MICROPUMP®

FUEL CELL CHP UNIT COOLING

SOLUTION: GA SERIES

THE FLUID INDUSTRY

A UK company that applies its expertise in small, efficient combined heat and power unit (CHP) units was developing alternative solutions to address the challenges of reducing emissions, increasing fuel efficiency and improving energy security in the domestic home heating and fuel cell market.

APPLICATION

Innovations in fuel cell technology have led to the development of small-scale CHP units that incorporate fuel cells and offer energy efficiency. Micropump gear pumps are used in the recirculation of de-ionized (ultra pure) water coolant within CHP units and to meter the flow of the water coolant.

PROJECT SUCCESS

Micropump GA series with brushless 24DC motors with control of the input speed and a tachometer for feedback of the actual motor speeds were supplied.

The smooth flow and accurate metering of the pump, equipped with a system of feedback, provides the company with essential data for evaluating the operating efficiencies and heat transfer characteristics of CHP units.

BENEFITS

FEATURE / ADVANTAGE

- Suction Shoe Technology → Self-compensates for wear and wide temperature range operation
- External gear pump design → Precise, pulse-free flow
- Simple to service and maintain → Reduced downtime
- Magnetic coupling → Containment of pumped fluid
- Brushless DC Drive → Accurate control of the pump's output and accurate metering with integral speed control and tacho feedback

Wide operating temperature range

More system uptime

Accurate flow

Easy to monitor and control

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