

ATURE™ AQUAM

**THE
CENTRALIZED
EFFICIENCY**



**CENTRALIZED PRE-CONDITIONED AIR RANGE WITH GLYCOL
CHILED WATER STAGES FOR AIRCRAFTS ON GROUND**



A Carrier Company



ATURE™ AQUAM Up to 240 kg/min

SUSTAINABLE OPERATION AND COMFORT

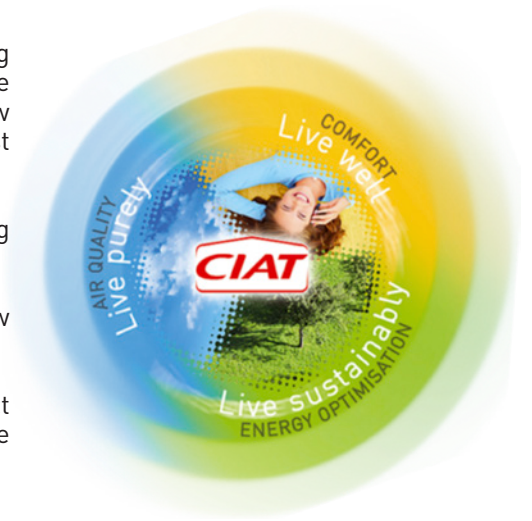
ZERO-REFRIGERANT PCA range for Cooling, Heating and Ventilating aircrafts on ground or maintenance hangars. **ATURE™ AQUAM** provides the precise airflow and temperature fulfilling occupants' comfort in the most efficient way.

Its M6 + Active Carbon two stages filters permits supplying clean and kerosene-odor-free air to the aircrafts.

The absence of compressors and outdoor fans allows low noise levels achieved on aircraft platform.

Relying on high performance rates obtained by district cooling plants in operation, ATURE™ AQUAM will provide the airport management:

- Lowest costs of ownership and operation.
- Best efficiency.
- Smallest carbon footprint zero-refrigerant technology.



LONG LIFETIME

Durable protection assured by **ATURE™ AQUAM** design concept and manufacturing process. Its casing is made of galvanized steel metal, cold-rolled in accordance with European standards EN 10-142 and finished in polyester paint.

The Protection grille in air aspiration prevents from external potential damage and the condensates galvanized drain pan prevents condensate water from stagnation in the unit, thus unit from corrosion. The pan can be manufactured in AISI-316 stainless steel enhancing lifetime.

ATURE™ AQUAM coils are manufactured with copper pipes and aluminum fins for standard ambient. Depending on outdoor environment, proximity to the sea or any other corrosion factors, the coils can be protected using COATING Protections such as Polyurethane fins.

SPECIFIC MATERIAL BUILT-IN protection such as copper pipes and copper fins or INERATM finishing, which is a specific designed aluminum alloy, which after standardized tests (more than 1.000 hours under ASTM B117 / ISO 9227), shows outstanding performances against corrosion in saline environments.





PRE-CONDITIONED AIR For aircrafts on ground

EASE OF INSTALLATION

ATURE™ AQUAM units are conceived to be installed on ground by the rotunda or at indoor technical areas.

Our engineering design department is able to customize and supply the units tailor-made attending to end-customer needs.

Heating mode operates by integrated Hot water coils (2 or 4 pipes system) or Electric Heaters option. 4 pipes system allows to supply heating or cooling depending on different aircrafts needs.



SMART AND EASE OPERATION

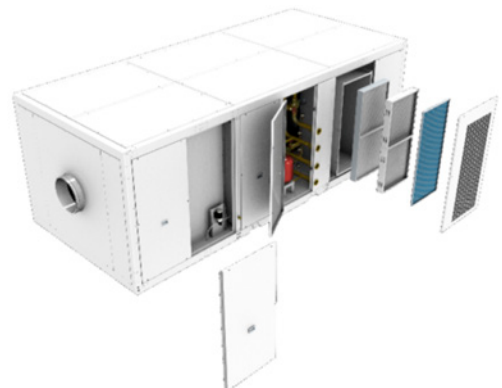
ATURE™ AQUAM is managed by a friendly user tactile interface which allows the End user to monitor and change main control parameters. It displays temperatures and all operation variables, monitoring and registering of the operation parameters.

Ask our experienced Controls department for Customized and tailor-made solutions depending on the project or airport management's needs.



EASE OF MAINTENANCE

ATURE™ AQUAM removable panels enable a comfortable and complete access to any inside part granting 100% access to all internal components: condensates pumps, coils, filters... Its Maintenance desk located on the main tactile display screen is protected by password for maintenance department users and allows to check the main information on: sensors, fans, condensates pump, counters, electric power meter, outlet/inlet temperatures, Counters of hours of operation and Start-ups of main components. Main parameters can be also checked and fast configured by the specifically dedicated Maintenance Terminal.





DATASHEET

ATURE AQUAM PCAW (1)

Modelos	Category (2)	Nominal Airflow (kg/min)(3)	Nominal Available Pressure (Pa)(3)	Nominal Discharge Temperature	Nominal Cooling Capacity (KW)(4)	Nominal Heating Discharge Temperature	Nominal Heating Capacity (KW)(5)	Power Fan (KW)	Optional Fan (KW)
120	C	90	5000	-2	98,4	45	94,8	15	-
120	C-D	110	5800	-2	119,6	45	112,9	30	45
200	D	135	6600	-2	150,7	45	144,6	45	30
200	D-E	150	7100	-2	167	45	159	45	75
200	E	180	8000	-2	200,1	45	187,2	45	75
240	1/2F	210	9800	-2	234	45	215	75	-

(1) Range Preliminary values. Subject to change without prior notice. Operation limits: -20°C / +46°C. Different operation limits under consultation.

(2) F CAT aircrafts require two identical units.

(3) Different selection points available. Ask CIAT Airports sales department.

(4) Cooling Capacity at 35° / 40% outdoor air - Chilled 35% MEG water -5 / 7°C.

(5) Heating Capacity at - 10°C outdoor air - Hot water 70 / 35°C.

MAIN FEATURES

- AVANT PCA PRO control board including 7-inch screen tactile terminal.
- 14" or 18" air outlet depending on unit size.
- 3 ways water valve.
- 2 pipes system.
- High efficiency direct drive centrifugal fan.
- Frequency converter with pressure sensor air-flow control.
- Smoke detector.
- Condensate drain pump.
- Galvanized tilted condensate drain pan.
- RAL colour standard bodywork: 7035.
- 2 stages G2+G4 air filters in air aspiration.
- Thermal exchange coils: Copper pipes + Aluminum fins coils.
- Cabin sensor.

OPTIONAL CONFIGURATION

- PGD1 Service terminal for maintenance tasks and fast configuration.
- 18" air outlet or secondary 14" with motor driven damper.
- 2 ways valve.
- 4 pipes system (extra heating coils).
- Electric Heaters.
- Remote Control box.
- AAR selector.
- Diamond-shaped upper panels.
- Stainless steel condensates drain pan.
- Pits management.
- Different RAL colour bodywork option.
- Clean and kerosene-odor-free air supply including M6 or M7 + Activated Carbon filters.
- Coils protection: Polyurethane coating, INERATM or Copper pipes+Copper fins.
- Supply setpoint managed by outdoor temperature
- Low outdoor temperature protections.
- Ground supporting feet.
- Antivibration mounts.
- Different communication BMS cards: Modbus TCP/IP, RS-485...
- Electric power meter.