

**Energy Conversion Products** 

## **C65 Microturbine**

#### Landfill Gas

# Achieve ultra-low emissions and reliable electrical generation from landfill gas.







#### Electrical Performance(1)

| Electrical Power Output(2) | 65kW                |
|----------------------------|---------------------|
| Voltage                    | 400/480 VAC         |
| Electrical Service         | 3-Phase, 4 Wire Wye |
| Frequency                  | 50/60 Hz            |
| Electrical Efficiency LHV  | 28%                 |

#### Fuel/Engine Characteristics(1)

| Landfill Gas HHV         | 13.0-22.4 MJ/m³ (350-600 BTU/scf) |
|--------------------------|-----------------------------------|
| H <sub>2</sub> S Content | < 5,000 ppmv                      |
| Inlet Pressure           | 517–551 kPa gauge (75–80 psig)    |
| Fuel Flow HHV            | 919 MJ/hr (871,000 BTU/hr)        |
| Net Heat Rate LHV        | 12.9 MJ/kWh (12,200 BTU/kWh)      |

#### Exhaust Characteristics(1)

| NOx Emissions @ 15% O <sub>2</sub> | $< 9 \text{ ppmvd } (18 \text{ mg/m}^3)$ |
|------------------------------------|--|
| Exhaust Mass Flow                  | 0.49 kg/s (1.08 lbm/s)                   |
| Exhaust Gas Temperature            | 329°C (625°F)                            |

#### **Benefits**

- Ultra-low emissions
- Accepts sour gas fuels with up to 5,000 ppm H<sub>2</sub>S
- 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

Smarter Energy for a Cleaner Future

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

| Width x Depth x Height      | 0.76 x 1.95 x 2.08 m (30 x 77 x 82 in) |
|-----------------------------|--|
| Weight - Grid Connect Model | 758 kg (1,671 lb)                      |

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

| Horizont | al Clearance |
|----------|--------------|

| Left & Right               | 0.76 m (30 in) |
|----------------------------|----------------|
| Front - Grid Connect Model | 0.76 m (30 in) |
| Rear                       | 0.91 m (36 in) |

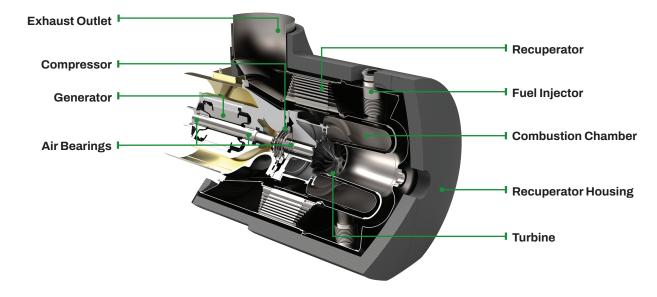
#### **Acoustic Emissions**

Nominal at Full Power at 10 m (33 ft)(5) 70 dBA

### 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

#### **C65 Engine Components**



- (1) Nominal full power performance at ISO conditions: 15°C (59°F), 14.696 psia, 60% RH
- (2) Minimum power output is 35kW
- Approximate dimensions and weights
  Clearance requirements may increase due to local code considerations
- (5) The optional acoustic inlet hood kit can reduce acoustic emissions at the front of the Microturbine as much as 5 dBA Specifications are not warranted and are subject to change without notice.

