



SPECIFICATIONS – SLIDE-IN CAFSYSTEMS: 160-80-DS CAFSystems™ That Perform Like a Giant

This slide-in, modular compressed air foam unit is designed and constructed to discharge water, foam solution or compressed air foam, developing 160 GPM of water at 100 PSIG (600 L/min @ 7 bar) and 80 CFM of air at 100 PSIG (2.3 m³/min @ 7 bar) simultaneously. The 160-80-DS also provides compressed air for pneumatic tools and comes with an industry exclusive five-year warranty.

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 @ 250 psig / 473 l/min @ 17.2 bar

Pump and Transmission 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 / Discharge:

2-1/2 inch intake, dual 1-1/2 inch discharges

Priming:

Pneumatic oil-free primer capable of priming the water pump through 20 feet (6 m) of 2-1/2 (63.5 mm) inch hard intake hose with a 10 foot (3 m) lift. Controls are mounted on the operator's panel.

Transmission:

“Poly Chain” drive with 8mm pitch sprockets.

Engine Specifications:

Cummins A2300 four-cylinder, turbocharged, liquid cooled, delivering a maximum of 60 horsepower (43.5 kW), 2.3L 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 60A alternator, electric ignition and start switch.

Exhaust:

Spark arrestor muffler

Frame / Pump Operator's Panel / Tanks:

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.

All steel structural members are primed and powder coated with a scratch and impact resistant, medium gloss black urethane powder coat which is applied by electrostatic process and heat cured.

Pump Operator's Panel:

- 3-position compressor control switch
- Water and air pressure gauges
- Air compressor temperature warning light and alarm
- Engine oil pressure warning light and alarm
- Engine temperature warning light and alarm
- Engine ignition and start switch
- Priming system controls
- Foam proportioner control
- Auxiliary compressed air outlet and valve control
- Discharge controls with preset gates for foam type
- 1.5" BSP chrome-plated discharge outlet
- Chrome-plated push-pull tank to pump valve

Industry-Leading Sales and Support

When you purchase Waterous equipment, not only do you get quality products, you get quality service. Our expert service technicians are the best in the business and they are always happy to answer any service questions you might have.

Sales/Applications Assistance
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Air Compressor:

The air compressor is an oil-flooded, rotary screw type, sized to supply a minimum of 80 scfm (2.3 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

Air Compressor Oil System:

A spin-on, full-flow oil filter unit is 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. 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.

Discharge:

Plumbing to two panel mounted 1-1/2" discharge outlets incorporate a stainless steel manifold and welded stainless steel pipe. 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 Options:

- FoamPro System 1601 automatic foam proportioner (Class A foam only). The proportioner automatically meters the correct percentage of foam concentrate into the water stream by a 1.5" paddlewheel sensor and low foam tank sensor.
- Aquis™ Foam Proportioner with operator interface terminal (OIT), pump module with electric motor/motor driver and microcontroller unit, foam concentrate strainer, shielded electrical cables for connection of all electronic components, foam inject check valve, WYE Strainer and flowmeter and tee.

On-Site Delivery Instruction (Optional):

Contact factory for pricing.