



## RJ150 Mobile Air Conditioner/Power Supply



Model RJ150 Trailer Mounted

### TRILECTRON:

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 Air Conditioner / Power Supply unit for comfortable conditioning of regional 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 Perkins or Deutz. Engines are diesel and jet fuel compatible.

### Air Conditioning:

15-ton air conditioning circuit for supply air cooling and 36 kW heater bank for heating

### Power Supply:

30 kVA 400 Hz solid state and 28VDC

### PERFORMANCE FEATURES:

#### Proven design:

- Hermetic scroll compressor re-refrigeration circuits with oversized condensing coils
- Finned-tube enclosed element electric resistance heaters
- Solid State PWM 400 Hz
- Solid State 28VDC Rectification
- Aluminum box frame and panels
- ETL tested, listed and labeled
- Meets all UL, NEMA, CE, NEC, OSHA, NFPA, ASHRAE, ASME and AHM 73 & 74 standards

#### Easy to Operate:

- Simple lighted button operator station mounted at ramp level
- Automatic DDC controls determine appropriate mode and output temperatures

#### Economical:

- Hermetic compressors and direct drive blower require no clutches, gears or pulleys
- Solid state 400 Hz and 28VDC rectification
- Less moving parts equate to lower maintenance costs
- 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	Optional Heater	Optional 400Hz	Optional 28VDC	Length	Width	Height	Weight
RJ150	15 Tons (53 kW)	36 kW	30 kVA	400 A continuous 1600 A peak	151" (384 cm)	72" (183 cm)	76.5" (194 cm)	5,600 lb (2,540 kg)

# Trilectron's RJ150 Mobile Air Conditioning/Ground Power Unit Specifications

## Construction

- Base Unit Weight: 5,600 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

### Air Conditioning

- Nominal Cooling Capacity: 15 tons
- Nominal Airflow: 75 ppm (0.57 kg/s)
- Nominal Static Press: 13"wg (3.24 kPa)
- Nominal Electric Heater: 36 kW, 3 stg
- Rating Condition: 95°Fdb/78°Fwb (35°Cdb / 26°Cwb ), 460/3/60, R22, sea level
- Rated Cooling Capacity: 308,440 Btu/hr (90.4 kW)
- Rated Condenser Airflow: 14,000 CFM (6,610 L/s)
- Rated Condensate Flow: 0.11 GPM (7 mL/s)
- Rated Heat Output (Blower+Heater+Engine): 149,100 Btu/hr (43.7 kW)
- Refrigerants: R22, R134a, 407c
- Regional temperatures and elevation affect unit performance. Consult factory for specific unit selection data.

### Power Supply

- Automatic line drop compensation
- Short circuit protected
- 400Hz: 30kVA, 115/200 VAC-3ph, Voltage regulation: <1%, THD: <3%, IHD:<2%, phase displacement: 120±1.5°

- 28.5VDC: 400A continuous, 1600 A peak, Voltage regulation ±0.05% up to rated load,

## Environmental

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

## Control

- 24VAC Control Voltage
- Manual and Automatic Mode Selection
- Damper Airflow Control
- Operator panel with large lighted momentary push buttons

## Generator/Engine Set

### Generator

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

### Engine

- Turbocharged 4-stroke, inline 4 cylinder
- Diesel and Jet Fuel Compatible

## 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

### Power Supply

- Overloads
- Under/Over Voltage
- Under/Over Frequency

### Engine

- High Coolant Temperature
- Low Coolant Level
- Low Oil Pressure
- Overcrank Starting Protection

## Displays/Instrumentation

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

- Indicator Lights: Lighted pushbuttons (see below)
- Buttons: Start, stop, mode, Aircraft class selection

## Available Options

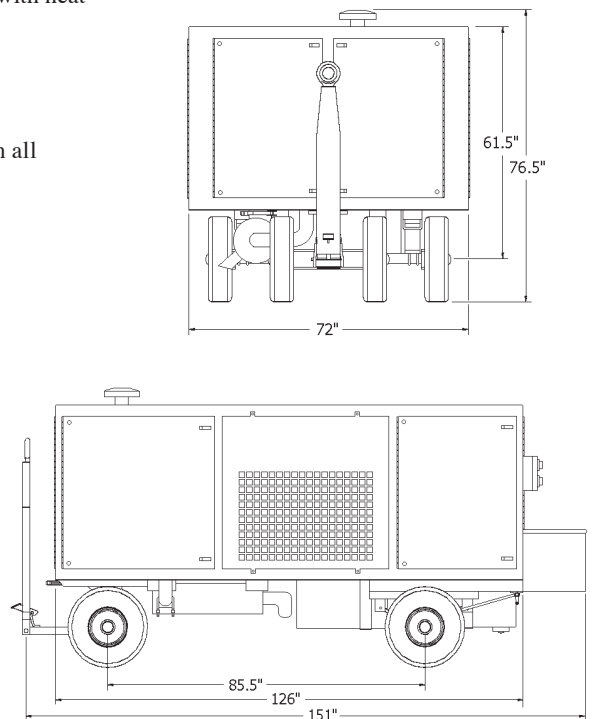
### Configuration

- 8"D Insulated, Flat Air Delivery Hose
- 8"D Un-insulated, Spiral Air Delivery Hose
- Banded 25' 4-wire, 3 phase cable
- Banded 25' 2-wire, DC cable
- 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
- Ether Cold Start
- Racor® Fuel Filter

*Specifications subject to change without notice.*



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INDUSTRIES

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