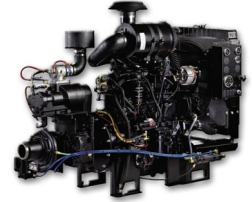




## SPECIFICATIONS – INTEGRATED CROSSMOUNTS: 500-140-DC John Deere Powered CAFSystems™

Waterous 500-140-DC integrated crossmount CAFSystems™ combine the engine, transmission, water pump and air compressor into one, single operation, skid-mounted unit capable of 500 GPM (1900 L/min) of water or 140 SCFM (4 m<sup>3</sup>/min) of air. These units are designed for transverse mounting within a pump compartment and come with an industry exclusive five-year warranty.



### Description:

The 500-140-DC develops a minimum of 280 GPM of water at 125 psig (1060 l/m @ 8.6 bar) and 140 cfm of air at 125 psig (4.0 m<sup>3</sup>/min @ 8.6 bar) simultaneously. The unit also can pump water or air independently.

With the air compressor in the “Unload” mode, the maximum pump performance ratings are still achievable. With the compressor in “Unload” mode, the water pump is capable of the following ratings:

- 500 GPM @ 150 psig / 1900 l/min @ 10.3 bar
- 500 GPM @ 165 psig / 1900 l/min @ 11.4 bar
- 350 GPM @ 200 psig / 1325 l/min @ 13.8 bar
- 250 GPM @ 250 psig / 946 l/min @ 17.2 bar

### Pump and Engine Specifications:

#### Pump:

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

#### Intake:

4 inch intake

#### Pressure Relief:

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

#### Priming System (Optional):

Waterous VPOS Oil-free primer. Rotating parts in the VPOS are made of corrosion-resistant, anodized aluminum, stainless steel and composite materials.

#### Engine:

John Deere, model 4045TF150, four-cylinder, turbocharged, liquid-cooled with variable speed governor, delivering a 115 horsepower (85 kW), 276 cu. in. (4.5L) displacement, four-cycle, diesel fueled.

#### Fuel System:

The engine draws fuel from the chassis fuel tank with a fuel pick-up tube installed so that the unit cannot draw the tank below 1/4 full.

#### 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.

#### Exhaust:

Heavy-duty exhaust muffler

#### Air Compressor Transmission:

“Poly Chain” drive and 8mm pitch sprockets.

### Panel Mounted Instruments:

The following items and controls are provided for installation on the pump operator's panel:

- Pump engine tachometer
- Pump engine hourmeter
- Pump engine oil pressure gauge w/light and alarm
- Pump engine coolant temp. gauge w/light and alarm

- Compressor temp. gauge w/warning light and alarm
- Pump engine voltmeter
- Engine ignition/start switch
- AutoSync pressure balance controls and instruction plate

### 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

Phone: 651-450-5234 (Press 3)  
pumps@waterousco.com

#### Service Assistance

Phone: 651-450-5200  
Fax: 800-488-1228  
service@waterousco.com

## **SPECIFICATIONS – INTEGRATED CROSSMOUNTS: 500-140-DC**

### **Air Compressor:**

The air compressor is an oil-flooded, rotary screw type, sized to supply a minimum of 140 scfm (3.96 m<sup>3</sup>/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. The system maintains recommended operating temperatures throughout the full operational range in ambient temperatures up to 115°F (46.1° C).

### **Foam Systems (Optional):**

- Advantus<sup>®</sup> Foam Systems with operator interface terminal, pump module with electric motor/motor driver and microcontroller unit, foam concentrate strainer, WYE strainer, shielded electrical cables for connection of all electronic components, process manifold with flowmeter and associated components as specified
- Aquis<sup>™</sup> 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.