## **C65 Microturbine**

## High-pressure Natural Gas, ICHP



# Achieve ultra-low emissions and reliable electrical/thermal generation from natural gas.

- Ultra-low emissions
- One moving part minimal maintenance and downtime
- Patented air bearings no lubricating oil or coolant
- Integrated utility synchronization no external switchgear
- Compact modular design allows for easy, low-cost installation
- Multiple units easily combined act as single generating source
- Remote monitoring and diagnostic capabilities
- Proven technology with tens of millions of operating hours
- Various Factory Protection Plans available



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### Electrical Performance(1)

Electrical Power Output	65kW
Voltage	400/480 VAC
Electrical Service	3-Phase, 4 Wire Wye
Frequency	50/60 Hz
Electrical Efficiency LHV	29%

## Fuel/Engine Characteristics(1)

Natural Gas HHV	30.7–47.5 MJ/m³ (825–1,275 BTU/scf)
Inlet Pressure	517–551 kPa gauge (75–80 psig)
Fuel Flow HHV	888 MJ/hr (842,000 BTU/hr)
Net Heat Rate LHV	12.4 MJ/kWh (11,800 BTU/kWh)

#### Exhaust Characteristics(1)

NOx Emissions @ 15% O <sub>2</sub>	< 9 ppmvd (19 mg/m³)
Exhaust Mass Flow	0.49 kg/s (1.08 lbm/s)
Exhaust Gas Temperature	309°C (588°F) (Heat Recovery Bypassed)

## ICHP Heat Recovery(2)

Integrated Heat Recovery Module Type	Copper Core	Stainless Steel Core
Hot Water Heat Recovery	122kW (0.42 MMBTU/hr)	70kW (0.24 MMBTU/hr)

## **Dimensions & Weight**(3)

Width x Depth x Height <sup>(4)</sup>	0.76 x 2.20 x 2.36 m (30 x 87 x 93 in)
Weight - Grid Connect Model	998 kg (2,200 lb)
Weight - Dual Mode Model	1,364 kg (3,000 lb)

### Minimum Clearance Requirements<sup>(5)</sup>

Horizontal Clearance	
Left & Right	0.76 m (30 in)
Front - Grid Connect Model	0.76 m (30 in)
Front - Dual Mode Model	1.65 m (65 in)
Rear	0.76 m (30 in)

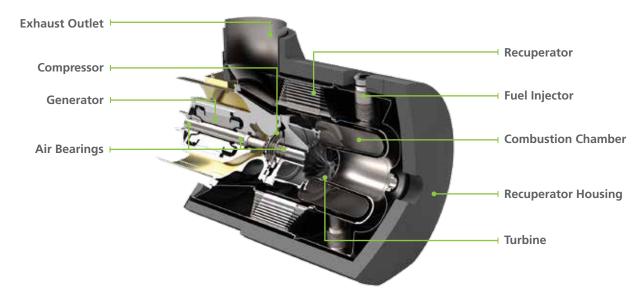
#### **Acoustic Emissions**

ominal at Full Power at 10 m (33 ft) 65 dBA

#### **Certifications**

- UL 2200 Listed
- **CE** Certified
- Certified to the following grid interconnection standards: UL 1741, VDE, and BDEW
- Compliant to California Rule 21

## **C65 Engine Components**



- Nominal full power performance at ISO conditions: 15°C (59°F), 14.696 psia, 60% RH
- (2) Heat recovery for water inlet temperature of 60°C (140°F) and flow rate of 2.5 l/s (40 GPM)

  (3) Approximate dimensions and weights
- (4) Height dimensions are to the roofline. Exhaust stack extends at least 178 mm (7 in) above the roofline
- Clearance requirements may increase due to local code considerations
- Specifications are not warranted and are subject to change without notice.

