

## C230 Pump Controller

- A. Manufacturers
  - 1. Earthsafe Systems C230 Series
  
- B. General: Provide a UL listed pump disconnect and motor starter controller to safely power fuel pumps and integrate with PLC based fuel system controls. Provide pump controllers as noted on the drawing with one of the following configurations:
  - C231: Critical Service Controller for Single Pump
  - C232: Critical Service Controller for Dual Pumps
  - C233: Standard Service Controller for Single Pump
  - C234: Standard Service Controller for Dual Pump
  - C235: Variable Frequency Drive Controller for Single Pump
  
- C. Design Criteria
  - 1. Enclosure: The controller shall be housed in a metallic electrical enclosure rated NEMA 4.
  - 2. Disconnect: The controller shall include a lockable rotary disconnect switch. Dual Pump units shall have 6 pole disconnects.
  - 3. Motor Starter and Overload Protection: The controller shall include a motor starter contactor with overload protection sized for the pump to be controlled.
  - 4. HOA Switch: The controller shall include a MANUAL-OFF\_AUTO selector switch for the controller operating mode. In the MANUAL mode the pump shall start using local control. In the AUTO mode the pump shall start when the controller receives a pump request input from the fuel system controller.
  - 5. Current Sensor: The pump controller shall include a current sensor for feedback to the fuel system controller.
  - 6. Other Outputs: The controller shall include dry contact outputs for Not-In-Auto status and overload trip.
  - 7. Critical Service Design: Critical Service Controllers shall operate such that in the MANUAL mode the pump starts using line power only, independent of control power from an external controller.
  - 8. VFD Drives: Where VFD controllers are specified, the drives shall be UL listed drives sized for the pump to be controlled. The controller shall allow for local selection of pump speed, and shall include an optional input for a line pressure sensor as an alternate control device.