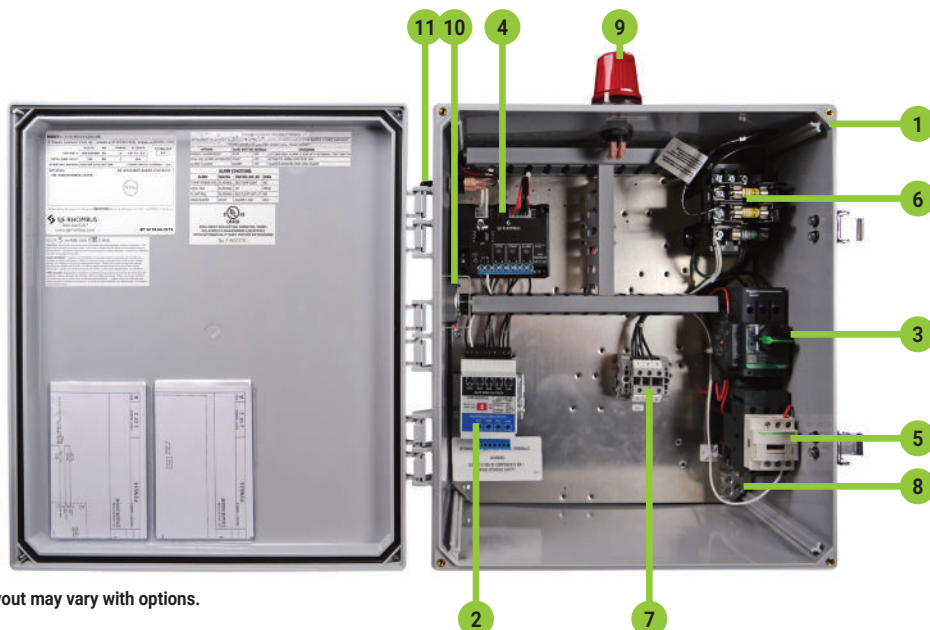


# MODEL 314 CONTROL PANEL

Three Phase, Simplex Pump Control with Intrinsically Safe Circuits



Panel layout may vary with options.



The Model 314 control panel is designed for applications requiring intrinsically safe float circuits or other circuit extensions. This panel will control one 208/240/480 VAC three phase pump. Two control switches activate a magnetic motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system. Common applications include pump chambers, lift stations, or other installations classified as hazardous locations requiring intrinsically safe circuits.

The Model 314 control panel features built in pump failure and float out of sequence detection. In addition, there are three user selectable field programmable options: alarm steady state or flashing; alarm auto reset or manual reset; and optional seal failure alarm beacon plus horn activation.

Simplex controller features include:

- Touch safe circuit board housing and low voltage 24 VDC float circuits
- Alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection
- Pump contactor failure detection
- Controller protected by three auto resettable fuses (control, alarm, and pump 1)

**Note:** SJE Rhombus recommends separate pump and control/alarm power sources.

## 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 flanges for outdoor or indoor use)
2. Intrinsically safe module limits the amount of energy to switches preventing ignition of flammable gases
3. Motor protective switch provides adjustable overload, branch circuit protection and pump disconnect
4. Simplex controller provides pump and alarm control; elevated in the enclosure for easy access and field wiring
  - a. HOA switch for manual control of the pump
  - b. Pump run green LED indicator
  - c. Control power ON/OFF switch
  - d. Power ON green LED indicator
  - e. Float push-to-test buttons
  - f. Float status red LED indicators
  - g. Auxiliary alarm contacts Form C
  - h. Option: adjustable seal failure circuit and red LED indicator (must select option 5E when ordering)
5. IEC motor contactor controls pump by switching electrical lines
6. Multi-tap transformer (208/240/480 VAC primary) provides 120 VAC control/alarm voltage or 600 VAC primary transformer
7. Input power terminal block
8. Ground lugs
9. Red LED beacon provides 360° visual check of alarm condition
10. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating)
11. 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

Model 314 control panels cannot be returned. Please refer to the Product Return section.

**Note:** Other options available. Options selected may increase enclosure size and change component layout.

**Note:** Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.



**MODEL 314 - Three phase, simplex pump control with intrinsically safe circuits.**

<b>314</b>	<b>1</b>	<b>W</b>			<b>6A10E</b>
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	PUMP FULL LOAD AMPS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

<b>CONTROL PANEL</b>	✓	314	Three Phase Simplex Intrinsically Safe
<b>ALARM PACKAGE</b>	✓	1	Alarm Package (includes test/normal/silence switch, fuse, red light, & horn)
<b>ENCLOSURE RATING</b>	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
<b>PUMP FULL LOAD AMPS</b>	208/240/480V		
		001	1.0 - 1.6 FLA
		101	1.6 - 2.5 FLA
		201	2.5 - 4.0 FLA
		301	4.0 - 6.3 FLA
		401	6.0 - 10.0 FLA
		511	9.0 - 14.0 FLA
		611	13.0 - 18.0 FLA
		621	17.0 - 23.0 FLA
		701	20.0 - 25.0 FLA
<b>LEVEL CONTROL APPLICATION</b>			600V
		005	1.0 - 1.6 FLA
		105	1.6 - 2.5 FLA
		205	2.5 - 4.0 FLA
		305	4.0 - 6.3 FLA
		405	6.0 - 10.0 FLA
		515	9.0 - 14.0 FLA
		615	13.0 - 18.0 FLA
		625	17.0 - 23.0 FLA
		705	20.0 - 25.0 FLA
		H	Floats - Pump Down (select Option 17 below)
		L	Floats - Pump Up (select Option 17 below)
		E	EZconnex® Float Switch System
		X	No Floats

	<b>OPTIONS</b>	<b>DESCRIPTION</b>
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)
	5E	Seal Failure Circuit & Red Indicator (2 wire)
✓	6A	Auxiliary Alarm Contact, Form C (included as standard)
	6G	Auxiliary Contact, Dry, Seal Fail, Normally Open (must select Option 5E)
	8A	Elapsed Time Meter
	8C	Event (Cycle) Counter
✓	10E	Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)
	10G	Lightning Arrestor
	10K	Anti-condensation Heater

	<b>OPTIONS</b>	<b>DESCRIPTION</b>	
	14B	Main Disconnect (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position)	0-20 FLA
			20-25 FLA
	16C	30' Cord in Lieu of 20' Cord (per float)	
	16D	40' Cord in Lieu of 20' Cord (per float)	
	17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical	
	17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical	
	19T	TOA (Test/Off/Automatic) Switch and Pump Run Light Through Door Mounted	
	19U	HOA (Hand/Off/Automatic) Switch and Pump Run Light Through Door Mounted	
	19X	Door Mounted Pump Run Indicator	
	33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp	
	35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp	

**PRICING WORKSHEET**

**Model 314 Base Price** \_\_\_\_\_

Alarm Package \_\_\_\_\_

Enclosure Rating \_\_\_\_\_

Pump Full Load Amps \_\_\_\_\_

Level Control Application \_\_\_\_\_

Total Options \_\_\_\_\_

**TOTAL LIST PRICE** \_\_\_\_\_

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.