

## DAC20 Mobile Pre-Conditioned Air Unit



Model DAC20 Trailer Mounted



### TRILECTRON/AIR-A-PLANE:

Trilectron Industries and air-a-plane products division have led the industry in product design and innovation. The best combination of experience, new technology and customer input has resulted in a product line you can trust for your aircraft's needs.

### APPLICATION:

Completely self-contained diesel powered PCAir unit for comfortable conditioning of narrow body passenger aircraft cabins. Endurance: approximately 8 hours of continuous operation per full fuel tank.

### OPTIONS:

Units can be trailer mounted for towing or truck mounted on a suitable chassis (consult factory). Power for the Generator/Engine set can be John Deere, Perkins, Cummins or Deutz.

### CE AND EMISSIONS CERTIFIED:

All engines meet current Tier Emissions Certifications as specified by EPA and CARB. CE Certification and international labeling is an added feature of this equipment.

### PERFORMANCE FEATURES:

#### Proven design:

- Hermetic scroll compressor refrigeration circuits with oversized condensing coils
- Finned-tube enclosed element electric resistance heaters
- Steel frame and aluminum panels
- Meets all UL, NEMA, CE, NEC, OSHA, NFPA, ASHRAE, ASME and AHM 73 & 74 standards

#### Easy to Operate:

- Simple selector switch operator station mounted at ramp level
- Automatic temperature control with manual heat/vent/cool operating mode selection

#### Economical:

- Blower fan mounted directly to the fan motor requiring no clutches, gears or pulleys
- Fewer moving parts equate to lower maintenance costs
- High efficiency output through the use of multiple refrigerant circuits in a "cascading series" arrangement
- Significantly less cost than running the aircraft APU

#### Durable:

- Designed to endure the rigors of the airport environment
- Easy access to all components for maintenance

Model	Cooling Capacity	Heating Capacity	Length	Width	Height	Weight
DAC20	20 Tons (70 kW)	68 kW	187" (475 cm)	84" (213 cm)	82" (208 cm)	7,720 lb (3,509 kg)

# Trilectron's DAC20 Mobile Pre-Conditioned Air Unit Specifications

## Construction

- Base Unit Weight: 7,720 lb
- Painted steel frame construction
- Aluminum body access panels and doors with stainless steel hardware
- NEMA 4 Electrical enclosure and weather tight wiring conduit
- Large operational switches, buttons and latches for cold weather operation in heavy gloves

## Finish

- Anti-corrosive polyester powder provides excellent weather resistance, flexibility and adhesion, plus a strong resistance to chemical agents such as glycol and skydrol
- Standard colors are high gloss white over black frame
- Custom colors require a paint chip or swatch for accurate color match

## Performance

- Nominal Cooling Capacity: 20 tons
- Nominal Airflow: 165 ppm (1.25 kg/s)
- Nominal Static Press: 20"wg (4.98 kPa)
- Nominal Electric Heater: 36 kW, 2 stg
- Nominal Water Heater: 26 kW
- Rating Condition: 95°Fdb/78°Fwb (35°Cdb / 26°Cwb ), 460/3/60, R22, sea level
- Rated Cooling Capacity: 240,000 Btu/hr (70.3 kW)
- Rated Condenser Airflow: 16,000 CFM (7,551 L/s)
- Rated Condensate Flow: 0.19 GPM (12 mL/s)
- Rated Heat Output (Blower+Heater+Engine): 232,700 Btu/hr (68.2 kW)
- Refrigerants: R22, R134a, 407c
- *Regional temperatures and elevation affect unit performance. Consult factory for specific unit selection data.*

## Environmental

- Operation Temperature: -40° F to +125° F (-40° C to + 52° C)
- Relative humidity 0-100%

## Electrical

- Blower Motor: 15 HP (11.2 kW)
- Condenser Fan Motors: 2 @ 1.5 HP (2 @ 1.1 kW)
- Electric heater (optional): 36 kW, 2 stage

## Control

- 24VAC Control Voltage
- Manual Mode Selection
- Damper Airflow Control
- Operator panel with rotary mode selection switches

## Generator/Engine Set

### Generator

- AC output: 480V, 3PH, 4 wire
- Continuous Duty Alternator

### Engine

- John Deere, Cummins, Perkins or Deutz
- Turbocharged 4-stroke, inline 4 cylinder

## Protection

### Air Conditioning

- High discharge air temperature (with heat option)
- Airflow loss
- High refrigerant pressure
- Low refrigerant pressure
- Circuit breakers and overloads on all motors

### Engine

- High Temperature Shutdown
- Low Oil Pressure Shutdown
- Overvoltage Shutdown
- Undervoltage Shutdown
- Overcrank Starting Protection
- Output Circuit Breaker

## Displays/Instrumentation

- Meters: Discharge air temperature, fuel level, hour meter, water temperature, oil pressure, battery volt meter

## Available Options

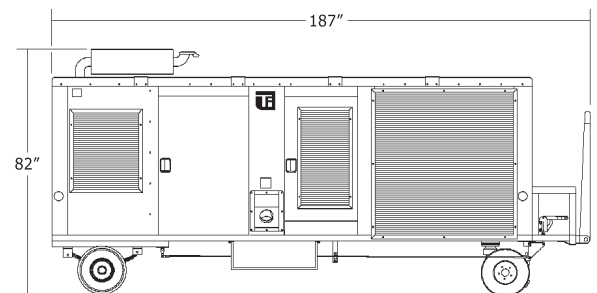
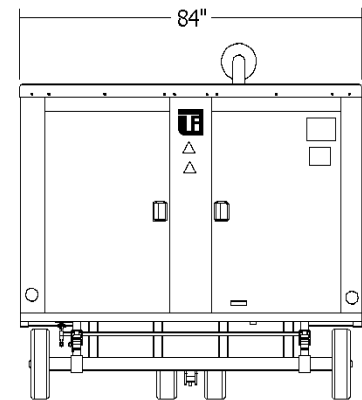
### Configuration

- 14"D Insulated, Flat Air Delivery Hose
- Truck Mounted (consult factory)
- Exterior hazard lights
- Shore Power Cable & Switch
- Proximity Crash Rail
- CE Package
- Low Fuel Warning Beacon
- Operation Indicator beacon
- Special paint scheme

### Engine

- Engine Block Heater
- Cold Weather Starting Aides
- Racor® Fuel Filter

*Specifications subject to change without notice.*



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