

New building and heating supply contract: Hermann Quarter, Berlin



ELCO ensures more energy and cost efficiency

The Hermann Quarter opened its doors at the end of 2008 in Hermannstraße in the Berlin district of Neukölln. The total utilised area is 15,400 m², spread over 3 floors. Of this, the greater part is taken up by retail areas with a total area of 8,650 m² on 2 floors. The centrepiece is a shopping mall, but there are also numerous shops, offices and a medical centre. The builders of the mall awarded the contract for the planning of a heating solution that would meet the requirements of efficiency and energy savings to the company MVV Energiedienstleistungen Mitte GmbH, with which a heating supply contract was signed. MVV is part of the MVV Energy Group, one of the leading energy service providers in Germany. What was finally implemented was a complete, tailor-made heating-equipment solution. At the heart of the configuration are 2 ELCO gas condensing boilers, the RENDAMAX 2909 and the RENDAMAX 3602, both floor mounted, with a total output of 1,300 kW.

Customer

TRIGON Invest Immobilien
GmbH & Co. KG
Ernst-Reuter-Platz 10
D-10587 Berlin

Executing technical partner

Mercedöl Feuerungsbau GmbH
Hauptstr. 56-60
D-13158 Berlin



BENEFITS

Efficiency

- Competent planning of the new heating solution
- Heating supply contract ensures reliable operation with guaranteed technical availability
- Flexible power adjustment through wide range of modulation

Convenience

- Leading-edge technology
- Compact construction, low space requirement
- Extremely low emissions and quiet operation

Reliability

- Reliable operation for many years

New building and heating supply contract: Hermann Quarter, Berlin

Modern heating technology that wins on efficiency

The new system

ELCO was able to impress with long experience and a high degree of competence in the area of high-performance condensing boilers. MVV Energiedienstleistungen Mitte GmbH decided on the floor-mounted types RENDAMAX 2909 and RENDAMAX 3602 with a total output of 1,319 kW. Compact dimensions, low weight and ease of dismantling further characterise these gas condensing boilers by ELCO.

With the modern gas condensing boilers, ELCO offers ideal heating solutions for the medium to high performance range. These boilers are quiet, modulating and highly efficient. The gas condensing boilers are used predominantly in industrial and commercial systems, but also in public housing projects.

On the basis of the wide modulation range and high standard efficiency factor of up to 109.8 %, ELCO guarantees tremendous economical benefits and energy-saving consumption with these boilers, compared to conventional heating systems. Thanks to infinite modulation and the low mass, the standstill losses of the gas condensing boilers are very slight.

Economical heating convenience, leading-edge heating technology

The RENDAMAX 2900 is a fully modulated, low-emission gas condensing boiler in the medium performance range for new and renovated buildings. It is suitable for closed heat-generation systems as defined in EN 12828. The condensing boilers are versatile, and with their small dimensions and low weight can be fitted in practically anywhere.

More efficient heating, energy savings - thanks to modulation technology

Modulating gas condensing boilers offer tremendous advantages over conventional models. They heat economically without sacrificing convenience. In contrast to the conventional On-Off principle, the power of the burner adjusts automatically and infinitely to the heating demands of the building in all seasons. A further advantage is that the modern ELCO condensing units can also give off small quantities of heat without switching the boiler on and off. This lowers the pollutant emission, reduces the maintenance effort and is easy on the wear parts. This can save a lot of energy, especially in spring and autumn.

Equipment

| | |
|------------------------|--------------------|
| One R 3602 | 747 kW |
| One R 2909 | 572 kW |
| Total output | 1,319 kW |
| Total heat consumption | 1,276 MWh per year |



The services to match the heating system

Modern heating systems are crammed full of sophisticated technology and complex electronics. So it is very important, especially in commercial and public buildings, to have a system with a "full service history". Failure of the heating can have serious consequences in these cases: loss of production, curtailment of rents, or suits for damages. Schools and hospitals must also be able to rely on fault-free 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 system reliability. Ensure long-term reliability of function and cost stability with an ELCO maintenance contract.

MVV Energiedienstleistungen Mitte GmbH - the partner for efficient energy utilisation

MVV Energiedienstleistungen Mitte GmbH is part of the MVV Energy Group, which is active Germany-wide as an electricity and gas supplier. One of the leading energy service providers in Germany, its objective is to find the most efficient solutions for the requirements of its customers. Consulting from the operator's viewpoint is foremost: lowering energy costs and protecting the climate. MVV Energiedienstleistungen offers economical solutions, information and consulting in all matters of energy supply. The companies in the MVV Energy Group have made it their business to reliably supply their customers with energy, and to give them security. The customers profit from this forward-looking model in the form of energy efficiency, leading-edge heating technology and trouble-free energy supply.



Energiedienstleistungen

MVV Energiedienstleistungen Mitte GmbH
Salzufer 8
D-10587 Berlin



New building and heating supply contract: Hermann Quarter, Berlin

RENDAMAX 3602: The gas condensing boiler for maximum performance

The RENDAMAX 3602

Thanks to double condensation in a smooth-tube and a ribbed-tube heat exchanger, the low-temperature gas condensing boilers in the RENDAMAX 3600 series achieve a remarkable standard efficiency factor of 109.8 %. In the upper performance range of 639 to 1,043 kW, the RENDAMAX 3600 gas condensing boilers thus offer very convincing figures at an attractive price - and reliability, because the parts that come into contact with condensation are made of stainless steel, and are very resistant to corrosion. In addition, several boilers can be arranged in a cascade. This allows even large complexes to be converted and heated simply and cheaply.



| Technical Data | | | R 3601 | R 3602 | R 3603 | R 3604 | R 3605 |
|---------------------------------------|-------------|----|--------|--------|--------|--------|--------|
| Power, full load | at 80/60 °C | kW | 639 | 747 | 846 | 945 | 1,043 |
| Power, minimum load | | kW | 183 | 213 | 242 | 270 | 298 |
| Standard efficiency factor | at 40/30 °C | % | 109.8 | 109.8 | 109.8 | 109.8 | 109.8 |
| Width overall | | mm | 1,330 | 1,130 | 1,130 | 1,330 | 1,330 |
| Height overall | | mm | 1,405 | 1,405 | 1,405 | 1,405 | 1,405 |
| Length overall, including connections | | mm | 2,265 | 2,653 | 2,653 | 2,653 | 2,658 |
| Weight | | kg | 890 | 1,040 | 1,150 | 1,280 | 1,410 |

- Compact system unit comprising boiler and burner.
- Modulation ratio 1:4.
- High standard efficiency factor (109.8 %).
- Extremely low emissions.
- Particularly quiet operation.
- Timer and weather-influenced controls for up to 15 mixer circuits.
- Integration in existing control systems and factory master control systems possible (DDC 2-10 V).
- Low weight.
- Built-in premix burner.

ELCO GmbH
Dreieichstraße 10
D-64546 Mörfelden-Walldorf

Tel. +49 (0) 61 05/9 68-0
Fax +49 (0) 61 05/9 68-119
www.elco.net