

LAMBDA SKY



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Packaged Rooftop

Air Handling Heat Pump/Air Conditioner
20÷300 kW



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THE BEST INDOOR AIR QUALITY FOR LARGE SPACES



Air Quality

- Various filters options (from G4 to F9)
- Fresh air management with Air Quality Sensors
- Humidity management for the best comfort all year long

Re-Use of Waste Energy

- Thermodynamic heat recovery
- Cross Flow Heat recovery
- Hot Gas Recovery

Enhanced Efficiency

- Inverter Plug Fans
- Inverter compressors
- Double Skin Sandwich panel

Smartness

- Advanced Variable Air flow solutions
- Smart Dampers Management
- Adaptive Defrost
- Cascade control
- Floating Set point compensation
- Remote Web control

Flexibility & Configurability

- Full Recirculation
- Fresh Air management
- Humidifier
- Auxiliary Heating options
- Flexible air return and delivery layouts

Use of Free Energy

- Enthalpic Free Cooling
- Free Heating opportunities





Low **GWP** below **700**

Smart Optimization Functions
to exploit the
best performance and efficiency
in all working conditions

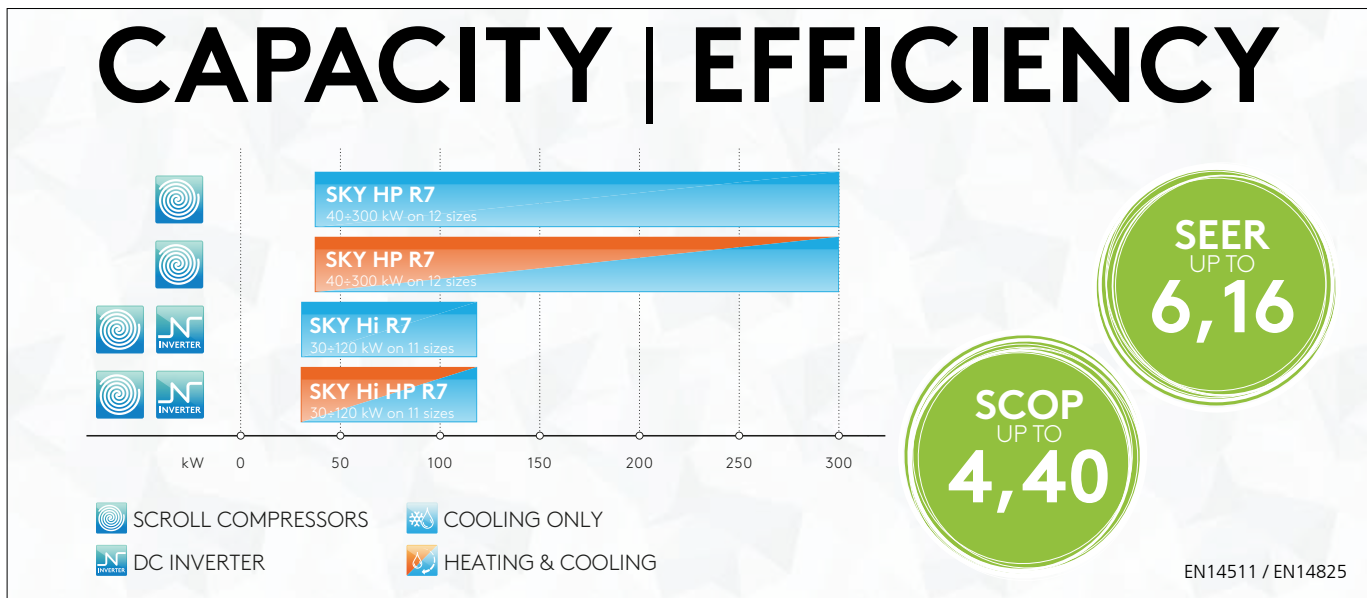
THE GREENEST ROOFTOP EVER



The **right fresh air**
in any moment



INVERTER



APPLICATIONS

Lambda SKY can be a real **All in One** solution for those who has space constrains or specific building needs.

Strongly Variable Heat Load

Optimize Consumption in any conditon

Different Layouts


Flexible & Adjustbale air intake and delivery positions

Energy Bills

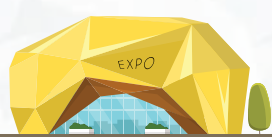
Efficiency far above minimum Tier 2 treshold

Strongly Variable Occupancy

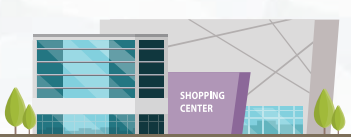
Multiple Variable Airflow Solutions




RETAILS



EXIBITION CENTERS




MALLS



WAREHOUSE INDUSTRIAL BUILDINGS

CONFIGURABILITY



FC **RS4S**
Heat Recovery to recover the whole energy from the exhaust air

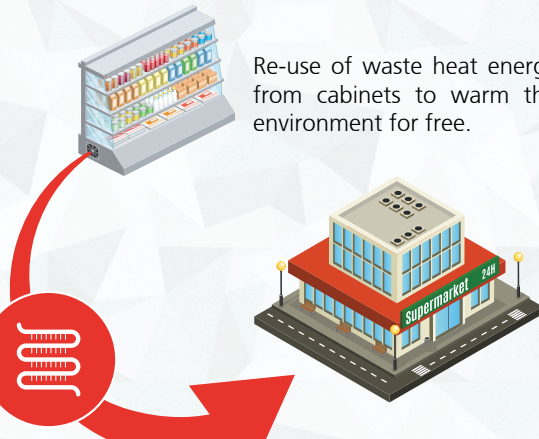
FC **FC3S**
Intake & Rejection

FC **FC2S**
Fresh Air Intake

BASIC
Full Ricirculation


FC: free cooling

HEAT RECOVERY FROM REFRIGERATED CABINETS



Re-use of waste heat energy from cabinets to warm the environment for free.

THERMODYNAMIC HEAT RECOVERY



Take advantage of the exhaust air to improve condensation in summer and evaporation in winter.

Cooling
External T°: 35°C | Return T°: 27°C
+5% EXTRA CAPACITY/EFFICIENCY

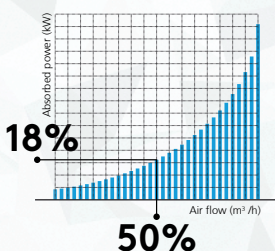
Heating
External T°: 0°C | Return T°: 20°C
+10% EXTRA CAPACITY/EFFICIENCY
DEFROST CYCLE REDUCTION

EC PLUG FANS

ELECTRONICALLY COMMUTATED BRUSHLESS MOTOR AS OPTION

Reduced energy consumption and noise, self-adaptation to changes in heat load, air volume or static pressure.

USER SIDE



SOURCE SIDE

up to **8%** SEER & SCOP Improvement

Hi VERSION DC INVERTER SCROLL COMPRESSOR

- Higher efficiency at part load
- Continuous modulation according to the load
- Accurate temperature control and stability

energy saving

up to **30%** higher **SEER** up to **10%** higher **SCOP**
 (compared with standard scroll compressor)

The control platform for air treatment, based on webserver.

Simple & Immediate
Human Machine
Interface

Standard Monitoring
Solutions
Serial Port Modbus RS485
Ethernet Port (RJ45):
Modbus su IP
Pagina Web



Unique Software
Features

A Control
Continuously Evolving
following the Latest
Industry
Requirements



SET POINT COMPENSATION

Reach the perfect indoor climate comfort
Let the unit work with the maximum efficiency (lowest ΔT between indoor and outdoor conditions)
Minimize energy expenditure

BESPOKE SETTINGS

The unit can be programmed with the highest flexibility on the days and timings:

Boosted fresh air function

Wash an ambient opening up all the Fresh Air Dampers

Pre-Heating & Pre-Cooling

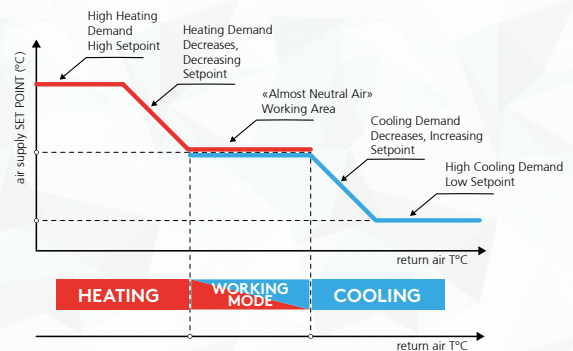
A software routine can be programmed to quickly restore the comfort conditions closing the fresh air and pushing at the maximum cooling/heating sources



CASCADE CONTROL

Cascade Control means the opportunity to act on the supply setpoint based upon the real heat load thus saving energy in most of the operating condition.

Neutral Air means avoiding unrequired Cooling/Heating.



BLUEYE CONNECT

REMOTE ACCESS TO UNIT

SAVE MONEY
FAST SERVICE



BLUEYE CLOUD

CLOUD RECORDING DATAPOINTS

PREDICTIVE MAINTENANCE
CUSTOMER REPORTING
ANALYSIS



