

# ACU-302

## AIR CONDITIONING & HEATING UNITS



### DESCRIPTION:

**ACU-302 Series** Conditioned Air Units comprise a line of diesel-electric and utility powered electric air conditioning and heating units designed to service narrow body regional and commuter aircraft worldwide. These units employ environmentally safe R-134a refrigerant. Built with low maintenance, commercially available parts, the ACU-302 warrants a long life span and consistently dependable operation.

### STANDARD FEATURES:

#### General:

- Twin 15 ton hermetic Trane scroll compressors
- Automatic compressor capacity control
- Condenser and evaporator coils of rugged copper tube and steel frame construction
- Frost resistant evaporator
- High efficiency blower
- Heavy gauge steel trailer base with towbar brake and narrow turn radius fifth wheel steering
- Heavy-duty running gear with 20.5 x 8.0 x 10 pneumatic tires
- Fully recessed instrument panel and gauges
- Tie Down and Lift rings

#### Diesel-Electric Units:

- Onan DGCBC Cummins generator set compatible with diesel or Jet A fuel.

#### Utility Electric Units:

- Available for operation with 3-phase power in 50 or 60 Hz and line voltage from 380 to 480 volts.

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### SAFETY FEATURES:

- Refrigerant high-low pressure shut down
- Compressor discharge temperature shut down
- Blower loss of pressure interlock
- Utility power quality shutdown relay monitors:
  - Loss of phase
  - Phase imbalance
  - Under voltage

### OPTIONS:

- Power transfer switch on diesel-electric units to allow operation solely from 50 to 60 Hz facility power.
- Adjustable air outlet damper to permit regulation of delivered air pressure and flow.
- Low fuel warning and low fuel shutdown systems
- Block heater

### DESIGN SPECIFICATIONS

Model	ACU-302-CUP & H-CUP	ACE-302-EMP & H-EMP
Cooling Capacity	24	24
Nominal Tons Refrigeration		
Air Flow	to 190 (86)	to 190 (86)
lb/min (kg/min)		
Supplied Air Temperature (@100°F & 50% RH)	35-50 (2-10)	35-50 (2-10)
°F (°C)		
Heating Capacity	234,000 (68.5)	150,000 (44)
btu/hr (kW)		
Heating Ambient	below 0 (below -18)	below 0 (below -18)
°F (°C)		
Heating Air Temperature	100-110 (38-44)	65-75 (19-24)
°F (°C)		
Engine Manufacturer	Cummins	-
Engine Model	QSB5-G3	-
Generator Power	60	-
kW		
Compressor Manufacturer	Trane	Trane
Compressor Model	CSHA-300K	CSHA-300K
Compressor Type	Scroll	Scroll

### DIMENSIONS (Approximate)

Model	ACU-302-CUP & H-CUP	ACE-302-EMP & H-EMP
Mounting	Trailer	Trailer
Length	184 (475)	146 (371)
Inches (cm)		
Width	87 (213)	82 (209)
Inches (cm)		
Height	78 (198)	64 (162)
Inches (cm)		
Weight	7,800 (3,540)	4,700 (2,135)
Lbs (kg)		

\* Dimensions shown are for module only. Overall dimensions depend on final mounting configuration. Height includes 5" exhaust pipe.

\*\* Skid units are also available and can be mounted on properly rated chassis. Overall dimensions and weight depend on final mounting configuration.



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Tolerances of mentioned data : +/- 5 %

Some views may show optional equipment. and specifications may be altered as a constant effort to improve performance.