

MODEL 322 Control Panel

Three phase, duplex alternating pump control with override.

The Model 322 control panel is designed to alternately control two three phase pumps in industrial and commercial water and sewage systems. The alternating action equalizes pump wear. In addition to the alternating pump control, this system provides override control should either pump fail. If an alarm condition occurs, the alarm switch activates the audio/visual alarm system. Common applications include lift stations, pump chambers, and irrigation systems.

PANEL COMPONENTS

1. **Enclosure** measures 14 x 12 x 6 inches (35.56 x 30.48 x 15.24 cm) NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use).
2. **IEC Motor Contactors** control pumps by switching electrical lines.
3. **Multi-Tap Transformer** (208/240/480 VAC primary) provides 120V control voltage.
4. **Motor Protective Switches** provide adjustable overload, branch circuit protection and pump disconnect.
5. **Alternating Circuit Board** provides pump control and alternation (U.S. Patent # 5,909,532).
6. **Green Pump Run Indicator Lights** (mounted on circuit board).
7. **Alarm/Control Fuse** (mounted on circuit board).
8. **Float Status Indicator Lights** (mounted on circuit board).
9. **Float Switch Terminal Block** (mounted on circuit board).
10. **Input Power Terminal Block**
11. **Ground Lugs**
12. **HOA Switches** for manual pump control (mounted on circuit board).
13. **Control ON/OFF Switch** (mounted on circuit board).

NOTE: Schematic/Wiring Diagram is located inside the panel on enclosure cover.

STANDARD ALARM PACKAGE

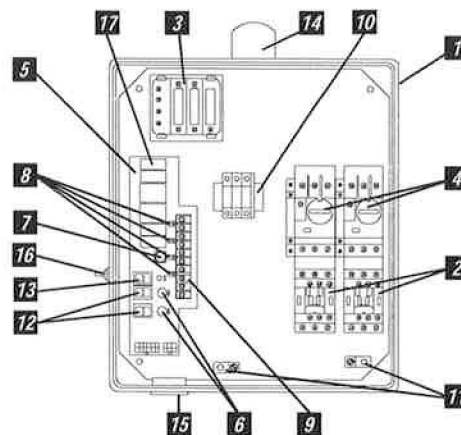
14. **Red Alarm Beacon** provides 360° visual check of alarm condition.
15. **Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating).
16. **Exterior Alarm Test/Normal/Silence Switch** allows horn and light to be tested and horn to be silenced in an alarm condition. Alarm automatically resets once alarm condition is cleared.
17. **Horn Silence Relay** (mounted on circuit board).

NOTE: other options available.

FEATURES

- Entire control system (panel and switches) is UL Listed to meet and/or exceed industry safety standards
- Dual safety certification for the United States and Canada
- Standard package includes three 20' SignalMaster® control switches
- Complete with step-by-step installation instructions
- Three-year limited warranty

**SEE BACKSIDE FOR COMPLETE LISTING OF AVAILABLE OPTIONS.
SEE PRICE BOOK FOR LIST PRICE.**



Model Shown 3221W511X



322 **W**

MODEL 322

ALARMPACKAGE

0 = select options or no alarm package
 1 = alarm package (includes test/normal/silence switch, fuse, red light, & horn)

ENCLOSURE RATING

W = Weatherproof, NEMA 4X (engineered thermoplastic)

208/230/460 575

PUMP FULL LOAD AMPS

<input type="checkbox"/> 001 = 1.0-1.6 FLA	<input type="checkbox"/> 721 = 24.5-30.0 FLA	<input type="checkbox"/> 005 = 1.0-1.6 FLA	<input type="checkbox"/> 725 = 24.5-30.0 FLA
<input type="checkbox"/> 101 = 1.6-2.5 FLA	<input type="checkbox"/> 751 = 29.0-36.0 FLA	<input type="checkbox"/> 105 = 1.6-2.5 FLA	<input type="checkbox"/> 755 = 29.0-36.0 FLA
<input type="checkbox"/> 201 = 2.5-4.0 FLA	<input type="checkbox"/> 771 = 33.0-38.0 FLA	<input type="checkbox"/> 205 = 2.5-4.0 FLA	<input type="checkbox"/> 775 = 33.0-38.0 FLA
<input type="checkbox"/> 301 = 4.0-6.3 FLA	<input type="checkbox"/> 811 = 35.0-47.0 FLA	<input type="checkbox"/> 305 = 4.0-6.3 FLA	<input type="checkbox"/> 815 = 35.0-47.0 FLA
<input type="checkbox"/> 401 = 6.0-10.0 FLA	<input type="checkbox"/> 851 = 45.0-60.0 FLA	<input type="checkbox"/> 405 = 6.0-10.0 FLA	<input type="checkbox"/> 855 = 45.0-60.0 FLA
<input type="checkbox"/> 511 = 9.0-14.0 FLA	<input type="checkbox"/> 911 = 58.0-75.0 FLA	<input type="checkbox"/> 515 = 9.0-14.0 FLA	<input type="checkbox"/> 915 = 58.0-75.0 FLA
<input type="checkbox"/> 611 = 13.0-18.0 FLA		<input type="checkbox"/> 615 = 13.0-18.0 FLA	
<input type="checkbox"/> 621 = 17.0-23.0 FLA		<input type="checkbox"/> 625 = 17.0-23.0 FLA	
<input type="checkbox"/> 701 = 20.0-25.0 FLA		<input type="checkbox"/> 705 = 20.0-25.0 FLA	

FLOAT SWITCH APPLICATION

H or L = pump down or pump up (select 17 option)
 X = no floats

OPTIONS *Listed below*

★ ENCLOSURE UPSIZE - If you selected one or more of the ★ options, a one-time enclosure upsize would apply.

- | CODE | DESCRIPTION | CODE | DESCRIPTION |
|-------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> 1A | Red beacon only / no audio | <input type="checkbox"/> 11D | NEMA 4X alarm panel (select option 6A) |
| <input type="checkbox"/> 1C | Horn only / no visual | <input type="checkbox"/> ★14B | Main disconnect (rotary style, mounted through door, non-fused) |
| <input type="checkbox"/> 3A | Alarm flasher | <input type="checkbox"/> ★0-10 FLA | (total of both pumps) |
| <input type="checkbox"/> 3B | Manual alarm reset | <input type="checkbox"/> ★10-20 FLA | (total of both pumps) |
| <input type="checkbox"/> ★4A | Redundant off
(select option 4D if floats included) | <input type="checkbox"/> ★20-50 FLA | (total of both pumps) |
| <input type="checkbox"/> 4B | Red redundant off indicator & alarm
(must select 4A also) | <input type="checkbox"/> 16A | 10' cord in lieu of 20' (per float) |
| <input type="checkbox"/> 4D | Redundant off float
(must select 4A option) (select 17 option) | <input type="checkbox"/> 16B | 15' cord in lieu of 20' (per float) |
| <input type="checkbox"/> ★5A | Thermal cutout/heat sensor auto reset (for pumps w/thermal switch leads) | <input type="checkbox"/> 16C | 30' cord in lieu of 20' (per float) |
| <input type="checkbox"/> ★5E | Seal failure circuit & red indicator (2 wire) | <input type="checkbox"/> 16D | 40' cord in lieu of 20' (per float) |
| <input type="checkbox"/> 6A | Auxiliary alarm contact, form C | <input type="checkbox"/> 17A | SignalMaster® / pipe clamp ● (per float) |
| <input type="checkbox"/> 8A | Elapsed time meter | <input type="checkbox"/> 17B | SignalMaster® / externally weighted ● (per float) |
| <input type="checkbox"/> ★8C | Event (cycle) counter | <input type="checkbox"/> 17C | Sensor Float® / internally weighted ▲ (per float) |
| <input type="checkbox"/> *10A | Clear inner swing-out door w/dead front (lights and switches mounted on inner door)
*Panels ordered with this option cannot be returned. | <input type="checkbox"/> 17D | Sensor Float® / externally weighted ▲ (per float) |
| <input type="checkbox"/> 10E | Lockable latch | <input type="checkbox"/> 17E | Sensor Float® Mini / pipe clamp ▲ (per float) |
| <input type="checkbox"/> 10G | Lightning arrester | <input type="checkbox"/> 17F | Sensor Float® Mini / externally weighted ▲ (per float) |
| <input type="checkbox"/> 10K | Anti-condensation heater | <input type="checkbox"/> 17J | Sensor Float® / pipe clamp ▲ (per float) |
| <input type="checkbox"/> 11C | NEMA 1 alarm panel (select option 6A) | <input type="checkbox"/> 19B | Lead lag selector switch |
| | | <input type="checkbox"/> 19F | Fourth float to separate alarm function from lag |
| | | <input type="checkbox"/> 19T | TOA (Test/Off/Automatic) switches and pump run lights through door mounted |
| | | <input type="checkbox"/> 19U | HOA (Hand/Off/Automatic) switches and pump run lights through door mounted |
| | | <input type="checkbox"/> 19X | Door mounted pump run indicator
● Mechanically-activated ▲ Mercury-activated |

If additional features are required, call the factory for a quote on an Engineered Custom control panel.

SAMPLE

MODEL 322 1 W 401 H 8AC 17A

Alarm Package 1

Enclosure Rating W

Pump Full Load Amps 401

Float Switch Application H

Options: Elapsed Time Meter, Event (cycle) Counter, SignalMaster® / pipe clamp