

# BALTIC


Air and water cooled rooftop units





R410A




AIR COOLED

 **22 - 122 kW**


 **21 - 115 kW**

 **4200 - 23500 m<sup>3</sup>/h**

WATER COOLED

 **47 - 90 kW**

 **60 - 117 kW**

 **7100 - 14500 m<sup>3</sup>/h**

LENNOX participates in the ECP  
programme for RT.  
Check ongoing validity of certificate :  
[www.eurovent-certification.com](http://www.eurovent-certification.com)

- # Installation and replacement made easy thanks to the unit's **compact nature with the same footprint and weight** as previous models.
- # Optimised design and integration of highly efficient components enabling **energy savings**.
- # **Flexibility** in capacity and airflow rates, ventilation options, energy sources and design (configurations and roof curbs) in order to best fit your application's needs.
- # **Low noise level** thanks to availability of several sound options.

## THERMODYNAMIC SYSTEM

- # Tandem scroll compressors allowing capacity modulation.
- # Variable refrigerant control with electronic expansion valve.
- # Easy access to compressors enabling faster maintenance operations.
- # Variable speed EC axial fans with swept blades for improved efficiency.



## REMOTE MONITORING

- # Connectivity through **LennoxCloud** (LENNOX WEB PORTAL for Multi sites / Multi units).
- # BMS through: **e-savvy**



## CONTROL

- # eCLIMATIC electronic controller and intelligent control parameters optimising part-load efficiency.
- # Integrated communication solutions offering flexibility (master/slave, Modbus, BACnet).
- # Several display solutions for different access levels.

### eCLIMATIC



### DS

Service display



### DM

Multi-Rooftop display



### DC

Comfort display



## CASING & DESIGN

- # Pre-coated steel or aluminum panels painted in RAL 9003 color, specially designed for corrosion resistance and to ensure long operation lifetime.
- # Compact design for perfect integration in its environment.
- # Same footprint as previous models for plug & play replacement.
- # Inclined removable drain pan in aluminum for easy disinfecting.
- # Double skin panels are available as an option.

## HEAT RECOVERY

- # Thermodynamic heat recovery, ideal for mild climates.
- # Plate heat exchanger, to improve the system's efficiency in colder climates by preheating the fresh air stream.
- # Heat recovery wheel, with both fresh and return air sections protected by G4 filters.
- # eRecovery, to recover free heat produced by food refrigeration systems.



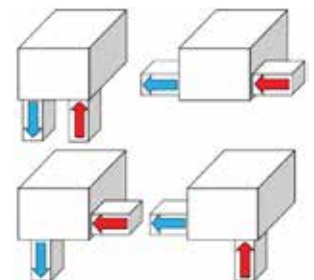
## AIR TREATMENT

- # EC motor fans ensuring a precise temperature for better comfort and energy savings.
- # IAQ kits for improved indoor air quality within the building:
  - Media filters (F7/ePM1 50%, M5/ePM10 50%).
  - UV-C lamps.
  - Ionization.



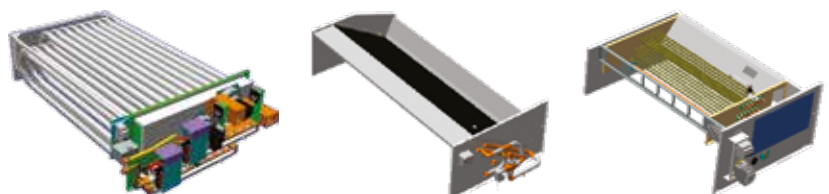
## AIRFLOW

- # Several available airflow configurations: top, bottom or horizontal, to fit each building's need.
- # Adaptable roof curb to fit the building's architecture:
  - Adjustable roof curb.
  - Multidirectional roof curb.
  - Vertical exhaust roof curb.
  - Non adjustable, non assembled (only available outside the EU).



## AUXILIARY HEATING DEVICES

- # Different options depending on the energy source available on site:
  - Hot water coil.
  - Condensing gas burner.
  - Electric heater.
  - Electric preheater.



# BA<sup>(A)</sup> C<sup>(B)</sup> 065<sup>(C)</sup> D<sup>(D)</sup> N<sup>(E)</sup> M<sup>(F)</sup> 5<sup>(G)</sup> M<sup>(H)</sup>

- (A) BA = BALTIC
- (B) C = Cooling - H = Heat pump
- (C) Cooling capacity in kW or airflow (x 1.000 m<sup>3</sup>/h)
- (D) S = 1 circuit - D = 2 circuits - T = 3 circuits - F = 4 circuits
- (E) H = High heat - S = Standard heat - N = No heat
- (F) M = R410A - H = HFO - Z = No refrigerant
- (G) Revision number
- (H) 400V/III/50Hz



**Air cooled version**



**Heat pump units**

BALTIC		025	030	040	042	045	055	057	065	075	085	095	115	125	
<b>Nominal thermal performances - Cooling mode</b>															
Cooling capacity <sup>(1)</sup>	kW	22,3	27,7	36,6	40,3	44,3	49,9	55,2	62,6	73,5	82,0	100,5	114,9	122,2	
Total Power Input	kW	6,41	8,59	11,74	13,87	12,84	14,90	16,70	20,24	22,81	26,64	31,24	37,28	41,06	
EER net <sup>(1)</sup>		3,48	3,22	3,12	2,90	3,45	3,35	3,30	3,09	3,22	3,08	3,22	3,08	2,98	
<b>Nominal thermal performances - Heating mode</b>															
Heating capacity <sup>(2)</sup>	kW	20,9	25,7	34,6	38,3	40,4	45,0	53,7	60,8	70,7	78,3	95,6	107,5	114,8	
Total Power Input	kW	5,59	7,10	9,97	11,34	11,57	13,07	14,87	17,97	21,45	24,41	26,98	31,73	35,37	
COP net <sup>(2)</sup>		3,74	3,62	3,47	3,38	3,49	3,44	3,61	3,38	3,30	3,21	3,54	3,39	3,24	
<b>Seasonal efficiencies - Cooling mode</b>															
Seasonal Energy Efficiency Ratio - SEER <sup>(3)</sup>		4,44	4,26	4	3,85	4,93	4,71	4,66	4,5	4,36	4,21	4,33	4,26	4,18	
Seasonal energy efficiency - η <sub>s,c</sub> <sup>(4)</sup>	%	175	167	157	151	194	186	184	177	172	166	170	168	164	
Eurovent energy efficiency class - Part load operation		B	B	B	B	B	B	B	B	B	B	B	B	B	
<b>Seasonal efficiencies - Heating mode</b>															
Seasonal Coefficient of Performance - SCOP <sup>(5)</sup>		3,49	3,4	3,27	3,21	3,33	3,29	3,32	3,3	3,21	3,22	3,4	3,33	3,2	
Seasonal energy efficiency - η <sub>s,h</sub> <sup>(6)</sup>	%	137	133	128	126	130	129	130	129	126	126	133	130	126	
Eurovent energy efficiency class - Part load operation		B	B	B	B	B	B	B	B	B	B	B	B	B	
<b>Auxiliary heating</b>															
Gas heating capacity	kW	33,9				57,2				74,1			101,5		
Electric heater capacity - Standard / High		18/36				27/54				27/54			27/54		
Electric pre-heater capacity - Standard / High		18/36				24/48				36/72			36/72		
Hot water coil capacity Air inlet 10°C/Water 90-70°C		50	59	63	66	84	93	103	109	178	186	186	186	186	
<b>Ventilation data</b>															
Minimum airflow rate	m <sup>3</sup> /h	3500	3500	3780	4140	5000	5000	5940	6600	9500	9500	12900	13800	14700	
Nominal airflow rate		4200	5700	6300	6900	7100	8300	9900	11100	13500	14500	19500	22000	23500	
Maximum airflow rate		5600	6800	10000	10000	9700	11200	16000	16000	22000	22000	23000	23000	24500	
<b>Acoustic data - Standard unit</b>															
Outdoor sound power	dB(A)	80,2	80,7	81,4	81,9	83,3	83,5	84,1	84,5	81,9	83,2	82,6	84,6	87,3	
Indoor blower outlet sound power		71	77,3	79,4	81,4	72,1	74,5	77,6	80	83,1	84,5	84,1	86,7	88,2	
<b>Electrical data</b>															
Maximum power	kW	13	15,3	18,3	20,3	25,8	28,1	30,2	33,3	40,6	44,6	49,8	55,8	60,5	
Maximum current	A	56,7	66,3	93,2	121,4	77,3	87	89	116	129,2	161,9	192,4	212,9	220,9	
Starting current	A	21,2	23,4	30,3	34,7	41,8	44	46,1	53	66,3	75,2	81,6	94,1	102	
Short circuit current	kA	10				10				10			10		
<b>Refrigeration circuit</b>															
Number of circuits		1	1	1	1	2	2	2	2	2	2	2	2	2	
Number of compressors		2	2	2	2	4	4	4	4	4	4	4	4	4	
Refrigerant load	kg	6,1	6,1	8,1	8,1	6,5 +6,5	6,5 +6,5	8 +8	8 +8	10,5 +10,5	10,5 +10,5	10 +10	10,4 +10,4	10,8 +10,8	

(1) **Cooling mode** : According to EN14511 nominal conditions - Outdoor temperature 35°C DB - Indoor temperature 27°C DB / 19°C WB  
 (2) **Heating mode** : According to EN14511 nominal conditions - Outdoor temperature 7°C DB / 6°C WB - Indoor temperature 20°C DB  
 (3) SEER in accordance with standard EN14825.  
 (4) Space cooling energy efficiency following Ecodesign regulation EU 2016/2281  
 (5) SCOP in accordance with standard EN 14825 (average climate conditions).  
 (6) Space heating energy efficiency following Ecodesign regulation EU 2016/2281.

# BA<sup>(A)</sup> C<sup>(B)</sup> 065<sup>(C)</sup> D<sup>(D)</sup> N<sup>(E)</sup> M<sup>(F)</sup> 5<sup>(G)</sup> M<sup>(H)</sup>

(A) **BA** = BALTIC

(B) **C** = Cooling - **H** = Heat pump

(C) Cooling capacity in kW or airflow (x 1.000 m<sup>3</sup>/h)

(D) **S** = 1 circuit - **D** = 2 circuits - **T** = 3 circuits - **F** = 4 circuits

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(F) **M** = R410A - **H** = HFO - **Z** = No refrigerant

(G) Revision number

(H) 400V/III/50Hz



## Water cooled version

## Heat pump units

BALTIC		045	055	057	065	075	085
<b>Nominal thermal performances - Cooling mode</b>							
Cooling capacity <sup>(1)</sup>	kW	47,6	53,2	61,3	71,3	84,7	90,7
Total Power Input	kW	10,7	12,6	13,7	16,9	19,9	23,0
EER net <sup>(1)</sup>		4,5	4,2	4,5	4,2	4,2	3,9
<b>Nominal thermal performances - Heating mode</b>							
Heating capacity <sup>(2)</sup>	kW	60,2	68,2	79,2	91,3	106,5	117,1
Total Power Input	kW	13,1	14,6	16,8	20,7	22,8	26,7
COP net <sup>(2)</sup>		4,6	4,7	4,7	4,4	4,7	4,4
<b>Seasonal efficiencies - Cooling mode</b>							
Seasonal Energy Efficiency Ratio - <b>SEER</b> <sup>(3)</sup>		5.08	5.88	6.43	5.93	5.39	5.26
Seasonal energy efficiency - <b>η<sub>s,c</sub></b> <sup>(4)</sup>	%	195	227.4	249.4	229.3	207.7	202.3
Eurovent energy efficiency class - Part load operation		B	B	B	B	B	B
<b>Seasonal efficiencies - Heating mode</b>							
Seasonal Coefficient of Performance - <b>SCOP</b> <sup>(5)</sup>		2.94	3.44	4.79	4.55	4.41	4.25
Seasonal energy efficiency - <b>η<sub>s,h</sub></b> <sup>(6)</sup>	%	109.5	129.4	183.6	174.1	168.3	161.8
Eurovent energy efficiency class - Part load operation		B	B	B	B	B	B
<b>Auxiliary heating</b>							
Gas heating capacity	kW	57,2				74,1	
Electric heater capacity - Standard / High		27/54				27/54	
Electric pre-heater capacity - Standard / High		24/48				36/72	
Hot water coil capacity Air inlet 10°C/Water 90-70°C		84	93	103	109	178	186
<b>Ventilation data</b>							
Minimum airflow rate	m <sup>3</sup> /h	5000	5000	5940	6660	9500	9500
Nominal airflow rate		7100	8300	9900	11100	13500	14500
Maximum airflow rate		9700	11200	16000	16000	22000	22000
<b>Acoustic data - Standard unit</b>							
Outdoor sound power	dB(A)	74,4	75,5	77,2	78,8	81,6	82,9
Indoor blower outlet sound power		75,2	78	81,4	83,6	87	88,5
<b>Electrical data</b>							
Maximum power	kW	22,1	25,2	28,4	31,5	39,6	43,7
Maximum current	A	124	126,9	86	113	127,7	160,4
Starting current	A	37,3	40,2	43,1	50	64,8	73,7
Short circuit current	kA	10				10	
<b>Refrigeration circuit</b>							
Number of circuits		2	2	2	2	2	2
Number of compressors		2	3	4	4	4	4
Refrigerant load	kg	6.8 +6.8	6.8 +6.8	7.8 +7.8	7.8 +7.8	9.1 +9.1	9.1 +9.1

(1) **Cooling mode** : According to EN14511 nominal conditions

(2) **Heating mode** : According to EN14511 nominal conditions

(3) SEER in accordance with standard EN14825.

(4) Space cooling energy efficiency following Ecodesign regulation EU 2016/2281

(5) SCOP in accordance with standard EN 14825 (average climate conditions).

(6) Space heating energy efficiency following Ecodesign regulation EU 2016/2281



**Air cooled version**

BALTIC BAC/BAH		025	030	040	042	045	055	057	065	075	085	095	115	125
A	mm	2298				2811				3691		3691		
B		2250				2250				2250		2305		
C		1263				1263				1263		1619		
D		435												
<b>Weight of standard units</b>														
Basic unit	kg	600	620	660	660	860	860	920	920	1150	1150	1350	1350	1350



**Water cooled version**

BALTIC BAC/BAH		045	055	057	065	075	085	
A	mm	2798				3298		
B		2250						
C		1263						
D		435						
<b>Weight of standard units</b>								
Basic unit	kg	800	820	860	880	1000	1050	

