

THE GAS TURBINE: AE64.3A

Proven technology in compact dimensions

Scaled-down compressor and combustion section from the AE94.3A.

15 stages axial compressor with variable guide vane.*

Single shaft, internally **air-cooled rotor**, disk type with Hirth serration and central tie rod.

Cold-end generator. Gear Box (for 50 or 60 Hz operation).

Annular type Combustion Chamber lined with individually replaceable tiles.

4 stages, **air cooled** turbine with axial discharge.*

24 **dry low NOx** dual-fuel burners.

**All vanes and blades replaceable with rotor in place.*

The mid-size flexible solution

The AE64.3A was the first annular gas turbine in the world to be operated in gas premix mode across the entire load range, simplifying the management of load rejection and all the transient modes in general. Due to its fast start up capability and operational versatility, it is a flexible solution for many applications: open cycle / peakers, base load plants, Combined Heat and Power Plants, power/steam producer for petrochemical industries.

Special application

Thanks to its compact design, the AE64.3A is suitable for offshore applications, providing a reliable solution for fast deployment of power generation to be located also in remote marine/fluvial areas.

Thanks to its capability to burn hydrogen in natural gas blends, the AE64.3A is also a valuable proposal for refineries, chemical plants or small /medium size renewable parks.

Environmental sustainable

NOx level down to 15 ppm in dry gas mode and 75 ppm in dry oil mode (with possibility to reach 60 ppm with small water amount).

Smart maintenance approach

- Extended 33 kEOH inspection interval for hot gas components
- Possibility to replace vanes and blades with rotor in place
- Compact arrangement and quick on-site activities

Optimized maintenance costs, low downtime and high availability.

Customized service agreements, including upgrading packages, allow Customers to choose the best solution to fit their needs.

Natural gas ISO conditions	AE64.3A Performance	Power Plant Configuration	1+1	2+1
Power output (MW)	80	CC Net Output (MW)	120	243
Efficiency (%)	36.4	CC Net Efficiency (%)	55.7	56.4
Exhaust Mass Flow (Kg/s)	215	CC Net Heat Rate (kJ/kWh)	6,507	6,388
Exhaust Temperature (°C)	580	Plant Turndown	50	30
GT minimum load (%)	45	Minimum load (%)		

General note: Performance data are calculated with 100% methane (LHV) at ISO conditions, direct cooling.

References:

50+ units in Combined Cycle, 4 units in Open Cycle, 1 barge solution

total > 2.5 million EOH

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