

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.

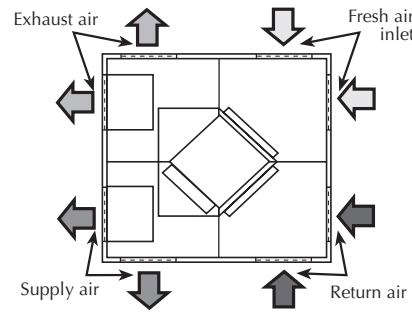
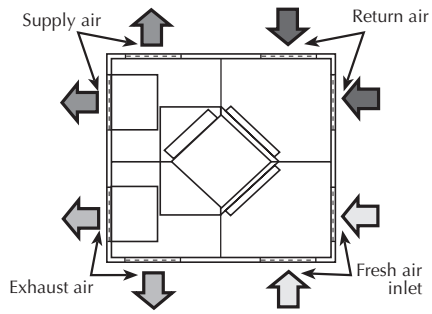
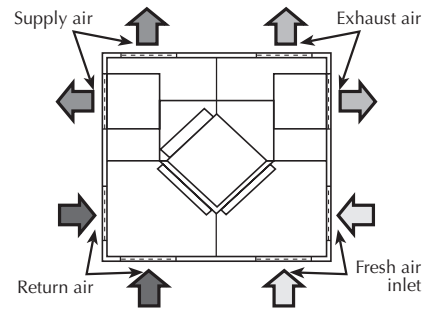
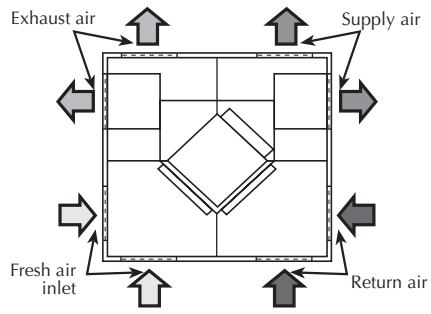
⁽¹⁾ air temp. 8 °C - water temp. 80/70 °C

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

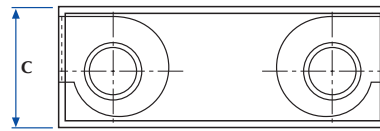
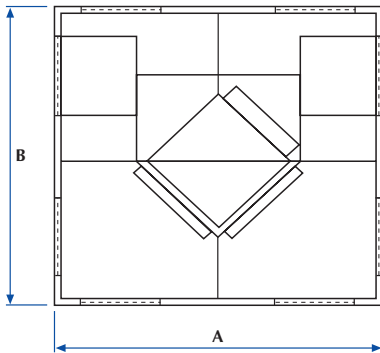
⁽³⁾ air temp. 8 °C - water temp. 45/40 °C

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

Lay-out



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