

FOUR-HOME

Residential Type Heat Recovery Unit

FOUR-HOME CEILING

Ceiling Type Residential Heat Recovery Unit



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 4 major groups as Air Handling Units, Heat/Energy Recovery Units, Air Distribution & Management Products and Kitchen Ventilation Equipment 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 45.000 sqm in which 25.000 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 18001 certifications. Air Handling Units have EUROVENT, TUV Hygiene [in accordance with DIN1946-4, VDI 6022-1, DIN EN 13053 standards], CE, TSEK, GOST-R 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, CE and GOST-R quality certifications.





- 1- Supply Fan [EC Plug]
- 2- Extract Fan [EC Plug]
- 3- Counter Flow Heat Recovery Exchanger
- 4- Control Box
- 5- Supply Filter
- 6- Extract Filter
- 7- By-pass Damper Motor
- 8- Galvanized, Painted Isolated Condensation Drip Tray
- 9- Plastic Spigot TOP or SIDE Switchable Direction



- 1- Spigot
- 2- Extract Fan [EC Plug]
- 3- Filters
- 4- Counter Flow Heat Recovery Exchanger
- 5- By-pass Damper Motor
- 6- Control Box
- 7- EC Plug Supply Fan

FOUR HOME / FOUR HOME CEILING

- ☞ High efficient fans with low sound level
- ☞ High efficient heat recovery
- ☞ Optional electrical heater DX/heating/cooling coil
- ☞ Sensitive supply air temperature control
- ☞ 19 mm acoustics insulation of the walls
- ☞ Easy mounting
- ☞ Galvanized, painted-isolated drip pan
- ☞ By-pass damper
- ☞ Plug&Play
- ☞ Optional wireless temperature sensor, wireless CO₂ sensor, wireless differential pressure sensor, wireless control panel-display available

Heat Exchanger

- ☞ High-efficiency polypropylene counter flow heat exchanger
- ☞ Special application for the anti-freeze protection

Filters

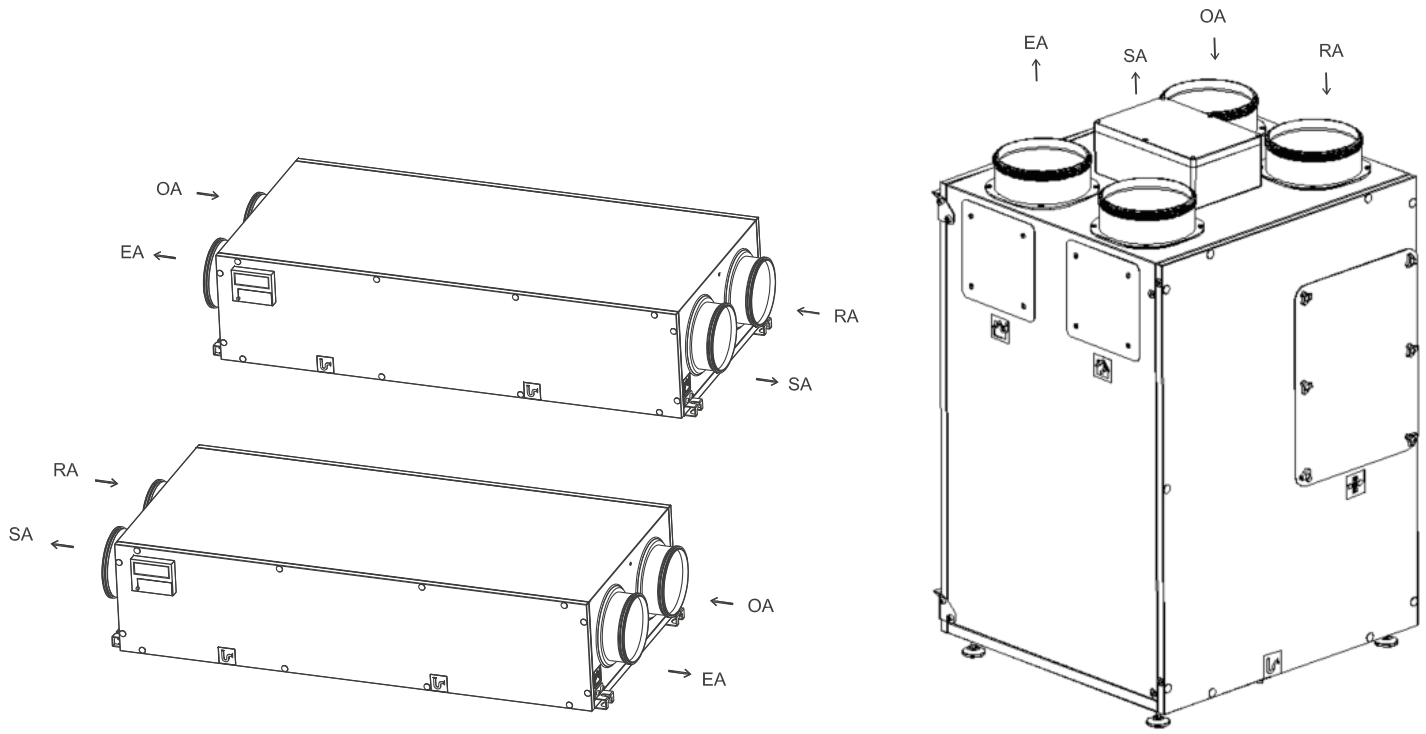
- ☞ Large filtering area for energy efficiency and long service period (up to 6 months)
- ☞ G4 panel filters or optional high efficiency F7 filter on supply air side.

Fans

- ☞ New generation EC fans
- ☞ Low power consumption
- ☞ Low sound level
- ☞ 10 years product life time [40.000 hours]

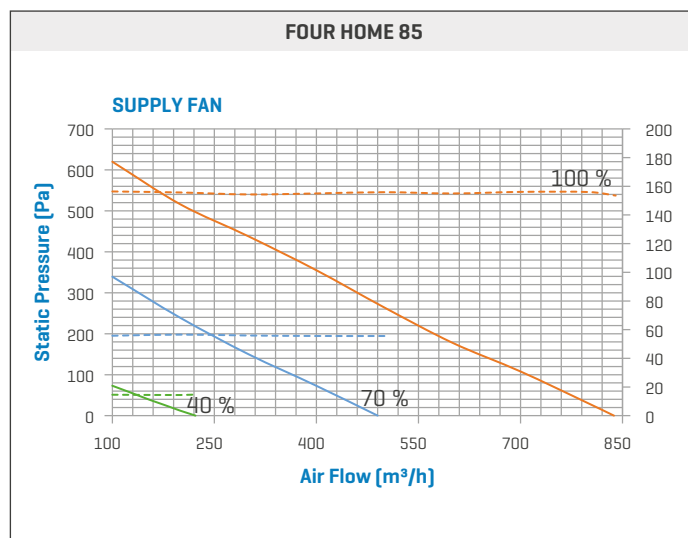
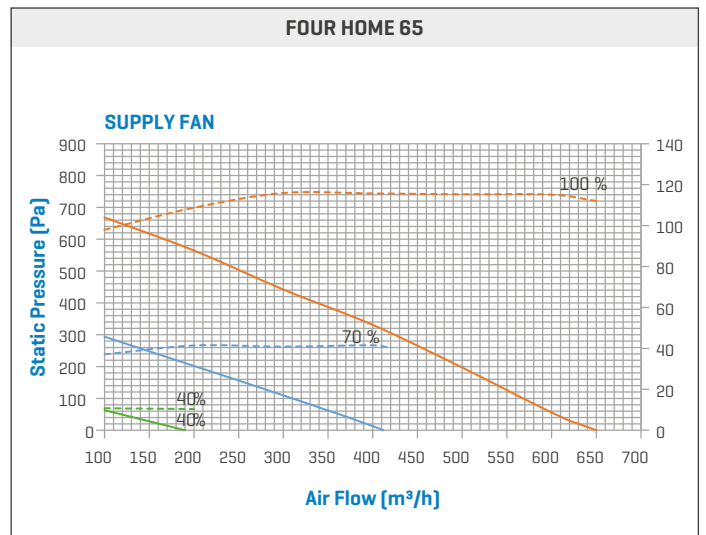
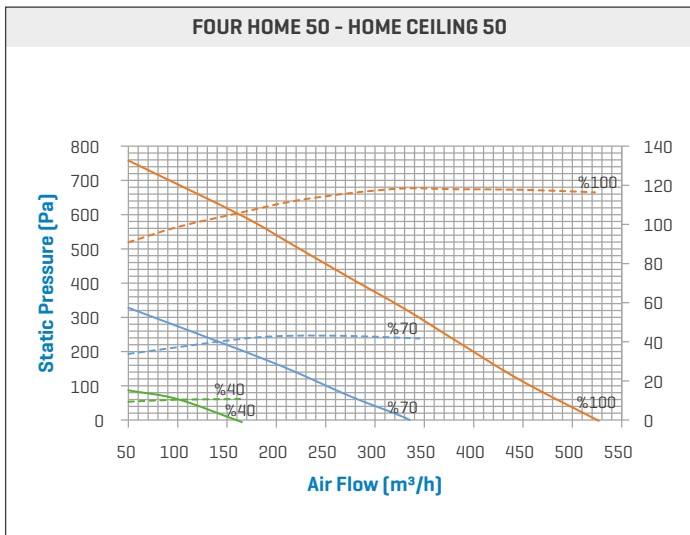
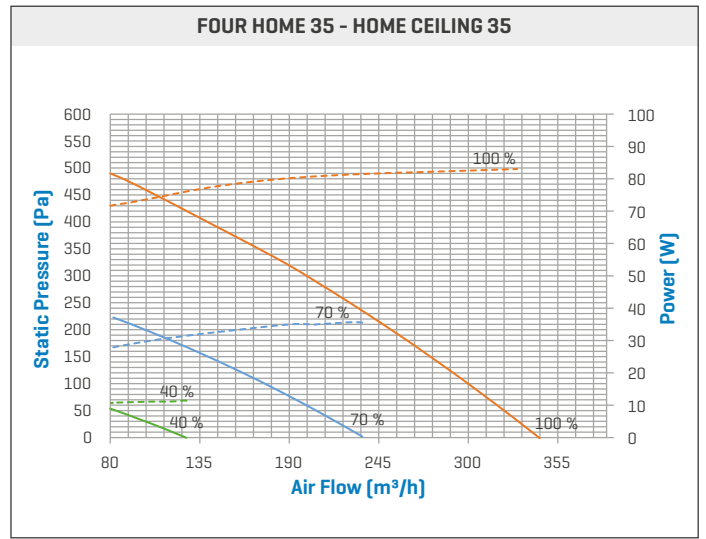
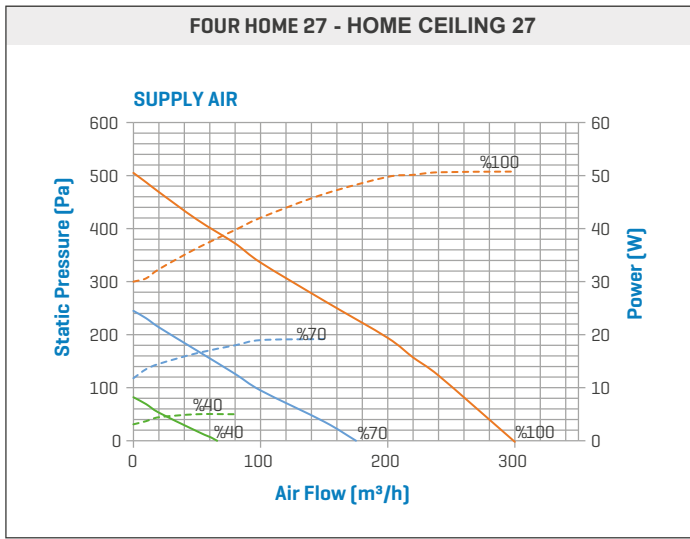
Options

- ☞ Optional electrical heater or DX/heating/cooling coil
- ☞ Optional CO₂ or pressure sensor
- ☞ Optional wireless temperature sensor, wireless CO₂ sensor, wireless differential pressure sensor, wireless control panel-display available

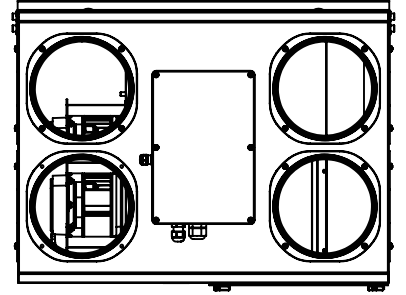
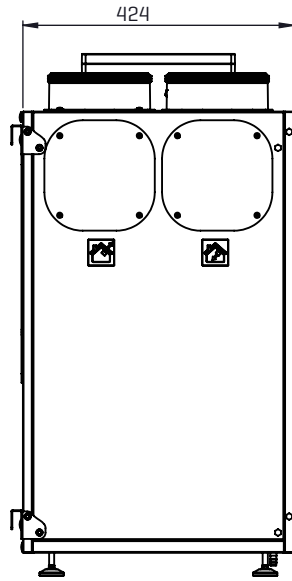
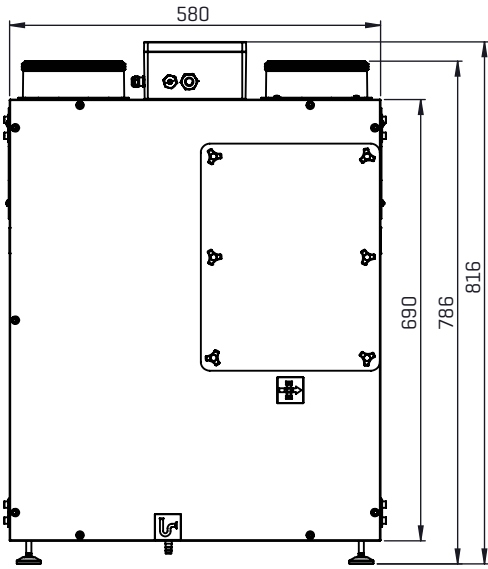


OA: OUTSIDE AIR
 SA: SUPPLY AIR
 RA: RETURN AIR
 EA: EXHAUST AIR

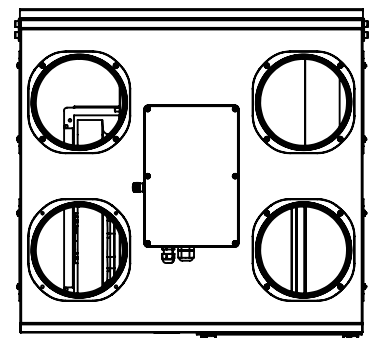
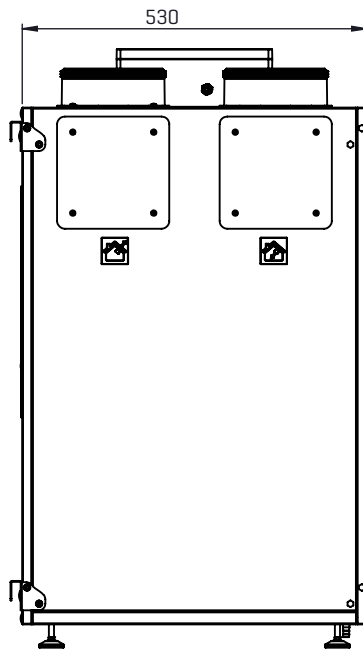
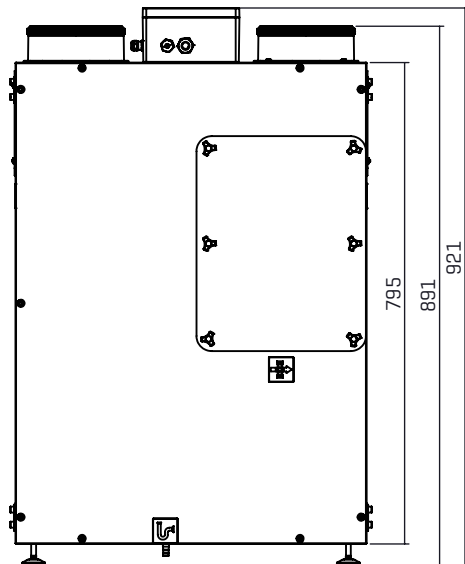
		HOME 35		HOME 50		HOME 65		HOME 85		HOME CEILING 27		HOME CEILING 35		HOME CEILING 50			
SEC(1)	warm	-17.09	E	-16.37	E	-16.9	E	-16.8	E	-17.71	E	-17.09	E	-16.37	E	-16.9	E
	mild	-42.08	A	-41	A	-41.7	A	-41.14	A	-42.61	A+	-42.08	A	-41	A	-41.7	A
	cold	-81.11	A+	-79.39	A+	-80.39	A+	-79.04	A+	-81.47	A+	-81.11	A+	-79.39	A+	-80.39	A+
Heat Recovery System		Recuperative		Recuperative		Recuperative		Recuperative		Recuperative		Rekuperator		Rekuperator			
SPI	W/(m³/h)	0.295		0.277		0.2975		0.267		0.2425		0.295		0.277		0.2975	
Thermal Efficiency	%	87.6		84.4		85.9		85.9		86.8		87.6		84.4		85.9	
Referenced Flow Rate(150 Pa)	m³/h	242		275		400		540		640		242		275		400	
Electrical Power Input	W	100		166		238		228.6		310.4		100		166		238	
Sound power level at flow rate	Lwa	43		39		41		41		54		43		39		41	
Filters		G4		G4		G4		G4		G4		G4		G4		G4	
Control System		Integrated		Integrated		Integrated		Integrated		Integrated		Integrated		Integrated		Integrated	



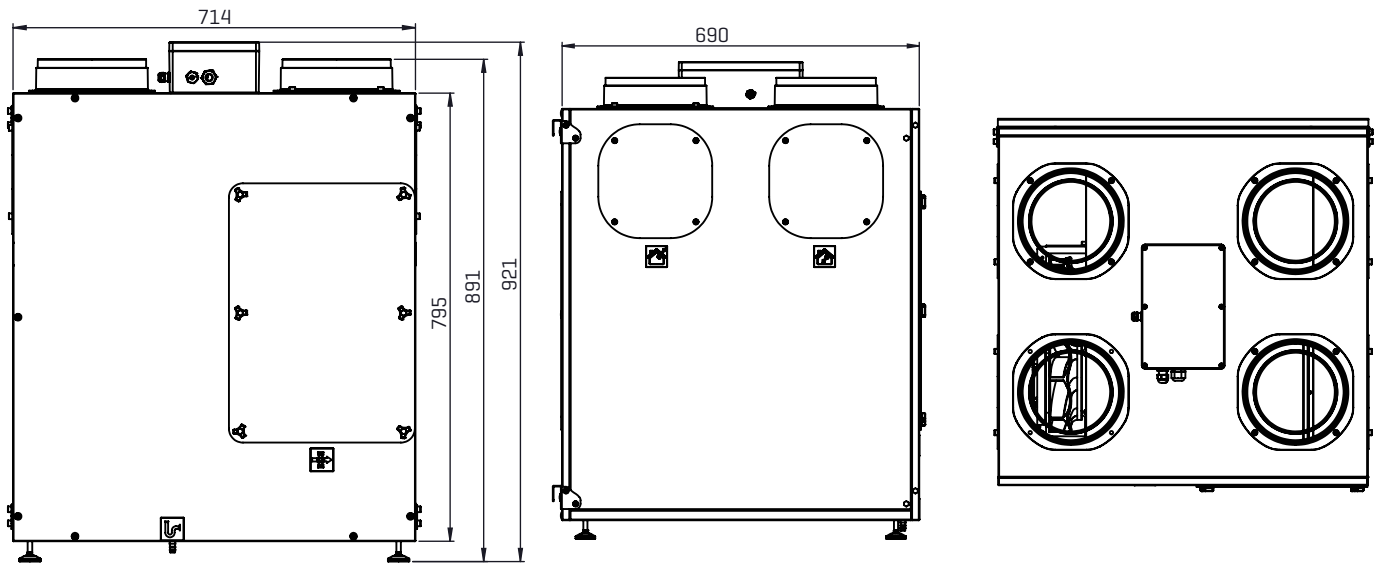
HOME 27



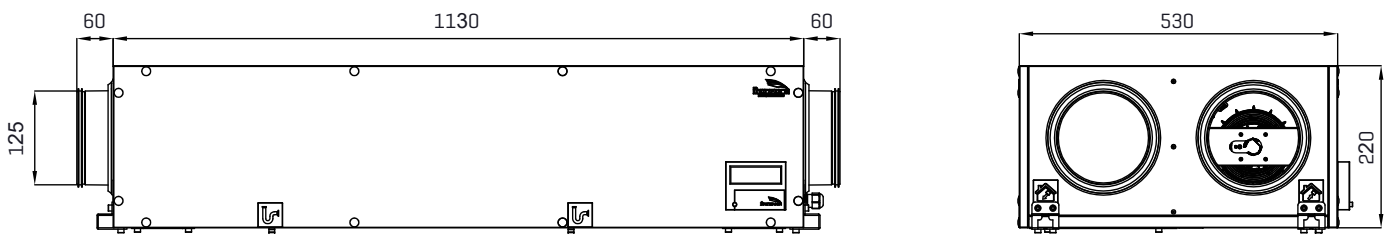
HOME 35 + 50



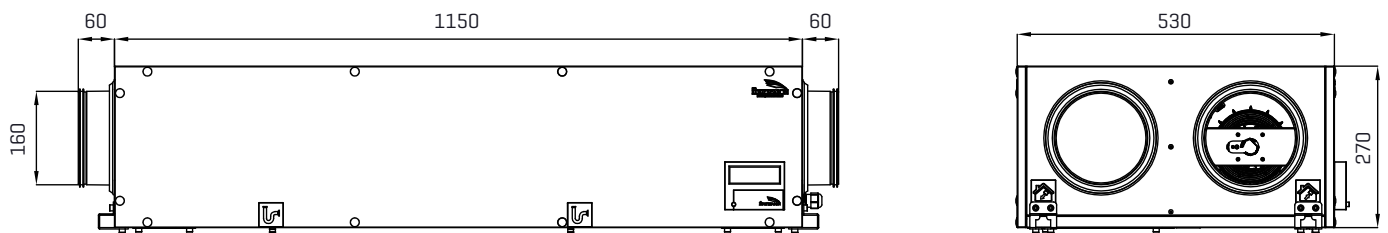
HOME 65 - 85



HOME CEILING 27

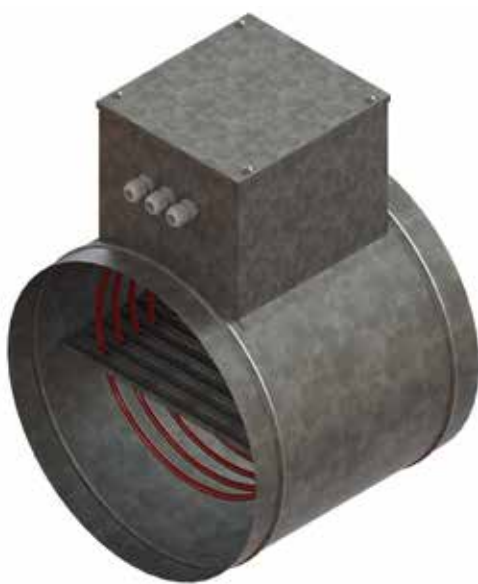


HOME CEILING 35 - 50



Operation	Description	Availability
On / Off	Control panel or external start stop function is available.	Standard
Display	Digital control panel is available.	Standard
Display	Wireless controller is available as option.	Optional
Fan Speed Control	3 steps fan speed control of supply and exhaust fan is available.	Standard
Fan Speed Control	Constant air flow is available with pressure sensors.	Optional
Fan Speed Control	Airflow control based on the air quality sensor is available.	Optional
Bypass Damper Function	Free cooling is available, by controlling the in door and outdoor air conditions.	Standard
Frost Protection Function	Where outdoor temperature is low, this function will be active by receiving information via humidity and temperature sensors.	Standard
ModBus	It controls all functions of unit via PC or BMS board.	Standard
Filter Function	There are 2 alternatives to control filters: 1: It records run time of the unit and when set time expires, control panel gives an alert for filter change. 2: Filter change time can be controlled with pressure switch mechanically. By this way, control panel gives an alert when filter needs to be changed.	Standard
Boost Function	It is used in order to increase fan speed: Alternative 1: Via boost button on the control panel. Alternative 2: Via dry contact or light power input [230V] on PCB board.	Standard
Safety	It automatically stops operating in case of interfering to the unit while it is working.	Standard
Fire Alarm Function	It will be active in case of fire.	Standard
Control and Sensor	Upon request, wireless CO ₂ , differential pressure, temperature and humidity sensors are available.	Optional

ACCESSORIES



Electrical Heater Circular electric heaters have two thermostats as standard.

The first thermostat is set to 70 ° C, the air in the electric heater cuts off the electric current when it reaches 70 ° C, allowing the device to restart automatically when the temperature drops.

The second thermostat used for safety purposes is activated at 110 ° C and cuts off the electric current.

The thermostat must be reset manually from the red button in order for the appliance to operate again.

	Air Flow [m ³ /h]	Diameter [mm]	ΔT=5	ΔT=10	ΔT=15
			kW	kW	kW
HOME 27	246	160	0,5	1	1,5
HOME 35	275	160	0,5	1	1,5
HOME 50	400	160	1	1,5	2
HOME 65	540	200	1	2	3
HOME 85	640	200	1	2	4

NOTES



We make the difference with
180 different types of products.



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