

# EHA

## CHILLERS AND HEAT PUMPS

AIR CONDENSED  
WITH SCROLL BLDC INVERTER  
COMPRESSORS

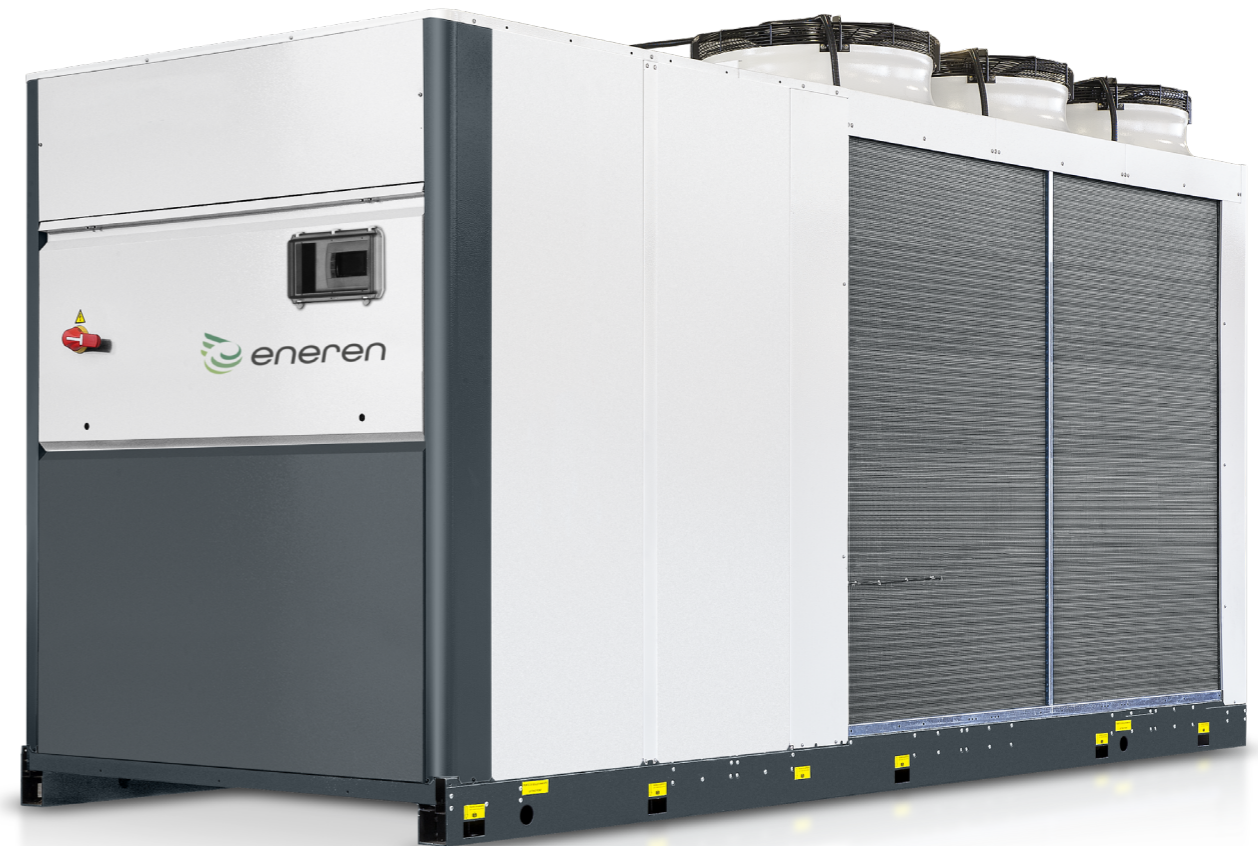
Available also for 60 Hz power supply

	30	35	61	62	81	82	101	102	104	121	122	124	141	142	144	171	172	174	204	244	294
<b>HIGHEST EFFICIENCY</b>																					
Water conditions: 12/7°C; 35°C outdoor air																					
Cooling capacity	kW																				
Total Power Input	kW																				
EER (UNI 14511)																					
<b>HIGHEST EFFICIENCY</b>																					
Water conditions: 16/10°C; 35°C outdoor air																					
Cooling capacity	kW																				
Total Power Input	kW																				
EER (UNI 14511)																					
<b>MAXIMUM CAPACITY</b>																					
Water conditions: 12/7°C; 35°C outdoor air																					
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Total Free Cooling temperature	°C																				
ESEER																					
Sound power	dB(A)																				
Sound power version Low Noise	dB(A)																				
Dimensions (LxDxH)	mm																				
Weight(withoutoptionalequipment)	kg																				

(1) Free-Cooling version not available for this Efficiency Pack

## CHILLERS AND HEAT PUMPS AIR CONDENSED WITH SCROLL BLDC INVERTER COMPRESSORS

# EHA



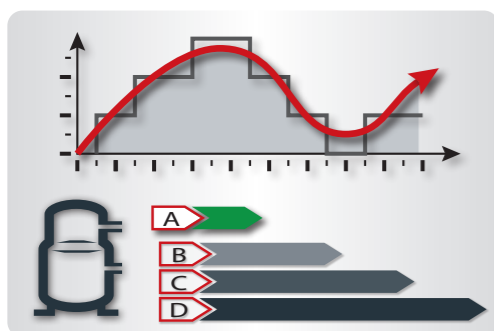
# EHA

## CHILLERS AND HEAT PUMPS

AIR CONDENSED WITH SCROLL BLDC INVERTER COMPRESSORS

EHA is the Eneren's range of air cooled liquid chillers that uses a combination of Scroll ON/OFF compressors and BLDC (Brushless DC-inverter) modulating compressors. Thanks to a precise control of the delivered cooling capacity, based on achieving the maximum capacity or the maximum energy efficiency of the system, the plant operating costs are cut down to a minimum. The high level of configurability of the range (layout of refrigerating circuit, sound emission level and available sizes), combined with the large number of accessories and selectable options make the EHA chillers especially versatile and suited to many applications.

### DOUBLE MANAGEMENT OF THE DELIVERED CAPACITY



The integrated software of the EHA range controls the delivery of the cooling/heating capacity by means of a dual logic on Scroll ON/OFF compressors and BLDC modulating compressors:

- Maximum capacity: the compressors are driven by inverters at the maximum frequency, in order to quickly reach the set-point conditions
- Maximum efficiency: the software calculates the highest efficiency point of the machine in order to minimise operating costs.

### EFFICIENCY AND RELIABILITY ACCORDING TO THE INSTALLATION NEEDS



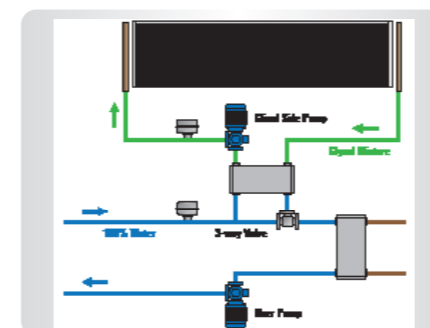
Depending on the machine size and on any special engineering installation needs, the chiller circuit is available in different versions:

- EFFICIENCY PACK 1: Dual compressor on a double circuit, for high system redundancy
- EFFICIENCY PACK 2: Dual compressor (tandem) on a single circuit, for higher efficiency at partial loads
- EFFICIENCY PACK 3: Three compressors (trio) on a single circuit, for higher efficiency at partial loads
- EFFICIENCY PACK 4: Four compressors (double tandem) on a double circuit, for a system that is both redundant and efficient at partial loads.

### MAXIMUM EFFICIENCY AT PARTIAL LOADS

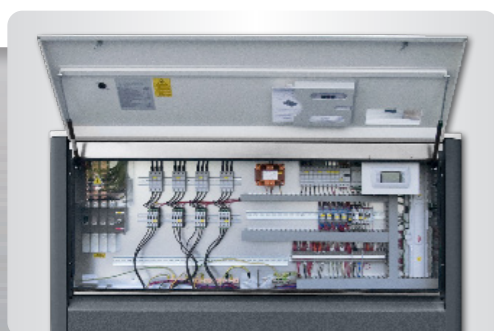
The high precision of the hot wire flow switch (down to 1/10 the nominal flow rate), combined with pump modulation through the control software, allows optimal matching between the unit capacity and the flow rate in the primary circuit. This optimises the water flow requested at each operating point and reduces the power absorbed by the hydraulic module, in any case preventing ice from forming inside the evaporator.

### GLYCOL-FREE KIT



The Free-Cooling versions can be selected with the "Glycol-Free" kit (onboard) in order to confine glycol inside the coils' tubes. This solution makes it possible to maximise efficiency during the heat exchange to the evaporator using pure water exclusively, as well as to drastically reduce pumping costs.

### ADVANTAGES OF THE MODULATION



DC inverter compressors are frequency modulated, thus the starting currents are significantly limited.

### CARE FOR DETAILS AND FOCUS ON NOISE



According to the site specific requirements, a EHA unit can come in standard or Low-Noise execution. To reduce the noise emissions the fan speed is managed, anti-vibration elements are used in the refrigerating circuit, compressors and pumps are installed in a soundproof box (Eneren's new HI-BOX®).

### ESEER = 4.1

- » Refrigerant R410A
- » Available in the version:
  - Liquid chiller
  - Free-Cooling
  - Reversible heat pump
- » Water flow management down to 25% of the nominal one
- » Electronically-controlled expansion valve (standard)
- » Quick water connections
- » Programmable microprocessor with dedicated software
- » Electronic flow switch