PROJECT OVERVIEW

29 Parker Avenue is a mixed use building housing the offices for Controlled Temperatures, Inc., a metal fabrication shop, warehousing and four residential apartments. The YANMAR CP10WN unit provides domestic hot water and space heating, as well as reduces the need to purchase electricity from the utility and offers continuous operation for when the grid is down through its blackout start capability.

REASON FOR CHOOSING YANMAR

YANMAR’s CP10WN is the perfect size system for the facility; it meets the building’s hot water requirements, including a 120 gallon heat exchanger water tank, as well as produces 10 kW of primary power.

The system is also designed with YANMAR’s reliable lean-burn Miller cycle gas engine. This engine results in a standard maintenance interval of 10,000 hours for the unit, which is the equivalent of only needing an oil change in your car every 300,000 miles.

Additional selling points of the unit included its quiet operation for no noise disruption to the building’s tenants, as well as blackout start for continued access to hot water, space heating and electricity even with the utility grid is down.

ABOUT CP10WN

Using natural gas, the CP10WN’s high-efficiency generator provides 10 kW of electrical power. The engine heat is captured, and heats water at a rated temperature of 158°F for immediate use or storage in your facility.

QUICK FACTS

Application: Office Building & Apartments
Location: Stamford, Connecticut
Commissioning Date: December 11, 2015
Product Installed: CP10WN-SN
Results:
• Quiet operation: 56 dB(A) at 3 ft.
• Consistently reliable operation
• Peak shaving for electrical costs
The YANMAR micro cogeneration unit has operated flawlessly since it was commissioned. It has been reliable and efficient, and we have seen substantial savings in electric and heat costs, including a reduction in electrical purchases from the utility of approximately 70%.” - William Calyanis, President, Controlled Temperatures, Inc.

**RESULTS**

- Overall, the CP10WN’s electric utilization is high, averaging 95% over the first seven months of operation.
- The CP10WN has resulted in an average monthly operating savings of $900 by switching to natural gas driven electric and heat production.
- The unit has provided consistently reliable operation with an average of 553 operating hours per month.

**CONCLUSION**

- The project successfully demonstrates the application of a YANMAR mCHP in an office and apartments. The unit has lived up to its promise of high electrical efficiency and dependability, while also meeting the building’s heating demand requirements.

![YANMAR mCHP Savings - January through June 2016](graph.png)