

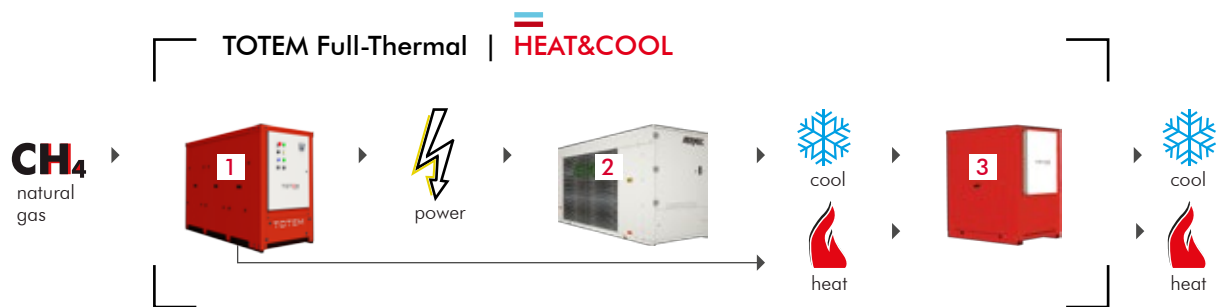
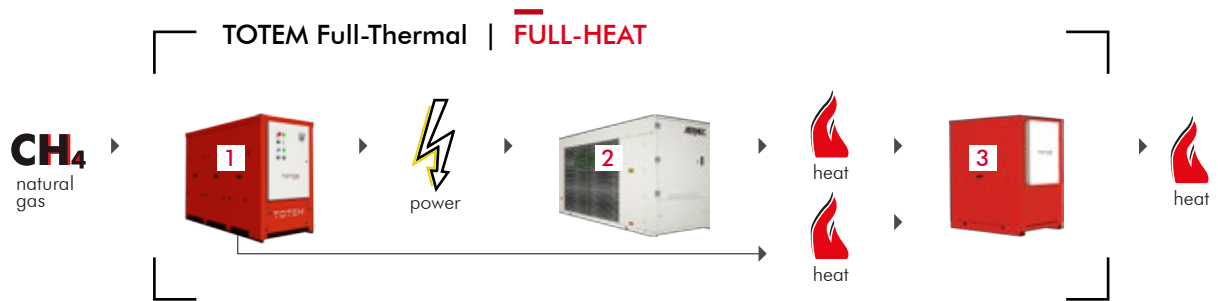


# Heat & cool on the demand + saving – emissions all year round

**Switch to TOTEM Full-Thermal!** Fueled by natural gas, it heats and cools while cutting costs up to 50% compared to traditional systems.

**TOTEM**  
full-thermal

# heat & cool at the best efficiency



1 TOTEM 25

2 NRK 300

3 HYDRONIC SKID

Choosing the TOTEM Full-Thermal means relying on the TOTEM micro-cogenerator benefits (efficient production of electricity and heat) as well as on the AERMEC heat pump high performances.

The heat pump heats and cools out of the electricity produced by the TOTEM. In Full-Heat mode, the heat generated by the heat pump is enhanced by the TOTEM heat: that allows a full heat production with an efficiency up to 160%. In the Heat&Cool mode, the TOTEM Full-Thermal is rather comparable to a polyvalent heat pump as it can simultaneously cool and heat at high temperature. Emissions are reduced thanks to the high efficient TOTEM technology and the heat pumps renewable contribution.

## PREVIEW

		<b>FULL-HEAT</b>	<b>HEAT&amp;COOL</b>
Thermal power	kW	126 <sup>(1)</sup>	57 <sup>(2)</sup>
Cooling capacity	kW	-	59 <sup>(3)</sup>
Fuel type		natural gas	
Fuel consumption	Nm <sup>3</sup> /h	7.54	
Average thermal efficiency @ medium enthalpy (Flow temperature 55 °C)		1.6	-
Average thermal efficiency @ high enthalpy (Flow temperature 65 °C)		1.4	-
Heat pump EER		-	3.03
TOTEM efficiency (condensation)		-	1.07
Emission NOx e CO (ref. 5% O <sub>2</sub> )	mg/Nm <sup>3</sup>	≤ 10	

<sup>(1)</sup> Maximum Heating Capacity @W 40°C/55°C, External air 7°C b.s./6°C b.u.

<sup>(2)</sup> Heating Capacity @W 35°C/45°C.

<sup>(3)</sup> Water evaporator 12°C/7°C, External air 35°C.

# give more together



TOTEM Full-Thermal heats & cools taking benefit of the natural gas low cost as well as the heat pumps high efficiency. As a result, the Full Thermal is a system extremely advantageous from the economic point of view compared to traditional electric heat pumps as well as the gas boilers.

Suitable applications for the TOTEM Full-Thermal are those in the residential sector, hospitality (hotels, campsites), wellness (swimming pools, spas, sports centers, gyms), healthcare (nursing homes, clinics and hospitals), food (dairies, meat processing farms) and small/medium industries.

# business case, savings



## swimming pool

operating hours per year **7,000**  
application **pools heating**  
annual savings **20,360 €**



## food farming

operating hours per year **5,000**  
application **pre-heating water for food processing**  
annual savings **13,500 €**



## hotel

operating hours per year **6,000**  
application **hot water generation and space cooling (air conditioning)**  
annual savings **13,100 €**

# benefits

## **rewarding**

The low consumption allows short payback of 3 years, on average.

## **versatility**

Replaces the functionality of both polyvalent heat pump and a boiler.

## **top reliability**

Guarantees continuity in the heat supply.

## **certain costs**

Independent from the electricity costs fluctuations.

## **outdoor**

Designed for outdoor applications.

## **high quality**

ASJA and AERMEC represent two brands of excellence worldwide.

## **eco-friendly**

Cutting harmful CO and NO<sub>x</sub> emissions and the release of CO<sub>2</sub> into atmosphere.

# ASJA and AERMEC



TOTEM micro-cogenerators are designed, produced and marketed by ASJA AMBIENTE ITALIA spa. Since 1995 ASJA has been operating in the sector of renewable energy production, energy efficiency and in the reduction of greenhouse gas emissions that cause climate change. The micro-cogenerators are developed and assembled in the modern plant of Rivoli (To): 2,100 square meters of technology and innovation dedicated to the TOTEM line. The new production plant, with a capacity of 600 machines a year, is designed to ensure maximum operating efficiency.



AERMEC, founded in 1961, is a manufacturer of heat pumps, the world leader in air conditioning. Its objective is to provide well-being and comfort in all environments where you live and work.

In Italy, AERMEC is present with 57 sales agencies and 77 technical assistance services that is over 700 employees and more than 130,000 square meters of floor area.

ASJA and AERMEC excellence lead to the creation of TOTEM Full-Thermal, a system that combines the efficiency of micro-cogenerators and the high performance of heat pumps.



**asja**

+39 011 9579274  
sales@totem.energy  
www.totem.asja.energy

**AERMEC**  
air conditioning