



CONTENT

Air Handling Unit

Framework
Panel
Radial and Plug Fans
Sealing
Volumetric Air Dampers
Filters
Silencers
Heating and Cooling Coils
Heat Recovery Unit
Steam Humidifier
Configuration Examples
Air Handling Unit Dimensions Table

7

Hygienic Air Handling Units 22

Air Handling Units with Heat Recovery 24

Recovery from Water to Air
Recovery from Air to Air

Packaged Type Hygienic Air Handling Unit

Framework
Panels
Fans
Volumetric Air Dampers
Filters
Steam Humidifier
Heating and Cooling Coils
Compressor
Condenser
Automation Operation Principle

28

Swimming Pool Dehumidifying Unit 36

Cell Aspirators 41

Fresh Air Units with Heat Recovery 45

Roof and Duct Type Fans

- AACF Horizontal Throw Axial Roof Fans
- ARF Horizontal Throw Centrifugal Roof Fans
- ARF-V Vertical Throw Centrifugal Roof Fans
- ADKF Rectangular Duct Fan
- ADTX Round Duct Fan

49

Heat Pump 59

HEPA Filter Boxes 64

Steam Humidifiers 65

Laminar Flow Units 66

VAV - CAV Units

ACSMART Automation 67

Our Factory 72

Our References

- Hotels
- Hospitals
- Governmental Institutions
- Industrial Facilities

74

Quality	83
Product Certificates	84
System Certificates	85
Humid Air Psychometric Chart	87



DELTA

18/04/2013

22:53:13

KAPAT

AÇIK

KİD

☀

MAHAL	23.7	°C
ÖFLEME	26.1	°C
TORBALI	20.5	°C
MAHAL NEM	40.7	%
HAVA KALİTE	64.8	%

R	S	T
11.4	10.2	10.5
A	A	A
İSTİ SET		23.5 °C
HAVA KALİTE SET		50.0 %

AYARLAR

SANTRAL
ÇALIŞIYOR

ALARM
BAYRAĞI

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 indispensable 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.



The background is an abstract composition of various-sized triangles in shades of teal, grey, and white. The triangles are arranged in a way that creates a sense of depth and movement, with some pointing towards the center and others towards the edges. The overall effect is a modern, architectural feel.

AIR HANDLING UNIT



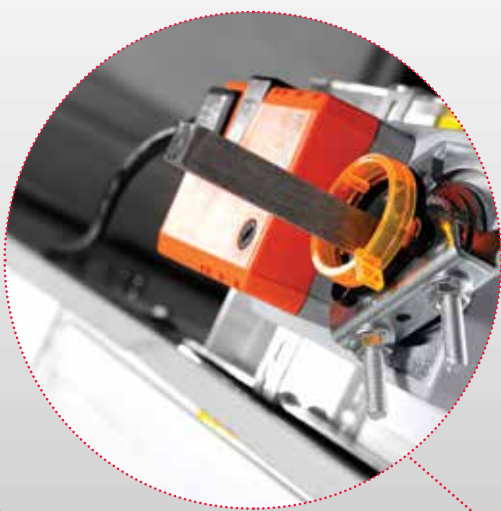


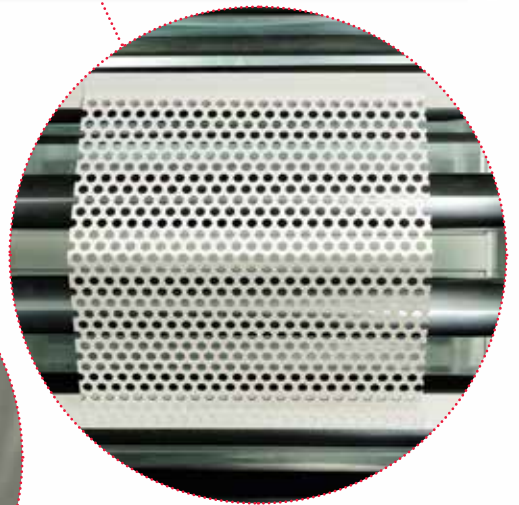
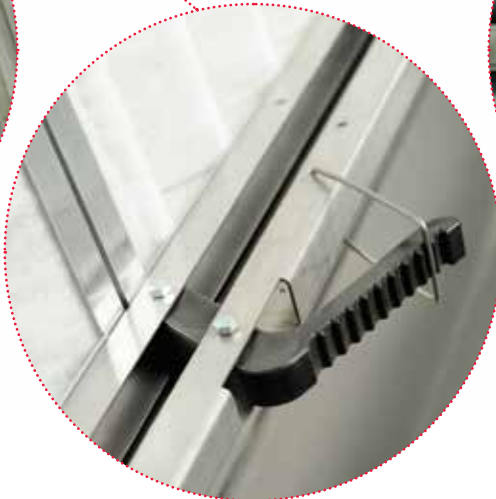
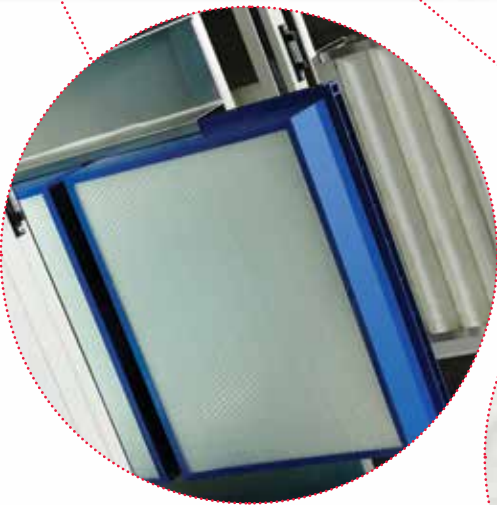
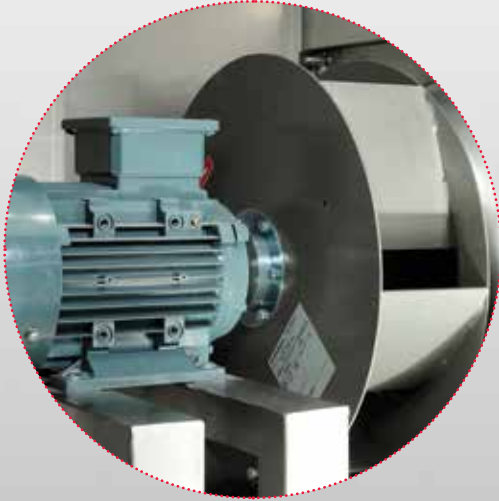
AIR HANDLING UNIT

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

ACS supplies air handling units under two series namely ACS25 and ACS50 having 30mm polyurethane and 50 mm rockwool insulation respectively. There are totally 42 models are available in the product range with capacities varying from 1,000 to 100,000 cubic meter per hour. All products have been tested and certified by EUROVENT as per EN 1886 standards.







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 to 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 ventilators, 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 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.

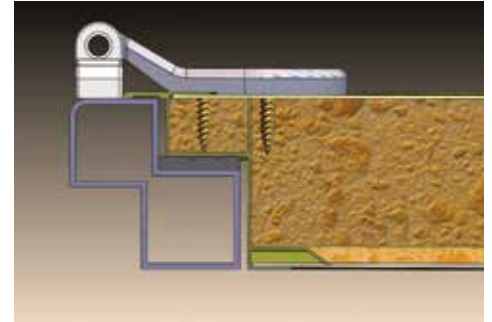


Air handling unit uses NICOTRA plug fan which are centrifugal fans without scroll. The fans have impellers with backward curved blades and they are statically and dynamically balanced, silent and high efficient fans and are suitable for velocity control and easy to clean inside the air handling unit.

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.

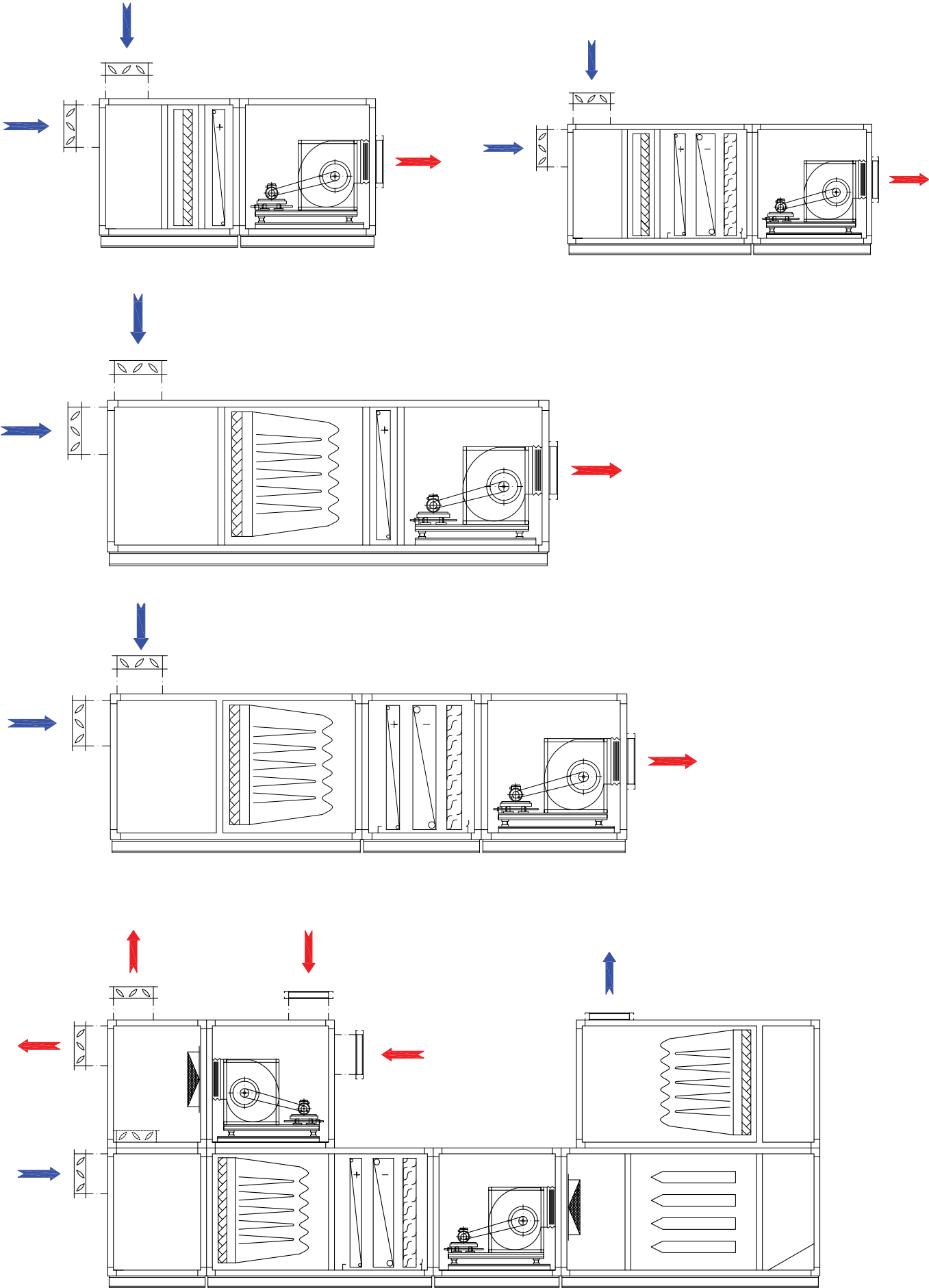


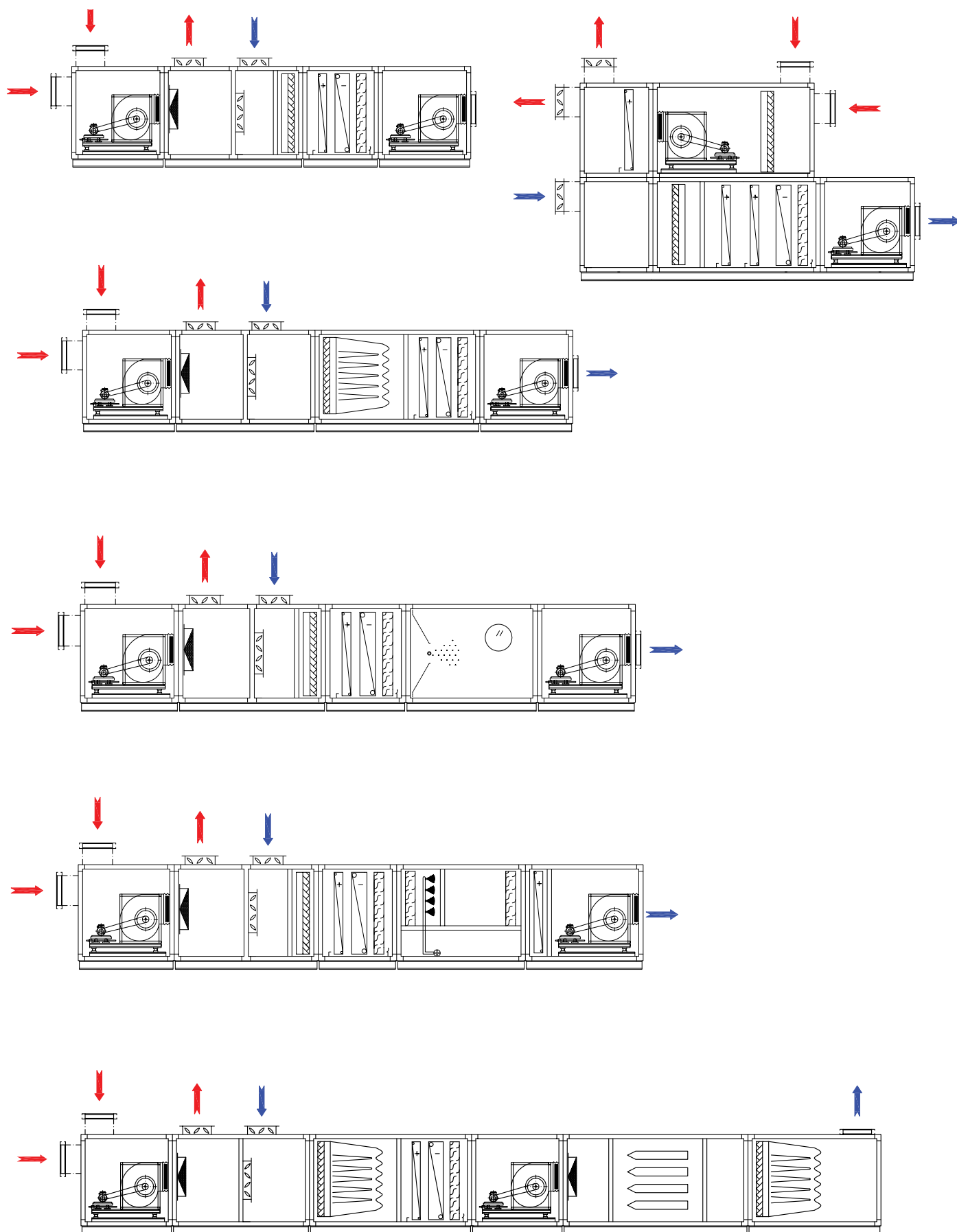
Steam Humidifiers

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.



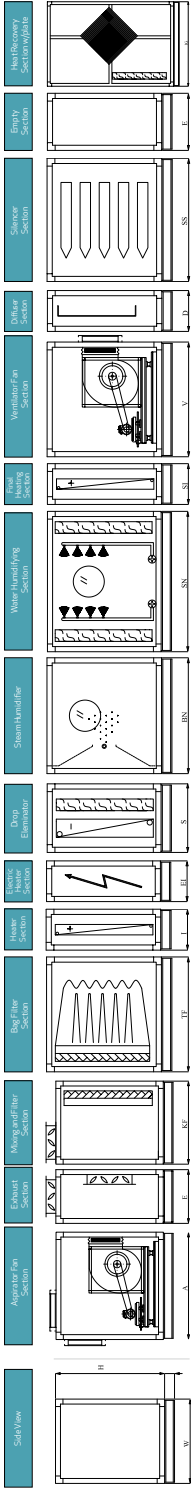






FEATURES		MODELS									
		ACS		ACSH		AHRV		AHRVT		AHRVH	
		S	O	S	O	S	O	S	O	S	O
Panel	K-profile	•		•		•		•		•	
Insulation	30mm Polyurethane	•			•			•			
	50mm Polyurethane	•			•					•	
	50mm Rockwool	•		•						•	
Inner Sheet	Cr-Ni		•	•						•	
	Galvanized	•				•		•			
Outer Sheet	Galvanized (Electrostatic Powder)	•		•		•		•		•	
	Cr-Ni		•		•		•		•		•
Color	White (Ral 9002)	•		•		•		•			
Framework	White (Ral 9002)	•		•						•	
	White (Ral 9002)	•		•		•		•		•	
Vibration Isolator	Spring		•		•		•		•		•
	Rubber	•		•		•		•		•	
Fan Model	Centrifugal Fan	•		•		•		•		•	
	Plug Fan				•						•
Filter	F4	•		•		•		•		•	
	F7		•				•				
	F9		•	•			•			•	
	F9 Mini-pleat			•						•	
Heat Recovery	Water-to-air		•		•						
	Air-to-air w/plate				•	•		•		•	
Equipment	Air-to-air rotary				•		•				•
	Fan Flexible Connection	•		•		•		•		•	
	Inspection Window			•						•	
	Bulkhead Light		•	•			•		•	•	
	Safety Switch	•		•		•		•		•	
	Emergency Button	•		•		•		•			
	U. Int. Elektrical Connections	•		•		•		•		•	
	Ex-proof Fan		•		•		•		•		•
	Ex-proof Motor		•		•		•		•		•
	Control Panel		•		•		•		•		•
	Frequency Invertor		•		•		•		•		•
Automatic Control	Control Panel		•		•		•		•		•
	Touch Screen Panel		•		•		•		•		•
	3-Way Valve		•		•		•		•		•
	3-Way Valve Motor		•		•		•		•		•
	Damper Motor		•		•		•		•		•
	Pressure Differential Switch		•		•		•		•		•
	Freezing Thermostat		•		•		•		•		•
	Temperature Sensor		•		•		•		•		•
	Velocity Sensor		•		•		•		•		•
	Interior Air Quality Sensor		•		•		•		•		•
	Humidity Sensor		•		•		•		•		•
	Pres. Differential Transmitter		•		•		•		•		•

ACS 25 AIR HANDLING UNIT DIMENSIONS TABLE



MODEL	AIR FLOW (m³/s)	WIDTH (mm)	HEIGHT (mm)	A	E-H-F	TF	I	EI	S	BN	SN	SI	V	D	SS	E	IG	AIR FLOW (m³/s)	NET HEIGHT (mm)	NET WIDTH (mm)	NET DEPTH (mm)	NET HEIGHT (mm)	NET DEPTH (mm)	NET HEIGHT (mm)	NET DEPTH (mm)	HEAT RECOVERY	EXHAUST & FRESH AIR					
ACS	7	1033	850	610	1020	670	440	770	770	750	750	410	1020	300	760	590	600	1033	208	534	500	442	490	693	590	18	390	200	442	300	770	280
8	1163	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	1163	208	534	500	442	490	693	590	20	420	200	442	300	770	280
9	1441	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	1441	208	534	500	442	490	693	590	22	450	200	442	300	770	280
10	1719	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	1719	208	534	500	442	490	693	590	24	480	200	442	300	770	280
11	2000	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	2000	208	534	500	442	490	693	590	26	510	200	442	300	770	280
12	2281	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	2281	208	534	500	442	490	693	590	28	540	200	442	300	770	280
13	2562	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	2562	208	534	500	442	490	693	590	30	570	200	442	300	770	280
14	2843	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	2843	208	534	500	442	490	693	590	32	600	200	442	300	770	280
15	3124	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	3124	208	534	500	442	490	693	590	34	630	200	442	300	770	280
16	3405	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	3405	208	534	500	442	490	693	590	36	660	200	442	300	770	280
17	3686	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	3686	208	534	500	442	490	693	590	38	690	200	442	300	770	280
18	3967	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	3967	208	534	500	442	490	693	590	40	720	200	442	300	770	280
19	4248	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	4248	208	534	500	442	490	693	590	42	750	200	442	300	770	280
20	4529	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	4529	208	534	500	442	490	693	590	44	780	200	442	300	770	280
21	4810	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	4810	208	534	500	442	490	693	590	46	810	200	442	300	770	280
22	5091	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	5091	208	534	500	442	490	693	590	48	840	200	442	300	770	280
23	5372	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	5372	208	534	500	442	490	693	590	50	870	200	442	300	770	280
24	5653	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	5653	208	534	500	442	490	693	590	52	900	200	442	300	770	280
25	5934	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	5934	208	534	500	442	490	693	590	54	930	200	442	300	770	280
26	6215	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	6215	208	534	500	442	490	693	590	56	960	200	442	300	770	280
27	6496	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	6496	208	534	500	442	490	693	590	58	990	200	442	300	770	280
28	6777	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	6777	208	534	500	442	490	693	590	60	1020	200	442	300	770	280
29	7058	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	7058	208	534	500	442	490	693	590	62	1050	200	442	300	770	280
30	7339	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	7339	208	534	500	442	490	693	590	64	1080	200	442	300	770	280
31	7620	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	7620	208	534	500	442	490	693	590	66	1110	200	442	300	770	280
32	7901	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	7901	208	534	500	442	490	693	590	68	1140	200	442	300	770	280
33	8182	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	8182	208	534	500	442	490	693	590	70	1170	200	442	300	770	280
34	8463	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	8463	208	534	500	442	490	693	590	72	1200	200	442	300	770	280
35	8744	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	8744	208	534	500	442	490	693	590	74	1230	200	442	300	770	280
36	9025	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	9025	208	534	500	442	490	693	590	76	1260	200	442	300	770	280
37	9306	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	9306	208	534	500	442	490	693	590	78	1290	200	442	300	770	280
38	9587	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	9587	208	534	500	442	490	693	590	80	1320	200	442	300	770	280
39	9868	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	9868	208	534	500	442	490	693	590	82	1350	200	442	300	770	280
40	10149	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	10149	208	534	500	442	490	693	590	84	1380	200	442	300	770	280
41	10430	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	10430	208	534	500	442	490	693	590	86	1410	200	442	300	770	280
42	10711	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	10711	208	534	500	442	490	693	590	88	1440	200	442	300	770	280
43	10992	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	10992	208	534	500	442	490	693	590	90	1470	200	442	300	770	280
44	11273	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	11273	208	534	500	442	490	693	590	92	1500	200	442	300	770	280
45	11554	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	11554	208	534	500	442	490	693	590	94	1530	200	442	300	770	280
46	11835	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	11835	208	534	500	442	490	693	590	96	1560	200	442	300	770	280
47	12116	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	12116	208	534	500	442	490	693	590	98	1590	200	442	300	770	280
48	12397	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	12397	208	534	500	442	490	693	590	100	1620	200	442	300	770	280
49	12678	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	12678	208	534	500	442	490	693	590	102	1650	200	442	300	770	280
50	12959	850	610	1020	1020	670	440	770	770	750	750	410	1020	300	760	590	600	12959	208</													

BOILER SU DRIP
CHILLED WATER INLET



DRAIN



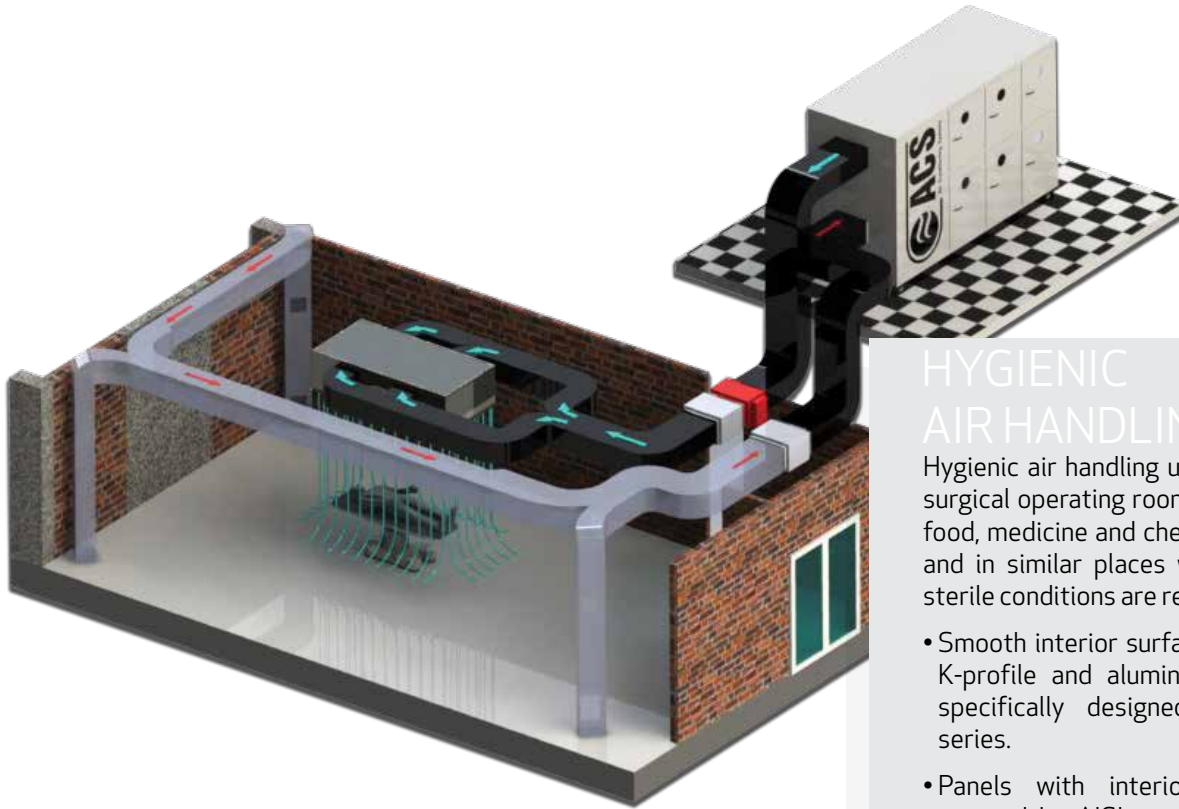
HYGIENIC AIR HANDLING UNITS

GÜVENLİK TALİMATI

TAVSİYE EDİLEN ENERJİ KESME PROSEDÜRÜ

- 1- Enerjinin kesileceğini diğer personele duyurulur.
- 2- Ana panodan enerjiyi kesiniz.
- 3- Panonun kapağını kilitleyiniz.
- 4- Personeli cihazdan uzaklaştırınız.
- 5- Çalıştırma butonuna basarak veya şalteri çevirerek enerjinin kesildiğini test ediniz.
- 6- Cihazı tekrar çalıştırmadan önce personeli cihazdan uzaklaştırınız.
- 7- Ana panonun kilidini açınız.
- 8- Ana panodan enerjiyi veriniz.
- 9- Enerjinin yeniden verildiğini ve cihazın çalışacağını personele duyurunuz.

VANTİLATÖR
HAVA AKIŞI YOK
BİLGİSİ



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 K-profile and aluminium 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.



A photograph of an air handling unit (AHU) with heat recovery. The unit is constructed from metal and features two large, circular, mesh-covered fans. The fans are positioned side-by-side, and the unit is mounted on a wall. The text "AIR HANDLING UNIT WITH HEAT RECOVERY" is overlaid on the image in a white, sans-serif font.

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.

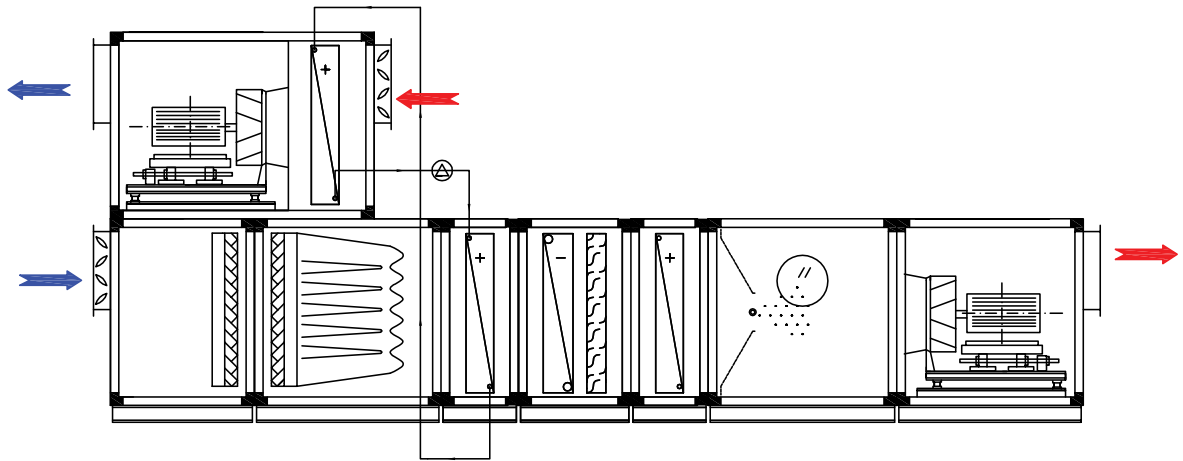


AIR HANDLING UNIT WITH HEAT RECOVERY

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.

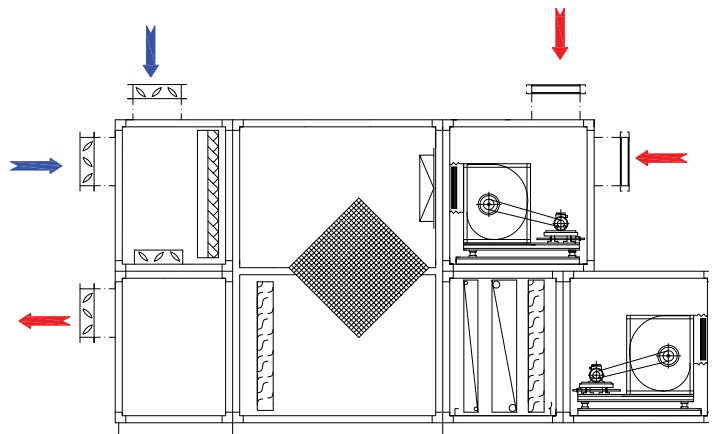
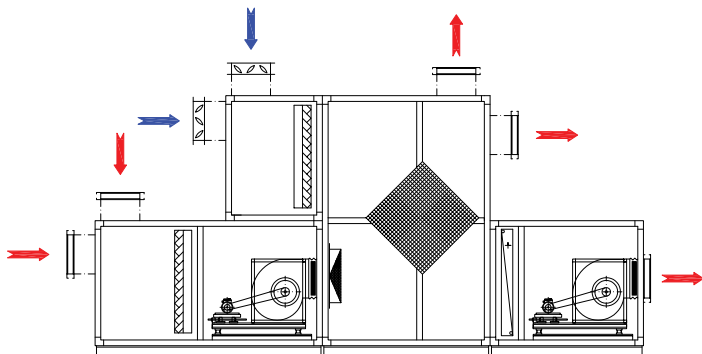
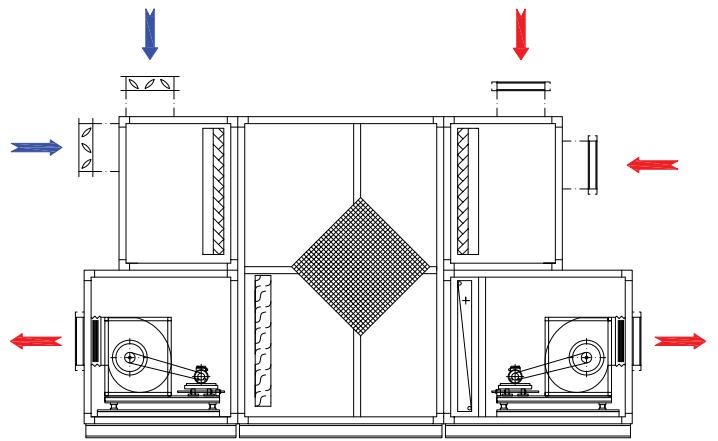
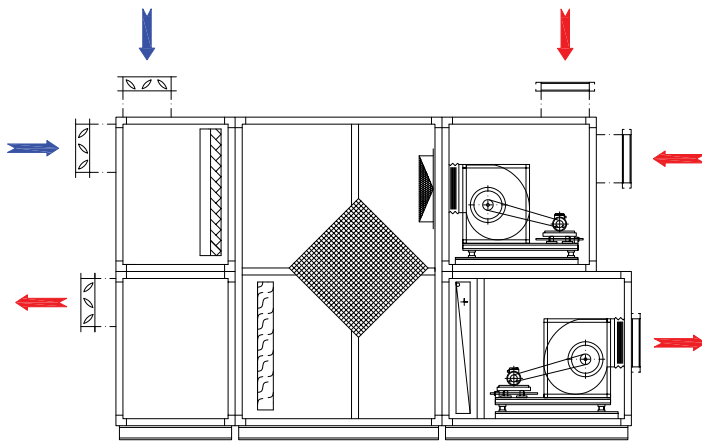
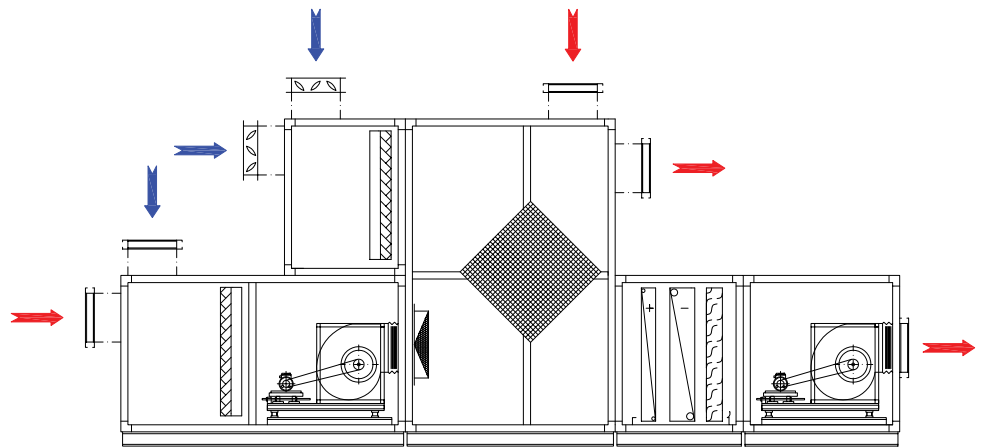
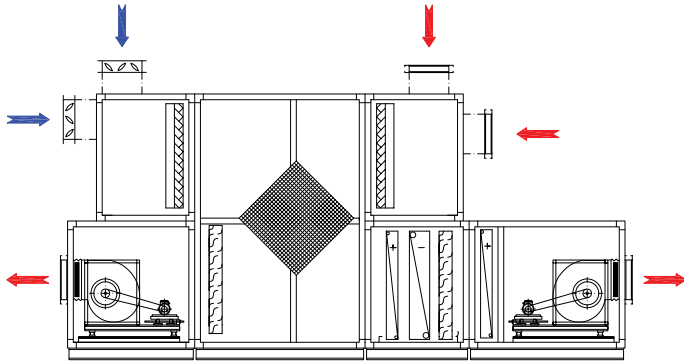
The purpose of the system is to reclaim the energy of the air on the exhaust side and transfer it to the fresh air; the system can be used for both heating and cooling.



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.

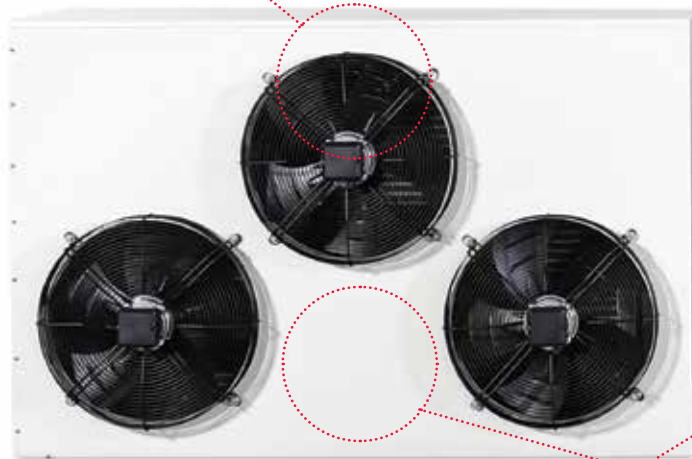
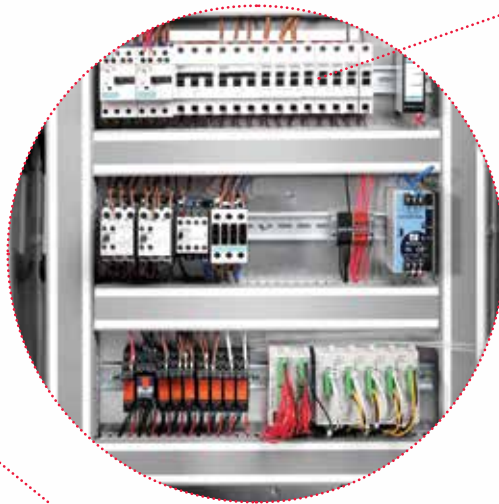
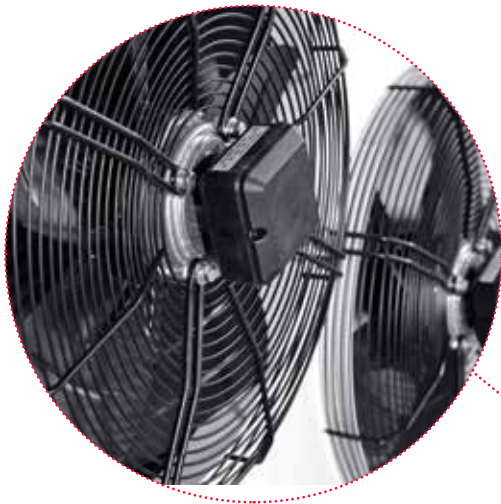
Packaged Type Hygienic Air Handling Unit combines a hygienic air handling unit and cooling group within the single unit thus provides an advantageous solution. Optionally, DX unit can be used with water heat exchangers, condenser and compressor group can be placed inside or outside the unit in order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

FEATURES

- Smooth inner surface is formed by means of K-profile and steel 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.





PACKAGED TYPE HYGIENIC AIR HANDLING UNITS

FRAMEWORK

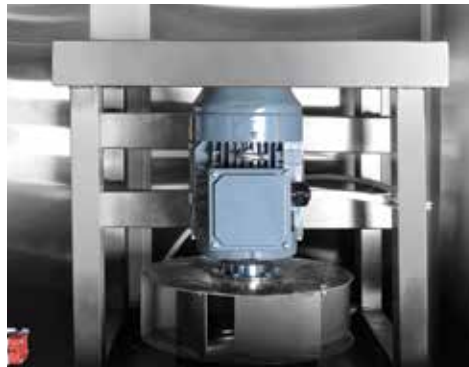
The frame is composed of specially rolled steel profiles and plastic brackets designed specially for these profiles. In order to minimize pressure loss and avoid aggregation of contaminants inside the air handling unit, a smooth inner surface is formed by means of the profiles specially designed for 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 of 1 mm thickness; and the interior surfaces are made of stainless steel sheet of 1 mm thickness. Two layers are connected via patented K-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 dismantling 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

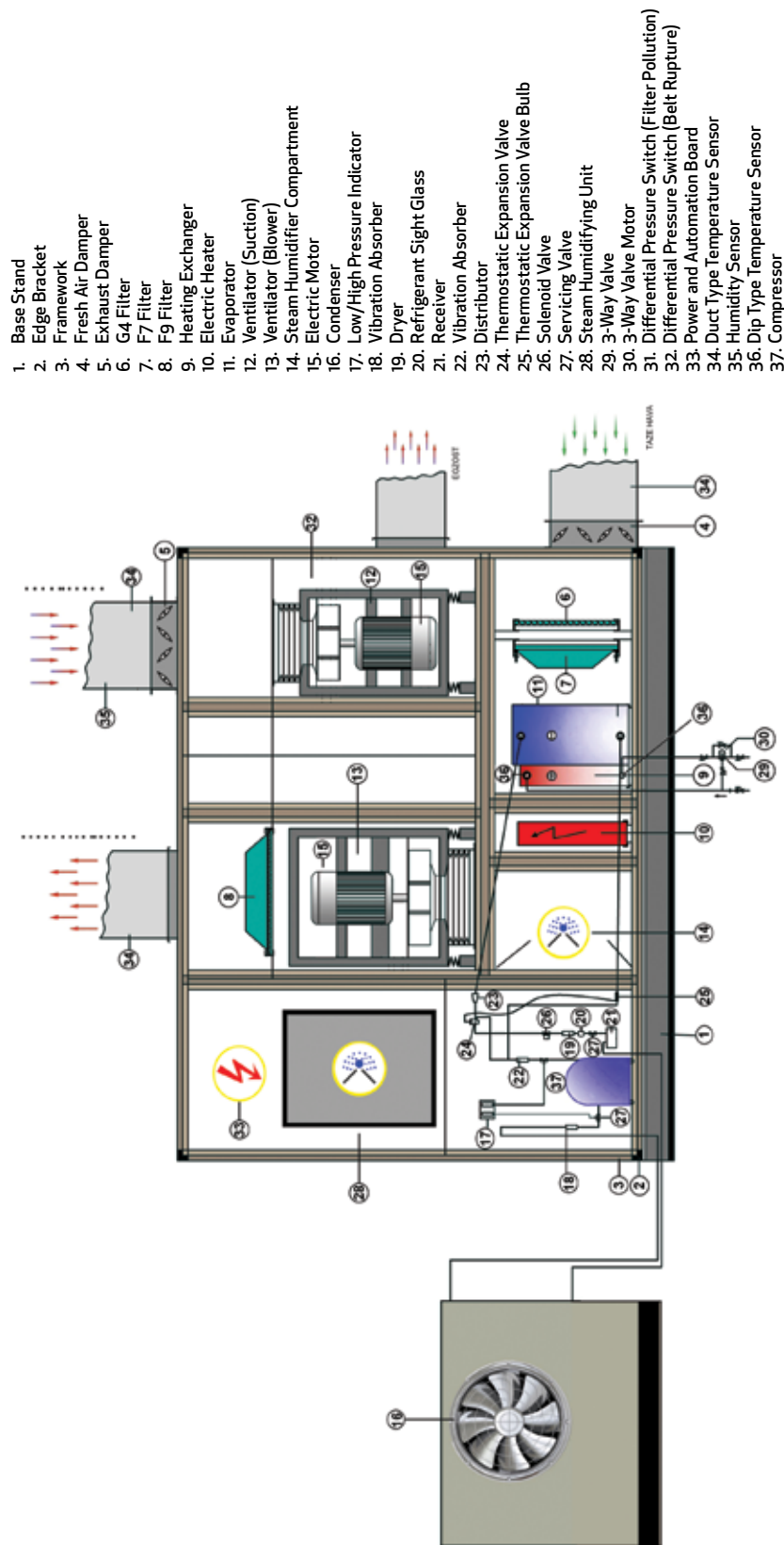
PLC, electric board and automatic control equipment are used to adjust and maintain the values of temperature, humidity, positive pressure and negative pressure of filtered air used in the hygienic space. The unit interprets the data transmitted by the sensors and changes the air flow until the required 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
	m³/h	m³/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

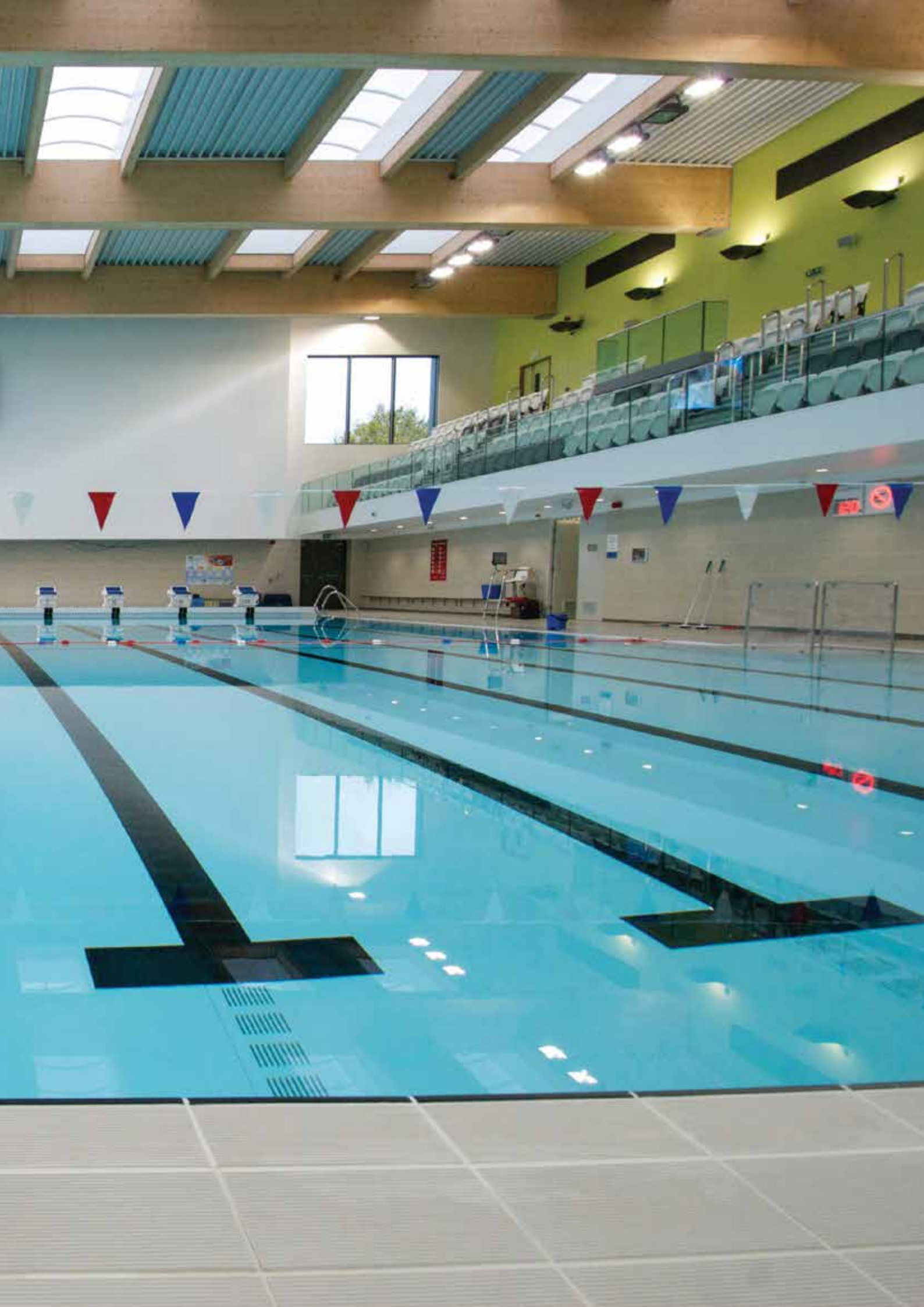
Heating capacities are valid for -12°C outside ambient temperature. Cooling capacities and compressor ratings are valid for condensation temperature at 45°C and evaporation temperature at 7°C. Please consult our company for different condensation and evaporation temperatures. Cooling capacities may vary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







POOL DEHUMIDIFYING UNIT

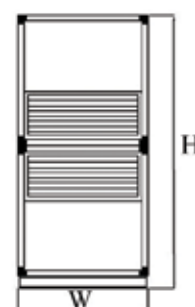
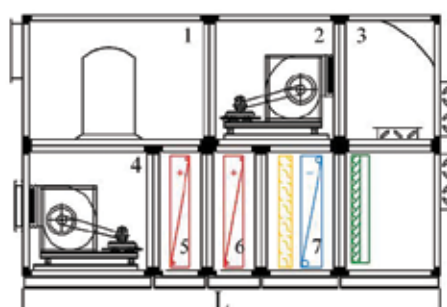


POOL DEHUMIDIFYING UNIT

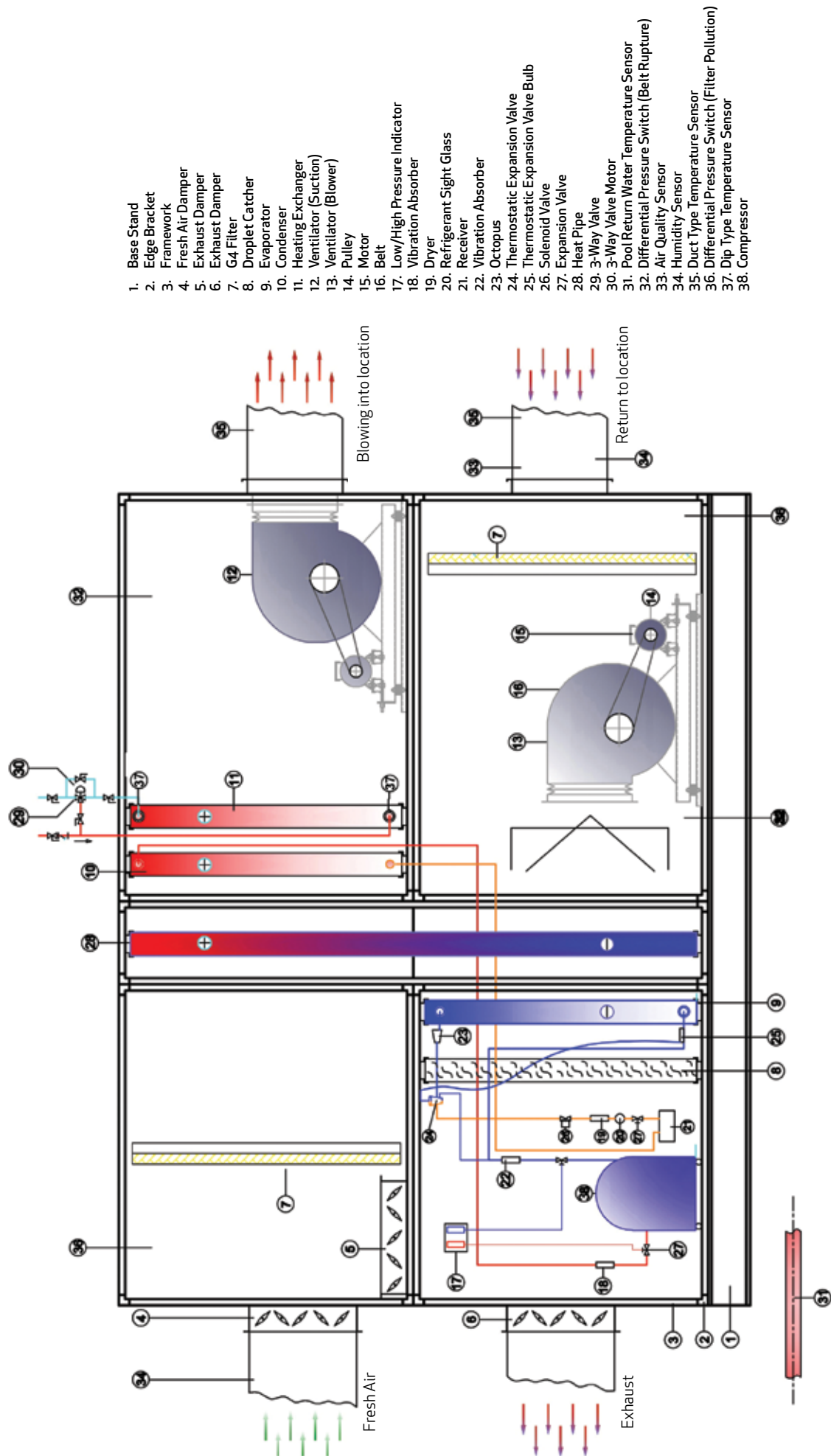
Evaporation of water and pool chemicals from indoor swimming pools deteriorate the comfort conditions of ambient air and harm the building structure. Therefore it is essential to remove the evaporating pool water out of the building and keep the relative humidity below 60%.

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



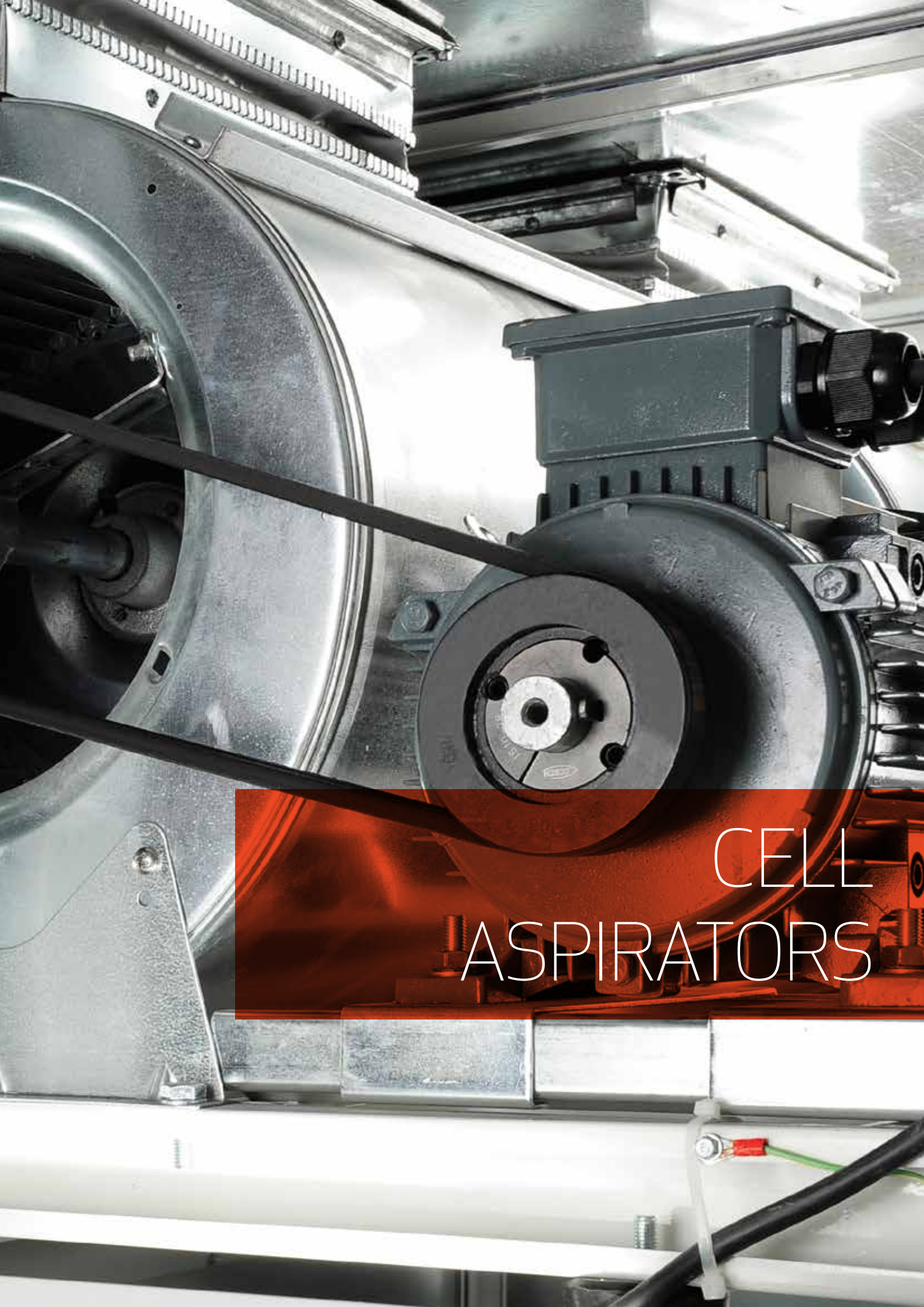
GÜVENLİK TALİMATI

**TAVSİYE EDİLEN
ENERJİ KESME PROSEDÜRÜ**

1. Enayetiň kadawylygy diňer şahsanyň depýetidir.
2. Iňňa gysymyň enayeti kadawydyr.
3. Perzant kadawyň kadawydyr.
4. Perzant kadawyň kadawydyr.
5. Kadawyň kadawy kadawydyr.
6. Kadawyň kadawy kadawydyr.
7. Kadawyň kadawy kadawydyr.
8. Kadawyň kadawy kadawydyr.
9. Kadawyň kadawy kadawydyr.
10. Kadawyň kadawy kadawydyr.

DİKKAT

the information from
of social re
is different
also have some optical
and chemical properties



CELL ASPIRATORS

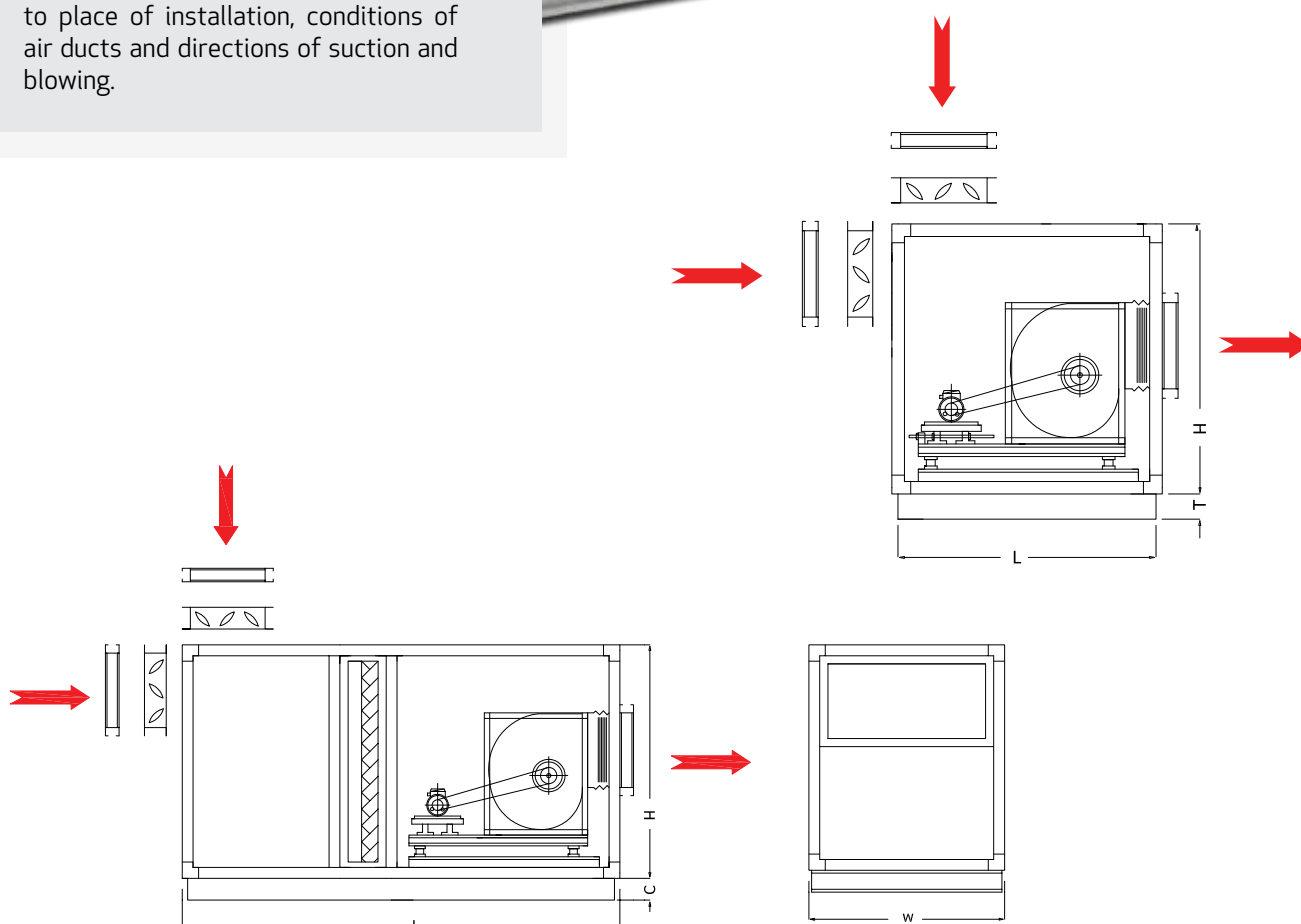
CELL ASPIRATORS

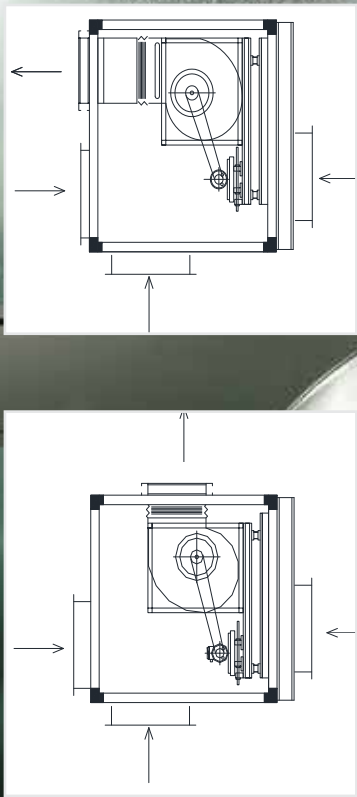
Cell aspirators are used in places where only ventilation is needed without heating or cooling. Depending on the physical properties of the air, the unit can be designed with low or high suction/blowing capacity to clean ambient air. The unit is produced with high quality material and workmanship to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





MODEL	AIR FLOW RATE	FAN TYPE	THROW MOUTH			SUCTION MOUTH			POSITION 1			POSITION 2			BASE
			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	LENGTH	WIDTH	HEIGHT	LENGTH	WIDTH	HEIGHT	
	m³/h								L (mm)	W (mm)	H (mm)	L (mm)	W (mm)	H (mm)	T (mm)
AHA7	2.000	AT 7-7	232	208	600	200	835	700	835	700	650	835	700	650	100
AHA9	3.300	AT 9-9	298	262	700	200	885	800	885	800	700	885	800	700	100
AHA10	5.100	AT 10-10	331	289	750	300	935	850	935	850	750	935	850	750	100
AHA12	7.200	AT 12-12	395	341	900	350	1035	1000	1035	1000	800	1035	1000	800	100
AHA15	10.000	AT 15-15	471	404	1050	400	1085	1150	1085	1150	900	1085	1150	900	100
AHA18	14.500	AT 18-18	557	478	1250	450	1235	1350	1235	1350	1050	1290	1350	1050	100
AHA45	18.500	(A/R) DH 450-(R/K)	569	569	1300	550	1335	1400	1335	1400	1100	1385	1400	1100	100
AHA50	23.500	(A/R) DH 500-(R/K)	638	638	1450	600	1485	1550	1485	1550	1250	1535	1550	1250	100
AHA56	29.500	(A/R) DH 560-(R/K)	715	715	1650	650	1585	1750	1585	1750	1350	1635	1750	1350	100
AHA63	36.200	(A/R) DH 630-(R/K)	801	801	1850	750	1735	1950	1735	1950	1450	1785	1950	1450	100
AHA71	46.000	(A/R) DH 710-(R/K)	898	898	1950	800	1935	2050	1935	2050	1650	1985	2050	1650	100
AHA80	58.200	(A/R) DH 800-(R/K)	1007	1007	2200	950	2135	2300	2135	2300	1800	2185	2300	1800	100
AHA90	73.000	(A/R) DH 900-(R/K)	1130	1130	2400	1100	2285	2500	2285	2500	2000	2335	2500	2000	100
AHA100	92.500	(A/R) DH 1000-(R/K)	1267	1267	2750	1300	2535	2850	2535	2850	2200	2535	2850	2200	100







FRESH AIR HANDLING UNITS WITH HEAT RECOVERY (VAM UNITS)

FRESH AIR HANDLING UNIT WITH HEAT RECOVERY



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

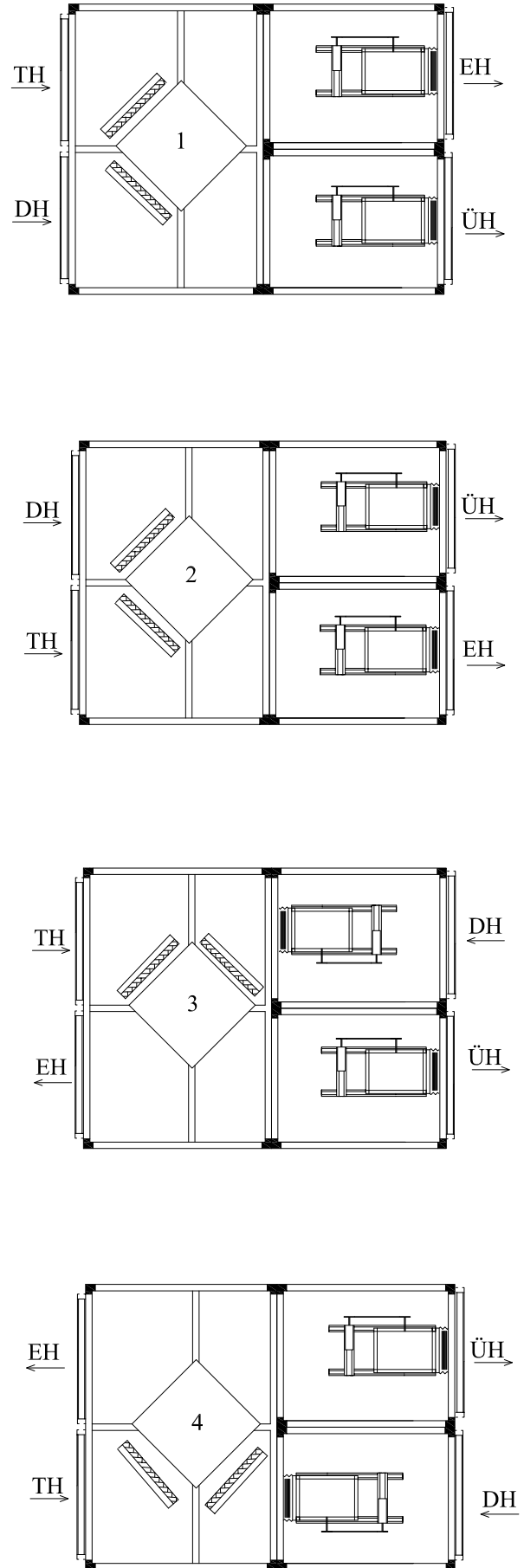


DUCT TYPE HEAT RECOVERY UNIT (FAN WITH SELF DRIVE)

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	m ³ /h	500	1,000	1,500	2,000	2,500	3,000	4,000	5,000
	STATIC PRESSURE	Pa	100	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	1,5 x 2	1,5 x 2
	VOLTAGE	V	230	230	230	230	230	230	400	400
DIMENSIONS	LENGTH (L)	mm	1,110	1,310	1,310	1,310	1,310	1,410	2,200	2,200
	HEIGHT (H)	mm	360	440	440	440	490	640	680	680
	WIDTH (W)	mm	770	870	870	1,050	1,210	1,310	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	m ³ /h	1,000	1,500	2,000	2,500	3,000	3,500	4,500	5,000
	STATIC PRESSURE	Pa	200	200	200	250	250	250	300	300
	MOTOR RATING	kW	0,37x2	0,55x2	0,75x2	0,75x2	1,1x2	1,1x2	2,2x2	2,2x2
	VOLTAGE	V	380	380	380	380	380	380	380	380
DIMENSIONS	LENGTH (L)	mm	1,300	1,550	1,550	1,700	1,850	2,200	2,200	2,200
	HEIGHT (H)	mm	440	440	460	500	560	720	720	720
	WIDTH (W)	mm	900	1,000	1,000	1,100	1,100	1,250	1,250	1,250





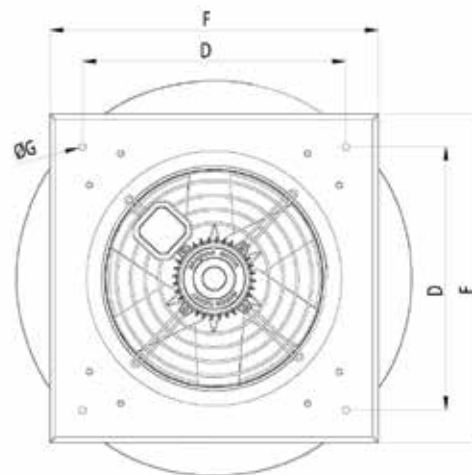
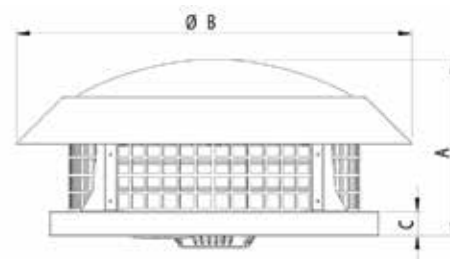
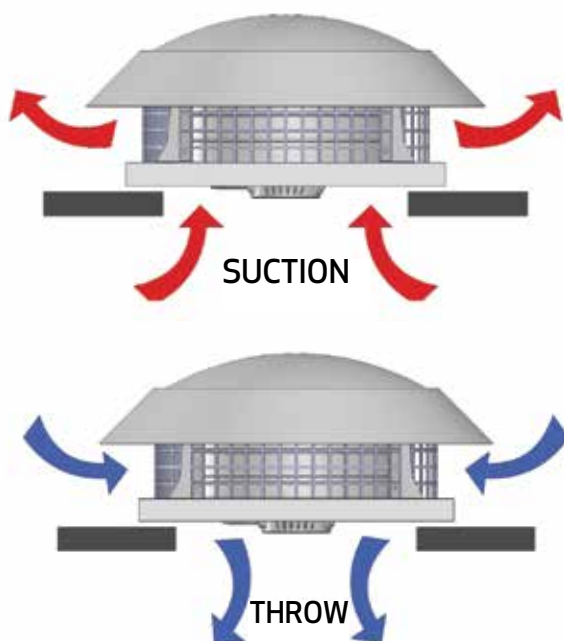


ROOF AND DUCT TYPE VENTILATORS

ROOF VENTILATORS

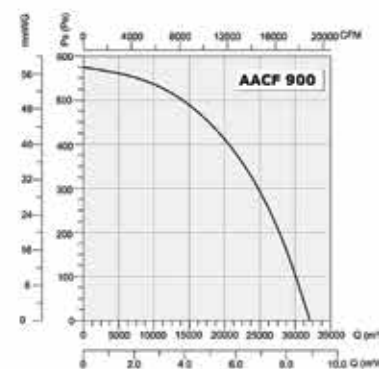
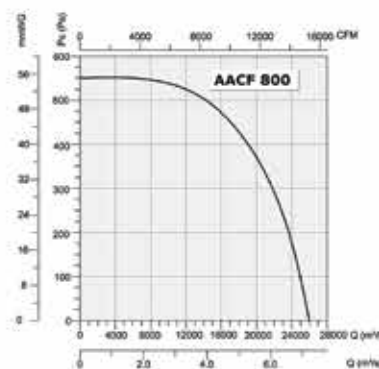
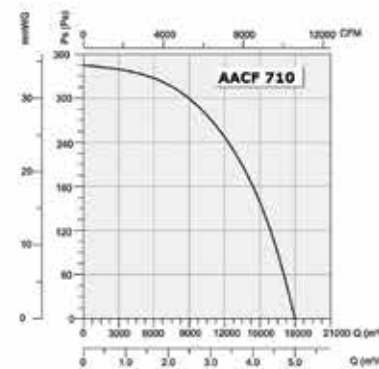
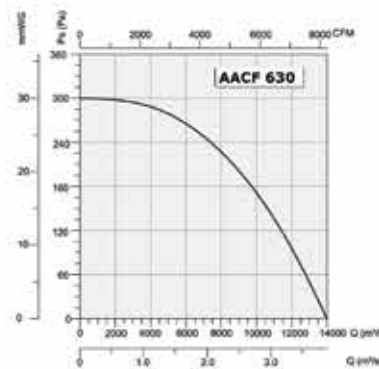
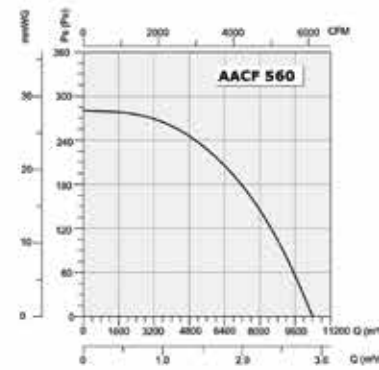
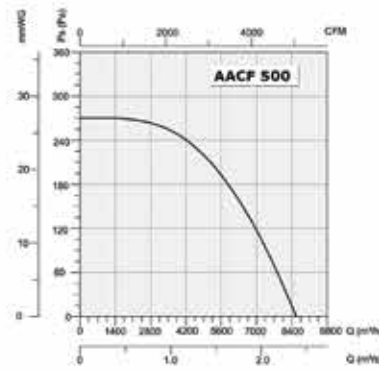
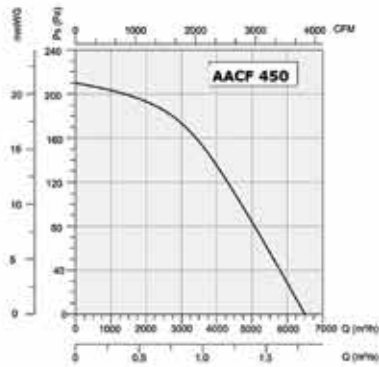
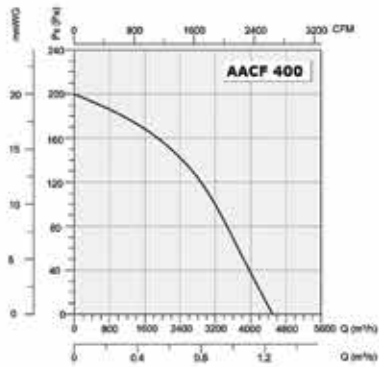
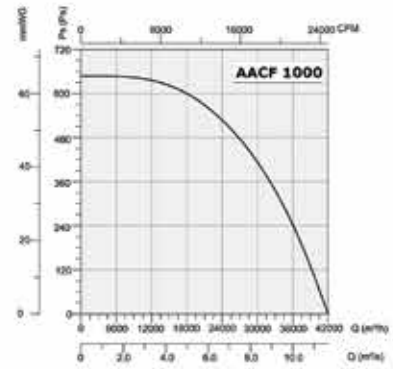
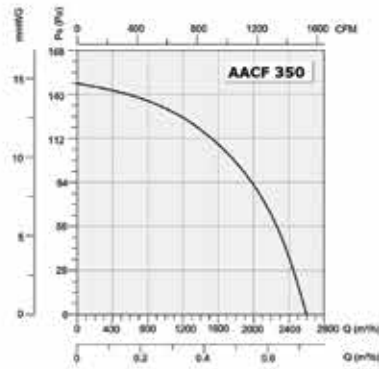
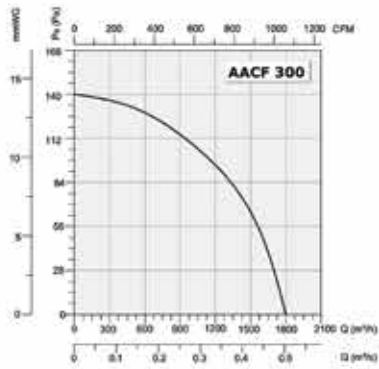
AACF Horizontal Throw Axial Roof Fans

- 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

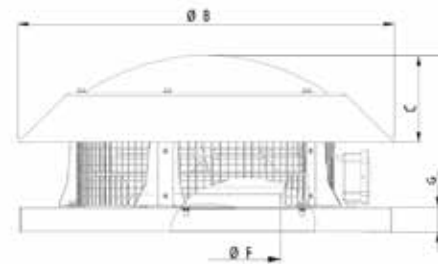
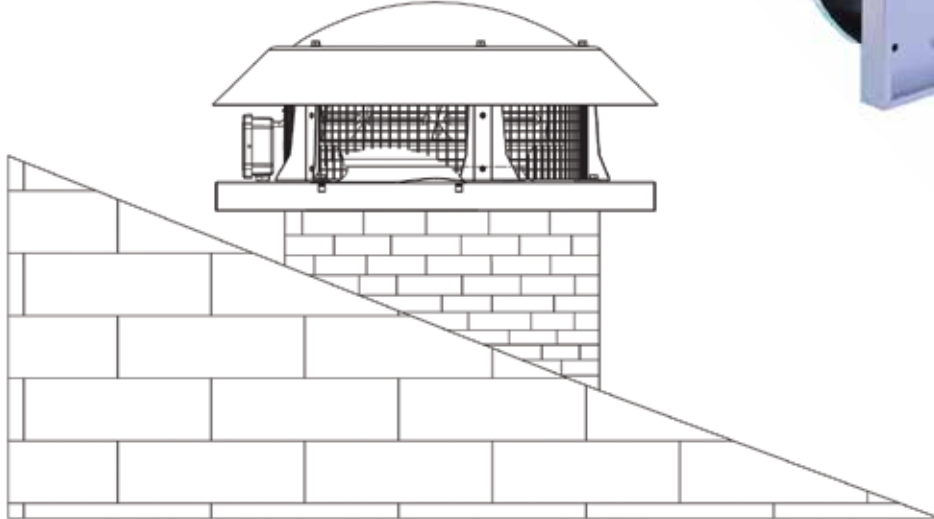
TYPE	VOLTAGE	FREQUENCY	POWER	CAPACITOR	CYCLE	FLOW RATE	NOISE LEVEL	WEIGHT
	V	Hz	W	μF	d/d	m³/h	dB(A)	kg
AACF 300M/AACF 300T	230/380	50	180	8/-	1430	1800	48	13.5
AACF 350M/AACF 350T	230/380	50	180	8/-	1360	2600	49	17.5
AACF 400M/AACF 400T	230/380	50	250	8/-	1400	4500	51	21
AACF 450M/AACF 450T	230/380	50	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



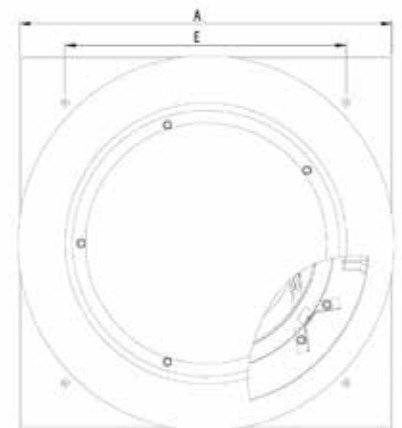
ROOF VENTILATOR

ARF Horizontal Throw Centrifugal Roof Fans

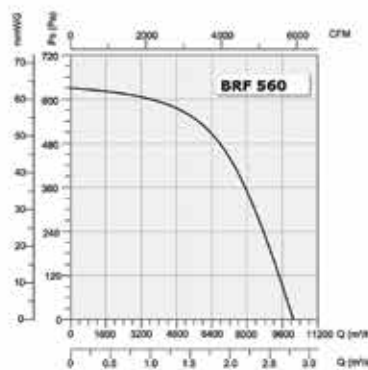
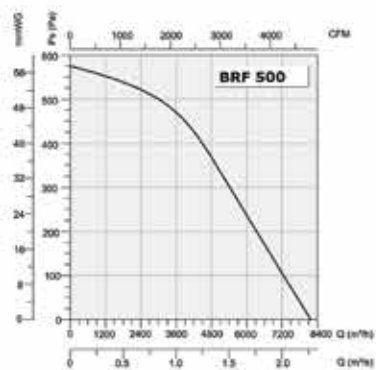
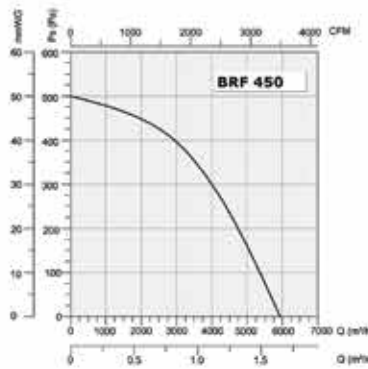
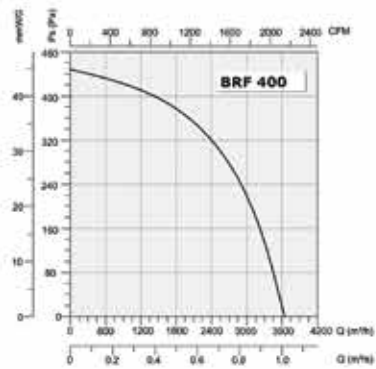
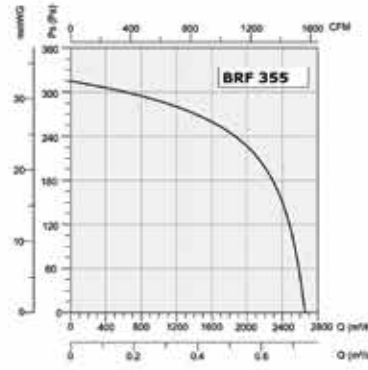
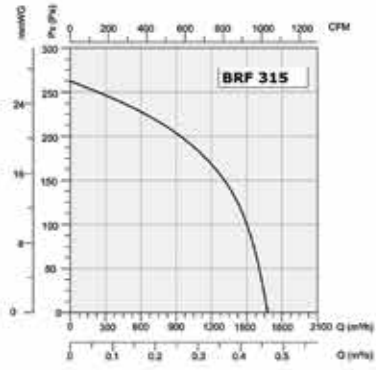
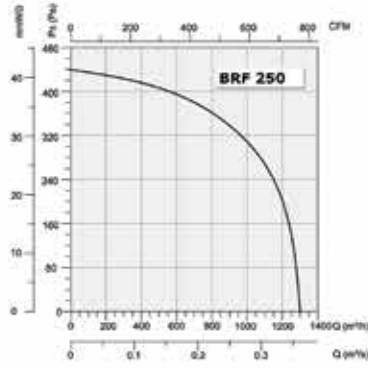
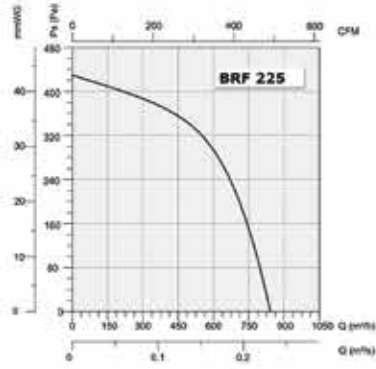
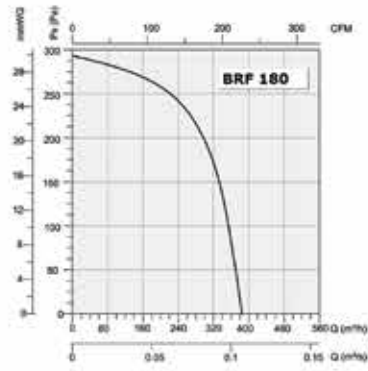
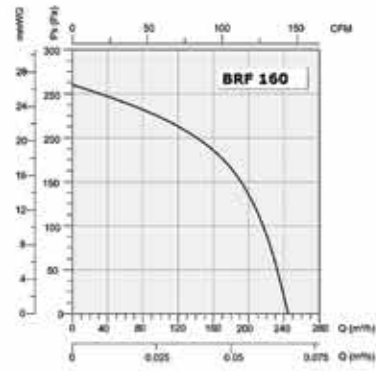
- Easy installation on chimney.
- High efficiency, low noise level.
- Electrostatic powder coated body and galvanized steel impeller with backward curved blades.
- Fan guard grill.
- Capacity control via optional speed control device.
- Both suction and throw functions.



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



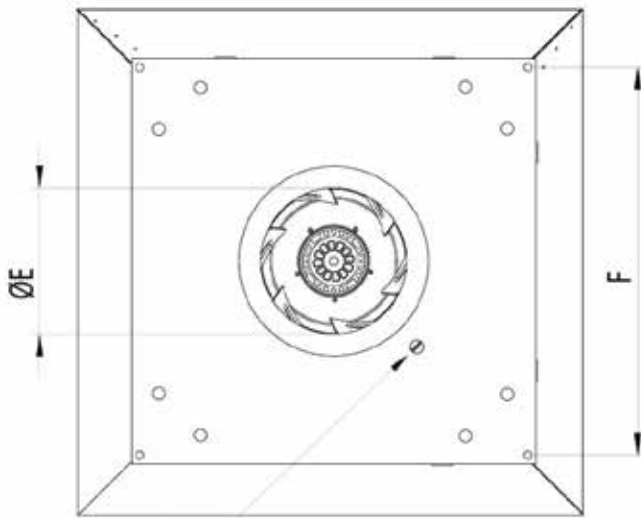
TYPE	VOLTAGE	FREQUENCY	POWER	CAPACITOR	CYCLE	FLOW RATE	NOISE LEVEL	WEIGHT
	V	Hz	W	µF	d/d	m³/h	dB(A)	kg
ARF 160	230	50	65	2	2547	245	45	4
ARF 180	230	50	85	2.5	2460	385	47	4.5
ARF 225	230	50	130	5	2640	850	48	7
ARF 250	230	50	160	6	2685	1300	52	8
ARF 315	230	50	120	6	1420	1680	54	10
ARF 355	230	50	200	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



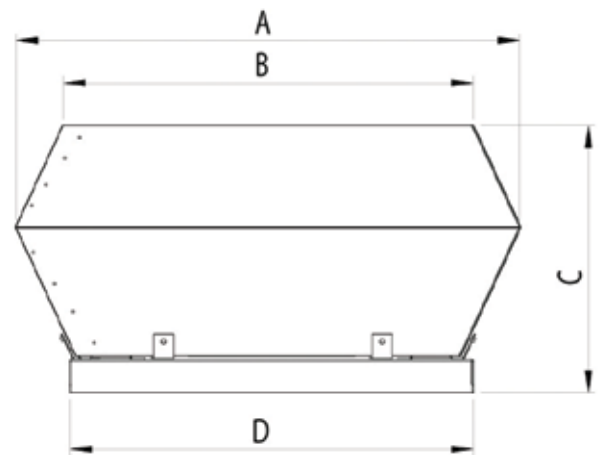
ROOF VENTILATOR

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.

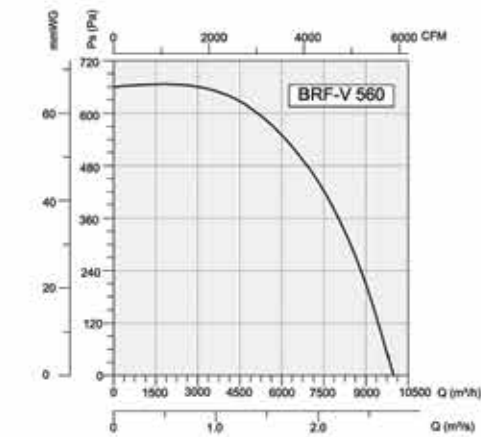
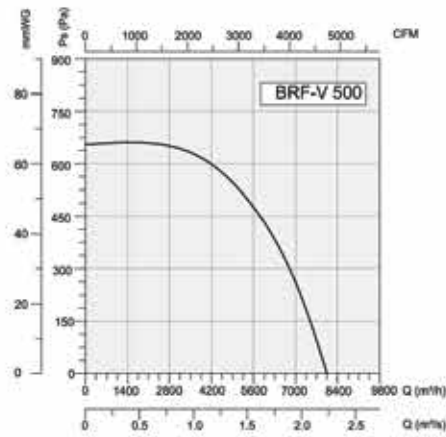
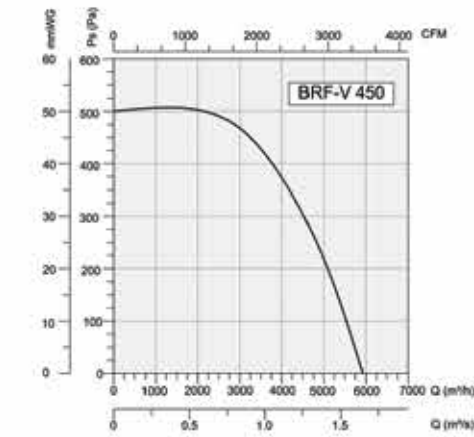
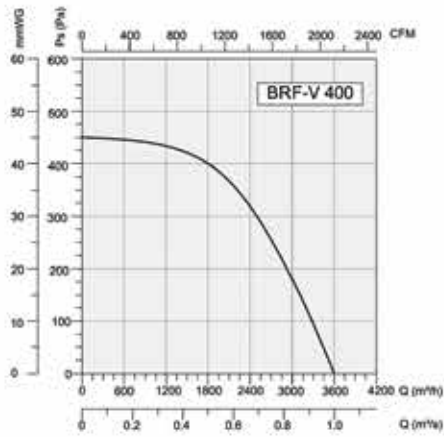
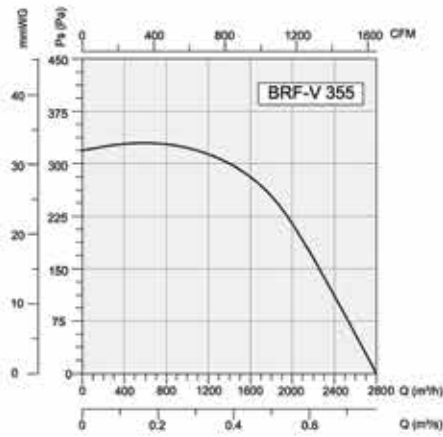
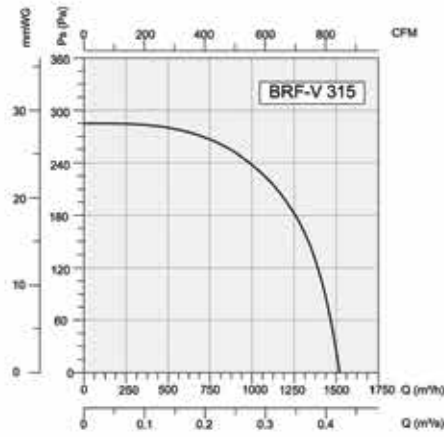
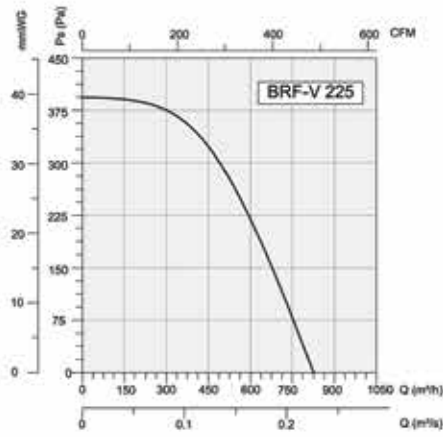


Rain water drainage hole



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

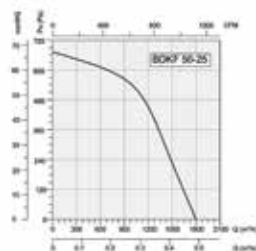
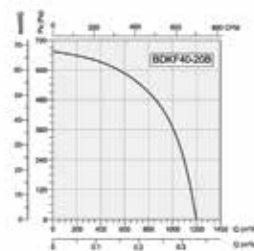
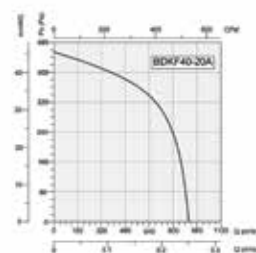
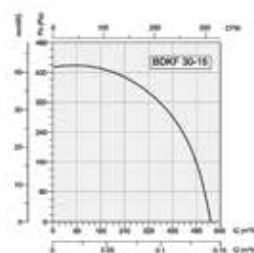
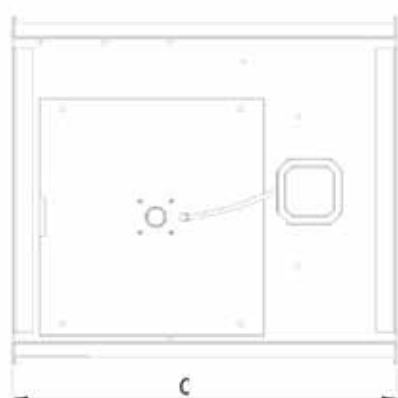
TYPE	VOLTAGE	FREQUENCY	POWER	CAPACITOR	CYCLE	FLOW RATE	NOISE LEVEL	WEIGHT
	V	Hz	W	µF	d/d	m³/h	dB(A)	kg
ARF-V 225	230	50	130	5	2640	850	48	7
ARF-V 315	230	50	120	4	1420	1550	54	10
ARF-V 355	230	50	200	6	1400	2800	58	16
ARF-V 400	230	50	345	12	1375	3600	62	29
ARF-V 450	230	50	595	18	1365	5800	63	37
ARF-V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



DUCT TYPE VENTILATORS

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.

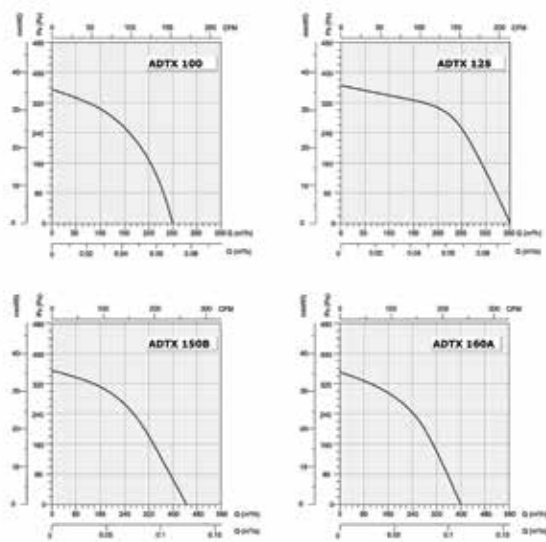
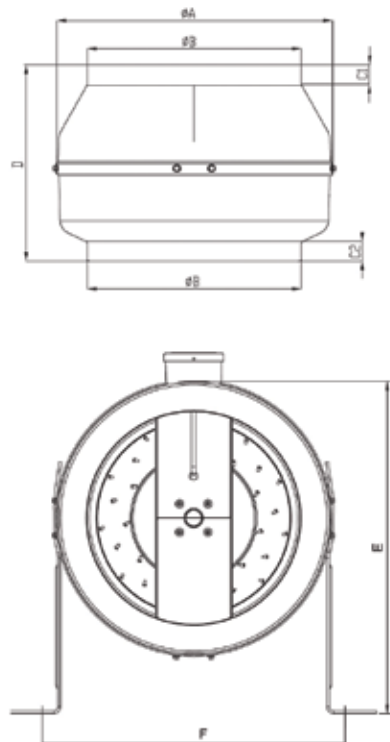


TYPE	A	B	C	D	E	F	G
ADKF 30-15	150	300	400	320	170	350	200
ADKF 40-20A	200	400	500	420	220	450	250
ADKF 40-20B	200	400	500	420	220	450	250
ADKF 50-25	250	500	565	520	270	550	300
ADKF 60-30	300	600	650	620	320	650	350
ADKF 60-35A	350	600	760	620	370	650	400
ADKF 60-35B	350	600	760	620	370	650	400
ADKF 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

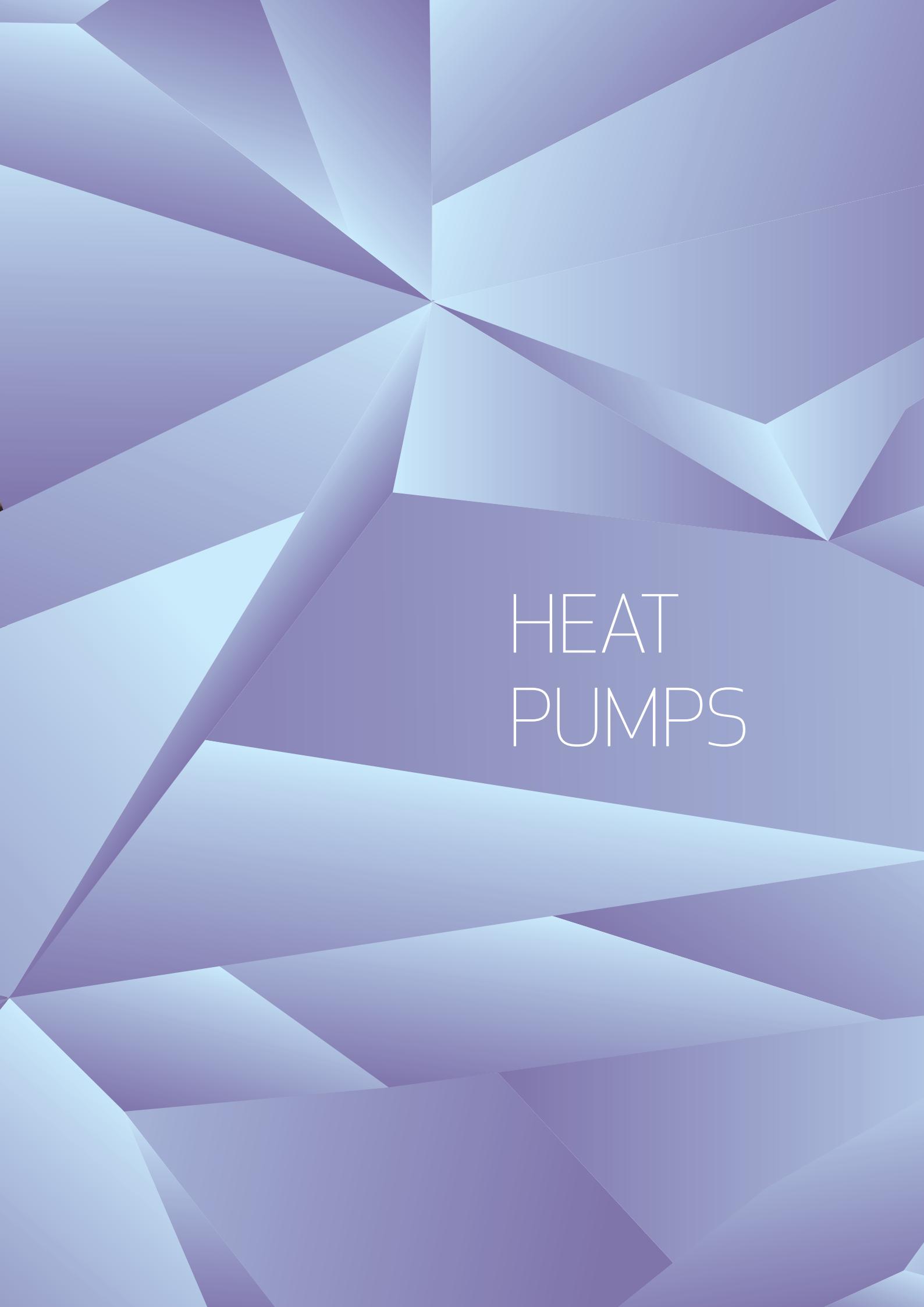
- Easy installation to duct.
- High efficiency, low noise level with aerodynamic design.
- Electrostatic powder coated body and galvanized steel impeller with backward curved blades.
- Capacity control via optional speed control device.



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	m³/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



The background is an abstract composition of various-sized triangles in shades of purple and blue. The triangles are arranged in a way that creates a sense of depth and movement, with some triangles pointing towards the center and others pointing outwards. The colors range from light, almost white, to deep, dark purple.

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 only 1kW electric power, are turned into smart units.

Hybrid heat pumps for green buildings

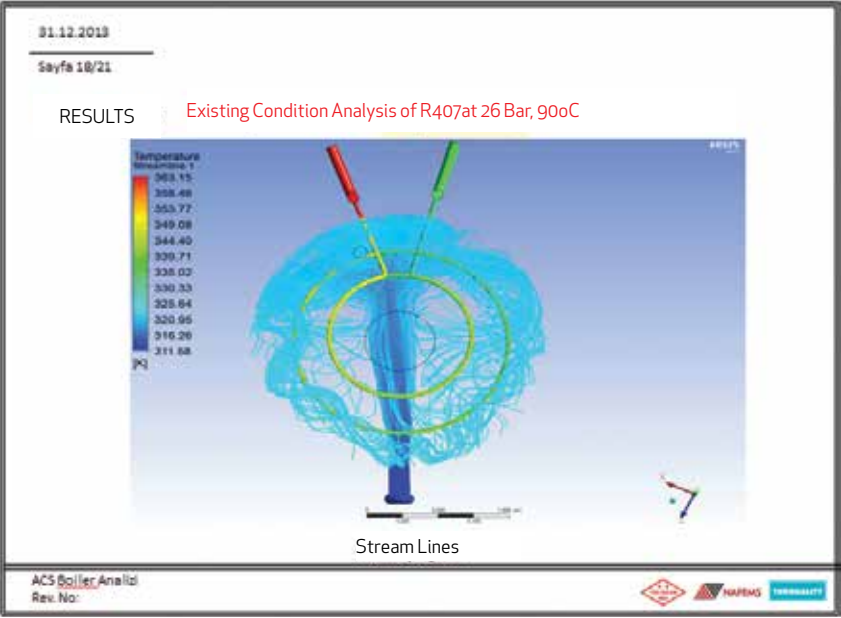
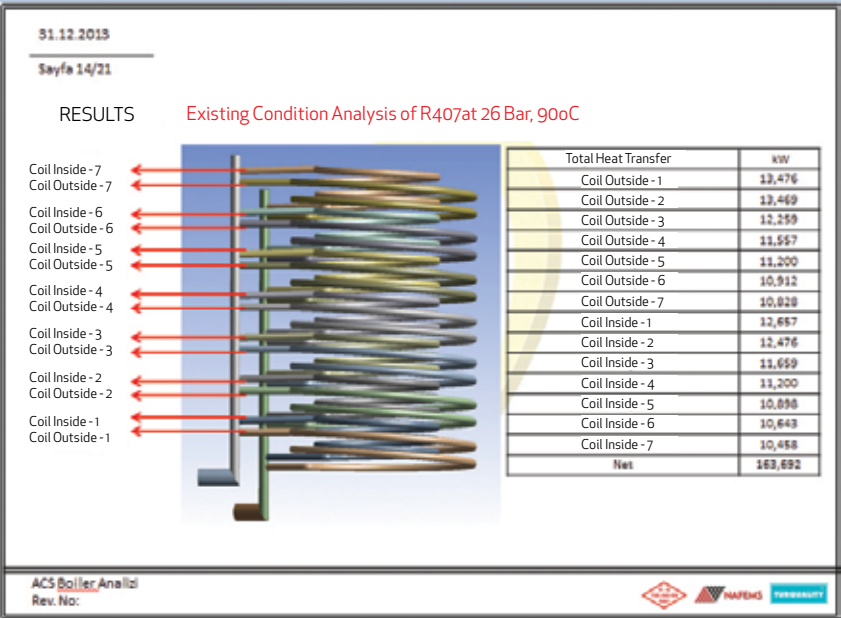
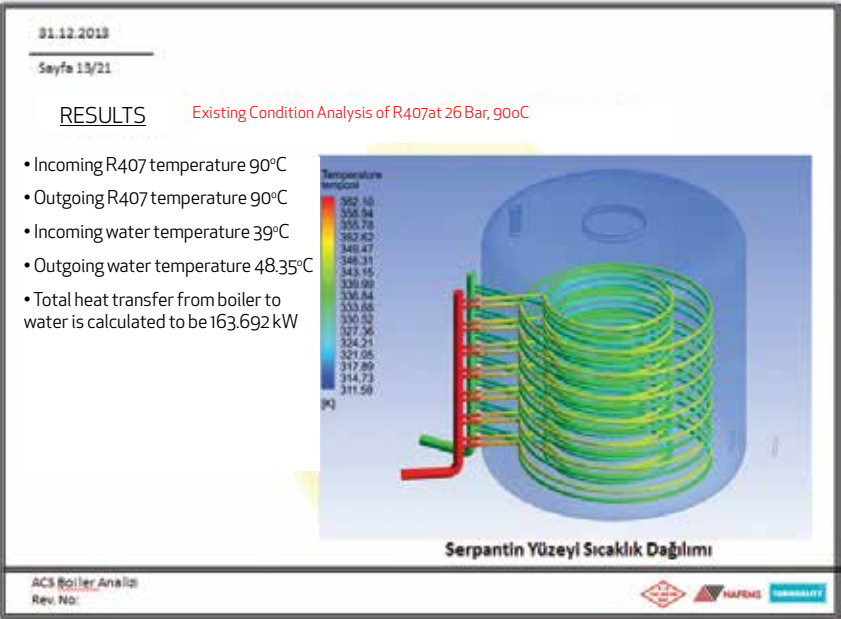
Energy saving and low emission perspective of green buildings encouraged the effective HVAC solutions and inspired the innovation that lead to the hybrid source heat pumps which can utilize underground heat sources. Hybrid heat pumps use cold water and simultaneously supply hot water to the facility. 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 pump that 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.

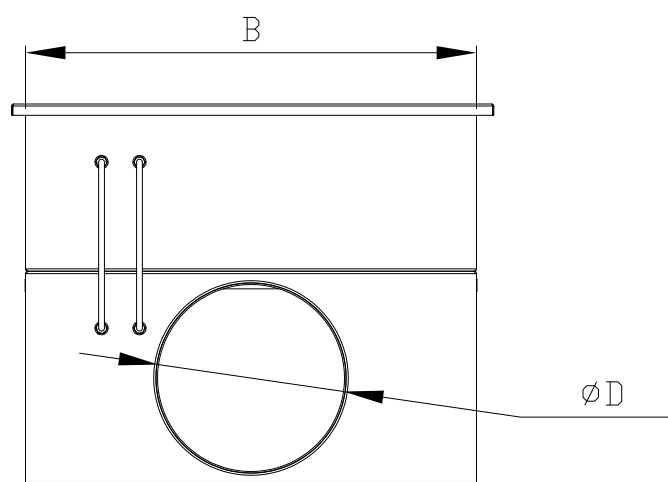
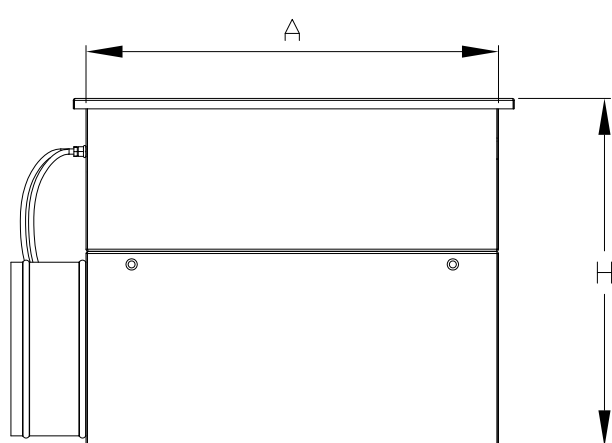
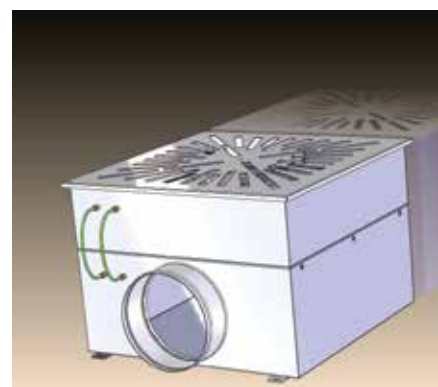
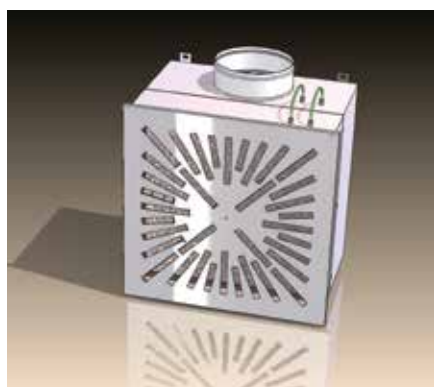
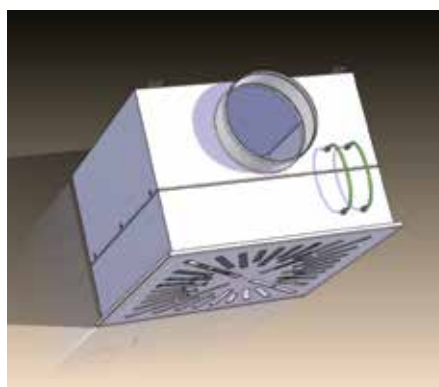






HEPA FILTER BOXES

- 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 diffuser.
- Low resistance and high capacity H-13 and H-14 HEPA filters in the high quality MDF enclosures; conforming to EN1822.



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.

A photograph of an ACS-MART Automation unit, a grey industrial device with a control panel featuring a small screen and several buttons. The unit is mounted in a white enclosure, and various colored wires (red, yellow, black, brown) are connected to its bottom. A red semi-transparent banner is overlaid on the bottom half of the image, containing the text 'ACS-MART AUTOMATION' in white. A warning label is visible on the front of the unit.

ACS-MART 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.

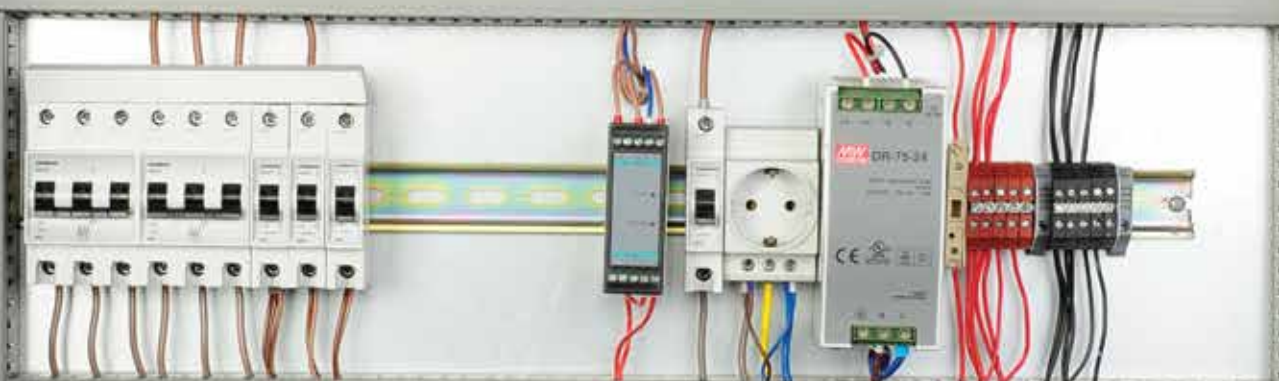
Besides, ACSmart decides the best option among exterior and interior ambient values for the best efficiency.

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.

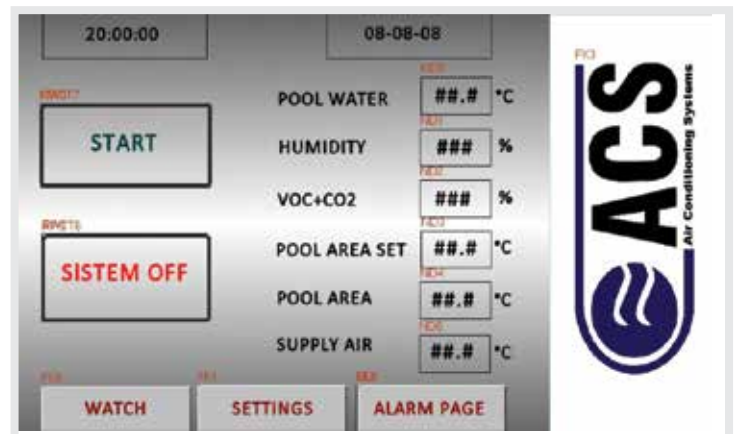
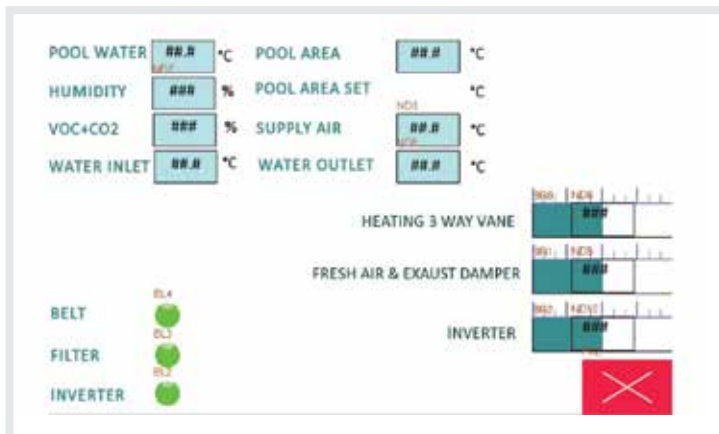
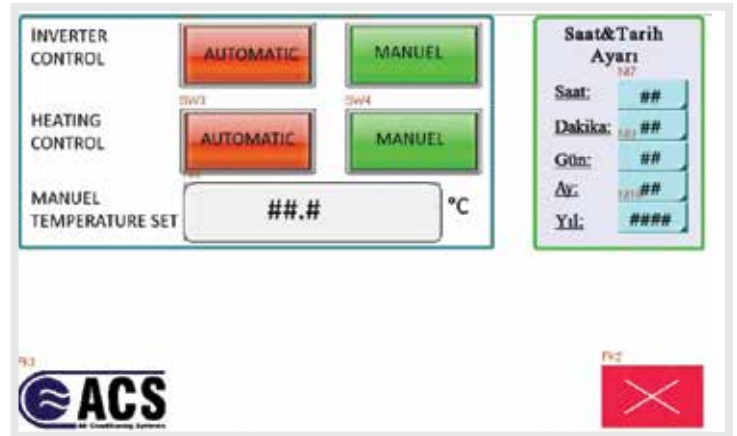
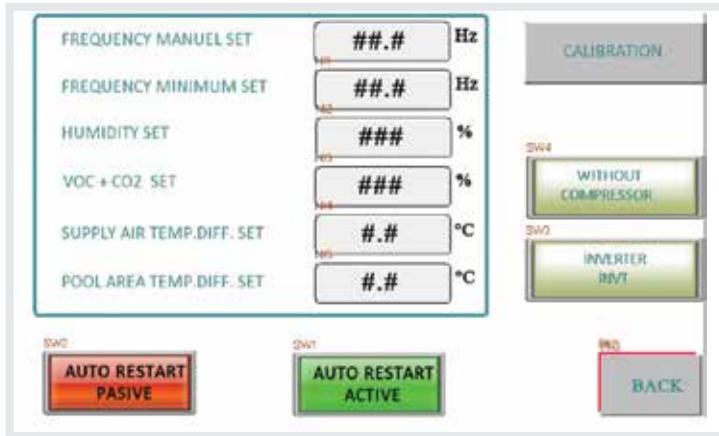
Please consult our engineers for detailed information.







AUTOMATION SYSTEM TOUCH SCREEN PANEL SCREEN SNAPSHOTS



FACTORY





REFERENCES



Ramada Plaza, ANTALYA



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



Royal Dragon Hotel, ANTALYA



State Hospital, 400 beds, ADIYAMAN



Yuksekkale Yüksek İhtisas Hospital, KIRIKKALE

HOTELS

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

HOSPITALS

- District Research Hospital, 300 Beds Maternity Hospital
- 19 Mayıs University Hospital I. and II. Stage
- Adıyaman State Hospital, 400 Beds
- Akcaabat State Hospital, 200 Beds / Toki
- Akcakale State Hospital, 75 Beds
- Akdagmadeni State Hospital, 50 Beds
- Akyazi Rehabilitation Centre
- Alacam State Hospital Surgical Operating Rooms
- Ankara Hospital / Ministry Of Health
- Ankara Occupational Diseases Hospital.
- Ankara Numune Education and Research Hospital
- Ankara Tube Baby Centre
- Arte Hekimkoy Tip Centre
- Artvin State Hospital
- Ataturk State Hospital New Born Unit
- Ataturk Education and Research Hospital - Katipçebe University
(New department with 36 Operating Rooms)
- Ataturk Pulmonary Disorders Hospital / Ministry Of Health
- Aydın State Hospital, 150 Beds / Toki
- Aydın State Hospital Cardiology
- Batıkent State Hospital, 200 Beds / Ministry Of Health
- Batman Dental Centre
- Beypazari State Hospital
- Bolu Dental Centre / Ministry Of Health
- Bozok University Research And Implementation Hospital
- Bozyaka SSK Organ Transplantation
- District Research Hospital, 200 Beds Cardiovascular Surgery
- Burdur State Hospital
- Bursa Cekirge State Hospital / Ministry Of Health
- Cengiz Gokcek Women and Maternity Hospital
- Cizre German Hospital
- Cumhuriyet University Sterilizing Unit
- Canakkale Dental Centre
- Canakkale Can State Hospital
- Corum Alaca State Hospital 100 Beds
- Dalaman State Hospital, 50 Beds
- Denizli State Hosp. Infantile Intensive Care
- Derinkuyu State Hospital, 10 Beds
- Diskapi Infantile Hospital / Ministry Of Health
- Dicle University Central Laboratory
- Dentistry Faculty
- Diyarbakir Infantile Diseases Hospital
- Dr. Dogan Baran Women and Infantile Diseases Hospital
- Dr. Munif Islamoglu State Hospital
- Eflani State Hospital, 10 Beds
- Elazığ State Hospital
- Disability Rehabilitation Centre
- Eregli State Hospital, 350 Beds
- Eskisehir Dental Hospital / Ministry Of Health
- Eskisehir Yunus Emre State Hospital / Ministry Of Health
- Etlik Zubeyde Hanim Maternity
- Fatih University Hospital
- Gaziantep Infantile Hospital 200 Beds / Ministry Of Health
- Gaziantep Dental Centre

Samsun
Samsun
Adıyaman
Trabzon
Şanlıurfa
Yozgat
Sakarya
Samsun
Ankara
Ankara
Ankara
Ankara
Ankara
Artvin
Balıkesir
İzmir

Ankara
Aydın
Aydın
Ankara
Batman
Ankara
Bolu
Yozgat
İzmir
Burdur
Bursa
Gaziantep
Şırnak
Sivas
Çanakkale
Çanakkale
Çanakkale
Çorum
Dalaman
Denizli
Ankara
Diyarbakır
Gaziantep
Diyarbakır
Niğde
Kastamonu
Karabük
Elazığ
Antalya
Zonguldak
Eskişehir
Eskişehir
Ankara
Ankara
İstanbul
Gaziantep
Gaziantep

• Gediz State Hospital, 100 Beds	Kutahya	• Sungurlu State Hospital / Ministry Of Health	Corum
• Golbasi State Hospital	Adiyaman	• Suleymaniyeye Ozel Hospital	Irak
• Gonen State Hospital, 75 Beds	Balikesir	• Sanliurfa Infantile Diseases Hospital	Sanliurfa
• Hınıs State Hospital / Ministry Of Health	Erzurum	• Sanliurfa Siverek State Hospital	Sanliurfa
• Idil State Hospital / Ministry Of Health	Sirnak	• Sebinkarahisar State Hospital, 75 Beds	Giresun
• Kagizman State Hospital	Kars	• Sevkett Yilmaz Education And Research Hospital	Bursa
• Karabuk State Hospital, 300 Beds	Karabuk	• Sirnak State Hospital, 150 Beds / Ministry Of Health	Sirnak
• Kars State Hospital, 200 Beds	Kars	• Suhut State Hospital, 75 Beds	Afyon
• Kirikkale Specialty Hospital	Kirikkale	• Tavsanlı State Hospital, 100 Beds	Kutahya
• Kirikkale Univ. Tip Fak. Education And Research Hospital	Kirikkale	• Tokat State Hospital, 200 Beds	Tokat
• Kırklareli Babaeski State Hospital 100 Beds	Kırklareli	• Tokat State Hospital, 500 Beds / Ministry Of Health	Tokat
• Kovancilar State Hospital	Elazig	• Tokat Almus State Hospital, 20 Beds	Tokat
• Kozluk State Hospital / Toki	Batman	• Toroslar Hospital, 250 Beds	Mersin
• Maya Eye Hospital	Ankara	• Ulus State Hospital Intensive Care	Ankara
• Medical Park Hospital	Elazig	• Van 100. Yil University State Hospital, 400 Beds	Van
• Merzifon State Hospital 150 Beds / Ministry Of Health	Merzifon	• Yalova Cinarcik State Hospital	Yalova
• Moris Sinasi State Hospital	Manisa	• Yalvac State Hospital, 75 Beds	Isparta
• Mustafa Kemal Pasa State Hospital	Bursa	• Yunak Hacilzzet Baysal State Hospital	Konya
• Namik Kemal University Hospital	Tekirdag	• Zekai Tahir Burak Women And Maternity Hospital	Ankara
• Nazilli State Hospital	Aydin	• Aksehir State Hospital, 200 Beds	Konya
• Nizip State Hospital	Gaziantep	• Babaeski 100 Beds State Hospital	Kırklareli
• Nusaybin State Hospital, 150 Beds	Mardin	• Mert Dental Hospital	Antalya
• Oltu State Hospital, 100 Beds / Ministry Of Health	Erzurum	• Narlidere 112	Izmir
• Osmancik State Hospital, 100 Beds	Corum	• Georgia Hospital	Georgia
• Ozel Ankara Hospital	Ankara	• Prof. Dr. Burhan Nalbantoglu State Hospital	Cyprus
• Ozel Atasan Hospital	Samsun		
• Ozel Batigoz Hospital	Izmir		
• Ozel Bilgi Hospital	Antalya		
• Ozel Bir Nefes Hospital	Ankara		
• Ozel Burhan Nalbantoglu Hospital	Nicosia, Cyprus		
• Ozel Corum Hospital	Corum		
• Ozel Entok.B.B. Centre	Izmir		
• Ozel Eryaman Hospital	Ankara		
• Ozel Hayat Hospital	Izmir		
• Ozel Hilal Hospital	Kirikkale		
• Ozel Karatas Hospital	Izmir		
• Ozel Oztan Hospital	Usak		
• Ozel Sina 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		
• Siirt Kurtalan 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		



Sultanbeyli State Hospital, 400 beds, ISTANBUL

GOVERNMENTAL INSTITUTIONS

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

Ankara
Adana
Afyon
Agri
Ankara
Antalya
Aydin
Baku
Adana
Ankara
Dalaman
Istanbul
Izmir
Kutahya
Elazig
Eskisehir
Eskisehir
Ordu
Ankara
Hatay
Izmir
Ankara
Gaziantep
Gaziantep
Azerbeycan
Siirt
Ankara
Ankara
Trabzon
Izmir
Ankara
Istanbul
Siirt
Izmir
Istanbul
Afyon
Samsun
Batman
Bilecik
Izmir
Mersin
Cankiri
Adiyaman
Konya
Ankara
Ankara
Van
Mersin
Ankara
Manisa
Burdur
Erzurum
Konya

- Ogm Building
- Simav Government House
- Simav Public Education Centre
- Saffet Cebi Sports Hall
- Hentbol Federation
- Ahi Evran University
- Artuklu University
- Artvin State Coruh University
- Bezmialem Vakif Univ. Medicine Faculty Hospital
- Dicle University Economy Faculty
- Dicle University Library Building
- Dokuz Eylul University Dean's Office Building
- Ege University Laboratory Building
- Erciyes University Sports Hall
- Erciyes University Veterinary Medicine
- Firat University Sports Hall
- Ibrahim Cecen Univ. Dining Hall And Sports
- Izmir Ekonomi University
- Kilis 7 Aralik University
- Nevsehir University Dining Hall Building
- Siirt Univ. Engineering Faculty
- Ufuk University Medicine Faculty Hospital
- Usak Occupational School
- Near East University
- Karatay University
- Tunceli University
- Dumlupinar University Guest House
- Dicle University Laboratory
- Ted College
- Kumluca College
- Akdeniz University Social Sci. Occup. School

Ankara
Kutahya
Kutahya
Istanbul
Ankara
Kirsehir
Mardin
Artvin
Istanbul
Diyarbakir
Diyarbakir
Izmir
Izmir
Kayseri
Kayseri
Elazig
Agri
Izmir
Kilis
Nevsehir
Siirt
Ankara
Usak
Cyprus
Konya
Tunceli
Kutahya
Diyarbakir
Antalya
Antalya
Antalya



Inegol State Hospital, 300 beds, BURSA.

INDUSTRIAL FACILITIES

- Almata Shopping Centre
- Armada Tuze Cinemas
- Atlantis Shopping Centre
- Atlantis Sports Centre
- Basyazicioglu Market
- Kunayeva Business Centre
- Lyra Shopping Centre
- Makro Shopping Centre
- Metro Gros Markets
- Metropol Cinemas
- Molida Shopping Centre
- Optimum Cinemas
- Tekpa Shopping Centre
- Wold Point Sports Center
- Esentuki Shopping Centre
- Lemar Hypermarket
- Mayas Shopping Centre
- Minvodi Shopping Centre
- Biskot Biscuit VeCikolata Factory
- Bak Chicken Plant
- PolinasAmbalaj
- PlenpakAmbalaj
- Lyra Park Shopping Centre
- E.Organik Market Wet Food Drying Plant
- TaskinTarim Food Drying
- EtiGida Cake Factory
- EtiGida Chocolate Factory
- EtiGida Biscuits Factory
- Eti Plaza
- Alyans Plaza
- AkcaMeyveSulari

Kazakhstan
Ankara
Ankara
Ankara
Kayseri
Almaty/Kazakhstan
Antalya
Ankara
Kayseri, Istanbul
Ankara
Balikesir
Ankara
Antalya
Istanbul
Russia
Cyprus
Kutahya
Russia
Karaman
Beypazari/Ankara
Manisa
Manisa
Manavgat / Antalya
Colombo / Srilanka
Gediz / Kutahya
Eskisehir
Eskisehir
Eskisehir
Istanbul
Antalya
Egridir



Rixos Grand Hotel - ANKARA



Education And Research Hospital, 300 Beds,
Karabuk



Cratos Premium Hotel, Cyprus



Dhmi Central Acc App Building, Ankara



Ereğli State Hospital, 350 Beds, Zonguldak

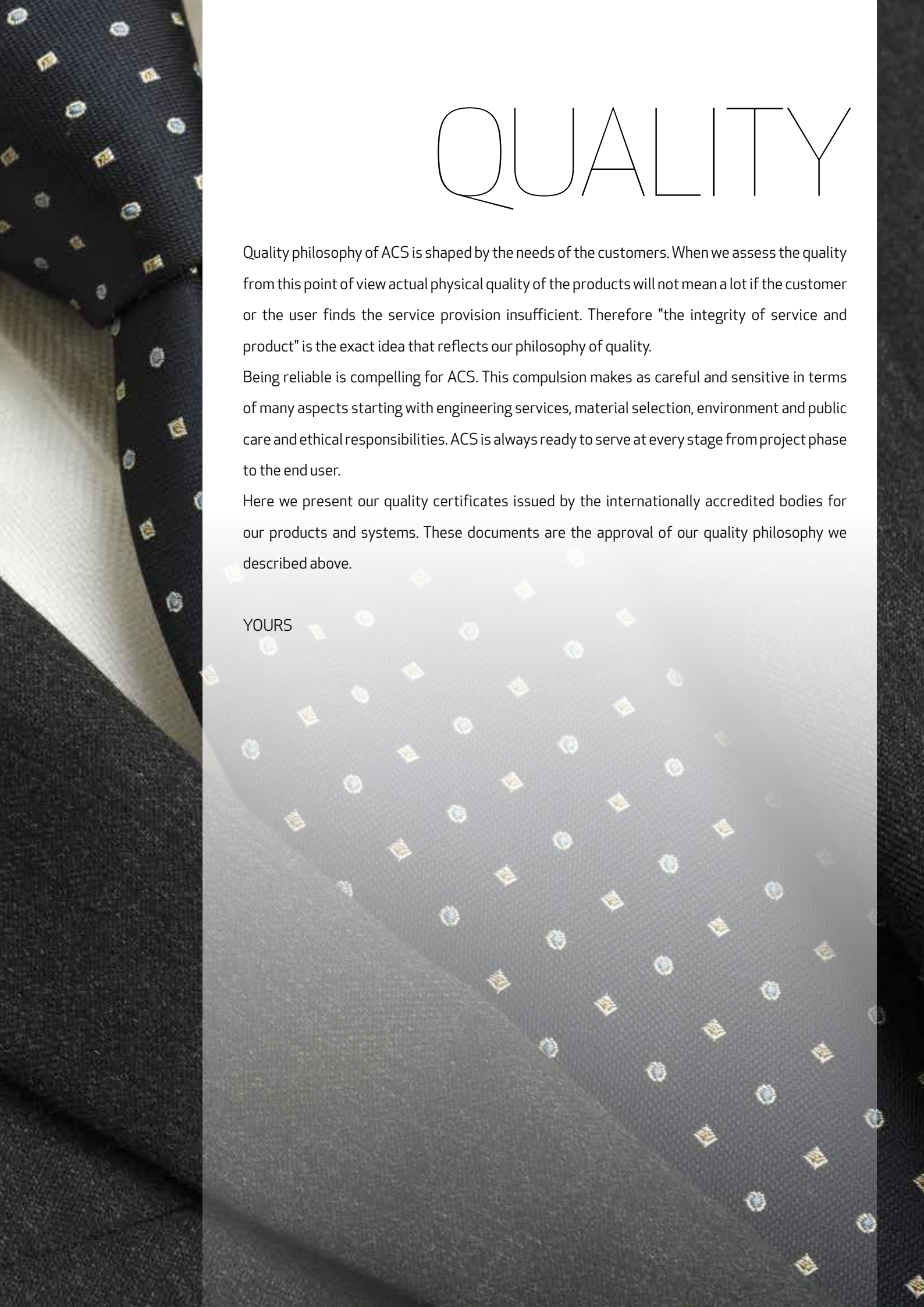


Atlantis Shopping Centre, Ankara



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 us 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 TÜV.



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 air handling units have been awarded by Eurovent certificate as a result of the tests conducted 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

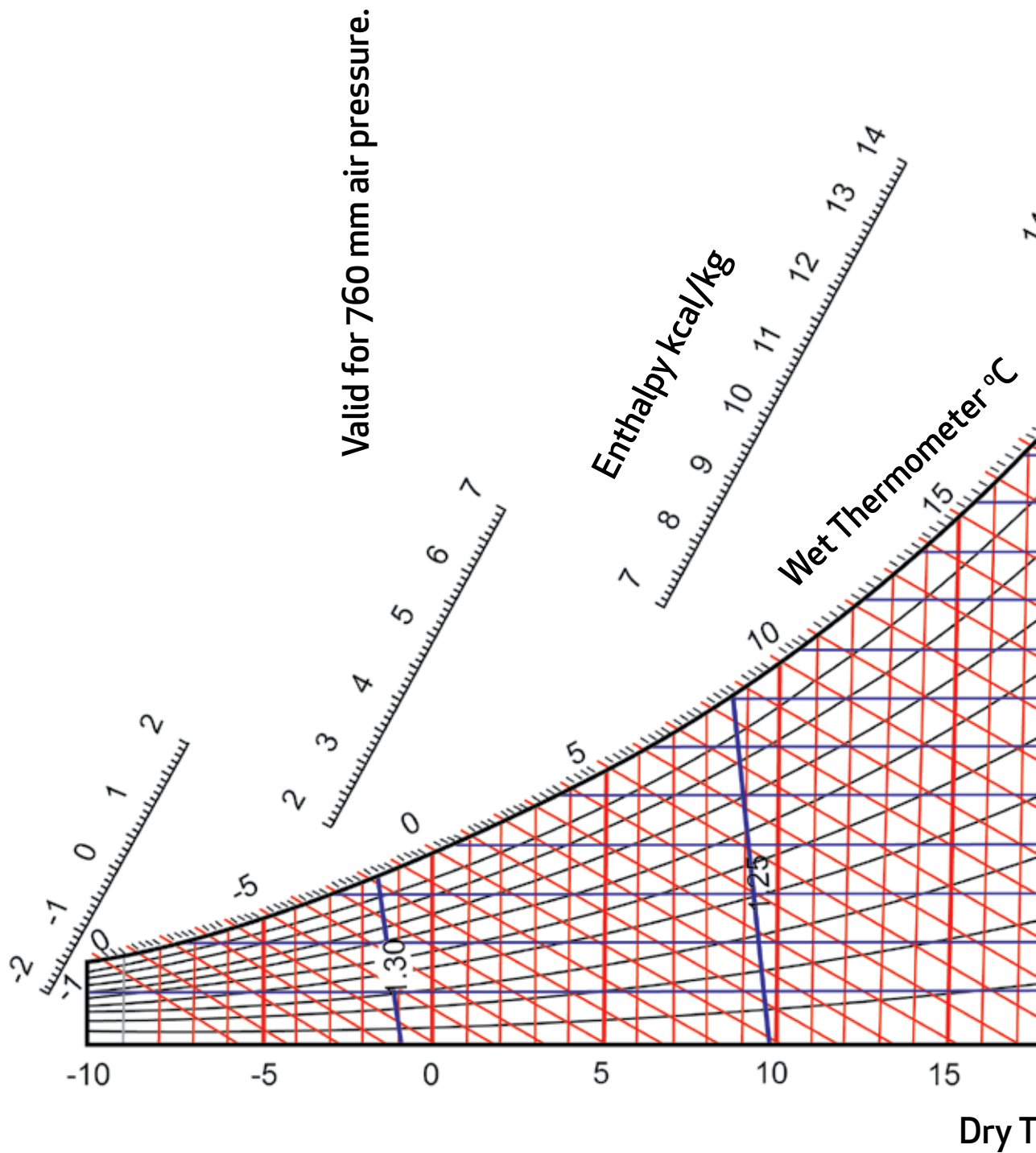
The certificate shows the environmental responsibility of ACS for production and services provided by the company.

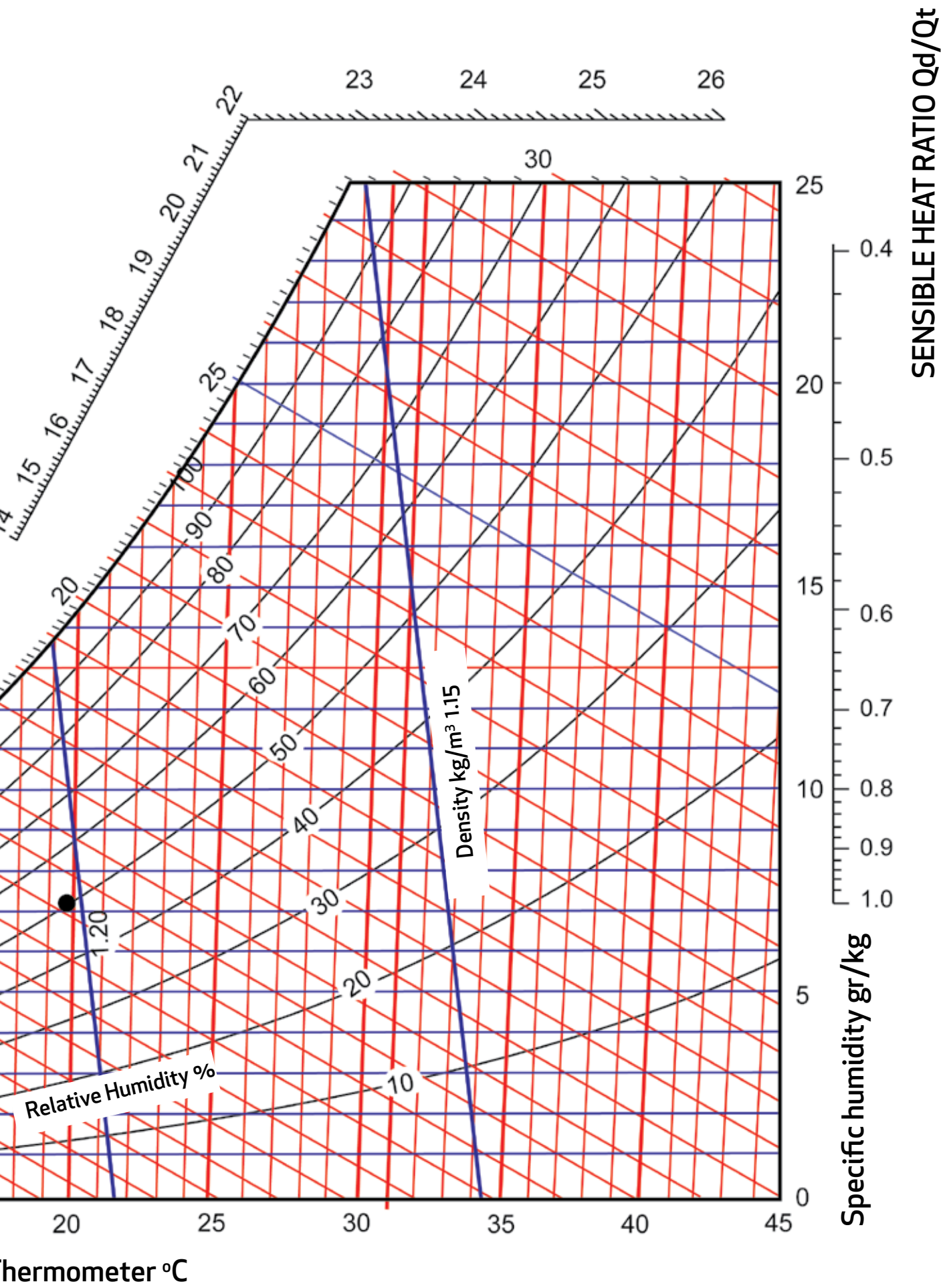


OHSAS 18001 : 2007 Occupational Health and Safety Management System Certificate

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.









Mimar Sinan Caddesi No. 81 Karakuyu Torbalı - İZMİR / TR
Tel. +90 232 866 20 50 • Fax. +90 232 866 22 23 • www.acsklima.com

