The new Jenbacher® gas engine is based on the proven Type 4 platform of more than 4,000 installed engines generating about 4.5 GW of power worldwide. The innovative design and engineering excellence translate to as much as an up to 4% increase in output – to 1,560 kW – and about up to 1% point boost in electrical efficiency compared to the respective J420 B gas engine versions.

Product highlights
- Increased output up to 1,560 kWel
- Greater electrical efficiency
  - up to 44% for Natural Gas
  - up to 43.2% for Biogas
- Reduced footprint – 0.6 meters shorter
- Enhanced serviceability

Jenbacher Type 4
Next-generation technology innovation

Technical data for divers customer needs

<table>
<thead>
<tr>
<th></th>
<th>Max. electrical efficiency</th>
<th>Max. total efficiency</th>
<th>Hot country</th>
<th>Biogas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Output</td>
<td>1,560 kW</td>
<td>1,560 kW</td>
<td>1,560 kW</td>
<td>1,560 kW</td>
</tr>
<tr>
<td>Electrical Efficiency</td>
<td>44.0%</td>
<td>42.8%</td>
<td>43.2%</td>
<td>43.2%</td>
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<tr>
<td>Thermal Efficiency</td>
<td>45.7%</td>
<td>48.7%</td>
<td>46.0%</td>
<td>42.5%</td>
</tr>
<tr>
<td>Gas Types</td>
<td>Natural gas</td>
<td>Natural gas</td>
<td>Natural gas</td>
<td>Biogas</td>
</tr>
<tr>
<td>GenSet dimensions l x w x h (m)</td>
<td>6.5 x 1.9 x 2.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine Speed (rpm)</td>
<td>1,500</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Bore / Stroke (mm)</td>
<td>145 / 185</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Technical data according to ISO 3046:
- Based on emission values of 500 mg/m³ NOx at 5% O₂ at dry exhaust gas.
- Total heat output with a tolerance of +/- 8% exhaust gas outlet temperature 120°C, for biogas gas outlet temperature 180°C.
- Natural gas with a methane number at 70.

All data according to full load and subject to technical development and modification. Further engine versions available on request.
Design Features

The new module delivers a robust compact footprint with a 0.6-meter reduction in length compared to the previous versions of engine Type 4. Aligned and integrated components with standardized interfaces increase reliability without compromising on the operator’s flexibility.

Steel piston technology (optional)
New steel pistons provide much higher power loading capability as well as significant efficiency improvement. Optimized piston cooling improves heat dissipation and reduces thermal load.

Improved 3K-gas-mixer
Derived from proven Type 6 engine technology, the new design delivers a homogenous, stable, and smooth gas-to-air mixture – with any fuel gas type – over the entire power range.

High performance turbocharger
Our latest turbocharger technology delivers top efficiency in addition to full output at high ambient temperatures and altitudes.

Repositioned SAFI-rails
This modification translates to improved operating conditions for the ignition-rails and the knocking detection system.

Improved cylinder head
Newly designed cylinder head with increased efficiency and improved cooling conditions in combination with further optimized camshaft profile. At the same time, the improved cooling further reduces the thermal load.

New throttle valve actuator and integrated flame arrestors
The new concept is not only maintenance-friendly, it also improves operational safety specifically for special gas applications.

Improved frame and mounting system
• Split design frame provides easier insertion in restricted spaces.
• The new installation concept additionally minimizes the vibration level of the module and reduces thereby resulting impacts on the components.
• High-dynamic coupling significantly reduces vibration transmission to the generator.
• 3D-adjustable chocks provide rigid generator support and fast alignment possibilities.
• Quickly removable safety guards offer improvement over bell-housing design, e.g., no shifting of the generator is needed for coupling changes.

Maintenance-friendly air filter
• Single cartridge with increased filter surface for longer lifetime
• Electronic differential pressure monitoring improves maintenance.

Individual interface positioning
• Three pre-defined interface panel positions ensure an ideal adjustment to local conditions.
• Easy access to all maintenance relevant parts like filters, pumps and turbocharger.

Optimized blow-by filter
Increased lifetime and exchangeable cartridge reduce service costs.

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Deflation
Steel piston technology (optional)
New blow-by filter with exchangeable cartridge
High performance turbocharger
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