

# FRS 660-MTU<sup>UL</sup> Fuel Recirculating System Specification Sheet

## Product Description:

The FRS 660-MTU UL Fuel Recirculating System is **UL 508A Listed**. It is designed to automatically circulate and clean fuel at 11 GPM for a single storage tanks on a preprogrammed schedule without the use of filter elements.

The FRS 660 MTU UL utilizes **RCI Technologies patented** fuel purification technology, which contains no filters or moving parts. It is used as primary fuel purification and removes 100% of all free water, including emulsified water and up to 98% of the normal solid or particulate contaminants found in fuel, including sludge and algae to approximately 10 microns.

The control system is housed in a **NEMA 4**, key lockable enclosure. The system consists of an RCI Universal Fuel Purifier, a continuous duty motor and fuel pump. The system is PLC controlled, with an Operator Interface Touch Panel that allows for system programming and alarm monitoring. Automatic controls are governed by a programmable 7 days, 24-hour real time clock with user definable start and run times. Four (4) relay alarm outputs include: pump failure, purifier high water level, system high pressure and fuel catch basin leak. Standard internal relays allow alarm status to be remotely monitored in addition to control of the automatic valve. Optional Modbus RTU output is available.

FRS Systems are designed for use with all Class II or III combustible fuels having a flash point of 100° F or higher. Multiple tank operations are available. While not necessary, an additional 2-micron fuel filter can be added as an option to meet certain specifications.

## Standard Features:

### System:

- Listing: **UL 508A**
- Approx. shipping weight: 425 lbs
- Power Requirements: Standard: 110 or 230 VAC, 60Hz, 1Ph (*Please Specify*)  
208/308/480 VAC, 3 Ph
- *OPTIONS:*

### Cabinet:

- Dimensions: 48" W x 42" H x 12" D
- Rating: **NEMA 4**
- Construction: Dual Door, Heavy Duty Powder Coated Steel (white)
- Mounting: Suitable for floor or wall mounting (Wall and Floor Mounting Tabs Included)
- Security: Individually Keyed Lock
- Fuel Leak Basin w/ Drain: Integral
- Leak Float Switch: 1/8" Liquid Detection
- Pressure Switch: 3 to 100 psi switch
- Plumbing and Wiring: Factory assembled and tested

### Controls

- System Controller: **UL 508A** Standard PLC
- Operator Interface: 6" Monochrome Touch Screen Panel
- System Data Display: Touch Screen
- Location of:
  - PLC Controller In **NEMA 4** Poly Pro Enclosure
  - Touch / Data Screen Exterior of Front Door
  - OHA Switch Exterior of Front Door
  - Summary Alarm Light Exterior of Front Door
  - Audible Horn Exterior of Front Door
  - Test Reset Alarm Button Exterior of Front Door
- *OPTIONS:*  
*Controller Heater*  
*MODBUS RTU output*

### Automatic Valves:

- 1" Automatic Ball Valve: 4 for two tanks  
6 for three tanks  
8 for four tanks



FRS 660-MTU <sup>UL</sup>

### Fuel Purifier:

- Model Number: FP 1000 Fuel Purifier
- Normal Flow: 40 GPM
- Water Removal: 100%
- Decontamination Unit: FM 2000
- Water Drain Valve: 1" Brass
- Particulate Removal:
  - Primary: 98% to approx. (10 micron)
  - Secondary: Provided by Engine Mfg (5 micron)
  - Final Removal: Provided by Engine Mfg (2 micron)
- *OPTIONS:*  
*Heater*  
*Automatic Water Drain Kit*  
*2 Micron Spin-On Filter*

### Pump:

- Type: Positive Displacement Pump
- Product to pump: Diesel Fuel
- Pump Rate: 11 GPM
- Pump Housing: Aluminum
- Pump Gears: Steel

### Pump Motor:

- Horse Power: 1 H.P.
- Enclosure: TEFC
- Frame: 56C
- Duty: Continuous
- Type: Capacitor Start

### Plumbing:

- 2 pcs. Brass 1" Manual Ball Valves (Fuel Line Input/Output)
- 2 pcs. Brass 1" Check Valves
- 3 pcs. Brass 1" Unions
- 1 pc. Brass 1" Priming Tee

*Note: Specifications subject to change without notice.*

462 Borrego Court, Suite D • San Dimas, California 91773  
Phone: (800) 868-2088 • (909) 305-1241 • Fax: (909) 305-1245  
www.rcitechnologies.com • email: info@rcitechnologies.com

