Dry Contact:

- Pressure fault
- Pretreat lockout
- Tank full

Relay Outputs

- Inlet solenoid valve relay: 120/240 VAC 5 amp maximum
- RO pump relay: 120/240 VAC 1HP, single phase maximum
- Flush solenoid valve relay: 120/240 VAC 5 amp maximum

Relays supply same output voltage as board power (120 or 240 VAC) 20A maximum total load for all outputs.