



LUXURY HOME SCARSDALE, NEW YORK

PROJECT OVERVIEW

A luxury homeowner in Scarsdale, New York desired a more efficient way to heat and power their 90-year-old 10,000 square foot home and in-ground pool once belonging to Mr. Gilbert Clifford Noble of Barnes and Noble. The YANMAR dealer elected to install the YANMAR CP10WN-SN with blackout start for the home's heat and power needs along with a geothermal system for the cooling needs.



REASON FOR CHOOSING YANMAR

Since the residence was originally built in 1926 and is large, it is very expensive to power, heat and cool. The homeowner desired not only to reduce their costs, but to do so using environmentally friendly technology that would also increase the home's efficiency.

The 10 kW YANMAR Combined Heat and Power (CHP) system powered by natural gas fit the home's electrical requirements, as well as the domestic hot water and pool heating requirements. The size of the unit also matched the designated installation area within the home.

Other attractive benefits of the unit included the blackout start option, which allows for continuous heat and power separate from the grid, which is unstable in their area; quiet operation since the unit is located within the basement of the home adjacent to other occupied rooms and an extended 10 years/60,000 hours maintenance contract option for peace of mind.

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: Residential

Location: Scarsdale, New York

Commissioning Date:
January 5, 2013

Product Installed:
CP10WN-SN

Results:

- Quiet operation: 56 dB(A) at 3 ft.
- Consistently reliable operation
- Reduced power and heating costs



LUXURY HOME CP10WN-SN

“The YANMAR CHP unit has provided me significant peace of mind as a homeowner. I know the unit is going to efficiently and sustainably meet the heat and power needs of my residence without worrying about downtime or having to rely on the grid.”
- Homeowner in Scarsdale, New York



RESULTS

- Low electric costs as a result of running the unit 24/7. Due to the area’s high electric rate, it is efficient to run the unit even during summer months.
- Heating costs have been reduced substantially; the geothermal units are primarily used for cooling needs with YANMAR’s unit meeting the home’s heating requirements.
- The CP10WN has experienced no downtime with the only service interruptions occurring during scheduled maintenance.

CONCLUSION

- The project successfully demonstrates the application of the YANMAR mCHP in a residence. The unit has delivered on its promise of consistent operation, while also offering an average monthly savings of over \$700 a total savings of \$8,900 over a 12 month period.

YANMAR mCHP Savings - November 2015 through October 2016

