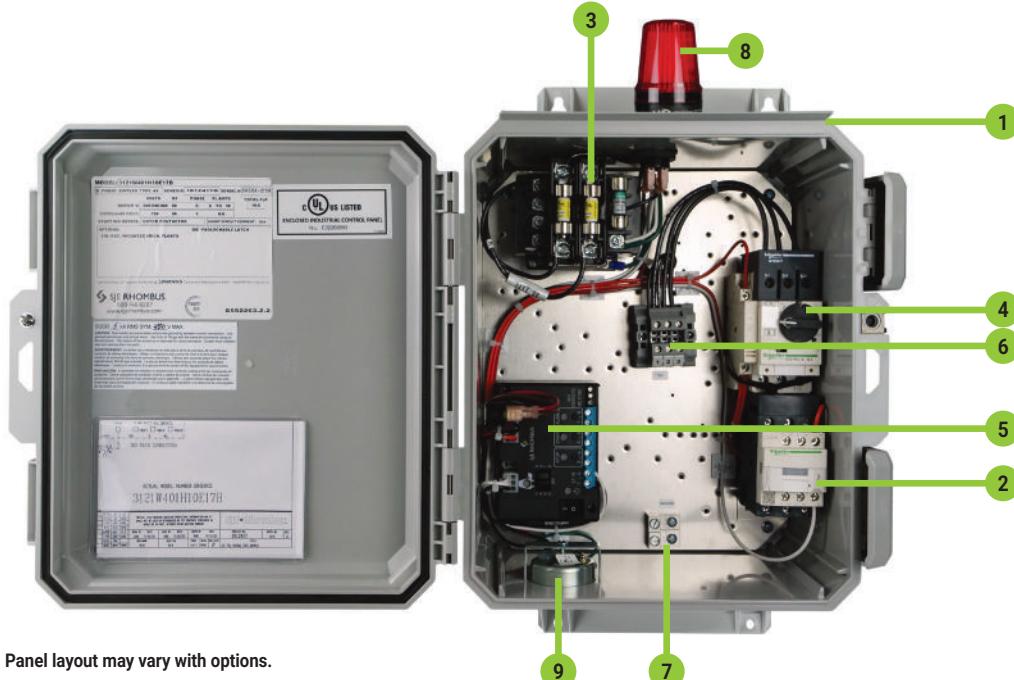


# MODEL 312 CONTROL PANEL

Three Phase, Simplex Motor Contactor Control



Panel layout may vary with options.



The Model 312 control panel provides industrial and commercial customers with a reliable means of controlling one 208/240/480V three phase pump in water and sewage installations. Two control switches activate an IEC 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, irrigation systems, and lift stations. This panel is available with optional EZconnex® float connection system.

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)

## COMPONENTS

1. NEMA 4X (ultraviolet stabilized thermoplastic enclosure measures 12 x 10 x 6 inches (30.48 x 24.4 x 15.24), padlockable with integral mounting flanges, drip shield, (2) heavy duty cover latches, and stainless steel 1/4 turn set screw; for outdoor or indoor use). Note: added options may change enclosure size and enclosure features.
2. IEC motor contactor controls pump by switching electrical lines
3. Multi-tap transformer (208/240/480 VAC primary) provides 120V control/alarm voltage or 600 VAC primary transformer
4. Motor protective switch provides adjustable overload, branch circuit protection and pump disconnect
5. 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)
6. Input power terminal block
7. Ground lugs
8. Red LED beacon provides 360° visual check of alarm condition
9. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating)
10. 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 (Not shown)

Note: Options may increase enclosure size and/or change enclosure features/component layout.

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

Three Phase

 **SJE RHOMBUS®**

312	1	W	PUMP FULL LOAD AMPS	LEVEL CONTROL APPLICATION	6A10E
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	OPTIONS (LISTED BELOW)		
CONTROL PANEL	✓ 312	Three Phase Simplex (includes Option 10E as standard)			
ALARM PACKAGE	✓ 1	Alarm Package (includes test/normal/silence switch, fuse, red light, & horn)			
ENCLOSURE RATING	✓ W	Weatherproof, NEMA 4X (engineered thermoplastic)			
PUMP FULL LOAD AMPS	208/240/480V		600V		
	001	1.0 - 1.6 FLA	005	1.0 - 1.6 FLA	
	101	1.6 - 2.5 FLA	105	1.6 - 2.5 FLA	
	201	2.5 - 4.0 FLA	205	2.5 - 4.0 FLA	
	301	4.0 - 6.3 FLA	305	4.0 - 6.3 FLA	
	401	6.0 - 10.0 FLA	405	6.0 - 10.0 FLA	
	511	9.0 - 14.0 FLA	515	9.0 - 14.0 FLA	
	611	13.0 - 18.0 FLA	615	13.0 - 18.0 FLA	
	621	17.0 - 23.0 FLA	625	17.0 - 23.0 FLA	
	701	20.0 - 25.0 FLA	705	20.0 - 25.0 FLA	
LEVEL CONTROL APPLICATION	H	Floats - Pump Down (select Option 17 below)			
	L	Floats - Pump Up (select Option 17 below)			
	E	EZconnex® Float Switch System			
	X	No Floats			

OPTIONS	DESCRIPTION
5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)
5E	Seal Failure Circuit & Red Indicator (2 wire)
<input checked="" type="checkbox"/> 6A	<b>Auxiliary Alarm Contact, Form C (included as standard)</b>
8A	Elapsed Time Meter
8C	Event (Cycle) Counter
<input checked="" type="checkbox"/> 10E	<b>Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)</b>
10G	Lightning Arrestor
10K	Anti-condensation Heater
14B	Main Disconnect - 14x12 Enclosure Upgrade (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position)

OPTIONS	DESCRIPTION
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

For additional control panel options, please contact Technical Support at [techsupport@sjieinc.com](mailto:techsupport@sjieinc.com).