

# MODEL 314 Control Panel

Three phase, simplex pump control with intrinsically safe circuits.

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.

## 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 flanges for outdoor or indoor use).
2. **Intrinsically Safe Module** limits the amount of energy to switches preventing ignition of flammable gases.
3. **Intrinsically Safe Partition** isolates intrinsically safe wiring.
4. **Motor Protective Switch** provides adjustable overload, branch circuit protection and pump disconnect.
5. **IEC Motor Contactor** controls pump by switching electrical lines.
6. **HOA Switch** for manual pump control (mounted on circuit board).
7. **Multi-tap Transformer** (208/240/480 VAC primary) provides 120V control alarm voltage or 600VAC primary transformer.
8. **Green Pump Run Indicator Light** (mounted on circuit board).
9. **Alarm Fuse** (mounted on circuit board).
10. **Control Fuse** (mounted on circuit board).
11. **Input Power Terminal Block**
12. **Ground Lugs**
13. **Control Power Indicator Light** (mounted on circuit board).
14. **Alarm Power Indicator Light** (mounted on circuit board).

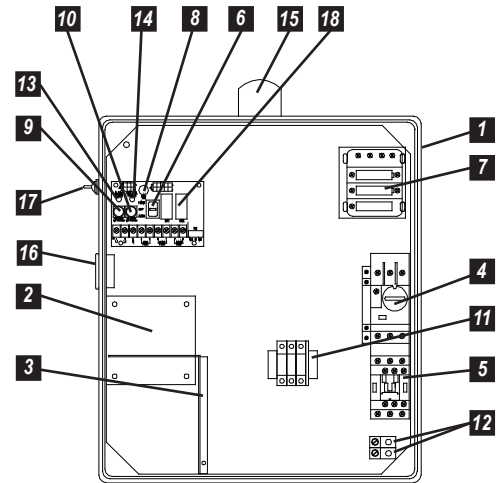
**NOTE:** Schematic/Wiring Diagram is located inside the panel on enclosure cover.

## STANDARD ALARM PACKAGE

15. **Red Alarm Beacon** provides 360° visual check of alarm condition.
16. **Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating).
17. **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.
18. **Horn Silence Relay** (mounted on circuit board).

**NOTE:** (other options available)

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



Model Shown 3141W511X

## FEATURES

- Industrial control panel is UL Listed relating to hazardous locations with intrinsically safe circuit extensions
- 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



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

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# MODEL 314

### ALARM PACKAGE

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

### ENCLOSURE RATING

- W = Weatherproof, NEMA 4X (engineered thermoplastic)

### PUMP FULL LOAD AMPS

#### 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

#### 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

### FLOAT SWITCH APPLICATION

- H or L = pump down or pump up (select 17 option)
- E = EZconnex® float switch system (select 33 or 34 option)
  - WITH alarm package
  - WITHOUT alarm package
- X = no floats
  - WITH alarm package
  - WITHOUT alarm package

### OPTIONS *Listed below*

- | CODE                         | DESCRIPTION   | CODE                         | DESCRIPTION  |
|------------------------------|---|------------------------------|--|
| <input type="checkbox"/> 1A  | Red beacon only / no audio<br><i>(must select 1E if floats included)</i>                      | <input type="checkbox"/> 11C | NEMA 1 alarm panel <i>(must select option 6A)</i>  |
| <input type="checkbox"/> 1C  | Horn only / no visual<br><i>(must select 1E if floats included)</i>                           | <input type="checkbox"/> 11D | NEMA 4X alarm panel <i>(must select option 6A)</i>   |
| <input type="checkbox"/> 1E  | Alarm float   | <input type="checkbox"/> 14B | Main disconnect <i>(rotary style, mounted through door, non-fused, padlockable in the OFF-position, door interlock in the ON-position)</i> |
| <input type="checkbox"/> 3A  | Alarm flasher   | <input type="checkbox"/>     | 0-20 FLA   |
| <input type="checkbox"/> 3B  | Manual alarm reset  | <input type="checkbox"/>     | 20-25 FLA  |
| <input type="checkbox"/> 3C  | Red high / low indicator light & alarm activation <i>(4A not needed)</i>                      | <input type="checkbox"/> 16A | 10' cord in lieu of 20' <i>(per float)</i>   |
| <input type="checkbox"/> 3D  | Float for low indicator<br><i>(must select option 3C)</i>                                     | <input type="checkbox"/> 16B | 15' cord in lieu of 20' <i>(per float)</i>   |
| <input type="checkbox"/> 3E  | Float for high indicator<br><i>(not required if panel contains high alarm)</i>                | <input type="checkbox"/> 16C | 30' cord in lieu of 20' <i>(per float)</i>   |
| <input type="checkbox"/> 4A  | Redundant off<br><i>(select option 4D if floats included, 3C not needed)</i>                  | <input type="checkbox"/> 16D | 40' cord in lieu of 20' <i>(per float)</i>   |
| <input type="checkbox"/> 4B  | Red redundant off indicator & alarm<br><i>(must select 4A also)</i>                           | <input type="checkbox"/> 17C | Sensor Float® / internally weighted ▲ <i>(per float)</i>   |
| <input type="checkbox"/> 4D  | Redundant off float<br><i>(must select 4A option) (must select 17 option)</i>                 | <input type="checkbox"/> 17D | Sensor Float® / externally weighted ▲ <i>(per float)</i>   |
| <input type="checkbox"/> 5A  | Thermal cutout/heat sensor auto reset<br><i>(for pumps w/thermal switch leads)</i>            | <input type="checkbox"/> 17G | MilliAmpMaster™ / pipe clamp ● <i>(per float)</i>  |
| <input type="checkbox"/> 5E  | Seal failure circuit & red indicator (2 wire)   | <input type="checkbox"/> 17H | MilliAmpMaster™ / externally weighted ● <i>(per float)</i>   |
| <input type="checkbox"/> 5M  | Seal fail alarm activation<br><i>(must selection option 5E)</i>                               | <input type="checkbox"/> 17J | Sensor Float® / pipe clamp ▲ <i>(per float)</i>  |
| <input type="checkbox"/> 6A  | Auxiliary alarm contact, form C   | <input type="checkbox"/> 19T | TOA (Test/Off/Automatic) switch and pump run light through door mounted  |
| <input type="checkbox"/> 6G  | Auxiliary contact, dry, seal fail, normally open<br><i>(must select option 5E)</i>            | <input type="checkbox"/> 19U | HOA (Hand/Off/Automatic) switch and pump run light through door mounted  |
| <input type="checkbox"/> 8A  | Elapsed time meter  | <input type="checkbox"/> 19X | Door mounted pump run indicator  |
| <input type="checkbox"/> 8C  | Event (cycle) counter   | <input type="checkbox"/> 33D | EZconnex® 3-Port, 25', w/10' floats (3) /pipe clamp *  |
| <input type="checkbox"/> 10A | Clear inner swing-out door w/dead front<br><i>(lights and switches mounted on inner door)</i> | <input type="checkbox"/> 33E | EZconnex® 3-Port, 50', w/10' floats (3) /pipe clamp *  |
| <input type="checkbox"/> 10E | Lockable latch  | <input type="checkbox"/> 33G | EZconnex® 3-Port, 25', w/20' floats (3) /pipe clamp *  |
| <input type="checkbox"/> 10G | Lightning arrestor  | <input type="checkbox"/> 33H | EZconnex® 3-Port, 50', w/20' floats (3) /pipe clamp *  |
| <input type="checkbox"/> 10K | Anti-condensation heater  | <input type="checkbox"/> 34D | EZconnex® 4-Port, 25', w/10' floats (3) /pipe clamp, sealing plug *  |
|                              |   | <input type="checkbox"/> 34E | EZconnex® 4-Port, 50', w/10' floats (3) /pipe clamp, sealing plug *  |
|                              |   | <input type="checkbox"/> 34G | EZconnex® 4-Port, 25', w/20' floats (3) /pipe clamp, sealing plug *  |
|                              |   | <input type="checkbox"/> 34H | EZconnex® 4-Port, 50', w/20' floats (3) /pipe clamp, sealing plug *  |

● Mechanically-activated ▲ Mercury-activated \* EZconnex® mechanically-activated, narrow angle float switches with quick release connections.