



Galx°C air handling units, with their Plug & Play design and inherent flexibility, can be configured and combined specifically to meet the exact requirements of any building, no matter what it is used for or who is to work there. Our systems are designed to be the most environmentally friendly and the most energy efficient on the market, thus reducing their ecological impact, while, at the same time, keeping costs down through the minimisation of energy consumption. When combined with the small physical footprint of the system, these features make our air handling units ideal for all markets.

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Galx°C air handling units

Always choose Galx°C air handling units

- Energy efficiency and indoor air quality
- Wide range of air handling units
- **High quality** in component selection
- **Innovative** technology
- Operation **efficiency** and energy **savings**
- Outstanding **reliability** and **performance**
- Various applications are possible including air conditioning applications, industry-type process cooling, and large-scale district heat source systems.

Benefits for the installer

- › Easy commissioning through pre-programmed DDC controller and external terminal connection avoiding drilling into unit panels
- › Internal electrical wiring saves installation time
- › Flush mounted electrical control panel avoids risk of damage during transportation and installation

Benefits for the consultant

- › In-house developed software with improved user interface allowing for a professional report in a few clicks

Benefits for the end user

- › Higher degree of control than ever before, allowing the user to determine a wide range of settings, resulting in excellent operational flexibility
- › Fully integrated electrical panel for units taller than 80cm

Packaged control solution for Galx°C AHU

- › Electrical control panel complete with Direct Digital Control (DDC) controller
- › Internal fitting of all sensors & pressure measurements devices
- › Built-in temperature, humidity and CO₂ sensors
- › Internal electrical wiring for all components

Energy efficient while focusing on maximum comfort

- › Set points can be specified for supply, return or room temperature
- › Control of all AHU components such as mixing dampers, heat recovery wheels, water valves, pressure switches for filters and fans, fan motors and inverters

Plug & Play design

- › Low voltage fast connectors in between AHU sections

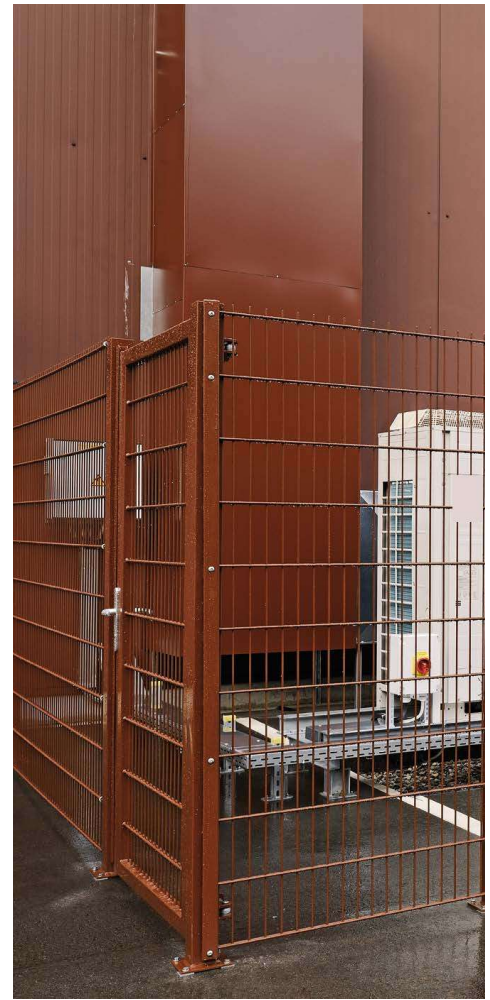
Easy start-up and commissioning

- › Pre-programmed and factory-tested controls ensuring all wiring is installed correctly
- › Reduced energy and operating costs





SMART CONTROLS



DAMPER AND EC FAN



HEAT RECOVERY
WHEEL AND FILTER



COMMERCIAL AND
INDUSTRIAL APPLICATIONS



COMFORTABLE
INDOOR CLIMATE

Software

The powerful software that Galx°C has developed to offer a **quick** and **comprehensive service** for the customer, to facilitate finding the right balance of **performance and cost** in an air handling unit. It is a complete tool that can configure any type of product and respond exactly to the strictest design needs. The result is a comprehensive **economic offer** including all the technical data and drawings, the psychrometric diagram with the relative air treatment and the fans' performance curves. However, Galx°C didn't stop there, they went further.

The other powerful software developed and designed to quickly **convert the offer in the executive order**. Technical drawings to be sent and approved by the client, executive drawings for the production, bill of material, code generation for each component used are just a few of the many functions of the instrument.

The integration has therefore made possible the complete automated management of the process by **reducing the time of the offer** and of the delivery and improving the service to our customers.



- › Quick AHU selection that will save you precious time, drastically reducing selection time through the new software interface.
- › Very competitive solution available within the Wizard thanks to pre-uploaded parameters.
- › High selection quality, thanks to the huge number of the pre-engineered units embedded within the software.

4 steps to configure an air handler in just 2 minutes

- 1 Select a configuration
- 2 Select coils
- 3 Select other components
- 4 Design conditions ----> Print report

Casing mechanical strength	D1	Casing Class	D1	D2	D3	
		Maximum relative deflection mm x m ⁻¹	4.00	10.00	EXCEEDING 10	
Casing air leakage	L1	Casing air leakage Negative pressure -400 Pa				
Negative pressure -400 Pa		Leakage Class	L1	L2	L3	
		Maximum leakage rate (f ₁₀₀) l x s ⁻¹ x m ⁻²	0.15	0.44	1.32	
Casing air leakage	L1	Casing air leakage Positive pressure +700 Pa				
Positive pressure +700 Pa		Leakage Class	L1	L2	L3	
		Maximum leakage rate (f ₁₀₀) l x s ⁻¹ x m ⁻²	0.22	0.63	1.90	
Filter bypass leakage	F9	Filter Class	F9	F8	F7	F6
		Maximum filter bypass leakage rate k in % of the volume flow rate	0.50	1	2	4
Thermal transmittance	T2	Thermal transmittance				
		Class	T1	T2	T3	T4
		Thermal transmittance (U) W/m ² x K	U <= 0.5	0.5 < U <= 1	1 < U <= 1.4	1.4 < U <= 2
Thermal bridging of the casing	TB2	Thermal Bridging of the casing				
		Class	TB1	TB2	TB3	TB4
		Thermal bridging facto (kb) W x m ⁻² x K-1	0.75 < K _b <= 1	0.6 < K _b <= 0.75	0.45 < K _b <= 0.6	0.3 < K _b <= 0.45

Modular

High-end solution with heat recovery

Energy efficiency and indoor air quality

- › Predefined sizes
- › IE4 premium efficiency motor
- › High efficiency heat wheel (heat recovery)
- › Compact design
- › Advanced control features
- › Easy installation
- › Indoor air quality compliant with VDI 6022 hygiene guideline
- › Operating limits from -25 °C, -40 °C with electric heaters, up to +46 °C ambient temperature
- › GRV and ERQ coupling capability
- › Indoor and outdoor versions
- › Free cooling capability
- › Economy and Night mode operation
- › Monitoring and control through Galx°C



EC Fan

- › Air flow or pressure control (Variable Air Volume - Constant Air Volume)
- › Nominal air flow programmed at factory
- › Quiet operation

Simple, quick installation

The Modular series' Plug & Play design is more than just a convenient feature for installers. It offers cost-saving benefits as there is no need for expensive adjustments before the unit is commissioned. Plug & Play makes everyone's life simpler, safer and more economical.

GDT-F/B		1	2	3	4	5	6	7	8	9	10
Airflow	m³/h	1,200	1,700	2,700	4,100	5,500	6,100	7,000	9,100	11,500	15,000
Temp. efficiency winter	%	81.3	81.1	81.2	81.6	80.7	81.2	82.7	81.8	81.5	81.9
External static pressure	Nom. Pa	200	200	200	200	200	200	200	200	200	200
Current	Nom. A	2.66	3.90	6.30	2.98	4.00	4.74	4.76	6.34	8.72	10.2
Power input	Nom. kW	0.62	0.89	1.50	1.98	2.68	2.96	3.30	4.28	5.48	7.04
SPFv	kW/m³/s	1.87	1.89	1.99	1.74	1.75	1.75	1.70	1.69	1.72	1.69
Electrical supply	Phase	1	1	1	3+N	3+N	3+N	3+N	3+N	3+N	3+N
	Frequency	Hz	50	50	50	50	50	50	50	50	50
	Voltage	V	230	230	230	400	400	400	400	400	400
Dimensions unit	Length	mm	1,700	1,700	1,800	1,920	2,080	2,280	2,400	2,450	2,400
	Depth	mm	720	820	990	1,200	1,400	1,400	1,600	1,940	2,300
	Height overall	mm	1,320	1,320	1,540	1,740	1,740	1,920	2,180	2,460	2,570
Weight unit	kg	325	350	475	575	750	790	950	1,330	1,410	1,750
Sound level	Lp dB(A)*	40	42	42	45	46	44	43	43	45	45

* Sound pressure level radiated from unit at 1 meter and according to ISO 3744 (supply outlet ducted)

Air handling unit application

Galx°C Fresh Air package

The Galx°C fresh air package provides a complete solution, including all unit controls (expansion valve, control box and an AHU controller) and sensors factory mounted and configured. It is unique solution allows for Plug & Play connection of our AHU series to Galx°C ERQ and GRV condensing units.

High efficiency

Galx°C heat pumps are renowned for their high energy efficiency. Integrating the AHU with a heat recovery system is even more effective since an office system can frequently be in cooling mode while the outdoor air is too cold to be brought inside in an unconditioned state. In this case heat from the offices is merely transferred to heat up the cold incoming fresh air.

High comfort levels

Galx°C ERQ and GRV units respond rapidly to fluctuations in supply air temperature, resulting in a steady indoor temperature and resultant high comfort levels for the end user. The ultimate is the GRV range which improves comfort even more by offering continuous heating, also during defrost.

