

# **ENERGY EFFICIENT** VENTILATION WITH HEAT RECOVERY 13:47 236567

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SPECIFIC FAN POWER

1,94 W/m³/h 92% HEAT RECOVERY

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Aircycle **T 2.85** units are designed to provide exceptionally high heat recovery efficiency - up to 92%. The combination of extremely low energy consumption and a highly efficient heat exchanger makes the aircycle T 2.85 efficient ventilation in medium-sized homes.



## **Features & Advantages**

- Versatile, very compact
- Patented design
- Quick assembly with the use of a dedicated bracket
- Very low specific fan power 1,94 W/m<sup>3</sup>/h
- Low energy EC centrifugal fans
- Energy class A+
- Highly efficient heat exchanger: to 92%
- Air flow up to 334 m<sup>3</sup>/h at 100 Pa
- Fully configurable boost mode
- Option to use external switches to activate the boost mode
- Intelligent automatic summer bypass
- SUMMERboost function automatically increasing the flow when excessive temperature is detected
- Automatic humidity control by built-in humidistat
- Independent regulation of supply and exhaust fans

- G4 class filters as standard (F7 optional)
- Option to install flaps to make the filter replacement easier
- Option to use an enthalpy heat exchanger, which in addition to heat recovery also provides for moisture recovery
- Enthalpy exchanger made in Microban® technology which provides protection against mold and bacteria

#### Additional options available for the BC version:

- Option to use the aircycle digital T wifi controller
- Application control option (iOS, Android) using the aircycle digital T wifi controller
- Option to control an external duct pre-heater
- Compatibility with BMS via RS485



# How does a heat recovery ventilation unit work?

Heat recovery is the process of recovering heat energy in order for it to be reused. In ventilation systems, this consists in recovering heat from the exhausted, used up air and transferring this heat to the supply air. Polluted air is extracted from rooms such as: kitchen, bathroom, toilet through a network of ventilation ducts and fresh air is blown into the living room, bedrooms. Air distribution is most often performed through diffusers connected to appropriate ducts. The system works continuously and the fresh and heated air is additionally cleaned thanks to built-in filters.

Thanks to the application of a modern counter-flow heat exchanger in the heat recovery ventilation unit, where the supplied and extracted air streams are tightly separated from each other, polluted air does not get mixed with fresh air. The exchanger, by making use of temperature differences between the air streams, heats up the cooler one. The Brookvent heat recovery systems are very efficient since, depending on the AHU model, they are able to recover even up to 93% heat.

The proposed ventilation system has been designed so that it guarantees effective ventilation in the entire house or apartment.

# Digital T/wifi controller

The improved remote control controller has been designed to meet the requirements of the most demanding user. The universal nature of the device allows you to adjust the system settings to the requirements of every project, giving residents freedom to control its functions.

### **Features & Advantages**

- Controller ensuring quick and simple installation and use of the heat recovery ventilation unit
- Clear menu based on universal symbols
- $\cdot$  Continuous monitoring of the unit's technical condition
- Failure messages displayed directly on the controller
- $\cdot$  Option to install the controller directly on the unit
- $\cdot\,$  Option to install the controller outside the unit with a connection cable
- · Possibility to plan the work schedule of the heat recovery unit in hourly and weekly range
- Possibility to connect to a pre-heater

#### Additional options available for the BC version with digital T wifi:

- $\cdot$  Option to connect via a wifi network or the own network generated by the controller
- $\cdot$  Application control option



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#### An example of a complete heat recovery system:







2 Insulated cables





4 Diffuser – supply of air



aircycle T 2.85 Performance charts

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#### Acoustic data

Speed							63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Tot. LW	Tot. LWA	Emissions from housing dB(A) @ 3m		
		m³/h	(15 l/s)	0	1 Pa	Extract	28	35	32	32	27	17	19	23	56	39	11		
18% 54	54					Supply	28	28	25	21	15	15	19	23	54	33			
						From the housing	4	16	17	25	21	17	18	21	36	29			
		m³/h	(29 l/s)	a	7 Pa	Extract	34	46	41	45	41	33	24	23	64	50			
30% 104	104					Supply	30	34	33	30	24	20	19	23	57	39	14		
			-		From the housing	7	22	21	27	25	19	19	21	40	31				
			(45 l/s)	0	18 Pa	Extract	37	52	48	54	54	44	36	30	70	59			
41% 162	162	m³/h				Supply	33	41	40	37	35	29	22	23	61	45	19		
						From the housing	9	28	26	31	31	24	21	21	45	36			
53% 220		m³/h	(61 l/s)	0	40 Pa	Extract	44	57	53	59	61	51	45	41	75	64			
	220					Supply	38	46	45	43	43	36	28	24	66	51	24		
						From the housing	14	33	32	36	37	30	26	21	51	41			
			(75 l/s)	0	65 Pa	Extract	48	59	56	63	65	57	50	47	79	69			
65% 270	270	m³/h				Supply	41	49	48	47	48	41	33	27	70	55	27		
						From the housing	16	36	35	40	40	34	31	22	54	45			
77% 317				0	83 Pa	Extract	51	62	62	65	69	62	55	52	82	72	33		
	317	m³/h	(88 l/s)			Supply	46	52	52	50	51	45	37	31	74	58			
						From the housing	19	40	40	48	44	40	37	25	59	51			
100% 335			(93 l/s)	) @	) 100 Pa	Extract	51	64	63	66	70	63	55	53	82	73			
	335	m³/h				Supply	46	53	53	51	52	47	39	33	74	59	34		
						From the housing	24	41	42	48	46	42	39	27	59	52			

#### Specification

Weight: 24kg Warranty: 3 years

- Connections with the diameter: 150 mm
- Left and right versions available
- IP32 certification
- Filters: ISO Coarse 60% (G4) as a standard and ISO ePM1 50% (F7) as an option
- Warranty period: 3 years
- Electrical data: 230V ~ 50/60Hz, 3A fuse

#### Used materials:

- Housing: galvanized sheet metal, painted white powder coated.
- Interior: Expanded polypropylene (EPP)
- Heat exchanger: Polystyrene
- Internal insulation: Closed-cell foamed nitrile rubber, fire resistance class "O"

#### Available versions of aircycle T 2.85

aircycle T 2.85 Product codes	1210200	1210300	1210400	1219700	1210500	1210600	1210700	1210800	1210900	1211000	1211100	1211200	1211300	1213200	1213300	1213400
Configuration															2	Ň
Inverted	•		•		•		•		•		•		•		•	
Standard		•		•		•		•		•		•		•		•
						Versi	on									
НМВ	•	•	•	•												
ВС					•	•	•	•	•	•	•	•	•	•	•	•
			1			Exchar	nger									
Standard exchanger	•	•	•	•	•	•	•	•	•	•	•	•				
Enthalpy exchanger													•	•	•	•
Control																
No built-in control					•	•										
Built-in potentiometers	•	•														
Built-in Digital T controller			•	•			•	•								
Built-in Digital T wifi controller									•	•	•	•	•	•	•	•
Possibility to connect a pre-heater					•	•	•	•	•	•	•	•	•	•	•	•
					Fi	iter ad	cess									
Detachable panel	•	•	•	•	•	•	•	•					•	•		
Door									•	•	•	•			•	•
						Filte	rs									
Inlet G4 / Outlet G4	•	•	•	•	•	•	•	•	•	•			•	•		
Inlet F7 / Outlet G4											•	•			•	•

#### Dimensions (mm)



**Channel configuration** 

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