H20 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.

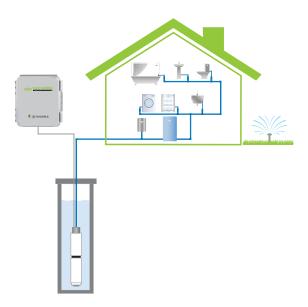
FEATURES

- 2 step quick start wizard for easy setup
 - 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

- 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







H20 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	H20 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	H20 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	H20 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	H20 Drive - 7.5HP	31.8A	31.8A	7.5	230V, 3 Phase	230V, 3 Phase	18 x 16 x 10	28.7 lbs.

¹VFD rated Amps 150% OL for 60 sec., 200% for 0.5 sec. (Constant torque - UL Listed)

²VFD Amps for pumps: 120% for 60 sec. (Variable torque)

³VFD UL rated for 3 phase input

SELECTING THE CORRECT VFD

- Determine the voltage available on site.
- 2. Select a well pump with the same voltage (motor must be three phase).
- 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 SLÁ.

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)

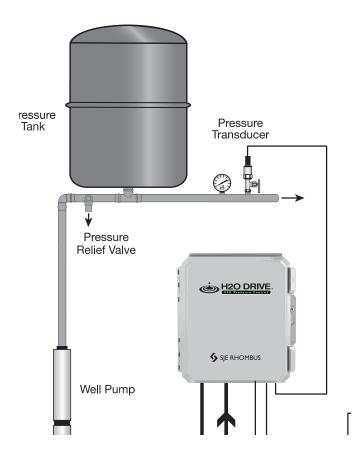
Panel internal temperature: 14°F to 122°F (-10°C to 50°C) Storage temperature: -4°F to 131°F (-20°C to 55°C) Altitude: Maximum of 3,280 ft (1,000 m) above sea level

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.

