

NEW



## Gas engine GS16R2-PTK



*Common rail*

### Applications

- Power Generation and Cogeneration
- Durable and Reliable
- Heart of Modular Energy Packages

### Features

- 1.5 MW\* high-output & high-efficiency natural gas engine
- Range of Lean burn and Miller Cycle engines available
- Proven high-efficiency, high compression ratio proprietary turbocharger technology

### Specifications

- 1.5 MW output at 1500rpm / 1 MW output at 1200rpm
- 42.1% efficiency, world's top level for 1.5 MW gas engine class

## technical information

		GS6R-PTK	GS6R2-PTK	GS12R-PTK	GS16R-PTK	GS16R2-PTK
<b>Type</b>		4-cycle, intercooled, Natural Gas engine	4-cycle, intercooled, Natural Gas engine	4-cycle, intercooled, Natural Gas engine	4-cycle, intercooled, Natural Gas engine	4-cycle, intercooled, Natural Gas engine
<b>Aspiration</b>		Turbocharged	Turbocharged	Turbocharged	Turbocharged	Turbocharged
<b>Number of cylinders</b>		6	6	12V	16V	16V
<b>Bore x stroke mm</b>		170x180	170x220	170x180	170x180	170x220
<b>Displacement Ltr</b>		24,52	29,96	49,03	65,37	79,9
<b>Combustion system</b>		Prechamber, Spark Ignited	Prechamber, Spark Ignited	Prechamber, Spark Ignited	Prechamber, Spark Ignited	Prechamber, Spark Ignited
<b>Fuel</b>		Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas
<b>Dry weight 50Hz / 60Hz kg</b>		2400 / 2400	2650 / 2650	5350 / 5350	6770 / 6830	8105 / 7815
<b>Continuous 'C' power rating output kWm hp</b>	50Hz 1500rpm 60Hz 1200rpm	363 315	na 394	722 632	959 845	1563 1031
<b>Emission compliance</b>		—	—	—	—	—
<b>Dimensions mm</b>	L x H x W	1989 x 1638 x 1123	1989 x 1718 x 1123	2396 x 2137 x 1832	2876 x 2137 x 1820	3422 x 2122 x 2164

## GS16R2-PTK , 1.5 MW high-output & high-efficiency natural gas engine

The newly developed 1.5 MW gas engine incorporates a Miller cycle system with larger compression which results in better thermal efficiency. By using computational fluid dynamics (CFD), a combustion strategy that can achieve both low NOx and high combustion, efficiency is assured.

Our own combustion control technology, with minimum knock margin improving thermal efficiency in combination with an optimized air-fuel ratio control technology, enables an initial load accep-

tance of 30%. This is the world's highest level for lean-burn engines.

Our engine control technology enables a 100% load acceptance within two minutes after Blackout Start.

In addition to a conventional cooling tower, a combustion technology which also works with a remote radiator was employed to ensure reliable operation even during water outages.



GSR-series

\* 1500rpm / 50Hz



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