

AIR CONDITIONING UNITS

APPLICATION

Vertical Air Handling Units are HVAC equipment designed and manufactured to regulate temperature, hygrometry, and air renewal through a building, a boat, a technical room. ACUs are divided into three specific compartments: air section / refrigerating section / electrical section.

Paumier manufactures tailor-made ACUs to meet our customers' specific requirements.

TECHNICAL INFORMATION (*)

Refrigerant	All H(C)FC
Cooling capacities	5 to 80 kW
Evaporating/Condensing	Air / Air
Filtration	G4
Air Volume	500 to 10 000 m ³ /h
Fan Motor	400VAC/3ph/50Hz

CASING / PANEL

Durable aluminum casing, double skinned panel with thermal and acoustic insulation (25 mm) constitute the frame of our units. Installation and maintenance access are made thanks to hinges and handles. ACU can be connected to ductwork, if required.

EVAPORATOR COILS

Coils are manufactured with copper pipes and aluminum fins (fin spacing of 2,5mm). Coils are available in option with a wide range of materials (copper fins,...), geometries and dimensions. Specific coating (Blygold/Heresite) can be applied on the coils to increase equipment lifetime.

FAN

ACUs are equipped with direct drive centrifugal fan. Fans are made of galvanized steel parts and have a shaft with ball bearings to avoid any specific system of lubricant. Fan motor protection class IP54, with an option to regulate fan speed with a variable frequency drive.

REFRIGERATING SECTION

A specific compartment of the unit is dedicated to cooling production. This compartment is equipped with a compressor and all the necessary instrumentation and refrigerating accessories for cooling production (pressure switches, pressure gauges, drier filters, sight glasses,...)



REGULATION

Electrical compartment is in charge of power distribution and regulation. ACU motors and instrumentation are connected to electrical cabinet to avoid interface during assembly on site. In option, ACU can be managed by a Program Logic Controller with a Human Machine Interface to increase possibility of monitoring and control.

OPTIONS (*)

Heating	Electrical Heater, Heating Coil
Casing / Panels	Stainless Steel 316L
Special Fan motor	60Hz, 440V, 230V,
	Frequency Inverter
Filtration (2nd) stage	F7
Evaporator and Condenser Coil	Copper fins, SS316L frame
Coating	Heresite treatment, Blygold
Instrumentation	Differential pressure transmitter,
Regulation	PLC Siemens , HMI
Accessories	Manual damper, Actuator, Droplet separator

(*)Please confirm your needs and your alternative solutions with Paumier Engineering Department

Solutions for Refrigeration and Climatic Engineering

www.paumier-sa.fr Fécamp (Head Office)

Parc d'activités des Hautes Falaises - 76400 - FECAMP

Tel: +33 (0)2 35 10 42 90 Fax: +33 (0)2 35 29 34 78 E-mail: marine@ets-paumier.fr Agencies: Concarneau - Vitrolles