ARTI will change your air!
We're manufacturing for a natural and a clean world...

We are designing the project of the industrial air conditioning systems and installing them.
You can contact us if you want to test our quality.

ARTI Air Conditioning and Ventilation provides succesful services in the air conditioning industries with its qualified 60 staff members, working in harmony with the ever-growing technologies, in a closed area of 7.000 m2 with the modern machinery section where the manufacturing section proceeds.

www.artimuhendislik.az

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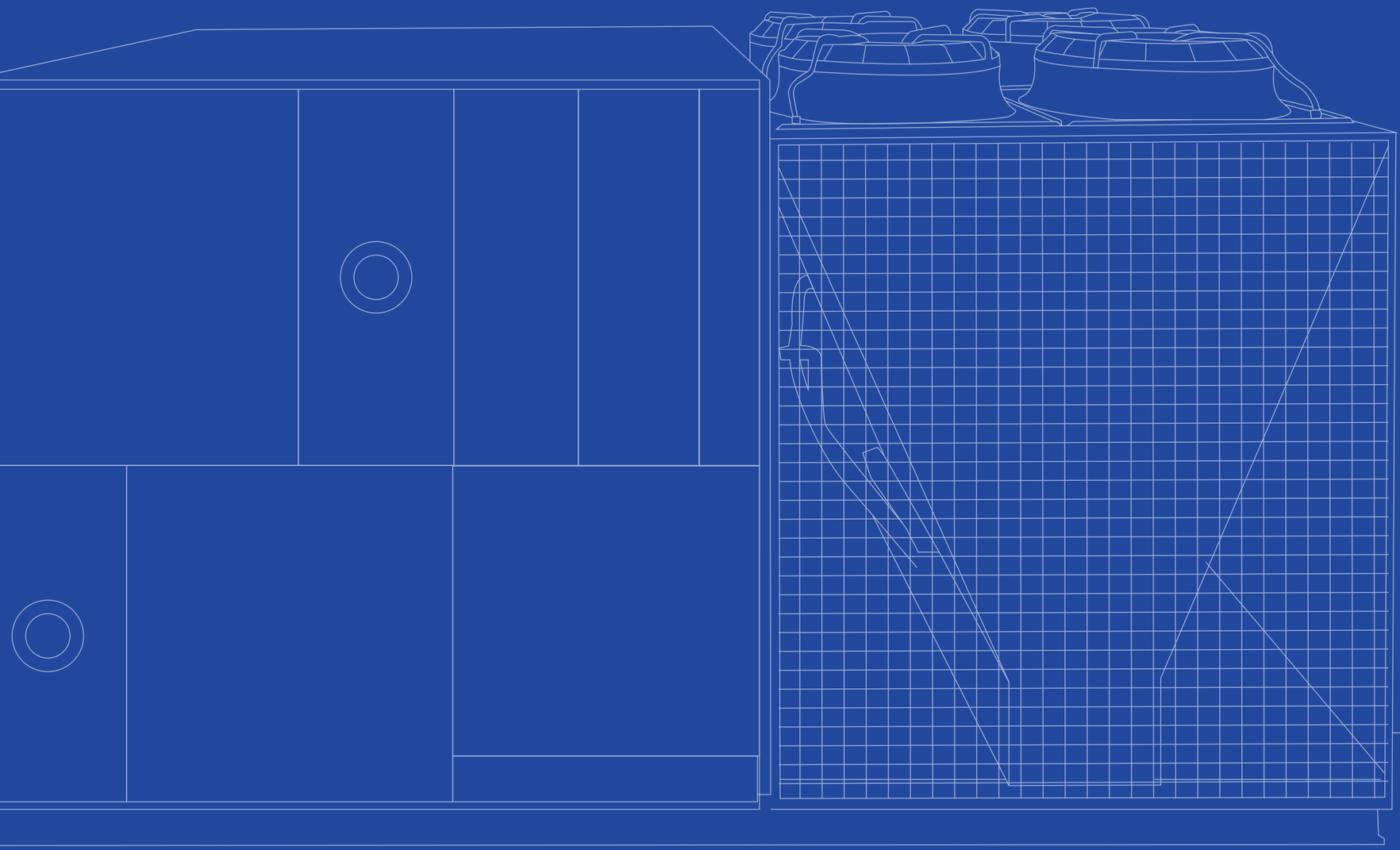
ROOFTOP



ROOFTOP

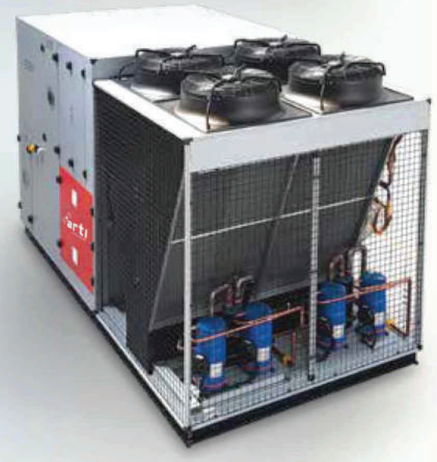
ROOFTOP

ROOFTOP

Technical specifications and user's manual

What is Rooftop?

Nowadays, rooftop air conditioners are preferred in the air conditioning technologies due to meeting all needs of heating, cooling and the fresh air in one device. The most important reasons of being preferred are being multi functional, efficient and appropriate to use outdoor. Rooftop air condition solutions are the best price/ performance ratio solutions for the buildings which would be applied to monospace comfort air conditioner applications. Rooftop air condition devices are the economical condition devices used for the comfort conditioning of the mesoscales and the large scales. Besides, today's techonology, allows us to offer multiple operating mode options with the simple cooling, heat pump, natural gas heating with heat pump, electrical heating reinforced, heating water coil reinforced heat pump versions of the rooftop air condition devices. Today, in the era of savingness, our rooftop air conditioner device works high efficiently with low cost due to its optional features. Rooftop air conditioner devices are most appropriate for plug-and-play applications due to its technologies and compact design. Today, rooftop air conditioner devices are used in groceries, commercial buildings, facilites (Hotel, residence, mall, etc.), airports, film theaters, theater halls, exhibition centers, convention centers, social facilities, hotel meeting rooms, educational establishments, sports halls, logistical operation centers, storehouses, warehouses and the factories (Industrial usage).



As ARTI Air Conditioninig, we have 3 Rooftop options;

1. Single Fan Rooftop

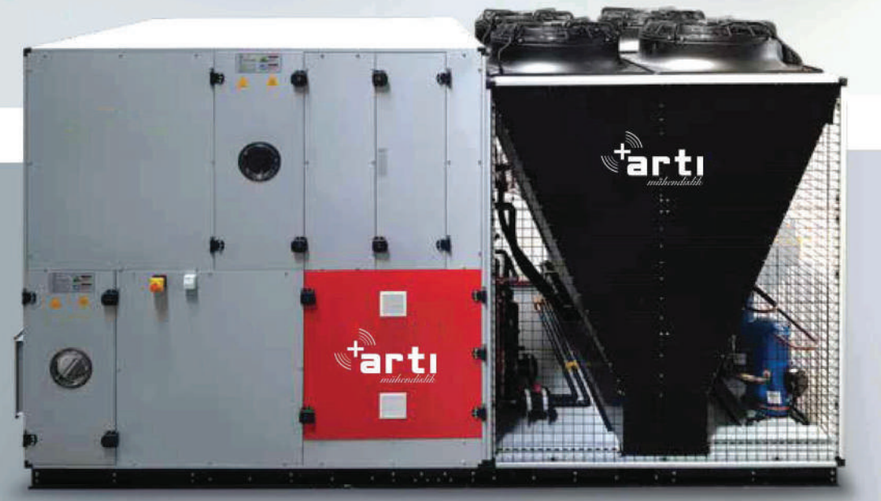
This model aspirates the air , applies conditioning procedures, then sends it back to the area. This device has 2 dumpers; one controls the aspirated air, the other one controls the fresh air. Aspirated air may includes the fresh air.

2. Double Fan Mixing Dumper Rooftop

Due to its double fan, the fan of the aspirator and the ventilating fan can work seperately. Mixing dumper system can adjust the ratio of the mixed and fresh air.

3. Double Fan Plate Exchanger Rooftop

Exhausted*air passes through air plated exchanger, in this way it gives its heat to the fresh air, so this process leads to the heat recovery. System works with %100 fresh air.*



ROOFTOP
TECHNICAL SPECIFICATIONS

Construction Specifications

▸ *Rooftop air conditioner device's surface is made of 1,5 mm dip galvanized single-hull material or between the internal and external paries have 50-70 kg/m3 isolation intensity and its made of A1 fire resistant isolation woolen material.*

▸ *All the surface area of the device dyed with the electrostatic powdered paint in the event of contacting water.*

▸ *For the impermeability, it's used EPDM seals and silicons.*

▸ *It's provided rubber isolation for thermal insulation and acoustic isolation for sound insulation.*

▸ *Device is on the 15 cm tall mount.*

▸ *Rooftop's compressor and radial fan are inserted on the mount with the vibration absorber wedges to prevent vibration.*

▸ *Evaporator and condenser parts are separeted by a 10 cm thick, stone wool lagged, sandwich panel*

▸ *On the evaporator part, it's used drift eliminator, special designed drain pipe to prevent perspiration*

Direct Expansion Refrigation Section

Compressor;

▸ *I can be used up to 4 compressor by the capacity.*

▸ *Valve tools, mantel heater, vibration absorbers, high and low pressure pressurestats, liquid freeze thermostat*

▸ *System works safely with sight glass, drier and liquid valve.*

▸ *System only works as a cooler. System can work as heater and cooler (Heat Pump) with the help of 4-way valve*

▸ *Copressors are guarded with the overcurrent relay and the needed mains electricity is 400 V /3 Phase /50 Hz.*

Evaporator Section

▸ *It is used copper pipe aluminium winged high heat transfer batteries.*

▸ *As a result of cooling process, condensing water particles occur; these particles move out from the drain pipe with the help of the condensation pan (Includes the evaporator* coil*)* and the drift eliminator.

▸ *Max intake rate through* coil *is 2,5 m/s.*

▸ *Evaporator fans are double suction belt and pulley radial fans.*

Condenser Section;

▸ *It is used copper pipe aluminium winged high heat transfer batteries.*

▸ *Max intake rate through* coil *is 3 m/s.*

▸ *Condenser fan uses direct coupled, built in motorized axial fan.*

▸ *The number of the condenser used change by the capacity.*

Fan Section

▸The fans used in the evaporator to blow air or to suction from the space are driven by double suction front curved radial fans with belt pulley.

▸ *Condenser's heat absorbing fans are the built in motorized axial fans. These fans run according to the blown gas heat and the blown gas pressure of the compressor.*

Filter Section

EU4 fiber filter is used. This filter can be disassemble and assemble easily and washable. These fans run according to the blown gas heat and the blown gas pressure of the compressor.

ROOFTOP

TECHNICAL SPECIFICATIONS

Exchanger Section

▸ *High efficient plated aluminium exchangers are used.*

▸ *This section is only included in the double fan plated exchanger versions.*

Dumper Section

▸ *Standart single fan rooftop devices have 2 dumpers called absorption and fresh air dumpers.*

▸ *Fresh air dumper makes the fresh air flow optionally; absorption dumper controls the absorbed air.*

▸ *Standart double fan mixing dumper rooftop has 3 dumpers called, fresh air, exhaust and mixing dumper.*

▸ *Dumpers are proportional controlled but the users can change it via digital display panel.*

▸ *In the special optional automation systems, dumpers are positioned automatically.*

Water Coil Section (Optional)

▸ *Consists of the combination of the seamless copper pipe and the aluminium lamellars.*

▸ *Coils are in a frame made of galvanized sheet material*

▸ *Min aluminium lamellar gap is 2,1 mm.*

▸ *Coil intake speed designed for 2 m/s -2,5 m/s.*

▸ *It has steel pipe collector.*

▸ *Liquid part's max pressure loss is 25kPa.*

▸ *It has freeze thermostat, flanges and counter flanges as the accessories on its surface. (Optional)*

Electrical Heater Section (Optional)

▸ *It's manufactured for the standart capacity but it can be manufactured for the valid project capacities optionally.*

▸ *Electrical heaters have double high discharge temperature safety thermostat.*

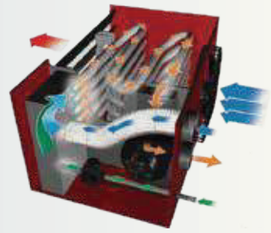
▸*Intake speed designed for 2 m/s - 2,5 m/s.*

Natural Gas Heater Section (Optional)

▸ *Natural gas or LPG pass through the port armature and they are blended with the combustion air; then they would be burnt separetely in the electronic ignition system (Burner) and in the pipe exchanger. Burnt hot air passes within exchangers via a fan; after getting cold, it would be thrown out. When the exchangers get heated, the fan runs and using the cold air it exhaused to heat the space, it blows the hot air to the space with the help of the exchanger*

▸ *It is designed as a package and it is integrated to the rooftop to help to heat the space.*

▸ *The device is safe due to its pressure thermostats in case of the breakdown of the fans. In case of pressure increase, with the help of these thermostat, the device shut down the system safely. Gas flow, burner control and fan control will be automatically with the help of completely electronic card.*



Optional Specifications

▸ *100% Fresh air ratio*

▸ *Smoke detector*

▸ *Filter pollution alarm*

▸*Variable flow control for the evoporator and condenser fans (Invertor)*

▸ *Variable flow control for the compressor used in refrigeration cycle (Invertor)*

▸ *Heating support with the hot water coil*

▸ *Heating support with the natural gas heater*

▸ *Heating support with the electrical heater*

▸ *Heating support with the steam coils.*

▸ *Thermal veya enthalpy free cooling (Economizer): When the exterior temperature and the humidity rate are appropriate*

▸ *Air conditioning process runs with 100 outside air without running cooling process so this feature induces energy saving. (Standart for the double fan version)*

▸ *CO2 inner air control: High efficient filters, filter pollution alarm and CO2 inner air quality sensor preserve the quality of the inner air. The CO2 inner air quality sensor, which controls the return air pollution, works with economizer integratedly and while absorbing the necessary fresh air, induces energy saving.*

▸ *Flexible production and solutions for the custom projects.*

▸ *Solutions for the custom automation demands.*

STANDART AND OPTIONAL SPECIFICATIONS		STANDART	OPTIONAL	STANDART	OPTIONAL
		DOUBLE FAN, MIXING AIR		SINGLE FAN	
FILTER	G4 FILTER	X		X	
	F7 BAG FILTER		X		X
	F9 BAG FILTER		X		X
HEATING	HEAT PUMP		X		X
	WATER COIL		X		X
	VAPOR COIL		X		X
	ELECTRICAL HEATER		X		X
	NATURAL GAS HEATER		X		X
HEAT RECOVERY	PLATED HEAT RECOVERY		X		X
	THERMODYNAMICAL HEAT RECOVERY	X		X	
FANS	CONDENSER FAN SPEED CONTROL	X		X	
	EVOPARATOR FAN SPEED CONTROL		X		X
	RADIAL FAN	X		X	
	PLUG FAN		X		X
	EC FAN		X		X
	AC FAN		X		X
EQUIPMENT - ACCESSORIES	ELECTRONIC EXPANSION VALVE	X		X	
	INVERTER COMPRESSOR		X		X
	ON/OFF HUMIDIFIER		X		X
	PROPORTIONAL HUMIDIFIER		X		X
	HOT WATER COIL THREE PORT VALVE		X		X
	ELECTRICAL HEATER OVERHEAT SAFETY SWITCH	X		X	
	PROPORTIONAL DUMPER ENGINE	X		X	
	STAINLESS INNER CASING		X		X
	EPOXY-COATED EVAPORATOR		X		X
	EPOXY-COATED CONDANSER		X		X
	INTERIOR EXTERIOR ELECTROSTATIC POWDER PAINT	X		X	
	SMART DEFROST	X		X	

STANDART AND OPTIONAL SPECIFICATIONS		STANDART	OPTIONAL	STANDART	OPTIONAL
		DOUBLE FAN, MIXING AIR		SINGLE FAN	
AUTOMATION - SENSORS	ENTHALPY FREE COOLING	X		X	
	THERMAL FREE COOLING	X		X	
	BLOWING HEAT SENSOR	X		X	
	ABSORPTION HEAT SENSOR	X		X	
	EXTERIOR TEMPERATURE SENSOR	X		X	
	BLOWING HUMIDITY SENSOR		X		X
	ABSORPTION HUMIDITY SENSOR		X		X
	EXTERIOR HUMIDITY SENSOR		X		X
	1.STAGE FILTER POLLUTION SENSOR	X		X	
	2.STAGE FILTER POLLUTION SENSOR		X		X
	3.STAGE FILTER POLLUTION SENSOR		X		X
	3.STAGE FILTER POLLUTION SENSOR		X		X
	VENTILATOR DIFFERENTIAL PRESSURE SENSOR		X		X
	ASPIRATOR DIFFERENTIAL PRESSURE SENSOR		X		X
	CO2 SENSOR		X		X
	VOC SENSOR		X		X
	FIRE DETECTOR INPUT	X		X	
	REMOTE CONTROL PANEL	X		X	
	INTERNET CONNECTION VIA MODEM OR MODBUS	X		X	
	REMOTE CONNECTION KIT	X		X	
	COMPRESSOR BLOWN GAS OVERTEMP SENSOR	X		X	
	COMPRESSOR ABSORBED GAS LOW TEMPERATURE SENSOR	X		X	
	LOW PRESSURE SWITCH	X		X	
	HIGH PRESSURE SWITCH	X		X	
	LOW PRESSURE TRANSMİTTER	X		X	
	HIGH PRESSURE TRANSMİTTER	X		X	

MODEL		5	7	10	12	14	17	20	23	25	29	33	35	40
COOLER														
Cooling capacity	Kw	27	38	57	66	78	91	112	135	152	175	198	216	238
Compressor power	Kw	8,95	13,6	19,8	24	26,9	32,4	32,3	38,1	40,5	42,6	45,7	52,6	57,6
EER		2,98	2,8	2,88	2,75	2,9	2,76	2,81	2,9	2,8	2,9	2,8	2,79	2,79
Heating-Heat pump														
Heating capacity	Kw	28	40,5	57,5	67	80	94	115	135	151	176	201	218	237,2
Compressor power	Kw	8,1	11,65	16,7	22	22,6	28	35,6	29,1	32	38	42	45,7	49,6
COP		3,4	3,48	3,36	3,1	3,52	3,36	3,24	3,3	3,3	3,2	3,1	3	3,1
Compressor														
Coolant	R-410a													
Compressor number	ad.	1	1	2	2	2	2	2	2	2	4	4	4	4
Compressor type	Scroll													
Compressor connection type		Standart	Standart	Standart	Standart	Asymmetric	Standart	Asymmetric	Standart	Standart	Standart	Standart	Asymmetric	Asymmetric
Refrigeration cycle	ad.	1	1	1	1	1	1	1	1	1	2	2	2	2
Capacity control	stage	1	1	2	2	3	2	3	3	2	4	4	6	6
Compressor														
MINIMUM — Fan type	Radial / Plug													
MINIMUM — Air volume	m³/ h	3800	5900	8150	10000	11200	13200	15500	17850	19800	23600	26850	28600	32600
MINIMUM — Statical pressure	Pa	250	300	300	300	300	300	350	350	350	350	350	400	400
MINIMUM — Fan number	ad,	1	1	1	1	1	1	1	1	1	1	1	1	1
MINIMUM — Fan engine power	Kw	1,5	1,5	2,2	3	3	4	5,5	7,5	7,5	11	11	15	15
STANDART — Air volume	m³/ h	5000	7500	10000	12000	14000	17000	19500	23000	25000	29000	32500	35000	40000
STANDART — Statical pressure	Pa	250	300	300	300	300	300	350	350	350	350	350	400	400
STANDART — Fan number	ad,	1	1	1	1	1	1	1	1	1	1	1	1	1
STANDART — Fan engine power	Kw	2,2	2,2	3	4	4	5,5	7,5	11	11	11	11	15	15
MAXIMUM — Air volume	m³/ h	5500	8400	11650	13650	16000	18900	22750	38200	28000	33250	38600	41500	46500
MAXIMUM — Statical pressure	Pa	350	300	300	300	300	300	350	350	300	350	350	400	400
MAXIMUM — Fan number	ad.	1	1	1	1	1	1	1	1	1	1	1	1	1
MAXIMUM — Fan engine power	Kw	2,2	2,2	3	4	4	5,5	7,5	11	11	11	11	15	15
Absorption fan (Aspirator)														
MINIMUM — Fan type	Radial / Plug													
MINIMUM — Air volume	m³/ h	3800	5900	8150	10000	11200	13200	15500	17850	19800	23600	26850	28600	32600
MINIMUM — Statical pressure	Pa	250	300	300	300	300	300	350	350	350	350	350	400	400
MINIMUM — Fan number	ad,	1	1	1	1	1	1	1	1	1	1	1	1	1
MINIMUM — Fan engine power	Kw	1,5	1,5	2,2	3	3	4	5,5	7,5	7,5	11	11	15	15
STANDART — Air volume	m³/ h	5000	7500	10000	12000	14000	17000	19500	23000	25000	29000	32500	35000	40000
STANDART — Statical pressure	Pa	250	300	300	300	300	300	350	350	350	350	350	400	400
STANDART — Fan number	ad,	1	1	1	1	1	1	1	1	1	1	1	1	1
STANDART — Fan engine power	Kw	2,2	2,2	3	4	4	5,5	7,5	11	11	11	11	15	15
MAXIMUM — Air volume	m³/ h	5500	8400	11650	13650	16000	18900	22750	38200	28000	33250	38600	41500	46500
MAXIMUM — Statical pressure	Pa	350	300	300	300	300	300	350	350	300	350	350	400	400
MAXIMUM — Fan number	ad.	1	1	1	1	1	1	1	1	1	1	1	1	1
MAXIMUM — Fan engine power	Kw	2,2	2,2	3	4	4	5,5	7,5	11	11	11	11	15	15

MODEL		5	7	10	12	14	17	20	23	25	29	33	35	40
Heating-Natural Gas														
Capacity	Kw	25	35	49	74	74	95	115	115	130	146	146	192	192
Gas flow	Nm³ / h	2,61	3,7	5,82	6,57	8,96	9,42	12,61	12,61	14,69	17,92	17,92	20,84	22,6
Burner pressure (Min/Max)	m/bar	17/55												
Used power	w	550	650	1100	1100	1100	1100	1650	1650	2200	2200	2200	2200	3300
Heating-Electrical resistance														
Capacity (OT =15 C)	Kw	25	40	50	60	72	85	104	120	126	150	162	180	202
Capacity (OT=30 C)	Kw	52	79	98	116	141	174	208	236	260	302	320	362	400
Heating-Hot water														
Capacity	Kw	60	94	120	140	210	230	252	330	352	395	440	556	598
Hot water regime	°C	80/60												
Heating-Vapor														
Capacity	Kw	60	109	140	162	254	264	286	190	414	456	465	648	684
Vapor pressure	bar	3												
Condenser														
Fan type	Aksiyal													
Fan number	ad.	2	2	2	2	4	4	4	4	4	4	4	6	6
Air flow (Cooling)	m³ / h	13000	15000	18500	18500	34000	34000	34000	68500	68500	68500	68500	94600	94600
Fan engine power (Cooling)	Kw	1,4	1,5	1,9	1,9	3,8	3,8	3,8	6,8	6,8	6,8	6,8	12,3	12,3
Sound pressure level														
Sound pressure level (1m range)	dB(A)	84,0	66,0	96,0	96,0	97,0	92,0	89,0	97,0	97,0	97,0	97,0	96,0	98,0
Sound pressure level (10m range)	dB(A)	66,0	71,0	77,0	78,0	79,0	76,0	71,0	79,0	79,0	79,0	79,0	77,0	79,0
Measurements														
Width	mm	2150	2150	2360	2360	2104	2104	2410	2410	2410	2410	2410	2410	2410
Height	mm	1800	1800	2176	2176	3543	3543	3722	4910	4910	4910	4910	7900	7900
Altitude	mm	2054	2054	2346	2346	2487	2487	2590	2600	2600	2600	2600	2680	2680

EXTERNAL TEMPERATURE 27 C° 50% RELATIVE HUMIDTY - COOLING

EXTERNAL TEMPERATURE : 35 C° HEATING EXTERNAL TEMPERATURE :

7 C° - EXTERNAL TEMPERATURE 22 C° 50% RELATIVE HUMIDITY ALL

RHP : HEAT PUMP ROOFTOP
RSS : ONLY COOLING ROOFTOP
RHD : HEAT PUMP+NATURAL GAS ROOFTOP
RSD: ONLY COOLING+NATURAL GAS ROOFTOP

EXAMPLES ARE MADE BY COUNTING FRESH AIR AS 30 %
EXAMPLE CODING: EBA RHP 12 : 12000 HEAT PUMP ROOFTOP

1- ALL MODELS HAS ELECTRONICAL EXPANSION VALVE

2- ALL MODELS ARE CONTROLLED BY DANFOSS PLC

3- CONDENSER FANS ARE CONTROLLED ACCORDING TO THE INVERTOR PRESSURE

4- ASYMMETRIC COOLING PRINCIPLE IS APPLIED

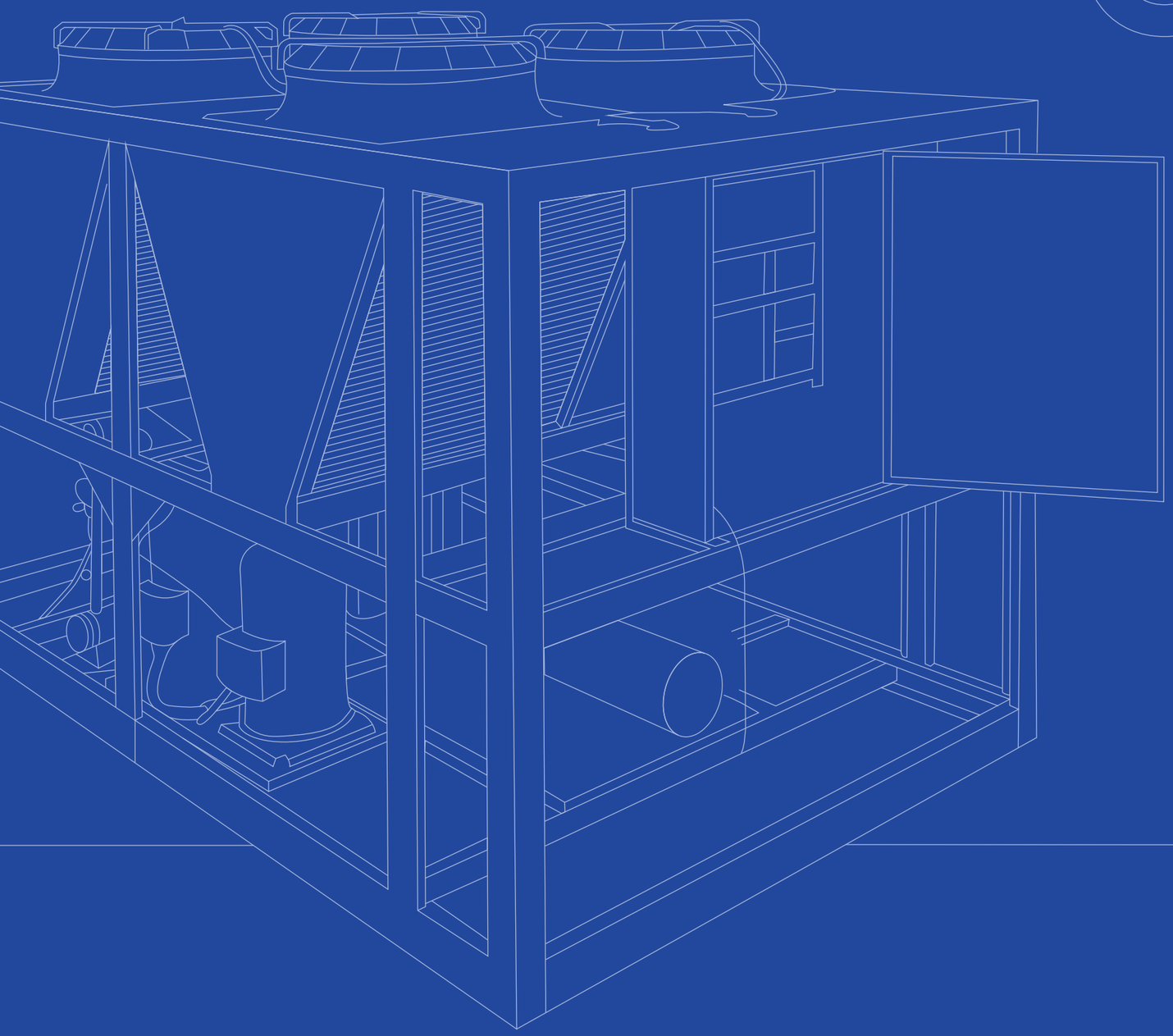
5- ALL DOUBLE FAN MODELS APPLY THERMODYNAMICAL HEAT RECOVERY.

6- ALL MODELS HAVE FREECOLING AND FREEHEATING FEATURE

7- HEAT PUMPMODELS HAVE SMART DEFROST FEATURE

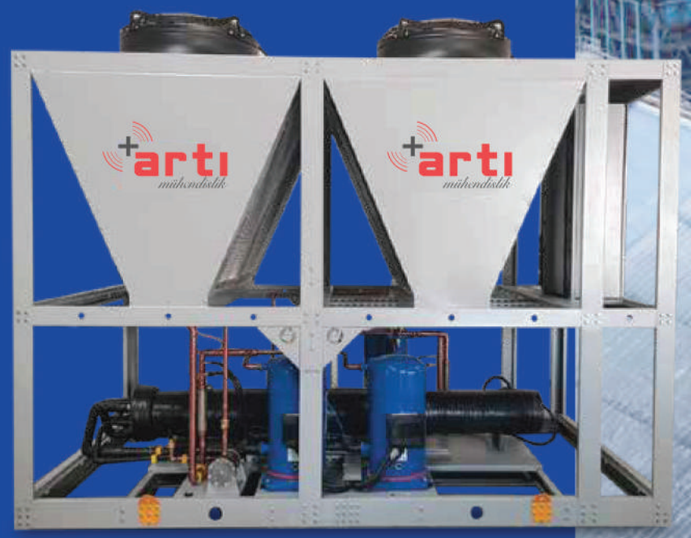
8- MORE THAN ONE COMPRESSOR MODELS APPLY CO-AGING FEATURE BETWEEN THE COMPRESSORS

CHILLER



CHILLER

CHILLER



CHILLER

TECHNICAL SPECIFICATIONS & USER'S MANUAL

Water Chiller Section Definition

Air cooled water chiller units include advanced cooling technologies. Especially, with its low noise level, compact design, easy and safe using and quality maintenance and technical service features, it's appropriate to use in all the places that the noise and air flow necessities of the cooling towers would be tough on operations and usage, such as hotels, restaurants, commercial buildings, industrial facilities, shopping centers, theatres, sports centers, hospitals.

TECHNICAL SPECIFICATIONS

COOLING SECTION

► *Built in compressors can run long time without maintenance.*
► *It has a few mobile pieces that's why it's easy to maintain and it's economic to use.*

► *Compressors* equipped with isolated valve, check-valve preventing to turnaround of the blowing line, oil level switch, oil gauge window, oil trap, filter, sump heater, capacity control *selenoids, vibration absorber, engine protection relay and PTC sensors.*

Required line voltage is 3 x 400V, 50 Hz.

Condenser

► Air cooled condensers are manufacturing by using copper pipe and the aluminium lamellars.
► *For* cooling liquid to become a densed it's mount on to an axial fan device which is coupled with its engine and high efficient and over current protection relay and silent frame.

Evaporator

► Direct expansion evaporators, manufacturing as Shell & Tube type or plated exchanger versions, are manufactured by fixating the special high efficient copper pipes with the steel mirror holes with a special technique.
► Pipe bundle is detachable so they can be maintained and cleaned easily. Evaporators, manufactured in accordance with the EN 14276-1 and EN 13445 standarts, are designed to refrigerate the water and glycol solutions.
Evaporator's surface and compressor absorber lines are isolated by using the proper thickness isolation material.

CHILLER

TECHNICAL SPECIFICATIONS

Electrical Controlling Panel

Designed in accordance with Ip54 protection level. Device has two parts in for power and controlling; they work for device to run completely automatic and safe. Panel is equipped with enough contactor, thermal fuse and switch. Device's panel and wires are suitable to the EN 60204-1 standart.

Required line voltage is 3 x400 V, 50 Hz.

Microprocessor Control System

Device's microprocessor control system can make capacity control easily on water input and output heat, absorbing and blowing gas pressures, evaporator's superheat temperature, compressor's running times and it can display all the malfunctions and recent malfunction records in the digital display.

Besides, according to the external temperature, the system can activate or desactivate the condenser fans and balance the running times, in this way device can provide optimum efficiency.

Cooling Circuit Equipments

- *For device to run automatically and safely, it includes electronical expansion valve or thermostatic expansion valve, dryer-filter, sight glass, safety valve, water flow control switch, low and high pressure sensible equipments and cooling valves.*
- *If device will run as a heat pump, it must be integrated additional 4-way valve.*
- *Cooling circuits can be single or multiple gas circuits.*

Optional Specifications

- *Condenser and evaporator circulation control with* hydraulic modul and microprocessor
- *EC axial fan*
- *Evaporator water section low flow rate protection*
- *Hot-cold (Heat pump) models*
- *Flexible production and appropriate design for the custom projects.*
- *Heat recovery and free cooling exchanger*
- *DC inverter compressor*
- *Cooling with sea water*
- *Epoxy-coated condanser*

MODEL ARTI HSC		11	14	17	20	23	26	29	32	35	40	43	48	51	55
Cooling capacity	kW	111,8	141,8	168,2	200,2	230,1	260,4	290,9	320,1	349,2	399,8	430,2	479,5	510,4	544,6
Total Used Power	kW	41,2	50,2	59,2	70,8	75,3	85,2	94,7	107,4	126,6	137,6	156,3	162,4	189,7	194,2
EER	*	2,6	2,5	2,5	2,7	2,6	2,6	2,6	2,6	2,7	2,7	2,7	2,8	2,9	2,9
Heating Capacity	kW	116,2	146,1	178,5	205,6	237,2	269	299,7	326,5	358,2	411,1	442,6	491,9	524,6	559,7
Total Used Power	kW	38,6	48,2	56,6	66,9	71,4	81,4	90,6	102,1	120,1	130	148,2	158,7	178,7	183,2
COP	*	3,1	3,1	2,8	2,9	3	2,9	2,9	2,9	2,8	2,9	2,7	3	2,9	3
Cooling Liquid	*	R 410 A													
Compressor Type	*	Scroll													
Compressor Number	Ad.	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Compressor Control	Gradual	Standart	Standart	Standart	Asymmetric	Standart	symmetric	symmetric	Standart	symmetric	Standart	symmetric	Standart	symmetric	symmetric
Compressor Connection Type	*														
Evaporator Type	*	Shell And Tube / Plated													
Evaporator Number	Ad.	1													
Condenser Type	*	Copper Pipe Aluminium Winged													
Condanser Nominal Air Flow (Cooling/Heating)	m³/h	41000/ 20500	41000/ 20500	41000/ 20500	61500/ 30750	61500/ 30750	61500/ 30750	82000/ 41000	82000/ 41000	82000/ 41000	114000/ 57000	114000/ 57000	152000/ 76000	190000/ 95000	190000/ 95000
Condanser FanType	*	Axial													
Condanser Fan Diameter	mm	910	910	910	910	910	910	910	910	910	800	800	800	800	800
Condanser Fan Number	Ad.	2	2	2	3	3	3	4	4	4	6	6	8	10	10
Condanser Fan Used Power	kW	5,2/ 2,6	5,2/ 2,6	5,2/ 2,6	7,8/ 3,9	7,8/ 3,9	7,8/ 3,9	10,4/ 5,2	10,4/ 5,2	10,4/ 5,2	13,6/ 6,8	13,6/ 6,8	18,2/ 9,1	22,7/ 11,4	22,7/ 11,4
Width	mm	1651	1651	1651	1651	1651	1651	2493	2493	2493	2412	2412	2412	2412	2412
Height		2943	2943	2943	4044	4044	4044	2540	2540	2540	2943	2943	4593	5600	5600
Altitude	kg	2477	2477	2477	2477	2477	2477	2477	2477	2477	2477	2477	2477	2477	2477
Device Weight		1177	1288	1455	1688	1827	1951	2125	2514	2625	2843	3105	3985	4250	4372
Device Working Weight		1183	1295	1464	1713	1845	1997	2162	2544	2688	2965	3170	4069	4326	4456
Sound Volume (10 m.)	dBA	60	60	60	61	61	66	67	66	66	68	68	67	69	70

Cooling capacity 7/12 water regime and 35 'C calculated according to the external temperature Heating capacity 40/45 water regime and 3 C calculated according to the external temperature

AIR COOLING SCROOL COMPRESSOR
CHILLER EXAMPLE CODING ARTI HSC 40

OPTIONAL SPESIFICATIONS

1- HYDRONIC KIT 2- EPOXY-COATED CONDENSERS 3- COMPRESSOR COLD CLIMATE KIT 4-WATER LINE COLD CLIMATE KIT

MODEL ARTI HVC		23	26	40	43	46	55	63	75	83	95	105	118
Cooling Capacity	kW	224,9	259,6	384,4	418,3	462,7	546,8	628,1	746,3	832,2	956,9	1056,2	1184,6
Total Used Power	kW	79,8	91,2	135,9	145,6	164,2	196,8	219,2	253,78	285,7	328,3	356,8	413,4
EER	*	2,6	2,6	2,7	2,7	2,8	2,9	2,9	2,85	2,9	2,7	2,8	2,8
Heating Capacity	kW	235,1	268,1	393,2	427,1	469,2	556,5	639,5	756,2	849,5	969,1	1074,1	1198,9
Total Used Power	kW	75,9	87,9	128,9	138,8	155,1	185,4	205,6	237,9	269,9	310,1	318,4	390,7
COP	*	2,9	2,8	2,8	2,7	2,9	2,9	2,9	2,9	2,9	2,8	2,9	2,8
Cooling Liquid	*	R 134 A / R 407 C											
Compressor Type	*	Scroll											
Compressor Number	Ad.	2	2	2	2	2	2	2	2	2	2	2	2
Compressor Control	Gradual	12,5%.....100%											
Evaporator Type	*	Shell And Tube / Plated											
Evaporator Number	Ad.	1											
Condanser Type	*	Copper Pipe Aluminium Wingedı											
Condanser Nominal Air Flow (Heating/Cooling)	m³/h	61500/ 30750	61500/ 30750	114000/ 57000	114000/ 57000	152000/ 76000	190000/ 95000	228000/ 114000	260000/ 133000	260000/ 133000	304000/ 152000	342000/ 171000	380000/ 190000
Condanser Fan Type	*	Axial											
Condanser Fan Diameter	mm	910	910	800	800	800	800	800	800	800	800	800	800
Condanser Fan Number	Ad.	3	3	6	6	8	10	12	14	14	16	18	20
Condanser Fan Used Power	kW	7,8/ 3,9	7,8/ 3,9	13,6/ 6,8	13,6/ 6,8	18,2/ 9,1	22,7/ 11,4	27,2/ 13,6	31,78/ 5,89	31,78/ 5,89	36,32/ 18,16	40,86/ 20,43	45,4/ 22,7
Wıdth	mm	1651	1651	2412	2412	2412	2412	2412	2412	2412	2412	2412	2412
Height		4044	4044	2943	2943	4593	5600	6720	7840	7840	8960	10080	11200
Altitude	kg	2477	2477	2477	2477	2477	2477	2477	2477	2477	2477	2477	2477
Device Weight		1827	1951	2843	3007	3922	4288	4412	4536	4699	4896	4985	5863
Device Working Weight		1838	1964	2873	3048	3969	4336	4489	4629	4789	4988	5101	5989
Sound Volume(10 m.)	dBA	61	66	68	68	67	70	70	71	71	70	72	72

Cooling capacity 7/12 water regime and 35 C' calculated according to the external temperature Heating capacity 40/45 water regime and 3 C' calculated according to the external temperature

AIR COOLING SCROOL COMPRESSOR
CHILLER EXAMPLE CODING ARTI HSC 40

OPTIONAL SPESIFICATIONS

1- HYDRONIC KIT 2- EPOXY-COATED CONDENSERS 3- COMPRESSOR COLD CLIMATE KIT 4-WATER LINE COLD CLIMATE KIT

MINI CHILLER

TECHNICAL SPECIFICATIONS & USER'S MANUAL

Chiller devices have many advantages on usage and cost. But it's main disadvantage, as we see in the other chiller devices, is to be a huge device. So we developed the mini chiller devices. Mini chiller devices have more advantages, such as easy setup, easy mounting and high efficiency. Also, they are affordable. It's an essential device for the tiny area business.It has two types as water or air chiller. Water chiller devices are more efficient than air chiller devices. And usually mini chiller devices are water chiller devices. But it also has disadvantages too, such as low capacity and power. Still, it's preferred for being not specious and compensating its price in a short period.

Mini chiller devices are ideal for injection and puffing machine molds, hydraulic fluid, extruders, hot forming molds, polishing machines, cylinder wringers, metal working benchs, extruder pipe and wire machines, shoe sole cooling machines, printing machines, milk pasteurizing machines, paint production rollers, tarpaulin pull rollers, textile and yarn industry and other various cooling applications.

With its compact design, high efficiency and small scale features, it can be used in confined spaces.

Easy Setup and Portability

Mini chiller devices's most preferred features are easy setup and portability. That's why these devices are most preferred devices in confined space business. With its easy setup feature it can be installed quickly so it compensates its price in a short period.

Fitting Every Space and Comfort

Due to its compatibility and comfort, it's preferred in different industries. It's sizes and energy saving features are the most preferred features. It's an affordable device so it doubles the comfort.

Simple Cooling System Solutions

Mini chiller devices have simple solutions for the enterprises want to make savings and not needed much cooling. Mini chiller devices' capacity is satisfying.

MODEL ARTI MİNİ HSC		5	9	12	14	17	23	29	46	66
Cooling Capacity	kW	5,9	9,1	11,8	14,2	17,3	23,8	29	46,4	66,7
Total Used Power	kW	2,26	3,3	3,75	4,56	5,6	6,9	9,5	13,4	20,3
EER	*	2,92	3,01	3,05	3,1	3,25	3,29	3,3	3,15	3,1
Cooling Liquid	*	R 407 C								
Compressor Type	*	Scroll								
Compressor Number	Ad.	1	1	1	1	1	1	1	2	2
Compressor Control	Gradual	1	1	1	1	1	1	1	2	2
Compressor Connection Type	*	STANDART	STANDART	STANDART	STANDART	STANDART	STANDART	STANDART	TANDEM	TANDEM
Evaporator Type	*	Shell And Tube / Plated								
Evaporator Number	Ad.	1								
Condanser Type	*	Copper Pipe Aluminium Wing								
Condanser Fan Type	*	Axial								
Condanser Fan Diameteri	mm	400	450	500	450	450	500	500	500	500
Condanser Fan Number	Ad.	1	1	1	2	2	2	2	4	4
Condanser Fan Used Power	W	190	250	450	500	4500	900	900	1800	1800
Width	mm	880	880	880	880	880	1150	1150	1460	1460
Height		880	880	880	1150	1150	1200	1200	2850	2850
Altitude		1250	1250	1250	1405	1405	1780	1780	1850	1850

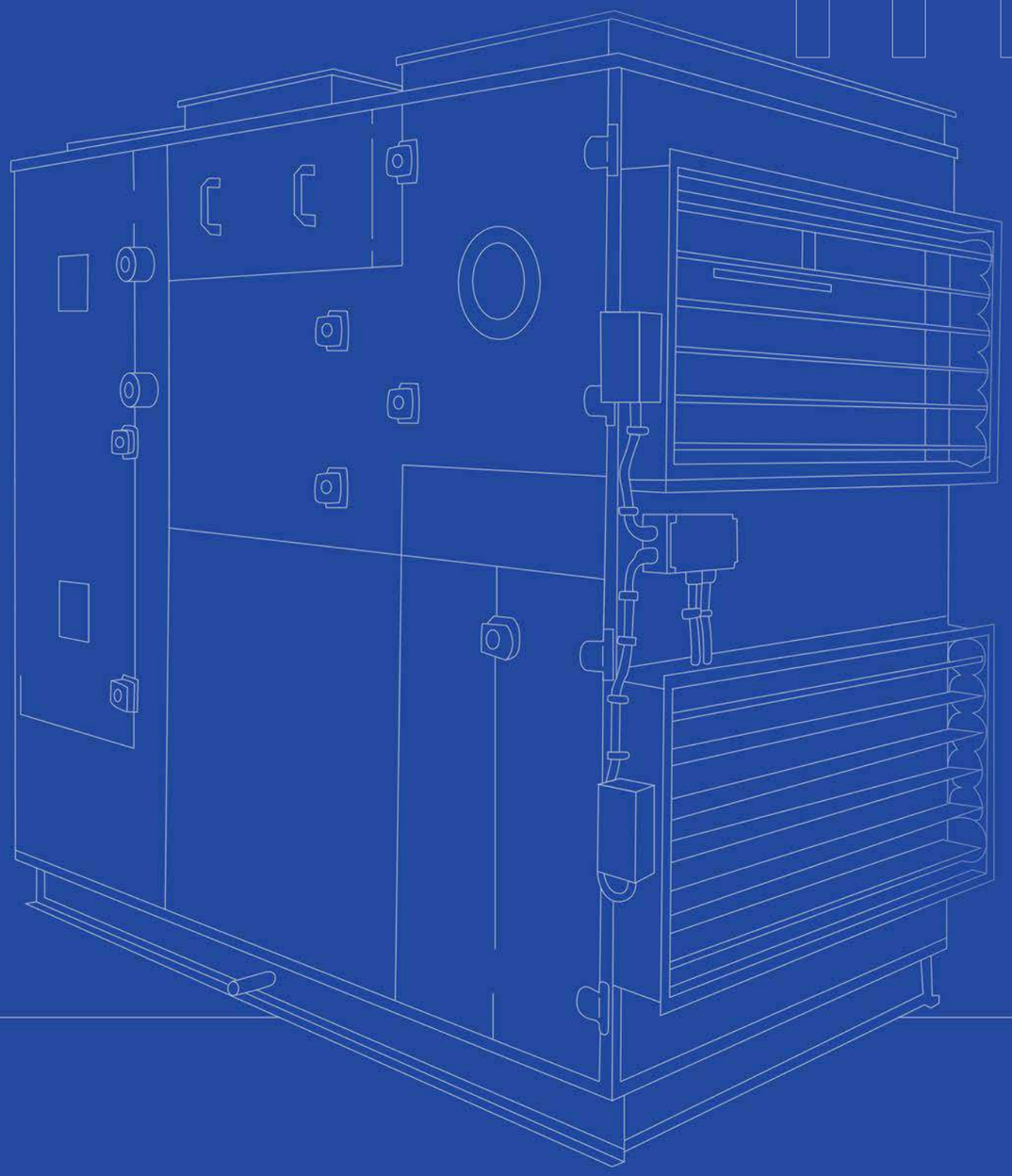
Cooling capacity 7/12 water regime and 35 C' calculated according to the external temperature / HYDRONIC KIT INCLUDED.

AIR COOLING SCROOL COMPRESSOR CHILLER EXAMPLE CODING ARTI HSC 29

OPTIONAL SPECIFICATIONS

1- EPOXY-COATED CONDENSERS
2- COMPRESSOR COLD CLIMATE KIT
3- WATER LINE COLD CLIMATE KIT

PACKAGE TYPE HYGIENIC AIR HANDLING UNIT



PACKAGE TYPE HYGIENIC AIR HANDLING UNIT

PACKAGE TYPE HYGIENIC AIR HANDLING UNIT

PACKAGE TYPE HYGIENIC AIR HANDLING UNIT

TECHNICAL SPECIFICATIONS & USER'S MANUAL

PACKAGE TYPE HYGIENIC AIR HANDLING UNIT **DEFINITION**

ARTI Package Type Hygienic Air Handling Units are used in applications that hygiene is the primary concern, such as health, food and chemical industries. Package type hygienic air handling units provide recycling the fresh air after sterilized it form the bacterias, particles and viruses by passing them through the filters.

The most important function of the air conditioners in the operating rooms is to standardize the particle ration within the room, to protect the patients against infections and to ensure the thermic comfort of the patient and the operation crew.For the clean and sterilised places, there must be a special planning which includes blowing air without particles, adjusting the positive and the negative pressure, absorbing the heating load caused by people and equipment, getting fresh air for the patients and the crew, moving away the polluted air and increasing the microorganism ratio on the low of cost. If there's no other criteria, standart clean air temperature is 22 C° (18-24 C°) and the relative humidity is 245 (40-55) Rh. For the placed needed to operate sensitively, inner temperature must be held in ±0,3, humidity must be held in ±2 ; so this prevents molds, fungi and microoragnisms to multiple faster.ARTI Package Type Hygienic Air Handling Units are designed to meet these needs and tested on the EN 1751/1988 DIN 1946 -4; 2008 DIN EN ISO 5167 standarts.

ARTI Package Type Hygienic Air Handling Units has 7 versions from 23850 m^3/h to 10.000 m^3/h flow. Package Type Hygienic Air Handling Units are preferred for its compact design, storable and high efficient woking features. It *can meet the needs of a place* by itself.

PACKAGE TYPE HYGIENIC AIR HANDLING UNIT

TECHNICAL SPECIFICATIONS

Construction Specifications

▸ *ARTI Package Type Hygienic Air Handling Units' modular pieces are made of a carcass material and they are installed by mounting special alloy aluminium extruded profiles or steel* profilles to the consolidated hygienic corner pieces.

▸ *Modular cell panels are double walled and the outer panels are made of demountable* carcass material and the the outer surface is electrostatic powder coated galvanized sheet.The *panels are fixed on aluminum carcass profiles with special stainless bolts suitable for external* removal.

▸ Units inner surface is designed to prevent the bacterias and there's no dead point in the *surface. Inner sheet is Imm AISI 304 stainless sheet. Outer sheet is made of electrostatic powder* coated galvanized material.

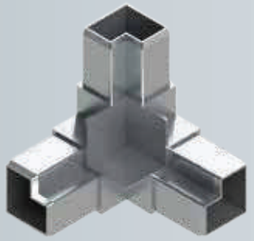
▸ *Between the internal and external paries, there is 50-70 kg/m3 isolation intensity and it's* made of A1 fire resistant isolation rock woolen material.

▸ *Modules connection can be made by tightening on the inner units via enduring connection* pieces.

▸ *To prevent the inner and outer sheets to touch each other it's used special design EPDM* seals. In this way, high thermal bridges and minimum thermal leakages can be achieved.

▸ Panels are connected to each other by using gap restriction profiles to connect panels to the frame.

▸ There are 150 mm legs integrated on the unit sarcass for forklifts and cranes to hold it easily.



Fan-engine Section

▸ *ARTI Package Type Hygienic Air Handling Units have backward curved direct coupled engine EC plug fans in accordance with the international standarts (ISO/DIN 1940)*

▸ *Compact electronical system.*

▸ *With the help of its electric circuit, it can make the speed control up to X©100*

▸ Preferred for high efficiency and compact design

▸ *Work silently*

▸ *Fan- Engine section can adjust its own circuit according to the integrated air flow and total* static pressure.

Filter Section

▸Package Type Hygienic Air Handling Units' filter transition area is calculated according to the international standarts.

▸ Filters are tray type and they are detachable.

▸ *Special EPDM seals provide impermeability.*

▸ Filter pollution alarm displays the pollution of the filters.

▸ Package Type Hygienic Air Handling Units have 3 graded filters to sterilize the fresh air from the bacterias, particles and viruses in accordance with the EN 1822 standarts.

1. GRADE
G4 Panel
Fiber Filter

2. GRADE
F7 Rigid
Filter

3.GRADE
F9 Compact
Filter

Rigid filters's efficiency ratio is between 2680 and 2685 an they have high dust holding capacity; they use 2 graded filter. In order to rigid filters be long-lived, it's used G4 fiber filter as 1.Grade front filter. Standart rigid filters are compatible with F7 grade; but if requested, they can be designed compatible for F6, F8, 79 grades.

It's used increased particle holding surfaces compact filters as last stage filter. Its efficiency ratio is between 2695 and 998; and it has high particle holding ratio. Used compact filter grade is F9 but if requested, they can be designed on HT1,H12,H13 grades.

It's recommended to place the hepa filter to the leaving point of the air from the area but if requested, it can be used hepa filter H14 grade, has 299 efficiency ratio instead of compact filter.

PACKAGE TYPE HYGIENIC AIR HANDLING UNIT

MODEL (HEAT PUMP)	UNIT	ARTI HP HKS 25	ARTI HP HKS 35	ARTI HP HKS 50	EBA HP HKS 60	ARTI HP HKS 70	ARTI HP HKS 80	ARTI HP HKS 100
VENTILATOR FLOW	m^3/h	2350	3500	4750	6000	7000	8200	10000
ASPIRATOR FLOW	m^3/h	2350	3500	4750	6000	7000	8200	10000
MAX. VENTILATOR PRESSURE	Pa	650	650	650	650	650	650	650
MAX. ASPIRATOR PRESSURE	Pa	400	400	400	400	400	400	400
FILTERS	-	G4-F7-F9	G4-F7-F9	G4-F7-F9	G4-F7-F9	G4-F7-F9	G4-F7-F9	G4-F7-F9
COOLING CAPACITY	kW	24,2	32	43	56,4	68,1	87	104
HEAT PUMP HEATING CAPACİTY	kW	23,6	30,9	44	55,8	66,7	86	105,2
ELECTRICAL HEATER (DEHUMIDIFICATION)	kW	5	8	10	16	18	20	24
HUMIDIFICATION CAPACITY	kg/h	10	15	20	30	45	50	60
WATER COIL HEATING CAPACITY (OPTIONAL)	kW	34	52	65	84	96	126	142
ELECTRICAL HEATER HEATING CAPACITY(DELTA T: 15) (OPTIONAL)	kW	14	16	25	32	40	46	50
L	mm	2500	2600	2800	2900	2950	2950	3050
W	mm	950	950	1050	1300	1300	1800	1800
H	mm	1800	1950	2000	2000	2100	2100	2100

HEATING WATER COIL WATER REGIME: 80 C°/60 C°

SUMMER/WINTER EXTERIOR TEMPERATURE: 35 C° 30% /

0 C° 90%

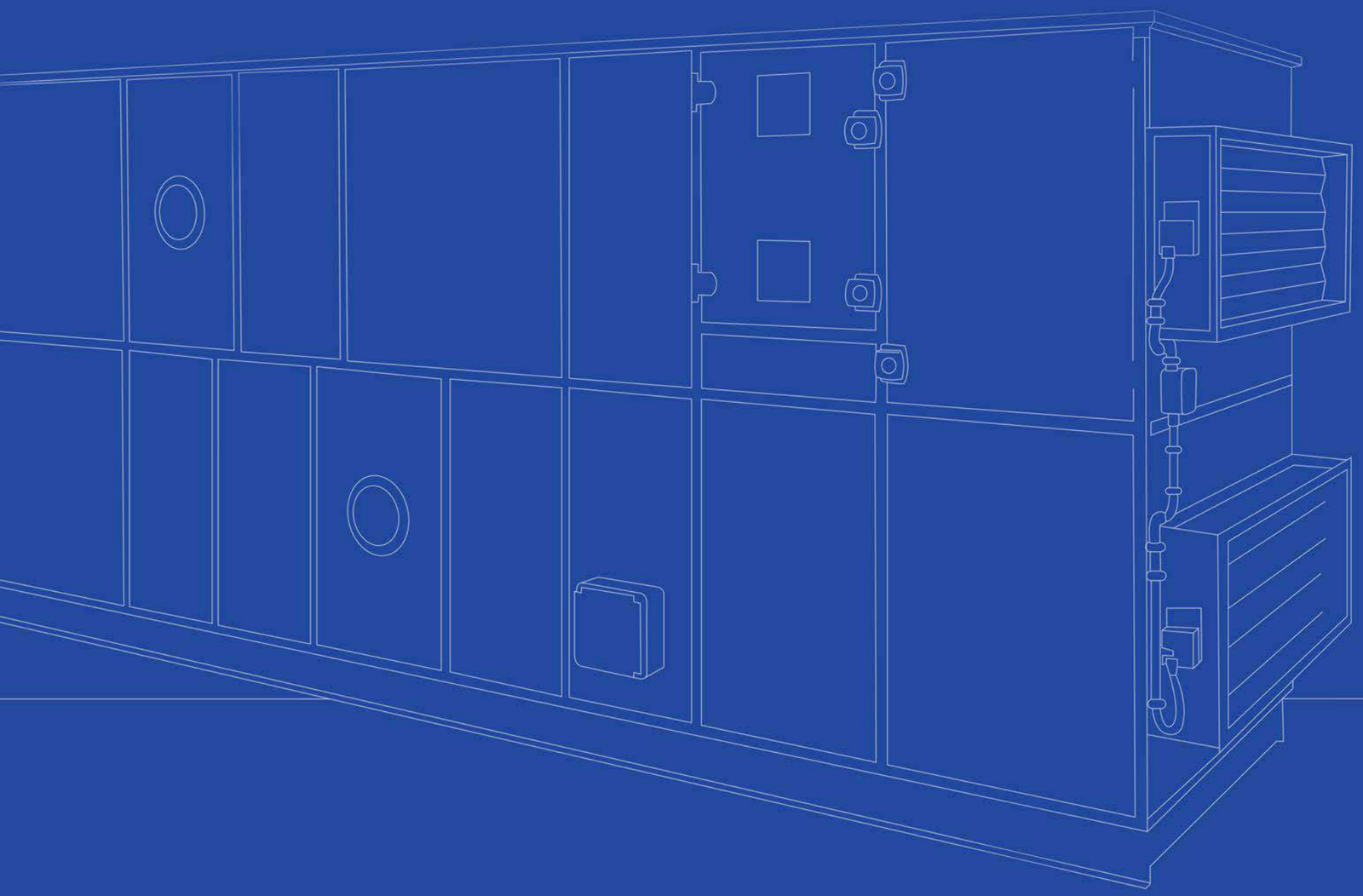
MODEL (STANDART)	UNIT	ARTI SS HKS 25	ARTI SS HKS 35	ARTI SS HKS 50	ARTI SS HKS 60	ARTI SS HKS 70	ARTI SS HKS 80	ARTI SS HKS 100
VENTILATOR FLOW	m^3/h	2350	3500	4750	6000	7000	8200	10000
ASPIRATOR FLOW	m^3/h	2350	3500	4750	6000	7000	8200	10000
MAX. VENTILATOR PRESSURE	Pa	650	650	650	650	650	650	650
MAX. ASPIRATOR PRESSURE	Pa	400	400	400	400	400	400	400
FILTERS	-	G4-F7-F9	G4-F7-F9	G4-F7-F9	G4-F7-F9	G4-F7-F9	G4-F7-F9	G4-F7-F9
COOLING CAPACITY	kW	24,2	32	43	56,4	68,1	87	104
ELECTRICAL HEATER (DEHUMIDIFICATION)	kW	5	8	10	16	18	20	24
HUMIDIFICATION CAPACITY	kg/h	10	15	20	30	45	50	60
WATER COIL HEATING CAPACITY	kW	34	52	65	84	96	126	142
L	mm	2500	2600	2800	2900	2950	2950	3050
W	mm	950	950	1050	1300	1300	1800	1800
H	mm	1800	1950	2000	2000	2100	2100	2100

HEATING WATER COIL WATER REGIME: 80 C°/60 C°

SUMMER/WINTER EXTERIOR TEMPERATURE: 35 °C %30 /

0 C° 90%

POOL DEHUMIDIFICATION UNIT



POOL DEHUMIDIFICATION UNIT

POOL DEHUMIDIFICATION UNIT

POOL DEHUMIDIFICATION UNIT

TECHNICAL SPECIFICATIONS & USER'S MANUAL

Pool Dehumidification Unit Definition

Pool Dehumidification Units are used in swimming pools to adjust the required temperature according to the dehumidification and season conditions (28 C° on pool water temperature, 30 C° on interior temperature 50-55 Rh humidity). It's designed as 9 different models and capacities for the closed swimming pools from 50 m2 to 500 m2 surfaces. These pool dehumidification units are designed for dehumidification and for requested climatization of the places like closed swimming pools in the need of drying processes and humidification.

It has aspiration, ventilator, heat recovery coil, direct expansion, cooling coil, hot water heating coil or electrical heating sections. It's used hermetic scroll compressors for dehumidification and cooling cycle processes to be graded.

Device has a special control system designed for dehumidification. With the help of this system, pool area fulfil the required conditions automatically with its "Summer", "Winter night" and "Winter Day" options. System is designed to get fresh air and exhaustit. *Device will be delivered packaged and with the electrical control panel.*

POOL DEHUMIDIFICATION UNIT

TECHNICAL SPECIFICATIONS

Construction Specifications

▸ *The carcass structure of the modular cells of the dehumidification units of the carcass is formed by the installation of special alloyed aluminum pull profiles or steel profiles in reinforced hard corner parts.*

▸ *Modular cell panels are double-walled; exterior panels are completely removable carcass design, electrostatic powder coated galvanized sheet. The panels are fixed on aluminum carcass profiles with special bolts suitable for external removal.*

▸ *The inner surfaces of the units are smooth, galvanized or painted, with weld seams and sharpness removed.*

▸ *Between the internal and external paries have 50-70 kg/m3 isolation intensity and its made of A1 fire resistant isolation rock woolen material.*

▸ *Modules connection can be made by tightening on the inner units via enduring connection pieces.*

▸ *To prevent the inner and outer sheets to touch each other it's used special design seals. In this way, high thermal bridges and minimum thermal leakages can be achieved.*

▸*It's not used the gap restriction profiles on the connection points of the frame and there's a panel to panel connection. In this way, a homogeneous isolation is provided on the whole surface of the air handling unit and thermal leaks can be kept to a minimum.*

▸ *There are legs integrated on the unit sarcass for forklifts and cranes to hold it easily. It's made of 2 mm galvanized material.*

Fan-Engine Section

Direct Coupled Plug Fans

▸ *These are single suction backward curved fans.*

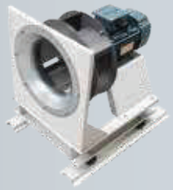
▸ *Engine, is directly mounted on the engine shaft.*

▸ *All mouvable system is placed on the stringed or rubber isolators.*

▸ *Fan can be extracted on the lateral surface.*

▸ *The connection between the fan opening and the cell panel is provided by a flexible canvas. Fittings for transport are available. (Large types)*

▸ *It's used manometer and frequency converter as the accessories of the fan pieces. (Optional)*



Filter Section

▸ *Filters are placed to the pool dehumidification units as easily detachable pieces via maintenance caps.*

▸ *Filters' surface have impermeable seals and filter seals are mounted on these trays.*

▸ *Air leakage is prevented with appropriate designs.*

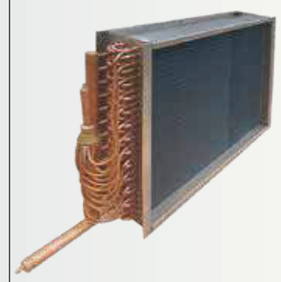
▸ *Display glass, lightening and manometer is optional.*

Panel Filters*; It's used G4 grade standart trays and it has 1,5 - 2 m/s air speed dust holding capacity. If requested, it can be used F7 or F8 grade last section filter on the fresh air input.*

Heater - Cooler Coil Section

▸ *Direct expansion dx cooling battery (evaporator), the air passing over the dew point is designed to cool down to condense. The battery consists of copper tube - aluminum gold anodized wings and the battery tray is protected against chlorine by epoxy paint and it is provided to have a long life.*

▸ *he coil is composed of copper pipe-aluminium gold anodized wings and the tray is protected against chlorine by coating with epoxy paint and the dx heater coil (Condenser) is designed to dry the dehumidified air which is provided to be long lasting and has high heat permeability. This coil condenses the cooling gas.*



▸ *As a standard, the water heater coil produced in 90/70 C° hot water regime consists of copper pipe-aluminum gold anodized wings and the coil tray is protected against chlorine with epoxy paint and its long life is provided. With the freezing thermostat, the heating coil is protected against freezing in winter. Optionally, it can be produced in superheated water and steam.*

▸ *In the absence of a water system, the optional electric heater is switched on automatically and gradually during season changes and when the central heating system is not operating. Electric heater control is designed in 1-2 or 3 stages according to the capacity. Electric heater*
If the temperature exceeds 60 C° , the internal safety thermostat will deactivate the resistances. This feature of the device is a precaution against engine burnout, and the excessive temperature is discharged in a way that does not damage the system when the ventilators remain active.

POOL DEHUMIDIFICATION UNIT

Technical Specifications

Drainage and Drift Eliminator Section

Drift eliminator is made of PVC filling material and framed with the galvanized covered sheet. ▸ It can be extracted easily.

▸ Drain pan is made of stainless sheet.

▸ Drainage connection is 33 mm (1) stainless pipe.

Dumper Section

▸ Opposite wing dumpers are used in airfoil structure in pool dehumidification units. The body and dumper wings of the dumper are painted with aluminum material. The leakage is minimized by the special seal used in the wings. Dumpers are driven by proportional controlled engines and perform their movements.

Cooling Section

▸ It's used hermetic compressors working with the 24O7JC and R410A gases, high efficiently and silently.

▸ Safe operation of the system has been ensured with valve sets, crankcase heater and vibration absorbers, Low - High pressure presostats, Liquid freezing thermostats, Sight Glass, Drier and Liquid Valve.

▸ Compressors are protected by overcurrent relays and required line voltage is 3 x 400V, 50 Hz.

▸ CAUTION: In case of the changes on the mains electricity (4910) or changes between phases (4963) it's needed to install regulator or special protection relays to the system.

Heat Recovery Section

▸ Two types of heat recovery used in pool dehumidification units.

- ***1. Plated Heat Recovery Units***
- ***2. Heat Pipe Recovery Units***

1. Plated Heat Recovery Units;

▸ Plated type exchanger is made of corrosion protected aluminium.

▸ Drain pan is made of stainless sheet.

*▸ **Drainage connection is 38 mm (1) stainless pipe.***

▸ By-Pass dumper can be applied against freezing or summer applications.

▸ It can be extracted easily.

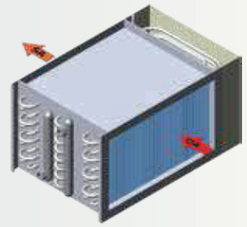
▸ Preferred working limits

Temperature: max.200 C° Air flow speed: max.5,0 m/s Pressure increase: Max. 250 Pa Efficiency: Min.: %50

On 400 Pa differential pressure max. impermeatibility; % 0,25

2. Heat Pipe Recovery Units

With the help of R134a or R22 liquids' latent heat, system makes the heat transfer automatically.

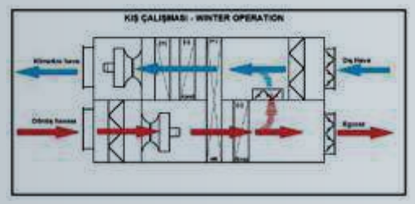


POOL DEHUMIDIFICATION UNIT

AUTOMATION SECTION

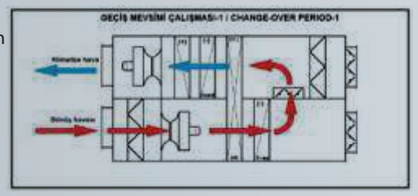
MOD-1

In winter applications, when the external air's absolute humidity is lower than the pool area's absolute humidity, system increases or decreases the external air ratio so the relative humidity ratio of the area would be adjusted. In this way heating heat pipe (HP or plated exchanger) would recover a limited ratio the absorbed air's temperature. Heat coil provides the needed heat increase.



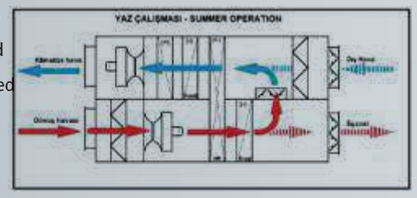
MOD-2

In the transition period (From winter to summer) and/or in the night operations, inner air would be circulated and passes through evaporator and condenser, in *this way absolute humidity would be decreased. Similar process can be applied in winter night operations which is not required external air. In this wayi system works with %100 fresh air but there can be no dehumidification process.*



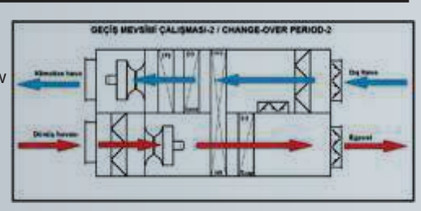
MOD-3

In the summer application, recirculated area air would be passed through evaporator, in this way it would be refrigated and the absolute humidity would be decreased. Then heated air on condenser, blown through area with decreased *related humidity. Meanwhile, needed fresh air would mixed with the* recirculated air.



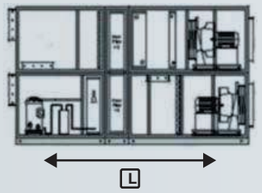
MOD-4

In the transition period (Winter to summer or summer to winter), if the related humidity and temperature of the external air is appropriate, device would blow %100 air. If heating needed, it would happen via heating or cooling coils.

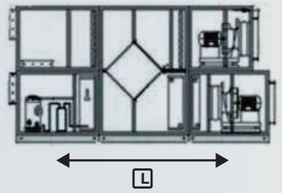


POOL DEHUMIDIFICATION UNIT

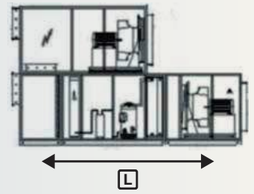
POOL DEHUMIDIFICATION UNIT CAPACITY AND SIZE TABLE



HP: HEAT PIPE RECOVERY MODEL



PL: PLATED RECOVERY MODEL

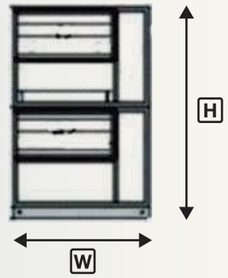


NO: NO RECOVERY MODEL

**Dehumidification ratio in accordance with the VID 2089 standarts 5 C°, 85% BN external air; %30 fresh air mixed*

*** 30 C°, 55 BN Inner Air Circulation Dehumidification without external air*

**** External Air **-3** C°, **490 BN,** Water Temperature **90/70** C° Calculated heat capacity*



HP: HEAT PIPE RECOVERY

PL: PLATED RECOVERY

NO: NO RECOVERY

	TİP	EHNS 03	EHNS 04	EHNS 05	EHNS 06	EHNS 08	EHNS 10	EHNS 13	EHNS 16	EHNS 18	EHNS 24
ACCORDING TO VDI 2089 MIXED AIR HUMIDITY CAPACITY (kg/h) *	HP	24	30	35	44	55	72	84	112	125	176
	PL	22	28	33	42	53	68	82	110	123	172
	NO	20	26	31	38	51	65	78	104	116	165
HUMIDITY CAPACITY (kg/h) **	HP	21	23	25	28	37,8	41,1	58,2	64,9	77	103
	PL	19	21	24,6	26,4	37	41,1	59	68	79	107
	NO	16	19	22	25,2	33,6	39	53	62	70,7	95
AIR FLOW(m^3/h)	HP	3000	4000	5000	6000	8000	10000	13000	16000	18000	24000
	PL										
	NO										
EXTERNAL PRESSURE LOSS (Pa)	HP	300	300	300	300	300	300	400	400	400	500
	PL										
	NO										
COOLING CAPACITY (Kw)	HP	25,7	25	30	37,3	51	56,5	78	91	115	159,8
	PL	28	27	31,3	38	52,2	59,7	80,3	95	117	161
	NO	29	29	34,8	42	56	65	86	101	122	170
WATER COIL HEATING CAPACITY(Kw) ***	HP	57	61	66	78	106	112	141	160,5	221	289
	PL										
	NO										
TOTAL ELECTRIC POWER (Kw)	HP	10	11,8	14,9	16,6	19,3	22,5	26,8	28,9	34,9	39
	PL										
	NO										
L (mm)	HP	3020	3020	3020	3350	3350	3700	3900	4100	4100	4950
	PL	3220	3220	3220	3790	3790	4185	4500	4700	4750	5900
	NO	2900	2900	2900	3400	3400	3700	3870	4100	4100	4850
H (mm)	HP	1600	1600	1800	2000	2000	2170	2250	2600	2650	3000
	PL										
	NO										
W (mm)	HP	1000	1000	1000	1300	1300	1450	1700	1900	2100	2350
	PL										
	NO										

* According to the VID 2089 Standart

POOL DEHUMIDIFICATION UNIT

POOL DEHUMIDIFICATION UNIT CALCULATIONS

Vaporization calculations will be made as shown.

Day Work *(*Active Pool)

[W= [0.118+(0.01995 x a x (PB — PL /1.333))] x A (kg/hr)]

Night Work *(*Inactive Pool*)*

[W=[-0.059+(0.0105 x (PB - PL/1.333))] x A (kg/hr)]

[A=Pool surface area (m)]

[PB-Water Vaporization Pressure]

[PL=Air Partial Vaporization Presure]

[a=Normal Activity]

0.5 - For Common Pools

0.4 - For Hotel Pools 0.3 - For Private Pools

Ex*:* Common pool

Pool sizes *:20 x10 m*

A=200m

Pool water temperature: *28°C*

PB=37.8 mbar

Pool area temperature*: 30°C (60% RH)*

PL=25.4 mbar

Pool area specific humidity:

Xi16.2g/kg

Day work: Vaporization

[W=[0.118+(0.1995 x 0.5 x (378 - 25.4/1.333))] x 200 = 42,16 kg/h]

Practical Calculation

When pool surface is multipled with *0,21* it can be calculated approximate vaporization [W = 0,21 x A] [W = 0,21 x 200 = 42 kg/h]

Night work: Vaporization

[W=[-0.059 + (0.0105 x 378 - 25.4)] x 200 = 7,73 kg/h]

Day Work*:* For determining the needed air flow to reach to vaporization ratio [W = 0,21 x A] [W = 0,21 x 200 = 42 kg/h]

Night work: Vaporization

[W = [-0.059 + (0.0105 x 378 - 25.4)] x 200 - 7,73kg/h]

Day Work: For determining the needed air flow to reach to vaporization ratio:

[V = W/(Xi - Xu) x 1,175 (m3/
[W h)] = vaporization (g/h)]
[Xu= external air absolute humidity (g/kg)]
[Xi = inner air absolute humidity (g/kg)]
[1175 = intensity of the air(kg/m3)]

External air's absolute humidity can change according to the season conditions *(Xu),* In summer maximum: *11-12 g/kg,* in winter *2-3 g/kg*.

Practically you can count *Xu* as *11.6 g/kg*, this can be passed over in the %2 of the year.

[V = 42160/(16,2 - 11,6) x 1,175 = 7800 m³/h]

With *7800 m³/h* change of air, *ARTI EHNS 8 model* is appropriate to use.

Practical calculation:

When pool surface is multipled with 39 it can be calculated approximate vaporization

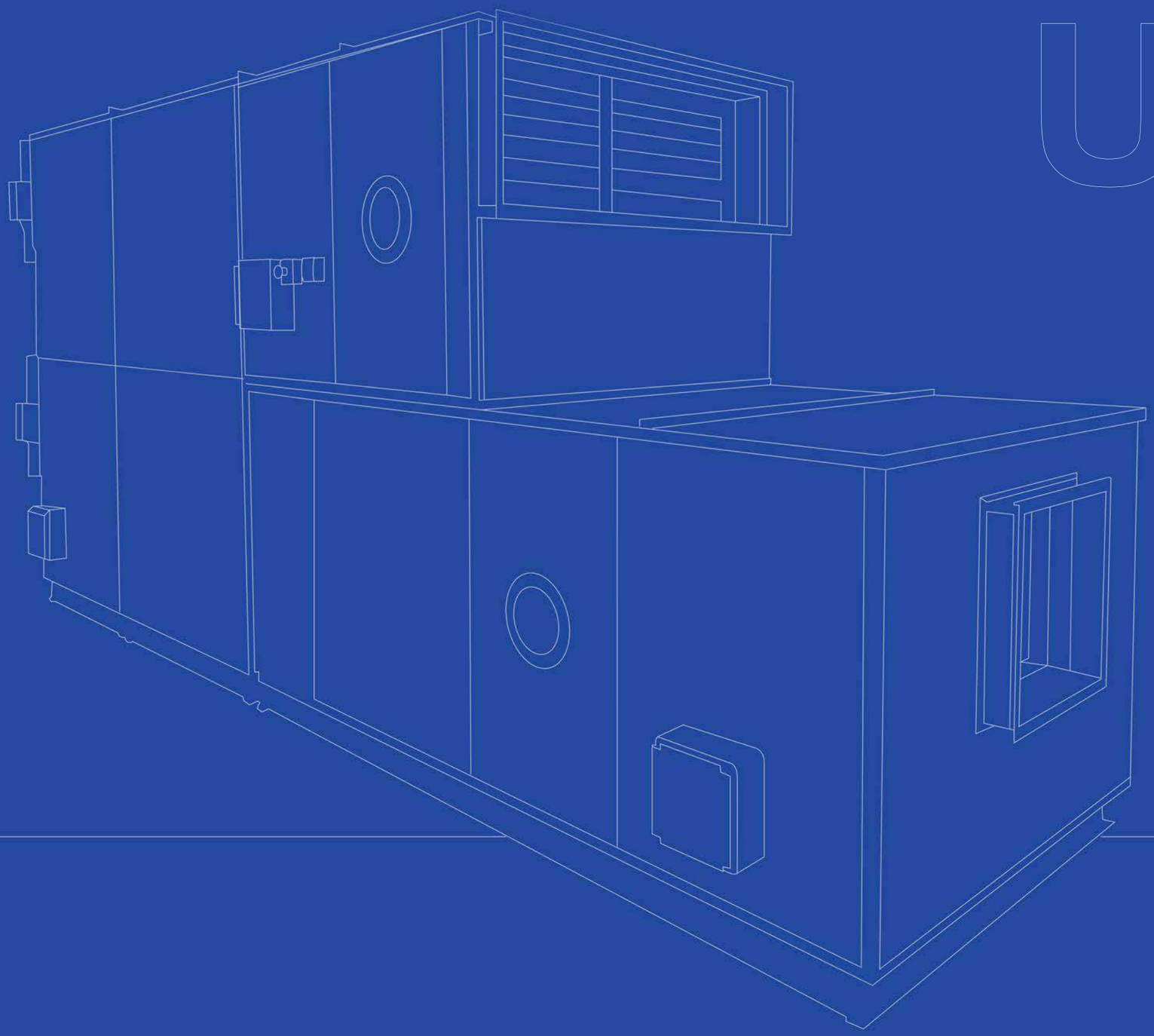
[W = 39 x A] [W = 39 x 200 - 7800 m^3/h]

Night work:

For night usages, there is no need to fresh air in pool area, so the device would make closed recirculation.

Vaporization at night would be lower than *7,73 kg/h*

AIR HANDLING UNIT



AIR HANDLING UNIT

AIR HANDLING UNIT

AIR HANDLING UNIT

TECHNICAL SPECIFICATIONS & USER'S MANUAL

Air Handling Unit Definition

Air handling units are used to provide the appropriate process conditions in the houses or commercial buildings; these are the central devices to used for conditioning the air to heat, refrigate, ventilate and humidify.

For selecting the air handling unit, we must determine the needs (Heating,cooling, ventilation, humidification,etc.) of the area. According to the needs and the size of the area, you can choose the moduls and the capacity of the air handling unit.

An air handling unit consists of the combination of these moduls***;***

- Ventilation Modul
- ***Aspiration Modul***
- ***Filter Modul***
- ***Heating Coil Modul***
- Electrical Heating Modul
- ***Burner Modul***
- ***Cooling Coil Modul***
- ***DX Coil Modul***
- Plated Heat Recovery Modul
- Drummed Heat Recovery Modul
- Heat-Pipe Heat Recovery Modul
- Silencer Modul
- Diffuser Modul
- Water Humidification Modul
- Vapor Humidification Modul
- Pad Humidification Modul
- Three Dumper Mixing Modul
- Two Dumper Mixing Modul
- Empty Modul

AIR HANDLING UNIT

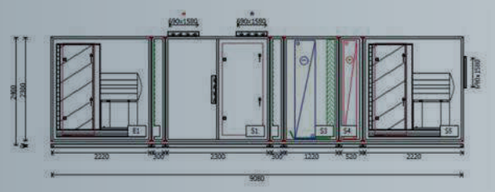
TECHNICAL SPECIFICATION & USER'S MANUAL

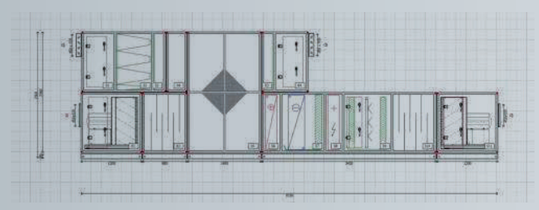
Air Handling Unit Definition

ARTI Air Conditioning research and development crew designed this air handling unit to find high efficient and low cost solutions to the various problems. Air Handling Units are made of EUROVENT certificated handling choosing program, AIRSOFT. All of the plated heat recovery, drummed heat recovery and heat pipe heat recovery types can be used in the modular air handling units, according to the working area. Thus, this lightens the cooling and heating burdens so we can design high efficient energy saving air handling units.

General carcass structure of air handling units consists of special design aluminum profiles. The 50 mm thick panel structure provides a heat-bridge-free structure with a special sealing system that prevents the internal and external steel sheets from coming into contact with each other. The plug-in design of the panels ensures a smooth surface in the air handling unit. 50 mm thick rock wool with a density of 50-70 kg / m is used as standard in the panels. In this way, heat and sound insulation can be provided without problems.

Due to the smooth inner surface provided by the carcass and panel structure of the Air Handling Units, the minimum air side internal pressure loss values can be captured. Accordingly, improvements can be achieved in the installed *electrical power values required by the air handling unit. IE2 class electric motors are used as standard. Optionally, IE3 class motors can be used. Fan system with belt pulley and direct coupled fans are used. In belt pulley systems,* forward curved dense fans, backward curved sparse blades, backward curved foil *bladed fans can be used. AC plug fans and EC plug fans can be used in direct coupled fans. In this way, the most efficient system design at the desired working point can be made easily and quickly.*





TECHNICAL SPECIFICATION

Construction Specifications

►The carcass structure of the modular cells of the dehumidification units of the carcass is formed by the installation of special alloyed aluminum pull profiles or steel profiles in reinforced hard corner parts.

Modular cell panels are double-walled; Exterior panels are completely removable carcass design, electrostatic powder coated galvanized sheet. The panels are fixed on aluminum carcass profiles with special bolts suitable for external removal.

The inner surfaces of the units are smooth, galvanized or painted, with weld seams and sharpness removed.

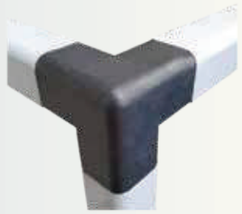
Between the internal and external paries have 50-70 kg/m3 isolation intensity and its made of A1 fire resistant isolation rock woolen material.

Modules connection can be made by tightening on the inner units via enduring connection pieces.

To prevent the inner and outer sheets to touch each other it's used special design seals. In this way, high thermal bridges and minimum thermal leakages can be achieved.

It's not used the gap restriction profiles on the connection points of the frame and there's a panel to panel connection. In this way, a homogeneous isolation is provided on the whole surface of the air handling unit and thermal leaks can be kept to a minimum.

There are legs integrated on the unit sarcass for forklifts and cranes to hold it easily. It's made of 2 mm galvanized material.



AIR HANDLING UNIT

TECHNICAL SPECIFICATIONS

Fan-Engine Section

Direct Coupled Plug Fans

- These are single suction backward curved fans.
- Engine, is directly mounted on the engine shaft.
- All mouvable system is placed on the stringed or rubber isolators.
- Fan can be extracted on the lateral surface.
- The connection between the fan opening and the cell panel is provided by a flexible canvas.

Fittings for transport are available. (Large types)

- It's used manometer and frequency converter as the accessories of the fan pieces. (Optional)

Double Suction Radial Fans

- *Fan is double suction and makes centrifuge.*
- *The fans are driven by belt pulley and the fan body is made of galvanized sheet in spiral form.*
- *Fan wheele (Rotor) is balanced as static dynamic.*
- *In order to tighten the belt, the electric motor is mounted on special strength and sliding type belt tensioning mechanisms. Pulleys are conical clamping system.*
- *The connection between the fan opening and the cell panel is provided by a flexible canvas.*
- *The fan, motor and belt tightening mechanism are mounted on the reinforced U-frame and mounted on the entire spring and rubber insulators.*
- *Fan can be extracted on the lateral surface.*
- *Fittings for transport are available. (Large types)*
- *Centrifugal fan with forward curved fans and backward curved fans are used.*
- *It's used manometer and frequency converter as the accessories of the fan pieces. (Optional)*
- *There are access panels for the fan and engine interventions.*
- *There are display glasses on the access panel to display fan and engine working.*

Filter Section

- *Filters are placed to the pool dehumidification units as easily detachable pieces via maintenance caps.*
- *Filters' surface have impermeable seals and filter seals are mounted on these trays.*
- *Air leakage is prevented with appropriate designs.*
- *Display glass, lightening and manometer is optional.*

Filter selection must be made according to the usage and the particle sizes would be held by fans. Filters would be used is shown in the table below according to the particle size.

	PARTICLE SIZE	EN 779	EUROVENT	*AVERAGE YIELD*
FRONT FILTERS	<10 micron	G1	EU1	OV<65
		G2	EU2	65<OV<80
	3-10 micron	G3	EU3	80<OV<90
		G4	EU4	90<OV
SENSITIVE FILTERS	1-3 micron	F5	EU5	40<OV<60
		F6	EU6	60<OV<80
	0,3-1 micron	F7	EU7	80<OV<90
		F8	EU8	90<OV<95
		F9	EU9	95<OV
HEPA FILTERS	0,3-1 micron	H10	EU10	OV<85
	0,3 micron	H11	EU11	OV<95
		H12	EU12	OV<99.5
		H13	EU13	OV<99.95
		H14	EU14	OV<99.995
ULPA FILTERS	0,2-0,1 micron	U15	EU15	OV<99.9995
		U16	EU16	OV<99.99995
		U17	EU17	OV<99.999995

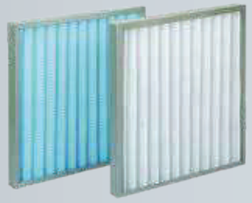
AIR HANDLING UNIT

TECHNICAL SPECIFICATIONS

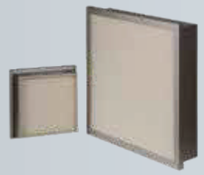
Fan-Engine Section

Panel Filters; *Panel filters used for front-filter purposes are manufactured as zig zag in trays to increase air passage area in comfort applications. Depending on their dust holding capacity, the filters can be G1, G2, G3 and G4 class.*

They can also be manufactured as a metal-containing oil trap for holding oil and similar materials. The filters are standard in size and easy to service and replace. Carbon impregnated types are also available to prevent odor in the air.

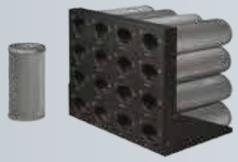


Compact Filters; *Compact filters are more prefereable than the bag filters for the better quality air in the area.*



Bag Filters; *They are used for good quality filtration of pre-filtered air, they have high dust holding capacity and they are named as F5, F6, F7 F8 and F9 according to dust holding capacities specified in EN779 standard. In order to reduce the pressure losses on the filter, the standard pocket length of the filters produced in pocket structure is 300 mm. Optionally, 600 mm and 900 mm can be used.*

Activated Carbon Filters; *They are used to absorb bad odor or vapor molecules in the air. Especially in process applications (industrial kitchens, aircraft hangars, chemical production places, treatment plants) are widely used. These cylinders have activated carbon granules to trap unwanted gases. The granules which lose their particle retention after a certain period of time should be replaced with a new one.*



Heater/Cooler Coil Section

Consists of seamless copper pipe and aluminum fins.

☒ The coils are in a frame made of galvanized sheet metal.

It is made of Stainless Steel in our hygienic devices.

☒ Aluminum coverslip spacing min. 2.1 mm.

☒ Coil face velocity is designed between 2 m / s and 2.5 m / s.

☒ With steel tube collector. (Copper Pipe in Hygienic Devices a collector.)

☒ If required, epoxy coated aluminum covers. (Hygienic devices as standard)

☒ Fluid side pressure loss is selected as max.25 kPa in heating coils and max.50 kPa in cooling coils.

☒ A special condensate pan is used for cooling coils.

☒ Drain and vent devices are available.

☒ Steam heaters; if the vapor pressure is below 4 bar; as standard, with thick flesh copper tube and aluminum fins; If the vapor pressure is above 4 bar, it is produced as steel pipe, steel spiral and dip galvanized. It is also produced in stainless steel for special applications.

☒ The electric heater can be customized if required.

☒ Freezing thermostat, flange and counter flange are available as accessories. (Optional)

Drainage and Drift Elimination Section

▸ Drift eliminator is made of PVC filling material and framed with the galvanized covered sheet.

▸ It can be extracted easily.

▸ Drain pan is made of stainless sheet.

▸ Drainage connection is 33 mm (1) stainless pipe.

Diffuser Section

They are used to regulate air flow in radial fans. The turbulent air at the first outlet of the fan is forced through the diffuser and forced into the laminar flow.

AIR HANDLING UNIT

TECHNICAL SPECIFICATIONS

Dumper Section

Dumpers with opposite wing are used in air foil structure in air handling units. The body and wings of the dumper are painted with aluminum material.
The leakage is minimized by the special seal used in the wings. The dumpers are manually controlled in standard applications and can be manufactured according to the dumper engine. Dumper motors can be supplied as on / off structure or proportional controlled type upon request.

Device has 3 different dumper section; single dumper suction modul, double dumper mixing modul and triple dumper mixing modul can be used for the usage. All the dumpers of the mixing dumpers are choosen according to the speed after absorbing whole air. Optionally, dumper can make front filter application.

Silencer Section

ARTI Air Conditioning's all units work silent but it occurs sound waves because of the air movement on the canal fitting or within the device. Used silencers are isolated by A2 grade fireproof stone wood material and mounted to the unit.

Humidification Section

Water Humidification

► *Spray humidifiers are used to hold the dust or similar things in the air, to fulfil the humidification need and evoporative cooling.*

► *There is a second modul construction in the double-walled panel modul, which is K304 stainless steel construction and it is completely watertight*

► *Depending on the air flow, there are also deflector wings and a separator at the air outlet.*

► *With water jets, water is dispensed into very small droplets in the cell.*

Vapor Humidifiers

► *There is an impermeable interference cap and display glass to intervene inside modul.*

► *There's a drainage pan to collect the condensed water occured below the steam distributor*

► *Steam generating and its control unit are given as a bundle and its connecting pipe (Optional)*

Pad Humidifiers

► *Due to the dampening pads on the stainless pool inside the standard double wall panel cell structure, dry air is humidified evaporatively.*

► *Humidifier pads have different thickness sizes according to its efficiency.*

Efficiency 65%....(Pad thickness; 100 mm)

Efficiency 85%....(Pad thickness; 200 mm)

Efficiency 95%....(Pad thickness; 300 mm)

► *This system works as a closed water circuit.*

►*There's a maintenance cap and display glass as a standart to intervene to the pump or the other circuit equipments.*

Heat Recovery Section

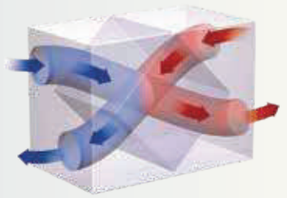
Plated Heat Recovery Units;

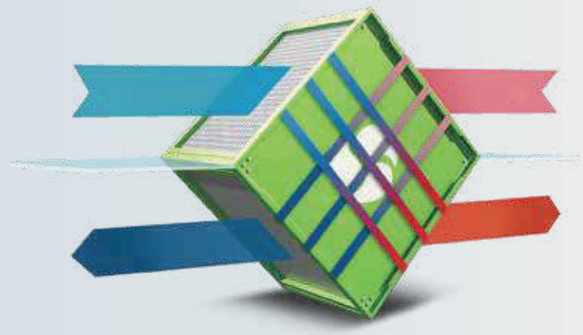
► *Drift eliminator is made of PVC filling material and framed with the galvanized covered sheet.*

► *It can be extracted easily.*

► *Drain pan is made of stainless sheet.*

► *Drainage connection is 33 mm (1) stainless pipe.*





AIR HANDLING UNIT

TECHNICAL SPECIFICATIONS

Drummed Heat Recovery Units

▸This system consists of rotary-type heat recovery rotor within the aluminium cell.

▸This rotor can move with the help of an engine and belt and pulley equipment.

▸ Special design carcass cell is protected by aluminium material against sea water. If required it can be customized with the galvanizd steel material.

▸ Rotor structure consists of alternatively straight and wavy fins.

▸ Preferable working limits:

Temperature: max. 80 Co Air

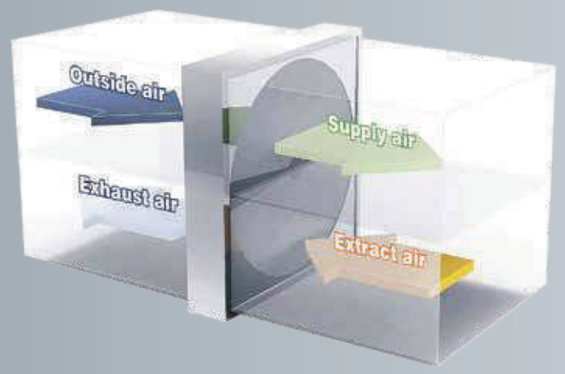
Flow Speed: max. 4,8 m/s

Pressure decrease: max.200 Pa

Rotor cycle max.10 rpm

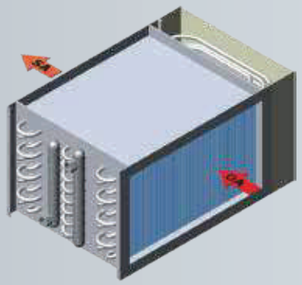
Efficiency: min.: 2665

Max. impermeability ratio is 5% in 400 Pa differantial pressure



Heat Pipe Heat Recovery Unit

Heat transfer happens with the help of the latent heat of the R134a or R22 liquids of the coil.

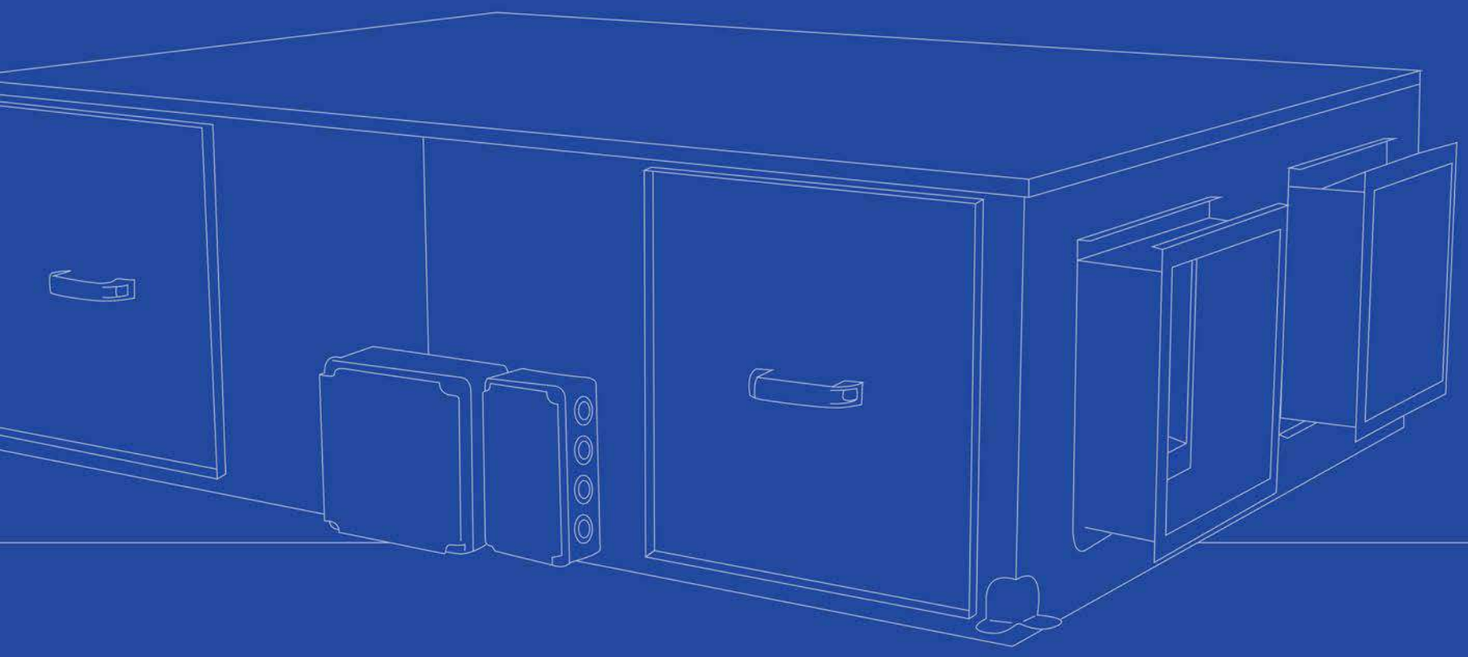


HEAT RECOVERY AIR HANDLING UNIT

MIXED AIR AIR HANDLING UNIT

100 % FRESH AIR AIR HANDLING UNIT

HEAT PUMP HEAT RECOVERY UNIT



HEAT PUMP HEAT RECOVERY UNIT

HEAT PUMP HEAT RECOVERY UNIT

HEAT PUMP HEAT RECOVERY UNIT

TECHNICAL SPECIFICATIONS & USER'S MANUAL

Heat Pump Heat Recovery Unit Definition

Thermal energy would be recovered and the room temperature would be adjusted due to heat transfer between the heat recovery ventilation devices and the exhausted air. Thus it occurs an enduring comfortable and cleam area. Conventional ventilation systems have additional air conditioning loads from fresh air. In heat recovery devices, the load added to the air conditioning system is reduced and energy saving is provided.

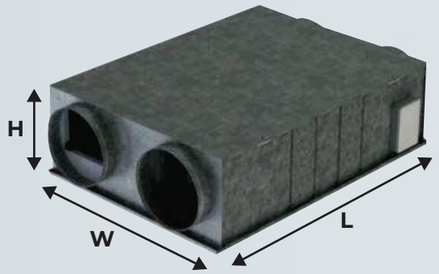
Due to heat pump heat recovery devices, fresh air is obtained at room temperature. In standard heat recovery devices, a mean blowing temperature of 29 degrees in summer and 11 degrees in winter is not the level of comfort. In the heat recovery units with heat pumps, the comfort level is reached by achieving a blowing temperature of 24 degrees in summer and 19 degrees in winter.

ARTI heat recovery devices heat pump are manufactured in 6 different types as ARTI 07-10-15-20-30-40. In all our models; body sheet is made of galvanized steel and double walled 30 mm rock wool insulated sandwich panel is provided by using heat and sound insulation and heat permeability coefficient is min. It was reduced. Standard heat recovery devices generally consist of eight separate sections;

Fresh air filter section, Exhaust air filter section, Heat recovery section, Exhaust section, Ventilation section, Compressor section, Evaporator section, Condenser section

Heat pump heat recovery devices have a compact design and heat transferring exchanger, fan section, compressor section, condenser, evaporator and filters are designed within the same frame. The device performs the cooling process with Steam Compressed Cooling Cycle.

Heat Pump Heat Recovery Device Technical Specifications Table



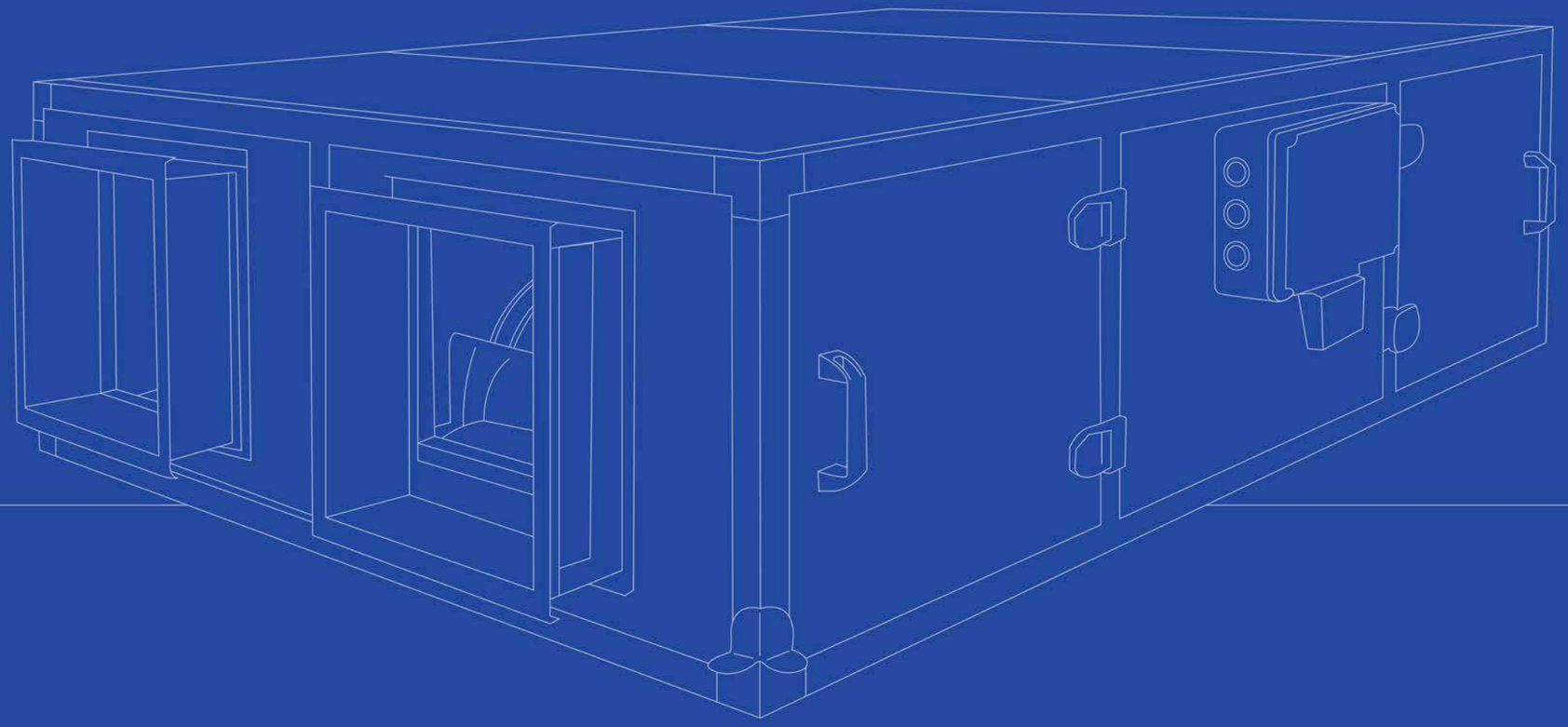
C***ooling:***
External air: 33 C° 45% BN
Inner air: 25 C° 50% BN

H***eating:***
External air: -3 C° 90% BN
Inner air: 20 C° 50% BN
are base calculations of the design.

MODEL	FLOW (m³/h)	COMPRESSOR POWER (W)	FAN POWER (W)	COMPRESSOR VOLTAGE (V&HZ)	FAN VOLTAGE (V&HZ)
ARTI IP IGK 07	750	1100	230 x 2	220 & 50	220 & 50
ARTI IP IGK 10	1000	1400	240 x 2	220 & 50	220 & 50
ARTI IP IGK 15	1500	2200	450 x 2	220 & 50	220 & 50
ARTI IP IGK 20	2000	2850	680 x 2	380 & 50	220 & 50
ARTI IP IGK 30	3000	3400	790 x 2	380 & 50	220 & 50
ARTI IP IGK 40	4000	4700	1400 x 2	380 & 50	220 & 50

HEAT PUMP HEAT RECOVERY DEVICE						
MODEL	FLOW (m³/h)	EXTERIOR PRESSURE LOSS (Pa)	COOLING CAPACITY (KW)	HEATING CAPACITY (KW)	SIZES (LxWxH (mm)	CONNECTION SIZES (mm)
ARTI IP IGK 07	750	160	3,5	7,4	1350x1000x450	250x250
ARTI IP IGK 10	1000	160	4,8	9,2	1400x1100x500	280x280
ARTI IP IGK 15	1500	210	7,6	14	1650x1300x550	400x400
ARTI IP IGK 20	2000	220	9,5	18,3	1850x1400x650	450x450
ARTI IP IGK 30	3000	150	13,4	25,1	2000x1600x750	500x500
ARTI IP IGK 40	4000	230	18,7	31,9	2100x1700x750	500x500

HEAT RECOVERY UNIT



HEAT RECOVERY UNIT

HEAT RECOVERY UNIT

HEAT RECOVERY UNIT

TECHNICAL SPECIFICATIONS & USER'S MANUAL

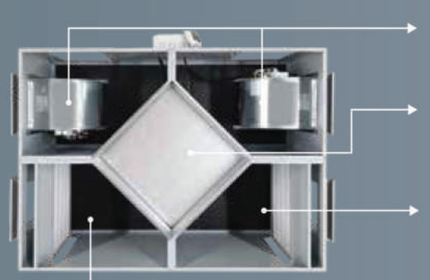
Heat Recovery Unit Definition

Thermal energy would be recovered and the room temperature would be adjusted due to heat transfer between the heat recovery ventilation devices and the exhausted air. Thus, it provides enduring comfortable and clean area. *Conventional* ventilation systems have additional air conditioning loads from fresh air. In heat recovery devices, the load added to the air conditioning system is reduced and energy saving is provided.

ARTI heat recovery devices are manufactured in 10 different types as ARTI 05-07-10-15-20-25-30-35-40-50. In addition, sensors can be connected to standard heat recovery devices to be controlled by electronic control. All our models can be manufactured both single-walled and double-walled. In our single-walled models; the *body sheet is made of galvanized steel and rubber insulation material is used for heat-sound insulation on the inner surfaces. In our double-walled models,* carcass is formed with the help of aluminum profil and plastic corners, and the covers are sandwich panels.

Standart heat recovery device has *5* sections; Fresh air filter section, Exhaust air filter section, Heat recovery section, Exhaust section, Ventilation section.

Standard heat recovery device is controlled by standard electronic control. In this way, the fresh air fan (3 stages) and the exhaust air fan (3 stages) can be intervened separately and the optional electric heater can be controlled in 2 stages. In addition, depending on the temperature set via the electronic control, the electric heater automatically switches on and off. Due to the electronic control, the electric heater is not switched on until the fresh air fan is switched on. In addition, fresh air fan 30sec. are closed late.



Ventilator Unit (3 Speed Radial Fan)

Heat Recovery Unit (Aluminium Heat Exchanger)

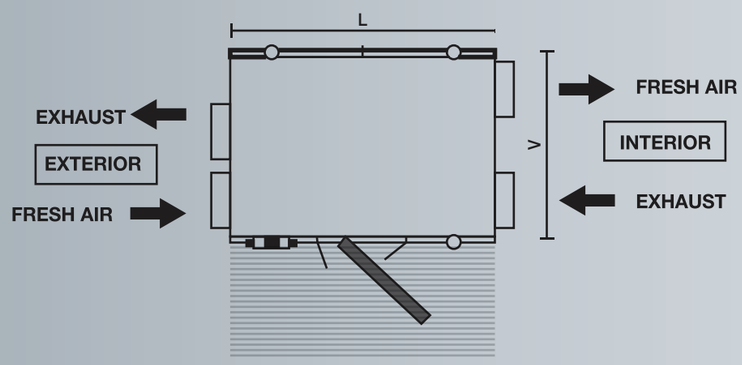
Fresh Air Filter Unit (Fiber Filter)

Exhaust Air Filter Unit (Fiber Filter)

HEAT RECOVERY UNIT

HEAT RECOVERY UNIT TECHNICAL SPECIFICATIONS TABLE

HEAT RECOVERY UNIT							
MODEL	FLOW (m^3/h)	EXTERNAL PRESSURE LOSS (Pa)	ELECTRICAL HEATER (OPTIONAL) (KW)	POWER (W)	SIZES (LxWxH (mm)	VOLTAGE (V&HZ)	CONNECTION SIZES (mm)
ARTI - IGK 05	500	140	1	150 x 2	1100 X 800 X 420	220 & 50	200x200
ARTI - IGK 07	750	150	2	300 x 2	1100 X 800 X 420	220 & 50	200x200
ARTI - IGK 10	1000	140	3	300 x 2	1250X900X420	220 & 50	250X250
ARTI - IGK 15	1500	165	5	450 x 2	1250X900X420	220 & 50	250X250
ARTI - IGK 20	2000	90	5	450 x 2	1500X1100X510	220 & 50	300x260
ARTI - IGK 25	2500	120	7	500 x 2	1500X1100X510	220 & 50	300x260
ARTI - IGK 30	3000	140	8	550 x 2	1650X1200X510	220 & 50	300x300
ARTI - IGK 35	3500	100	10	550 x 2	1650X1200X510	220 & 50	300x300
ARTI - IGK 40	4000	120	10	750 x 2	1750X1300X560	220 & 50	350x350
ARTI - IGK 50	5000	140	16	800 x 2	1750X1300X610	220 & 50	400x400



HEAT RECOVERY UNIT

By Pass Dumper Heat Recovery Definition

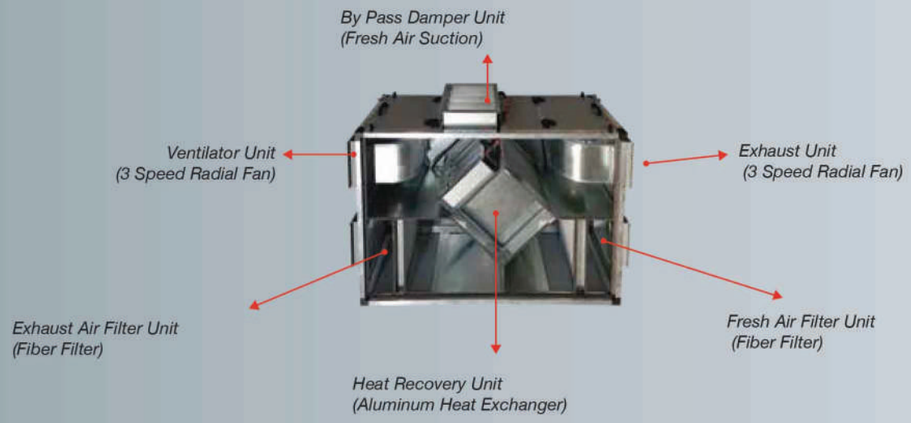
hermal energy would be recovered and the room temperature would be adjusted due to heat transfer between the heat recovery ventilation devices and the exhausted air. Thus it endures an enduring comfortable and clean area. Convantional air conditioning systems have additional fresh air climate burden. In the heat recovery devices, air conditioning system's burden would be decreased thus it staves the energy. Especially in the season transitions (Autumn and spring) or in the day time and night time external temperature approaches to the interior temperature. For using the fresh air efficiently (To eliminate the exchanger pressure loss), plated exchanger can be by-passed. Besides, in the warm season transitions, in case of external temperature is getting lower than the interior temperature, fresh air plated exchanger can be by-passed for using this air to refrigate the area. By pass connection kit and the external temperature can be controlled over device's electronical card automatically and if necessary, external air is blow to the area without passing through plated exchanger.

ARTI By pass heat recovery devices are manufacturing as 10 type, these are ARTI 7-10-15-20-25-30-35-40-45-50. Besides by installing sensors, they can be controlled through remote control. In all our models; body sheet is made of galvanized steel and internal surfaces are insulated for heat-sound insulation. Our devices are double-skinned and are manufactured as sandwich panels. The dumpers used are fully card controlled and operate automatically. By pass heat recovery device has six section:

Fresh air filter section, Exhaust air filter section, Heat recovery section, Exhaust section, Ventilation section, By pass dumper section.

HEAT RECOVERY UNIT

By Pass Dumper Heat Recovery Device Technical Specifications Table



BY PASS DUMPER HEAT RECOVERY DEVICE							
MODEL	FLOW (m^3/h)	PRESSURE (PA)	ELECTRICAL HEATER (OPTIONAL) (KW)	POWER (W)	SIZES (LxWxH (mm)	VOLTAGE (V&HZ)	CONNECTION SIZES (mm)
ARTI BY IGK 7	750	105	1	150x2	1400 X 860 X 490	220 & 50	200x200 300x200
ARTI BY IGK 10	1000	135	1	250x2	1500 X 1000 X 490	220 & 50	200x200 350x240
ARTI BY IGK 15	1500	120	3	250x2	1500 X 1000 X 490	220 & 50	250x250 350x240
ARTI BY IGK 20	2000	110	3	450x2	1800 X 1260 X 540	220 & 50	300x260 400x370
ARTI BY IGK 25	2500	100	5	450x2	1800 X 1260 X 540	220 & 50	300x260 400x370
ARTI BY IGK 30	3000	115	7	550x2	1900 X 1360 X 560	220 & 50	300x300 400x400
ARTI BY IGK 35	3500	95	8	550x2	1900 X 1360 X 560	220 & 50	330x330 420x400
ARTI BY IGK 40	4000	130	10	750x2	2000 X 1440 X 560	220 & 50	350x350 430x420
ARTI BY IGK 45	4500	115	13	750x2	2000 X 1440 X 560	220 & 50	350x350 430x420
ARTI BY IGK 50	5000	90	16	780x2	2100 X 1440 X 690	220 & 50	400x400 550x440

TECHNICAL SPECIFICATIONS

By Pass Dumper Heat Recovery Device Working Scenarios

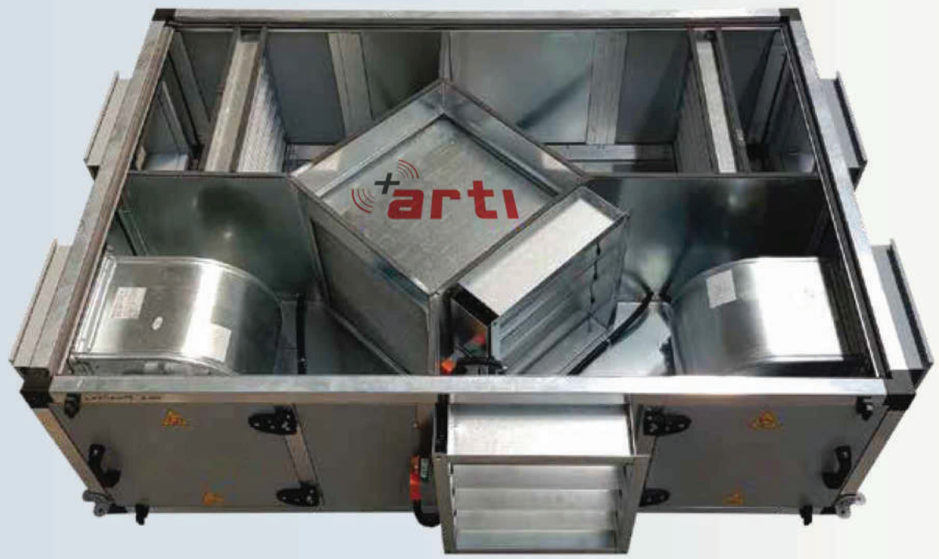
▸ If the area temperature falls below the setpoint controlled via control panel, if available, electrical heater switches on, when it goes up to the setpoint it switches off; besides, the heaters have high temperature safety thermostat, so if the heater overheats it switches off automatically for safety.

▸ While electrical heater working external temperature would be lower then inner temperature so by pass dumper would be closed and inner dumper in front of exchanger would be opened.

▸ When electrical heater not working if external temperature is below 25 degrees, outer dumper would be opened to refrigate the area and the air would be by passed and this prevents to make heat transfer.

▸ No electrical heater models we can select manually On/Of options in the digital display; by switching on we select winter mode, by switching off we select summer mode. So we can operate the systen when there's no heater. The external air is controlled by external air thermostat; inner air is controlled by remote panel's digital display and transmits to the motherboard.

▸ If the 3 graded fans which makes the air circulation, are closed, all the dumpers would bu closed to prevent the air intake. Thus, it prevents the air or extraneous things to pass into the device when it's switched off.



HEAT RECOVERY UNIT

TECHNICAL SPECIFICATIONS

Optional Accessories

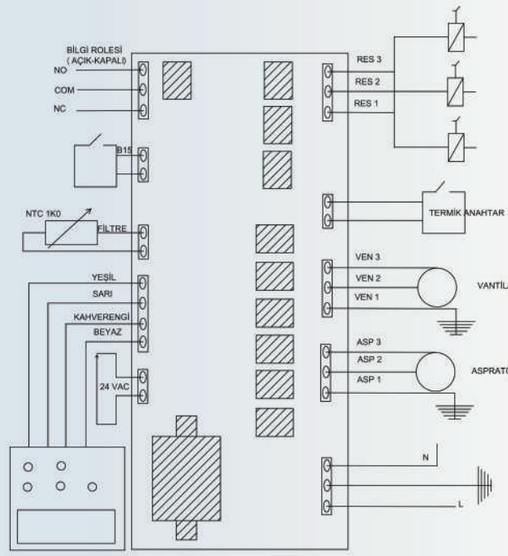
Canal Type Silencers; ARTI canal type silencers can be manufactured as round edged or rectangle edged optionally. All silencer models can be manufactured in accordance with the international standarts on valid sizes and made for the backstage numbers. Circular silencers are manufactured on the standart round edges; rectangle canal type silencers are manufactured on the optional canal edges according to the project. All models are suitable for quick and easy installation with minimum air leakage to the existing duct system. In our standard production, glass wool and stone wool insulation are used as sound dampening insulation material.

Canal Type Electrical Heater; ARTI canal type silencers can be manufactured as round edged or rectangle edged optionally. They can be manufactured on standart capacity or on the other valid project capacities. Canal type lecetrical heaters have double overheating preventing safety themostat and ARTI heat recovery ventilation devices can be controlled automatically via electronical card control or manually over the device.

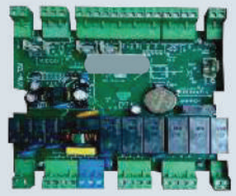
Canal Type Heater or Cooler Coil; ARTI canal type coils are manufactured rectangle edged. They can be manufactured on standart capacity or on the other valid project capacities. Canal type coil units can be placed on ceiling floor and they are designed to be placed into the heat recovery ventilation devices or mounted to the blown intake.

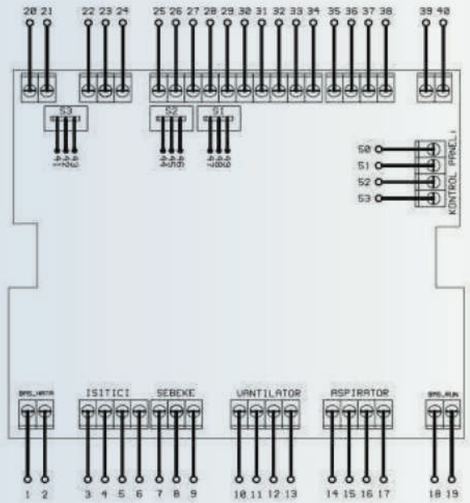
REMOTE PANELS AND CONNECTION CHART

MODEL 1



MODEL 2





Clean Air, Clean Future

Suomi is ARTI's flagship on the ecological products category. Designed for the needs of the sector and based on the 'Clean Air, Clean Future' slogan and it achieved up to 97% on filtering the smoke, oil and smell.

Suomi's main filtering electrostatical gatherers, are manufacturing in the ARTI facilities as a result of the huge investments and the work of the research development team to decrease the external dependence in 2016*. So we can provide economical solutions for the maintenance and the needs of the spare parts of the devices that we manifactured.*

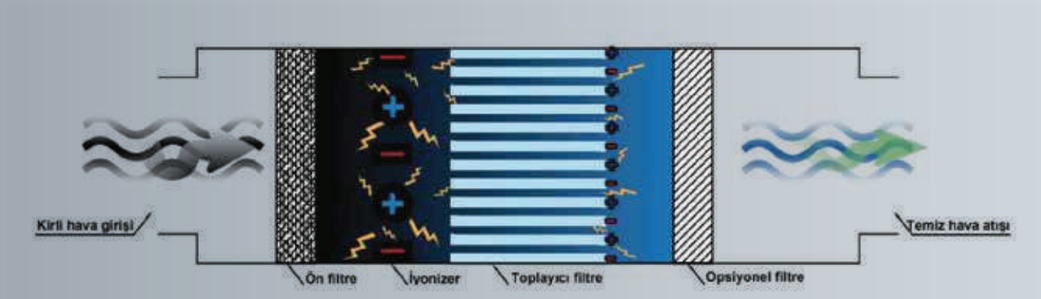
ELECTROSTATIC FILTERS

ELECTROSTATIC FILTERS

ELECTROSTATIC FILTERS

How it works?

Electrostatic filters are consist of the various components designed specially for the filtering the smoke and the smell particles. Polluted air is passed through 3 phases and this ensures the total degradation. You can see how the electrostatic filters work in the diagram shown below.



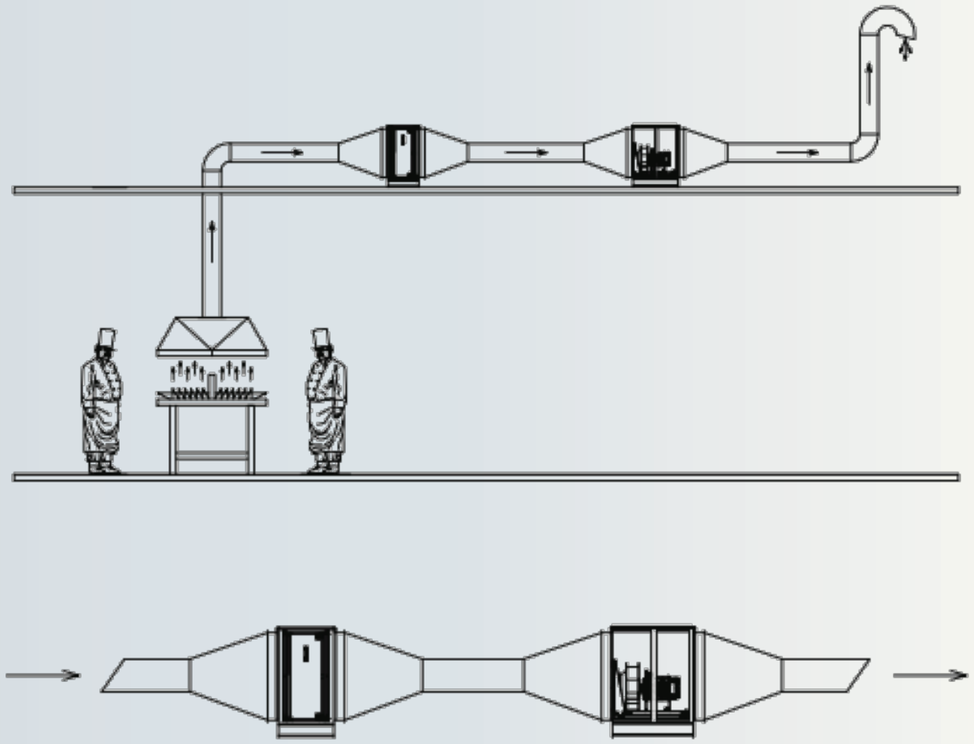
First, polluted air is passed through the front filter coarsely. Thus, bigger particles are holding by attaching to the pores. The other 10- 0.1 micron sized pollutants are charged negative electrical charge in the ionizer charger. The negative electrical charged particles came from the gathering modul, are gathered by pulling by the positive charged plated. These accured particles are filtered via plates and stored in the oil pan.

WORKING AREAS

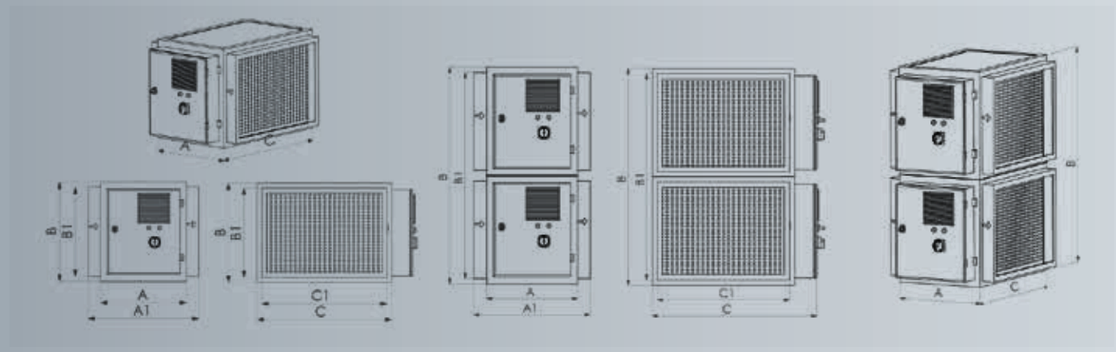
Restaurants - *Minimum fire risk*
Hotels - *Minimum maintenance and comsumption cost*
Cafes- *Minimum* environment pollution
Industrial Kitchens - *Minimum energy waste*
Barbeques- *Minimum efficiency waste*

ARTI Air Conditioning -TF Series

ARTI - TF series ecological products consist of front blatant filters and single stage electrostatic filters. There is no built in suction fan on the contrary of ARTI - PAK and SANT series. They can be integrated easily through the systems have ventilation system and it allows to the customization. ARTI - TF series are compact system so they can be used by hanging to the ceiling or to the ventilation canal. So there's no need to huge spaces for the installation.



ELECTROSTATIC FILTERS



ARTI - T f									
Model	ARTI Tf 20	ARTI Tf 30	ARTI Tf 40	ARTI Tf 60	ARTI Tf 80	ARTI Tf 100	ARTI Tf 120	ARTI Tf 160	ARTI Tf 200
Voltage	220								
Air Flow (m³/h)	2.000	3.000	4.000	6.000	8.000	10.000	12.000	16.000	20.000
Efficiency	<95	<95	<95	<95	<95	<95	<95	<95	<95
Pressure Loss (Pa)	35	35	35	35	35	35	35	35	35
Power Unit / Filter Number	1\1	1\1	1\2	1\2	1\2	1\3	2\4	2\4	2\6
Energy Consumption (w)	80 w	80 w	120 w	120 w	150 w	200 w	240 w	300 w	400 w
Weight (kg)	75 kg	100 kg	110 kg	130 kg	140 kg	160 kg	260 kg	280 kg	320 kg
Size (A) Length	540 mm	540 mm	540 mm	520 mm	540 mm	540 mm	540 mm	540 mm	540 mm
Size (A1) Length + Shot Suction Frame	660 mm	660 mm	660 mm	660 mm	660 mm	660 mm	660 mm	660 mm	660 mm
Size (B) Height	600 mm	600 mm	600 mm	600 mm	600 mm	1200 mm	1200 mm	1200 mm	1800 mm
Size (B1) Shot Suction Frame	550 mm	550 mm	550 mm	550 mm	550 mm	1150 mm	1150 mm	1150 mm	1750 mm
Size (C) Width	560 mm	670 mm	1040 mm	1150 mm	1260 mm	1040 mm	1150 mm	1260 mm	1260 mm
Size (C1) Shot Suction Frame	510 mm	620 mm	990 mm	1100 mm	1210 mm	990 mm	1100 mm	1210 mm	1210 mm

All devices have roof. TF series are single staged.

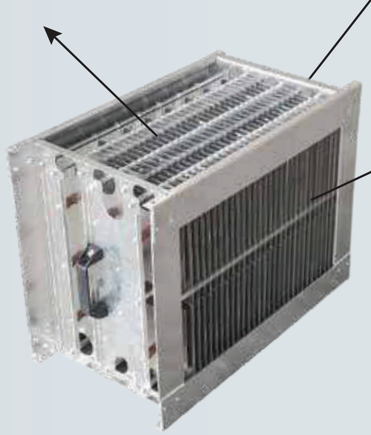
SIMPLE ELECTROSTATIC FILTER INNER PIECES

ALUMINIUM GATHERING PIECE

- *Durable and lightweight*
- *Fit for the industrial standarts*
- *Washable with the pressure water, durable to the corrosion and high resisting aluminium blend.*
- *Performance up to 97% with the customized moduls.*

HIGH VOLTAGE ISOLATION MATERIAL

- *Brand new design* preventing elecrtric arc
- *Resistant to the high temperature and pressure*
- *Resistant to the voltage skippings high resistant* isolator



***TUNGSTEN** IONISATION DESIGN*

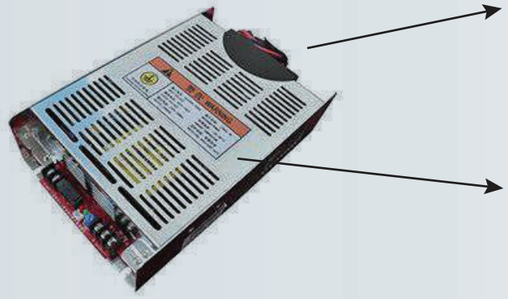
- *Ionisation capacity not needed maintenance*
- High efficient filtering with the ionisation layer preventing the *passage of the oil and smoke*

***TFE** IONISATION MATERIAL*

- *Usage in high temperature, pressure and humidity areas*
- Electrical insulation and high isolation power
- Completely isolated current
- *Preventing* and eliminatingelectric arc
- High safety parameter

DETACHABLE DESIGN

- Easy to clean and maintenance
- Safe usage due to safety switch on the cap



***PWM** HIGH FREQUENCY NUTRITION TRANSFORMER*

- High efficiency
- *Minimum* energy waste
- *15.000 – 100.000 Volt* output
- Current stabilising and nutrition stability

HIGH SAFETY DUE TO MULTIPLE SAFETY MECHANISM

- Electric arc protection
- High current protection
- Overcharging protection
- Transformer over heat protection

ELECTROSTATIC FILTERS

ARTI – TF SECTION

Electrostatic filters are specially manufactred according to the work, sizes of the hood fume, area, population, place and the other various factors.Device is supported with many filtering systems according to the need.
It's aimed to get sufficiency on the increasing smell- smoke performance and its main objective is increase as soon as high the glide ratio.

They are manufacturing as single stage - double stage - triple stage and more stage, *and the numbers of the electrostatic filter and the other filters are specially designed. We can manufacture specially according to the capasity* and theneeds *of the area .*
We aim to find persistent solutions for to fulfil the users' needs.

Alongside of the customizable capacity and design we want to make our customers happy with the color selections.

ELECTROSTATIC FILTERS

If requested, excluding the fan, we can make single chamber filter products to fulfil the needs of the customers on the ventilation.

A single electrostatic filter + cartridge carbon filter bundle manufactured as single stage can work in multiple areas and in the right place with the right capacity can work high efficiently.

SINGLE ELECTROSTATIC FILTER CEILING TYPE CYLINDER CARBON FILTER ESF UNIT WITHOUT FAN

	FLOW (m^3/h)	PRESSURE LOSS(Pa)	CARBON CYLINDER NUMBER	HEIGHT (mm)	WIDTH (mm)	LENGTH (mm)	WEIGHT (kg)
ARTI - TF SC 02	2000	320	8	660	670	1600	110
ARTI - TF SC 03	3000	330	16	660	670	1600	155
ARTI - TF SC 04	4000	335	16	660	1030	1600	170
ARTI - TF SC 05	5000	340	24	660	1140	1600	190
ARTI - TF SC 06	6000	350	24	660	1140	1600	205
ARTI - TF SC 08	8000	350	32	660	1270	1600	240

ALL MODELS HAVE ROOF.

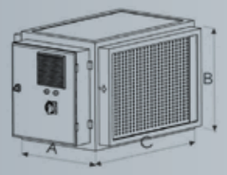
DOUBLE ELECTROSTATIC FILTER CEILING TYPE CYLINDER CARBON FILTER ESF UNIT WITHOUT FAN

	FLOW (m^3/h)	PRESSURE LOSS (Pa)	CARBON CYLINDER NUMBER	HEIGHT (mm)	WIDTH (mm)	LENGTH (mm)	WEIGHT (kg)
ARTI - TF SC-DE 02	2000	350	8	660	670	1900	160
ARTI - TF SC-DE 03	3000	360	16	660	670	1900	205
ARTI - TF SC-DE 04	4000	365	16	660	1030	1900	235
ARTI - TF SC-DE 05	5000	370	24	660	1140	1900	250
ARTI - TF SC-DE 06	6000	380	24	660	1140	1900	290
ARTI - TF SC-DE 08	8000	380	32	660	1270	1900	310

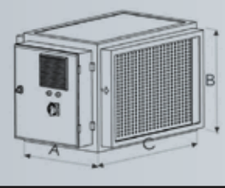
ALL MODELS HAVE ROOF.

ELECTROSTATIC FILTER

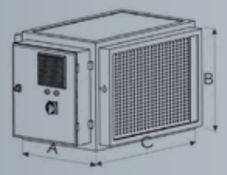
ARTI-TF ESF Technical Specıfications



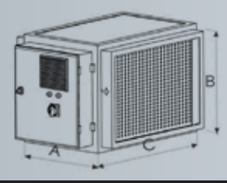
ARTI TF 02	
MAX. AIR FLOW:	2000 m³/h
IONISER WIRE NUMBER :	6
IONISER PLATE NUMBER :	5
GATHERING SURFACE:	11,3 m²
ESF CELL NUMBER:	1
ESF INPUT VOLTAGE	230V
ESF ELECTRIC CONSUMPTION:	80 W
ESF PRESSURE LOSS:	35 Pa
MAX. WORKING HEAT :	120 °C
CASE SIZE:	A: 650 mm B: 600mm C: 560mm
SHOT SUCTION SIZE:	540mm*540mm
WEIGHT :	75 kg



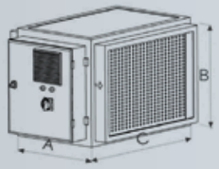
ARTI TF 03	
MAX. AIR FLOW :	3000 m³/h
IONISER WIRE NUMBER:	8
İIONISER PLATE NUMBER:	7
GATHERING SURFACE :	13,6 m²
ESF CELL NUMBER:	1
ESF INPUT VOLTAGE	230V
ESF ELECTRIC CONSUMPTION:	80 W
ESF PRESSURE LOSS :	35 Pa
MAX. WORKINGHEAT	120 °C
CASE SIZE	A: 650 mm B: 600mm C: 670mm
SHOT SUCTION SIZE	620mm*540mm
WEIGHT :	100 kg



ARTI TF 04	
MAX. AIR FLOW:	4000 m³/h
IONISER WIRE NUMBER:	12
IONISER PLATE NUMBER :	10
GATHERING SURFACE:	21,6 m²
ESF CELL NUMBER:	2
ESF GINPUT VOLTAGE	230V
ESF ELECTRIC CONSUMPTION:	120 W
ESF PRESSURE LOSS:	35 Pa
MAX. WORKINGHEAT	120 °C
CASE SIZE	A: 660 mm B: 600mm C: 1040mm
SHOT SUCTION SIZE	990mm*540mm
WEIGHT:	110 kg

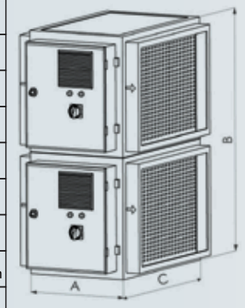


ARTI TF 06	
MAX. AIR FLOW:	6000 m³/h
IONISER WIRE NUMBER	14
IONISER PLATE NUMBER	12
GATHERING SURFACE :	24,2 m²
ESF CELL NUMBER:	2
ESF INPUT VOLTAGE	230V
ESF ELECTRIC CONSUMPTION :	120 W
ESF PRESSURE LOSS:	35 Pa
MAX. WORKING HEAT	120 °C
CASE SIZE	A: 660 mm B: 600mm C: 1150mm
SHOT SUCTION SIZE	1100mm*540mm
WEIGHT:	130 kg

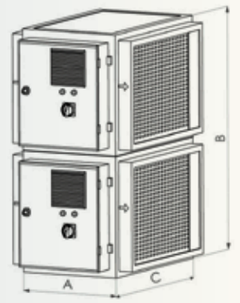


ARTI TF 08	
MAX AIR FLOW :	8000 m³/h
IONISER WIRE NUMBER :	16
IONISER PLATE NUMBER:	14
GATHERING SURFACE	27,6 m²
ESF CELL NUMBER:	2
ESF INPUT VOLTAGE	230V
ESF ELECTRIC CONSUMPTION:	150 W
ESF PRESSURE LOSS	35 Pa
MAX. WORKING HEAT	120 °C
CASE SIZE	A: 660 mm B:600mm C:1260mm
SHOT SUCTION SIZE	1210mm*540mm
WEIGHT:	140 kg

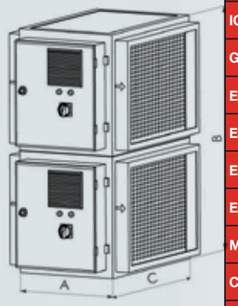
ARTI TF 10	
MAX. AIR FLOW:	10.000 m³/h
IONISER WIRE NUMBER :	22
IONISER PLATE NUMBER:	19
GATHERING SURFACE:	43,2 m²
ESF CELL NUMBER	4
ESF INPUT VOLTAGE	230V
ESF ELECTRIC CONSUMPTION	200 W
ESF PRESSURE LOSS :	35 Pa
MAX. WORKINGHEAT	120 °C
CASE SIZE	A: 660 mm B:1250mm C:1040mm
SHOT SUCTION SIZE	1150mm*990mm
WEIGHT :	160 kg



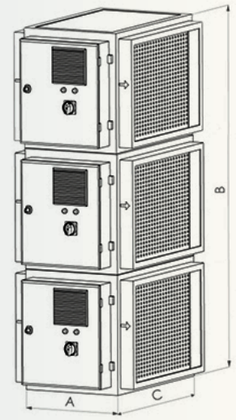
ARTI TF 12	
MAX.AIR FLOW:	12.000 m³/h
IONISER WIRE NUMBER:	28
IONISER PLATE NUMBER:	24
GATHERING SURFACE :	48,4 m²
ESF CELL NUMBER	4
ESF INPUT VOLTAGE	230V
ESF ELECTRIC CONSUMPTION:	240 W
ESF PRESSURE LOSS:	35 Pa
MAX. WORKING HEAT	120 °C
CASE SIZE	A: 660 mm B:1200mm C:1150mm
SHOT SUCTION SIZE	1150mm*1100mm
WEIGHT:	260 kg



ARTI TF 16	
MAX. AIR FLOW :	16.000 m³/h
IONISER WIRE NUMBER	32
IONISER PLATE NUMBER:	28
GATHERING SURFACE :	55,2 m²
ESF CELL NUMBER :	4
ESF INPUT VOLTAGE	230V
ESF EELECTRIC CONSUMPTION :	300 W
ESF PRESSURE LOSS:	35 Pa
MAX. WORKING HEAT	120 °C
CASE SIZE	A: 660 mm B:1200mm C:1260mm
SHOT SUCTION SIZE	1150mm*1210mm
WEIGHT:	280 kg



ARTI TF 20	
MAX. AIR FLOW :	20.000 m³/h
IONISER WIRE NUMBER:	44
IONISER PLATE NUMBER:	38
GATHERING SURFACE	71,6 m²
ESF CELL NUMBER:	6
ESF INPUT VOLTAGE	230V
ESF ELECTRIC CONSUMPTION :	400 W
ESF PRESSURE LOSS :	35 Pa
MAX. WORKING HEAT	120 °C
CASE SIZE	A: 660 mm B:1800mm C:1260mm
SHOT SUCTION SIZE	1750mm*1210mm
WEIGHT :	320 kg



Clean Air, Clean Future

Suomi is ARTI flagship on the ecological products category. Designed for the needs of the sector and based on the 'Clean Air, Clean Future' slogan and it achieved up to *97% on filtering the smoke, oil and smell.*

Suomi's main filtering electrostatical gatherers, are manufacturing in the ARTI facilities as a result of the huge investments and the work of the research development team to decrease the external dependence in 2016. So we can provide economical solutions for the maintenance and the needs of the spare parts of the devices that we manifactured.

ELECTROSTATIC FILTERS

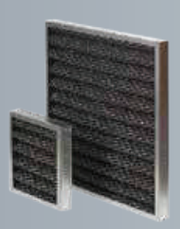
ELECTROSTATIC FILTERS

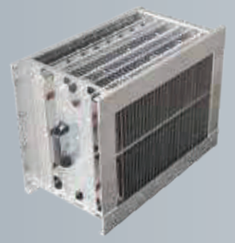
ELECTROSTATIC FILTERS

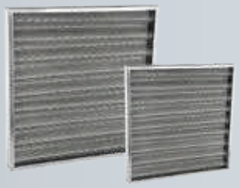
Package type electrostatic filters are specially designed 'PLUG AND PLAY' devices to fulfil the basic filtration needs by saving space.

It has a simple system and it's easy to use and for the efficiency and performance, it's more efficient than the piece by

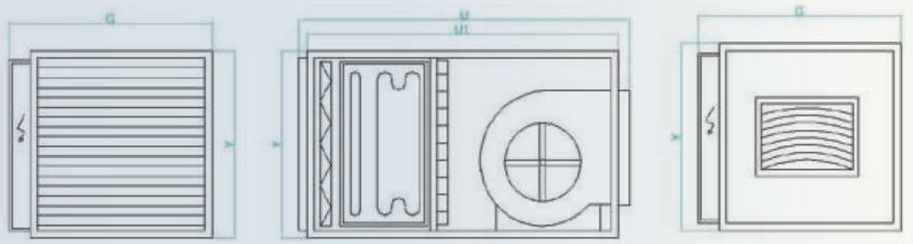
according to the design, array of the inner equipment and the size of the case.







We import and export the package type filters and the lower size of the device is designed by considering the customers' interests such as transportation costs, performance efficiency and w/v balance,etc.



		G	Y	U	U1	Shot	Suction	Weight (Kg)	Volume (m)
ARTI - PAK MONO	PAK Mono 20	550	650	1470	1350	300x300	600x500	90	0,48
	PAK Mono 30	660	650	1470	1350	300x300	610x600	130	0,57
	PAK Mono 40	1030	650	1520	1400	350x350	980x600	150	0,93
	PAK Mono 50	1140	650	1550	1430	400x400	1090x600	170	1,05
	PAK Mono 60	1140	650	1550	1430	400x400	1090x600	190	1,05
	PAK Mono 80	1250	650	1550	1430	400x400	1200x600	220	1,16

ELECTROSTATIC FILTERS

ARTI - PAK MONO 20	
MAX. AIR FLOW :	2000 m³/h
IONISER WIRE NUMBER:	6
IONISER PLATE NUMBER :	5
GATHERING SURFACE:	11,3 m²
ESF CELL NUMBER:	1
INPUT VOLTAGE:	230V
TOTAL ELECTRIC POWER:	510 W
MAX. WORKING HEAT:	120 °C
WEIGHT :	90 kg

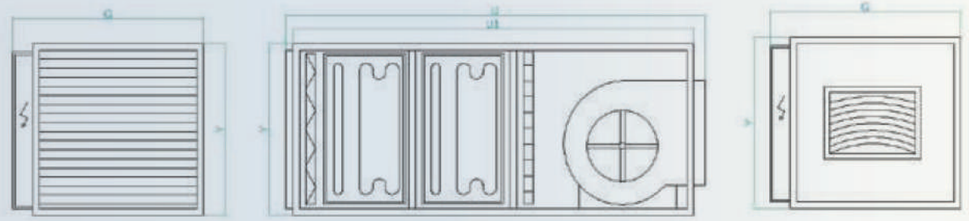
ARTI - PAK MONO 30	
MAX. AIR FLOW :	3000 m³/h
IONISER WIRE NUMBER :	8
IONISER PLATE NUMBER :	7
GATHERING SURFACE:	13,6 m²
ESF CELL NUMBER:	1
INPUT VOLTAGE:	230V
TOTAL ELECTRIC POWER :	510 W
MAX. WORKING HEAT:	120 °C
WEIGHT :	130 kg

ARTI - PAK MONO 40	
MAX. AIR FLOW:	4000 m³/h
IONISER WIRE NUMBER :	12
IONISER PLATE NUMBER:	10
GATHERING SPACE:	21,6 m²
ESF CELL NUMBER:	2
INPUT VOLTAGE:	230V
TOTAL ELECTRIC POWER:	670 W
MAX. WORKING HEAT :	120 °C
WEIGHT :	150 kg

ARTI - PAK MONO 50	
MAX.AIR FLOW:	5000 m³/h
IONISER WIRE NUMBER :	14
IONISER PLATE NUMBER :	12
GATHERING SPACE:	24,2 m²
ESF CELL NUMBER:	2
INPUT VOLTAGE :	230V
TOTAL ELECTRIC POWER:	855 W
MAX. WORKING HEAT:	120 °C
WEIGHT :	170 kg

ARTI - PAK MONO 60	
MAX. AIR FLOW :	6000 m³/h
IONISER WIRE NUMBER:	14
IONISER PLATE NUMBER :	12
GATHERING SPACE :	24,2 m²
ESF CELL NUMBER:	2
INPUT VOLTAGE:	230V
TOTAL ELECTRIC POWER:	1620 W
MAX. WORKING HEAT:	120 °C
WEIGHT:	190 kg

ARTI - PAK MONO 80	
MAX. AIR FLOW:	8000 m³/h
IONISER WIRE NUMBER:	16
IONISER PLATE NUMBER:	14
GATHERING SURFACE:	27,6 m²
ESF CELL NUMBER:	2
INPUT VOLTAGE :	230V
TOTAL ELECTRIC POWER :	1620 W
MAX. WORKING HEAT :	120 °C
WEIGHT :	230 kg

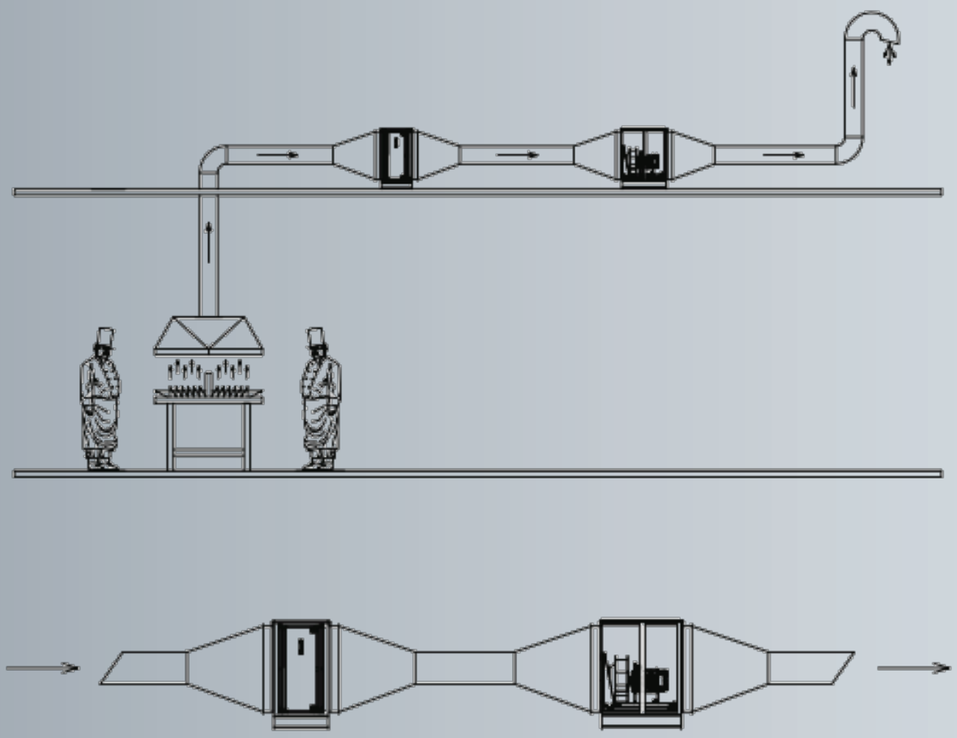


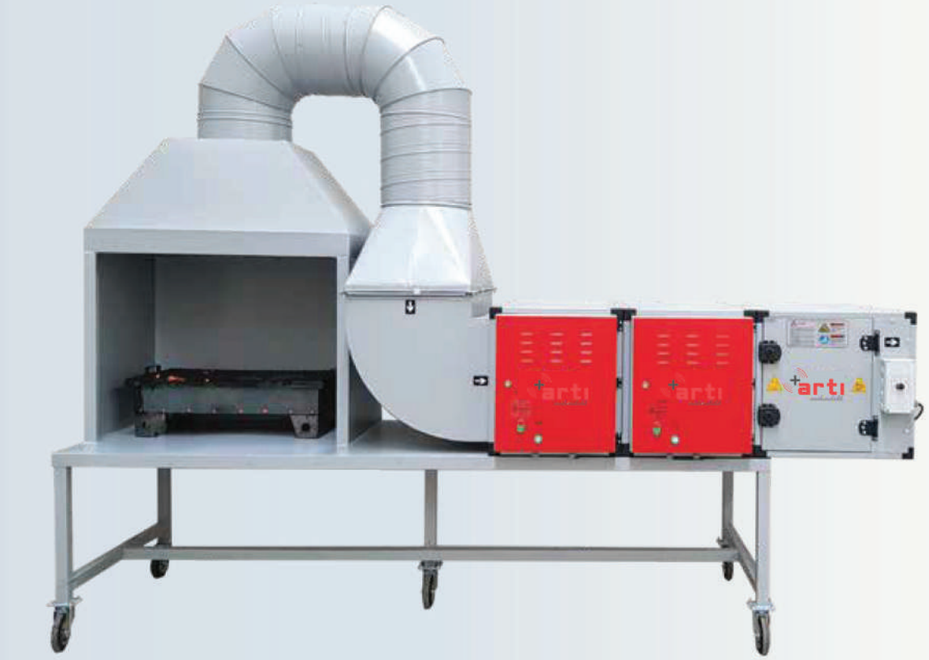
		G	Y	U	U1	Shot	Suction	Weight (Kg)	Volume (m³)
ARTI - PAK DUAL	PAK Dual 20	550	650	1920	1800	300x300	600x500	140	0,64
	PAK Dual 30	660	650	1920	1800	300x300	610x600	180	0,77
	PAK Dual 40	1030	650	2020	1900	350x350	980x600	210	1,27
	PAK Dual 50	1140	650	2080	1960	400x400	1090x600	240	1,45
	PAK Dual 60	1140	650	2080	1960	400x400	1090x600	285	1,45
	PAK Dual 80	1250	650	2080	1960	400x400	1200x600	305	1,59

ELECTROSTATIC FILTERS

ARTI – PAK GENERAL VIEW

	ARTI PAK 20		ARTI PAK 30		ARTI PAK 40		ARTI PAK 50		ARTI PAK 60		ARTI PAK 80	
	Mono	Dual	Mono	Dual	Mono	Dual	Mono	Dual	Mono	Dual	Mono	Dual
Flow (m^3/h)	2000		3000		4000		5000		6000		8000	
External Pressure Loss(Pa)	160	130	100	70	100	80	120	75	215	190	140	110
Electrostatic Power Consumption (W)	200	400	200	400	200	400	200	400	200	400	200	400
Carbon Filter Thickness(mm)	50											
Voltage / Phase / Frequency	220 v	220 v	220 v	220 v	220 v	220 v	220 v	220 v	380 v	380 v	380 v	380 v
Fan Engine Power* (Kw)	0,42	0,42	0,42	0,42	0,55	0,55	0,735	0,735	1,5	1,5	1,5	1,5

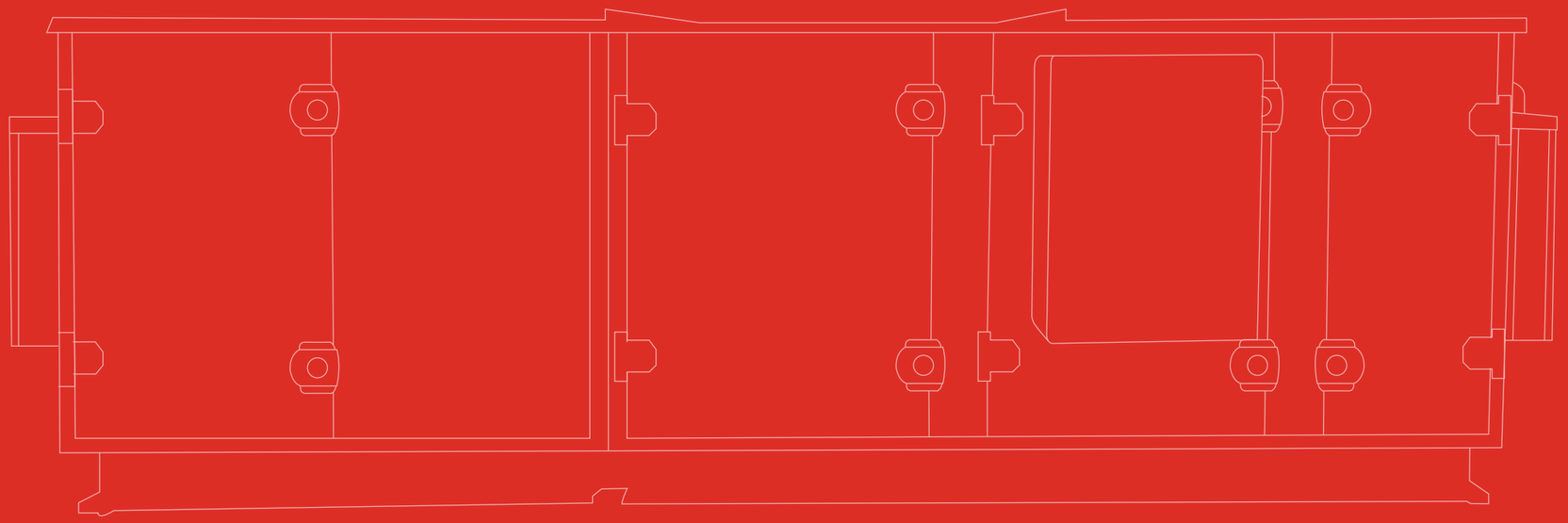




Please look at the picture below to see the usage and installation simplicity. The connection between device and canal line is crucial. It's one of the most important significant things for decreasing the air speed or adjusting it to the needed level to make them equal. Otherwise, the wrong connections affect negatively the performance and decrease the gliding ratio. Canal lenght, diameter - thickness, elbows and the other similar factors must be calculated carefully and be considered choosing the right capacity.

ONE - PAK series can be placed on roof, floor, ceiling and the other similar places and they have so many advantages such as space-saving and maintenance simplicity.

You can see the example placing in the picture above. These series have placement simplicity to totally fulfill the user's need and they can be manufactured as single stage or double stage. For the high level capacity needs, it's recommended to use SANT series.



Clean Air, Clean Future

ARTI is flagship on the ecological products category. Designed for the needs of the sector and based on the 'Clean Air, Clean Future' slogan and it achieved up to 97% on filtering the smoke, oil and smell.

ARTI's main filtering electrostatical gatherers, are manufacturing in the EBA facilities as a result of the huge investments and the work of the research development team to decrease the external dependence in 2016. So we can provide economical solutions for the maintenance and the needs of the spare parts of the devices that we manifactured.

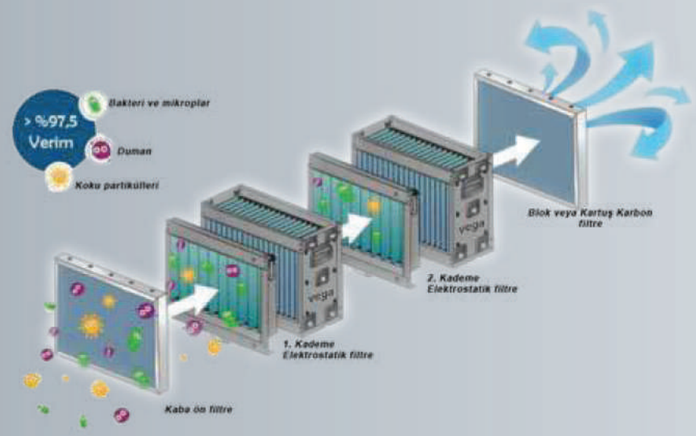
ELECTROSTATIC FILTERS

ELECTROSTATIC FILTERS

ELECTROSTATIC FILTERS

CENTRAL TYPE ELECTROSTATIC FILTERS

Equipped with the filters filterates the air flow highly *and durable on the exterior,* powerful central type electrostatic filters are *made for the bigger projects that the classic electrostatic filters fell short and most intensive smell* - smoke process happened.



This one piece device includes all its equipment within itself and it's an 'PLUG AND PLAY' device. You can start to use it immediately after the installation.

	Smoke Intensity			Smell Intensity		
	Low	Medium	High	Low	Medium	High
Cafe / Home Cooking	✓			✓		
Pizza & Bakery		✓			✓	
Meat Restaurant		✓			✓	
Fast Food (Fried Food)			✓			✓
Meat & Chicken Doner		✓			✓	
Kebap Restaurant			✓			✓
Fast Food (Burger)			✓			✓
Seafood			✓			✓

According to the function or details of the area you can choose one of these models shown on the table or you can contact with us.

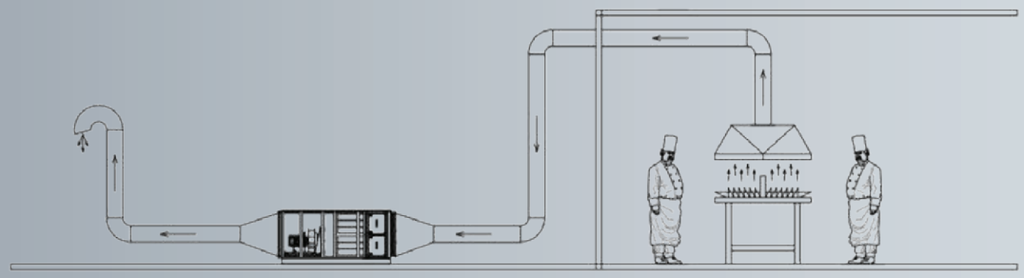
	Smell	Smoke	Definition
ARTI - TF	LOW	LOW	Can be mounted to the canal gap Front Coarse Filter+ Electrostatic Filter
ARTI – PAK MONO	MEDIUM	MEDIUM	Front Coarse Filter+ Electrostatic Filter - Tray Carbon Filter - Fan Modul
ARTI – PAK DUAL	MEDIUM	MEDIUM	Front Coarse Filter+Double Electrostatic Filter - Tray Carbon Filter - Fan Modul
ARTI - SANT - RG	MEDIUM	MEDIUM	Front Coarse Filter+ Electrostatic Filter - Cartridge Carbon Filter - Fan Modul
ARTI - SANT - DE	MEDIUM	HIGH	Front Coarse Filter+ Double Stage Electrostatic Filter - Cartridge Carbon Filter - Fan Modul
ARTI - SANT - DC	HIGH	MEDIUM	Front Coarse Filter+ Electrostatic Filter - Double Stage Cartridge Carbon Filter - Fan Modul
ARTI - SANT - HP	HIGH	HIGH	Front Coarse Filter+ Double Stage Electrostatic Filter - Double Stage Cartridge Carbon Filter - Fan Modul

As the other electrostatic filters have, Central type electrostatic filters have also modellings It's important to make the right choiceaccording to the need. Otherwise, not getting efficiency or making higher capacity selection than needed can cause material and technical damages.

ELECTROSTATIC FILTERS

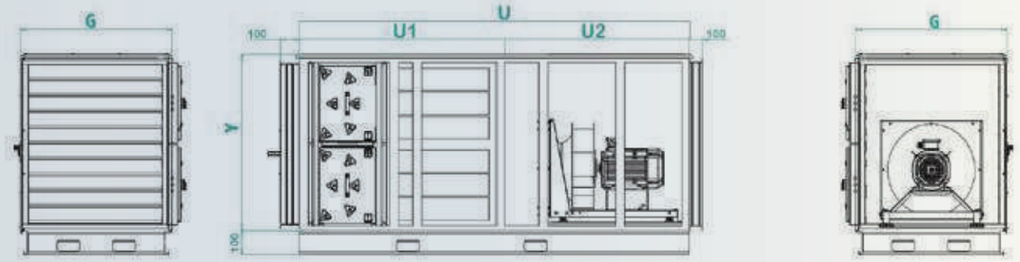
ARTI - SANT (Central Type) MODELS

- ▸ SANT RG (REGULAR)
- ▸ SANT DE (DUAL ELECTROSTATIC)
- ▸ SANT DC (DUAL CARBON)
- ▸ SANT HP (HEAVY PURGE)



SANT RG – (REGULAR)

Single electrostatic filter is a central type product, manufactured as single carbon, and supported with the metal oil holding filter in the air suction section can be placed as lower or middle levelaccording to the needs and space.

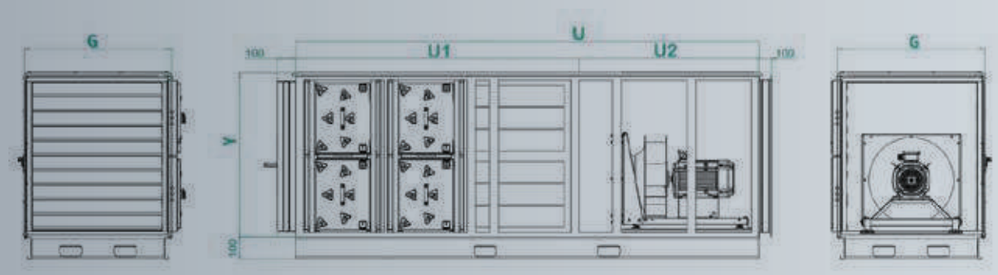


		U1	U2	U	Y	G	Shot	Suction	Weight (Kg)
ARTI - SANT Regular	ARTI -SANT RG 30	1600	700	2300	800	720	670X450	670X450	120
	ARTI -SANT RG 50	1600	800	2400	800	1060	1020X500	1020X500	175
	ARTI -SANT RG 75	1600	900	2500	800	1320	1270X500	1270X500	215
	ARTI -SANT RG 100	1600	950	2550	1450	1060	1020X1020	1020X1020	255
	ARTI -SANT RG 120	1600	1000	2600	1450	1060	1020X1020	1020X1020	316
	ARTI -SANT RG 150	1600	1100	2700	1450	1320	1270X970	1270X970	380
	ARTI -SANT RG 200	1600	1200	2800	1450	1320	1270X970	1270X970	486

ELECTROSTATIC FILTERS

SANT DE – (DUAL ELECTROSTATIC)

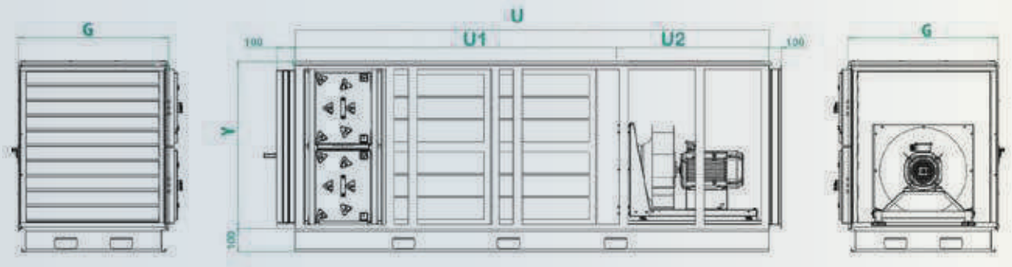
Double electrostatic filter is a central type product, manufactured as single carbon, and supported with the metal oil holding filter in the air suction section can be placed as middle or higher level according to the needs and space.



		U1	U2	U	Y	G	Shot	Suction	Weight (Kg)
ARTI SANT-DUAL ESF	ARTI -SANT DE 30	2150	700	2850	800	720	670X450	670X450	150
	ARTI -SANT DE 50	2150	800	2950	800	1060	1020X500	1020X500	225
	ARTI -SANT DE 75	2150	900	3050	800	1320	1270X500	1270X500	265
	ARTI -SANT DE 100	2150	950	3100	1450	1060	1020X500	1020X500	354
	ARTI -SANT DE 120	2150	1000	3150	1450	1060	1020X500	1020X500	398
	ARTI -SANT DE 150	2150	1100	3250	1450	1320	1270X970	1270X970	425
	ARTI -SANT DE 200	2150	1200	3350	1450	1320	1270X970	1270X970	536

SANT DC – (DUAL CARBON)

Single electrostatic filter is a central type product, manufactured as dual carbon, and supported with the metal oil holding filter in the air suction section can be placed as middle or higher levelaccording to the needs and space.

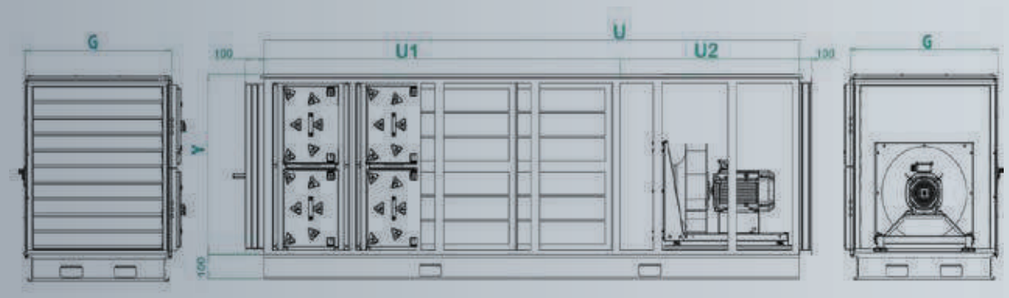


		U1	U2	U	Y	G	Shot	Suction	Weight (Kg)
ARTI SANT -DUAL CARBON	ARTI -SANT DC 30	2200	700	2900	800	720	670X450	670X450	170
	ARTI -SANT DC 50	2200	800	3000	800	1020	970X500	970X500	245
	ARTI -SANT DC 75	2200	900	3100	800	1320	1270X500	1270X500	285
	ARTI -SANT DC 100	2200	950	3150	1450	1020	970X970	970X970	374
	ARTI -SANT DC 120	2200	1000	3200	1450	1020	970X970	970X970	418
	ARTI -SANT DC 150	2200	1100	3300	1450	1320	1270X970	1270X970	445
	ARTI -SANT DC 200	2200	1200	3400	1450	1320	1270X970	1270X970	556

ELEKTROSTATİK FİLTRELER

SANT HP (DUAL ESF-DUAL CARB)

Double electrostatic filter is a central type product, manufactured as dual carbon, and supported with the metal oil holding filter in the air suction section can be placed as higher level*according to the needs and space.*



		U1	U2	U	Y	G	Shot	Suction	Weight (Kg)
ARTI SANT DUAL ESF DUAL CARBON	ARTI -SANT HP 30	2750	700	3450	800	720	670X450	670X450	240
	ARTI -SANT HP 50	2750	800	3550	800	1060	970X500	970X500	260
	ARTI -SANT HP 75	2750	900	3650	800	1320	1270X500	1270X500	390
	ARTI -SANT HP 100	2750	950	3700	1450	1060	970X970	970X970	420
	ARTI -SANT HP 120	2750	1000	3750	1450	1060	970X970	970X970	485
	ARTI -SANT HP 150	2750	1100	3850	1450	1320	1270X970	1270X970	560
	ARTI -SANT HP 200	2750	1200	3950	1450	1320	1270X970	1270X970	680

ARTI- Sant Technical Table

	ARTI SANT 30				ARTI SANT 50				ARTI SANT 75				ARTI SANT 100				ARTI SANT 120				ARTI SANT 150				ARTI SANT 200			
	RG	DE	DC	HP	RG	DE	DC	HP	RG	DE	DC	HP	RG	DE	DC	HP	RG	DE	DC	HP	RG	DE	DC	HP	RG	DE	DC	HP
Flow (m³/h)	3000				5000				7500				10000				12000				15000				20000			
Metal Filter	1T				1T – 1Y				2T				2T – 2Y				2T – 2Y				4T				4T – 2Y			
Electrostatic Filter Number / Group	1T	2T	1T	2T	1T/ 1Y	2T/ 2Y	1T/ 1Y	2T/ 2Y	2T	4T	2T	4T	2T/ 2Y	4T/ 4Y	2T/ 2Y	4T/ 4Y	2T/ 2Y	4T/ 4Y	2T/ 2Y	4T/ 4Y	4T	8T	4T	8T	4T/ 2Y	8T/ 4Y	4T/ 2Y	8T/ 4Y
Carbon Filter Number / Group	1T	1T	2T	2T	1T/ 1Y	1T/ 1Y	2T/ 2Y	2T/ 2Y	2T	2T	4T	4T	2T/ 2Y	2T/ 2Y	4T/ 4Y	4T/ 4Y	2T/ 2Y	2T/ 2Y	4T/ 4Y	4T/ 4Y	4T	4T	8T	8T	4T/ 2Y	4T/ 2Y	8T/ 4Y	8T/ 4Y
Carbon Filter Contact Time (S)	0,1	0,1	0,2	0,2	0,1	0,1	0,2	0,2	0,1	0,1	0,2	0,2	0,1	0,1	0,2	0,2	0,1	0,1	0,2	0,2	0,1	0,1	0,2	0,2	0,1	0,1	0,2	0,2
Electrostatic Power Consumption (W)	25	50	25	50	25	50	25	50	50	100	50	100	50	100	50	100	100	200	100	200	100	200	100	200	150	300	150	300
Fan Engine Power(kw)	1,1	1,1	1,5	1,5	2,2	2,2	3	3	4	4	4	4	4	4	4	4	5,5	5,5	5,5	5,5	7,5	7,5	7,5	7,5	11	11	11	11
Carbon Cartridge Length(mm)	450																											
Pressure Loss(Pa)	300				300				300				300				300				400				400			
Plug Fan Diameter(mm)	Ø280				Ø315				Ø400				Ø500				Ø500				Ø560				Ø630			
Fan Cycle (rpm)	2800				2800				2800				1400				1400				1400				1400			
Voltage / Phase / Frequency (PH / V / Hz)	380V 3PH 50HZ																											

RG: Single Electrostatic - Single Carbon DE: Double Electrostatic - Single Carbon T: Total DC: Dual Carbon - Single Electrostatic HP: Double Electrostatic - Dual Carbon Y: Half

ELECTROSTATIC FILTERS

Technical Values for ARTI -Sant Single Stage (RG)

ARTI ONE 30	
MAX. AIR FLOW :	3000 m³/h
IONISER WIRE NUMBER :	8
IONISER PLATE NUMBER:	7
GATHERING SURFACE:	16,4 m²
ESF CELL NUMBER:	1
ESF INPUT VOLTAGE:	230V
ESF ELECTRIC CONSUMPTION:	25 W
MAX. WORKING HEAT :	120 'C

ARTI ONE 50	
MAX. AIR FLOW	5000 m³/h
IONISER WIRE NUMBER :	12
IONISER PLATE NUMBER:	10
GATHERING SURFACE:	24,8 m²
ESF CELL NUMBER :	2
ESF INPUT VOLTAGE:	230V
ESF ELECTRIC CONSUMPTION:	25 W
MAX. WORKING HEAT:	120 'C

ARTI ONE 120	
MAX. AIR FLOW:	12.000 m³/h
IONISER WIRE NUMBER:	24
IONISER PLATE NUMBER:	20
GATHERING SURFACE :	49,6 m²
ESF CELL NUMBER:	4
ESF INPUT VOLTAGE:	230V
ESF ELECTRIC CONSUMPTION :	100 W
MAX. WORKING HEAT:	120 'C

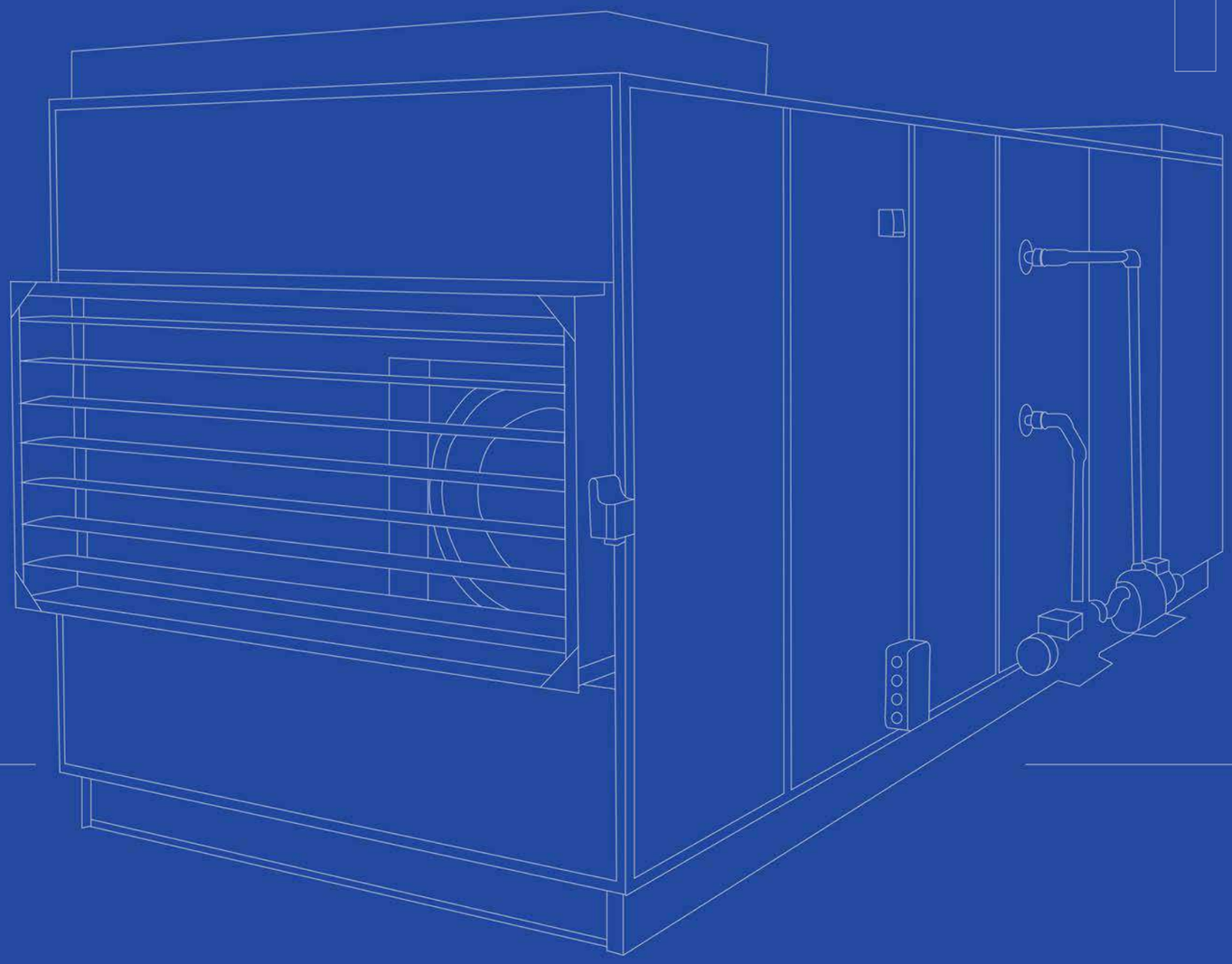
ARTI ONE 150	
MAX. AIR FLOW :	15.000 m³/h
IONISER WIRE NUMBER :	32
IONISER PLATE NUMBER:	28
GATHERING SURFACE :	67,2 m²
ESF CELL NUMBER :	4
ESF INPUT VOLTAGE :	230V
ESF ELECTRIC CONSUMPTION:	100 W
MAX. WORKING HEAT:	120 'C

ARTI ONE 75	
MAX. AIR FLOW:	7500 m³/h
IONISER WIRE NUMBER :	16
IONISER PLATE NUMBER:	14
GATHERING SURFACE:	32,8 m²
ESF CELL NUMBER:	2
ESF INPUT VOLTAGE:	230V
ESF ELECTRIC CONSUMPTION:	50 W
MAX. WORKING HEAT :	120 'C

ARTI ONE 100	
MAX. AIR FLOW:	10.000 m³/h
IONISER WIRE NUMBER:	24
IONISER PLATE NUMBER :	20
GATHERING SURFACE :	49,6 m²
ESF CELL NUMBER :	4
ESF INPUT VOLTAGE:	230V
ESF ELECTRIC CONSUMPTION :	50 W
MAX. WORKING HEAT:	120 'C

ARTI ONE 200	
MAX. AIR FLOW:	20.000 m³/h
IONISER WIRE NUMBER:	44
IONISER PLATE NUMBER:	38
GATHERING SURFACE :	88,6 m²
ESF CELL NUMBER:	6
ESF INPUT VOLTAGE :	230V
ESF ELECTRIC CONSUMPTION:	150 W
MAX. WORKING HEAT:	120 'C

AQUEOUS FILTER



AQUEOUS FILTER

AQUEOUS FILTER

AQUEOUS FILTER

Aqueous Filter (Optional);

It can be optional on the smell gathering systems. *With* the electrostatic filter systems, it is used before the electrostatic filter. *Chemical* wastes, geresols, fog, mist, oil vapor, soot and water vapor in the dirty air produced in *cooking* units used in cutting, painting, polishing, grinding and similar *works in* many industrial branches and in professional *kitchens* and restaurants cleaning units without polluting the environment by preventing to throw them into the air. *With the help of high-performance fixed washers and / or rotating nozzles that vary depending on the needs, they help to* clean the oil and soot by washing the particles in the air. *Aqueous filter* units are used as *front-filters. It is* not possible to hold *100%* odor, *smoke,* oil and soot *T*he highest efficiency is obtained with appropriate Electrostatic, *Mechanical, Activated carbon or cartridge filtration systems.*

Water filter units suitable for the desired air flow are washing units that minimize operating costs due to their very low pressure loss *fixed and /* or rotary nozzles and low electrical consumption with *maximum* washing power. *Water* filter units are modular. *The* desired capacities can easily be achieved by adding to each other. *There are 3* types of use of filter *system with water;*

1. Only water cabin

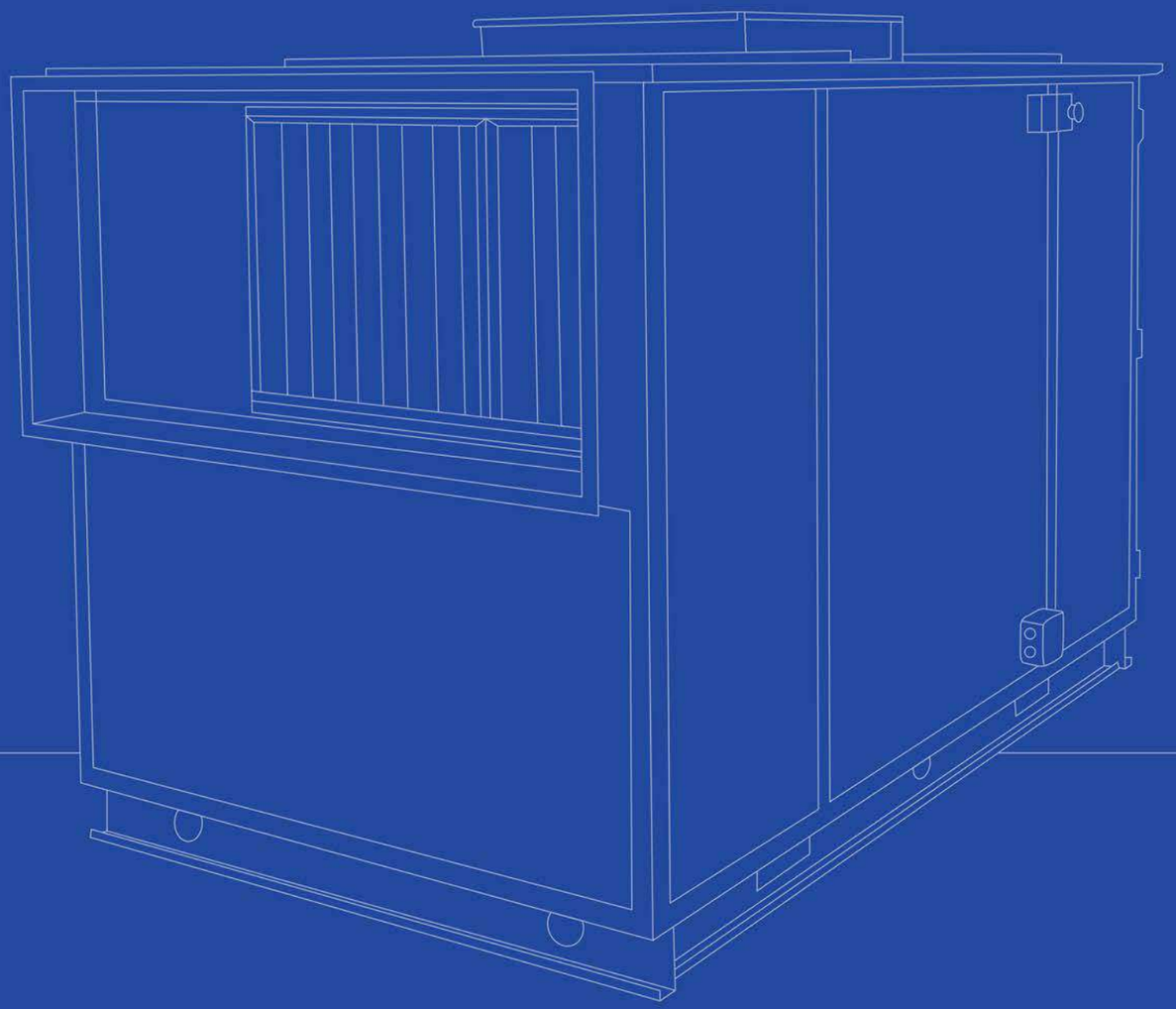
2. Water cabin + Rare wing fan

3. Odor holding central + Water cabin

Due to separators and rotating nozzles, its performance is much higher than traditional water spray systems. Water tank is made of 3 mm dipped galvanized material and the inside is painted with anticorrosion paint to prevent rust formation. It can also be manufactured from stainless sheet upon request. The water tank is enclosed in a panel consisting of 20 mm stone wool insulated panels consisting of aluminum carcass, and the sealing is reduced to zero. Due to the water motor located on the outside of the device, the water installation is drawn into the water tank and water is pressed. Thus, a washing pool is formed in the tank. The washed air is also hit by metal oil filters inside the tank and completely cleaned and exhausted. Filling of the tank is made via filling valve placed on the surface of the device, when the device is full, water gage would be closed and it prevents water flow, besides, you can see the liquid level of the tank via display situated on the surface of the device.

Water engine and the fan section's electric engine must be installed separetely. You can intervene easily to the tank via maintenance cap on the surface and the polluted metal oil filters can be detachted easily and can be installed after *cleaning. Water tank maximum air speed must be between 3m/s and 5 m/s.* According to the sizing, processing, flow and pressure loss, it can be designed specially by ARTI research and development team.

ASPIRATOR WITH CASING



ASPIRATOR WITH CASING

ASPIRATOR WITH CASING

ASPIRATOR WITH CASING

USING SPECIFICATIONS

ARTI HA series standart aspirators with casing are made for freshening the air without heating or cooling it; according to the area, they can be manufactured as low or high suction and blowing capacity, fully leakproof and high quality. Its working areas are, offices, cafes, markets, restaurants, convention rooms, malls, hospitals, kitchens, industrial facilities, banks, etc. ARTI HA EX series aspirators with casing are used in leading industries such as petrochemical, medicine, paint, food, crude oil and natural gas transportation. Considering explosive gases, we're making high safety aspirators with casing by using ex-proof engine and fan.

Ex-proof engines and fans protect the working heat while temperature is rising. Aspirators are designed to work safely in the explosive gas areas.

By using rare winged fans , hood fume can exhaust easily. With the filter support, aspirators can make cleaner air to the area.

ASPIRATOR WITH CASING

TECHNICAL SPECIFICATIONS

►The carcass of our aspirators with casing is made of natural anodized aluminum profile and plastic corner elements.

► Casing panels can be between 25 mm and 50 mm thickness optionally and outer wall is applied electrostatic powdered paint; inner wall is made of galvanized sheet.

► High efficient energy saving 50 kg/m3 density stone wool panels are used.

► Static and dynamic balance adjustment is made and optionally it can be used silent, efficient double suction radial or plug fans.

► Our electric engines are 380V-50Hz. Optionally, 220v-5Ohz up to 3 kw can be used.

► The fan-engine assembly used in ARTI HA series standard aspirators with casing is in a vibration damping chassis and power transfer is provided by belt-pulley assembly or direct coupled fans.

► Double-walled panels are mounted to aluminum carcass with screws. Service and intervention caps are standard, rigid hinges without gaps and air-conditioning lock which does not protrude inside the cell, which has compression feature that does not allow air leakage, and double-walled rigid structure so that the caps do not rub against carcass frames.

► Beneath the cells are 2 mm thick galvanized sheet metal, 100 mm high through-to-length or split chassis legs. There are eyebolts for crane transport and knife slots for forklift transport on the corners of the chassis legs.

► Fresh air blowing filter can be choosed optionally.

► With the option of external engine in the devices used for exhaust hoods, the engine is kept out of the air flow and all kinds of lubrication risks are eliminated.

► In the ARTI HA EX series aspirators with casing, double suction radial fans have an ex-proof feature which prevents the formation of sparks in possible metal shocks between the rotor and the housing due to the body suction funnel made of copper. Our electric engines are ex-proof and 380V-5OHz.

► Optionally, automation devices such as door switch, emergency stop button, differential pressure sensor, lighting, speed frequency inverter can be installed on our devices.

► All aspirator with casing choices are made by Eurovent certified Airsoft package software.

► Our aspirators with casing have IS0 9001,CE, TSEK certificates.

Aspirator with Casing Size and Capacity Specifications

FREQUENT WINGED ASPIRATOR WITH CASING

SPECIFICATIONS

► 20 different types on 2.000 m³/h - 70.100 m³/h *flow rate.*

► Easy assembly - disassembly, maintenance and service

► Silently working fan - engine group (Forward inclined double suction fan with belt pulley)

► Special sound isolation 3mm Stone wool

TECHNICAL SPECIFICATIONS									
MODEL	FLOW (m³/h)	PRESSURE (Pa)	FAN	ENGINE POWER (kw)	VOLTAGE (VOLT)	CASE SIZES (L x W x H)	SUCTION NOZZLE (mm)	SHOT NOZZLE (mm)	WEIGHT (kg)
ARTI HA 2	2.000 m³/h	300	SYT 7 - 7	0,55 - 1500	380	870x750x750	670x150	259x228	120
ARTI HA 4	3.500 m³/h	300	SYT 9 - 9	1,1 - 1500	380	870x750x750	670x300	298x262	129
ARTI HA 5	5.000 m³/h	300	SYT 10-10	1,5 - 1500	380	1020x980x750	900x300	331x289	158
ARTI HA 7	7.000 m³/h	300	SYT 12 - 12	2,2 - 1500	380	1020x1280x850	1200x300	395x341	197
ARTI HA 8	8.000 m³/h	300	SYT 12 - 12	3.0 - 1500	380	1020x1280x850	1200x350	395x341	203
ARTI HA 10	10.000 m³/h	300	SYT 15 - 15	3.0 - 1500	380	1170x1280x1050	1200x450	471x404	242
ARTI HA 12	12.000 m³/h	300	SYT 18 - 18	3.0 - 1500	380	1170x1280x1050	1200x550	557x478	257
ARTI HA 15	14.500 m³/h	300	SYD 400 R	4.0 - 1500	380	1320x1350x1350	1270x650	507x507	338
ARTI HA 16	16.000 m³/h	300	SYD 450 R	4.0 - 1500	380	1320x1350x1350	1270x700	569x569	346
ARTI HA 19	18.500 m³/h	300	SYD 450 R	5,5 - 1500	380	1320x1580x1350	1500x700	569x569	355
ARTI HA 20	20.000 m³/h	300	SYD 450 R	7,5 - 1500	380	1325x1600x1350	1500x750	569x569	403
ARTI HA 25	25.000 m³/h	300	SYD 560 R	7,5 - 1500	380	1475x1900x1350	1800x750	715x715	492
ARTI HA 30	30.000 m³/h	300	SYD 630 R	7,5 - 1500	380	1625x1900x1625	1800x900	801x801	526
ARTI HA 36	36.000 m³/h	300	SYD 630 R	11.0 - 1500	380	1625x1950x1950	1850x1100	801x801	660
ARTI HA 46	46.000 m³/h	300	SYD 710 R	15.0 - 1500	380	1800x2200x1950	2200x1200	898x898	759
ARTI HA 50	50.000 m³/h	300	SYD 710 R	15.0 - 1500	380	1800x2200x1950	2100x1300	898x898	825
ARTI HA 55	55.000 m³/h	300	SYD 800 K	15.0 - 1500	380	1950x2550x1900	1800x1700	1007x1007	994
ARTI HA 60	60.000 m³/h	300	SYD 800 K	18,5 - 1500	380	1950x1900x2550	1800x1850	1007x1007	938
ARTI HA 65	65.000 m³/h	300	SYD 800 K	22.0 - 1500	380	1950x220x2550	2100x1700	1007x1007	1750
ARTI HA 70	70.100 m³/h	300	SYD 900 K	18,5 - 1500	380	2100x2200x2550	2100x1850	1130x1130	1127

ASPIRATOR WITH CASING

TECHNICAL SPECIFICATIONS

FREQUENT WINGED ASPIRATOR WITH CASING

SPECIFICATIONS

- *19 different types on 3.000 m3/h - 50.000 m3/h flow rate.*
- *Easy assembly - disassembly, maintenance and service*
- *Silently working fan - engine group (Forward inclined double suction fan with belt pulley)*
- *Special sound isolation 3mm Stone wool*

TECHNICAL SPECIFICATIONS									
MODEL	FLOW (m³/h)	PRESSURE (Pa)	FAN	ENGINE POWER (kw)	VOLTAGE (VOLT)	CASE SIZES (L x W x H)	SUCTION NOZZLE (mm)	SHOT NOZZLE (mm)	WEIGHT (kg)
EXP 15 - 7	3.000	300	ADH 225 R	0,75 - 1500	380	870x750x750	670x150	259x228	120
EXP 15 - 9	4.000	300	ADH 225 R	1,10 - 1500	380	870x750x750	670x300	298x262	129
EXP 15 - 10	5.000	300	ADH 250 R	1,50 - 1500	380	1020x980x750	900x300	331x289	158
EXP 20	7.000	300	ADH 280 R	2,20 - 1500	380	1020x1280x850	1200x300	395x341	197
EXP 25	8.000	300	ADH 315 R	2,20 - 1500	380	1020x1280x850	1200x350	395x341	203
EXP 25	10.000	300	ADH 315 R	3,00 - 1500	380	1170x1280x1050	1200x450	471x404	242
EXP 30	12.000	300	ADH 315 R	3,00 - 1500	380	1170x1280x1050	1200x550	557x478	257
EXP 30	14.000	300	ADH 400 R	4,00 - 1500	380	1320x1350x1350	1270x650	507x507	338
EXP 35	16.000	300	ADH 400 R	4,00 - 1500	380	1320x1350x1350	1270x700	569x569	346
EXP 40	18.000	300	ADH 450 R	5,50 - 1500	380	1320x1580x1350	1500x700	569x569	355
EXP 45	20.000	300	ADH 450 R	7,50 - 1500	380	1325x1600x1350	1500x750	569x569	403
EXP 50	22.500	350	ADH 500 R	7,50 - 1500	380	1475x1900x1350	1800x750	715x715	492
EXP 55	25.000	350	ADH 560 R	5,50 - 1500	380	1625x1900x1625	1800x900	801x801	526
EXP 60	27.500	350	ADH 560 R	7,50 - 1500	380	1625x1950x1950	1850x1100	801x801	660
EXP 65	30.000	350	ADH 630 R	7,50 - 1500	380	1800x2200x1950	2200x1200	898x898	759
EXP 70	35.000	350	ADH 630 R	11,00 - 1500	380	1800x2200x1950	2100x1300	898x898	825
EXP 75	40.000	350	ADH 710 R	11,00 - 1500	380	1950x2550x1900	1800x1700	1007x1007	994
EXP 80 - 1	45.000	350	ADH 710 R	15,00 - 1500	380	1950x1900x2550	1800x1850	1007x1007	938
EXP 80 - 2	50.000	350	ADH 800 R	15,00 - 1500	380	1950x2200x2550	2100x1700	1007x1007	1750

FREQUENT WINGED ASPIRATOR WITH CASING (G4 FILTER)

SPECIFICATIONS

- *20 different types on 2.000 m3/h - 70.100 m3/ hm3/h flow rate.*
- *Easy assembly - disassembly, maintenance and service*
- *Silently working fan - engine group (Forward inclined double suction fan with belt pulley)*
- *Special sound isolation 3mm Stone wool*

TECHNICAL SPECIFICATIONS									
MODEL	FLOW (m³/h)	PRESSURE (Pa)	FAN	ENGINE POWER (kw)	VOLTAGE (VOLT)	CASE SIZES (L x W x H)	SUCTION NOZZLE (mm)	SHOT NOZZLE (mm)	WEIGHT (kg)
ARTI HA 2	2.000 m³/h	300	SYT 7 - 7	0,55 - 1500	380	1060x750x750	670x150	259x228	140
ARTI HA 4	3.500 m³/h	300	SYT 9 - 9	1,1 - 1500	380	1060x750x750	670x300	298x262	164
ARTI HA 5	5.000 m³/h	300	SYT 10-10	1,5 - 1500	380	1210x980x750	900x300	331x289	212
ARTI HA 7	7.000 m³/h	300	SYT 12 - 12	2,2 - 1500	380	1210x1280x850	1200x300	395x341	223
ARTI HA 8	8.000 m³/h	300	SYT 12 - 12	3.0 - 1500	380	1210x1280x1050	1200x350	395x341	252
ARTI HA 10	10.000 m³/h	300	SYT 15 - 15	3.0 - 1500	380	1360x1280x1050	1200x450	404x404	287
ARTI HA 12	12.000 m³/h	300	SYT 18 - 18	3.0 - 1500	380	1360x1350x1350	1270x500	453x453	354
ARTI HA 15	14.500 m³/h	300	SYD 400 R	4.0 - 1500	380	1510x1350x1350	1270x650	507x507	363
ARTI HA 16	16.000 m³/h	300	SYD 450 R	4.0 - 1500	380	1510x1580x1350	1500x600	569x569	403
ARTI HA 19	18.500 m³/h	300	SYD 450 R	5,5 - 1500	380	1510x1850x1350	1800x550	569x569	441
ARTI HA 20	20.000 m³/h	300	SYD 450 R	7,5 - 1500	380	1650x1900x1350	1800x600	638x638	475
ARTI HA 25	25.000 m³/h	300	SYD 560 R	7,5 - 1500	380	1650x1900x1650	1800x750	715x715	547
ARTI HA 30	30.000 m³/h	300	SYD 630 R	7,5 - 1500	380	1800x1950x1950	1850x900	801x801	691
ARTI HA 36	36.000 m³/h	300	SYD 630 R	11.0 - 1500	380	1800x2200x1950	2100x950	801x801	766
ARTI HA 46	46.000 m³/h	300	SYD 710 R	15.0 - 1500	380	1975x2550x2550	2450x1050	898x898	950
ARTI HA 50	50.000 m³/h	300	SYD 710 R	15.0 - 1500	380	2200x2550x2550	2450x1150	1007x1007	1150
ARTI HA 55	55.000 m³/h	300	SYD 800 K	15.0 - 1500	380	2125x2550x2550	2450x1150	1007x1007	1124
ARTI HA 60	60.000 m³/h	300	SYD 800 K	18,5 - 1500	380	2125x2550x2550	2450x1350	1007x1007	1847
ARTI HA 65	65.000 m³/h	300	SYD 800 K	22.0 - 1500	380	2275x2550x2550	2450x1450	1007x1007	1343
ARTI HA 70	70.100 m³/h	300	SYD 900 K	18,5 - 1500	380	2275x2550x2550	2450x1600	1130x1130	1935

ASPIRATOR WITH CASING

TECHNICAL SPECIFICATIONS

RARE WINGED ASPIRATOR WITH CASING (METAL OIL TRAP FILTER)

SPECIFICATIONS

- *21 different types on 3.500 m3/h - 70.000 m3/h flow rate.*
- *Easy assembly - disassembly, maintenance and service*
- *Silently working fan - engine group (Forward inclined double suction fan with belt pulley)*
- *Special sound isolation 3mm Stone wool*

TECHNICAL SPECIFICATIONS								
MODEL	FLOW (m³/h)	PRESSURE (Pa)	FAN	ENGINE POWER (kw)	CASE SIZES (L x W x H)	SUCTION NOZZLE (mm)	SHOW NOZZLE (mm)	WEIGHT (kg)
ARTI HA S 4	3.500 m³/h	300	SYQ 250 R	1,1 - 3000	1060x980x750	900x200	322x322	174
ARTI HA S 6	5.400 m³/h	300	SYQ 280 R	1,5 - 3000	1210x1280x850	1200x250	361x361	226
ARTI HA S 7	7.000 m³/h	300	SYQ 315 R	2,2 - 3000	1210x1280x850	1200x300	404x404	234
ARTI HA S 9	8.300 m³/h	300	SYQ 315 R	3.0 - 3000	1210x1280x1050	1200x400	404x404	267
ARTI HA S 10	9.500 m³/h	300	SYQ 355 R	3.0 - 3000	1360x1280x1050	1200x450	453x453	335
ARTI HA S 11	10.500 m³/h	300	SYQ 355 R	4.0 - 3000	1360x1350x1350	1270x450	453x453	335
ARTI HA S 13	12.700 m³/h	300	SYQ 400 R	4.0 - 3000	1360x1350x1350	1270x550	507x507	345
ARTI HA S 14	14.000 m³/h	300	SYQ 400 R	5,5 - 3000	1510x1350x1350	1270x600	507x507	379
ARTI HA S 16	16.100 m³/h	300	SYQ 450 R	5,5 - 3000	1510x1580x1350	1500x600	569x569	426
ARTI HA S 18	17.300 m³/h	300	SYQ 450 R	7,5 - 3000	1510x1580x1350	1500x650	569x569	425
ARTI HA S 22	22.000 m³/h	300	SYQ 500 R	7,5 - 3000	1650x1900x1650	1800x700	638x638	551
ARTI HA S 23	23.000 m³/h	300	SYQ 560 R	7,5 - 3000	1650x1900x1650	1800x700	715x715	561
ARTI HA S 26	26.000 m³/h	300	SYQ 560 R	11.0 - 3000	1800x1900x1650	1800x800	715x715	645
ARTI HA S 30	30.000 m³/h	300	SYQ 630 R	11.0 - 3000	1800x1950x1950	1850x900	801x801	741
ARTI HA S 36	36.000 m³/h	300	SYQ 630 R	15.0 - 3000	1800x2200x1950	2100x950	801x801	800
ARTI HA S 41	41.000 m³/h	300	SYQ 710 R	15.0 - 3000	1975x1900x2550	1800x1250	801x801	878
ARTI HA S 44	44.000 m³/h	300	SYQ 710 R	15.0 - 3000	1975x1900x2550	1800x1350	898x898	874
ARTI HA S 50	50.000 m³/h	300	SYQ 710 R	22.0 - 3000	1975x2550x2550	2450x1150	898x898	1028
ARTI HA S 57	57.000 m³/h	300	SYQ 800 K	18,5 - 3000	2125x2550x2550	2450x1300	1007x1007	1137
ARTI HA S 61	61.000 m³/h	300	SYQ 900 K	18,5 - 3000	2275x2550x2550	2450x1400	1130x1130	1239
ARTI HA S 70	70.000 m³/h	300	SYQ 900 K	30.0 - 3000	2425x2200x2550	2100x1900	1130x1130	1309

RARE WINGED ASPIRATOR WITH CASING (METAL OIL TRAP FILTER)

SPECIFICATIONS

- *21 different types on 3.500 m3/h - 70.000 m3/h flow rate.*
- *Easy assembly - disassembly, maintenance and service*
- *Silently working fan - engine group (Forward inclined double suction fan with belt pulley)*
- *Special sound isolation 3mm Stone wool*

TECHNICAL SPECIFICATIONS								
MODEL	FLOW (m³/h)	PRESSURE (Pa)	FAN	ENGINE POWER (kw)	CASE SIZES (L x W x H)	SUCTION NOZZLE (mm)	SHOT NOZZLE (mm)	WEIGHT (kg)
EXP 15 - 7	3.000	300	RDH 250 R	0,75 - 3000	1060x980x750	900x200	322x322	174
EXP 15 - 9	4.000	300	RDH 250 R	1,10 - 3000	1210x1280x850	1200x250	361x361	226
EXP 15 - 10	5.000	300	RDH 280 R	1,50 - 3000	1210x1280x850	1200x300	404x404	234
EXP 20	7.000	300	RDH 280 R	2,20 - 3000	1210x1280x1050	1200x400	404x404	267
EXP 25	8.000	300	RDH 315 R	2,20 - 3000	1360x1280x1050	1200x450	453x453	335
EXP 25	10.000	300	RDH 355 R	3,00 - 3000	1360x1350x1350	1270x450	453x453	335
EXP 30	12.000	300	RDH 355 R	3,00 - 3000	1360x1350x1350	1270x550	507x507	345
EXP 30	14.000	300	RDH 400 R	4,00 - 3000	1510x1350x1350	1270x600	507x507	379
EXP 35	16.000	300	RDH 450 R	5,50 - 3000	1510x1580x1350	1500x600	569x569	426
EXP 40	18.000	300	RDH 500 R	5,50 - 3000	1510x1580x1350	1500x650	569x569	425
EXP 45	20.000	300	RDH 500 R	7,50 - 3000	1650x1900x1650	1800x700	638x638	551
EXP 50	22.500	350	RDH 560 R	7,50 - 3000	1650x1900x1650	1800x700	715x715	561
EXP 55	25.000	350	RDH 560 R	11,00 - 3000	1800x1900x1650	1800x800	715x715	645
EXP 60	27.500	350	RDH 630 R	11,00 - 3000	1800x1950x1950	1850x900	801x801	741
EXP 65	30.000	350	RDH 630 R	11,00 - 3000	1800x2200x1950	2100x950	801x801	800
EXP 70	35.000	350	RDH 710 K	11,00 - 3000	1975x1900x2550	1800x1250	801x801	878
EXP 75	40.000	350	RDH 710 K	15,00 - 3000	1975x1900x2550	1800x1350	898x898	874
EXP 80 - 1	45.000	350	RDH 800 K	15,00 - 3000	1975x2550x2550	2450x1150	898x898	1028
EXP 80 - 2	50.000	350	RDH 900 K	18,50 - 3000	2125x2550x2550	2450x1300	1007x1007	1137

ASPIRATOR WITH CASING

TECHNICAL SPECIFICATIONS

RARE WINGED ASPIRATOR WITH CASING (METAL OIL TRAP FILTER)

SPECIFICATIONS

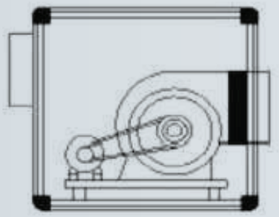
14 different types on 3.000 m3/h - 28.000 m3/h flow rate.

* Easy assembly - disassembly, maintenance and service
* Silently working fan - engine group
* Special sound isolation 3mm Stone wool

TECHNICAL SPECIFICATIONS								
MODEL	FLOW (m³/h)	PRESSURE (Pa)	FAN	ENGINE POWER (kw)	CASE SIZES (L x W x H)	SUCTION NOZZLE (mm)	SHOT NOZZLE (mm)	WEIGHT (kg)
ARTI P 3	3.000 m³/h	300	SYW 355	1,1 - 1500	1060x750x750	670x250	670x250	149
ARTI P 4	4.000 m³/h	300	SYW 355	1,5 - 1500	1060x980x750	900x250	900x250	158
ARTI P 5	5.000 m³/h	300	SYW 400	2,2 - 1500	1210x1280x850	1200x250	1200x250	205
ARTI P 6	6.000 m³/h	300	SYW 400	3.0 - 1500	1210x1280x850	1200x300	1200x300	213
ARTI P 7	7.000 m³/h	300	SYW 450	2,2 - 1500	1210x1280x850	1200x300	1200x300	209
ARTI P 8	8.000 m³/h	300	SYW 450	2,2 - 1500	1210x1280x1050	1200x350	1200x350	235
ARTI P 10	10.000 m³/h	300	SYW 500	3.0 - 1500	1210x1280x1050	1200x450	1200x450	246
ARTI P 12	12.000 m³/h	300	SYW 500	4.0 - 1500	1360x1350x1350	1270x500	1270x500	297
ARTI P 15	15.000 m³/h	300	SYW 560	5,5 - 1500	1350x1580x1350	1500x550	1500x550	348
ARTI P 17	17.000 m³/h	300	SYW 630	5,5 - 1500	1350x1580x1350	1500x650	1500x650	355
ARTI P 20	20.000 m³/h	300	SYW 630	7,5 - 1500	1500x1900x1350	1800x600	1800x600	424
ARTI P 23	23.000 m³/h	300	SYW 710	7,5 - 1500	1500x1900x1650	1800x700	1800x700	465
ARTI P 25	25.000 m³/h	300	SYW 710	11.0 - 1500	1650x1900x1650	1800x750	1800x750	547
ARTI P 28	28.000 m³/h	300	SYW 710	11.0 - 1500	1650x1950x1950	1850x850	1850x850	583

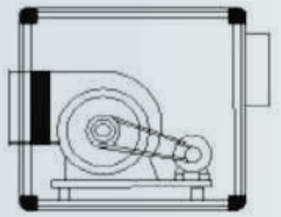
ASPIRATOR WITH CASING DIRECTION DIAGRAM

DIRECTION-1



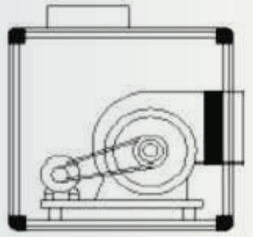
SUCTION FROM LEFT, SHOT FROM RIGHT

DIRECTION-2



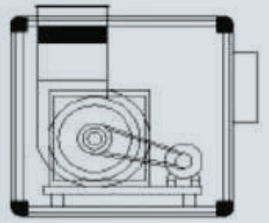
SUCTION FROM RIGHT, SHOT FROM LEFT

DIRECTION-3



SUCTION FROM ABOVE, SHOT FROM RIGHT

DIRECTION-4

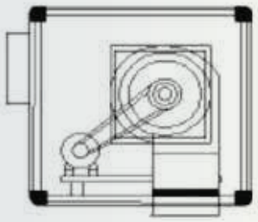


SUCTION FROM RIGHT, SHOT FROM ABOVE

DIRECTION-5

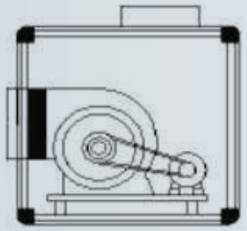
SUCTION FROM ABOVE, SHOT FROM ABOVE

DIRECTION-6



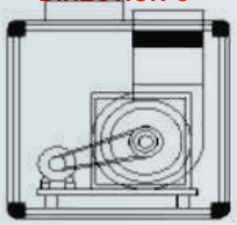
SUCTION FROM LEFT, SHOT FROM BELOW

DIRECTION-7



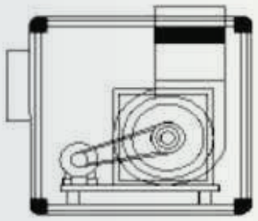
SUCTION FROM ABOVE, SHOT FROM LEFT

DIRECTION-8



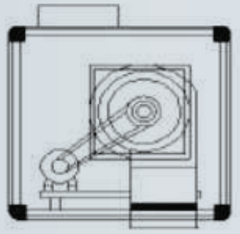
SUCTION FROM ABOVE, SHOT FROM ABOVE

DIRECTION-9



SUCTION FROM LEFT, SHOT FROM ABOVE

DIRECTION-10

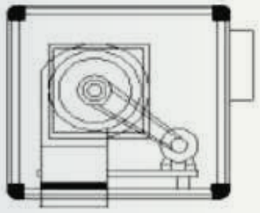


SUCTION FROM ABOVE, SHOT FROM BELOW

DIRECTION-11

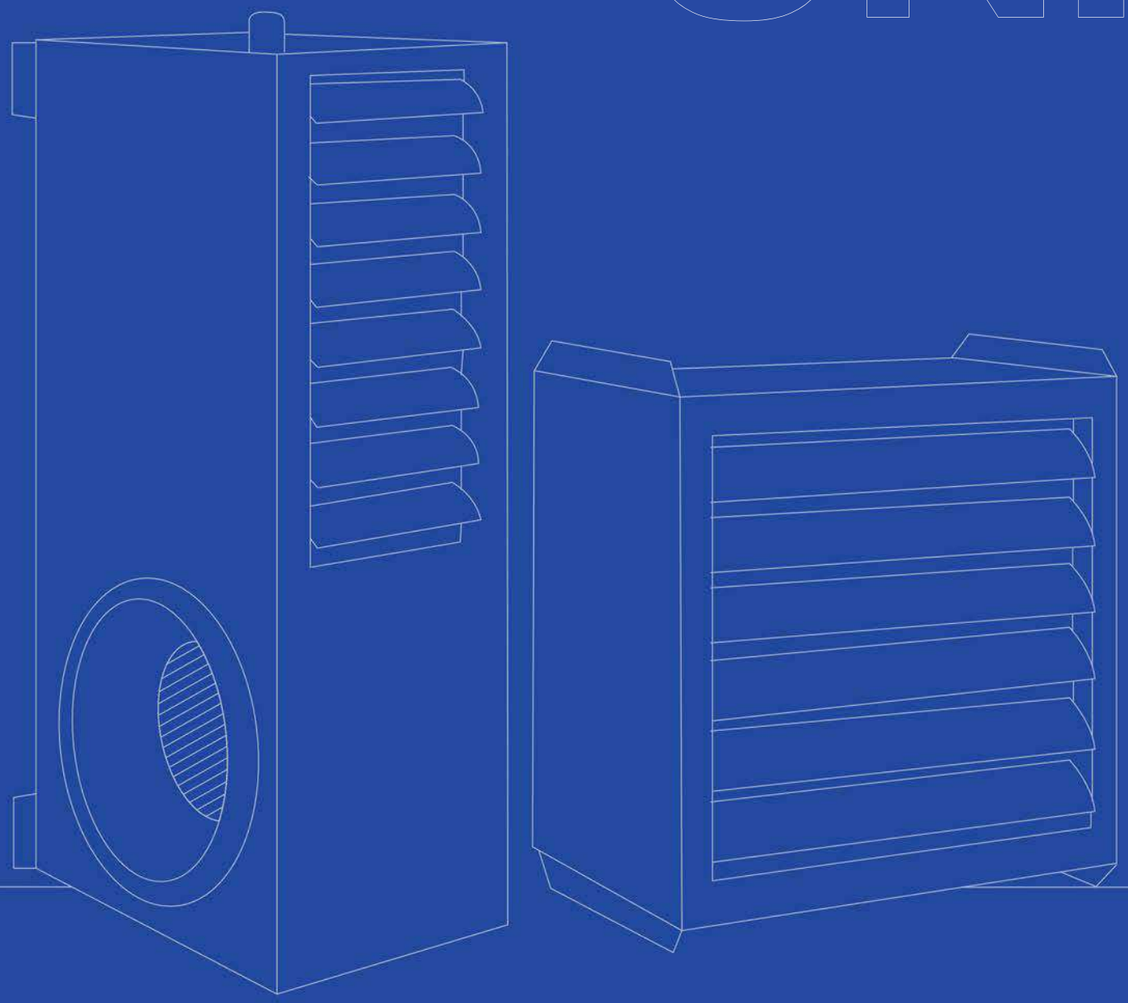
SUCTION FROM ABOVE, SHOT FROM BELOW

DIRECTION-12



SUCTION FROM RIGHT, SHOT FROM BELOW

UNIT HEATER



UNIT HEATER

UNIT HEATER

UNIT HEATER

TECHNICAL SPECIFICATIONS & USER'S MANUAL

UNIT HEATER

Unit heater's working areas are; factories, ateliers, sports centers, warehouses, garages, hangars, repair shops, markets and similar huge areas. Its function is heating the huge areas that the sound level is not important.

Unit heaters main advantages are being economic, having high heating capacity with lower sizes, and being user friendly. You can use the building's central heating system's water, the hot water of your building or the vapor of the boiler for getting the most economical heating method. Besides there's no need to advanced mounting process, manpower and special fitting equipments.

Unit heater is not appropriate for the canal connection because of working on free shot and free suction principles.

Unit heaters are manufactured as 2 models; radial fans (RSA) and axial fans (ASA) and as 7 types. Heating capacity is between the range of 7100 kcal/h and 42.200 kcal/h .

TECHNICAL SPECIFICATIONS

Body; *Device's body is made of 1mm galvanized sheet. It's painted with 9002 ral coded electrostatic powder paint.*

Fan Section; *ASA series have built-in engine axial fans. These fans are silent and secure. Device is safe with safety cage on the surface. Engine voltage is 230v.*

RSA series have built-in engine radial fans. These fans are infrequently winged backwards. Engine voltage is 230v.

Heating Coil; *It's used copper pipe aluminium winged heating coils. With these high efficient coils, heat transfer can be made easily. For the vapor and the superheated water options (0,5 Atu - 6 Atu), steel pipe, steel winged electro galvanized heat coils can be used optionally too.*

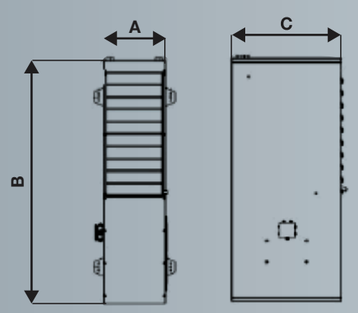
Air Setting Shutter; *ASA and RSA are located in the front of the unit heaters, allowing the air to reach the space in the desired direction. It is made of galvanized sheet and painted with electrostatic powder paint.*

Battery Inputs - Outputs; *Gland and threaded pipe are used as standard. In steam systems, a steam-flanged connection is used.*

UNIT HEATER

Radial Fan Unıt Heater's (RSA) Capacity and Size Specifications

TYPE	FLOW (m^3/h)	ENGINE POWER (watt)	HEATING CAPACITY (kcal/h)	LIQUID PRESSURE LOSS (kPa)
ARTI RSA 14	1350	80	7100	6
ARTI RSA 15	1500	80	9650	8
ARTI RSA 16	1600	80	10000	8,2
ARTI RSA 26	2600	175	16900	7
ARTI RSA 28	2800	175	20000	8
ARTI RSA 35	3500	275	33700	9,8
ARTI RSA 38	3800	275	42200	16,2



▸ Water regime : 90/70 C°
▸ Selections are made by counting air input temperature as 18 C°.

▸ Engine voltage is 230 V / 50 Hz

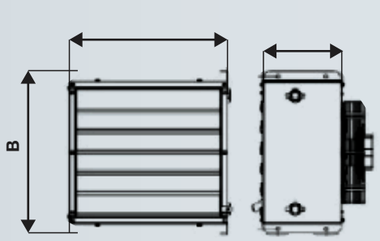
Water regime : 90/70 C°

TYPE	A	B	C
ARTI RSA 14	2600	25	2100
ARTI RSA 15	3800	26	3100
ARTI RSA 16	5600	30	4900
ARTI RSA 26	7200	27	6200
ARTI RSA 28	9800	31	8600
ARTI RSA 35	12400	30	11000
ARTI RSA 38	15000	32	13400

Sizes are in mm

Axial Fan Unıt Heater's (ASA) Capacity and Size Specifications

TYPE	FLOW (m^3/h)	ENGINE POWER (watt)	HEATING CAPACITY (kcal/h)	LIQUID PRESSURE LOSS (kPa)
ARTI ASA 09	900	55	4200	16
ARTI ASA 12	1250	105	6150	31
ARTI ASA 14	1400	105	8900	17,1
ARTI ASA 16	1600	130	11150	26,8
ARTI ASA 18	1800	130	16500	20,3
ARTI ASA 20	2000	170	21000	29,8
ARTI ASA 24	2400	180	24400	40



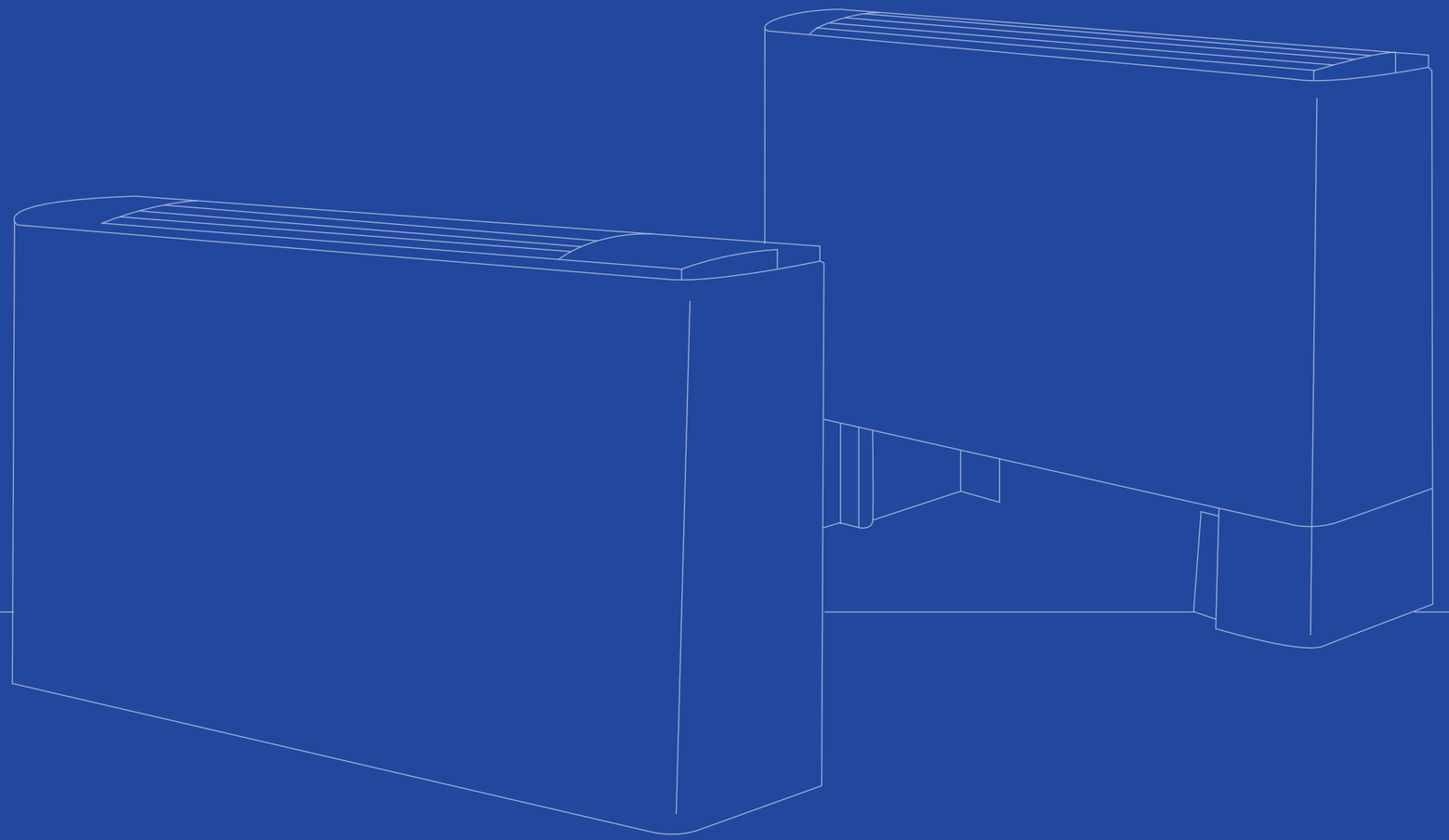
Selections are made by counting air input temperature as 18 C°.

Engine voltage is 230 V / 50 Hz

TYPE	A	B	C
ARTI ASA 09	465	480	230
ARTI ASA 12	465	480	230
ARTI ASA 14	470	480	240
ARTI ASA 16	470	540	240
ARTI ASA 18	560	560	300
ARTI ASA 20	560	560	300
ARTI ASA 24	570	570	300

Sizes are in mm

FAN COIL



FAN COIL

FAN COIL

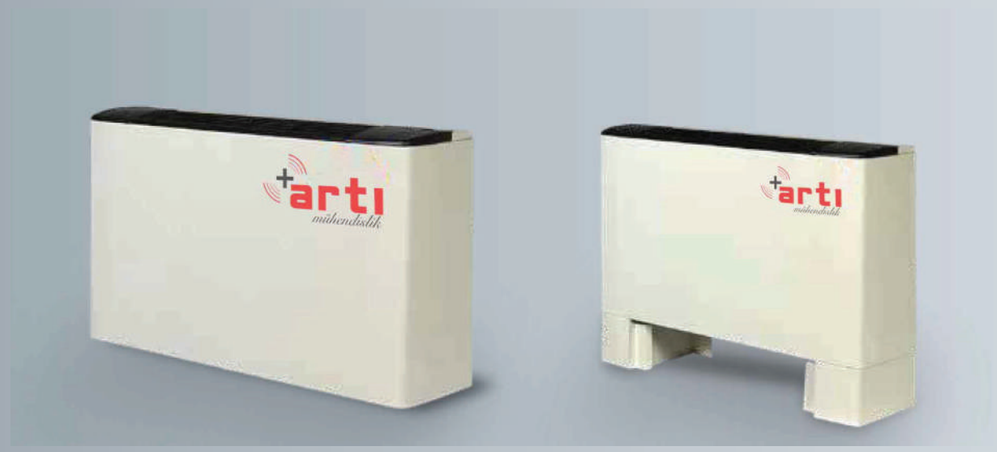
FAN COIL

TECHNICAL SPECIFICATIONS & USER'S MANUAL

Fan Coil Units

Installation type; tray legs or no legs (Type 00)
Ceiling type traymountable to the ceiling (Type 01 No leg)
Tray hidden installation and ceiling type *(Type 02, 03, 04).*

Optionally, an additional single row battery can be ordered in accordance with the 4-pipe system. If the boiler will be used in fan coil devices, the application scheme is shown on the website.



TECHNICAL SPECIFICATIONS

INNER BODY

It has 0,8-1 mm galvanized sheet shaped construction. Inner body is designed as mounting holes are open to mount to the wall or to the ceiling. The fan coils have a main condensate pan and 3 mm thermal insulation is applied to prevent perspiration. Condensation from the elements connected on the water inlet and outlet pipes was prevented by placing additional drip pan.

Inner body is shaped with special reinforced bend and press workship to prevent noise and vibration.

TECHNICAL SPECIFICATIONS

TRAY

It has modern and decorative design; colored with standart white (RAL 9002). 0.8-1 mm. galvanized sheet is painted with electrostatic powder paint. It has movable side hatches to reach to the ABS plastic shutters and to the control panel easily. The air is blown to the environment via shutters at 609 degrees.

COIL

Aluminum wings in standard sizes are mounted on copper pipes by mechanical blowing method. This ensures the highest thermal efficiency. The water inlet and outlet connections are brass threaded 1/2 "- 3/4" and can be manufactured with left or right connection from the front.

FAN

Dynamic and static balanced self-propelled double suction centrifugal fan is used. According to the types; There are 1,2 or 3 fans. 3 speeds are selected as standard. It works quietly and safely. There is no balance due to direct coupled fans.

CONTROL PANEL

Master switch operating the fan coil is three position. It also commands the fan speed. Wall type digital or analog summer / winter thermostat can be given optionally.

FILTER

Specially designed sliding and detachable filter is G2 grade, washable and made of polypropylene material.

FAN COIL

SIZE AND WEIGHT TABLES

FANCOIL UNITS

SPECIFICATIONS

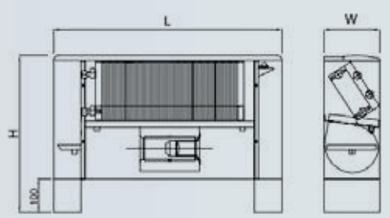
- ▸ 2,2 - 9,8 kw Cooling capacity
- ▸ 5 different types and 7 different models
- ▸ Decorative tray, plastic (abs) air direction shutter in outer body
- ▸ Rubber inner isolation
- ▸ Hight efficient coil
- ▸ 3 speed coupled fan engine working silently
- ▸ Solid and durable galvanized sheet body
- ▸ Washable sliding filter
- ▸ 2 and 4 pipes application
- ▸ Easiness on service, maintenance and installation

MODEL	FAN FLOW LEVEL (d/min)	FLOW (m³/h)	COOLING CAPACITY(kw)		HEATING CAPACITY (kw)		WATER PRESSURE LOSS(			Max) WATER FLOW			SOUND PRESSURE LEVEL (dBA)	POWER(w)
			Total Cooling	Perceivable Cooling	Heating	Extra Heating	Cooling (kPa)	Heating (kPa)	Extra Heating (kPa)	Cooling (ı/h)	Heating (ı/h)	Extra Heating (ı/h)		230v/ 50Hz/1F
ARTI FC-100	Low	323	1,28	0,96	5,01	1,7	6,9	4,2	9,5	220	215	146	36	45
	Medium	456	1,85	1,36	6,42	2,17				318	276	187	40	
	High	600	2,28	1,72	7,85	2,65				392	337	228	44	
ARTI FC-200	Low	428	2,38	1,67	6,95	2,43	14,3	6,6	17,0	409	299	209	38	45
	Medium	554	2,88	2,05	8,43	2,95				495	362	254	41	
	High	630	3,13	2,25	9,26	3,24				538	398	279	45	
ARTI FC-300	Low	456	2,71	1,87	7,88	2,83	15,2	9,4	25,2	466	339	243	38	75
	Medium	630	3,47	2,44	10,13	3,64				597	436	313	41	
	High	725	3,81	2,71	11,26	4,04				655	484	347	46	
ARTI FC-100	Low	527	2,95	2,05	7,97	2,57	22,4	11,6	5,5	507	343	221	39	80
	Medium	722	3,65	2,61	10,02	3,23				628	431	278	44	
	High	850	4,1	2,97	11,39	3,67				705	490	316	48	
ARTI FC-400	Low	495	3,42	2,28	9,07	3,27	30,7	11,8	8,9	588	390	281	41	85
	Medium	683	4,45	2,99	11,87	4,28				765	510	368	47	
	High	785	4,89	3,36	13,34	4,81				841	574	414	50	
ARTI FC-700	Low	980	5,94	4,09	16,38	5,18	34,8	14,3	16,7	1022	704	445	43	190
	Medium	1252	7,12	4,98	19,93	6,19				1225	857	532	49	
	High	1440	7,82	5,53	22,14	6,73				1345	952	579	54	
ARTI FC-900	Low	1360	7,41	5,56	21,95	7,5	21,0	27,2	31,0	1275	944	645	49	280
	Medium	1780	8,97	6,48	27,29	9,33				1543	1173	802	52	
	High	2000	9,75	7,04	29,66	10,14				1677	1275	872	56	

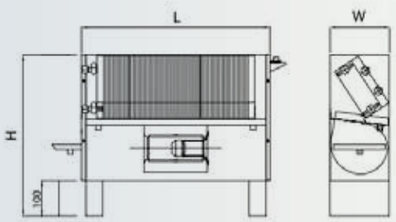
ARTI

SIZE (mm) and WEIGHT(kg) TABLE								
TYPE		ARTI FC-100	ARTI FC-200	ARTI FC-300	ARTI FC-350	ARTI FC-400	ARTI FC-700	ARTI FC-900
TRAY INSTALLATION	Height (h)	580	580	580	580	580	580	580
	Length(l)	760	960	960	1260	1260	1460	1660
	Width(w)	220	220	220	220	220	220	220
	Weight(kg)	16	17	17	22	22	27	33
TYPE		ARTI FC FC-101	ARTI FC-201	ARTI FC-301	ARTI FC-351	ARTI FC-401	ARTI FC-701	ARTI FC-901
TRAY CEILING	Height (h)	480	480	480	480	480	480	480
	Length (l)	760	960	960	1260	1260	1460	1660
	Width(w)	220	220	220	220	220	220	220
TYPE		ARTI FC-102	ARTI FC-202	ARTI FC-302	ARTI FC-352	ARTI FC-402	ARTI FC-702	ARTI FC-902
HIDDEN INSTALLATION	Height(h)	560	560	560	560	560	560	560
	Length(l)	540	740	740	1040	1040	1240	1440
	Width (w)	220	220	220	220	220	220	220
TYPE		ARTI FC-103	ARTI FC-203	ARTI FC-303	ARTI FC-353	ARTI FC-403	ARTI FC-703	ARTI FC-903
HIDDEN CEILING	Height (h)	460	460	460	460	460	460	460
	Length (l)	640	840	840	1140	1340	1340	1540
	Width(w)	220	220	220	220	220	220	220
	Ceiling Length (m)	540	740	740	1040	1240	1240	1440
	Blowing Canal Connection (mm)	510x125	710x125	710x125	1010x125	1210x125	1210x125	1410x125
	Suction Canal Connection (mm)	510x195	710x195	710x195	1010x195	1210x195	1210x195	1410x195
	Cooling and Heating Connection Diameter (inç)	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
	Extra Heating Connection Diameter (inç)	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

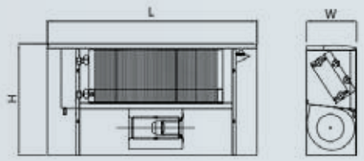
TRAY INSTALLATION TYPE



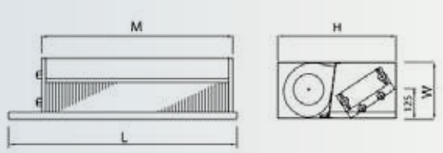
HIDDEN INSTALLATION TYPE



TRAY CEILING TYPE



HIDDEN CEILING TYPE



FAN COIL

SIZE AND WEIGHT TABLE

HIGH PRESSURE FAN COIL

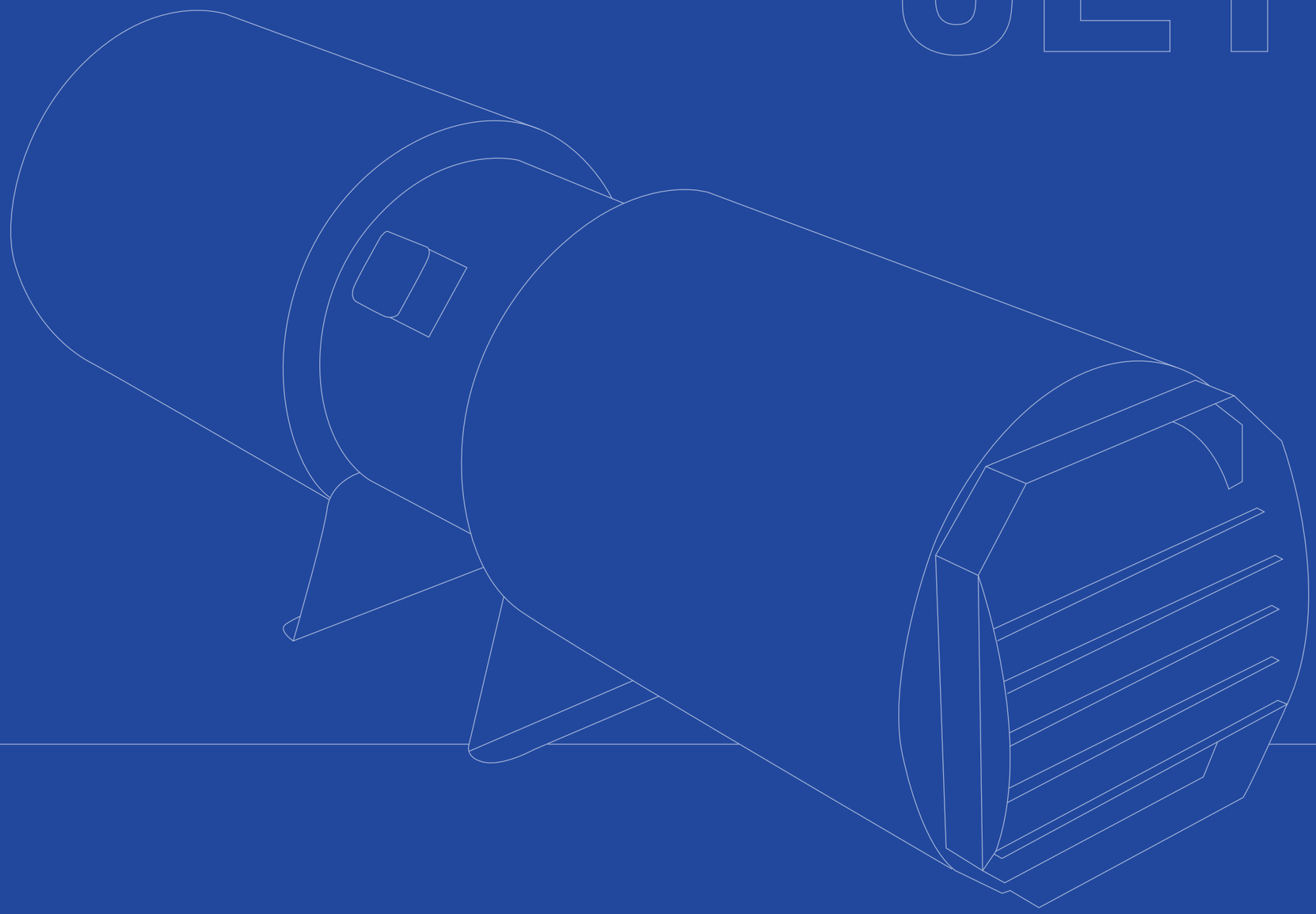
SPECIFICATIONS

- ▸ *4,25 - 24,4 kw Heating capacity range 7 different models*
- ▸ *100 - 260 Pa external pressure*
- ▸ *High efficient coil*
- ▸ *Silent 3 cycle centrifuge, direct coupled fan engine section (230 V, 50 Hz)*
- ▸ *2 and 4 pipes application options*
- ▸ *Easily replaceable and washable filter*
- ▸ *Sound pressure is according to the 1m in the open areas.*
- ▸ *Fit for the Plenium cell connection.*
- ▸ *2 and 4 pipes application*
- ▸ *Easiness on service, maintenance and installation*
- ▸ Optional wall type digital or analog summer / winter thermostat

SIZE (mm) and WEIGHT (kg) TABLE								
TYPE		ARTI FC 010	ARTI FC 020	ARTI FC 030	ARTI FC 040	ARTI FC 050	ARTI FC 055	ARTI FC 060
HIDDEN CEILING TYPE	Height(h)	300	300	325	325	375	375	675
	Length (l)	720	1065	1165	1405	1405	1405	1405
	Width (w)	525	525	590	590	590	590	790
	Weight(kg)	28	38	44	50	60	65	120
	Suction- Blowing Canal Connection (mm)	200 / 565	200 / 910	225 / 1010	225 / 1250	275 / 1250	275 / 1250	575 / 1250
	Drainage (mm)	19	19	19	19	19	19	19
	Cooler Heater Connection Diameter (inç)	1/2"	1/2"	3/4"	3/4"	1"	1"	1 1/4"
	Extra Heating Connection Diameter(inç)	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"

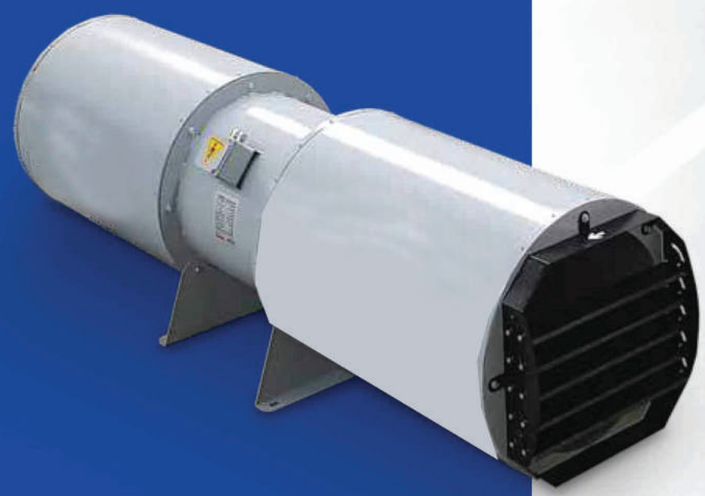
MODEL	FAN FLOW LEVEL (d/min)	FLOW (m³/h)	COOLING CAPACITY(w)		HEATING CAPACITY (kw)		WATER PRESSURE LOSS (Max)			WATER FLOW			SOUND PRESSURE LEVEL (dBA)	POWER (w)
			Total Cooling	Perceivable Cooling	Heating	Extra Heating	Cooling (kPa)	Heating (kPa)	Extra Heating (kPa)	Cooling (ı/h)	Cooling (ı/h)	Extra Heating (ı/h)		230v/ 50Hz/1F
ARTI FC-100	Low	830	3,74	2,78	9,42	5,28	12,6	4,7	3,6	643	405	227	51	135
	Medium	950	4,08	3,04	10,38	5,82				702	446	250		
	High	1000	4,25	3,20	10,70	6,00				731	460	258		
ARTI FC-200	Low	1225	5,27	3,91	14,04	8,42	5,4	2,4	14,7	906	604	362	50	175
	Medium	1488	6,01	4,53	16,02	9,61				1033	689	413		
	High	1750	6,75	5,15	18,00	10,80				1161	774	464		
ARTI FC-300	Low	1320	6,13	4,50	15,73	8,80	7,0	2,9	1,8	1054	676	378	53	265
	Medium	2112	8,23	6,06	21,43	11,99				1415	922	515		
	Medium	2200	8,75	6,52	22,80	12,75				1505	980	548		
ARTI FC-100	Low	1300	7,52	5,41	17,75	9,98	13,7	4,9	3,0	1294	763	429	53	280
	Medium	1675	9,51	6,81	22,93	12,84				1636	986	554		
	High	2500	11,06	8,20	27,30	15,35				1902	1174	660		
ARTI FC-400	Low	1440	7,92	5,68	18,85	10,73	11,2	4,0	3,1	1362	811	461	53	530
	Medium	2160	10,69	7,84	25,68	14,62				1839	1104	428		
	High	3000	13,20	9,80	32,50	18,50				2270	13998	796		
ARTI FC-700	Low	1750	10,62	7,20	25,17	11,79	15,3	5,0	3,7	1827	1082	507	55	500
	Medium	2625	14,58	10,15	34,72	16,26				2508	1493	699		
	High	3500	18,00	12,85	43,40	20,33				3096	1866	874		
ARTI FC-900	Low	2250	14,40	9,63	33,35	18,68	7,3	2,3	0,4	2476	1434	803	60	815
	Medium	3375	19,76	13,59	46,00	25,76				3399	1978	1108		
	High	4500	24,40	17,20	57,50	32,20				4197	2473	1385		

JET FAN



JET FAN

JET FAN



JET FAN

TECHNICAL SPECIFICATIONS

Jet fan system is a smoke exhaust system which is used as ventilation system in parking lots and in case of fire, it ensures safely evacuation of the harmful smoke and gases. It prevents the fire to spread and keeps the evacuation route safe. Thus it prevents the poisoning and drowning. It decreases the harms occured by high temperature and smoke.

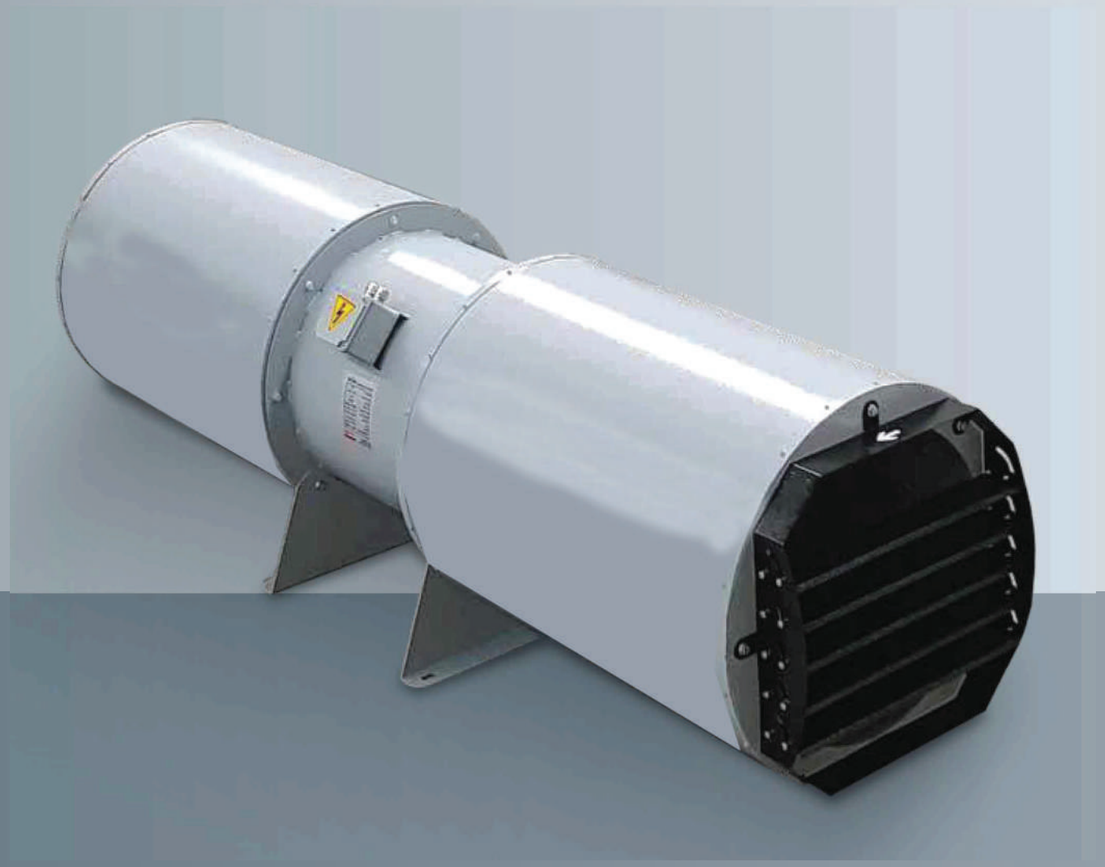
Jet fan choosing and placing criterias; *Jet fans would be placed in line or parallel by means there would be no dead* space, according to the repulsive force and model specifications.

Repulsive Force (N)- V (m/s) x Q (m^3/h) x q (kg/m^3)

V =Symbolises the air speed and it changes according to the electric engine power.

Q = Symbolises the volumetric flow rate and it changes according to the fan diameter and to the engine used.

q = Symbolises the air density and calculated as *1.2kg/m^3*



▸ Placing distance can change according to the architectural project.

▸ *Jet fans must be min. 2500 mm away from people.*

▸ They force large air masses with the repulsive force, dilute CO and other clean gases in their area with clean air and discharge them.

▸ *Ventilation is carried out to remove the gas, dust and heat emitted from vehicles within the parking lot. CO is an exhaust gas that is dangerous to human health. 50 ppm CO level is the hazard limit. The system operates according to the level information from CO detectors. In today's engine technology, CO emissions are very low. Although there is no CO signal reaching the hazard limit, the ventilation system should operate at a minimum level to remove other* contaminants.

▸ *Jet fans mix the fresh air with the area's air and drags it through the evacuation shaft.*

▸ *Jet fans are placed in such a way that there is no dead space considering the architectural project.*

▸ *Evacuation fans' capacity:* According to the building usages *(TS 3419, VDI2053);*

In commercial buildings; Total parking area *x 12 m3/h/m2*

In residential buildings; Total parking area calculated as *x6 m3/h/m2*

Jet Fan Automatisation System

▸ For daily ventilation, the system must operate according to the CO level signal and the fire alarm signal in case of fire. This can be ensured by adjusting the motor speeds with frequency drivers or by using a dual speed motor.

With the scenario written for the region of the incoming signal, the respective jet fans and main evacuation fans must be operated in the desired direction and capacity via the PLC.

▸ If two-sided direction fan would be used; the direction of the engine must be configurable via drivers

▸ System must be traceable by BMS

▸ There must be manuel key in the board for operating in case of emergency.

As ARTI AIR CONDITIONING we are manufacturing jet fans in two different types. These are;

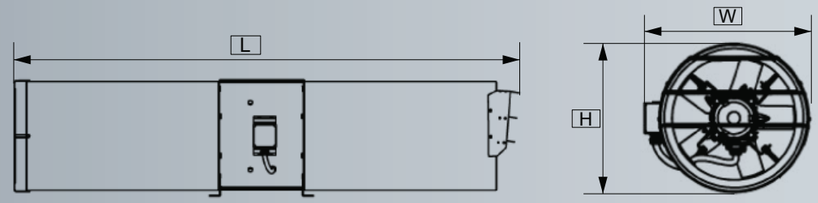
1. Axial Jet Fans
2. Radial Jet Fans

JET FAN

TECHNICAL SPECIFICATIONS

Axial Jet Fans

- It has two sided and double speed working options.
- *Both sides have silencers.*
- *Silencers are rounded bodied*
- *Shot nozzles have directional fans.*



JET FAN - TWO SIDED DOUBLE CYCLE- 2/4 THERMOSTABLE (F200 - F300)								
MODEL	DIAMETER (mm)	ENGINE POWER (kw)	FLOW (m^3 /h)	REPULSIVE FORCE (N)	SOUND LEVEL (dB)	L(mm)	H(mm)	W(mm)
ARTI AKS JF 315 - 2/4 CYCD-F	Ø 315	0,85 kw - 0,18 kw	4.500 / 2.200 m^3/h	35/9 N	71/56	1950	400	400
ARTI AKS JF 355 - 2/4 CYCD-F	Ø 355	1,1 kw - 0,25 kw	6.500 /3.300 m^3/h	55/15 N	74/59	1950	440	440
ARTI AKS JF 400 - 2/4 CYCD-F	Ø 400	1,5 kw - 0,36 kw	9.000 /3.300 m^3/h	75/18 N	79/64	1990	500	500
ARTI AKS JF 450 - 2/4 CYCD-F	Ø 450	2,2 kw - 0,55 kw	14.000 /6.900 m^3/h	85/22 N	82/67	2490	550	550

JET FAN - TWO SIDED DOUBLE CYCLE - THERMOLABILE (F 80)								
MODEL	DIAMETER (mm)	ENGINE POWER (kw)	FLOW (m^3 /h)	REPULSIVE POWER (N)	SOUND LEVEL (dB)	L(mm)	H(mm)	W(mm)
ARTI AKS JF 315 - 2/4 CYCD-F	Ø 315	0,85 kw - 0,18 kw	4.500 / 2.200 m^3/h	35/9 N	71/56	1950	400	400
ARTI AKS JF 355 - 2/4 CYCD-F	Ø 355	1,1 kw - 0,25 kw	6.500 /3.300 m^3/h	55/15 N	74/59	1950	440	440
ARTI AKS JF 400 - 2/4 CYCD-F	Ø 400	1,5 kw - 0,36 kw	9.000 /3.300 m^3/h	75/18 N	79/64	1990	500	500
ARTI AKS JF 450 - 2/4 CYCD-F	Ø 450	2,2 kw - 0,55 kw	14.000 /6.900 m^3/h	85/22 N	82/67	2490	550	550

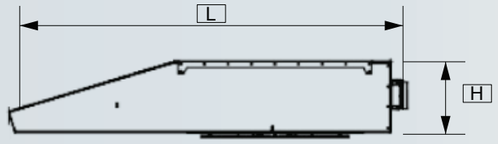
JET FAN - TWO SIDED SINGLE CYCLE -THERMOSTABLE(F200 - F300)								
MODEL	DIAMETER (mm)	ENGINE POWER (kw)	FLOW (m^3/h)	REPULSIVE POWER (N)	SOUND LEVEL (dB)	L(mm)	H(mm)	W(mm)
ARTI AKS JF 315 - 2 CYTD-F	Ø 315	0,85 kw	4.500 m^3/h	35 N	71	1950	400	400
ARTI AKS JF 355 - 2 CYTD-F	Ø 355	1,1 kw	6.500m^3/h	55 N	74	1950	440	440
ARTI AKS JF 400 - 2 CYTD-F	Ø 400	1,5 kw	9.000m^3/h	75 N	79	1990	500	500
ARTI AKS JF 450 - 2 CYTD-F	Ø 450	2,2 kw	14.000m^3/h	85 N	82	2490	550	550

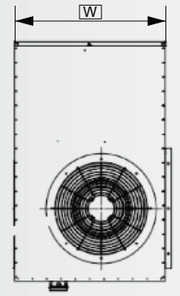
JET FAN - TWO SIDED SINGLE CYCLE- THERMOLABILE(F 80)								
MODEL	DIAMETER (mm)	ENGINE POWER (kw)	FLOW (m^3 /h)	REPULSIVE POWER (N)	SOUND LEVEL (dB)	L(mm)	H(mm)	W(mm)
ARTI AKS JF 315 - 2 CYTD-F	Ø 315	0,85 kw	4.500 m^3/h	35 N	71	1950	400	400
ARTI AKS JF 355 - 2 CYTD-F	Ø 355	1,1 kw	6.500m^3/h	55 N	74	1950	440	440
ARTI AKS JF 400 - 2 CYTD-F	Ø 400	1,5 kw	9.000m^3/h	75 N	79	1990	500	500
ARTI AKS JF 450 - 2 CYTD-F	Ø 450	2,2 kw	14.000m^3/h	85 N	82	2490	550	550

SOUND LEVEL TESTED FROM 1.5M DISTANCE

Radial Jet Fans

- It has higher repulsive power. 100N Repulsive power model has more than 70 m influence area. Thus it's used lesser fans. Lesser cable costs and installation works.
- With its backward curved radial fan, it produces less turbulent shots.
- Engines have single speed.
- Models can work in different capacities via frequency drivers thus it ensures energy saving.





JET FAN-SINGLE CYCLE - THERMOSTABLE (F200-F300)								
MODEL	FLOW (m^3 /h)	ENGINE POWER (kw)	CYCLE (d/d)	REPULSIVE POWER (N)	SOUND LEVEL (dB)	L(mm)	H(mm)	W(mm)
ARTI RD JF 6	6.000 m^3/h	1,62	1500	50	72	1300	350	800
ARTI RD JF 9	8.800 m^3/h	2,44	1500	98	77	1800	400	1050

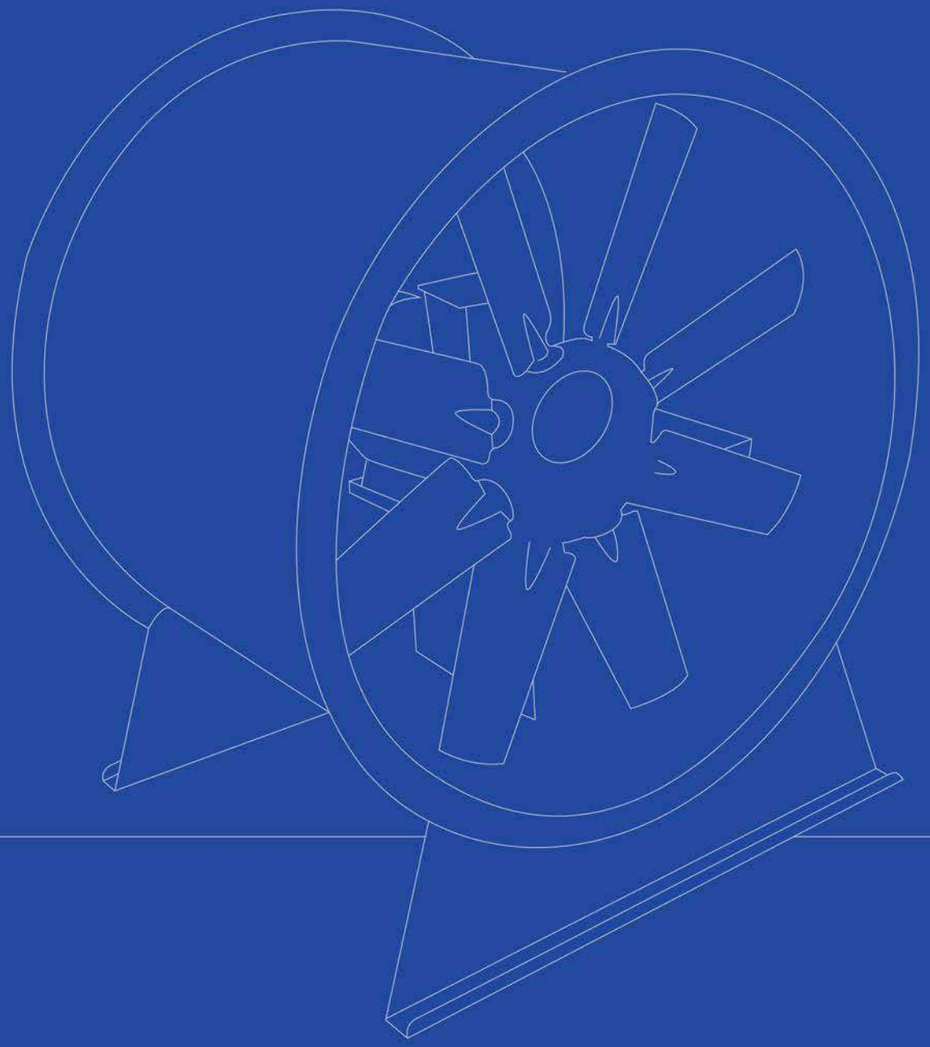
JET FAN-SINGLE CYCLE- THERMOLABILE(F80)								
MODEL	FLOW (m^3 /h)	ENGINE POWER (kw)	CYCLE (d/d)	REPULSIVE POWER (N)	SOUND LEVEL (dB)	L(mm)	H(mm)	W(mm)
ARTI RD JF 6	6.000 m^3/h	1,62	1500	50	72	1300	350	800
ARTI RD JF 9	8.800 m^3/h	2,44	1500	98	77	1800	400	1050

JET FAN-DOUBLE CYCLE- THERMOSTABLE (F200-F300)								
MODEL	FLOW (m^3 /h)	ENGINE POWER (kw)	CYCLE (d/d)	REPULSIVE POWER (N)	SOUND LEVEL (dB)	L(mm)	H(mm)	W(mm)
ARTI RD JF 6	6.000 m^3/h	1,62/0,38	1500/750	50/14	72/59	1300	350	800
ARTI RD JF 9	8.800 m^3/h	2,44/0,69	1500/750	98/22	77/61	1800	400	1050

JET FAN-DOUBLE CYCLE- THERMOLABILE(F80)								
MODEL	FLOW (m^3 /h)	ENGINE POWER (kw)	CYCLE (d/d)	REPULSIVE POWER (N)	SOUND LEVEL (dB)	L(mm)	H(mm)	W(mm)
ARTI RD JF 6	6.000 m^3/h	1,62/0,38	1500/750	50/14	72/59	1300	350	800
ARTI RD JF 9	8.800 m^3/h	2,44/0,69	1500/750	98/22	77/61	1800	400	1050

SOUND LEVEL TESTED FROM 1.5M DISTANCE.

SMOKE REMOVAL FAN



SMOKE REMOVAL FAN

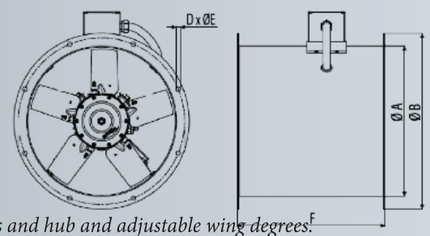
SMOKE REMOVAL FAN

SMOKE REMOVAL FAN

TECHNICAL SPECIFICATION & USER'S MANUAL

Smoke Removal Fan Technical Specifications

ARTI axial smoke removal fans are resistant to the high temperature and they are used in parking lots, metro stations and similar projects. We can manufacture proper capacity products according to the needs with its high capacity range, different fan wings and hubs and adjustable wing degrees.



Specifications

- *Conforming to EN12101-3 standarts*
- *From 400 mm to 1250 mm diameter option*
- *Dipping galvanized 3 mm body*
- *Aluminium alloyed fan hub*
- *Best and optimum solution to the needs with its different fan wings and hub and adjustable wing degrees.*
- *IP55 protected, from 0,55 kw to 15kw capacity electric engine options.*
- *300 degrees ,120 degrees and 80 degrees heat resistance options.*

TECHNICAL SPECIFICATIONS

Smoke Removal Fan Size Table

Model	A	B	D
Ø 400	430	520	420
Ø 450	480	570	450
Ø 500	530	620	500
Ø 560	590	680	540
Ø 630	660	750	580
Ø 710	740	830	600
Ø 800	830	920	680
Ø 900	930	1020	750
Ø 1000	1030	1130	800
Ø 1120	1150	1250	850
Ø 1250	1280	1380	900

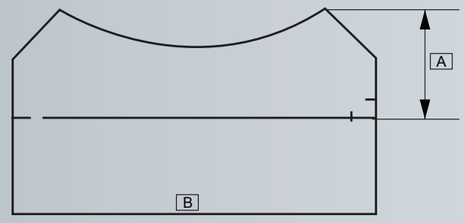
SMOKE REMOVAL FAN			
MODEL	FLOW (m³/h)	MAX (Pa)	ENGINE POWER (Kw - d/d)
ARTI - 400 / 003	3000	200	0,55 - 1450
ARTI - 450 / 005	5000	200	0,55 - 1450
ARTI - 450 / 007	7000	200	0,75 - 1450
ARTI - 500 / 009	9000	250	0,75 - 1450
ARTI - 500 / 011	11000	300	1,1 - 1450
ARTI - 560 / 013	13000	200	1,1 - 1450
ARTI - 560 / 015	15000	250	1,5 - 1450
ARTI - 630 / 016	16000	200	1,5 - 1450
ARTI - 630 / 018	18000	250	2,2 - 1450
ARTI - 630 / 020	20000	300	3,0 - 1450
ARTI - 710 / 022	22000	200	2,2 - 1450
ARTI - 710 / 024	24000	250	3,0 - 1450
ARTI - 710 / 026	26000	300	4,0 - 1450
ARTI - 800 / 027	27000	200	3,0 - 1450
ARTI - 800 / 030	30000	250	4,0 - 1450
ARTI - 800 / 034	34000	300	5,5 - 1450
ARTI - 800 / 038	38000	350	7,5 - 1450
ARTI - 900 / 040	40000	250	4 - 1450
ARTI - 900 / 044	44000	300	5,5 - 1450
ARTI - 900 / 048	48000	350	7,5 - 1450
ARTI - 1000 / 050	50000	300	7,5 - 1450
ARTI - 1000 / 055	55000	400	11 - 1450
ARTI - 1120 / 060	60000	400	11 - 1450
ARTI - 1250 / 065	65000	400	11 - 1450

SMOKE REMOVAL FAN

Optional Accessories

1- Counter Flange;

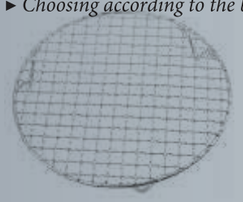
- *Compatible with the nominal diameter of the body*
- *Dipping galvanized material*
- *Choosing according to the body diameter*
- *Sizes are equal to the flange sizes.*



MODEL	A	B
ARTI DTF 40	570	300
ARTI DTF 45	635	315
ARTI DTF 50	680	315
ARTI DTF 63	680	236
ARTI DTF 71	700	240
ARTI DTF 80	800	280
ARTI DTF 90	900	295
ARTI DTF 100	1000	370
ARTI DTF 112	1120	450
ARTI DTF 125	1250	450

2- Leg;

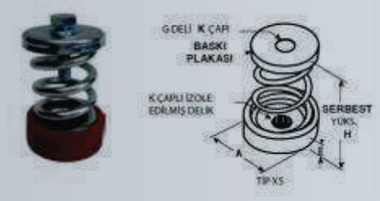
- *Compatible with the nominal diameter of the body*
- *Dipping galvanized material*
- *Choosing according to the body diameter*



3 -Wire Cage

- *Used in suction and blowing flanges.*

 Dipping galvanized material



4- Vibration Holding Wedge

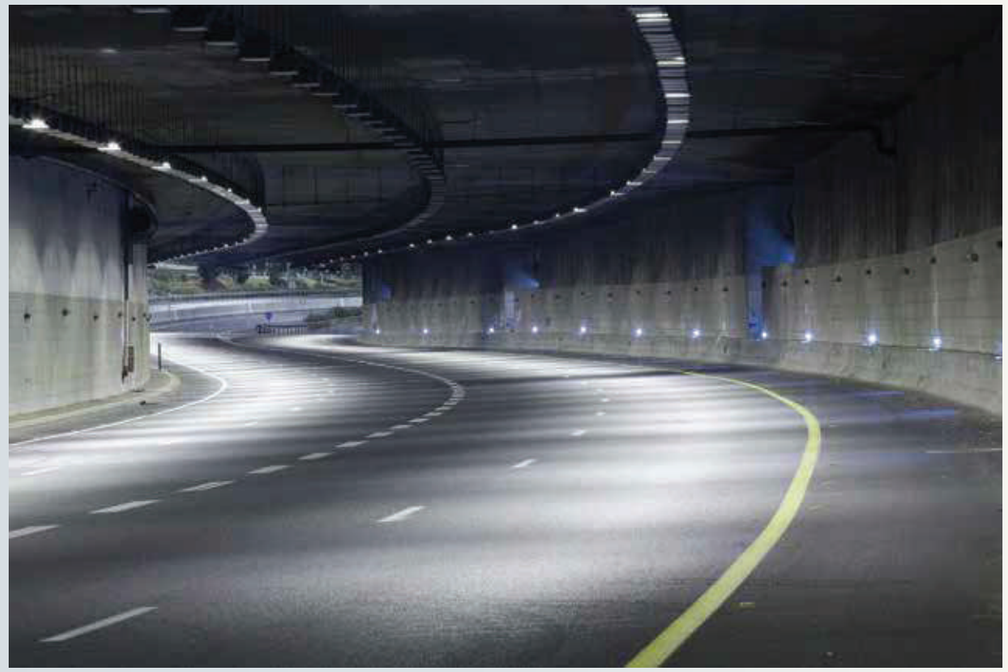
A=60 mm H=82 mm E=14 mm

5- Silencer

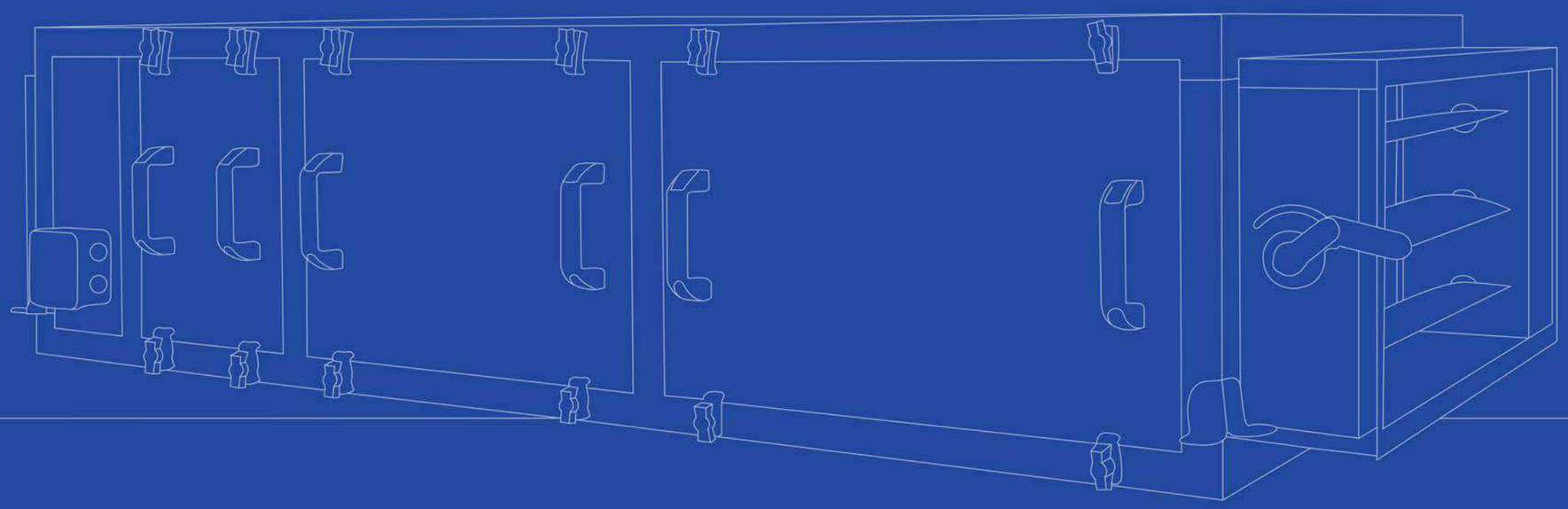
SMOKE REMOVAL FANS WITH CASING

Optionally, we produce the same size and capacity smoke extraction fans 30 mm stone wool insulated sandwich panel (Inner sheet 0.6 mm dip galvanized, outer sheet powder coated 0.6 mm dip galvanized sheet) smoke extraction fans both sound and heat intended for insulation.

We provide different options to our customers and flexibility for the projects with out smoke removal fans with casing.



SHELTER AIR HANDLING UNIT



SHELTER AIR HANDLING UNIT

SHELTER AIR HANDLING UNIT

SHELTER AIR HANDLING UNIT

TECHNICAL SPECIFICATIONS & USER'S MANUAL

Shelter Air Handling Unit Definition

Shelter air handling units work in two ways; in daily usage, fresh air is sent by passing throught 64 panel filters; During the war, fresh air is passed through an activated carbon filter, hepa filter and lead aliminator, which can absorb nuclear, biological, chemical gases.

Shelter Types According Working Areas

Private shelters; *they are used in residential areas, public or private workplaces, the basements of the factories and alike facilites. It's used for protecting the people of these facilites.*

Public shelters; *They are used where the people is crowded (Like malls, garages, harbours, stations,etc.) and where the traffic is intense; they are made by government, municipality or local authority.*

Shelter Types According to the Usage

Pressure shelters; *They are built for being protected against the rapid or residual effects of the nuclear arms (Radioactive fallout) and the effects of the modern and classical arms, and the chemical and biological warfare* agents.

Fallout shelters; *They are built for being protected against the radioactive fallout effects. These shelters also provide* protection against chemical and biological warfare agents, weakened pressure and heat effects of nuclear weapons *and fragmentary effects of classic and modern weapons.*

Regardless of the type of shelter, mechanical ventilation is mandatory. Air taken from outside during protection times; nuclear type hepa filter, activated carbon filter, lead eliminator through the filtration system is passed into the shelter.

In peacetime, the air taken from outside is passed through G4 type coarse filter and fed into the shelter. It should be ensured that the ambient air is suitable for the minimum living conditions during the period of the protection *environment of the people benefiting from the refuge. The air inhaled by an adult person without physical activity is* about *0.5 m3 / h (maximum 8 .... 9 m3 / h);* the inhaled air has a *humidity of 35 C°* and *95% and* contains an *average of 17% 02, 4% CO2 and 79% N. Adequate air exchange should be achieved, CO2 in the environment should not be more than 2% and oxygen level should not be less than 19%. In order to prevent radiation, biological and chemical dust and particles from leaking into the shelter, a positive pressure of 50 Pa relative to the external* environment must be created indoors. The shelter air should not be heated, cooled or humidified.

Hazardous pipes, such as gas pipes, radiator pipes, etc. shouldn't passed through shelter. Drinking water pipes and drainpipes can pass through shelter. The cables of the electric devices must be choosen compatible with humid environments. All the gaps of the shelter, such as, doors, and the other outer connection equipments must be made air-tight.

Shelter Unit Calculation

According to the no. 3194 Building Law's Shelter Regulation Ventilation Calculation Table

Shelter Capacity	Shielding Ventilation	High Risk of Fire	Low and Medium Risk of Fire
From 0 to 50 people	1,8 m /h - People	Sand Filter G4 Dust Filter Activated Carbon Filter	G4 Dust Filter Radioactive Filter Activated Carbon Filter
From 51 to 150 people	3,0 m /h - People	Sand Filter G4 Dust Filter Activated Carbon Filter	G4 Dust Filter Radioactive Filter Activated Carbon Filter
From 51 to 150 people	3,0 m /h - People	Sand Filter G4 Dust Filter Activated Carbon Filter	G4 Dust Filter Radioactive Filter Activated Carbon Filter

SHELTER AIR HANDLING UNIT

SHELTER AIR HANDLING UNIT MODELS

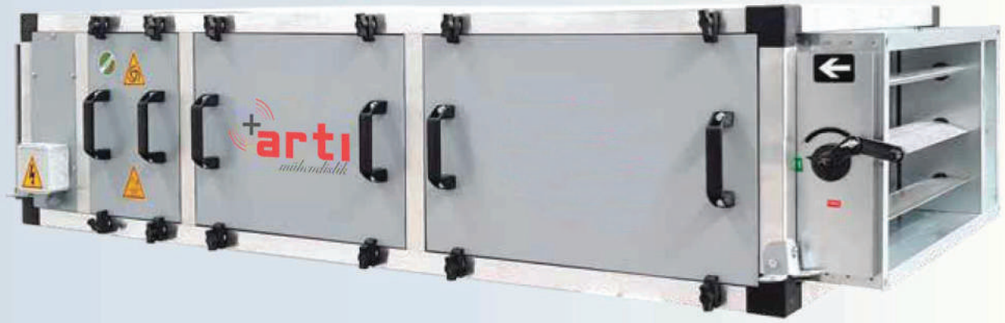
As ARTI Aır Conditioning, we're manufacturing 3 types of shelter air handling units.

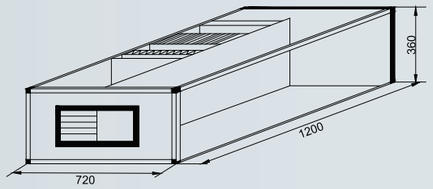
1- Single Hull Canal Type Shelter Air Handling Unit
2- Double Hull Canal Type Shelter Air Handling Unit
3- Ground Type Double Hull Shelter Air Handling Unit

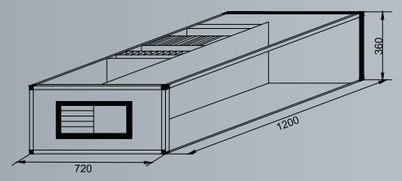
1- Single Hull Canal Type Shelter Air Handling Unit

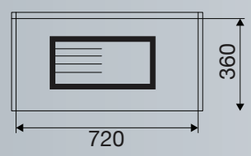
- *Case is made of 1mm galvanized steel placard.*
- *Direct coupled fans are used.*
- *Specially manufactured air adjusting dumper can By-Pass the air.*
- *You can easily reach to the engine section and fan section via hinged intervene caps.*
- *Special silicone and gaskets are used on the sides of the case and sealing feature is gained.*

These are the capacity and sizes;

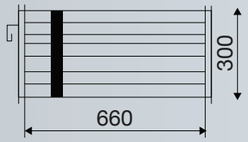








BLOWING NOZZLE:
720*360



SUCTION NOZZLE:
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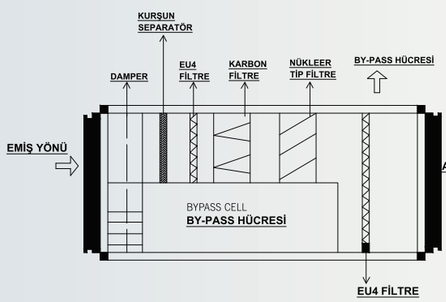
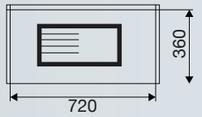
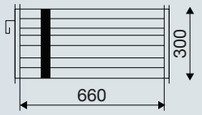




BLOWING NOZZLE
720*360



SUCTION NOZZLE
660*300

MODEL	FLOW (m³/h)	POWER (W)	VOLTAGE (V)	EXTERIOR PRESSURE LOSS (PA)
ARTI ÇC KSH 3	300	150	220	100
ARTI ÇC KSH 5	500	150	220	100
ARTI ÇC KSH 8	800	150	220	100
ARTIÇC KSH 10	1000	260	220	100
ARTI ÇC KSH 13	1300	260	220	85
ARTI ÇC KSH 15	1500	480	220	85
ARTI ÇC KSH 18	1800	480	220	85
ARTI ÇC KSH 20	2000	640	220	85

MODEL	CAPACITY (m^3/h)	PULLED POWER (W)	VOLTAGE (V)	EXTERIOR PRESSURE LOSS (PA)
ARTI ÇC KSH 3	300	150	220	100
ARTI ÇC KSH 5	500	150	220	100
ARTI ÇC KSH 8	800	150	220	100
ARTI ÇC KSH 10	1000	260	220	100
ARTI ÇC KSH 13	1300	260	220	85
ARTI ÇC KSH 15	1500	480	220	85
ARTI ÇC KSH 18	1800	480	220	85
ARTI ÇC KSH 20	2000	640	220	85

SHELTER AIR HANDLING UNIT

SHELTER AIR HANDLING UNIT MODELS

2- Double Hull Canal Type Shelter Air Handling Unit

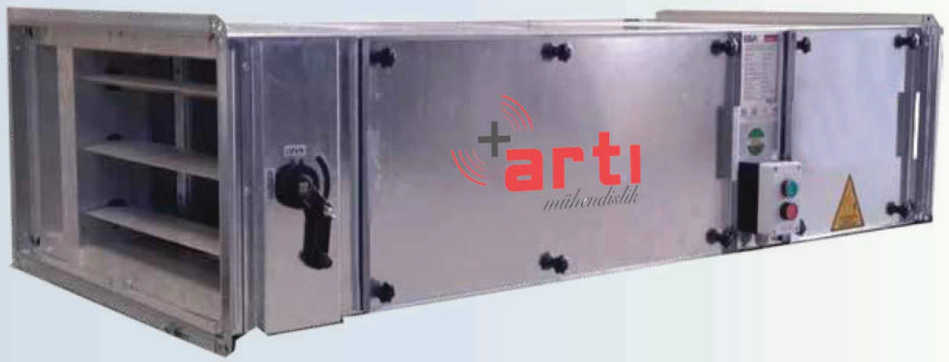
- *Inner hull is made of 0.6 mm outer sheet and 0,6 mm coated galvanized steel sheet.*
- *Direct coupled fans are used.*
- *30 mm isolation material is used. Thus, it provides sound and heat isolation*

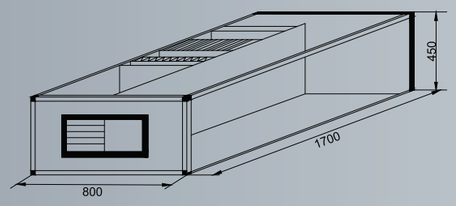
Specially manufactured air adjusting dumper can By-Pass the air.

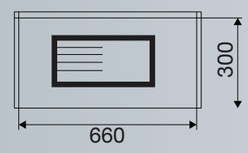
You can easily reach to the engine section and fan section via hinged intervene caps.

Special silicone and gaskets are used on the sides of the case and sealing feature is gained.

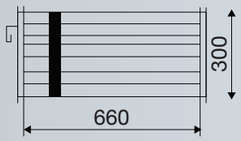
These are the capacity and sizes;





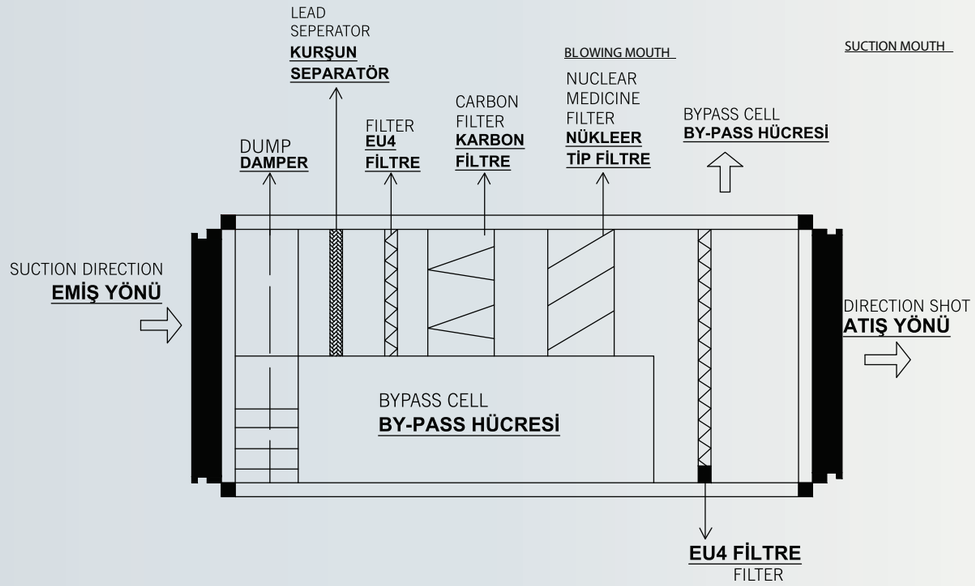


BLOWING NOZZLE:
660*300



SUCTION NOZZLE:
660*300

MODEL	FLOW (m^3/h)	POWER (W)	VOLTAGE (V)	EXTERIOR PRESSURE LOSS (PA)
ARTI ÇC KSH 3	300	150	220	100
ARTI ÇC KSH 5	500	150	220	100
ARTI ÇC KSH 8	800	150	220	100
ARTI ÇC KSH 10	1000	260	220	100
ARTI ÇC KSH 13	1300	260	220	85
ARTI ÇC KSH 15	1500	480	220	85
ARTI ÇC KSH 18	1800	480	220	85
ARTI ÇC KSH 20	2000	640	220	85



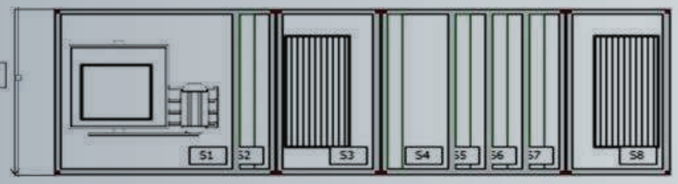
SHELTER AIR HANDLING UNIT

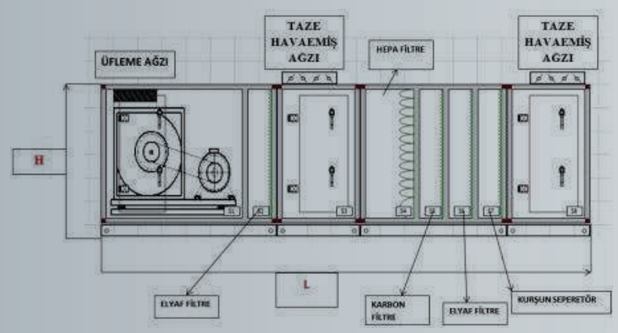
SHELTER AIR HANDLING UNIT MODELS

3- Ground Type Double Hull Shelter Air Handling Unit

- *Inner hull is made of 0.6 mm outer sheet and 0,6 mm coated galvanized steel sheet.*
- *Fans with backward curved belt pulleys are used.*
- *30 mm isolation material is used. Thus, it provides sound and heat isolation*
- *Specially manufactured air adjusting dumper can By-Pass the air.*
- *You can easily reach to the engine section and fan section via hinged intervene caps.*
- *Special silicone and gaskets are used on the sides of the case and sealing feature is gained.*

These are the capacity and sizes;



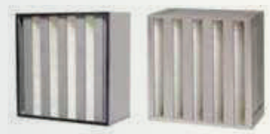


MODEL	FLOW (m³/h)	POWER (W)	EXTERIOR PRESSURE LOSS (PA)
ARTI SH 30	3000	1,5	300
ARTI SH 40	4000	1,5	300
ARTI SH 50	5000	2	300
ARTI SH 60	6000	2	300
ARTI SH 70	7000	3	300
ARTI SH 80	8000	3	300
ARTI SH 100	10000	4	300

Used Filters' Specifications

Radioactive fallout holding filter; *Designed to be used in shelters, the H12 class is made of pleated filter paper with an efficiency of 99.5%. It is suitable for 120 C° in continuous operation and capable of withstanding 220 C° for a short time. It should be capable of holding nuclear radioactive fallout.*

Activated carbon filter and G4 coarse filter**;** *In peacetime, the air must be by-passed for just passing through the G4 coarse filter without passing the other filters. Canal type ventilation device is compatible for low or medium risk of fire graded buildings. It has more advantages by its compact design than the central type devices.*



Warnings

Air filters must be cleaned twice a year. You can get the detachable and washable filters along with the device.

1- Open the door and detach the filters.

2- After detaching the filters, clean the filters via pressured air from the distance which would not harm to the filters.

3- After cleaning, mount the filters and make sure the door is closed. Do not clean with the brush and alike cleaning equipments.

4- Have all connection and cabling performed by experienced personnel and / or technical service teams.

5- Use power cable lugs to make power entries in the electrical panel and do not leave any open cable ends that may contact each other during connection.

6- Make sure to connect the overtemperature thermistor (set to max. 80 Co).

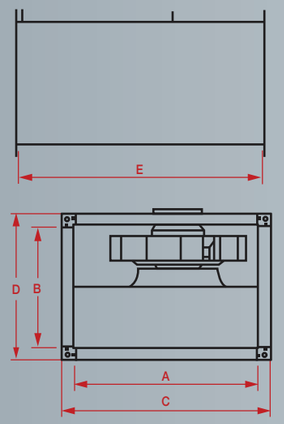
VENTILATION EQUIPMENTS

VENTILATION EQUIPMENTS

VENTILATION EQUIPMENTS

RECTANGLE CANAL FAN

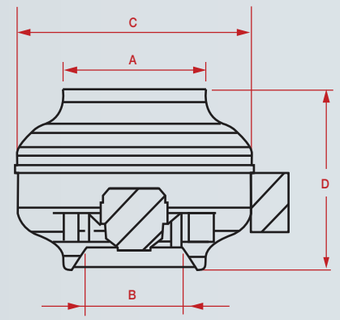
RECTANGLE CANAL FAN						
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m³ /h)**	LOUD **(DBA)**
ARTI 30-15	230/50	90	0,35	2650	650	71
ARTI 40-20 A	230/50	105	0,46	2762	1000	74
ARTI 40-20 B	230/50	140	0,61	2693	1250	76
ARTI 50-25	230/50	213	0,94	2546	1900	79
ARTI 60-30	230/50	135	0,6	1400	2100	70
ARTI 60-35 A	230/50	170	0,78	1385	2800	80
ARTI 60-35 B	230/50	240	1,1	1370	3400	83
ARTI 70-40 A	230/50	510	2,35	1320	4500	83
ARTI 70-40 B	230/50	510	2,35	1378	5900	84
ARTI 80 -50	400/50	700/1070	2,18	1430	8000	86
ARTI 100-50	400/50	700/1070	2,18	1430	10000	87



MODEL	A	B	C	D	E
: 30-15	300	150	350	200	400
: 40-20 A	400	200	450	250	500
: 40-20 B	400	200	450	250	500
: 50-25	500	250	550	300	560
: 60-35	600	300	650	350	650
: 60-35 A	600	350	650	400	760
: 60-35 B	600	350	650	400	760
: 70-40 A	700	400	750	450	800
: 70-40 B	700	400	750	450	800
: 80-50	800	500	850	550	920
: 100-50	1000	500	1050	550	1050

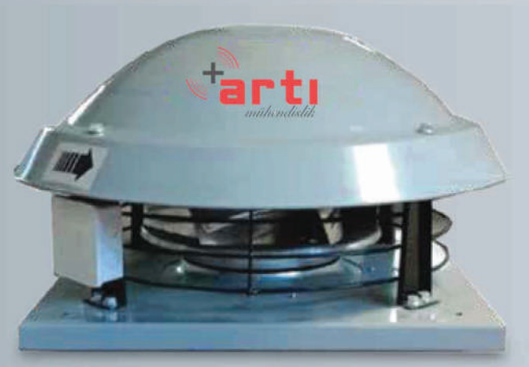
ROUND CANAL FAN

ROUND CANAL FAN						
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m³ /h)**	LOUD **(DBA)**
ARTI 100 B	230/50	72	0,33	2540	255	46
ARTI 125 B	230/50	72	0,37	2480	330	45
ARTI 160 B	230/50	120	0,55	2600	760	51
ARTI 200 B	230/50	160	0,74	2750	1140	53
ARTI 250 B	230/50	195	0,98	2710	1250	54
ARTI 315 B	230/50	310	1,5	2645	1875	60

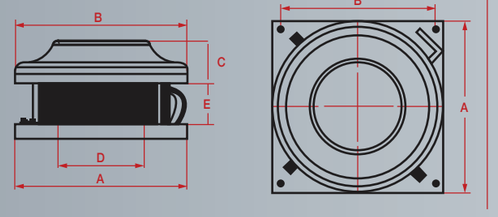


A	B	C	D
97	97	235	180
120	120	235	185
155	155	235	200
195	195	330	220
247	247	345	235
310	310	400	300

HORIZONTAL SHOOTING RADIAL ROOF TYPE FAN



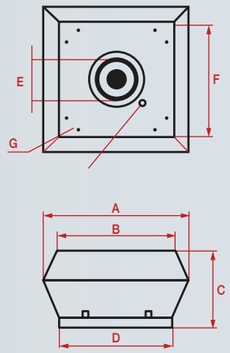
HORIZONTAL SHOOTING RADIAL ROOF TYPE FAN						
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m³ /h)**	LOUD **(DBA)**
ARTI 250	230/50	200	0,87	2510	1300	54
ARTI 315	230/50	145	0,68	2650	1870	55
ARTI 355	230/50	240	1,1	1350	2750	66
ARTI 400	230/50	510	2,3	1410	3750	68
ARTI 450	230/50	510	2,3	1390	6290	73
ARTI 500	400/50	700/1070	2,18	1375	8000	73
ARTI 560	400/50	1500/2580	4,4	1360	10000	80



MODEL	A	B	C	D	E	G
: 250	450	460	110	180	120	360
: 315	565	500	110	180	130	450
: 355	595	500	80	235	180	495
: 400	595	530	80	270	180	495
: 450	665	530	80	285	220	565
: 500	800	900	100	320	265	690
: 560	800	900	100	355	265	690

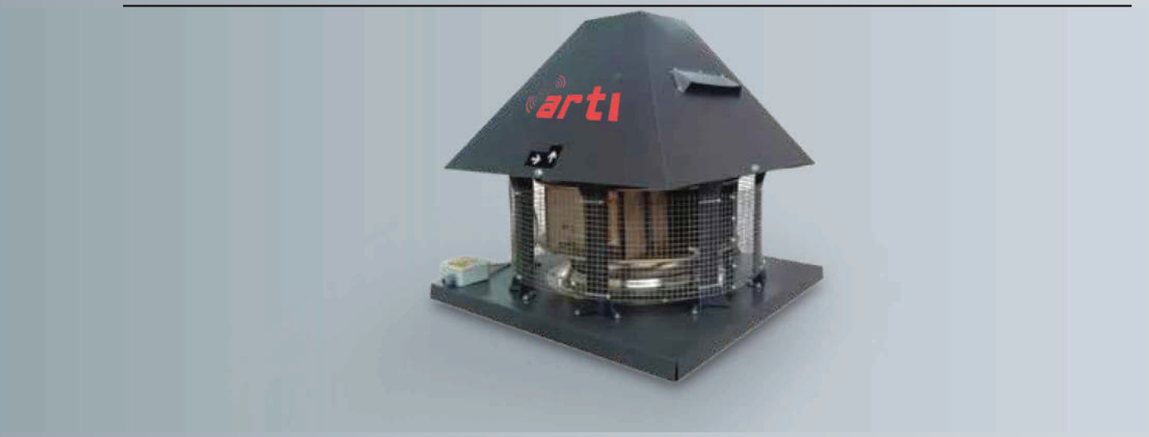
VERTICAL SHOOTING RADIAL ROOF TYPE FAN

VERTICAL SHOOTING RADIAL ROOF TYPE FAN						
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m³ /h)**	LOUD **(DBA)**
ARTI 225	230/50	160/220	0,71-0,99	2650	850	43-35
ARTI 315	230/50	150/175	0,92-0,85	1450-1725	1900-2260	45-37
ARTI 355	230/50	200/255	1,1-1,25	1400-1600	2850-3250	46-38
ARTI 400	230/50	310/460	1,56-2,27	1380-15860	4000-4521	47-39
ARTI 450	230/50	425/630	2,17-3,15	1390-1550	5400-6000	50-42
ARTI 500	380/50	960/620	2/1,1	1400-1050	7600-5700	52-44
ARTI 560	380/50	1515/870	2,9-1,7	1250-950	9600-7300	60-52

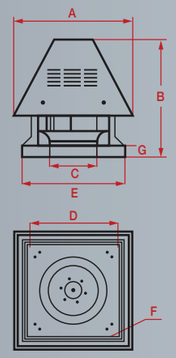


MODEL	A	B	C	D	E	F	G
225	350	295	190	335	146	245	10
315	552	450	330	505	185	450	10
355	745	607	385	595	234	450	10
400	745	607	385	595	270	450	10
450	900	742	512	665	282	630	10
500	900	742	512	665	320	630	12
560	1190	955	595	946	360	740	12

HORIZONTAL SHOOTING EXTERNAL ENGINE RADIAL ROOF TYPE FAN



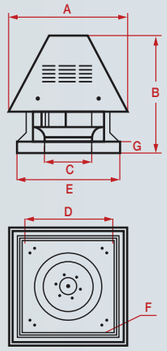
HORIZONTAL SHOOTING EXTERNAL ENGINE RADIAL ROOF TYPE FAN **(Resistant to 110 C°)**						
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m³ /h)**	LOUD **(DBA)**
ARTI 280	380/50	0,25	0,87	1380	1.000	53-45
ARTI 315	380/50	0,25	0,87	1380	1.950	53-45
ARTI 355	380/50	0,25	0,87	1380	2.900	55-47
ARTI 400	380/50	0,37	1,2	1390	4.000	60-52
ARTI 450	380/50	0,55	1,6	1365	5.550	62-54
ARTI 500	380/50	1,1	2,6	1410	8.300	64-56
ARTI 560	380/50	2,2	4,9	1420	10.800	66-58
ARTI 630	380/50	3	6,6	1425	13.000	60-52
ARTI 710	380/50	4	8,4	1440	15.000	63-55
ARTI 800	380/50	7,5	15,4	1465	17.000	67-59



MODEL	A	B	C	D	E	F	G
280	524	505	165	354	404	10	44
315	593	546	185	404	454	10	44
355	655	546	234	450	500	10	44
400	655	574	270	450	500	12	44
450	730	568	282	530	580	12	44
500	800	665	320	590	640	12	44
560	856	723	360	650	700	12	44
630	986	888	448	660	730	12	54
710	1080	958	450	710	780	12	54
800	1190	1130	542	850	900	12	54

VERTICAL SHOT RADIAL ROOF FAN

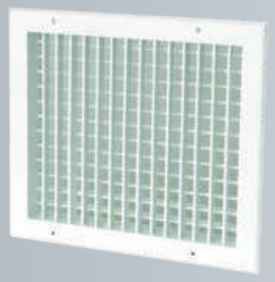
HORIZONTAL SHOOTING EXPROOF ENGINE RADIAL ROOF TYPE FAN ENGINE FEATURES EXPROOF.						
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m³ /h)**	LOUD **(DBA)**
ARTI EX 280	380/50	0,25	0,87	1380	1.000	53-45
ARTI EX 315	380/50	0,25	0,87	1380	1.950	53-45
ARTI EX 355	380/50	0,25	0,87	1380	2.900	55-47
ARTI EX 400	380/50	0,37	1,2	1390	4.000	60-52
ARTI EX 450	380/50	0,55	1,6	1365	5.550	62-54
ARTI EX 500	380/50	1,1	2,6	1410	8.300	64-56
ARTI EX 560	380/50	2,2	4,9	1420	10.800	66-58
ARTI EX 630	380/50	3	6,6	1425	13.000	60-52
ARTI EX 710	380/50	4	8,4	1440	15.000	63-55
ARTI EX 800	380/50	7,5	15,4	1465	17.000	67-59



MODEL	A	B	C	D	E	F	G
280	524	505	165	354	404	10	44
315	593	546	185	404	454	10	44
355	655	546	234	450	500	10	44
400	655	574	270	450	500	12	44
450	730	568	282	530	580	12	44
500	800	665	320	590	640	12	44
560	856	723	360	650	700	12	44
630	986	888	448	660	730	12	54
710	1080	958	450	710	780	12	54
800	1190	1130	542	850	900	12	54

GRILLES

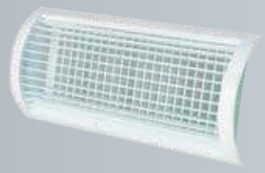
SINGLE LINE WING GRILL



DOUBLE ROW WING GRILL

SQUARE HONEYCOMB GRILL

LINEAR GRILL



DOUBLE ROW WING
ROUND CANAL GRILL

SLOT DIFFUSER

QUADRIVIAL SWİRL DIFFUSER

ADJUSTABLE SHUTTER

OUTDOOR AIR SHUTTER

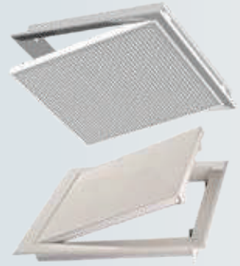
GRILLES

SWIRL DIFFUSER

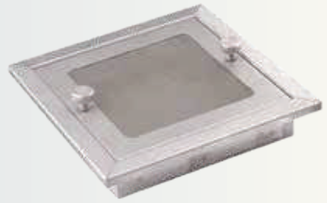
SQUARE DIFFUSER

ROUND OUTDOOR
AIR SHUTTER

DOOR TRANSFER CENTRAL

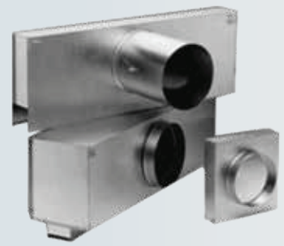


SQUARE HONEYCOMB
CASED GRILL CONTROL CAP



FIBER HOLDING GRILL

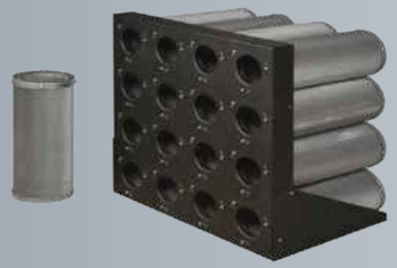
VOLUME DUMPER



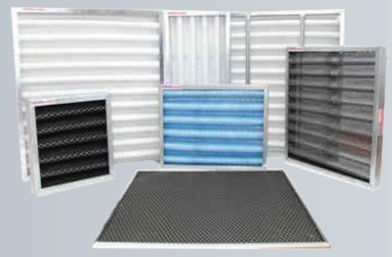
PLENUM BOX

SAILOR DIFFUSER

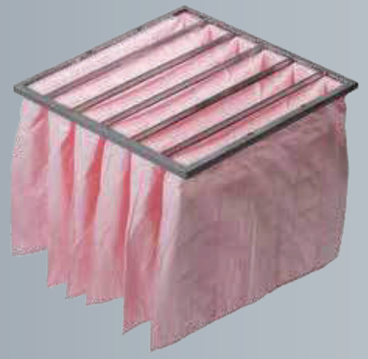
FILTERS



ACTIVATED CARBON CARTRIDGE FILTER
-1 TOTAL FILTER = 16 CARTRIDGE (610X610X450)
-1 HALF FILTER= 8 CARTRIDGE (305X610X450)

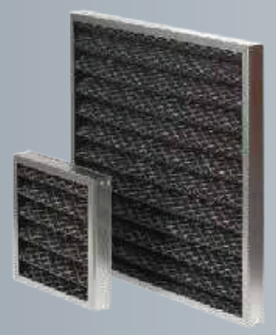


Tray **Panel Filter -G2-G3-G4**



BAG FILTER **-F7-F8-F9**

F6-F7-F8-F9 COMPACT **F**ILTER



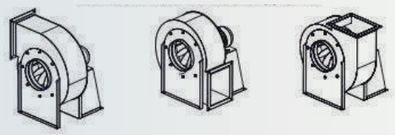
TRAY CARBON FILTER

HEPA FILTER

FORWARD CURVED RARE WING LOW PRESSURE RADIAL **FAN**

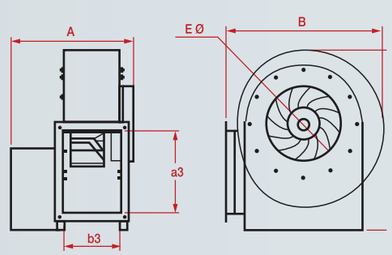
R (RIGHT) RADIAL PLACING FORMS

L (LEFT) RADIAL PLACING FORMS



PS: PLACING FORMS ARE MADE ACCORDING TO THE SUCTION .

FORWARD CURVED RARE WING LOW PRESSURE RADIAL FAN					
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m̊ /h)**
ARTI S 20	380/50	0,37	1,15	1400	2.000
ARTI S 30	380/50	0,75	2,1	1400	3.000
ARTI S 40	380/50	1,1	2,6	1400	4.000
ARTI S 50	380/50	1,5	3,5	1400	5.000
ARTI S 65	380/50	2,2	5	1400	6.500
ARTI S 75	380/50	3	6,6	1400	7.500
ARTI S 85	380/50	4	8,2	1400	8.500
ARTI S 105	380/50	5,5	11,2	1400	10.500
ARTI S 125	380/50	7,5	15,4	1400	12.500



A	B	C	SUCTION E Ø	SHOT a3	SHOT b3
387	430	455	200	205	160
437	530	573	220	265	190
467	570	613	240	275	200
487	630	703	260	295	220
527	650	723	300	325	230
547	690	773	325	325	240
581	740	846	350	385	260
681	850	934	380	445	280
781	930	1044	420	545	350

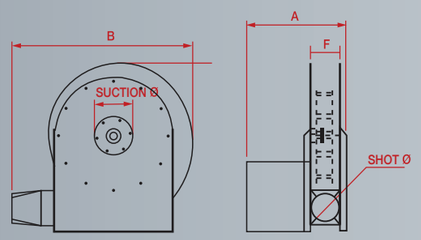
MEDIUM PRESSURE RADIAL FAN

R (RIGHT) RADIAL PLACING FORMS

L (LEFT) RADIAL PLACING FORMS

PS: PLACING FORMS ARE MADE ACCORDING TO THE SUCTION .

MEDIUM PRESSURE RADIAL FAN					
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m^3 /h)**
ARTI S 10	380/50	0,37	1,05	2800	1.000
ARTI S 11	380/50	0,75	1,7	2800	1.100
ARTI S 14	380/50	1,1	2,3	2800	1.400
ARTI S 16	380/50	1,5	3,3	2800	1.600
ARTI S 21	380/50	2,2	4,48	2800	2.100
ARTI S 23	380/50	3	5,8	2800	2.300
ARTI S 26	380/50	4	7,4	2800	2.600
ARTI S 32	380/50	5,5	10,3	2800	3.200
ARTI S 42	380/50	7,5	13,6	2800	4.200
ARTI S 58	380/50	11	19,5	2800	5.800
ARTI S 70	380/50	15	28,3	2800	7.000



A	B	C	SUCTION	ØSHOT Ø	F
324	540	493	100	100	100
324	630	493	100	100	100
364	670	613	120	100	120
364	695	643	130	120	130
420	745	684	130	120	120
455	764	735	140	140	150
455	890	795	150	150	150
535	925	845	190	150	150
565	945	875	200	150	150

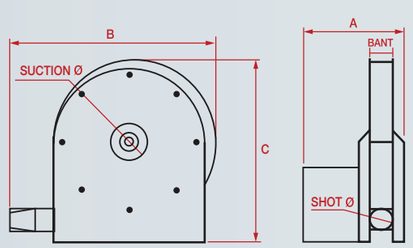
HIGH PRESSURE CENTRIFUGAL FANS

R (RIGHT) RADIAL PLACING FORMS

L (LEFT) RADIAL PLACING FORMSİ

PS: PLACING FORMS ARE MADE ACCORDING TO THE SUCTION .

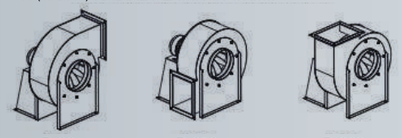
HIGH PRESSURE CENTRIFUGAL FANS					
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m^3 /h)**
ARTI S 035	380/50	0,37	1,05	2800	350
ARTI S 045	380/50	0,75	1,7	2800	450
ARTI S 055	380/50	1,1	2,3	2800	550
ARTI S 060	380/50	1,5	3,3	2800	600
ARTI S 070	380/50	2,2	4,48	2800	700
ARTI S 10	380/50	3	5,8	2800	1.000
ARTI S 12,5	380/50	4	7,4	2800	1.250
ARTI S 15	380/50	5,5	10,3	2800	1.500
ARTI S 17	380/50	7,5	13,6	2800	1.700
ARTI S 20	380/50	11	19,5	2800	2.000
ARTI S 25	380/50	15	28,3	2800	2.500



A	B	C	SUCTION	ØSHOT Ø	BANT
274	565	503	100	60	60
294	640	583	120	60	60
314	687	633	120	70	60
316	710	653	130	70	60
344	775	714	140	80	70
364	790	734	150	80	80
379	840	774	160	90	80
449	895	824	170	100	80
469	970	894	180	100	100

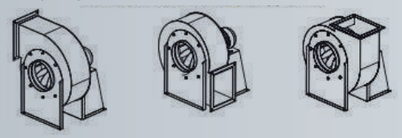
SQUARE TYPE LOW PRESSURE RARE WING FANS

R (RIGHT) RADIAL PLACING FORMS



R-90 R-270 R-360

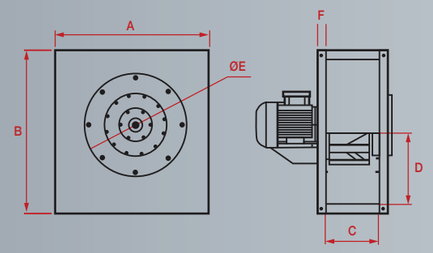
L (LEFT) RADIAL PLACING FORMS



L-90 L-270 L-360

PS: PLACING FORMS ARE MADE ACCORDING TO THE SUCTION .

SQUARE TYPE LOW PRESSURE RARE WING FANS					
MODEL	**VOLTAGE (VOLT/HZ)**	POWER **(WATT)**	**CURRENT (A)**	**CYCLE (d/d)**	FLOW **(m³ /h)**
ARTI S 20	380/50	0,37	1,15	1400	2.000
ARTI S 30	380/50	0,75	2,1	1400	3.000
ARTI S 40	380/50	1,1	2,6	1400	4.000
ARTI S 50	380/50	1,5	3,5	1400	5.000
ARTI S 65	380/50	2,2	5	1400	6.500
ARTI S 75	380/50	3	6,6	1400	7.500
ARTI S 85	380/50	4	8,2	1400	8.500
ARTI S 105	380/50	5,5	11,2	1400	10.500
ARTI S 125	380/50	7,5	15,4	1400	12.500



A	B	SHOT Ø C	SHOT Ø D	SUCTION Ø E	F
510	520	190	260	220	30
600	630	200	270	240	30
600	715	220	290	260	30
680	745	230	320	300	30
720	760	240	320	320	30
770	825	260	385	350	30
880	940	280	440	380	30
1065	960	350	545	420	30

RECURVATE LOW PRESSURE CONICAL RADIAL FAN

R (RIGHT) RADIAL PLACING FORMS

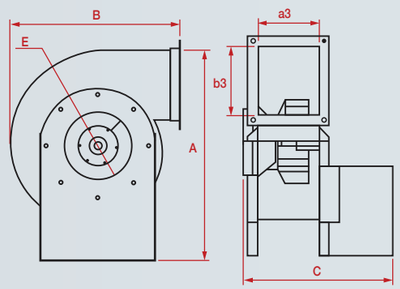
R-90 R-270 R-360

L (LEFT) RADIAL PLACING FORMS

L-90 L-270 L-360

PS: PLACING FORMS ARE MADE ACCORDING TO THE SUCTION .

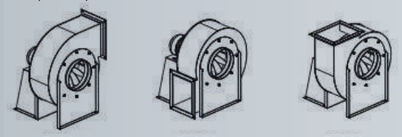
RECURVATE LOW PRESSURE CONICAL RADIAL FAN					
MODEL	**VOLTAGE (VOLT/HZ)**	POWER **(WATT)**	**CURRENT (A)**	**CYCLE (d/d)**	FLOW **(m³ /h)**
ARTI S 20	380/50	0,37	1,15	1400	2.000
ARTI S 35	380/50	0,75	2,1	1400	3.500
ARTI S 45	380/50	1,1	2,6	1400	4.500
ARTI S 60	380/50	1,5	3,5	1400	6.000
ARTI S 80	380/50	2,2	5	1400	8.000
ARTI S 100	380/50	3	6,6	1400	10.000
ARTI S 120	380/50	4	8,2	1400	12.000
ARTI S 160	380/50	5,5	11,2	1400	16.000
ARTI S 200	380/50	7,5	15,4	1400	20.000
ARTI S 250	380/50	11	21	1400	25.000
ARTI S 300	380/50	15	29,8	1400	30.000
ARTI S 350	380/50	18,5	34,5	1400	35.000
ARTI S 400	380/50	22	42,5	1400	40.000
ARTI S 450	380/50	30	55	1400	45.000
ARTI S 500	380/50	37	67	1400	50.000



A	B	C	SUCTION E	SHOT a3	SHOT b3
634	515	451	200	184	210
759	610	491	300	204	275
864	710	551	350	234	285
864	710	571	350	254	315
926	750	672	400	304	415
1006	820	734	450	356	460
1181	950	814	500	406	515
1411	1040	904	550	456	560
1411	1100	954	600	506	610
1461	1170	1147	700	556	710
1581	1300	1198	750	606	810
1791	1350	1289	800	606	820
1858	1375	1372	850	708	860
1983	1450	1532	900	758	880
2378	1720	1622	1000	804	1010

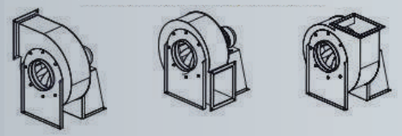
RECURVATE MEDIUM PRESSURE CONICAL RADIAL FAN

R (RIGHT) RADIAL PLACING FORMS



R-90 R-270 R-360

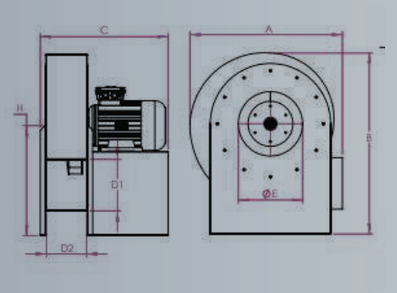
L (LEFT) RADIAL PLACING FORMS



L-90 L-270 L-360

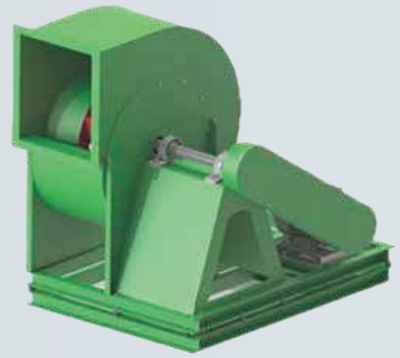
PS: PLACING FORMS ARE MADE ACCORDING TO THE SUCTION .

RECURVATE MEDIUM PRESSURE CONICAL RADIAL FAN					
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m³/h)**
ARTI S 20	380/50	0,37	1,15	2800	2.000
ARTI S 30	380/50	0,75	2,1	2800	3.000
ARTI S 35	380/50	1,1	2,6	2800	3.500
ARTI S 45	380/50	1,5	3,5	2800	4.500
ARTI S 55	380/50	2,2	5	2800	5.500
ARTI S 63	380/50	3	6,6	2800	6.300
ARTI S 75	380/50	4	8,2	2800	7.500
ARTI S 85	380/50	5,5	11,2	2800	8.500
ARTI S 105	380/50	7,5	15,4	2800	10.500
ARTI S 125	380/50	11	21	2800	12.500
ARTI S 150	380/50	15	29,8	2800	15.000
ARTI S 165	380/50	18,5	34,5	2800	16.500
ARTI S 180	380/50	22	42,5	2800	18.000
ARTI S 210	380/50	30	55	2800	21.000
ARTI S 235	380/50	37	67	2800	23.500



A	B	C	SUCTION	E	H	SHOT D1	SHOT D2
460	525	375	150	313		120	120
530	620	397	150	376		120	120
560	653	401	150	393		120	120
600	672	447	180	402		150	150
620	720	506	200	433		160	180
650	770	558	220	458		180	200
740	830	578	250	483		200	200
770	913	667	300	548		250	250
800	940	663	300	568		250	250
882	1073	786	350	634		270	250
950	1125	796	400	685		320	250
1012	1144	782	400	694		370	250

RECURVATE LOW PRESSURE BELT AND PULLEY CONICAL RADIAL FAN



R (RIGHT) RADIAL PLACING FORMS

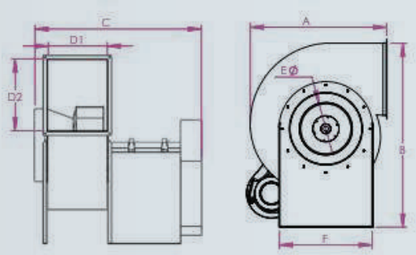
R-90 R-270 R-360

L (LEFT) RADIAL PLACING FORMS

L-90 L-270 L-360

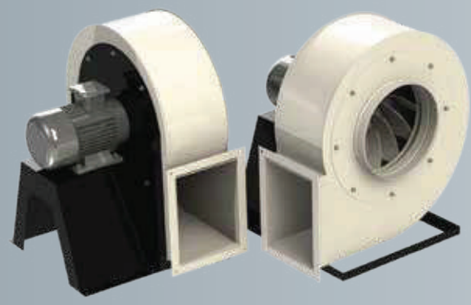
PS: PLACING FORMS ARE MADE ACCORDING TO THE SUCTION .

RECURVATE LOW PRESSURE BELT AND PULLEY CONICAL RADIAL FAN					
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m³ /h)**
ARTI S 20	380/50	0,37	1,15	1400	2.000
ARTI S 35	380/50	0,75	2,1	1400	3.500
ARTI S 45	380/50	1,1	2,6	1400	4.500
ARTI S 60	380/50	1,5	3,5	1400	6.000
ARTI S 80	380/50	2,2	5	1400	8.000
ARTI S 100	380/50	3	6,6	1400	10.000
ARTI S 120	380/50	4	8,2	1400	12.000
ARTI S 160	380/50	5,5	11,2	1400	16.000
ARTI S 200	380/50	7,5	15,4	1400	20.000
ARTI S 250	380/50	11	21	1400	25.000
ARTI S 300	380/50	15	29,8	1400	30.000
ARTI S 350	380/50	18,5	34,5	1400	35.000
ARTI S 400	380/50	22	42,5	1400	40.000
ARTI S 450	380/50	30	55	1400	45.000
ARTI S 500	380/50	37	67	1400	50.000

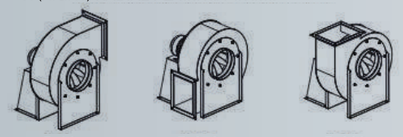


A	B	C	SUCTION	ØE	SHOT D1	SHOT D2	F
634	515	630	200	184	210	340	
759	610	670	300	204	275	440	
864	710	720	350	234	285	490	
864	710	780	350	254	315	490	
926	750	820	400	304	415	540	
1006	820	870	450	356	460	600	
1181	950	960	500	406	515	660	
1411	1040	1050	550	456	560	710	
1411	1100	1120	600	506	610	750	
1461	1170	1120	700	556	710	880	
1581	1300	1300	750	606	810	910	
1791	1350	1300	800	606	820	980	
1858	1375	1350	850	708	860	1030	
1983	1450	1532	900	758	880	1060	
2378	1720	1622	1000	804	1010	1140	

ACID RARE WING FANS WITH PLASTIC
BODY AND PLASTIC PROPELLER

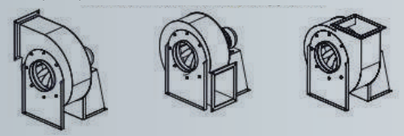


R (RIGHT) RADIAL PLACING FORMS



R-90 R-270 R-360

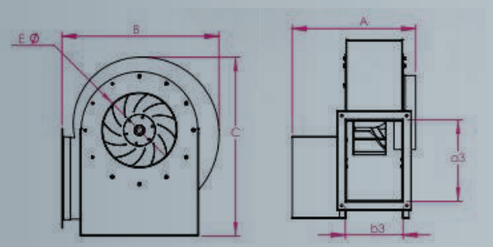
L (LEFT) RADIAL PLACING FORMS



L-90 L-270 L-360

PS: PLACING FORMS ARE MADE ACCORDING TO THE SUCTION .

ACID RARE WING FANS WITH PLASTIC BODY AND PLASTIC PROPELLER					
MODEL	VOLTAGE **(VOLT/HZ)**	POWER **(WATT)**	CURRENT **(A)**	CYCLE **(d/d)**	FLOW **(m³ /h)**
ARTI S 20	380/50	0,37	1,15	1400	1.500
ARTI S 35	380/50	0,75	2,1	1400	2.500
ARTI S 45	380/50	1,1	2,6	1400	3.500
ARTI S 60	380/50	1,5	3,5	1400	4.500
ARTI S 80	380/50	2,2	5	1400	5.500
ARTI S 100	380/50	3	6,6	1400	6.500
ARTI S 120	380/50	4	8,2	1400	7.500
ARTI S 160	380/50	5,5	11,2	1400	9.000
ARTI S 200	380/50	7,5	15,4	1400	12.000



A	B	C	SUCTION E	Ø SHOT a3	b3
387	430	455	200	205	160
437	530	573	220	265	190
467	570	613	240	275	200
487	630	703	260	295	220
527	650	723	300	325	230
547	690	773	325	325	240
581	740	846	350	385	260
681	850	934	380	445	280
781	930	1044	420	545	350

SQUARE ELECTRIC HEATER

ROUND ELECTRIC HEATER

NOTES

NOTES

NOTES

Azərbaycan, Bakı,
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