

UR Heating recovery unit



These units allow to extract a certain amount of exhaust air from the room and supply an equivalent quantity of fresh air.

A crossflow aluminium plate exchanger assures an efficient heat exchange between exhaust and fresh air: therefore the fresh air is pre-heated or pre-cooled according to the seasons.

The supply air is filtered before entering the heat recovery exchanger that is protected with a synthetic filter also at the exhaust air side.

The supply air can optionally be re-heated with a hot water coil or with an electric coil.

Features

- 7 sizes are available:
 - **UR:** standard version
 - **UR W:** same as standard version and equipped with water heating coil with copper tubes and 3 rows aluminium fins. Not to be used with chilled water
 - **UR E:** same as standard versions and equipped with electric heating coil with aluminium fins and double safety thermostat
- Double suction centrifugal fans coupled directly to the electric motors, equipped with adjustable speeds via an electronic control to vary the flow rate
- G3 class synthetic filter on the air outlet
- Aluminium plate reheater housed in the condensate tray that is easily removed from the bottom
- G3 class synthetic filter on the fresh air intake
- Self-bearing panels made of galvanized plate with injected polyurethane insulation and thickness 20 mm.
- Galvanized condensate tray
- Fans can be inspected from the bottom
- Filters can be removed from the bottom for cleaning or replacement
- Two versions available for horizontal and vertical installation (it is not possible to install the cooling coil accessories and silencers for the vertical installation)
- Electronic Regulator with Slave Application allowing continuous variation of rotation speed and air flow rate

Accessories

- **BF:** Water cooling coil.
- **FGC:** Circular flanges.
- **G4:** High-efficiency filters on the fresh air intake in class G4.
- **MPW:** Module with 4-row water cooling coil and 1-row water post-heating coil.
- **MPX:** Module with 4-row water cooling coil and electric post-heating coil with reinforced finned coils. Safety thermostat included.
- **SE:** Free-Cooling control dampers.
- **SU:** Silencers.

Compatibility of accessories							
Horizontal installation:	UR 35	UR 55	UR 75	UR 100	UR 150	UR 210	UR 330
BF 35	✓						
BF 55		✓					
BF 75			✓				
BF 100				✓			
BF 150					✓		
BF 210						✓	
BF 330							✓
FGC 1	✓	✓	✓				
FGC 2				✓	✓		
G4 35	✓						
G4 55		✓					
G4 75			✓				
G4 100				✓			
G4 150					✓		
G4 210						✓	
G4 330							✓
MPW 35	✓						
MPW 55		✓					
MPW 75			✓				
MPW 100				✓			
MPW 150					✓		
MPW 210						✓	
MPW 330							✓
MPX 35	✓						
MPX 55		✓					
MPX 75			✓				
MPX 100				✓			
MPX 150					✓		
MPX 210						✓	
MPX 330							✓
SE 1	✓	✓					
SE 2			✓				
SE 3				✓	✓		
SE 4						✓	
SE 5							✓
SU 1	✓	✓					
SU 2			✓				
SU 3				✓	✓		
SU 4						✓	
SU 5							✓
Vertical installation:	UR 35	UR 55	UR 75	UR 100	UR 150	UR 210	UR 330
FGC 1	✓	✓	✓				
FGC 2				✓	✓		
G4 35	✓						
G4 55		✓					
G4 75			✓				
G4 100				✓			
G4 150					✓		
G4 210						✓	
G4 330							✓
SE 1	✓	✓					
SE 2			✓				
SE 3				✓	✓		
SE 4						✓	
SE 5							✓

Technical data

Mod.		UR 35	UR 55	UR 75	UR 100	UR 150	UR 210	UR 330
Air flow	m ³ /h	350	550	750	1000	1500	2100	3300

Recoverer:

Efficiency	%	52.1	55	54.3	54.4	53.1	52.7	52
Heat capacity recovered	kW	1.5	2.5	3.4	4.6	6.7	9.3	14.3
Cooling capacity recovered	kW	0.4	0.7	1	1.3	1.9	2.6	4.3
Output temperature	°C	8	8.7	8.6	8.6	8.3	8.2	8

Fan motor assembly:

Fans	n.	2	2	2	2	2	2	4
Total input power	kW	0.27	0.44	0.65	1.12	1.12	2	4
Max. input current	A	1.1	1.7	2.8	5	5	8.6	17.2
Fan speed variation		continuous continuous continuous continuous continuous continuous continuous						
Available static pressure (Pa)	UR Standard	125	140	170	150	150	120	150
	UR E	115	130	160	140	140	110	140
	UR W	50	50	50	70	50	50	50
Electrical protection	IP	44	54	44	55	55	55	55
Insulation class		B	F	F	F	F	F	F

Filtres:

EN779 Classification		G3	G3	G3	G3	G3	G3	G3
Efficiency	%	80	80	80	80	80	80	80

Water heating coil (UR W):

Geometry		P2519	P2519	P2519	P2519	P2519	P2519	P2519
Rows	n.	3	3	3	3	3	3	3
Fin pitch	mm	1.8	1.8	1.8	1.8	1.8	1.8	2.1
Frontal surface area	m ²	0.027	0.047	0.052	0.092	0.119	0.165	0.237
Heating capacity ⁽¹⁾	kW	4.9	8.1	10.6	15.5	22.4	31	43
Air output temperature ⁽¹⁾	°C	48	50	48	52	51	50	46
Heating capacity ⁽²⁾	kW	4.1	6.7	8.8	13	18.7	25.9	36.6
Air output temperature ⁽²⁾	°C	41.2	43	41.3	45	43.6	43	39.5
Heating capacity ⁽³⁾	kW	2.4	4	5.2	7.7	11.2	15.4	22
Air output temperature ⁽³⁾	°C	27.7	28.7	27.8	30	29.2	29	27

Electric heating coil (UR E):

Heating capacity	kW	3	3	6	6	10	15	25
Air side pressure drop	Pa	10	10	10	10	10	10	10
Stages	n.	2	2	2	2	3	3	3
Input current	A	4.6	4.6	9.1	9.1	15.2	22.7	37.9
Air output temperature (air 8 °C)	°C	34	25	32	26	28	29	31

Water cooling coil accessory with box to be positioned after the discharge fan:

Frontal surface area	m ²	0.075	0.075	0.1125	0.2125	0.2125	0.25	0.25
Rows	n.	4	4	4	4	4	4	4
Cooling capacity ⁽⁴⁾	kW	2	3	4	6.9	8.8	12	17.5
Air side pressure drop	Pa	25	57	48	25	54	74	105

Power supply = 1~ 230V 50Hz (3N~ 400V 50 Hz for electric heaters).

Performance values refer to the following conditions:

- room air temperature 20 °C;
- ambient air temperature -5 °C.

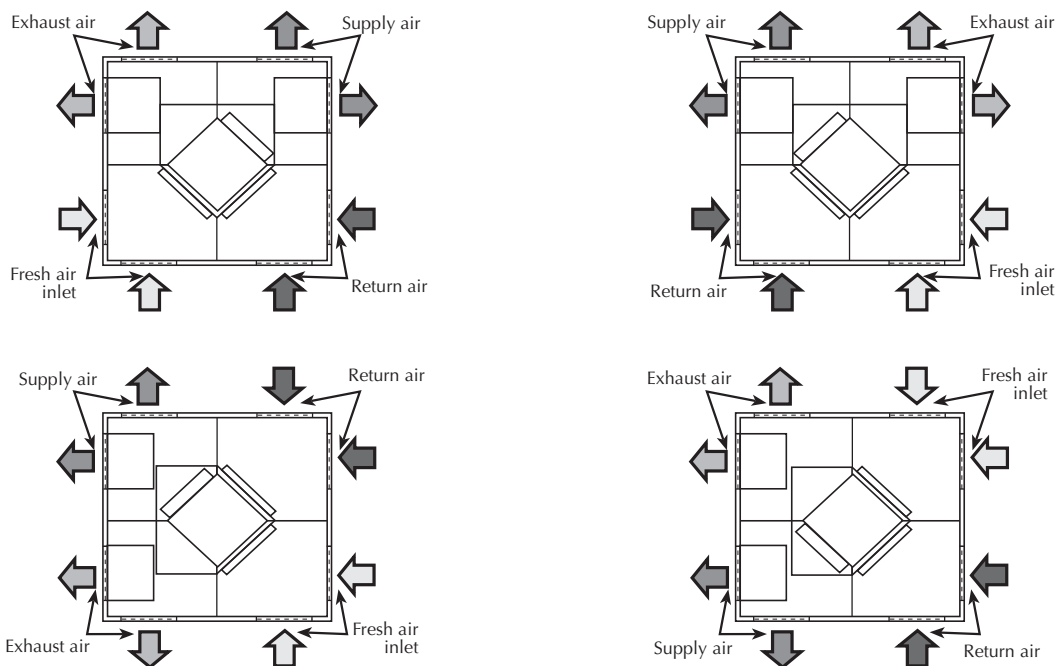
⁽¹⁾ air temp. 8 °C - water temp. 80/70 °C

⁽²⁾ air temp. 8 °C - water temp. 70/60 °C

⁽³⁾ air temp. 8 °C - water temp. 45/40 °C

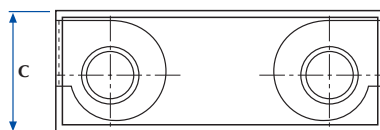
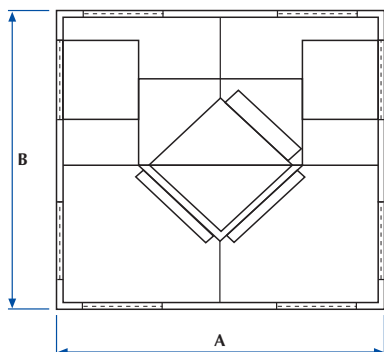
⁽⁴⁾ air temp. 27 °C - HR 50% - water temp. 12/7 °C

Lay-out (horizontal configuration)



Warning : the above diagrams refer to the unit in horizontal configuration only. For the vertical configuration, please consult the manual.

Dimensions (mm)



Mod. UR		35	55	75	100	150	210	330
Height	A	1090	1090	1190	1500	1500	1750	2500
Width	B	900	900	1000	1250	1250	1400	1750
Depth	C	300	300	330	390	390	390	390
Weight (kg)	UR Std	61	65	74	115	130	170	280
	UR E	62	66	75	117	133	174	286
	UR W	62	66	75	117	133	174	286