H2O DRIVE® CONSTANT PRESSURE CONTROL

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

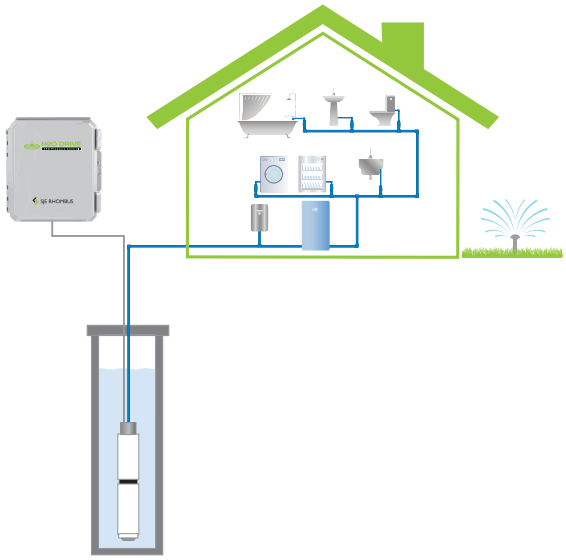
- 2 step quick start wizard for easy setup
  1. Enter set pressure
  2. Enter well pump amps (SFA)
- Graphic color display (LCD):
  - High Brightness / Direct sunlight readable
  - Removable/handheld for easy programming
  - Discharge Pressure (PSI)
  - Pump run indication
  - Pump speed (Hz)
  - Pump 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



SJE RHOMBUS®

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H2O DRIVE® CONSTANT PRESSURE CONTROLS - Variable Frequency Drive well pump control panel.

Part #	Model	Description	Rated Amps[1]	S.F. Amps[2]	HP	Input	Output	Enclosure Size	Shipping Weight
1076917	RD150	H2O Drive - 1.5HP	7.0A	7.3A	0.5 - 1.5	230V, 1 Phase	230V, 3 Phase	14 x 12 x 6	16.4 lbs.
1076918	RD300	H2O Drive - 3.0HP	10.0A	10.9A	2.0 - 3.0	230V, 1 Phase	230V, 3 Phase	14 x 12 x 6	17.4 lbs.
1076919	RD500	H2O Drive - 5.0HP	15.9A	17.8A	5.0	230V, 1 or 3 Phase[3]	230V, 3 Phase	18 x 16 x 10	32.7 lbs.
1077249	RD750	H2O Drive - 7.5HP	31.8A	31.8A	7.5	230V, 3 Phase	230V, 3 Phase	18 x 16 x 10	28.7 lbs.

[1]VFD rated Amps 150% OL for 60 sec., 200% for 0.5 sec. (Constant torque - UL Listed)
[2]VFD Amps for pumps: 120% for 60 sec. (Variable torque)
[3]VFD UL rated for 3 phase input

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 (SLA) for proper VFD sizing.
4. Select a VFD with an output amp rating higher than motor SLA.

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: **RD150 and RD300**
14 x 12 x 6 inch (35.6 x 30.5 x 15.2 cm)
NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

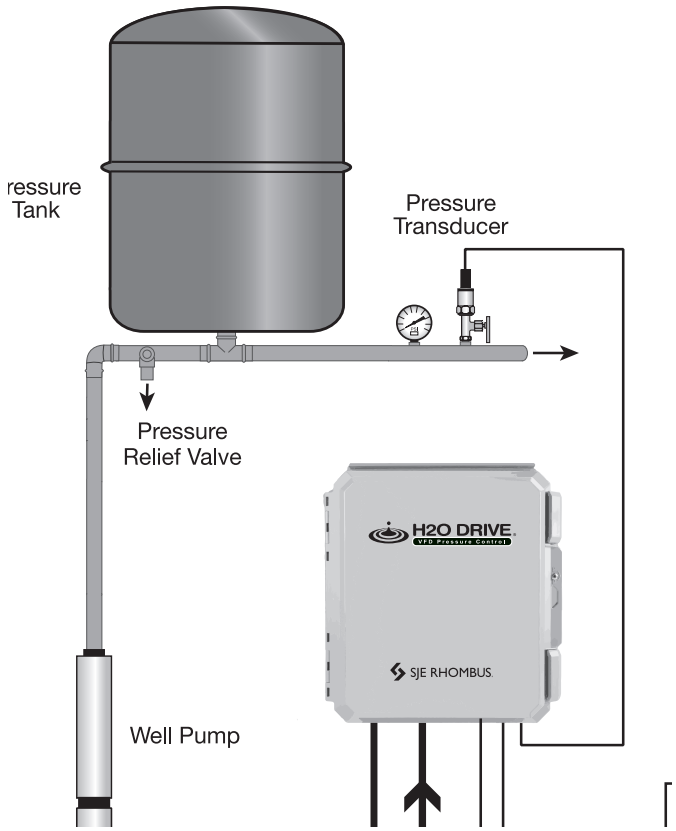
RD500 and RD750
18 x 16 x 10 inch (50.8 x 40.6 x 25.4 cm)
NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

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 for RD150 & RD300
200-240V 50Hz/60Hz, 3 phase /single phase for RD500
200-240V 50Hz/60Hz, 3 phase for RD750

Note: The output voltage cannot exceed the input voltage.



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