



## Preferred Specifications

Document Number	Issue Date	Rev. Date
<b>F-2851</b>	<b>07/18</b>	

# 70-35-GP

## Slide-In CAFSystem

This unit shall be a slide-in, modular, portable compressed air foam unit designed and constructed to discharge water, foam solution or compressed air foam. The system develops a minimum of 35 GPM of water at 100 PSIG (132 L/min @ 6.9 bar) simultaneously and compressed air foam discharge pressures up to 130 PSIG (9 bar).

This unit shall come with a centrifugal water pump utilizing a close-grained iron case, reinforced nylon impeller, stainless steel shaft and maintenance-free mechanical seal. It shall come with a 1-1/2 inch intake and 1-1/2 inch discharge. It shall come with a pneumatic oil-free primer capable of priming the water pump through 20 feet (6 m) of 2-1/2 inch (63.5 mm) hard intake hose with a 10 foot (3 m) lift. Controls shall be mounted on the operator's panel. The pump shall be driven by a "poly chain" drive transmission with an automatic tensioner and 8mm pitch sprockets.

The unit shall be powered by a Briggs and Stratton engine, Vanguard model 380447, two-cylinder, air cooled, sintered iron cylinder liners delivering a maximum of 23 horsepower (17.2 kW), 627 cc displacement, four-cycle, gasoline fueled. The engine shall come with a two (2) year manufacturer's warranty. The engine shall draw fuel from a fuel tank (not supplied) via a pulse fuel pump. There shall be a pressure lube system with spin-on oil filter. An extension hose is installed on the engine oil drain with a valve located at the oil pan and a plug installed in the end of the hose to facilitate oil changes. It shall come with a 12-volt electric with 20A alternator, electric ignition and start switch along with a spark arrestor muffler.

The frame of the unit shall be made of high-strength, welded tubular steel frame provided to support and contain the CAFS unit. It shall be constructed 1-1/4 inch tubing with radius corners and a durable corrosion-resistant powder coat finish.

The pump operator's panel shall have an engine ignition/start switch; engine throttle control; engine choke control; 2-1/2 inch oil-free master water pressure gauge; 2-1/2 inch oil-free master air pressure gauge; auto-sync compressor pressure controls; foam proportioner control, pneumatic primer control (water/solution discharge valve control, 1/4 turn swing type); air discharge valve control; 1/4 turn, two (2) shielded pump panel lights. The unit shall come with a Fire Troll FT-150 foam proportioner.

The unit shall come with a 4-cylinder rotary screw air compressor, rated at 35 scfm (.9 m<sup>3</sup>/min) equipped with a low oil pressure warning light. The unit shall come with an auto sync balancing system which automatically maintains the air pressure within +/- 5% of the water pump pressure throughout the pressure range. The auto sync balancing system is located on the operator's panel and allows for the following modes:

- Automatic – Air pressure matched to water pressure
- Fixed – Air pressure defaults to manual setting on compressor mounted control valve
  - Unload – Air pressure reduced to 40 psig (2.8 bar) for standby operations

All air hoses, fittings and piping with the unit are rated to a minimum of 250 psi (17.5 bar). Locations where discharge air runs at high temperatures, stainless steel wire braid reinforced Teflon hoses are used. Brass or bronze check air valves are utilized at plumbing air injection points to prevent water or foam back flow into the air lines.

The unit's plumbing shall come with inlet piping 1.5 inch brass pipe with a 2 inch 3-way tank to pump / overboard suction with a 1-1/2 inch NST female swivel hose connection. The unit shall have plumbing to one 1.5 inch discharge outlet is 1-1/2 inch high-pressure hydraulic hose with brass or stainless steel fittings. Discharge valve is a full-flow, quarter-turn type constructed of bronze. Check valves of bronze or brass are installed in each discharge to prevent foam back flow into the water pump. A 1 inch tank fill valve for connection to as booster tank is also provided. The unit shall have a panel mounted drain valves are provided to drain water from the water pump, discharge manifold and compressor cooler.

