

# SPECIFICATIONS – AIR COMPRESSOR MODULES: 1000/1250-100-P Performance Enhancing Integrated Pump/Compressor Systems

PTO-driven, integrated water pump / air compressor designed specifically for installation in fire apparatus. 1000/1250-100-P develops a minimum of 1000/1250 GPM of water at 125 PSIg (3785 L/min @ 8.6 bar) and 100 CFM of air at 125 PSIg (2.8 m3/min @ 8.6 bar) simultaneously. The 1000/1250-100-P is also backed by an exclusive five-year warranty.

With the air compressor in the "Unload" mode, the unit can achieve the following performance ratings:

- 1000 GPM @ 150 psig / 3785 l/min @ 10.3 bar
- 700 GPM @ 200 psig / 2650 l/min @ 13.8 bar
- 500 GPM @ 250 psig / 1900 l/min @ 17.2 bar
- 1250 GPM @ 150 psig / 4750 l/m @ 10.3 bar
- 875 GPM @ 200 psig / 3312 l/m @ 13.8 bar
- 625 GPM @ 250 psig / 2365 l/m @ 17.2 bar



## **Pump Specifications:**

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

6 inch Victaulic® intake

Optional: 6 inch Victaulic® Rams Horn Intake (CXS)

#### Discharge:

4 inch ANSI Flange Discharge

#### Pressure Relief:

An optional pressure relief system is available to comply with NFPA 1901 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.

## **Air Compressor Specifications:**

The air compressor is an oil-flooded, rotary screw type, sized to supply a minimum of 100 scfm (2.8 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
- 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 Transmission:

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

## 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).

#### **Panel Mounted Instruments:**

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

- Air compressor PTO engagement switch (OEM provided)
- AutoSync compressor controls w/engraved instruction plate
- Air compressor oil temp. gauge w/warning light and alarm
- CAF system air pressure gauge
- Air flow meter (optional)
- · An air valve for each compressed air foam discharge.

## 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
- Aguis™ Foam Proportioner w/operator interface terminal (OIT), pump module w/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.

# 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) pumpsales@waterousco.com

Service Assistance

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

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