

# ASP Mobile Air Start Unit



Model ASP250 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, continuous flow air start unit for jet engine starting and air conditioning using the onboard air cycle machines (Air Pacs). Airflow is provided by a integrated dry screw compressor/gear-set for oil free air delivery driven by a Detroit Diesel Series 60 engine with diesel and jet fuel compatibility. Endurance in air conditioning mode: 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). Multiple compressor selections accommodate various aircraft requirements.

## CE AND EMISSIONS CERTIFIED:

The engine meets current Tier Emissions Certifications as specified by EPA and CARB. CE Certification and international labeling is an added feature of this equipment.

## PERFORMANCE FEATURES:

Model	Output (Jet Start Mode)	Length	Width	Height	Weight
ASP180	180 lb/min (1.36 kg/s) at 40 PSIG (276 kPa)	217" (551 cm)	88.5" (225 cm)	86" (218 cm)	12,600 lb (5,715 kg)
ASP250	250 lb/min (1.89 kg/s) at 40 PSIG (276 kPa)	217" (551 cm)	88.5" (225 cm)	86" (218 cm)	14,000 lb (6,350 kg)
ASP300	300 lb/min (2.37 kg/s) at 40 PSIG (2.27 kPa)	217" (551 cm)	88.5" (225 cm)	86" (218 cm)	15,700 lb (7,122 kg)

## Proven design:

- Robust high-pressure direct coupled screw compressor
- Electronically controlled diesel engine
- Demand sensitive output regulation
- Steel support frame on heavy-duty running gear (trailer version) and sound insulated aluminum body panels

## Easy to Operate:

- Simple lighted operator panel mounted on unit near discharge valves
- Automatic controls for auto-start and regulation of rpm & pressure for selected mode

## Economical:

- Direct-coupled engine to integral compressor/gear-set requiring no clutches, external gears or pulleys
- Fewer moving parts equate to lower maintenance costs
- Idle and Air Con mode offer significantly less fuel burn in standby and during Air Pac operation
- 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

# Trilectron's ASP Mobile Air Start Unit Specifications



## Construction

- 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

- ASP 180 Nominal Output - Jet Start: 180 ppm (1.36 kg/s)
- ASP 250 Nominal Output - Jet Start: 250 ppm (1.89 kg/s)
- ASP 300 Nominal Output - Jet Start: 300 ppm (2.27 kg/s)
- Nominal Disch. Press. - Jet Start: 40 psig (276 kPa)
- Nominal Disch. Press. - Air Con: 30 psig (207 kPa)
- Approx. Delivered Air Temp.: 390° F (199° C)
- Air Pacs and Jet Start delivery pressures are adjustable

## Environmental

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

## Control

- Pneumatic/Electric with 24VDC Control Voltage
- Airflow regulation via linear actuated bypass valve with stainless steel diaphragm
- Lighted Operator panel with large push buttons and switches
- Low voltage control box for maintenance and diagnostics

## Air Mover Set

### Compressor

- GHH Rand high pressure, air cooled dry screw
- Integral gear-set and lubrication system

### Engine

- Detroit Diesel Series 60 with FADEC
- Turbocharged 4-stroke, inline 6 cylinder
- Diesel and Jet Fuel Compatible

## Protection\*

### Compressor

- High discharge air temperature
- High oil temperature
- Low oil pressure
- Low oil level

### Engine

- High Water Temperature
- Low Oil Pressure
- Overspeed
- Overcrank Starting Protection

\* All unit safeties are disabled in Jet Start mode to prevent premature shutdown during and engine start attempt.

## Displays/Instrumentation

- Meters: Compressor discharge air temperature, discharge air pressure, oil temperature and oil pressure. Engine fuel level, hour meter, water temperature, oil pressure, tachometer, and battery voltmeter. E-stop counter, jet start runtime counter

- Indicator Lights: Compressor high oil temperature, low oil pressure, low oil level and high discharge air temperature. Engine low oil pressure, high water temperature, overspeed, Cool Down, Check Engine and Stop Engine.
- Buttons and Switches: Ignition on, start, mode selector, panel lights, emergency stop, jet start runtime

## Available Options

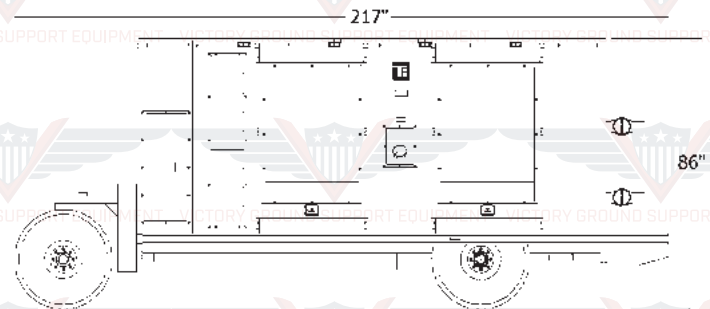
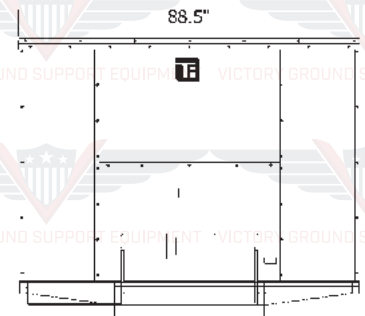
### Configuration

- Sound Attenuation Package
- Truck Mounted (consult factory)
- Exterior hazard lights
- 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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