

e-Baltic


Air cooled rooftop units





R32



AIR COOLED

 31 - 207 kW

 30 - 207 kW

 5700 - 35000 m³/h

LENNOX participates in the ECP
programme for RT.
Check ongoing validity of certificate :
www.eurovent-certification.com

- # Installation and replacement made easy thanks to the unit's **compact nature with the same footprint and weight** as previous Baltic and Flexair ranges.
- # 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 attenuation options.
- # **Reduced frequency of leak testing and lower taxes** thanks to a lower CO₂e (carbon dioxide equivalent).



R32 is an obvious choice to replace R410A. It already makes up 50% of its composition, and it has a number of other key advantages:

- # low GWP: 675
- # low cost
- # pure substance
- # many providers due to no patent



THERMODYNAMIC SYSTEM

- # R32 refrigerant (GWP = 675) enabling a decrease of the carbon dioxide equivalent for potential tax savings.
- # Tandem scroll compressors allowing capacity modulation.
- # Variable refrigerant control with electronic expansion valve.
- # Heat transfer efficiency thanks to new coil design.
- # Easy access to compressors enabling faster maintenance operations.
- # Fan with variable speed EC motor and swept blades, enabling control of the high and low floating pressure for optimum operation.
- # Integrated safety devices for peace of mind.

REMOTE MONITORING

- # Connectivity through **LennoxCloud** (LENNOX WEB PORTAL for Multi sites / Multi units).
- # BMS through:
 - **LennoxOneWeb**.
 - **ADALINK II*** (LENNOX WEB SERVER One site / Several units).
 - **LennoxTouch.***

* Check the availability of this feature in your country.



CONTROL

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

eCLIMATIC



DS

Service display



DM

Multi-Rooftop display



DC

Comfort display



CASING & DESIGN

- # New design enabling a -30% refrigerant charge.
- # 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.



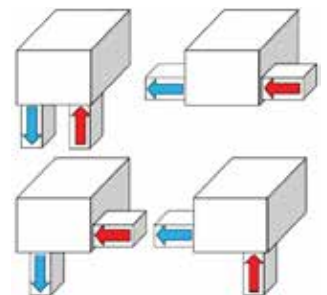
AIR TREATMENT

- # 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.



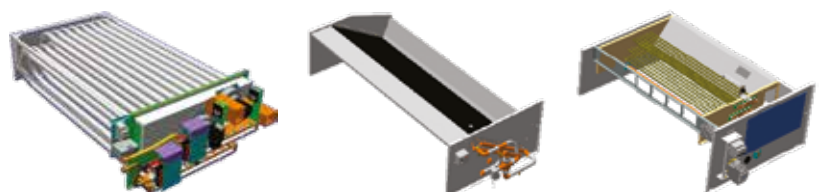
AIRFLOW

- # 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.



eB^(A) B^(B) H^(C) 100^(D) D^(E) P^(F) 1^(G) M^(H)

- (A) **eB** = e-Baltic
- (B) **B** = Steel - **F** = Aluminium
- (C) **H** = Heat pump unit
- (D) Cooling capacity in kW (x 100 m³/h)
- (E) **S** = 1 circuit - **D** = 2 circuits
- (F) **P** = R32 - **H** = HFO - **N** = No refrigerant
- (G) Revision number
- (H) 400V/3/50Hz



Air cooled version



Heat pump units

e-Baltic		035	045	055	065	075	085	095
Nominal thermal performances - Cooling mode								
Cooling capacity ⁽¹⁾	kW	31,3	43,0	45,9	57,6	66,7	81,0	98,4
Total Power Input	kW	9,50	13,86	14,89	19,86	22,48	28,44	30,37
EER net ⁽¹⁾		3,30	3,10	3,08	2,90	2,97	2,85	3,24
Nominal thermal performances - Heating mode								
Heating capacity ⁽²⁾	kW	29,7	37,2	43,0	56,5	64,3	83,0	92,7
Total Power Input	kW	7,94	10,54	12,61	16,57	18,71	25,80	24,14
COP net ⁽²⁾		3,74	3,53	3,41	3,41	3,44	3,22	3,84
Seasonal efficiencies - Cooling mode								
Seasonal Energy Efficiency Ratio - SEER ⁽³⁾		4,41	4,41	3,99	3,93	3,98	3,71	4,51
Seasonal energy efficiency - η_{s,c} ⁽⁴⁾	%	173	173	157	154	156	145	177
Eurovent energy efficiency class - Part load operation		B	B	B	B	B	B	B
Seasonal efficiencies - Heating mode								
Seasonal Coefficient of Performance - SCOP ⁽⁵⁾		3,46	3,24	3,43	3,23	3,52	3,23	3,35
Seasonal energy efficiency - η_{s,h} ⁽⁶⁾	%	135	127	134	126	138	126	131
Eurovent energy efficiency class - Part load operation		B	B	B	B	B	B	B
Auxiliary heating								
Gas heating capacity	kW	33,9	33,9	57,2	57,2	74,1	74,1	101,5
Electric heater capacity - Standard / High		18 / 36	18 / 36	27 / 54	27 / 54	27 / 54	27 / 54	27 / 54
Electric pre-heater capacity - Standard / High		18 / 36	18 / 36	24 / 48	24 / 48	36 / 72	36 / 72	36 / 72
Hot water coil capacity Air inlet 10°C/Water 90-70°C		Capacity depends on air and water conditions.						
Ventilation data								
Minimum airflow rate	m ³ /h	5600	6000	6400	8800	10800	10800	15000
Nominal airflow rate		7000	7500	8000	11000	13500	16000	20500
Maximum airflow rate		10500	10500	11200	16000	22000	22000	23000
Acoustic data - Standard unit								
Outdoor sound power	dB(A)	75,2	77,2	74,1	76,4	79,0	81,7	81,4
Indoor blower outlet sound power		80,2	81,5	75,5	80,8	82,2	86,2	85,2
Electrical data								
Maximum power	kW	14,5	21,3	22,6	26,6	33,3	37,9	47,8
Maximum current	A	24,5	34,2	98,4	102,6	118,3	130,4	162,7
Starting current	A	82,2	112,1	39,3	44,9	56,0	63,4	75,8
Short circuit current	kA	10	10	10	10	10	10	10
Refrigeration circuit								
Number of circuits		1	1	2	2	2	2	2
Number of compressors		2	2	4	4	4	4	4
Refrigerant load	kg	5.1	6.75	6.2 / 6.2	6.2 / 6.2	5.7 / 5.7	5.7 / 5.7	7.7 / 7.7

- (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.

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Air cooled version



Heat pump units

e-Baltic		100	115	120	130	150	180	210
Nominal thermal performances - Cooling mode								
Cooling capacity ⁽¹⁾	kW	97,5	117,1	117,7	134,7	150,2	180,0	206,7
Total Power Input	kW	31,05	38,52	38,59	45,36	51,09	57,51	71,27
EER net ⁽¹⁾		3,14	3,04	3,05	2,97	2,94	3,13	2,90
Nominal thermal performances - Heating mode								
Heating capacity ⁽²⁾	kW	93,5	114,0	115,0	129,3	145,9	172,9	207,0
Total Power Input	kW	24,60	31,84	32,86	34,95	41,10	45,86	59,65
COP net ⁽²⁾		3,80	3,58	3,50	3,70	3,55	3,77	3,47
Seasonal efficiencies - Cooling mode								
Seasonal Energy Efficiency Ratio - SEER ⁽³⁾		4,50	4,26	4,20	4,29	4,23	4,31	3,81
Seasonal energy efficiency - η_{s,c} ⁽⁴⁾	%	177	167	165	169	166	169	149
Eurovent energy efficiency class - Part load operation		B	B	B	B	B	B	B
Seasonal efficiencies - Heating mode								
Seasonal Coefficient of Performance - SCOP ⁽⁵⁾		3,39	3,33	3,30	3,38	3,38	3,39	3,35
Seasonal energy efficiency - η_{s,h} ⁽⁶⁾	%	133	130	129	132	132	133	131
Eurovent energy efficiency class - Part load operation		B	B	B	B	B	B	B
Auxiliary heating								
Gas heating capacity	kW	95,4	101,5	95,4	139,2	139,2	172,9	172,9
Electric heater capacity - Standard / High		30 / 72	27 / 54	30 / 72	45 / 108	45 / 108	72 / 162	72 / 162
Electric pre-heater capacity - Standard / High		-	36 / 72	-	-	-	-	-
Hot water coil capacity Air inlet 10°C/Water 90-70°C		Capacity depends on air and water conditions.						
Ventilation data								
Minimum airflow rate	m ³ /h	15000	17000	15700	19000	21000	24000	28000
Nominal airflow rate		20500	23000	23000	26000	28000	33000	35000
Maximum airflow rate		23000	23000	23000	35000	35000	43000	43000
Acoustic data - Standard unit								
Outdoor sound power	dB(A)	81,4	83,2	83,7	84,5	86,4	85,7	87,5
Indoor blower outlet sound power		85,2	87,7	87,7	89,4	91,0	88,6	89,8
Electrical data								
Maximum power	kW	47,9	55,8	56,3	62,6	68,8	82,0	98,6
Maximum current	A	162,9	212,6	213,5	202,8	230,2	273,8	328,7
Starting current	A	76,0	93,6	94,5	98,4	108,6	129,4	155,4
Short circuit current	kA	10	10	10	10	10	10	10
Refrigeration circuit								
Number of circuits		2	2	2	2	2	2	2
Number of compressors		4	4	4	4	4	4	4
Refrigerant load	kg	7.3 / 7.3	7.8 / 7.8	7.4 / 7.4	11.25 / 10.5	11.25 / 10.5	12.8 / 12.8	13.5 / 13.5

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



Air cooled version

e-Baltic		035	045	055	065	075	085	095	100	115	120	130	150	180	210
A	mm	2250	2250	2250	2250	2250	2250	2305	2245	2305	2245	2245	2245	2260	2260
B		2298	2298	2811	2811	3691	3691	3691	3315	3691	3315	4360	4360	5166	5166
C		1263	1263	1263	1263	1263	1263	1619	1750	1619	1750	1885	1885	2235	2235
D		435	435	435	435	435	435	435	360	435	360	456	456	620	620
Weight of standard units															
Basic unit	kg	640	640	980	980	1150	1150	1300	1300	1300	1350	1700	1700	2150	2150

