



Preferred Specifications

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80-P/ 140-P/ 200-P

PTO-Driven Air Compressor Kits

These units are PTO-driven, air compressor kits that are specifically designed for installation in fire apparatus, either OEM installed or retrofitted to an in-service vehicle. The units air compressor shall have an airend with tapered roller bearings and triple lip shaft seal, oil-flooded, rotary type screw, and sized to supply 80 scfm (2.3 m³/m) (80-P model), 140 scfm (3.4 m³/m) (140-P model) or 200 scfm (5.6 m³/m) (200-P model) of usable air. The air compressor shall be controlled by the pneumatic modulation inlet valve mounted on the air end. The pneumatic modulation inlet valve shall control air delivery while maintaining constant pressure. The units shall come with an electric auto sync balancing system. This system shall automatically maintain the air pressure within +/- 5% of the water pump pressure throughout the pressure range. The Auto Sync Balancing System shall be located on the operator's panel and shall allow 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 for standby operations
- Run – Air compressor in run operation. Air pressure determined by Auto or Fixed setting.

The units shall come with an air compressor oil system. A spin-on, full-flow oil filter unit and thermostatic valve are shall be 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. The units shall come with a modular air/oil separator. Replacement elements for the oil filter and separator shall be available. An air compressor cooling system shall be available with the units. The air compressor shall be cooled by the units' 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 shall maintain the recommended operating temperatures throughout the full operation range in ambient temperatures up to 115°F (46.1°C). The units shall come with an air compressor system protection. A warning system in the hydraulic oil system shall alert the operator of high temperature. A warning light and audible alarm are provided for mounting on the pump operator's panel. The following controls and instruments shall be provided for mounting on the pump operator's panel:

- Auto/Sync compressor controls with engraved instruction plate
- Air compressor temperature gauge with 250° warning switch
- NFPA required warning and instruction plates

The units shall be available with the optional equipment listed below:

- Aquis™ Foam Proportioner that shall come with operator interface terminal (OIT), pump module with electric motor/motor driver and microcontroller unit, foam concentrate strainer, WYE strainer, shielded electrical cables for connection of all electronic components, foam inject check valve, WYE strainer and flowmeter and tee.
- An optional air flow meter shall be available for mounting on the pump operator's panel. The air flow meter indicates the total air-flow in standard cubic feet per minute (0-150)
- An optional Five-year Limited Warranty. A One-Year Limited Warranty comes standard.
- A three-day operational training shall be provided. No training shall be provided as an option for deduct in the price of the units.

