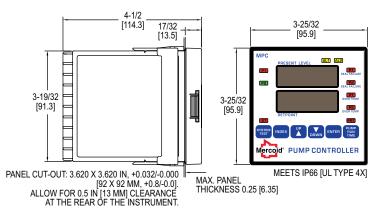


## PUMP CONTROLLER

# One or Two Pump Control with Built-In Alternation, Over Temperature Protection and Seal Failure Monitoring





The Series MPC Pump Controller provides versatile level control in a standard 1/4 DIN package. Designed for use with almost any style level transmitter the unit displays the present level and main set point value. Incorporated in the MPC is programmable level differential for on/off control of one or two pumps, valves, or other devices through two SPDT relays.

#### **BENEFITS/FEATURES**

- · Selectable pump alternation when used with two pumps to minimize pump wear, with alternation "on" a seal failure or over temperature condition will force the non-failed pump to lead status and stop alternation
- · Alarms can be programmed for output indication of pump seal failure or over temperature
- · Selectable time delay, for pump two, on power up to prevent both pumps from starting at the same time
- · In the event of power loss, upon regaining power a time delay of up to 60 seconds can be selected to prevent excessively large current draw
- · Test system function simulates the process input to ensure the pumps are operating or to test programming
- · User-friendly programming menu

### **APPLICATIONS**

- · Water and wastewater
- · Sump and sludge pits, clarifiers, digesters
- · Chemical storage tanks
- · Oil tanks
- · Reservoirs

SPECIFICATIONS
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Inputs: 4 (or 0)-20 mA DC or 2 (or 0)-10 VDC selectable. Input Impedance: Current = 10  $\Omega$ ; Voltage = 100 K  $\Omega$ .

Output Ratings: Control relays: SPDT, rated 10 A @ 240 VAC res., 1/4 hp @ 120 VAC, 1/3 hp @ 240 VAC; Alarm relays: SPST, 3 A @ 240 VAC res., 1/10 hp @ 120

Control Type: On/off, reverse (pump out) or direct (pump in) acting. Output Signal: 4-20 mA current process input retransmission.

Power Requirements: 100-240 VAC nominal, +10%-15%, 50 to 400 Hz, single

phase; 132-240 VDC nominal, +10%-15%. Enclosure Rating: NEMA 4X (IP66) front panel face.

Power Consumption: 7.5 VA max. Accuracy: ±0.25% of span, ±1 least significant digit. Display: Two 4 digit, 7 segment 0.56" high LED's.

Display Resolution: 1 count.

Memory Backup: Nonvolatile memory (no batteries required).

Serial Communications: Optional RS-232 or RS-485 with Modbus® protocol. Ambient Operating Temperature/RH: 14 to 131°F (-10 to 55°C)/0 to 90% up to 104°F (40°C) non-condensing, 10 to 50% at 131°F (55°C) non-condensing.

Front Panel Rating: Meets UL Type 4X (IP66).

Loop Power Supply (Isolated): 24 VDC @ 50 mA, regulated.

Seal Failure (Moisture Sensor): Power: 2.5 VDC; Search current: 3 micro amps;

Resolution: 10K to 500K  $\Omega$  in 10K  $\Omega$  steps.

Weight: 16 oz (454 g). Compliance: cULus.

MODEL	CHART
Model	Description
MPC	Pump controller

OPTIONS	
To order add suffix:	Description
-232	RS-232 Modbus® RTU serial communications
-485	RS-485 Modbus® RTU serial communications
-RV	2-20 VDC voltage retransmission

### **ACCESSORIES**

Weatherproof Enclosures, NEMA 4X (IP66).0



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Compatible Level Transmitters: See page 328 (Series SBLT2) See page 330 (Series PBLT2) Additional Digital Control Panel Meters: See page 338 (Series APM/MPM/PPM) • See page 339 (Series A-900 & A-901)