# **Unit description**



Outdoor unit for the production of chilled water with hermetic rotary Scroll compressors, low-GWP and ozone-friendly refrigerant R454B, axial-flow fans, braze-welded plate-type heat exchanger, micro-channel full-aluminum air coils and thermostatic expansion valve. The range is composed by units equipped with four compressors in tandem configuration on two independent refrigeration circuits.

### **Versions**

- **K** Key efficiency, compact version
- LN-K Low Noise, Key efficiency and compact version
- **SL-K** Super Low noise, Key efficiency and compact version

## **Configurations**

- - Basic function
- D Partial condensing heat recovery function

### **Features**

- LOW GWP REFRIGERANT
  - The new generation refrigerant R454B is the most eco-sustainable alternative to traditional refrigerant R410A, offering a 76% reduction in terms of GWP (Global Warming Potential GWP of R454B = 466, GWP of R410A = 1924 as per IPCC rev. 5th) and zero impact on the ozone layer.
- MAXIMUM COMPACTNESS
  - This new range is available in the K version, that integrates the maximum compactness with a qualifying unit's efficiency. This allow to achieve a very high flexibility in the design process as well as during the on-site installation operations, offering a premium solution in case of reduced clearances or when retrofitting existing installations.
- ALUMINIUM MICRO-CHANNEL HEAT EXCHANGERS
   The full aluminium micro-channel condenser coils deliver high efficiency whilst ensuring a reduced refrigerant volume and a lower unit weight. The

e-coating protection (optional) grants the highest level of resistance to corrosion in any condition, even in the most aggressive environments.

### WIDE OPERATING RANGE

Full load operation is ensured with outdoor air temperature up to 46°C, partial load operation is possible up to or even beyond 50°C. The unit can produce chilled water at negative temperature (down to -10°C of leaving water temperature). Dedicated accessories allow the unit operation down to -20°C of outdoor air temperature.

INTEGRATED HYDRONIC GROUP
 The optional built-in hydronic module already contains the main water circuit components; it is available with single or twin in-line, for achieving both low or high head.

## **Accessories**

- Microchannel coils with e-coating protection
- Traditional coils with copper tubes and alluminium fins, also available with prepainted fins or Fin Guard Silver protective treatment.
- Copper-Copper heat exchanger coils
- Electronic expansion valve
- Compressor power factor correction
- Soft start
- Compressor suction and discharge valves
- High and low pressure gauges
- DVVF and DVV2F devices for low air temperature operation
- Anti-intrusion grills
- EC fans with electronic DC brushless motor
- Hydronic kit available in different configurations with 1 or 2 pumps fixed speed or variable speed and buffer tank