# **HORACE** Residential Type Heat Recovery Unit





**EPP HOME (Expanded Polypropylene)** Residential Type Heat Recovery Unit

# **©DOGU**

## FOCUS DOGU For the Future of Sustainability

With our R&D investments and strong team that lead the air conditioning sector, we are at a place where devices that consider the future of the world are **meticulously tested**.

### HOME

#### **GENERAL OVERVIEW**

- € EC Plug Fan
- Reverse Flow Heat Recovery Exchanger
- Control Panel
- ♥ Feed Direction Filter
- Exhaust Direction Filter
- By-pass Damper Motor
- Stainless Steel designed condensate pan
- Plastic Spigot directions can be changed to TOP or SIDE





### HOME

**Residential Type** Heat Recovery Unit



#### **EPP HOME** | RESIDENTIAL TYPE HEAT RECOVERY UNIT

#### HOME OVERVIEW

- Galvanized casing
- Low-noise, high-efficiency fans
- High-efficiency heat recovery exchanger
- Optional electric heater DX/heating/ cooling coil
- ♦ A+ energy efficiency class
- € 19 mm rubber insulation
- Body made of electrostatically powdercoated galvanized steel sheet

#### **EPP HOME OVERVIEW**

- Low-noise, high-efficiency fans
- High-efficiency heat recovery exchanger
- Optional electric heater DX/heating/ cooling coil
- ♦ A+ energy efficiency class
- € 45-density EPP
- € Easy installation
- Lightweight design for easy commissioning
- High structural durability for protection against external factors
- Energy-absorbing against heavy impacts and applications
- € Environmentally friendly with 100% recyclable material and low carbon footprint
- High thermal insulation for superior leak prevention
- High resistance to various chemical compounds
- Corrosion-resistant due to moistureimpervious structure
- High sound insulation for a comfortable, noise-free environment



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#### • HEAT EXCHANGER

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

#### FILTERS

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

#### · FANS

Sew generation EC fans E Low power consumption Section 2 € Low sound level € 10 years product life time (40.000 hours)

#### · OPTIONS

Optional electrical heater or DX/heating/ cooling coil

Solutional CO₀ or pressure sensor

⊘ Optional wireless temperature sensor,

wireless CO<sub>2</sub> sensor, wireless differential

pressure sensor, wireless control paneldisplay available

#### **TECHNICAL DATA**





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

		HOME 27		HOME - EPP HOME 35		HOME - EPP HOME 50		HOME 65		HOME 85	
	warm	-16,37	E	-16,37	E	-16,9	E	-16,8	E	-17,71	E
SEC (1)	mild	-41	А	-41	А	-41,7	A	-41,14	A+	-42,61	A
	cold	-79,39	A+	-79,39	A+	-80,39	A+	-79,04	A+	-81,47	A+
Heat Recorvery System		Recuperative		Recuperative		Recuperative		Recuperative		Recuperative	
SPI	W/[m <sup>3</sup> /h]	0,295		0,277		0,2975		0,267		0,2425	
Thermal Efficiency	%	87,6		84,4		85,9		85,9		86,8	
Referanced Flow Rate (150 Pa)	m³/h	242		275		400		540		640	
Electrical Power Input	W	100		166		238		228,6		310,4	
Sound Power Level At Flow Rate	Lwa	43		39		41		41		54	
Filters		G4		G4		G4		G4		G4	
Control System		Integ	rated	Integ	rated	Integ	rated	Integ	rated	Integ	rated







#### **EPP HOME** | RESIDENTIAL TYPE HEAT RECOVERY UNIT

#### **TECHNICAL DATA**



700

#### **EPP HOME** | RESIDENTIAL TYPE HEAT RECOVERY UNIT



Air Flow (m<sup>3</sup>/h)

#### TECHNICAL DATA

#### **HOME 27**







HOME 65 - 85



#### HOME 35 + 50







#### **EPP HOME** | RESIDENTIAL TYPE HEAT RECOVERY UNIT

#### EPP HOME 35-50







EPP HOME	
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OPERATION	DESCRIPTION	STANDARD - S Optional - O	
On / Off	Control panel or external start stop function is available.	S	
Display	Digital control panel is available.	S	
Display	Wireless controller is available as option.	0	
Fan Speed Control	3 steps fan speed control of supply and exhaust fan is available.	S	
Fan Speed Control	Constant air flow is available with pressure sensors.	0	
Fan Speed Control	Airflow control based on the air quality sensor is available.	0	
Bypass Damper FunctionDonmaya	Free cooling is available, by controlling the in door and outdoor air conditions.	S	
Frost Protection Function	Where outdoor temperature is low, this function will beactive by receiving information via humidity and temperature sensors.	S	
ModBus	It controls all functions of unit via PC or BMS board.	S	
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 givesan alert when filter needs to be changed.	S	
Boost Function	It is used in order to increase fan speed: Alternative1: Via boast button on the control panel. Alternative 2: Via dry contact or light power input (230V) on PCB board.	S	
Safety	It automatically stops operatingin case of interfering to the unit while it is working.	S	
Fire Alarm Function	It will be active in case of fire.	S	
Control and Sensor	Upon request, wireless CO <sub>2</sub> , differential pressure, temperature humidity sensors are avaliable.	0	

#### 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.

HOME 27 HOME - EPP HO HOME - EPP HO HOME 65 HOME 85

#### RESIDENTIAL TYPE HEAT RECOVERY UNIT

			∆T=5	∆T=10	∆T=15
	Air Flow (m³/h)	Diameter (mm)	kW	kW	kW
	246	160	0,5	1	1,5
OME 35	275	160	0,5	1	1,5
OME 50	400	160	1	1,5	2
	540	200	1	2	3
	640	200	1	2	4

### 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 DOĞU 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 m<sup>2</sup> 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 energyefficient 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 İSKAV to prevent corruption and unfair competition, aligning with sectoral ethical values.

### Venues Breathe With Us



Read to watch our promotional video



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