High-pressure Natural Gas, ICHP



The Signature Series Microturbine provides 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
- 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





C800S ICHP Power Package

Electrical Performance⁽¹⁾

Electrical Power Output	800kW
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	30.7-47.5 MJ/m ³ (825-1,275 BTU/scf)
Inlet Pressure	517–551 kPa gauge (75–80 psig)
Fuel Flow HHV	9,600 MJ/hr (9,120,000 BTU/hr)
Net Heat Rate LHV	10.9 MJ/kWh (10,300 BTU/kWh)

Exhaust Characteristics⁽¹⁾

NOx Emissions @ 15% O ₂	< 9 ppmvd (18 mg/m³)
Exhaust Mass Flow	5.3 kg/s (11.7 lbm/s)
Exhaust Gas Temperature	280°C (535°F) (Heat Recovery Bypassed)

Dimensions & Weight⁽²⁾

Width x Depth x Height ⁽³⁾	3.0 x 7.5 x 3.8 m (117 x 295 x 148 in)
Weight - Grid Connect Model, dry	17,400 kg (38,300 lbs)
Weight - Dual Mode Model, dry	20,200 kg (44,500 lbs)

Minimum Clearance Requirements⁽⁴⁾

Horizontal Clearance		
Left	1.5 m (60 in)	
Right	0.0 m (0 in)	
Front	1.7 m (65 in)	
Rear	2.0 m (80 in)	

ICHP Heat Recovery⁽⁵⁾

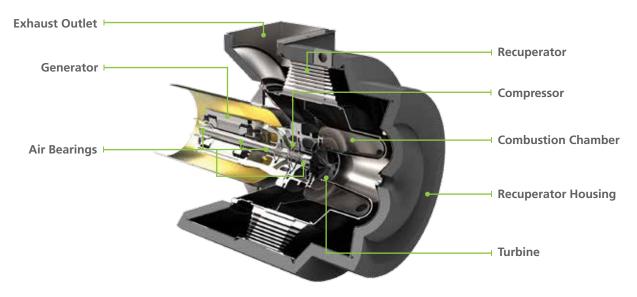
Hot Water Heat Recovery

1.2 MW (4.1 MMBtu/hr)

Certifications

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

C200 Engine Components



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

(2) Approximate dimensions and weights

Height dimensions are to the roofline. Exhaust outlet extends at least 236 mm (9.3 in) above the roofline Clearance requirements may increase due to local code considerations (3)

- (4)
- (5) Total heat recovery using 4 Heat Recovery Modules (HRM). Inlet 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.

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