

Are you ready for the NEXT move? Move to R-32, Move to Kubic NEXT



HITECSA COOL AIR THE FIRST R-32 INVERTER ROOF TOP WORLDWIDE

...

Size 1



LET'S GO TO NEXT LEVEL

... IN EFFICIENCY ... IN SUSTAINABILITY ... IN TECHNOLOGY ... IN AIR QUALITY



# A NEW CONCEPT OF ROOF TOP



# The new family of Air-Air Roof Top **KUBIC NEXT**

adds to the already advanced characteristics of the Kubic HE family, **the incorporation of the low GWP refrigerant R-32** which is, amongst other advantages, more respectful with the environment, because of the nature of the gas itself and the significant reduction of greenhouse gas emissions thanks to its higher efficiency.

Likewise, this fluid allows the equipment to have wide operating limits and to perform better under severe conditions.

All these advantages make this range the most advanced solution in Roof Top Heat Pump units.





# Which are the advantages of R-32?



# WHY R-32?

R-32 is a HFC pure refrigerant gas, with a very low Global Warming Potential (GWP: 677), high efficiencies and a great power of refrigeration.







The EU legislation has established that gases with a high GWP will gradually disappear.

The European regulation EC 517/2014 states it is mandatory for all European countries to replace fluorinated gases (F gases) due to environmental reasons and pollution.

They are being progressively replaced by R-32, with 0% impact on the ozone layer, higher energy efficiencies, 30% lower charge of refrigerant and 75% less impact on the global warming.

The complete transition will take place before the year 2030, but at Hitecsa it is our commitment to act in advance with the aim of always offering leading-edge HVAC solutions, environmentally friendly, with the best energy efficiencies and low GWP refrigerants.

# WHY R-32



### **BETTER PERFORMANCE**

With higher COP and EER rates than other HFC gases, R-32 has optimal thermodynamic properties and very high efficiencies, even at severe external conditions.

### **HIGHER ENERGY EFFICIENCY**

R-32 is a more energy-efficient refrigerant gas in respect to the traditional ones.

R-32 allows to achieve a 13% heating capacity level and a 4% COP rate higher than R-410A. This means that with a lower charge, higher capacities and efficiencies can be obtained.

R-32 has a 2.9% cooling capacity level and a 6.4% EER rate higher than R-410A at standard conditions.

R-32 consumes less energy at very low outdoor temperatures.

R-32 allows to obtain A+++ class energy efficiency and it has A2L safety classification, which means very low flammability level and zero toxicity rate.



R-32 vs R-	-410A							
REFRIGERANT	GWP (AR5)	GWP vs R-410A	Cost Price €/kg	VAT (Spain) €/kg	Capacity vs R-410A	COP vs R-410A	EER vs R-410A	Gas Charge vs R-410A
R-410A	1924	-	-	31.31	-	-	-	-
R-32	677	-65%	-25%	10.13	131%	+ 3%	+ 6%	-30%

# WHY R-32?

### **ENVIRONMENTALLY FRIENDLY**

The lower GWP and its higher efficiency contribute reduce direct greenhouse effect, due to lower  $CO_2$  emissions from the electricity production system.

The equipment and facilities carry less refrigerant fluid, so there are fewer emissions of this gas into the atmosphere.

It is an easier fluid to collect, recover and use in other mixes, which contributes to the circular economy.



### MAXIMUM ECONOMIC SAVINGS

R-32 is a **more energy-efficient** refrigerant gas in respect to the traditional ones.

R-32 allows to achieve a 13% heating capacity level and a 4% COP rate higher than R-410A. This means that with a lower charge, **higher capacities and efficiencies** can be obtained.

**The lower gas charge of the equipment**, per unit of thermal power delivered, means a lower cost that multiplies the mentioned savings.

**The greater energy efficiency** of this gas has a direct impact on energy consumption, and therefore on the cost of electricity consumption.

As a **pure refrigerant**, equipment recharging operations and, consequently, maintenance and repair costs are reduced.

The increase that will occur in the demand for R-32 will lead to a consequent decrease in the price, while in the case of the aforementioned HFC, the trend will be the reverse.

From an operating cost point of view, R-32 is a much cheaper refrigerant than the traditional HFCs used in air conditioning due to its purity, sustainability and efficiency.

# WHY INVERTER?



full inverter

The equipment using Inverter Technology offers the best performance at partial load and, consequently, the highest SEER and SCOP values.

The Kubic NEXT Roof Top uses inverter compressors (M1) for optimal performance at partial loads.

inverter

The Ecodesign Directive for energy-related products (ErP) addresses all aspects of equipment efficiency, with the aim of reducing the impact on the environment during its life cycle.

PIONEER

In the case of air conditioning equipment, its efficiency is evaluated by analyzing the variation in performance throughout the changing seasons and the application conditions. Peak heating or cooling situations occur during periods that add up to less than 10% per year. Therefore, the seasonal energy efficiency is the parameter that really determines the efficiency of the equipment. The legislative parameters related to this variable are the SEER (Seasonal Energy Efficiency Coefficient) for cooling, and the SCOP (Seasonal Coefficient of Performance) for heating.

The EN14825 is the standard that allows evaluating the performance of the equipment under the different partial load conditions and under it the tests are carried out to obtain the aforementioned coefficients.



HITECSA is a leader in the application of Inverter Technology in autonomous and roof top equipment, always going ahead of legislative requirements.



# KuNBi Inverter Heat Pump



High efficiency Roof Top units to be installed outside (roofs, terraces, etc.) for large surfaces with air ducts installation.

# MAIN FEATURES

- **Compressor on off + inverter** (Cabinet 1) to adapt the load to the demand in each situation.
- External axial type fan with EC motor, composed of aluminum blades, low noise level, with 0-100% speed regulation and low consumption.
- Interior plug fan with EC motor, for maximum energy efficiency and precise regulation of the air flow supplied and available pressure.
- Cabinet: made of galvanized sheet steel, finished with polyester resins (RAL 1013), polymerized in the oven, with excellent resistance to corrosion and the elements.
- Electrical protection of all the main components by circuit breakers.
- Compact filter with different degrees of efficiency.
- Electronic expansion valves.

**No vibrations** thanks to an internal damping structure for each compressor and installation with dampers in the base frame.

**Easy and safe access** to its internal parts by means of hexagonal screws with riveted nut on the panels, the controller display can be accessed by a window and the electrical panel by a hinged door and a lock cover.

- Cooling Capacity: From 41.9 to 85.4 kW (Size 1)
- Heating Capacity: From 41.5 to 87.7 kW (Size 1)







Adapted to the new needs of Efficiency, Emissions and Air Quality

# **ADVANTAGES OF KUBIC NEXT RANGE, R-32 SERIES**





### **HIGH EFFICIENCY**

In accordance with the requirements established in Regulation 2281/2016 (Ecodesign, ErP Ready), complying with the requirements of Regulation Erp21.



### SCROLL COMPRESSOR WITH INVERTER TECHNOLOGY

- TOTAL ADAPTATION to the real needs of the installation.
- GREATER COMFORT. Reduction of excesses of cold and heat. It also allows you to reach the desired temperature more quickly.
- ENERGY SAVINGS. Constant system resets are avoided and energy production is optimized on demand (saving up to 50% energy).
- QUIETER: sound level about 40% less than an air conditioner with classic technology.
- MORE DURABLE: avoiding constant start-stop cycles extends the life of the compressor and equipment.
- RESPECTFUL WITH THE ENVIRONMENT: reduction of CO<sub>2</sub> emissions.



### **STANDARD PLUG FAN**

- Better energy efficiency
- Lower consumption
- More silent
- High pressures available
- Low maintenance cost
- Lower installation cost
- Plug and play: the flow is adjusted to the installation



### **INDOOR AIR QUALITY.**

**Precise regulation of all comfort parameters, and high capacity to improve Indoor Air Quality,** thanks to its high capacity to provide fresh outdoor air and to incorporate high-efficiency filters and germicidal elements.



# GREAT FLEXIBILITY and ability to adapt to the specific needs of each project.

**Compact unit with great installation and operation versatility**, being able to adapt to each project. The same footprint is maintained as in previous models.



Incorporates complete control systems for smart, safe and efficient comfort

## SMART AND INTELLIGENT CONTROL SYSTEMS



## **CONTROL & REGULATION**

## STANDARD CONTROL: TH tune OPTIONAL CONTROL: PGD y MINI PGD

- Operating modes: Cooling and Heating.
- 3-speed selection of indoor or auto fan.
- One stage of electrical resistance to support defrost.
- *Return control probe (remote): optional.*
- Modification of operating parameters.
- Display of operating mode, set temperature, room temperature, days of the week, mode, fan speed, setpoints, alarms, etc.
- of the week, mode, fan speea, setpoints, alarms,
- Weekly schedule. Time phase mode.
- Indication of alarm types by codes.



**ADVANCED REGULATION SYSTEM,** with condensation and evaporation control by variator as standard, with comprehensive management of all components for maximum efficiency in all circumstances, and total protection of equipment components.

- ModBus RS485 interface. ModBus card (PCO / μPC).
- Open system of communication through protocols and IP.

### CONNECTIVITY FOR REMOTE MANAGEMENT

High communication and remote monitoring capacity through the IoT Connect Plus by HITECSA system that allows permanent monitoring with identification and recording of operating parameters and conditions, radically facilitating maintenance operations.

### KUBIC NEXT INVERTER Technical Specifications



R32

inverter

My HITECS

....

# KuNBi – Inverter Heat Pump

Size 1

Models KuNB <i>i</i> – C1		45i	55i	65i	75i	90i	
KUBIC NEXT INVERTER	CAPACITIES						
	COOLING CA	APACITY(Outdoor:	: 35°C - Indoor: 27	d.b./19°C w.b UN	IE-EN_14511)		
Nominal COOLING capacity	kW	41.9	52.0	63.4	75.4	85.0	
Total Absorbed power	kW	14.5	18.6	21.2	26.9	30.4	
EER	kW/kW	2.9	2.8	3.0	2.8	2.8	
Air flow	m³/h	8,400	10,400	12,000	14,400	16,500	
Available pressure	Ра	150	200	200	200	250	
SEER	kW/ kW	4.4	4.1	4.2	4.2	4.2	
ηs cooling	%	171.7	161.2	164.4	163.5	163.4	
	HEATING CA	PACITY (Outdoor	: 7 d.b. /6°C w.b	Indoor: 20/-°C)			
HEATING capacity	kW	41,5	52,0	67,0	76,4	87,7	
Total Absorbed power	kW	13,1	15,9	20,5	23,5	27,4	
COP Coefficient	kW/kW	3,2	3,3	3,3	3,3	3,2	
Air flow	m³/h	8,400	10,400	12,000	14,400	16,500	
Available pressure	Ра	150	200	200	200	250	
SCOP Coefficient	kW/kW	3.4	3.2	3.3	3.3	3.2	
ηs heating	%	131.3	125.7	129.3	128.3	126.7	
	REFRIGERANT CIRCUIT						
	GENERAL ESPECIFICATIONS						
Number of circuits	-			2			
Number of compressors	-			2			
Number of power stages	-			– Multiple			
	REFRIGERA	лт		manipic			
Refrigerant type	REFRIGERANT						
GWP	677						
GWI							
	OUTDOOR	IEAT EXCHANGER					
Туре	-		Aluminu	m fins and copper t	ubes coil		
	OUTDOOR F	AN					
Туре	-			Axial			
Total number	-			2			
Air flow	m³/ h		40,	.000		44,000	
	INDOOR HE	AT EXCHANGER					
Туре			Aluminum fins	and interwoven co	pper tubes coil		
	INDOOR FAI	N			pp		
Туре	-			Radial EC			
Total number	-			2			
Air flow	m³∕h	8,400	10,400	12,000	14,400	16,500	
Available pressure	Pa	150	200	200	200	250	
Available pressure (Maximum Available)	Pa	950	850	800	700	500	
			030	000	700	500	
	ELECTRICAL DATA						
Power Supply	V / ~/Hz 400V / 3ph / 50Hz without Neutral						
	SOUND LEV	EL					
Sound power	dB(A)	81.0	83.1	86.5	86.4	89.1	
Sound pressure (5m)	dB(A)	59.5	61.6	65.0	64.9	67.7	
	DIMENSION	S AND WEIGHT					
Length	mm	2,900	2,900	2,900	2,900	2,900	
Width	mm	2,215	2,215	2,215	2,215	2,215	
Height	mm	1,830	1,830	1,830	1,830	1,830	
Weight	kg	1,222	1,230	1,307	1,323	1,377	

# full inverter



Size 1

THE 2 COMPRESSORS ARE INVERTER, MAXIMUM SEASONAL EFFICIENCY IN THE WHOLE CYCLE OF OPERATION.

# KuNB2*i* – FULL Inverter Heat Pump

Size1

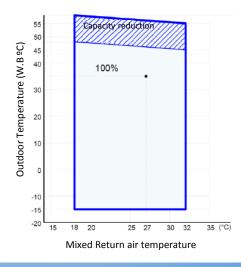
Models KuNB <i>2i</i> – C1	45i	55i	65i	75i	90i	
KUBIC NEXT FULL INVERTER	CAPACITI	ES .				
	COOLING	CAPACITY(Outdo	or: 35°C - Indoo	r: 27 d.b./19°C w	.b UNE-EN_14	511)
Nominal COOLING capacity	kW	38.8	44.51	58.8	71	85.4
Total Absorbed power	kW	13.7	16.8	20.6	27.41	34.69
EER	kW/ kW	2.84	2.64	2.85	2.59	2.46
ηs cooling	%	209.8	207.5	214	212.2	205.1
HEATING CAPACITY (Outdoor: 7 d.b. /6°C w.b Indoor: 20/-°C)						
HEATING capacity	kW	37.6	43.5	61.7	72.3	81.9
Total Absorbed power	kW	11.6	13.9	19.7	23.8	26.6
COP Coefficient	kW/ kW	3.25	3.13	3.14	3.04	3.08
ηs heating	%	141.7	139.5	146.2	143.9	141.1
	_					
	OUTDOORI	HEAT EXCHANGE				
Туре	-		Aluminum	fins and copper t	ubes coil	
	OUTDOOR	AN				
Туре	-			Axial EC		
Total number	-	2				
Air flow	m³/ h	40,000 44,000				
	INDOOR HE	NDOOR HEAT EXCHANGER				
Туре	-	,	Aluminum fins a	nd interwoven co	pper tubes coil	
	INDOOR FA	N				

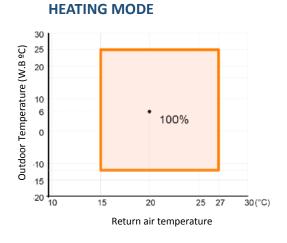
Туре	-	Radial EC				
Total number	-			2		
Air flow	m³/ h	8,400	10,400	12,000	14,400	16,500
Available pressure	Ра	150	200	200	200	250
Available pressure (Maximum Available)	Ра	950	850	800	700	500
	ELECTRICAL DATA					
Power Supply	V / ~/Hz		400V/	3ph / 50Hz withou	ut Neutral	
	SOUND LE	VEL				
Sound power	dB(A)	81.0	83.1	86.5	86.4	89.1
Sound pressure (5m)	dB(A)	59.5	61.6	65.0	64.9	67.7
	DIMENSIC	ONS AND WEIGHT				
Length	mm	2,900	2,900	2,900	2,900	2,900
Width	mm	2,215	2,215	2,215	2,215	2,215
Height	mm	1,830	1,830	1,830	1,830	1,830
Weight	kg	1,222	1,230	1,307	1,323	1,377

- The Full Inverter technology, of which HITECSA is a pioneer in its application to packaged air-air units, provides the equipment with the best values of the seasonal efficiency parameters SCOP, SEER, n<sub>sc</sub> and n<sub>sh</sub> in the market.
- HITECSA's Full Inverter control, which integrates the operation of the compressors with modulation from 15% to 100% of the power of each one of them, as well as the total regulation of the interior and exterior air flows thanks to the radial fans and Axial with EC motors, allows total control of the benefits delivered by the equipment, in any operating condition, both on demand and external working conditions.
- This means that these teams are at the forefront of seasonal efficiency for air conditioning installations, and even that the installations improve the energy consumption values obtained in the energy simulation calculations.
- This technology not only means maximum energy savings, but also provides the equipment with a very smooth operation for maximum comfort, without stock of energy consumption tips, and a significantly higher durability of the equipment thanks to less wear on the components.

### WIDE LIMITS OF OPERATION

### **COOLING MODE**





Models KuNB <i>i</i>		45i	55i	65i	75i	90i	
KUBIC NEXT SERIES	OPERAT						
	COOLING	OOLING MODE					
Minimum Outside Temperature	°C	-15	-15	-15	-15	-15	
Maximum Outside Temp. (Capacity 10%)	°C	55	55	55	55	55	
Maximum Outside Temp. (Capacity 100%)	°C	48	48	48	48	48	
Minimum Inside Temperature	°C	18	18	18	18	18	
Maximum Inside Temperature	°C	32	32	32	32	32	
	HEATING	MODE					
Minimum Outside Temperature	°C	-12	-12	-12	-12	-12	
Maximum Outside Temperature	°C	25	25	25	25	25	
Minimum Inside Temperature	°C	15	15	15	15	15	
Maximum Inside Temperature	°C	27	27	27	27	27	



### **TYPES OF MOUNTING STANDARD UNIT**

### SUPPLY AIR CONFIGURATIONS



BOTTOM





LEFT SIDE



**RIGHT SIDE** 

### **RETURN AIR CONFIGURATIONS**









**RIGHT SIDE** 



UPPER FRONT



LOWER FRONT

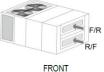
FREE-COOLING CONFIGURATIONS





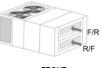


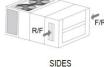
LEFT SIDE + TOP FRONT

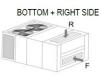




BOTTOM + LEFT SIDE







TOP + LOWER FRONT

### F: Renewal air damper/ R: Return air damper

\* Please contact our Technical Department for special configurations.

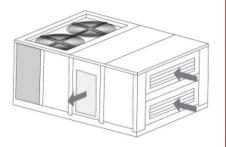
### **EXAMPLES OF CONFIGURATIONS**

### **AIR SUPPLY / RETURN**

Any combination of air supply and return is valid, taking into account that there can be only one air supply and one return.

### **AIR SUPPLY/ FREECOOLING**

Any combination of air supply and return is valid, taking into account that there can only be one air supply and two dampers.



# **RCF & VRR OPTIONS**

### RCF

### THERMODYNAMIC RECOVERY MODULE

The thermodynamic recovery module includes an additional circuit that provides a high cooling performance.

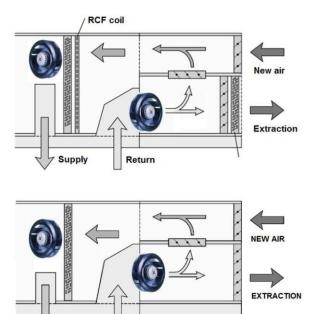
This circuit grabs the extraction air to recover a part of the wasted heat. That heat recovery enables the system to increase capacities and the nominal and seasonal efficiencies.

### VRR

### Roof top with return EC radial fan and damper.

The VRR module enables the system to manage various renewal percentages of the supply air flow.

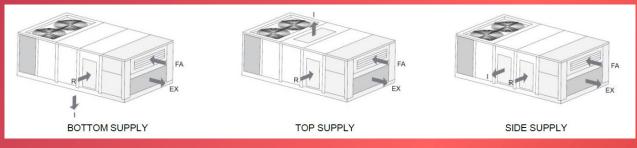
Moreover, its mixing structure equipped with three dampers enables the system to manage as well the free-cooling feature (thermal, enthalpy or thermal-enthalpy).



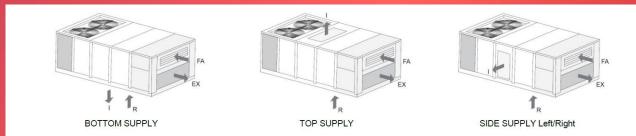
RETURN

SUPPLY

### SIDE RETURN CONFIGURATIONS



### LOWER RETURN CONFIGURATIONS



# **RCF and VRR OPTIONS**

SIZE 1 – Technical data

## Size 1

# **KuNB***i***RCF** Inverter Heat Pump wiht Thermodynamic Recovery

R3

Models KuNB <i>i</i> RCF		45i	55i	65i	75i	90i
SERIE KUBIC NEXT RCF	CAPACITIE	S				
COOLING CAPACITY (60% Outdoor air renewal: 35°C - Inc	loor: 27 d.b.	/19°C w.b UI	NE-EN_14511)			
Nominal COOLING capacity	kW	57.9	67.4	88.6	100.1	114.6
Total Absorbed power	kW	22.5	25.8	31.3	37.1	44.8
EER	kW/ kW	2.58	2.61	2.83	2.70	2.56
HEATING CAPACITY (60% Outdoor air renewal: 7 d.b. /6°	C w.b Inde	oor: 20/-°C)				
HEATING capacity	kW	63.6	73.8	95.8	107.8	121.3
Total Absorbed power	kW	20.5	24.0	34.0	35.9	41.5
COP Coefficient	kW/ kW	3.10	3.08	2.82	3.00	2.92
	RCF CIRCU	IT				
Compressor type	-			Scroll		
Number of compressors	-			1		
	RETURN FA	AN				
Туре	-			Radial EC		
Total quantity	-			1		
	DIMENSIONS					
Length	mm	3,975	3,975	3,975	3,975	3,975
Width	mm	2,215	2,215	2,215	2,215	2,215
Height	mm	1,825	1,825	1,825	1,825	1,825
	WEIGHT					
Weight	kg	1,333	1,339	1,421	1,434	1,531

## KuNB*i* VRR Inverter Heat Pump – Return Radial Fan

Models KuNbi VRR		45i	55i	65i	75i	90i
SERIE KUBIC NEXT VRR	CAPACITI	ES			-	
COOLING CAPACITY (60% Outdoor air renewal: 35°C - Ind	oor: 27 d.b.	./19°C w.b UI	NE-EN_14511)			
Nominal COOLING capacity	kW	45.32	53.72	68.29	77.09	90.51
Total Absorbed power	kW	16.67	20.23	23.90	29.67	37.48
EER	kW/ kW	2.72	2.65	2.86	2.60	2.42
HEATING CAPACITY (60% Outdoor air renewal: 7 d.b. /6°C w.b Indoor: 20/-°C)						
HEATING capacity	kW	46.51	55.02	70.51	78.03	91.49
Total Absorbed power	kW	13.46	16.02	23.07	24.58	30.21
COP Coefficient	kW/ kW	3.46	3.44	3.06	3.17	3.03
	RETURN	FAN				
Туре	-			Radial EC		
Total quantity	-			2		
	DIMENSI	ONS				
Length	mm	3,975	3,975	3,975	3,975	3,975
Width	mm	2,215	2,215	2,215	2,215	2,215
Height	mm	1,825	1,825	1,825	1,825	1,825
	WEIGHT					
Weight	kg	1,260	1,266	1,328	1,341	1,385

# A FULL EQUIPPED ROOF TOP

For a total adaptation to all types of projects

# WIDE RANGE OF ACCESSORIES AND OPTIONALS

### CONFIGURATION

RCF Refrigeration Recovery Module	Auxiliary refrigerant circuit that allows to take advantage of the energy it contains from the expelled air. It incorporates the mixing boxes with three gates and the EC radial return fan.
3-damper module with return fan and VRR dampers	Set of mixing boxes with three gates and an EC radial return fan that allows managing different percentages of supply air renewal.
2-damper Free-Cooling	Mixing box with two gates. One for return air intake, and one for outside air.

### **MECHANICS**

Thermal Sandwich Panel in Indoor Unit	It provides the equipment with additional thermal insulation, while having a soundproofing effect.
External heat exchangers protection grid	It allows to protect the batteries against blows.
Compressor insulation	Jacket with acoustic insulation in the compressors.
Pre-treated battery LCE coating on batteries	The protective coating of heat exchangers against corrosion, with superhydrophobic effect and antimicrobial protection.
GALVAL Refrigeration set treatment	Tratamiento anticorrosivo en las líneas frigoríficas.
Resistor batteries for auxiliary electric heating	It allows to provide additional support to the operation of the equipment in heating mode.
Water coil	It allows to provide additional support to the operation of the equipment in heating mode.

### AIR QUALITY

G4, M6, F7, F8 & F9 Filters	Incorporated in the equipment (up to three filters).
GermiCLEAN System	System that incorporates germicidal UV-C radiation lamps for the elimination of pathogens by means of lamps and whose operation and monitoring are integrated into the equipment control system.



For a total adaptation to all types of projects

# WIDE RANGE OF ACCESSORIES AND OPTIONALS

### CONTROL

Dirty filter detectors	Up to three detectors, with signals integrated into the equipment's control system.
Mini-PGD remote control	Interface for the complete management of the equipment. It allows the modification at any time of the set points, stop / start of the unit, change of the summer / winter cycle and schedules in the case of incorporating a clock card, without the need for a password, as well as the on-screen display of possible alarms of the system and acoustic warning of the same.
PGD control	Advanced version of the MiniPGD, larger.
ModBus card ( PCO/ μPC)	It allows the integration of components or the interconnection with all the equipment through the open ModBus protocol.
BACNET PCOC Communications Card	It allows interconnection with other equipment through the open BacNet protocol.
Wall temperatura sensor	For taking the ambient temperature.
Duct temperatura sensor	For taking the temperature in air in the return or in the discharge.
VOC Air Quality sensor, Wall or Duct mounted	It allows the measurement of the ppm of Volatile Organic Compounds in the environment, and the performance of the equipment accordingly.
Wall or Duct CO2 Air Quality Probes	It allows the measurement of the ppm of $CO_2$ in the environment, and the performance of the equipment accordingly.
Wall or duct temperature and humidity probes	It allows the measurement of both parameters and, consequently, the enthalpy of the air, and the performance of the equipment accordingly.
Leak detector	Measures the presence of refrigerant gas in the environment.
Measurement of cooling capacity	It allows to provide the data of the cooling power delivered by the equipment.
Network analyzer. Measurement of energy consumption	It allows to provide the data of the energy consumed by the equipment, as well as the energy efficiency.

### **MOUNTING ACCESORIES**

Anti-vibration dampers	Adjusted to the weight and operating conditions of the equipment.
External coil condensate tray	Collects and channels the condensed water in the batteries.



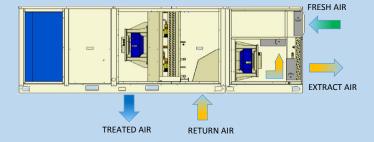
## MAXIMUM AIR QUALITY

## **AIR PURIFICATION SOLUTION**

HITECSA's KuNB Roof Top equipment allows treating all the air in a room in a continuous and uniform way, not only maintaining the appropriate thermo-hygrometric conditions, but also purifying it and eliminating germs, as well as the elements that may appear in it by cause of pollution or contamination.

They allow to unify in a single installation the air conditioning of the occupied spaces and the ventilation, allowing not only to provide the premises with **high rates of air renewal**, but they are also capable of working with **duct networks** that allow ensuring adequate distribution and diffusion of air in all spaces of the building.





Likewise, the incorporation of radial fans with EC motor and automatic and continuous modulation of their speed allows the recirculation air flow to be adjusted to the minimum values so that the air conditioning equipment can operate within its operating ranges, ensuring sufficient levels of comfort and energy efficiency, as well as to carry out a continuous and controlled extraction through toilets and wet rooms in general, since both the treated air supply fan and the extraction fan operate in a rhythmic way.

Thanks to the high capacity of their fans, these units can incorporate high efficiency filters, even class H13 or higher, with an MPPS efficiency of 99.95%.

On the other hand, the optional **GermiCLEAN**, which can be integrated in the equipment, is a direct solution for reducing the viral load in the premises, being able to even eradicate it, thanks to the incorporation of Germicidal Ultraviolet Irradiation (UVGI) lamps, and whose operation and monitoring are regulated by the unit's own control system.

### INDOOR AIR DISINFECTION SYSTEM OF GERMICIDED ACTION BY UV-C RADIATION





**GermiCLEAN Complet** is composed of UV-C (germicidal) lamps and is designed so that the dose of UV-C light irradiated to pathogens by the germicidal lamps is sufficient to obtain high efficiencies of disinfection in passing.

**GermiCLEAN Complet is intelligently controlled** from the air conditioning machine's control system.

**GermiCLEAN Complet PLUS adds a plus** to the power of germicidal UV-C radiation, for the disinfection of spaces with a greater influx of people or a greater concentration of biological agents.



Your air conditioning installation under your control

## IOT CONNECT PLUS SYSTEM REMOTE CONTROL

The Hitecsa IoT system that allows to remotely manage and control air conditioning equipment in a facility.



### **EFFICIENT • FAST • EASY • SAFE**

### **REMOTE CONTROL OF THE EQUIPMENT AND THE INSTALLATION**

- Equipment operation
- Stop and go
- Environmental conditions
- Temperature programming
- Diagnostics and alerts
- Customizable consumption control

### EFFICIENT IOT SYSTEM FOR PREDICTIVE MAINTENANCE AND CONTROLLED ENERGY MANAGEMENT

- Reduction of operating costs
- Efficiency optimization
- Greater energy savings
- Maximum comfort in all types of installation
- Increased safety and reliability of operation

### CUSTOM APP DEVELOPED BY HITECSA

CONNECT

HITECS

Roof 4





# **CUSTOMIZED SERVICE IN HVAC**

Tailor-made advice and support thanks to the large experience of HITECSA in HVAC installations and to the professional skills of its team with quick response times.





HIPLUS AIRE ACONDICIONADO S.L.

www.hitecsa.com T. +34 93 938 934 912



#madeineurope #madeinspain