ACU-802

AIR CONDITIONING & HEATING UNITS

The ACU-802 Series 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 refrigerant, the ACU-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. The “change-over” from one mode to another is so simple that it can be performed by the operator on the ramp while the unit is in service. There are no dangers of combustion or its by-products near the aircraft.

DESIGN ADVANTAGES

The ACU-802 Series has distinct advantages over air conditioning units using reciprocating compressors.

- **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.
- **Direct drive system** which avoids the intermediate step of converting fuel power into electric power as is necessary with common "diesel electric" systems. This approach insures the lowest fuel consumption, minimal maintenance and highest reliability on the market.
- **No pump down cycle required**
- **Simplified operating controls**

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 42-inch diameter condenser fans**
- **ASME receiver** for refrigerant
- **127-gallon diesel fuel tank** provides for more than ten hours of operation
- **Warm up and cool down systems****
- **Tie down / lifting rings**

OPTIONAL EQUIMENT

- **Second 12-inch outlet**
- **Side and rear bumpers**
- **Ether Start kit (DD S40 only)**
- **Fuel filter/water separator with heater**
- **Low fuel warning and/or shutdown system** with red or amber, flashing or rotating beacon
- **Warning beacon,** flashing or rotating, red or amber
- **Engine block heater**, 120 VAC or 240 VAC
- **Refrigeration gage package**

Tolerances of mentioned data: +/- 5 %
Specifications may be altered due to a constant effort to improve performance

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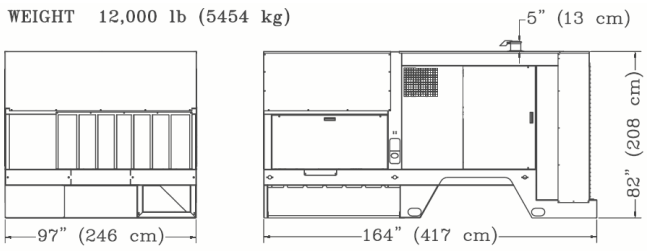
DESIGN SPECIFICATIONS

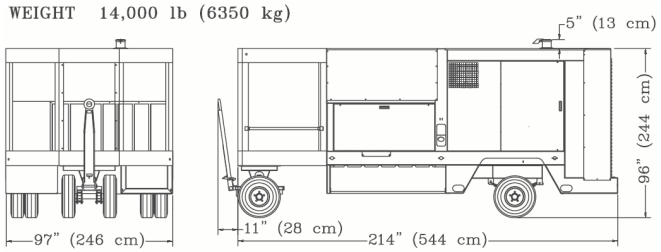
Cooling Capacity	Nominal Tons Refrigeration	115
Air Flow - Single Outlet	lb/min (kg/min)	to 400 (to 182)
Air Flow – Dual Outlet	lb/min (kg/min)	to 700 (to 318)
Supplied Air Temperature (@ 100 ºF & 50% RH)	ºF (ºC)	35-50 (2-10)
Compressor Manufacturer		Frick
Compressor Model		XJF-151L
Compressor Type		Rotary Screw
Capacity Control		Automatic, Pressure Controlled
Heating Capacity	Btu/hr (kW)	750,000 (220)
Heating Ambient	°F (°C)	Below Zero (Below Zero)
Heating Air Temperature	°F (°C)	100-135 (38-57)

AVAILABLE CONFIGURATION

Engine	Cummins QSL 8.9	Deutz TCD 2013 L06 4V	Detroit Diesel S40E8.7LTA
Mounting	**Skid**		
	Trailer with 5th wheel		
Heating/Cooling	**Cooling**		
	Heating, Ventilation, & Cooling**		

DIMENSIONS (Approximate)





* Skid units can be mounted on properly rated chassis. Dimensions shown are for module only. Overall dimensions depend on final mounting configuration.

** Not available on Detroit Diesel version

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