

AUTOGAS & FILL STATION EQUIPMENT

- Top quality equipment
- On-call Technical support



Solutions beyond products...



For Standard Cylinder Fill Cabinet Information See Pages 14 – 17



Autogas is an exciting, rapidly growing segment of the LP Gas industry.

Call on our people to help answer your questions.

AUTOGAS DISPENSERS

Answers To Your Most Important Questions About Autogas..... 1

Two Styles of Dispenser Units

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STANDARD CYLINDER FILL CABINETS

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Ray Murray Inc., 50 Limestone Road, Lee, MA



What type of carburetion system will you be filling from your dispenser?

- Vapor System:** If this is the ONLY type you will ever fill from this dispenser then standard 20lb fill station equipment will suffice. (Prinz system for example)
- Liquid System:** Liquid systems require higher horsepower and the need to overcome higher differential pressures. Liquid systems require Autogas specific pumps and motors. (Roush system for example) See page 10 for pump/motor details.

How many GPM will I need? See page 10 for GPM information

- A few company vehicles or small number of daily fills... 7.5 - 11 GPM is adequate
- Larger fleet or multiple fleets... 15 + GPM is required to prevent long waits for filling
- Pump differential is important in your decision making see below and page 10.

Pump Differential information... you need to match your filling needs to the correct pump

What is pump differential? It is the difference between the inlet and outlet pressures of the pump

- Filling 20 lb cylinders requires 55-60# differential pressure
- Filling a vapor fuel system requires 75-80# differential pressure
- Filling a liquid injection fuel system requires 140-175# differential pressure.

What Voltage/Phase electrical considerations do I need?

- Blackmer and Corken pump assemblies can handle either single or three phase power (via use of a Variable Frequency Drive... VFD) w/exception of the Blackmer LGL-158B which requires 3 phase.
- Blackmer and Corken can also be used with a starter (instead of VFD) see page 10 for a matrix of this information
- Smith Pump is single phase only

Can I use an existing tank?

- Yes, a 1000 or 2000 gal tank. Standard tanks will suffice.
- Quality Tank produces a 1,000 gallon Autogas specific tank that has 3 bottom openings with side load and side gauges.
- Vertical tanks may be used. CFT offers a Vertical Skid Package w/a 1000 vertical. (Called CFT Vertical Station System)

How do I make a Dispenser choice?**Cabinet configuration** (See Page 2)

AG-RMI Cabinet Dispenser is a great choice for filling company vehicles or an application that does not require "Gas Pump" style dispenser appearance or card reader

Gas-Pump configurations (See Pages 4-8)

- Pro-2100, Pro-2200 are basic dispenser models, compact, SS cabinets, mechanically identical except for the cylinder filling option on the 2200
- Pro-6100, 6200, 7100, 7200 are mechanically identical. Difference is the larger size and style of dispenser boxes and the one or two hose option
- Pro-6100, 6200, 7100, 7200 also have optional LC meter and "SCAMP linearization". (meter accuracy enhancement)
- Pro-5100 Single hose Gasboy is a pump style that is often used for fleet use. This does not come preset with card reading applications
- Pro-5200 Double hose Gasboy w/same features as the PRO-5100
- Pro-3100 Single hose Gilbarco is the favored unit for retail usage... it is pre-wired with full card reader capabilities... is set up with a high hose/top mount for maximum flexibility
- Pro-3200 Dual hose Gilbarco w/same features as Pro-3100

All dispensers can be mounted at the tank or remotely

Do you need Fuel Management/Card reader compatibility?

- All CFT Dispensers are compatible with most Fuel Management Systems...Gibarco 3100 and 3200 units come with card reading as standard equipment

Single or Double hose configuration needed?

- PRO 2100 is available in single hose only (cylinder fill second hose is available on this Series... item # Pro-2200... but not 2 vehicle hoses)
- All other models available in double vehicle hose versions
- Double hose configurations require either the Blackmer LGL158B or the Corken HDPDLF-150-1P10 pumps due to HP requirements

Tank Mounting options?

Tank alone? Use MT-Tank-2 and MT-Pumpskid-2 for all CFT dispensers. For DIAFF cabinet specify #TS-1 stand and #TPMPA pump skid.

Full Skid? Use CFT-SKID for tank and dispenser connected as one unit. CFT- Skid is a stand alone, one piece unit. This unit is shipped assembled as one piece. All other above part numbers use 2" pipe (not supplied) for alignment of Dispenser and Tank

Mini Skid? Use MINISKID to mount Dispenser w/Pump/Motor adjacent to, but separately from the Tank

D-1AFF Cabinet Assembly Features

Ideal for fueling small fleet or company vehicles where a fuel management system is not needed.

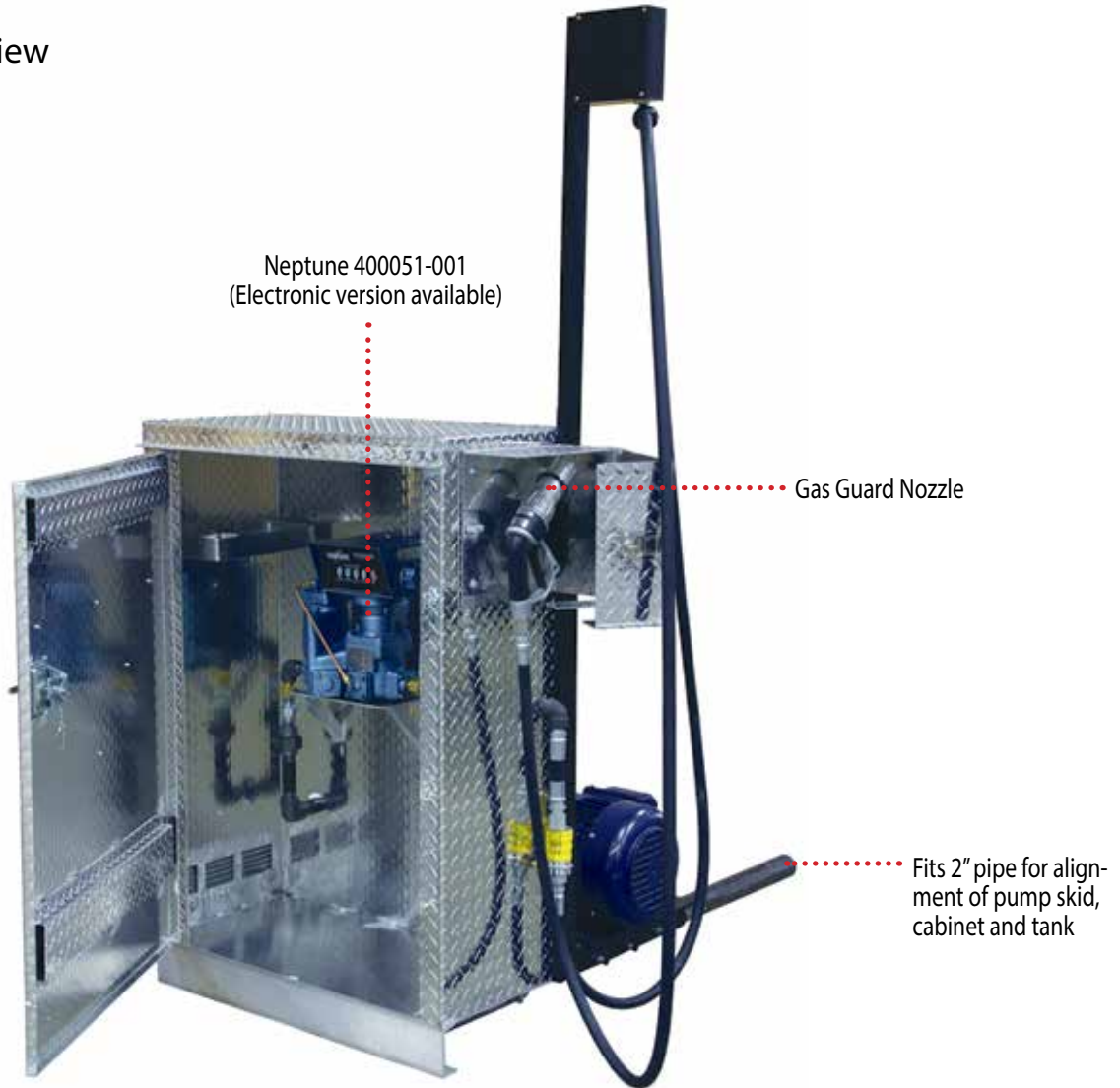
- D1AFF compact cabinet
- Neptune 3/4" meter
- High differential Blackmer or Corken pump/motor options
- Single phase VFD unit standard
- Hi-Hose Retractor
- Gas guard nozzle with hose
- All fittings/valves/strainers
- Cabinet signage

Options

- Electronic register/pulse input-output



D-1AFF Open View



Sample Packages

Basic Blackmer Package D-1AFFB-154

Delivers 8.4 GPM at 140 PSID

Package Includes:

Dispenser Cabinet D-1AFF

Blackmer LGL154A-F 3 hp w/VFD and Bypass

Valve Kit complete #PK-AGB (inc. all fittings, valves, cabinet signage, nozzle, hose)

Pump/Motor Base #TPMPA

Hi-Hose Retractor 6102-1078P + PB1373

Basic Corken Package D-1AFFC-060

Delivers 11 GPM at 140 PSID

Package Includes:

Dispenser Cabinet D-1AFF

Corken HDPDLF-060 w/5 hp motor (includes VFD and Bypass)

Valve Kit complete #PK-AGC (inc. all fittings, valves, cabinet signage, nozzle, hose)

Pump/Motor Base #TPMPA

Hi-Hose Retractor 6102-1078P + PB1373

Pro-2100/2200 Industrial /Commercial Dispensers

Ideal solution for fleets, the 2100 provides a simple-to-use, reliable and attractive dispenser, with all the electronic functionality of bigger retail dispensers. Its compact and high durability stainless steel cabinet can be installed on a small footprint. It comes complete with a LiquaTech LPM102 flow meter with Trac-Bearing Chamber and CFT Electronic register, as well as standard 12' over all delivery hose and MEC break-away.

Computer Features

- Easy-to-read back-lit LCD displays
- Separate display for functions & programming
- 16 Key alpha-numeric keypad
- 5-level secured access programming
- 8-6-6 character displays
- 110 vac/60 Hz OR 220 vac/50 Hz power supply
- Communicates to most fuel management systems
- Integral Gilbarco 2-wire communication protocol Metering & Hydraulics
- Standard LiquaTech LPM102 meter
- Explosion-proof electrical connections in conduit
- Explosion-proof junction box for safe connections
- Isolation valves for easy maintenance
- Liquid inlet & vapor outlet gauges for diagnostics

PRO-2200 Series

Is identical to the Pro-2100 but with the cylinder filling feature

- Additional hose with a cylinder filling nozzle
- The cylinder hose is separated from the autogas hose by electronically controlled solenoid valves
- The desired hose, either autogas or cylinder fill is selected using a switch on the face of the dispenser
- When cylinder fill is selected, the gallons and price display is deactivated



Pro-2100



Pro-2200

Complete installation requirements:

Dispenser	2100 OR 2200
Dispenser Mount	Full Skid OR Mini Skid OR User Supplied Pad
Tank	1,000 Gallon OR 2,000 Gallon
Pump Assembly	See Chart Page 10 for Pump Options/1 phase or 3 phase
Piping Kit	Piping layout differs with pump choice. Please call RMI Technical Service for the your installation requirements.
Filter Kit	Blue Moon Filter Kit Part #PK-BMF

CFT PRO-C-6000 Series Commercial Autogas Dispenser

PRO-6100 SERIES

Low frame commercial single sided, single hose

- Powder-coated Cabinet
- Computerized volume/price calculator
- Preset for money & volume Optional
- 16-key keypad for programming
- Self diagnostics for troubleshooting
- Lexan display panel, virtually unbreakable
- LiquaTech LPM102 meter with Trac-Bearing (Liquid Controls MA4 with SCAMP optional)
- Inlet 3/4" filter with replaceable filter element

Computer Features

- Easy-to-read back-lit LCD displays
- Separate display for functions & programming
- 16-Key alpha-numeric keypad
- 5-level secured access programming
- 8-6-6 character displays
- 110 vac/60 Hz OR 220 vac/50 Hz power supply
- Communicates to most fuel management systems
- Integral Gilbarco 2-wire communication protocol Metering & Hydraulics
- Standard LiquaTech LPM102 meter
- Explosion-proof electrical connections in conduit
- Explosion-proof junction box for safe connections
- Isolation valves for easy maintenance
- Liquid inlet & vapor outlet gauges for diagnostics

Metering & Hydraulics

- Standard LiquaTech LPM102 meter
- Optional LC MA4 with SCAMP linearization
- Explosion-proof electrical connections in conduit
- Explosion-proof junction box for safe connections
- Isolation valves for easy maintenance
- Liquid inlet & vapor outlet gauges for diagnostics

PRO-6200 Series

All of the 6100 features include shown above plus:

- Two sided, two hose

Custom customer graphics available. Provide adobe file for a quote.



Complete installation requirements:

Dispenser	2100 OR 2200
Dispenser Mount	Full Skid OR Mini Skid OR User Supplied Pad
Tank	1,000 Gallon OR 2,000 Gallon
Pump Assembly	See Chart Page 10 for Pump Options/1 phase or 3 phase
Piping Kit	Piping layout differs with pump choice. Please call RMI Technical Service for the your installation requirements.
Filter Kit	Blue Moon Filter Kit Part #PK-BMF

CFT PRO-C-7000 Series Commercial Autogas Dispenser

PRO-7100 SERIES

High Frame Retail. Single sided, single hose

- Powder-coated Cabinet
- Computerized volume / price calculator
- Preset for money & volume
- 16-key keypad for programming
- Self diagnostics for troubleshooting
- Lexan display panel, virtually unbreakable
- LiquaTech LPM102 meter with Trac-Bearing (LiquidControls MA4 with SCAMP optional)
- Inlet 3/4" filter with replaceable filter element

Computer Features

- Easy-to-read back-lit LCD displays
- Separate display for functions & programming
- 16-Key alpha-numeric keypad
- 5-level secured access programming
- 8-6-6 character displays
- 110 vac/60 Hz OR 220 vac/50 Hz power supply
- Communicates to most fuel management systems
- Integral Gilbarco 2-wire communication protocol

Metering & Hydraulics

- Standard LiquaTech LPM102 meter
- Optional LC MA4 with SCAMP linearization
- Explosion-proof electrical connections in conduit
- Explosion-proof junction box for safe connections
- Isolation valves for easy maintenance
- Liquid inlet & vapor outlet gauges for diagnostics

PRO-7200 Series

All of the 7100 features include shown above plus:

- Two sided, two hose

Custom customer graphics available. Provide adobe file for a quote.



Complete installation requirements:

Dispenser	2100 OR 2200
Dispenser Mount	Full Skid OR Mini Skid OR User Supplied Pad
Tank	1,000 Gallon OR 2,000 Gallon
Pump Assembly	See Chart Page 10 for Pump Options/1 phase or 3 phase
Piping Kit	Piping layout differs with pump choice. Please call RMI Technical Service for the your installation requirements.
Filter Kit	Blue Moon Filter Kit Part #PK-BMF

PRO 3000 Series Gilbarco LPG Autogas Dispenser

Gilbarco Encore S Pro-3100

Single sided, single hose. Two sided, two hose

- Galvanized Meter support bracket with reinforcements
- Explosion-proof conduit for all high-voltage wires
- Piloted solenoids for flow control
- Intrinsically safe circuits for pulser and ATC probes
- Liquid inlet & vapor outlet diagnostic gauges
- Bleeder & isolation valves for maintenance
- Air-Gap separation with conduit and vapor seals
- Standard LC MA4 meter with SCAMP linearization
- Available with standard and custom Gilbarco MOC graphics
- Retains original Gilbarco computer and features
- Compatible with standard Gilbarco options
- Gasguard GG20 nozzle standard
- Automatic Temperature Compensation

PRO-3200 Series

All of the 3100 features includes shown above plus:

- Two sided, two hose

Custom customer graphics available. Provide adobe file for a quote.



Pro-3100 Shown

Complete installation requirements:

Dispenser	2100 OR 2200
Dispenser Mount	Full Skid OR Mini Skid OR User Supplied Pad
Tank	1,000 Gallon OR 2,000 Gallon
Pump Assembly	See Chart Page 10 for Pump Options/1 phase or 3 phase
Piping Kit	Piping layout differs with pump choice. Please call RMI Technical Service for the your installation requirements.
Filter Kit	Blue Moon Filter Kit Part #PK-BMF

Gasboy Autogas Dispenser

Pro-5100

Standard Features:

- Electronic computer
- Gilbarco 2-wire communication
- Backlighted electronic display 6-6-4: money, volume, and PPU
- Capable of stand-alone operation
- Automatic temperature compensation (ATC)
- Flow rate from 2 to 40 gallons per minute
- Breakaway coupling, whip hose and 12' dispenser hose
- GG20 Gasguard nozzle for LPG autogas
- Side mount nozzle
- Painted G90 galvanized steel
- Painted lockable, removable panels
- Painted and replaceable G60 galvanized sheathing

Available Options

- Extended hose up to 18', if permitted by local authorities
- Tripod safety mounting system
- Optional custom vinyl wrap
- Extended Warranty
- Worldwide service for the Gilbarco electronics
- Kooline lockable, removable stainless steel panels
- Kooline stainless steel sheathing

PRO-5200 Series

All of the 5100 features include shown above plus:

- Two sided, two hose

Custom customer graphics available.
Provide adobe file for a quote.



Pro-5200 Shown

Complete installation requirements:

Dispenser	2100 OR 2200
Dispenser Mount	Full Skid OR Mini Skid OR User Supplied Pad
Tank	1,000 Gallon OR 2,000 Gallon
Pump Assembly	See Chart Page 10 for Pump Options/1 phase or 3 phase
Piping Kit	Piping layout differs with pump choice. Please call RMI Technical Service for the your installation requirements.
Filter Kit	Blue Moon Filter Kit Part #PK-BMF

1000/2000 Gallon Horizontal LPG Autogas Skid Package

Features

Pre-assembled and tested, fully integrated design. Ready to install with minimal installation work requirements, just hook up the electricity, fill with LPG and go!

- 1000 or 2000 gal horizontal tank on saddles, with three bottom openings, powder-coated with side mounted valving for easy fill, gauge read and access.
- Pneumatic internal valves in ALL bottom outlets, liquid feed to pump, bypass liquid return, vapor return to tank.
- Corken or Blackmer high differential pump.
- All piping preassembled with flexible isolation in & out of pump with protective coating and paint.
- Ball valves for easy maintenance at all service points.
- Strainer with service drain, conveniently located for easy access.
- Inlet & outlet gauges for pump diagnostics.
- Pre wired with explosion-proof junction box, large for accessories. Access room for card reader.
- Heavy duty 3" welded square tube frame, durable vinyl textured "bed-liner" finish for enhanced corrosion resistance.
- Flexible modular design, for a variety of tanks, pumps and dispenser options.

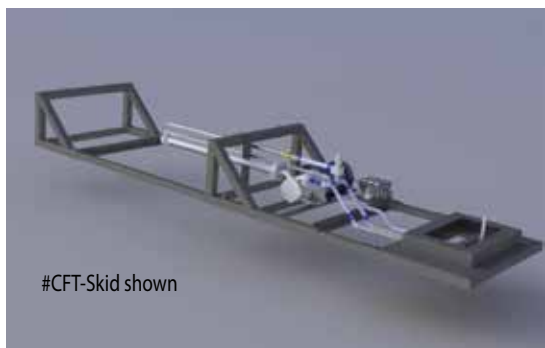


- Designed to accommodate all CFT single-hose dispensers with card reader interface.
- Designed to accommodate Tripod Safety System (optional kit)
- Call for specific quotation.

Simplified - Tankless Skid System

Features

Preassembled and tested, fully integrated design. Ready to install to existing customer tanks (tank must meet minimum requirements). Requires minimal additional materials; hook up electricity, mount tank, connect vapor return, bypass return and pump supply, and it is ready for service!



- Can control Pneumatic internal valves in ALL tank openings, liquid feed to pump, bypass & vapor return. Minimum requirement of 1-1/4" bottom liquid opening for internal valve installation.
- Welded 3" channel frame, adjustable for expansion, heavy vinyl coating for long life durability.
- Corken or Blackmer high differential pump.
- Pre installed bypass and inlet flange set.
- All piping preassembled with flexible isolation in & out of pump with protective coating and paint. Kit includes flex hoses, vapor valves with excess flows, and other hardware for bypass and vapor.
- Ball valves for easy maintenance at all service points.
- Inlet & outlet gauges for pump diagnostics.
- Pre-wired with explosion-proof junction box, large for accessories. Access room for card reader.
- Optional base plate designed to accommodate all CFT single-hose dispensers.
- Optional Tripod safety system.

LPG Mini-Skids

Features

Preassembled and tested, fully integrated design. Ready to install with minimal installation work requirements, just hook up the electricity, connect to tank and go.



#Pro-2100-Miniskid shown

FOR SINGLE PHASE ELECTRICAL SUPPLY

BLACKMER	MAX FLOW @ 0 PSID	COMPARATIVE FLOW @140 PSID	COMPARATIVE FLOW @ MAX DIFF.	MAX DIFFERENTIAL CAPABILITY
LGL154A-F + EMC-3 + VFD or Manual or Magnetic Starter (see pg 11) + Bypass (ME840-8-150)	11 GPM	8.5 GPM	8.5 GPM	140 PSID
LGL156A-F + EMC-5 + VFD or Manual or Magnetic Starter (see pg 11) + Bypass (ME840-8-225)	21 GPM	15.5 GPM	15 GPM	160 PSID
LGL158B-F + EMC 7.5 + VFD or Manual or Magnetic Starter (see pg 11) + Bypass (ME840-8-225)	32 GPM	25 GPM	22.5 GPM	200 PSID

CORKEN

HDPDLF060-1P53 (Includes motor, pump, bypass & VFD)	22 GPM	9.5 GPM	8 GPM	150 PSID
HDPDLF075-1P75 (Includes motor, pump, bypass & VFD)	40 GPM	22 GPM	14 GPM	200 PSID
HDPDLF-150-1P10 (Includes motor, pump, bypass & VFD)	58 GPM	34 GPM	17 GPM	250 PSID

SMITH PRECISION

GC-1ZL Complete pump/motor	13 GPM	7.5 GPM @ 125	-	125 PSID
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FOR THREE PHASE ELECTRICAL SUPPLY

BLACKMER	MAX FLOW @ 0 PSID	COMPARATIVE FLOW @140 PSID	COMPARATIVE FLOW @ MAX DIFF.	MAX DIFFERENTIAL CAPABILITY
LGL154A-F + EMC-3 + VFD or Manual or Magnetic Starter + Bypass (ME840-8-150)	11 GPM	8.5 GPM	8.5 GPM	140 PSID
LGL156A-F + EMC-5 + VFD or Manual or Magnetic Starter + Bypass (ME840-8-225)	21 GPM	15.5 GPM	15 GPM	160 PSID
LGL158B-F + EMC 7.5 + VFD or Manual or Magnetic Starter + Bypass (ME840-8-225)	32 GPM	25 GPM	22.5 GPM	200 PSID

CORKEN

HDPDLF060-3P53 + VFD or Manual or Magnetic Starter (incl. pump, motor, & bypass)	22 GPM	9.5 GPM	8 GPM	150 PSID
HDPDLF075-3P75 + VFD or Manual or Magnetic Starter (incl. pump, motor, & bypass)	40 GPM	22 GPM	14 GPM	200 PSID
HDPDLF-150-3P10 + VFD or Manual or Magnetic Starter (incl. pump, motor, & bypass)	58 GPM	34 GPM	17 GPM	250 PSID

SMITH PRECISION

No offering for three phase applications.

- Units shown above are most often used configurations.
- Pump/Motor packages can be modified to suit a unique application if necessary.

Corken Pump Package Note: Bypass valve included in pump/motor packages have a 150 PSI Max Differential. If differential pressures up to 225 PSI are needed, order RMI Part Number ME840-8-225 for correct bypass valve.

Either VFD or starter option is compatible with either single or three phase power. Use of a VFD has certain benefits as shown below.

VFD (Variable Frequency Drive) Options

- The VFD converts single phase power to three phase power.
- The VFD takes the place of a manual or magnetic starter for the pump.
- VFD use improves the efficiency of the motor and reduces power use.
- The slow motor start up prevents surges prolonging motor life.
- These units include overload protection for the motor.

Note: Standard VFD unit is mounted inside on your electrical panel.
Weather proof models are available if necessary.

RMI Part #	Description
4204-1	VFD for 3 or 5 HP 1 Phase Motor
4204	VFD for 7.5 HP 1 Phase Motor
4204-2	VFD for 10 HP 1 Phase Motor



NOTE: If you currently have single phase power, using a VFD gives the option to purchase a three phase motor which is considerably less cost than a single phase motor.

STARTER OPTIONS

Starter choice must be matched to motor horsepower, voltage and power phase.

SINGLE PHASE SERVICE

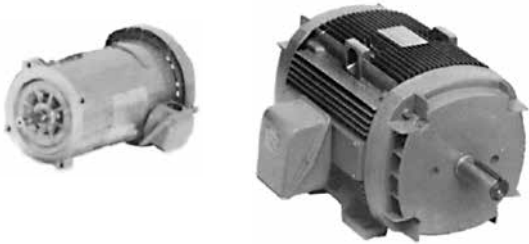
MOTOR HP	MANUAL STARTERS		MAGNETIC STARTERS	
	115V	230V	115V	230V
3	609-XHX	609-BHX	509-XHxD	509-BHXA
5	N/A	609-XHX	N/A	509-XHXA

THREE PHASE SERVICE

MOTOR HP	MANUAL STARTERS		MAGNETIC STARTERS	
	230V	460V	230V	460V
3	609-AHW	609-AHW	509-AHA	509-AHB
3	609-BHW	609-AHW	509-BHA	509-AHB
7.5	609-BHW	609-BHW	509-BHA	509-BHB
10	N/A	609-BHW	509-CHA	509-BHB



Motors



1 PHASE - C FACE 1725 RPM

RMI Part #	HP	Frame Size	Shaft	Voltage	Amp Rating	
					115v	230v
EMC-1	1	56C	5/8"	115/230	11.2	5.6
EMC-1.5	1.5	56C	5/8"	115/230	12	6
EMC-2	2	184C	7/8"	115-208/230	22	11.6
EMC-3	3	215C	1 1/8"	115/230	30	15
EMC-5	5	215C	1 1/8"	230		21

3 PHASE - C FACE 1725 RPM

RMI Part #	HP	Frame Size	Shaft	Voltage	Amp Rating	
					115v	230v
EMCT-1	1	56C	5/8"	208-230/460	3.6	1.8
EMCT-1.5	1.5	56C	5/8"	208-230/460	4.6	2.3
EMCT-2	2	56C	5/8"	230/460	6	3
EMCT-3	3	182TC	1 1/8"	230/460	8.2	4.1
EMCT-5	5	184TC	1 1/8"	230/460	13.6	6.8
EMCT-7.5	7.5	213TC	1 3/8"	230/460	20.2	10
EMCT-10	10	215TC	1 3/8"	230/460	26	13

C FACE 3600 RPM for Corken C Model Pumps

RMI Part #	HP	Frame Size	Phase	Voltage	Amp Rating	
					115v	230v
2556	1	C10/C12	1	115-208/230	12	6
4261	2	C12/C13	1	115-208/230	20	10
2557	3	C14	3	230/460	4	8

TS-1 Tank Stands

For D1AFF cabinets



Meters

- Aluminum construction
- 1" size with 3/4 FNPT flanges



RMI Part #	Description
400051-001	Non-Compensated Version
400051-002	Temp Compensated Version

Note: printer head shown, unit also available with Mid-Comm Electronic register



RMI Part #	Description
MA4GX-10	1" in and out w/vapor eliminator, strainer and pressure diff. valve
MA4CX-10	1" non-print version

Bypass Valves

RMI provides Bypass Valve options from Fisher, Blackmer, Corken and Marshall-Excelsior. Multiple sizes and pressure ranges available... call for details.



Fill Nozzles

- Fill Mobile & Stationary Tanks
- Lightweight & Well Balanced
- Will Not Disconnect From Filler Valve While Lever in Open Position
- Fine Filter Incorporated in Nozzle
- Long Swivel Nut for Forklift Truck Filling

RMI Part #	Description
GG.205	3/4" FNPT x 1 3/4" ACME



Blue Moon Filter

RMI Part #	Inlet/Outlet	Description	Life Span in Gallons
BMF-FST26	3/8"	15GPM Flow Rate Disp. Filter	1000
BMF-FST63	1"	35GPM Flow Rate Disp. Filter	150,000
BMF-FST634	1"	50GPM Flow Rate Filter Asmb.	250,000
BMF-FSTRF6	N/A	Replacement Filter for FST63	250,000
BMF-FST124HV	2"	65-85GPM Flow Rate Filter Asmb.	500,000
BMF-RF4	N/A	Replacement Cartr. for FST124HV	500,000



Breakaway

RMI Part #		Connection FNPT	OAL Length	Accessory Reassembly Tool
Bracket Style	Lanyard Style			
ME860S-6	ME861S-6	3/4"	6"	MEP128-6
ME860S-8	ME861S-8	1"	6 3/4"	—
ME860S-10	ME861S-10	1 1/4"	7 3/4"	—



Tripod Safety System for CFT Dispensers

This system is recommended for high-traffic retail stations for minimizing liability in case of accident.

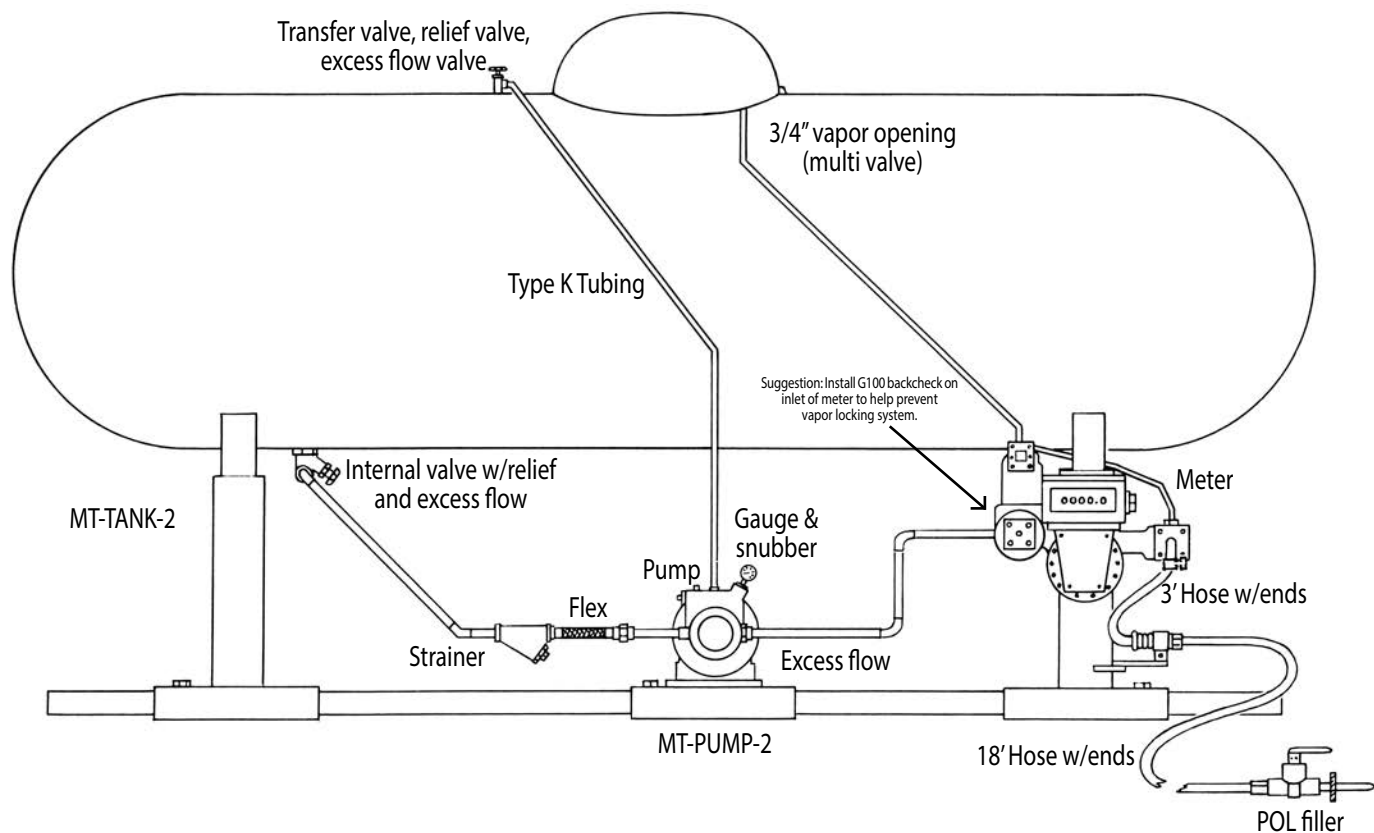
This unique system provides the maximum protection in the event of a dispenser knock-over caused by a vehicle impact or severe weather. The system safely separates with minimal loss of fuel when the dispenser is tilted in any direction, 360 degrees. With minimal reinstallation time if the dispenser is not damaged, the station can be back and running shortly.

The kit is complete with all required fittings, hoses, brackets and connectors. Custom applications may require modifications.



General Design Principles For Fill Stations

1. An adequate size storage tank free of sediment and scale must be supported by a stable and sturdy mounting stand mounted as high above the pump as practical. The assembly must be properly grounded.
2. Heavy duty schedule 80 pipe and fittings are required with an excess flow valve at the tank, and a strainer and a flex connector in the line to protect the piping and pump.
3. The pump should be located under the tank with a short, direct line of adequate size to supply the pump. This inlet line should never rise up to the pump.
4. The pump and motor must be properly sized to provide the capacity desired. A by-pass valve set at approximately 100 psi must be used and the by-pass line must have sufficient capacity to handle flow returning to tank.
5. Proper selection of a meter requires many considerations including capacity of the system and the meter features desired. Vapor line from vapor eliminator on the meter to a vapor opening on the tank must be free of scale and have no dips in the pipe.
6. Sufficiently sized hose and hose valve are necessary for the capacity required and must be protected by an excess flow valve. Filler couplings and adaptors must be selected to allow filling of the various type containers.
7. Safety considerations at the fill station should include a break-a-way coupling, fire extinguisher and proper warning and instructional signs.



TANKS FOR FILL STATIONS

Tanks must be cleaned and free of scale and sediment and properly purged before using for a fill station. The maximum delivery rate from a tank is about 2.5% of the tank's capacity per minute.

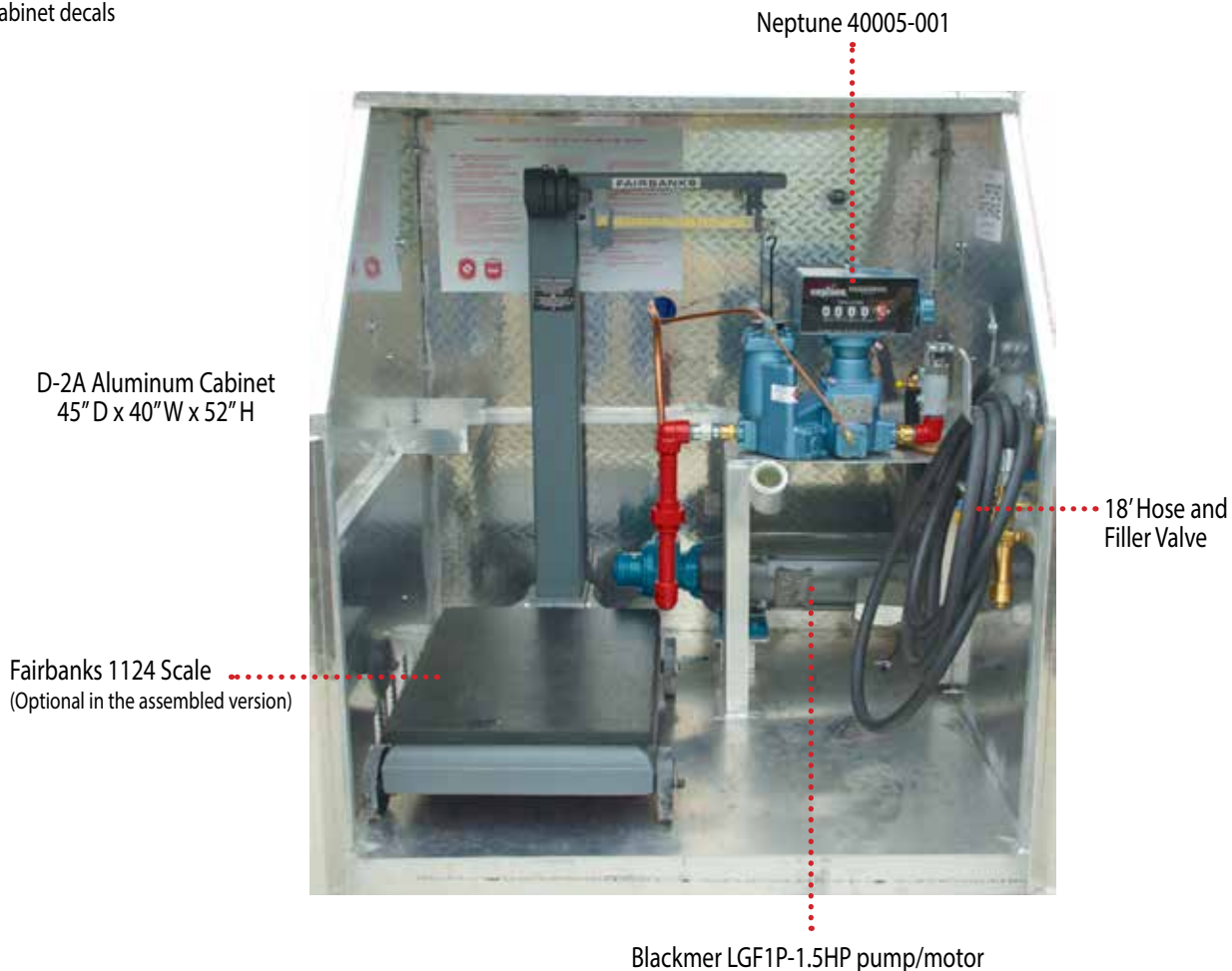
Tanks for Fill Stations

Tank Size WC	Nominal Length	Nominal Diameter	Liquid Openings	Top Vapor	Output Capacity
500	9'-11'	37 1/2"	1 1/4"	1 1/4"	3/4" 12.5 GPM
1000	16'-1 1/2"	41"	1 1/4"	3/4"	25 GPM

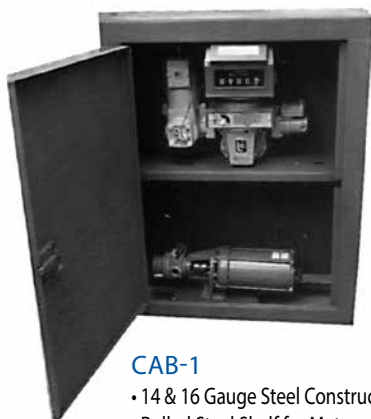
- RMI provides several cabinets as fully assembled units. D-1A, D-2 (steel), D-2A , D-4A . See picture below for typical assembled details. This makes it very easy to arrive at a job site, set the assembled dispenser, attach to the tank, run power to the pump and go!
- RMI offers cabinets empty as well as all components required if you wish to assemble the dispenser yourself or in the event that you already have certain pieces see pages 16 and 17.
- RMI stocks complete Fitting and Valve packages- examples : PK-11 (complete valving kit, PF-11 (complete fittings and pipe nipple kit) PK-11B (Valve kit w/ Breakaway) PF11B (Fittings kit for use w/Breakaway) as well as other kit versions. Call for details or with any special requirements.

D-2A-Assembled Example

- Blackmer LGF1P pump with a Baldor 1.5hp motor or Corken C12 pump
- Neptune Type 4D aluminum body meter with register
- Fisher Internal Valve with latch
- Parker 19ft hose with quick acting valve
- MEC Break-A-Way coupling to allow RV filling
- Fittings and adapters to fill everything from 20lb cylinder to an RV
- Cabinet decals



Cabinet Styles Available:



CAB-1

- 14 & 16 Gauge Steel Construction
- Rolled Steel Shelf for Meter
- Locking Latch & Tamperproof Hinges
- Mounts on "MT-PUMP-CAB"



CAB-2

- 14 Gauge Steel Construction
- Open Area for Pump
- Locking Latch & Tamperproof Hinges



CAB-3

- 14 Gauge Steel Construction
- Door Lock
- Separate Pedestal (included)
- Mounts on "MT-TANK-2"



D-2

- 14 & 16 gauge steel construction



D-2A

- Aluminum diamond plate construction
- 3 Windproof doors
- Securable with one lock
- Holds pump, meter, hoses and any accessories



D-4A

- Aluminum diamond plate construction
- Tall, walk-in size
- One door-lockable

Fill Station Cabinets

RMI Part No.	Style	Encloses Items	H	W	D	OAH	Mounting Locations
D-1A (not pictured)	Enclosed Cabinet	Meter/Pump/Hose	48"	45"	24"	48"	Concrete Pad or 2" runners
D-2	Enclosed Cabinet	Meter/Pump/Scale/Hose	52"	48"	41"	52"	Concrete Pad or 2" runners
D-2A	Enclosed Cabinet	Meter/Pump/Scale/Hose	53"	47"	45"	53"	Concrete Pad or 2" runners
D-4A	Enclosed Walk-In	Meter/Pump/Scale/Hose	78"	48"	48"	78"	Concrete Pad or 2" runners
Cab-1	Enclosed Cabinet	Meter/Pump/Hose	46"	36"	18"	46"	Concrete Pad or MT-PUMP-CAB
Cab-2	Cabinet & Stand	Meter/Hose	27"	24"	24"	55"	Concrete Pad
Cab-3	Cabinet w/Pedestal	Meter	19 1/2"	24"	9"	45"-50"*	Side of MT-TANK-2

Notes: Overall height varies by selection of mounting location. "A" designates aluminum construction. All others are steel.

RMI stocks numerous fittings, valves, hoses, motors and miscellaneous fill station components in addition to those shown here.

Let us help you solve your fill station issues.

Pumps



LGF1-1HP

8 Gallon capacity is best suited for cylinder and small motor fuel fill systems.

LGF1P-1.5HP

13 Gallon capacity is excellent for motor fuel fill systems.

RMI Part No.		Capacity (GPM) (50lb. Dif. / 100lb Dif.)		Inlet Outlet	Motor & Electrical Service	Bypass Valve
Pump, Motor & Switch Assembly	Pump Only					
LGF1-1HP	LGF1	8	4.4	1"	1HP, 115/230V, 1PH	Built-In
LGF1P-1.5HP	LGF1P	13	8.0	1"	1.5HP, 115/230V, 1PH	Built-In



C10, C12, C13 MODELS

- C10 ideal for the one scale bottle filling operation. Fills 20# cylinders in 30 seconds.
- C12 recommended for motor fueling and "batch" fork lift filling. Fills 20# cylinders in 15 seconds.

RMI Part No.	Capacity (GPM) 75 PSID	Inlet	Outlet	Max PSID	H.P. Rating	Motor Phase
C10JD-SM-B	2.5	1 1/4"	1"	75	1.0	1
C12JD-SM-B	11	1 1/2"	1"	85	1.0	1
C13JD-SM-B	17	1 1/2"	1"	100	2.0	1



Economical pump for low volume filling applications.

- Built in Bypass (Set@90PSID)
- Built in Strainer
- Super Seal Mechanical Seal

RMI Part No.		Capacity		Inlet Outlet	Motor
Pump, Motor & Switch	Pump Only	Motor Only	40 PSID / 70 PSID		
DW1ZM-3	DW-1Z	EM-1-3	8.5 / 7	3/4"	1HP 1PH 115/230V
DWHZM-5	DW-HZ	EM-1.5-3	13.5 / 12	1"	1.5HP 1PH 115/230V

Meters

4000/51 SERIES



RMI Part No.	Inlet Outlet	Capacity	ATC	Register	Weight (lbs.)
400051-001	3/4"	3-18 gpm	no	631 Non Print	24
400051-002	3/4"	3-18 gpm	yes	631 Non Print	29

Fill Nozzles

ME516 with ME791CJ

Type 1 Filler 1/4" w/toggle valve and bleeder



Stands

MT-TANK-2 HEAVY DUTY STANDS

MT-PUMP-2 PUMP BRACKET



Scales

Fairbanks 1124

- Cast Iron base/platform
- Rugged design

RMI Part No.	Style	Ht.
1124	Standard Pillar	43"
1124-S	Short Pillar - 20#	28"
1124-L	Tall Pillar - 100#	66"
1124-100	100# Counterweight (1 lb)	
1124-200	200# Counterweight (2 lb)	
1124-400	400# Counterweight (4 lb)	



Signs

RMI stocks all signage needed for your fill station.
Check local codes for any additional signage requirements



Also available from RMI access these catalogs at www.raymurray.com



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