



GLT DELTA BROCHURE

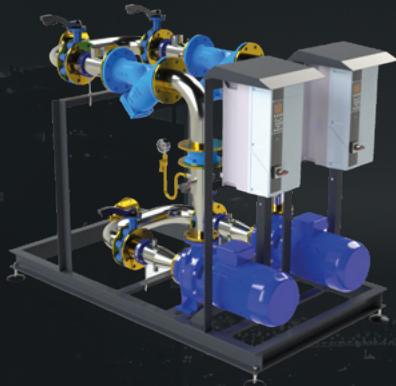
I. GLT MODOULAR BLOCKS

I.1 GLT Pump Skids

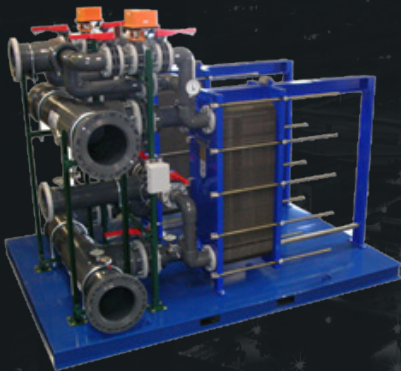
We are convinced that in today's world, we can do a much more detailed, accurate and faster job with the help of technological innovations. Our laser scanner and drone surveys will soon be offered to our customers together with our new VR app.

TECHNICAL DATA

SYSTEM CONDITIONS		RANGE
System head [bar]		3-6
System flow rate [lps]		up to 380
Numbers of pumps		2-5
Motor power [kW]		10 to 200
OPTIONAL COMPONENTS		
Vertical inline or split case pumps		
Variable frequency drives (VFD)		
Power distribution		
Intelligent Pump Manager & instrumentation		
Air separator		
Pressurization Unit		
Expansion tank		
Suction diffusers		
Check valves		
Chemical pot feeder		
Glycol feeder		
Buffer tank		
Plate Heat Exchanger		
Inertia Base		
Insulation		
Cladding		



Standard Pumpskid



Skid with optional components

SKID DIMENSIONS

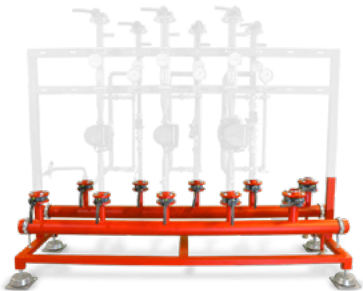
	Header size [mm]	L [m]	W [mm]	H [m]
2 pump systems	150	2.1	2.6	2.3
	200	2.1	2.6	2.3
	250	2.5	2.7	2.5
	300	2.5	3.3	2.5
3 pump systems	200	3	2.6	2.3
	250	3.5	2.6	2.3
	300	3.7	2.7	2.5
	350	3.7	2.7	2.5
	400	3.7	3.3	2.5
4 pump systems	250	4	2.6	2.3
	300	4.5	2.6	2.3
	350	4.5	2.6	2.3
	400	4.9	2.7	2.5
	450	4.9	3.3	2.5

1.2 GLT manifold blocks

Manifold blocks are essential components for distributing fluids such as water or glycol in heating, cooling, or solar systems. They ensure proper flow distribution to multiple branches and are used in underfloor heating systems, radiator circuits, or industrial fluid transfer systems.

TECHNICAL DATA

SYSTEM CONDITIONS	RANGE
Diameter [mm]	DN50 - 300
Performance [kW]	100 - 10 000
Operating pressure [bar]	PN 6 - 20
Circles	2 - 12
OPTIONAL COMPONENTS	
Butterfly valves	
Check valves	
3-way valves for temperature control	
Drain valve	
Liquid filter	
Pumps	
Thermometers	
Pressuremeter	
Thermal and water barial insulation	
Metal sheet cover	
Cladding	
Vibration damping base	
Plate Heat Exchanger	
Inertia Base	
Insulation	
Cladding	



Prefabricated manifold block with optional components



Prefabricated manifold

MANIFOLD DIMENSIONS

Nominal Size [mm]	Typical flow rate [m ³ /h]	Performance, ($\Delta T = 20^{\circ}\text{C}$) [kW]
DN50	5 – 10	116 – 232
DN65	10 – 18	232 – 418
DN80	15 – 30	348 – 696
DN100	25 – 50	580 – 1160
DN125	40 – 80	928 – 1856
DN150	60 – 120	1392 – 2784
DN200	100 – 200	2320 – 4640
DN250	150 – 300	3480 – 6960
DN300	200 – 400	4640 – 9280

I.3. Hidraulic separators

Hydraulic separators are designed to enhance the performance and efficiency of heating and cooling systems by ensuring smooth hydraulic flow and separation of flows in complex systems. They act as buffers to prevent system pressure surges and allow for better energy efficiency in a wide range of applications, from residential to industrial.

TECHNICAL DATA

SYSTEM CONDITIONS	RANGE
Diameter [mm]	DN50 - 1000
Performance [kW]	100 – 120 000
Operating pressure [bar]	PN 6 - 20
OPTIONAL COMPONENTS	
Butterfly valves	
Drain valve	
Pressure release valve	
Thermometers	
Pressuremeters	
Heat and vapor barriers insulation	



DN80 separator



DN1000 puffer tank

HIDRAULIC SEPARATOS DIMENSIONS

Nominal Size	Typical flow rate [m ³ /h]	Performance, ($\Delta T = 20^{\circ}\text{C}$) [kW]
[mm]	Typical flow rate	116 – 232
[m ³ /h]	Performance, ($\Delta T = 20^{\circ}\text{C}$)	232 – 418
[kW]	15 – 30	348 – 696
DN50	5 – 10	116 – 232
DN65	10 – 18	232 – 418
DN80	15 – 30	348 – 696
DN100	25 – 50	580 – 1160
DN125	40 – 80	928 – 1856
DN150	60 – 120	1392 – 2784
DN200	100 – 200	2320 – 4640
DN250	150 – 300	3480 – 6960
DN300	200 – 400	4640 – 9280
DN400	300 – 600	6960 – 13 920
DN500	500 – 1000	11 600 – 23 200
DN600	800 – 1600	18 560 – 37 120
DN800	1500 – 3000	34 800 – 69 600
DN1000	2500 – 5000	58 000 – 116 000

II. GLT CONTAINERS

II.1. Gasboiler energy center

A high-performance containerized gas boiler system designed for large-scale heating needs in commercial and industrial settings, offering efficient heat output with a wide power range.

TECHNICAL DATA

SYSTEM CONDITIONS	RANGE
Size	40 feet container
Performance [kW]	150 – 1 000
Thermal efficiency [%]	90 – 95
Operating pressure [Bar]	PN 6 - 16
Temperature range [°C]	40 - 85
Flow rate [l/hour]	5 000 – 20 000
Electrical supply [V]	400, 3 phase
OPTIONAL COMPONENTS	
Flue kit	
Expansion tank	
Water filtration system	
Smart controls: Integration with building management systems (BMS)	
Pump Options: High-efficiency circulation pumps	



Gas boiler center
inside



Gas boiler center

GASBOILER ENERGY CENTER DIMENSIONS

Parameter	150 kW	250 kW	500 kW	750 kW	1 000 kW
Heat output [kW]	150	250	500	750	1 000
Flow rate [l/h]	5 000	8 000	12 000	16 000	20 000
Fuel Consumption [m ³ /h, Natural Gas]	~15	~25	~50	~75	~100
Thermal Efficiency [%]	90 - 95	90 - 95	90 - 95	90 - 95	90 - 95
Water Temp. Range [°C]	40 - 85	40 - 85	40 - 85	40 - 85	40 - 85
Operating Pressure [bar]	6 - 16	6 - 16	6 - 16	6 - 16	6 - 16
Weight [kg]	2 500	3 500	5 000	6 500	8 000
Pump power [kW]	1.5	2.2	4.0	5.5	7.5
Chimney/Flue Diameter [mm]	200	250	300	350	400
Expansion Tank [L]	100	150	250	400	500

II.2 Heatpump centers

Heat pump container centers provide an efficient and sustainable heating and cooling solution for residential, commercial, and industrial applications. These prefabricated units house high-performance heat pumps in a compact, transportable container, ensuring easy installation and scalability. They utilize air-source, water-source, or ground-source technology to maximize energy efficiency and reduce operational costs

TECHNICAL DATA

SYSTEM CONDITIONS	RANGE
Size	40 feet container
Performance	100-250 kW
Types	water/water, air/water
COP	4.0 – 5.0
Water Temp. Range [°C]	35 – 65 °C
Refrigerant Type	R32
Operating Pressure [bar]	6 - 16
Power supply [V]	400, 3 phase
OPTIONAL COMPONENTS	
Anti-Freeze Protection: Glycol-based system enhancements for extreme weather conditions.	
Redundant Pump Systems: Backup circulation pumps for increased reliability.	
Water Treatment System: To prevent scaling and corrosion in closed-loop circuits.	
Buffer Tank: Custom-sized thermal storage for improved efficiency and system stability.	
Water Treatment System: To prevent scaling and corrosion in closed-loop circuits.	
Buffer Tank: Custom-sized thermal storage for improved efficiency and system stability.	
Advanced Control System: Smart monitoring with remote access and integration into Building Management Systems (BMS).	
Solar Panel Integration: Hybrid system compatibility with solar energy for additional savings.	
Heat Recovery System: Reuse excess heat for domestic hot water or secondary heating applications.	

HEATPUMP ENERGY CENTER DIMENSIONS

Parameter	100 kW	150 kW	200 kW	250 kW
Heating Capacity (kW)	100	150	200	250
Cooling Capacity (kW)	80	120	160	200
Coefficient of Performance (COP)	4.0 – 5.0	4.0 – 5.0	4.0 – 5.0	4.0 – 5.0
Flow Rate (l/h)	3 000	4 500	6 000	7 500
Water Temp. Range (°C)	35 – 65	35 – 65	35 – 65	35 – 65
Refrigerant Type	R32	R32	R32	R32
Operating Pressure (bar)	6 – 16	6 – 16	6 – 16	6 – 16
Weight (kg)	2 500	3 500	5 000	6 500
Noise level [dB]	50 – 55	55 – 60	60 – 65	60 – 68



**water/water
heatpump center**



**water/water heatpump
center inside**

II.3 Container data center

Container data centers provide a modular, scalable, and rapidly deployable IT infrastructure solution. These prefabricated units are designed to house servers, networking equipment, and cooling systems, offering a cost-effective alternative to traditional data centers. They ensure high availability, energy efficiency, and security, making them ideal for remote locations, disaster recovery, and enterprise expansion.

TECHNICAL DATA

SYSTEM CONDITIONS	RANGE
Size	40 feet container
IT Load capacity [kW]	100 – 500
Power supply [V]	400, 3 phase
Rack capacity	10 - 40
OPTIONAL COMPONENTS	
Modular UPS System (for uninterrupted power backup)	
Liquid Cooling System (for high-performance computing applications)	
Integrated Solar Power (for off-grid or energy-efficient operations)	
Advanced Fire Suppression (inert gas-based or water mist system)	
AI-Based Energy Optimization (smart cooling and power management)	
5G Connectivity & Edge Computing (for real-time data processing)	
Custom Rack Layouts & Configurations	



DATA CENTER DIMENSIONS

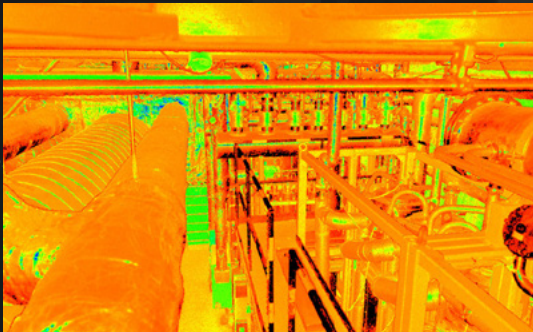
Paremeter	Small (100 kW IT Load)	Medium (250 kW IT Load)	Large (500 kW IT Load)
IT Load Capacity [kW]	100	250	500
Power Supply	400V, 3-phase, 50/60Hz	400V, 3-phase, 50/60Hz	400V, 3-phase, 50/60Hz
Rack Capacity	Up to 10 racks	Up to 20 racks	Up to 40 racks
Cooling Type	Direct Expansion (DX) / Chilled Water	Chilled Water / InRow Cooling	Chilled Water / Immersion Cooling
PUE (Power Usage Effectiveness)	≤1.3	≤1.2	≤1.15
Redundancy (Power & Cooling)	N+1 or 2N	N+1 or 2N	N+1 or 2N
Container dimensions [feet]	40	40	40
Weight [kg]	~7,000	~12,000	~20,000

III. GLT „4in1” BUILDING ENGINEERING SERVICES

III.1 3D Scanning

We are convinced that in today's world, we can do a much more detailed, accurate and faster job with the help of technological innovations. Our laser scanner and drone surveys will soon be offered to our customers together with our new VR app.

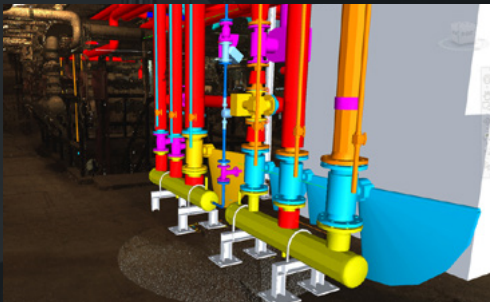
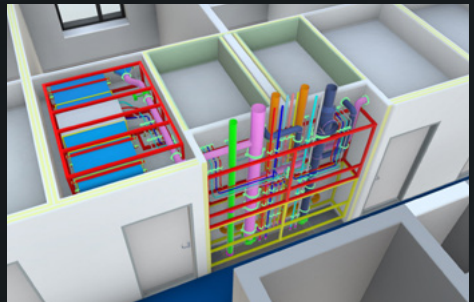
Main parameters
Every little detail is assessed
Surveying hard-to-reach, high altitude sites
Visualisation, easier understanding of the site
Fewer site inspections
Survey-based, millimetre-accurate design
Reduced surveying and planning costs
Reducing the number of errors in the project



III.2 BIM engineering

Using a point cloud generated by a laser scanner and Autodesk software, our engineers carry out the design process with millimetre accuracy, resulting in improved cost efficiency and speed from both an engineering and an architectural perspective.

Main parameters
Optimised route, material savings
Accurate and precise preparation
No conflict with existing systems
Complex heat centres can be built even in small spaces
Accurate design of fittings and pipe couplings
Accurate incorporation of customer requirements into the plans
More accurate scheduling of installation work



III.3 Prefabrication

Based on the completed plans, we prefabricate the required elements in our factory in Szigetvár. Thanks to production in a factory environment, the quality of the finished elements is higher, on-site construction is simplified and the time required is significantly shorter.

Main parameters
Higher level of work quality (welding, painting, cutting)
Swiftness
Logistics (reduction of storage time on-site)
Better procurement and use of materials
Simplified on-site implementation
In-production and end-of-production quality control
Good plannability (time and costs)



III.4 Onsite installation

Whether you are building a new building from scratch or upgrading your mechanical system, we have the experience and resources to add value to your project. We ensure that your engineering systems are designed and built to the highest quality, reducing the risk of your investment.

Main parameters
75% less onsite construction time
95% less construction waste
More than 30 years of building services engineering experience
Complete integrated service package for the sake of high quality - consulting, design, construction, maintenance and service
A stable, large-number and continuously trained workforce
Technical support for our customised building services engineering systems
Reliable, multi-generation family company



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REFERENCES





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