

# H2O DRIVE® CONSTANT PRESSURE CONTROL

Single Phase, 240 V - Variable Frequency Drive Well Pump Control Panel



The H2O Drive® control panel is designed to control a three phase submersible well pump in constant pressure control applications.

As flow conditions change in the pumping system, the VFD is able to automatically control the pump speed and maintain a constant pressure. The desired set pressure is entered on the color LCD display. The pressure transducer measures the pump system pressure.

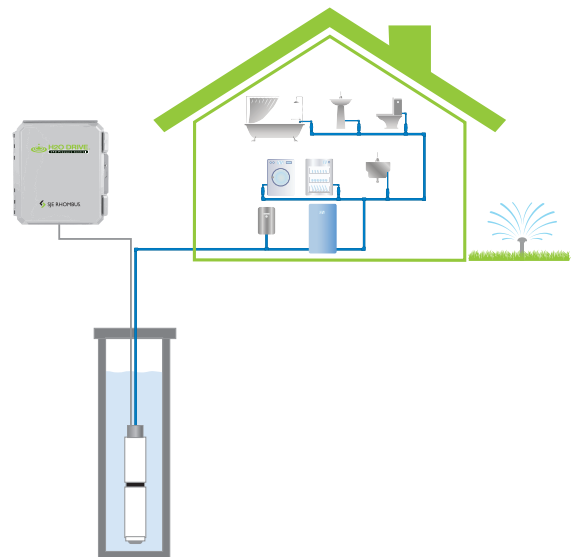
## FEATURES

- 2 step quick start wizard for easy setup
  1. Enter set pressure
  2. Enter well pump amps (SFA)
- Graphic color display (LCD):
  - High Brightness / Direct sunlight readable
  - Removable/handheld for easy programming
  - Discharge Pressure (PSI)
  - Pump run indication
  - Pump speed (Hz)
  - Pump Amps (A)
  - Message bar (Status & Alarm)
  - Alarm history
  - Password protection
  - Rotary button for easy menu navigation
- Pump dry run alarm
- Well recharge timer function
- High and Low Pressure Alarm
- Pump motor overload protection
- Monitors transducer faults
- Includes 0-150 PSI pressure transducer with cable
- 2 digital inputs for optional level or floor sensor
- 60Hz max. motor speed (default)
- Up to 80Hz max. possible in select systems




## COMPONENTS

1. Enclosure: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover  
Note: See specifications on back side for sizing.
2. Vents for VFD cooling (not shown)
3. Variable Frequency Drive
4. LCD controller display



**H2O DRIVE® CONSTANT PRESSURE CONTROLS** - Single phase, 240V - Variable Frequency Drive well pump control panel.

Part #	Model	HP	Max Amps	Sine Filter	Input	Pump Rating	Enclosure Size	Shipping Weight
1076917	RD150 <sup>1</sup>	0.5 - 1.5	7.5A	No	240V, 1 Phase	208/230V, 3 Phase	14 x 12 x 6	17 lbs.
1076918	RD300 <sup>1</sup>	2.0 - 3.0	11.6A	No	240V, 1 Phase	208/230V, 3 Phase	14 x 12 x 6	18 lbs.
1076919	RD500	5.0	17.8A	No	240V, 1 Phase	208/230V, 3 Phase	18 x 16 x 10	33 lbs.
1107747	RD750	7.5	28.0A	No	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	41 lbs.
1107690	RD1000	10	35.0A	No	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	44 lbs.
1107691	RD1500	15	55.0A	No	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	46 lbs.
1107750	RD150SF	0.5 - 1.5	7.5A	Yes	240V, 1 Phase	208/230V, 3 Phase	14 x 12 x 6	19 lbs.
1107751	RD300SF	2.0 - 3.0	11.6A	Yes	240V, 1 Phase	208/230V, 3 Phase	14 x 12 x 6	20 lbs.
1107752	RD500SF	5.0	17.8A	Yes	240V, 1 Phase	208/230V, 3 Phase	18 x 16 x 10	35 lbs.
1107748	RD750SF	7.5	28.0A	Yes	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	44 lbs.
1107692	RD1000SF	10	35.0A	Yes	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	47 lbs.
1107693	RD1500SF	15	55.0A	Yes	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	50 lbs.

<sup>1</sup>UL Listed 

Variable Speed

**SELECTING THE CORRECT VFD**

1. Determine the voltage available on site.
2. Select a well pump with the same voltage (motor must be three phase).
3. Check well pump motor nameplate Service Factor Amps (SFA) for proper VFD sizing.
4. Select a VFD with an output amp rating higher than motor SFA.
5. Use Full Load Amps (FLA) for booster pump application.

**SPECIFICATIONS**

**CONTROL:** Pump run indication  
 Pump speed (Hz) and Amps (A) indication  
 Pump motor overload protection  
 High and low pressure alarms  
 Pump dry run alarm

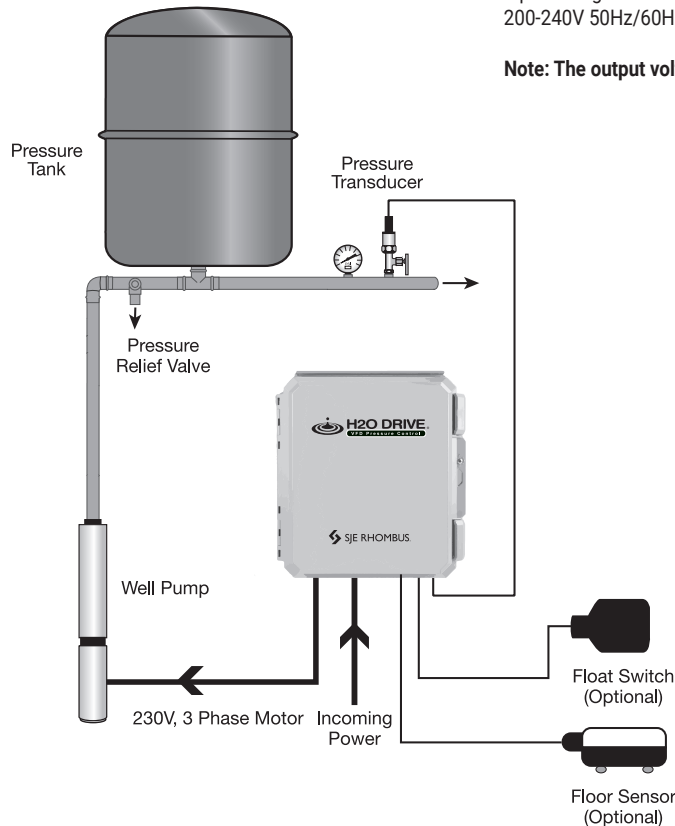
**ENCLOSURE:** NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

**PRESSURE TRANSDUCER:** 0-150 PSI (included) 1/4" NPT Male, NSF 61 rated, 4-20mA, with 15 ft cable. Two-year limited warranty on pressure transducer.

**ENVIRONMENTAL:** Surrounding air temperature: 14°F to 104°F (-10°C to 40°C)  
 Panel internal temperature: 14°F to 122°F (-10°C to 50°C)  
 Storage temperature: -4°F to 131°F (-20°C to 55°C)  
 Altitude: Maximum of 3,280 ft (1,000 m) above sea level

**ELECTRICAL:** Input voltage: 240V nominal  
 200-240V 50Hz/60Hz, single phase

**Note:** The output voltage cannot exceed the input voltage.



**Note:** For use in clean water pressure control applications. Not for use with sewage pumps.

California Prop 65 requires the following:  WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)