

eComfort

Air cooled chillers / Heat pumps



R32



R410A



R32

AIR COOLED



35 - 210 kW



35 - 210 kW



R410A

AIR COOLED



20 - 180 kW



20 - 190 kW



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

- # **Fast and easy installation and commissioning** thanks to the integration of a complete hydraulic module with buffer tank and immersed heating rods.
- # Compact and discreet design **for perfect architectural integration**.
- # **Excellent SEPR seasonal energy efficiencies**, which exceed the European EcoDesign 2021 requirements regarding high-temperature process cooling.
- # **Precise water temperature control** in cooling and heating modes thanks to highly efficient components.

THERMODYNAMIC SYSTEM

- # Extended operating map to match most market requirements
- # New heat exchanger and latest generation components to provide high efficiency and the best Total Cost of Ownership (TCO) of the market
- # R32 refrigerant (GWP = 675) enabling a decrease of the refrigerant load (-30%) and of the unit's carbon footprint (-75% TeqCO₂)
- # Desuperheater (as an option): additional plate heat exchanger on each circuit to recover the rejected heat and provide free hot water for sanitary or industrial purposes



ACOUSTIC COMFORT

Intelligent noise attenuation management thanks to:

- # Acoustic compressor jacket
- # High efficiency EC fans

CASING & DESIGN

- # Optimized design for compact footprint, including water tank (as an option)



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



CONTROL

- # The integrated control management (LonWorks / ModBus / BACnet / Ethernet TCP / IP communication interface / Lennox Cloud as an option) offers a turnkey control solution



INTEGRATED HYDRAULIC MODULE

- # Enables Plug & Play installation and reduced footprint
- # Available with eDrive technology (inverter) to reduce operation costs

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- # Compact and discreet design **for perfect architectural integration**.
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- # **Precise water temperature control** in cooling and heating modes thanks to highly efficient components.

CONTROL

- # eClimatic electronic controller and intelligent control parameters optimising part-load efficiency.
- # Integrated communication solutions offering flexibility (master/slave, Modbus, BACnet LonWorks®).
- # DC Advanced display, equipped with a graphic screen providing access to the main user parameters, with two optional displays:
 - Remote Display
 - Service Display



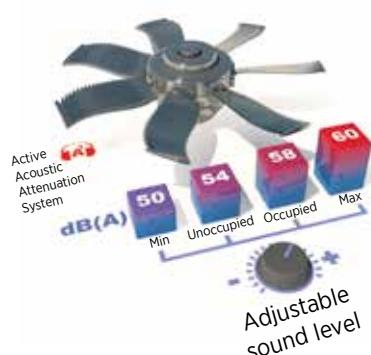
CASING & DESIGN

- # Casing made of white painted galvanised steel.
- # Compact design, perfect for architectural integration.
- # All thermodynamic and hydraulic components installed inside the box.
- # Unit designed with reduced height for discreet installation on a roof or on the ground (up to 1.7m), without the need for a peripheral screen.

ACOUSTIC COMFORT

Three different noise level configurations available:

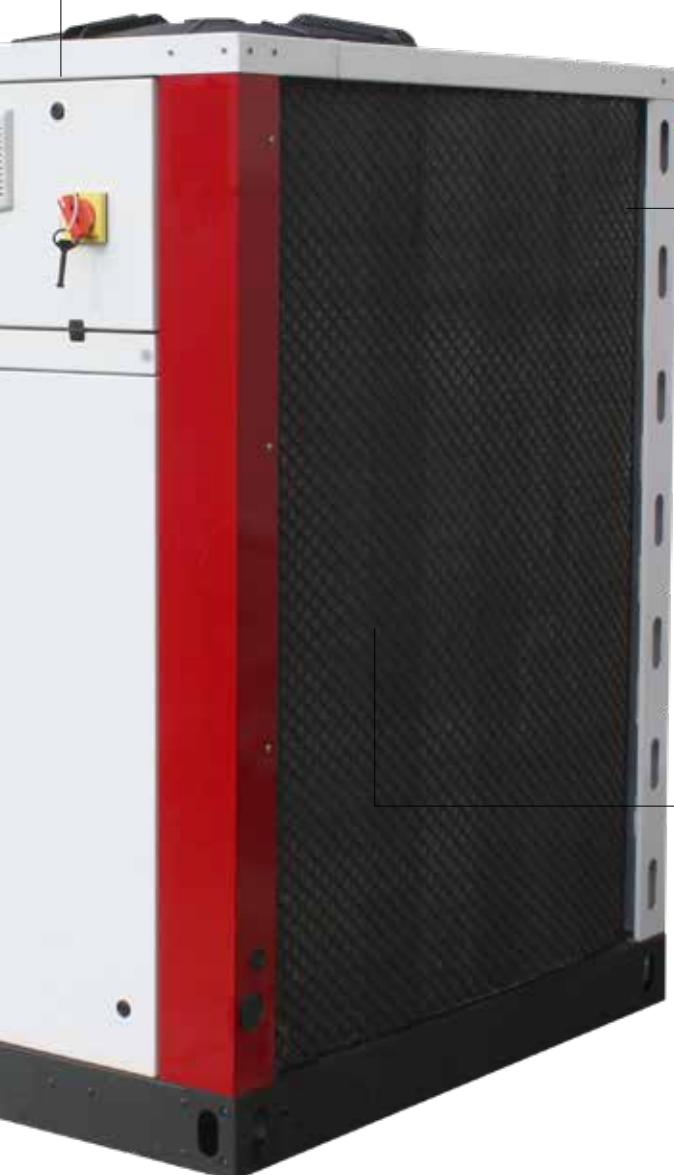
- # **Quiet operation** (standard), achieved with compact design, silent compressors and pumps, and with high-performance propeller fans, all installed in a closed box.
- # **Low noise level option**: High performance acoustic compressor jacket can have the noise produced by the unit.
- # **Active Acoustic Attenuation System** with variable fan speed allows progressive adaptation of the unit to the building load while respecting the noise level constraints and the operating limits (as an option).



REMOTE MONITORING

- # Connectivity through **LennoxHydrocontrol**, a user-friendly interface for local supervision of the entire hydraulic system.
- # Connectivity through **LennoxCloud** (LENNOX WEB PORTAL for Multi sites / units).
- # BMS through:
 - **LennoxOneWeb**.
 - **ADALINK II*** (LENNOX WEB SERVER One site / Several units).
 - **LennoxTouch.***

* Check the availability of this feature in your country.



THERMODYNAMIC SYSTEM

- # Multi-scroll compressors, mounted in tandem or trio, to provide the best seasonal efficiencies.
- # Aluminium microchannel condenser coil on cooling only units.
- # Large surface exchangers built with copper tubing and aluminium fins on heat-pump units.
- # High performance propeller fans with profiled blades to improve efficiency and reduce noise level (EC version available as an option).
- # Thermally insulated and frost-protected water heat exchangers made from stainless steel plates with copper brazing.
- # One or two independent circuits, each equipped with electronic expansion valves.
- # Desuperheater (as an option): additional plate heat exchanger on each circuit to recover the rejected heat and provide free hot water for sanitary or industrial purposes.



eDRIVE

Variable speed drive pump option, which modulates the water flow through the plate heat exchanger and reduces energy costs:

- # Saves energy consumption especially at part-load conditions and during off period, reaching up to 75% reduction of the pump consumption.
- # Savings on the initial system cost, due to fewer pumps and piping connections than primary-secondary systems.
- # Flexibility and accuracy of the pump operation control: smooth start and stop, gradual change of speed, accuracy and stability of control.
- # Reduction of the repeated stress on the pump and piping resulting in longer equipment lifetime.
- # Elimination of the start-up current thanks to variable frequency drive that controls a gradual pump motor supply.



G_(A) A_(B) C_(C) 020_(D) S_(E) M_(F) 2_(G) M_(H)

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- (C) **C** = Cooling only unit - **H** = Heat pump unit
- (D) **020** = Approximate power in kW
- (E) **S** = Single circuit - **D** = Double circuit
- (F) **M** = Refrigerant R410A - **P** = Refrigerant R32
- (G) **1 or 2** = Revision number
- (H) **M** = 400V/3/50Hz



Air cooled version

Cooling only units

eCOMFORT - GAC			035S	040S	045S	050S	055S	060S	
Nominal thermal performances - Cooling mode									
Cooling capacity ⁽¹⁾	kW	38,4	41,6	47,5	51,8	55,0	63,6		
Total absorbed power ⁽¹⁾	kW	12,7	13,8	15,8	17,0	18,5	21,1		
EER ⁽¹⁾		3,02	3,00	3,02	3,05	2,97	3,02		
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,36	4,60	4,30	4,46	4,35	4,38	
Process Application		Seasonal energy efficiency ⁽³⁾ $\eta_{s,c}$	%	171	181	169	175	171	
Comfort Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)	6,15	6,63	5,61	5,68	5,59	5,53	
Process Application		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)	3,68	3,88	3,83	3,80	3,81	3,81	
Comfort Application		Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,26	4,51	4,23	4,37	4,20	4,21	
Process Application		Seasonal energy efficiency ⁽³⁾ $\eta_{s,c}$	%	167	177	166	172	165	
Comfort Application	Standard Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)	5,78	6,30	5,41	5,49	5,23	5,18	
Process Application		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)	3,53	3,84	3,74	3,81	3,55	3,56	
Nominal thermal performances - Heating mode									
Heating capacity ⁽¹⁾	kW	-	-	-	-	-	-	-	
Total absorbed power ⁽¹⁾	kW	-	-	-	-	-	-	-	
COP ⁽¹⁾		-	-	-	-	-	-	-	
Comfort Application	Standard Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP	-	-	-	-	-	-	
Process Application		Seasonal energy efficiency ⁽⁷⁾ $\eta_{s,h}$	%	-	-	-	-	-	
Comfort Application	EC Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP	-	-	-	-	-	-	
Process Application		Seasonal energy efficiency ⁽⁷⁾ $\eta_{s,h}$	%	-	-	-	-	-	
Seasonal efficiency class ⁽⁸⁾			-	-	-	-	-	-	
Acoustic data									
Global sound power level - Standard unit	dB(A)	75,3	75,3	74,4	74,9	75,3	78,6		
Electrical data									
Maximum power	kW	17,4	18,8	20,6	22,3	24,0	28,8		
Maximum current	A	28,1	31,0	35,4	38,1	40,9	47,5		
Starting current	A	116,0	108,4	146,6	157,6	160,4	164,4		
Short circuit current	kA	10,0	10,0	10,0	10,0	10,0	10,0		
Refrigeration circuit									
Number of circuits		1	1	1	1	1	1		
Number of compressors		2	2	2	2	2	2		
Total refrigerant load - R32	kg	3,0	3,5	3,7	4,5	4,6	4,7		
Evaporator									
Nominal water flow rate	m ³ /h	6,61	7,15	8,17	8,90	9,47	10,94		
Nominal pressure drop	kPa	17	25	27	36	30	39		
Hydraulic connection									
Type		Threaded male							
Diameter		1"1/2	1"1/2	1"1/2	1"1/2	1"1/2	1"1/2	1"1/2	

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Air cooled version

Cooling only units

eCOMFORT - GAC			065S	070S	080S	095S	110S	115S	125S	
Nominal thermal performances - Cooling mode										
Cooling capacity ⁽¹⁾	kW	64,3	70,0	86,3	95,8	108,3	119,3	128,8		
Total absorbed power ⁽¹⁾	kW	20,4	22,6	26,9	29,9	34,8	37,9	41,1		
EER ⁽¹⁾		3,14	3,09	3,21	3,20	3,11	3,15	3,13		
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,60	4,58	4,61	4,67	4,73	4,60	4,73	
Process Application		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	181	180	181	184	186	181	
Comfort Application		Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		5,79	5,72	5,90	5,86	5,80	5,77	
Process Application		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)		3,81	3,83	3,96	3,87	3,90	3,93	
Comfort Application	EC Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,35	4,39	4,50	4,56	4,43	4,39	4,45	
Process Application		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	171	173	177	179	174	173	
Comfort Application		Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		5,37	5,35	5,66	5,68	5,35	5,35	
Process Application		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)		3,68	3,63	3,87	3,90	3,60	3,65	
Nominal thermal performances - Heating mode										
Heating capacity ⁽¹⁾	kW	-	-	-	-	-	-	-	-	
Total absorbed power ⁽¹⁾	kW	-	-	-	-	-	-	-	-	
COP ⁽¹⁾		-	-	-	-	-	-	-	-	
Comfort Application	Standard Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP	-	-	-	-	-	-	-	
Process Application		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	-	-	-	-	-	-	
Comfort Application		Seasonal Coeficient of Performance ⁽⁶⁾ SCOP	-	-	-	-	-	-	-	
Process Application		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	-	-	-	-	-	-	
Seasonal efficiency class ⁽⁸⁾										
Acoustic data										
Global sound power level - Standard unit	dB(A)	77,9	78,5	80,2	84,1	84,1	86,3	82,6		
Electrical data										
Maximum power	kW	28,3	30,9	37,0	41,5	47,1	54,3	57,4		
Maximum current	A	47,0	52,6	62,9	70,0	79,2	90,0	96,9		
Starting current	A	163,8	208,8	219,1	273,3	320,3	331,2	253,1		
Short circuit current	kA	10,0	10,0	10,0	10,0	10,0	10,0	10,0		
Refrigeration circuit										
Number of circuits		1	1	1	1	1	1	1		
Number of compressors		2	2	2	2	2	2	3		
Total refrigerant load - R32	kg	6,0	6,2	7,4	9,0	9,2	9,4	9,2		
Evaporator										
Nominal water flow rate	m ³ /h	6,61	7,15	8,17	8,90	9,47	10,94	11,05		
Nominal pressure drop	kPa	17	25	27	36	30	39	33		
Hydraulic connection										
Type		Victrallic or Welded								
Diameter		2"	2"	2"	2"1/2	2"1/2	2"1/2	2"1/2		

(1) EUROVENT certified data, in accordance with standard EN 14511.

(2) Cooling mode: Evaporator water temperature = 12/7°C | Outdoor air temperature = 35°C / Heating mode: Condenser water temperature = 40/45°C | Outdoor air temperature = 7°C

(3) Following ecodesign regulation EU 2016/2281 on space cooling, normalized leaving water temperature at 7°C, in accordance with standard EN 14825, | (4) Following ecodesign regulation EU 2016/2281 on process cooling units, normalized leaving water temperature at 7°C, in accordance with standard EN 14825, | (5) Following ecodesign regulation EU 2015/1095 on process cooling chillers, normalized leaving water temperature at -8°C, in accordance with standard EN 14825 | (6) SCOP in accordance with standard EN 14825 | (7) Following ecodesign regulation EU 813/2013 on space heaters, normalized leaving water temperature at -8°C, in accordance with standard EN 14825, average climate conditions. | (8) Following energy labelling regulation EU 811/2013 on space heaters.

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Air cooled version

Cooling only units

eCOMFORT - GAC			140S	110D	125D	140D	160D	185D	210D	
Nominal thermal performances - Cooling mode										
Cooling capacity ⁽¹⁾		kW	156,3	111,4	127,5	142,3	167,8	187,2	210,5	
Total absorbed power ⁽¹⁾		kW	51,1	36,9	41,9	46,6	53,6	60,7	69,9	
EER ⁽¹⁾			3,03	3,02	3,04	3,05	3,13	3,08	3,01	
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		4,53	4,66	4,60	4,65	4,72	4,71	4,64
		Seasonal energy efficiency ⁽³⁾ η_{s,c}		%	178	183	181	183	186	185
Process Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		5,52	5,70	5,54	5,51	5,80	5,64	5,45
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)		3,89	3,94	3,89	3,92	3,98	3,93	3,87
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		4,35	4,60	4,46	4,48	4,64	4,60	4,36
		Seasonal energy efficiency ⁽³⁾ η_{s,c}		%	171	181	175	176	183	181
Process Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		5,36	5,54	5,22	5,22	5,55	5,44	5,09
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)		3,71	3,93	3,67	3,71	3,87	3,85	3,56
Nominal thermal performances - Heating mode										
Heating capacity ⁽¹⁾		kW	-	-	-	-	-	-	-	
Total absorbed power ⁽¹⁾		kW	-	-	-	-	-	-	-	
COP ⁽¹⁾			-	-	-	-	-	-	-	
Comfort Application	Standard Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		-	-	-	-	-	-	
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}		%	-	-	-	-	-	
Process Application	EC Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		-	-	-	-	-	-	
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}		%	-	-	-	-	-	
Seasonal efficiency class ⁽⁸⁾			-	-	-	-	-	-	-	
Acoustic data										
Global sound power level - Standard unit		dB(A)	88,3	78,3	81,6	84,1	83,2	87,5	87,5	
Electrical data										
Maximum power		kW	72,4	48,0	57,6	64,5	73,9	88,3	99,5	
Maximum current		A	120,0	81,6	95,0	108,6	125,6	147,5	165,8	
Starting current		A	323,3	201,1	211,8	264,8	281,8	350,8	407,0	
Short circuit current		kA	10,0	10,0	10,0	10,0	10,0	10,0	10,0	
Refrigeration circuit										
Number of circuits			1	2	2	2	2	2	2	
Number of compressors			3	4	4	4	4	4	4	
Total refrigerant load - R32		kg	9,4	9,0	9,2	9,4	14,5	15,0	15,2	
Evaporator										
Nominal water flow rate		m ³ /h	26,89	19,16	21,93	24,48	28,86	32,19	36,20	
Nominal pressure drop		kPa	42	56	46	61	58	61	58	
Hydraulic connection										
Type		Victaulic or Welded								
Diameter			2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	

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Air cooled version

Heat pumps units

eCOMFORT - GAH		035S	040S	045S	050S	055S	060S	
Nominal thermal performances - Cooling mode								
Cooling capacity ⁽¹⁾	kW	37,7	41,2	46,9	50,5	56,1	63,2	
Total absorbed power ⁽¹⁾	kW	13,2	14,2	16,5	17,7	19,0	22,0	
EER ⁽¹⁾		2,87	2,90	2,85	2,86	2,96	2,87	
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,21	4,48	4,26	4,33	4,18	
		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	165	176	167	170	
Process Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		6,03	6,58	5,58	5,59	
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)		3,71	3,94	3,89	3,85	
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		4,15	4,40	4,19	4,25	
		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	163	173	165	167	
Process Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		5,71	6,21	5,38	5,40	
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)		3,52	3,83	3,75	3,77	
Nominal thermal performances - Heating mode								
Heating capacity ⁽¹⁾	kW	39,0	42,1	48,4	52,2	56,6	64,2	
Total absorbed power ⁽¹⁾	kW	13,2	14,1	15,8	17,4	18,9	21,8	
COP ⁽¹⁾		2,95	2,99	3,06	2,99	2,99	2,95	
Comfort Application	Standard Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		3,46	3,54	3,57	3,56	
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	136	139	140	140	
Process Application	EC Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		3,31	3,44	3,45	3,49	
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	129	134	135	137	
Seasonal efficiency class ⁽⁸⁾		A+	A+	A+	A+	A+	A+	
Acoustic data								
Global sound power level - Standard unit	dB(A)	75,3	75,3	74,4	74,9	75,3	78,6	
Electrical data								
Maximum power	kW	17,4	18,8	20,6	22,3	25,4	28,8	
Maximum current	A	28,1	31,0	35,4	38,1	42,9	47,5	
Starting current	A	116,0	108,4	146,6	157,6	162,4	164,4	
Short circuit current	kA	10	10	10	10	10	10	
Refrigeration circuit								
Number of circuits		1	1	1	1	1	1	
Number of compressors		2	2	2	2	2	2	
Total refrigerant load - R32	kg	5,2	5,8	6,5	8,0	8,3	9,0	
Evaporator								
Nominal water flow rate	m ³ /h	6,49	7,09	8,07	8,69	9,65	10,87	
Nominal pressure drop	kPa	37	32	30	34	34	33	
Hydraulic connection								
Type		Threaded male						
Diameter		1"1/2	1"1/2	1"1/2	1"1/2	1"1/2	1"1/2	

(1) EUROVENT certified data, in accordance with standard EN 14511.

(2) Cooling mode: Evaporator water temperature = 12/7°C | Outdoor air temperature = 35°C / Heating mode: Condenser water temperature = 40/45°C | Outdoor air temperature = 7°C

(3) Following ecodesign regulation EU 2016/2281 on space cooling, normalized leaving water temperature at 7°C, in accordance with standard EN 14825, | (4) Following ecodesign regulation EU 2016/2281 on process cooling units, normalized leaving water temperature at 7°C, in accordance with standard EN 14825, | (5) Following ecodesign regulation EU 2015/1095 on process cooling chillers, normalized leaving water temperature at -8°C, in accordance with standard EN 14825 | (6) SCOP in accordance with standard EN 14825 | (7) Following ecodesign regulation EU 813/2013 on space heaters, normalized leaving water temperature at -8°C, in accordance with standard EN 14825, | (8) Following energy labelling regulation EU 811/2013 on space heaters.

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Air cooled version

Heat pumps units

eCOMFORT - GAH		065S	070S	080S	095S	110S	115S	125S		
Nominal thermal performances - Cooling mode										
Cooling capacity ⁽¹⁾	kW	64,3	69,6	84,7	94,1	105,3	118,0	126,4		
Total absorbed power ⁽¹⁾	kW	20,8	23,1	27,7	30,9	36,4	39,4	42,7		
EER ⁽¹⁾		3,09	3,02	3,06	3,05	2,90	2,99	2,96		
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,56	4,53	4,46	4,56	4,60	4,39	4,62	
Process Application		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	179	178	175	180	181	173	182
Comfort Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)	5,78	5,69	5,82	5,81	5,73	5,59	5,65	
Process Application		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)	3,92	3,88	3,99	3,93	3,94	3,94	3,90	
Comfort Application		Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,28	4,35	4,40	4,46	4,34	4,27	4,37	
Process Application		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	168	171	173	175	171	168	172
Comfort Application	Standard Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)	5,29	5,32	5,57	5,58	5,25	5,24	5,39	
Process Application		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)	3,64	3,64	3,84	3,87	3,57	3,60	3,69	
Nominal thermal performances - Heating mode										
Heating capacity ⁽¹⁾	kW	64,9	70,4	84,9	94,8	106,7	117,5	126,1		
Total absorbed power ⁽¹⁾	kW	20,4	23,0	26,8	30,1	33,9	38,9	40,7		
COP ⁽¹⁾		3,18	3,06	3,17	3,15	3,15	3,02	3,10		
Comfort Application	Standard Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP	3,65	3,63	3,63	3,59	3,61	3,58	3,73	
Process Application		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	143	142	142	141	141	140	146
Comfort Application	EC Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP	3,58	3,64	3,50	3,61	3,51	3,31	3,71	
Process Application		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	140	143	137	141	137	129	146
Seasonal efficiency class ⁽⁸⁾		A+	A+	A+	A+	A+	A+	A+		
Acoustic data										
Global sound power level - Standard unit	dB(A)	77,9	78,5	80,2	84,1	84,1	86,3	82,6		
Electrical data										
Maximum power	kW	28,3	30,9	37,0	41,5	47,1	54,3	57,4		
Maximum current	A	47,0	52,6	62,9	70,0	79,2	90,0	96,9		
Starting current	A	163,8	208,8	219,1	273,3	320,3	331,2	253,1		
Short circuit current	kA	10	10	10	10	10	10	10		
Refrigeration circuit										
Number of circuits		1	1	1	1	1	1	1		
Number of compressors		2	2	2	2	2	2	3		
Total refrigerant load - R32	kg	10,0	10,5	12,5	17,0	17,5	17,5	18,0		
Evaporator										
Nominal water flow rate	m ³ /h	11,06	11,98	14,57	16,19	18,12	20,29	21,74		
Nominal pressure drop	kPa	34	39	39	48	36	45	34		
Hydraulic connection										
Type		Victaulic or Welded								
Diameter		2"	2"	2"	2"1/2	2"1/3	2"1/4	2"1/5		

G_(A) A_(B) C_(C) 020_(D) S_(E) M_(F) 2_(G) M_(H)

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- (D) **020** = Approximate power in kW
- (E) **S** = Single circuit - **D** = Double circuit
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- (H) **M** = 400V/3/50Hz



Air cooled version

Heat pumps units

eCOMFORT - GAH		140S	110D	125D	140D	160D	185D	210D		
Nominal thermal performances - Cooling mode										
Cooling capacity ⁽¹⁾	kW	152,0	108,6	125,3	140,3	166,1	187,3	209,1		
Total absorbed power ⁽¹⁾	kW	54,8	38,4	43,3	48,4	55,1	62,5	73,0		
EER ⁽¹⁾		2,78	2,83	2,89	2,90	3,01	3,00	2,86		
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,36	4,56	4,42	4,49	4,62	4,56	4,49	
Process Application		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	171	179	174	177	182	179	176
Comfort Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)	5,31	5,64	5,40	5,36	5,73	5,49	5,27	
Process Application		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)	3,85	3,92	3,84	3,85	3,99	3,92	3,82	
Comfort Application		Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,25	4,48	4,35	4,38	4,55	4,50	4,26	
Process Application		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	167	176	171	172	179	177	167
Comfort Application		Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)	5,25	5,47	5,11	5,10	5,48	5,34	4,95	
Process Application		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)	3,65	3,88	3,61	3,64	3,85	3,81	3,50	
Nominal thermal performances - Heating mode										
Heating capacity ⁽¹⁾	kW	154,5	114,0	129,3	142,5	170,7	190,3	216,0		
Total absorbed power ⁽¹⁾	kW	52,9	35,4	41,4	45,9	53,3	61,0	72,9		
COP ⁽¹⁾		2,92	3,22	3,12	3,11	3,20	3,12	2,96		
Comfort Application	Standard Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP	3,70	3,78	3,76	3,79	3,78	3,74	3,71	
Process Application		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	145	148	147	148	148	147	145
Comfort Application	EC Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP	3,54	3,71	3,48	3,51	3,64	3,64	3,38	
Process Application		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	139	145	136	138	143	143	132
Seasonal efficiency class ⁽⁸⁾		A+	A+	A+	A+	A+	A+	A+		
Acoustic data										
Global sound power level - Standard unit	dB(A)	88,3	78,3	81,6	84,1	83,2	87,5	87,5		
Electrical data										
Maximum power	kW	72,4	48,0	57,6	64,5	73,9	88,3	99,5		
Maximum current	A	120,0	81,6	95,0	108,6	125,6	147,5	165,8		
Starting current	A	323,3	201,1	211,8	264,8	281,8	350,8	407,0		
Short circuit current	kA	10	10	10	10	10	10	10		
Refrigeration circuit										
Number of circuits		1	2	2	2	2	2	2		
Number of compressors		3	4	4	4	4	4	2+2		
Total refrigerant load - R32	kg	18,3	17,8	19,0	20,0	27,0	27,5	28,0		
Evaporator										
Nominal water flow rate	m ³ /h	26,14	18,68	21,55	24,13	28,56	32,21	35,97		
Nominal pressure drop	kPa	48	20	25	21	28	31	38		
Hydraulic connection										
Type		Vtaulic or Welded								
Diameter		2"1/6	2"1/7	2"1/8	2"1/9	3"	3"	3"		

(1) EUROVENT certified data, in accordance with standard EN 14511.

(2) Cooling mode: Evaporator water temperature = 12/7°C | Outdoor air temperature = 40/45°C | Condenser water temperature = 35°C | Heating mode: Condenser water temperature = 40/45°C | Outdoor air temperature = 7°C

(3) Following ecodesign regulation EU 2016/2281 on space cooling, normalized leaving water temperature at 7°C, in accordance with standard EN 14825, | (4) Following ecodesign regulation EU 2016/2281 on process cooling units, normalized leaving water temperature at 7°C, in accordance with standard EN 14825, | (5) Following ecodesign regulation EU 2015/1095 on process cooling chillers, normalized leaving water temperature at -8°C, in accordance with standard EN 14825 | (6) SCOP in accordance with standard EN 14825 | (7) Following ecodesign regulation EU 813/2013 on space heaters, normalized leaving water temperature at -8°C, in accordance with standard EN 14825, average climate conditions. | (8) Following energy labelling regulation EU 811/2013 on space heaters.

G_(A) A_(B) C_(C) 020_(D) S_(E) M_(F) 2_(G) M_(H)

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Air cooled version

Cooling only units

eCOMFORT - GAC			020S	025S	030S	035S	040S	045S	055S	060S	070S	080S	
Nominal thermal performances - Cooling mode													
Cooling capacity ⁽¹⁾		kW	20,1	24,6	31,7	36,9	40,1	45,5	54,8	61,2	69,5	82,7	
Total absorbed power ⁽¹⁾		kW	6,0	7,8	10,8	12,0	13,1	15,6	17,3	19,5	22,3	25,9	
EER ⁽¹⁾			3,36	3,14	2,93	3,07	3,06	2,91	3,17	3,14	3,12	3,19	
Eurovent energy class ⁽¹⁾ - Full load operation			A	A	B	B	B	B	A	A	A	A	
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		4,67	4,66	4,32	4,44	4,49	4,34	4,67	4,44	4,57	4,61
		Seasonal energy efficiency ⁽³⁾ η_{s,c}		%	184	183	170	174	177	171	184	175	180
Process Application	Standard Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		6,64	6,79	5,91	6,22	6,43	5,65	6,30	5,69	5,63	5,70
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)		4,64	4,55	4,33	4,67	4,38	4,06	4,75	4,35	4,31	4,30
Comfort Application	EC Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		4,93	5,02	4,61	4,81	4,76	4,65	4,89	4,64	4,71	4,85
		Seasonal energy efficiency ⁽³⁾ η_{s,c}		%	194	198	182	190	187	183	193	183	185
Process Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		6,64	6,92	6,00	6,45	6,65	5,86	6,43	5,70	5,70	5,87
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)		3,33	3,53	3,54	3,64	3,44	3,46	3,73	3,63	3,65	3,58
Nominal thermal performances - Heating mode													
Heating capacity ⁽¹⁾		kW	-	-	-	-	-	-	-	-	-	-	
Total absorbed power ⁽¹⁾		kW	-	-	-	-	-	-	-	-	-	-	
COP ⁽¹⁾			-	-	-	-	-	-	-	-	-	-	
Eurovent energy class ⁽¹⁾ - Full load operation			-	-	-	-	-	-	-	-	-	-	
Comfort Application	Standard Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		-	-	-	-	-	-	-	-	-	
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}		%	-	-	-	-	-	-	-	-	
Comfort Application	EC Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		-	-	-	-	-	-	-	-	-	
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}		%	-	-	-	-	-	-	-	-	
Seasonal efficiency class ⁽⁸⁾			-	-	-	-	-	-	-	-	-	-	
Acoustic data													
Global sound power level - Standard unit		dB(A)	72,4	74,0	74,0	76,4	76,4	75,7	77,8	75,4	79,5	81,0	
Electrical data													
Maximum power		kW	9,9	12,2	15,3	17,6	18,2	21,0	25,1	28,0	30,9	35,8	
Maximum current		A	52,1	61,7	88,7	118,0	117,6	147,9	140,6	162,6	167,4	210,5	
Starting current		A	16,6	18,8	25,8	31,2	30,5	37,1	42,2	47,0	51,8	68,1	
Short circuit current		kA	10	10	10	10	10	10	10	10	10	10	
Refrigeration circuit													
Number of circuits			1	1	1	1	1	1	1	1	1	1	
Number of compressors			2	2	2	2	2	2	2	2	2	2	
Total refrigerant load - R410a		kg	3,3	3,3	4,4	4,6	4,8	4,8	7,0	8,0	8,5	9,5	
Evaporator													
Nominal water flow rate		m ³ /h	3,47	4,24	5,47	6,36	6,92	7,85	9,45	10,56	11,99	14,26	
Nominal pressure drop		kPa	17	25	27	36	30	39	33	40	18	24	
Hydraulic connection													
Type			Threaded male						Victaulic or Welded				
Diameter			1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	

G_(A) A_(B) C_(C) 020_(D) S_(E) M_(F) 2_(G) M_(H)

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Air cooled version

Cooling only units

eCOMFORT - GAC		090S	110S	125S	110D	125D	140D	160D	185D		
Nominal thermal performances - Cooling mode											
Cooling capacity ⁽¹⁾	kW	91,3	106,7	122,3	105,6	123,2	138,8	162,0	185,0		
Total absorbed power ⁽¹⁾	kW	30,1	32,8	39,7	36,4	40,6	44,7	52,3	60,0		
EER ⁽¹⁾		3,04	3,25	3,08	2,90	3,04	3,10	3,10	3,08		
Eurovent energy class ⁽¹⁾ - Full load operation		B	A	B	B	B	A	A	B		
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		4,79	4,67	4,61	4,67	4,38	4,54	4,58	4,61
		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	189	184	181	184	172	179	180	182
Process Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		5,88	5,64	5,50	6,08	5,43	5,44	5,49	5,43
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)	%	4,34	4,17	4,10	4,52	4,08	4,12	4,17	4,08
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		5,03	4,98	4,85	4,90	4,51	4,56	4,71	4,84
		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	198	196	191	193	178	179	186	190
Process Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		6,09	5,55	5,47	6,26	5,42	5,53	5,70	5,50
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)	%	3,56	3,33	3,38	3,78	3,39	3,49	3,54	3,39
Nominal thermal performances - Heating mode											
Heating capacity ⁽¹⁾	kW	-	-	-	-	-	-	-	-		
Total absorbed power ⁽¹⁾	kW	-	-	-	-	-	-	-	-		
COP ⁽¹⁾		-	-	-	-	-	-	-	-		
Eurovent energy class ⁽¹⁾ - Full load operation		-	-	-	-	-	-	-	-		
Comfort Application	Standard Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		-	-	-	-	-	-	-	
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	-	-	-	-	-	-	-	
Process Application	EC Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		-	-	-	-	-	-	-	
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	-	-	-	-	-	-	-	
Seasonal efficiency class ⁽⁸⁾		-	-	-	-	-	-	-	-		
Acoustic data											
Global sound power level - Standard unit	dB(A)	81,0	83,6	84,2	81,0	83,6	84,2	84,0	85,1		
Electrical data											
Maximum power	kW	41,1	48,4	54,9	49,5	57,4	63,2	71,5	84,1		
Maximum current	A	166,2	197,5	245,8	182,2	212,3	222,0	278,5	292,2		
Starting current	A	69,8	82,0	103,4	83,8	96,8	106,5	136,1	149,9		
Short circuit current	kA	10	10	10	10	10	10	10	10		
Refrigeration circuit											
Number of circuits		1	1	1	2	2	2	2	2		
Number of compressors		3	3	3	2 / 2	2 / 2	2 / 2	2 / 2	3 / 2		
Total refrigerant load - R410a	kg	12,5	12,5	12,5	13,0	13,6	16,0	16,6	19,5		
Evaporator											
Nominal water flow rate	m ³ /h	15,75	18,40	21,10	18,21	21,25	23,94	27,94	31,91		
Nominal pressure drop	kPa	29	25	32	42	56	46	61	58		
Hydraulic connection											
Type		Victaulic or Welded									
Diameter		2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	3"	3"	3"		

(1) EUROVENT certified data, in accordance with standard EN14511.

Cooling mode: Evaporator water temperature = 12/7°C | Outdoor air temperature = 40/45°C | Condenser water temperature = 35°C / **Heating mode:** Condenser water temperature = 40/45°C | Outdoor air temperature = 7°C

(2) SEER in accordance with standard EN 14825 | (3) Following ecodesign regulation EU 2016/2281 on space cooling, normalized leaving water temperature at 7°C, in accordance with standard EN 14825, (4) Following ecodesign regulation EU 2016/2281 on process cooling units, normalized leaving water temperature at 7°C, in accordance with standard EN 14825 | (5) Following ecodesign regulation EU 2015/1095 on process cooling chillers, normalized leaving water temperature at -8°C, in accordance with standard EN 14825 | (6) SCOP in accordance with standard EN 14825, (7) Following ecodesign regulation EU 813/2013 on space heaters, normalized leaving water temperature at 7°C, in accordance with standard EN 14825, (8) Following energy labelling regulation EU 811/2013 on space heaters.

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Air cooled version

Heat pumps units

eCOMFORT - GAH		020S	025S	030S	035S	040S	045S	055S	060S	070S	080S			
Nominal thermal performances - Cooling mode														
Cooling capacity ⁽¹⁾	kW	20,0	24,4	31,0	36,4	39,4	44,7	54,0	60,1	68,4	81,4			
Total absorbed power ⁽¹⁾	kW	6,0	8,0	11,2	12,4	13,5	16,2	17,9	20,1	23,1	26,7			
EER ⁽¹⁾		3,31	3,05	2,77	2,94	2,92	2,76	3,02	2,99	2,96	3,05			
Eurovent energy class ⁽¹⁾ - Full load operation		A	B	C	B	B	C	B	B	B	B			
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		4,67	4,50	4,15	4,28	4,34	4,19	4,53	4,28	4,48	4,52	
		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	184	177	163	168	170	165	178	168	176	178	
Process Application		Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		7,29	6,77	5,88	6,20	6,38	5,63	6,32	5,67	5,72	5,74	
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)		4,77	4,56	4,26	4,64	4,33	4,01	4,73	4,28	4,29	4,30	
Comfort Application	EC Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		4,67	4,84	4,42	4,64	4,69	4,54	4,79	4,55	4,65	4,77	
		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	190	197	180	188	190	185	194	185	189	194	
Process Application		Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		7,29	6,76	5,85	6,25	6,52	5,64	6,26	5,55	5,61	5,74	
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)		3,39	3,52	3,51	3,62	346,00	344,00	372,00	360,00	368,00	360,00	
Nominal thermal performances - Heating mode														
Heating capacity ⁽¹⁾	kW	19,8	24,5	31,9	36,7	39,2	44,6	53,6	61,3	67,6	79,3			
Total absorbed power ⁽¹⁾	kW	6,6	8,2	10,6	12,2	13,1	14,9	17,9	20,3	21,7	26,0			
COP ⁽¹⁾		3,00	3,00	3,01	3,00	3,00	3,00	3,00	3,02	3,11	3,05			
Eurovent energy class ⁽¹⁾ - Full load operation		B	B	B	B	B	B	B	B	B	B			
Comfort Application	Standard Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		3,45	3,27	3,27	3,35	3,33	3,32	3,39	3,38	3,49	3,51	
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	135	128	128	131	130	130	133	132	137	138	
	EC Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		3,45	3,46	3,37	3,48	3,45	3,43	3,57	3,45	3,57	3,62	
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	135	135	132	136	135	134	140	135	140	142	
Seasonal efficiency class ⁽⁸⁾			A+	A+	A+	A+	A+	A+	A+	A+	A+			
Acoustic data														
Global sound power level - Standard unit	dB(A)	72,4	74,0	74,0	76,4	76,4	75,7	77,8	75,4	79,5	81,0			
Electrical data														
Maximum power	kW	9,9	12,2	15,3	17,6	18,2	21,0	25,1	28,0	30,9	35,8			
Maximum current	A	52,1	61,7	88,7	118,0	117,6	147,9	140,6	162,6	167,4	210,5			
Starting current	A	16,6	18,8	25,8	31,2	30,5	37,1	42,2	47,0	51,8	68,1			
Short circuit current	kA	10	10	10	10	10	10	10	10	10	10			
Refrigeration circuit														
Number of circuits		1	1	1	1	1	1	1	1	1	1			
Number of compressors		2	2	2	2	2	2	2	2	2	2			
Total refrigerant load - R410a	kg	7,0	7,4	8,3	8,8	9,0	9,2	13,5	17,0	18,4	18,4			
Evaporator														
Nominal water flow rate	m ³ /h	3,45	4,21	5,35	6,28	6,80	7,71	9,31	10,37	11,80	14,04			
Nominal pressure drop	kPa	17	25	26	35	29	38	32	39	17	24			
Hydraulic connection														
Type		Threaded male						Victaulic or Welded						
Diameter		1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"			

G_(A) A_(B) C_(C) 020_(D) S_(E) M_(F) 2_(G) M_(H)

- (A) **G** = eComfort
- (B) **A** = Standard Air Cooled unit - **B** = Advanced air cooled unit
- (C) **C** = Cooling only unit - **H** = Heat pump unit
- (D) **020** = Approximate power in kW
- (E) **S** = Single circuit - **D** = Double circuit
- (F) **M** = Refrigerant R410A - **P** = Refrigerant R32
- (G) **1 or 2** = Revision number
- (H) **M** = 400V/3/50Hz



Air cooled version

Heat pumps units

eCOMFORT - GAH		090S	110S	125S	110D	125D	140D	160D	185D		
Nominal thermal performances - Cooling mode											
Cooling capacity ⁽¹⁾	kW	90,5	105,6	120,4	104,7	121,0	136,5	159,3	181,4		
Total absorbed power ⁽¹⁾	kW	30,4	33,5	40,8	37,4	41,8	46,2	54,1	62,3		
EER ⁽¹⁾		2,98	3,15	2,95	2,80	2,90	2,95	2,95	2,91		
Eurovent energy class ⁽¹⁾ - Full load operation		B	A	B	C	B	B	B	B		
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		4,76	4,67	4,58	4,60	4,28	4,41	4,49	4,53
		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	187	184	180	181	168	173	176	178
Process Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		5,93	5,63	5,47	6,05	5,39	5,38	5,48	5,37
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)	%	4,32	4,18	4,08	4,57	4,04	4,05	4,12	4,05
Comfort Application	EC Fans	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER		4,97	4,93	4,79	4,82	4,47	4,58	4,69	4,75
		Seasonal energy efficiency ⁽³⁾ η_{s,c}	%	202	200	195	196	182	186	191	193
Process Application	EC Fans	Seasonal Energy Performance Ratio ⁽⁴⁾ SEPR - High temperature (7°C)		6,01	5,40	5,36	6,18	5,44	5,41	5,60	5,42
		Seasonal Energy Performance Ratio ⁽⁵⁾ SEPR - Medium temperature (-8°C)	%	3,59	3,36	3,39	3,83	3,39	3,48	3,53	3,39
Nominal thermal performances - Heating mode											
Heating capacity ⁽¹⁾	kW	91,2	103,4	118,1	106,3	121,1	135,8	157,2	174,6		
Total absorbed power ⁽¹⁾	kW	30,3	34,1	39,4	34,0	40,2	43,5	51,5	58,5		
COP ⁽¹⁾		3,01	3,03	3,00	3,13	3,02	3,12	3,05	2,99		
Eurovent energy class ⁽¹⁾ - Full load operation		B	B	B	B	B	B	B	B		
Comfort Application	Standard Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		3,71	3,58	3,49	3,81	3,49	3,58	3,63	3,38
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	145	140	136	150	137	140	142	132
Process Application	EC Fans	Seasonal Coeficient of Performance ⁽⁶⁾ SCOP		3,76	3,71	3,69	3,84	3,65	3,58	3,74	3,70
		Seasonal energy efficiency ⁽⁷⁾ η_{s,h}	%	147	145	145	151	143	140	147	145
Seasonal efficiency class ⁽⁸⁾				A+	A+	A+	A+	A+	A+	A+	
Acoustic data											
Global sound power level - Standard unit	dB(A)	81,0	83,6	84,2	81,0	83,6	84,2	84,0	85,1		
Electrical data											
Maximum power	kW	41,1	48,4	54,9	49,5	57,4	63,2	71,5	84,1		
Maximum current	A	166,2	197,5	245,8	182,2	212,3	222,0	278,5	292,2		
Starting current	A	69,8	82,0	103,4	83,8	96,8	106,5	136,1	149,9		
Short circuit current	kA	10	10	10	10	10	10	10	10		
Refrigeration circuit											
Number of circuits		1	1	1	2	2	2	2	2		
Number of compressors		3	3	3	2 / 2	2 / 2	2 / 2	2 / 2	3 / 2		
Total refrigerant load - R410a	kg	25,0	27,0	27,3	27,6	29,0	35,0	37,0	38,0		
Evaporator											
Nominal water flow rate	m ³ /h	15,61	18,21	20,77	18,06	20,87	23,54	27,48	31,29		
Nominal pressure drop	kPa	29	25	31	41	54	44	59	56		
Hydraulic connection											
Type		Victronic or Welded									
Diameter		2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	3"	3"	3"		

(1) EUROVENT certified data, in accordance with standard EN14511.

Cooling mode: Evaporator water temperature = 12/7°C | Outdoor air temperature = 40/45°C | Condenser water temperature = 35°C / Heating mode: Condenser water temperature = 40/45°C | Outdoor air temperature = 7°C

(2) SEER in accordance with standard EN 14825 | (3) Following ecodesign regulation EU 2016/2281 on space cooling, normalized leaving water temperature at 7°C, in accordance with standard EN 14825, (4) Following ecodesign regulation EU 2016/2281 on process cooling units, normalized leaving water temperature at 7°C, in accordance with standard EN 14825 | (5) Following ecodesign regulation EU 2015/1095 on process cooling chillers, normalized leaving water temperature at -8°C, in accordance with standard EN 14825 | (6) SCOP in accordance with standard EN 14825 | (7) Following ecodesign regulation EU 813/2013 on space heaters, normalized leaving water temperature at 7°C, in accordance with standard EN 14825, average climate conditions. | (8) Following energy labelling regulation EU 811/2013 on space heaters.

**Air cooled version****Cooling only units**

eCOMFORT - GAC	035S	040S	045S	050S	055S	060S	065S	070S	080S
A mm		1125			1125			2250	
		1320			1320			1320	
		1740			2109			1779	
Weight of standard units									
Basic unit	kg	434	443	449	565	566	583	793	843

**Air cooled version****Cooling only units**

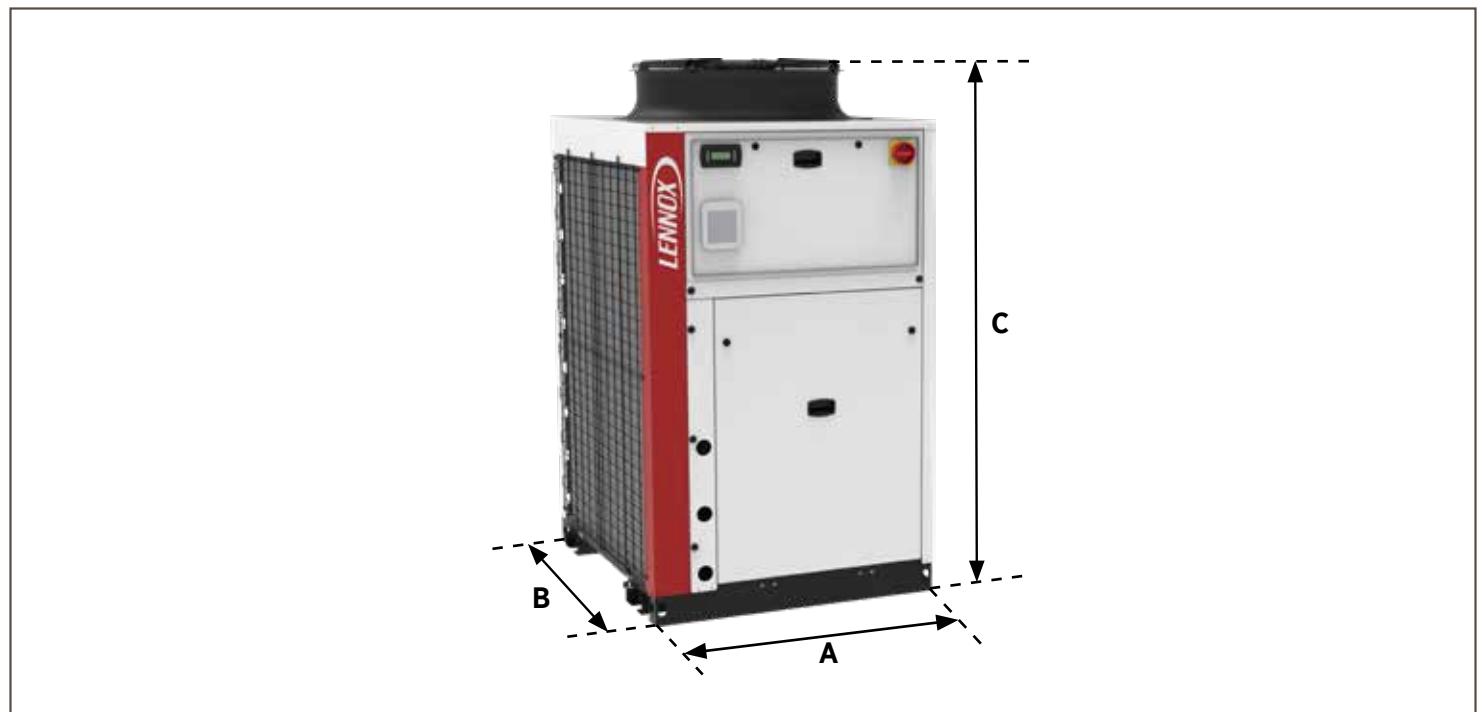
eCOMFORT - GAC	095S	110S	115S	125S	140S	110D	125D	140D	160D	185D	210D
A mm		2250				2250			2250		
		1320				1740			2650		
		2071				2071			2071		
Weight of standard units											
Basic unit	kg	679	691	719	868	901	859	895	880	1405	1441

**Air cooled version****Heat pumps units**

eCOMFORT - GAH	035S	040S	045S	050S	055S	060S	065S	070S	080S
A mm		1125			1125			2250	
		1320			1320			1320	
		1740			2109			1779	
Weight of standard units									

**Air cooled version****Heat pumps units**

eCOMFORT - GAH	095S	110S	115S	125S	140S	110D	125D	140D	160D	185D	210D
A mm		2250				2250			2250		
		1320				1740			2650		
		2071				2071			2071		
Weight of standard units											



**Air cooled version****Cooling only units**

eCOMFORT - GAC	020S	025S	030S	035S	040S	045S	055S	060S	070S	080S	090S	110S	125S	110D	125D	140D	160D	185D	
A																			
B	mm																		
C																			
Weight of standard units																			
Basic unit	kg	312	319	342	366	371	386	602	627	657	706	876	892	892	989	1000	1401	1508	1575

**Air cooled version****Heat pumps units**

eCOMFORT - GAH	020S	025S	030S	035S	040S	045S	055S	060S	070S	080S	090S	110S	125S	110D	125D	140D	160D	185D	
A																			
B	mm																		
C																			
Weight of standard units																			
Basic unit	kg	312	319	342	366	371	386	602	627	657	706	876	892	892	989	1000	1401	1508	1575

