



TRANS-ALASKA BUILDING WASILLA, ALASKA

PROJECT OVERVIEW

The Trans-Alaska Building is a 20,000 square foot office complex that houses Alaska Family Services and other professional and administrative offices in Wasilla, Alaska. Kwaan Energy installed a 35 kW YANMAR natural gas blackout start cogeneration unit outside of the building to provide consistent, cost effective electrical access and heat to the building's many business tenants.



REASON FOR CHOOSING YANMAR

Having already completed two installations in rural Alaska, Kwaan Energy wanted the opportunity to install YANMAR's newest EPA-certified Combined Heat and Power (CHP) system, and the Trans-Alaska Building was the perfect candidate. Located in Wasilla, which is one of the busiest business districts outside of Anchorage in the state, this building suffered from an outdated HVAC system and high electrical costs.

YANMAR's 35 kW CHP system was chosen due to its ability to offer reliable heating and power without breaking the bank. By switching to natural gas, the building has saved around \$2,400 per month in electrical costs, while also gaining a stable heat and power source due to the owner's election to install a blackout start model.

In addition, the system offers other benefits such as quiet operation, easy installation, a long maintenance interval and dependable customer support, including a commissioning of the system after it was installed by local contractors.

ABOUT CP35D1Z

Using natural gas, the CP35D1Z's high-efficiency generator provides 35 kW of electrical power. The engine heat is captured, and heats water at a rated temperature of 176°F for immediate use or storage in your facility.

QUICK FACTS

Application: Office Building

Location: Wasilla, Alaska

Commissioning Date:
July 19, 2016

Product Installed:
CP35D1Z-TNUG

Results:

- High electrical utilization (98%)
- Quiet operation: 64 dB(A) at 3 ft.
- Consistently reliable operation



TRANS-ALASKA BUILDING CP35D1Z-TNUG

“It works! YANMAR’s 35 kW CHP has exceeded expectations, and the reliability is great! I love the fact that the unit reports problems even when it is the grid (not the unit) acting up. The system has protected the building and its tenants during a couple of blackout situations, and the tenants were grateful that they were able to continue working and stay warm during a severe storm.”

- Al Tellman, President of KI Holdings Inc.



RESULTS

- Overall, the CP35D1Z’s electric utilization is high, averaging 98% over six months of operation.
- The CP35D1Z has resulted in an average monthly savings of \$2,400 by switching to natural gas driven electric and heat production.
- The unit has provided consistently reliable operation with an average of 695 operating hours per month.

CONCLUSION

- The project successfully demonstrates the application of a YANMAR CHP at an office building. The unit has lived up to its promise of high reliability and savings during the first six months of operation due to a well-designed project application.

YANMAR CHP Savings - August 2016 through January 2017

