

Strantrol® 886 pH Control System

SIEMENS

Description

The Strantrol® 886 pH control system significantly improves pH monitoring and control in industrial process and cooling water applications. A combination of innovative component design - including an industrial grade sensor and a unique sample flowcell, coupled with industry leading service and support - establish Strantrol® systems as the benchmark for industrial pH control.

Each unit is equipped with three relays that can be configured in any combination for control, alarm or sensor wash.

In a typical installation, the first relay is set to On/Off or Time-Based Proportional control. Time-Based Proportional control enables simple chemical feeders to mimic the accuracy of more complex PID control.

The second relay can be configured to control a second feeder at an alternative setpoint, or to perform an automatic sensor wash function.

The third relay can be set as a master alarm reporting high, low, or overfeed conditions.

In addition to the security provided by an external interrupt, one of the relays may be configured "disabled" as normally open or closed. This provides an "alarm on power failure only" mode, eliminating enunciation of less critical alarms.

The unit's (4) 4-20 mA outputs may be used for direct data recording or transmitting data to a computer or distributed control system PID control of pH or temperature.

Additionally, the Strantrol® 886 control system provides two digital inputs: one to accept a signal from a timer and/or sample stream flow switch, and another triggered input to accept a signal from a contacting water meter.



Benefits of the Strantrol® 886 Control System Include:

- Accurate and Reliable pH Monitoring and Control
- Optional Sensor Wash and Flow Switch for Peak Performance and Safety
- User-Programmable Feed Modes to Meet Application Needs

Inputs

Sensor input: Isolated pH sensor
 Range: 1 to 14 pH units
 Resolution: .02 pH units
 Voltage: 120/240 VAC, 50/60 Hz
 Single phase: 12 amps
 Temperature Sensor: 100 ohms RTD (optional)

Digital Inputs: Contact Closure
 (Totalizer & ChemFeed trigger)
 Sample Flow Switch
 (Blowdown & ChemFeed enable)

Outputs

Recorder output: 4 Isolated fully rangeable 4-20mA up to 750 ohms with record or control capabilities

Resolution $\pm .5\%$

Three programmable relays for chemical control, alarm, sensor wash, or triggered timer function.

120/240 VAC, 50/60 Hz

Two 5 amp, one 1 amp

Ratings

ETL approved to UL® Standard 508A
 CE approved for heavy industrial use
 Voltage: 120/250 VAC, 50/60 Hz
 Total Current: 12 amps

Enclosure

Rating: NEMA 4X (IP 66)
 Dimensions: (H x W x D)
 7.1" x 7.2" x 4.4" in
 (180 x 182 x 111 mm)
 Weight: 2.1 pounds (0.95 kg)
 Material: UL® Listed Polycarbonate

Sample Flowcell

Design ensures sensor remains wetted at all times. Flowcell comes complete with fittings, including two isolation valves and a sample tap. Flowcell cover is clear permitting on-line inspection of sensor tip.

Material: Schedule 80 PVC
 Pressure: Tested to 100 psig (6.8 bar)
 Temperature: 120°F (48.8°C) (Max)
 Cover: Clear Polycarbonate

User Interface

Keypad: 7 pressure sensitive keys for setting calibration, control setpoint, alarms, 4-20mA, triggered timer, totalizer, and sensor clean values. UP, DOWN, PREV, and ENTER keys for scrolling through menu and changing settings. CAL button for single point calibration. SETPOINT for changing the control value. MENU for more detailed configuration.

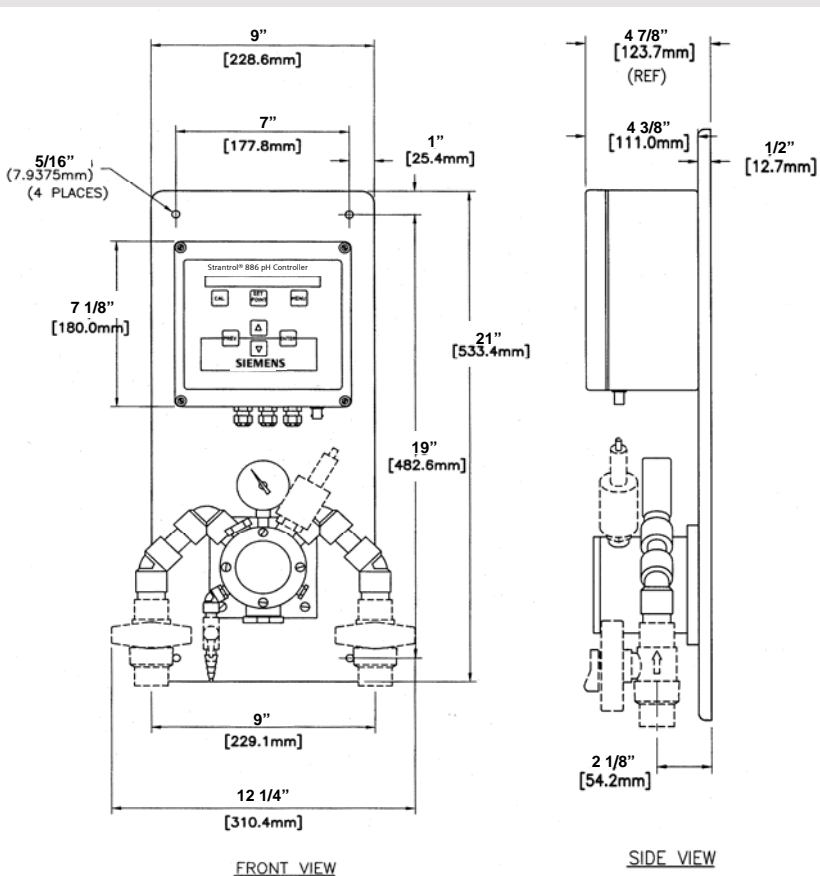
Options

Automatic sensor washing:

Recommended for high TDS applications such as recirculated cooling water. On-line sensor washing is available by requesting the optional diaphragm pump and tank package (part no. 7149002).

Temperature Sensor: An optional 100 ohm RTD temperature sensor may be used as an input for temperature compensation, control or alarm indication.

Sample flow switch: The optional sample flow switch assures that when the sample stream is interrupted for any reason, the feed of chemicals is halted. This is a valuable safety device as well as a way to prevent overfeeding of chemical due to a trapped "dead" sample. Alternatively, enable input may be selected. This interlocks the chemical feed outputs with another device such as a slug-feed timer or control room "kill" switch.



Strantronic and High Resolution Redox are trademarks of Siemens, its subsidiaries or affiliates. UL is a registered trademark of Underwriters Laboratories, Inc.

The information provided in this brochure contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of the contract.

Siemens
 Water Technologies
 595 Industrial Drive
 Bradley, IL 60915, USA
 800.809.0971 phone
 www.usfilter.com
 stranco.water@siemens.com

Literature No. ST-886-DS-0806
 Subject to change without notice.
 ©2006 Siemens Water Technologies Corp.