

engineered to move



Our HVAC Advantages:

- Compact rooftop design, just 1.5" cab intrusion
- Wide capacity range accommodates varied comfort needs
- 30,000 btu/hr in high cool 24,000 btu/hr in low cool (ASHRAE 37)
- Multi-port vents
- Two-speed cooling fan
- New G3 Processor/Inverter
- Easily update for changing operating conditions
- Increased processing speed
- Data logger for trouble shooting
- Optional predictive maintenance capabilities and diagnostic capability
- 407c Environmentallyfriendly refrigerant
- Built to last
 - Finite Element Analysis designed components
 - Vibration and factory run tested

ADVANTAGE Series[™]

low profile hvac

Dayton-Phoenix Group products are engineered to move, and our new Advantage Series™ Rooftop AC units are designed to move you into the next generation of cab cooling technology with improved capacity, operating range and reliability.

Our DPG Advantage SeriesTM Low Profile Rooftop AC changes the game in the design of AC rooftop units. This environmentally–friendly cooling system is designed for older locomotives where space is limited. Our versatile air distribution system features adjustable multi-port vents for more air flow than ever, if desired, eliminating hot and cool spots for greater crew comfort.

Features new Next Generation G3 microprocessor-based system controls, which offer a higher level of reliability and control. Cab return air temperature, high and low pressures, current, voltage levels, and internal microprocessor temperature are also monitored to provide more efficient and reliable operation. This system improves communication and is easy to update for changing operating conditions. Added Data Logger capabilities for trouble shooting with predictive maintenance capability.



rooftop ac

Built to Last

Dayton–Phoenix Group has designed this system with a new, more durable, higher output, semi–hermetic compressor that takes advantage of the environmentally–friendly refrigerant R407c. This refrigerant has proven performance history and system reliability, plus it comes in a lower quantity than ever for an even smaller environmental impact. Minimal piping and all-brazed connections, assembled using modern manufacturing methods, provide unrestriced and leak–free refrigerant flow. Refrigerant Migration Protection stops compressor slugging and extends unit life. The compressor's semi–hermetic design eliminates couplings and alignment requirements and provides leak–free performance.

The motor employes a unique electronic control system that optimizes performance while minimizing system weight. Unit is fully equipped with more than ample capacitors for expected long life. A new heater interlock suppressor has been added to further protect the new Next Generation G3 microprocessor from unwanted input voltage spikes. Retains improved slosh–free drainpan introduced in 2013.

Testing

Our design engineers have used Finite Element Analysis and 20-year simulated life vibration tests to optimize the structutral integrity of the unit and Failure Mode Effect Analysis (FMEA) to ensure its reliability and predictability.

The model was qualified for a broad range of environmental temperatures, whether inside or outside the locomotive.

Each unit is performance tested prior to shipping to give you a proven rugged, long-lasting, reliable ventilating and air conditioning system for your locomotive.

* For application/inspection/overhaul cycle information, please contact your **DPG** sales representative.

Rooftop	AC - 74	Volts DC
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DPG Part#	Description	Voltage	AMPS	BTU/Hr Cooling	Weight	
2817500	Inverter style rooftop AC	74 V DC	100	30,000	700	

 $\label{lem:visit_www.dayton-phoenix.com} Visit\ www.dayton-phoenix.com\ for\ replacement\ parts.$



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full line provider

We design, manufacture and service an extensive line of world-class components for major systems of the modern locomotive ... thousands of individual models for everything from cab comfort to engine protection .. each one engineered to keep your business moving forward.