

IGK

Heat Recovery Unit



FOUR SEASONS[®]

Venues Breathe with DOGU HVAC Systems!

DOGU HVAC founded in 1999, and ever since has been manufacturing energy and cost efficient products as Air Handling Units, Air Distribution & Management & Movement Systems [HVAC Components] and constantly enhancing to provide an integrated solution for well-being. DOGU HVAC's core business products which are subsumed under 6 major groups as Air Handling Units, Rooftop Units, Heat/Energy Recovery Units, Air Purifiers, Air Distribution & Management Products and Kitchen Ventilation Equipments are all produced under the compliance with EU standards. Particularly AHU and HRU-ER units are entitled under the "FOUR SEASONS" brand name for domestic and foreign markets. DOGU HVAC's, headquarter in Izmir/Turkey, operates in a large-sized plant spread over 2 factories, in total area of 32.000 sqm in which 17.500 sqm indoor space that enables DOGU HVAC manufactures 180 various type of products. Additionally, DOGU HVAC has a powerful sales network with 4 sales offices located in İstanbul, Ankara, Antalya and Adana in Turkey as well as authorized dealers in many other countries for sales and after sales operations. DOGU HVAC has been exporting to more than 55 countries.

Thanks to our "Customer Satisfaction", "Zero-Defect Policy" motto and reinforced by complete certified products, more than 250 employees. DOGU HVAC R&D center developed exclusive products, such as Double Skin Make-Up Kitchen Hood, Recirculated Laminar Airflow Unit, Single Piece Square Ceiling Diffuser and Ecology Units, for the first time have brought to the sector. DOGU HVAC R&D has the ability to make customized production which can meet the requirement of the customers by means of special software such as "ANSYS FLUENT". DOGU HVAC guaranteed its quality of management by having advantages of ISO 9001, ISO 14001, ISO 45001 certifications. Air Handling Units have EUROVENT, TUV Hygiene [in accordance with DIN1946-4, VDI 6022-1, DIN EN 13053 standards], have TSEK and CE quality certifications. Fire Dampers have EN 1366-2 and EN 13501-3 CE certifications; Smoke Control Dampers have EN 1366-10 and 12101-8 CE certifications; Kitchen Ventilation Products have TSEK and CE quality certifications.



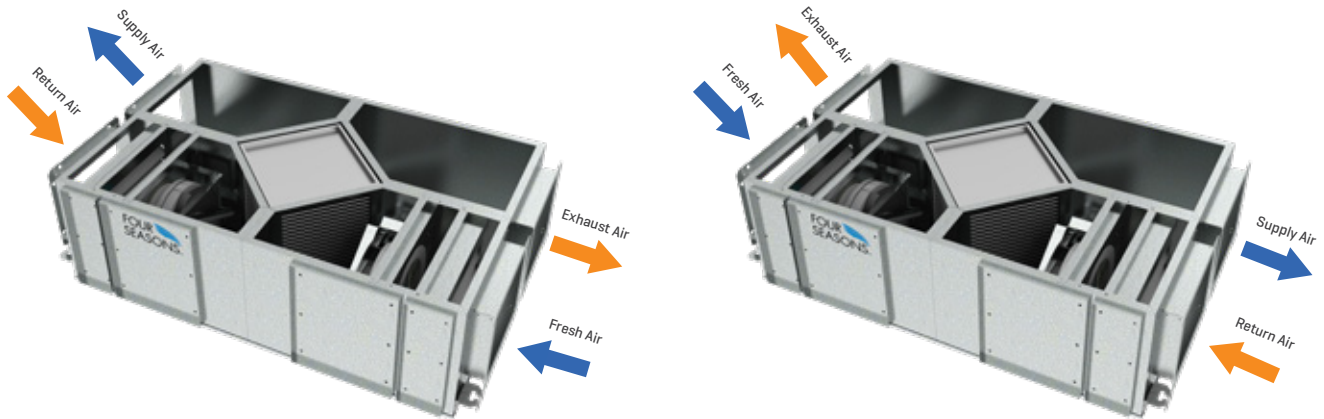


GENEL SPECIFICATIONS

- High efficient plug fans with backward-curved blades for low energy consumption.
- EC and AC fan option
- High efficient aluminum heat exchanger
- Low sound level
- High static pressure
- ISO Coarse 55% Filters
- Optional duct type water heater or electric heater
- Optional duct type attenuator
- Optional automation solutions
- The unit case is produced from 275 gr galvanized sheet.

OPERATION

In venues where air conditioned by heating or cooling, low grade climatized indoor air which includes high quantity carbon dioxide and other harmful gases, occur. While this poor quality of air is exhausted, the heat load of the exhaust air is collected on the heat exchanger. Afterwards, conditioning of the supply air is ensured by this energy load. Thus, the heat load of the air is recycled in the ratio of 50-60%, while poor quality indoor air is exhausted. IGK-Heat Recovery Units perform quietly and efficiently by means of plug fans . Unit can operate at desired air flow by speed control which is delivered as standard.



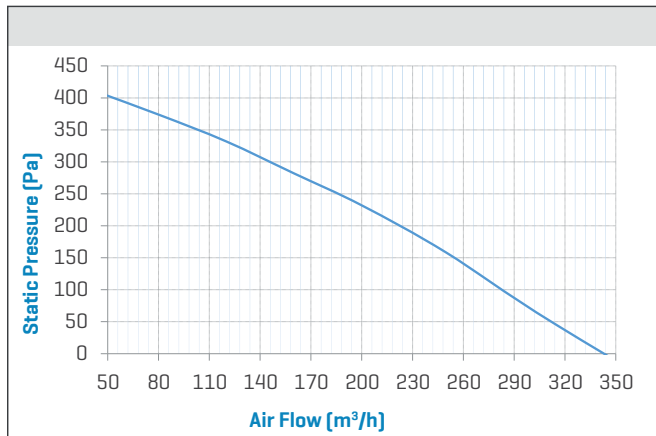
MATERIAL

IGK- Heat Recovery Units are comprised 6 main parts. The case [1] is manufactured from galvanized steel. Inner insulation is 9 mm rubber . Thus, the sound and heat insulation is ensured. The lifetime and visibility are increased by powder. Supply and exhaust fans are plug type [2]. Service doors for easy maintenance for fans [3]. ISO Coarse %55 filters [4] in both exhaust and fresh air inlet. Thus, aluminum heat exchanger [5], which is main component of the unit, is kept clear and efficient operation is ensured. The electric connection box [6], which has the terminal connections of the fans, is fixed on the case of unit for easy connection of the unit to the network.

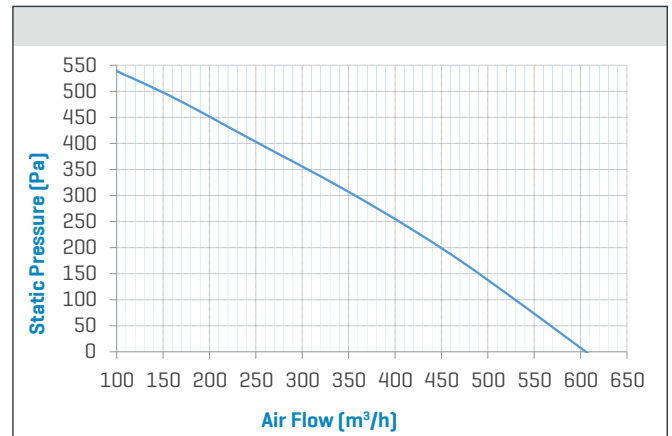


IGK-AC

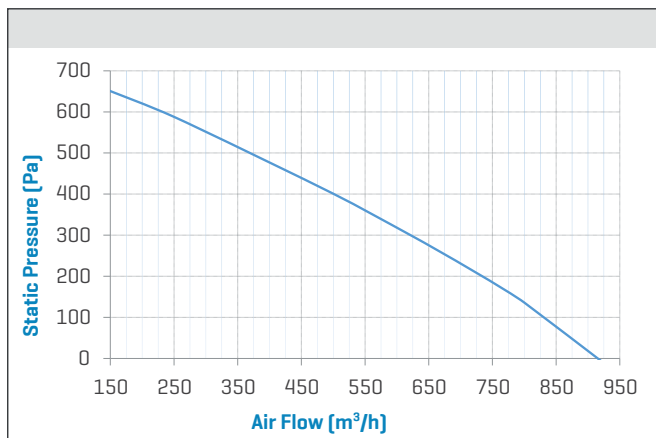
IGK-04



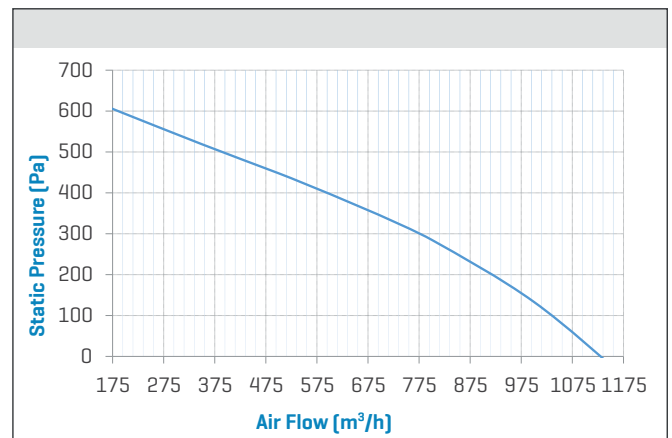
IGK-07



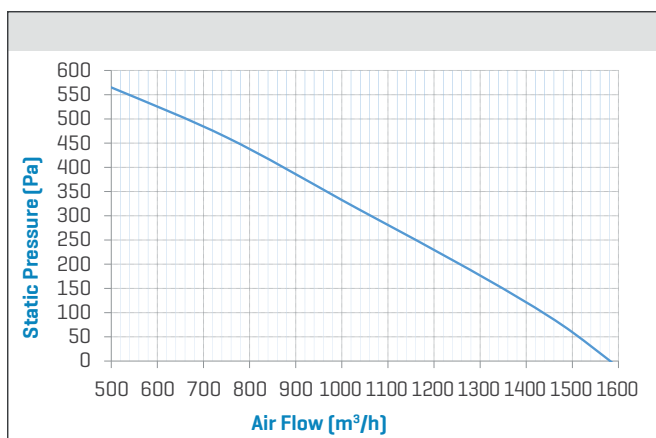
IGK-10



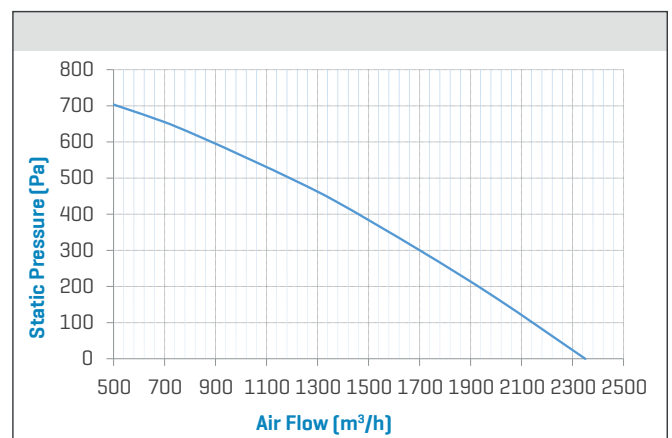
IGK-15



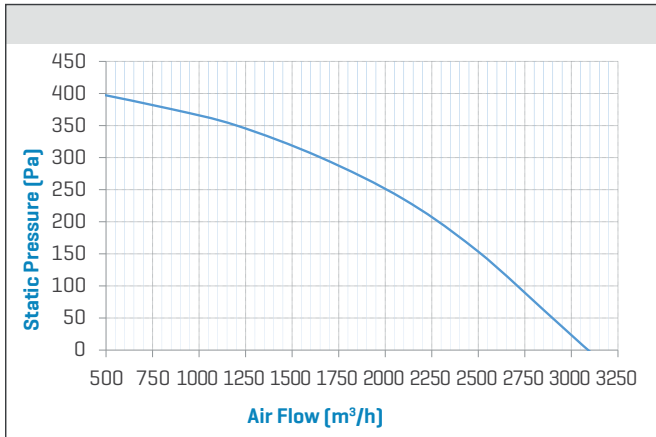
IGK-20



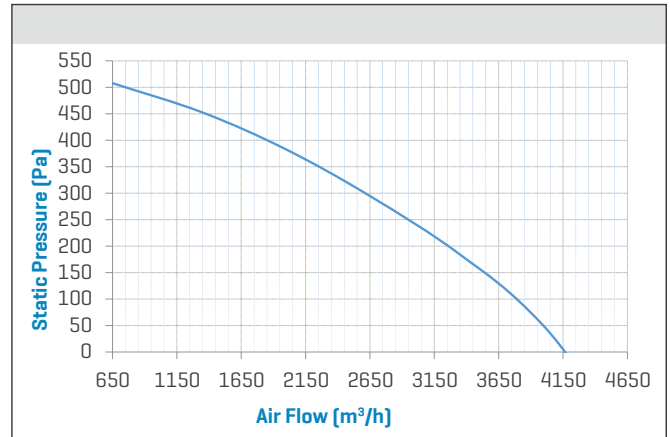
IGK-30



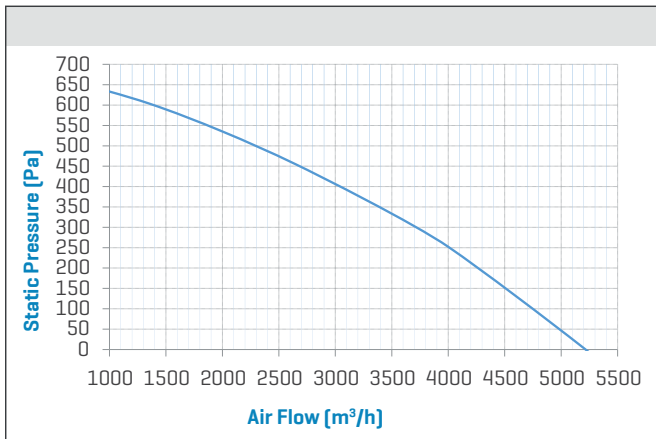
IGK-40



IGK-50



IGK-60



TECHNICAL DATA AC FAN

Unit Models		IGK-04	IGK-07	IGK-10	IGK-15	IGK-20	IGK-30	IGK-40	IGK-50	IGK-60
Unit Features	m³/h	345	610	910	1125	1580	2350	3150	4155	5250
Air Flow [150 Pa ESP]	m³/h	250	500	800	1000	1350	2000	2500	3500	4500
Total Power	W	128	270	414	424	634	1006	916	1388	2600
Sound Power	db[A]	48	59	63	58	65	64	65	67	68

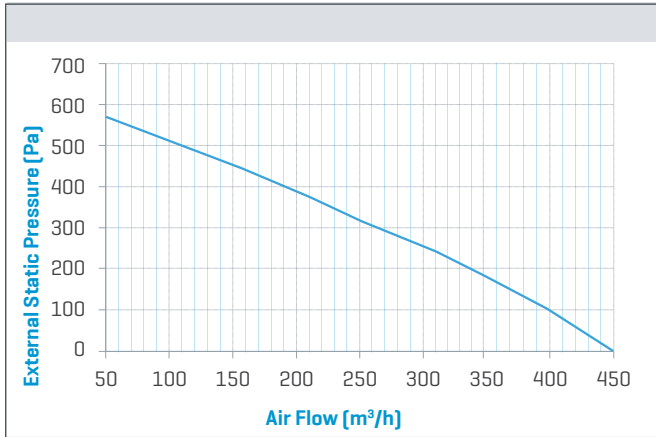
Note:

Sound power values are 1 meter from the unit.

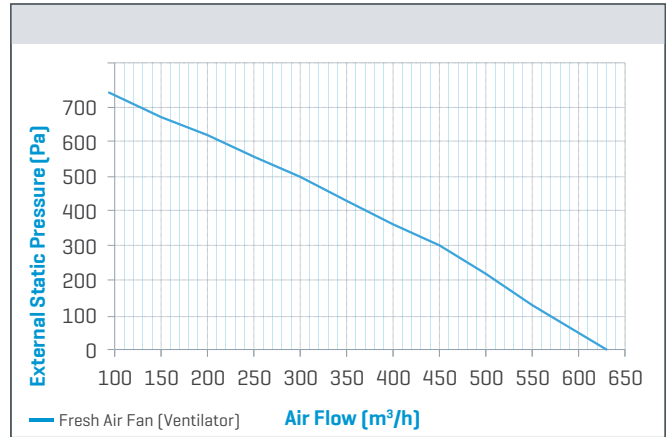
All capacities of IGK-AC are 230V supplied.

IGK-EC

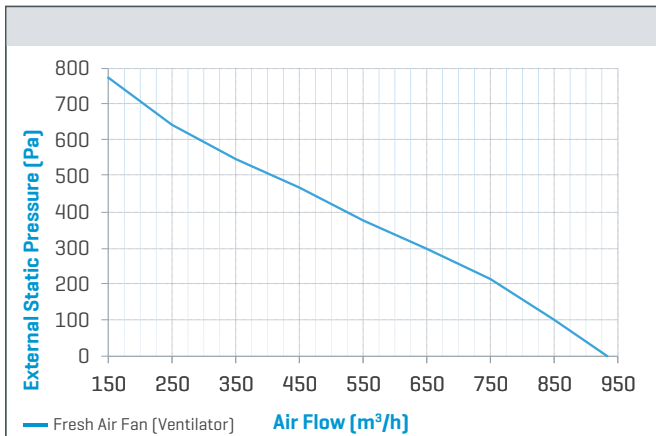
IGK-04



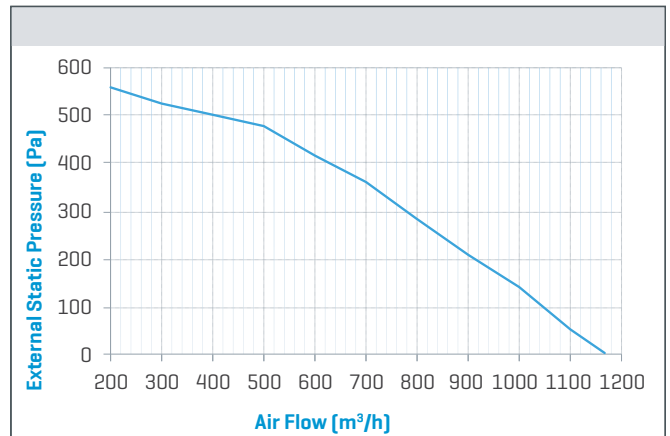
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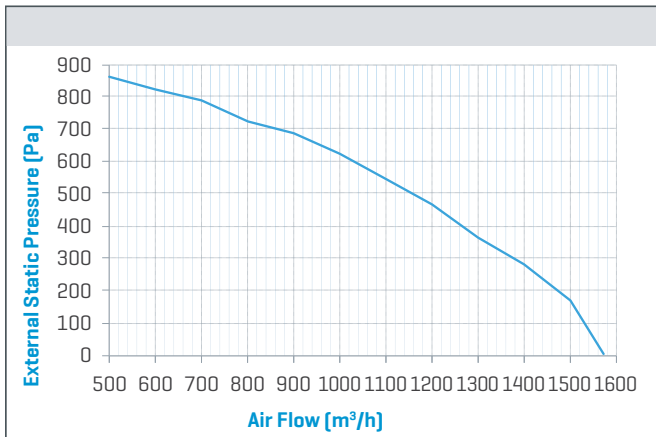
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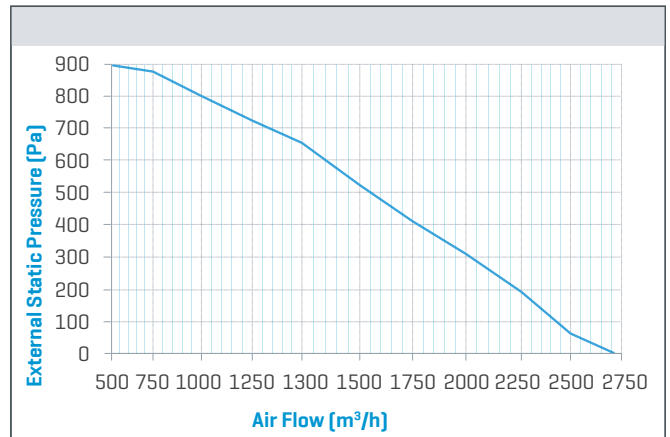
IGK-15



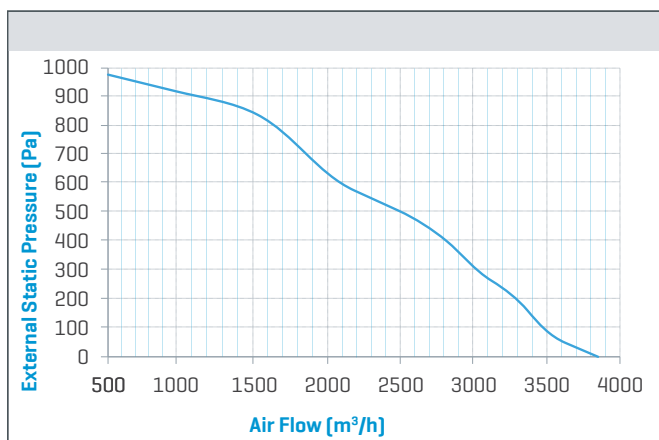
IGK-20



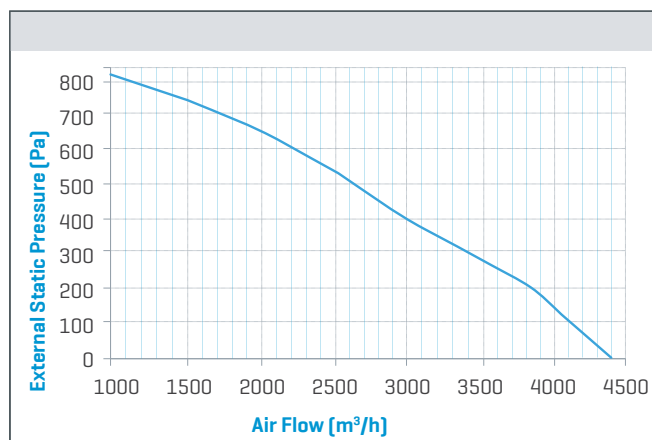
IGK-30



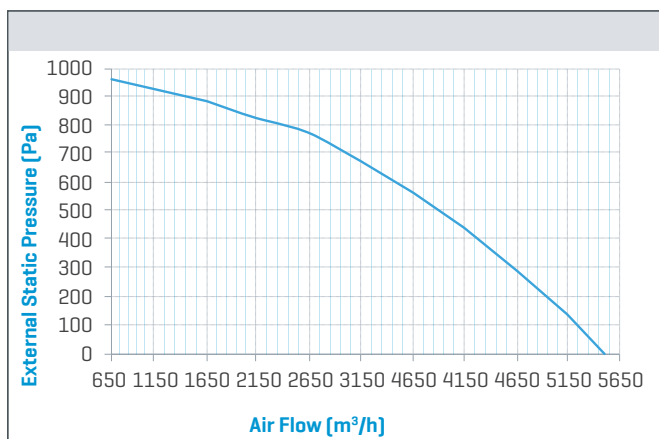
IGK-40



IGK-50



IGK-60



TECHNICAL DATA EC FAN

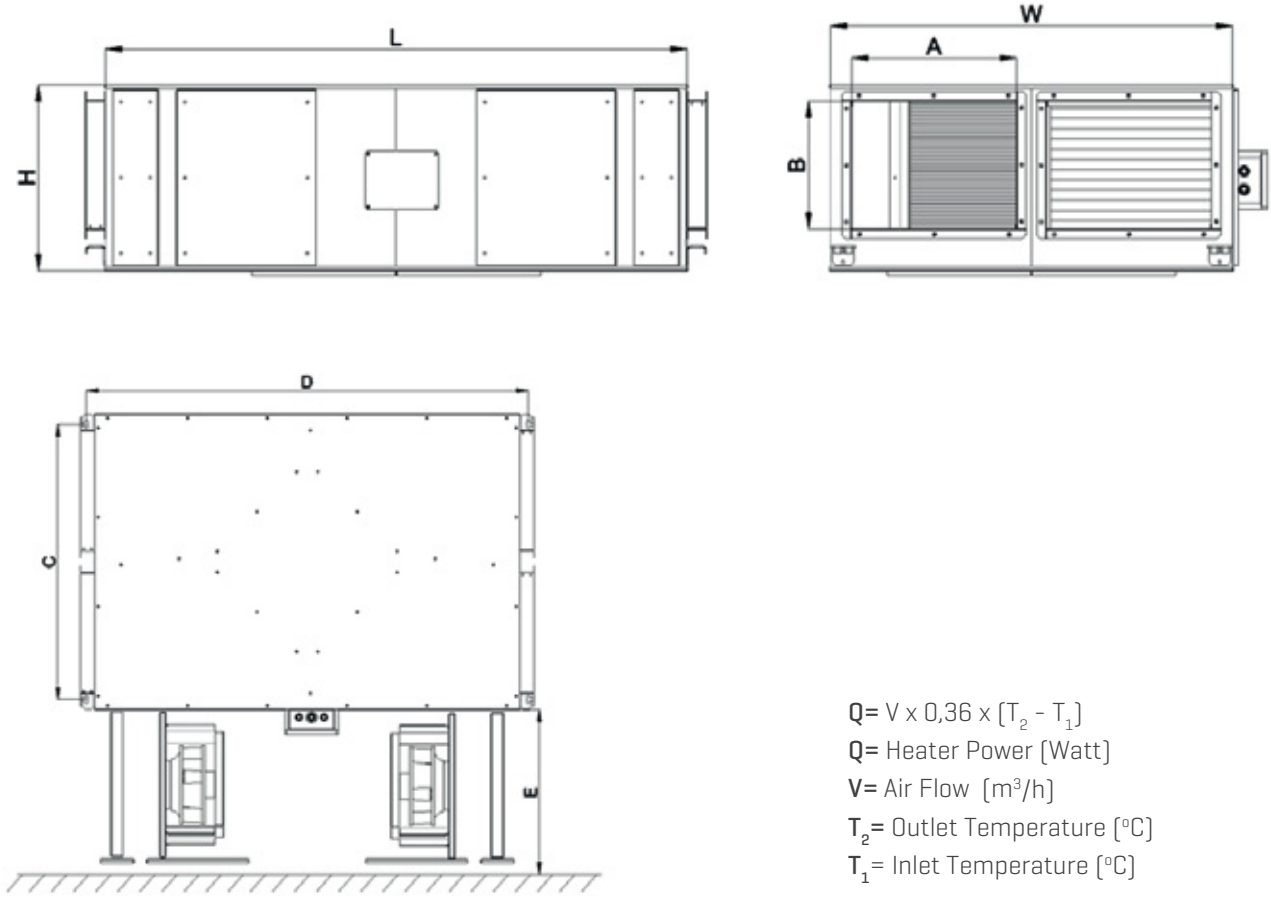
Unit Features		IGK-04	IGK-07	IGK-10	IGK-15	IGK-20	IGK-30	IGK-40	IGK-50	IGK-60
Air Flow (0 Pa External Pressure)	m³/h	450	630	930	1160	1580	2700	3800	4400	5550
Air Flow (150 Pa External Pressure)	m³/h	370	520	800	1000	1500	2300	3350	3900	5050
Total Power	W	166	230	336	340	770	1000	1580	1500	2640
Sound Power	db[A]	47	57	60	56	63	61	62	66	66
Voltage	V	230-1	230-1	230-1	230-1	230-1	230-1	230-1	230-1	380-3

Note:

Sound power values are 1 meter from the unit.

All capacities of IGK-AC are 230V supplied.

DIMENSIONS



$$Q = V \times 0,36 \times (T_2 - T_1)$$

Q= Heater Power [Watt]
 V= Air Flow [m³/h]
 T₂= Outlet Temperature [°C]
 T₁= Inlet Temperature [°C]

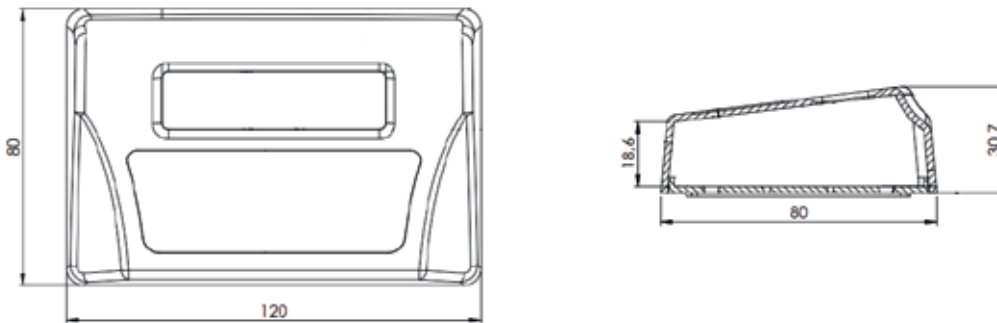
	Unit	Capacity				L	W	H	A	B	C	D	E	Weight	ELECTRICAL HEATER
		Air Flow	Pressure	Air Flow	Pressure										
		m³/h	Pa	m³/h	Pa	mm	mm	mm	mm	mm	mm	mm	mm	kg	Capacity
MODELS	IGK-04	345	0	250	150	960	600	305	200	150	530	1026	320	35	1 kW-1Stg
	IGK-07	620	0	500	150	980	650	355	230	200	580	1046	350	45	2 kW-1Stg
	IGK-10	910	0	800	150	1120	720	355	260	210	650	1086	400	55	3 kW-2Stg
	IGK-15	1125	0	1000	150	1160	800	385	300	240	730	1126	440	60	4 kW-2Stg
	IGK-20	1570	0	1350	150	1430	980	450	390	300	910	1496	550	105	6 kW-3Stg
	IGK-30	2350	0	2000	150	1590	1100	510	450	350	1030	1656	610	130	9 kW-3Stg
	IGK-40	3100	0	2500	150	1900	1126	620	510	460	1156	1966	660	160	10 kW-3Stg
	IGK-50	4155	0	3500	150	1930	1300	675	550	520	1230	1996	700	210	15 kW-3Stg
IGK-60	5550	0	5000	150	1930	1300	675	550	520	1230	1996	700	210	15 kW-3Stg	

CONTROL PANEL OF HRU WITH AC FAN

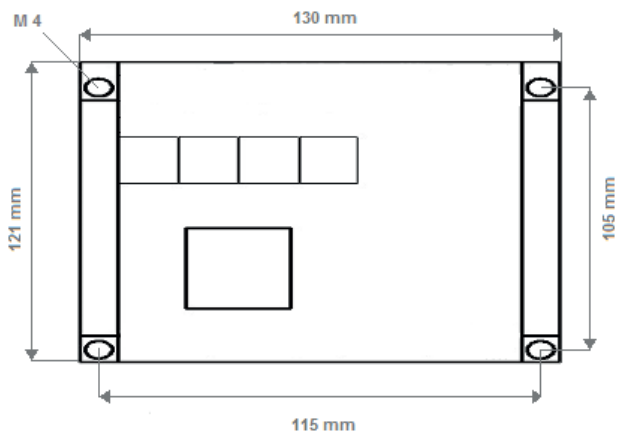
The control panel, which is has been designed with thinking all details of the heat recovery units, takes the control of the heat recovery unit one step further. Nowadays as energy costs increase day by day, energy saving is gained importance in air conditioning. It plays a big role in the operating cost decrease with energy saving raise to high levels.

- ☞ Turkish menu
- ☞ Stylish and simple LCD display control unit
- ☞ 220V AC supply
- ☞ Instant motoring of room temperature
- ☞ User-friendly screen interface
- ☞ Summer or winter mode
- ☞ Automatic or manual operation
- ☞ Motoring the fan stages in manual mode
- ☞ Ability to communicate between the control unit and the heat recovery device at a distance up to 50 meters

DCP-6 (Room Panel)



M1002 (Control Card)

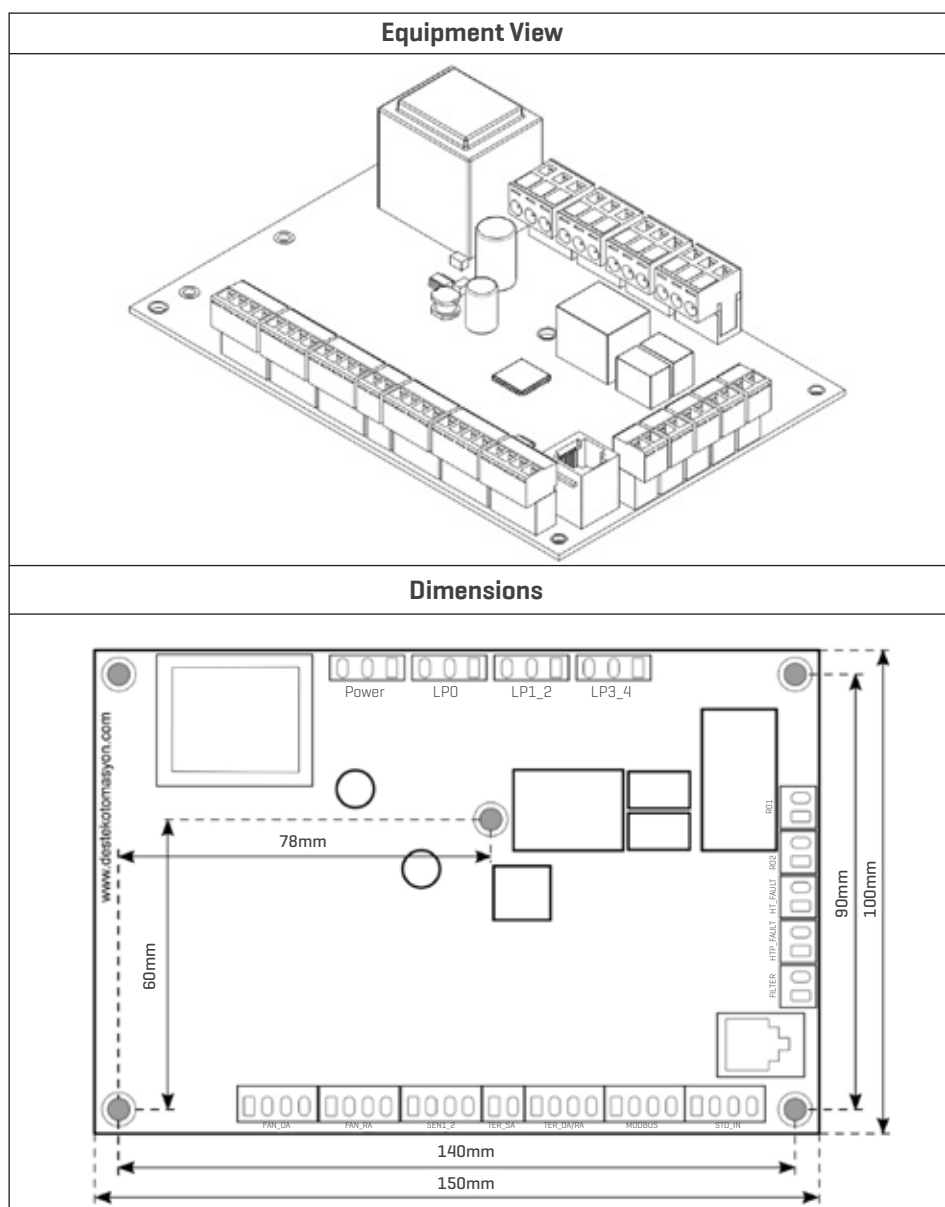


CONTROL PANEL OF HRU WITH EC FAN

- Stylish and simple LCD display control unit
- Instant monitoring of room temperature
- User-friendly screen interface
- Weekly programming
- Monitoring the fan stages in manual mode
- 3-stage EC fan speed control
- Ability to communicate between the control unit and the heat recovery unit at a distance up to 50 meters



LCD ROOM PANEL





We make the difference with
180 different types of products.



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İKLİMLENDİRME | HVAC SYSTEMS

