

MODEL 123 Control Panel

Single phase, duplex capacitor start/run pump control with override.

Model 123 control panels are designed to alternately control two 120, 208, or 240 VAC single phase pumps requiring external starting components in water and sewage installations. The alternating action equalizes pump wear. In addition to the alternating pump control, these systems provide override control should either pump fail. If an alarm condition occurs, an alarm switch activates the audio/visual alarm system. Common applications include pump chambers and lift stations.

PANEL COMPONENTS

- 1. Enclosure** measures 16 X 14 X 6 inches (40.64 X 35.56 X 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use). **Note:** Options selected may increase enclosure size and change component layout.
- 2. IEC Motor Contactors** control pumps by switching electrical lines.
- 3. HOA Switches** for manual pump control (mounted on circuit board).
- 4. Alternating Circuit Board** provides pump control and alternation (U.S. Patent 5,909,352).
- 5. Green pump Run Indicator Lights** (mounted on circuit board).
- 6. Incoming Pump Power Terminal Block / Pump Terminal Block**
- 7. Circuit Breakers** (optional) provide pump disconnect and branch circuit protection.
- 8. Control ON/OFF Switch** (mounted on circuit board).
- 9. Ground Lugs**
- 10. Float Status Indicator Lights** (mounted on circuit board).
- 11. Control / Alarm Power Indicator Light** (mounted on circuit board).
- 12. Capacitor Start Modules** - start/run capacitor kits must be ordered separately.

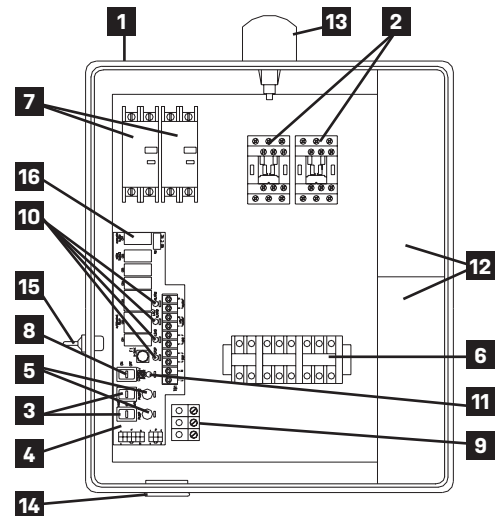
NOTE: Schematic/Wiring Diagram is located inside the panel on enclosure cover.

STANDARD ALARM PACKAGE

- 13. Red Alarm Beacon** provides 360° visual check of alarm condition.
- 14. Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating).
- 15. 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.
- 16. Horn Silence Relay** (mounted on circuit board).

NOTE: other options available.

Model 123 control panels cannot be returned. Please refer to the Product Return section.



Model Shown 1231W124X

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' control switches or EZconnex® float system
- Complete with step-by-step installation instructions
- Five-year limited warranty. This express warranty does not apply to the motor start kit components. SJE Rhombus will warranty motor start kit components supplied by SJE Rhombus for one year. SJE Rhombus makes no warranties of any type with respect to motor start kits supplied by a customer.



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**SEE REVERSE SIDE FOR ORDERING INFORMATION.
SEE PRICE BOOK FOR LIST PRICE.**

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MODEL 123

ALARM PACKAGE

- 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)

STARTING DEVICE

- 1 = IEC motor contactor 120/208/240V

PUMP FULL LOAD AMPS

- 0 = 0-7 FLA
- 1 = 7-15 FLA
- 2 = 15-20 FLA
- 3 = 20-30 FLA
- 4 = 30-40 FLA

PUMP DISCONNECTS

- 0 = no pump disconnect
- 4 = circuit breaker

FLOAT SWITCH APPLICATION

- H or L = pump down or pump up (select 17 option)
- E = EZconnex® float switch system (select 34 or 35 option)
- X = no floats

OPTIONS *Listed below*

Start/run capacitor kits must be ordered separately (see option 12 below or call factory).



ENCLOSURE UPSIZE - If one or more of the ★ options are selected

CODE DESCRIPTION

- 1A Red beacon only / no audio
- 1C Horn only / no visual
- 3A Alarm flasher
- 3B Manual alarm reset
- ★ 4A Redundant off
(select option 4D if floats included)
- 4B Red redundant off indicator & alarm
(must select 4A also)
- 4D Redundant off float *(must select 4A & 17 option)*
- ★ 5A Thermal cutout/heat sensor auto reset
(for pumps with thermal switch leads)
- ★ 5 E Seal fail circuit and indicator (2 wire)
- 6A Auxiliary alarm contact, form C
- ★ 8A Elapsed time meter
- ★ 8C Event (cycle) counter
- 9_A Pump overload
specify amperage after number 9 followed by letter "A". Example: 912A = 12 amp pump.
 - 0-30 FLA
 - 30-40 FLA
- 10E Lockable latch
- ★ 10F Lightning arrestor
(must select pump circuit breakers)
- 10K Anti-condensation heater
- 11C NEMA 1 alarm panel *(must select option 6A)*
- 11D NEMA 4X alarm panel *(must select option 6A)*
- 12B Customer supplied motor start components, mounted in enclosure by SJE Rhombus
- 12C Motor start component, mounted and supplied by SJE Rhombus
- ★ 14B Main disconnect *(rotary style, mounted through door, non-fused, padlockable in the OFF-position, door interlock in the ON-position)*
(must select pump circuit breakers)
 - ★ 0-20 FLA
 - ★ 20-80 FLA

CODE DESCRIPTION

- 16A 10' cord in lieu of 20' *(per float)*
- 16B 15' cord in lieu of 20' *(per float)*
- 16C 30' cord in lieu of 20' *(per float)*
- 16D 40' cord in lieu of 20' *(per float)*
- 17A SJE SignalMaster® / pipe clamp ● *(per float)*
- 17B SJE SignalMaster® / externally weighted ● *(per float)*
- 17C Sensor Float® / internally weighted ▲ *(per float)*
- 17D Sensor Float® / externally weighted ▲ *(per float)*
- 17E Sensor Float® Mini / pipe clamp ▲ *(per float)*
- 17F Sensor Float® Mini / externally weighted ▲ *(per float)*
- 17J Sensor Float® / pipe clamp ▲ *(per float)*
- 19B Lead lag selector switch
- 19F Fourth float to separate alarm from lag
- 19T TOA (Test/Off/Automatic) switches and pump run lights through door mounted
- 19U HOA (Hand/Off/Automatic) switches and pump run lights through door mounted
- 19X Door mounted pump run indicator
- 34D EZconnex® 4-Port, 25', w/10' floats (3) /pipe clamp, sealing plug *
- 34E EZconnex® 4-Port, 50', w/10' floats (3) /pipe clamp, sealing plug *
- 34G EZconnex® 4-Port, 25', w/20' floats (3) /pipe clamp, sealing plug *
- 34H EZconnex® 4-Port, 50', w/20' floats (3) /pipe clamp, sealing plug *
- 35D EZconnex® 4-Port, 25', w/10' floats (4) /pipe clamp *
- 35E EZconnex® 4-Port, 50', w/10' floats (4) /pipe clamp *
- 35G EZconnex® 4-Port, 25', w/20' floats (4) /pipe clamp *
- 35H EZconnex® 4-Port, 50', w/20' floats (4) /pipe clamp *

● Mechanically-activated ▲ Mercury-activated

* EZconnex® mechanically-activated, narrow angle float switches with quick release connections.