

# ANLI

REVERSIBLE HEAT PUMP WITH INVERTER

WELL-BEING WITH LOWEST ENERGY CONSUMPTIONS

---



Air-cooled – axial fans

Scroll compressors – R410A

Cooling capacity 29,3kW – Heating capacity 31,5kW

---



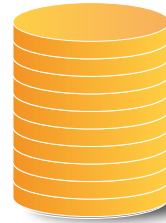
# ANLI INVERTER



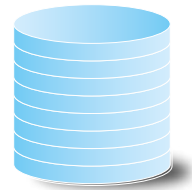
## Greater wellbeing, lower energy consumption

- Designed for use with all terminals (radiant heating panels, fan coils and radiators) and able to produce domestic hot water
- Manages variable water flow systems (also available with inverter-driven pump): to save more than 50% on pumping costs
- Reduces heating costs by up to 30% compared with traditional systems (condensing boilers)
- Lower weight and smaller dimensions thanks to the use of refrigerant R410A and absence of the storage tank
- Greater climate and acoustic comfort

Traditional ON-OFF Chiller



ANLI INVERTER TECHNOLOGY



**-20%**

Reduction in carbon dioxide emissions  
(carbon dioxide contributes to the Greenhouse effect)

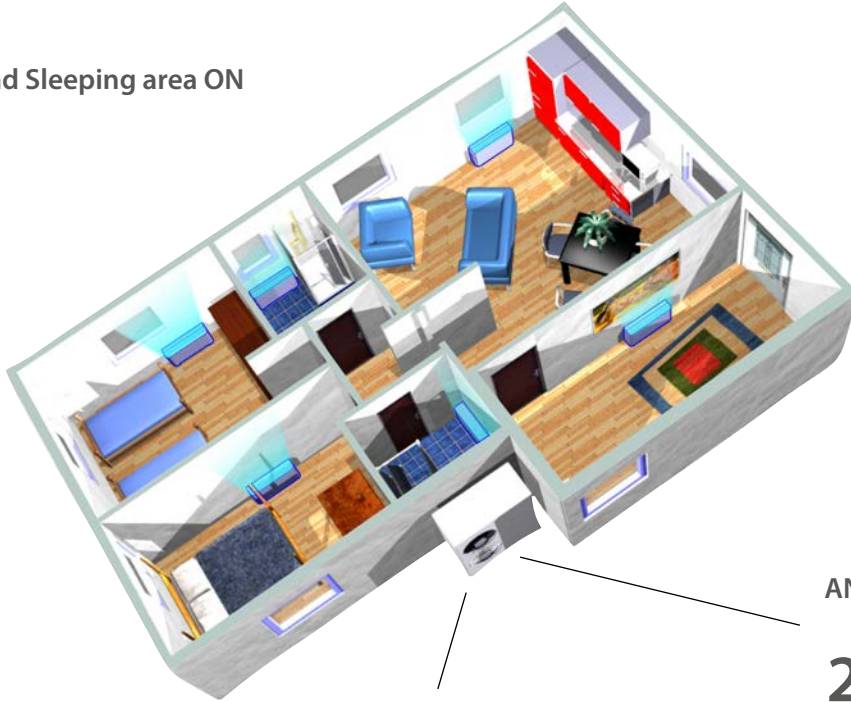
Annual savings in terms of electricity consumption  
Compared with traditional ON-OFF systems



ANLI101H

**FAN COILS**

Living area and Sleeping area ON



Traditional  
ON-OFF Chiller

**2000 Watt**



**2000 Watt**

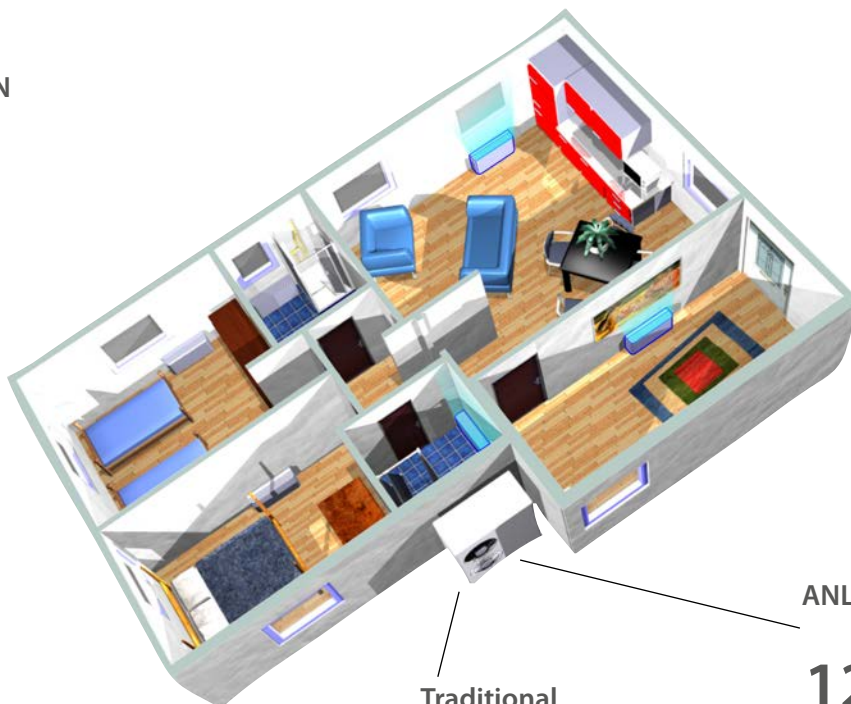


Electricity consumption adjusts instantly on demand.

Thanks to the inverter technology, the power needed for heating or cooling is modulated, meaning that electrical consumption is in continuous change. In this way, it becomes even easier to manage many simultaneous electrical loads, whilst avoiding exceeding the maximum electricity consumption allowed under the electricity provider's contract.

**FAN COILS**

Living area ON



Traditional  
ON-OFF Chiller

**2000 Watt**



**1200 Watt**

# -20°C

ANNUAL SAVINGS IN ELECTRICITY CONSUMPTION COMPARED WITH TRADITIONAL ON-OFF SYSTEMS

## LOWER BILLS



Thanks to the Inverter technology, the electrical “brushless” DC motor with permanent magnets and the electronic thermostatic valve, the heat pumps and chillers of the ANLI series are able to modulate continuously the power needed for heating and cooling from 35% to 100%. This makes it possible to adjust, whenever necessary, the power supplied, as requested by system sensors. The result is an energy saving in summer and winter climate control and in the production of domestic hot water, of roughly 20% on average, compared with the traditional ON-OFF series. That’s the same as saying for every 100 Euro of electricity consumed by a traditional ON-OFF heat pump, the inverter-driven ANLI heat pump produces a net saving of a healthy 20 Euro!

# -50°C

THE NOISE LEVEL REDUCTION, AT APPROX. 3 DB (A), ESPECIALLY APPRECIATED DURING NIGHT-TIME OPERATION

## NIGHT-TIME SILENCE

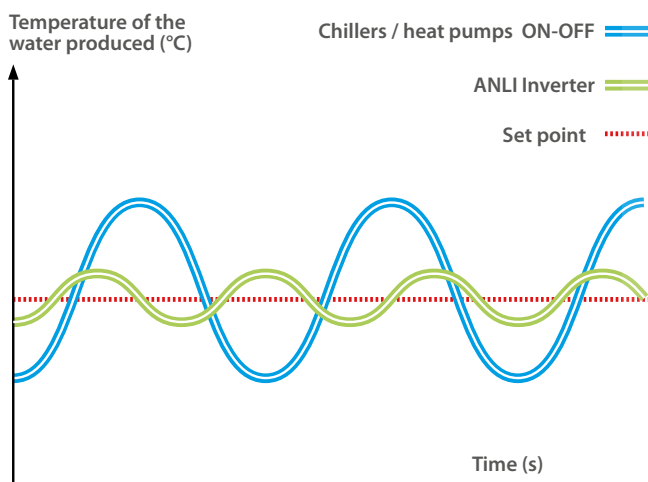


ANLI Inverter è ANLI Inverter was designed with a particular focus on silent operation. Its success is thanks to the choice of high quality acoustic components and to continuously monitoring appliances in both the development phase as well as in the testing phase in the Research and Development department’s sophisticated semi-anechoic chamber. Under nominal conditions the ANLI Inverter series is, on average, quieter than the ON-OFF series, but what really makes the difference is the change in the noise level in response to a change in load. While a traditional On-Off appliance always emits the same

# -20%

REDUCTION IN CO<sub>2</sub> EMISSIONS (CARBON DIOXIDE CONTRIBUTES TO THE GREENHOUSE EFFECT)


level of noise, the ANLI Inverter series gradually reduces the noise it makes as the power required decreases. This brings a significant benefit during night-time operation, when the load is naturally reduced and the need for silence is considerably greater compared with daytime hours. Under these conditions, a reduction of 3 dB(A) can effectively be achieved, which corresponds to half the level of noise of a traditional ON-OFF ANL.



**+20%**

THE INCREASE IN SEASONAL ENERGY EFFICIENCY (ESEER-EUROPEAN SEASONAL ENERGY EFFICIENCY RATIO) COMPARED WITH NORMAL ON-OFF WATER CHILLERS


**LOWER WEIGHT AND SMALLER DIMENSIONS**

 The use of the specific high energy fluid refrigerant R410A and absence of water storage make the ANLI Inverter smaller and lighter compared to the equivalent ON-OFF series with storage.

**-70%**

THE REDUCTION IN START-UP POWER DEMAND COMPARED WITH RANGES WITH ON-OFF COMPRESSORS

**RESPECT FOR THE ENVIRONMENT**

 Thanks to greater energy efficiency and the use of fluid refrigerant R410A, harmless to the stratospheric ozone layer, the ANLI Inverter series is environmentally friendly. R410A is also a fluid with high thermodynamic efficiency and this makes it possible, together with use of the Inverter, to reduce CO2 emissions. Totting up the savings in terms of summer climate control, winter heating and the production of domestic hot water, in comparison with the use of an ON-OFF heat pump, CO2 emissions fall by 20%.

**-25%**

THE AVERAGE REDUCTION IN WEIGHT AND DIMENSIONS COMPARED WITH TRADITIONAL RANGES

**DOMESTIC HOT WATER**

 The ANLI Inverter can produce hot water even when the external environmental temperature falls to -20°C. The temperature of the water produced can even reach 60°C in summer, and that makes it possible to use the ANLI Inverter all year round to produce domestic hot water and to heat a swimming pool.



# SILENT COMFORT

## FAN COILS

Sleeping area ON



Traditional ON-OFF Chiller

30dB(A)



27dB(A)

## VARIATION OF THE NOISINESS AT LOAD CHANGE



Under nominal conditions the ANLI Inverter series is, on average, quieter than the ON-OFF series, but what really makes the difference is the change in the noise level in response to a change in load. While a traditional On-Off appliance always emits the same level of noise, the ANLI Inverter series gradually reduces the noise it makes as the power required decreases. This brings a significant benefit during night-time operation, when the load is naturally reduced and the need for silence is considerably greater compared with daytime hours.



Research and innovation are essential prerequisite in order to maintain the leadership in the global market and Aermec, which holds this position, has always distinguished itself for the cutting-edge solutions of its products.

The **innovative capacity** and constant attention to research in order to meet market needs and trends, as well as anticipating the demands, are developed through highly skilled staff but also through the co-operation with prestigious universities and teachers of subjects related to air-conditioning.

The devices of the future are developed and designed within **the modern Aermec laboratories**, equipped with sophisticated and constantly updated equipment, such as the new semi-anechoic chamber of the **Research and Development Department**.

## Technical data and dimensions

			ANLI - H 101	ANLI - HX/HP 101	
12°C / 7°C	Cooling capacity	(1)	kW	28,9	29,3
	Total input power	(1)	kW	11,7	11,9
	Total input current (cooling)	(1)	A	16	18
	EER	(1)		2,48	2,47
	Water flow rate	(1)	l/h	4985	4985
	Pressure drop	(1)	kPa	50	-
40°C / 45°C	Useful head	(1)	kPa	-	175
	Heating capacity	(2)	kW	31,5	31,2
	Total input power	(2)	kW	11,3	11,5
	Total input current (heating)	(2)	A	16	17
	COP	(2)		2,78	2,70
	Water flow rate	(2)	l/h	5457	5457
23°C / 18°C	Pressure drop	(2)	kPa	59	-
	Useful head	(2)	kPa	-	158
	Cooling capacity	(3)	kW	42,0	42,6
	Total input power	(3)	kW	13,7	13,8
	Total input current (cooling)	(3)	A	-	-
	EER	(3)		3,08	3,08
30°C / 35°C	Water flow rate	(3)	l/h	7301	7301
	Pressure drop	(3)	kPa	107	-
	Useful head	(3)	kPa	-	81
	Heating capacity	(4)	kW	33,4	33,0
	Total input power	(4)	kW	9,7	9,9
	Total input current (heating)	(4)	A	13	15
30°C / 35°C	COP	(4)		3,43	3,33
	Water flow rate	(4)	l/h	5762	5762
	Pressure drop	(4)	kPa	66	-
	Useful head	(4)	kPa	-	147
<b>Performance under average climatic conditions (Average) UE n°811/2013 Pdesignh ≤ 70kW</b>			<b>HX</b>	<b>HP</b>	
Pdesignh			30	30	
SCOP			2,73	3,25	
ηs			106	127	
Efficiency Energy Class			A+	A+	
<b>Cooling mode for low temperature</b>					
ηsc			149,2	139,8	
SEER			3,81	3,57	

### Date (14511:2018)

(1) Water system side 12°C/7°C, External air 35°C

(2) Water system side 40°C/45°C, External air 7°C b.s./6°C b.u.

(3) Water system side 23°C/18°C, External air 35°C

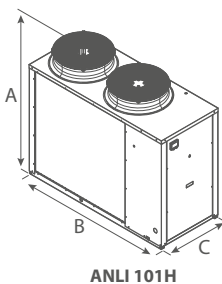
(4) Water system side 30°C/35°C, External air 7°C b.s./6°C b.u.

<b>GENERAL DATA</b>			ANLI 101
<b>Electrical data</b>			
Power supply		V/ph/Hz	400V/3N/50Hz
Maximum current (FLA)	(5)	H	A
Starting current (LRA)	(5)	H	A
<b>Scroll compressors</b>			circuits/n°
Refrigerant		type	R410A
<b>Heat exchanger system side</b>			type/n°
Hydraulic connections	(in/out)	Ø	piastre/1
<b>Axial fans</b>			type/n°
Air flow rate (cooling)		m³/h	on-off/2
			13200
<b>Dati sonori</b>			
Sound power level		dB(A)	76,0
Sound pressure level		dB(A)	44,0

(5) Unit standar configuration without hydronic kit

**Sound power** Aermec determines sound power values on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification.

**Sound pressure** in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).



ANLI			101
A	mm	all	1450
B	mm	all	1750
C	mm	all	750
Empty weight	H	kg	293
	HX/HP	kg	308



**Aermec** participates at EUROVENT program: LCP  
The involved products can be found in the website [www.eurovent-certification.com](http://www.eurovent-certification.com).

**Aermec S.p.A.**  
Via Roma, 996  
37040 Bevilacqua (VR) - Italia  
Tel. + 39 0442 633111  
Fax +39 0442 93577  
sales@aermec.com  
www.aermec.com

All specifications are subject to change without prior notice. Although every effort has been made to ensure accuracy, Aermec does not assume responsibility or liability for eventual errors or omissions.