

## Technical Parameters

### ■ Cabinet

Patented ISOSTREAM® Cabinet is built out of aluminum profiles to which individual panels are attached by screws. The panels are made out of galvanized sheet metal with wall thickness of 45 mm and finished with external grey-white paint, type RAL9002. Optional anti-corrosion surface protection is available upon request. The panels are lined with non-flammable mineral wool core and sandwiched from both sides. All panels are removable and selected panels are equipped with hinges and locks to provide for easy service access. In location where condensation will accumulate cabinets are fitted with condensate drains outlets.

### ■ Fans

Centrifugal, backward-curve blades fans with impeller made out of composite materials. Each fan comes statically and dynamically balanced.

### ■ Motors

Direct drive EC motors. Each motor can be continuously controlled by external 0...10V signal, comes with built-in thermal protection. Motor efficiency class is rated IE4, electric motor insulation protection is IP54.

### ■ RW Heat Exchanger

Rotating Wheel heat exchanger can transfer heat or heat and humidity simultaneously. It is designed for ambient temperatures running between -20 °C to +55 °C. Wheel is coiled from layers of aluminum foil with standard layer span of 1,6 mm. Wheel's casing is supported by galvanized profiles. Brush seal provides a tight seal between rotor and its casing. Where needed labyrinth seal with air leakage rate less than 1,5% can be used. The rotating wheel is driven by electric motor, worm transmission with pulley and belt. Power supply requirement: 1x 230V/50Hz or 3x 230V/50Hz. 0 to 10V continuous speed controller comes as an option.

### ■ Filters

Unit's outside air and return air inlets come fitted with either two sets of 48 mm compact filter brackets or one set of 96 mm filter bracket. Filter classification G4 to F9 is available. Filter access is provided through a set of service doors.

### ■ Power Supply

Either 1x 230V/50Hz or 3x 400V/50Hz, depending on unit's accessories. Control wires and power cables come installed running through plastic penetration inlets which are pre-drilled in panels, rubber penetration gromets with membrane on the inside of unit.

### ■ Controls

In standard configuration Digireg® control system enclosure comes mounted to the unit's mid panel with all internal wiring completed and with control board preprogrammed based on unit's configuration. Any other mounting location can be done per request. QC running test is performed before each unit leaves the manufacturing plant.

### ■ Installation

Installed in vertical position sitting on a floor or in vertical position mounted under a ceiling. Unit's inlet and outlet openings must be considered when installing the unit. Service access must be sufficient in order to open service door in order to replace filters. Digireg must be accessible for any future service work. Adequate space below the unit must be maintained in order to connect to condensate drain outlets and install drain traps. Condensate drain needs to slope at 5degree towards the condensate discharge. Refrigeration lines are to be connected to prefabricated penetration panel. Flexible pipe connections and flexible duct connections are recommended in order to eliminate any noise vibrations coming from the unit. ROOFPACK-A and ROOFPACK-B configurations must be consulted with the production personnel prior of ordering.

### ■ Noise

Noise data as listed in acoustic tables represent acoustic output levels at individual inlets/outlets, including tolerance for weight filter A. The table includes acoustic noise level incorporating casing of the unit and reads noise level when measured 1 m from the service side of the unit, in open field Q=2. The acoustic readings come within ±3dB tolerance.

### ■ Unit Configurations

Unit's specific configuration and its accessories are identified by a specific abbreviation code which is listed as part of the model number. Any non-typical, custom unit configuration needs to be consulted prior to ordering.

### ■ HVAC ductwork accessories

- Sonoflex®, Termoflex® – flexible hoses and fittings
- SPIRO – round spiro pipes and fittings
- KAA, IAE – flexible couplings
- MAA, MTS – noise silencers
- RSK, TSK – check flap
- MSK, IJK – throttle and mixing flaps disc valves, diffusers, nozzles, grilles rain louvres
- MBE, IBE, IBW, MBW – electric and water heaters for round and square pipes
- MKW, IKW, IKF, MKF – water coolers and direct evaporators for round and square pipes
- MFL, IFL – filter cartridges for round and square pipes
- ESU – mixing nozzles

### ■ Warranty terms

The DUOVENT® COMPACT RV device, including the DVAV, DCAV and DCOP control system, must be put into operation exclusively by the Seller or a person designated by the Seller. Failure to comply with this condition has as a result of the termination of the Buyer's rights from defective performance and from the Quality Guarantee. Detailed terms are specified in the Seller's Complaint Procedure.

### ■ EL accessories

- Digireg® – digital control system for units with heating and cooling, controller with touch-screen display.
- JTR – triac switch for electric heater power control
- HIG, HYG – humidistats
- EDF-CO<sub>2</sub>, SQA – CO<sub>2</sub> sensors
- RTR – thermostats
- DTS PSA – pressure switches actuators
- AIRSENS – air quality sensors (K 8.2)

### ■ Informationen

The unit is designed for ventilation of commercial areas. Mounting variants allow adaptation to the requirements of the building. The unit is intended to permanent operation.

### ■ Model number abbreviation list

**D U O V E N T   C O M P A C T   R V   4 2 0 0 T   D I   D X   M X   K L   G 4 + F 7 / M 5   D V A V   A V**

1 2 3 4 5 6 7 8 9 10

1 – unit size – 800, 1800, 3000, 4200, 6000, 7800

2 – type of rotating wheel:

- T – temperature
- E – enthalpy
- S – sorption

3 – type of heating:

- DI – electric
- DCA – water, temperature gradient 80/60 °C
- DCB – water, temperature gradient 45/35 °C

4 – type of cooling:

- DCC – water, temperature gradient 6/12 °C
- DX – direct evaporation coil, R410A or R32 refrigerant, evaporation temperature 6 °C  
(When using DX coil we must specify type of refrigerant, cooling capacity and amount of cooling circuits based on type of condensing unit being used)
- Use of heat pump needs to be specified in the order.
- DXr – direct evaporation cooling coil use for heating and cooling, R410A or R32 refrigerant

5 – MX – mixing air damper, without actuator (when unit is ordered with Digireg MAR system, the power actuator becomes part of delivery)

- C – mixing air damper designed for 100% air recirculation (when unit is ordered with Digireg MAR system, the power actuator becomes part of delivery)

6 – KL – outside air and return air dampers, without actuators (when unit is ordered with Digireg MAR system, the power actuator becomes part of delivery)

7 – classification of air filters for outside air and return air inlets (G4–F9)

8 – type of unit control system:

- D – Digireg®

9 – type of airflow regulation:

- VAV – variable air volume
- CAV – constant air volume
- COP – constant operating pressure

10 – placement of unit's inlets and outlets – AV or AV2

\*TZ – heat loss of vented object

Class acc. to EN779	Class acc. to EN ISO 16890
G4	ISO Coarse 60%
M5	ISO ePM10 50%
F7	ISO ePM2,5 70%
F9	ISO ePM1 80%

### Order examples

DUOVENT COMPACT RV 4200T DI DX MX KL G4+F7/M5 DVAV AV

Unit size 4200 with recuperator temperature rotor, with electric heater, direct evaporator, mixing flap, two-stage filtration on inlet G4+F7, single-stage filtration on discharge G4+F7, I&C system Digireg® with VAV, position of necks AV

DUOVENT COMPACT RV 800 E DCA M5/G4 DVAV AV2

Unit size 800 with recuperator enthalpy rotor, with water heater 80/60 °C, without inlet flaps, with inlet filter M5, exhaust filter G4, I&C system Digireg® with VAV, neck position AV2.

## DUOVENT® COMPACT RV

Type	Nominal flow [m³/h]	voltage [V/Hz]	Inlet/exhaust fan		Erhitzer		cooler power* [kW]	efficiency* [%]	unit max. air flow [m³/h]	control system Digireg®	Weight without MX/with MX** [kg]
			max. input power [W]	current [A]	power* [kW]	current [A]					
800	800	1×230V 50 Hz	341/300	1.5/1.3	-	-	-	81.2	800	M1-Vx	155-208 171-224
800 DCA					6	-	-				
800 DCB					4.2	-	-				
800 DCA DCC					6	-	4.8				
800 DCA DX					6	-	4.9				
800 DI					3.0	13.0	-				
1800	1800	3×400V 50 Hz	902/750	1.3/1.1	-	-	-	78.4	2000	M3-Vx	278-355 298-375
1800 DCA					15.3	-	-				
1800 DCB					10.7	-	-				
1800 DCA DCC					15.3	-	10.9				
1800 DCA DX					15.3	-	11.1				
1800 DI					7.5	10.8	-				
3000	3000	3×400V 50 Hz	1346/1137	1.95/1.65	-	-	-	78.3	3500	M3-Vx	357-440 381-464
3000 DCA					25.4	-	-				
3000 DCB					17.7	-	-				
3000 DCA DCC					25.4	-	18.5				
3000 DCA DX					25.4	-	17.9				
3000 DI					15	21.7	-				
4200	4200	3×400V 50 Hz	1692/1520	2.45/2.2	-	-	-	78.5	4500	M3-Vx	429-557 456-584
4200 DCA					36.5	-	-				
4200 DCB					25.5	-	-				
4200 DCA DCC					36.5	-	26.5				
4200 DCA DX					36.5	-	25.5				
4200 DI					15	21.7	-				
6000	6000	3×400V 50 Hz	2290/2000	3.3/2.9	-	-	-	78	6000	M3-Vx	624-757 654-787
6000 DCA					52.4	-	-				
6000 DCB					35.1	-	-				
6000 DCA DCC					52.4	-	37.4				
6000 DCA DX					52.4	-	34.9				
6000 DI					22.5	32.5	-				
7800	7800	3×400V 50 Hz	2965/2546	4.3/3.7	-	-	-	78.3	8000	M3-Vx	635-786 668-819
7800 DCA					70.5	-	-				
7800 DCB					74.2	-	-				
7800 DCA DCC					70.5	-	47.1				
7800 DCA DX					70.5	-	45.7				
7800 DI					30	43.3	-				

\* At nominal air flow,  $t_s = -12^\circ\text{C}/90\%$  r.h.,  $t_i = 22^\circ\text{C}/50\%$  r.h.,  $t_e = 32^\circ\text{C}/40\%$  r.h. (SUMMER), temperature rotor.

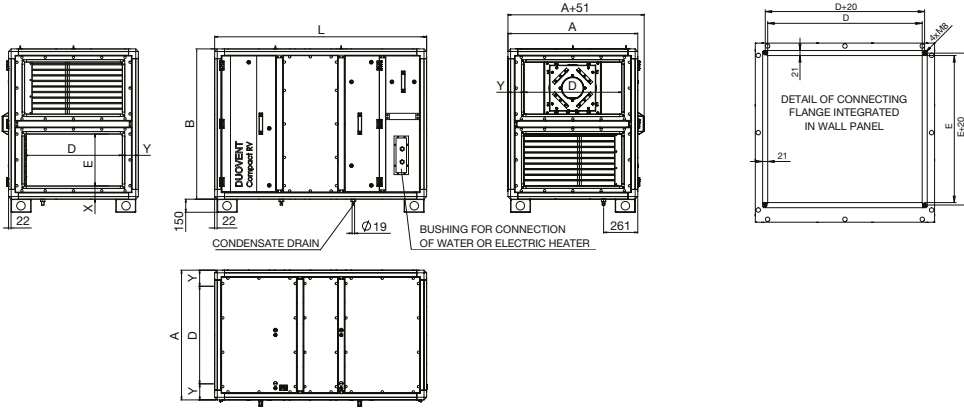
\*\* Depending on particular variant.

Water cooler power DCC for  $t_s = 32^\circ\text{C}/40\%$  r.h.,  $t_w = 6/12^\circ\text{C}$ . Water heater power DCA for  $t_s = 8^\circ\text{C}$ ,  $t_w = 80/60^\circ\text{C}$ .

Water heater power DCB for  $t_s = 8^\circ\text{C}$ ,  $t_w = 45/35^\circ\text{C}$ . Direct evaporating unit power DX for R410A coolant,  $t_s = 32^\circ\text{C}/40\%$  r.h.,  $t_{\text{evp}} = 6^\circ\text{C}$ .

**Dimensions**

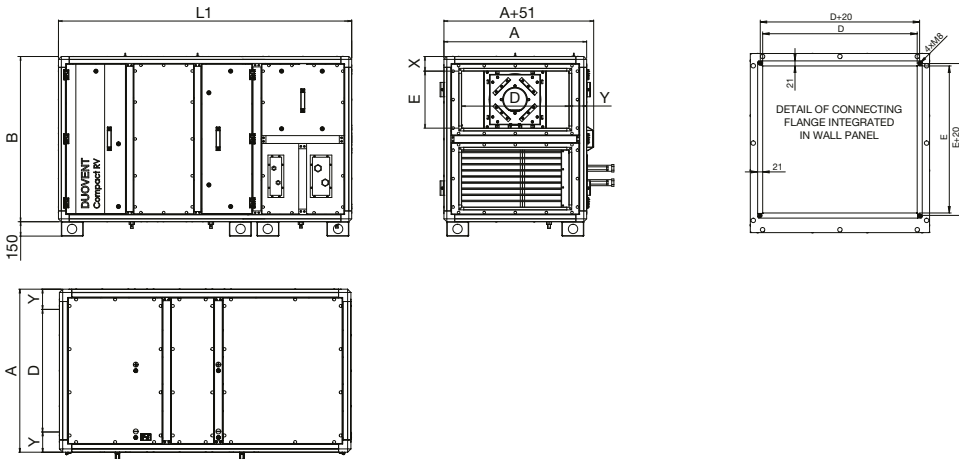
Dimensions of units DUOVENT® only with water or electric heater (DCA, DCB, DI) or only with cooler (DCC, DX):



Size	A [mm]	B [mm]	D [mm]	E [mm]	L [mm]	L (for MX)* [mm]	X [mm]	Y [mm]
800	678	678	470	160	1306	1620	108	104
1800	835	992	600	300	1620	1934	110.5	117.5
3000	992	1149	750	400	1620	1934	100	121
4200	1149	1306	900	470	1934	2248	104	124.5
6000	1306	1463	1050	550	2091	2405	103.5	128
7800	1463	1620	1200	630	2091	2405	102.5	131.5

\*Units with integrated mixing flap feature higher length of the unit basic block „L“.

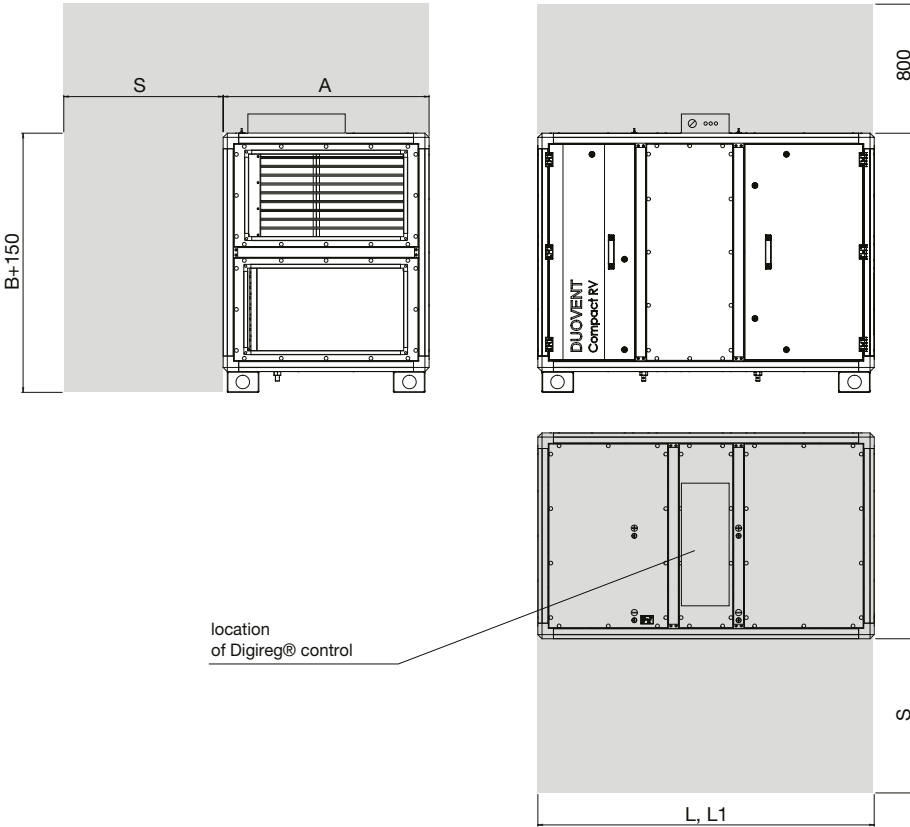
Dimensions of units DUOVENT® with water or electric heater (DCA, DCB, DI) or with cooler (DCC, DX):



Size	A [mm]	B [mm]	D [mm]	E [mm]	L1 [mm]	L1 (for MX)* [mm]	X [mm]	Y [mm]
800	678	678	470	160	1620	1934	108	104
1800	835	992	600	300	1934	2248	110.5	117.5
3000	992	1149	750	400	1934	2248	100	121
4200	1149	1306	900	470	2248	2562	104	124.5
6000	1306	1463	1050	550	2405	2719	103.5	128
7800	1463	1620	1200	630	2405	2719	102.5	131.5

\*Units with integrated mixing flap feature higher length of the unit basic block „L1“.

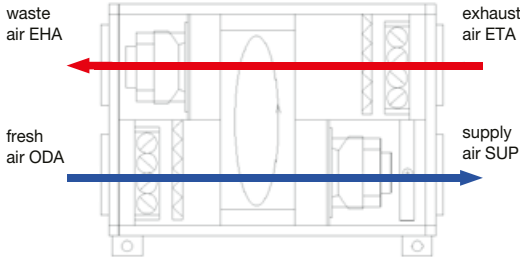
Service space for operation and repairs of Duovent® Compact RV units



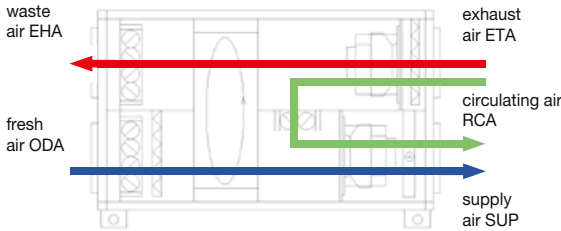
Recuperation

Size	A [mm]	B [mm]	L [mm]	L1 [mm]	L (for MX) [mm]	L1 (for MX) [mm]	S [mm]
800	678	678	1306	1620	1620	1934	700
1800	835	992	1620	1934	1934	2248	850
3000	992	1149	1620	1934	1934	2248	1000
4200	1149	1306	1934	2248	2248	2405	1200
6000	1306	1463	2091	2405	2405	2405	1350
7800	1463	1620	2091	2405	2405	2719	1500

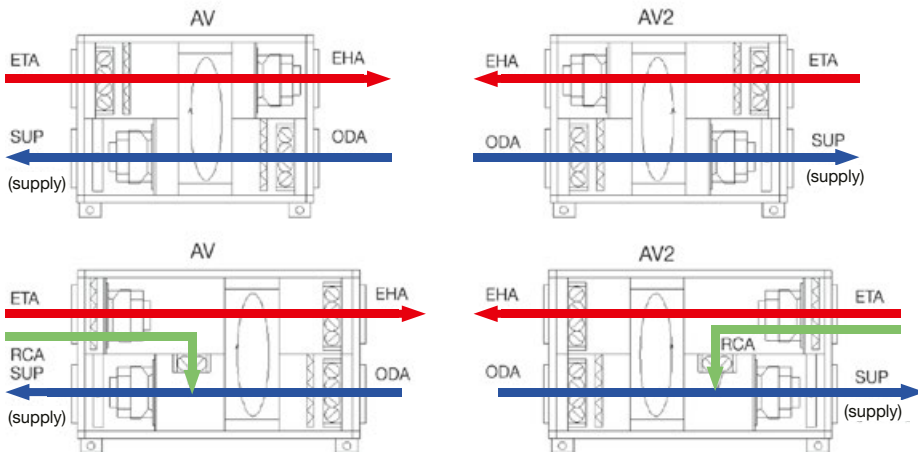
Arrangement diagram of components of Duovent® Compact RV units without mixing:



Arrangement diagram of components of Duovent® Compact RV units with mixing:



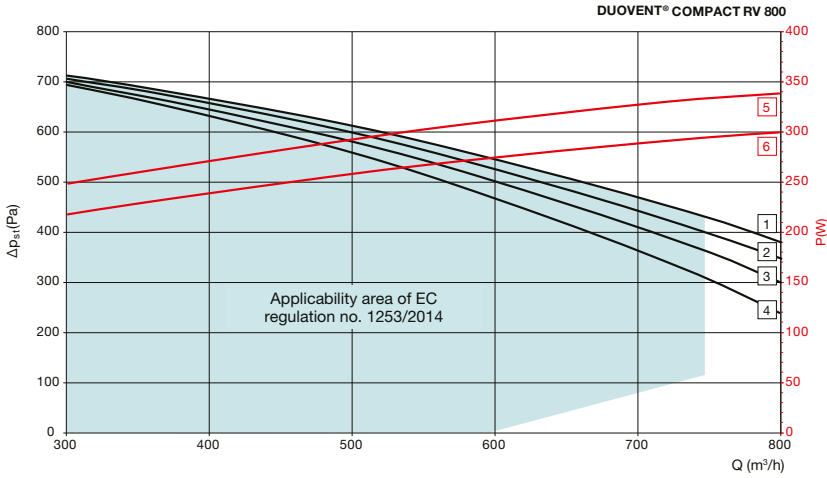
Neck variants – unit vertical arrangement (viewed from operation side)



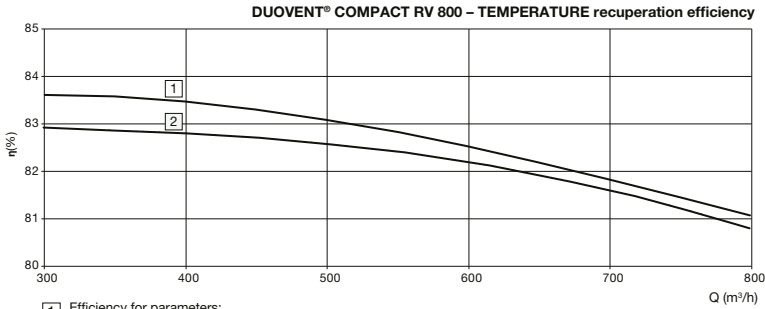
**Characteristics**

Q air flow (m<sup>3</sup>/h)  
 $\Delta p_{st}$  unit external static pressure (Pa)  
 P electric input (W)

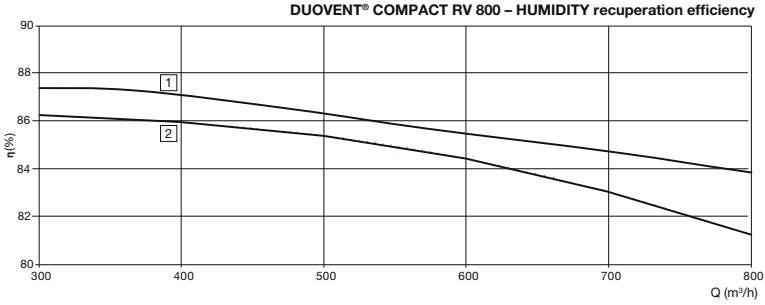
$\eta$  heat recuperation efficiency or humidity (%)  
 ADD pressure loss of added components (higher filter class, DX etc.)  
 4 performance curve with max. pressure loss of internal parts (+ADD)



- 1 inlet - F7+RV
- 3 inlet - F7+RV+DCB+DCC
- 5 el. input - INLET (W)
- 2 inlet - F7+RV+DCB
- 4 inlet - F7+RV+DCB+DCC+ADD (Pa)
- 6 el. input - DISCHARGE (W)

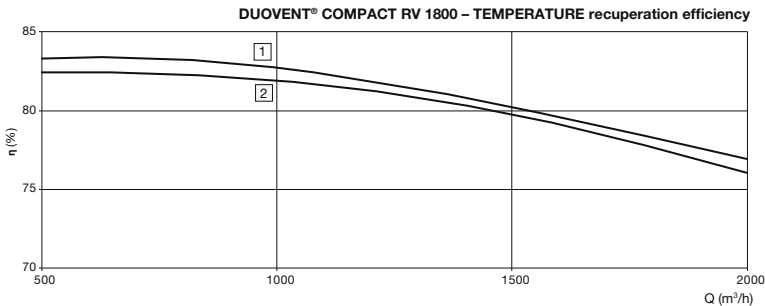
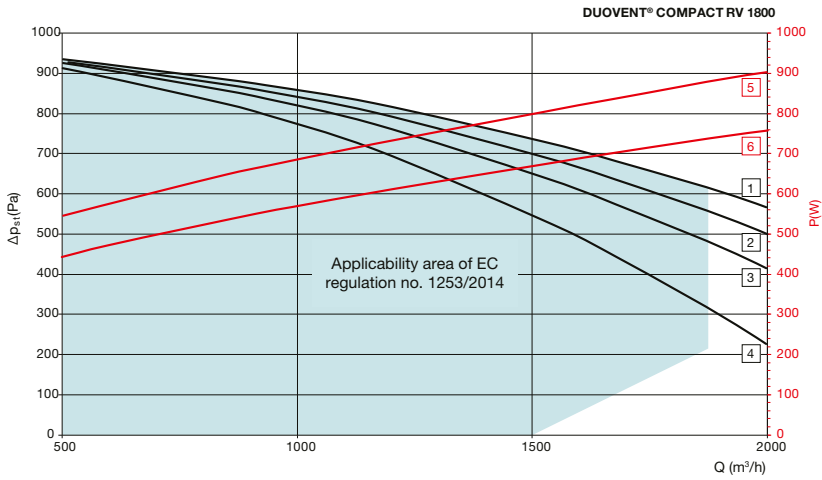


- 1 Efficiency for parameters:  
 EXHAUST: 22°C/50% r.h.  
 SUPPLY: -12°C/90% r.h.
- 2 Efficiency acc. to EC/1253/2014

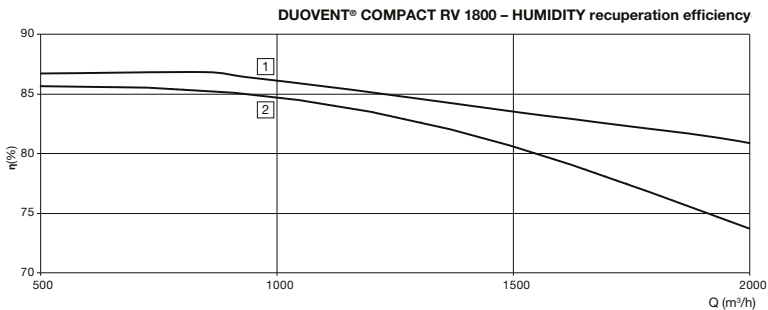


- 1 S-sorption rotor  
 Efficiency for parameters:  
 EXHAUST: 22°C/50% r.h.  
 SUPPLY: -12°C/90% r.h.
- 2 E-enthalpy rotor  
 Efficiency for parameters:  
 EXHAUST: 22°C/50% r.h.  
 SUPPLY: -12°C/90% r.h.

Recuperation

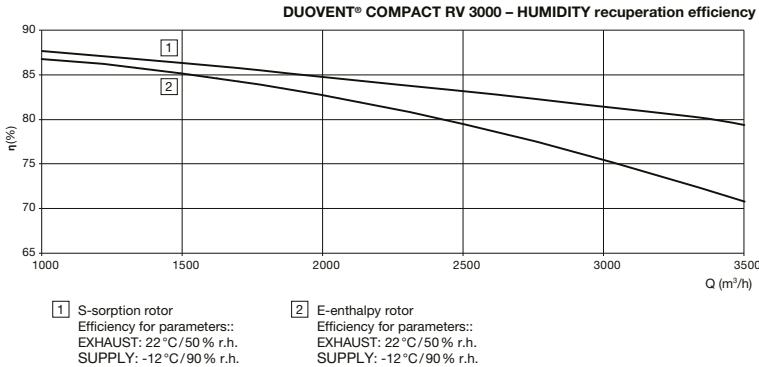
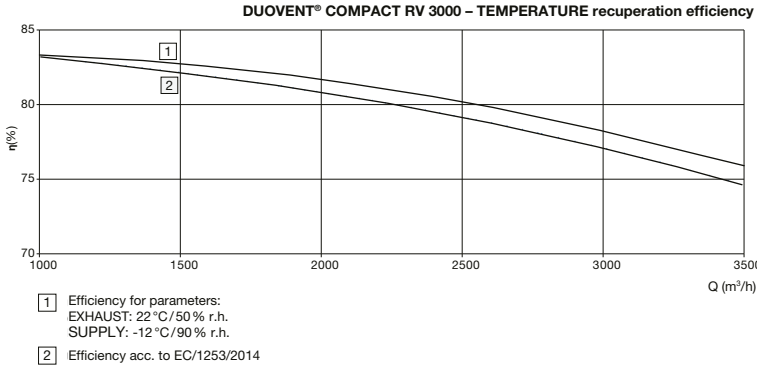
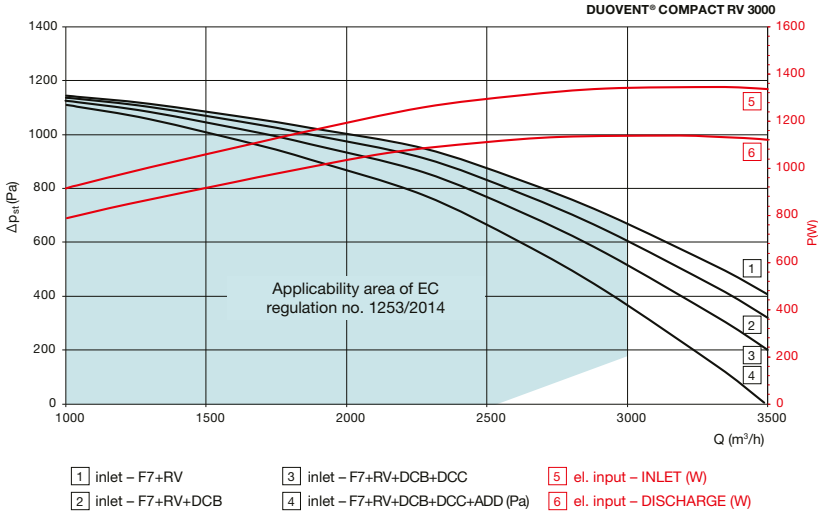


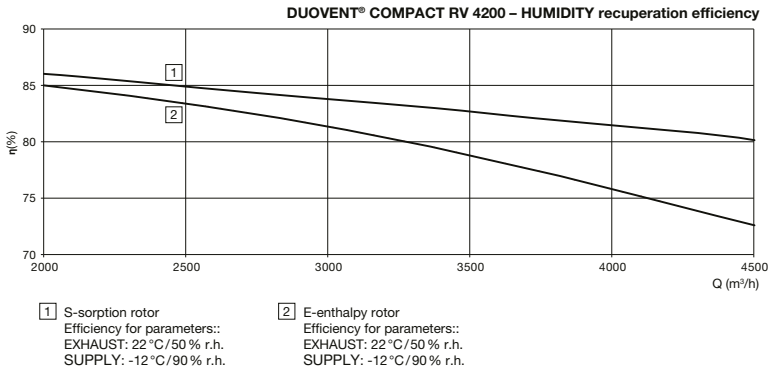
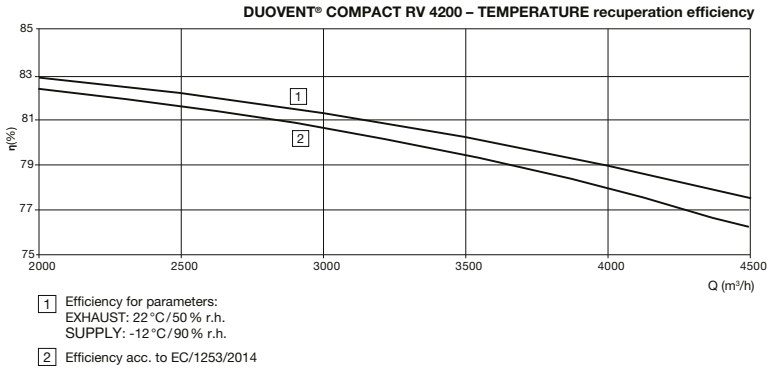
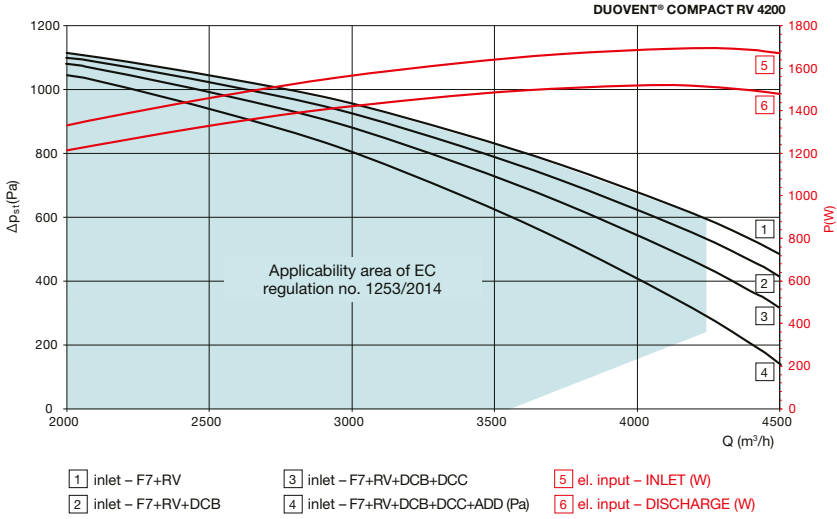
- 1 Efficiency for parameters:  
EXHAUST: 22°C/50% r.h.  
SUPPLY: -12°C/90% r.h.
- 2 Efficiency acc. to EC/1253/2014

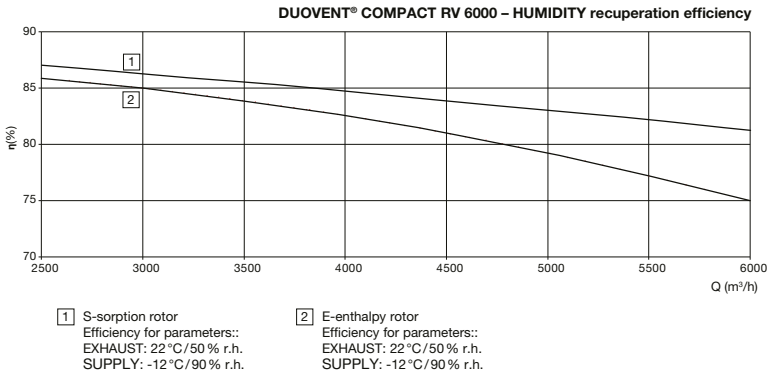
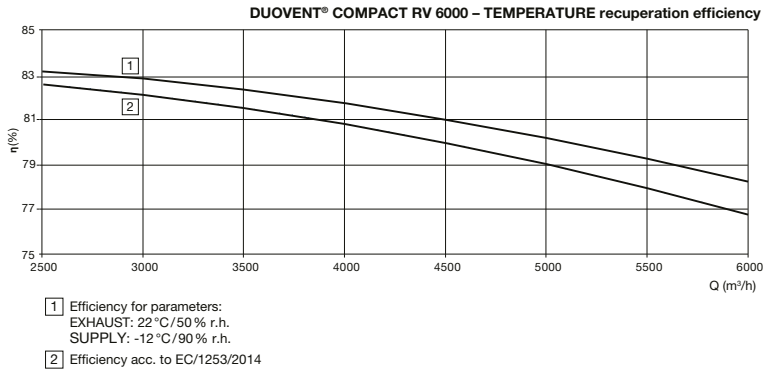
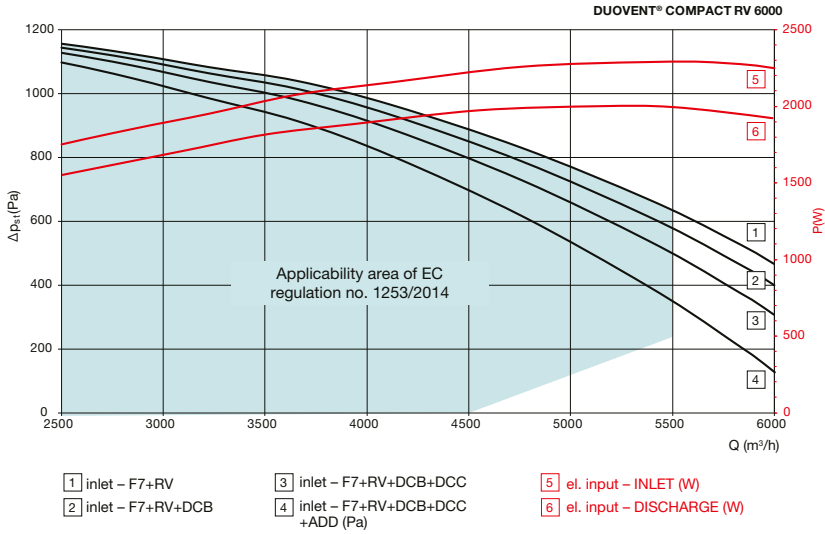


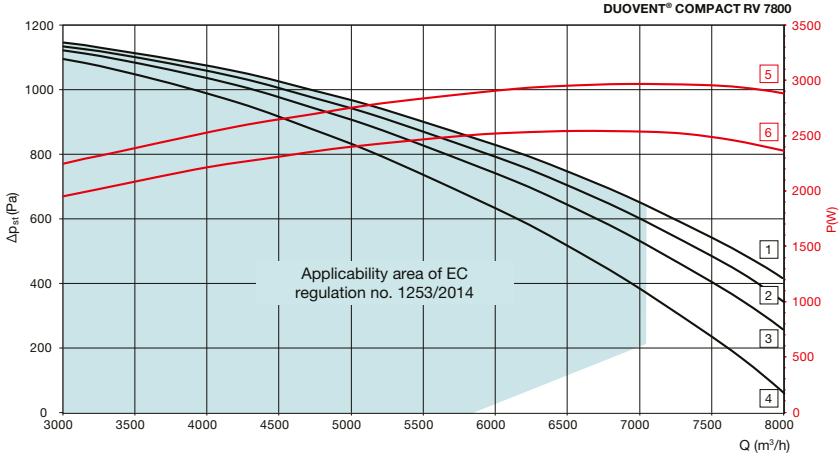
- 1 S-sorption rotor  
Efficiency for parameters: EXHAUST: 22°C/50% r.h.  
SUPPLY: -12°C/90% r.h.
- 2 E-enthalpy rotor  
Efficiency for parameters: EXHAUST: 22°C/50% r.h.  
SUPPLY: -12°C/90% r.h.



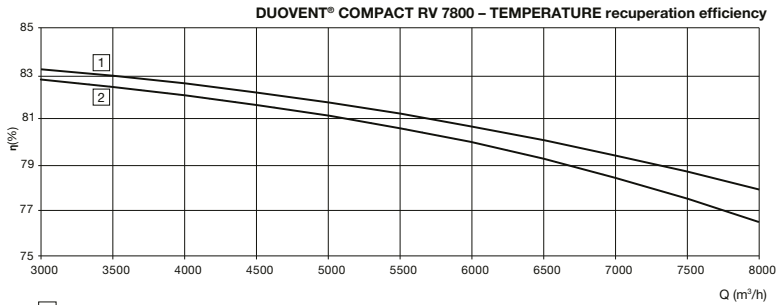




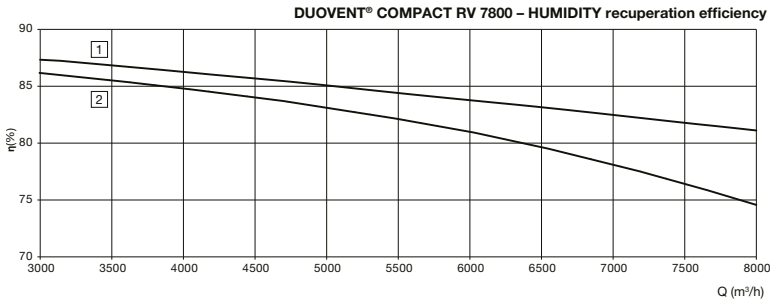




- 1 inlet - F7+RV
- 2 inlet - F7+RV+DCB
- 3 inlet - F7+RV+DCB+DCC
- 4 inlet - F7+RV+DCB+DCC+ADD (Pa)
- 5 el. input - INLET (W)
- 6 el. input - DISCHARGE (W)



- 1 Efficiency for parameters:  
EXHAUST: 22°C/50% r.h.  
SUPPLY: -12°C/90% r.h.
- 2 Efficiency acc. to EC/1253/2014



- 1 S-sorption rotor  
Efficiency for parameters:  
EXHAUST: 22°C/50% r.h.  
SUPPLY: -12°C/90% r.h.
- 2 E-enthalpy rotor  
Efficiency for parameters:  
EXHAUST: 22°C/50% r.h.  
SUPPLY: -12°C/90% r.h.

Acoustic power (pressure) level in octave ranges [db(A)]\*

**DUOVENT® COMPACT RV 800 (for Q = 800 m³/h)**

Hz	63	125	250	500	1000	2000	4000	8000	L <sub>WA</sub>
fresh	49	53	62	65	61	55	48	41	68
intel	47	57	67	71	71	71	61	58	76
L <sub>WA</sub> exhaust	48	52	59	63	59	53	46	40	66
waste	48	59	68	72	72	72	64	61	78
case**	30	40	49	49	44	35	17	10	53

**DUOVENT® COMPACT RV 4200 (for Q = 4200 m³/h)**

Hz	63	125	250	500	1000	2000	4000	8000	L <sub>WA</sub>
fresh	43	42	63	64	60	60	54	47	68
intel	47	51	69	72	77	76	68	65	81
L <sub>WA</sub> exhaust	41	42	62	63	59	59	53	46	67
waste	48	54	71	74	80	78	71	68	83
case**	30	34	51	50	51	41	24	17	56

**DUOVENT® COMPACT RV 1800 (for Q = 1800 m³/h)**

Hz	63	125	250	500	1000	2000	4000	8000	L <sub>WA</sub>
fresh	47	52	62	65	59	60	54	46	68
intel	50	59	71	72	76	76	69	64	81
L <sub>WA</sub> exhaust	43	48	60	62	57	58	51	44	66
waste	49	58	72	72	78	78	70	66	82
case**	32	40	53	50	50	41	24	16	56

**DUOVENT® COMPACT RV 6000 (for Q = 6000 m³/h)**

Hz	63	125	250	500	1000	2000	4000	8000	L <sub>WA</sub>
fresh	38	43	66	65	62	61	55	53	70
intel	45	53	72	74	79	76	69	68	82
L <sub>WA</sub> exhaust	38	46	65	65	61	60	54	53	70
waste	46	57	74	77	81	78	72	72	85
case**	28	37	54	53	53	41	25	21	58

**DUOVENT® COMPACT RV 3000 (for Q = 3000 m³/h)**

Hz	63	125	250	500	1000	2000	4000	8000	L <sub>WA</sub>
fresh	39	45	57	65	61	61	55	48	68
intel	43	53	67	72	78	78	71	67	82
L <sub>WA</sub> exhaust	37	43	57	64	60	60	54	47	67
waste	44	54	69	74	80	80	73	69	84
case**	26	35	49	50	52	43	26	19	55

**DUOVENT® COMPACT RV 7800 (for Q = 7800 m³/h)**

Hz	63	125	250	500	1000	2000	4000	8000	L <sub>WA</sub>
fresh	41	50	66	69	65	62	56	57	72
intel	45	57	77	79	81	78	72	72	85
L <sub>WA</sub> exhaust	41	50	66	68	64	61	56	56	72
waste	49	60	80	82	84	80	75	76	88
case**	30	40	59	58	55	43	28	28	63

\* Data for configuration INLET - IN - FL + M7 + RV + DCC + DCA / OUTLET - OUT.FL. + M5 + RV

\*\* shell damping with R<sub>w</sub> value

Recuperation

Characteristics of recuperation units acc. to EC regulation 2009/125/EC, no. 1253/2014:

Size unit	Nominal air flow [m³/h]	SFPint [W/(m³/s)]	recuperation efficiency [%]	SFPint <sub>LIMIT 2018</sub> [W/(m³/s)]	external pressure [Pa]
800	700	1116	81.8	1315	350
1800	1800	1083	77.5	1160	350
3000	3000	1060	76.9	1092	350
4200	4200	998	77.2	1051	350
6000	5500	1003	77.9	1017	350
7800	7050	964	78.3	965	350

**Technical data of water heaters DCA ( $t_w = 80/60$  °C) and DCB ( $t_w = 45/35$  °C)**

Size unit	temp. gradient [°C]	power [kW]	air flow [m³/h]	air inlet temperature [°C]	air outlet temperature [°C]	pressure loss at water side [kPa]	water flow [m³/h]
800	80/60	6.0	800	8	30.4	3	0.26
	45/35	4.2	800		23.9	6	0.37
1800	80/60	15.3	1800	8	33.4	3	0.67
	45/35	10.7	1800		25.8	4	0.93
3000	80/60	25.4	3000	8	33.2	5	1.11
	45/35	17.7	3000		25.7	8	1.54
4200	80/60	36.5	4200	8	34.0	4	1.60
	45/35	25.5	4200		26.1	10	2.21
6000	80/60	52.4	6000	8	34.1	7	2.30
	45/35	35.1	6000		25.5	6	3.05
7800	80/60	70.5	7800	8	35.0	9	3.10
	45/35	74.2	7800		26.1	8	4.10

**Technical data of water coolers DCC ( $t_w = 6/12$  °C) and evaporation units DX ( $t_{vp} = 6$  °C, R410A coolant)**

Size unit	temp. gradient / evaporation temp. [°C]	power [kW]	air flow [m³/h]	inlet temperature [°C] rel. humidity [%]	outlet temp. [°C]	pressure loss at water/coolant side [kPa]	water flow [m³/h]
800	6/12	4.8	800	32 °C/40 %	19.1	22	0.69
	6	4.9	800		18.6	52	–
1800	6/12	10.9	1800	32 °C/40 %	18.5	12	1.56
	6	11.1	1800		18.0	84	–
3000	6/12	18.5	3000	32 °C/40 %	18.6	22	2.64
	6	17.9	3000		18.4	86	–
4200	6/12	26.5	4200	32 °C/40 %	18.3	19	3.78
	6	25.5	4200		18.5	43	–
6000	6/12	37.4	6000	32 °C/40 %	18.5	28	5.34
	6	34.9	6000		19.0	72	–
7800	6/12	47.1	7800	32 °C/40 %	18.6	13	6.73
	6	45.7	7800		18.8	100	–

**Technical data of electric heaters (supply power 1× 230V/50 Hz for size 800, 3× 400V/50 Hz for sizes 1800 to 7800), assignment of control kits:**

Size unit	type DI (standard variant)	power [kW]	no. of sections	Digireg® kit
800	IBE-RV-800-3/1	3.0	1	M1-E8-2
1800	IBE-RV-1800-7,5/1	7.5	1	M1-E8-2
3000	IBE-RV-3000-15/1	15.0	1	M3-E15
4200	IBE-RV-4200-15/1	15.0	1	M3-E15
6000	IBE-RV-6000-22/2	22.5	2	M3-E24
7800	IBE-RV-7800-30/1	30.0	1	M3-E36

Optionally, the unit can be ordered with atypical powers of electric heaters For this variant contact our technical dept.

**ROOFPACK – Roof variant of recuperation unit****■ ROOFPACK-A**

- Roof from galvanized steel or painted sheet
- Direct installation to the unit
- Frame height 150 mm in combination with feet
- Insulated corner profiles of cabinet frame
- Watertight variant of external case
- For unit inlet part the electric heaters IBET of power 250 W or 1000 W can be delivered as an accessory. The heater will prevent freezing of the water exchangers with the unit shut-down. The heater is controlled independently by integrated thermostat.

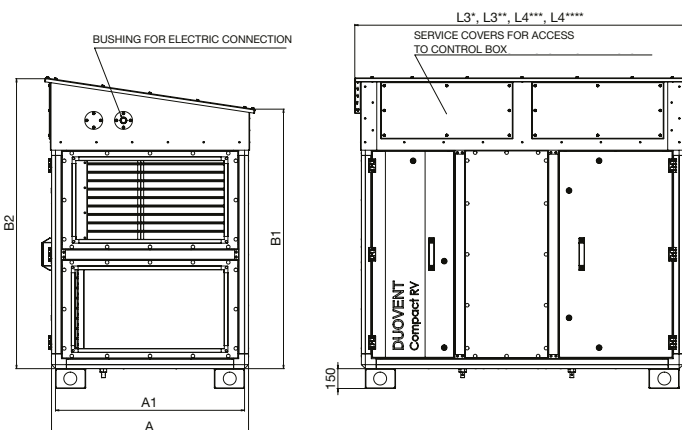
**■ Type key for ordering of ROOFPACK accessory**

R O O F P A C K - A - D U O - R V - 3 0 0 0

- 1    2    3
- 1 – ROOFPACK accessory type:  
ROOFPACK – A  
ROOFPACK – B
  - 2 – Identification of recuperation unit type:  
DUO-RV = Duovent® Compact RV
  - 3 – unit size Duovent® Compact RV:  
800, 1800, 3000, 4200, 6000, 7800



Example of roof variant ROOFPACK-A

**Dimensions**

size	L3* [mm]	L3** [mm]	L4*** [mm]	L4**** [mm]	A [mm]	A1 [mm]	B1 [mm]	B2 [mm]	m* [kg]	m** [kg]	m*** [kg]	m**** [kg]
800	1372	1686	1686	2000	678	638	836	993	34	41	44	50
1800	1686	2000	2000	2314	835	795	1150	1307	47	55	58	66
3000	1686	2000	2000	2314	992	952	1307	1464	56	60	69	73
4200	2000	2314	2314	2628	1149	1109	1464	1621	66	81	81	95
6000	2157	2471	2471	2785	1306	1266	1621	1778	76	93	93	110
7800	2157	2471	2471	2785	1463	1423	1778	1935	83	101	102	120

\* Data for units without mixing flap, with heater (DCA, DCB, DI) or cooler (DCC, DX)

\*\* Data for units with mixing flap, with heater (DCA, DCB, DI) or cooler (DCC, DX)

\*\*\* Data for units without mixing flap, with both heater (DCA, DCB, DI) and cooler (DCC, DX)

\*\*\*\* Data for units with mixing flap, with both heater (DCA, DCB, DI) and cooler (DCC, DX)

# ROOFPACK – Roof variant of recuperation units

## ROOFPACK-B

- Roof from galvanized steel or painted sheet
- Direct installation to the unit
- frame of height 350 mm for integration to the roof structure, demountable, with inner insulation of th. 30 mm. In the lower part, the frame is fitted with holes Ø 12 mm to insert the anchor bolts M10 to the roof structure
- Insulated corner profiles of cabinet frame
- Watertight variant of external case
- For unit inlet part the electric heaters IBET of power 250W or 1000W can be delivered as an accessory. The heater will prevent freezing of the water exchangers with the unit shut-down. The heater is controlled independently

## Type key for ordering of ROOFPACK accessory

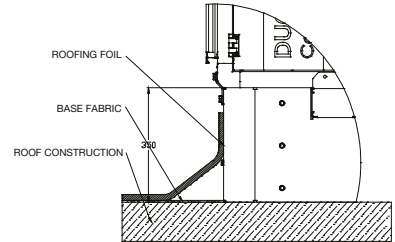
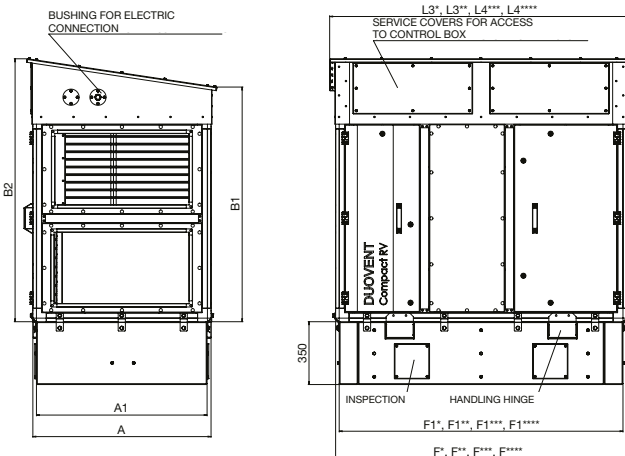
R O O F P A C K - A - D U O - R V - 3 0 0 0

- 1 – ROOFPACK accessory type:  
ROOFPACK – A  
ROOFPACK – B
- 2 – Identification of recuperation unit type:  
DUO – RV = Duovent® Compact RV
- 3 – unit size Duovent® Compact RV:  
800, 1800, 3000, 4200, 6000, 7800



Example of roof variant ROOFPACK-B

## Dimensions



Example of integration of the support frame ROOFPACK-B to the building roof structure

size	L3* [mm]	L3** [mm]	L4*** [mm]	L4**** [mm]	A [mm]	A1 [mm]	B1 [mm]	B2 [mm]
800	1372	1686	1686	2000	678	638	836	993
1800	1686	2000	2000	2314	835	795	1150	1307
3000	1686	2000	2000	2314	992	952	1307	1464
4200	2000	2314	2314	2628	1149	1109	1464	1621
6000	2157	2471	2471	2785	1306	1266	1621	1778
7800	2157	2471	2471	2785	1463	1423	1778	1935

size	F* [mm]	F1* [mm]	F** [mm]	F1** [mm]	F*** [mm]	F1*** [mm]	F**** [mm]	F1**** [mm]	m* [kg]	m** [kg]	m*** [kg]	m**** [kg]
800	1306	1262	1620	1576	1620	1576	1934	1890	58	71	74	86
1800	1620	1576	1934	1890	1934	1890	2248	2204	84	99	102	118
3000	1620	1576	1934	1890	1934	1890	2248	2204	100	113	122	134
4200	1934	1890	2248	2204	2248	2204	2562	2518	127	152	152	171
6000	2091	2047	2405	2361	2405	2361	2719	2675	151	179	179	208
7800	2091	2047	2405	2361	2405	2361	2719	2675	167	198	199	229

\* Data for units without mixing flap, with heater (DCA, DCB, DI) or cooler (DCC, DX)  
 \*\* Data for units with mixing flap, with heater (DCA, DCB, DI) or cooler (DCC, DX)  
 \*\*\* Data for units without mixing flap, with both heater (DCA, DCB, DI) and cooler (DCC, DX)  
 \*\*\*\* Data for units with mixing flap, with both heater (DCA, DCB, DI) and cooler (DCC, DX)



**DUO-RV-MOUNT**

- The rain louvres for outdoor use of the unit
- galvanized steel sheet
- sieve against entry of larger object or birds
- powder coating on request

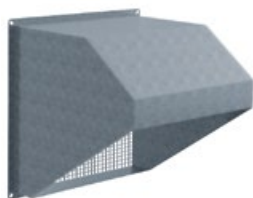
**Type key for ordering of accessories  
 DUO-RV-MOUNT**

D U O - R V - M O U N T 3 0 0 0 I N

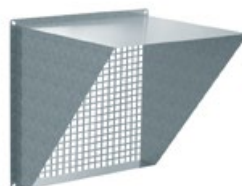
1 2

1 – unit size Duovent® Compact RV:  
 800, 1800, 3000, 4200, 6000, 7800

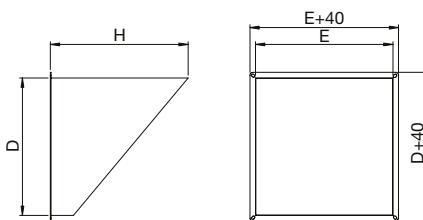
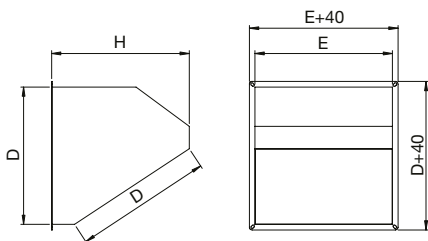
2 – Accessory type  
 IN – for suction  
 OUT – for outlet



suction



discharge



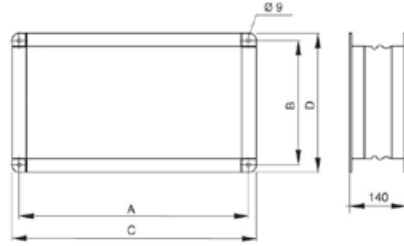
Recuperation

Type	E [mm]	D [mm]	H [mm]
DUO-RV-MOUNT 800 IN	160	470	245
DUO-RV-MOUNT 1800 IN	300	600	490
DUO-RV-MOUNT 3000 IN	400	750	490
DUO-RV-MOUNT 4200 IN	470	900	490
DUO-RV-MOUNT 6000 IN	550	1050	490
DUO-RV-MOUNT 7800 IN	630	1200	620

Type	E [mm]	D [mm]	H [mm]
DUO-RV-MOUNT 800 OUT	160	470	245
DUO-RV-MOUNT 1800 OUT	300	600	490
DUO-RV-MOUNT 3000 OUT	400	750	490
DUO-RV-MOUNT 4200 OUT	470	900	490
DUO-RV-MOUNT 6000 OUT	550	1050	490
DUO-RV-MOUNT 7800 OUT	630	1200	620

**DUO-RV-IAE**

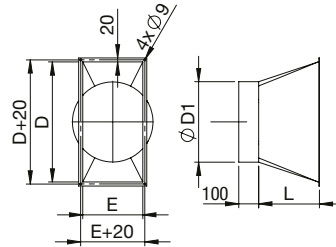
- Flexible coupling to connect inlet and outlet necks of HVAC unit with pipe lines
- Prevents transfer of vibration to air-ducts
- Flange width 20 mm
- To be delivered for unit sizes RV 800–7800



Type	A [mm]	B [mm]	C [mm]	D [mm]
DUO-RV-IAE-800	490	180	510	200
DUO-RV-IAE-1800	620	320	640	340
DUO-RV-IAE-3000	770	420	790	440
DUO-RV-IAE-4200	920	490	940	510
DUO-RV-IAE-6000	1070	570	1090	590
DUO-RV-IAE-7800	1220	650	1240	670

**DUO-RV-PRO**

- Transition piece for round piping at outlets of unit sizes RV 800–7800
- Flange width 20 mm



Type	D [mm]	D1 [mm]	E [mm]	L [mm]
DUO-DV-PRO-800	470	247	160	300
DUO-DV-PRO-1800	600	397	300	350
DUO-DV-PRO-3000	750	557	400	400
DUO-DV-PRO-4200	900	627	470	450
DUO-DV-PRO-6000	1050	707	550	500
DUO-DV-PRO-7800	1200	797	630	500