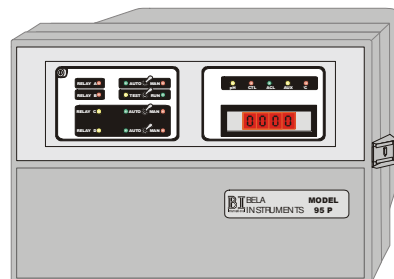


Model BI 95 pH and ORP Microprocessor (16 bit) based controller

Features:

- Multiple measurements. (pH/ORP, temperature)
Accepts conventional combinational pH or ORP sensor
Accepts Pt 1000 RTD, Pt 100 RTD, or NTC 300 ohm thermistor temperature compensators
Adaptive gain PID
Remote set point
User friendly configuration
Flow signal inputs can be linearised and used for feed forward and transit time calculations
Two DC voltage and four DC mA output signals are standard
PD & PID controllers with uni-directional, bi-directional or pulsed outputs
Relay options with and without watchdog and repeat-cycle timers
Unique transit time function compensates for process dead time



Specifications:

Display.....1/2" (13 mm) high four character LED 4 digit

Table with 6 columns: Description, Range, Description, Range, Description, Range. It lists various function inputs (F#1 to F#9) and their corresponding ranges for pH, temperature, and flow measurements.

Operational:

- Sensitivity0.01 pH 0.1°C
Stability0.01 pH/day, non-cumulative 0.05°C/day, non-cumulative
Non-Linearity 0.01 pH (electrical) 0.1 °C
Repeatability 0.01 pH 0.05°C
Temperature Drift Input to 4-20 mA output
Span: 90 ppm/°C
Zero: 60 ppm/°C
Display Alphanumeric, 1/2" high four character LED
Response Time 2 seconds
Ambient Conditions -30 to + 50°C; 0-100% relative humidity
Relay Function (optional):
Control and Alarm Setpoints Keyboard selectable, 0.00-14.00 pH
Control Deadband Keyboard selectable, 0.05-7.00 pH units
Indicators LED lights whenever instrument's control state calls for relay
Operating Modes Auto, off and manual (switch selectable on two relays). LED's indicate auto and manual status
Output Signal 115/230 VAC, 3A maximum rating
Note - Relays energize on increasing or decreasing reading, operator selectable.
Temperature Compensation Automatic, 0-100°C (32-212°F)
Sensor-to-Analyser Distance 3000 feet maximum

Electrical:

- Power 115 VAC ± 15%, 50/60 Hz, less than 15 VA
230 VAC optional, connections via terminal strip

Analog Inputs:

- Sensor pH signal (mV DC)
Temperature signal (thermistor, 300 Ω @ 25°C)
Auxiliary Input Transducer signal (4-20 mA, 200 ohm impedance)
Switch Closure input On/off dry contact

Analog Outputs

- Two voltage and four current signals (isolated)
0-5 VDC, 50 k ohms minimum load or 0-1 mA, 100 ohms maximum load
1-5 VDC, 50 k ohms minimum load or 0.2-1.0 mA, 100 ohms maximum load
0.20 mA, 500 ohms maximum load or 4-20 mA, 500 ohms maximum load

Note: Inputs are isolated from outputs and both are isolated from ground and the incoming power, but inputs are not isolated from each other nor are outputs isolated from each other.

Range Expand - The pH analog output signal can be made to represent a selected segment of the 0-14 pH range. This segment cannot be smaller than 0.5 pH units and may be positioned anywhere within the full scale range.

- Controller Outputs: Current One or two signals (isolated)
4-20 mA, 500 ohms, maximum load (0-20 mA optional, user selectable)

% Cycle One or two signals
 115/230 VAC, 3A maximum rating
 Pulsed One signal 115/230 VAC, 3A maximum rating
 30 to 600 pulses per minute

Note: Three-mode (P.I.D.) controllers have transit time feature to compensate for process dead-time. Transit time is adjustable from 0 to 16.6 minutes.

Enclosure NEMA 4X, styrene structural foam (with flame retardant additive), panel/surface/pipe mount
 Net Weight 12 lbs. (5.5 kg) maximum

Ordering Information

MODEL NUMBER	
95 P/R Microprocessor-based pH/ORP controller in NEMA 4X styrene structural foam (with flame retardant additive) enclosure including two stainless steel mounting brackets.	
LINE VOLTAGE	
1 115 volts, 50/60 Hz	2 230 volts, 50/60 Hz
CONTROLLERS	
A None	
B Three-mode, PID, Uni-directional current output	
C Three-mode, PID, bi-directional current output	
RELAYS WITH AUTO/OFF/MANUAL SWITCHES	
A None B Two control relays	
N Standard instrument K Special instrument	

Product Number

Choose one from each category.

Enclosure Dimensions & Mounting

Inches (mm)

