

HOME CEILING

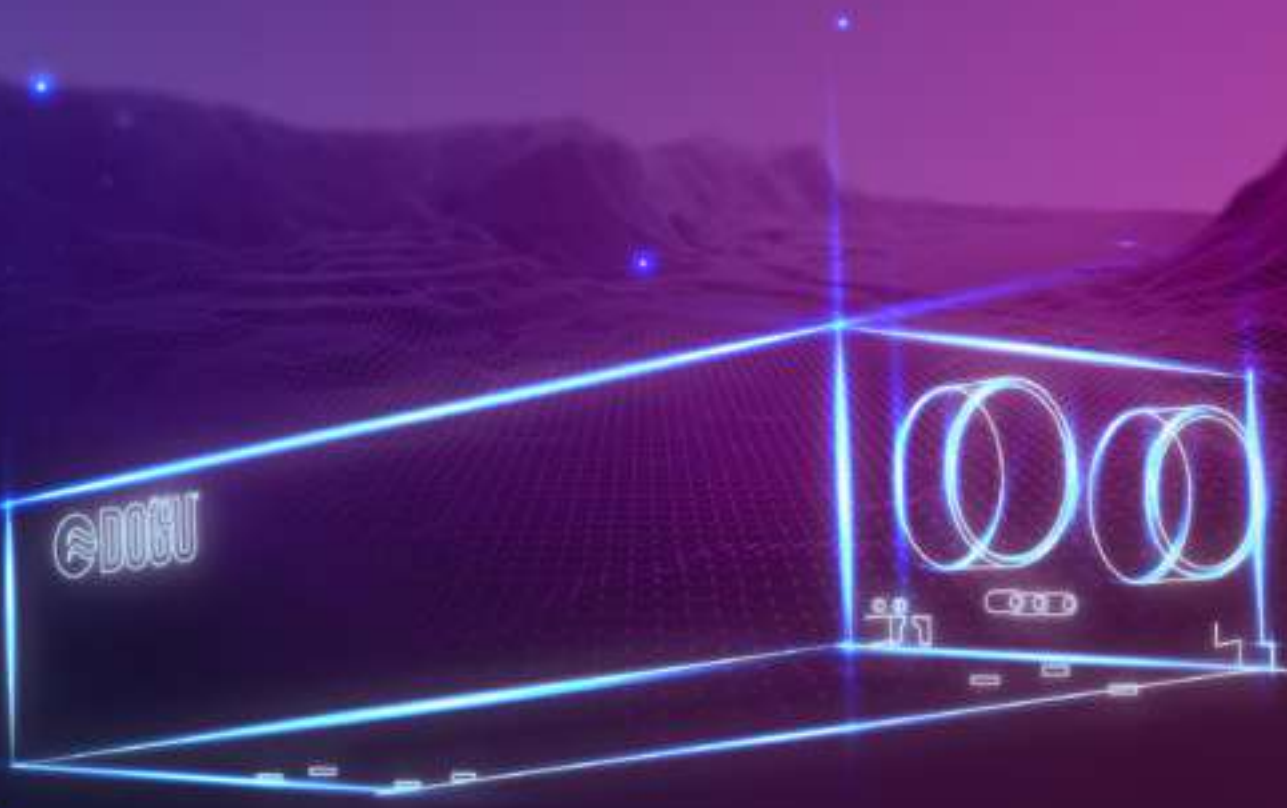
Residential Heat Recovery Unit
Ceiling Type



FOCUS DOGU

For the Future of Productivity

With our R&D investments and strong team that lead the air conditioning sector, we are where high energy efficiency devices



HOME CEILING

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RESIDENTIAL HEAT RECOVERY UNIT CEILING TYPE

GENERAL FEATURES

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

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COMPONENTS

① PLASTIC SPIGOT TOP

Plastic and metal spigots, which provide the connection between the unit and the ductwork, are located on the sides of the unit.

② EXTRACT FAN (EC PLUG)

The EC plug fans integrated into the Home Ceiling units extract stale air from the space and exhaust it outside, while simultaneously supplying fresh air into the room to ensure optimal indoor air circulation and enhanced comfort. The casing is equipped with access panels that allow easy intervention for maintenance or inspection. These fans are characterized by low energy consumption, quiet operation, and a long service life of up to 10 years [40,000 hours].

③ FILTERS

Both exhaust and fresh air intakes of the unit are equipped with ISO Coarse 55% [G4] type filters. G4 panel filters are standard, while optional high-efficiency F7 filters are available for the supply air side. These filters ensure that the unit's primary component—the heat exchanger—remains clean for efficient operation. Filter contamination levels can be monitored over time via the control panel, or optionally through differential pressure switches. The filters are washable and reusable when dirty.

④ COUNTER FLOW HEAT RECOVERY EXCHANGER

The unit is equipped with a high-efficiency polypropylene counterflow heat exchanger. A special anti-frost application is included to protect the exchanger from freezing.

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⑤ BY-PASS DAMPER

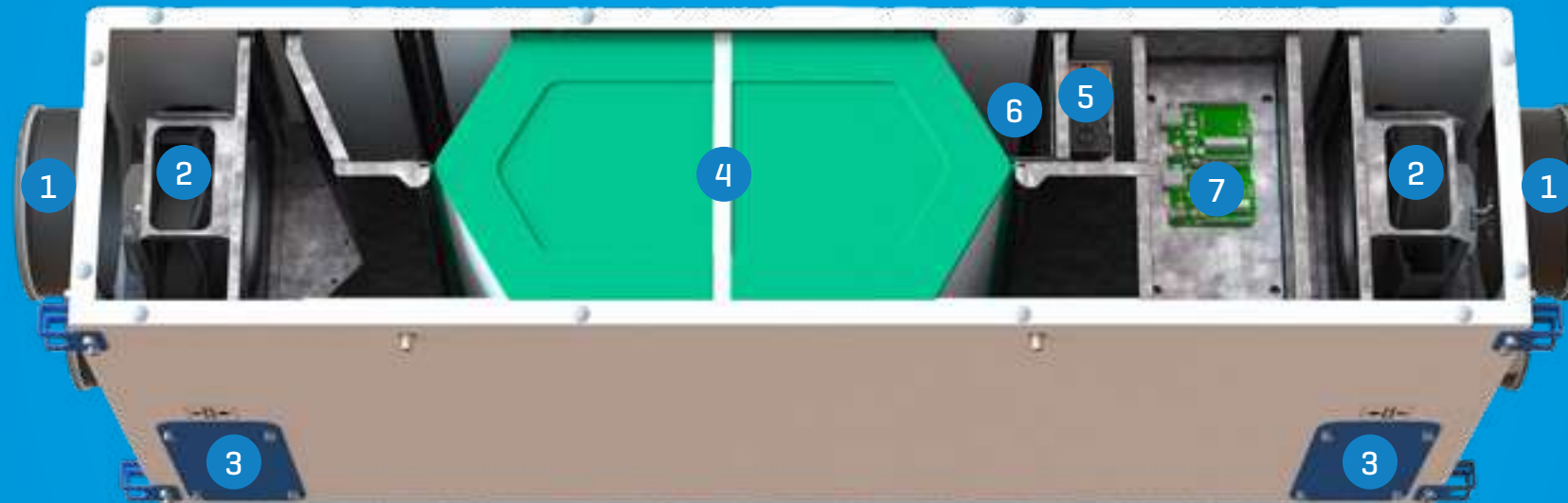
When outdoor conditions are cooler than the indoor environment and there is a demand for indoor cooling, the bypass damper facilitates free cooling by directly allowing outdoor air intake and exhausting the warm indoor air. In cases where outdoor temperatures are extremely low and there is a risk of exchanger freezing, the bypass damper opens to channel the outside air through the bypass route, thereby protecting the exchanger from frost.

⑥ BY-PASS DAMPER MOTOR

The main function of the bypass damper motor is to open or close the damper based on frost protection or free cooling scenarios. It regulates the flow of outdoor air into the unit or prevents it, depending on the required operational mode.

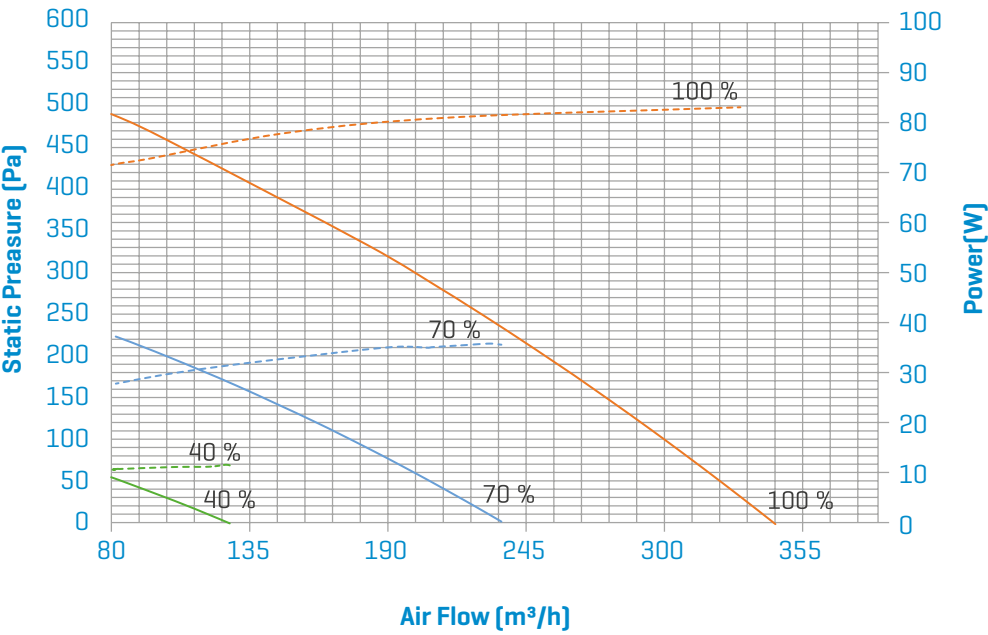
⑦ CONTROL BOX

The Home Ceiling series comes standard with an integrated microprocessor-based control system featuring a built-in display. The unit is Modbus-compatible, allowing it to be monitored via the building management system [BMS]. Thanks to its Plug-and-Play functionality, the control system performs all heating, cooling, and ventilation processes autonomously without the need for additional modules. Optional components such as a CO₂ sensor or differential pressure switch can also be managed through the same control system. The system is equipped with an IoT-enabled microprocessor.

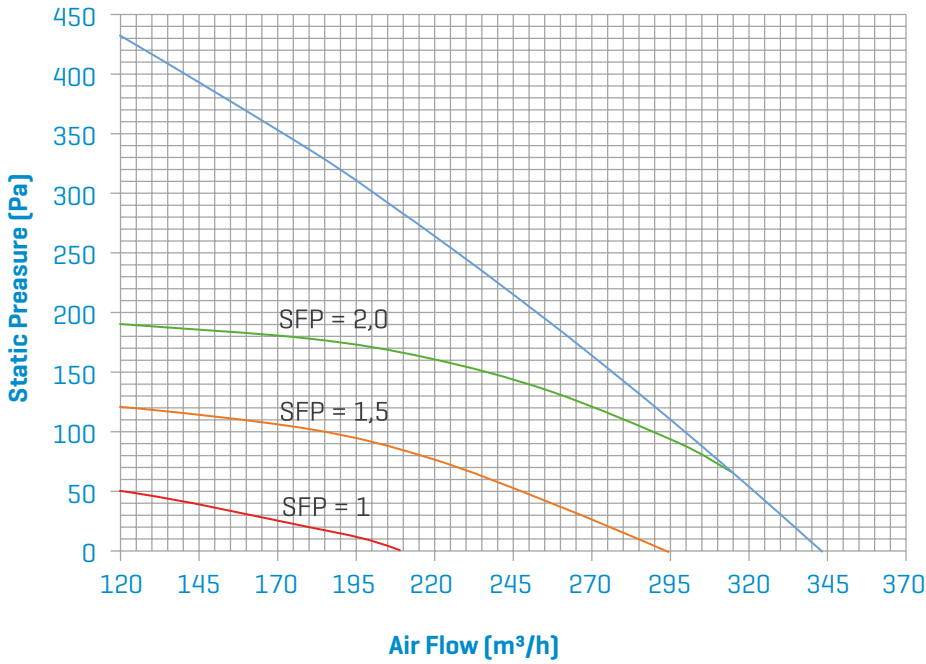


TECHNICAL DATA

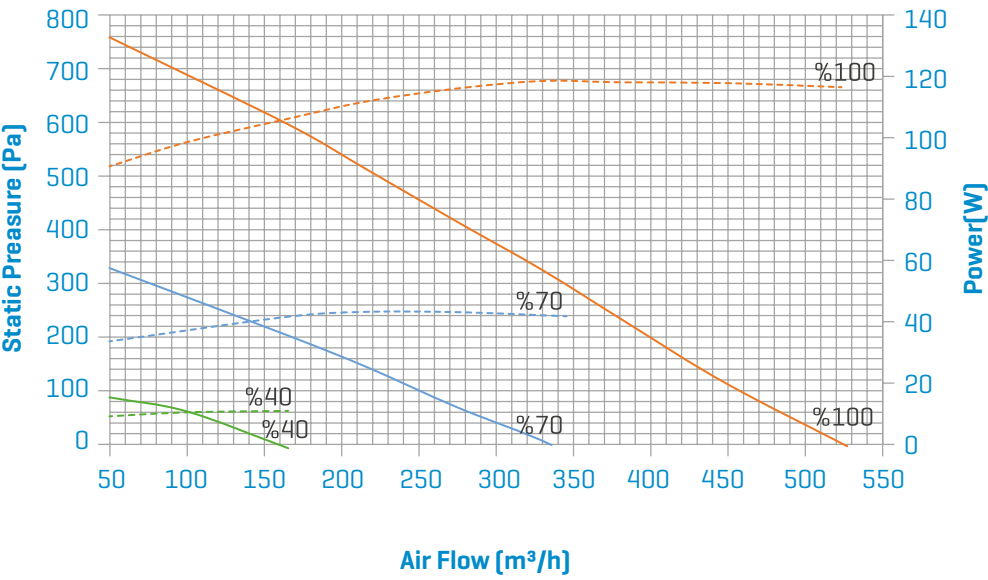
HOME CEILING 35



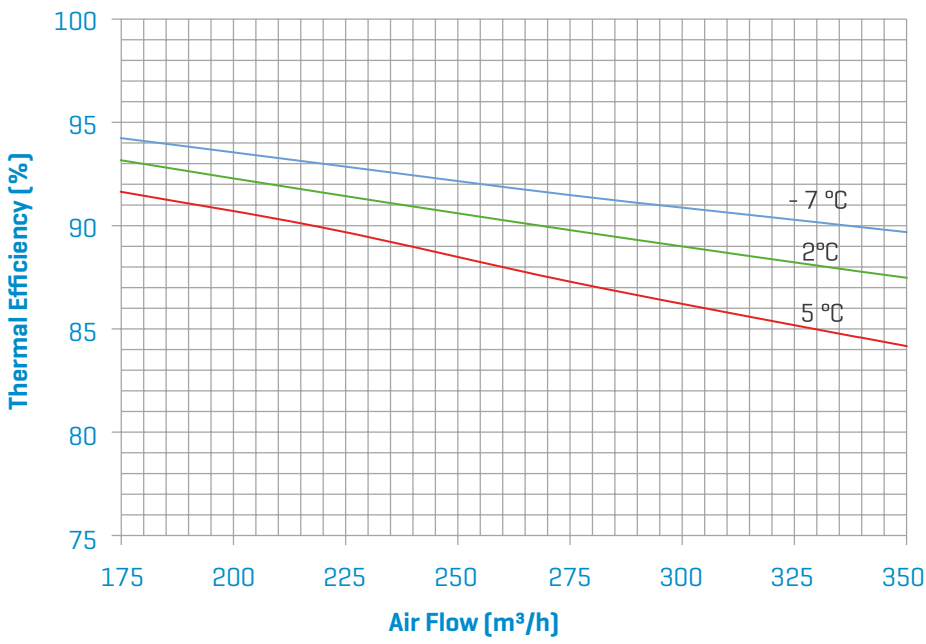
HOME CEILING 35



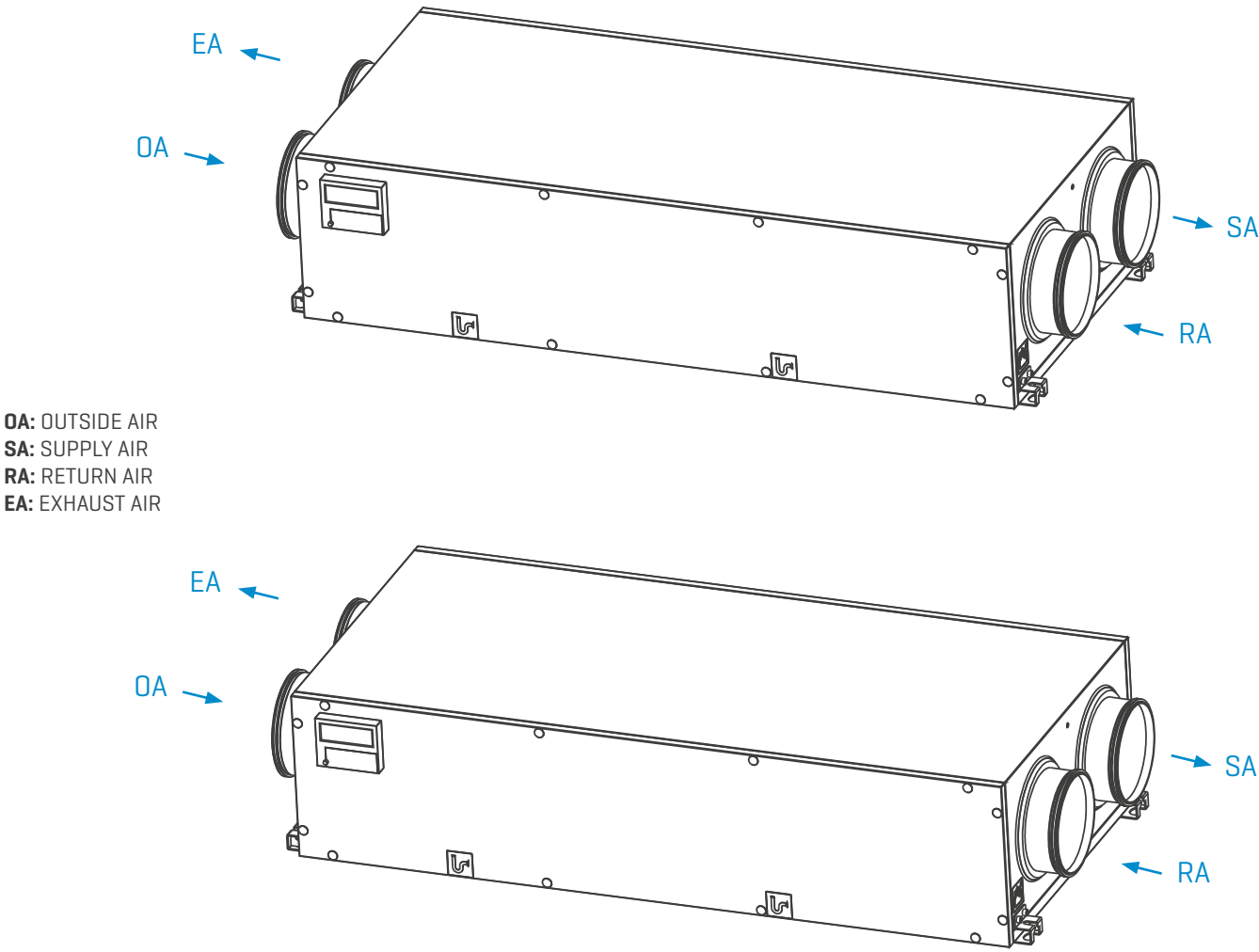
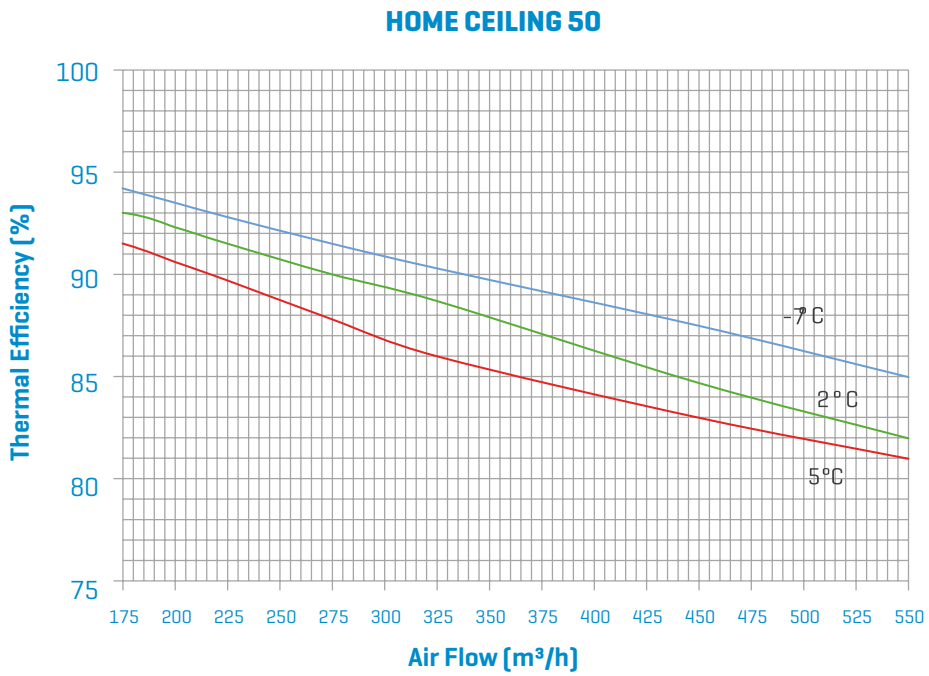
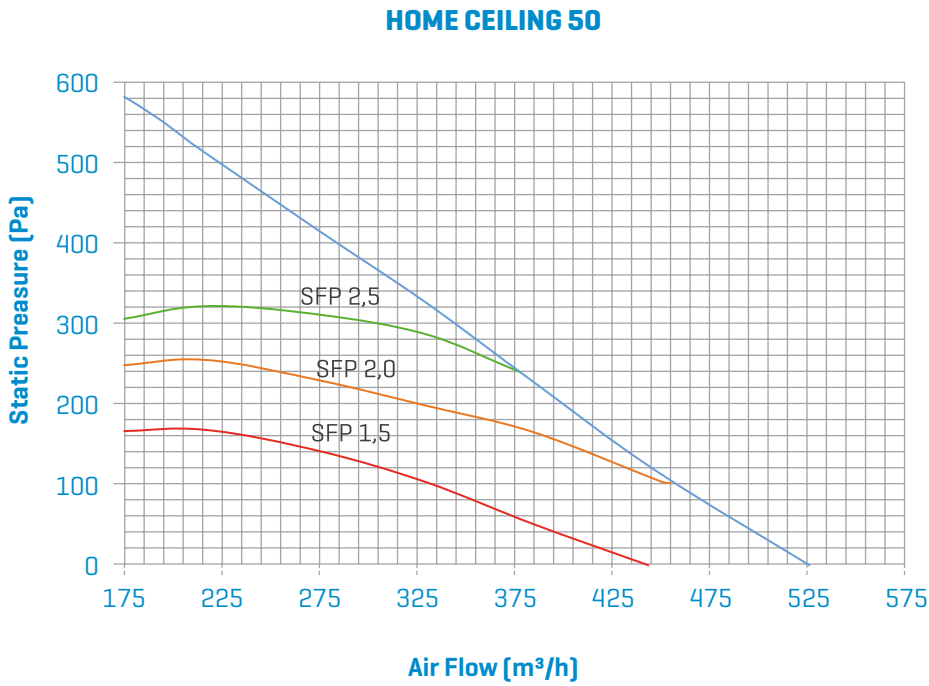
HOME CEILING 50



HOME CEILING 35

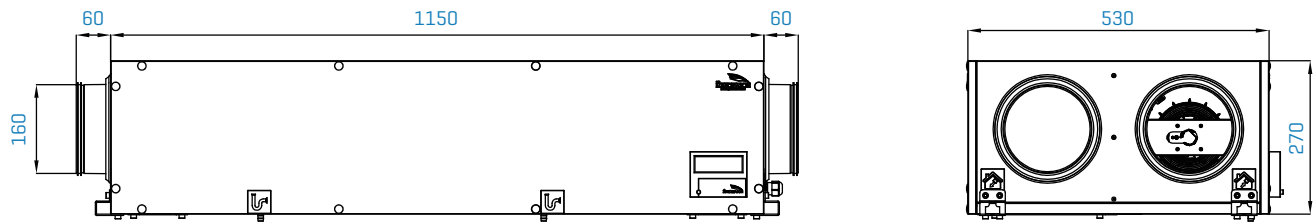


TECHNICAL DATA



		HOME CEILING 35		HOME CEILING 50	
SEC(1)	warm	-16,37	E	-16,9	E
	mild	-41	A	-41,7	A
	cold	-79,39	A+	-80,39	A+
Heat Recorvery System		Recuperative		Recuperative	
SPI	w[m³/h]	0,277		0,2975	
Thermal Efficiency	%	84,4		85,9	
Referanced Flow Rate [150 Pa]	m³/h	275		400	
Electrical Power Input	W	166		238	
Sound Power Level At Flow Rate	Lwa	39		41	
Filters		G4		G4	
Control System		Integrated		Integrated	

DIMENSIONS



AUTOMATION OPTION

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

AUTOMATION OPTION

- Touch screen option.
- Temperature can be monitored on the screen.
- Control feature via the app.



DOGU Touchscreen



DOGU Graphic Display



DOGU IOT Basic



DOGU IOT Touchscreen



DOGU IOT Pro

HOME CEILING

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.

DUTCH-TYPE ELECTRICAL HEATERS						
Product Name	Diameters	Code	$\Delta T=5$	$\Delta T=10$	$\Delta T=15$	$\Delta T=20$
			kW - Stage	kW - Stage	kW - Stage	kW - Stage
HOME CEILING 350	Ø160	ACH	0,5 kW - 1	1 kW - 1	1,5 kW - 1	-
HOME CEILING 500	Ø160	ACH	0,5 kW - 1	1 kW - 1	1,5 kW - 1	2 kW - 1

PRODUCED in DOGU

We produce energy efficient, environmentally friendly, innovative and sustainable air conditioning devices with the



HOME CEILING



SUSTAINABILITY SOLUTIONS AT DOGU HVAC



We offer supplementary health insurance to our employees to promote healthy living. We also plan health-focused initiatives such as smoking cessation programs.



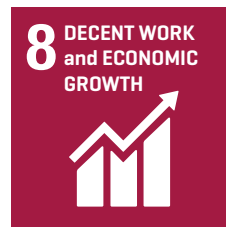
Through the DOGU HVAC CLUB project, we organize technical tours of our factory, participate in career events, and provide sponsorships to support the skill development of university and technical high school students.



In 2024, we increased female employment in our administrative and production departments. This step aims to contribute to gender equality by offering a workplace with equal rights for all employees.



Our R&D center's 2,500 m² solar panels and 0.6 MW annual capacity solar energy systems reduce our carbon footprint. We generate our electricity, ensuring a reliable, sustainable, and accessible clean energy source.



Decent Work and Economic Growth: As an employer brand, our primary goal is to protect our employees' rights and create a workplace founded on equality and justice for all employees.



We enhance indoor air quality with environmentally friendly and energy-efficient products, ensuring adherence to European standards.



We minimize waste through lean production policies and emphasize recycling, simultaneously increasing efficiency in our production processes.



We support environmental protection through our eco-friendly, sustainable, energy-efficient product lines and R&D efforts focused on reducing waste that could contribute to climate change.



We value transparency and accountability, working with associations like ISKAV to prevent corruption and unfair competition, aligning with sectoral ethical values.



Venues Breathe With Us



Read to watch our
promotional video