

CASE STUDY

Fuel-Cell Company Chooses PLW Water-Cooled Electronic Load

Background

Governments are increasingly pushing green initiatives for commercial trucking to save energy and reduce pollution. For example, the state of California describes its Advanced Clean Truck Regulation as "...part of a holistic approach to accelerate a large-scale transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8." The regulation sets an aggressive schedule for increasing the percentage of clean trucks on the road in the state from 2024 to 2035. Consequently, commercial trucking companies are looking for alternatives to the diesel engine. While battery-powered electric trucks offer one possibility, one U.S. company sees fuel-cell-powered electric vehicles as an alternative.



The Challenge

The company designs and manufactures fuel cells and fuel-cell engines for the transportation market for heavy goods. To test its fuel-cell products, the company required variable water-cooled electronic loads.



The Solution

The company selected 36-kW and 108-kW Sorensen PLW Series of water-cooled electronic loads from AMETEK Programmable Power. These loads offer a unique condensation-protection design, high power-density and current ratings, and a wide selection of high-voltage models. Several factors contributed to the company's decision. First, the customer's facility had the necessary infrastructure for water-cooling. In addition, AMETEK Programmable Power offered a very competitive bid and timely shipment. But the key factor in the company's decision was the customer's relationship with AMETEK Programmable Power's sales representative, which extended back through many previous purchases of AMETEK Programmable Power's supplies. In addition, the AMETEK sales representative demonstrated an in-depth understanding of the customer's application, the customer's test strategy before the purchase, and the competitive landscape.

The Sorensen PLW Series offers several technical features that make it an ideal choice for fuel-cell test applications. One such feature is closed-case calibration, making it unnecessary for customers to send their electronic out for calibration. In addition, to ensure the reliability of the PLW Series, the load's design includes individual FET protection, which prevents a cascading failures. Apart from the technical details, the consultative approach of the entire AMETEK Programmable Power sales channel sealed the deal.