

IM270: The perfect solution for excellent electric power generation efficiency and total thermal efficiency

IM	270 performance				For natural gas					
Amb	ent temperature	°C	0	15	30	40				
	Output at generator terminal	kW	2,000	2,000	1,670	1,460				
Rated output	Fuel consumption	Nm³/h	705	699	630	57				
	Exhaust gas flow	kg/h	37,904	34,772	32,357	30,839				
	Efficiency at generator terminal	%	25.1	25.4	23.5	22.4				
	Steam flow	t/h	6.18	6.53	6.10	5.80				
	Total efficiency	%	79.2	83.1	83.2	84.3				

Operating conditions / Ambient pressure: 1013 hPa, Relative humidity: 60%, Steam pressure: 0.78 MPa Feed water temperature: 60°C, Voltage: 6,600 V / 3,300 V, Frequency: 50 Hz / 60 Hz, Fuel: Natural gas, LHV: 40.6 MJ/Nm³

IM270-IHI-FLECS*: IHI's unique solution for steam and electricity demand fluctuation

Ambient temperature °C 0 15 30 40 An				Ambi	ent temperature	°C	0	15	30	4			
	•	1344	2 5 00	2 5 00	2 200		Maximum steam (Priority to steam demand)	•	1.3.4/	2 000	_	1.070	1.40
Maximum power (Priority to electricity demand)	Output at generator terminal	kW	2,500	2,500	2,200	2,000		Output at generator terminal	kW	2,000	2,000	1,670	1,46
	Fuel consumption	Nm³/h	789	774	694	645		Fuel consumption	Nm³/h	705	699	630	57
	Steam injection flow	kg/h	2,500	2,500	2,500	2,500		Steam injection flow	kg/h	0	0	0	
	Exhaust gas flow	kg/h	39,836	36,377	33,634	31,994		Exhaust gas flow	kg/h	37,904	34,772	32,357	30,83
	Efficiency at generator terminal	%	28.1	28.6	28.1	27.5		Efficiency at generator terminal	%	25.1	25.4	23.5	22.
	Steam flow	t/h	3.85	4.16	3.72	3.50		Steam flow	t/h	5.81	6.21	5.80	5.5
	Total efficiency	%	56.4	60.0	59.1	58.8		Total efficiency	%	76.5	80.8	80.8	81.

IHI Power Systems Co., Ltd.

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• The contents of this catalog are true as of November 2019. • Please note that the specifications, dimensions, and appearance included in this catalog are subject to change without notice due to improvements. • Please note that the color of the product may look different

The above figures are average performance on new and clean condition

from the actual color due to reasons related to printing. • Please note that our current address is subject to change.



IHI Power Systems Co., Ltd.





IM270 : powerful and clean IHI original gas turbine.

Since the completion of Japan's first jet engine in 1945, we, at IHI, having produced approximately 17,000 jet engines to date, have originally developed high efficiency and environment friendly gas turbine, IM270. It is designed utilizing technology and know-how accumulated over the years. IM270 is a best fit gas turbine for cogeneration with both of high performance and low NOx emission, and well as being friendly for both human and environment and offering high reliability.



Features of

1. High Efficiency and Energy Saving

The compressor utilizes industrial compressor and vehicle turbo charger technology, and the turbine utilizes aircraft engine technology. These technologies support to improve the thermal efficiency of cogeneration system.

2. Extensive Experiences and High Reliability

Minimizing the numbers of parts by simple structure, IHI aircraft engine technology and materials support high reliability.

3. Environmental Friendliness

Acoustic enclosure and dry low NOx combustor have been adopted as standard. The impact for surrounding environment is minimized.

4. Compact System Design

IHI's plant engineering knowledge and expertise contribute to space saving.

Operation Support through Remote Monitoring



Customer Operation Support Center "i-MOTS"* (i-MOTS: IHI Global Monitoring and Technical Service Center