



Air Handling Unit Series SC





The air handling units series SC are manufactured with aluminium profiles and sandwich paneling.

The bearing framework made of extruded aluminium, is assembled with angulars made of nylon

weighted with fiber glass up to model SC480 and with die-cast aluminium angulars for higher sizes.

Panels are insulated with mineral wool of density or with polyurethane of density.

The thickness of panels is 48 mm.

Panels are fastened by screws to the structure from the outside in order to allow the easy maintenance of the unit.

A neoprene airtight gasket is placed between panels and profile of the bearing frame.

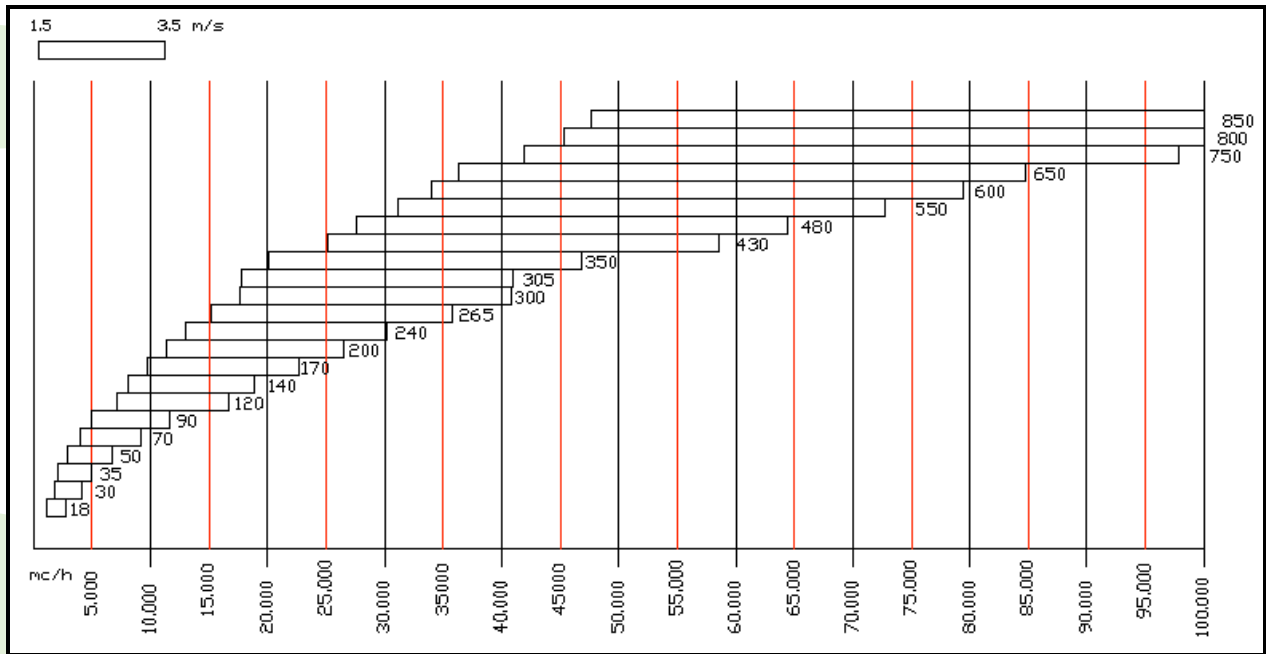
The supporting structure of the unit is a solid basement made of pressure bent steel arranged for lifting and motion.

Standard execution:

- Bearing structure: made of extruded aluminium profiles dim. 50x50 mm up to SC480 and dim. 70x70 mm for higher sizes.
- Internal panels: made of hot dipped carbon steel sheet, with zinc cover of 200 gr/mq.
- External panels: made of galvanized prepainted carbon steel sheet.
- The painted side is protected by a self-adhesive antiabrasion pvc film easily detachable.
- Insulation: panels are insulated with polyurethane.
- Basement: the basement consists of pressure bent profiles made of hot dipped carbon steel sheet, with zinc cover of 200 gr/mc
- Internal metal sheets: in the standard configuration the internal metal sheets such as guides and internal supports are made of hot dipped galvanized carbon steel, with zinc cover of 200 gr/mq.

Execution on request:

- Bearing framework with thermal break profile.
- Internal and external paneling in peraluman, stainless steel, galvanized prepainted, or galvanized preplastified sheet.
- Insulation with a mineral woolmattress of a density.
- Stainless steel aisi 304 or 316 basement .
- Internal metal sheets in peraluman, or stainless steel.
- Light points; round windows, door locking system with key.
- Outdoor execution with covering roof and technical space for valves.



Series SC Range

The air handling units series SC are an extremely complete and articulated answer to the requirements of air handling in civil and industrial plant engineering. Available in a wide range of sizes and sections, IDROAIR air handling units series SC are expressly design to satisfy every request of any aeraulic plant. The air handling units series SC are available in 23 standard sizes with air volume up to 90000 m3h.

The combination of the numerous modular sections proposed for each size permits to carry out units suitable for any installation. Every model is identified with simple references that allow an easy selection. This catalogue provides the elements necessary for a summary design of the air handling unit. Besides, the technical and dimensional main features of each section or component are briefly illustrated.

Beyond what mentioned in this catalogue, IDROAIR can propose out standard air handling units expressly designed and calculated on the basis of Client's request.

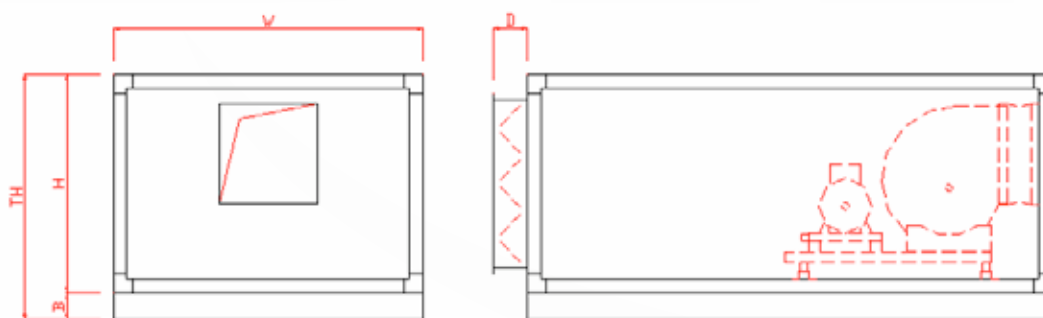
- AIR CAPACITY - AIR SPEED ACROSS COILS -

Gr.	18	30	35	50	70	90	120	140	170	200	240	265
Coil Section(mq)	0.22	0.32	0.40	0.53	0.73	0.92	1.32	1.50	1.80	2.10	2.40	2.84
Speed/ Air Volum	mc/h											
2.0 m/s	1555	2333	2851	3802	5227	6653	9504	10800	12960	15120	17280	20412
2.25 m/s	1750	2624	3208	4277	5881	7484	10692	12150	14580	17010	19440	22964
2.5 m/s	1944	2916	3564	4752	6534	8316	11880	13500	16200	18900	21600	25515
2.75 m/s	2138	3208	3920	5227	7187	9148	13068	14850	17820	20790	23760	28067
3.0 m/s	2333	3499	4277	5702	7841	9979	14256	16200	19440	22680	25920	30618
3.5 m/s	2722	4082	4990	6653	9148	11642	16632	18900	22680	26460	30240	35721
4.0 m/s	3110	4666	5702	7603	10454	13306	19008	21600	25920	30240	34560	40824

Gr.	300	305	350	430	480	550	600	650	750	800	850
Coil Section(mq)	3.24	3.26	3.72	4.65	5.12	5.78	6.30	6.72	7.77	8.40	8.82
Speed/ Air Volum	mc/h										
2.0 m/s	23328	23436	26784	33480	36828	41580	45360	48384	55944	60480	63504
2.25 m/s	26244	26366	30132	37665	41432	46778	51030	54432	62937	68040	71442
2.5 m/s	29160	29295	33480	41850	46035	51975	56700	60480	69930	75600	79380
2.75 m/s	32076	32225	36828	46035	50639	57173	62370	66528	76923	83160	87318
3.0 m/s	34992	35154	40176	50220	55242	62370	68040	72576	83916	90720	95256
3.5 m/s	40824	41013	46872	58590	64449	72765	79380	84672	97902	-	-
4.0 m/s	46656	46872	53568	66960	73656	83160	90720	96768	-	-	-

DIMENSIONAL FEATURES

- EXTERNAL DIMENSIONS



EXTERNAL DIMENSIONS (mm)

Gr.	18	30	35	50	70	90	120	140	170	200	240	265	300	305	350	430	480	550	600	650	750	800	850
W	900	900	900	1100	1430	1430	1430	1600	1850	2100	2400	2100	2400	2100	2400	2850	3100	3110	3410	3610	4110	4410	4610
H	590	760	900	900	900	1100	1430	1430	1430	1430	1430	1850	1850	2100	2100	2100	2100	2400	2400	2400	2400	2400	2400
B	100	100	100	100	100	100	150	150	150	150	150	150	150	200	200	200	200	200	200	200	200	200	200
TH	690	860	1000	1000	1000	1200	1580	1580	1580	1580	1580	2000	2000	2300	2300	2300	2300	2600	2600	2600	2600	2600	2600
D	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125