

HEAT RECOVERY URC 80 EC SERIES

AIR EXCHANGE SOLUTIONS SUITABLE FOR THE COMMERCIAL/TERTIARY SECTOR

HORIZONTAL/VERTICAL
INSTALLATION



UP TO **4500 m³/h**
WITH **ONE**
MACHINE



SHOPS



RESTAURANTS



OFFICES



GYMS



SPA



URC 80 EC

CHARACTERISTICS

- Self-supporting sheet metal structure with perimeter sealing gasket.
- Sandwich panels in galvanized sheet metal (thickness 25 mm) with insulation chin in polyurethane foam.
- Certified cross-flow aluminum exchanger Eurovent.
- Summer bypass with motorized damper installed.
- Brushless fans with electronic motor and control modulating.
- Very high efficiency and low noise levels (ErP 2018).
- Filters with low pressure drops, easy extraction: ePM1 70% (F7) on the fresh air, ePM10 50% (G4) on the air extracted.
- Universal installation (Z).

DESCRIPTION



ELECTRONICS S *STANDARD*: electrical preparation for quick connection of the unit to the mains.

CNV-BPM PANEL

Control panel for managing: fan speed adjustment (3 steps), ON/OFF bypass for free-cooling, filter alarm display (timer).

SUITABLE FOR URC 80 EC (ZS) SERIES

Code	Price
CNV-BPM	



ELECTRONICS E *EVOLUTE*: Solution with electrical panel on board the unit complete with microprocessor and dedicated regulation. Management of modulating fans, display of internal machine temperature probes, management of dirty filters with pressure switches, management of free-cooling with temperature probes, management of pre- and post-heating coils - water and electric cooling, management of on-off and modulating valves 2-3 points, dehumidification management through external batteries and humidity probes. Fan operation with variable speed, constant flow or constant pressure..

CNV-EVO PANEL

Advanced control panel. Large graphic interface with configuration menu and multilingual user menu. Adjustable timer for cleaning and filter replacements. Weekly timer management.

SUITABLE FOR URC 80 EC (ZE) SERIES

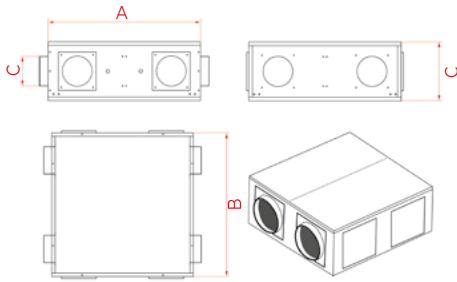
Code	Price
CNV-EVO	

TECHNICAL DATA

MODEL	Voltage (V) 50Hz	Air Flow (m ³ /h)	Useful pressure (Pa)	Max absorbed power (W)	Sound pressure Lp at 3 m dB(A)	Efficiency (%)	Code machine	Price machine	Control code
URC 80 EC 050	230	440	80	2 x 100	39,2	73	URC80-EC-050-ZS		CNV-BPM
							URC80-EC-050-ZE		CNV-EVO
URC 80 EC 070	230	680	50	2 x 145	40,8	73	URC80-EC-070-ZS		CNV-BPM
							URC80-EC-070-ZE		CNV-EVO
URC 80 EC 100	230	1000	120	2 x 305	43,9	72,5	URC80-EC-100-ZS		CNV-BPM
							URC80-EC-100-ZE		CNV-EVO
URC 80 EC 150	230	1500	80	2 x 305	45,1	74,5	URC80-EC-150-ZS		CNV-BPM
							URC80-EC-150-ZE		CNV-EVO
URC 80 EC 200	230	2000	80	2 x 270	47,7	74,5	URC80-EC-200-ZS		CNV-BPM
							URC80-EC-200-ZE		CNV-EVO
URC 80 EC 250	400	2800	100	2 x 725	48,9	74	URC80-EC-250-ZS		CNV-BPM
							URC80-EC-250-ZE		CNV-EVO
URC 80 EC 350	400	3500	80	2 x 1006	52,5	77,5	URC80-EC-350-ZS		CNV-BPM
							URC80-EC-350-ZE		CNV-EVO
URC 80 EC 450	400	4500	120	2 x 1006	54,1	74,5	URC80-EC-450-ZS		CNV-BPM
							URC80-EC-450-ZE		CNV-EVO

Data referring to conditions (UNI EN 13141-7): nominal air flow - external air 5 °C with 72% RH / exhaust air 25 °C with 28% RH)

DIMENSIONAL DATA

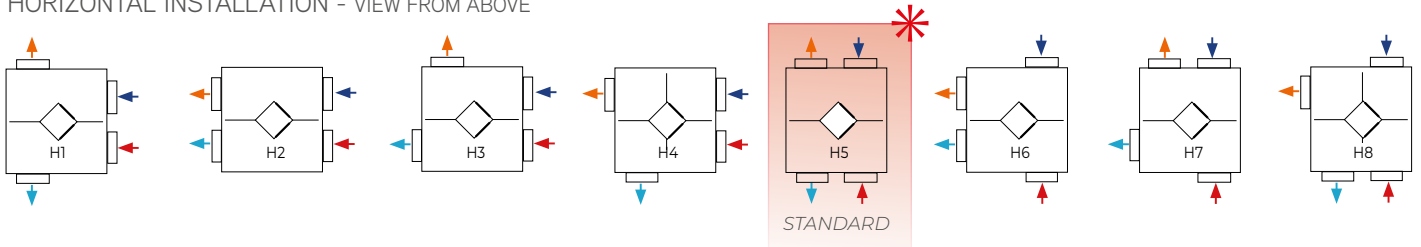


SIZES	Width A (mm)	Depth B (mm)	Height C (mm)	Ø Connections (mm)	Condensation Ø (mm)	Weight (kg)
050	750	750	390	160	20	75
070	1050	1050	400	200	20	98
100	1050	1050	400	200	20	103
150	1250	1250	550	315	20	155
200	1390	1390	610	355	20	225
250	1390	1390	610	355	20	231
350	1900	1900	710	400	20	245
450	1900	1900	860	450	20	275

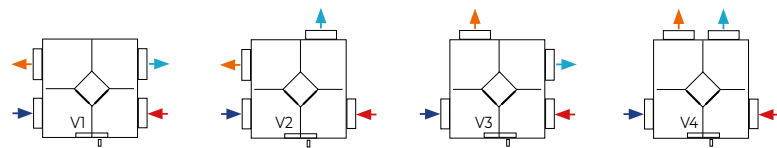
MACHINE CONFIGURATION

HORIZONTAL/VERTICAL INSTALLATION

HORIZONTAL INSTALLATION - VIEW FROM ABOVE



VERTICAL INSTALLATION - FRONT VIEW



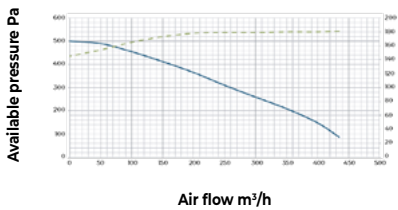
**NB Without indication of the configuration, the H5 is considered standard. For a different configuration, it must be specified when ordering. (E.g. H7/V4...)*

LEGEND

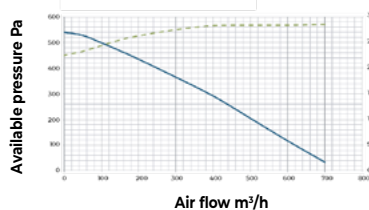
- ▶ EXTERNAL AIR INTAKE
- ▶ AMBIENT AIR DELIVERY
- ▶ ROOM AIR INTAKE
- ▶ OUTSIDE AIR EXHAUST

PERFORMANCE GRAPHS

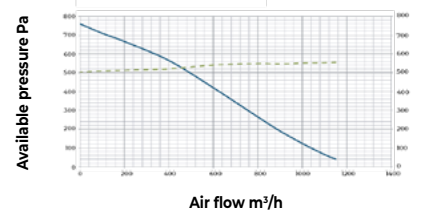
URC 80 EC 050



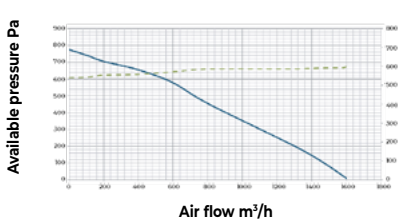
URC 80 EC 070



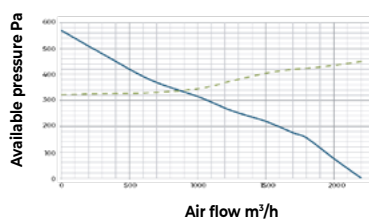
URC 80 EC 100



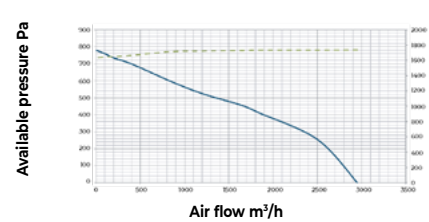
URC 80 EC 150



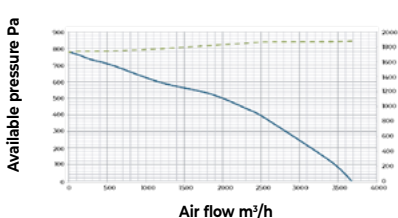
URC 80 EC 200



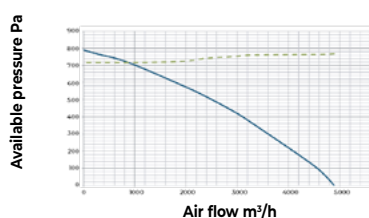
URC 80 EC 250



URC 80 EC 350



URC 80 EC 450



Data referring to the following conditions:
External air 5° 72% Ur - Internal air 25° 28% U.r.

BATTERIES COMBINED WITH THE URC 80 EC SERIES



BER - HEATING BATTERY

MODEL	Voltage (V/F/Hz)	Nominal electric power (Kw)	Temperature flow (pre) (1) °C	Temperature renewal (post) (2) °C	Ø (mm)	Size matching	Pairing ZS version	Pairing ZE version	Price	Code	Price
							Code	Code			
BER 1C	230/1/50	1	20	2	160	50	BER 1C-S	BER 1C-E			
BER 2C	230/1/50	2	20	2	200	70	BER 2C-S	BER 2C-E			
BER 3C	230/1/50	4	20	2	200	100	BER 3C-S	BER 3C-E			
BER 4C	230/1/50	4	20	2	315	150	BER 4C-S	BER 4C-E			
BER 5C	400/3/50	6	20	2	355	200	BER 5C-S	BER 5C-E			
BER 6C	400/3/50	9	20	2	355	250	BER 6C-S	BER 6C-E			
BER 7C	400/3/50	16	20	2	400	350	BER 7C-S	BER 7C-E			
BER 8C	400/3/50	20	20	2	450	450	BER 8C-S	BER 8C-E			

(1) Yields and technical data with nominal flow rates and temperatures: Air IN -8°

(2) Yields and technical data with nominal flow rates and temperatures: Air IN -10°

BAC - WATER HEATING BATTERY



FOR BATTERY MANAGEMENT, THE **ELECTRONIC TYPE E** MACHINE VERSION IS RECOMMENDED

MODEL	Thermal power nominal (Kw)	Water flow rate nominal (l/h)	Pressure drop water side (Kpa)	Pressure drop air side (Pa)	Temperature flow rate (°C)	Water conn. (Ø)	Ø (mm)	Pairing cut	Code	Price
BAC 1C	2,09	364	1,6	17	30,3	1/2"	160	050	BAC 1C	
BAC 2C	3,10	539	3,5	36	28,9	1/2"	200	070	BAC 2C	
BAC 3C	5,52	959	9,2	37	32	3/4"	200	100	BAC 3C	
BAC 4C	7,75	1347	19,3	37	32,4	3/4"	315	150	BAC 4C	
BAC 5C	10,42	1811	13,2	42	31,9	3/4"	355	200	BAC 5C	
BAC 6C	12,03	2091	19,5	27	29,1	1"	355	250	BAC 6C	
BAC 7C	15,86	2757	19,2	38	28,2	1"	400	350	BAC 7C	
BAC 8C	20,84	3623	33,1	38	28,5	1-1/4"	450	450	BAC 8C	

Yields and technical data with nominal flow rates and temperatures: Water IN / OUT -45° / -40° - Air IN 15° / 20%.

The dimensions vary depending on the exchange battery in combination with the necessary flow rate.

BAF - WATER HEATING/COOLING COIL



FOR BATTERY MANAGEMENT, THE **ELECTRONIC TYPE E** MACHINE VERSION IS RECOMMENDED

MODEL	Nominal cooling capacity Thermal power (Kw)	Water flow rate nominal (l/h)	Pressure drop water side (Kpa)	Pressure drop air side (Pa)	Temperature flow rate (°C)	Water conn. (Ø)	Ø (mm)	Pairing cut	Code	Price
BAF 1C	3,68	645	5	72	13,9	3/4"	160	050	BAF 1C	
BAF 2C	5,88	1034	13,3	120	14,1	3/4"	200	070	BAF 2C	
BAF 3C	8,12	1437	25,9	90	14,7	3/4"	200	100	BAF 3C	
BAF 4C	11,69	2060	26,2	89	14,2	1"	315	150	BAF 4C	
BAF 5C	15,02	2600	10,2	86	14,9	1"	355	200	BAF 5C	
BAF 6C	20,59	3570	12,3	100	15	1"	355	250	BAF 6C	
BAF 7C	30,65	5408	30,1	103	14,5	1"	400	350	BAF 7C	
BAF 8C	39,89	7038	29,5	94	14,3	1-1/4"	450	450	BAF 8C	

Yields and technical data with nominal flow rates and temperatures: Water IN / OUT -7° / 12° - Air IN 27° / 70%.

The dimensions vary depending on the exchange battery in combination with the necessary flow rate.

ACCESSORIES



SUPPORT FEET KIT

Kit of 4 support feet for vertical installation of the unit.

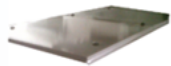
Code	Price
KIT-URC80-V	



HORIZONTAL RAIN ROOF

Hot-pressed Aluzinc steel rainproof roof for horizontal external installation of the unit.

Size matching	Code	Price
URC 80 EC 050	THE1-URC80	
URC 80 EC 070	THE2-URC80	
URC 80 EC 100	THE3-URC80	
URC 80 EC 150	THE4-URC80	
URC 80 EC 200	THE5-URC80	
URC 80 EC 250	THE6-URC80	
URC 80 EC 350	THE7-URC80	
URC 80 EC 450	THE8-URC80	



VERTICAL RAIN ROOF

Hot-pressed Aluzinc steel rainproof roof for vertical external installation of the unit.

Size matching	Code	Price
URC 80 EC 050	TVE1-URC80	
URC 80 EC 070	TVE2-URC80	
URC 80 EC 100	TVE3-URC80	
URC 80 EC 150	TVE4-URC80	
URC 80 EC 200	TVE5-URC80	
URC 80 EC 250	TVE6-URC80	
URC 80 EC 350	TVE7-URC80	
URC 80 EC 450	TVE8-URC80	



ACTIVE MACHINE SANITIZATION KIT

ACTIVE SANITIZATION MODULES



PRESSURE SWITCH DF

BOX in sandwich panel including:

- active sanitization device 'ACTIVE 6' or 'ACTIVE 12'
- pressure switch (for activating the device when air passage inside the box is detected)
- 2 dinghies (inlet/outlet) of the same diameter as the recuperator

Installation: on the external socket in order to sanitize the combined recuperator.

NB: in case of external installation provide a roof to protect against bad weather.

	Size combination	Dimension (mm)	Connection diameter (mm)	Code	Price
SANITIZATION MODULE ACTIVE 6"	050	400x400x400	160	SANIVMC160-AC6-P	
	070		200	SANIVMC200-AC6-P	
	100		315	SANIVMC315-AC6-P	
	150		355	SANIVMC355-AC6-P	
	200				
	250				
SANITIZATION MODULE ACTIVE 12"	350	500x500x500	400	SANIVMC400-AC12-P	
	450		450	SANIVMC450-AC12-P	

N.B. The device is sized for sanitizing the machine and not the environments to be treated

QUICK GUIDE TO CHOOSE THE URC 80 EC SIZE

THE FOLLOWING TABLES ALLOW YOU TO IDENTIFY, THE SIZE OF THE RECOVERY UNIT ACCORDING TO THE INTENDED USE OF THE ROOMS TO BE TREATED, CONSIDERING THE ROOM SURFACE AREA OR THE NUMBER OF OCCUPANTS WHO NEED TO ENSURE OPTIMAL AIR EXCHANGE.

THE SIDE IDENTIFICATION OF THE SIZE OF THE RECOVERY DOES NOT TAKE INTO ACCOUNT THE PRESSURE LOSSES OF THE SYSTEM.

N.B. The data in the tables were calculated according to the values present in EX UNI 10339.

The sizing and selection of the machine must however be verified and approved by a designer.

CHOOSE THE RECOVERY BASED ON THE SURFACE TO BE TREATED

INTENDED USE	URC 80 EC 050		URC 80 EC 070		URC 80 EC 100		URC 80 EC 150		URC 80 EC 200		URC 80 EC 250		URC 80 EC 350		URC 80 EC 450	
	Surface m ²		Surface m ²		Surface m ²		Surface m ²		Surface m ²		Surface m ²		Surface m ²		Surface m ²	
	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max
Es. → Offices	10	180	180	280	280	410	410	610	610	830	830	1.160	1.160	1.460	1.460	1.880
Open space offices	10	90	90	140	140	200	200	300	300	410	410	580	580	730	730	940
Meeting rooms (no smoking)	10	30	30	50	50	80	80	120	120	160	160	230	230	290	290	370
Museums	10	60	60	100	100	150	150	230	230	300	300	430	430	540	540	690
Places of worship	10	20	20	30	30	50	50	80	80	110	110	160	160	200	200	260
Bar	10	10	10	20	20	30	30	40	40	60	60	80	80	110	110	140
Restaurant (lounge and self-service)	10	20	20	30	30	40	40	60	60	90	90	120	120	160	160	200
Barbers and beauty salons	10	40	40	60	60	90	90	140	140	190	190	270	270	340	340	440
Shops	10	100	100	160	160	240	240	360	360	480	480	670	670	840	840	1.080
Grocery, dry cleaning and pharmacies	10	60	60	100	100	150	150	230	230	300	300	430	430	540	540	690
Gyms	10	30	30	50	50	80	80	120	120	160	160	230	230	290	290	370
Libraries	10	60	60	100	100	150	150	230	230	300	300	430	430	540	540	690

EXAMPLE: 190m² office → choice of URC 80 EC 070 machine

CHOOSE THE RECOVERY BASED ON THE NUMBER OF OCCUPANTS

INTENDED USE	URC 80 EC 050		URC 80 EC 070		URC 80 EC 100		URC 80 EC 150		URC 80 EC 200		URC 80 EC 250		URC 80 EC 350		URC 80 EC 450	
	No. of people		No. of people		No. of people		No. of people		No. of people		No. of people		No. of people		No. of people	
	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max
Offices	1	11	11	17	17	25	25	37	37	50	50	70	70	88	88	113
Open space offices	1	11	11	17	17	25	25	37	37	50	50	70	70	88	88	113
Es. → Meeting rooms (no smoking)	1	22	22	34	34	50	50	75	75	101	101	141	141	176	176	227
Museums	1	20	20	31	31	46	46	69	69	92	92	129	129	162	162	208
Places of worship	1	20	20	31	31	46	46	69	69	92	92	129	129	162	162	208
Bar	1	11	11	17	17	25	25	37	37	50	50	70	70	88	88	113
Restaurant (lounge and self-service)	1	12	12	18	18	27	27	41	41	55	55	77	77	97	97	125
Barbers and beauty salons	1	8	8	13	13	19	19	29	29	39	39	55	55	69	69	89
Shops	1	10	10	16	16	24	24	36	36	48	48	67	67	84	84	108
Grocery, dry cleaning and pharmacies	1	13	13	20	20	30	30	46	46	61	61	86	86	108	108	138
Gyms	1	7	7	11	11	16	16	25	25	33	33	47	47	58	58	75
Libraries	1	20	20	31	31	46	46	69	69	92	92	129	129	162	162	208

EXAMPLE: meeting room with 42 people → choice of URC 80 EC 100 machine

follow Air Control srl



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