

**MITSUBISHI ELECTRIC  
HYDRONICS & IT COOLING SYSTEMS S.p.A.**

COMFORT

ROOFTOP UNITS

# WRX

AIR COOLED ROOFTOP UNITS,  
COOLING CAPACITY FROM 50 TO 240 kW,  
AIRFLOW FROM 10000 TO 45000 m<sup>3</sup>/h





# ENGINEERED FOR MAXIMUM EFFICIENCY AND VERSATILITY



## REVERSIBLE AND COOLING ONLY AIR COOLED ROOFTOP UNIT. COOLING POWER FROM 50 TO 240 kW.

WRX is an autonomous and reversible rooftop unit dedicated to the air handling and air renewal in large volume areas. All models come with a double cooling circuit, scroll compressors, R410A refrigerant, and EC plug fans.

The high flexibility in choosing the airflow direction, as well as the possibility to customize the units with four types of heat recovery and different air handling sections, make WRX an extremely versatile unit, which can easily fit in every type of application.

### IDEAL APPLICATIONS:

- ▶ Supermarkets
- ▶ Sport Arenas
- ▶ Shopping malls
- ▶ Cinemas and theatres

### VERSIONS:

- WRX:** Reversible heat pump  
**WRX-T:** Cooling only

### FUNCTIONS:

- |             |   |
|-------------|---|
| <b>AR</b>   | Air Recirculation (Baseline)                                |
| <b>MF</b>   | Air mixing and free cooling                                 |
| <b>AX</b>   | Air mixing and axial fan extraction                         |
| <b>HR-F</b> | Heat recovery with thermodynamic effect                     |
| <b>HR-B</b> | Heat recovery with Refrigerant Booster                      |
| <b>HR-P</b> | Heat recovery with plate heat exchanger (High and low flow) |
| <b>HR-E</b> | Heat recovery with rotary enthalpy wheel                    |

### MAXIMUM ENERGY EFFICIENCY IN ALL APPLICATIONS

Available in seven different configurations and four different heat recovery technologies, WRX has been engineered for maximum efficiency in any situation.

As standard, WRX features plug fans with built-in EC motor, electronic thermostatic valves and the latest generation axial fans.

All units are designed to meet the seasonal efficiency standards (SEER & SCOP) established by the EU 2016/2281 regulation, First Tier.



Cooling capacity increase	% (1)	+3%	+12%	+10%	+45%
Thermal capacity increase	% (2)	+7%	+11%	+22%	+39%

1 ▶ Percentage values refer to WRX/MF version (no heat recovery). Standard conditions for cooling: Outdoor 35°C 50% R.H. / Indoor 27°C 47% R.H. / Mix 50% - Nominal air flow.  
 2 ▶ Percentage values refer to WRX/MF version (no heat recovery). Standard conditions for heating: Outdoor 7°C 87% R.H. / Indoor 20°C 50% R.H. / Mix 50% - Nominal air flow.

**High flexibility in the airflow direction, top efficiency and total reliability combined with a rational and compact design.**  
**This is the result of the new WRX versatile range featuring seven operational types and four different heat recovery technologies.**

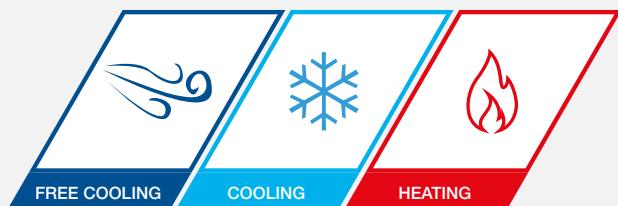
#### ► HIGHLY UNIT VERSATILITY



WRX is a modular and configurable solution that has been wisely engineered to fit precise size requirements.

WRX is available in both heat pump and cooling only versions, while the base module features seven different functions. Additionally, a wide range of accessories dedicated to the air handling range allow the unit to operate optimally in any condition.

#### ► TOTAL SYSTEM RELIABILITY



WRX manages additional resources for heating and air handling in a completely independent way.

Thanks to its free cooling mode, the unit utilizes the favorable external conditions to condition the environment without switching on the compressors.

Units are always supplied with two independent cooling circuits.

#### ► SPACE OPTIMIZATION

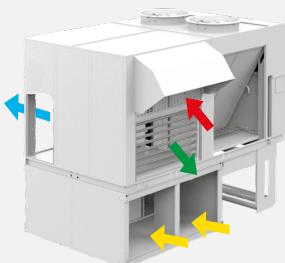


WRX features a unique design to fit large applications as well as small / medium volume areas.

An accurate distribution of the various components (fans, coils, compressors) ensures a small footprint compared to a traditional unit developed lengthwise.

#### ► REDUCED FOOTPRINT

#### ► DESIGN FLEXIBILITY



WRX ensures a free selection in the direction of both the supply and return airflows. A super flexible layout that simplifies installation and facilitates the replacement of pre-existing HVAC systems.

# TECHNOLOGICAL CHOICES

**Rational unit design, together with cutting-edge technological choices: these are the distinguishing traits of WRX.**

## AIR3000TE CONTROL

The core of the WRX management is the evolved AIR3000TE control, specifically designed for Climaveneta rooftop units.



Besides the cooling circuit management there is the air handling control, and both of these functions allow the WRX unit to work in a completely autonomous way.

## OUTDOOR FANS

New-generation axial fans with 3-D aerodynamic blades.

Each fan is equipped with a diffuser to recover the kinetic energy into static/pressure energy.

It has been designed to ensure a reduction in the number of rotational speeds which minimizes the absorbed power supply and noise level.

## ELECTRONIC THERMOSTATIC VALVE

The electronic expansion valve, which comes as standard in all versions, provides great benefits with variable loads and varying external weather conditions.



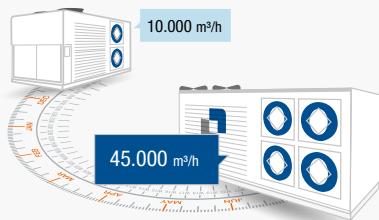
Its introduction is in line with the accurate design of the cooling circuit and its efficient operation in multiple operating conditions.



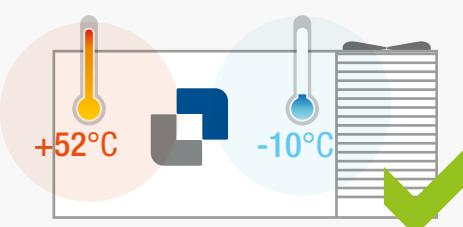
## OPERATING RANGE AND LIMITS

The WRX range consists of 13 sizes, from 50 to 240 kW of cooling capacity and airflow from 10000 to 45000 m<sup>3</sup>/h.

Thanks to the wide and generous dimensions of the treatment



coils, together with the smart design of the cooling circuit, WRX units also boast an extended outdoor temperature operating range: from -10°C when the unit is working in heat pump operation, to +52°C in cooling mode.



Because the excellence of a product, according to Climaveneta brand philosophy, starts with the best quality of each single technical component, in both the design and installation phases.

## CASING

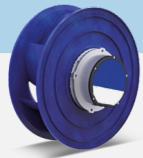
The units have been designed with a self-supporting structure made from suitably thick hot galvanized steel sections.

The external panelling is painted with polyester powder coat whereas the air treatment section is insulated using specific high performing adhesives.

As an option, the air handling section can be made of aluminium load-bearing frame and sandwich panels.



## EC PLUG FANS



The WRX units are equipped with radial plug fans with an EC incorporated motor.

The fan speed can be regulated by keeping both the airflow or the external static pressure constant or by selecting the variable airflow through the Vair function.



## ACCESSORIES

A wide range of accessories completes the air treatment and allows the unit to optimally manage its operation.



High efficiency filters (Class F) in addition to the standard class G4 filters



BMS connection



Control function for the air handling section



Air quality control with CO<sub>2</sub> or VOC probes



Heating and pre-heating coils, electrical heater, hot gas coil



Steps or modulating gas heating module

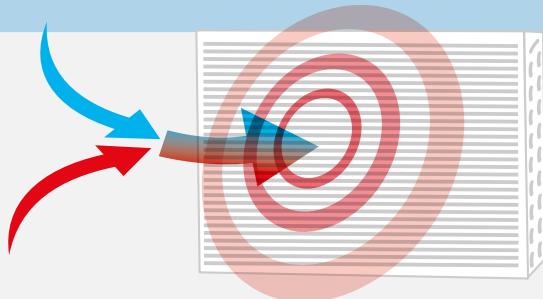
# WRX HEAT RECOVERY TECHNOLOGIES

## HR-F

### THERMODYNAMIC HEAT RECOVERY

Thermodynamic heat transfer is achieved by deviating the exhaust air through the outdoor section of the refrigerant circuit.

This increases efficiency by allowing the unit to work at a more advantageous condensing temperature than allowed by the outside conditions.



kW/h

Smart and functional design

Advantageous average temperature on the outdoor coil

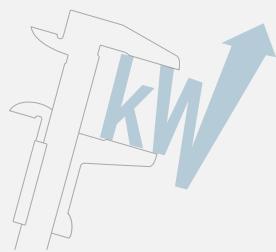
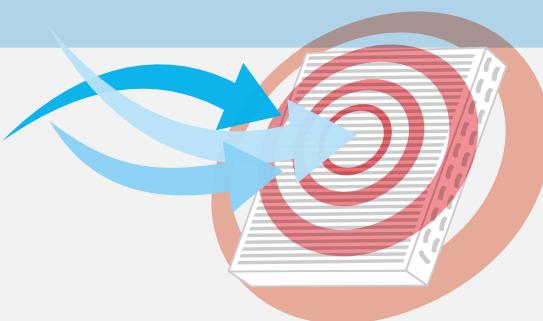
No additional pressure drops

## HR-B

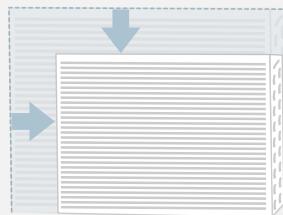
### REFRIGERANT BOOSTER

The WRX HR-B units are fitted with the exclusive Refrigerant Booster heat recovery system, which promptly and fully recovers heat from the exhaust air.

This recovered energy is transferred to the refrigerant circuit, which increases the capacity of the air handling coil while reducing the power absorbed by the compressor. The recovery system, made of a finned coil installed at the air exhaust damper, takes advantage of the favourable conditions of the exhaust air, both during summer and winter operation.



Quantifiable benefits



Compact footprint of the recovery system



Ideal for Mediterranean climate

Four heat recovery technologies designed to precisely and reliably transfer the energy contained in the exhaust air to the refrigerant circuit, thus increasing the unit's overall efficiency.

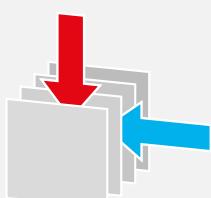
## HR-P

### CROSS-FLOW HEAT RECOVERY

The WRX HR-P units feature the cross-flow heat recovery, which transfers the thermal energy contained in the exhaust air to the fresh airflow.

The plate heat recovery system extends the operating limits of the unit, allowing it to work with higher flow rates of external air.

The units are equipped with by-pass dampers for free-cooling operation, to reduce system pressure drops.



Complete airflow separation



High operating reliability and safety



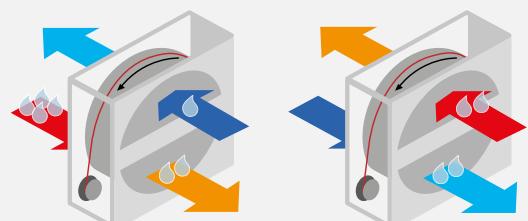
Quick and easy cleaning and maintenance

## HR-E

### RECOVERY OF ENTHALPY ROTARY HEAT

The most efficient heat recovery technology in terms of efficiency is the rotary enthalpic recovery, which provides performance values from 60% to 90% higher than traditional solutions.

The key component is the enthalpic wheel which is made with alternately flat and wavy sheets treated by hygroscopic coating. Due to the large exchange surface compared to its volume, it ensures the recovery of latent and sensible heat, with a significant increase in the unit overall capacity.



Latent heat recovery



Cooling capacity recovered



Quick return on the investment

# WRX FUNCTIONS

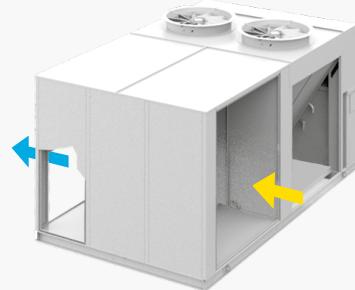
**WRX is available in 7 configurations to easily fit modern HVAC design**



## AR Function

Unit function for the total recovery. Ideal in those applications where the air renewal and the exhaust air extraction are not managed by the rooftop unit.

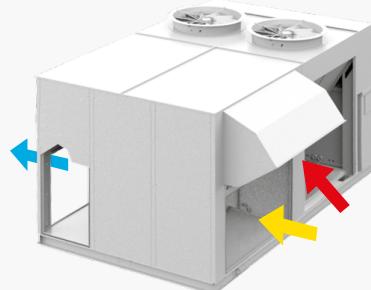
This unit perfectly substitutes old products in pre-existing HVAC plants which already have a system dedicated to air renewal.



## MF Function

The MF function allows the recirculated ambient air to be mixed with some fresh outside air. Free cooling operation is managed by the controller, which automatically opens the dampers according to the indoor and outdoor temperatures, and the set point.

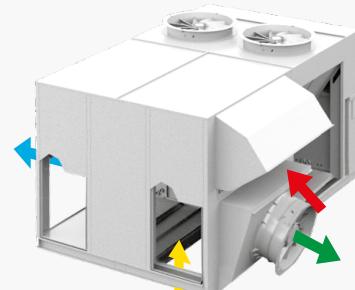
This function is ideal in refurbished buildings with low air tightening, to be coupled with already existing air extraction systems which need to be used to balance pressure inside the building.



## AX Function

As the MF function, the AX function allows the unit to mix the recirculated ambient air with some fresh outdoor air. The unit is equipped with one or more axial fans in order to ensure exhaust air rejection.

Thanks to these fans, AX is ideal in all commercial applications, such as gas stations where a compact and autonomous solution is required.



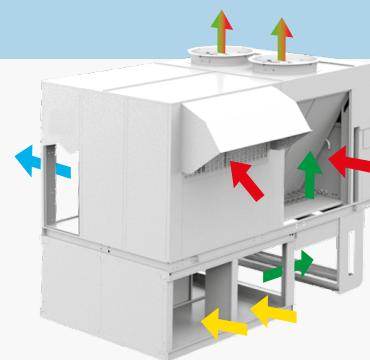


## HR-F Function

Unit with three dampers for unit operation in different modes: 100% recirculated air, air mixing, free cooling, air extraction/expulsion.

Exhaust air is forced through the expulsion damper to the external coils, in order to enhance overall unit performance:

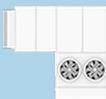
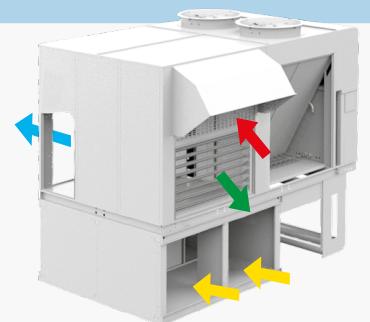
this thermodynamic effect is totally free, without the need of further heat exchangers.



## HR-B Function

Unit with three motorized dampers and Refrigerant Booster heat recovery. The unit ensures the treatment, renovation, and air extraction in a completely autonomous way. At the same time, the HR-B function rejects excess air and ensures free cooling mode.

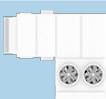
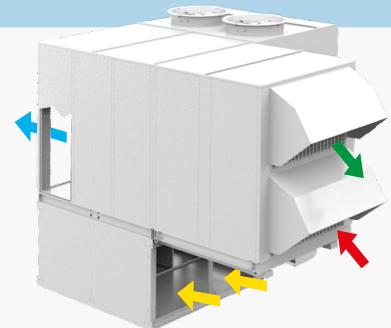
Thanks to the Refrigerant Booster recovery, the WRX HR-B unit promptly and fully recovers the thermal heat of the exhaust air, transferring this energy to the cooling circuit which increases its capacity.



## HR-P Low Flow and High Flow Function

The HR-P function is the ideal solution for an extreme climate with very hot, or alternatively, very cold conditions. Thanks to the cross-flow heat recovery the unit transfers the thermal energy contained in the exhaust air to the fresh air. The unit is equipped with three motorized dampers for the unit operation in total recirculated mode, free cooling, air extraction, and air expulsion.

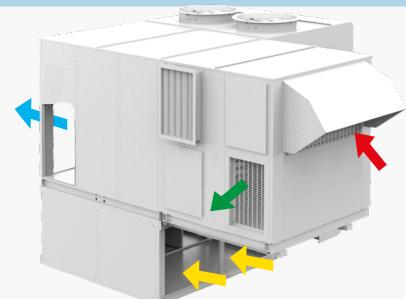
During free cooling operation, exhaust air by-passes the plate heat exchanger and it is transferred towards the external coils, thus ensuring the thermodynamic heat recovery. There are two PHE available: low flow, whenever a little fresh air is required, while high flow is recommended when a lot of fresh air is required.



## HR-E Function

The HR-E function employs the enthalpy heat recovery to exchange latent and sensible heat between the fresh outside air and exhaust air. The unit is equipped with three modulating dampers for the operation at 100% recirculation, air mixing, free cooling, and air extraction/expulsion.

In free cooling mode, the exhaust air by-passes the recovery system thus reducing pressure losses.



# WRX

## 0162 - 0804

Air source reversible and cooling only  
rooftop unit  
(from 50 to 240 kW)



### WRX/AR-MF

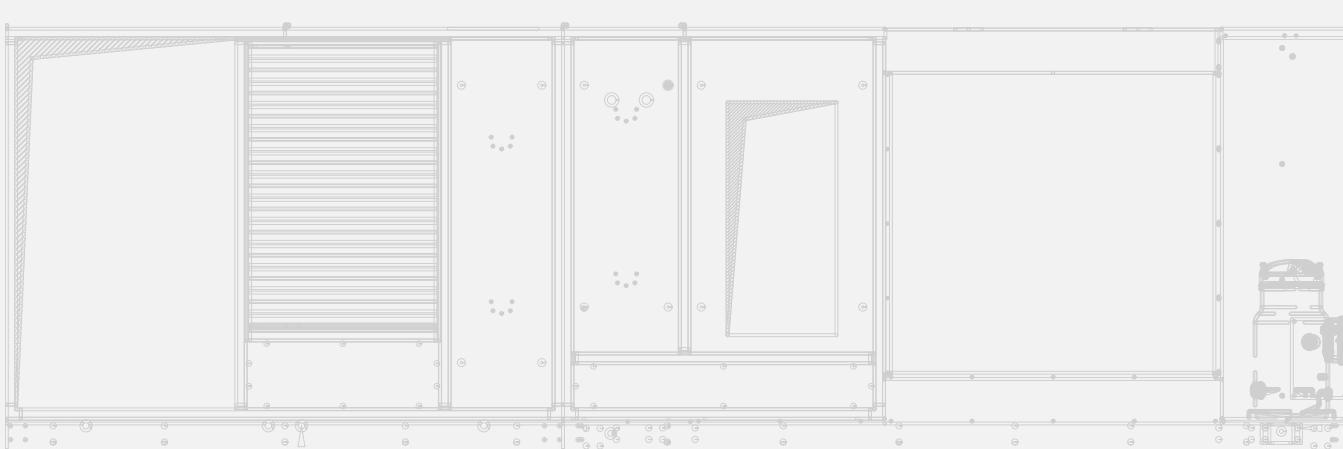
Model	0162	0182	0202	0262	0302	0352	0402	0444	0484	0524	0604	0704	0804
<b>COOLING WRX / WRX-T (GROSS VALUE)</b>													
Total cooling capacity (1) kW	50,8	58,3	69,0	82,6	97,2	110	121	142	154	170	189	219	240
Total sensible capacity (1) kW	43,0	48,4	56,7	67,8	79,5	89,2	97,8	116	127	139	152	176	194
Total power input (1) kW	16,2	18,4	21,8	27,3	31,5	36,2	40,0	44,9	47,7	52,4	63,9	72,8	82,4
EER (1)	3,14	3,17	3,17	3,03	3,09	3,04	3,02	3,16	3,23	3,24	2,96	3,01	2,91
<b>COOLING WRX / WRX-T (EN14511 VALUE)</b>													
Cooling capacity (1) kW	51,4	58,9	69,7	83,6	98,3	111	123	144	156	173	192	222	243
EER (1)	3,32	3,35	3,34	3,18	3,24	3,18	3,16	3,30	3,34	3,36	3,06	3,12	3,02
<b>SEASONAL EFFICIENCY, COOLING MODE [REG. (EU) 2016/2281]</b>													
Pdesign, C (6) kW	51,4	58,9	69,7	83,6	98,3	111	123	144	156	173	192	222	243
SEER (6) (7)	3,37	3,37	3,45	3,35	3,46	3,43	3,36	3,54	3,85	3,8	3,77	3,55	3,69
Performance $\eta_{s,c}$ (6) (8)	131,63	131,94	134,91	130,96	135,49	134,22	131,33	138,46	150,87	148,86	147,92	139,06	144,42
<b>HEATING (GROSS VALUE)</b>													
Heating capacity (2) kW	48,9	55,9	66,4	81	95,2	109	123	138	148	168	192	217	239
Total power input (2) kW	13,6	15,5	18,3	22,3	26,4	29,8	33,7	37	40,7	46,1	55	60,2	67,8
COP (2)	3,6	3,61	3,63	3,63	3,61	3,66	3,65	3,73	3,64	3,64	3,49	3,6	3,53
<b>HEATING WRX (EN14511 VALUE)</b>													
Heating capacity (2) kW	48,3	55,3	65,7	80,0	94,1	108	121	136	146	165	189	214	236
COP (2)	3,76	3,78	3,79	3,76	3,72	3,77	3,70	3,82	3,67	3,67	3,51	3,64	3,57
<b>SEASONAL EFFICIENCY, HEATING MODE [REG. (EU) 2016/2281]</b>													
Pdesign, H (9) kW	40,3	46,2	54,8	67,0	78,7	90,2	101	106	114	129	148	192	183
SCOP (9) (10)	2,98	2,96	2,98	3,01	2,99	3,05	2,99	3,20	3,20	3,26	3,14	3,30	3,21
Performance $\eta_{s,c}$ (9) (11)	116,10	115,44	116,38	117,52	116,45	118,98	116,42	124,98	124,90	127,59	122,54	128,95	125,30
<b>SUPPLY FANS</b>													
No.	1	1	1	2	2	2	2	2	4	4	4	4	4
Supply air flow rate	m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000
Available external static pressure (3)	Pa	250	250	250	250	250	250	250	250	250	250	250	250
<b>COMPRESSORS</b>													
No. compressors	N°	1	1	1	1	1	1	1	2	2	2	2	2
No. circuits	N°	2	2	2	2	2	2	2	2	2	2	2	2
<b>NOISE LEVEL</b>													
Sound power (4) dB(A)	77	79	82	83	84	86	87	85	86	86	86	89	90
<b>WEIGHTS AND DIMENSIONS WRX/AR</b>													
Length	mm	3400	3400	3400	3850	3850	3850	3850	5325	5325	5325	5325	6225
Width	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	mm	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130
Operating weight (5) kg	1264	1330	1350	1546	1618	1749	1814	2141	2335	2427	2427	3016	3168
<b>WEIGHTS AND DIMENSIONS WRX/MF</b>													
Length	mm	3400	3400	3400	3850	3850	3850	3850	5325	5325	5325	5325	6225
Width with rainproof hood	mm	2850	2850	2850	2850	2850	2850	2850	2850	2850	2850	2850	2850
Height	mm	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130
Operating weight (5) kg	kg	1341	1407	1427	1708	1780	1911	1976	2318	2512	2604	2604	3238

**Notes:**

- 1 ► Cooling: Outdoor 35°C 50% R.H. / Indoor 27°C 47% R.H. / Mix 0%.
- 2 ► Heating: Outdoor 7°C 87% R.H. / Indoor 20°C 50% R.H. / Mix 0%.
- 3 ► ESP for standard configuration (optional accessories not included/calculated).
- 4 ► Sound power on the basis of measurements made in compliance with ISO 3744.
- 5 ► Unit in standard configuration/execution, without optional accessories.
- 6 ► Seasonal energy efficiency in cooling mode in AVERAGE climatic conditions [REGULATION (EU) N. 2016/2281]
- 7 ► Seasonal energy efficiency ratio

- 8 ► Seasonal space cooling energy efficiency
- 9 ► Seasonal energy efficiency in heating mode in AVERAGE climatic conditions [REGULATION (EU) N. 2016/2281]
- 10 ► Seasonal coefficient of performance
- 11 ► Seasonal space heating energy efficiency

The units highlighted in this publication contain HFC R410A [GWP100 2088] fluorinated greenhouse gases.





## WRX/AX

Model	0162	0182	0202	0262	0302	0352	0402	0444	0484	0524	0604	0704	0804
<b>COOLING WRX / WRX-T (GROSS VALUE)</b>													
Total cooling capacity (1) kW	54	61,9	73,2	87,8	104	117	129	151	163	182	201	233	256
Total sensible capacity (1) kW	43,8	49,2	57,6	68,8	80,9	90,4	99,1	118	129	141	153	179	196
Total power input (1) kW	16,5	18,6	22,1	27,7	32,0	36,9	40,8	45,6	48,3	53,2	65,0	74,1	84,1
EER (1)	3,27	3,33	3,31	3,17	3,25	3,17	3,16	3,31	3,37	3,42	3,09	3,14	3,04
<b>WRX (GROSS VALUE)</b>													
Heating capacity (2) kW	49,5	56,5	67,3	81,8	96,4	111	124	140	150	170	194	220	242
Total power input (2) kW	12,9	14,6	17,2	21	25	28,4	31,9	34,7	38,4	43,5	52,1	57	64,2
COP (2)	3,84	3,87	3,91	3,90	3,86	3,91	3,89	4,03	3,91	3,91	3,72	3,86	3,77
<b>SUPPLY FANS</b>													
No.	1	1	1	2	2	2	2	2	4	4	4	4	4
Supply air flow rate m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3) Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>EXPULSION FANS</b>													
No.	1	1	1	1	1	1	1	2	2	2	2	3	3
Expulsion airflow rate m³/h	3150	3600	4200	4800	5550	6300	6750	8100	9000	9750	10500	12300	13500
Available external static pressure (3) Pa	150	150	150	150	150	150	150	150	150	150	150	150	150
<b>COMPRESSORS</b>													
No. compressors	N°	1	1	1	1	1	1	2	2	2	2	2	2
No. circuits	N°	2	2	2	2	2	2	2	2	2	2	2	2
<b>NOISE LEVEL</b>													
Sound power (4) dB(A)	79	80	86	86	86	88	88	88	88	88	88	91	92
<b>WEIGHTS AND DIMENSIONS</b>													
Length mm	3400	3400	3400	3850	3850	3850	3850	5325	5325	5325	5325	6225	6225
Width mm	2880	2880	2880	2880	2880	2880	2880	2880	2880	2880	2880	2880	2880
Height mm	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130
Operating weight (5) kg	1389	1454	1474	1754	1826	1957	2022	2439	2633	2725	2725	3374	3526

**Notes:**

- 1 ► Cooling: Outdoor 35°C 50% R.H. / Indoor 27°C 47% R.H. / Mix 30%.  
2 ► Heating: Outdoor 7°C 87% R.H. / Indoor 20°C 50% R.H. / Mix 30%.  
3 ► ESP for standard configuration (optional accessories not included/calculated).

4 ► Sound power on the basis of measurements made in compliance with ISO 3744.

5 ► Unit in standard configuration/execution, without optional accessories.

The units highlighted in this publication contain HFC R410A [GWP100 2088] fluorinated greenhouse gases.

## WRX/HR-F

Model	0162	0182	0202	0262	0302	0352	0402	0444	0484	0524	0604	0704	0804
<b>COOLING WRX / WRX-T (GROSS VALUE)</b>													
Total cooling capacity (1) kW	54,4	62,4	73,8	88,7	105	118	131	153	165	183	204	236	259
Total sensible capacity (1) kW	44,0	49,4	57,8	69,2	81,4	91,1	99,9	119	129	142	154	180	198
Total power input (1) kW	17,7	20,2	23,8	29,2	33,6	41,9	42,7	48,0	51,2	56,4	68,4	77,6	87,8
EER (1)	3,07	3,09	3,1	3,04	3,12	2,82	3,07	3,19	3,22	3,24	2,98	3,04	2,95
<b>HEATING WRX (GROSS VALUE)</b>													
Heating capacity (2) kW	50,6	57,9	68,7	83,8	99,2	114	129	144	154	175	200	227	251
Total power input (2) kW	14,4	16,6	19,3	23,1	27,4	34,5	35,2	38,2	42,3	48	57,2	62,7	70,8
COP (2)	3,51	3,49	3,56	3,63	3,62	3,3	3,66	3,77	3,64	3,65	3,5	3,62	3,55
<b>SUPPLY FANS</b>													
No.	1	1	1	2	2	2	2	2	4	4	4	4	4
Supply air flow rate m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3) Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>RETURN FANS</b>													
No.	1	1	1	2	2	2	2	3	3	3	3	4	4
Return airflow rate m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3) Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>COMPRESSORS</b>													
No. compressors	N°	1	1	1	1	1	1	2	2	2	2	2	2
No. circuits	N°	2	2	2	2	2	2	2	2	2	2	2	2
<b>NOISE LEVEL</b>													
Sound power (4) dB(A)	77	79	82	83	84	86	87	85	86	86	86	89	90
<b>WEIGHTS AND DIMENSIONS</b>													
Length mm	3400	3400	3400	3850	3850	3850	3850	5325	5325	5325	5325	6225	6225
Width with rainproof hood mm	2820	2820	2820	2820	2820	2820	2820	2820	2820	2820	2820	2820	2820
Height with return fan module mm	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170
Operating weight (5) kg	1769	1835	1855	2307	2379	2510	2575	3213	3407	3499	3499	4264	4416

**Notes:**

- 1 ► Cooling: Outdoor 35°C 50% R.H. / Indoor 27°C 47% R.H. / Mix 30%.  
2 ► Heating: Outdoor 7°C 87% R.H. / Indoor 20°C 50% R.H. / Mix 30%.  
3 ► ESP for standard configuration (optional accessories not included/calculated).

4 ► Sound power on the basis of measurements made in compliance with ISO 3744.

5 ► Unit in standard configuration/execution, without optional accessories.

The units highlighted in this publication contain HFC R410A [GWP100 2088] fluorinated greenhouse gases.

# WRX

## 0162 - 0804

Air source reversible and cooling only  
rooftop unit  
(from 50 to 240 kW)



### WRX/HR-B

Model		0162	0182	0202	0262	0302	0352	0402	0444	0484	0524	0604	0704	0804
<b>COOLING WRX / WRX-T (GROSS VALUE)</b>														
Total cooling capacity (1)	kW	58,6	67,2	79,5	95,4	113	127	140	164	178	197	219	253	278
Total sensible capacity (1)	kW	46,0	51,6	60,4	72,2	84,8	94,8	104,0	124	135	148	161	187	206
Total power input (1)	kW	18,0	20,5	24,2	29,7	34,3	39,6	43,8	49,0	52,2	57,5	69,8	79,4	90,1
EER (1)		3,26	3,28	3,29	3,21	3,29	3,21	3,2	3,35	3,41	3,43	3,14	3,19	3,09
<b>HEATING WRX (GROSS VALUE)</b>														
Heating capacity (2)	kW	53,3	60,9	72,5	88,2	104	119	134	151	162	183	209	237	261
Total power input (2)	kW	14,7	16,9	19,7	23,5	27,9	31,8	35,8	38,9	43,1	48,8	58,1	63,7	71,8
COP (2)		3,63	3,61	3,68	3,76	3,73	3,75	3,74	3,87	3,76	3,75	3,6	3,72	3,63
<b>SUPPLY FANS</b>														
No.		1	1	1	2	2	2	2	2	4	4	4	4	4
Supply air flow rate	m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3)	Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>RETURN FANS</b>														
No.		1	1	1	2	2	2	2	3	3	3	3	4	4
Return airflow rate	m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3)	Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>COMPRESSORS</b>														
No. compressors	N°	1	1	1	1	1	1	1	2	2	2	2	2	2
No. circuits	N°	2	2	2	2	2	2	2	2	2	2	2	2	2
<b>NOISE LEVEL</b>														
Sound power (4)	dB(A)	77	79	82	83	84	86	87	85	86	86	86	89	90
<b>WEIGHTS AND DIMENSIONS</b>														
Length	mm	3400	3400	3400	3850	3850	3850	3850	5325	5325	5325	5325	6225	6225
Width with rainproof hood	mm	2820	2820	2820	2820	2820	2820	2820	2820	2820	2820	2820	2820	2820
Height with return fan module	mm	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170
Operating weight (5)	kg	1809	1874	1894	2357	2429	2549	2624	3278	3473	3566	3566	4348	4500

**Notes:**

1 ► Cooling: Outdoor 35°C 50% R.H. / Indoor 27°C 47% R.H. / Mix 30%.

2 ► Heating: Outdoor 7°C 87% R.H. / Indoor 20°C 50% R.H. / Mix 30%.

3 ► ESP for standard configuration (optional accessories not included/calculated).

4 ► Sound power on the basis of measurements made in compliance with ISO 3744.

5 ► Unit in standard configuration/execution, without optional accessories.

The units highlighted in this publication contain HFC R410A [GWP100 2088] fluorinated greenhouse gases.

### WRX/HR-P LOW FLOW

Model		0162	0182	0202	0262	0302	0352	0402	0444	0484	0524	0604	0704	0804
<b>COOLING WRX / WRX-T (GROSS VALUE)</b>														
Total cooling capacity (1)	kW	58,1	66,6	78,6	94,1	111	125	138	161	174	193	213	247	271
Total sensible capacity (1)	kW	45,8	51,3	59,9	71,5	83,7	93,6	102,0	122	133	146	158	184	202
Total power input (1)	kW	18,1	20,7	25,0	30,1	34,8	40,6	44,7	52,6	58,3	63,8	77,2	86,2	98,4
EER (1)		3,21	3,22	3,14	3,13	3,19	3,08	3,09	3,06	2,98	3,03	2,76	2,87	2,75
<b>HEATING WRX (GROSS VALUE)</b>														
Heating capacity (2)	kW	56,7	64,7	76,6	92,9	109	125	139	157	169	190	215	245	269
Total power input (2)	kW	15	17,2	20,7	24,1	28,7	33	36,9	42,9	49,6	55,4	65,8	70,8	80,5
COP (2)		3,78	3,76	3,7	3,86	3,8	3,78	3,76	3,65	3,4	3,43	3,27	3,46	3,35
<b>SUPPLY FANS</b>														
No.		1	1	1	2	2	2	2	2	4	4	4	4	4
Return air flow rate	m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3)	Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>RETURN FANS</b>														
No.		1	1	1	2	2	2	2	3	3	3	3	4	4
Return airflow rate	m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3)	Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>COMPRESSORS</b>														
No. compressors	N°	1	1	1	1	1	1	1	2	2	2	2	2	2
No. circuits	N°	2	2	2	2	2	2	2	2	2	2	2	2	2
<b>NOISE LEVEL</b>														
Sound power (4)	dB(A)	77	79	82	83	84	86	87	85	86	86	86	89	90
<b>WEIGHTS AND DIMENSIONS</b>														
Length	mm	3400	3400	3400	3850	3850	3850	3850	5325	5325	5325	5325	6225	6225
Width with recovery module and rainproof hood	mm	4100	4100	4100	4100	4100	4100	4100	4100	4100	4100	4100	4100	4100
Height with return fan module	mm	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170
Operating weight (5)	kg	1882	1948	1968	2412	2484	2615	2680	3407	3601	3693	3693	4415	4567

**Notes:**

1 ► Cooling: Outdoor 35°C 50% R.H. / Indoor 27°C 47% R.H. / Mix 30%.

2 ► Heating: Outdoor 7°C 87% R.H. / Indoor 20°C 50% R.H. / Mix 30%.

3 ► ESP for standard configuration (optional accessories not included/calculated).

4 ► Sound power on the basis of measurements made in compliance with ISO 3744.

5 ► Unit in standard configuration/execution, without optional accessories.

The units highlighted in this publication contain HFC R410A [GWP100 2088] fluorinated greenhouse gases.



## WRX/HR-P HIGH FLOW

Model		0162	0182	0202	0262	0302	0352	0402	0444	0484	0524	0604	0704	0804
<b>COOLING WRX / WRX-T (GROSS VALUE)</b>														
Total cooling capacity (1)	kW	58,0	66,4	78,4	94	111	125	137	161	175	193	214	247	271
Total sensible capacity (1)	kW	45,8	51,3	59,8	71,5	83,6	93,5	102,0	122	133	146	158	184	202
Total power input (1)	kW	18,0	20,6	24,3	29,8	34,4	39,9	43,9	49,1	52,4	57,8	70,2	81,7	92,4
EER (1)		3,22	3,22	3,23	3,15	3,23	3,13	3,12	3,28	3,34	3,34	3,05	3,02	2,93
<b>HEATING WRX (GROSS VALUE)</b>														
Heating capacity (2)	kW	56,6	64,5	76,4	92,7	109	124	139	158	170	191	217	244	268
Total power input (2)	kW	14,8	17,1	20	23,8	28,2	32,3	36,1	39,5	43,8	49,5	58,9	66,3	74,4
COP (2)		3,82	3,78	3,82	3,9	3,85	3,85	3,84	3,99	3,88	3,86	3,68	3,68	3,6
<b>SUPPLY FANS</b>														
No.		1	1	1	2	2	2	2	2	4	4	4	4	4
Supply air flow rate	m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3)	Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>RETURN FANS</b>														
No.		1	1	1	2	2	2	2	3	3	3	3	4	4
Return airflow rate	m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3)	Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>COMPRESSORS</b>														
No. compressors	N°	1	1	1	1	1	1	1	2	2	2	2	2	2
No. circuits	N°	2	2	2	2	2	2	2	2	2	2	2	2	2
<b>NOISE LEVEL</b>														
Sound power (4)	dB(A)	77	79	82	83	84	86	87	85	86	86	86	89	90
<b>WEIGHTS AND DIMENSIONS</b>														
Length	mm	3400	3400	3400	3850	3850	3850	3850	5325	5325	5325	5325	6225	6225
Width with recovery module and rainproof hood	mm	4525	4525	4525	4525	4525	4525	4525	4525	4525	4525	4525	4525	4525
Height with return fan module	mm	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170
Operating weight (5)	kg	2181	2247	2267	2744	2816	2947	3012	3790	3984	4076	4076	4881	5033

**Notes:**

- 1 ► Cooling: Outdoor 35°C 50% R.H. / Indoor 27°C 47% R.H. / Mix 30%.  
2 ► Heating: Outdoor 7°C 87% R.H. / Indoor 20°C 50% R.H. / Mix 30%.  
3 ► ESP for standard configuration (optional accessories not included/calculated).

4 ► Sound power on the basis of measurements made in compliance with ISO 3744.

5 ► Unit in standard configuration/execution, without optional accessories.

The units highlighted in this publication contain HFC R410A [GWP100 2088] fluorinated greenhouse gases.

## WRX/HR-E

Model		0162	0182	0202	0262	0302	0352	0402	0444	0484	0524	0604	0704	0804
<b>COOLING WRX / WRX-T (GROSS VALUE)</b>														
Total cooling capacity (1)	kW	72,2	81,8	95,2	116	134	150	164	195	211	230	252	295	321
Total sensible capacity (1)	kW	49,6	55,7	64,8	78,0	90,9	102,0	111,0	132	144	158	171	200	218
Total power input (1)	kW	18,5	21,1	25,5	30,6	35,5	41,3	45,4	50,4	54,9	60,5	73,1	82,6	93,0
EER (1)		3,90	3,88	3,73	3,79	3,77	3,63	3,61	3,87	3,84	3,8	3,45	3,57	3,45
<b>HEATING WRX (GROSS VALUE)</b>														
Heating capacity (2)	kW	63	71,6	84,2	103	120	137	151	174	187	209	235	269	294
Total power input (2)	kW	15,6	17,9	21,5	25,2	29,9	34,3	38,3	41,6	47	53,1	62,8	68,6	76,6
COP (2)		4,03	4,01	3,91	4,09	4,01	3,98	3,94	4,17	3,97	3,93	3,74	3,92	3,84
<b>SUPPLY FANS</b>														
No.		1	1	1	2	2	2	2	2	4	4	4	4	4
Supply air flow rate	m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3)	Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>RETURN FANS</b>														
No.		1	1	1	2	2	2	2	3	3	3	3	4	4
Return airflow rate	m³/h	10500	12000	14000	16000	18500	21000	22500	27000	30000	32500	35000	41000	45000
Available external static pressure (3)	Pa	250	250	250	250	250	250	250	250	250	250	250	250	250
<b>COMPRESSORS</b>														
No. compressors	N°	1	1	1	1	1	1	1	2	2	2	2	2	2
No. circuits	N°	2	2	2	2	2	2	2	2	2	2	2	2	2
<b>NOISE LEVEL</b>														
Sound power (4)	dB(A)	77	79	82	83	84	86	87	85	86	86	86	89	90
<b>WEIGHTS AND DIMENSIONS</b>														
Length	mm	3400	3400	3400	3850	3850	3850	3850	5325	5325	5325	5325	6225	6225
Width with recovery module and rainproof hood	mm	4525	4525	4525	4525	4525	4525	4525	4525	4525	4525	4525	4525	4525
Height with return fan module	mm	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170	3170
Operating weight (5)	kg	2154	2220	2240	2717	2789	2920	2985	3785	3950	4042	4042	4929	5081

**Notes:**

- 1 ► Cooling: Outdoor 35°C 50% R.H. / Indoor 27°C 47% R.H. / Mix 30%.  
2 ► Heating: Outdoor 7°C 87% R.H. / Indoor 20°C 50% R.H. / Mix 30%.  
3 ► ESP for standard configuration (optional accessories not included/calculated).

4 ► Sound power on the basis of measurements made in compliance with ISO 3744.

5 ► Unit in standard configuration/execution, without optional accessories.

The units highlighted in this publication contain HFC R410A [GWP100 2088] fluorinated greenhouse gases.

# MORE THAN 1000 PROJECTS ALL OVER THE WORLD

2015 Milan - Italy

## RAI Production Center in Mecenate Street

**Application:** Offices

**Plant type:** Air to Air System

**Airflow:** 48500 m<sup>3</sup>/h

**Installed machines:** 3x WSM AR 0202,  
2x WSM AR 0152



2009 Palmela - Portugal

## Staples

**Application:** Offices

**Plant type:** Air to Air System

**Installed machines:** 2x WHISPER/B rooftop units



2015 - 2016 Grosseto - Italy

## Maremà Shopping Centre

**Application:** Shopping Centre

**Plant type:** Hydronic System - Air to Air System

**Airflow:** 207000 m<sup>3</sup>/h

**Cooling capacity:** 2185 kW **Heating capacity:** 1271 kW

**Installed machines:** 1x FOCS-N/CA/S 2722,  
1x FOCS-N/CA/S 2622, 1x FOCS-N/CA/S 3622, 10x WSM/HR-P/S



2009 Santarem - Portugal

## E. Leclerc

**Application:** Supermarket

**Plant type:** Hydronic System

**Cooling capacity:** 57,5 kW

**Heating capacity:** 64,5 kW

**Installed machines:** 1x NECS-N air cooled chiller,  
2x WHISPER rooftop units



Climaveneta's rooftop units, with their unbeatable advantages in terms of efficiency, quality, and precision are already the preferred choice of the major brands in the most prestigious projects all over the world.

**2009-2017 over 19 stores in Croatia**

### Konzum

**Application:** Supermarket

**Plant type:** Air to Air System

**Cooling capacity:** 11310 kW

**Installed machines:** 40x rooftop units,  
several air cooled chillers



**2013 Montrouge - France**

### Le Fairway

**Application:** Offices

**Plant type:** Air to Air System

**Cooling capacity:** 941 kW

**Installed machines:** 2x 4-pipe heat pumps  
NECS-Q/SL-CA, 6x i-WHISPER-E rooftop units



**2009 Przemysl - Poland**

### Media Markt

**Application:** Retail

**Plant type:** Air to Air System

**Cooling capacity:** 360 kW

**Installed machines:**

2x WISPER-T/B rooftop units



**2005 Rome - Italy**

### Rome Fair

**Application:** Fair

**Plant type:** Air to Air System

**Cooling capacity:** 26000 kW

**Heating capacity:** 16000 kW

**Installed machines:** 168x rooftop units,  
34x air cooled chillers, WIZARD





for a greener tomorrow



Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

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