



AIR CONDITIONING & AIR CONDITIONING/HEATING UNITS ACE-802-SERIES



The ACE-802-Series Air Conditioning and Air Conditioning/Heating Units provide maximum passenger comfort in all types of aircraft. Available in a wide variety of configurations, these units meet the requirements of all aircraft operators regardless of fleet size or local ambient conditions. Using R-134a as a refrigerant, the ACE-802-Series are environmentally "Safe", causing no damage to the atmospheric ozone.

The units employ an air-to-air type refrigeration system and, for operators requiring heat, can be supplied with an optional reverse-cycle "heat-pump" system. Provisions are made to utilize engine coolant heat to augment the reverse cycle heat mode. There are no dangers of combustion or its by-products near the aircraft. The "change-over" from one mode to another is so simple that it can be performed by the operator on the ramp. Heating and cooling modes are available as required throughout the day without taking the unit out of service for adjustment.

DESIGN ADVANTAGES

The ACE-802-Series Units have distinct advantages over other air conditioning units using reciprocating compressors.

- Simplified Operating Controls.

- Rotary Screw Compressor with two mated helically-grooved rotors. Rotary motion ensures reduced vibration and uniform continuous gas flow over a wide range of evaporating and condensing temperatures. Compressor is not sensitive to liquid slugging. Automatic capacity control for increased efficiency.
- Normal compressor overhaul at 25,000 hours.
- No pump down cycle required.
- Temperature Control. The desired conditioned air temperature is selected using a thermostatic control on the instrument panel.

DESIGN FEATURES

- R-134a Refrigerant - environmentally "Safe", will not harm the atmosphere.
- Filter dryer, includes a fine-mesh Monel filter and desiccant cartridge, to maintain a clean and dry system.
- Two (2) each 42 inch diameter condensing fans.
- ASME receiver for refrigerant.
- 127 gallon diesel fuel tank provides for more than ten hours of operation.

AIR CONDITIONING & AIR CONDITIONING/HEATING UNITS

ACE-802-SERIES

OPTIONAL EQUIPMENT

- Deutz BF8M1015 Engine.
- Second 12-inch diameter hose outlet with associated controls, output hose and aircraft coupler.
- 30 Ft. hose extension kit - including hose, quick disconnect fittings and aircraft coupler.
- Full heat package, reverse-cycle (-400 and -300 series).
- Heat boost system utilizing engine coolant heat to provide partial heating on air conditioning units (-600 and -900 series) (for areas where full heating is not required).
- Flashing Beacon (Amber or Red).

DESIGN SPECIFICATIONS

ACE Model No.	802-440/640	802-340/940	802-390/990
Mounting	Truck	Trailer	Trailer
Cooling Capacity	Nominal Tons Refrigeration 110		
Air Flow			
Single Outlet	Lb/Min (Kg/Min)	to 400 (to 182)	
Dual Outlet	Lb/Min (Kg/Min)	to 700 (to 318)	
Cooling Air Temperature (Adjustable)	°F (°C)	35-50 (2-10)	
Compressor Manufacturer	Dunham-Bush		
Compressor Model	1610 FRDVI		
Refrigerant	R-134a		
Compressor Type	Rotary Screw		
Capacity Control	Automatic, Thermostatic		
Engine Type	DDC 6V92TA		Electric
Estimated Fuel Burn At Max. Load	Gal/Hr (Ltr/Hr)	12 (45)	N/A
Optional Heat Package (Reverse Cycle) -400 and -300 Series			
Heating Capacity	Btu/Hr (Gram-Calorie/Sec)	750,000 (52,500)	
Heating Ambient	°F (°C)	Below Zero (Below Zero)	
Heating Air Temperature	°F (°C)	100-135 (38-57)	

DIMENSIONS (Approximate)

Mounting	Trailer	Truck		Less Vehicle*
		Side Hose	Front Hose	
Length	Inches (Cm) 220/(559)	264 (670)	280 (711)	158 (401)
Width	Inches (Cm) 94 (239)	96 (244)	96 (244)	94 (239)
Height	Inches (Cm) 94 (239)	104 (264)	104 (264)	82 (208)
Weight	Lbs (Kg) 14,000 (6,350)	18,000 (8,165)	18,000 (8,165)	13,000 (5,897)

* "Less Vehicle" units can be mounted on properly rated locally available chassis.

Equipment is manufactured and warranted by **Accessory Controls & Equipment Corp.**
 805 Bloomfield Avenue, Windsor, CT 06095 • Phone: (860) 688-4986 • Fax: (860) 688-7773