

RELIABLE, REDUNDANT COOLING  
FOR ANY AIRCRAFT

# Air Conditioning Units



At Avro GSE, we deliver ground cooling systems engineered for maximum uptime, redundancy, and efficiency. Our ACU line supports regional jets, narrow-body, and wide-body aircraft with capacities from 30 ton to 110 ton.



# WHY AVRO ACUs

- Dual/triple independent refrigerant circuits
- Robust diesel-driven generator integration
- Safety monitoring & alarms
- Optional power & heater add-ons
- Backed by Avro's "Always Available (AAA)" support program



## ACU 30 Ton ACU30

This model is optimized for smaller narrow-body aircraft, regional jets, and ground support operations where managing lighter cooling loads is critical.

### KEY TECHNICAL SPECS

- **Cooling capacity:** 30 tons (2 compressor circuits)
- **Airflow:** 80 kg/min (nominal)
- **PCA outlet pressure:** ~5,000 Pa @ DB 35 °C, RH 48% ambient
- **Dimensions:** L ~4,000 mm, W ~2,100 mm, H ~2,000 mm
- **Refrigerant:** R410A (independent circuits)
- **Power / Engine:** Diesel-driven, 4-stroke, water-cooled engine, 1,500 rpm (generator included)

### APPLICATIONS / HIGHLIGHTS:

Ideal for single-aisle operations, remote stands, or airports with lighter cooling demands. The independent dual circuits allow redundancy and partial load operation.

## ACU 60 Ton ACU60

The mid-tier model is suited for medium wide-body aircraft or mixed fleet operations where redundancy & scalability are valued.

### KEY TECHNICAL SPECS

- **Cooling capacity:** 60 tons (2 compressor circuits)
- **Airflow:** 160 kg/min (nominal)
- **PCA outlet pressure:** ~7,000 Pa in design conditions
- **Dimensions:** L ~4,825 mm x W 2,280 mm x H 2,180 mm
- **Refrigerant:** R410A, independent circuits
- **Power / Engine:** Diesel / generator set integrated

### APPLICATIONS / HIGHLIGHTS:

Designed for heavier narrow-body or lower-capacity wide-body operations. Allows full-load performance in hot ambient climates while maintaining reliability and system continuity.

## ACU 110 Ton ACU110

Built for the most demanding cooling environments and large wide-body aircraft, this is Avro's highest-capacity unit, delivering heavy-duty performance under peak loads.

### KEY TECHNICAL SPECS

- **Cooling capacity:** 110 tons (3 compressor circuits)
- **Airflow:** 290 kg/min (nominal)
- **PCA outlet pressure:** ~7,000 Pa design condition
- **Dimensions:** L ~6,200 mm x W 2,280 mm x H 2,180 mm
- **Refrigerant:** R410A independent circuits
- **Power / Engine:** Diesel / generator set integrated

### APPLICATIONS / HIGHLIGHTS:

Ideal for ultra-widebody aircraft (A380, B777, A350, B747), high-demand hubs, or scenarios with high ambient temperatures. Redundant compressor configuration enhances resilience during long operations.



## USE CASES & DEPLOYMENT SCENARIOS

### Gate / Ramp Cooling

Provide conditioned air to aircraft during ground operations (pre-cool, boarding, turnarounds).

### High-Intensity Terminals

ACU 60 and ACU 110 allow servicing multiple aircraft or wide-body planes concurrently.

### Back-up or Redundant Cooling

Use as backup in case of terminal HVAC failure or surge cooling need.

### Mobile & Remote Operations

Truck-mounted or mobile configurations allow flexible positioning.

## FEATURE

## BENEFIT / VALUE

<b>Independent Refrigerant Circuits (dual or triple)</b>	Allows redundancy – if one circuit fails, others maintain partial cooling.
<b>Use of R410A refrigerant</b>	Environmentally compliant, high efficiency thermodynamics.
<b>Integrated diesel generator / power unit</b>	Self-contained unit, no external power infrastructure needed in remote stands.
<b>Control board with start/stop, fuel-level display, emergency stop</b>	Ease of user operation and safety functionality.
<b>Safety &amp; alarm systems</b>	Alerts for compressor overheat, high/low coolant pressure, low fuel, etc.
<b>Optional outputs &amp; accessories</b>	28 VDC, 200/115 VAC 400 Hz, air heater, truck-mount configurations.
<b>Warranty &amp; support</b>	36-month warranty from delivery date.
<b>Distribution / Spare support</b>	Stock locations in U.S. & Canada, Avro's "AAA" maintenance spare program.

## OPERATION & MAINTENANCE

### Startup & Interface

Walk through typical start sequence: fuel check, engine start, monitoring pressures / temps, control panel interface.

### Preventive Maintenance Tasks

- Periodic refrigerant circuit checks / leak inspection
- Engine oil, coolant, filters intervals
- Air filters, fans, belts, drives
- Safety interlock testing (alarms)

### Diagnostics & Monitoring

Control board self-diagnostics, alarm logs, maintenance alerts.

### Serviceability

Flip-open access doors, modular components, standardized parts

### Spare & Support Strategy

Through Avro's AAA program (spare standby units, priority parts, on-site tech dispatch)



MODEL	COOLING CAPACITY	CIRCUITS / REDUNDANCY	AIRFLOW / PRESSURE	DIMENSIONS (L x W x H)	KEY USE CASES
ACU 30	30 tons	2 independent circuits	80 kg/min, 5,000 Pa	4,000 x 2,100 x 2,000 mm	Narrow-body / regional, light loads
ACU 60	60 tons	2 independent circuits	160 kg/min, 7,000 Pa	4,825 x 2,280 x 2,180 mm	Mixed fleet, midsize / widebody support
ACU 110	110 tons	3 independent circuits	290 kg/min, 7,000 Pa	6,200 x 2,280 x 2,180 mm	High-demand hub, largest aircraft



## AVRO SUPPORT, SERVICES & FINANCING

# Keeping Your Fleet Moving. Always.

Avro GSE is committed to maximizing uptime across your entire operation. Our comprehensive after-sales support and flexible acquisition solutions ensure your fleet performs at its best – today and in the future.

### Avro Financing & Acquisition Solutions

Acquiring new GSE shouldn't slow you down. With Avro Financing, you can expand your fleet strategically and affordably.

- **Finance to Own** – Manageable monthly payments with ownership at term end.
- **Lease or Rent** – Flexible terms to match seasonal or contract-based operations.
- **Preserve Capital** – Free up cash flow while accessing the newest Avro technology.
- **Integration** – Financing works hand-in-hand with Avro's service and parts

Whether you're upgrading to electric models or scaling your ramp operations, Avro Financing helps you get the right equipment, right when you need it.

Learn more [avrogse.com/avro-financing](https://avrogse.com/avro-financing)



- Avro's AAA Maintenance / Parts Program provides priority repairs, guaranteed parts availability, and fast response to minimize downtime.
- Dedicated support specialists and diagnostic tools ensure seamless service across North America.
- Preventive maintenance and warranty support available through certified Avro service centers.

## Why AVRO GSE

- ✓ Proven performance in airport environments
- ✓ Modular design with shared components for easier service
- ✓ Broad North American parts and service network
- ✓ Financing and rental solutions tailored to your business

**avro GSE**  
Best on Ground

Powering ground operations with performance, reliability, and innovation.

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