QVANTUM

COMMERCIAL AND INDUSTRIAL HEAT PUMPS

32 – 192 kW

Qvantum's large, high-efficiency heat pumps are easily integrated with building management systems and keep noise levels at a minimum. The robust design of the products makes them very reliable and durable.

Positive customer experiences are prioritised throughout the product life cycle. A dedicated team of technical experts and supporting digital tools ensure that customers get quality support in all stages.

The wide range of high-capacity products ensures that the requirements of all types of commercial properties are fulfilled.

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A +++

System efficiency class, room heating 55 °C.
* VS A++

HIGH PERFORMANCE
Top range COP and high capacity throughout the envelope

LOW NOISE
Flexible installation of outdoor unit in noise sensitive areas

Q COMMITMENT
We offer quality support throughout the product life cycle

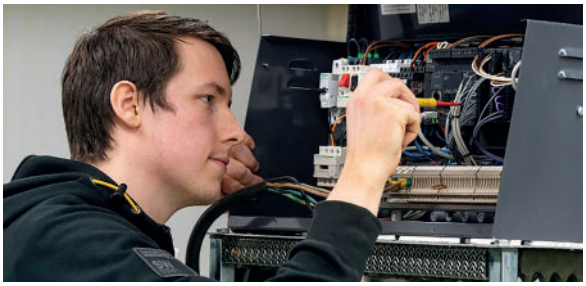
MODULAR RANGE WITH MANY OPTIONS

QVANTUM RS/2 and RS^{e} Water/water heat pump

Qvantum RS/2/RS^{e} is intended for use in liquid source systems, as for example ground source, open loop, and heat recovery systems. The economiser and the 2-step EVI compressor enable higher efficiency and heat capacity at low brine temperatures. The RS^{e} models can reach a supply temperature up to 74 °C and a heating capacity of up to 96 kW per heat pump. Examples of available options are for example the X-Pro control system, desuperheater, reversible refrigerant cycle for cooling.

A +++

System efficiency class, room heating, 55 °C.



All of Qvantums products are thoroughly tested and calibrated before delivery, making your solution reliable and safe.

CONTROL SYSTEM

All Qvantum commercial and industrial products are equipped with QLC, Qvantum Logic Controller, as standard. QLC is managed via a 5.7" display mounted in the heat pump where all parameters are set via the display. The QLC provides dynamic flow charts with all temperatures and operating modes measured and controlled. The QLC also logs temperatures and events, simplifying settings and analysis. The system communicates via Modbus.

QLC also has a web server that allows the control system to communicate with a web browser on a computer or mobile phone. The QLC can control up to 8 heat pumps in cascade with automatic runtime balancing between the different heat pumps.

OPTIONS

Examples of available options:

- The X-Pro control system, which provides even more control options.
- Hot gas heat exchanger.
- Reversible function.

UNIQUE SOLUTIONS *for your demand*

QVANTUM LB4 – Air/water heat pump

Air source heat pump Qvantum LB4 extracts heat from the air via a especially designed dry cooler. The heat from the air coil is transferred to the indoor heat pump through a brine filled loop. This enables a very flexible and silent installation of the outdoor unit.

The Qvantum LB4 delivers up to 65°C and has a heating capacity of up to 165 kW per heat pump. By using both liquid injection and economizer, the LB4 can supply heat at 65°C down to -20°C outdoor temperature and operate with a high SCOP.

A +++

System efficiency class, room heating, 55 °C.

QVANTUM KVP – Air/water heat pump

Air source heat pump Qvantum KVP is suitable for commercial properties where there is a need for simultaneous heating and cooling. By balancing simultaneous heating and cooling needs, a cost-effective solution is provided in one installation. The KVP discharge only the the surplus of either heating or cooling through the dry cooler, thus maximising system efficiency. The dry cooler could alternatively be replaced or complemented by liquid source, for example a borehole.

Qvantum KVP has a supply temperature of up to 65 °C and a heating capacity of up to 165 kW per unit.

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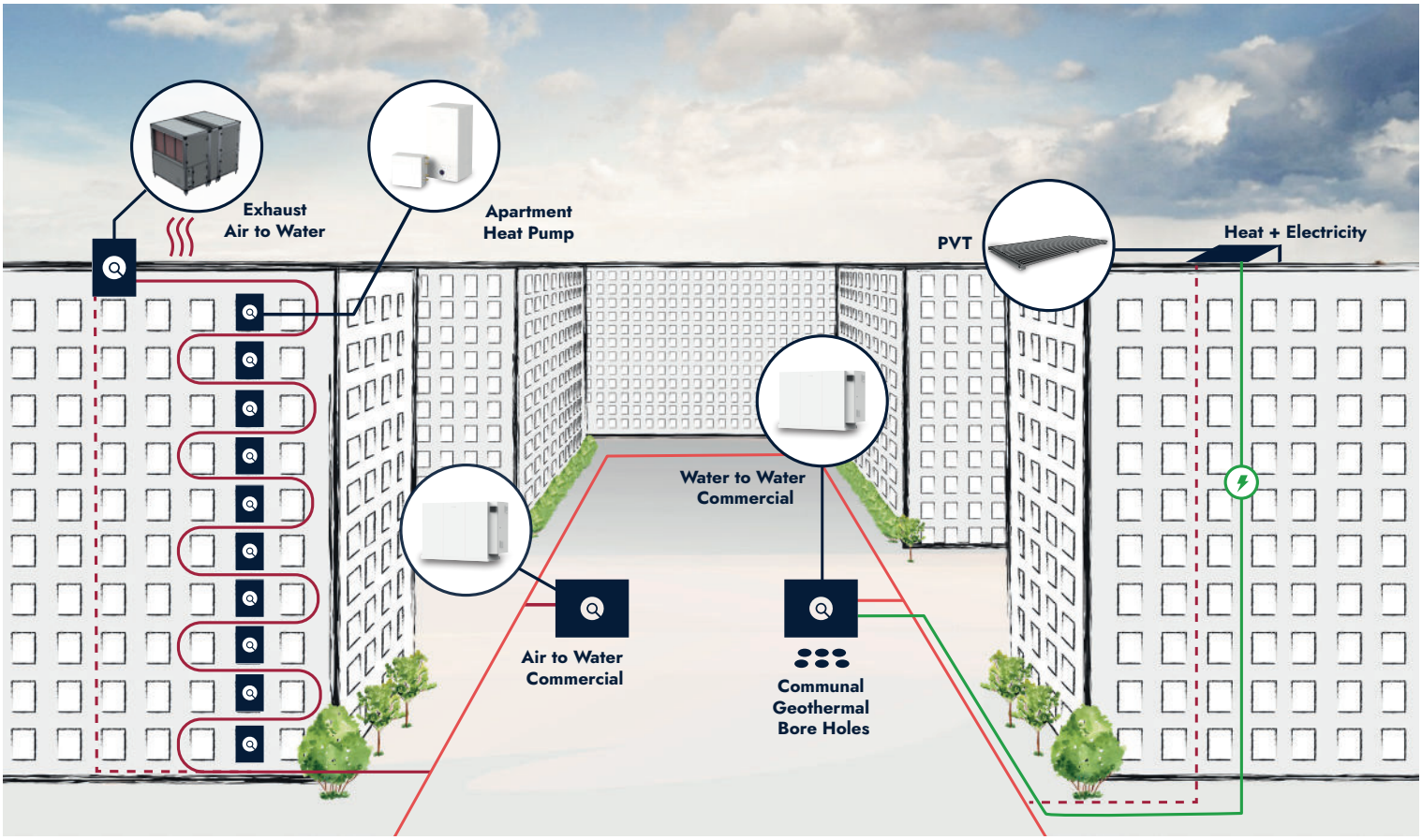
System efficiency class, room heating, 55 °C.

ENERGY GRID ENABLED *(5GDHC)*



QVANTUM VS
– Water/water heat pump

Water/water heat pump Qvantum VS has an inverter-controlled compressor, enabling the heat pump to continuously regulate the capacity to accommodate the current heating demand.

Qvantum VS has a supply temperature of up to 65 °C and a heating capacity up to 79 kW per heat pump.

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System efficiency class, room heating, 55 °C.

TECHNICAL DATA		Range RS/2	Range RSe
Heating capacity (EN14511)			
Heating Capacity 0°C/35°C	kW	26,2–148,8	31,3–67,1
Heating Capacity 0°C/45°C	kW	26,7–151,2	29,2–62,8
Heating Capacity 0°C/65°C	kW	27,9–158,4	27,2–58,7
Heating Capacity 10°C/65°C	kW	34,2–194,8	36,1–77,6
Condensor			
Max operating temperature	°C	65	74
Evaporator			
Temperature evaporator inlet (Min/Max)*	°C	-10 / 25	
Refrigerant circuit			
Type of refrigerant		R407C	R513A
Amount of refrigerant	kg	3,8–2 x 8,3	3,9–8,1
GWP (AR5)		1 624	573
CO_2(e) 31,3 - 67,1	ton	6,17–26,96	2,23–4,64
Dimensions & appearance			
Width	mm	600–2 100	1 200–1500
Depth	mm	640	640
Height	mm	1 418–1 665	1 665
Weight	kg	234–700	294–525
Sound levels (LWA EN12102)			
Sound effect level	dB(A)	47–53	47–50
Components			
Compressor type		Fully hermetic EVI scroll	
Number of compressors	pcs	1 to 4	2 to 3
Number of refrigerant circuits	pcs	1 to 2	1
Electrical data			
Fusing (depending on electricity supply)	A	25–125	35–63
Rated voltage	V	400V 3N – 50Hz	

*Data valid for entire RS/2 range. Data valid for RSe range when using brine bioethanol 29% as cold carrier.

HEAT PUMPS FOR SUSTAINABLE CITIES

WE CHANGE THE WAY THE CITIES OF EUROPE ARE HEATED

Qvantum, founded in Sweden in 1993, develops high-quality heat pumps for individual buildings and innovative heat pump-based solutions for densely populated areas to enable everybody to benefit from emission free heating and cooling. The company has deep knowledge in both heat pump technology and energy systems engineering and works in close collaboration with engineering consultants, installers, project developers and utilities.

Qvantum
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