Orenco® SYSTEMS

Technical Data Sheet

S-Series Simplex Control Panels

Applications

Orenco® S-Series Simplex Control Panels control single pumps in effluent sewer (STEP) systems, onsite septic systems, and for pump control into conventional gravity sewer systems.

Orenco S-Series Simplex Control Panel (S1ETMCT shown)

General

Orenco® S-Series Simplex Control Panels are electromechanical panels for controlling single pumps. Standard features include an Automatic/Off/Manual (Auto/Off/Man) toggle switch, controls circuit breaker, pump circuit breaker, automatic motor control operation, and an audible/visible high water level alarm with auto reset. Specifications for standard and optional features are listed on page 2.

All S-Series control panels have a 120 VAC controls circuit breaker. S1 panels have a 120 VAC pump circuit breaker, while S2 panels have a 240 VAC pump circuit breaker.

All S-Series panels can be used with both mechanical and mercury float switches.

Listed per UL-508 and cUL-508; CE-listed versions of S-Series panels are available.

Standard Models

S1, S2

Materials of Construction

Component	Material
Enclosure	UV-resistant fiberglass, Type 4X (IP 66)
Hinge	Stainless steel
Latch	Stainless steel

Specifications

Feature	Specifications
Height, in. (mm)	11.5 (292)
Width, in. (mm)	9.3 (236)
Depth, in. (mm)	5.4 (137)
S1 panel ratings*	120 VAC, 1 hp (0.75 kW), 16 A, 1-phase, 60 Hz
S2 panel ratings*	240 VAC, 3 hp (2.24 kW) 16 A, 1-phase, 60 Hz

** Pump motors used with these panels require internal overload protection.*

Product Code Diagram

S **2** [ ] **RO**

Standard options (list in order):
- PT = programmable timer
- RO = redundant off relay
- DS = disconnect switch
- ETM = elapsed time meter
- CT = event counter
- HT = heater
- PRL = pump run light
- PL = power light
- SA = surge arrestor

Intrinsically safe relays:
- Blank = standard, no IR relays
- IR1 = up to 2 float switches
- IR2 = up to 4 float switches

Pump voltage:
- 1 = 120 VAC
- 2 = 120 VAC or 240 VAC

S Series simplex control panel

Orenco S-Series Simplex Control Panel (S1ETMCT shown)

Standard Features

Feature	Specifications*
1. Motor-start contactor	120 VAC: 17 FLA, 1 hp (0.75 kW), 2.5 million cycles at FLA 240 VAC: 17 FLA, 3 hp (2.24 kW), 2.5 million cycles at FLA
4. Auto/Off/Man toggle switch	Single-pole, double-throw HOA switch
2. Controls circuit breaker	10 A, OFF/ON switch, single pole, DIN rail mounting with thermal magnetic tripping characteristics
3. Pump circuit breaker tripping characteristics	20 A, OFF/ON switch, single pole (120 VAC) or double pole (240 VAC), DIN rail mounting with thermal magnetic
5. Audible alarm	95 dB at 24 in. (610 mm), warble-tone sound; gasketed, UL Type 4X (IP66)
6. Audible alarm silence relay	Automatic reset, DIN rail mount
7. Visible alarm	7⁄8-in. (22-mm) diameter red lens, “Push-to-silence,” UL Type 4X (IP66), 1 W LED light
8. Enclosure	UV-resistant fiberglass and stainless steel, UL Type 4X (IP66)

Optional Features

Feature	Specifications*	Product code adder
Intrinsically safe control relays	Listed per UL 698A, for Class 1 Div. 1, groups A, B, C, D hazardous locations (Requires larger enclosure)	IR
Programmable timer	Repeat cycle from 0.05 seconds to 30 hours; separate variable controls for OFF & ON time periods	PT
Redundant off relay	DIN rail mount; provides a secondary off; sounds alarm upon low level condition	RO
Elapsed time meter	7-digit, non-resettable; limit of 99,999 hours; accurate to 0.01 hours	ETM
Event counter	6-digit, non-resettable	CT
Heater	anti-condensation heater; self-adjusting: radiates additional wattage as temperature drops	HT
Pump run light	7⁄8-in. (22-mm) diameter green lens; UL Type 4X (IP66), 1 W LED light	PRL
Power light	7⁄8-in. (22-mm) diameter green lens; UL Type 4X (IP66), 1 W LED light	PL
Surge arrestor	Status light on unit; protects incoming power supply from electrical surges	SA
Test Switch	Momentary switch for alarm testing	TS

** All voltages are 120 VAC unless otherwise noted.*

Orenco Systems® Inc. , 814 Airway Ave., Sutherlin, OR 97479 USA • 800-348-9843 • 541-459-4449 • www.orenco.com