All P4-Series Dispensers, Electrical Specifications

Hazardous Location Rating: NEC (NFPA70) Class 1, Division I/II
In accordance with UL495 / 1238 / 1203

Supply Voltage 120vac / 60Hz (or 220vac/50Hz)
Voltage supply circuit breaker for dispensers should be no less than 6 amps
Each dispenser / hose has the following connections:

1. 120vac supply to Black wire (min 6 amps)
2. Neutral to White wire
3. Ground to Green wire
4. Red (separate 18ga) is 120vac out when authorized to close remote motor starter relay, max .5 amps
5. Shielded cable
    a. Red/Black pair is for fuel management pulse output (5-12 VDC square wave pulses with supplied voltage from FMS unit)
    b. White /Black pair is for Fuel management remote Authorize (no current)

Conduits:

¾" min – The Data wires (RED/BLACK – WHITE/BLACK) must be run in a dedicated conduit to prevent any electrical interference from the AC voltage wires.

¾" min – The RED, BLACK, GREEN & WHITE dispenser power wires and pump command wires should be run in a dedicated conduit to separate them from both data and high voltage motor lines.

1" min – The pump motor wires should be run in a dedicated conduit to separate them from the data and AC supply voltage to the dispenser (Colors and voltages vary based on the motor requirements)

A ground rod is required under dispenser for direct cabinet ground (for protection from lightning and static discharge to cabinet).

Recommend to use Parafour P4-Series Electrical control panels for integrating all electrical requirements, E-STOP, and hose isolation.

Each hose must have an isolation relay on the red motor starter relay signal wire, to prevent voltage back feed to the Solid State Relays on dispenser computer. These are usually mounted in the same main electrical controls panel as the pump motor starter(s) as they are used to control the 120vac closing voltage on the starter. The purpose is to isolate all the RED dispenser pump command wires from each other, using them to close the isolation relays, controlling a separate 120vac feed to close the motor starter.

All wiring to/from and inside the lower hydraulic enclosure MUST be Class I, Division I per NEC. Explosion proof listed components only.

All dispensers have 6' extensions for electrician convenience. All interconnection wires are in a ¾" sealed (in upper electronics enclosure) conduit, with ¾" npt threads, stubbed, approximately 13" above the dispenser base.

Parafour Innovations, LLC, nor their Distributors, Master Installers or Affiliates shall be held responsible for installations made by unqualified or underqualified electricians and installing technicians. All dispensers must be installed by an electrician with the appropriate licensing, with documentable experience in petroleum installations, Class1, Division 1&2 hazardous areas, and specifically refueling stations.