DUOVENT® COMPACT DV TOP

DR
Digireg®

VCC
VAV-CAV-COP control types

ErP
ErP conform

91%
Heat recovery efficiency

EC
EC-motor

BP
Bypass

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 controlled by external 0…10 V signal, comes with built-in thermal protection. Motor efficiency class is rated IE4, electric motor insulation protection is IP54.

Heating and Cooling provisions
Based on project requirements each unit can be fitted with hot water coil or electric heat strip to provide heating. Chilled water coil or DX coil to provide cooling. Heat pump can provide both, primary source of heating and cooling with water coil or electric heat strip serving as a secondary source of heating. Coils are built from copper tubes and aluminium sheets locked inside a galvanized frame. Where better protection is needed optional anti-corrosion coating is available. Electric heat strip comes equipped with a safety thermostat activating at temperature 60°C and emergency thermostat with manual reset and activating at temperature 120 °C.

Heat Exchanger
A cross-flow heat exchanger made out of aluminium exchanges thermal energy from one stream to another, mounted inside AHU. Air inlet side is equipped with by-pass damper. Mixing and recirculation damper can be added per request (marked as C or MX).

Filters
Unit size 500, 1000, 1500, 2200 and 3600 comes with 96 mm thick F7 and M5 type of filters. For unit size 5100, 6000 and 7100 outside air and return air inlets come fitted with either two sets of 48 mm thick filters or one 96 mm filter. Filter type classification rated G4 to F9 is available. MFL filter cartridges for multi-stage filtrations are available upon request. Filter access is provided through a set of removable service doors.

Dampers
Aluminium control dampers are mounted on outside air inlet and return air inlet. Dampers are installed with Belimo actuators and comply with class 2 leakage rate, EN1751. Optional class 3 leakage rate is available upon request.

Power supply
Either 1× 230 V / 50 Hz or 3× 400 V / 50 Hz, depends on AHU's configuration. Control wires and power cables are installed running through plastic penetration inlets pre-drilled in panels and rubber penetration gromets with membrane running on the inside of unit.

Control
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.

Assembly
In a vertical position with the necks at the top (or top and sides). There is a left and the right variant. In front of and next to the unit it is necessary to have a handling space for the needs of service interventions, replacement of filters, etc. There must be a space under the unit for the installation of a condensate drain. The specific arrangement of the sockets with respect to the operating side of the unit must be specified, see further. The unit must be mounted with a slope 5 % towards the condensate drain. HVAC piping is connected to prepared round (DUOVENT® DV TOP 500, 1000, 1500, 2200, 3600) or rectangular necks (DUOVENT® DV TOP 5100, 6000, 7800) – we recommend to mount flexible sleeves for the pipes between the pipe necks and the unit to eliminate the vibration transmission from the unit to the pipeline. Rectangular sockets are integrated in the wall sandwich panel of the unit and the spacing of the corner connection holes is optimized for P20 connection flanges.

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 ±3 dB tolerance.

Warranty terms
DUOVENT® COMPACT DV TOP including DVAV control system, DCAV and DCOP must be put into operation exclusively by the Seller or a person designated for that purpose by the Seller. Failure to comply with this condition will result in 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.

Information
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. Consult our technical department for the design of the pool hall ventilation unit (SP code version).

HVAC accessories

- **Sonoflex®, Termoflex®** flexible hosed and fittings (K7.3)
- **SPIRO** round spiro pipes and fittings (K7.3)
- **KAA, IAE** flexible couplings (K7.1)
- **MAA, IAA** silencers (K7.1)
- **RSK, TSK** check valves (K7.1)
- **MSK, IJK** throttles and mixing flaps (K7.1)
- Disc valves, diffusers, nozzles, grilles (K7.2)
- **Rain blinds** (K7.1)
- **MBE, IBE, IBW, IKW** electric and water heaters for round and square pipes (K7.1)
- **MKW, IKW, IKF, MKF** water coolers and direct evaporators for round and square pipes (K7.1)
- **MFL, IFL, MFLT** filter cassettes for round and square pipes (K7.1)
- **ESU** mixing nodes (K7.1)
- **SF-P** vacuum siphon (K7.1)

EL accessories

- **Digireg®** digital control system for units with heating and cooling, controller with touch-screen display (K9)
- **JTR** triac switch for eletric heater power control (K9)
- **HIG, HYG** humidistats (K8.2)
- **EDF-CO2, SQA CO2** sensors (K8.2)
- **RTR** thermostats (K8.2)
- **DTS PSA** pressure sensors (K8.2)
- **Actuators** (K8.2)
- **AIRSENS** air quality sensors (K 8.2)

Model Number Abbreviation List

DUOVENT	COMPACT	DV	3600	DI	DX	MX	KL	F7/M5	DVAV	P	TOP	SP
			1	2	3	4	5	6	7	8	9	10

1 – unit size – 500, 800, 1500, 2200, 3600, 5100, 6000, 6900, 7800
2 – type of heating:
DI – electric
DCA – water, temperature gradient 80/60 °C
DCB – water, temperature gradient 45/35 °C
3 – 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
4 – **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)
5 – **KL** – outside air and return air dampers, without actuators (when unit is ordered with Digireg MAR system, the power actuator becomes part of delivery)
6 – classification of air filters for outside air and return air inlets (G4–F9)
7 – type of unit control system:
D – Digireg®
8 – type of airflow regulation:
VAV – variable air volume
CAV – constant air volume
COP – constant operating pressure
9 – placement of unit's inlets and outlets
10 – **SP** – setup for pool ventilation. Needs to be consulted with Elektrodesign's technical department

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 DV 3600 DI DX MX KL F7/M5 DVAV P TOP
Unit size 3600 with electric heater, direct evaporator, bypass and mixing damper, integrated dampers for suction and exhaust, filtration on inlet F7, single--stage filtration on outlet M5, MaR system Digireg with VAV, position P.

DUOVENT® COMPACT DV TOP

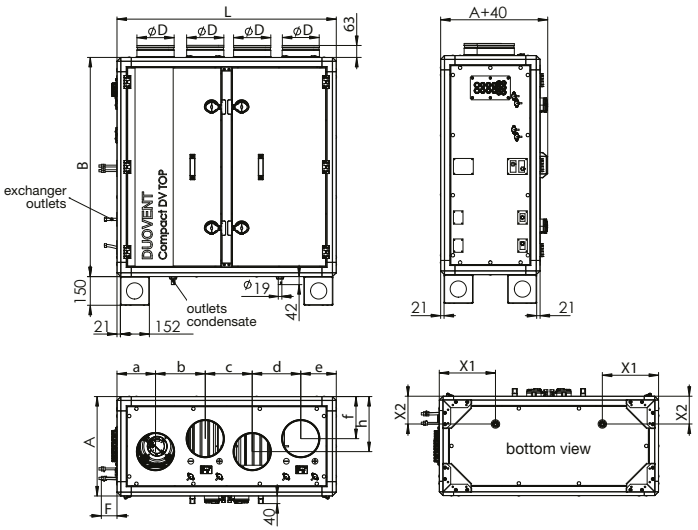
Soler&Palau Ventilation Group

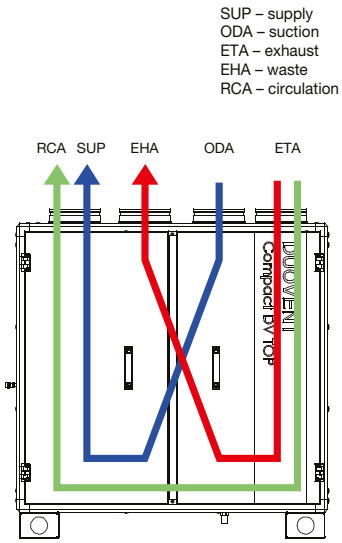
Type	Nominal flow	voltage	Inlet/exhaust fan		heater		cooler power*	efficiency*	unit max. air flow	control system	weight**
			max. input power	current	power*	current					
	[m³/h]	[V/Hz]	[W]	[A]	[kW]	[A]	[kW]	[%]	[m³/h]	Digireg®	[kg]
500 D	500	1× 230V 50Hz	145/120	0.6/0.5	–	–	–	88	550	M1–Vx	110–122
500 DCA					3.6	–	–				
500 DCB					2.4	–	–				
500 DCC					–	–	3.6				
500 DX					–	–	3.5				
500 DI					2	8.7	–			M1–E2	
1000 D	1000	1× 230V 50Hz	312/260	1.4/1.1	–	–	–	86.8	1200	M1–Vx	148–165
1000 DCA					6.4	–	–				
1000 DCB					4.3	–	–				
1000 DCC					–	–	7.1				
1000 DX					–	–	4.5				
1000 DI					4	17.4	–			M1–E8–2	
1500 D	1500	3× 400V 50Hz (1× 230V 50Hz)	560/480	2.4/2.1	–	–	–	87.7	1800	M1–Vx (M3-Vx)	168–190
1500 DCA					10	–	–				
1500 DCB					7.8	–	–				
1500 DCC					–	–	11.1				
1500 DX					–	–	10.5				
1500 DI					4.5	6.5	–			M1–E8–2	
2200 D	2200	3× 400V 50Hz	715/575	1/0.8	–	–	–	89	2600	M3–Vx	328–355
2200 DCA					16	–	–				
2200 DCB					11.4	–	–				
2200 DCC					–	–	16.9				
2200 DX					–	–	15.6				
2200 DI					9	13	–			M3–E15	
3600 D	3600	3× 400V 50Hz	1253/1098	1.8/1.6	–	–	–	88.5	4200	M3–Vx	365–399
3600 DCA					23.7	–	–				
3600 DCB					17.5	–	–				
3600 DCC					–	–	27.1				
3600 DX					–	–	25.4				
3600 DI					13.5	19.5	–			M3–E15	
5100 D	5100	3× 400V 50Hz	1886/1570	2.7/2.3	–	–	–	90.5	5500	M3–Vx	528–581
5100 DCA					34.3	–	–				
5100 DCB					25.1	–	–				
5100 DCC					–	–	37.3				
5100 DX					–	–	34.8				
5100 DI					22.5	33	–			M3–E24	
6000 D	5900	3× 400V 50Hz	2194/1880	3.2/2.7	–	–	–	90.5	6300	M3–Vx	603–661
6000 DCA					42	–	–				
6000 DCB					29.2	–	–				
6000 DCC					–	–	44.9				
6000 DX					–	–	40.7				
6000 DI					22.5	33	–			M3–E24	
7800 D	7400	3× 400V 50Hz	2692/2335	3.9/3.4	–	–	–	90.8	8000	M3–Vx	698–774
7800 DCA					49.4	–	–				
7800 DCB					38.4	–	–				
7800 DCC					–	–	57				
7800 DX					–	–	53.7				
7800 DI					30	43.5	–			M3–E36	

* at nominal air flow, t_e = 12 °C/90 % r.h., t_i = 22 °C/50 % r.h., t_e = 35 °C/35 % r.h. (SUMMER)
** depending on particular variant
Water cooler power DCC for t_e = 35 °C/35 % r.h., t_w = 6/12 °C. Water heater power DCA for t_e = 10 °C, t_w = 80/60 °C.
Water heater power DCB for t_e = 10 °C, t_w = 45/35°C. Direct evaporating unit power DX for R410A coolant, t_e = 35°C/35 % r.h., t_{vyp}= 6 °C.

Dimensions

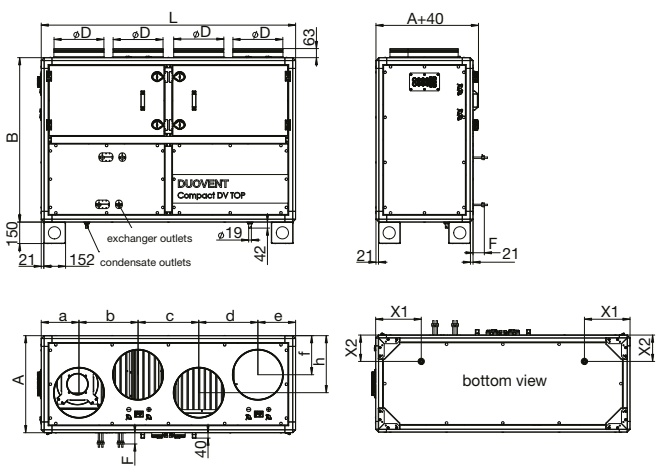
DUOVENT® COMPACT DV 500, 1000 TOP

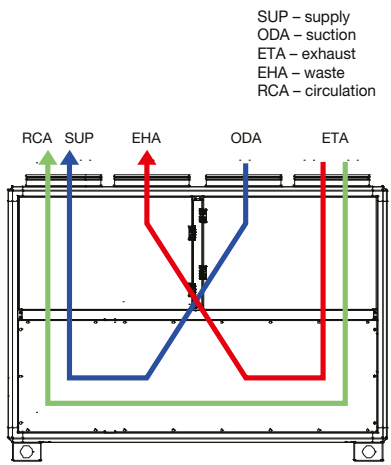




Type	A [mm]	B [mm]	L [mm]	Ø D [mm]	F [mm]	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	h [mm]	X1 [mm]	X2 [mm]
DV 500 TOP	521	1149	1149	200	51	202	260,5	246	240,5	254,5	220,5	288,5	320	150
DV 1000 TOP	678	1149	1306	250	51	207	303	297	292	207	246	404	255	180

DUOVENT® COMPACT DV 1500 to 3600 TOP

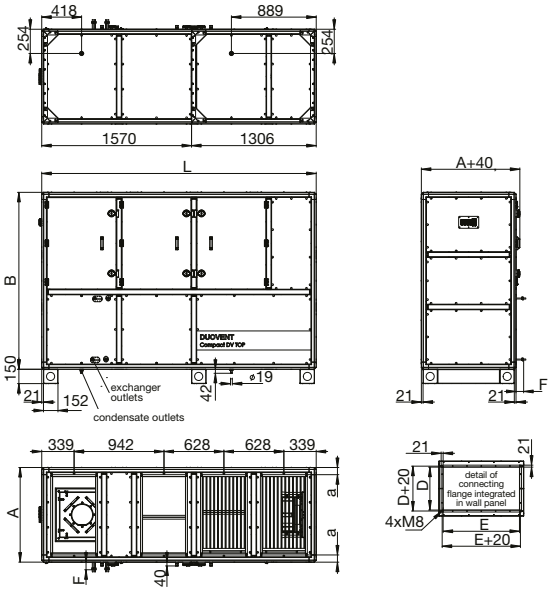


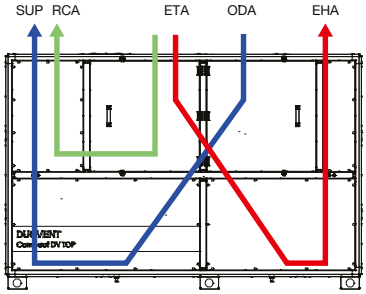


Type	A [mm]	B [mm]	L [mm]	Ø D [mm]	F [mm]	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	h [mm]	X1 [mm]	X2 [mm]
DV 1500 TOP	678	1149	1777	355	51	263,5	413	424	413	263,5	273	398,5	315	180
DV 2200 TOP	835	1463	1934	400	51	292	447	498	452	287	321,5	521,5	290	180
DV 3600 TOP	992	1620	2091	450	51	307,5	480,5	515	480,5	307,5	351	641	290	180

DUOVENT® COMPACT DV TOP

DUOVENT® COMPACT DV 5100 to 7800 TOP





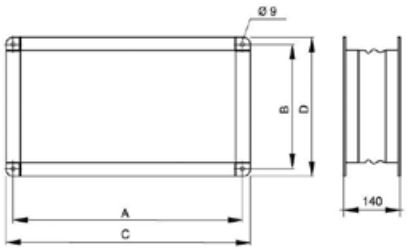
SUP – supply
ODA – suction
ETA – exhaust
EHA – waste
RCA – circulation

Type	A [mm]	B [mm]	L [mm]	D [mm]	E [mm]	F [mm]	a [mm]
DV 5100 TOP	992	1777	2876	450	800	51	96
DV 6000 TOP	1149	1777	2876	450	950	51	99.5
DV 7800 TOP	1463	1777	2876	450	1250	51	106.5

Accessories

DUO-DV TOP-IAE

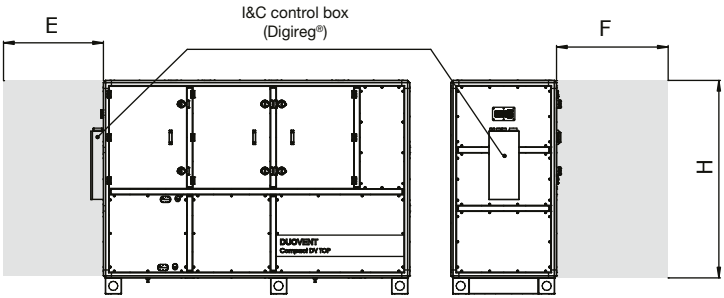
- Flexible coupling to connect inlet and outlet necks of HVAC unit with pipe lines
- Prevents transfer of vibration to air-ducts
- Supplied for unit sizes DV TOP 5100–7800
- Flange width 20 mm

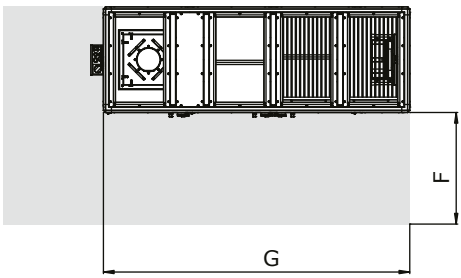


Type	A [mm]	B [mm]	C [mm]	D [mm]
DUO-DV TOP-IAE-5100	820	470	840	490
DUO-DV TOP-IAE-6000	970	470	990	490
DUO-DV TOP-IAE-7800	1270	470	1290	490

Supplementing figures

Minimum service space (drawn position P):





Size	E [mm]	F [mm]	G [mm]	H [mm]
500	940	570	1250	1150
1000	940	700	1350	1150
1500	940	900	1800	1150
2200	940	1000	1950	1470
3600	940	1050	2100	1620
5100	940	1050	2880	1860
6000	940	1200	2880	1860
7800	940	1600	2880	1860

Installation examples of DUOVENT® COMPACT DV TOP units:

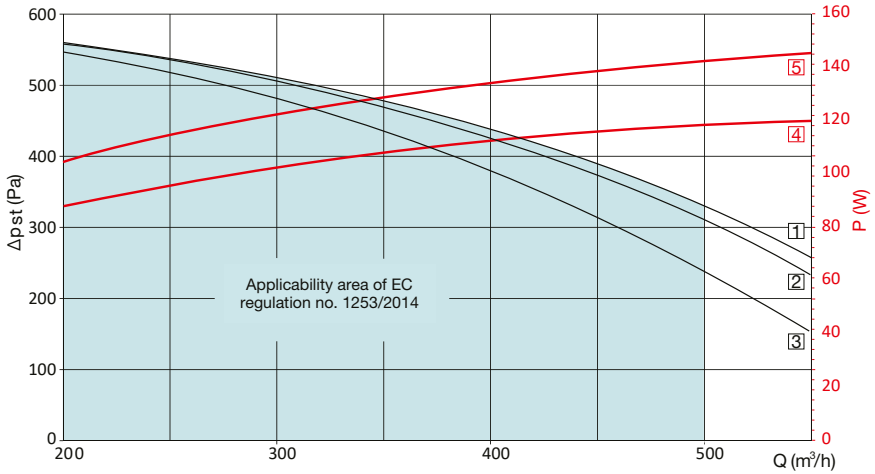
DUOVENT® COMPACT DV TOP

Soler&Palau Ventilation Group

Characteristics

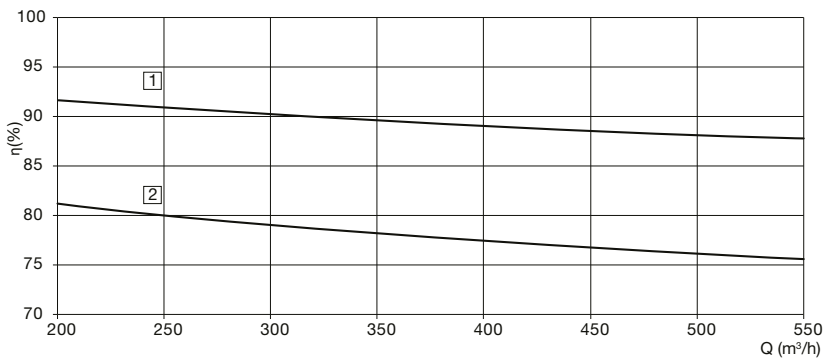
Q air flow (m³/h)
Δp_{st} unit external static pressure (Pa)
P electric input (W)
η heat recuperation efficiency (%)

DUOVENT® COMPACT DV 500



1 inlet – F7+DV
2 inlet – F7+DV+DCB
3 inlet – F7+DV+DCB+DCC
4 el. input – EXHAUST (W)
5 el. input – SUPPLY (W)

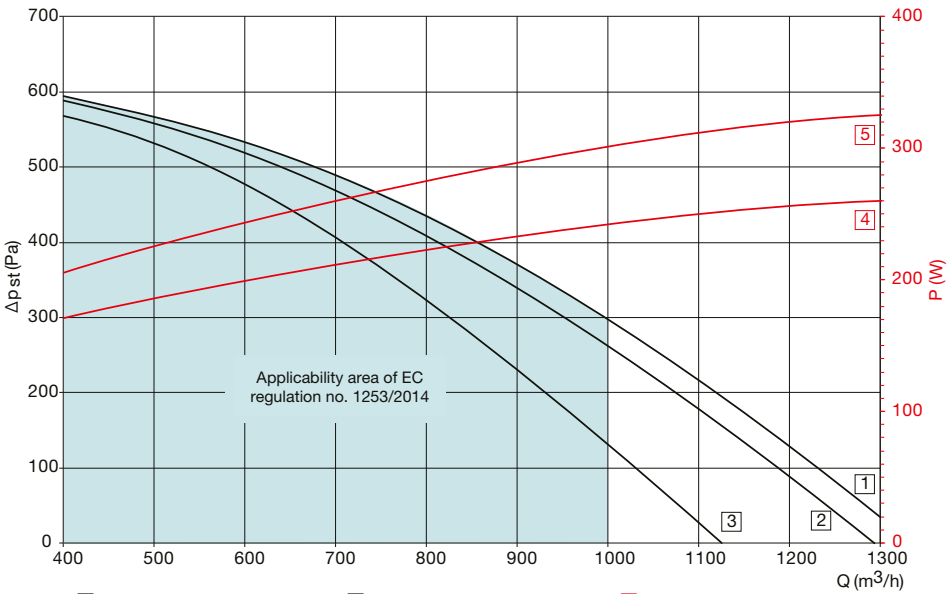
DUOVENT® COMPACT DV 500 – recuperation efficiency



1 Efficiency for parameters:
EXHAUST: 22 °C/50 % r.h.
SUPPLY: -12 °C/90 % r.h.

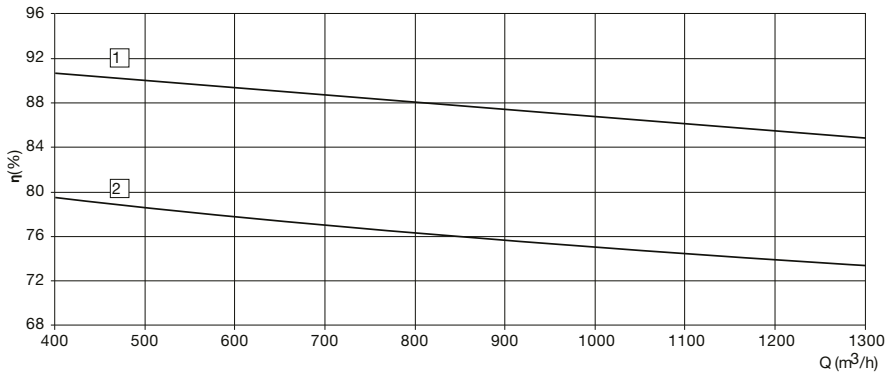
2 Efficiency acc. to EC/1253/2014

DUOVENT® COMPACT DV 1000 TOP



1 inlet – F7+DV
2 inlet – F7+DV+DCB
3 inlet – F7+DV+DCB+DCC
4 el. input – EXHAUST (W)
5 el. input – SUPPLY (W)

DUOVENT® COMPACT DV 1000 TOP – recuperation efficiency

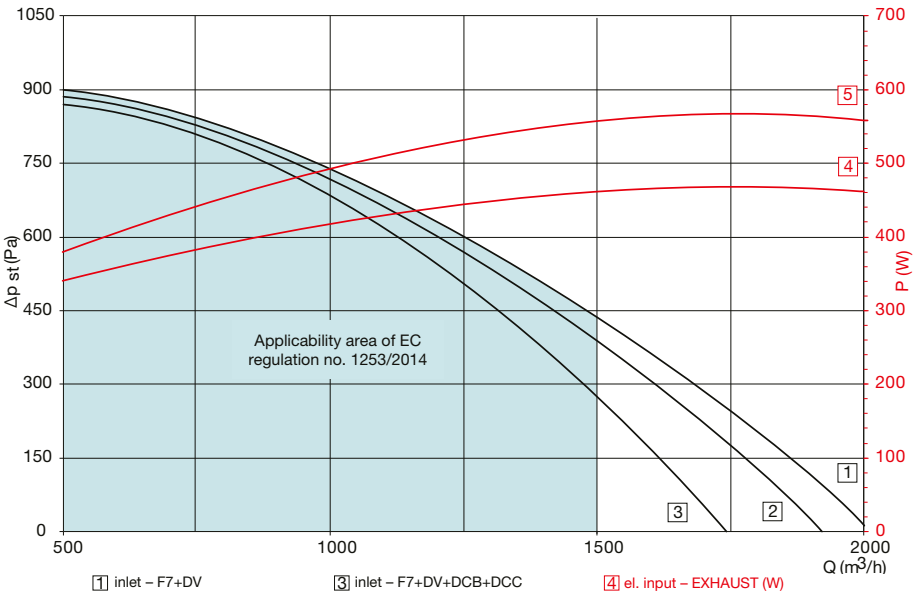


1 Efficiency for parameters:
EXHAUST: 22 °C / 50 % r.h.
SUPPLY: -12 °C / 90 % r.h.

2 Efficiency acc. to EC/1253/2014

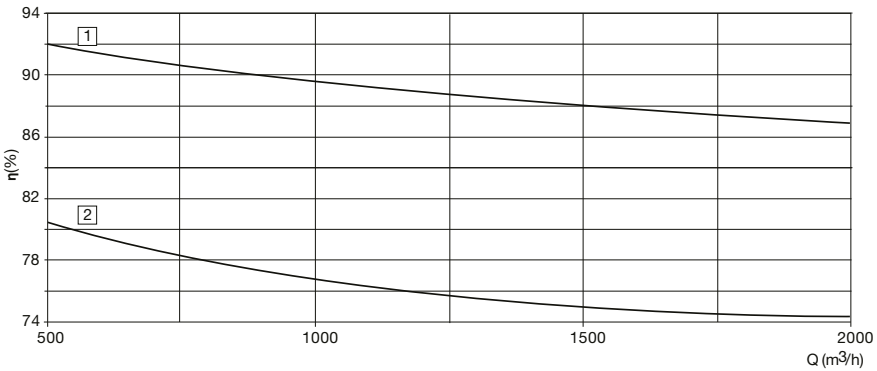
Soler&Palau Ventilation Group

DUOVENT® COMPACT DV 1500 TOP



1 inlet – F7+DV
2 inlet – F7+DV+DCB
3 inlet – F7+DV+DCB+DCC
4 el. input – EXHAUST (W)
5 el. input – SUPPLY (W)

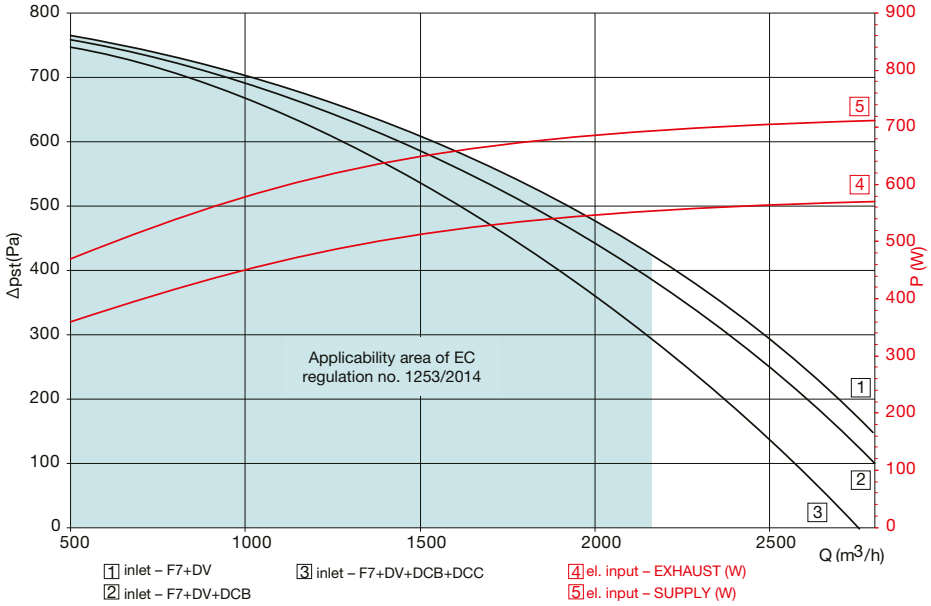
DUOVENT® COMPACT DV 1500 TOP – recuperation efficiency



1 Efficiency for parameters:
EXHAUST: 22 °C / 50 % r.h.
SUPPLY: -12 °C / 90 % r.h.

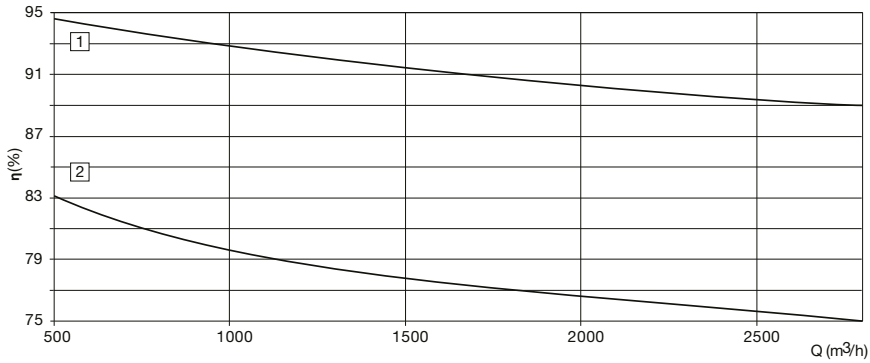
2 Efficiency acc. to EC/1253/2014

DUOVENT® COMPACT DV 2200 TOP



1 inlet – F7+DV
2 inlet – F7+DV+DCB
3 inlet – F7+DV+DCB+DCC
4 el. input – EXHAUST (W)
5 el. input – SUPPLY (W)

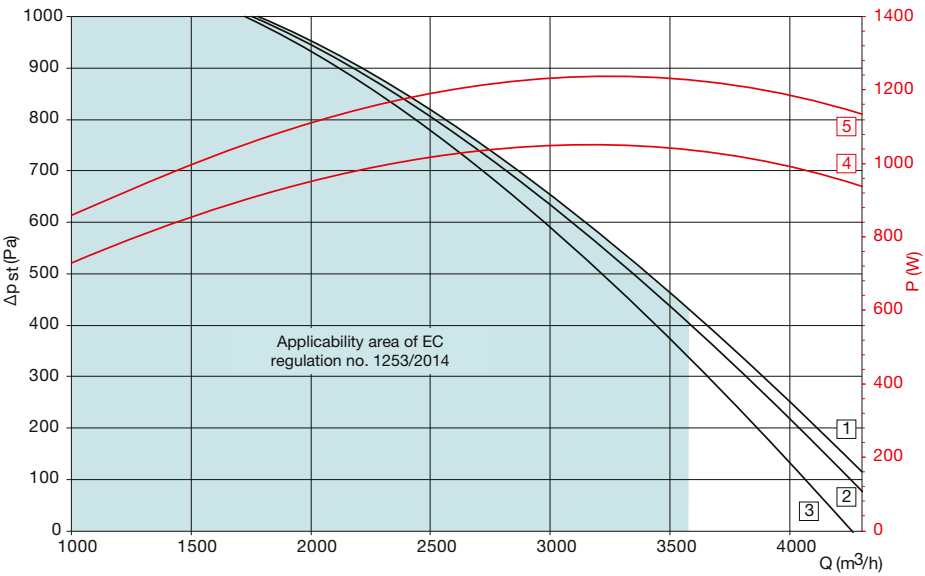
DUOVENT® COMPACT DV 2200 TOP – recuperation efficiency



1 Efficiency for parameters:
EXHAUST: 22 °C / 50 % r.h.
SUPPLY: -12 °C / 90 % r.h.

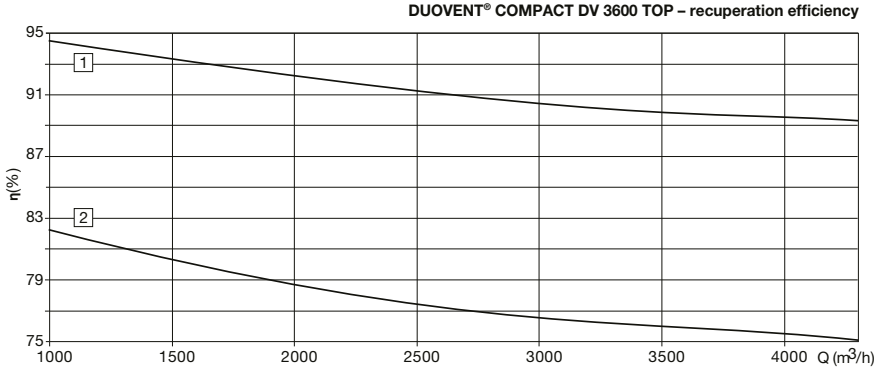
2 Efficiency acc. to EC/1253/2014

DUOVENT® COMPACT DV 3600 TOP



1 inlet – F7+DV
2 inlet – F7+DV+DCB
3 inlet – F7+DV+DCB+DCC
4 el. input – EXHAUST (W)
5 el. input – SUPPLY (W)

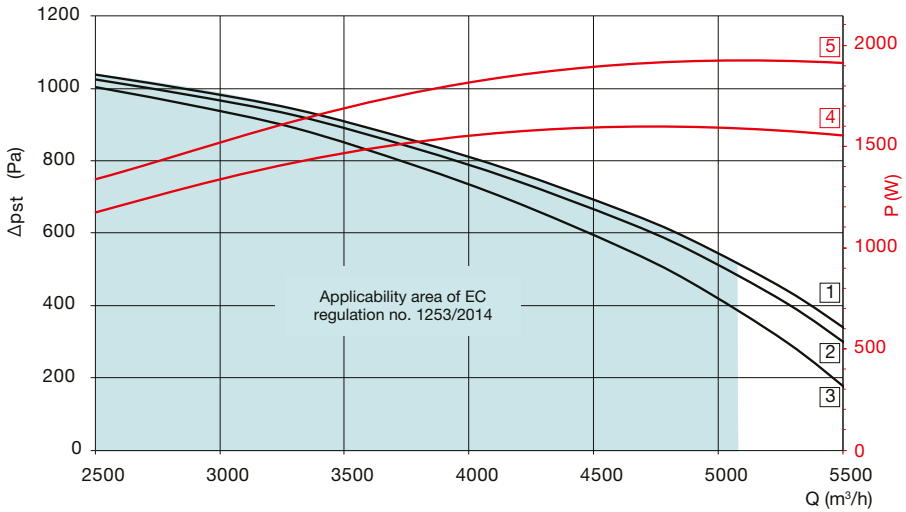
DUOVENT® COMPACT DV 3600 TOP – recuperation efficiency



1 Efficiency for parameters:
EXHAUST: 22 °C / 50 % r.h.
SUPPLY: -12 °C / 90 % r.h.

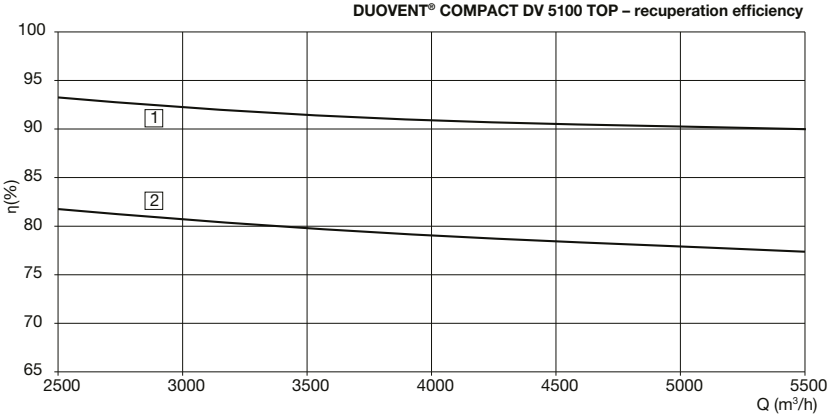
2 Efficiency acc. to EC/1253/2014

DUOVENT® COMPACT DV 5100 TOP



1 inlet – F7+DV
2 inlet – F7+DV+DCB
3 inlet – F7+DV+DCB+DCC
4 el. input – EXHAUST (W)
5 el. input – SUPPLY (W)

DUOVENT® COMPACT DV 5100 TOP – recuperation efficiency

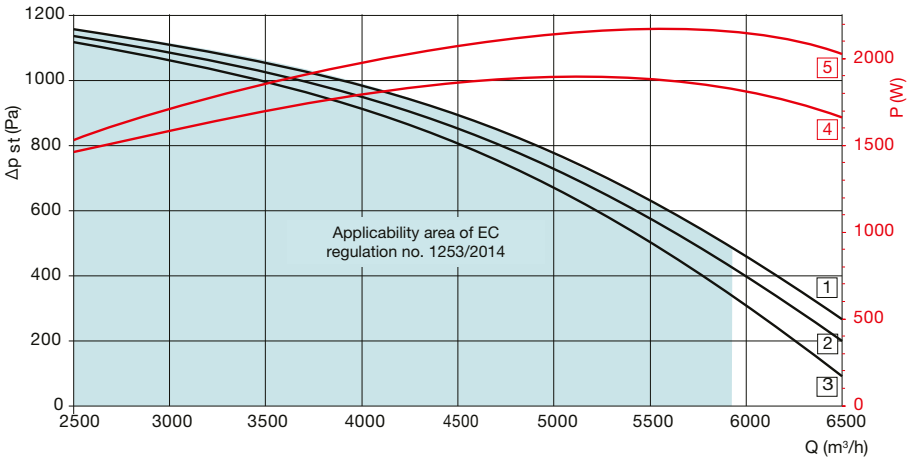


1 Efficiency for parameters:
EXHAUST: 22 °C/50 % r.h.
SUPPLY: -12 °C/90 % r.h.

2 Efficiency acc. to EC/1253/2014

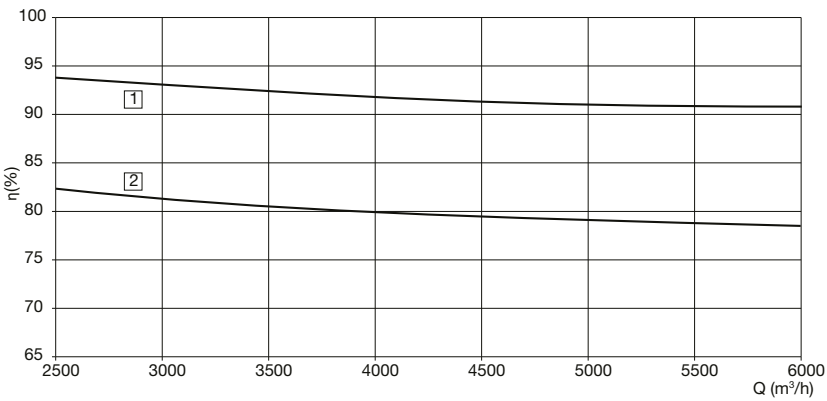
Soler&Palau Ventilation Group

DUOVENT® COMPACT DV 6000 TOP



1 inlet – F7+DV
2 inlet – F7+DV+DCB
3 inlet – F7+DV+DCB+DCC
4 el. input – EXHAUST (W)
5 el. input – SUPPLY (W)

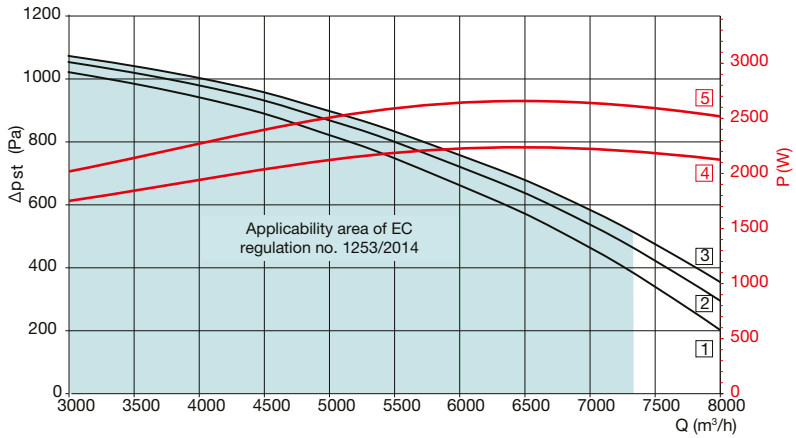
DUOVENT® COMPACT DV 6000 TOP – recuperation efficiency



1 Efficiency for parameters:
EXHAUST: 22 °C / 50 % r.h.
SUPPLY: -12 °C / 90 % r.h.

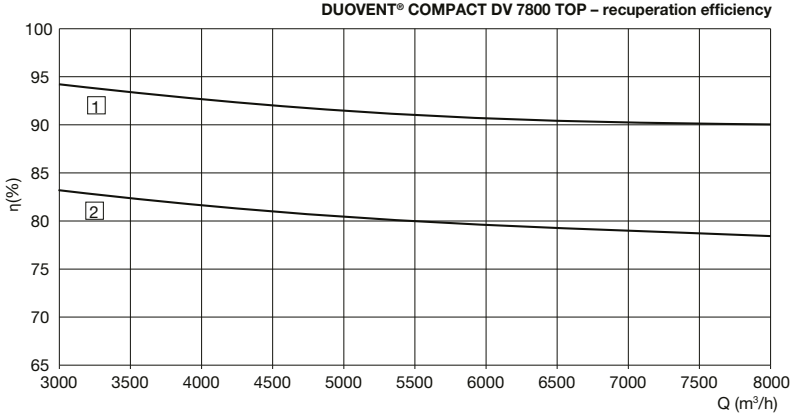
2 Efficiency acc. to EC/1253/2014

DUOVENT® COMPACT DV 7800 TOP



1 inlet – F7+DV
2 inlet – F7+DV+DCB
3 inlet – F7+DV+DCB+DCC
4 el. input – EXHAUST (W)
5 el. input – SUPPLY (W)

DUOVENT® COMPACT DV 7800 TOP – recuperation efficiency



1 Efficiency for parameters:
EXHAUST: 22 °C / 50 % r.h.
SUPPLY: -12 °C / 90 % r.h.

2 Efficiency acc. to EC/1253/2014

Recuperation

DUOVENT® COMPACT DV TOP

Soler&Palau Ventilation Group

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

DUOVENT® COMPACT DV 500 TOP (for Q = 500 m³/h)

	Hz	63	125	250	500	1000	2000	4000	8000	L_{wA}
L_{WA}	fresh	32	40	48	52	53	54	47	44	59
	intel	37	47	56	64	69	71	65	61	75
	exhaustion	34	43	51	57	60	60	54	53	65
	waste	33	41	51	59	61	64	57	54	67
	environment (1 m)**	30	43	50	48	44	41	28	20	53

DUOVENT® COMPACT DV 1000 TOP (for Q = 1000 m³/h)

	Hz	63	125	250	500	1000	2000	4000	8000	L_{wA}
L_{WA}	fresh	43	49	58	58	58	53	47	43	63
	intel	48	57	70	71	75	73	66	62	79
	exhaustion	42	52	59	62	63	59	53	50	68
	waste	41	50	63	64	66	64	57	53	71
	environment (1 m)**	40	52	63	55	50	42	29	21	64

DUOVENT® COMPACT DV 1500 TOP (for Q = 1500 m³/h)

	Hz	63	125	250	500	1000	2000	4000	8000	L_{wA}
L_{WA}	fresh	40	48	57	62	62	58	50	48	66
	intel	49	57	68	75	81	78	71	67	84
	exhaustion	48	54	61	68	69	65	59	58	73
	waste	45	54	64	70	74	71	64	61	77
	environment (1 m)**	42	54	62	59	57	48	35	27	65

DUOVENT® COMPACT DV 2200 TOP (for Q = 2200 m³/h)

	Hz	63	125	250	500	1000	2000	4000	8000	L_{wA}
L_{WA}	fresh	35	42	55	56	53	55	47	41	61
	intel	42	52	67	70	76	76	69	65	80
	exhaustion	36	45	57	61	60	60	53	49	66
	waste	36	46	61	65	69	68	61	56	73
	environment (1 m)**	34	48	60	54	52	45	32	24	62

* data for specific configuration: Inlet-M7+DV+DCC+DCA / Outlet-M5+DV

** casing damping of R_w value

DUOVENT® COMPACT DV 3600 TOP (for Q = 3600 m³/h)

	Hz	63	125	250	500	1000	2000	4000	8000	L_{wA}
L_{WA}	fresh	37	44	59	62	58	59	52	47	66
	intel	44	54	71	75	82	81	74	71	86
	exhaustion	41	48	62	68	66	66	60	57	72
	waste	41	50	66	71	75	74	67	64	79
	environment (1 m)**	37	51	65	60	58	51	38	30	67

DUOVENT® COMPACT DV 5100 TOP (for Q = 5100 m³/h)

	Hz	63	125	250	500	1000	2000	4000	8000	L_{wA}
L_{WA}	fresh	38	44	63	61	58	59	52	47	67
	intel	49	57	74	77	81	79	73	68	85
	exhaustion	40	50	67	67	64	65	59	56	72
	waste	45	53	70	72	74	71	65	61	78
	environment (1 m)**	42	54	68	61	57	48	36	27	69

DUOVENT® COMPACT DV 6000 TOP (for Q = 5900 m³/h)

	Hz	63	125	250	500	1000	2000	4000	8000	L_{wA}
L_{WA}	fresh	38	44	65	62	60	60	53	50	68
	intel	49	57	75	78	82	80	74	71	86
	exhaustion	42	48	70	68	66	66	60	61	74
	waste	45	53	71	73	76	72	66	65	80
	environment (1 m)**	42	54	69	62	58	49	37	31	70

DUOVENT® COMPACT DV 7800 TOP (for Q = 7400 m³/h)

	Hz	63	125	250	500	1000	2000	4000	8000	L_{wA}
L_{WA}	fresh	50	54	67	65	60	59	51	53	70
	intel	56	64	77	80	84	80	72	73	87
	exhaustion	55	59	71	72	67	66	59	64	76
	waste	53	51	74	76	77	72	65	67	82
	environment (1 m)**	49	61	71	65	60	49	36	33	73

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

Size unit	Nominal air flow	SFP_{int}	recuperation efficiency	$SFP_{int\ LIMIT\ 2016}$	external pressure
	[m³/h]	[W/(m³/s)]	[%]	[W/(m³/s)]	[Pa]
500	500	657	76.4	1181	250
1000	1000	866	75	1118	250
1500	1500	1059	74.9	1095	300
2200	2200	860	75.8	1092	300
3600	3600	992	76	1040	300
5100	5100	1030	77.9	1035	350
6000	5900	1001	78	1004	350
7800	7400	951	78.1	953	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]
500	80/60	3.6	500	10	31.4	10	0.16
	45/35	2.4	500		24.2	9	0.21
1000	80/60	6.8	1000	10	30.4	7	0.56
	45/35	5.2	1000		25.5	13	0.68
1500	80/60	10.0	1500	10	30.0	16	0.44
	45/35	7.8	1500		25.5	18	0.68
2200	80/60	16.0	2200	10	31.7	16	0.70
	45/35	11.4	2200		25.5	20	0.99
3600	80/60	23.7	3600	10	29.6	20	1.04
	45/35	17.5	3600		24.5	21	1.52
5100	80/60	34.3	5100	10	30.1	16	1.50
	45/35	25.1	5100		24.7	17	2.18
6000	80/60	42.0	5900	10	31.3	25	1.85
	45/35	29.2	5900		24.8	11	2.54
7800	80/60	49.4	7400	10	30.0	20	2.17
	45/35	38.4	7400		25.5	18	3.34

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]
500	6/12	3.6	500	35 °C/35 %	19.1	16	0.51
	6	3.5	500		18.9	44	-
1000	6/12	7.1	1000	35 °C/35 %	19.3	36	1.02
	6	4.5	1000		20.8	87	-
1500	6/12	11.1	1500	35 °C/35 %	18.6	12	1.58
	6	10.5	1500		19.4	75	-
2200	6/12	16.9	2200	35 °C/35 %	18.3	23	2.41
	6	15.6	2200		19.3	65	-
3600	6/12	27.1	3600	35 °C/35 %	18.5	21	3.88
	6	25.4	3600		19.4	55	-
5100	6/12	37.3	5100	35 °C/35 %	18.9	23	5.32
	6	34.8	5100		19.8	61	-
6000	6/12	44.9	5900	35 °C/35 %	18.5	29	6.41
	6	40.7	5900		19.8	92	-
7800	6/12	57	7400	35 °C/35 %	18.3	21	8.14
	6	53.7	7400		20	98	-

Technical data of electric heaters (supply power 3× 400 V/50 Hz, 1× 230 V/50 Hz), assignment of control kits

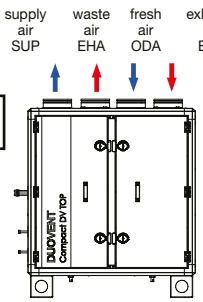
Size unit	type DI	power [kW]	no. of sections	Digireg®
500	IBE-500 DV TOP-2/1	2	1	M1-E2
1000	IBE-1000 DV TOP-4/2	4	2	M1-E8-2
1500	IBE-1500 DV TOP -4,5/1	4.5	1	M1-E8-2
2200	IBE-2200 DV TOP-9/2	9	2	M3-E15
3600	IBE-3600 DV TOP-13,5/2	13.5	2	M3-E15
5100	IBE-5100 DV TOP-22,5/1	22.5	1	M3-E24
6000	IBE-6000 DV TOP-22,5/1	22.5	1	M3-E24
7800	IBE-7800 DV TOP-30/1	30	1	M3-E36

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

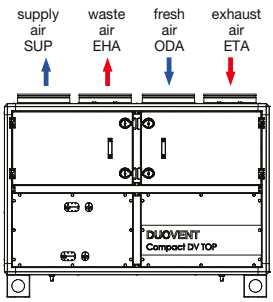
DUOVENT® COMPACT DV TOP

Neck variants

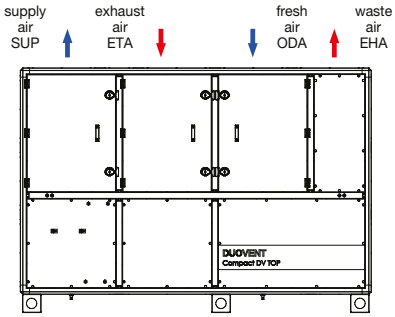
P



DV 500, 1000 TOP

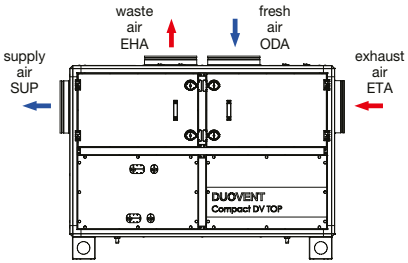


DV 1500, 2200, 3600 TOP

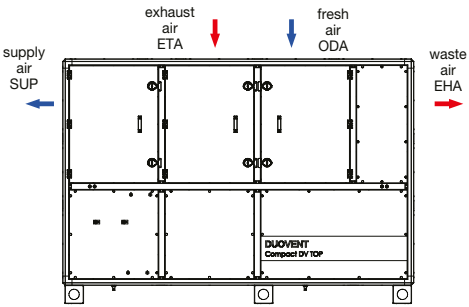


DV 5100, 6000, 7800 TOP

PB

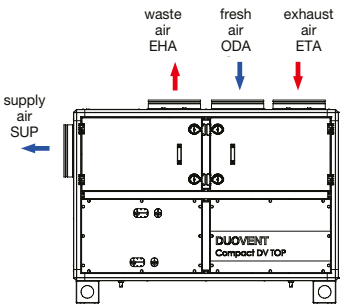


DV 1500, 2200, 3600 TOP

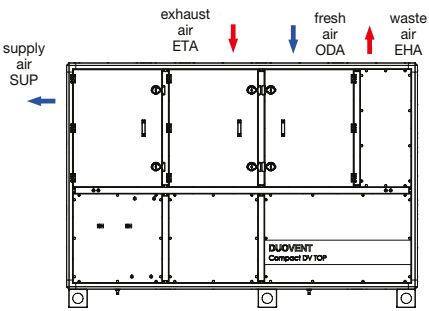


DV 5100, 6000, 7800 TOP

PBP

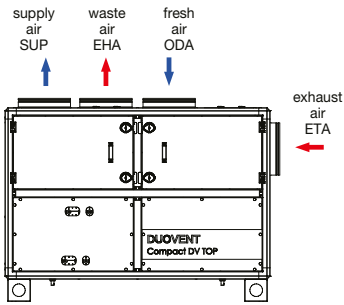


DV 1500, 2200, 3600 TOP

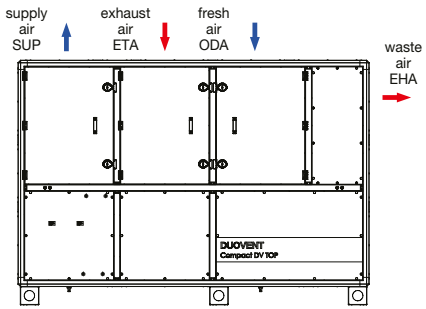


DV 5100, 6000, 7800 TOP

PBO



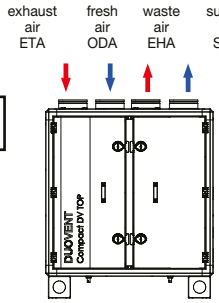
DV 1500, 2200, 3600 TOP



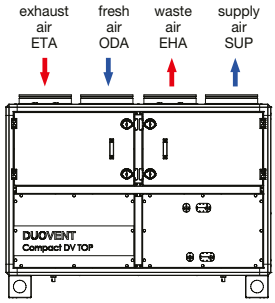
DV 5100, 6000, 7800 TOP

Neck variants

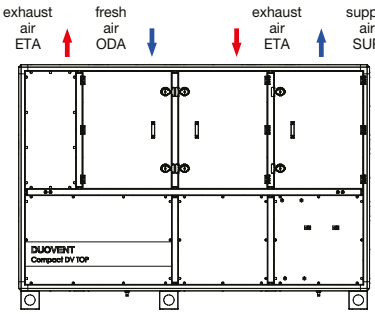
L



DV 500, 1000 TOP

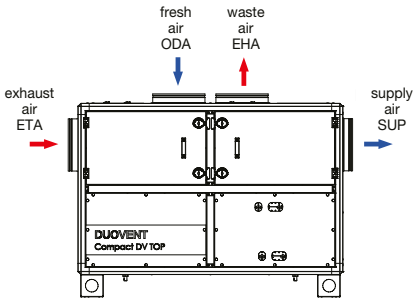


DV 1500, 2200, 3600 TOP

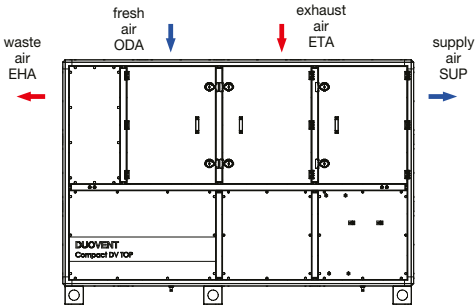


DV 5100, 6000, 7800 TOP

LB

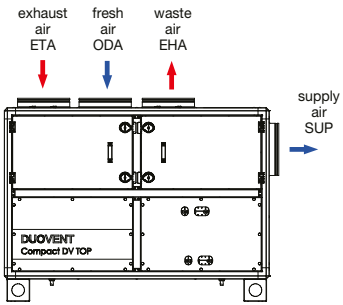


DV 1500, 2200, 3600 TOP

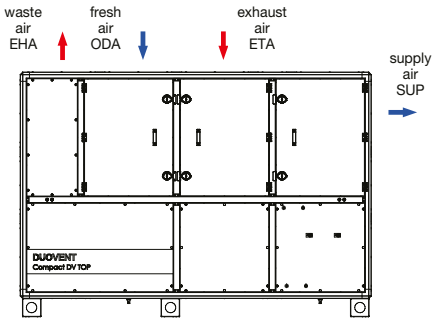


DV 5100, 6000, 7800 TOP

LBP

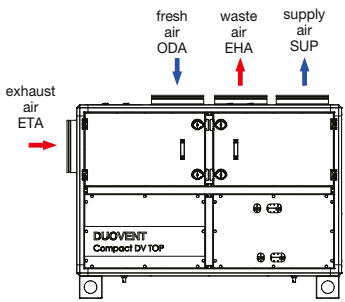


DV 1500, 2200, 3600 TOP

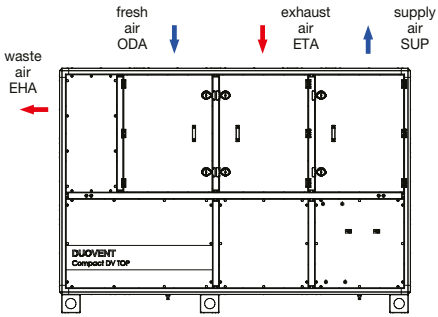


DV 5100, 6000, 7800 TOP

LBO



DV 1500, 2200, 3600 TOP



DV 5100, 6000, 7800 TOP