

# SPECIFICATIONS – AIR COMPRESSOR MODULES: 250-150-P Performance Enhancing Integrated Pump/Compressor Systems

PTO-driven, integrated water pump / air compressor designed specifically for installation in fire apparatus. 250-150-P develops a minimum of 250 GPM of water at 125 PSIG (473 L/min @ 8.6 bar) and 150 CFM of air at 125 PSIG (4.25 m³/min @ 8.6 bar) simultaneously. The 250-150-P is also backed by an industry exclusive five-year warranty.

**Other Available Models:** 250-100-P: Equipped with a Waterous CPK-2 pump, the 250-100-P is capable of developing a minimum of 200 GPM of water at 125 psig (757 l/min @ 8.6 bar) and 100 cfm at 125 psig (2.8 m³/min @ 8.6 bar) simultaneously.



## Pump Specifications:

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 System (Optional):

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

#### **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.

## **Air Compressor Specifications:**

The air compressor is an oil-flooded, rotary screw type, sized to supply a minimum of 150 scfm (4.2 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 Compressor Transmission:

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

#### Foam Systems (Optional):

 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.

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