

Control Freak is an exclusive new electronic controller that provides motor speed control for Hydra-Cell Metering Solutions pumps (or Hydra-Cell bare shaft pumps for metering). It features built-in programming and is available in a web-based format or with an easy-to-use touch-screen display.

The user can enter the desired flow rate or volume in gallons or liters and system pressure in psi or bar, and the controller automatically runs the pump manually at the desired flow rate or volume total/time, or in pre-set batches.

This versatile electronic controller allows programming for the flow rate or for totalization of the recent process application as well as the life of the pump.



Start-up menu for the touch-screen model.

## **Touch-screen Exclusives:**

- 7" color graphic touch-screen user interface in a NEMA-4X enclosure - easy to operate and visible in low-light areas.
- Safety features for emergency stop, loss of power and fault monitoring.
- Can control up to six (6) pumps with one Hydra-Cell Control Freak screen - requires additional VFDs and I/O modules.

## **Performance Features**

- Variable Frequency Drive (VFD).
- Pre-set (with password protection) for Hydra-Cell pump performance algorithms - can also be field-calibrated for greater accuracy.
- Input for temperature probe monitoring.
- Pump-drive information screen.
- · Four configurable on-off relays.
- Ten separate batch set-up screens per pump.
- · Two user-configurable analog input displays.
- · Analog and digital I/O for interfacing with external devices.
- One analog input dedicated to a pre-programmed closed loop feedback.
- Includes real-time clock.
- Emergency stop safety feature.
- Versatile enables programming for flow rate or totalization.



Web-based version operating from a tablet.

# Web-based Exclusives:

- Accessible through phone/mobile devices, tablets, laptops, and desktops.
- Can control an unlimited number of Hydra-Cell metering pumps - requires additional VFDs and I/O modules.
- Two-pump proportioning.
- · Inputs for leak detection and oil level monitoring.
- Maintenance reminders.
- · Updates through thumb drive.

## **Control Freak Selection Process**

### **Programming Options**

Touch-screen: Includes 7" screen with assembly cable,

CAT5e, 7-ft.

Web-based: For phone/mobile, tablet, and laptop/desktop

computers.

Touch-screen shown with required VFD kit. The Web-based program also uses a VFD kit.



### **VFD Kits** (order one VFD kit for each pump operated by the Control Freak)

Power	Туре	Input Voltage/Phase	Output Voltage/Phase
1/2 hp (0.37 kW)	VFD	115 volt/1-phase	230/460 volt/3-phase
1/2 hp (0.37 kW)	VFD	230 volt/1-phase	230/460 volt/3-phase
1 hp (0.75 kW)	VFD	115 volt/1-phase	230/460 volt/3-phase
1 hp (0.75 kW)	VFD	230 volt/1-phase	230/460 volt/3-phase
2 hp (1.5 kW)	VFD	230 volt/1-phase	230/460 volt/3-phase
3 hp (2.2 kW)	VFD	230 volt/1-phase	230/460 volt/3-phase
1/2 hp (0.37 kW)	VFD	230 volt/3-phase	230/460 volt/3-phase
1 hp (0.75 kW)	VFD	230 volt/3-phase	230/460 volt/3-phase
2 hp (1.5 kW)	VFD	230 volt/3-phase	230/460 volt/3-phase
3 hp (2.2 kW)	VFD	230 volt/3-phase	230/460 volt/3-phase
1 hp (0.75 kW)	VFD	460 volt/3-phase	230/460 volt/3-phase
2 hp (1.5 kW)	VFD	460 volt/3-phase	230/460 volt/3-phase
3 hp (2.2 kW)	VFD	460 volt/3-phase	230/460 volt/3-phase

For higher hp or kW, please consult factory.

#### Each VFD kit includes:

- Appropriate VFD model in chart to left
- I/O Module, Single Pump
- Wiring, I/O Module
- Wiring, Motor, 22 ga., 1-ft., Red
- Wiring, Motor, 22 ga., 1-ft., White
- Cable, CAT5e, 1-ft.

#### **Control Freak Accessories**

Accessory	Description	
Enclosure (1)	VFD Enclosure for up to 1 hp (0.75 kW)	
Probe Kit	Oil Temperature Sensor Probe with Oil Cap	
Ball Mount Assembly (2)	Bracket Ball, Ball Mount Hinge, Screw, Nut	
Emergency Stop Button (3)	Safety Kit	
Cabling	1-ft. CAT5e Cable	
Cabling	3-ft. CAT5e Cable	
Cabling	7-ft. CAT5e Cable	
Cabling	10-ft. CAT5e Cable	
Cabling	30-ft. CAT5e Cable	

- (1) Consult Factory for larger VFDs and for pricing on equipment mounting in enclosure.
- (2) Available for Touch-screen model only.
- (3) Available as an accessory for Web-based version only; built into Touch-screen model.

