

XRGI25 Field Trial Micro CHP FAQ's

1. Certifications

1. What certifications are on the Micro CHP?
**ETL Certified the following standards:
CSA C22.2 #100 Motors and Generators
CSA C22.2#14 Industrial Control Equipment
UL 2200:2012 Ed.2 Stationary Engine Generator Assemblies**

2. Electrical

1. What KW does the XRGI25 produce?
The XRGI25 Micro CHP produces 24KW
2. What voltage is the XRGI25?
480/3/60
3. Can multiple voltages be used?
Yes with an additional transformer.
4. What is the rated "In Rush" Current
No In-Rush current applies.
5. What is the Short Circuit current ratings?
(SCCR) 10 ka
6. How are the on board electronics Protected.
Fused, Control Boards on the CHP unit are contained in an isolated compartment on the upper rear section of the unit above oil and water connections.
7. What kind of diminished KW would be seen during various service hours?
The Micro CHP produces 24KW. No diminishing KW is anticipated over the life span if proper maintenance is performed using only EC Power service kits
8. **Black Start?**
The XRGI25 is designed for supplemental power does not support black start.

3. Efficiency

1. What is the efficiency of the XRGI25 Micro CHP Unit?
Efficiencies are 31% Electrical, 62% Heat (Ihv). Combined 93% efficient @ 100% power modulation.
2. Is there an efficiency derate for altitude?
Subject to Natural Gas deregulation at specific altitudes.

4. Fuel

1. Fuels type?
Natural Gas & Propane
2. What are the incoming "MIN/MAX" natural gas pressure requirements?
4.5"WC Min (10"WC Min w/ Propane)/ 20" WC Max

5. Generator

1. Is the unit Generator Driven or Reciprocating?
Reciprocating, The Toyota 4Y reciprocating engine uses the expansion of gases to drive a piston within each cylinder, and converts the piston's linear movement to a circular (or rotating) movement of a crankshaft to generate power.

6. Maintenance

1. How many run hours before service is required?
4000 hrs. on field trial units. 6000 hrs. on production units.

7. Temperature

1. What are the heat gains to the room?
Negligible, The Unit is insulated to maximize heat recovery.
2. To what extent will ambient temperature diminish the rated KW?
Negligible up to the rated max ambient temperature rating.
3. **Outdoor Rated?**
The XRG125 is indoor rated only however, Lochinvar is working on a solution for outdoor installations.

8. Venting

1. **Exhaust**
 - a. What are the "General Ventilation Requirements"?
3" Class II or IV UL 1738 approved. 150' Max length.
 - b. What is the connection size provided?
3"
2. **Intake**
 - a. Is ducted fresh air allowed?
Room Air is recommended for Commercial applications.

9. Heating

1. How much heat can the XRG125 Micro CHP Unit produce?
The XRG125 produces 163,000 BTU/Hr.
2. What applications can the XRG125 Micro CHP Unit supply heat for?
The XRG125 can is ideal for supplying heat to any load that requires at least 163,000 BTU/Hr.
3. Can the XRG125 Micro CHP Unit supply hot water to smaller loads.
Yes, this can be accomplished with Lochinvar's Cogeneration Storage Tanks; however, this will reduce runtime.
4. Will the XRG125 Micro CHP Unit modulate?
The XRG125 will produce a continuous 163,000 BTU/Hr. during operation. During periods of time where building load is less than 163,000 BTU/Hr., the XRG125 will automatically divert heat into the site installed Cogeneration Storage Tanks.