

Oshkosh AeroTech JetAire® Air Handling Unit (AHU)



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For the Perfect Turn

JetAire® Air Handler Technical Specifications

The JetAire Air Handling Units (AHU) are packaged into two sizes: small and large. Small units include APC2000, APC2750, APC3000, and APC3500. Large units include APC4500 & APC6000

Electrical

480/60 Hz/3 Phase

Unit Size	Blower Size (hp)	Heater Size (kW)	RLA (A)
APC2000	25	No Heat/18/36	32/54/75
APC2750	30	No Heat/18/36/54	39/61/82/104
APC3000	40	No Heat/36/54/72	51/94/116/138
APC3500	50	No Heat/36/54/72	63/106/128/150
APC4500	60	No Heat/90/135	64/172/227
APC6000	75	No Heat/90/135	80/189/243

400/50 Hz/3 Phase

Unit Size	Blower Size (hp)	Heater Size (kW)	RLA (A)
APC2000	25	No Heat/18/36	35/61/90
APC2750	30	No Heat/18/36/54	40/67/95/122
APC3000	40	No Heat/36/54/72	55/110/137/164
APC3500	50	No Heat/36/54/72	66/121/148/175
APC4500	60	No Heat/90/135	77/207/272
APC6000	75	No Heat/90/135	74/224/289

Aircraft Serviced

Unit	Code B	Code C	Code D	Code E	Code F
APC2000	X	X			
APC2750	X	X			
APC3000	X	X	X		
APC3500	X	X	X		
APC4500	X	X	X	X*	X(2)
APC6000	X	X	X	X	X(2)

*In mild climates only. Consult factory for correct sizing.

Airflow Performance*

Unit	Airfl w (lb/min)	Pressure (in H ₂ O)	Airfl w (kg/min)	Pressure (kPa)	Blower (hp)
APC2000	180	22	81.6	5.47	25 (18.7 kW)
APC2750	240	22	108.8	5.47	30 (22.4 kW)
APC3000	300	22	136	5.47	40 (29.8 kW)
APC3500	340	22	154.2	5.47	50 (37.3 kW)
APC4500	400	22	181.4	5.47	60 (44.8 kW)
APC6000	550	35	249.4	8.71	75 (56 kW)

*Values measured at the unit outlet.

Ethylene Glycol Requirement

Unit	Flow-gpm (L/s)	Supply Temp °F (°C)-Cooling	Supply Temp °F (°C)-Heating	Percent Mixture
APC2000	20.4 (1.29)			
APC2750	27 (1.71)			
APC3000	34 (2.14)	20°F (-6.70°C)	180°F (82.0°C)	30
APC3500	39 (2.43)			
APC4500	60 (3.78)			
APC6000	95 (6)	20°F (-6.70°C)	180°F (82.0°C)	30

Dimensions/Weight

Unit	Length	Width	Height	Weight
Small	116 in (295 cm)	76 in (193 cm)	54 in (137 cm)	3750 lb (1701 kg) Max
Large	156 in (396 cm)	76 in (193 cm)	59 in (150 cm)	5250 lb (2381 kg) Max

Design Ambient

Summer (humid)	100°F (38°C) dry bulb and 80°F (27°C) wet bulb temperature
Summer (dry)	125°F (52°C) dry bulb and 71°F (22°C) wet bulb temperature
Winter	-20°F (-29°C) temperature

This information is provided for reference only and should not be used as technical specification data. This information is subject to change without notice. Please contact an Oshkosh AeroTech sales office for formal technical information.

Sound Level

Unit	dBA per SAE ARP 1801
Small	80
Large	85

Control System

PLC-Beckhoff

Defrost Cycle: 3 minutes every 40 minutes (Standard)

Cooling Coils-Primary (upstream)

Unit	Face Area ft ² (m ²)	Number of Row	Fin Pitch (fins/in)	Construction
Small	10.8 (1.0)	8	12	Copper tube-Aluminum fi
Large	20.3 (1.89)	8	12	Copper tube-Aluminum fi

Cooling Coils-Secondary (downstream)

Unit	Face Area ft ² (m ²)	Number of Row	Fin Pitch (fins/in)	Construction
Small	16.25 (1.51)	8	8	Copper tube-Aluminum fi
Large	16.25 (1.51)	8	8	Cooper tube-Aluminum fi

Exiting Air Temperatures

Cooling*	25°F (-4°C)	2" Washable	Standard
Heating*	130°F (54°C)	2" Disposable	Optional

Air Filters

*Values measured at unit outlet.

Design Features

The JetAire Air-Handling Units (AHU) are packaged into two sizes; small and large, with each size sharing a majority of components within the family size.

Split Coil Design: Every AHU is configured with a "split-coil" design. This means that the cooling coil is split into two pieces with the primary coil upstream of the blower and the secondary coil downstream of the blower. The upstream coil operates above the freezing point of water and removes the majority of the moisture from the airstream. The downstream coil operates below the freezing point and thus requires a defrost cycle. Because of the "split-coil" design our defrost is less frequent than other AHU's. Additionally, the upstream coil continues to operate during the defrost cycle such that the discharge temperature remains lower during defrost than other units.

Flow and Pressure: Our AHU is designed to deliver the highest airflow and pressure to compensate for telescoping air-ducts (TAD tubes) and other hose management systems that increase resistance to airflow between the AHU and the aircraft.

Universal Configuration: JetAire® AHU is configured for mounting in multiple locations and configurations. Installation of glycol lines and airflow outlets can be configured to allow orientation of the unit in either right or left hand configuration.

Blower Access: The blower can be easily removed as an assembly or the motor can be removed alone without the removal of the unit from its mounts (bridge or stand).

Seamless Drain Pan: The entire bottom of the unit is a single seamless drain pan so that condensate can be collected and pumped into a remote drain.

Maintenance Display: Behind the control box door is an onboard LCD display that shows glycol flow, inlet, and outlet temperature and unit discharge temperature.

Remote Monitoring: Being controlled by a PLC, our AHU can communicate via Ethernet with Building Management Systems, the passenger boarding bridge, or maintenance locations.

Control Panel Location: The control can be remote mounted at ground-level for ease of maintenance.

Optional Equipment

Electric Heat (supplemental): Multiple stages of electric heat (18 kW) for transition between winter and summer operation.

Outlets: Each unit can be configured with one or two outlets for servicing aircraft and one outlet for passenger bridge cooling.

Aircraft Cabin Temperature Probe

Filters: Multiple filter options available (washable or disposable)

Hush-Kit: Additional sound-attenuation available for locations requiring sound levels lower than standard.

Isolation/Shut-Off Valves: For ease of maintenance.



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