

# eComfort+

# eComfort Advanced

Air cooled chillers / Heat pumps



R32





R32



R32



AIR COOLED

 35 - 210 kW  
 35 - 210 kW



R32

ADVANCED AIR COOLED

 40 - 210 kW  
 40 - 210 kW



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

## INVERTER COMPRESSOR

- The cooling demand is precisely adapted to the needs :
- # Optimized design for compact footprint, including water tank (as an option)
  - # The control of the outlet water temperature is perfect.
  - # Buffer tank requirements in case of low water volume or fast variable heat load are reduced.



**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



## EC STANDARD FANS

Intelligent noise attenuation management thanks to:

- # Acoustic compressor jacket
- # High efficiency EC fans
- # A further increase in energy savings through improved seasonal efficiencies (floating HP).
- # Year-round operation down to -20 °C outdoor temperature in cooling mode.
- # Year-round operation up to 30 °C outdoor temperature in heating mode (heat pump).
- # Intelligent noise attenuation management, programmable night and day, combined with acoustic covers.

## TOTAL MODULATION

The eCOMFORT range benefits from the **latest technologies** to achieve **very high seasonal efficiencies**

- # Refrigerant : thanks to a very high efficiency variable speed compressor with permanent magnet motor,
- # Air : with high-efficiency EC fans with "Owlet" type blades and high performance integrated diffusers to improve airflow efficiency,
- # Water : thanks to the variable speed inverter of the water pump.
- # The integrated control management (ModBus / BACnet / Ethernet TCP / IP communication interface / Lennox Cloud as an option) offers a turnkey control solution.



## 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.



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- # 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.

## CONTROL

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



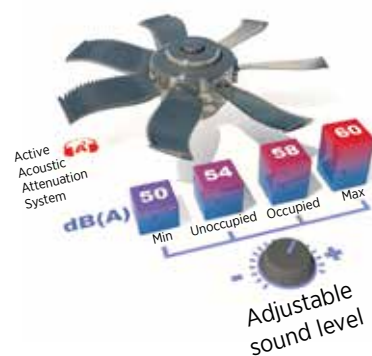
## CASING & DESIGN

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

## 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**
- # BMS through: **e-savvy**



## 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 in standard).
- # 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.
- # 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.



## INTEGRATED HYDRAULIC MODULE

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



# G<sub>(A)</sub> A<sub>(B)</sub> C<sub>(C)</sub> 020<sub>(D)</sub> S<sub>(E)</sub> M<sub>(F)</sub> 2<sub>(G)</sub> M<sub>(H)</sub>

- (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

## Cooling only units

eCOMFORT - GAC		035S	040S	045S	050S	055S	060S		
<b>Nominal thermal performances - Cooling mode</b>									
Cooling capacity <sup>(1)</sup>		kW	38,4	41,6	47,5	51,8	63,6		
Total absorbed power <sup>(1)</sup>		kW	12,7	13,8	15,8	17,0	21,1		
EER <sup>(1)</sup>			3,02	3,00	3,02	3,05	3,02		
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,36	4,60	4,30	4,46	4,35	4,38
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	171	181	169	175	171	172
Process Application	Standard Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR</b> - High temperature (7°C)		6,15	6,63	5,61	5,68	5,59	5,53
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR</b> - Medium temperature (-8°C)		3,68	3,88	3,83	3,80	3,81	3,81
Comfort Application	AC Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,26	4,51	4,23	4,37	4,20	4,21
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	167	177	166	172	165	165
Process Application	AC Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR</b> - High temperature (7°C)		5,78	6,30	5,41	5,49	5,23	5,18
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR</b> - Medium temperature (-8°C)		3,53	3,84	3,74	3,81	3,55	3,56
<b>Nominal thermal performances - Heating mode</b>									
Heating capacity <sup>(1)</sup>		kW	-	-	-	-	-		
Total absorbed power <sup>(1)</sup>		kW	-	-	-	-	-		
COP <sup>(1)</sup>			-	-	-	-	-		
Comfort Application	Standard Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		-	-	-	-	-	
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	-	-	-	-	-	
	AC Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		-	-	-	-	-	
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	-	-	-	-	-	
<b>Acoustic data</b>									
Global sound power level - Standard unit		dB(A)	75,3	75,3	74,4	74,9	75,3	78,6	
<b>Electrical data</b>									
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	
<b>Refrigeration circuit</b>									
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	
<b>Evaporator</b>									
Nominal water flow rate		m <sup>3</sup> /h	6,61	7,15	8,17	8,90	9,47	10,94	
Nominal pressure drop		kPa	17	25	27	36	30	39	
<b>Hydraulic connection</b>									
Type			Threaded male						
Diameter			1"1/2	1"1/2	1"1/2	1"1/2	1"1/2	1"1/2	

# G<sup>(A)</sup> A<sup>(B)</sup> C<sup>(C)</sup> 020<sup>(D)</sup> S<sup>(E)</sup> M<sup>(F)</sup> 2<sup>(G)</sup> M<sup>(H)</sup>

- (A) **G** = eComfort  
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## Air cooled version

## Cooling only units

eCOMFORT - GAC			065S	070S	080S	095S	110S	115S	125S	
<b>Nominal thermal performances - Cooling mode</b>										
Cooling capacity <sup>(1)</sup>		kW	64,3	70,0	86,3	95,8	108,3	119,3	128,8	
Total absorbed power <sup>(1)</sup>		kW	20,4	22,6	26,9	29,9	34,8	37,9	41,1	
EER <sup>(1)</sup>			3,14	3,09	3,21	3,20	3,11	3,15	3,13	
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,60	4,58	4,61	4,67	4,73	4,60	4,73
		Seasonal energy efficiency <sup>(3)</sup>	%	181	180	181	184	186	181	186
Process Application	Standard Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR</b> - High temperature (7°C)		5,79	5,72	5,90	5,86	5,80	5,77	5,77
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR</b> - Medium temperature (-8°C)		3,81	3,83	3,96	3,87	3,90	3,93	3,91
Comfort Application	AC Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,35	4,39	4,50	4,56	4,43	4,39	4,45
		Seasonal energy efficiency <sup>(3)</sup>	%	171	173	177	179	174	173	175
Process Application	AC Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR</b> - High temperature (7°C)		5,37	5,35	5,66	5,68	5,35	5,35	5,47
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR</b> - Medium temperature (-8°C)		3,68	3,63	3,87	3,90	3,60	3,65	3,74
<b>Nominal thermal performances - Heating mode</b>										
Heating capacity <sup>(1)</sup>		kW	-	-	-	-	-	-	-	
Total absorbed power <sup>(1)</sup>		kW	-	-	-	-	-	-	-	
COP <sup>(1)</sup>			-	-	-	-	-	-	-	
Comfort Application	Standard Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		-	-	-	-	-	-	
		Seasonal energy efficiency <sup>(7)</sup>	%	-	-	-	-	-	-	
Comfort Application	AC Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		-	-	-	-	-	-	
		Seasonal energy efficiency <sup>(7)</sup>	%	-	-	-	-	-	-	
<b>Acoustic data</b>										
Global sound power level - Standard unit		dB(A)	77,9	78,5	80,2	84,1	84,1	86,3	82,6	
<b>Electrical data</b>										
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	
<b>Refrigeration circuit</b>										
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	
<b>Evaporator</b>										
Nominal water flow rate		m <sup>3</sup> /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	
<b>Hydraulic connection</b>										
Type			Victaulic 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.  
**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  
 (2) SEER in accordance with standard EN 14825. | (3) Following ecodesign regulation EU 2016/2281 on process 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. Heating mode performance is defined for average climate conditions. | (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.

# G<sub>(A)</sub> A<sub>(B)</sub> C<sub>(C)</sub> 020<sub>(D)</sub> S<sub>(E)</sub> M<sub>(F)</sub> 2<sub>(G)</sub> M<sub>(H)</sub>

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## Air cooled version

## Cooling only units

eCOMFORT - GAC		140S	110D	125D	140D	160D	185D	210D		
<b>Nominal thermal performances - Cooling mode</b>										
Cooling capacity <sup>(1)</sup>		kW	156,3	111,4	127,5	142,3	167,8	187,2	210,5	
Total absorbed power <sup>(1)</sup>		kW	51,1	36,9	41,9	46,6	53,6	60,7	69,9	
EER <sup>(1)</sup>			3,03	3,02	3,04	3,05	3,13	3,08	3,01	
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,53	4,66	4,60	4,65	4,72	4,71	4,64
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	178	183	181	183	186	185	183
Process Application	Standard Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR</b> - High temperature (7°C)		5,52	5,70	5,54	5,51	5,80	5,64	5,45
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR</b> - Medium temperature (-8°C)		3,89	3,94	3,89	3,92	3,98	3,93	3,87
Comfort Application	AC Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,35	4,60	4,46	4,48	4,64	4,60	4,36
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	171	181	175	176	183	181	171
Process Application	AC Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR</b> - High temperature (7°C)		5,36	5,54	5,22	5,22	5,55	5,44	5,09
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR</b> - Medium temperature (-8°C)		3,71	3,93	3,67	3,71	3,87	3,85	3,56
<b>Nominal thermal performances - Heating mode</b>										
Heating capacity <sup>(1)</sup>		kW	-	-	-	-	-	-	-	
Total absorbed power <sup>(1)</sup>		kW	-	-	-	-	-	-	-	
COP <sup>(1)</sup>			-	-	-	-	-	-	-	
Comfort Application	Standard Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		-	-	-	-	-	-	
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	-	-	-	-	-	-	
	AC Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		-	-	-	-	-	-	
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	-	-	-	-	-	-	
Seasonal efficiency class <sup>(8)</sup>			-	-	-	-	-	-	-	
<b>Acoustic data</b>										
Global sound power level - Standard unit		dB(A)	88,3	78,3	81,6	84,1	83,2	87,5	87,5	
<b>Electrical data</b>										
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	
<b>Refrigeration circuit</b>										
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	
<b>Evaporator</b>										
Nominal water flow rate		m <sup>3</sup> /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	
<b>Hydraulic connection</b>										
Type			Victaulic or Welded							
Diameter			2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	



# G<sup>(A)</sup> B<sup>(B)</sup> C<sup>(C)</sup> 040<sup>(D)</sup> S<sup>(E)</sup> P<sup>(F)</sup> 1<sup>(G)</sup> M<sup>(H)</sup>

- (A) **G** = eComfort  
 (B) **A** = Air cooled unit fix compressor - **B** = Advanced air cooled unit  
 (C) **C** = Cooling only unit - **H** = Heat pump unit  
 (D) **040** = Approximate power in kW  
 (E) **S** = Single circuit - **D** = Double circuit  
 (F) **P** = Refrigerant R32  
 (G) **1** = Revision number  
 (H) **M** = 400V/3/50Hz



## Advanced Air cooled version

## Cooling only units

eCOMFORT - GBC		040S	060S	070S	080S	110S	120S	125D	140D		
<b>Nominal thermal performances - Cooling mode</b>											
Cooling capacity <sup>(1)</sup>		kW	34,5	51,3	61,5	77,4	94,6	117,0	124,8	146,7	
Total absorbed power <sup>(1)</sup>		kW	10,2	15,8	19,5	23,9	28,9	36,8	40,9	48,6	
EER <sup>(1)</sup>			3,38	3,24	3,15	3,24	3,28	3,18	3,05	3,02	
Comfort Application	EC Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		5,0	4,9	4,8	4,8	4,9	5,0	5,0	
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	195,2	193,1	190,1	190,5	194,3	192,5	195,4	197,5
Process Application	EC Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR - High temperature (7°C)</b>		5,7	5,5	5,5	5,5	5,6	5,5	5,7	
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR - Medium temperature (-8°C)</b>		3,57	3,67	3,41	3,44	3,58	3,48	3,68	3,74
<b>Nominal thermal performances - Heating mode</b>											
Heating capacity <sup>(1)</sup>		kW	-	-	-	-	-	-	-	-	
Total absorbed power <sup>(1)</sup>		kW	-	-	-	-	-	-	-	-	
COP <sup>(1)</sup>			-	-	-	-	-	-	-	-	
Comfort Application	EC Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		-	-	-	-	-	-	-	
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	-	-	-	-	-	-	-	-
<b>Acoustic data</b>											
Global sound power level - Standard unit		dB(A)	82,5	83,3	82,8	84,1	84	86,3	84,4	86,1	
<b>Electrical data</b>											
Maximum power		kW	16,4	25,3	28,7	37,5	42,4	55,2	58	68,3	
Maximum current		A	26,1	41	47,1	61,4	70,5	90,5	95,1	113,4	
Starting current		A	26,1	41	166,6	217,6	226,7	331,7	211,9	269,6	
Short circuit current		kA	10								
<b>Refrigeration circuit</b>											
Number of circuits			1	1	1	1	1	2	2	2	
Number of compressors			1	1	2	2	2	2	2+2	2+2	
Total refrigerant load - R32		kg	3,6	4,6	6	7,4	8,8	9	9,2	9,4	
<b>Evaporator</b>											
Nominal water flow rate		m <sup>3</sup> /h	5,96	8,85	10,61	13,35	16,31	20,17	21,53	25,31	
Nominal pressure drop		kPa	23	29	31	33	30	29	25	22	
<b>Hydraulic connection</b>											
Type			Threaded male			Victaulic or Welded					
Diameter			1"1/2			2		2"1/2			

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

**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  
 (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. Heating mode performance is defined for average climate conditions. | (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.

# G<sub>(A)</sub> B<sub>(B)</sub> C<sub>(C)</sub> 040<sub>(D)</sub> S<sub>(E)</sub> P<sub>(F)</sub> 1<sub>(G)</sub> M<sub>(H)</sub>

- (A) **G** = eComfort
- (B) **A** = Air cooled unit fix compressor - **B** = Advanced air cooled unit
- (C) **C** = Cooling only unit - **H** = Heat pump unit
- (D) **035** = Approximate power in kW
- (E) **S** = Single circuit - **D** = Double circuit
- (F) **P** = Refrigerant R32
- (G) **1** = Revision number
- (H) **M** = 400V/3/50Hz



## Advanced air cooled version

## Cooling only units

eCOMFORT - GBC			160D	185D	210D	
<b>Nominal thermal performances - Cooling mode</b>						
Cooling capacity <sup>(1)</sup>		kW	159,5	170,0	196,6	
Total absorbed power <sup>(1)</sup>		kW	50,6	54,1	64,2	
EER <sup>(1)</sup>			3,15	3,14	3,06	
Comfort Application	EC Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		5.05	5.03	5.08
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	199	198	200
Process Application	EC Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR - High temperature (7°C)</b>		6.01	5.95	5.64
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR - Medium temperature (-8°C)</b>		3.77	3.75	3.7
<b>Nominal thermal performances - Heating mode</b>						
Heating capacity <sup>(1)</sup>		kW	-	-	-	
Total absorbed power <sup>(1)</sup>		kW	-	-	-	
COP <sup>(1)</sup>			-	-	-	
Comfort Application	EC Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		-	-	-
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	-	-	-
<b>Acoustic data</b>						
Global sound power level - Standard unit		dB(A)	85,2	87,3	87,5	
<b>Electrical data</b>						
Maximum power		kW	71.7	81.6	94.8	
Maximum current		A	120	135.1	157.1	
Starting current		A	276.3	338.5	398.3	
Short circuit current		kA		10		
<b>Refrigeration circuit</b>						
Number of circuits			2	2	2	
Number of compressors			2+2	2+2	2+2	
Total refrigerant load - R32		kg	14,6	15	15,2	
<b>Evaporator</b>						
Nominal water flow rate		m <sup>3</sup> /h	27,52	29,32	33,91	
Nominal pressure drop		kPa	26	26	34	
<b>Hydraulic connection</b>						
Type			Victaulic or Welded			
Diameter			3"			

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

**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  
 (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. Heating mode performance is defined for average climate conditions. | (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.

# G<sup>(A)</sup> A<sup>(B)</sup> H<sup>(C)</sup> 020<sup>(D)</sup> S<sup>(E)</sup> M<sup>(F)</sup> 2<sup>(G)</sup> M<sup>(H)</sup>

- (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		035S	040S	045S	050S	055S	060S		
<b>Nominal thermal performances - Cooling mode</b>									
Cooling capacity <sup>(1)</sup>		kW	37,7	41,2	46,9	50,5	56,1	63,2	
Total absorbed power <sup>(1)</sup>		kW	13,2	14,2	16,5	17,7	19,0	22,0	
EER <sup>(1)</sup>			2,87	2,90	2,85	2,86	2,96	2,87	
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,21	4,48	4,26	4,33	4,18	4,18
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	165	176	167	170	164	164
Process Application	Standard Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR - High temperature (7°C)</b>		6,03	6,58	5,58	5,59	5,50	5,43
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR - Medium temperature (-8°C)</b>		3,71	3,94	3,89	3,85	3,87	3,86
Comfort Application	AC Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,15	4,40	4,19	4,25	4,13	4,15
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	163	173	165	167	162	163
Process Application	AC Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR - High temperature (7°C)</b>		5,71	6,21	5,38	5,40	5,17	5,14
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR - Medium temperature (-8°C)</b>		3,52	3,83	3,75	3,77	3,53	3,55
<b>Nominal thermal performances - Heating mode</b>									
Heating capacity <sup>(1)</sup>		kW	39,0	42,1	48,4	52,2	56,6	64,2	
Total absorbed power <sup>(1)</sup>		kW	13,2	14,1	15,8	17,4	18,9	21,8	
COP <sup>(1)</sup>			2,95	2,99	3,06	2,99	2,99	2,95	
Comfort Application	Standard Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		3,46	3,54	3,57	3,56	3,54	3,54
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	136	139	140	140	139	139
Comfort Application	AC Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		3,31	3,44	3,45	3,49	3,28	3,30
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	129	134	135	137	128	129
Seasonal efficiency class <sup>(8)</sup>			A+	A+	A+	A+	A+	A+	
<b>Acoustic data</b>									
Global sound power level - Standard unit		dB(A)	75,3	75,3	74,4	74,9	75,3	78,6	
<b>Electrical data</b>									
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	
<b>Refrigeration circuit</b>									
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	
<b>Evaporator</b>									
Nominal water flow rate		m <sup>3</sup> /h	6,49	7,09	8,07	8,69	9,65	10,87	
Nominal pressure drop		kPa	37	32	30	34	34	33	
<b>Hydraulic connection</b>									
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.  
**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  
 (2) SEER in accordance with standard EN 14825. | (3) Following ecodesign regulation EU 2016/2281 on process cooling units, 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. Heating mode performance is defined for average climate conditions. | (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.

# G<sub>(A)</sub> A<sub>(B)</sub> H<sub>(C)</sub> 020<sub>(D)</sub> S<sub>(E)</sub> M<sub>(F)</sub> 2<sub>(G)</sub> M<sub>(H)</sub>

- (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		065S	070S	080S	095S	110S	115S	125S		
<b>Nominal thermal performances - Cooling mode</b>										
Cooling capacity <sup>(1)</sup>		kW	64,3	69,6	84,7	94,1	105,3	118,0	126,4	
Total absorbed power <sup>(1)</sup>		kW	20,8	23,1	27,7	30,9	36,4	39,4	42,7	
EER <sup>(1)</sup>			3,09	3,02	3,06	3,05	2,90	2,99	2,96	
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,56	4,53	4,46	4,56	4,60	4,39	4,62
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	179	178	175	180	181	173	182
Process Application	Standard Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR</b> - High temperature (7°C)		5,78	5,69	5,82	5,81	5,73	5,59	5,65
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR</b> - Medium temperature (-8°C)		3,92	3,88	3,99	3,93	3,94	3,94	3,90
Comfort Application	AC Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,28	4,35	4,40	4,46	4,34	4,27	4,37
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	168	171	173	175	171	168	172
Process Application	AC Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR</b> - High temperature (7°C)		5,29	5,32	5,57	5,58	5,25	5,24	5,39
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR</b> - Medium temperature (-8°C)		3,64	3,64	3,84	3,87	3,57	3,60	3,69
<b>Nominal thermal performances - Heating mode</b>										
Heating capacity <sup>(1)</sup>		kW	64,9	70,4	84,9	94,8	106,7	117,5	126,1	
Total absorbed power <sup>(1)</sup>		kW	20,4	23,0	26,8	30,1	33,9	38,9	40,7	
COP <sup>(1)</sup>			3,18	3,06	3,17	3,15	3,15	3,02	3,10	
Comfort Application	Standard Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		3,65	3,63	3,63	3,59	3,61	3,58	3,73
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	143	142	142	141	141	140	146
Comfort Application	AC Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		3,58	3,64	3,50	3,61	3,51	3,31	3,71
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	140	143	137	141	137	129	146
Seasonal efficiency class <sup>(8)</sup>			A+	A+	A+	A+	A+	A+	A+	
<b>Acoustic data</b>										
Global sound power level - Standard unit		dB(A)	77,9	78,5	80,2	84,1	84,1	86,3	82,6	
<b>Electrical data</b>										
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	
<b>Refrigeration circuit</b>										
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	
<b>Evaporator</b>										
Nominal water flow rate		m <sup>3</sup> /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	
<b>Hydraulic connection</b>										
Type			Victaulic or Welded							
Diameter			2"	2"	2"	2"1/2	2"1/3	2"1/4	2"1/5	

# G<sub>(A)</sub> A<sub>(B)</sub> H<sub>(C)</sub> 020<sub>(D)</sub> S<sub>(E)</sub> M<sub>(F)</sub> 2<sub>(G)</sub> M<sub>(H)</sub>

- (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			140S	110D	125D	140D	160D	185D	210D	
<b>Nominal thermal performances - Cooling mode</b>										
Cooling capacity <sup>(1)</sup>		kW	152,0	108,6	125,3	140,3	166,1	187,3	209,1	
Total absorbed power <sup>(1)</sup>		kW	54,8	38,4	43,3	48,4	55,1	62,5	73,0	
EER <sup>(1)</sup>			2,78	2,83	2,89	2,90	3,01	3,00	2,86	
Comfort Application	Standard Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,36	4,56	4,42	4,49	4,62	4,56	4,49
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	171	179	174	177	182	179	176
Process Application	Standard Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR - High temperature (7°C)</b>		5,31	5,64	5,40	5,36	5,73	5,49	5,27
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR - Medium temperature (-8°C)</b>		3,85	3,92	3,84	3,85	3,99	3,92	3,82
Comfort Application	AC Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4,25	4,48	4,35	4,38	4,55	4,50	4,26
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	167	176	171	172	179	177	167
Process Application	AC Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR - High temperature (7°C)</b>		5,25	5,47	5,11	5,10	5,48	5,34	4,95
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR - Medium temperature (-8°C)</b>		3,65	3,88	3,61	3,64	3,85	3,81	3,50
<b>Nominal thermal performances - Heating mode</b>										
Heating capacity <sup>(1)</sup>		kW	154,5	114,0	129,3	142,5	170,7	190,3	216,0	
Total absorbed power <sup>(1)</sup>		kW	52,9	35,4	41,4	45,9	53,3	61,0	72,9	
COP <sup>(1)</sup>			2,92	3,22	3,12	3,11	3,20	3,12	2,96	
Comfort Application	Standard Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		3,70	3,78	3,76	3,79	3,78	3,74	3,71
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	145	148	147	148	148	147	145
Comfort Application	AC Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		3,54	3,71	3,48	3,51	3,64	3,64	3,38
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	139	145	136	138	143	143	132
Seasonal efficiency class <sup>(8)</sup>			A+	A+	A+	A+	A+	A+	A+	
<b>Acoustic data</b>										
Global sound power level - Standard unit		dB(A)	88,3	78,3	81,6	84,1	83,2	87,5	87,5	
<b>Electrical data</b>										
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	
<b>Refrigeration circuit</b>										
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	
<b>Evaporator</b>										
Nominal water flow rate		m <sup>3</sup> /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	
<b>Hydraulic connection</b>										
Type			Victaulic 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.  
**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  
 (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. Heating mode performance is defined for average climate conditions. | (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.



# G<sub>(A)</sub> B<sub>(B)</sub> H<sub>(C)</sub> 040<sub>(D)</sub> S<sub>(E)</sub> M<sub>(F)</sub> 2<sub>(G)</sub> M<sub>(H)</sub>

- (A) **G** = eComfort
- (B) **A** = Standard Air Cooled unit - **B** = Advanced air cooled unit
- (C) **C** = Cooling only unit - **H** = Heat pump unit
- (D) **040** = 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



## Advanced air cooled version

## Heat pumps units

eCOMFORT - GBH		040S	060S	070S	080S	110S	120S		
<b>Nominal thermal performances - Cooling mode</b>									
Cooling capacity <sup>(1)</sup>		kW	33,6	50,0	60,6	71,9	87,6	109,2	
Total absorbed power <sup>(1)</sup>		kW	10,4	16,0	19,7	24,0	29,1	37,6	
EER <sup>(1)</sup>			3,22	3,12	3,07	3,00	3,01	2,90	
Comfort Application	EC Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4.73	4.73	4.6	4.6	4.68	4.68
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	186	186	181	181	184	184
Process Application	EC Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR</b> - High temperature (7°C)		6.52	6.29	5.7	5.57	5.75	5.51
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR</b> - Medium temperature (-8°C)		3.66	3.7	3.32	3.08	3.24	3.14
<b>Nominal thermal performances - Heating mode</b>									
Heating capacity <sup>(1)</sup>		kW	34,4	51,1	64,0	78,4	94,0	116,5	
Total absorbed power <sup>(1)</sup>		kW	10,3	15,3	19,8	24,3	28,6	37,8	
COP <sup>(1)</sup>			3,36	3,33	3,23	3,23	3,29	3,08	
Comfort Application	EC Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		3.93	3.93	4	3.95	4.05	4.05
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	154	154	157	155	159	159
<b>Acoustic data</b>									
Global sound power level - Standard unit		dB(A)	82,5	83,3	82,8	84,1	84	86,3	
<b>Electrical data</b>									
Maximum power		kW	16.4	25.3	28.7	37.5	42.4	55.2	
Maximum current		A	26.1	41	47.1	61.4	70.5	90.5	
Starting current		A	26.1	41	166.6	217.6	226.7	331.7	
Short circuit current		kA	10	10	10	10	10	10	
<b>Refrigeration circuit</b>									
Number of circuits			1	1	1	1	1	1	
Number of compressors			2	2	2	2	2	2	
Total refrigerant load - R32		kg	6,5	8,2	10,5	14	18,5	21	
<b>Evaporator</b>									
Nominal water flow rate		m <sup>3</sup> /h	11,06	11,98	14,57	16,19	18,12	20,29	
Nominal pressure drop		kPa	34	39	39	48	36	45	
<b>Hydraulic connection</b>									
Type		Victaulic or Welded							
Diameter			2"	2"	2"	2"1/2	2"1/3	2"1/4	

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

**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

(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. Heating mode performance is defined for average climate conditions. | (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.

# G<sub>(A)</sub> B<sub>(B)</sub> H<sub>(C)</sub> 040<sub>(D)</sub> S<sub>(E)</sub> M<sub>(F)</sub> 2<sub>(G)</sub> M<sub>(H)</sub>

- (A) **G** = eComfort  
 (B) **A** = Standard Air Cooled unit - **B** = Advanced air cooled unit  
 (C) **C** = Cooling only unit - **H** = Heat pump unit  
 (D) **040** = 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



## Advanced air cooled version

## Heat pumps units

eCOMFORT - GBH		125D	140D	160D	185D	210D		
<b>Nominal thermal performances - Cooling mode</b>								
Cooling capacity <sup>(1)</sup>		kW	126,8	146,9	161,1	171,3	199,9	
Total absorbed power <sup>(1)</sup>		kW	40,4	48,2	49,9	53,6	65,3	
EER <sup>(1)</sup>			3,14	3,05	3,23	3,20	3,06	
Comfort Application	EC Fans	Seasonal Energy Efficiency Ratio <sup>(2)</sup> <b>SEER</b>		4.85	4.8	4.98	4.9	4.95
		Seasonal energy efficiency <sup>(3)</sup> <b>η<sub>s,c</sub></b>	%	191	189	196	193	195
Process Application	EC Fans	Seasonal Energy Performance Ratio <sup>(4)</sup> <b>SEPR - High temperature (7°C)</b>		5.59	5.34	5.93	5.69	5.46
		Seasonal Energy Performance Ratio <sup>(5)</sup> <b>SEPR - Medium temperature (-8°C)</b>		3.66	3.67	3.78	3.76	3.69
<b>Nominal thermal performances - Heating mode</b>								
Heating capacity <sup>(1)</sup>		kW	126,8	146,9	161,1	171,3	199,9	
Total absorbed power <sup>(1)</sup>		kW	40,4	48,2	49,9	53,6	65,3	
COP <sup>(1)</sup>			3,14	3,05	3,23	3,20	3,06	
Comfort Application	EC Fans	Seasonal Coefficient of Performance <sup>(6)</sup> <b>SCOP</b>		3.88	3.88	3.9	3.88	3.93
		Seasonal energy efficiency <sup>(7)</sup> <b>η<sub>s,h</sub></b>	%	152	152	153	152	154
<b>Acoustic data</b>								
Global sound power level - Standard unit		dB(A)	84,4	86,1	85,2	87,3	87,5	
<b>Electrical data</b>								
Maximum power		kW	58	68.3	71.7	81.6	94.8	
Maximum current		A	95.1	113.4	120	135.1	157.1	
Starting current		A	211.9	269.6	276.3	338.5	398.3	
Short circuit current		kA	10	10	10	10	10	
<b>Refrigeration circuit</b>								
Number of circuits			2	2	2	2	2	
Number of compressors			2+2	2+2	2+2	2+2	2+2	
Total refrigerant load - R32		kg	20	22	27	27,2	27,6	
<b>Evaporator</b>								
Nominal water flow rate		m <sup>3</sup> /h	21,31	24,85	27,28	29,31	33,8	
Nominal pressure drop		kPa	25	22	26	26	34	
<b>Hydraulic connection</b>								
Type		Victaulic or Welded						
Diameter		2"1/2			3"			

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

**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  
 (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. Heating mode performance is defined for average climate conditions. | (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		
B		1320			1320			1320		
C		1740			2109			1779		
<b>Weight of standard units</b>										
Basic unit	kg	325	339	350	379	385	405	565	559	605



**Air cooled version**

**Cooling only units**

eCOMFORT - GAC		095S	110S	115S	125S	140S	110D	125D	140D	160D	185D	210D	
A	mm	2250				2250				2250			
B		1320				1740				2650			
C		2071				2071				2071			
<b>Weight of standard units</b>													
Basic unit	kg	679	701	730	846	932	893	932	911	1216	1340	1340	



**Advanced air cooled version**

**Cooling only units**

eCOMFORT - GBC		040S	060S	070S	080S	110S	120S
A	mm	1125		2250		2250	
B		1320		1320		1320	
C		1740	2109	1779	1779	2071	2071
<b>Weight of standard units</b>							
Basic unit	kg	332	367	547	640	682	721



**Advanced air cooled version**

**Cooling only units**

eCOMFORT - GBC		125D	140D	160D	185D	210D
A	mm	2250			2250	
B		1740			2650	
C		2071			2071	
<b>Weight of standard units</b>						
Basic unit	kg	894	949	1201	1283	1283



**Air cooled version**

**Heat pumps units**

eCOMFORT - GAH		035S	040S	045S	050S	055S	060S	065S	070S	080S
A	mm	1125			1125			2250		
B		1320			1320			1320		
C		1740			2109			1779		
<b>Weight of standard units</b>										
Basic unit	kg	350	369	385	416	424	448	614	608	649



**Air cooled version**

**Heat pumps units**

eCOMFORT - GAH		095S	110S	115S	125S	140S	110D	125D	140D	160D	185D	210D
A	mm	2250			2250			2250			2250	
B		1320			1740			2650			2650	
C		2071			2071			2071			2071	
<b>Weight of standard units</b>												
Basic unit	kg	742	771	793	918	1006	975	1017	998	1388	1463	1463



**Advanced air cooled version**

**Heat pumps units**

eCOMFORT - GBH		040S	060S	070S	080S	110S	120S
A	mm	1125	1125	2250	2250	2250	2250
B		1320	1320	1320	1320	1320	1320
C		1740	2109	1770	1779	2071	2071
<b>Weight of standard units</b>							
Basic unit	kg	351	401	609	705	746	789



**Advanced air cooled version**

**Heat pumps units**

eCOMFORT - GBH		125S	140S	160S	185S	210S
A	mm	2250	2250	2250	2250	2250
B		1740	1740	2650	2650	2650
C		2071	2071	2071	2071	2071
<b>Weight of standard units</b>						
Basic unit	kg	1001	1065	1360	1427	1427

