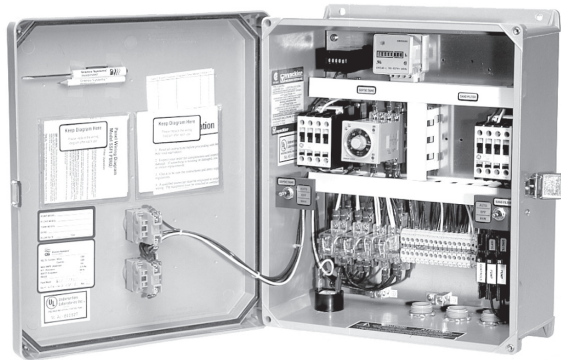


Sand Filter Control Panels

Applications

Orenco Sand Filter Control Panels are used to control STEP (Septic Tank Effluent Pump) and sand filter pumps, alarms, and other equipment as specified in onsite septic systems.



General

Orenco Sand Filter Control Panels are specifically engineered for onsite septic treatment systems. Standard features include circuit breakers, automatic/manual/off toggle switches for each pump, automatic motor control operation, an audio/visual high level alarm, and automatic reset. Other standard features and options are listed on page 2. The design includes an automatic shutoff of the septic tank pump should a high water condition occur in the sand filter. Orenco Panels are designed for use with mechanical and/or mercury float switches. Listed per UL 508; a UL-Canada listing is available.

Standard Models

SSF1, SSF2

Product Code Diagram



Standard options, sand filter (point "B") pump (list in order):

- IR = intrinsically safe relays
- PT = programmable timer
- RO = redundant off relay
- ETM = elapsed time meter
- CT = event counter
- PRL = pump run light

Standard options, sand filter (point "A") pump (list in order):

- IR = intrinsically safe relays
- PT = programmable timer
- RO = redundant off relay
- ETM = elapsed time meter
- CT = event counter
- PRL = pump run light

Shared options:

- Blank = no shared options
- HT = heater
- PL = power light
- SA = surge arrestor

Pump voltage:

- 1 = 120 VAC
- 2 = 120 VAC or 240 VAC

SSF serial control panel

Specifications

Height, in. (mm)	15.5 (394)
Width, in. (mm)	13.3 (338)
Depth, in. (mm)	6.7 (170)
SSF1 panel ratings	120 VAC, 1 hp (0.75 kW), 16 A, 1-phase, 60 Hz
SSF2 panel ratings	240 VAC, 3 hp (2.24 kW), 16 A, 1-phase, 60 Hz

Materials of Construction

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

Standard Features

Feature	Specifications (all voltages are 120 VAC unless otherwise noted)
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
Auto/Off/Man toggle switch	Single-pole, double-throw HOA switch
Controls circuit breaker	10 A, OFF/ON switch, single pole, DIN rail mounting with thermal magnetic tripping characteristics
Pump circuit breakers	220 A, OFF/ON switch, single pole (120 VAC) or double pole (240 VAC), DIN rail mounting with thermal magnetic tripping characteristics
Audible alarm	95 dB at 24 in. (610 mm), warble-tone sound; gasketed, UL Type 4X (IP66)
Audible alarm silence relay	Automatic reset, DIN rail mount
Visible alarm	7/8-in. (22-mm) diameter red lens, "Push-to-silence," UL Type 4X (IP66), 1 W LED light

Optional Features

Feature	Specifications (all voltages are 120 VAC unless otherwise noted)	Product code adder
Heater	Anti-condensation heater; self-adjusting; radiates additional wattage as temperature drops	HT
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
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
Pump run light	7/8-in. (22-mm) diameter green lens; UL Type 4X (IP66), 1 W LED light	PRL