Microprocessor-Based pH Controller with Automatic Temperature Compensation

PHCN-37 Series

- Microprocessor-Based Versatility
- High and Low Alarm Setpoints
- Scalable 4 to 20 mA, 0 to 20 mA or 0 to 10V Output
- Compact Panel Design

This microprocessor-based family of pH panel mounted controller is designed for a wide variety of environmental monitoring applications. The units feature automatic or manual temperature compensation of pH, two 5 A mechanical relays and a choice of a scalable 4 to 20 mA, or 0 to 20 mA control or recording output or a 0 to 10V output. For ease of operation all calibration and parameter setpoints are selectable through the front keypad. The PHCN-37 can be interfaced with a variety of pH electrodes.

Specifications

- Resolution: 0.1, 1 mV
- Accuracy: 0.1 mV @ 25°C
- Decimal Point: 2 position auto ranging pH and Temperature
- Range: 0 to 14.00 pH; 0 to 100°C (32 to 212°F)
- Resolution: 0.01 pH, 0.1°C
- Calibration pH: 2 or 3 point
- Accuracy: ±0.03 pH; ±0.5°C

Common Specifications

- Display: 4-digit, LED, 13.7 mm (0.54”)
- Relays: 2 From "C" on/off relays. Configurable for latched and unlatched by software.
  - Max Current: 5 AMPS, Resistive Load*
  - Max Voltage: 250 V AC or 28 V DC

*Important Note: For inductive loads not to exceed maximum voltage/current relay specifications, a proper TVS protection diode needs to be used externally across Wiper and NC/NO contacts of relays.

- Output: 4 to 20 mA, 0 to 20 mA or 0 to 10V (scalable) software selectable
- Input Impedance: >10^12 Ω

Temperature Compensation:
- Manual or Automatic, 0 to 100°C using Pt 100 Ω or Pt 1000 Ω RTD Connectors: pH/ORP-BNC; Temperature -terminal strip
- Power: 115 Vac, 230 Vac; 10 to 32 Vdc

Panel Cutout: ⅛ DIN, 45 H x 92 mm W (1.772 x 3.622”)
Dimensions: 48 H x 96 W x 177 mm D (1.89 x 3.78 x 7.00”)
Weight: 580 g (1.27 lb)

To Order

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCN-37</td>
<td>Microprocessor-based pH controller. 115 VAC power.</td>
</tr>
<tr>
<td>PHCN-37-230</td>
<td>Microprocessor-based pH controller. 230 VAC power.</td>
</tr>
<tr>
<td>PHCN-37-DC10/32</td>
<td>Microprocessor-based pH controller. 10/32 VDC power.</td>
</tr>
</tbody>
</table>

Comes complete with operator's manual.
To order with isolated analog output, add suffix “-AI” to model number for additional cost.
To order with 10 to 32 Vdc power, add suffix “-DC10/32” to model number for additional cost.

Ordering Examples: PHCN-37 microprocessor-based pH controller.