

**Energy Conversion Products** 

# **C600S Microturbine**

High-pressure Natural Gas, ICHP

The Signature Series Microturbine provides ultra-low emissions and reliable electrical/thermal generation from natural gas.





**C600S ICHP Power Package** 

#### Electrical Performance(1)

Electrical Power Output	600kW
Voltage	400/480 VAC
Electrical Service	3-Phase, 4 Wire Wye
Frequency	50/60 Hz
Electrical Efficiency LHV	33%

# Fuel/Engine Characteristics(1)

Natural Gas HHV <sup>(2)</sup>	30.7-47.5 MJ/m³ (825-1,275 BTU/scf)
Inlet Pressure	517–551 kPa gauge (75–80 psig)
Fuel Flow HHV	7,200 MJ/hr (6,840,000 BTU/hr)
Net Heat Rate LHV	10.9 MJ/kWh (10,300 BTU/kWh)

#### Exhaust Characteristics(1)

NOx Emissions @ 15% O <sub>2</sub>	< 9 ppmvd (18 mg/m³)
Exhaust Mass Flow	4.0 kg/s (8.8 lbm/s)
Exhaust Gas Temperature	280°C (535°F) (Heat Recovery Bypassed)

### **Benefits**

- 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
- High electrical efficiency over a very wide operating range
- High availability part load redundancy
- Remote monitoring and diagnostic capabilities
- Proven technology with tens of millions of operating hours
- Various Factory Protection Plans available

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### **Dimensions & Weight<sup>(3)</sup>**

Width x Depth x Height	3.0 x 5.8 x 4.0 m (117 x 230 x 157 in)
Weight - Grid Connect Model, dry	13,700 kg (30,000 lbs)
Weight - Dual Mode Model, dry	15,800 kg (34,900 lbs)

## Minimum Clearance Requirements<sup>(4)</sup>

Horizontal Clearance		
Left	1.5 m (60 in)	
Right	0.0 m (0 in)	
Front	1.7 m (65 in)	
Rear	2.2 m (85 in)	

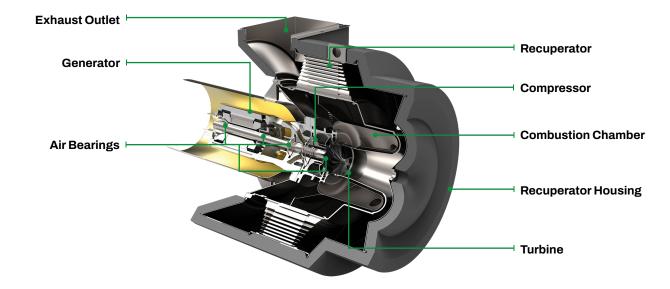
## ICHP Heat Recovery<sup>(5)</sup>

Hot Water Heat Recovery 0.9 MW (3.1 MMBtu/hr)

## Certifications

- UL 2200 Listed
- CE Certified
- Certified to the following grid interconnections standards: UL 1741-SA, VDE, BDEW, CEI 0-16, **AS4777**
- Compliant to California Rule 21

## **C200 Engine Components**



<sup>(5)</sup> Nominal heat recovery using 3 Heat Recovery Modules (HRM). Inlet water temperature of 38°C (100°F) and flow rate of 6.3 l/s (100 gpm) per HRM Specifications are not warranted and are subject to change without notice.



<sup>(1)</sup> Nominal full power performance at ISO conditions: 15°C (59°F), 14.696 psia, 60% RH

Suitable for use with fuel blends containing up to 30 percent hydrogen gas by volume

Approximate dimensions and weights
Clearance requirements may increase due to local code considerations