

H2O DRIVE® CONSTANT PRESSURE CONTROL

Three Phase, 480V - 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.

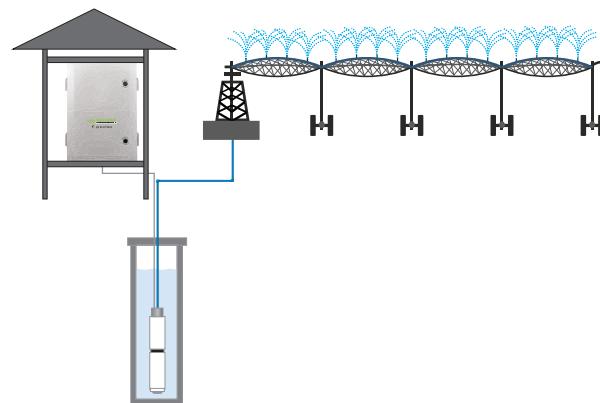
FEATURES

- 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 door
Note: See specifications and sizing table on the back.
2. Variable Frequency Drive
3. LCD controller display
4. Vents for VFD cooling (not shown)



Part #	Model	HP	Max Amps	Load Reactor	Input	Pump Rating	Enclosure Size	Shipping Weight	List Price
1104994	RD304	3	6.9A	No	480V, 3 Phase	460V, 3 Phase	18 x 16 x 10	33.5 lbs.	\$2,781.00
1104993	RD504	5	11.1A	No	480V, 3 Phase	460V, 3 Phase	18 x 16 x 10	33.5 lbs.	\$3,090.00
1104990	RD1004	7.5-10	17.5A	No	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	61.3 lbs.	\$4,635.00
1104987	RD2004	15-20	35.0A	No	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	66.5 lbs.	\$5,768.00
1104985	RD2504	25	45.0A	No	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	80.3 lbs.	\$7,519.00
1104983	RD3004	30	60.0A	No	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	80.3 lbs.	\$8,343.00
1106585	RD304LR	3	6.9A	Yes	480V, 3 Phase	460V, 3 Phase	18 x 16 x 10	50.5 lbs.	\$3,605.00
1106584	RD504LR	5	11.1A	Yes	480V, 3 Phase	460V, 3 Phase	18 x 16 x 10	50.5 lbs.	\$3,811.00
1106581	RD1004LR	7.5-10	17.5A	Yes	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	78.3 lbs.	\$5,775.00
1106578	RD2004LR	15-20	35.0A	Yes	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	83.6 lbs.	\$6,798.00
1106576	RD2504LR	25	45.0A	Yes	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	93.8 lbs.	\$8,755.00
1106574	RD3004LR	30	60.0A	Yes	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	114.3 lbs.	\$10,197.00
1110360	RD5004LR	40-50	77.0A	Yes	480V, 3 Phase	460V, 3 Phase	36 x 30 x 12	170.0 lbs.	\$14,317.00
1110361	RD6004LR	60	93.0A	Yes	480V, 3 Phase	460V, 3 Phase	36 x 30 x 12	215.0 lbs.	\$16,377.00
1122156	RD7504LR	75	116A	Yes	480V, 3 Phase	460V, 3 Phase	36 x 36 x 12	280.0 lbs.	\$27,511.57

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.
6. The H2O Drive® can be used with non-submersible pump applications such as booster pumps. Use the Full Load Amps (FLA) for VFD sizing for booster pump applications.
7. A load reactor is recommended for well pumps and for long motor cable applications.

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:

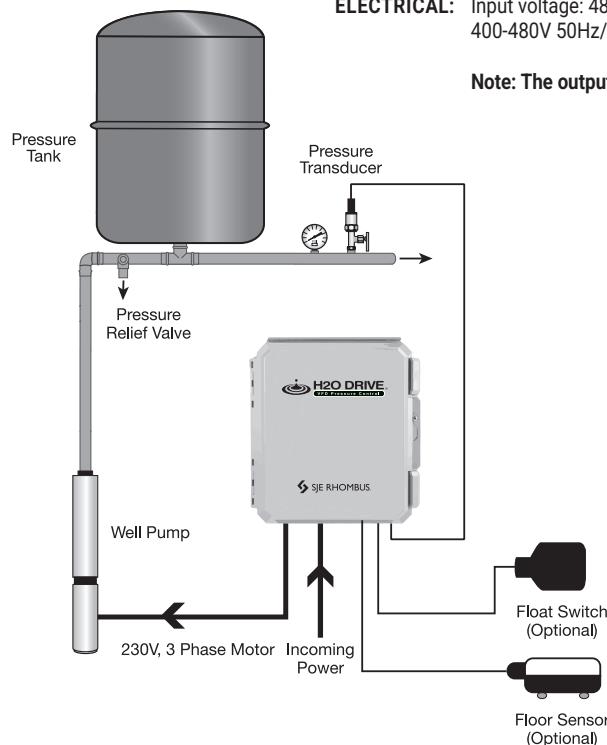
NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

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: 480V nominal
400-480V 50Hz/60Hz, three 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