

Environment-friendly heating system serves leading architects' office

Associated Architects in Birmingham is one of the leading and most modern architects' offices in England. The portfolio of this committed team is widely spread, and the claims to the quality of their own work are very high. To keep their own heating system state of the art, they decided that renovation should include an environment-friendly heating system that used the water from the canal as a primary energy source: two AQUATOP T 26 heat pumps by ELCO.

The probes of the heat pumps that were installed in the building were placed in the Grand Union Canal, which runs past the premises. This makes it possible to utilise the waste heat generated by the surrounding buildings. This is converted to valuable energy, which is then used for the heating of the architects' office.



Customer

Associated Architects
1 Severn Street Place
UK-Birmingham
B1 1SE

Executing specialist partner

C A Southers Ltd.
156 Hockley Hill
Birmingham, B18 5AN

BENEFITS

Efficiency

- Excellent thermal output of up to 113.6 kW, cascaded
- Convincing figures - performance values (COP) of up to 6.0

Convenience

- Space-saving, compact size
- Quick, simple installation

- Free utilisation of regenerative energy sources
- Low noise emission (below 35 dBA)
- Large selection

Savings

- Reduction of operating costs by 20 %
- Amortisation after only 3.5 years
- CO₂ reduction: 5.4 t per year

Renovation: Associated Architects, Birmingham

State of the art heating technology with free energy

The new system

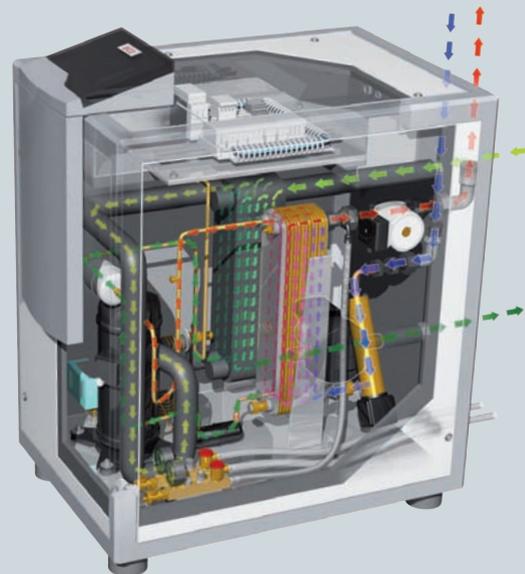
The two AQUATOP T 26 water/water heat pumps are used for the convector heating in the office of Associated Architects in the unique office and shopping centre "The Mailbox." Martin Atkins, Sales Manager at C A Southers sums it up this way: "The AQUATOP T heat pumps are ideal for the requirements of convector heating. They use the canal water as the primary source of warmth, their compact size was very good for the limited space available, where they were installed without problems."

AQUATOP T stands for a new generation of ELCO heat pumps that utilise ground water or surface water, or water from geothermal springs as a free source of energy for convenient warmth for heating. A choice of 7 different compact models ensures systematic solutions when heat pumps are used. And all the components, such as expansion vessels, circulation pumps, safety equipment and electrical inset are already installed. The operating costs of the AQUATOP T heat pumps are significantly lower than those of conventional heating systems.

Equipment	New system	
Heat pump	AQUATOP T 26	
Heating power at W 10, Water temperature 10 °C	tv 35	34.4 kW
Heating power at W 10, Water temperature 10 °C	tv 50	31.7 kW
Cooling power at W 10, Water temperature 10 °C	tv 35	28.1 kW
Required water volume 3 °K temperature difference	8.1 m ³ /h	

The services to match the system

Modern heating systems are crammed full of sophisticated technology and complex electronics. Systems with a "full service history" are therefore a must, especially in commercial and public buildings. Failure of the heating can have disastrous consequences here: loss of production, curtailment of rents, suing for damages. Schools and hospitals must also be able to rely on uninterrupted operation. That is why ELCO offers the matching services for each heating system and each requirement. From professional commissioning through regular maintenance to many years' service and reliability. Secure your long-term function and cost reliability with an ELCO maintenance contract.



Associated Architects - one of England's leading architects' offices

Modern, innovative, versatile, prize-winning - Associated Architects in Birmingham are a team of top-notch architects who have made a name for themselves with the planning and execution of housing developments, office buildings, commercial premises, galleries and above all with their work for educational establishments. Associated Architects have received numerous national prizes, including 21 RIBA Awards, a high distinction from the Royal Institute of British Architects.

ELCO UK
MHS Boilers Ltd
3 Juniper West, Fenton Way
Southfield Business Park
Basildon, Essex
SS15 6SJ, UK

Tel. +44 (0) 12 68 54 67 00
Fax +44 (0) 12 68 88 82 50
www.elco.net