CLIMACS

AIR CONDITIONING SYSTEMS

CONTENT


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KIS
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SANTRAL ÇALIŞIYOR
ALARM SAYFASI
AYARLAR

Your point of view will change when you read this page

When searching for a product, it may be difficult to select a product among similar ones. If you are at this stage, we would like to remind you some important points.

This catalogue contains technical details for our product range. When you review and compare the products, you will see the superior features of our products. You will discover the potential that how our products can contribute to your firm.

Your purchase decision affects your future!

"The evaluation criterion should not be limited to price only but price & performance!"

Market researches showed that the price of a product has a significant role in decision making process for purchase. In the manufacturing sectors based on advanced engineering, experienced buyer companies generally review a product down to the subcomponents. Fans, motors, coils and all other components that are used for manufacturing, actually constitute the road map of the problems that you may encounter in the future. Weak decisions of purchase are generally resulted by time and effort loss in a shorter term, as well as financial damages.

In 1999 when we planned our first unit for our first customer we were discussing this question: "Which problems may arise?" We are still discussing the same question with the responsibility we carry for our thousands of customers. We equipped our products with the most advanced technology by which we provide remote control and remote report retrieval via the Internet connection; many of our competitors in the sector fall behind the technology level we use. Our R&D department continues to develop to add more. All our investments are made to a single question "Which problem may the our customer encounter?"

Sales ok, then?

"All our activity planning is based on possible down time, which we limit it down to moments, not hours or days."

Aftersales support is particularly important in the sectors based on intensive engineering. There is no doubt that every manufacturer has its own aftersales support policy. On the other hand, some technical problems demand urgent intervention where well prepared technical documentation plays a crucial role. In addition to hard copy training manuals printed in 2014, "online training documents" will be an indispensible source for your technical team. Moreover, "online training videos" are being prepared for you.

After 15 years left behind, ACS family is keep growing in year 2014 with thousands of customers who selected us.

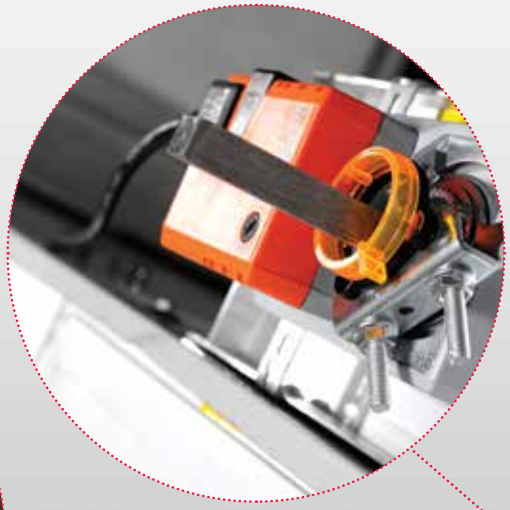
In this short article, we would like to remind you to consider not only the product you plan to use but also consider whose product you plan to use.

AIR HANDLING UNIT

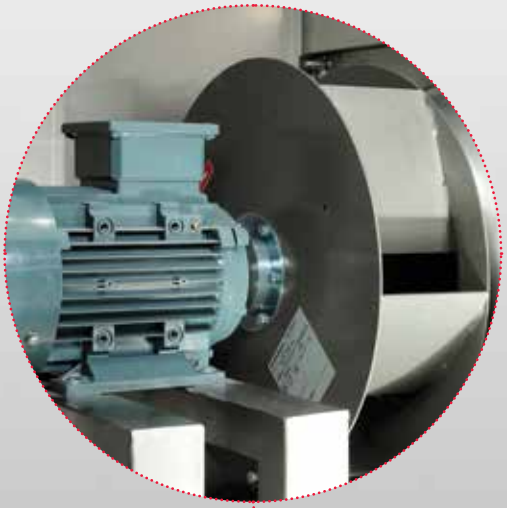
AIR HANDLING UNIT

Air handling units are used in ventilation, filtering, heating, cooling, humidifying and dehumidifying applications.

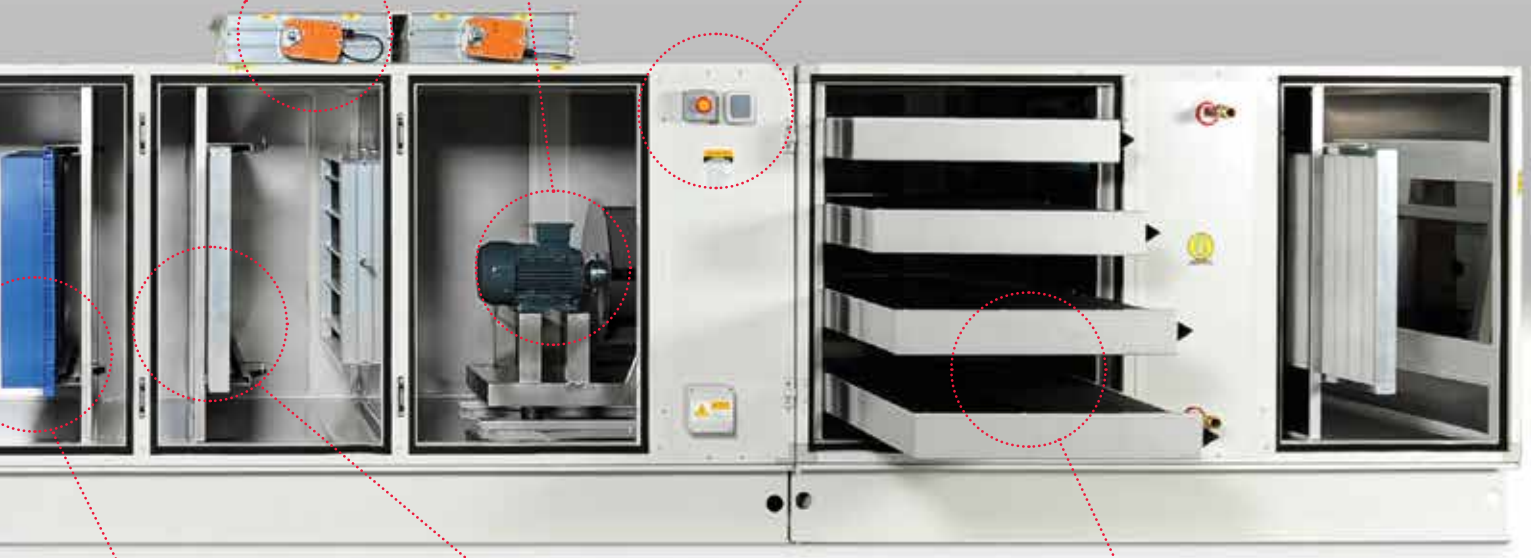
ACS supplies air handling units under serie namely ACS50 having 50 mm rockwool insulation respectively. There are totally 29 models are available in the product range with capacities varying from 1,000 to 100,000 cubic meter per hour. ACS50 with range ACS 71 -1003 has been tested and certified by EUROVENT as per EN 1886 standards.

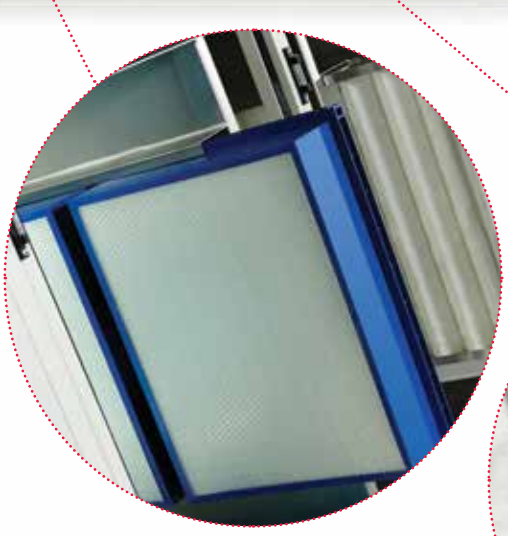


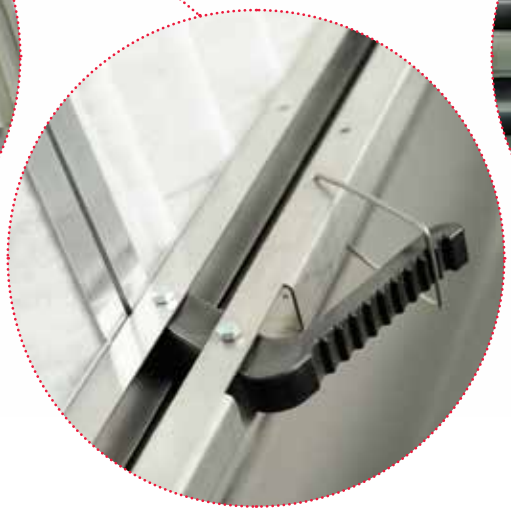

ACS

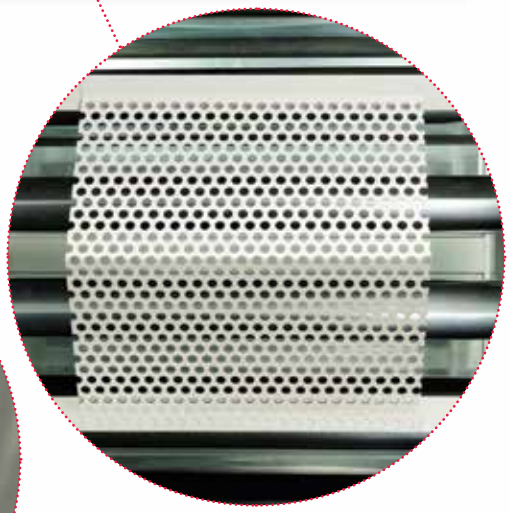



GÜVENLİK TALİMATI
TAVSİYE EDİLEN
ENERJİ KESME PROSEDÜRÜ
STOP









FRAMEWORK

The frame is composed of specially rolled aluminium or steel profiles and plastic brackets designed specially for these profiles. Interior surfaces of the profiles are designed be smooth and free of recess and protrusion and are fully sealed in order to minimize pressure loss and avoid aggregation of contaminants inside the air handling unit.

PANEL

The panels constituting the body have double layers. The inner surface of the panels is composed of electrostatic painted galvanized sheets. Heat and sound isolation is achieved either by fixing rockwool plates of suitable shape and density into the gap between the layers or by injection of polyurethane. Two component polyurethane injection is mixed and charged between the layers by means of special equipment. The layers of galvanized sheets are connected via new design K-profiles.

Beside serving as fixed body panels, the panels can be used as service doors as well. The panels serving as service doors are equipped with hinges and handle mechanisms of which number differ from 2 to 4 depending on the height of the unit. The units are equipped with emergency stop button for emergency and another safety switch will stop the operation in case the maintenance lid is open.

RADIAL AND PLUG FANS

Cell aspirators and vatilators, depending on the pressure loss in the ventilation system, either tightly set forward curved blade fans (in systems with low to medium pressure loss, 100-700 Pa) or widely set backward curved blade fans (in systems with high pressure loss, 700-1500 Pa) are used. The fans are statically and dynamically balanced, highly efficient, silent, double suction, NICOTRA brand radial fans. Optionally, direct driven NICOTRA plug fans can be used.

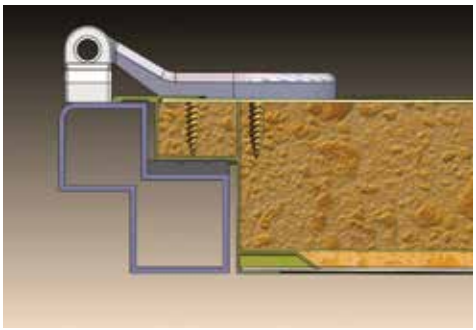
Electric motors have IP54 protection and F isolation classes and operate with 380 V 50 Hz. Selection criterion depends on the power required by the fan shaft: Motors having 15% higher capacity (safety margin) are selected. Radial fans and electric motors can be fixed on the same chassis. In order to prevent to transmission of possible vibration into the cabinet rubber or spring vibration absorbers are used on the support skids standing on the body panel below the fan chassis. Fan cabinet outlet mouth and centrifugal fan mouth are interconnected by using rubber sealing and flexible flange.

Air handling unit uses NICOTRA plug fan which are centrifugal fans without scroll. The fans have impellers with backward curved blades and they are statically and dynamically balanced, silent and high efficient fans and are suitable for velocity control and easy to clean inside the air handling unit.

Motor is directly coupled to the rotor. This way power loss caused by transmission components is avoided and contamination and breaking risk of belt is eliminated. Because the revolutions of the fan and the motor are the same air flow rate control can be managed by controlling the frequency in the fans. Fans are powered 380V /50 Hz. Asynchronous motors have IP55 protection class and F isolation class.

SEALING

Special extruded rubber gaskets with air cushion are used to avoid possible air leakage caused by the pressure difference at the seams where framework and body panels overlap.



AIR DAMPERS

The dampers used in the air handling units are made of special self sealing aluminium flaps with hidden plastic gear mechanism and bearing components. Air dampers provide seamless adjustment for air proportions ranging from 0 to 100% and they are designed according to the air flow rate and unit dimensions to minimize air leakage at the edges. Optionally, dampers can be controlled manually or by a servo motor.

FILTERS

Depending on the requirements various types of filters are used in the air handling units. Class G4 pre-filters are used to catch coarse dust particles and they are arranged in V-form in order to keep the air velocity at minimum over the filter. Class F5, F6, F7 and F9 synthetic bag filters have high dust removal capacity and they are installed in air handling units in the form of cartridges enabling the easy installation and dismounting. Cartridges are composed of specially designed galvanized sheet frame with rubber gaskets. Filter cell structure is designed to avoid unwanted air leakage and complies to international filter dimensions and optimum air velocity. All filter cells are equipped with a lid providing easy access for replacement and cleaning.

SILENCERS

Silencers are designed to absorb noise to reduce it to a required level. The filters are composed of galvanized frame with glass wool filling and the frame is covered by a fabric forming a silencer chamber. The cover fabric is either glass fabric or a special fabric according to hygienic conditions.

Heating and Cooling Coils

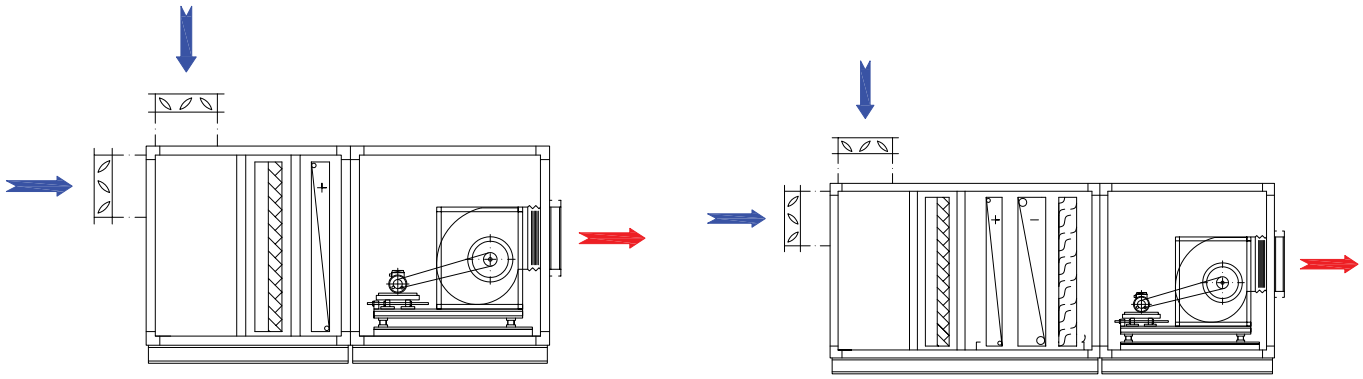
Heater and cooler coils can be composed of either copper pipe and aluminium fins or steel pipe and steel fins depending on the purpose of the component and type of the fluid. All coils are subjected to pressurized hydrostatic test upon completion of the production. Coils are installed on the studs arranged in a way to enable easy access and maintenance. Cooling coils exchangers are equipped with a stainless steel trays or a specially formed PVC droplet catcher for condensing water. Electric heaters are produced using steel pipe and steel fins with optional safety thermostat.

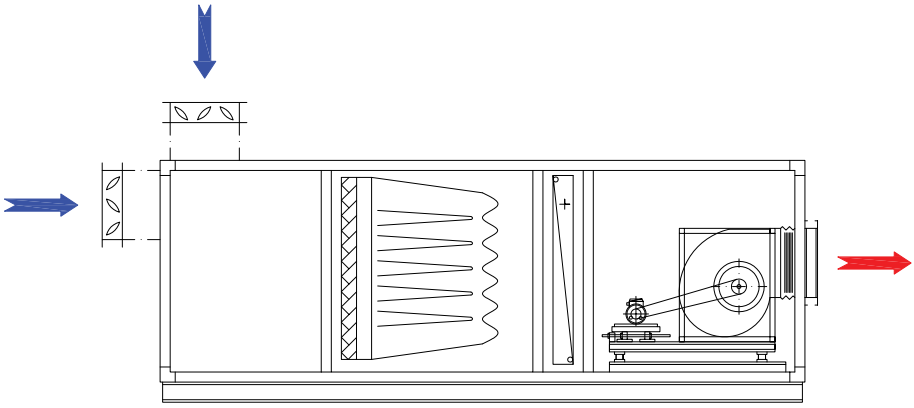
Heat Recovery Unit

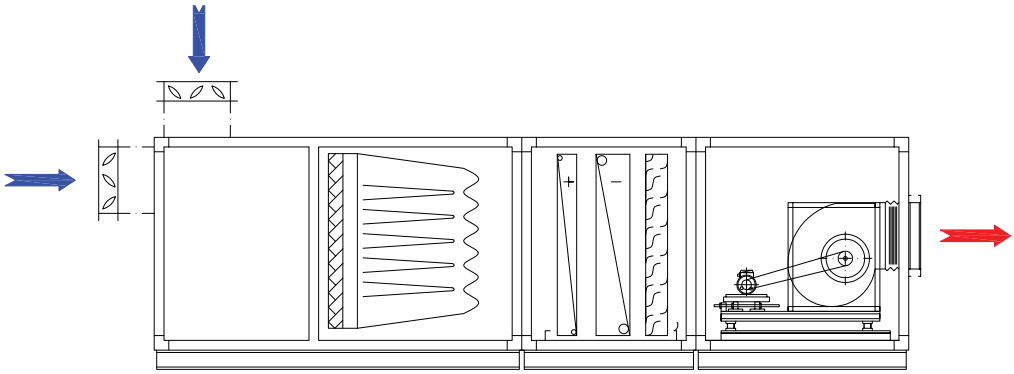
Diagonal flow heat recovery unit is composed of aluminium plates. As a result of the high coefficient of heat transfer and large surface area, the unit provides an effective heat transfer between the fresh air coming in and the discharged air going out of the air handling unit. The optimum solution for each system is achieved through consideration of summer and winter design temperatures and operational aspects.

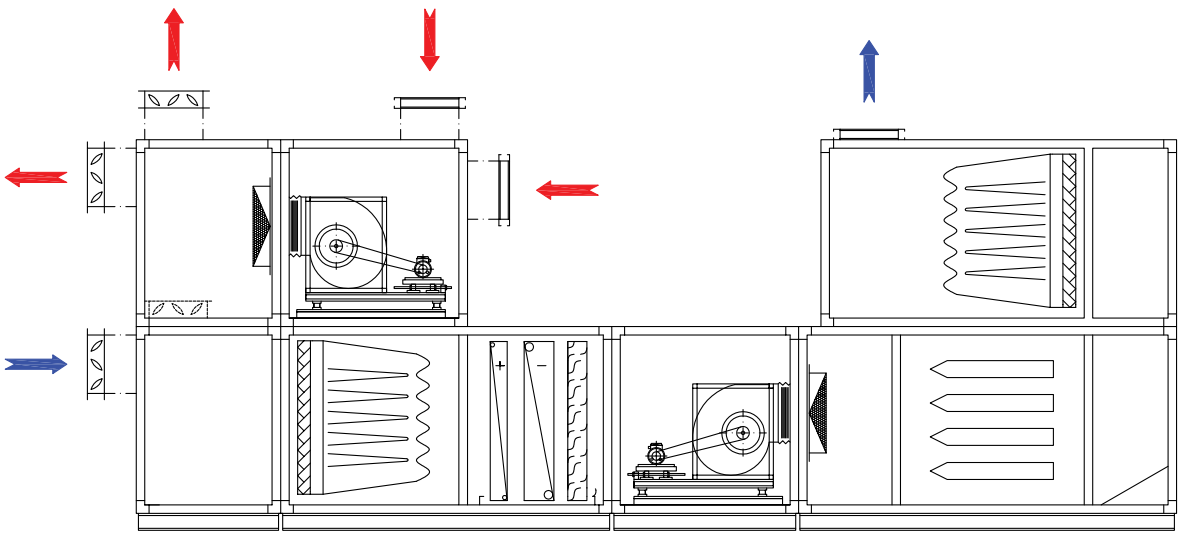
Steam Humidifiers

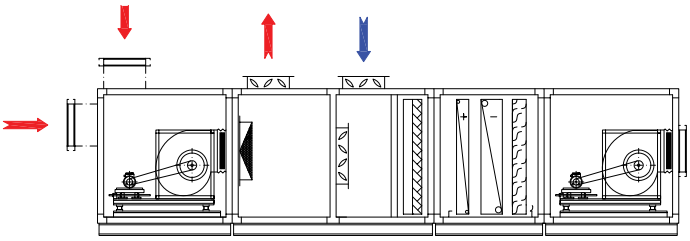
Steam humidifiers are composed of following components: Fittings for steam distributors. The fittings are available in various dimensions and numbers depending on the capacity and are installed in the cabinets built of standard panels; Hard PVC monitoring glass; PVC and stainless steel droplet catchers to avoid drift of water.

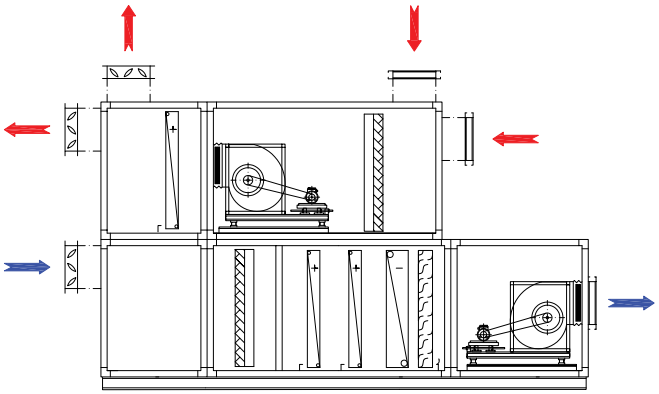


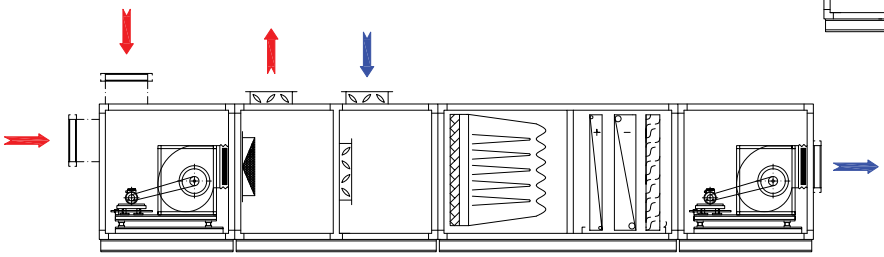


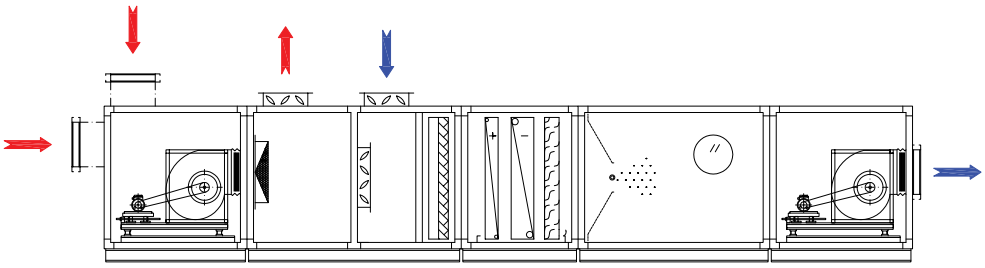


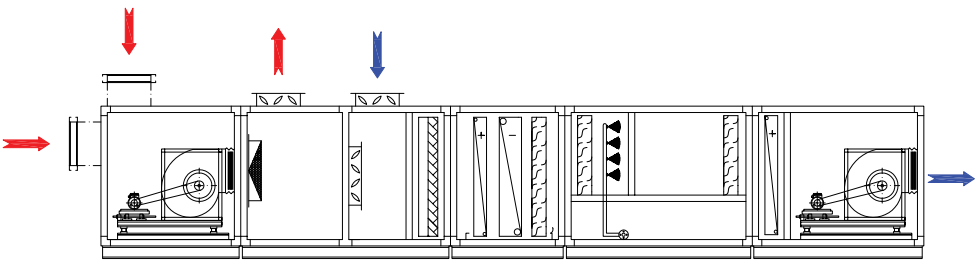


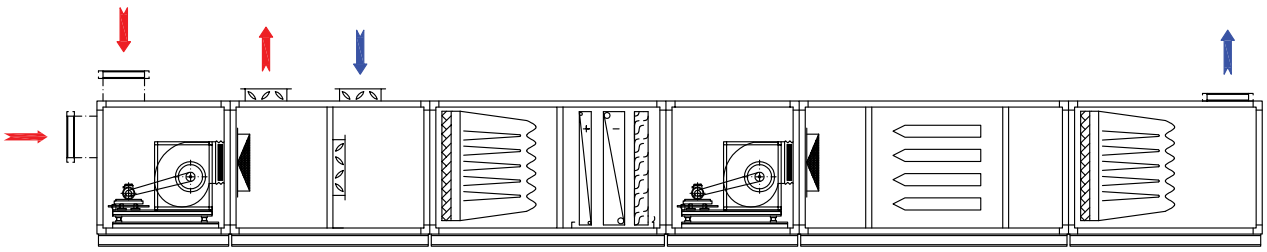




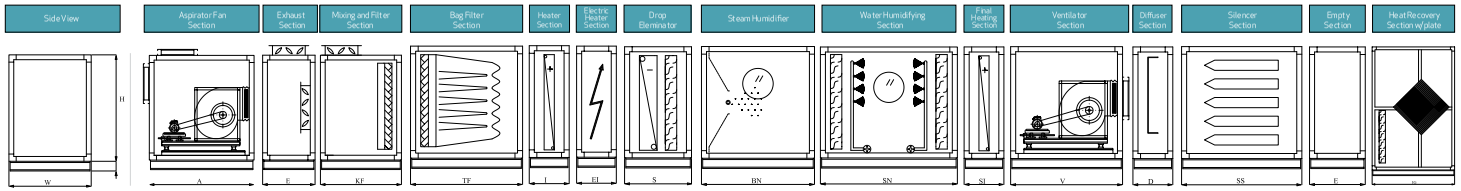








ACS 50 AIR HANDLING UNIT DIMENSIONS TABLE

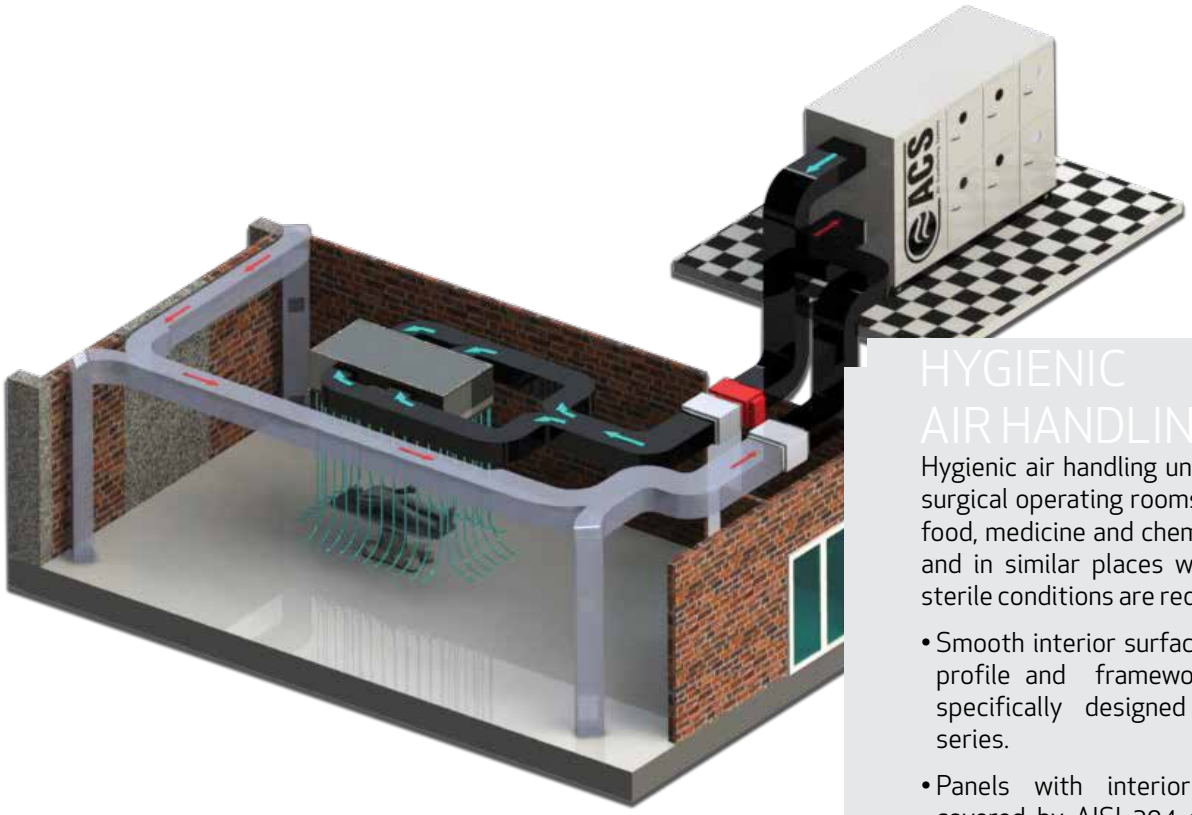


																	OUTLET NOZZLE			INLET NOZZLE			HEAT RECOVERY					EXHAUST &FRESH AIR				
MODEL ACS	AIR FLOW RATE (m³/h)	FAN TYPE (NICOTRA)	WIDTH	HEIGHT	A	E+KF	TF	I	EI	S	BN	SN	SI	V	D	SS	E	IG	AIR FLOW RATE (m³/h)	WIDTH	HEIGHT	OUTLET AIR VELOCITY	WIDTH	HEIGHT	INLET AIR VELOCITY	WIDTH	HEIGHT	DIAGONAL	LENGTH	FACE AIR VELOCITY	EXHAUST & FRESH AIR DAMPER		AIR MIXING DAMPER		COOLING HEATING COILS
			(W)	(H)																(mm)	(mm)	(m/s)	(mm)	(mm)	(m/s)	(mm)	(mm)	(mm)	(mm)	(m/s)	DIMENSION	AIR QUANT.	DIMENSION	AIR QUANT.	FACE AIR VELOCITY
71	1.623	AT 7-7	650	720	1.050	1060	710	450	810	810	790	790	450	1.050	350	800	630	600	1623	232	208	9,34	550	200	4,10	490	490	693	500	1,8	550	200	4,10	300	200	751	2,80
72	1.947		720	720		1060												700	1947	232	208	11,21	650	250	3,49	490	490	693	600	1,8	650	200	4,26	300	300	901	2,80
73	2.411		820	720		1060												800	2411	232	208	13,88	750	300	3,10	490	490	693	700	2,0	720	200	4,65	400	300	1.058	2,80
91	2.643	AT 9-9	760	760	1.060	1260	710	450	810	810	790	790	450	1.060	350	800	630	700	2643	298	262	9,40	650	250	4,45	490	490	693	600	2,5	650	300	3,71	400	300	612	2,80
92	3.275		870	760		1260												800	3275	298	262	11,65	770	300	3,94	490	490	693	700	2,7	770	300	3,94	450	300	674	2,80
93	3.907		980	760		1260												900	3907	298	262	13,90	880	400	3,48	600	600	849	800	2,3	880	300	4,11	500	300	724	2,80
101	3.964	AT10-10	990	780	1.100	1260	710	450	810	810	790	790	450	1.100	350	800	630	900	3964	331	289	11,51	890	300	4,12	600	600	849	800	2,3	890	300	4,12	500	300	734	2,80
102	4.539		1090	780		1260												1,000	4539	331	289	13,18	990	400	3,18	600	600	849	900	2,3	990	300	4,25	550	400	573	2,80
103	5.114		1190	780		1260												1,100	5114	331	289	14,85	1090	400	3,26	600	600	849	1000	2,4	1090	300	4,34	600	400	592	2,80
121	6.052	AT 12-12	1090	950	1.250	1260	710	450	810	810	790	790	450	1.250	350	800	630	1,000	6052	395	341	12,48	990	400	4,25	600	600	849	900	3,1	990	300	5,66	600	400	700	2,80
122	6.895		1200	950		1260												1,100	6895	395	341	14,22	1100	500	3,48	600	600	849	1000	3,2	1100	300	5,80	600	500	638	2,80
123	7.661		1300	950		1260												1,200	7661	395	341	15,80	1200	500	3,55	600	600	849	1100	3,2	1200	300	5,91	600	600	591	2,80
151	7.802	AT 15-15	1200	1050	1.300	1460	710	450	810	810	790	790	450	1.300	350	800	630	1,100	7802	470	404	11,41	1100	500	3,94	750	750	1061	1000	2,9	1100	400	4,93	700	600	516	2,80
152	8.669		1300	1050		1460												1,200	8669	470	404	12,68	1200	500	4,01	750	750	1061	1100	2,9	1200	400	5,02	700	500	688	2,80
153	9.536		1420	1200		1460												1,300	9536	470	404	13,95	1300	550	3,70	750	750	1061	1200	2,9	1300	400	5,09	700	600	631	2,80
181	12.501	AT 18-18	1360	1360	1.450	1660	710	450	810	810	790	790	450	1.450	350	800	630	1,300	12501	557	478	13,04	1260	500	5,13	750	750	1061	1200	3,9	1260	500	5,13	800	700	626	2,80
182	13.681		1480	1360		1660												1,400	13681	557	478	14,27	1360	550	5,08	1000	1000	1414	1300	2,9	1360	500	5,59	900	600	704	2,80
183	15.096		1580	1360		1660												1,500	15096	557	478	15,75	1480	600	4,72	1000	1000	1414	1400	3,0	1480	500	5,67	900	600	777	2,80
451	16.275	(A/R) DH 650 - (R/K)	1420	1420	1.560	1660	710	450	810	810	840	840	450	1.560	350	800	630	1,600	16275	559	559	13,96	1580	550	5,20	1000	1000	1414	1500	3,0	1580	500	5,72	900	700	718	2,80
452	17.455		1750	1420		1660												1,700	17455	559	559	14,98	1680	600	4,81	1000	1000	1414	1600	3,0	1680	500	5,27	1050	700	660	2,80
453	18.634		1880	1420		1660												1,800	18634	559	559	15,99	1780	650	4,47	1000	1000	1414	1700	3,0	1780	500	5,82	1050	700	704	2,80
501	20.227	(A/R) DH 500 - (R/K)	1880	1460	1.650	1860	710	450	810	810	840	840	450	1.650	350	800	630	1,800	20227	638	638	13,90	1780	600	5,26	1000	1000	1414	1700	3,3	1780	600	5,26	1050	800	669	2,80
502	21.507		1980	1460		1860												1,900	21507	638	638	14,68	1880	700	4,54	1000	1000	1414	1800	3,3	1880	600	5,30	1100	800	679	2,80
503	22.787		2080	1460		1860												1,800	22787	638	638	15,35	1980	750	4,26	1000	1000	1414	1900	3,3	1980	600	5,33	1150	800	688	2,80
561	22.811	(A/R) DH 560 - (R/K)	1850	1650	1.710	2060	710	450	810	810	990	990	450	1.710	350	800	630	1,800	22811	715	715	12,39	1750	700	5,17	1000	1000	1414	1700	3,7	1750	700	5,17	1150	900	612	2,80
562	24.283		1950	1650		2060												1,900	24283	715	715	13,19	1850	800	4,65	1000	1000	1414	1800	3,7	1850	700	5,21	1200	900	625	2,80
563	27.226		2100	1700		2060												2,100	27226	715	715	14,79	2050	850	4,34	1000	1000	1414	2000	3,8	2050	700	5,27	1350	900	622	2,80
631	31.479	(A/R) DH 630 - (R/K)	2170	1860	1.850	2060	710	450	810	810	990	990	450	1.850	350	800	630	2,100	31479	801	801	13,63	2070	800	5,28	1500	1500	2121	2000	2,9	2070	700	6,03	1350	1000	648	2,80
632	33.162		2270	1860		2060												2,200	33162	801	801	14,36	2170	850	4,99	1500	1500	2121	2100	2,9	2170	700	6,06	1450	1000	635	2,80
633	34.846		2370	1860		2060												2,300	34846	801	801	15,09	2270	900	4,74	1500	1500	2121	2200	2,9	2270	700	6,09	1550	1000	624	2,80
711	37.134	(A/R) DH 710 - (R/K)	2270	2060	2.000	2260	710	450	810	810	990	990	450	2.000	450	800	630	2,200	37134	898	898	12,79	2170	850	5,59	1700	1700	2404	2100	2,9	2170	800	5,94	1550	1200	535	2,80
712	39.019		2370	2060		2260												2,300	39019	898	898	13,44	2270	1000	4,77	1700	1700	2404	2200	2,9	2270	800	5,97	1600	1200	595	2,80
713	42.789		2570	2060		2260												2,500	42789	898	898	14,14	2470	1050	4,93	1700	1700	2404	2400	2,9	2470	800	6,02	1650	1200	600	2,80
801	45.077	(A/R) DH 800 - (R/K)	2570	2160	2.350	2260	710	450	810	810	990	990	450	2.350	450	800	630	2,500	45077	1007	1007	12,35	2470	1000	5,07	2000	2000	2828	2400	2,6	2470	800	6,34	1600	1400	559	2,80
802	51.538		2770	2260		2260												2,700	51538	1007	1007	14,12	2670	1100	4,87	2000	2000	2828	2600	2,8	2670	800	6,70	1650	1400	630	2,80
803	56.215		2870	2360		2260												2,800	56215	1007	1007	15,40	2770	1200	4,70	2000	2000	2828	2700	2,9	2770	800	7,05	1750	1400	637	2,80
901	58.403	(A/R) DH 900 - (R/K)	2970	2360	2.400	2460	710	450	810	810	990	990	450	2.400	450	800	630	2,900	58403	1130	1130	12,71	2870	1100	5,14	2000	2000	2828	2800	2,9	2870	900	6,28	1800	1500	583	2,80
902	62.777		3170	2360		2460												3,100	62777	1130	1130	13,66	3070	1200	4,73	2000	2000	2828	3000	2,9	3070	900	6,31	1800	1500	605	2,80
903	69.339		3470	2360		2460												3,400	69339	1130	1130	15,08	3370	1200	4,76	2000	2000	2828	3300	2,9	3370	900	6,35	1900	1500	634	2,80
1001	72.863	(A/R) DH 1000 - (R/K)	3350	2560	2.660	2660	710	450	810	810	1.140	1.140	450	2.660	450	800	630	3,300	72863	1267	1267	12,61	3250	1500	4,15	2000	2000	2828	3400	3,0	3250	1000	6,23	1900	1800	592	2,80
1002	80.269		3660	2560		2660												3,600	80269	1267	1267	13,93	3560	1500	4,18	2000	2000	2828	3500	3,2	3560	1000	6,26	2000	1900	587	2,80
1003	89.825		4060	2560		2660												4,000	89825	1267	1267	15,54	3960	1500	4,20	2000	2000	2828	3900	3,2	3960	1000	6,30	2000	2000	6,24	2,80

All air handling unit cell dimensions of sections in "mm"


SOĞUK SU GİRİŞİ
DRENAJ

HYGIENIC AIR HANDLING UNITS



HYGIENIC AIR HANDLING UNITS

Hygienic air handling units are used in surgical operating rooms, clean rooms, food, medicine and chemistry facilities and in similar places where sensitive sterile conditions are required.

- Smooth interior surface by means of profile and framework specifically designed for hygienic series.
- Panels with interior layers fully covered by AISI 304 stainless steel sheets.
- Stainless steel skids for filter and exchangers and stainless steel silencer chamber sheets.
- Cooling and heating coils composed of copper pipes and epoxy coated fins.
- Fan, filter and humidifying compartments are equipped with sight glasses and lighting armatures.
- There is no need for a belt drive mechanism with direct drive NICOTRA plug fans.

AIR HANDLING UNIT WITH HEAT RECOVERY

AIR HANDLING UNIT WITH HEAT RECOVERY

In air handling units with heat recovery, effective heat transfer takes place between the incoming fresh air and exhaust air. The efficiency of the heat recovery reaches to levels up to 70%. The level of energy saving varies depending on the location and temperature and air volume of fresh air.

Optionally, the units can also be designed to operate with mixed air. Although heat recovery does not take place at a higher degree as in the case of 100% fresh air operation, there will still be some remarkable amount of heat recovery.

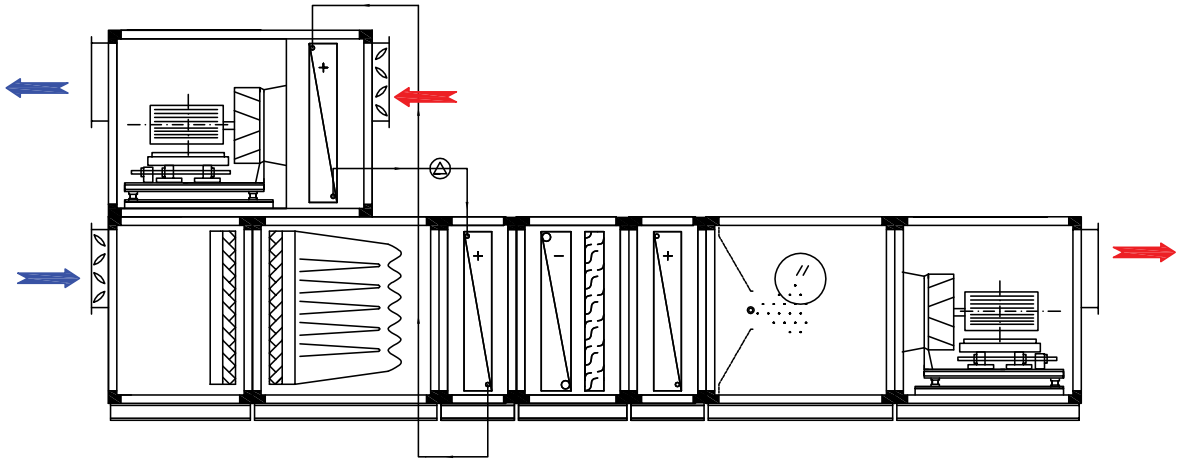
There are two types of heat recovery namely air-to-air and air-to-water.

AIR HANDLING UNIT WITH HEAT RECOVERY

Water-to-Air Heat Recovery

There are two separate exchangers in the water-to-air heat recovery systems. One exchanger is on the exhaust side and the other is on the fresh air side. These two exchangers operate in a close circuit by means of a water recirculation pump.

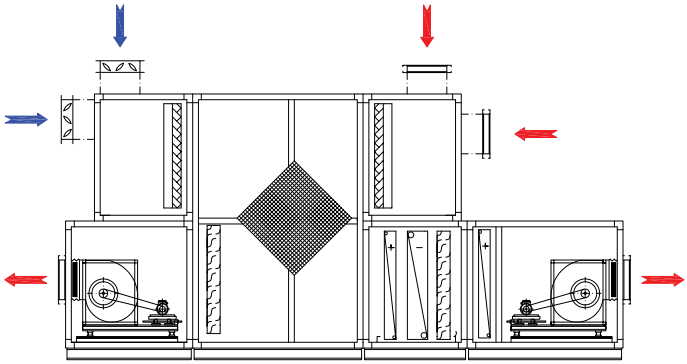
The purpose of the system is to reclaim the energy of the air on the exhaust side and transfer it to the fresh air; the system can be used for both heating and cooling.

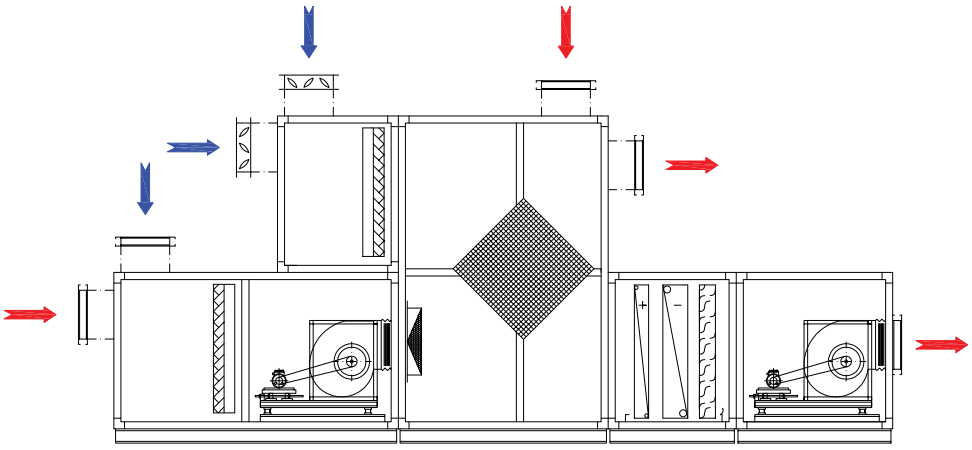


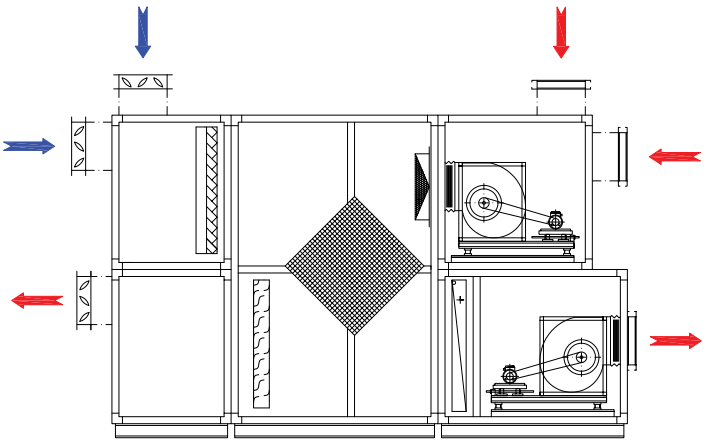
AIR-TO-AIR HEAT RECOVERY

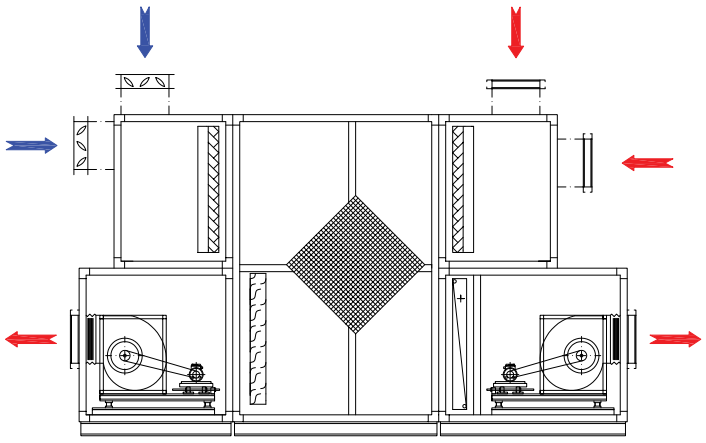
In air-to-air heat recovery systems, the energy of the exhaust air is transferred to the fresh air via heat converters consisting of aluminium profile plates.

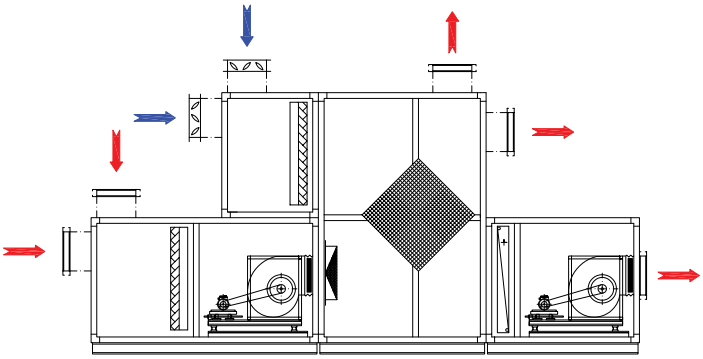
Units can be designed differently depending on the requirements of projects.

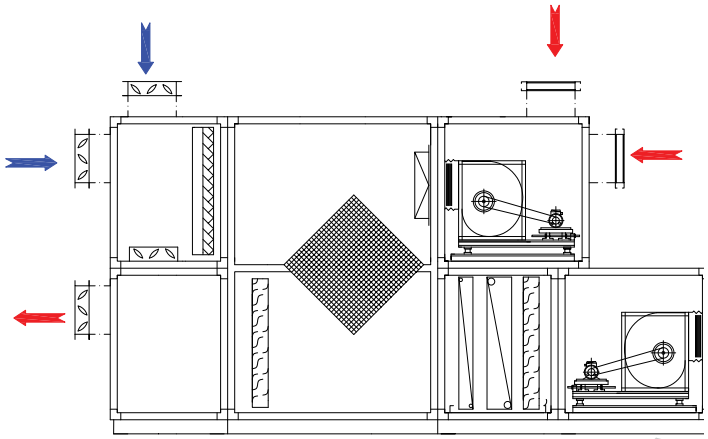












PACKAGED TYPE HYGIENIC AIR HANDLING UNITS

PACKAGED TYPE HYGIENIC AIR HANDLING UNITS

Packaged Type Hygienic Air Handling Units have been developed to meet the requirements of hygienic spaces and clean rooms used by the medicine technology.

The units are used to meet air conditions and positive and negative pressure requirements in surgical operating rooms, clean room, food, air defence, space and aviation industries and medicine and chemical industries where similar sterile applications take place.

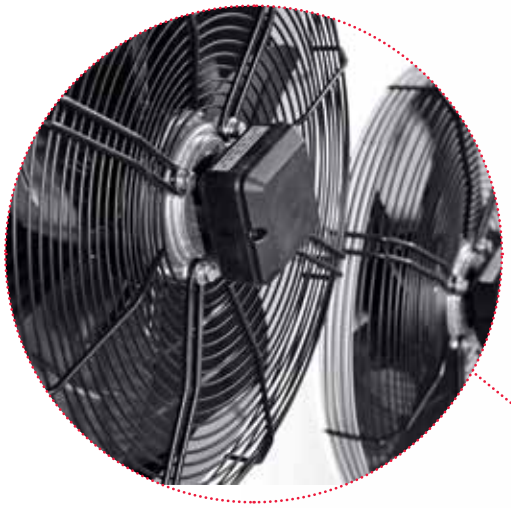
Packaged Type Hygienic Air Handling Unit combines a hygienic air handling unit and cooling group within the single unit thus provides an advantageous solution. Optionally, DX unit can be used with water heat exchangers, condenser and compressor group can be placed inside or outside the unit in order to meet project requirements.

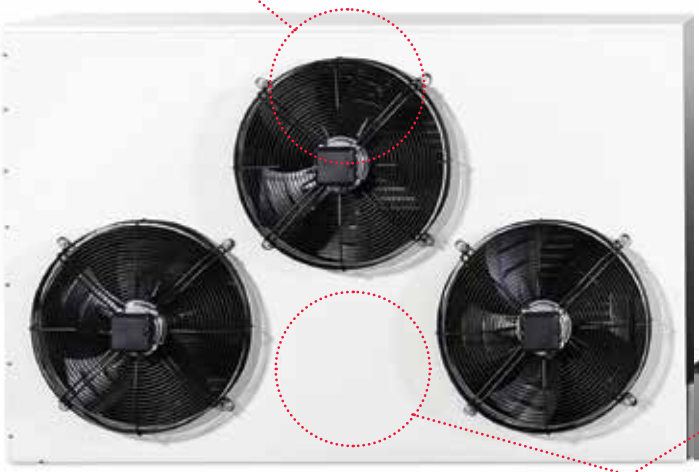
FEATURES

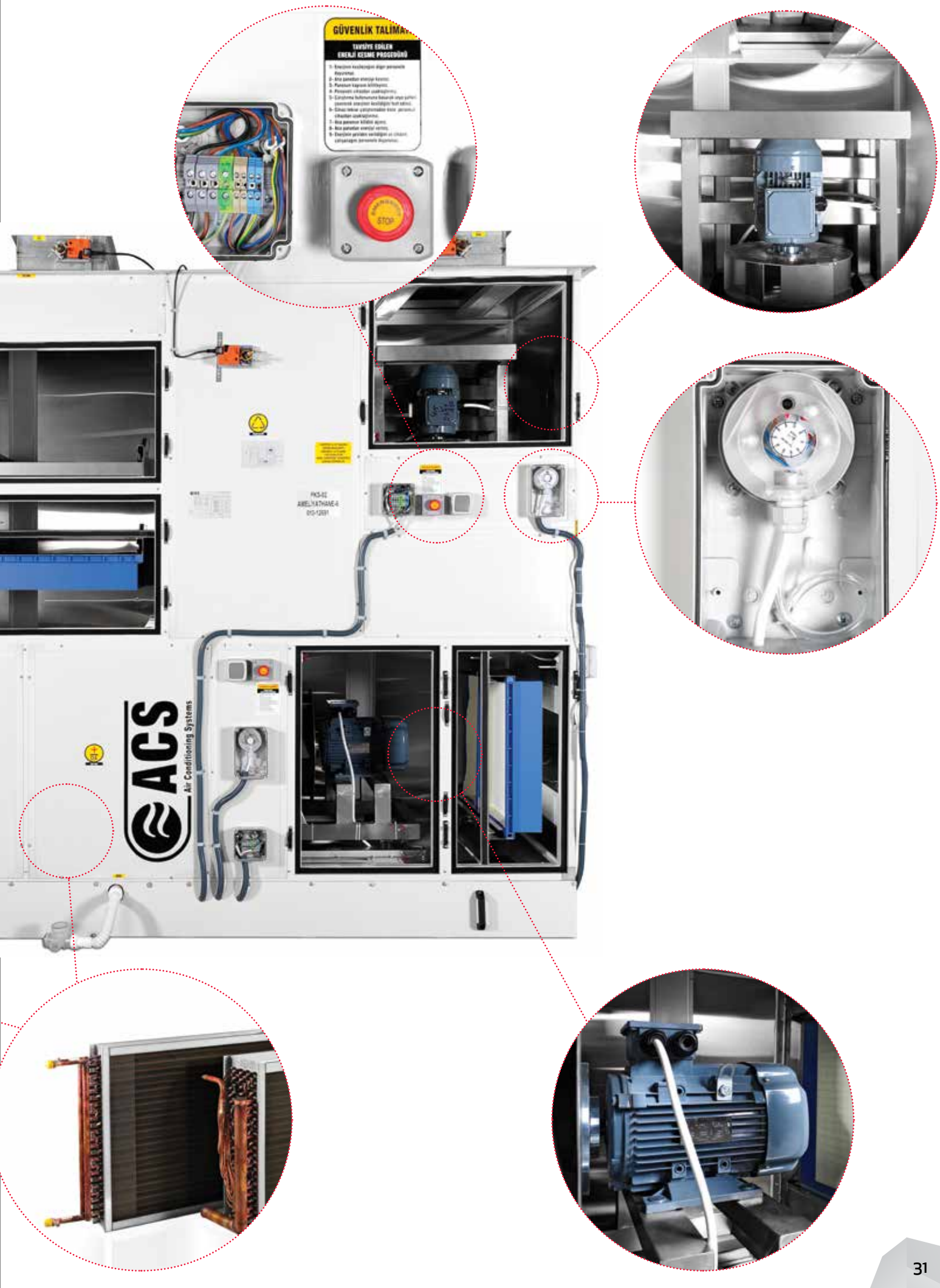
- Smooth inner surface is formed by means of profile and framework that are specially designed for hygienic series.
- AISI 304 stainless steel inner panel layers.
- Stainless steel skids for filters and heat exchangers.
- Class G4(panels), class F7 and F9(compact) filters.
- DX cooling coils composed of copper pipes and epoxy coated fins.
- Fan, filter and humidifying compartments are equipped with sight glass and lighting armatures.
- Direct drive NICOTRA plug fans.
- High efficiency SCROLL compressors.
- Steam humidifiers.
- Aluminium air dampers.

PURPOSE

- Anaesthetic gasses and other contaminants in the surgical operating rooms are removed by means of fresh air.
- Contaminant content of fresh air is extensively filtered before the HEPA filter.
- Any contaminant from the adjacent spaces is avoided by keeping a positive ambient pressure using air flow adjustment on suction and blowing.
- Microbial passage is avoided by keeping the septic spaces at negative pressure.
- Ambient temperature and humidity values are maintained accurately.
- Smooth interior surface is formed by means of K-profile and aluminium framework that are specially designed for hygienic series.






GÜVENLİK TALİMA
TAVSİYE EDİLEN
ENERJİ KESME PROSEDÜRÜ
STOP
ACS
Air Conditioning Systems

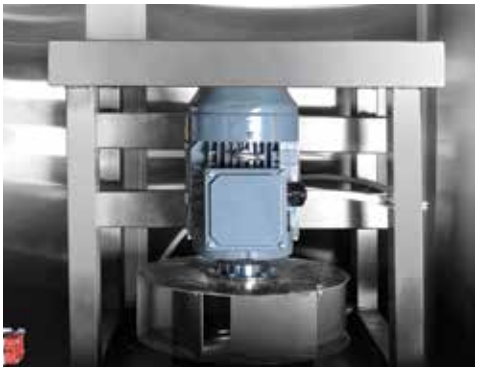
FRAMEWORK

The frame is composed of specially rolled steel profiles and plastic brackets designed specially for these profiles. In order to minimize pressure loss and avoid aggregation of contaminants inside the air handling unit, a smooth inner surface is formed by means of the profiles specially designed for hygienic series.

PANEL

The panels constituting the body have double layers. The outer surfaces of the panels are made of electrostatic powder coated galvanized sheet ; and the interior surfaces are made of stainless steel sheet. Two layers are connected via patented profile. The heat and sound insulation is achieved by filling the gap between layers with 50 mm thick rock wool at 70 kg/m3 density. Panels are installed on the framework with special gaskets for sealing and smooth interior surfaces free of recess or protrusion

FANS



Air handling unit uses NICOTRA plug fan which are centrifugal fans without scroll. The fans have impellers with backward curved blades and they are statically and dynamically balanced, silent and highly efficient fans. The fans are suitable for velocity control and their cleaning is easy inside the air handling unit. Motor is directly coupled to the rotor. This way power loss caused by transmission components is avoided and contamination and breaking risk of belt is eliminated. Because the revolutions of the fan and the motor are the same air flow rate control can be managed by controlling the frequency in the fans. Fans are powered 380V /50 Hz. Asynchronous motors have IP55 protection class and F isolation class.

AIR DAMPERS

Fresh air and exhaust air dampers are composed of aerodynamic aluminium flap profiles having smooth double layers with low resistance. Edges of flaps and frames are equipped with gaskets to provide sealing. Spring return Damper on/off servo motors are used for the dampers serving in sterile spaces.

FILTERS

Following filters are used: class G-4 panel filter at fresh air intake, class F-7 bag filter at the second stage and finally class F-9 compact filter at the unit outlet. These filters have high capacity of dust removal. They are used with specially designed tightening filter skids with gaskets to maintain sealing. Differential pressure indicators are used to monitor clogging of filters.

STEAM HUMIDIFIERS

These are standard humidifiers with electro boilers and ratio adjustment. Ambient humidity ratio is maintained by means of humidity sensors.

HEATING AND COOLING COILS

Cooling coils are composed of copper pipes and epoxy coated aluminium fins. Copper pipes are used for collector in order to avoid corrosion due to condensation. Installation on skids enables easy dismounting and removal of the component for servicing outside the unit. All bypass plates and skids are stainless steel.

COMPRESSOR

Compressor is selected according to cooling capacity, air volume and requirements of place. Scroll type compressors are preferred because of silent and zero vibration operation with low losses and high efficiency. The refrigerant is R407C.

CONDENSER

Condenser is selected according to cooling capacity, air volume and requirements of place. The component are designed to be suitable for outdoor installation an operation. The refrigerant is R407C.

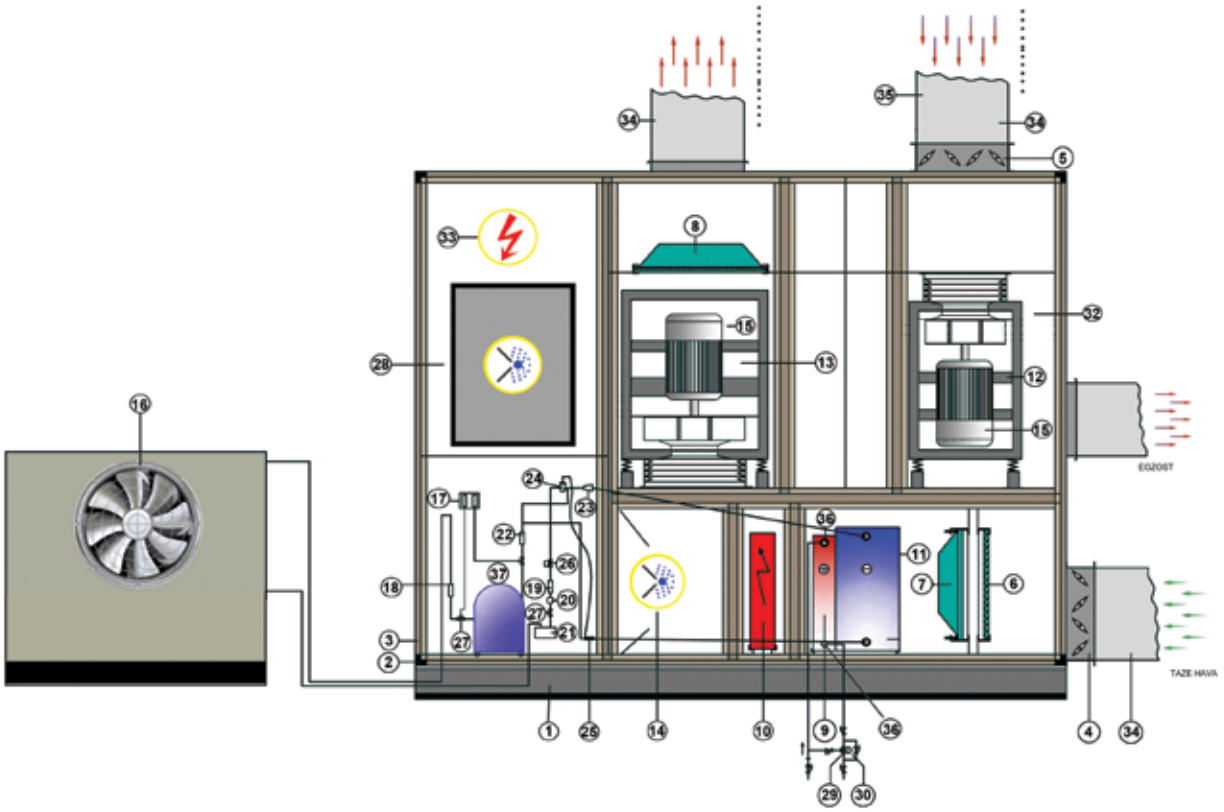
AUTOMATION AND OPERATION PRINCIPLE

PLC, electric board and automatic control equipment are used to adjust and maintain the values of temperature, humidity, positive pressure and negative pressure of filtered air used in the hygienic space. The unit interprets the data transmitted by the sensors and changes the air flow until the required set values are reached in the space.

- Touch Screen Panel
- Frequency control
- 0 - 100% humidity and temperature control
- 0 - 100% automatic air volume control
- Proportional heat control
- PID, PLC operation logic
- MCC, with DCC Control Board

MODEL	AIR FLOW RATE (BLOWING)	AIR FLOW RATE (SUCTION)	MOTOR (BLOWING)	MOTOR (SUCTION)	HUMIDIFIER	HEATING	COOLING	CONDENSER	NUMBER OF COMPRESSORS	COMPRESSOR	LENGTH	WIDTH	HEIGHT
	m^3/h	m^3/h	kW	kW	kg / h	kW	kW	kW	ad.	kW/ad.	mm	mm	mm
ACSPH-71	2,400	2,400	2.2	1.1	18	37	24	34	2	3	2,650	900	2,100
ACSPH-91	3,500	3,500	3	1.5	30	54	36	46	2	4.5	2,750	950	2,150
ACSPH-101	4,500	4,500	4	2.2	45	69	44	46	2	4.5	2,750	1,000	2,200
ACSPH-121	5,500	5,500	5.5	3	45	84	54	70	2	6.7	2,800	1,100	2,300
ACSPH-151	6,500	6,500	7.5	3	55	100	64	92	2	8.7	2,950	1,310	2,400
ACSPH-181	7,500	7,500	7.5	3	60	115	74	92	2	8.7	3,400	1,310	2,500
ACSPH-182	8,500	8,500	7.5	4	70	130	83	105	2	9.3	3,400	1,310	2,500
ACSPH-451	10,000	10,000	11	5.5	90	153	92	120	2	12	3,500	1,310	2,900
ACSPH-452	12,000	12,000	11	7.5	110	184	120	150	3	10	3,500	1,430	2,900
ACSPH-501	15,000	15,000	15	11	130	230	140	180	3	12	3,650	1,540	3,200

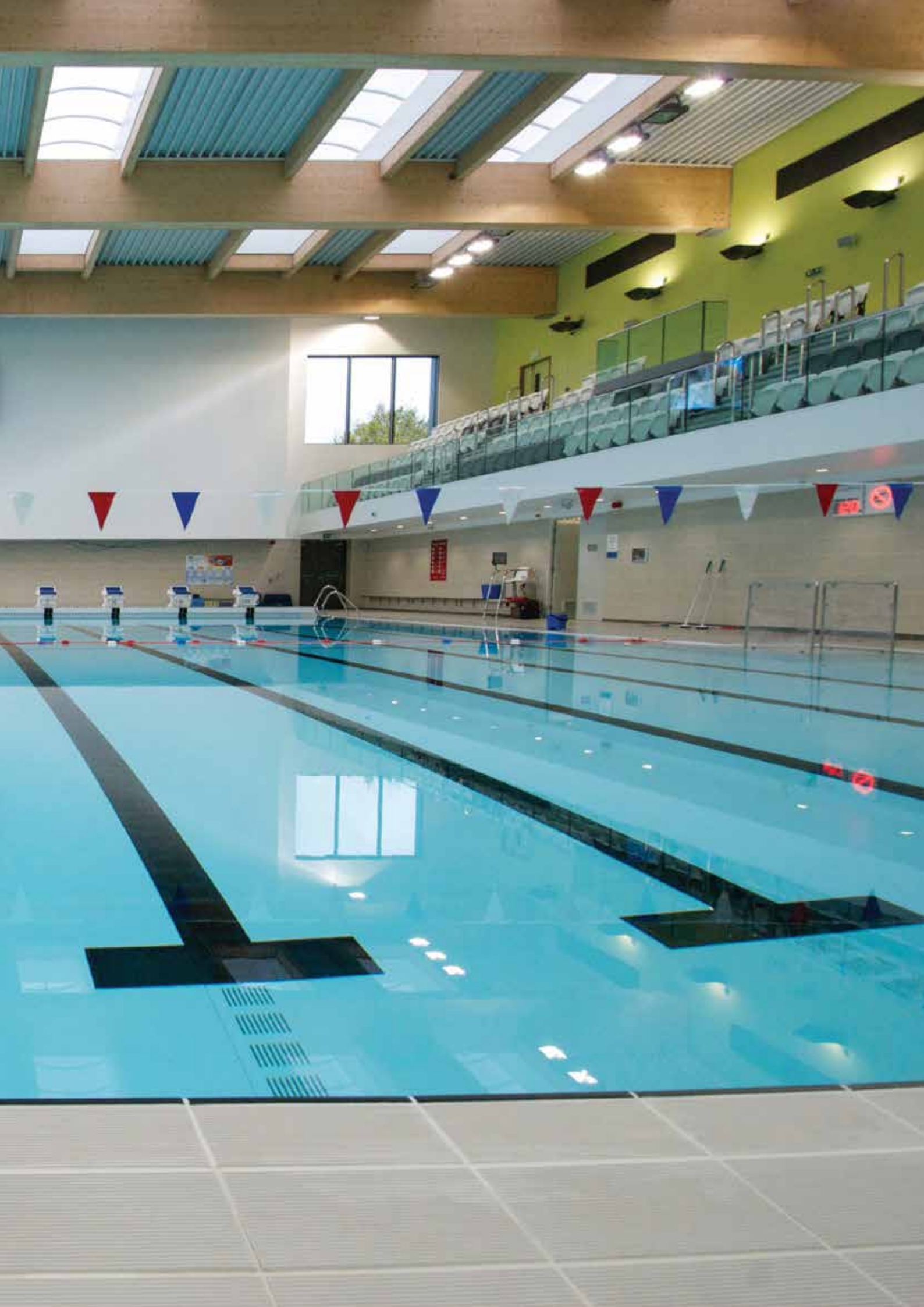
Heating capacities are valid for -12°C outside ambient temperature. Cooling capacities and compressor ratings are valid for condensation temperature at 45°C and evaporation temperature at 7°C. Please consult our company for different condensation and evaporation temperatures. Cooling capacities may vary depending on the dry thermometer temperature of outside ambient air.

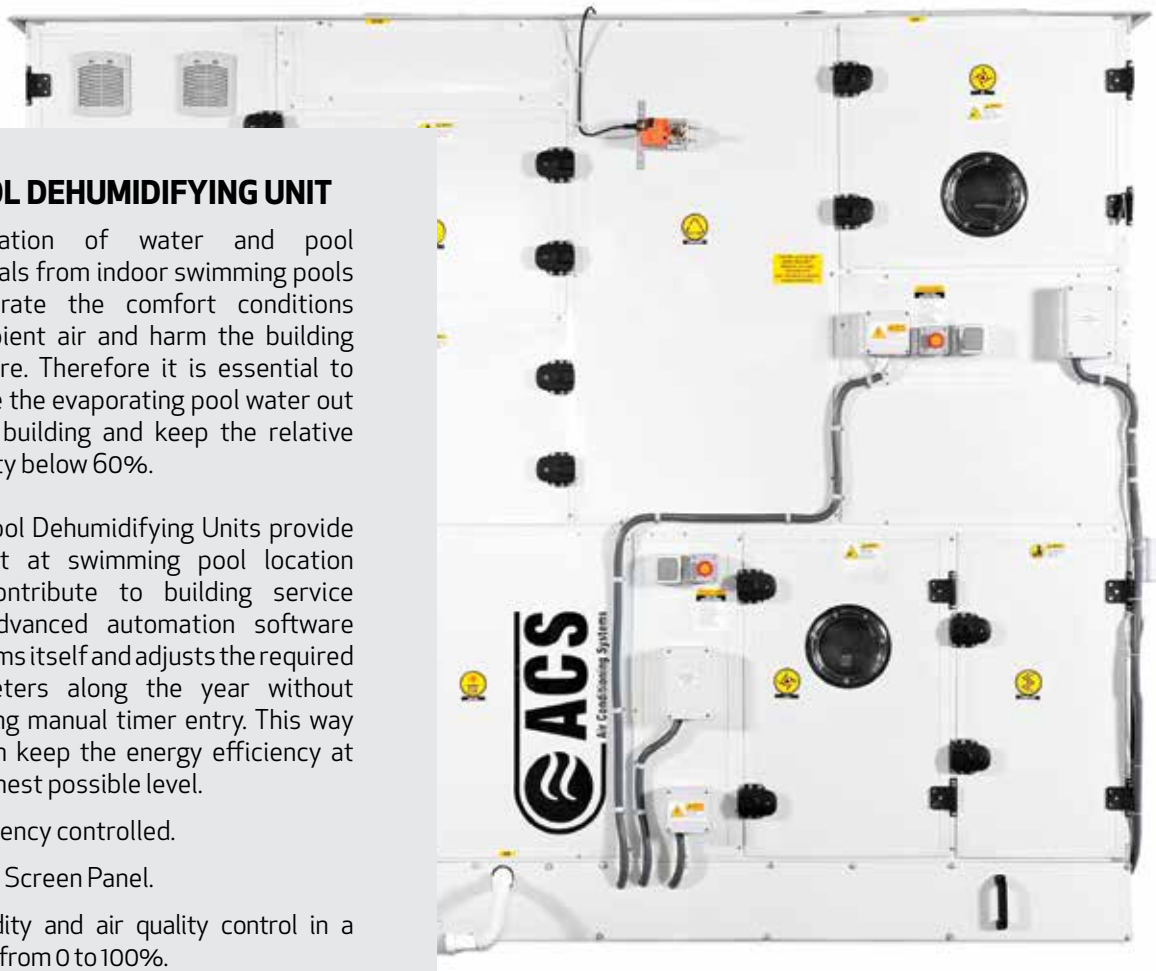


1. Base Stand
2. Edge Bracket
3. Framework
4. Fresh Air Damper
5. Exhaust Damper
6. G4 Filter
7. F7 Filter
8. F9 Filter
9. Heating Exchanger
10. Electric Heater
11. Evaporator
12. Ventilator (Suction)
13. Ventilator (Blower)
14. Steam Humidifier Compartment
15. Electric Motor
16. Condenser
17. Low/High Pressure Indicator
18. Vibration Absorber
19. Dryer
20. Refrigerant Sight Glass
21. Receiver
22. Vibration Absorber
23. Distributor
24. Thermostatic Expansion Valve
25. Thermostatic Expansion Valve Bulb
26. Solenoid Valve
27. Servicing Valve
28. Steam Humidifying Unit
29. 3-Way Valve
30. 3-Way Valve Motor
31. Differential Pressure Switch (Filter Pollution)
32. Differential Pressure Switch (Belt Rupture)
33. Power and Automation Board
34. Duct Type Temperature Sensor
35. Humidity Sensor
36. Dip Type Temperature Sensor
37. Compressor


ACS
Air Conditioning Systems

POOL DEHUMIDIFYING UNIT



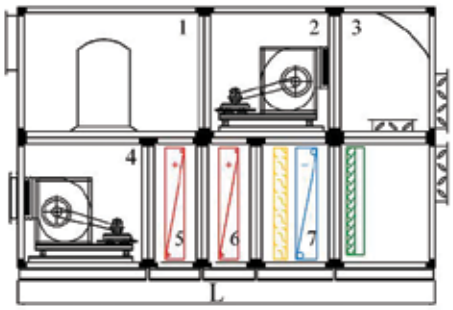


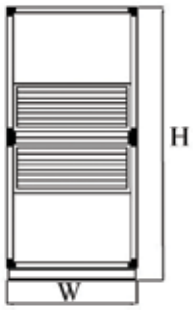
POOL DEHUMIDIFYING UNIT

Evaporation of water and pool chemicals from indoor swimming pools deteriorate the comfort conditions of ambient air and harm the building structure. Therefore it is essential to remove the evaporating pool water out of the building and keep the relative humidity below 60%.

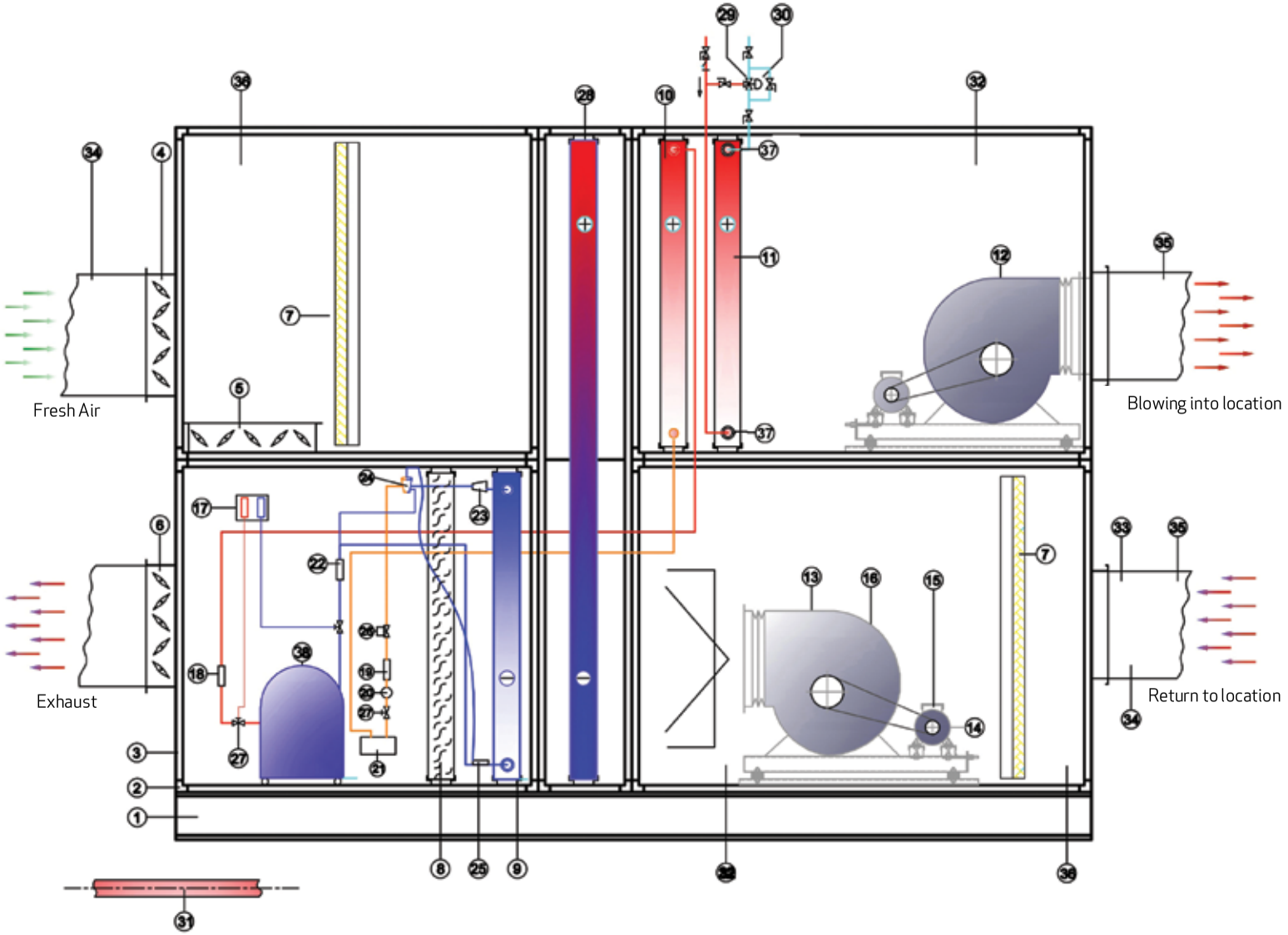
ACS Pool Dehumidifying Units provide comfort at swimming pool location and contribute to building service life. Advanced automation software programs itself and adjusts the required parameters along the year without requiring manual timer entry. This way you can keep the energy efficiency at the highest possible level.

- Frequency controlled.
- Touch Screen Panel.
- Humidity and air quality control in a range from 0 to 100%.
- Automatic air flow rate control in a range from 0 to 100%
- MCC, DCC Panel.
- PID, system control with PLC
- Accurate humidity control by the compressor, depending on outdoor humidity exceeding 50%.
- Maintaining the stabilized ambient conditions by the comparison of feedback values to the set values.



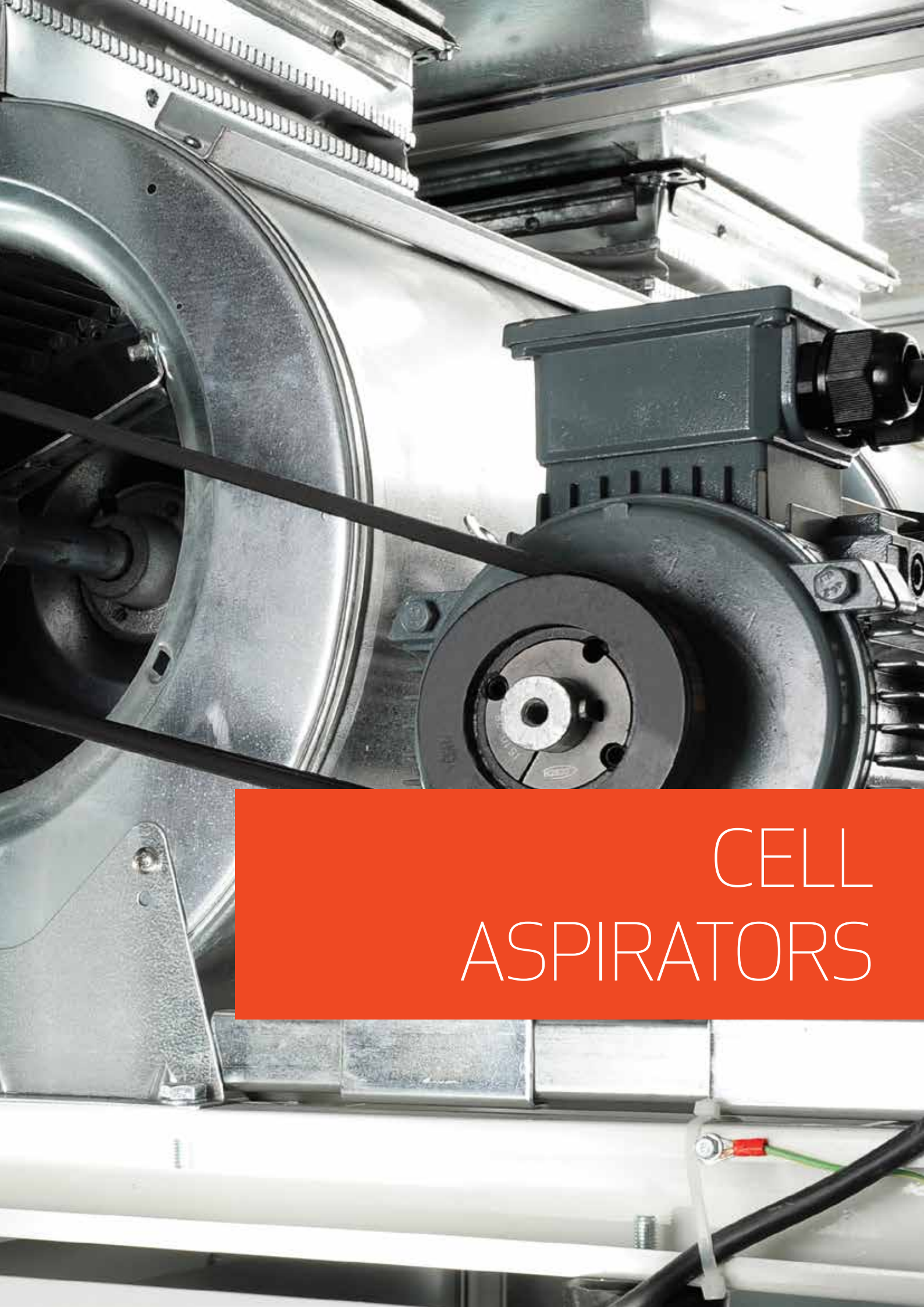


MODEL		ACSP30	ACSP50	ACSP70	ACSP100	ACSP125	ACSP150
Air flow rate	m³/h	3.000	5.000	7.000	10.000	12.500	15.000
Heating	kW	32	52	72	95	130	155
Cooling	kW	15	25	35	50	62	75
Dehumidifying	kg/h	15	35	50	60	75	90
L	mm	2.980	3.130	3.180	3.580	3.580	3.730
W	mm	657	1.147	1.249	1.249	1.249	1.541
H	mm	1.460	1.880	2.090	2.460	2.460	2.620



1. Base Stand
2. Edge Bracket
3. Framework
4. Fresh Air Damper
5. Exhaust Damper
6. Exhaust Damper
7. G4 Filter
8. Droplet Catcher
9. Evaporator
10. Condenser
11. Heating Exchanger
12. Ventilator (Suction)
13. Ventilator (Blower)
14. Pulley
15. Motor
16. Belt
17. Low/High Pressure Indicator
18. Vibration Absorber
19. Dryer
20. Refrigerant Sight Glass
21. Receiver
22. Vibration Absorber
23. Octopus
24. Thermostatic Expansion Valve
25. Thermostatic Expansion Valve Bulb
26. Solenoid Valve
27. Expansion Valve
28. Heat Pipe
29. 3-Way Valve
30. 3-Way Valve Motor
31. Pool Return Water Temperature Sensor
32. Differential Pressure Switch (Belt Rupture)
33. Air Quality Sensor
34. Humidity Sensor
35. Duct Type Temperature Sensor
36. Differential Pressure Switch (Filter Pollution)
37. Dip Type Temperature Sensor
38. Compressor


GÜVENLİK TALİMATI
TAVSİYE EDİLEN
ENERJİ KESME PROSEDÜRÜ
DİKKAT



CELL ASPIRATORS

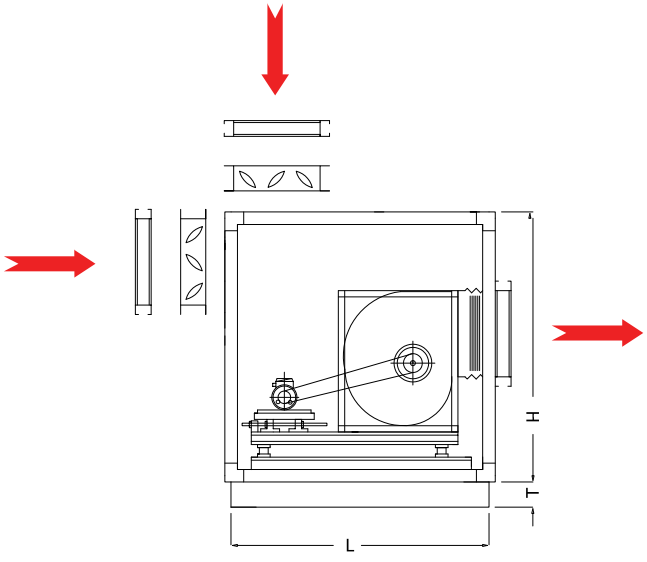
CELL ASPIRATORS

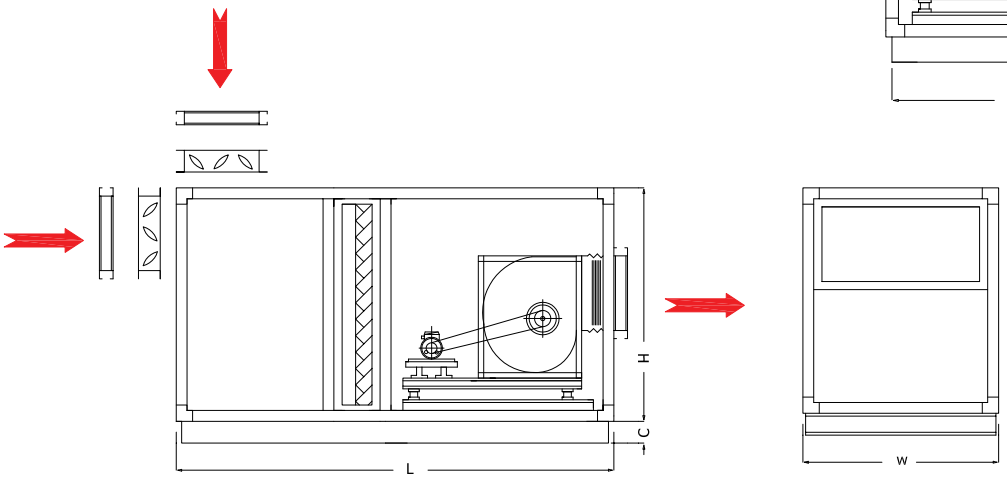
Cell aspirators are used in places where only ventilation is needed without heating or cooling. Depending on the physical properties of the air, the unit can be designed with low or high suction/blowing capacity to clean ambient air. The unit is produced with high quality material and workmanship to provide full sealing and can be used with or without filter cartridges.

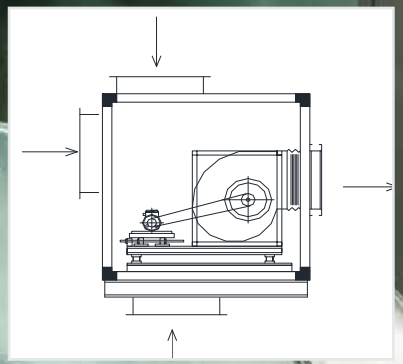
Filter types used in filter cartridges:

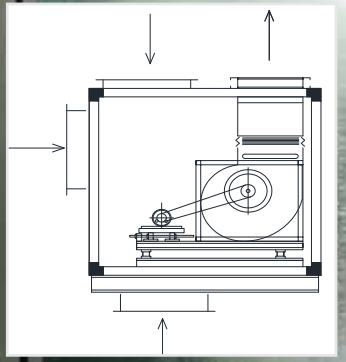
- Class G-4 dust holder pre-filter
- Metal oil holder filter
- Carbon filter
- Metal fiber holder filter

Cell aspirators are designed according to place of installation, conditions of air ducts and directions of suction and blowing.









							POSITION 1			POSITION 2			
MODEL	AIR FLOW RATE	FAN TYPE	THROW MOUTH		SUCTION MOUTH		LENGTH	WIDTH	HEIGHT	LENGTH	WIDTH	HEIGHT	BASE
	m^3/h		(mm)	(mm)	(mm)	(mm)	L (mm)	W (mm)	H (mm)	L (mm)	W (mm)	H (mm)	T (mm)
AHA 7	2.000	AT 7-7	232	208	600	200	835	700	650	835	700	650	100
AHA9	3.300	AT 9-9	298	262	700	200	885	800	700	885	800	700	100
AHA10	5.100	AT 10-10	331	289	750	300	935	850	750	935	850	750	100
AHA12	7.200	AT 12-12	395	341	900	350	1035	1000	800	1035	1000	800	100
AHA15	10.000	AT 15-15	471	404	1050	400	1085	1150	900	1085	1150	900	100
AHA18	14.500	AT 18-18	557	478	1250	450	1235	1350	1050	1290	1350	1050	100
AHA45	18.500	(A/R) DH 450 -(R/K)	569	569	1300	550	1335	1400	1100	1385	1400	1100	100
AHA50	23.500	(A/R) DH 500 -(R/K)	638	638	1450	600	1485	1550	1250	1535	1550	1250	100
AHA56	29.500	(A/R) DH 560 -(R/K)	715	715	1650	650	1585	1750	1350	1635	1750	1350	100
AHA63	36.200	(A/R) DH 630 -(R/K)	801	801	1850	750	1735	1950	1450	1785	1950	1450	100
AHA71	46.000	(A/R) DH 710 -(R/K)	898	898	1950	800	1935	2050	1650	1985	2050	1650	100
AHA80	58.200	(A/R) DH 800 -(R/K)	1007	1007	2200	950	2135	2300	1800	2185	2300	1800	100
AHA90	73.000	(A/R) DH 900 -(R/K)	1130	1130	2400	1100	2285	2500	2000	2335	2500	2000	100
AHA100	92.500	(A/R) DH 1000 -(R/K)	1267	1267	2750	1300	2535	2850	2200	2535	2850	2200	100

FRESH AIR HANDLING UNITS WITH HEAT RECOVERY (VAM UNITS)

FRESH AIR HANDLING UNIT WITH HEAT RECOVERY

AHRV - - TD type heat recovery units are designed for saving energy at locations where need for fresh air flow is high. The unit improves the quality of ambient air as well.

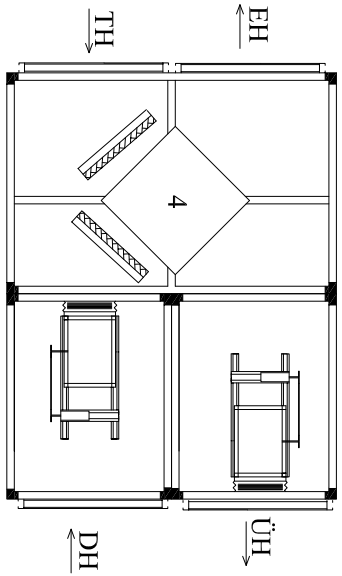
- Easy installation in false ceiling due to compact structure and minimal dimensions
- Standard capacities ranges between 500 - 5000 m3/h. Optional custom products are available for higher capacities.
- Sandwich type panels are composed of single layer galvanized steel of which outer surface is coated with electrostatic powder paint. Heat and sound isolation is provided by 10 mm rubber sealing covering the inner surface or optionally by 30mm polyurethane fill .
- High air flow rates and pressures are met by statically and dynamically balanced double suction fans which are either self-driven or optionally with a belt-pulley drive.
- Heat recovery coils can be optionally either with aluminium fins or polymer based fins.
- The efficiency of the heat recovery can reach to levels up to 70% depending on the temperatures of ambient air and fresh air.
- Electric or hot water heating option is possible in case the temperature of fresh air is low.
- A control panel is provided at the location, using which the unit can be turned on and off, fan speed can be adjusted and duct type heaters can be controlled

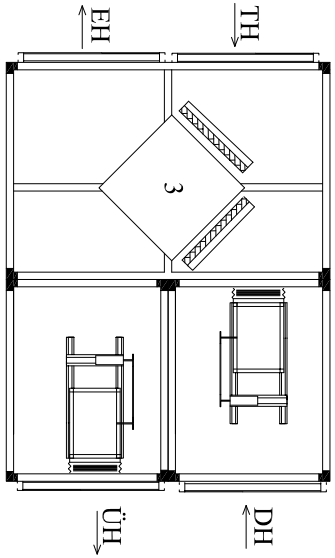
DUCT TYPE HEAT RECOVERY UNIT (FAN WITH SELF DRIVE)

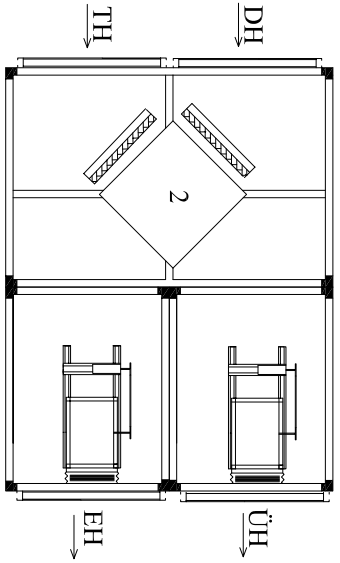
MODEL			AHRV-TD 71	AHRV-TD 72	AHRV-TD 73	AHRV-TD 91	AHRV-TD 92	AHRV-TD 101	AHRV-TD 102	AHRV-TD 103	AHRV-TD 104
CAPACITY	AIR FLOW RATE	m³/h	500	1,000	1,500	2,000	2,500	3,000	4,000	4,500	5,000
	STATIC PRESSURE	Pa	100	150	150	150	150	150	150	150	150
	MOTOR RATING	kW	0,15 x 2	0,375 x 2	0,375 x 2	0,375 x 2	0,5 x 2	0,5 x 2	0,75 x 2	1,5 x 2	1,5 x 2
	VOLTAGE	V	230	230	230	230	230	230	230	400	400
DIMENSIONS	LENGTH (L)	mm	1,110	1,310	1,310	1,310	1,310	1,410	1,510	2,200	2,200
	HEIGHT (H)	mm	360	440	440	440	490	490	640	680	680
	WIDTH (W)	mm	770	870	870	1,050	1,210	1,310	1,410	1,500	1,500

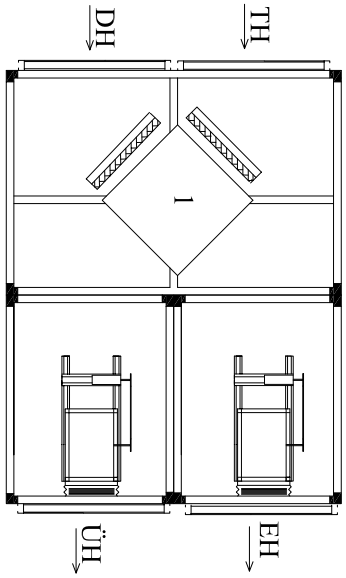
DUCT TYPE HEAT RECOVERY UNIT (FAN WITH PULLEY-BELT DRIVE)

MODEL			AHRV- 71	AHRV- 72	AHRV- 73	AHRV- 91	AHRV- 92	AHRV- 101	AHRV- 102	AHRV- 103	AHRV- 104
CAPACITY	AIR FLOW RATE	m³/h	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000
	STATIC PRESSURE	Pa	200	200	200	250	250	250	300	300	300
	MOTOR RATING	kW	0,37x2	0,55x2	0,75x2	0,75x2	1,1x2	1,1x2	1,5x2	2,2x2	2,2x2
	VOLTAGE	V	380	380	380	380	380	380	380	380	380
DIMENSIONS	LENGTH (L)	mm	1,300	1,550	1,550	1,700	1,850	1,850	2,200	2,200	2,200
	HEIGHT (H)	mm	440	440	460	500	500	560	720	720	720
	WIDTH (W)	mm	900	1,000	1,000	1,100	1,100	1,100	1,250	1,250	1,250





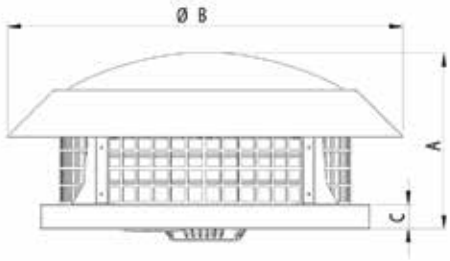


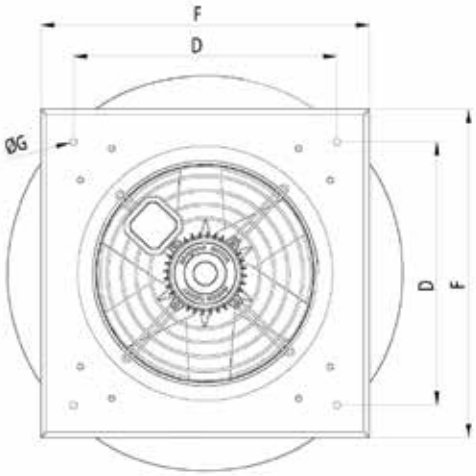


ROOF AND DUCT TYPE VENTILATORS

AACF Horizontal Throw Axial Roof Fans

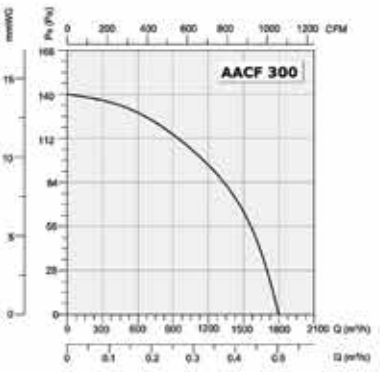
- Easy installation on chimney.
- High efficiency, low noise level.
- Electrostatic powder coated body and glass wool reinforced plastic axial impeller.
- Fan guard grill.
- Capacity control via optional speed control device.
- Both suction and throw functions.

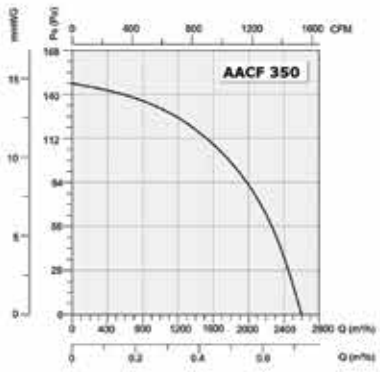


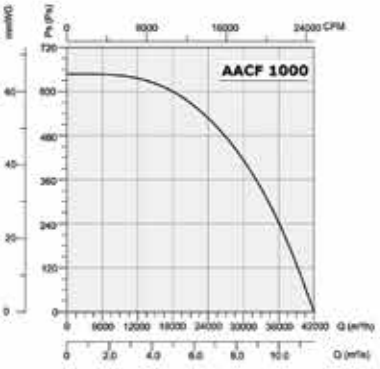


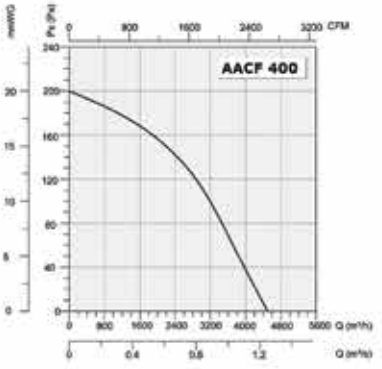
TYPE	A	B	C	D	F	G
AACF 300	320	675	40	450	500	12
AACF 350	320	675	40	450	560	12
AACF 400	470	850	40	530	630	12
AACF 450	480	850	40	590	710	12
AACF 500	480	850	40	680	740	12
AACF 560	710	1100	40	750	800	12
AACF 630	710	1250	40	850	850	14
AACF 710	800	1250	40	850	850	14
AACF 800	900	1350	40	1000	1000	14
AACF 900	900	1350	40	1000	1000	14
AACF 1000	950	1450	40	1050	1100	14

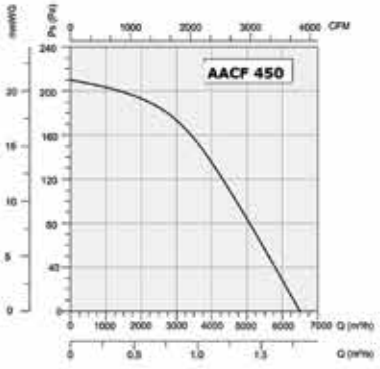
TYPE	VOLTAGE	FREQUENCY	POWER	CAPACITOR	CYCLE	FLOW RATE	NOISE LEVEL	WEIGHT
	V	Hz	W	µF	d/d	m³/h	dB(A)	kg
AACF 300M/AACF 300T	230/380	50	180	8/-	1430	1800	48	13.5
AACF 350M/AACF 350T	230/380	50	180	8/-	1360	2600	49	17.5
AACF 400M/AACF 400T	230/380	50	250	8/-	1400	4500	51	21
AACF 450M/AACF 450T	230/380	50	370	8/-	1375	6500	54	30
AACF 500M/AACF 500T	230/380	50	550	8/-	1350	8500	57	35
AACF 560M/AACF 560T	230/380	50	750	20/-	1450	10000	62	37
AACF 630M/AACF 630T	230/380	50	1100	30/-	1450	14000	63	66
AACF 710M/ AACF 710T	230/380	50	1500	40/-	1450	18000	68	65
AACF 800M/AACF 800T	230/380	50	2200	50/-	1450	26000	72	88
AACF 900T	380	50	3000	-	1450	32000	77	94
AACF 1000T	380	50	5500	-	1400	42000	91	105

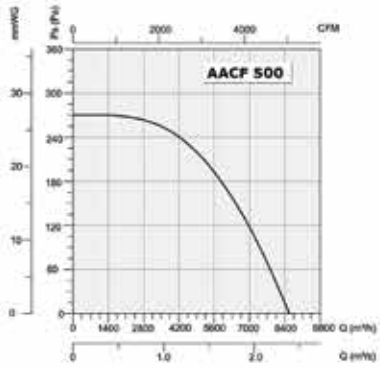

AACF 300


AACF 350


AACF 1000


AACF 400


AACF 450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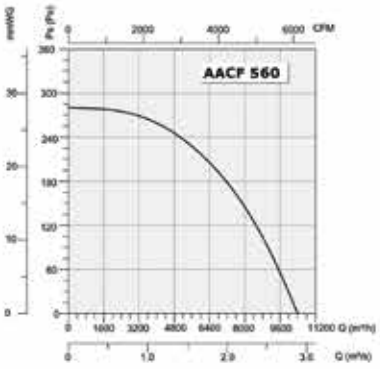
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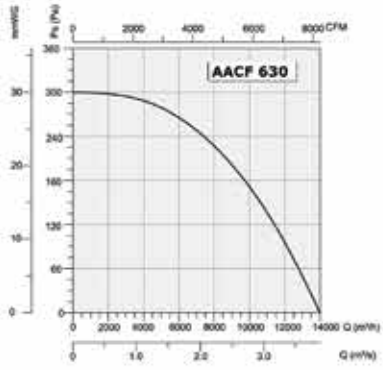
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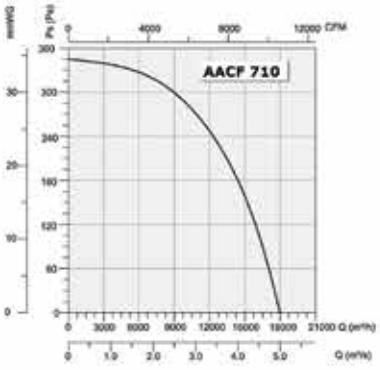
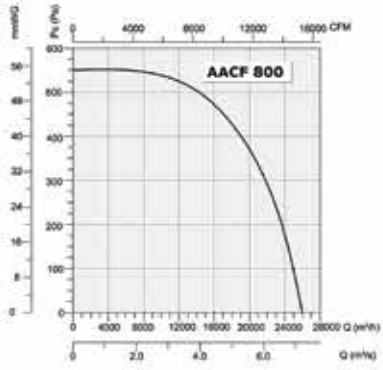
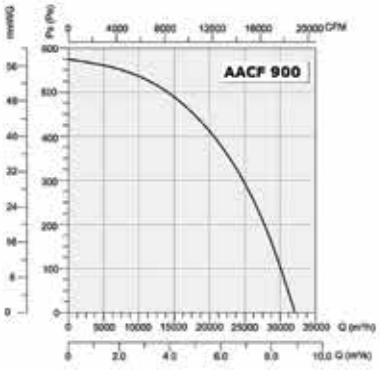
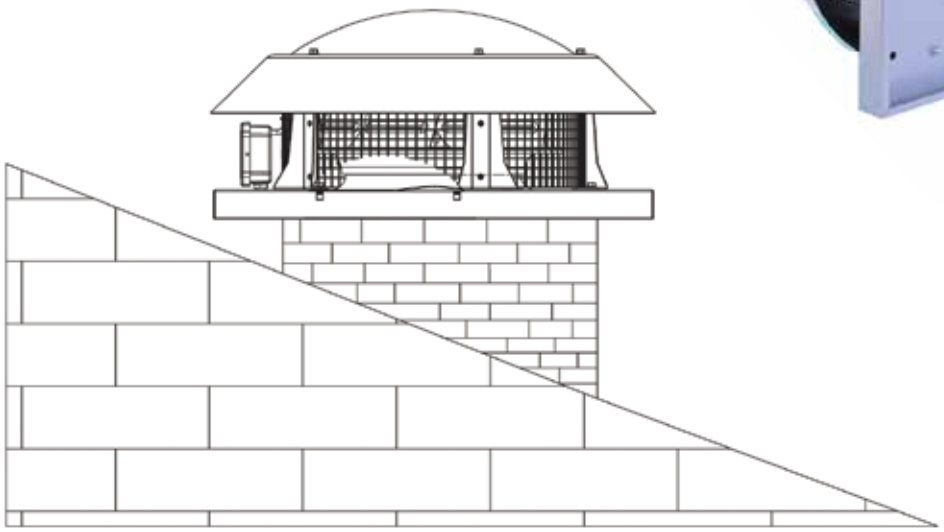

AACF 710

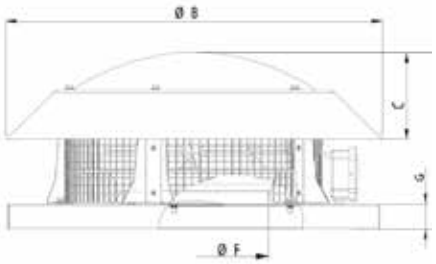

AACF 800


AACF 900

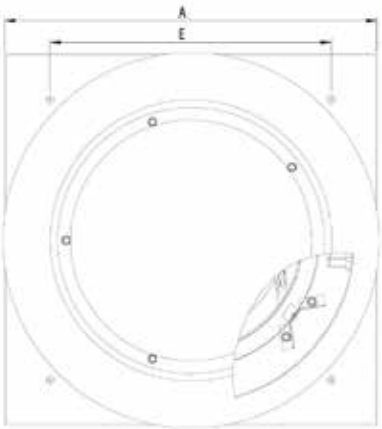
ARF Horizontal Throw Centrifugal Roof Fans

- Easy installation on chimney.
- High efficiency, low noise level.
- Electrostatic powder coated body and galvanized steel impeller with backward curved blades.
- Fan guard grill.
- Capacity control via optional speed control device.
- Both suction and throw functions.

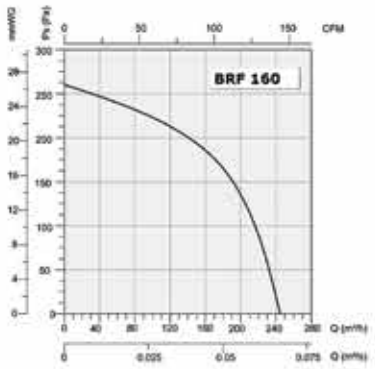


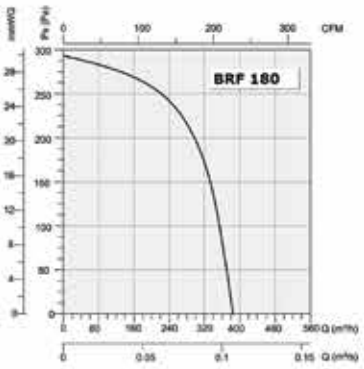


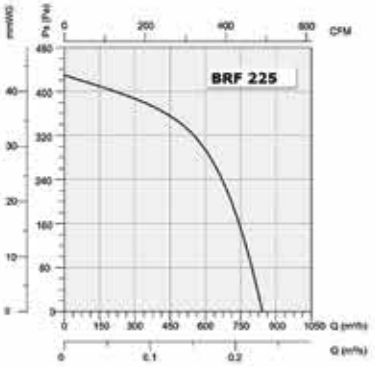
TYPE	A	B	C	D	E	F	G
ARF 160	252	260	50	140	210	80	25
ARF 180	252	260	50	140	210	80	25
ARF 225	336	340	110	160	273	146	35
ARF 250	370	380	110	160	290	163	35
ARF 315	454	446	140	260	333	185	40
ARF 355	595	600	138	285	450	234	40
ARF 400	595	700	160	355	450	270	40
ARF 450	664	700	160	400	450	282	40
ARF 500	798	840	170	385	600	320	40
ARF 560	798	840	170	400	600	360	40

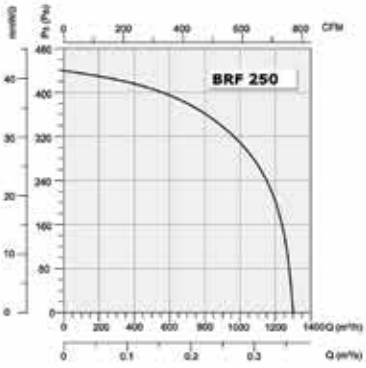


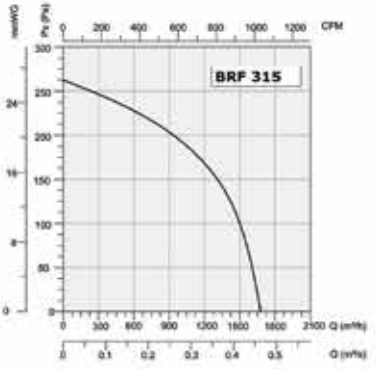
TYPE	VOLTAGE	FREQUENCY	POWER	CAPACITOR	CYCLE	FLOW RATE	NOISE LEVEL	WEIGHT
	V	Hz	W	µF	d/d	m³/h	dB(A)	kg
ARF 160	230	50	65	2	2547	245	45	4
ARF 180	230	50	85	2.5	2460	385	47	4.5
ARF 225	230	50	130	5	2640	850	48	7
ARF 250	230	50	160	6	2685	1300	52	8
ARF 315	230	50	120	6	1420	1680	54	10
ARF 355	230	50	200	6	1400	2750	58	16
ARF 400	230	50	345	12	1375	3620	62	29
ARF 450	230	50	595	18	1365	5800	63	37
ARF 500	380	50	880		1400	8000	65	51
ARF 560	380	50	1450		1400	10000	65	62

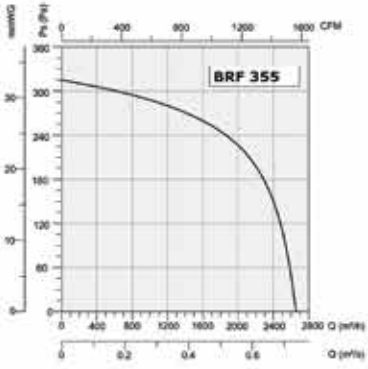

BRF 160
CFM
Q (m³/h)
Q (m³/s)

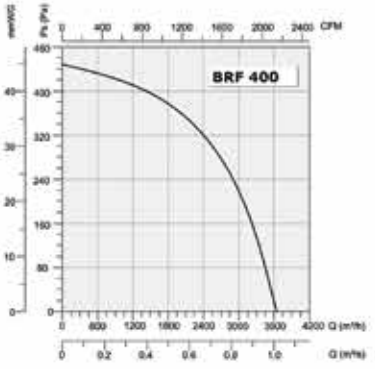

BRF 180
CFM
Q (m³/h)
Q (m³/s)

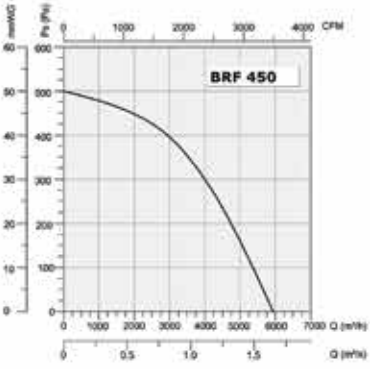

BRF 225
CFM
Q (m³/h)
Q (m³/s)

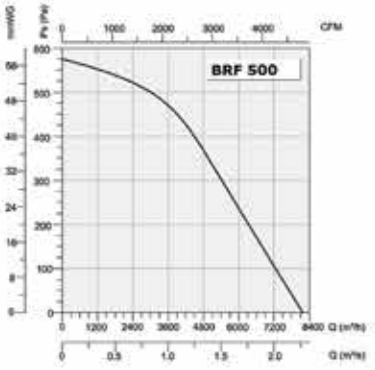

BRF 250
CFM
Q (m³/h)
Q (m³/s)

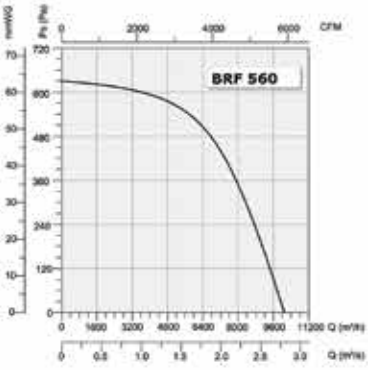

BRF 315
CFM
Q (m³/h)
Q (m³/s)


BRF 355
CFM
Q (m³/h)
Q (m³/s)


BRF 400
CFM
Q (m³/h)
Q (m³/s)

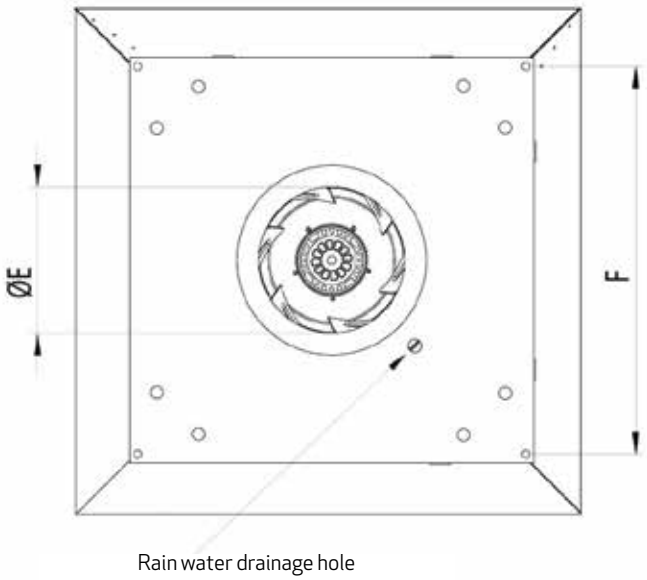

BRF 450
CFM
Q (m³/h)
Q (m³/s)


BRF 500
CFM
Q (m³/h)
Q (m³/s)

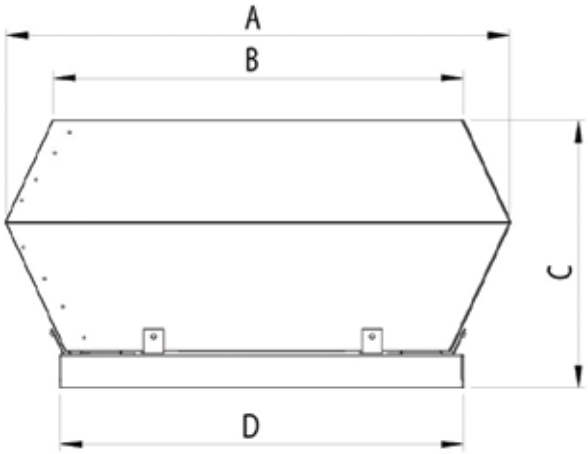

BRF 560
CFM
Q (m³/h)
Q (m³/s)

ARF-V Vertical Throw Centrifugal Roof Fans

- Easy installation on chimney.
- Especially useful in the locations where it is not possible to exhaust air horizontally.
- High efficiency, low noise level.
- Galvanized steel sheet body and galvanized steel impeller with backward curved blades.
- Fan guard grill.
- Capacity control via optional speed control device.
- Both suction and throw functions.

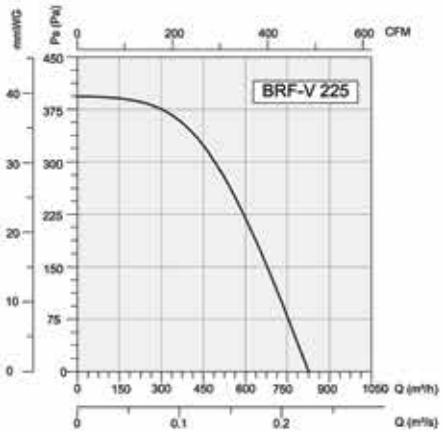


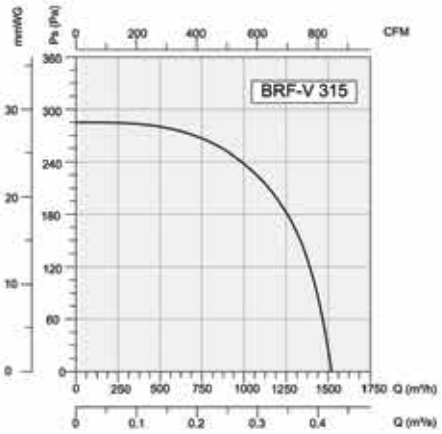
Rain water drainage hole

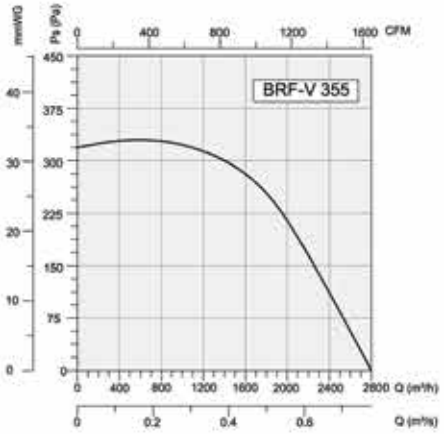


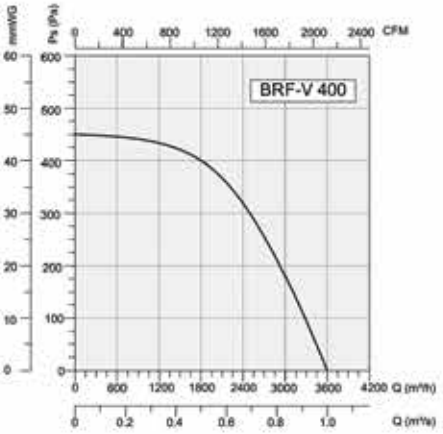
TYPE	A	B	C	D	E	F
ARF-V 225	370	295	170	335	213	245
ARF-V 315	560	470	330	435	285	330
ARF-V 355	720	618	400	595	438	450
ARF-V 400	720	618	400	595	438	450
ARF-V 450	900	748	440	665	438	535
ARF-V 500	900	748	440	665	438	535
ARF-V 560	1150	955	530	939	605	750
ARF 560	798	840	170	400	600	360

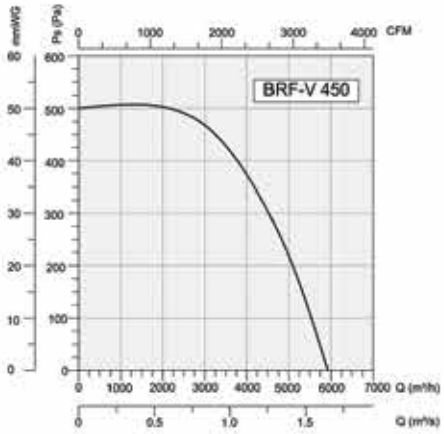
TYPE	VOLTAGE	FREQUENCY	POWER	CAPACITOR	CYCLE	FLOW RATE	NOISE LEVEL	WEIGHT
	V	Hz	W	µF	d/d	m³/h	dB(A)	kg
ARF-V 225	230	50	130	5	2640	850	48	7
ARF-V 315	230	50	120	4	1420	1550	54	10
ARF-V 355	230	50	200	6	1400	2800	58	16
ARF-V 400	230	50	345	12	1375	3600	62	29
ARF-V 450	230	50	595	18	1365	5800	63	37
ARF-V 500	380	50	880		1400	8000	65	51
ARF-V 560	380	50	1450		1400	10000	65	62
ARF 560	380	50	1450		1400	10000	65	62

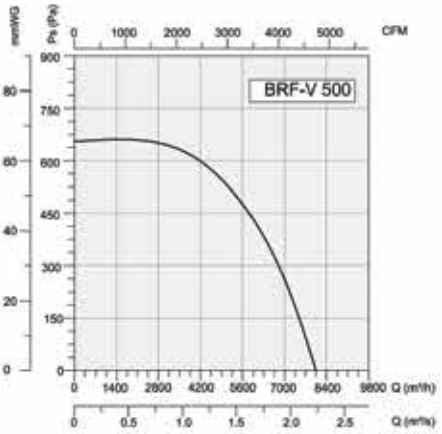

BRF-V 225
mmWG
Ps (Pa)
CFM
Q (m³/h)
Q (m³/s)

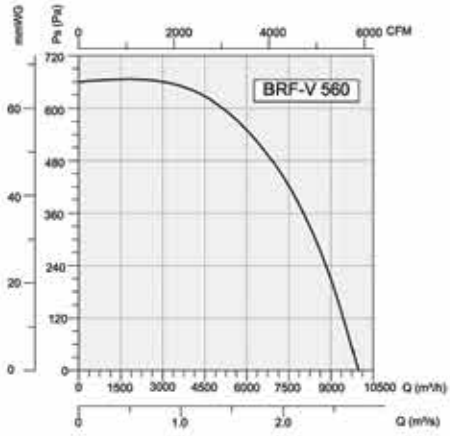

BRF-V 315
mmWG
Ps (Pa)
CFM
Q (m³/h)
Q (m³/s)


BRF-V 355
mmWG
Ps (Pa)
CFM
Q (m³/h)
Q (m³/s)


BRF-V 400
mmWG
Ps (Pa)
CFM
Q (m³/h)
Q (m³/s)

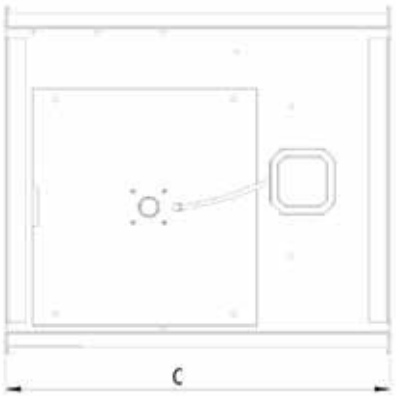

BRF-V 450
mmWG
Ps (Pa)
CFM
Q (m³/h)
Q (m³/s)

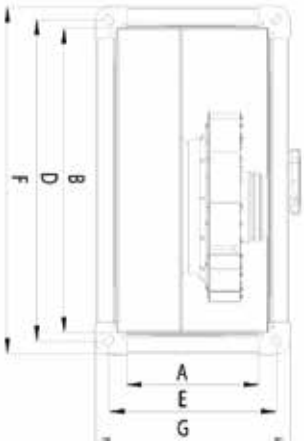

BRF-V 500
mmWG
Ps (Pa)
CFM
Q (m³/h)
Q (m³/s)

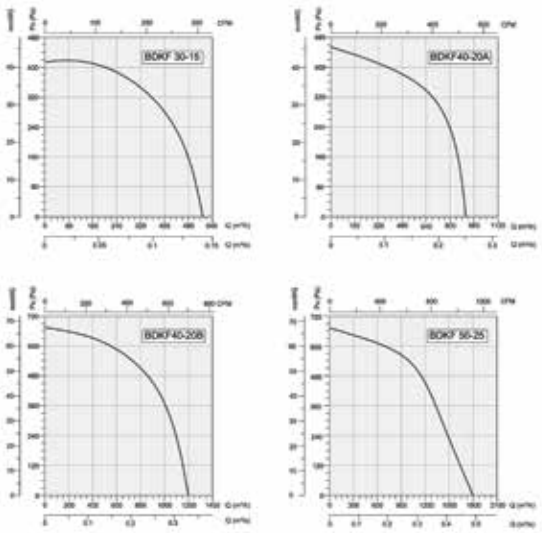

BRF-V 560
mmWG
Ps (Pa)
CFM
Q (m³/h)
Q (m³/s)

ADKF RECTANGULAR DUCT FAN

- Easy installation to duct.
- Easy maintenance via service access lid.
- High efficiency, low noise level with aerodynamic design.
- Galvanized body, galvanized centrifugal impeller.
- Capacity control via optional speed control device.





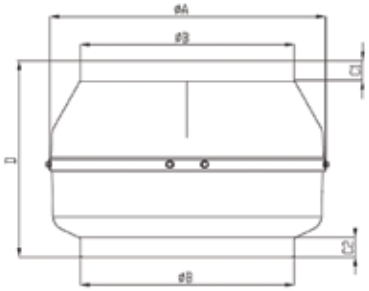


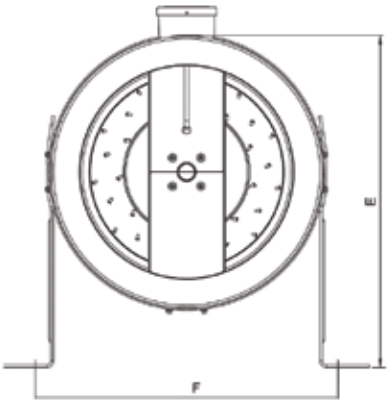
TYPE	A	B	C	D	E	F	G
ADKF 30-15	150	300	400	320	170	350	200
ADKF 40-20A	200	400	500	420	220	450	250
ADKF 40-20B	200	400	500	420	220	450	250
ADKF 50-25	250	500	565	520	270	550	300
ADKF 60-30	300	600	650	620	320	650	350
ADKF 60-35A	350	600	760	620	370	650	400
ADKF 60-35B	350	600	760	620	370	650	400
ADKF 70-40A	400	700	800	720	420	750	450
ADKF 70-40B	400	700	800	720	420	750	450
ADKF 80-50	500	800	920	820	520	850	560
ADKF 100-50	500	1000	1050	1030	530	1060	560

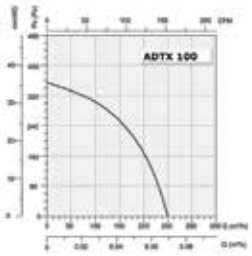
TYPE	VOLTAGE	FREQUENCY	POWER	CAPACITOR	CYCLE	FLOW RATE	NOISE LEVEL	WEIGHT
	V	Hz	W	µF	d/d	m³/h	dB(A)	kg
ADKF 30-15	230	50	90	2,5	2650	520	48	7
ADKF 40-20A	230	50	100	4	2650	940	53	12
ADKF 40-20B	230	50	140	5	2690	1200	57	13
ADKF 50-25	230	50	200	6	2500	1800	52	16
ADKF 60-30	230	50	130	4	1400	2000	50	17
ADKF 60-35A	230	50	160	6	1400	2800	53	35
ADKF 60-35B	230	50	200	8	1400	3400	58	37
ADKF 70-40A	230	50	380	14	1400	4500	60	42
ADKF 70-40B	230	50	630	18	1410	5900	62	44
ADKF 80-50	380	50	880		1375	8000	64	65
ADKF 100-50	380	50	1450		13250	10000	66	93

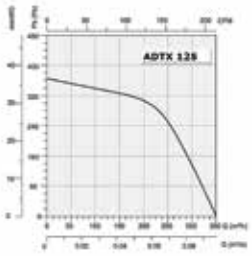
ADTX ROUND DUCT FAN

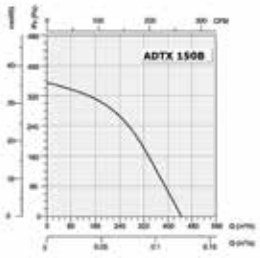
- Easy installation to duct.
- High efficiency, low noise level with aerodynamic design.
- Electrostatic powder coated body and galvanized steel impeller with backward curved blades.
- Capacity control via optional speed control device.

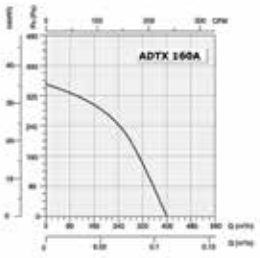












TYPE	A	B	C1	C2	D	E	F	G
ADTX 100	245	97	22	22	197	273	268	200
ADTX 125	245	122	20	20	188	273	268	250
ADTX 150B	272	147	23	25	192	286	295	250
ADTX 160A	272	157	23	25	192	286	295	300
ADTX 200A	330	196	30	28	230	380	352	350
ADTX 200B	330	196	30	28	230	380	352	400
ADTX 250A	330	247	30	28	227	380	352	400
ADTX 250B	330	247	30	28	227	380	352	450
ADTX 315A	400	313	30	30	285	415	422	450
ADTX 315B	400	313	30	30	285	415	422	560
ADTX 355	400	352	30	30	378	415	422	560

TYPE	VOLTAGE	FREQUENCY	POWER	CAPACITOR	CYCLE	FLOW RATE	NOISE LEVEL	WEIGHT
	V	Hz	W	µF	d/d	m^3/h	dB(A)	kg
ADTX 100	230	50	60	2	2580	250	44	3,4
ADTX 125	230	50	80	2,5	2255	350	49	3,4
ADTX 150B	230	50	85	2,5	2345	450	51	3,7
ADTX 160A	230	50	80	2,5	2450	400	51	3,5
ADTX 200A	230	50	85	2,5	2315	850	49	5,3
ADTX 200B	230	50	110	4	2550	1000	51	5,6
ADTX 250A	230	50	120	4	2550	1100	53	5,8
ADTX 250B	230	50	140	5	2550	1250	54	6,3
ADTX 315A	230	50	170	5	2400	1600	52	7,1
ADTX 315B	230	50	200	7	2545	1900	54	8,2
ADTX 355	230	50	130	4	1380	1450	47	11,2

HEAT PUMPS

Be a winner with our advanced technology hybrid heat pumps!

Energy efficiency is not a criterion but a must...

Based on the fact that the sources decrease gradually, energy efficiency became a prime concern for any operation no matter what size of capacity or number of people involved. Generally speaking, focusing on saving without compromising output or quality is no more a criterion for a choice but a must.

Today, as a result of technological developments, COP values can be obtained around 6.8. Heat pumps, which can output 6-7 kW heat by an input of only1kW electric power, are turned into smart units.

Hybrid heat pumps for green buildings

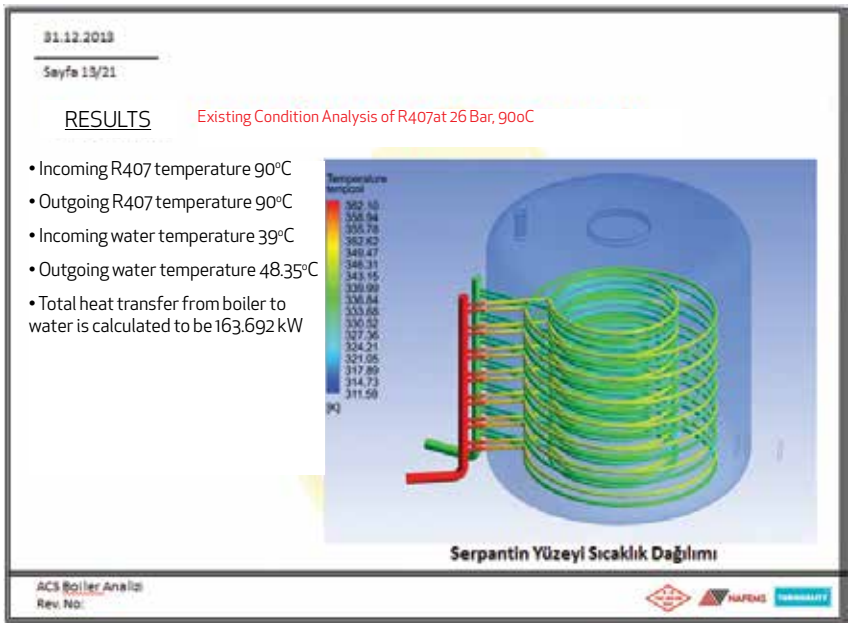
Energy saving and low emission perspective of green buildings encouraged the effective HVAC solutions and inspired the innovation that lead to the hybrid source heat pumps which can utilize underground heat sources. Hybrid heat pumps use cold water and simultaneously supply hot water to the facility. Hybrid heat pumps achieve the best COP values by using the energy in natural air, water and earth resources and optimizing their energies for thermal cycle.

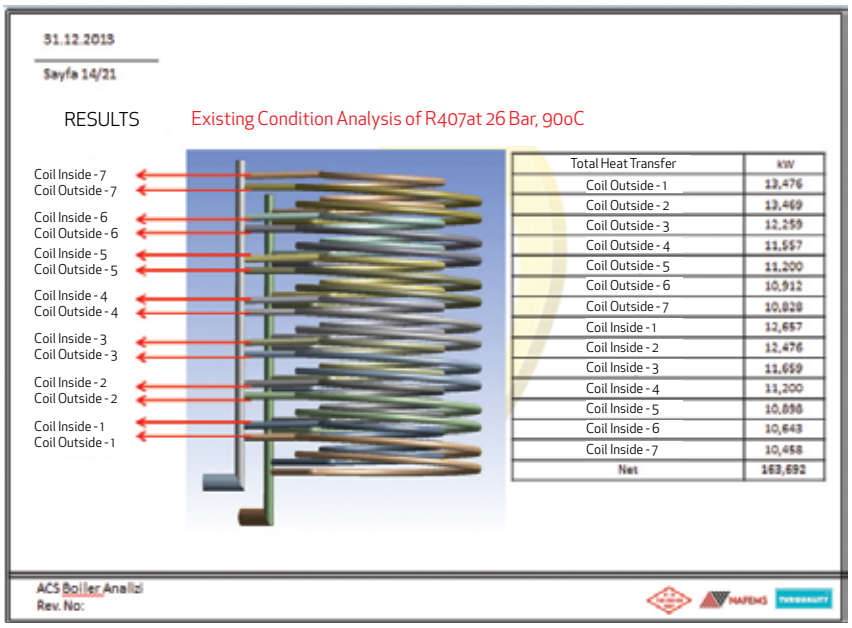
Conventional heat pumps simply cannot reach to the COP values of hybrid heat pumps. Because while hybrid heat pumps use natural resources with more stable heat values, conventional heat pumps are affected by the outside ambient temperatures. Consequently, hybrid heat pumps became the first choice of green buildings and facilities.

High technology hybrid heat pump manufacturing in Turkey

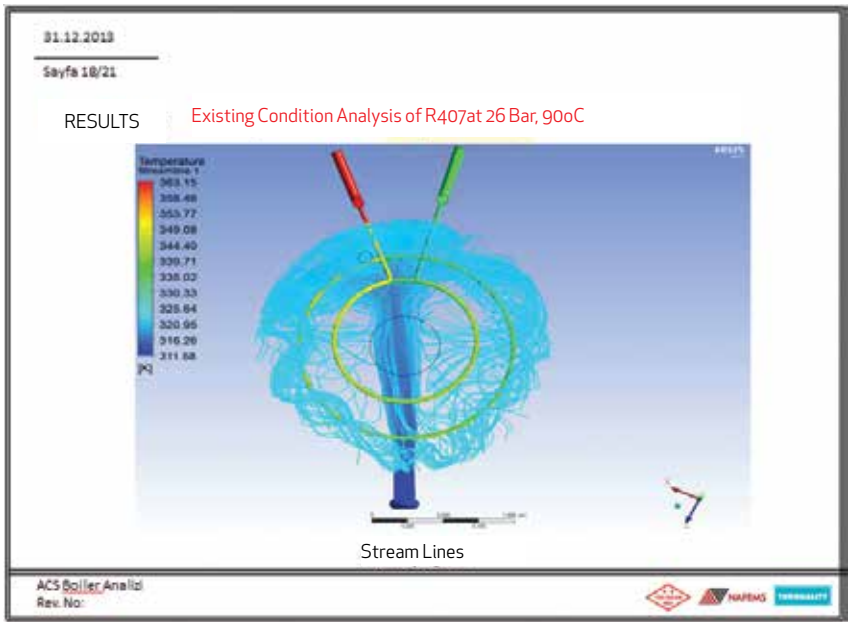
Our Climacs brand is a high tech hybrid heat pumpthat can be remotely controllable and manageable by an automation; with these features the unit is regarded as a "Smart Unit".

- Various model options from 250 kW to 1250 kW, according to your requirements.
- World standard efficiency and specific heat values.
- Efficient system that can simultaneously use the heat loads of three different natural resource (air, water, earth).
- Adjustable capacity ratio depending on the required heat load.
- Obtaining COP values as high as 8-9 by transferring heat of natural resources to the system.
- Comfort and energy saving can be increased by set temperature adjustment.
- Automation by PLC software.
- Instantaneous / daily / annual energy and COP reports.
- Controllable by remote access.





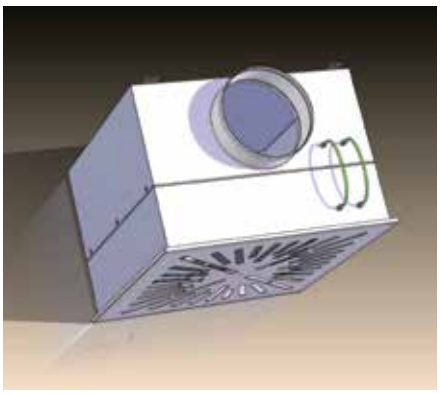
Total Heat Transfer	kW
Coil Outside - 1	13,476
Coil Outside - 2	13,469
Coil Outside - 3	12,259
Coil Outside - 4	11,557
Coil Outside - 5	11,200
Coil Outside - 6	10,912
Coil Outside - 7	10,828
Coil Inside - 1	12,657
Coil Inside - 2	12,476
Coil Inside - 3	11,659
Coil Inside - 4	11,200
Coil Inside - 5	10,898
Coil Inside - 6	10,643
Coil Inside - 7	10,458
Net	163,692

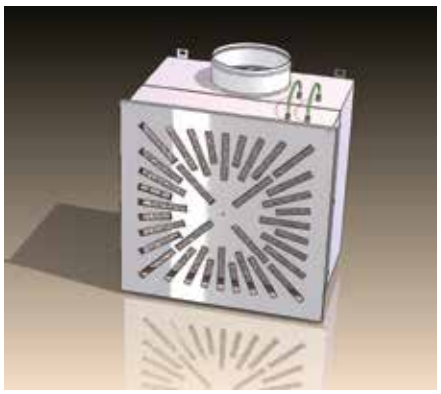


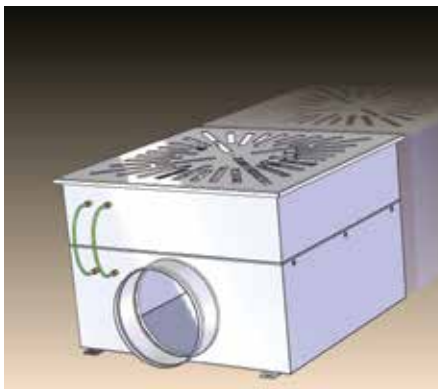
HEPA FILTER BOXES
STEAM HUMIDIFIERS
LAMINAR FLOW UNITS
VAV - CAV UNITS

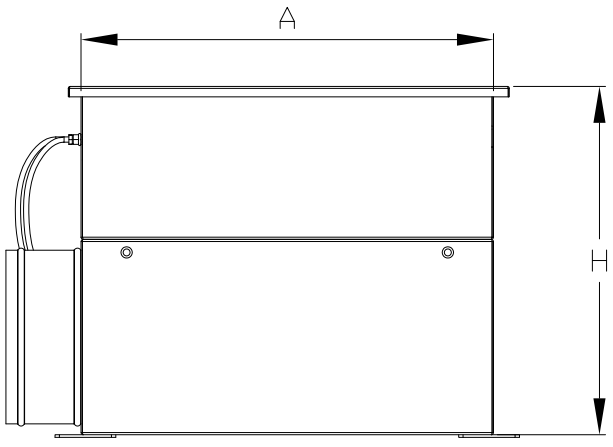
HEPA FILTER BOXES

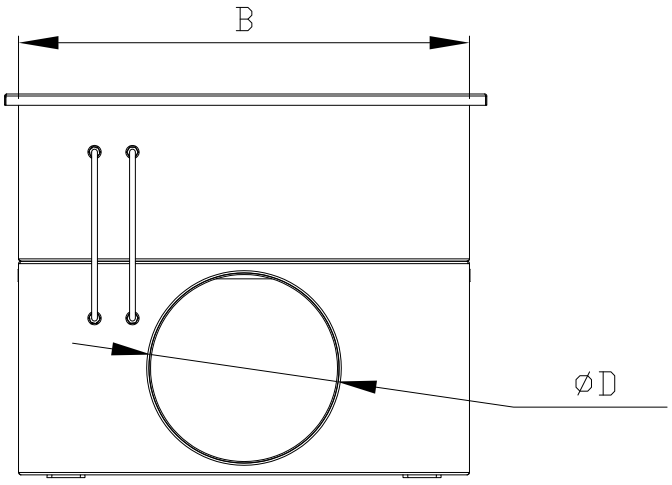
- Built from DKP sheets using laser and CNC technology.
- Full sealing by means of seamless air contact surface.
- Easy filter replacement by means of removable swirl diffusor.
- Low resistance and high capacity H-13 and H-14 HEPA filters in the high quality MDF enclosures; conforming to EN 1822.











MODEL		AIR FLOW RATE	DIMENSIONS (mm)			
			A	B	C	ØD
AHF-1	305X305X78	250	323	323	355	160
AHF-2	305X610X78	500	323	628	397	200
AHF-3	457X457X78	570	473	473	395	200
AHF-4	457X610X78	750	473	628	447	200
AHF-5	610X610X78	1000	628	628	447	250

Steam Humidifier

Steam is produced by the heat that is generated by the electric current formed between the electrodes and the minerals in the water. Produced steam can be distributed to air handling units via the supplied steam hoses and diffusers or it can be delivered directly to the ambient air using a special distribution head.

- On/off or control in a range from 20 to 100% of its capacity.
- Capability of communication to BMS systems.
- Capability of sending on / fault signals to the BMS system.
- Controllable by all analogue DC signals and potentiometric signals.
- Minimal maintenance requirement, optimal cylinder life cycle.
- LED light display for easy reading.
- Capability to form a chain with up to 7 units which can be controlled as a single system.
- Drainage pump .

MODEL		LE05	LE09	LE18	LE30	LE45	LE45	LE55	LE60	LE60	LE90	LE110
Capacity	kg/h	1/5	1.8/9	3.6/18	6/30	39/45	39/45	11/55	12/60	12/60	18/90	22/110
Number of Cylinders		1	1	1	1	2	1	2	2	2	2	2
Voltage	V	220/440	220/440	220/440	220/440	200/230	380/440	380/440	200/230	380/440	380/440	380/440
Power Rating	kW	3.8	6.8	13.5	22.5	33.7	33.9	42	44.8	45	67.8	82.8
Height	mm	676	676	676	810	810	810	810	810	810	810	810
Width	mm	430	430	430	520	990	520	520	990	990	990	990
Depth	mm	320	320	320	415	415	415	415	415	415	415	415
Weight	kg	34	36	39	40	73	40	40	74	74	75	75

VARIABLE AIR VOLUME (VAV) UNITS

VAV units controls air flow rate and thermostat according to the signal received from the building automation.

• Compact design provides easy installation in false ceilings; favorable in projects with extensive false ceilings.

• Operation is possible with related control equipment such as damper, drive motor, air flow sensor etc.

• Optional heating unit and silencer.

CONSTANT AIR VOLUME (CAV) UNITS

CAV units are mechanically self-controlled units. CAV units are used in any size project to deliver a specific of air flow rate to a location. CAV unit's operation is not affected by pressure fluctuations, that is, the same air flow rate is obtained even if the pressure at the unit's inlet changes.

• Body models are available as galvanized steel, stainless steel and plastic.
• Optional layer isolation, silencer and heating unit accessories are available for galvanized and stainless steel body models.

LAMINAR FLOW UNITS

Laminar flow units are designed to reduce the number of microorganisms to 1 per cubic meter. The unit provides stable and low turbulence sweep air flow for surgical operations and protected areas. Sweep air flow output of the unit removes the contaminants in the ambient air. The unit reduces the microorganism risks to the minimum level via the homogenous air flow provided by its superior design. Sweep air flow dilutes the concentration of harmful gas in the anesthesia area and removes it before it reaches to the personnel.

• Class H13 HEPA filters having high flow rate with low starting pressure.
• Sealing tests at the production stage as per DIN 1946/4 and DIN 25414 standards.
• Built from stainless plates with a decorative panel and laminator.
• Uniform air velocity distribution and low turbulence.
• Self lighting system.
• Designed to provide an easy installation and maintenance.


ACSMART
AUTOMATION

Quality of software affects, quality of hardware.

Raise hardware's efficiency to the highest possible level by ACSMART.

You may put your hardware's efficiency under risk unless you do not use a powerful software to take your multi-component HVAC system under control. ACSmart provide high degree of control over your HVAC system and keep the efficiency at the highest possible level.

Technically speaking, ACSmart, is an advanced automation software controlling your HVAC via package solutions with the help of accurate sensors.

It is capable to cope with various scenarios and configurations to meet the requirements of facilities such as hospitals, laboratories, industrial plants, tourism facilities and governmental institutions.

Regardless of your area of activity, ACSmart is capable to program your HVAC equipment in the best possible way by analyzing the data retrieved via sensors distributed in the site.

You can easily define your set values and develop your scenarios by using user friendly interface.

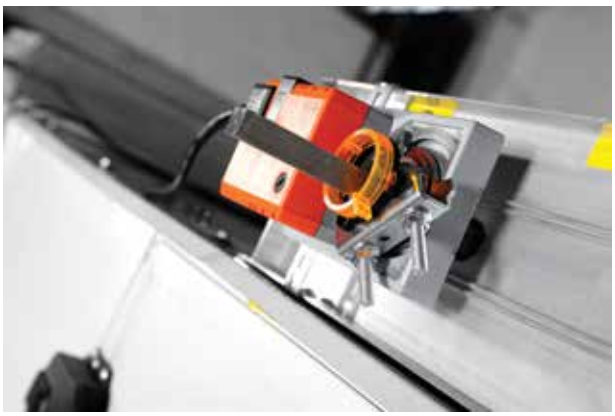
By using ACSmart, you can accurately control negative and positive pressures or fresh air ratio which are the crucial parameters for health institutions.

Besides, ACSmart decides the best option among exterior and interior ambient values for the best efficiency.

ACSmart provides a flawless user experience with additional optional features (such as external key pads, internal RF/EMI filter options)

In addition to features mentioned above, the most distinguishing feature of ACSmart is that its optional communication capability with the existing building automation and fire mode. Optional expansion is unlimited by the addition of I/O modules.

Please consult our engineers for detailed information.

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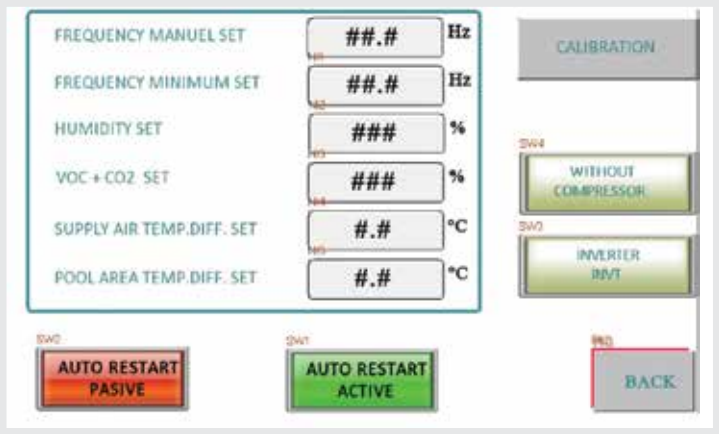
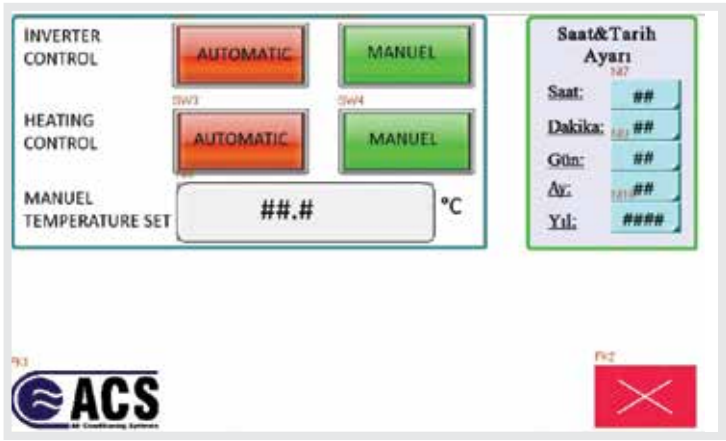
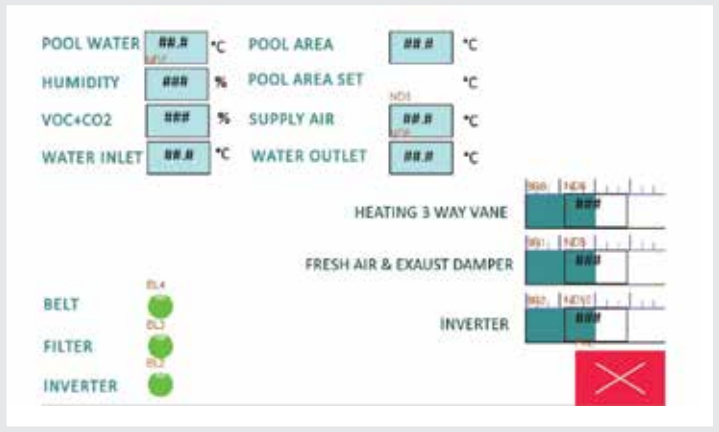
ÖFLEME 25.1 °C
TORBALI 20.5 °C
MAHAL NEM 40.7 %
HAVA KALİTE 64.8 %
ISI SET 23.5 °C
HAVA KALİTE SET 50.0 %
SANTRAL ÇALIŞIYOR
ALARM SAYFASI
AYARLAR

AUTOMATION SYSTEM
TOUCH SCREEN PANEL SCREEN SNAPSHOTS








ACS


ACS


ACS


ACS
Air Conditioning Systems

Ramada Plaza, ANTALYA

100. Yıl University Medicine Faculty Research Hospital, 400 beds, VAN

Royal Dragon Hotel, ANTALYA

State Hospital, 400 beds, ADIYAMAN

Yuksek Ihtisas Hospital, KIRIKKALE

HOTELS

• Royal Al Hambra Hotel	Antalya
• Royal Dragon Hotel	Antalya
• Royal Holiday	Antalya
• Royal Wıngs Resort Hotel	Antalya
• Ramada Hotel	Antalya
• Rixos Hotel	Ankara
• Defnem Hotel	Antalya
• Barut Hotels Sunwing Resort	Antalya
• Port Cratos	Kıbrıs
• Delphin Hotel	Antalya
• Lake & River Hotel	Antalya
• Side Villa Hotel	Antalya
• Commodore Hotel	Antalya
• AdıyamanÜnv. Myo Tur. OtelcilikUyg. Hotel	Adıyaman
• Akgün Hotel	Elazığ
• Alaiye Resort Hotel	Antalya
• Alba Resort Hotel	Antalya
• Arum Hotel	Antalya
• Arycanda Hotel	Antalya
• Aspendos Beach Hotel	Side / Antalya
• Barut Hotels Acanthus	Antalya
• Barut Hotels Hemera	Antalya
• Barut Hotels Lara Resort	Antalya
• Belek Beach Resort Hotel	Antalya
• CennetAkantus Hotel	Antalya
• Club Grand Side	Antalya
• Club Nena Hotel	Antalya
• Crystal Green Bay	Bodrum
• Crystal Admiral Resort	Antalya
• Crystal Hotels Belek	Antalya
• Crystal Hotels Kemer	Antalya
• Crystal Paraiso Verde	Antalya
• Crystal Sunrıse Queen	Antalya
• Defne Dream Hotel	Antalya
• DefneKumul Hotel	Antalya
• Defne Star Hotel	Antalya
• Erdoba Hotel	Mardin
• Hane Hotel	Antalya
• Hedef Resort Hotel & Spa	Antalya
• Korumar Hotel	Kuşadası / Aydın
• La BarnaPenez Hotel	Çorum
• Lyra Resort Hotel	Manavgat / Antalya
• Mavi Ay Hotel	Didim
• Melia Beach Hotel	Antalya
• Miramare Hotel	Antalya
• Monachus Hotel	Manavgat / Antalya
• Novum Garden Hotel	Antalya
• Oscar Resort Hotel	K.K.T.C
• Pala Hotel	Afyon
• Palm Area Hotel	Bodrum
• Port Side Hotel	Antalya
• Prenses Hotel	Antalya
• Robinson Select Maris Hotel	Marmaris
• Roxy Hotel	Antalya
• Saturn Palace Resort Hotel	Antalya
• Sea Light Resort Hotel	Kuşadası
• SeherHotel	Antalya
• Selge Beach Resort & Spa	Antalya
• Selin Hotel	Antalya
• Side Crown Palace Hotel	Antalya
• Side Mare Hotel	Manavgat / Antalya
• Side Star Hotel	Antalya
• Sidera Hotel	Antalya
• Sultan Of Side Hotel	Antalya
• Vikingen Hotel	Antalya
• Nizam Park Hotel	Ankara
• Roma Resort Hotel	Antalya
• SandıklıTermalHotel	Afyon
• Bumerang Hotel	K.K.T.C.
• Berr Hotel	Antalya
• Asteria Hotels	Antalya
• İber Hotel	Antalya
• Bilem Hotel	Antalya
• Kahvecioğlu Hotel	Antalya
• Palm Beach Hotel	Antalya
• The Inn Hotel	Antalya
• PortobellaHotel	Antalya
• Büyük Hotel	Antalya
• Antea Hotel	İstanbul
• Larissa Hotel	Antalya
• KuleHotel	Konya
• Verbena Hotel	Antalya
• Beldibi Villa Hotel	Antalya
• Sunwing Hotel	Antalya
• Merve Sun Hotel	Antalya
• Water Planet Hotel	Antalya
• Hane Family Hotel	Antalya
• Çenger Hotel	Antalya

HOSPITALS

• District Research Hospital, 300 Beds Maternity Hospital	Samsun
• 19 Mayis University Hospital I. and II. Stage	Samsun
• Adiyaman State Hospital, 400 Beds	Adıyaman
• Akcaabat State Hospital, 200 Beds / Toki	Trabzon
• Akcakale State Hospital, 75 Beds	Şanlıurfa
• Akdagmadeni State Hospital, 50 Beds	Yozgat
• Akyazi Rehabilitation Centre	Sakarya
• Alacam State Hospital Surgical Operating Rooms	Samsun
• Ankara Hospital / Ministry Of Health	Ankara
• Ankara Occupational Diseases Hospital.	Ankara
• Ankara NumuneEducation and Research Hospital	Ankara
• Ankara Tube Baby Centre	Ankara
• Arte Hekimkoy Tip Centre	Ankara
• Artvin State Hospital	Artvin
• Ataturk State Hospital New Born Unit	Balıkesir
• Ataturk Education and Research Hospital - Katipçelebi University (New department with 36 Operating Rooms)	İzmir
• Ataturk Pulmonary Disorders Hospital / Ministry Of Health	Ankara
• Aydin State Hospital, 150 Beds / Toki	Aydın
• Aydin State Hospital Cardiology	Aydın
• Batikent State Hospital, 200 Beds / Ministry Of Health	Ankara
• Batman Dental Centre	Batman
• Beypazari State Hospital	Ankara
• Bolu Dental Centre / Ministry Of Health	Bolu
• Bozok University Research And Implementation Hospital	Yozgat
• Bozyaka SSK Organ Transplantation	İzmir
• District Research Hospital, 200 Beds Cardiovascular Surgery	Burdur
• Burdur State Hospital	Bursa
• Bursa Cekirge State Hospital / Ministry Of Health	Gaziantep
• Cengiz Gokcek Women and Maternity Hospital	Şırnak
• Cizre German Hospital	Sivas
• Cumhuriyet University Sterilizing Unit	Çanakkale
• Canakkale Dental Centre	Çanakkale
• Canakkale Can State Hospital	Çanakkale
• CorumAlaca State Hospital100 Beds	Çorum
• Dalaman State Hospital, 50 Beds	Dalaman
• Denizli State Hosp. Infantile Intensive Care	Denizli
• Derinkuyu State Hospital,10 Beds	Ankara
• Diskapi Infantile Hospital / Ministry Of Health	Diyarbakır
• Dicle University Central Labratory	Gaziantep
• Dentistry Faculty	Diyarbakır
• Diyarbakir Infantile Diseases Hospital	Niğde
• Dr. Dogan Baran Women and Infantile Diseases Hospital	Kastamonu
• Dr. Munif Islamoglu State Hospital	Karabük
• Eflani State Hospital,10 Beds	Elazığ
• Elazig State Hospital	Antalya
• Disablity Rehabilitation Centre	Zonguldak
• Eregli State Hospital, 350 Beds	Eskişehir
• Eskisehir Dental Hospital / Ministry Of Health	Eskişehir
• Eskisehir Yunus Emre State Hospital / Ministry Of Health	Ankara
• EtlikZubeydeHanim Maternity	Ankara
• Fatih University Hospital	Istanbul
• Gaziantep Infantile Hospital 200 Beds / Ministry Of Health	Gaziantep
• Gaziantep Dental Centre	Gaziantep

• Gediz State Hospital,100 Beds	Kutahya
• Golbasi State Hospital	Adiyaman
• Gonen State Hospital, 75 Beds	Balikesir
• Hinis State Hospital / Ministry Of Health	Erzurum
• Idil State Hospital / Ministry Of Health	Sirnak
• Kagizman State Hospital	Kars
• Karabuk State Hospital, 300 Beds	Karabuk
• Kars State Hospital, 200 Beds	Kars
• Kirikkale Specialty Hospital	Kirikkale
• KirikkaleUnv. Tip Fak. Education And Research Hospital	Kirikkale
• KirklareliBabaeski State Hospital100 Beds	Kirklareli
• Kovancilar State Hospital	Elazig
• Kozluk State Hospital / Toki	Batman
• Maya Eye Hospital	Ankara
• Medical Park Hospital	Elazig
• Merzifon State Hospital 150 Beds / Ministry Of Health	Merzifon
• MorisSinasi State Hospital	Manisa
• Mustafa Kemal Pasa State Hospital	Bursa
• Namik Kemal University Hospital	Tekirdag
• Nazilli State Hospital	Aydin
• Nizip State Hospital	Gaziantep
• Nusaybin State Hospital,150 Beds	Mardin
• Oltu State Hospital, 100 Beds / Ministry Of Health	Erzurum
• Osmancik State Hospital,100 Beds	Corum
• Ozel Ankara Hospital	Ankara
• OzelAtasan Hospital	Samsun
• OzelBatigoz Hospital	Izmir
• OzelBilgi Hospital	Antalya
• OzelBirNefes Hospital	Ankara
• OzelBurhanNalbantoglu Hospital	Nicosia, Cyprus
• OzelCorum Hospital	Corum
• OzelEntoK.B.B. Centre	Izmir
• OzelEryaman Hospital	Ankara
• Ozel Hayat Hospital	Izmir
• OzelHilal Hospital	Kirikkale
• OzelKaratas Hospital	Izmir
• OzelOztan Hospital	Usak
• OzelSina Hospital	Van
• Polatli Can Hospital	Ankara
• Rize State Hospital, 150 Beds / Toki	Rize
• Rize State Hospital, 250 Beds / Toki	Rize
• Safa Hospital	Istanbul
• Sami Ulus State Hospital	Ankara
• Samsun Pulmonary Disorders Hospital	Samsun
• SiirtKurtalan State Hospital	Siirt
• Silifke State Hospital, 200 Beds	Silifke
• Silopi State Hospital / Ministry Of Health	Sirnak
• Sinop Ataturk State Hospital / Ministry Of Health	Sinop
• Sivas Dental Centre	Sivas
• Sungurlu State Hospital / Ministry Of Health	Corum
• SuleymaniyeOzel Hospital	Irak
• Sanliurfa Infantile Diseases Hospital	Sanliurfa
• SanliurfaSiverek State Hospital	Sanliurfa
• Sebinkarahisar State Hospital, 75 Beds	Giresun
• SevketYilmazEducation And Research Hospital	Bursa
• Sirnak State Hospital, 150 Beds / Ministry Of Health	Sirnak
• Suhut State Hospital, 75 Beds	Afyon
• Tavsanli State Hospital, 100 Beds	Kutahya
• Tokat State Hospital, 200 Beds	Tokat
• Tokat State Hospital, 500 Beds / Ministry Of Health	Tokat
• TokatAlmus State Hospital, 20 Beds	Tokat
• Toroslar Hospital, 250 Beds	Mersin
• Ulus State Hospital Intensive Care	Ankara
• Van 100. Yil University State Hospital, 400 Beds	Van
• YalovaCinarcik State Hospital	Yalova
• Yalvac State Hospital,75 Beds	Isparta
• YunakHaciIzzetBaysal State Hospital	Konya
• ZekaiTahirBurak Women And Maternity Hospital	Ankara
• Aksehir State Hospital, 200 Beds	Konya
• Babaeski 100 Beds State Hospital	Kirklareli
• Mert Dental Hospital	Antalya
• Narlidere 112	Izmir
• Georgia Hospital	Georgia
• Prof. Dr. BurhanNalbantoglu State Hospital	Cyprus

Sultanbeyli State Hospital, 400 beds, ISTANBUL

GOVERNMENTAL INSTITUTIONS

• Ministry Of Justice Service Building	Ankara
• Adana Closed Arrest House Sports Hall	Adana
• Afyon Retirement Home	Afyon
• Agri Palace Of Justice	Agri
• Ankara Revenues Administration Service Building	Ankara
• Asat Municipality Building	Antalya
• Aydin Municipality Theatre	Aydin
• Azerbeycan Ministry Of Defense	Baku
• Ceyhan Palace Of Justice	Adana
• Dhmi Smart Acc And Air Traffic Control Building	Ankara
• Dhmi Smart Acc And Air Traffic Control Building	Dalaman
• Dhmi Smart Acc And Air Traffic Control Building	Istanbul
• Dhmi Smart Acc And Air Traffic Control Building	Izmir
• DumlupinarUniversitesi Indoor Swimming Pool	Kutahya
• Elazig Municipality Building	Elazig
• Eskisehir Palace Of Justice	Eskisehir
• Eskisehir Iller Bank	Eskisehir
• Fatsa Cultural Centre	Ordu
• Undersecretary Of Ministry Of Customs, Social Facilities Building	Ankara
• Hatay Bus Station	Hatay
• IzsuKarabaglar Service Building	Izmir
• Losev	Ankara
• Nizip Palace Of Justice	Gaziantep
• Olimpik Swimming Pool	Gaziantep
• SabirabatSpor Complex	Azerbeycan
• Siirt Palace Of Justice	Siirt
• Tbmm Print House And Visitors Building	Ankara
• Presidency Of Communication (Tib)	Ankara
• Trabzon Airport	Trabzon
• Bornova Ice Rink	Izmir
• Sincan Palace Of Justice	Ankara
• FatihUniversitesi Girls Dormitory	Istanbul
• Siirt Palace Of Justice	Siirt
• Buca Municipality Building	Izmir
• EsenlerGoverntment House	Istanbul
• Afyon Museum	Afyon
• Samsun Sports Hall, 2000 Person	Samsun
• Batman Special Forces Service Building	Batman
• Bilecik Sports Hall, 2000 Person	Bilecik
• Izmir City Special Administration Building	Izmir
• Mersin 7. Bolge Sports Hall	Mersin
• Cankiri Youth Centre	Cankiri
• Kahta Youth Centre	Adiyaman
• Karapinar Youth Centre	Konya
• Cubuk Girls Dormitory	Ankara
• Revenue Office Service Building	Ankara
• Van Disaster Houses	Van
• Erdemli Sports Hall	Mersin
• Esenboga Airport Foreign Visitor Residance	Ankara
• West Barracks Kitchen, 9000 Person	Manisa
• Golhisar Anatolian High School, 16 Classrooms	Burdur
• Erzurum City Directorate Of Health	Erzurum
• Konya Court Of Appeals	Konya

• Ogm Building	Ankara
• SimavGoverntment House	Kutahya
• Simav Public Education Centre	Kutahya
• SaffetCebi Sports Hall	Istanbul
• HentbolFederation	Ankara
• AhiEvran University	Kirsehir
• Artuklu University	Mardin
• Artvin State Coruh University	Artvin
• BezmialemVakif Univ. Medicine Faculty Hospital	Istanbul
• Dicle University Economy Faculty	Diyarbakir
• Dicle University Library Building	Diyarbakir
• DokuzEylul University Dean's Office Building	Izmir
• Ege University Laboratory Building	Izmir
• Erciyes University Sports Hall	Kayseri
• Erciyes University Veterinary Medicine	Kayseri
• Firat University Sports Hall	Elazig
• Ibrahim Cecen Univ. Dining Hall And Sports	Agri
• Izmir Ekonomi University	Izmir
• Kilis 7 Aralik University	Kilis
• Nevsehir University Dining Hall Building	Nevsehir
• Siirt Univ. Engineering Faculty	Siirt
• Ufuk University Medicine Faculty Hospital	Ankara
• Usak Occupational School	Usak
• Near East University	Cyprus
• Karatay University	Konya
• Tunceli University	Tunceli
• Dumlupinar University Guest House	Kutahya
• Dicle University Labratory	Diyarbakir
• Ted College	Antalya
• Kumluca College	Antalya
• Akdeniz University Social Sci. Occup. Shoool	Antalya

Inegol State Hospital, 300 beds, BURSA.

INDUSTRIAL FACILITIES

• Almata Shopping Centre	Kazakhstan
• Armada Tuze Cinemas	Ankara
• Atlantis Shopping Centre	Ankara
• Atlantis Sports Centre	Ankara
• Basyazicioglu Market	Kayseri
• Kunayeva Business Centre	Almaty/Kazakhstan
• Lyra Shopping Centre	Antalya
• Makro Shopping Centre	Ankara
• Metro Gros Markets	Kayseri, Istanbul
• Metropol Cinemas	Ankara
• Molida Shopping Centre	Balikesir
• Optimum Cinemas	Ankara
• Tekpa Shopping Centre	Antalya
• Wold Point Sports Center	Istanbul
• Esentuki Shopping Centre	Russia
• Lemar Hypermarket	Cyprus
• Mayas Shopping Centre	Kutahya
• Minvodi Shopping Centre	Russia
• Biskot Biscuit VeCikolata Factory	Karaman
• Bak Chicken Plant	Beypazari/Ankara
• PolinasAmbalaj	Manisa
• PlenpakAmbalaj	Manisa
• Lyra Park Shopping Centre	Manavgat / Antalya
• E.Organik Market Wet Food Drying Plant	Colombo / Srilanka
• TaskinTarim Food Drying	Gediz / Kutahya
• EtiGida Cake Factory	Eskisehir
• EtiGida Chocolate Factory	Eskisehir
• EtiGida Biscuits Factory	Eskisehir
• Eti Plaza	Istanbul
• Alyans Plaza	Antalya
• AkcaMeyveSulari	Egridir

Rixos Grand Hotel - ANKARA

Education And Research Hospital, 300 Beds, Karabuk

Cratos Premium Hotel, Cyprus

Dhmi Central Acc App Building, Ankara

Eregli State Hospital, 350 Beds, Zonguldak

Atlantis Shopping Centre, Ankara

Namik Kemal University Research And Implementation Hospital, Tekirdag

QUALITY

Quality philosophy of ACS is shaped by the needs of the customers. When we assess the quality from this point of view actual physical quality of the products will not mean a lot if the customer or the user finds the service provision insufficient. Therefore "the integrity of service and product" is the exact idea that reflects our philosophy of quality.

Being reliable is compelling for ACS. This compulsion makes as careful and sensitive in terms of many aspects starting with engineering services, material selection, environment and public care and ethical responsibilities. ACS is always ready to serve at every stage from project phase to the end user.

Here we present our quality certificates issued by the internationally accredited bodies for our products and systems. These documents are the approval of our quality philosophy we described above.

YOURS

PRODUCT CERTIFICATES

TSEK Certificate

ACS holds the TSEK certificate granted by Turkish Standards Institution. The certificate proves the conformity of the products to the related standards for the specific field of manufacturing.

CE Certificate

ACS uses the CE mark for air handling units and cabinet type ventilators. CE mark enables the products to circulate freely within the European Union where Turkey is a member through the European Customs Union. The mark can be considered as a passport for the products and it is a requirement for 21 product groups within the borders of the union as per the European Union legislation. ACS brand products are manufactured to the requirements of related AB directives. Certification has been made by TUV.

GOST Certificate

ACS brand Air Handling Units and Cabinet Type Ventilators have GOST certificates for exporting products to Russian Federation, Belarus, Uzbekistan, Moldova, Kazakhstan, Azerbaijan, Armenia, Tajikistan, Kyrgyzstan and Turkmenistan.

TÜV SÜD Hygiene Certificate

ACS brand Hygienic Air Handling Unit has been approved to be fully complied to DIN 1946/4 (12/2008) standard.

EUROVENT Certificate(Certificate no. 06.09.325)

Eurovent Certification shows the performance rating of the HVAC-R products based on the European and International standards. ACS brand (for its certified range as ACS 50 ACS 71-1003 air handling units have been awarded by Eurovent certificate as a result of the tests conductec in the laboratories of TÜV. ACS brand air handling units satisfactorily fulfills the required performance criteria specified by EN 1886.

TSE Service Qualification Certificate

The certificate proves the conformity of the consumer services to related Turkish Standards and criteria.

Hygiene Certificate for Package Type Air Handling Units

The certificate proves that our package type hygienic air handling units have been build to DIN 1946-4 standards. Tests and certification by TÜV-SÜD.

DIN 1946 - 4

SYSTEM CERTIFICATES

ISO 9001 : 2008 Quality System Certificate

All production processes of ACS fulfills the requirements of international quality management systems. ACS brand products has been approved by 9001 : 2008 Quality System Certificate of ISO (International Standards Organization) proving the compliance of the products to the worldwide standards.

ISO 140001 : 2009 Environmental Management System Certificate

The certificate shows the environmental responsibility of ACS for production and services provided by the company.

OHSAS 18001 : 2007 Occupational Health and Safety Management System Certificate

By ISO 18001 : 2007 (OHSAS) Occupational Health and Safety Management System, ACS assures the rights of the company personnel for working in a safe and healthy environment.



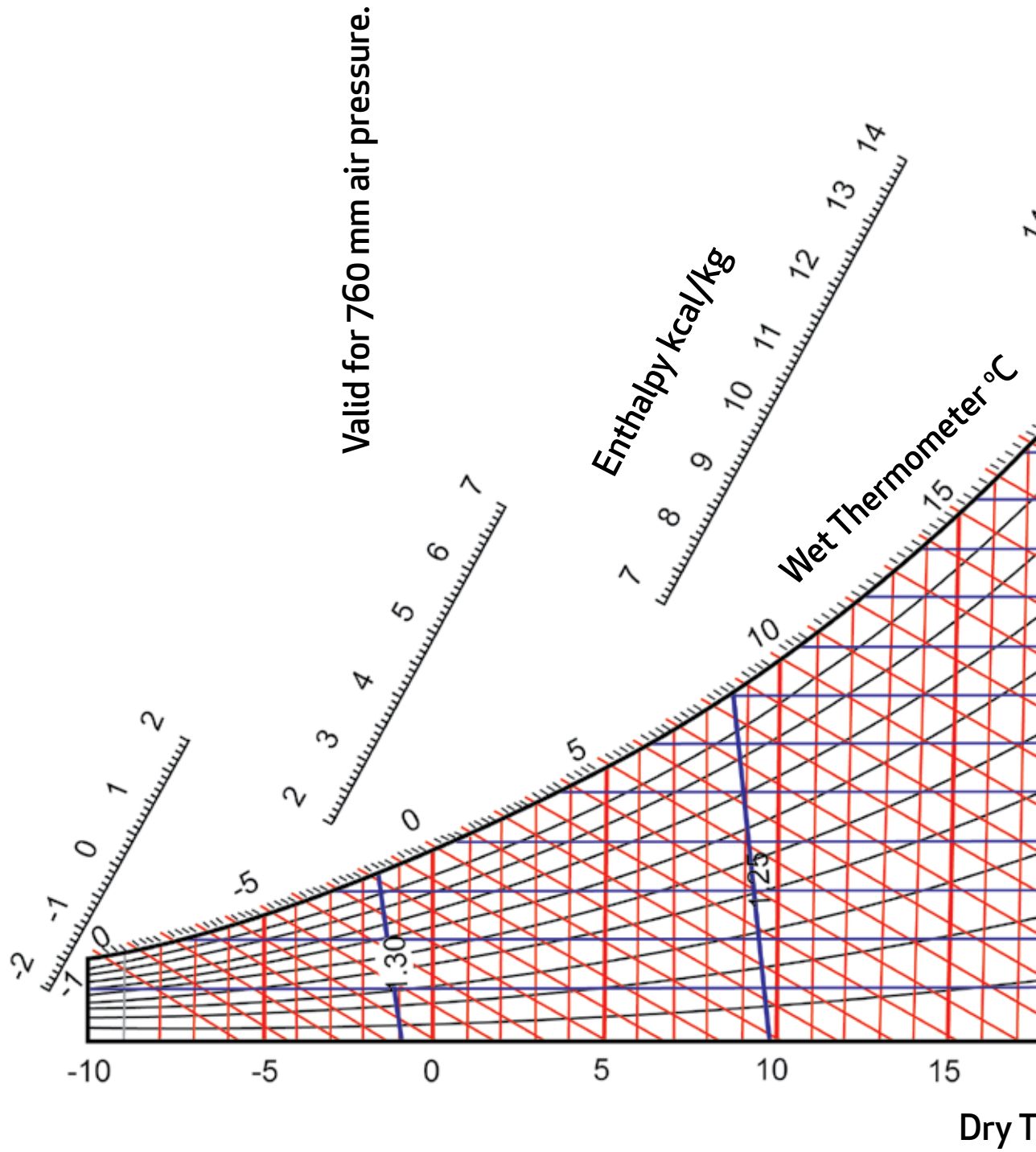


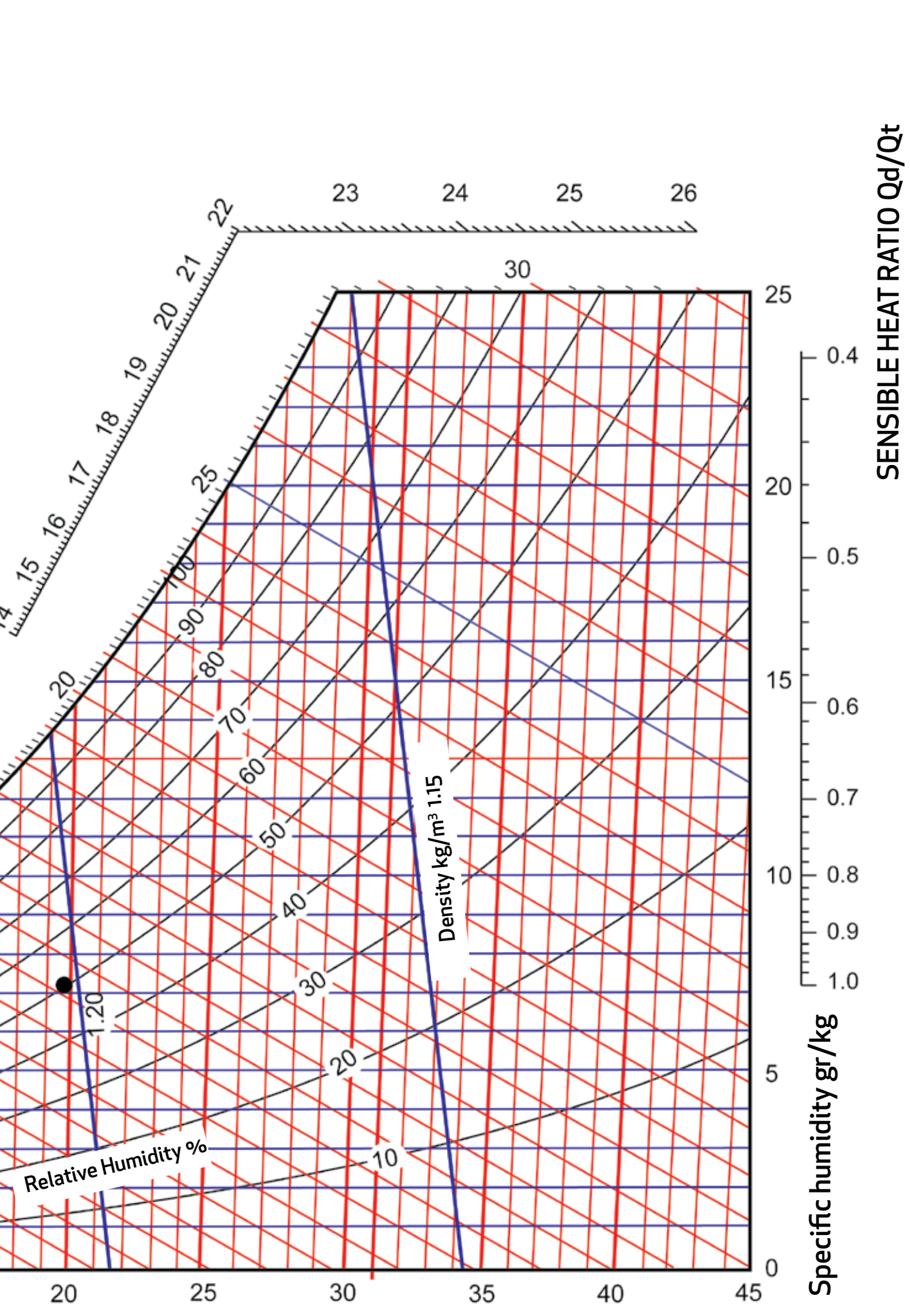





ACS
Air Conditioning Systems

ACS, THE EFFICIENT WAY OF AIR HANDLING




SENSIBLE HEAT RATIO Qd/Qt
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Specific humidity gr/kg
25
20
15
10
5
0
Density kg/m³ 1.15
1.20
Relative Humidity %
100
90
80
70
60
50
40
30
20
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25
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35
40
45
Thermometer °C

CLIMACS

AIR CONDITIONING SYSTEMS

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