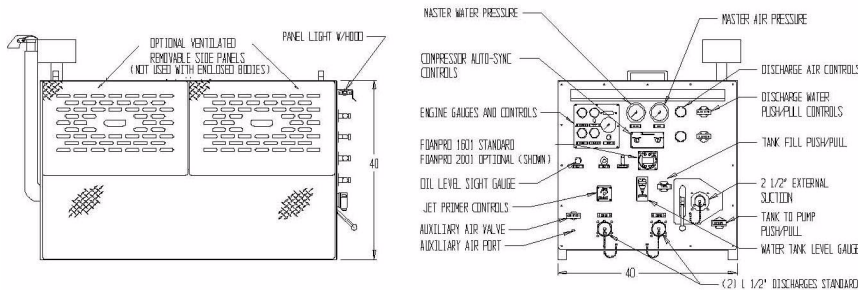


250-120-DS Modular Slide-In CAFSystems™

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Description

The Waterous/Pneumax 250-120-DS is a slide-in modular compressed air foam unit designed and constructed to discharge water, foam solution or compressed air foam. The consistency of the compressed air foam from each discharge is individually adjustable.

The 250-120-DS develops a minimum of 180 gpm of water at 125 psig (681 l/min @ 8.6 bar) and 90 cfm of air at 125 psig (2.54 m³/min @ 8.6 bar) simultaneously. The unit also can pump water or air independently. With the air compressor in the "Unload" mode, the unit can achieve the following performance ratings:

- 250 gpm @ 150 psig / 946 l/min @ 10.3 bar
- 125 gpm @ 200 psig / 473 l/min @ 13.8 bar
- 100 gpm @ 250 psig / 378 l/min @ 17.1 bar

Pump Specifications:

Pump:

Waterous CPK-2 centrifugal fire pump. CPK-2 utilizes a high-tensile gray iron body, bronze impeller, replaceable wear rings and maintenance-free mechanical seals.

Intake and Discharge:

3 inch intake, 2 inch discharge

Pressure Relief:

An optional pressure relief system is available to comply with NFPA 1906 standards.

Priming:

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 are mounted on the operator's panel.

Transmission:

"Poly Chain" drive with an manual tensioner and 8mm pitch sprockets.

Pump Operator's Panel:

Incorporated into frame. Contains Auto Sync™, air compressor, foam proportioner controls, and water pressure and air pressure gauges.

Engine Specifications:

Volkswagen, Model ADE, four-cylinder, turbocharged, liquid cooled, delivering a maximum of 78 horsepower (57.8 kW), 1896 cc displacement, four-cycle, diesel fueled.

Fuel System:

The engine draws fuel from the chassis fuel tank.

Lubrication:

Pressure lubrication system with oil pressure warning light and 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.

Electrical:

12-volt electric with 65A alternator, electric ignition and start switch.

Exhaust:

Heavy-duty exhaust muffler

Frame:

A steel skid weldment provides support and encloses the entire CAFS module. Constructed of 3/16" wall steel square tubing. The sub-frame is made of steel tubing sufficient to support the weight of the module while in the apparatus and during loading and unloading. Provisions incorporated into the sub-frame enables the use of a forklift for loading and unloading of the unit.

All steel structural members are primed and painted with a high-quality black urethane paint.

The top enclosure incorporates a hinged service access door. The optional side enclosure panels have machine cut ventilation openings and attach to the frame with stainless steel machine screws.

Specifications subject to change without notice

250-120-DS Slide-In Compressed Air Foam Unit

Air Compressor:

The air compressor is an oil-flooded, rotary screw type, sized to supply a minimum of 120 scfm (3.4 m³/min) of usable air.

Pneumatic Modulating Inlet Valve:

The air compressor is controlled by the pneumatic modulation inlet valve mounted on the air end. The pneumatic modulation inlet valve controls air delivery while maintaining constant pressure.

Auto Sync Balancing System:

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
- Run – Air compressor in run operation. Air pressure determined by Auto or Fixed setting.

Air Compressor Oil System:

A spin-on, full-flow oil filter unit and a thermostatic valve are all part of the system to control oil flow to the cooler. All lines are routed in braided hose conforming to SAE 100R1 standards for hydraulic hose.

Modular Air/Oil Separator:

Replacement elements for the oil filter and separator are available.

Air Compressor Cooling System:

The air compressor is cooled by the unit's water pump, utilizing a copper and brass shell and tube heat exchanger. When the fire pump is operating, water flows through the heat exchanger while an in-line removable strainer, on the water inlet side, prevents clogging. The system maintains recommended operating temperatures throughout the full operational range in ambient temperatures up to 115°F (46.1° C).

Air Lines:

All air lines are rated to a minimum of 250 psig (17.2 bar). Air line fittings are constructed of brass, bronze or steel. Stainless steel or brass check valves are provided at all air injection points to prevent water back-flow into the air lines. All hoses shall be secured to the frame with insulating clamps and located away from any heat sources.

Plumbing:

Inlet:

Inlet piping is 2-1/2" stainless steel pipe with a 2-1/2" tank to pump valve controlled at the pump panel. A 2-1/2" valve with integral bleeder valve is provided behind the pump panel for overboard pump inlet with a 2-1/2" F-NST swivel connection. Victaulic-type couplings are utilized in the pump inlet for flexibility and improved serviceability.

Discharge:

Plumbing to two panel mounted 1-1/2" discharge outlets incorporate a stainless steel manifold and welded stainless steel pipe. Optional discharges may be fitted with wire braided reinforced high-pressure hydraulic hose with stainless steel fittings. A 1-1/2" tank fill provision with 1-1/2" valve is provided. Victaulic-type couplings are utilized in the discharge plumbing for flexibility and serviceability. All discharge plumbing is designed and tested to a minimum of 500 psig (34.5 bar) burst pressure.

Drains:

Panel mounted drain valves are provided to drain water from the water pump, discharge manifold and compressor cooler.

Foam Proportioner:

A FoamPro System 1601 automatic foam proportioner (Class A foam only) is provided and installed to inject foam concentrate into all discharges. The proportioner automatically meters the correct percentage of foam concentrate into the water stream by a 1.5" paddlewheel sensor.

An optional FoamPro System 2001 is available.

NOTE: Foam proportioner pump assembly shipped loose.

On-Site Delivery Instruction (Optional):

Contact factory for pricing.

Approximate Dimensions & Weights – U.S.

Length (inches)	Width (inches)	Height (inches)	Dry Weight (lbs)
70.00	40.00	40.00	1350

Approximate Dimensions & Weights – Metric

Length (cm)	Width (cm)	Height (cm)	Dry Weight (kg)
178	102	102	612