

CTA

AIR HANDLING UNITS



Description

The CORAL company manufactures a wide range of air conditioning equipment. The CTA range is among the most qualified and technologically advanced.

The CTA air conditioning units can be used for many purposes among which:

- pressurisation with or without heating of the varnishing, drying and seasoning areas etc.
- clean air issuing/pressurisation of sealed areas and chambers (dust free)
- heating/cooling/air conditioning of industrial areas

The CTA units are available in various versions and models to meet the most varied requirements, please refer to the attached technical specifications.

Technical features CTA

Description

CORAL manufactures a wide range of equipment for air conditioning, together with its standard production it also offers personalised units that meet individual plant system requirements.

The high quality components and accessories together with the field of air pressure covered, place the CORAL CTA range of air conditioning units among the most qualified and technologically developed.

They are constructed in galvanised sheet steel (varnished on request) bolted together with the possibility of creating a double wall with thermo-acoustic insulation.

The attachment of the panels using bolts is far more reliable than that of self-tapping screws, making the structure extremely rigid and at the same time easy to dismount if necessary.

The inspection hatches are constructed in the same way as the panels and are equipped with nylon resin handles.

The registers are finned with opposed pitch of 100 or 150 mm made of galvanised sheet steel the pins of which are housed in ferrules located on the vertical segments of the frame. The maximum pressure variance is 1400 Pa for the registers with closed fins and with a maximum torsion of 12 Nm on 3 sq. Mt. of surface area and a static pressure of 500 Pa. The registers can be manual or servo controlled according to customer request.

The PRECLEAN filter corrugated panels are 100 mm thick constructed of a galvanised sheet steel frame and polyester filter with protective grill. The corrugated type structure provides a double filtering surface compared to that of the air vane. The standard filtering system is of type A250 with high level separation with self extinguishing features (F1 class).

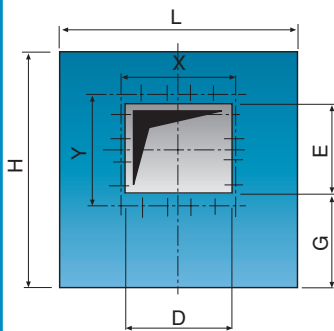
The heating unit of the CTA houses the hot water supplied batteries (standard) or by electric resistors (optional) with a number of ranks suited to the thermic variations expected. The hot water batteries are of copper pipes with aluminium pack finning with a maximum operating temperature of 150° C and a maximum pressure of 15 bars.

The batteries can also be equipped for cold water supply produced by a chiller (not provided) for cooling/conditioning of air entering the CTA.

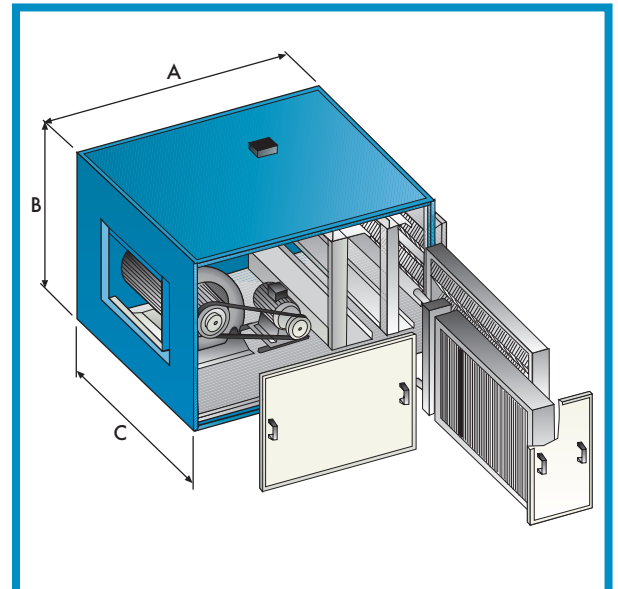
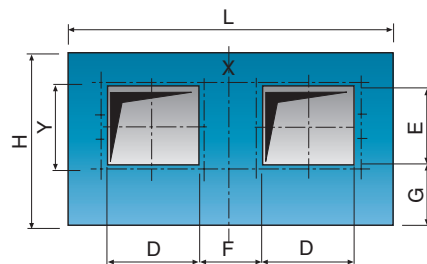
The ventilating section consists of double intake fans with basket type vanes, coupled to the motor by belts and pulleys mounted on a common frame in steel plate and supported by anti vibration brackets. The motors are mounted on stainless steel guides with a single movement screw simplifying the tension and belts replacement operations.

Technical features

CTA 1/2/3



CTA 4/5



Dimensions

Model	A	B	C	D	E	F	G	H	L	X	Y	Pipe channel	Flow
CTA 1	1350	750	730	330	362	-	255	750	730	500	500	470	470
CTA 2	1606	840	1025	490	425	-	285	840	1025	950	720	920	920
CTA 3	1850	1320	1280	580	500	-	346	1320	1280	630	630	600	600
CTA 4	1850	970	1780	494	424	358	250	970	1780	1430	480	1400	450
CTA 5	1850	1320	2145	580	500	435	345	1320	2145	1730	580	1700	550

			CTA1	CTA2	CTA3	CTA4	CTA5
Max capacity (m³/h)			6000	10000	16000	20000	26000
Fan power (kW)			3	4	5,5	7,5	7,5
RPM			1300	1100	800	1050	725
Voltage (V) 3-PH			230/400	230/400	400/690	400/690	400/690
Static pressure (Pa)			150	150	150	150	150
DT H ₂ O (°C)			20	20	20	20	20
Max thermic power							
(Kw)/(Kcal/h)	Thermal variation	DT 40°C DT 30°C DT 20°C	102/87450 80/68700 47/40445	170/146000 132/113500 95/81450	276/237600 220/189000 155/133600	345/296550 276/237150 196/168200	425/365900 302/259700 198/170520
Capacity							
(m³/h)	Thermal variation	DT 40°C DT 30°C DT 20°C	4,5 3,5 2,1	7,4 5,8 4,2	12 9,5 7	14,8 12 8,5	19 13 9,2
Battery joints							
Thermal variator							
		DT 40°C DT 30°C DT 20°C	1" 1" 1"	1" 1/4 1" 1/4 1"	2" 2" 1" 1/2	2" 2" 1" 1/2	2" 1/2 2" 1" 1/2
Batterie loss							
(Pa)	Thermal variation	DT 40°C DT 30°C DT 20°C	157 120 70	139 108 72	55 43 33	94 70 51	40 29 22
Sound level dB(A)			69	69	71	72	74