

NEW

AWN DV

Exhaust fan with heat recovery module
Outdoor terrace installation



Recovery of the exhaust air energy for heating or water preheating through connection to heat pump.



Low energy consumption: EC motor associated with an automatic pressure control device.

High energy performance.

DCV

DCV compatible: integrated automatic pressure control device, optimizing the DCV performance.



Easy to install: many available adaptation parts, possibility of custom-built construction.

Terrace installation.



Silent: acoustic foam on the envelope and sound trap (optional).



Easy to maintain: motor easily accessible by a trapdoor.

Demand controlled ventilation, even more energy efficient

The AAWN range enhances again the energy performance of the root Aereco demand controlled ventilation system: by adapting the airflows according to the needs in the dwelling, the Aereco DCV system already reduces consequently the heat demand. Through recovering the heat air energy at the level of the exhaust fan, the AAWN drastically reduces the energy load for the air renewal. The AAWN is connected to a heat pump that can be used for water heating or general heating. The AAWN range offers two types of calorigen fluid: water + glycol or refrigerant.

Decreasing the energy load of the heating system

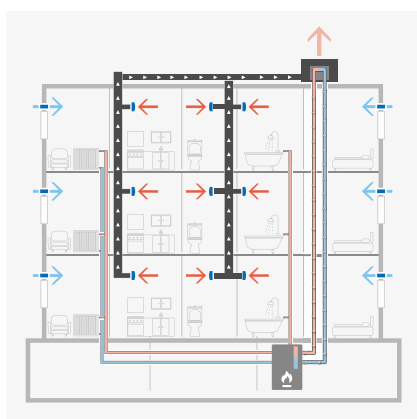
Through this system, an important part of the energy induced by the ventilation can be recovered and then be reused to decrease the energy demand of the energy generating system. In the presence of a heat pump for heat generation, this energy can be directly integrated into the heat source circuit (brine or air). In the case of other heat generators, this energy quantity can be brought from the exhaust air to a temperature level (max. 50°C) by means of an autonomous heat pump. Thus, for example, the preheating of the hot water is possible or is provided in a buffer store for the heating and / or hot water. In the case of combined use of the ventilation and heat pump technology, a heat exchanger is installed in front of the exhaust fan. The remaining usable energy is extracted from the exhaust air. Intelligent control optimizes the supply and demand of energy from exhaust air and outside air.

Pressure control device

A pressure control system is integrated in the fan, allowing to define easily the working pressure. Pressure measured by the pressure gauge is displayed on digital screen. It is automatically regulated, optimizing the system working with demand controlled exhaust units.

Easy maintenance

The AAWN DV exhaust fans are equipped with a trapdoor allowing the direct access to the motor.





AWN DV

 Exhaust fan with heat recovery module

		AWN DV-A40 h G	AWN DV-A50 h G	AWN DV-A70 h G
Outdoor installation configuration		■	■	■
Standard configuration		Connection side left side (seen in air direction)		
Energetic data				
Corresponding estimated living space	m ²	1 760	2 640	3 840
Maximum heat extraction per year	MWh	73	120	159
Heat supply degree (brine 7°C/0°C)	%	78 / 115	86 / 126	83 / 122
Maximum heat supply of heat pump	kW	11,6	19,3	25,5
Features				
Dimensions (W x H x L)	mm	900 x 1 155 x 1 490	1 460 x 1 425 x 1 600	1 460 x 1 625 x 1 600
Sound pressure level, housing radiation L _{wag} ** /suction side**	dB	72 / 55	69 / 62	71 / 65
Weight	kg	143	175	304
Heat exchanger air/water/glycol transfer to exchanger medium				
		Ethylene glycol 35%	Ethylene glycol 35%	Ethylene glycol 35%
Heat recovery	kW	5,1	10,5	14,7
Exhaust air inlet/outlet temperature	°C	20 / 12,3	20 / 10,4	20 / 10,6
Water glycol (35%) fluid	m ³ /h	0,87	1,9	2,8
Water glycol inlet temperature/ outlet temperature	°C	7 / 13,2	7 / 12,3	7 / 12,3
Filter protection G4 (with filter monitoring)		■	■	■
Heat exchanger flow and return		Cu ¾ " thread	Cu 1" external thread	Cu 1" external thread
Glycol pressure sensor / glycol dyke inclusive accessories		■	■	■
Condensate trough inclusive accessories		■	■	■
Condensate tube diameter	mm	ø 20	ø 20	ø 20
Fan motors				
Fan type		DV-A40	DV-A50	DV-A70
Nominal airflow @ 130 Pa**	m ³ /h	2 200	3 300	4 800
EC technology		■	■	■
Connection facilities (exhaust air pipes)		Lateral (x2), front-end (x1)	Lateral (x2), front-end (x1)	Lateral (x2), front-end (x1)
Exhaust air pipe connector diameter (DN)	mm	355	400	400
SFP* @ 130 Pa** / SFP* with 75% @ 130 Pa**	W/m ³ h	0,19 / 0,14	0,159 / 0,12	0,124 / 0,099
Power consumption at 75% (specification)	W	226	230	355
Repair switch		■	■	■
Connection voltage		230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz
Rated current @ 130 Pa**	A	1,8	1,66	2,64
Nominal power @ 130 Pa**	W	410	381	597
Maximum power consumption (motor start)	W	450	530	735
Protection type	IP	54	54	54
Maximum air temperature	°C	40	40	40
Error message		■	■	■
Mains connection		To repair switch, otherwise completely hardwired		
Smoke detectors and bypass for free outflow in the event of a fire		□	□	□

*SFP = Specific Fan Power

**Tested by Institut für Luft und Kältetechnik (ILK) Dresden.

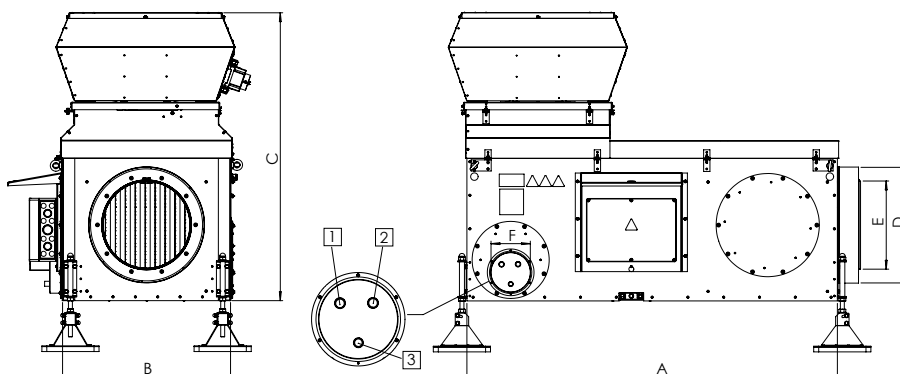
■ standard □ optional

		AWN DV-A40 h R	AWN DV-A50 h R	AWN DV-A70 h R
Outdoor installation configuration		■	■	■
Standard configuration		Connection side left side (seen in air direction)		
Energetic data				
Corresponding estimated living space	m ²	1 760	2 640	3 840
Maximum heat extraction per year	MWh	73	120	159
Heat supply degree (brine 7°C/0°C)	%	78 / 115	86 / 126	83 / 122
Maximum heat supply of heat pump (Remark: data depends on installed heat pump on site)	kW	11,6	19,3	25,5
Features				
Dimensions (W x H x L)	mm	900 x 1 155 x 1 490	1 460 x 1 425 x 1 600	1 460 x 1 625 x 1 600
Sound pressure level, housing radiation Lwag** /suction side**	dB	72 / 55	69 / 62	71 / 65
Weight	kg	142	174	303
Refrigerant type (other types available on demand)				
		R 410a -- R 134a	R 410a -- R 134a (Data reference to 3 000 m³/h)	R 410a -- R 134a
Heat recovery	kW	9,20 -- 8,81	14,87 -- 14,30	NC -- 20,55
Exhaust air inlet/outlet temperature	°C	20 / 9 -- 20 / 9,25	20 / 8,35 -- 20 / 8,59	20 / NC -- 20 / 8,68
Refrigerant	m ³ /h	7 -- 13	11 -- 21	NC -- 31
Refrigerant - vaporizing temp /condensation temp	°C	5 / 48 -- 5 / 48	5 / 48 -- 5 / 48	5 / 48 -- 5 / 48
Filter protection G4 (with filter monitoring)		■	■	■
Heat exchanger flow and return		Soldering nozzles	Soldering nozzles	Soldering nozzles
Glycol pressure sensor / glycol dyke inclusive accessories		■	■	■
Condensate trough inclusive accessories		■	■	■
Condensate tube diameter	mm	ø 20	ø 20	ø 20
Fan motors				
Fan type		DV-A40	DV-A50	DV-A70
Nominal airflow @ 130 Pa**	m ³ /h	2 200	3 300	4 800
EC technology		■	■	■
Connection facilities (exhaust air pipes)		Lateral (x2), front-end (x1)	Lateral (x2), front-end (x1)	Lateral (x2), front-end (x1)
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Maximum air temperature	°C	40	40	40
Error message		■	■	■
Mains connection		To repair switch, otherwise completely hardwired		
Smoke detectors and bypass for free outflow in the event of a fire		□	□	□

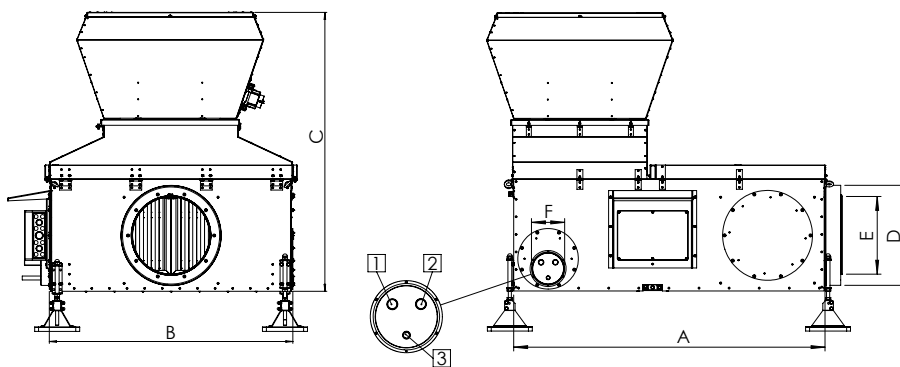
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■ standard □ optional



AWN DV-A40 h



AWN DV-A50 h / DV-A70 h

	Overall size	AWN DV-A40 h	AWN DV-A50 h	AWN DV-A70 h
A	Length [mm]	1 490	1 600	1 600
B	Width [mm] / + control unit	680 / 900	1 240 / 1 470	1 240 / 1 470
C	Height [mm]	1 155	1 425	1 625
D	Insulated connection of air channelling connection pipe socket	DN 467	DN 512	DN 512 (2x)
E	Connection spigot	DN 355	DN 400	DN 400 (2x)
F	Insulated connection of tube bundle	DN 160	DN 160	DN 160
1	Heat exchanger – return flow	Copper tube 3/4 “	Copper tube 1”	Copper tube 1”
2	Heat exchanger flow	Copper pipe 3/4 “	Copper pipe 1”	Copper pipe 1”
3	Condensate drainage	DN 20 plastics	DN 20 plastics	DN 20 plastics