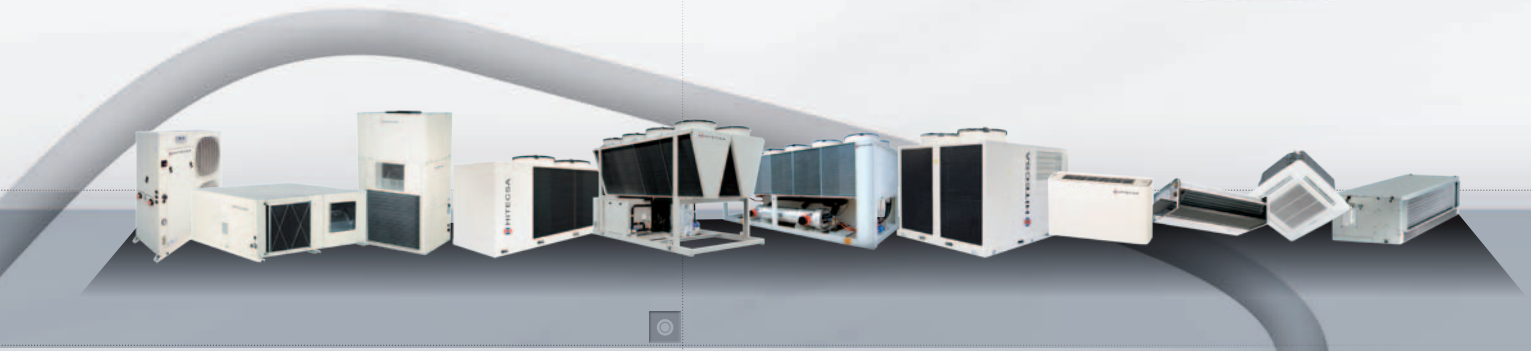
HITECSA

COOL AIR



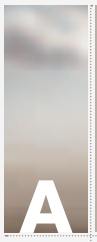
General Catalogue 2013-2014

HITECSA
COOL AIR

The guarantee
of the leader,

the quality
of the specialist

TABLE OF CONTENTS

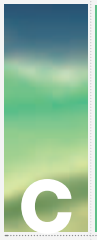


SELF-CONTAINED **AIR-TO-AIR UNITS**

AIR/AIR Inverter, compact and split units.	Page 8
AIR/AIR ON/OFF compact and split units	Page 14
CLVA-CLVBA ductable indoor units	Page 26
Ductable axial condenser units	Page 29
Heat recovery units	Page 34

ROOF TOP **AIR TO AIR**

Roof Top standard version axial fans	Page 38
Roof Top standard version axial fans RCF cooling recovery	Page 40
Roof Top standard version centrifugal fans	Page 42
Roof Top standard version RCF centrifugal fans cooling recovery	Page 44
Roof Top standard version MINI centrifugal fans	Page 46



SELF-CONTAINED **WATER TO AIR UNITS**

WATER/AIR compact horizontal COAXIAL exchanger	Page 50
WATER/AIR compact horizontal PLATES exchanger	Page 52
AIR/AIR compact vertical COAXIAL exchanger	Page 54
WATER/WATER compact vertical PLATES exchanger	Page 56

D WATER CHILLER UNITS

MINI ADVANCE i, AIR/WATER units axial fans	Page 62
MINI KRONO X, AIR/WATER units axial fans	Page 63
KRONO X, AIR/WATER units axial fans medium power	Page 65
ADVANCE X, AIR/WATER units axial fans high power, scroll	Page 68
ADVANCE XT, AIR/WATER units axial fans high power, screw	Page 70
KRONO C, AIR/WATER units centrifugal fans medium power	Page 72
ADVANCE W, WATER/WATER units scroll compressors	Page 74
ADVANCE WT, WATER/WATER screw compressors	Page 77

E FAN COILS AND AIR HANDLING UNITS

FCW/FCCW, 2T and 4T vertical and horizontal fan coil with and without housing	Page 80
FKW and FKWS, 4-way 2T and 4T cassette fan coil	Page 84
FPW, wall mounted fan coil	Page 86
BSW, fan coil installation high pressure ducts available	Page 87
BHW, ductable fan-coil	Page 90
EHW, horizontal air conditioning units	Page 92
CLW, indoor units for connection to vertical ducts	Page 94
EHWM, air handling units	Page 96

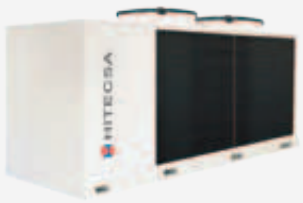
F REGULATION AND CONTROL

Page 97

01.
Reason for being

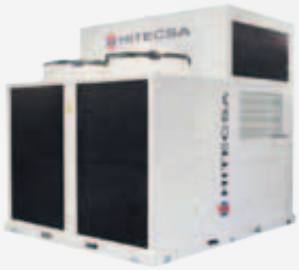
Our reason for being is to support our customers throughout the entire life-cycle of their equipment

Hitecsa, leader in the European market in the design, manufacturing and prescription of air conditioning equipment, is an international benchmark in terms of flexibility and productive punctuality.



Our reason of being is to support our customers throughout the entire life-cycle of their equipment. **We strive to understand our customers' needs for air-conditioning comfort and well-being** and to provide them with advice on the selection of the right equipment, as well as offering the best possible level of after-sales service. **Our team of specialists and engineers offers you a personalised technical consulting service,** helps you choose the best air-conditioning solution for your needs, and offers you assistance during the entire life-cyle of the unit.

Our large head offices in Vilanova i la Geltrú, Barcelona, cover over 10,000 m^2, allowing us to offer a top-quality service in logistics, R&D, manufacturing, and assembly. At these facilities, our equipment is subjected to functional tests to ensure the quality of all products.



Our R&D Department guarantees the development of efficient and environmentally friendly products. In addition to the internal quality control procedures, HITECSA products are subjected to EUROVENT certification procedures, a leading European certification body in the European air-conditioning market.

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

02.
Since 1982

We have been leaders in the market since 1982. Since then, all of our departments have evolved in line with the changes required by the new needs of our customers and the changes brought about by standards regarding environmental and energy efficiency.

1982
HITECSA was founded
in Vilanova i la Geltrú (Barcelona)

1995
The H2 plant was opened, where the head offices and assembly plant are currently located.

2003
Updating of the production unit to speed up the response times to the needs of our customers.

2007
Start up of the HITECSA School
training courses.

2012
The new property promotes the development of new products from the optimisation of the R&D department.

Today
Over 100 workers on the staff. 10,000 m^2 of facilities devoted to the design and manufacture of equipment.

Plans for the future
Continuous innovation of our product range in terms of energy efficiency, respect for the environment and cost optimisation in order to adapt it to the needs of our customers.
Continuous improvement of our customer services.
Geographic expansion and increase of our network of collaborators

03.
Team

A team of specialists at your service

José María, Ricardo, Josep Manel, Sonia, Josep, Constanza... just some of over 100 specialists. People are our best capital. We are not machines. We are a team of people at the service of our customers.

Behind a telephone number or e-mail address, you will always find a name – a person who can help you to find an answer to any technical, administrative or commercial doubt or query.

The training and experience of our team guarantees the quality of all of our equipment and services.

04.
Dedication
To the customer

We adapt to our customers' needs, both in terms of delivery times and with regard to the specific characteristics of their projects, offering the best pre- and after-sales advice and the highest possible quality.

Our production system, structured into separate cells, allows us to offer a totally flexible assembly chain so that we can manufacture products which are 100% tailor-made – in the time required by our customers, with the quality they expect, and serviced and installed where they need them.

Flexibility
Speed
Support
Quality

05.
Solutions
pre-installation

We design solutions,
we shape your comfort

Our technical departments are responsible for finding out about our customers' air-conditioning needs and offering an engineering and design service which allows customers to find the best possible unit for their project from our range of equipment.

HITECSA also designs tailor-made solutions which meet customers' expectations regarding technical features, energy efficiency, costs and delivery times – all in line with the required time period and geographic location.

Spare parts
With the aim of improving the quality of our service, we have implemented a series of improvements in our spare parts department, strengthening the team devoted to this area and updating the prices of the components. The management of requests is carried out by our team of technicians, who personally contact our customers to track progress and make sure that requests are answered as soon as possible.

HITECSA Training School
At our facilities in Vilanova i la Geltrú (Barcelona), training courses are given for all professionals in the sector who wish to increase their knowledge of air conditioning systems and the operation of HITECSA products.
We also offer our collaborators and customers the option of participating in tailor-made courses at their own premises.

POST-SALES
We have a network of official service technicians in all major cities who, in conjunction with approved service technicians, provide fast and reliable service coverage for the whole country. Our head office has a special after-sales service telephone team. The in-house post-sales team can make on-site visits in order to provide support for commissioning or to check that equipment is working correctly.

06.
Solutions
post-installation

We support you throughout the life-cycle of your air-conditioning unit, both with training at our Hitecsa School and with spare parts, thanks to our new SERV-HIPLUS division. Our post-sales department is in charge of coordinating and providing technical assistance and our website allows you to quickly find all up-to-date technical information on our products.

A

SELF-CONTAINED
AIR-TO-AIR UNITS

AIR/AIR Inverter, compact and split units	Page 8
AIR/AIR ON/OFF compact and split units	Page 14
CLVA-CLVBA ductable indoor units	Page 26
Ductable axial condenser units	Page 29
Heat recovery units	Page 34

SELF-CONTAINED
AIR-TO-AIR UNITS
COMPACT/SPLIT HORIZONTAL INVERTER

inverter

ACHIA
Cooling only

ACHIBA
Heat pump

COMPACT configuration

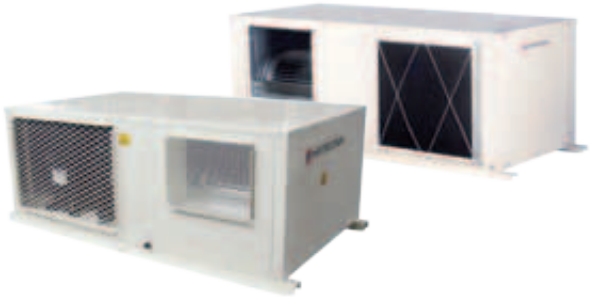
ECHIA/CCHIA
Cooling only

ECHIBA/CCHIBA
Heat pump

SPLIT configuration

Inverter High Energy Efficiency at the service of energy rehabilitation in the commercial sector

ACHIA/ACHIBA



ECHIA/CCHIA – ECHIBA/CCHIBA

This range of units are self-contained horizontal units suitable for connection to both indoor and outdoor sections of a network of air distribution ducts.

Designed to be installed inside the building to be air-conditioned, they are characterised by offering great flexibility in the installation.

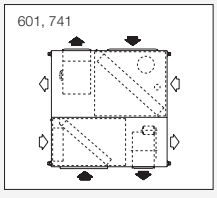
MAIN FEATURES

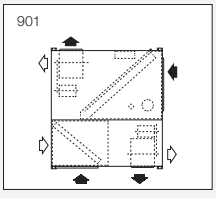
- Variable airflow for the outdoor fan
- Three air speeds in the Indoor Fan
- Cooling capacities ranging from 4 to 29 kW
- EER/COP coefficient ranging from 3.2 in nominal temperature conditions
- Scroll compressors with soft-start
- R410A refrigerant
- Can be combined with the RCAH range of heat recovery units of high energy efficiency and filters up to F Class.
- DC inverter technology: maximum savings and comfort
- Low sound level
- High performance in heat pump for low outdoor temperatures as low as -15°C
- Operating limit in cooling mode with outdoor temperature of 48°C
- Soft-start of the indoor and/or outdoor fan
- Oil separator (only for split units)
- ON/OFF remote
- Remote cooling/heating
- Scheduling function and Modbus connection
- Controls supplied as standard TH Tune

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

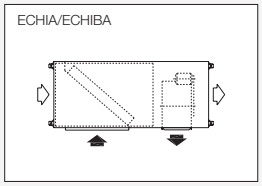
◆ standard ◇ optional

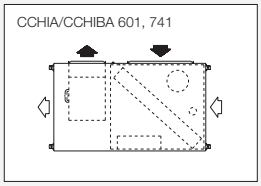
ACHIA/ACHIBA

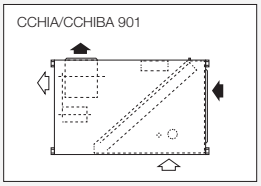




ECHIA/CCHIA – ECHIBA/CCHIBA







HITECSA COOL AIR

ACHIA-ACHIBA TECHNICAL SPECIFICATIONS

MODEL		601	741	901
Maximum cooling capacity (120 Hz)	kW	17.3	22.4	28.9
Maximum cooling capacity (120 Hz)	R.T.	4.9	6.4	8.2
Maximum heating capacity (120 Hz)	kW	18.6	24.2	28.9
Nominal cooling capacity (80 Hz)	kW	12.9	16.6	20.6
Nominal cooling capacity (80 Hz)	R.T.	3.7	4.7	5.9
Nominal heating capacity (80 Hz)	kW	13.0	15.7	20.4
Maximum EER coefficient	kW/kW	3.16	2.95	2.90
Maximum COP coefficient	kW/kW	3.21	3.03	2.93
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N
Nominal indoor airflow in cooling	m^3/h	2300	3000	3700
Nominal indoor airflow in heating	m^3/h	2800	3600	4400
Max. int. airflow – static pressure	m^3/h – Pa	3600 – 70	4600 – 80	5600 – 90
Max out. airflow – static pressure	m^3/h – Pa	5600 – 50	6200 – 50	7,500 – 50
Dimensions (length x width x height)	mm	1755x1697x640	1755x1697x640	1998x1755x672
Net weight	Kg	375	420	495

OUTDOOR UNIT (CCHIA/CCHIBA) TECHNICAL SPECIFICATIONS

MODEL		601	741	901
Maximum cooling capacity (120 Hz)	kW	17.3	22.4	26.5
Maximum cooling capacity (120 Hz)	R.T.	4.9	6.4	7.5
Maximum cooling capacity (120 Hz)	kW	18.6	24.2	28.9
Nominal cooling capacity (80 Hz)	kW	12.9	16.6	20.6
Nominal cooling capacity (80 Hz)	R.T.	3.7	4.7	5.9
Nominal cooling capacity (80 Hz)	kW	13.0	15.7	20.4
Maximum EER coefficient	kW/kW	3.16	2.95	2.90
Maximum COP coefficient	kW/kW	3.21	3.03	2.93
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	1/2	5/8	5/8
Cooling connect. Gas line	Ø (")	7/8	1 1/8	1 1/8
Max out. airflow – static pressure	m^3/h – Pa	5600 – 50	6200 – 50	7500 – 50
Dimensions (length x width x height)	mm	1755x1004x640	1755x1004x640	1750x1057x662
Net weight	Kg	240	295	312

INDOOR UNIT (ECHIA/ECHIBA) TECHNICAL SPECIFICATIONS

MODEL		601	741	901
Maximum cooling capacity (120 Hz)	kW	17.3	22.4	28.9
Maximum cooling capacity (120 Hz)	R.T.	4.9	6.4	8.2
Maximum cooling capacity (120 Hz)	kW	18.6	24.2	28.9
Nominal cooling capacity (80 Hz)	kW	12.9	16.6	20.6
Nominal cooling capacity (80 Hz)	R.T.	170.9	210.7	256.2
Nominal cooling capacity (80 Hz)	kW	13.0	15.7	20.4
Maximum EER coefficient	kW/kW	3.16	2.95	2.90
Maximum COP coefficient	kW/kW	3.21	3.03	2.93
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	1/2	5/8	5/8
Cooling connect. Gas line	Ø (")	7/8	1 1/8	1 1/8
Nominal indoor airflow in cooling	m^3/h	2300	3000	3700
Nominal indoor airflow in heating	m^3/h	2800	3600	4400
Max. int. airflow – static pressure	m^3/h – Pa	3600 – 70	4600 – 80	5500 – 90
Dimensions (length x width x height)	mm	1755x752x640	1755x752x640	1750x900x662
Net weight	Kg	145	150	180

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for semi-enthalpy free cooling with two dampers

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Option of manufacturing units with symmetric configuration

Outdoor installation kit

Upgraded motors

Anti-freeze heater for collection tray

Fireproof filter class M0

Hot water heating coils

Electrical heating as backup in defrosting

Anti-corrosion pre-treated coils

Prepared for disassembly

Quick-connect valves with preload of refrigerant gas (only for SPLIT configuration)

MAINTENANCE

Service valves

External Schrader valves for pressure test (standard for the 901 model)

Clogged filter indication

Condenser filter

Split filter

REGULATION AND CONTROL

Alarm indication

Smoke detection

Separate electrical panel

Ambient temperature or wall mounted sensor

Discharge temperature sensor

Centralised integrated management operation

Operation without neutral

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

SELF-CONTAINED
AIR-TO-AIR UNITS

COMPACT/SPLIT VERTICAL INVERTER

ACVIA
Cooling only

ACVIBA
Heat pump

COMPACT configuration

ECVIA/CCVIA
Cooling only

ECVIBA/CCVIBA
Heat pump

SPLIT configuration

Inverter High Energy Efficiency at the service of energy rehabilitation in the commercial sector

ACVIA/ACVIBA

ECVIA/CCVIA – ECVIBA/CCVIBA

This range of units are self-contained vertical units suitable for connection to both indoor and outdoor sections of a network of air distribution ducts. Designed to be installed inside the building to be air-conditioned, they are characterised by offering great flexibility in the installation.

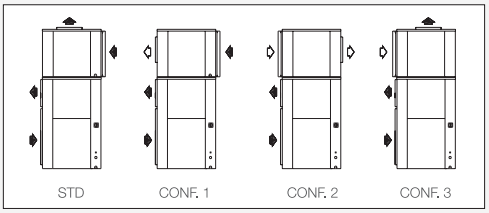
MAIN FEATURES

- Cooling capacities up to 30 kW
- EER/COP coefficient ranging from 2.9 in nominal temperature conditions
- Scroll Compressors with soft-start
- R410a refrigerant
- DC inverter technology: maximum savings and comfort
- Low sound level
- High performance in heat pump for low outdoor temperatures as low as -15°C
- Operating limit in cooling mode with outdoor temperature of 48°C
- Soft-start of the indoor and/or outdoor fan
- Oil separator (only in split units)
- ON/OFF remote
- Remote cooling/heating
- Scheduling function and Modbus connection
- Controls supplied as standard TH Tune

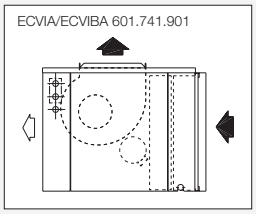
POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

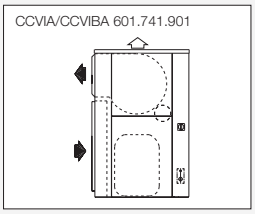
◗ standard ◗ optional

ACVIA/ACVIBA



ECVIA/ECVIBA – CCVIA/CCVIBA





ACVIA-ACVIBA TECHNICAL SPECIFICATIONS

MODEL		601	741	901
Maximum cooling capacity (120 Hz)	kW	18.5	23.9	28.3
Maximum cooling capacity (120 Hz)	R.T.	5.3	6.8	8.1
Maximum heating capacity (120 Hz)	kW	20.0	26.1	30.6
Nominal cooling capacity (80 Hz)	kW	13.8	17.7	22.0
Nominal cooling capacity (80 Hz)	R.T.	3.9	5.0	6.3
Nominal heating capacity (80 Hz)	kW	14.0	18.0	22.5
Maximum EER coefficient	kW/kW	2.90	2.86	2.96
Maximum COP coefficient	kW/kW	2.95	2.94	2.99
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N
Indoor airflows	m^3/h	2700/3200/4000	3200/3800/4800	3900/4650/5900
Max. int. airflow – static pressure	m^3/h – Pa	4000 – 70	4800 – 75	5900 – 90
Max out. airflow – static pressure	m^3/h – Pa	6800 – 50	7300 – 50	10,000 – 50
Dimensions (length x width x height)	mm	1130x800x1900	1130x800x1900	1700x870x1900
Net weight	Kg	400	470	600

OUTDOOR UNIT (CCVIA/CCVIBA) TECHNICAL SPECIFICATIONS

MODEL		601	741	901
Maximum cooling capacity (120 Hz)	kW	18.5	23.9	28.3
Maximum cooling capacity (120 Hz)	R.T.	5.3	6.8	8.1
Maximum heating capacity (120 Hz)	kW	20.0	26.1	30.6
Nominal cooling capacity (80 Hz)	kW	13.8	17.7	22.0
Nominal cooling capacity (80 Hz)	R.T.	3.9	5.0	6.3
Nominal heating capacity (80 Hz)	kW	14.0	18.0	22.5
Maximum EER coefficient	kW/kW	2.90	2.86	2.96
Maximum COP coefficient	kW/kW	2.95	2.94	2.99
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	1/2	5/8	5/8
Cooling connect. Gas line	Ø (")	7/8	1 1/8	1 1/8
Max out. airflow – static pressure	m^3/h – Pa	6800 – 50	7300 – 50	10,000 – 50
Dimensions (length x width x height)	mm	1130x800x1250	1130x800x1250	1700x870x1250
Net weight	Kg	260	320	390

INDOOR UNIT (ECVIA/ECVIBA) TECHNICAL SPECIFICATIONS

MODEL		601	741	901
Maximum cooling capacity (120 Hz)	kW	18.5	23.9	28.3
Maximum cooling capacity (120 Hz)	R.T.	5.3	6.8	8.1
Maximum heating capacity (120 Hz)	kW	20.0	26.1	30.6
Nominal cooling capacity (80 Hz)	kW	13.8	17.7	22.0
Nominal cooling capacity (80 Hz)	R.T.	3.9	5.0	6.3
Nominal heating capacity (80 Hz)	kW	14.0	18.0	22.5
Maximum EER coefficient	kW/kW	2.90	2.86	2.96
Maximum COP coefficient	kW/kW	2.95	2.94	2.99
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	1/2	5/8	5/8
Cooling connect. Gas line	Ø (")	7/8	1 1/8	1 1/8
Indoor airflows	m^3/h	2700/3200/4000	3200/3800/4800	3900/4650/5900
Max. int. airflow – static pressure	m^3/h – Pa	4000 – 70	4800 – 75	5900 – 90
Dimensions (length x width x height)	mm	1130x800x650	1130x800x650	1700x870x650
Net weight	Kg	140	150	210

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with three dampers

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Option of manufacturing units with symmetric configuration

Outdoor installation kit

Upgraded motors

Anti-freeze heater for condenser in tray

Fireproof filter class M0

Hot water heating coils

Electrical heating as backup in defrosting

Anti-corrosion pre-treated coils

Prepared for disassembly

Only for SPLIT configuration:
Quick-connect valves with preload of refrigerant gas

MAINTENANCE

Service valves

Clogged filter indication

Condenser filter

Split filter

REGULATION AND CONTROL

Alarm indication

Smoke detection

Separate electrical panel

Ambient temperature or wall mounted sensor

Discharge temperature sensor

Centralised integrated management operation

Operation without neutral

Versions for other climates

Versions for other power supplies

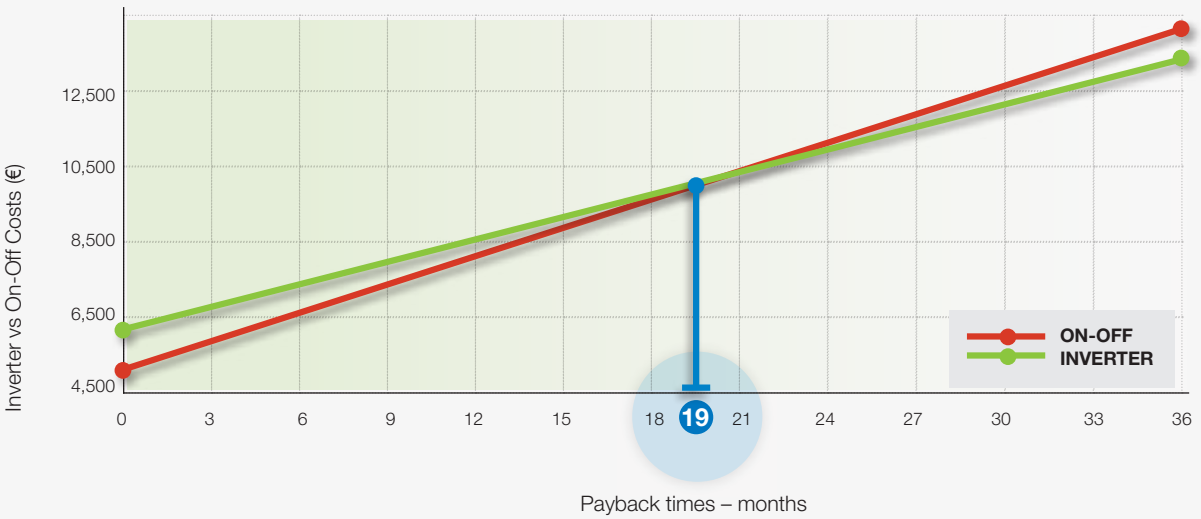
As well as these options consult our Commercial Department for any other configuration or function not described as available.

PAYBACK STUDY

Comparative study and calculation of the payback period for replacing the existing unit with a fixed speed unit or an inverter unit in the banking sector. This corresponds to a standard office in the Madrid climatic area. Estimated calculation based on the entry of data provided by the customer.

HITECSA offers you its Technical Department
to make estimated calculations for replacing your units.

PRODUCT RECOMMENDED FOR ENERGY REHABILITATION



Payback times – months

SELF-CONTAINED
AIR-TO-AIR UNITS

COMPACT/SPLIT HORIZONTAL ON-OFF

ACHA
Cooling only

ACHBA
Heat pump

COMPACT configuration

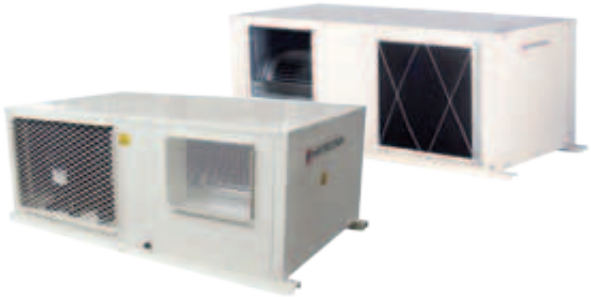
ECHA/CCHA
Cooling only

ECHBA/CCHBA
Heat pump

SPLIT configuration

Maximum flexibility for air conditioning through ducts of commercial premises

ACHA/ACHBA



ECHA/CCHA – ECHBA/CCHBA

This range of units are self-contained horizontal units suitable for connection to both indoor and outdoor sections of a network of air distribution ducts.

Designed to be installed inside the building to be air-conditioned, they are characterised by offering great flexibility in the installation.

MAIN FEATURES

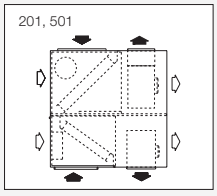
- Cooling capacities ranging from 5.6 to 33.5 kW
- Scroll Compressors
- R410a refrigerant
- Can be combined with the RCAH range of heat recovery units of high energy efficiency and filters up to F Class.
- Thermostats and controls supplied as standard for units with electromagnetic regulation

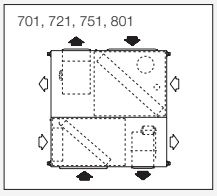
  RTR 7035 model 201
  T-8376B models 251-501
  SUPER SI models 701-1201

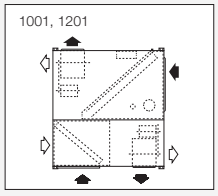
POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

◆ standard ◇ optional

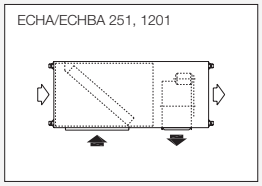
ACHA/ACHBA

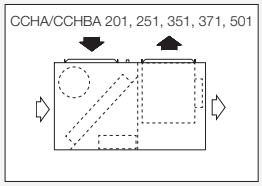


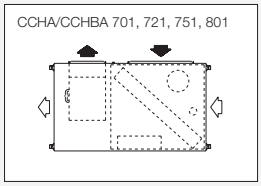


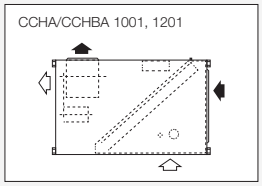


ECHA/CCHA – ECHBA/CCHBA









HITECSA COOL AIR

ACHA/ACHBA TECHNICAL SPECIFICATIONS

MODEL		201	251	351	371	401	501
Nominal cooling capacity	kW	5.6	7.4	9.7	11.6	12.4	14.1
Nominal cooling capacity	R.T.	1.6	2.1	2.8	3.3	3.5	4.0
Nominal heating capacity	kW	6.1	8.2	9.8	12	13.8	16.4
Total power input – cooling	kW	2.8	3.3	4.3	4.9	5.1	6.5
Total power input – heating	kW	2.6	3.1	3.8	4.4	4.6	5.9
Power supply (50 Hz ~)	V	230.1	230.1-400.3+N	230.1-400.3+N	400.3+N	400.3+N	400.3+N
Airflow – in. static pressure	m^3/h – Pa	1500 – 37	1600 – 47	2000 – 37	2700 – 32	2700 – 32	3200 – 48
Airflow – out. static pressure	m^3/h – Pa	2100 – 50	2450 – 50	3180 – 50	3800 – 50	3800 – 50	4150 – 50
Dimensions (length x width x height)	mm	1175x1109x452	1325x1259x504	1445x1339x504	1505x1389x562	1505x1389x562	1505x1389x562
Net weight	Kg	159	197	219	253	253	260
MODEL		**701**	**721**	**751**	**801**	**1001**	**1201**
Nominal cooling capacity	kW	17.2	18.5	20.8	21.9	28.4	33.5
Nominal cooling capacity	R.T.	4.9	5.3	5.9	6.2	8.1	9.5
Nominal heating capacity	kW	18.9	20.4	21.9	24.6	29.8	37.2
Total power input – cooling	kW	7.8	8.5	9.5	9.7	12.4	15.7
Total power input – heating	kW	6.9	7.9	8.1	8.8	11.8	15.1
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Airflow – in. static pressure	m^3/h – Pa	4300 – 50	4300 – 50	4300 – 50	4300 – 50	5900 – 50	7550 – 82
Airflow – out. static pressure	m^3/h – Pa	5600 – 50	5600 – 50	5700 – 50	6200 – 50	7600 – 50	9900 – 90
Dimensions (length x width x height)	mm	1755x1697x640	1755x1697x640	1755x1697x640	1755x1697x640	1998x1755x672	2400x2201x782
Net weight	Kg	354	354	395	404	476	633

OUTDOOR UNIT (CCHA/CCHBA) TECHNICAL SPECIFICATIONS

MODEL		201	251	351	371	401	501
Nominal cooling capacity	kW	5.6	7.4	9.7	11.6	12.4	14.1
Nominal cooling capacity	R.T.	1.6	2.1	2.8	3.3	3.5	4.0
Nominal heating capacity	kW	6.1	8.2	9.8	12	13.8	16.4
Total power input – cooling	kW	2.5	3.0	3.9	4.3	4.5	5.6
Total power input – heating	kW	2.3	2.9	3.4	3.8	4.0	4.9
Power supply (50 Hz ~)	V	230.1	230.1 – 400.3+N	230.1 – 400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"
Cooling connect. Gas line	Ø (")	1/2"	5/8"	3/4"	7/8"	7/8"	7/8"
Airflow – out. static pressure	m^3/h – Pa	2100 – 50	2450 – 50	3180 – 50	3800 – 50	3800 – 50	4150 – 50
Dimensions (length x width x height)	mm	1175x619x452	1325x706x504	1405x825x504	1455x843x562	1455x843x562	1455x843x562
Net weight	Kg	106	133	146	172	172	172
MODEL		**701**	**721**	**751**	**801**	**1001**	**1201**
Nominal cooling capacity	kW	17.2	18.5	20.8	21.9	28.4	33.5
Nominal cooling capacity	R.T.	4.9	5.3	5.9	6.2	8.1	9.5
Nominal heating capacity	kW	18.9	20.4	21.9	24.6	29.8	37.2
Total power input – cooling	kW	6.7	7.4	8.3	8.5	11.1	13.6
Total power input – heating	kW	5.7	6.7	7	7.4	10.2	12.2
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"
Cooling connect. Gas line	Ø (")	7/8"	7/8"	7/8"	7/8"	1 1/8"	1 1/8"
Airflow – out. static pressure	m^3/h – Pa	5600 – 50	5600 – 50	5700 – 50	6200 – 50	7600 – 50	9900 – 90
Dimensions (length x width x height)	mm	1755x1004x640	1755x1004x640	1755x1004x640	1755x1004x640	1750x1057x662	2300x1382x782
Net weight	Kg	223	223	263	272	292	410

INDOOR UNIT (ECHA/ECHBA) TECHNICAL SPECIFICATIONS

MODEL		201	251	351	371	401	501
Nominal cooling capacity	kW	5.6	7.4	9.7	11.6	12.4	14.1
Nominal cooling capacity	R.T.	1.6	2.1	2.8	3.3	3.5	4.0
Nominal heating capacity	kW	6.1	8.2	9.8	12	13.8	16.4
Total power input – cooling	kW	0.15	0.23	0.3	0.4	0.4	0.7
Total power input – heating	kW	0.15	0.23	0.3	0.4	0.4	0.7
Airflow – static pressure	m^3/h – Pa	1500 – 37	1600 – 47	2000 – 37	2700 – 32	2700 – 32	3200 – 48
Power supply (50 Hz ~)	V	230.1 – 400.3+N	230.1	230.1	230.1	230.1 – 400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	1/2"	3/8"	3/8"	1/2"	1/2"	1/2"
Cooling connect. Gas line	Ø (")	3/8"	5/8"	3/4"	7/8"	7/8"	7/8"
Dimensions (length x width x height)	mm	1175x562x452	1325x600x504	1405x600x504	1455x642x562	1455x642x562	1455x642x562
Net weight	Kg	61	72	81	89	89	96
MODEL		**701**	**721**	**751**	**801**	**1001**	**1201**
Nominal cooling capacity	kW	17.2	18.5	20.8	21.9	28.4	33.5
Nominal cooling capacity	R.T.	4.9	5.3	5.9	6.2	8.1	9.5
Nominal heating capacity	kW	18.9	20.4	21.9	24.6	29.8	37.2
Total power input – cooling	kW	0.9	0.9	0.9	1.3	1.6	2.7
Total power input – heating	kW	0.8	0.9	0.9	1.1	1.3	2.1
Airflow – static pressure	m^3/h – Pa	4300 – 50	4300 – 50	4300 – 50	4300 – 50	5900 – 50	7550 – 82
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"
Cooling connect. Gas line	Ø (")	7/8"	7/8"	7/8"	7/8"	1 1/8"	1 1/8"
Dimensions (length x width x height)	mm	1775x752x640	1755x752x640	1755x752x640	1755x752x640	1750x900x662	2300x925x782
Net weight	Kg	136	136	137	137	172	209

For sizing of refrigerated lines depending on layout and total installation distance consult our Commercial Department

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with two or three dampers

Thermal or enthalpy regulation with PCO control card and PGD control

Head pressure control by frequency converter or voltage converter

Compressor soft-start (depending on models)

Soft-start of the indoor and/or outdoor fan (depending on models)

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Option of manufacturing units with symmetric configuration

Outdoor installation kit

Upgraded motors

Anti-freeze resistance operation in collection tray

Fireproof filter class M0

Hot gas bypass

Hot water heating coils

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

R407C refrigerant models available on request

Prepared for disassembly

Only for SPLIT configuration:

- Oil separator
- Service valves
- Quick-connect valves with preload of refrigerant gas

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indication

Condenser filter

Split filter

REGULATION AND CONTROL

ETN thermostat

ARIA thermostat

SUPER SI thermostat (man. 24 V)

PGD thermostat

DSX@ thermostat (man. 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Wall mounted ambient temperature sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult

Thermostat chapter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

SELF-CONTAINED
AIR-TO-AIR UNITS
DUCTABLE SPLIT

CCHA/FTA

Cooling only

CCHBA/FTBA

Heat pump

Self-contained ductable split systems consisting of a centrifugal condenser unit

Maximum flexibility for air conditioning through ducts of commercial premises

CCHA/CCHBA

FTA/FTBA

The units in the CCHA/FTA and CCHBA/FTBA series are sets comprising a centrifugal condenser unit and a direct expansion fan coil evaporator unit.

The reduced height of the indoor units make them ideal for fast installation in false ceilings, with the unit either supported or suspended.

MAIN FEATURES

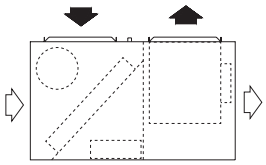
- Cooling capacities ranging from 5.2 to 19.3 kW
- Outdoor units with standard blue fin pre-treated coils
- 3-speed indoor fan
- Maximum connection distances between indoor and outdoor units of 50 metres.
- Thermostats and controls supplied as standard for units with electromagnetic regulation

  RTR 7007 (depending on models)
  T-8376B (depending on models)
  SUPER SI (depending on models)

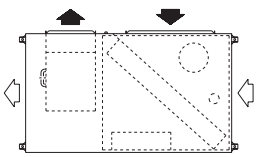
POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

◆ standard ◇ optional

CCHA/CCHBA 201, 251, 351, 371, 501



CCHA/CCHBA 701, 721



CCHA/FTA
CCHBA/FTBA TECHNICAL SPECIFICATIONS

OUTDOOR MODEL		201	251	351	371
INDOOR MODEL		201	251	351	371
Nominal cooling capacity	kW	5.2	7.4	9.6	10.4
Nominal cooling capacity	R.T.	1.5	2.1	2.7	3.0
Nominal heating capacity	kW	5.8	7.8	10.2	11.0
Total power input – cooling	kW	2.7	3.2	4.24	4.68
Total power input – heating	kW	2.5	3.1	3.74	4.18
Power supply (50 Hz ~)	V	230.1	230.1 or 400.3+N	230.1-230.3 or 400.3+N	230.1-230.3 or 400.3+N
Airflow – static pressure (in.)	m^3/h – Pa	1100 – 44	1150 – 72	1500 – 80	2200 – 96
Airflow – static pressure (out.)	m^3/h – Pa	2100 – 50	2450 – 50	3180 – 50	3800 – 50
Liq. pipe diameter	Ø (")	3/8	3/8	3/8	1/2
Gas pipe diameter	Ø (")	1/2	5/8	3/4	3/4 (in.)- 7/8 (out.)
Ext. dimens. (length x width x height)	mm	1175x619x452	1325x706x504	1405x825x504	1455x843x562
Int. dimens. (length x width x height)	mm	925x660x280	925x660x280	925x660x280	1250x750x315
Total dist. in./out. units	m	50	50	50	50
Vertical dist in./out. units	m	25	25	25	25
Net weight – outdoor	Kg	106	133	146	172
Net weight – indoor	Kg	37	39	44	59
OUTDOOR MODEL		401	501	701	721
INDOOR MODEL		401	501	721	721
Nominal cooling capacity	kW	11.8	14.5	18.0	19.3
Nominal cooling capacity	R.T.	3.4	4.1	5.1	5.5
Nominal heating capacity	kW	12.5	15.3	19.8	20.6
Total power input – cooling	kW	4.94	6.13	7.9	8.6
Total power input – heating	kW	4.44	5.43	6.9	7.9
Power supply (50 Hz ~)	V	230.3 or 400.3 +N	230.3 or 400.3 +N	400.3+N	230.3 or 400.3 +N
Airflow – static pressure (in.)	m^3/h – Pa	2300 – 80	2500 – 76	3000 – 140	3000 – 140
Airflow – static pressure (out.)	m^3/h – Pa	3800 – 50	4150 – 50	5600 – 50	5600 – 50
Liq. pipe diameter	Ø (")	1/2	1/2	1/2	1/2
Gas pipe diameter	Ø (")	3/4 (in.)- 7/8 (out.)	7/8	7/8	7/8
Ext. dimens. (length x width x height)	mm	1455x843x562	1455x843x562	1755x1004x640	1755x1004x640
Int. dimens. (length x width x height)	mm	1250x750x315	1250x750x315	1250x805x369	1250x805x369
Total dist. in./out. units	m	50	50	50	50
Vertical dist. in./out. units	m	25	25	25	25
Net weight – outdoor	Kg	172	172	223	223
Net weight – indoor	Kg	59	61	71	71

Voltage for indoor unit 230.1 50 Hz ~

For sizing of refrigerated lines depending on layout and total installation distance consult our Commercial Department

OPTIONS AVAILABLE

ENERGY SAVING

Compressor soft-start (depending on models)

Head pressure control by frequency converter or voltage converter

AIR QUALITY

Gravimetric filter in return G4

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Side intake and discharge (outdoor unit)

Option of manufacturing units with symmetric configuration (outdoor unit)

Connections on rear side. (outdoor unit)

Indoor unit equipment and accessories painted in RAL 1013 polyester powder coating

Outdoor installation kit

Upgraded motors

Anti-freeze heater for collection tray

Fireproof filter class M0

Hot gas bypass

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

R407C refrigerant models available on request

Prepared for disassembly

Only for SPLIT configuration:

- Oil separator
- Service valves
- Quick-connect valves with preload of refrigerant gas

Discharge plenum and return

Grille discharge plenum and return

3 and 5 outlet nozzle plenum

Condensate evacuation pump

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indication

Condenser filter

Split filter

REGULATION AND CONTROL

Pressure switches

Electromagnetic regulation

Infrared remote control

ARIA thermostat

PGD thermostat

ETN thermostat

DSX@ thermostat (man. 24 V)

SUPER SI thermostat (man. 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Stopping of the evaporator fan in the defrosting

Unit without thermostat

Wall mounted ambient temperature sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus

connection, etc. consult Thermostat chapter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

SELF-CONTAINED
AIR-TO-AIR UNITS

COMPACT/SPLIT VERTICAL ON-OFF

ACVA
Cooling only

ACVBA
Heat pump

COMPACT configuration

ECVA/CCVA
Cooling only

ECVBA/CCVBA
Heat pump

SPLIT configuration

Maximum flexibility for air conditioning through ducts of commercial premises

ACVA/ACVBA

ECVA/CCVA – ECVBA/CCVBA

This range of units are self-contained vertical units suitable for connection to both indoor and outdoor sections of a network of air distribution ducts.

Designed to be installed inside the building to be air-conditioned, they are characterised by offering great flexibility in the installation.

MAIN FEATURES

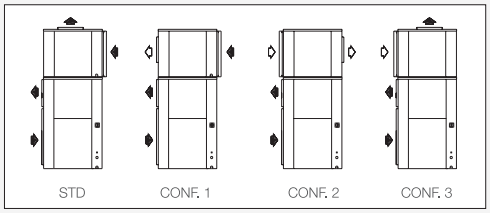
- Cooling capacities ranging from 9.8 to 114.3 kW
- Scroll Compressors
- R410a refrigerant
- 2 separate refrigerated circuits (models from 1402 to 3502)
- Option of operating as 2x1 multisplit set (models 1402 to 3002)
- Two indoor units connected to an outdoor unit (operation with one or two thermostats)
- One indoor unit connected to two outdoor units (operation with only one thermostat)
- Refrigerated distance between indoor and outdoor unit (Split config.) of up to 50 m in total
- Can be combined with the RCAH range of heat recovery units of high energy efficiency and filters up to F Class.
- Thermostats and controls suppliedas standard for units with electromagnetic regulation

  T-8376B- models 351-501
  SUPER SI- models 701-3502

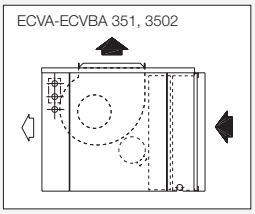
POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

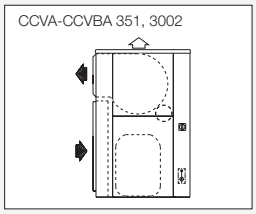
◗ standard ◇ optional

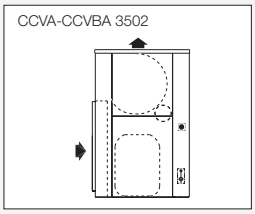
ACVA/ACVBA



ECVA/CCVA – ECVBA/CCVBA







HITECSA COOL AIR

ACVA/ACVBA TECHNICAL SPECIFICATIONS

MODEL		351	401	501	701	721	751
Nominal cooling capacity	kW	9.8	12.5	14.4	18.9	19.6	22.7
Nominal cooling capacity	R.T.	2.8	3.6	4.1	5.4	5.6	6.5
Nominal heating capacity	kW	10.4	13.7	15.0	20.0	21.0	23.9
Total power input – cooling	kW	4.6	5.6	7.2	8.4	9.3	10.9
Total power input – heating	kW	4.2	5.1	6.5	7.9	8.2	10.3
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Airflow – in. static pressure	m^3/h – Pa	2315-43	2600-50	3540-60	4720-55	4720-55	5133-53
Airflow – out. static pressure	m^3/h – Pa	4300-50	3950-50	4900-50	6800-50	6800-50	7400-50
Dimensions (length x width x height)	mm	937x750x1604	937x750x1604	1087x750x1604	1130x800x1900	1130x800x1900	1130x800x1900
Net weight	Kg	251	276	290	367	392	423
MODEL		**801**	**1001**	**1201**	**1402**	**1502**	**1602**
Nominal cooling capacity	kW	24.2	30.1	34.9	37.8	43.4	50.2
Nominal cooling capacity	R.T.	6.9	8.6	9.9	10.7	12.3	14.3
Nominal heating capacity	kW	25.3	31.7	38.2	39.5	44.2	51.9
Total power input – cooling	kW	10.9	13.4	14.4	16.2	17.6	20.1
Total power input – heating	kW	9.6	12.4	13.2	15.5	16.5	18.0
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Airflow – in. static pressure	m^3/h – Pa	5150-83	6200-73	8000-91	8000-130	10000-145	10000-145
Airflow – out. static pressure	m^3/h – Pa	7714-57	10000-50	12500-50	13600-88	15600-110	16000-110
Dimensions (length x width x height)	mm	1130x800x1900	1700x870x1900	1700x870x1900	2000x939x1997	2000x939x1997	2000x939x1997
Net weight	Kg	440	553	558	730	810	820

MODEL		2002	2302	2402
Nominal cooling capacity	kW	63.1	73.6	78.5
Nominal cooling capacity	R.T.	17.9	20.9	22.3
Nominal heating capacity	kW	65.5	81.9	81.9
Total power input – cooling	kW	26.0	28.7	34.3
Total power input – heating	kW	22.8	27.5	29.0
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N
Airflow – in. static pressure	m^3/h – Pa	11000-175	12000-160	12000-160
Airflow – out. static pressure	m^3/h – Pa	22000-123	23000-142	23000-142
Dimensions (length x width x height)	mm	2600x980x2174	2600x980x2174	2600x980x2174
Net weight	Kg	1080	1115	1135

OUTDOOR UNIT (CCVA/CCVBA) TECHNICAL SPECIFICATIONS

MODEL		351	401	501	701	721	751
Nominal cooling capacity	kW	9.8	12.5	14.4	18.9	19.6	22.7
Nominal cooling capacity	R.T.	2.8	3.6	4.1	5.4	5.6	6.5
Nominal heating capacity	kW	10.4	13.7	15.0	20.0	21.0	23.9
Total power input – cooling	kW	4.0	5.1	6.4	7.3	8.0	9.4
Total power input – heating	kW	3.7	4.5	5.5	6.8	7.0	9.0
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	3/8	1/2	1/2	1/2	1/2	5/8
Cooling connect. Gas line	Ø (")	3/4	3/4	7/8	7/8	7/8	7/8
Airflow – out. static pressure	m^3/h – Pa	4300-50	3950-50	4900-50	6800-50	6800-50	7400-50
Dimensions (length x width x height)	mm	937x750x1022	937x750x1022	1087x750x1022	1130x800x1250	1130x800x1250	1130x800x1250
Net weight	Kg	172	189	200	253	272	297
MODEL		**801**	**1001**	**1201**	**1402**	**1502**	**1602**
Nominal cooling capacity	kW	24.2	30.1	34.9	37.8	43.4	50.2
Nominal cooling capacity	R.T.	6.9	8.6	9.9	10.7	12.3	14.3
Nominal heating capacity	kW	25.3	31.7	38.2	39.5	44.2	51.9
Total power input – cooling	kW	9.4	12.0	12.5	13.9	15.2	14.4
Total power input – heating	kW	8.3	11.0	11.5	14.9	14.6	16.5
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	5/8	5/8	5/8	1/2	5/8	5/8
Cooling connect. Gas line	Ø (")	7/8	1 1/8	1 1/8	7/8	7/8	1 1/8
Airflow – out. static pressure	m^3/h – Pa	7714-57	10000-50	12500-50	13600-88	15600-110	16000-110
Dimensions (length x width x height)	mm	1130x800x1250	1700x870x1250	1700x870x1250	2000x939x1250	2000x939x1250	2000x939x1250
Net weight	Kg	304	373	397	477	538	548

OUTDOOR UNIT (CCVA/CCVBA) TECHNICAL SPECIFICATIONS

MODEL		2002	2302	2402	3002	3502
Nominal cooling capacity	kW	63.1	73.6	78.5	86.6	114.3
Nominal cooling capacity	R.T.	17.9	20.9	22.3	24.6	32.5
Nominal heating capacity	kW	65.5	81.9	81.9	88.8	119.6
Total power input – cooling	kW	21.6	23.4	24.2	31.1	39.8
Total power input – heating	kW	21.7	25.7	25.5	27.4	32.3
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	5/8	5/8	5/8	5/8	7/8
Cooling connect. Gas line	Ø (")	1 1/8	1 1/8	1 1/8	1 3/8	1 5/8
Airflow – out. static pressure	m^3/h – Pa	22000-123	23000-142	23000-142	27000-140	32000-160
Dimensions (length x width x height)	mm	2600x980x1422	2600x980x1422	2600x980x1422	2800x1050x1722	2800x1050x1722
Net weight	Kg	747	782	802	978	1058

INDOOR UNIT (ECVA/ECVBA) TECHNICAL SPECIFICATIONS

MODEL		351	401	501	701	721	751
Nominal cooling capacity	kW	9.8	12.5	14.4	18.9	19.6	22.7
Nominal cooling capacity	R.T.	2.8	3.6	4.1	5.4	5.6	6.5
Nominal heating capacity	kW	10.4	13.7	15.0	20.0	21.0	23.9
Total power input – cooling	kW	0.3	0.4	0.9	1.0	0.9	1.1
Total power input – heating	kW	0.3	0.4	0.8	0.9	0.9	1.0
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	3/8	1/2	1/2	1/2	1/2	5/8
Cooling connect. Gas line	Ø (")	3/4	3/4	7/8	7/8	7/8	7/8
Airflow – static pressure	m^3/h – Pa	2315-43	2600-50	3540-60	4720-55	4720-55	5133-53
Dimensions (length x width x height)	mm	937x750x582	937x750x582	1087x750x582	1130x800x650	1130x800x650	1130x800x650
Net weight	Kg	92	95	99	126	126	136
MODEL		**801**	**1001**	**1201**	**1402**	**1502**	**1602**
Nominal cooling capacity	kW	24.2	30.1	34.9	37.8	43.4	50.2
Nominal cooling capacity	R.T.	6.9	8.6	9.9	10.7	12.3	14.3
Nominal heating capacity	kW	25.3	31.7	38.2	39.5	44.2	51.9
Total power input – cooling	kW	1.0	1.0	1.3	2.2	2.2	2.3
Total power input – heating	kW	1.0	0.9	1.2	1.7	1.7	1.9
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	5/8	5/8	5/8	1/2	5/8	5/8
Cooling connect. Gas line	Ø (")	7/8	1 1/8	1 1/8	7/8	7/8	1 1/8
Airflow – static pressure	m^3/h – Pa	5125-83	6277-73	8000-91	8000-130	10000-145	10000-145
Dimensions (length x width x height)	mm	1130x800x650	1700x870x650	1700x870x650	2000x939x747	2000x939x747	2000x939x747
Net weight	Kg	136	197	199	253	272	272

MODEL		2002	2302	2402	3002	3502
Nominal cooling capacity	kW	63.1	73.6	78.5	86.6	114.3
Nominal cooling capacity	R.T.	17.9	20.9	22.3	24.6	32.5
Nominal heating capacity	kW	65.5	81.9	81.9	88.8	119.6
Total power input – cooling	kW	3.1	3.3	3.6	3.9	3.9
Total power input – heating	kW	2.7	2.4	2.9	2.3	2.3
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	5/8	5/8	5/8	5/8	7/8
Cooling connect. Gas line	Ø (")	1 1/8	1 1/8	1 1/8	1 3/8	1 5/8
Airflow – static pressure	m^3/h – Pa	11000-175	12000-160	12000-160	14000-200	18000-250
Dimensions (length x width x height)	mm	2600x980x752	2600x980x752	2600x980x752	2800x1050x915	2800x1050x915
Net weight	Kg	333	333	333	418	524

For sizing of refrigerated lines depending on layout and total installation distance consult our Commercial Department

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with two or three dampers

Thermal or enthalpy regulation with PCO control card and PGD control

Compressor soft-start (depending on models)

Soft-start of indoor and/or outdoor fan (depending on models)

Head pressure control by frequency converter or voltage converter

EC radial indoor fan (depending on models)

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

SOUND LEVEL

Double thermo-acoustic insulation
Compressor sound jacket

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Option of manufacturing units with symmetric configuration

Outdoor installation kit

Upgraded motors

Anti-freeze heater for collection tray

Fireproof filter class M0

Hot gas bypass

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

R407C refrigerant models available on request

Prepared for disassembly

Only for SPLIT configuration:

- Oil separator
- Service valves
- Quick-connect valves with preload of refrigerant gas

2x1 multisplit operation (1402 to 2402)

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indication

Condenser filter

Split filter

REGULATION AND CONTROL

ETN thermostat (mod. 1 circuit)

ARIA thermostat

SUPER SI thermostat (man. 24 V)

PGD thermostat

DSX@ thermostat (man. 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Wall mounted ambient temperature sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult

Thermostat chapter.

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

SELF-CONTAINED
AIR-TO-AIR UNITS

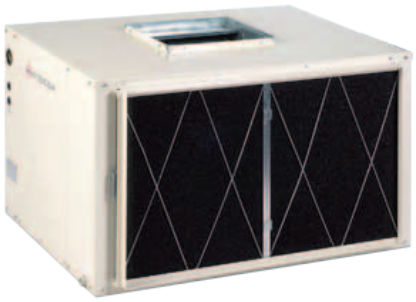
SELF-CONTAINED SPLIT AXIAL FAN

UXCA/ECVA
Cooling only

UXCBA/ECVBA
Heat pump

Maximum flexibility for air conditioning through ducts of commercial premises

UXCA/UXCBA



ECVA/ECVBA

The units in the UXCA/ECVA – UXCBA/ECVBA series are split units that are especially suitable for installation on rooftops, terraces or in other outdoor areas.

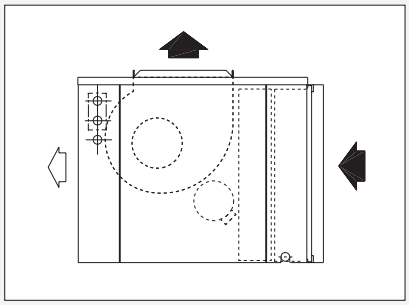
Their design allows large distances in the installation between outdoor and indoor units.

MAIN FEATURES

- Cooling capacities ranging from 23.6 to 139.7 kW
- Scroll compressors
- 2 separate refrigerated circuits (models from 1602 to 4502)
- Can be combined with the RCAH range of heat recovery units of high energy efficiency and filters up to F Class.
- 3 versions available:
  Standard (STD)
  LOW SOUND LEVEL (SIL)
  Special High Ambient Temperatures (ATA)
- Refrigerated distance between outdoor and indoor unit up to 50 m in total
- Option of operating as a set multisplit 2x1 (models 1602 to 3002)
- Two indoor units connected to an outdoor unit (operation with one or two thermostats)
- One indoor unit connected to two outdoor units (operation with only one thermostat)
- Thermostats and controls supplied as standard for units with electromagnetic regulation SUPER SI- (man. 24V)

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

◗ standard ◗ optional



OUTDOOR UNIT (UXCA/UXCBA) TECHNICAL SPECIFICATIONS

MODEL		801	1001	1201	1501	1602	2002
Nominal cooling capacity	kW	23.6	29.7	34.5	40.3	49.6	65.3
Nominal cooling capacity	R.T.	6.7	8.4	9.8	11.5	14.1	18.6
Nominal heating capacity	kW	24.9	30.6	39.6	41.6	52.4	67.6
Total power input – cooling	kW	10.1	12.0	14.0	15.5	19.5	23.0
Total power input – heating	kW	9.9	11.1	14.2	14.7	18.3	21.3
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Dimensions (length x width x height)	mm	1430x1008x325	1430x1008x1325	1400x1320x1500	1400x1320x1500	2035x1030x1325	2035x1030x1325
Net weight	Kg	251	316	382	392	495	545

MODEL		2402	3002	4002	4502
Nominal cooling capacity	kW	73.1	89.4	122.9	139.7
Nominal cooling capacity	R.T.	20.8	25.4	34.9	39.7
Nominal heating capacity	kW	78.3	86.0	124.8	144.2
Total power input – cooling	kW	24.4	29.6	40.7	46.3
Total power input – heating	kW	24.7	30.7	38.4	42.3
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N
Dimensions (length x width x height)	mm	2280x1320x1500	2720x1320x1500	2200x2250x1725	2200x2250x1725
Net weight	Kg	567	894	950	992

INDOOR UNIT (ECVA/ECVBA) TECHNICAL SPECIFICATIONS

MODEL		801	1001	1201	1501	1602	2002
Nominal cooling capacity	kW	23.6	29.7	34.5	40.3	49.6	65.3
Nominal cooling capacity	R.T.	6.7	8.4	9.8	11.5	14.1	18.6
Nominal heating capacity	kW	24.9	30.6	39.6	41.6	52.4	67.6
Total power input – cooling	kW	1.5	1.4	1.9	2.6	2.4	2.6
Total power input – heating	kW	1.5	1.3	1.7	2.4	2.3	2.5
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	5/8	5/8	5/8	5/8	5/8	5/8
Cooling connect. Gas line	Ø (")	7/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
Airflow – static pressure	m^3/h – Pa	5150-83	6200-73	8000-91	9000-130	10000-145	11000-175
Dimensions (length x width x height)	mm	1130x800x650	1700x870x650	1700x870x650	2000x939x747	2000x939x747	2600x980x752
Net weight	Kg	136	197	199	272	272	333

MODEL		2402	3002	4002	4502
Nominal cooling capacity	kW	73.1	89.4	122.9	139.7
Nominal cooling capacity	R.T.	20.8	25.4	34.9	39.7
Nominal heating capacity	kW	78.3	86	124.8	144.2
Total power input – cooling	kW	2.6	3.3	5.6	6.2
Total power input – heating	kW	2.5	3.6	5.5	5.4
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N
Cooling connect. Liquid line	Ø (")	5/8	5/8	7/8	7/8
Cooling connect. Gas line	Ø (")	1 1/8	1 3/8	1 5/8	1 5/8
Airflow – out. static pressure	m^3/h – Pa	12000-160	14000-200	20500-210	22000-200
Dimensions (length x width x height)	mm	2600x980x752	2800x1050x915	2900x1200x1115	2900x1200x1115
Net weight	Kg	333	418	550	570

For sizing of refrigerated lines depending on layout and total installation distance consult our Commercial Department

SELF-CONTAINED
AIR-TO-AIR UNITS

INDOOR UNITS FOR CONNECTION TO VERTICAL DUCTS

CLVA
Cooling only

CLVBA
Heat pump

Maximum flexibility for air conditioning through ducts of commercial premises

The units of the CLVA/CLVBA series are direct expansion evaporator units suitable for connection to a network of air distribution ducts. These units are designed to work together with any Hitecsa outdoor unit of an equivalent cooling capacity.

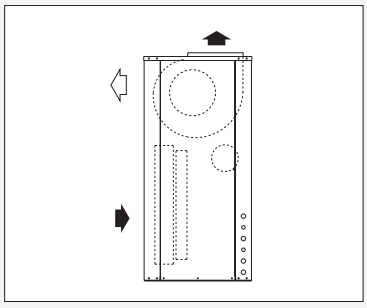
All models have the option to operate on direct discharge by means of an optional air discharge plenum equipped with an anodised aluminium grille for direct discharge.

MAIN FEATURES

- Airflows up to 10,200 m³/h
- Countless installation possibilities
- Connectable to any Hitecsa condensing unit

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

◗ standard ◇ optional



CLVA/CLVBA TECHNICAL SPECIFICATIONS

MODEL		251	351	401	501	701	721
Nominal cooling capacity	kW	7.4	9.8	12.0	14.4	18.2	22.1
Nominal cooling capacity	R.T.	2.1	2.8	3.4	4.1	5.2	6.3
Nominal heating capacity	kW	7.4	10.4	12.7	15.5	19.3	23.5
Total power input	kW	0.3	0.4	0.6	0.6	0.9	0.9
Power supply (50 Hz ~)	V	230.1	230.1	230 or 400.3+N	230 or 400.3+N	230 or 400.3+N	230 or 400.3+N
Airflow – static pressure	m³/h – Pa	1900-38	2500-68	3000-56	3400-100	4200-115	4400-109
Liquid pipe diameter	Ø (")	3/8	3/8	1/2	1/2	1/2	1/2
Gas pipe diameter	Ø (")	5/8	3/4	3/4	7/8	7/8	7/8
Dimensions (length x width x height)	mm	697x500x1000	697x500x1000	697x500x1000	757x500x1100	1152x600x1200	1152x600x1200
Net weight	Kg	45	69	73	94	118	118

HITECSA COOL AIR

CLVA/CLVBA TECHNICAL SPECIFICATIONS

MODEL		751	801	1001	1201	1402	1502	1602
Nominal cooling capacity	kW	22.1	23.2	29.7	35.0	36.4	44.2	45.4
Nominal cooling capacity	R.T.	6.3	6.6	8.4	10.0	10.3	12.6	12.9
Nominal heating capacity	kW	23.5	24.4	31.7	37.0	38.6	46.6	48.8
Total input power	kW	1.3	1.3	1.3	1.8	1.8	2.6	2.6
Power supply (50 Hz ~)	V	230 or 400.3+N	230 or 400.3+N	230 or 400.3+N	230 or 400.3+N	230 or 400.3+N	230 or 400.3+N	230 or 400.3+N
Airflow static pressure	m^3/h – Pa	4800-120	5200-84	7200-78	8000-85	8400-72	9600-129	10200-123
Liquid pipe diameter	Ø (")	5/8	5/8	5/8	5/8	2x1/2	2x5/8	2x5/8
Gas pipe diameter	Ø (")	1 1/8	1 1/8	1 1/8	1 1/8	2x7/8	2x7/8	2x1 1/8
Dimensions (length x width x height)	mm	1152x600x1200	1152x600x1200	1700x600x1300	1700x600x1300	1800x675x1400	1800x675x1400	1800x675x1400
Net weight	Kg	119	125	175	175	187	187	197

For sizing of refrigerated lines depending on layout and total installation distance consult our Commercial Department

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with two or three dampers

Thermal or enthalpy regulation with PCO control card and PGD control

EC radial indoor fan (depending on models)

Fan soft-start (depending on models)

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

SOUND LEVEL

Double thermo-acoustic insulation

UNIT INSTALLATION

Front discharge

Power supply at 60Hz and voltages 230, 208, etc.

Outdoor installation kit

Upgraded motors

Fireproof filter class M0

Hot gas bypass

Hot water heating coils (cooling only)

Electric resistance coils for auxiliary electrical heating

Return for insertion

Connections opposite side

Discharge plenum

Intake grille

Anti-corrosion pre-treated coils

R407C refrigerant models available on request

Prepared for disassembly

Base guides

MAINTENANCE

Service valves

Clogged filter indication

Split filter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

OPTIONS AVAILABLE

ENERGY SAVING

Discharge fan in radial indoor unit with EC motor (depending on models)

Bionic profile condensation fan operated by EC or AC motor

Option of mixing module for free cooling with two or three dampers

Thermal or enthalpy regulation with PCO control card and PGD control

Compressor soft-start (depending on models)

Soft-start of indoor and/or outdoor fan (depending on models)

Head pressure control by frequency converter or voltage converter

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

SOUND LEVEL

Low sound level EC fan

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Option of manufacturing units with symmetric configuration

Outdoor installation kit (indoor unit)

Upgraded motors

Anti-freeze heater for condenser in tray

Guides on the base (indoor unit)

New defrost system with pressures

Fireproof filter class M0

Hot gas bypass

Double speed or double speed by circuit condensation control (depending on models)

Coil protection grille (outdoor unit)

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

R407C refrigerant models available on request

Prepared for disassembly

Only for SPLIT configuration:

- Oil separator
- Service valves
- Quick-connect valves with preload of refrigerant gas

2x1 multisplit operation (1602/3002)

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indication

Split filter

Pressure gauges

REGULATION AND CONTROL

ARIA thermostat

PGD thermostat

DSX@ thermostat (man. 24V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

High pressure switch reset from thermostat

Indoor fan stop in defrost

Unit without thermostat

Wall mounted ambient temperature sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult

Thermostat chapter.

Option of combining an outdoor unit and two indoor units with one indoor unit (only units with two circuits)

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

DUCTABLE INDOOR UNITS
ADVANCE
AXIAL CONDENSER

DXCZ
Cooling only

DXCBZ
Heat pump

FTZ
Cooling only

FTBZ
Heat pump

SPLIT configuration

Maximum flexibility for air conditioning through ducts of commercial premises

DXCZ/DXCBZ

FTZ/FTBZ

The units in the DXCZ/FTZ and DXCBZ/FTZ series are sets comprising an axial condenser unit and a direct expansion fan coil evaporator unit. The reduced height of the indoor units make them ideal for fast installation in false ceilings, with the unit either supported or suspended.

MAIN FEATURES

- Cooling capacities ranging from 4.7 to 19 kW
- Rotary compressors (models 171-351) and Scroll (371-721)
- Outdoor units with standard blue fin pre-treated coils
- 3-speed indoor fan
- Maximum connection distances between indoor and outdoor units of 50 metres.
- Quick-connect valves with preload of refrigerant gas for 5 metres
- Standard thermostats and controls with electromagnetic regulation ETN

DXCZ/FTZ TECHNICAL SPECIFICATIONS

OUTDOOR MODEL		171	201	221	251	271	351
INDOOR MODEL		171	201	221	251	271	351
Nominal cooling capacity	kW	4.7	5.3	6.3	7.0	7.7	9.8
Nominal cooling capacity	R.T.	1.3	1.5	1.8	2.0	2.2	2.8
Total power input	kW	1.9	2.1	2.7	3.0	3.0	3.9
Power supply (50 Hz ~)	V	230.1	230.1	230.1	230.1	230.1 or 400.3	230.1 or 400.3
Airflow – static pressure	m^3/h – Pa	700 – 32	1100 – 44	1100 – 44	1150 – 72	1400 – 96	1500 – 80
Liq. pipe diameter	Ø (")	3/8	3/8	3/8	3/8	3/8	3/8
Gas pipe diameter	Ø (")	1/2	1/2	1/2	5/8	3/4	3/4
Ext. dimens. (length x width x height)	mm	870x394x630	870x394x630	870x394x630	870x394x630	920x394x730	920x394x730
Int. dimens. (length x width x height)	mm	726x555x218	925x660x280	925x660x280	925x660x280	925x660x280	925x660x280
Total dist. in./out. units	m	50	50	50	50	50	50
Vertical in./out. unit dist. (1)	m	25	25	25	25	25	25
Net weight – outdoor	Kg	50	53	53	54	58	63
Net weight – indoor	Kg	31	37	37	39	43	44

1) For greater distances we recommend installing an oil separator
Voltage for indoor unit 230.1 Sortz

DXCZ/FTZ TECHNICAL SPECIFICATIONS

OUTDOOR MODEL		371	401	451	501	701	721
INDOOR MODEL		371	401	451	501	721	721
Nominal cooling capacity	kW	11.0	11.8	13.5	14.8	17.2	19.0
Nominal cooling capacity	R.T.	3.1	3.4	3.8	4.2	4.9	5.4
Total power input	kW	4.3	4.6	5.4	5.7	7.3	7.8
Power supply (50 Hz ~)	V	400.3	400.3	400.3	400.3	400.3	400.3
Airflow – static pressure	m^3/h – Pa	2200 – 96	2300 – 80	2400 – 94	2500 – 76	3000 – 140	3000 – 140
Liq. pipe diameter	Ø (")	1/2	1/2	1/2	1/2	1/2	1/2
Gas pipe diameter	Ø (")	3/4	3/4	7/8	7/8	7/8	7/8
Ext. dimens. (length x width x height)	mm	950x374x1143	950x374x1143	950x374x1143	950x374x1143	950x374x1143	950x374x1143
Int. dimens. (length x width x height)	mm	1250x750x315	1250x750x315	1250x750x315	1250x750x315	1250x805x369	1250x805x369
Total in./out. unit dist. (1)	m	50	50	50	50	50	50
Vertical in./out. unit dist. (1)	m	25	25	25	25	25	25
Net weight – outdoor	Kg	82	82	101	101	115	120
Net weight – indoor	Kg	59	59	61	61	71	71

1) For greater distances we recommend installing an oil separator
Voltage for indoor unit 230.1 Sortz

DXCBZ/FTBZ TECHNICAL SPECIFICATIONS

OUTDOOR MODEL		171	201	221	251	271	351
INDOOR MODEL		171	201	221	251	271	351
Nominal cooling capacity	kW	4.7	5.3	6.3	7.0	7.7	9.8
Nominal cooling capacity	R.T.	1.3	1.5	1.8	2.0	2.2	2.8
Nominal heating capacity	kW	4.8	5.8	6.5	7.8	8.3	10.4
Total power input – cooling	kW	1.9	2.1	2.7	3.0	3.0	3.9
Total power input – heating	kW	1.9	2.0	2.3	2.6	2.6	3.7
Power supply (50 Hz ~)	V	230.1	230.1	230.1	230.1	230.1 or 400.3+N	230.1 or 400.3+N
Airflow – static pressure	m^3/h – Pa	700 – 32	1100 – 44	1100 – 44	1150 – 72	1400 – 96	1500 – 80
Liq. pipe diameter	Ø (")	3/8	3/8	3/8	3/8	3/8	3/8
Gas pipe diameter	Ø (")	1/2	1/2	1/2	5/8	3/4	3/4
Ext. dimens. (length x width x height)	mm	870x394x630	870x394x630	870x394x630	870x394x630	920x394x730	920x394x730
Int. dimens. (length x width x height)	mm	726x555x218	925x660x280	925x660x280	925x660x280	925x660x280	925x660x280
Total in./out. unit dist. (1)	m	50	50	50	50	50	50
Vertical in./out. unit dist. (1)	m	25	25	25	25	25	25
Net weight – outdoor	Kg	53	56	56	58	62	68
Net weight – indoor	Kg	31	37	37	39	43	44
OUTDOOR MODEL		371	401	451	501	701	721
INDOOR MODEL		371	401	451	501	721	721
Nominal cooling capacity	kW	11.0	11.8	13.5	14.8	16.8	18.6
Nominal cooling capacity	R.T.	3.1	3.4	3.8	4.2	4.8	5.3
Nominal heating capacity	kW	12.0	12.8	14.0	15.3	19.8	20.7
Total power input – cooling	kW	4.3	4.6	5.4	5.7	7.3	7.8
Total power input – heating	kW	3.7	4.1	4.9	5.0	6.7	7.5
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Airflow – static pressure	m^3/h – Pa	2200 – 96	2300 – 80	2400 – 94	2500 – 76	3000 – 140	3000 – 140
Liq. pipe diameter	Ø (")	1/2	1/2	1/2	1/2	1/2	1/2
Gas pipe diameter	Ø (")	3/4	3/4	7/8	7/8	7/8	7/8
Ext. dimens. (length x width x height)	mm	950x374x1143	950x374x1143	950x374x1143	950x374x1143	950x374x1143	1035x424x1335
Int. dimens. (length x width x height)	mm	1250x750x315	1250x750x315	1250x750x315	1250x750x315	1250x805x369	1250x805x369
Total dist. in./out. units	m	50	50	50	50	50	50
Vertical in./out. unit dist. (1)	m	25	25	25	25	25	25
Net weight – outdoor	Kg	89	89	109	109	130	135
Net weight – indoor	Kg	59	59	61	61	71	71

(1) For distances over 25 m we recommend installing an oil separator Voltage for indoor unit 230.1 50 Hz ~

OPTIONS AVAILABLE

ENERGY SAVING

Head pressure control by frequency converter or voltage converter

AIR QUALITY

Gravimetric filter in return G4

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Indoor unit equipment and accessories painted in RAL 1013 polyester powder coating

Connections on rear, outdoor unit.

Magnetothermics in electrical panel

Power supply at 60Hz and voltages

230, 208, etc. (depending on models)

Option of manufacturing units with symmetric configuration

Anti-freeze heater for condenser in tray

Fireproof filter class M0

Thermoacoustic insulation class M0

Hot gas bypass

Discharge plenum and return

Grille discharge plenum and return

3 and 5 outlet nozzle plenum

Condensate evacuation pump

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

Anti-corrosion treatment in piping with galval type coating

Prepared for disassembly
- Oil separator
- No refrigerant and no flare valves

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indircation

Split filter

REGULATION AND CONTROL

Pressure switches

Operation for three phase evaporator

ARIA thermostat

PGD thermostat

Infrared remote control

SUPER SI thermostat (man. 24 V)

DSX@ thermostat (man. 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Wall mounted ambient temperature sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult Thermostat chapter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

DUCTABLE INDOOR UNITS
ADVANCE
AXIAL CONDENSER

AXCZ "Dual"
Cooling only
AXCBZ "Dual"
Heat pump

FTZ
Cooling only
FTBZ
Heat pump

Maximum flexibility for air conditioning through ducts of commercial premises

AXCZ/AXCBZ "Dual"

FTZ/FTBZ

The units in the AXCZ/FTZ and AXCBZ/FTBZ DUAL series are sets comprising a two-circuit axial condenser unit, in general not the same, and two direct expansion fan coil evaporator units. The reduced height of the indoor units make them ideal for fast installation in false ceilings, with the unit either supported or suspended.

MAIN FEATURES

- Cooling capacities ranging from 10.8 to 15.8 kW
- Outdoor units with standard blue fin pre-treated coils
- 3-speed indoor fan
- Maximum connection distances between indoor and outdoor units of 50 metres.
- ETN thermostat

AXCZ "Dual"/FTZ TECHNICAL SPECIFICATIONS

OUTDOOR MODEL		ACXZ 402	ACXZ 442	ACXZ 452	ACXZ 472	ACXZ 502	ACXZ 542
INDOOR MODEL		FTZ 201+201	FTZ 221+221	FTZ 201+251	FTZ 221+251	FTZ 251+251	FTZ 271+271
Nominal cooling capacity	kW	5.4 + 5.4	6.0 + 6.0	5.4 + 7.4	6.0 + 7.4	7.4 + 7.4	7.9 + 7.9
Nominal cooling capacity	R.T.	1.5 + 1.5	1.7 + 1.7	1.5 + 2.1	1.7 + 2.1	2.1 + 2.1	2.2 + 2.2
Total power input	kW	4.2	4.4	4.7	4.8	5.14 – 5.06	5.38 – 5.46
Power supply (50 Hz ~)	V	230.1	230.1	230.1	230.1	230.1 or 400.3+N	230.1 or 400.3+N
Airflow	m^3/h -m^3/h	1100 – 1100	1100 – 1100	1100 – 1150	1100 – 1150	1150 – 1150	1400 – 1400
static pressure	Pa	44	44	44 – 72	44 – 72	72 – 72	96 – 96
Liq. pipe diameter	Ø (")	3/8 – 3/8	3/8 – 3/8	3/8 – 3/8	3/8 – 3/8	3/8 – 3/8	3/8 – 3/8
Gas pipe diameter	Ø (")	1/2 – 1/2	1/2 – 1/2	1/2 – 5/8	1/2 – 5/8	5/8 – 5/8	3/4 – 3/4
Ext. dimens. (length x width x height)	mm	950x407x1349	950x407x1349	950x407x1349	950x407x1349	950x407x1349	950x407x1349
In. dimens. (length x width x height)	mm	See FTBZ models	See FTBZ models	See FTBZ models	See FTBZ models	See FTBZ models	See FTBZ models
Total dist. in./out. units	m	50	50	50	50	50	50
Vertical dist. in./out. units	m	25	25	25	25	25	25
Net weight – outdoor	Kg	131	135	138	139	141	176
Net weight – indoor	Kg	37 + 37	37 + 37	37 + 39	37 + 39	39 + 39	43 + 43

AXCBZ "Dual"/FTBZ TECHNICAL SPECIFICATIONS

OUTDOOR MODEL		ACXBZ 402	ACXBZ 442	ACXBZ 452	ACXBZ 472	ACXBZ 502	ACXBZ 542
INDOOR MODEL		FTBZ 201+201	FTBZ 221+221	FTBZ 201+251	FTBZ 221+251	FTBZ 251+251	FTBZ 271+271
Nominal cooling capacity	kW	5.2 + 5.2	6.0 + 6.0	5.2 + 7.0	6.0 + 7.0	7.0 + 7.0	7.5 + 7.5
Nominal cooling capacity	R.T.	1.5 + 1.5	1.7 + 1.7	1.5 + 2.0	1.7 + 2.0	2.0 + 2.0	2.1 + 2.1
Nominal heating capacity	kW	6.2 + 6.2	6.6 + 6.6	6.2 + 8.1	6.6 + 8.1	8.1 + 8.1	8.3 + 8.3
Total power input – cooling	kW	4.2	4.4	4.7	4.8	5.14 – 5.06	5.38 – 5.46
Total power input – heating	kW	3.6	3.7	4.0	4.0	4.40 – 4.32	4.60 – 4.64
Power supply (50 Hz ~)	V	230.1	230.1	230.1	230.1	230.1 – 400.3+N	230.1 – 400.3+N
Airflow	m^3/h-m^3/h	1100 – 1100	1100 – 1100	1100 – 1150	1100 – 1150	1150 – 1150	1400 – 1400
static pressure	Pa	44	44	44 – 72	44 – 72	72 – 72	96 – 96
Liq. pipe diameter	Ø (")	3/8 – 3/8	3/8 – 3/8	3/8 – 3/8	3/8 – 3/8	3/8 – 3/8	3/8 – 3/8
Gas pipe diameter	Ø (")	1/2 – 1/2	1/2 – 1/2	1/2 – 5/8	1/2 – 5/8	5/8 – 5/8	3/4 – 3/4
Ext. dimens. (length x width x height)	mm	950x407x1349	950x407x1349	950x407x1349	950x407x1349	950x407x1349	950x407x1349
Int. dimens. (length x width x height)	mm	See FTBZ models	See FTBZ models	See FTBZ models	See FTBZ models	See FTBZ models	See FTBZ models
Total dist. in./out. units	m	50	50	50	50	50	50
Vertical dist. in./out. units	m	25	25	25	25	25	25
Net weight – outdoor	Kg	137	141	143	145	148	182
Net weight – indoor	Kg	37 + 37	37 + 37	37 + 39	37 + 39	39 + 39	43 + 43

Voltage for indoor unit 230.1 50 Hz ~

OPTIONS AVAILABLE

ENERGY SAVING

Compressor soft-start (depending on models)

Head pressure control by frequency converter or voltage converter

AIR QUALITY

Gravimetric filter in return G4

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Indoor unit equipment and accessories painted in RAL 1013 polyester powder coating

Connections on rear, outdoor unit

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc. (depending on models)

Anti-freeze heater for condenser in tray

Fireproof filter class M0

Thermo-acoustic insulation class M0

Hot gas bypass

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

Anti-corrosion treatment in piping with galval type coating

No refrigerant and no flare valves

Discharge plenum and return

Grille discharge plenum and return

3 and 5 outlet nozzle plenum

Condensate evacuation pump

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indication

Split filter

REGULATION AND CONTROL

Pressure switches

High pressure switch auto-reset

Operation for three phase evaporator

ETN thermostat

ARIA thermostat

PGD thermostat

Infrared remote control

SUPER SI thermostat (man. 24 V)

DSX@ thermostat (man. 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Ambient temperature wall sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult

Thermostat chapter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

HEAT RECOVERY **UNITS**

HIGH EFFICIENCY. BASIC LINE

Optimisation of the performance of the air-conditioning facilities

RCAH

RCAH units are static heat recovery units that can be combined with air-cooled or water-cooled air conditioning systems to provide significant energy savings.

MAIN FEATURES

- Airflow rates ranging from 500 to 6000 m^3/h
- Exchanger of crossed flows in aluminium, with Eurovent certification
- Reduction of consumptions with a minimum thermal recovery of 50%
- 3 versions available:
  - RCAH Efficiency over 50%
  - RCAH AE Efficiency over 90%
  - RCAH RCF With built-in R410A refrigerated circuit
- Unit available in horizontal or vertical configuration
- Multiple air supply and return options
- Easy accessibility and maintenance of components
- Double panel with insulation structure
- G4 filters included

RCAH TECHNICAL SPECIFICATIONS

MODEL		5	10	20	30	40
Maximum airflow	m^3/h	500	1000	2000	3200	4300
available static pressure	Pa	155	125	130	160	180
Efficiency	%	58.7	56.4	50.0	53.8	54.6
Recovered capacity	kW	2.4	4.7	8.3	14.3	19.5
Power supply (50 Hz ~)	V	230.1	230.1	230.1	230.1	400.3
Maximum input current	A	1.4	3.0	7.8	11.4	6.6
Sound level at 1 m	dB (A)	51.0	52.0	58.0	59.0	62.0
Dimensions (length x width x height)	mm	750x750x295	900x900x410	1000x1000x470	1300x1300x530	1400x1400x705
Weight	Kg	41	68	99	155	235

MODEL		50	60
Maximum airflow	m^3/h	5000	6000
available static pressure	Pa	99	188
Efficiency	%	53.8	53.1
Recovered capacity	kW	22.4	26.5
Power supply (50 Hz ~)	V	400.3	400.3
Maximum input current	A	11.2	10.8
Sound level at 1 m	dB (A)	63.7	64.5
Dimensions (length x width x height)	mm	1700x1350x705	1900x1450x755
Weight	Kg	235	273

Performance referring to entry of renewal air at -5ºC (80% RH) and temperature of the extracted air at 20ºC (50% RH)
Maximum fan speed

RCAH AE TECHNICAL SPECIFICATIONS

MODEL		5	10	15	20
Maximum airflow	m^3/h	500	1000	1500	2000
available static pressure	Pa	85	130	150	215
Efficiency	%	90.0	90.1	90.1	90.0
Recovered capacity	kW	4.1	8.2	12.3	16.3
Power supply (50 Hz ~)	V	230.1	230.1	230.1	230.1
Maximum input current	A	3.0	6.2	14.2	11.4
Sound level at 1 m	dB (A)	52.0	55.0	60.0	59.0
Dimensions (length x width x height)	mm	1150x860x385	1450x1230x410	1700x1230x490	1700x1230x630
Weight	Kg	75	120	175	220

Performance referring to entry of renewal air at -7ºC (80% RH) and temperature of the extracted air at 20ºC (55% RH)
Maximum fan speed

RCAH RCF TECHNICAL SPECIFICATIONS

MODEL		10	15	20	25
Maximum airflow	m^3/h	900	1400	2000	2600
discharge static pressure	Pa	225	154	187	179
return static pressure	Pa	184	122	130	148
Efficiency (1)	%	46.7	44.6	49.2	47.8
Total cooling capacity (1)	kW	5.4	8.2	12.2	15.0
EER (1)	W/W	2.8	2.6	2.6	2.9
Efficiency (2)	%	54.0	51.4	56.9	55.2
Total heating capacity (2)	kW	8.8	13.7	21.0	26.5
COP (2)	W/W	6.1	5.6	5.7	5.9
Power supply (50 Hz ~)	V	230.1	230.1	230.1	400.3
Maximum input current	A	14.6	21.6	36.3	22.6
Sound level at 1 m	dB (A)	55.0	52.0	59.0	58.0
Dimensions (length x width x height)	mm	1450x1230x470	1450x1230x470	1700x1560x530	1700x1560x530
Weight	Kg	212	225	258	258

MODEL		30	40
Maximum airflow	m^3/h	3300	4000
discharge static pressure	Pa	211	159
return static pressure	Pa	153	133
Efficiency (1)	%	48.8	47.8
Total cooling capacity (1)	kW	20.6	23.5
EER (1)	W/W	2.9	2.8
Efficiency (2)	%	56.4	55.2
Total heating capacity (2)	kW	35.1	40.4
COP (2)	W/W	6.0	5.6
Power supply (50 Hz ~)	V	400.3	400.3
Maximum input current	A	26.9	24.8
Sound level at 1 m	dB (A)	58.0	62.0
Dimensions (length x width x height)	mm	1900x1700x705	1900x1700x705
Weight	Kg	305	315

(1) Performance referring to entry of renewal air at 32ºC (50% RH) and temperature of the extracted air at 26°C (50% RH)
(2) Performance referring to entry of renewal air at -5ºC (80% RH) and temperature of the extracted air at 20°C (50% RH)

OPTIONS AVAILABLE

ENERGY SAVING
Brushless Fans
Adiabatic cooling kit

AIR QUALITY
Filters F6-F7-F8
Air quality control

UNIT INSTALLATION
By-pass.
Electric heater
Hot water heating coil
(indoor or outdoor)
Cold water cooling coil
3-way valve with actuator
Constant flow rate control
Clogged filter indication
Circular opening
Flexible gasket
Anti-freeze thermostat
Outdoor installation kit

REGULATION AND CONTROL
On/off control and 3-speed switch.
Remote temperature sensor
Basic electronic control
Advanced electronic control

Versions for other climates
Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

B ROOF TOP **AIR-TO-AIR**

Roof Top standard version axial fans	Page 38
Roof Top standard version axial fans RCF cooling recovery	Page 40
Roof Top standard version centrifugal fans	Page 42
Roof Top standard version centrifugal fans RCF cooling recovery	Page 44
Roof Top standard version MINI centrifugal fans	Page 46

ROOF TOP UNITS

AXIAL FANS

Roof top solutions for high flow rates, flexible and adaptable for each project

EUROVENT CERTIFIED PERFORMANCE

RXCA
Cooling only

RXCBA
Heat pump

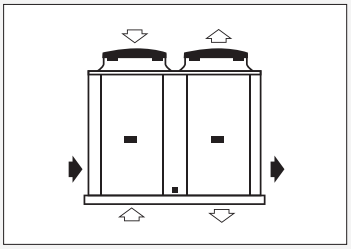
The RXCA-RXCBA series units are self-contained compact rooftop units that are specially designed for installation on rooftops, roof terraces or in any other outdoor location with air distributed treated in ducts.

MAIN FEATURES

- Cooling capacities ranging from 40.7 to 192.3 kW
- Scroll Compressors
- Maximum partialisation up to 9 stages according to models
- Maximum air quality and comfort. Option to install F type high efficiency filters (F6 to F9)
- 3 versions available: standard (STD), with gas burner module (GAS) and the special high ambient temperature version (ATA)
- Thermostats and controls supplied as standard for units with electromagnetic regulation
  ARIA – models 1602 to 4502
  PGD – models 5002 to 6002

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

◗ standard ◇ optional



RXCA/RXCBA TECHNICAL SPECIFICATIONS

MODEL		1402	1602	2002	2402	3002
Nominal cooling capacity	kW	40.7	46.2	61.2	71.5	84.5
Nominal cooling capacity	R.T.	11.6	13.1	17.4	20.3	24.0
Nominal heating capacity	kW	42.2	48.6	63.4	74.6	87.5
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
EER	kW/kW	2.7	2.7	2.7	2.8	3.0
COP	kW/kW	3.0	3.0	3.0	3.1	3.3
Cooling energy rating (1)		C	C	C	C	B
Heating energy rating (1)		D	D	D	C	B
Airflow – static pressure	m^3/h – Pa	7800-100	9500 – 100	12318 – 135	14075 – 115	14980 – 115
Dimensions (length x width x height)	mm	2702x2300x1647	2702x2300x1647	2702x2300x1647	2702x2300x1832	2702x2300x2010
Net weight	Kg	1200	1200	1236	1250	1300

(1) according to EUROVENT

HITECSA COOL AIR

RXCA/RXCBA TECHNICAL SPECIFICATIONS

MODEL		3502	4002	4502	5002	6002
Nominal cooling capacity	kW	105.2	115.0	142.6	162.0	192.3
Nominal cooling capacity	R.T.	29.9	32.7	40.5	46.1	54.7
Nominal heating capacity	kW	109.8	120.0	148.7	167.8	199.4
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
EER	kW/kW	2.9	3.1	2.9	3.0	2.9
COP	kW/kW	3.6	3.5	3.2	3.3	3.3
Cooling energy rating (1)		B	A	B	B	B
Heating energy rating (1)		A	A	C	B	B
Airflow – static pressure	m^3/h – Pa	17901 – 125	20258-125	25083 – 125	28100 – 150	32800 – 175
Dimensions (length x width x height)	mm	4800x2100x1872	4800x2100x1872	4800x2100x1872	4800x2100x2222	4800x2100x2222
Net weight	Kg	2200	2210	2240	2600	2710

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with two or three dampers

Thermal or enthalpy regulation with PCO control card and PGD control

Compressor soft-start

Soft-start of the indoor and/or outdoor fan

Heat recovery of cooling units (R-404a, etc.)

EC plugfan type indoor fan

EC type axial fans

Head pressure control by voltage converter

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

Outdoor module for F Filters on rail

New air supply damper

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

Outdoor section fans low sound level

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Option of manufacturing units with symmetric configuration

Upgraded motors

Control of indoor flow when the filters clog up (with EC plugfan type indoor fan)

Anti-freeze heater for condenser in tray

Bottom indoor air discharge

Top indoor air discharge

Rear indoor air discharge (with EC plugfan fans)

Bottom indoor air return

Top indoor air return

Fireproof filter class M0

Thermo-acoustic insulation class M0

Gas burner

Hot gas bypass

Double speed condensation control models 1402/3502

All or nothing condensation control in one fan models 4002/4502

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

Prepared for disassembly

Roof curb

Condensation fan with pressure available

RCCBA with centrifuge condensation fan

Condensation tray in outdoor section

Protective grille in outdoor section exchangers

Drip Separator

MAINTENANCE

Service valves

Pressure gauges outdoors to read pressures

External Schrader valves for pressure test

Clogged filter indication

REGULATION AND CONTROL

PGD thermostat

DSX@ thermostat (requires operation 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Ambient temperature wall sensor

Return temperature sensor (ARIA)

Temperature sensor in duct

Air quality sensor

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult Thermostat chapter

Option for customising software with specific functions for the customer

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

ROOF TOP UNITS

AXIAL FANS
HEAT RECOVERY

Roof top solution with cooling recovery. Maximum performance in the minimum space

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

RXCA RCF
Cooling only

RXCBA RCF
Heat pump

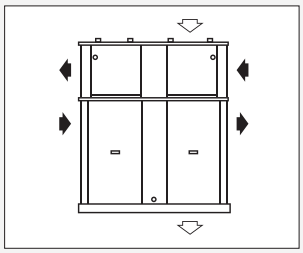
The RXCA/RXCBA RCF series units are self-contained compact rooftop units that are specially designed for installation on rooftops, roof terraces or in any other outdoor location with air distributed treated in ducts. The heat recovery system uses an additional cooling circuit as a heat exchanger. This purpose of this new circuit is to transfer the energy from the exhaust air to the new ventilation air.

MAIN FEATURES

- Cooling capacities ranging from 53.1 to 233.4 kW
- Scroll Compressors
- Maximum partialisation up to 9 stages according to models
- Maximum air quality and comfort. Option to install F type high efficiency filters (F6 to F9)
- 3 versions available: with cooling heat recovery (RCF), with gas burner module (GAS) and special high ambient temperature version (ATA)
- Thermostat – PGD

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

◗ standard ◇ optional



RXCA RCF / RXCBA RCF TECHNICAL SPECIFICATIONS

MODEL		1402	1602	2002	2402	3002
Total cooling capacity	kW	53.1	60.6	75.4	92.3	101.9
Main circuit cooling capacity	kW	40.2	46.6	58.9	71.1	80.2
Recovery circuit cooling capacity	kW	12.9	14.0	16.5	21.2	21.7
Total cooling capacity	R.T.	15.1	17.2	21.4	26.2	29.0
Main circuit cooling capacity	R.T.	11.4	13.2	16.7	20.2	22.8
Recovery circuit cooling capacity	R.T.	3.7	4.0	4.7	6.0	6.2
Total heating capacity	kW	55.7	60.1	76.9	93.1	105.5
Main circuit heating capacity	kW	43.8	47.2	61.7	72.5	85.1
Recovery circuit heating capacity	kW	11.9	12.9	15.2	20.6	20.4
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
EER		2.9	2.9	2.8	2.9	3.0
COP		3.4	3.4	3.2	3.2	3.3
Cooling energy rating (1)		B	B	C	B	B
Heating energy rating (1)		B	B	C	C	B
Airflow	m^3/h	7,800	9,500	12,318	14,075	14,980
Available discharge pressure	Pa	100	100	135	115	115
Available return pressure	Pa	75	85	85	85	85
Dimensions (length x width x height)	mm	2702x2300x2175	2702x2300x2175	2702x2300x2175	2702x2300x2360	2702x2300x2540
Net weight	Kg	1420	1425	1475	1540	1604

RXCA RCF / RXCBA RCF TECHNICAL SPECIFICATIONS

MODEL		3502	4002	4502	5002	6002
Total cooling capacity	kW	125.1	141.4	178.9	202.9	233.4
Main circuit cooling capacity	kW	100.5	110.4	141.3	160.9	190.9
Recovery circuit cooling capacity	kW	24.6	31.0	37.6	42.0	42.5
Total cooling capacity	R.T.	35.6	40.2	50.9	57.7	66.4
Main circuit cooling capacity	R.T.	28.6	31.4	40.2	45.7	54.3
Recovery circuit cooling capacity	R.T.	7.0	8.8	10.7	11.9	12.1
Total heating capacity	kW	130.6	146.9	179.8	202.9	233.9
Main circuit heating capacity	kW	106.7	116.7	144.5	163.1	193.8
Recovery circuit heating capacity	kW	23.9	30.2	35.3	39.8	40.1
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
EER		3.3	3.1	3.0	3.1	3.0
COP		3.7	3.5	3.3	3.4	3.3
Cooling energy rating (1)		A	A	B	A	B
Heating energy rating (1)		A	A	B	B	B
Airflow	m^3/h	17,901	20,258	25,083	28,100	32,800
Available discharge pressure	Pa	125	125	125	150	175
Available return pressure	Pa	70	85	85	85	100
Dimensions (length x width x height)	mm	4800x2100x2410	4800x2100x2410	4800x2100x2410	4800x2100x2760	4800x2100x2760
Net weight	Kg	2650	2780	2820	3450	3480

OPTIONS AVAILABLE

ENERGY SAVING

Thermal or enthalpy regulation for incorporated free cooling with PCO control card and PGD control

Compressor soft-start

Soft-start of indoor and/or outdoor fan

Head pressure control by frequency converter

Heat recovery of cooling units (R-404a, etc.)

EC plugfan type indoor fan

EC type axial fans

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

Outdoor module for F Filters on rail

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

Outdoor section fans low sound level

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Option of manufacturing units with symmetric configuration

Upgraded motors

Indoor flow rate control when the filters clog up

Anti-freeze heater for condenser in tray

Bottom indoor air discharge

Rear indoor air discharge (with EC plugfan fans)

Top indoor air return

Fireproof filter class M0

Thermo-acoustic insulation class M0

Gas burner

Hot gas bypass

Double speed condensation control models 1402/3502

All or nothing condensation control in one fan models 4002/4502

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

Prepared for disassembly

Roof curb

Condensation fan with pressure available

RCCBA with centrifuge condensation fan

Condensation tray in outdoor section

Protective grille in outdoor section exchangers

Drip separator

MAINTENANCE

Service valves

Pressure gauges outdoors to read pressures

External Schrader valves for pressure test

Clogged filter indication

REGULATION AND CONTROL

PGD thermostat

DSX@ thermostat

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Ambient temperature wall sensor

Return temperature sensor

Temperature sensor in duct

Air quality sensor

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult Thermostat chapter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

ROOF TOP UNITS

CENTRIFUGAL FANS

RCCA
Cooling only

RCCBA
Heat pump

Shopping centres, multiplex cinemas, large department stores, etc.

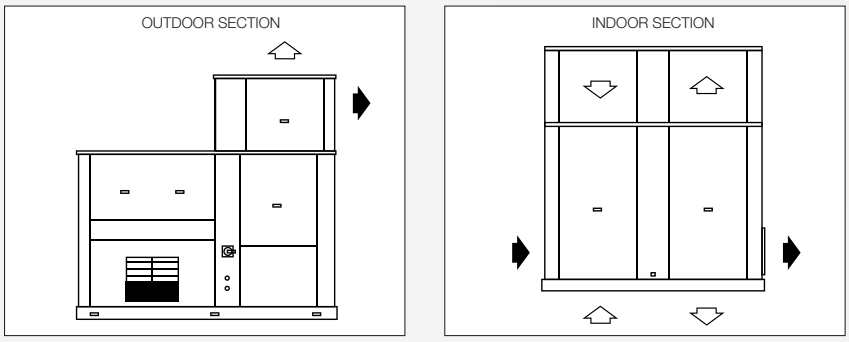
The RCCA/RCCBA series units are self-contained compact roof top units with centrifugal fans on the two sections, suitable for indoor installation. Air distribution is channelled through ducts.

MAIN FEATURES

- Cooling capacities ranging from 40.7 to 84.5 kW
- Scroll Compressors
- Maximum partialisation up to 4 stages according to models
- Maximum air quality and comfort. Option to install F type high efficiency filters (F6 to F9)
- 3 versions available: standard (STD), with gas burner module (GAS) and the special high ambient temperature version (ATA)
- Standard thermostats and controls for standard units with electromechanical regulation
  ARIA – models 1402 to 3002

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

◗ standard ◗ optional



RCCA/RCCB TECHNICAL SPECIFICATIONS

MODEL		1402	1602	2002	2402	3002
Nominal cooling capacity	kW	40.7	46.2	61.2	71.5	84.5
Nominal cooling capacity	R.T.	11.6	13.1	17.4	20.3	24.0
Nominal heating capacity	kW	42.2	48.6	63.4	74.6	87.5
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
EER	kW/kW	2.7	2.6	2.6	2.7	2.8
COP	kW/kW	2.9	2.8	2.9	3.0	3.2
Cooling energy rating		C	D	D	C	C
Heating energy rating		D	D	D	D	C
Airflow – Static pressure	m3/h – Pa	7800-100	9500 – 100	12318 – 135	14075 – 115	14980 – 115
Dimensions (length x width x height)	mm	2702x2300x2185	2702x2300x2185	2702x2300x2185	2702x2300x2390	2702x2300x2550
Net weight	Kg	1500	1500	1536	1550	1600

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with two or three dampers

Thermal or enthalpy regulation with PCO control card and PGD control

Compressor soft-start

Soft-start of the indoor and/or outdoor fan

Heat recovery of cooling units (R-404a, etc.)

Head pressure control by frequency converter.

EC plugfan type indoor fan

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

Outdoor module for F Filters on rail

New air supply damper

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Option of manufacturing units with symmetric configuration

Upgraded motors

Indoor flow rate control when the filters clog up

Anti-freeze heater for condenser in tray

Bottom indoor air discharge

Top indoor air discharge

Rear indoor air discharge (with EC plugfan fans)

Bottom indoor air return

Top indoor air return

Fireproof filter class M0

Gas burner (essential PGD thermostat)

Thermo-acoustic insulation class M0

Hot gas bypass

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

Prepared for disassembly

Roof curb

Condensation fan with higher pressure available

Protective grille in outdoor section exchangers

Drip separator

MAINTENANCE

Service valves

Pressure gauges outdoors to read pressures

External Schrader valves for pressure test

Clogged filter indication

REGULATION AND CONTROL

PGD thermostat

DSX@ thermostat (with man. 24 V)

SUPER SI thermostat (with man. 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Ambient temperature wall sensor

Return temperature sensor

Temperature sensor in duct

Air quality sensor

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult Thermostat chapter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

ROOF TOP UNITS

CENTRIFUGAL FANS HEAT RECOVERY

Shopping centres, multiplex cinemas, large department stores, etc.

EUROVENT CERTIFIED PERFORMANCE

RCCA RCF
Cooling only

RCCBA RCF
Heat pump

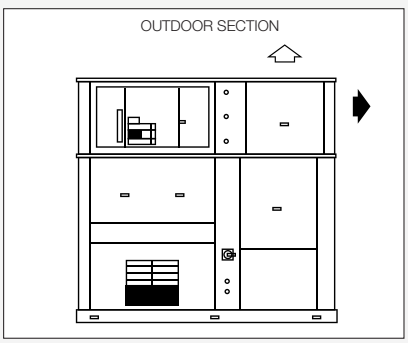
The RCCA/RCCBA RCF series units are self-contained compact roof top units with centrifugal fans on the two sections, suitable for indoor installation. Air distribution is channelled through ducts. The heat recovery system uses an additional cooling circuit as a heat exchanger. This purpose of this new circuit is to transfer the energy from the exhaust air to the new ventilation air.

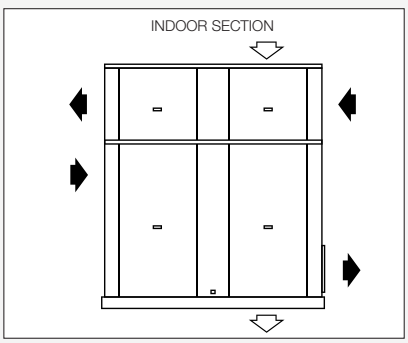
MAIN FEATURES

- Cooling capacities ranging from 53.1 to 101.9 kW
- Scroll Compressors
- Maximum partialisation up to 4 stages according to models
- Maximum air quality and comfort. Option to install F type high efficiency filters (F6 to F9)
- 3 versions available: with cooling heat recovery (RCF), with gas burner module (GAS) and special high ambient temperature version (ATA)
- Thermostat – PGD (all models)

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

standard optional





RCCA/RCCB TECHNICAL SPECIFICATIONS

MODEL		1402	1602	2002	2402	3002
Total cooling capacity	kW	53.1	60.6	75.4	92.3	101.9
Main circuit cooling capacity	kW	40.2	46.6	58.9	71.1	80.2
Recovery circuit cooling capacity	kW	12.9	14.0	16.5	21.2	21.7
Total cooling capacity	R.T.	15.1	17.2	21.4	26.2	29.0
Main circuit cooling capacity	R.T.	11.4	13.2	16.7	20.2	22.8
Recovery circuit cooling capacity	R.T.	3.7	4.0	4.7	6.0	6.2
Total heating capacity	kW	55.7	60.1	76.9	93.1	105.5
Main circuit heating capacity	kW	43.8	47.2	61.7	72.5	85.1
Recovery circuit heating capacity	kW	11.9	12.9	15.2	20.6	20.4
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
EER	kW/kW	2.9	2.9	2.8	2.9	3.0
COP	kW/kW	3.3	3.3	3.1	3.1	3.2
Cooling energy rating		B	B	C	B	B
Heating energy rating		B	B	C	C	C
Airflow	m^3/h	7,800	9,500	12,318	14,075	14,980
Available discharge pressure	Pa	100	100	135	115	115
Available return pressure	Pa	75	85	85	85	85
Dimensions (length x width x height)	mm	2702x2300x2185	2702x2300x2185	2702x2300x2185	2702x2300x2390	2702x2300x2550
Net weight	Kg	1720	1725	1775	1840	1904

OPTIONS AVAILABLE

ENERGY SAVING

Thermal or enthalpy regulation for incorporated free cooling with PCO control card and PGD control

Compressor soft-start

Soft-start of the indoor and/or outdoor fan

Heat recovery of cooling units (R-404a, etc.)

Head pressure control by frequency converter.

EC plugfan type indoor fan

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

Outdoor module for F Filters on rail

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Option of manufacturing units with symmetric configuration

Upgraded motors

Indoor flow rate control when the filters clog up

Anti-freeze heater for condenser in tray

Bottom indoor air discharge

Rear indoor air discharge (with EC plugfan fans)

Top indoor air return

Fireproof filter class M0

Thermo-acoustic insulation class M0

Gas Burner (essential PGD thermostat)

Hot gas bypass

Hot water heating coils

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

Prepared for disassembly

Roof curb

Condensation fan with pressure available

Protective grille in outdoor section exchangers

Drip separator

MAINTENANCE

Service valves

Pressure gauges outdoors to read pressures

External Schrader valves for pressure test

Clogged filter indication

REGULATION AND CONTROL

PGD thermostat

DSX@ thermostat (with man. 24 V)

SUPER SI thermostat (with man. 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

Ambient temperature wall sensor

Temperature sensor in duct

Air quality sensor

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult Thermostat chapter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

ROOF TOP TYPE UNITS

MINI CENTRIFUGAL FANS

RCAZ
Cooling only

RCABZ
Heat pump

Roof top solutions for high flow rates, flexible and adaptable for each project

EUROVENT CERTIFIED PERFORMANCE

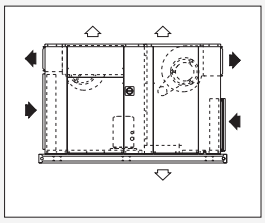
The RCAZ/RCABZ series units are self-contained compact roof top units with centrifugal fans on the two sections, suitable for indoor installation. Air distribution is channelled through ducts.
For use in shopping centres, multiplex cinemas, large department stores, etc.

MAIN FEATURES

- Cooling capacities ranging from 29.7 to 70 kW
- Thermostats and controls supplied as standard for units with electromagnetic regulation SUPER SI (man. 24 V)- all models

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

standard optional



RCAZ TECHNICAL SPECIFICATIONS

MODEL		1001	1201	1401	1501
Total cooling capacity	kW	30.0	35.0	37.2	44.4
Total cooling capacity	R.T.	8.5	10.0	10.6	12.6
Total power input	kW	13.6	16.3	16.5	19.3
Power supply (50 Hz ~)	V	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N
Airflow (in.-out.)	m^3/h	7000 – 10500	8000 – 12500	8000 – 12500	9000 – 14000
indoor static pressure	Pa	82	85	85	110
outdoor static pressure	Pa	65	50	60	80
Dimensions (length x width x height)	mm	1733x2132x1350	1733x2132x1350	1733x2132x1350	1733x2132x1350
Net weight	Kg	710	740	765	780

MODEL		2002	2302	2402
Total cooling capacity	kW	60.0	67.0	72.0
Total cooling capacity	R.T.	17.1	19.1	20.5
Total power input	kW	25.5	27.9	31.3
Power supply (50 Hz ~)	V	230.3 or 400.3+N	400.3+N	230.3 or 400.3+N
Airflow (in.-out.)	m^3/h	11000 – 18000	12000 – 18500	12000 – 18500
indoor static pressure	Pa	190	190	190
outdoor static pressure	Pa	60	78	78
Dimensions (length x width x height)	mm	2184x2312x1462	2184x2312x1462	2184x2312x1462
Net weight	Kg	930	939	955

RCABZ TECHNICAL SPECIFICATIONS

MODEL		1001	1201	1402	1502
Total cooling capacity	kW	29.7	35.0	36.4	44.2
Total cooling capacity	R.T.	8.4	10.0	10.3	12.6
Total heating capacity	kW	31.7	37.0	38.6	46.6
Total power input – cooling	kW	14.1	16.6	16.5	20.0
Total power input – heating	kW	12.2	14.2	14.3	16.9
Power supply (50 Hz ~)	V	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N
Airflow (in.-out.)	m^3/h	7000 – 10500	8000 – 12500	8000 – 13600	10000 – 15600
indoor static pressure	Pa	82	85	85	125
outdoor static pressure	Pa	65	50	80	100
Dimensions (length x width x height)	mm	1733x2132x1350	1733x2132x1350	2075x2262x1350	2075x2262x1350
Net weight	Kg	715	745	792	807
MODEL		**1602**	**2002**	**2302**	**2402**
Total cooling capacity	kW	45.4	59.4	66.0	70.0
Total cooling capacity	R.T.	12.9	16.9	18.8	19.9
Total heating capacity	kW	48.8	63.4	70.0	74.0
Total power input – cooling	kW	20.2	26.4	28.7	31.1
Total power input – heating	kW	17.4	22.2	25.0	26.4
Power supply (50 Hz ~)	V	230.3 or 400.3+N	230.3 or 400.3+N	400.3+N	230.3 or 400.3+N
Airflow (in.-out.)	m^3/h	10000 – 16000	11000 – 22000	12000 – 23000	12000 – 23000
indoor static pressure	Pa	125	190	190	190
outdoor static pressure	Pa	90	120	135	135
Dimensions (length x width x height)	mm	2075x2262x1350	2776x2175x1600	2776x2175x1600	2776x2175x1600
Net weight	Kg	815	1150	1200	1250

HITECSA recommends the installation of an anti-freeze heater in the water collection tray for ambient temperatures of less than 5°C.

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with two or three dampers

Thermal or enthalpy regulation with PCO control card and PGD control

Compressor soft-start

Fan soft-start indoor and/or outdoor fan

Indoor EC radial fan (depending on models)

Head pressure control by frequency converter

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

Option of fresh air supply damper

Air quality sensor

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Air discharge bottom evaporator

Air discharge top evaporator

Air discharge top condenser

Protection grille in outdoor exchanger

Outdoor installation kit

Upgraded motors

Anti-freeze resistance operation in collection tray

Fireproof filter class M0

Thermo-acoustic insulation class M0

Hot gas bypass

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indication

Condenser filter

Split filter

REGULATION AND CONTROL

ARIA thermostat

PGD thermostat

DSX@ thermostat (man. 24 V)

HoneyWell T8376B thermostat (man. 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Wall mounted ambient temperature sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult Thermostat chapter

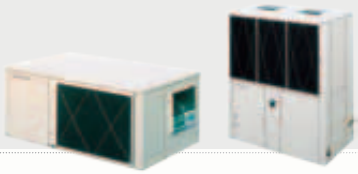
Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

C

SELF-CONTAINED
WATER-TO-AIR UNITS

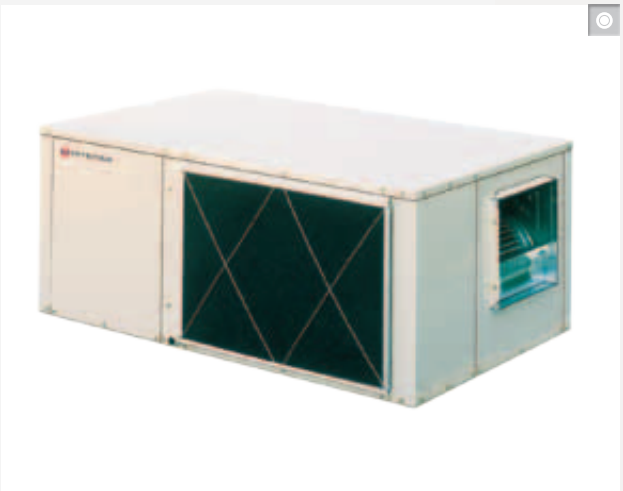


WATER/AIR compact horizontal exchanger COAXIAL	Page 50
WATER/AIR compact horizontal exchanger PLATES	Page 52
AIR/AIR compact vertical exchanger COAXIAL	Page 54
WATER/WATER compact vertical PLATES exchanger	Page 56

SELF-CONTAINED
WATER-TO-AIR UNITS
COMPACT HORIZONTAL SELF-CONTAINED UNITS

WCHZ
Cooling only
WCHBZ
Heat pump

Robust and adaptable solutions for facilities by ENERGY LOOP



The WCHZ/WCHBZ series are self-contained horizontal units equipped with a water-cooled coaxial condenser, suitable for connection to a network of air distribution ducts.

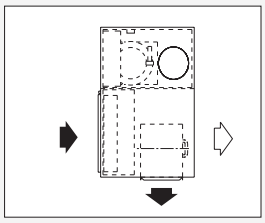
HITECSA recommends installing units with coaxial condensers given their great robustness for possible impurities in the circuit.

MAIN FEATURES

- Cooling capacities ranging from 6.4 to 25.1 kW
- Coaxial condenser
- Airflows up to 4,600 m^3/h
- Easy access to inside the unit for maintenance
- Reduced dimensions
- T-8376B thermostat

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

◗ standard ◗ optional



WCHZ (cooling only) TECHNICAL SPECIFICATIONS

MODEL		201	251	271	351	401
Nominal cooling capacity	kW	6.4	8.1	9.0	11.3	13.4
Nominal cooling capacity	R.T.	1.8	2.3	2.6	3.2	3.8
Total power input – cooling	kW	2.1	2.7	2.7	3.3	4.4
Power supply (50 Hz ~)	V	230.1	230.1	230.1 or 400.3+N	230.1- 230.3 o 400.3+N	230.3 or 400.3+N
Airflow – static pressure	m^3/h – Pa	1500 – 58	1600 – 55	2000 – 77	2300 – 86	2400 – 94
Water connections	Ø (")	1/2	1/2	1/2	1/2	3/4
Dimensions (length x width x height)	mm	990x520x425	1080x657x484	1200x750x484	1200x750x484	1280x850x542
Net weight	Kg	87	104	123	130	147

MODEL		501	701	721	751
Nominal cooling capacity	kW	16.6	20.6	22.2	25.1
Nominal cooling capacity	R.T.	4.7	5.9	6.3	7.1
Total power input – cooling	kW	5.2	6.6	6.2	7.7
Power supply (50 Hz ~)	V	230.3 or 400.3+N	400.3+N	230.3 or 400.3+N	230.3 or 400.3+N
Airflow – static pressure	m^3/h – Pa	3500 – 70	4300 – 80	4500 – 75	4600 – 120
Water connections	Ø (")	3/4	1	1	1
Dimensions (length x width x height)	mm	1400x900x542	1600x1030x630	1600x1030x630	1600x1030x630
Net weight	Kg	160	240	259	259

WCHBZ (heat pump) TECHNICAL SPECIFICATIONS

MODEL		201	251	351	401	501
Nominal cooling capacity	kW	6.0	8.1	11.1	13.0	16.5
Nominal cooling capacity	R.T.	1.7	2.3	3.2	3.7	4.7
Nominal heating capacity	kW	6.9	9.1	12.6	16.0	19.6
Total power input – cooling	kW	1.9	2.6	3.4	4.3	5.1
Total power input – heating	kW	1.8	2.5	3.2	4.2	5.0
Power supply (50 Hz ~)	V	230.1	230.1 or 400.3+N	230.1-230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N
Airflow – static pressure	m^3/h – Pa	1500 – 58	2000 – 55	2300 – 86	2400 – 94	3500 – 70
Water connections	Ø (")	1/2	1/2	1/2	3/4	3/4
Dimensions (length x width x height)	mm	1080x675x484	1200x750x484	1200x750x484	1280x850x542	1400x900x542
Net weight	Kg	104	130	130	160	185

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with two or three dampers (depending on models)

Thermal or enthalpy regulation with PCO control card and PGD control

Compressor soft-start (depending on models)

Fan soft-start (depending on models)

EC radial indoor fan (depending on models)

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Differential pressure switch

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Outdoor installation kit

Upgraded motors

Anti-freeze heater for condenser in tray

Fireproof filter class M0

Hot gas bypass

Pressostatic valve

Inverted intake or discharge

Base guides

Hot water heating coil

Electric resistance coils for auxiliary electrical heating

Anti-corrosion pre-treated coils

Seawater condenser

Without water condenser

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indication

Split filter

Pressure gauges

REGULATION AND CONTROL

ETN thermostat

ARIA thermostat

PGD thermostat

DSX@ thermostat

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Wall mounted ambient temperature sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult Thermostat chapter.

Versions for other climates

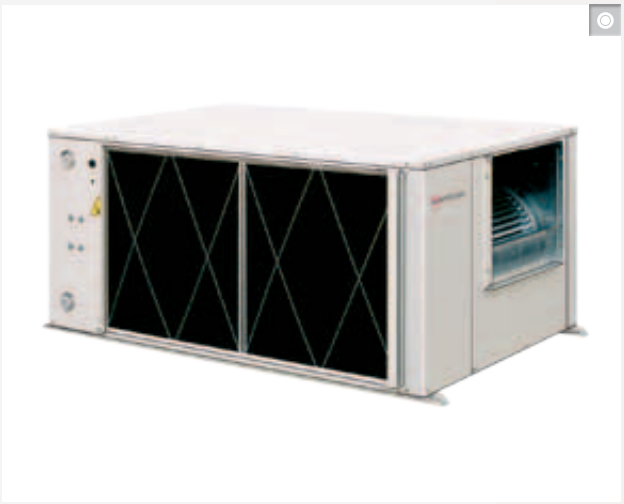
Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

SELF-CONTAINED
WATER-TO-AIR UNITS
COMPACT HORIZONTAL SELF-CONTAINED UNITS

WPHZ
Cooling only
WPHBZ
Heat pump

Robust and adaptable solutions for facilities by ENERGY LOOP



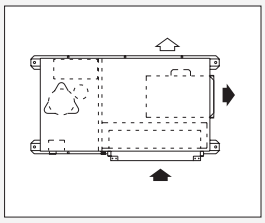
The WPHZ/WPHBZ series are self-contained horizontal units equipped with a water-cooled plate heat exchanger, suitable for connection to a network of air distribution ducts.

MAIN FEATURES

- Cooling capacities ranging from 2.7 to 40.5 kW
- Plate condenser
- Airflow of up to 8,000 m3/h
- Easy access to inside the unit for maintenance
- Thermostats and controls supplied as standard for units with electromagnetic regulation:
  ETN (all models)

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

◗ standard ◗ optional



WPHZ/WPHBZ TECHNICAL SPECIFICATIONS

MODEL		091	121	141	171
Nominal cooling capacity	kW	2.7	3.5	4.1	5.2
Nominal cooling capacity	R.T.	0.8	1.0	1.2	1.5
Nominal heating capacity	kW	3.2	4.1	4.8	6.1
Total power input – cooling	kW	1.0	1.2	1.3	1.6
Total power input – heating	kW	1.2	1.5	1.6	1.8
Power supply (50 Hz ~)	V	230.1	230.1	230.1	230.1
Airflow – static pressure	m^3/h – Pa	500 – 13	550 – 26	900 – 17	1200 – 110
Water connections	Ø (")	1/2	1/2	1/2	3/4
Dimensions (length x width x height)	mm	1055x560x385	1055x560x385	1055x560x385	1055x560x470
Net weight	Kg	79	80	82	85
MODEL		**201**	**251**	**351**	**401**
Nominal cooling capacity	kW	6.4	8.1	11.9	13.4
Nominal cooling capacity	R.T.	1.8	2.3	3.4	3.8
Nominal heating capacity	kW	7.6	9.6	14.0	15.8
Total power input – cooling	kW	1.8	2.4	3.7	4.3
Total power input – heating	kW	2.0	2.5	3.8	4.4
Power supply (50 Hz ~)	V	230.1	230.1	230.1-400.3+N	400.3+N
Airflow – static pressure	m^3/h – Pa	1500 – 58	2000 – 55	2300 – 86	2400 – 94
Water connections	Ø (")	3/4	3/4	3/4	1
Dimensions (length x width x height)	mm	1055x560x470	1135x670x530	1135x670x530	1135x670x530
Net weight	Kg	87	104	115	120

WPHZ/WPHBZ TECHNICAL SPECIFICATIONS

MODEL		501	701	751	1001	1201
Nominal cooling capacity	kW	16.6	20.6	25.1	35.4	40.5
Nominal cooling capacity	R.T.	4.7	5.9	7.1	10.1	11.5
Nominal heating capacity	kW	19.6	24.8	30.1	41.8	49.6
Total power input – cooling	kW	4.8	6.4	8.3	11.0	13.4
Total power input – heating	kW	5.0	6.6	8.6	11.3	13.8
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Airflow – static pressure	m^3/h – Pa	3500 – 70	4300 – 80	4800 – 100	5800 – 86	8000 – 85
Water connections	Ø (")	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2
Dimensions (length x width x height)	mm	1385x940x620	1385x940x620	1385x940x620	1600x1040x690	1600x1040x690
Net weight	Kg	160	200	225	275	290

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with two or three dampers

Thermal or enthalpy regulation with PCO control card and PGD control

Compressor soft-start (depending on models)

Fan soft-start (depending on models)

EC radial indoor fan (depending on models)

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Option of manufacturing units with symmetric configuration

Rear air discharge

Differential pressure switch

Water shut-off electrovalves

Outdoor installation kit

Upgraded motors

Fireproof filter class M0

Thermo-acoustic insulation class M0

Hot gas bypass

Water regulating pressostatic valve

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

Prepared for disassembly

Without water condenser

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indication

Split filter

REGULATION AND CONTROL

ARIA thermostat

PGD thermostat

SUPER SI thermostat (man. 24 V)

HoneyWell T8376B thermostat (man. 24 V)

Eberle thermostat 7007 (man. 24 V)

DSX@ thermostat (man. 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Wall mounted ambient temperature sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult Thermostat chapter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

SELF-CONTAINED
WATER-TO-AIR UNITS
COMPACT VERTICAL SELF-CONTAINED UNITS

WCVZ
Cooling only
WCVBZ
Heat pump

Robust and adaptable solutions for facilities by ENERGY LOOP

The WCVZ/WCVBZ series are self-contained vertical units equipped with a water-cooled coaxial condenser, suitable for connection to a network of distribution ducts.

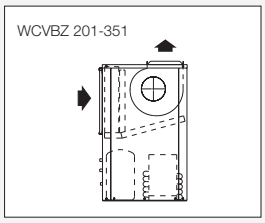
HITECSA recommends installing units with coaxial condensers given their great robustness for possible impurities in the circuit.

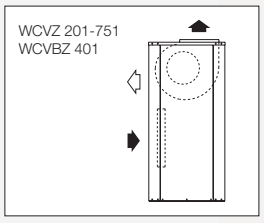
MAIN FEATURES

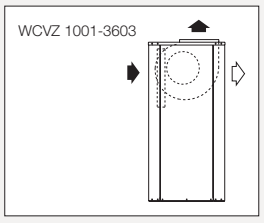
- Cooling capacities ranging from 6.0 to 120 kW
- Coaxial condenser
- Airflow rates of up to 21,500 m³/h
- Easy access to inside the unit for maintenance
- Reduced dimensions
- Thermostats and controls supplied as standard for units with electromagnetic regulation.
  T8376B (depending on models)
  SUPER SI (depending on models)

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

◗ standard ◗ optional







WCVZ (cooling only) TECHNICAL SPECIFICATIONS

MODEL		201	251	271	351	401	501
Nominal cooling capacity	kW	6.4	8.1	9.0	11.9	13.4	16.6
Nominal cooling capacity	R.T.	1.8	2.3	2.6	3.4	3.8	4.7
Total power input – cooling	kW	1.7	2.1	2.3	3.3	3.5	4.5
Power supply (50 Hz ~)	V	230.1	230.1	230.1 or 400.3+N	230.1-230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N
Airflow – static pressure	m³/h – Pa	1500 – 58	2000 – 55	2000 – 77	2300 – 86	2400 – 94	3500 – 70
Water connections	Ø (")	1/2	1/2	1/2	1/2	1/2	3/4
Dimensions (length x width x height)	mm	628x440x1060	720x550x1200	720x550x1200	720x550x1200	780x550x1350	1140x600x1700
Net weight	Kg	105	134	134	141	160	245

MODEL		701	721	751	1001	1201	1002
Nominal cooling capacity	kW	20.6	23.0	25.1	35.4	40.5	35.6
Nominal cooling capacity	R.T.	5.9	6.5	7.1	10.1	11.5	10.1
Total power input – cooling	kW	5.4	5.9	6.3	9.8	11.2	9.7
Power supply (50 Hz ~)	V	400.3+N	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N
Airflow – static pressure	m³/h – Pa	4300 – 80	4500 – 75	4800 – 100	7400 – 70	8200 – 80	7300 – 87
Water connections	Ø (")	1	1	1	2	2	2
Dimensions (length x width x height)	mm	1140x600x1700	1140x600x1700	1140x600x1700	1700x870x1600	1700x870x1600	1700x870x1600
Net weight	Kg	252	252	258	445	472	470

WCVZ (cooling only) TECHNICAL SPECIFICATIONS

MODEL		1402	1502	2002	2402	3003	3603
Nominal cooling capacity	kW	41.2	50.2	70.8	81.0	105.0	120.0
Nominal cooling capacity	R.T.	11.7	14.3	20.1	23.0	29.9	34.1
Total power input – cooling	kW	11.3	13.7	19.7	22.4	28.9	33.3
Power supply (50 Hz ~)	V	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N	230.3 or 400.3+N
Airflow – static pressure	m^3/h – Pa	8200 – 80	9000 – 110	11000 – 190	12000 – 190	18000 – 270	21500 – 190
Water connections	Ø (")	2	2	2	2	2	2
Dimensions (length x width x height)	mm	1700x870x1600	1700x870x1600	1700x980x1950	1700x980x1950	2307x1157x2062	2307x1157x2062
Net weight	Kg	515	525	645	706	968	1060

WCVBZ (heat pump) TECHNICAL SPECIFICATIONS

MODEL		201	251	351	401
Nominal cooling capacity	kW	6.0	8.1	11.0	13.0
Nominal cooling capacity	R.T.	1.7	2.3	3.1	3.7
Nominal heating capacity	kW	6.9	9.1	12.6	16.0
Total power input – cooling	kW	1.8	2.5	3.3	3.8
Total power input – heating	kW	1.8	2.4	3.2	3.8
Power supply (50 Hz ~)	V	230.1	230.1 or 400.3+N	230.1-230.3 or 400.3+N	230.3 or 400.3+N
Airflow – static pressure	m^3/h – Pa	1500 – 58	2000 – 55	2300 – 86	2400 – 94
Water connections	Ø (")	1/2	1/2	1/2	1/2
Dimensions (length x width x height)	mm	601x625x1000	601x625x1000	601x625x1000	780x550x1350
Net weight	Kg	105	134	141	165

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with two or three dampers

Thermal or enthalpy regulation with PCO control card and PGD control

Compressor soft-start (depending on models)

Fan soft-start (depending on models)

EC radial indoor fan (depending on models)

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Magnetothermics on electric panel

Power supply at 60Hz and voltages 230, 208, etc.

Outdoor installation kit

Upgraded motors

Anti-freeze heater for condenser tray

Fireproof filter class M0

Hot gas bypass

Water regulating pressostatic

More compact WCVSZ units

WCVCZ units for heating swimming pools

Hot water heating coils (only WCVZ models – cooling only)

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

Front discharge (mod. 201/751)

Rear discharge (mod. 1001/3603)

Without water condenser

Seawater condenser

Without compressor

Discharge plenum

Intake grille

Filter in insertable return

Base guides

Pressure gauges

Differential pressure switch

Prepared for disassembly

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indication

Split filter

REGULATION AND CONTROL

ETN thermostat

ARIA thermostat

PGD thermostat

DSX@ thermostat

SUPER SI thermostat

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Wall mounted ambient temperature sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult Thermostat chapter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

SELF-CONTAINED
WATER-TO-AIR UNITS
COMPACT VERTICAL SELF-CONTAINED UNITS

Robust and adaptable solutions for facilities by ENERGY LOOP

WPVZ
Cooling only
WPVBZ
Heat pump

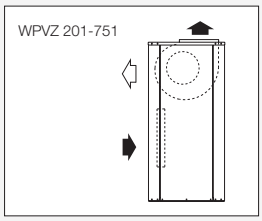
The WPVZ/WPVBZ series are self-contained vertical units equipped with water-cooled plate heat exchangers (one or two depending on the model), suitable for connection to a network of air distribution ducts.

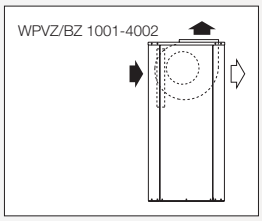
MAIN FEATURES

- Cooling capacities ranging from 8.1 to 132 kW
- Plate condenser
- Airflow of up to 21,500 m3/h
- Easy access to inside the unit for maintenance
- Thermostats and controls supplied as standard for units with electronic regulation
  ETN- models 251-1501
  ARIA- models 2002-4002

POSSIBLE AIR SUPPLY / RETURN CONFIGURATIONS

standard optional





WPVZ/WPVBZ TECHNICAL SPECIFICATIONS

MODEL		251	351	401	501
Nominal cooling capacity	kW	8.1	11.9	13.4	16.6
Nominal cooling capacity	R.T.	2.3	3.4	3.8	4.7
Nominal heating capacity	kW	9.6	14.0	15.8	19.6
Total power input – cooling	kW	2.4	3.7	4.2	4.8
Total power input – heating	kW	2.5	3.8	4.4	4.9
Power supply (50 Hz ~)	V	230.1	230.1 or 400.3+N	400.3+N	400.3+N
Airflow – static pressure	m^3/h – Pa	2000 – 55	2300 – 86	2400 – 94	3500 – 70
Water connections	Ø (")	3/4	1	1	1 1/4
Dimensions (length x width x height)	mm	720x650x1230	720x650x1230	780x650x1380	1140x700x1730
Net weight	Kg	139	146	166	251
MODEL		**701**	**751**	**1001**	**1201**
Nominal cooling capacity	kW	21.0	25.5	35.4	42.0
Nominal cooling capacity	R.T.	6.0	7.3	10.1	11.9
Nominal heating capacity	kW	24.8	30.1	41.8	49.6
Total power input – cooling	kW	6.4	8.3	11.0	13.4
Total power input – heating	kW	6.6	8.6	11.3	13.8
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N
Airflow – static pressure	m^3/h – Pa	4300 – 80	4800 – 100	7400 – 70	8200 – 80
Water connections	Ø (")	1 1/4	1 1/2	1 1/2	1 1/2
Dimensions (length x width x height)	mm	1140x700x1730	1140x700x1730	1790x870x1630	1790x870x1630
Net weight	Kg	258	265	450	478

WPVZ/WPVBZ TECHNICAL SPECIFICATIONS

MODEL		1501	2002	2402	3002	4002
Nominal cooling capacity	kW	54.0	70.8	84.0	108.0	132.0
Nominal cooling capacity	R.T.	15.4	20.1	23.9	30.7	37.5
Nominal heating capacity	kW	63.7	83.5	99.1	127.4	155.8
Total power input – cooling	kW	15.9	22.6	26.5	35.0	43.0
Total power input – heating	kW	16.4	23.3	27.3	36.0	44.3
Power supply (50 Hz ~)	V	400.3+N	400.3+N	400.3+N	400.3+N	400.3+N
Airflow – static pressure	m^3/h – Pa	9000 – 110	11000 – 190	12000 – 190	18000 – 270	21500 – 190
Water connections	Ø (")	1 1/2	1 1/2	1 1/2	2	2
Dimensions (length x width x height)	mm	1790x870x1630	1790x980x1980	1790x980x1980	2404x1157x2092	2404x1157x2092
Net weight	Kg	515	650	711	973	1065

OPTIONS AVAILABLE

ENERGY SAVING

Option of mixing module for free cooling with two or three dampers

Thermal or enthalpy regulation with PCO control card and PGD control

Compressor soft-start (depending on models)

Fan soft-start (depending on models)

EC radial fan (depending on models)

AIR QUALITY

Gravimetric filter in return G4

Opacimetric filter in return class F6 to F9 (combinable with a G4 or Fx+Fy)

SOUND LEVEL

Double thermo-acoustic insulation

Compressor sound jacket

UNIT INSTALLATION

Magnetothermics in electrical panel

Power supply at 60Hz and voltages 230, 208, etc.

Option of manufacturing units with symmetric configuration

Outdoor installation kit

Upgraded motors

Fireproof filter class M0

Thermo-acoustic insulation class M0

Filter in insertable return

Differential pressure switch

Intake grille

Without water condenser

Water regulating pressostatic valve

Rear discharge (mod. 1001-4002)

Front discharge (mod. 201-751)

Discharge plenum

Hot gas bypass

Hot water heating coil

Electric resistance coils for auxiliary electric heating

Anti-corrosion pre-treated coils

Prepared for disassembly

MAINTENANCE

Service valves

External Schrader valves for pressure test

Clogged filter indication

Split filter

REGULATION AND CONTROL

ARIA thermostat

PGD thermostat

SUPER SI thermostat (man. 24 V)

HoneyWell T8376B thermostat (man. 24 V)

Eberle thermostat 7007 (man. 24 V)

DSX@ thermostat (man. 24 V)

Alarm indication

Smoke detection

ON/OFF remote

Separate electrical panel

Option of master-slave operation

High pressure switch reset from thermostat

Unit without thermostat

Wall mounted ambient temperature sensor

Return temperature sensor

Temperature sensor in duct

Operation for redundant machine

Centralised integrated management operation

Operation without neutral

Scheduling function and Modbus connection, etc. consult Thermostat chapter

Versions for other climates

Versions for other power supplies

As well as these options consult our Commercial Department for any other configuration or function not described as available.

F

REGULATION AND CONTROL

For AIR-TO-AIR and WATER-TO-AIR self-contained unit range	Page 98
For INVERTER, AIR-TO-AIR self-contained unit range	Page 99
For ROOF TOP AND WATER-TO-AIR SELF-CONTAINED unit range	Page 99
For ROOF TOP AND AIR-TO-AIR SELF-CONTAINED unit range	Page 99
For Krono Series water chiller units	Page 100
Centralised Management System and BMS	Page 101
Supervision System (BMS) Plant Visor	Page 103
Hydrofan System	Page 105

REGULATION AND CONTROL

For AIR-TO-AIR and WATER-TO-AIR
self-contained unit range

RTR 7035 THERMOSTAT

Operation at 220 V at 24 V
One cool stage and one heat stage
ON/OFF selector
Temperature control dial
Ventilation selection
COOL / HEAT selection
Wall mounted

T8376B THERMOSTAT

Analogue thermostat
Operation at 24 V
One cool stage and one heat stage
ON/OFF selector
Temperature control dial
Ventilation selection
COOL / HEAT selection
Wall mounted

SUPER-SI CONTROL

Digital thermostat with LCD screen
Operation at 24 V
Hot / cold / automatic selector
Fan speed selector
For units with 1 or 2 compressors
Cooling only and heat pump
1 or 2 resistance stages
Contact window/economy function
Indoor/outdoor sensor (remote)

DSX@

Digital thermostat with LCD screen
Operation at 24 V
Hot /cold / automatic selector
Fan speed selector
For machines with 1 or 2 compressors
Cooling only and heat pump
1 or 2 resistance stages
Scheduling function
Indoor/outdoor sensor (remote)
Integrated Modbus protocol communications output

ETN

Digital thermostat with LCD screen
Operation at 220 V
Hot /cold / automatic selector
Fan speed selector
Option of scheduling function (programmable ETN)
Temperature regulation range: 10ºC to 30ºC Includes all the control and protection functions of the unit
For units with heat pump or only cooling with option of one electric heater stage
Wall mounted

For **INVERTER, AIR-TO-AIR**
self-contained range units

th TUNE

Thermostat comprising a user interface terminal installed in the environment, and a input and output board (uPC) located on the outdoor unit (electric panel). For INVERTER R410A, AIR-TO-AIR units

For units with 1 inverter compressor

Cooling only and heat pump

Power supply at 220 V

Selection of 3 speeds of the indoor fan or automatic

1 electric resistance stage (only active in defrost) Control sensor in return (remote)

Parameterisable thermostat, with 3 access levels: User, Maintenance, Manufacturer

Option of Modbus communications protocol using RS-485 card

For **SELF-CONTAINED ROOF TOP AND WATER-TO-AIR**
unit range

ARIA

Thermostat comprising a user interface terminal installed in the environment, and a input and output board located on the outdoor unit (electric panel). For AIR-TO-AIR or WATER-TO-AIR units

For units with 1 or 2 compressors

Cooling only and heat pump

2 heat stages

Control sensor configurable in environment or in return (remote)

Parameterisable thermostat, with 3 access levels:
User, Maintenance, Manufacturer

Scheduling function

(model: PROGRAMMABLE ARIA)

Option of interconnection units in network: model ARIA pLAN (refer to Centralised management systems section)

Output with Modbus, BackNet, Lonworks communication protocols, via supernode gateway and the card of the used protocol

For **SELF-CONTAINED ROOF TOP AND WATER-TO-AIR**
unit range

pGD (with PCOC, PCOC3 control cards)

Thermostat comprising a user interface terminal installed in the environment, and a input and output board (PCOC, PCO3) located on the outdoor unit (electric panel). Only for AIR-TO-AIR units

For units with 1 or 2 compressors

Cooling only and heat pump

Control of 2 or 3 electric resistance stages, heat valve and gas burner module

Option of adapting and modifying the internal software to meet specific customer needs and functions

Option of interconnecting units in a network (refer to Centralised Management Systems section)

Several options available: clock card for function scheduling, cards available for Modbus, BacNet, Lonworks, TCP-IP... communication protocols.

FOR **WATER CHILLER UNITS**

serie KRONO

MICROCHILLER 2

Thermostat typically used for AIR-TO-WATER or WATER-TO-WATER water chiller units. Made up of only one set that is used as a user interface and electronic board

For units
with 1 or 2 compressors

Cooling only and heat pump

Management of the recirculation pump and inertia module

Scheduling function

Parameterisable thermostat, with 3 access levels: User, Maintenance, Manufacturer

Option of interconnecting units in a network (refer to Centralised Management Systems section)

Option of output Modbus communication protocol via communication card

DN33

Thermostat typically used for AIR-TO-WATER or WATER-TO-WATER water chiller units. Made up of only one set that is used as a user interface and electronic board.

For units
with up to 4 compressors.

Cooling only
and heat pump.

Scheduling function

Management of the heat pump and inertia module.

Parameterisable thermostat, with 3 access levels: User, Maintenance, Manufacturer

Option of output Modbus communication protocol via communication card

MCX08

Parameterisable thermostat typically used for R410A refrigerant AIR-TO-WATER or WATER-TO-WATER water chiller units. Made up of only one set that is used as a user interface and electronic board

For units
of up to 4 compressors

Cooling only and heat pump

Management of the recirculation pump and inertia module

Scheduling function

Parameterisable thermostat, with 3 access levels: User, Maintenance, Manufacturer

Option of interconnecting units in a network (refer to Centralised Management Systems section)

Option of output Modbus communication protocol via communication card

CENTRALISED MANAGEMENT SYSTEM AND BMS

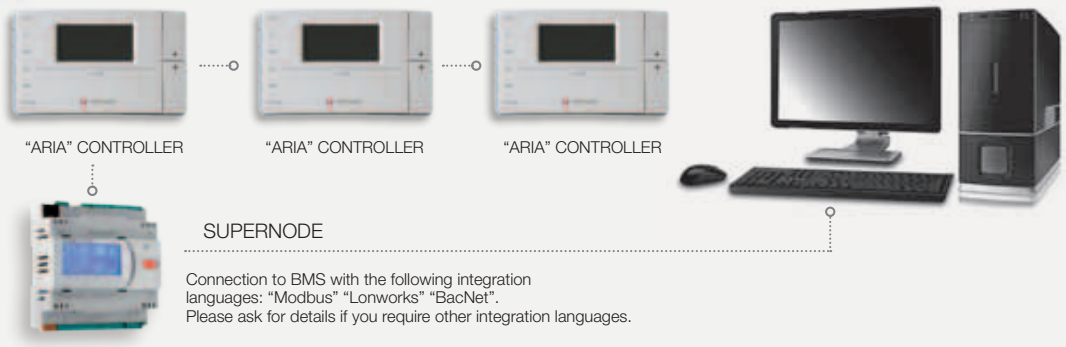
Centralised control for units with Aria pLAN thermostat

Network up to 15 units

Centralised management for an ARIA pLAN unit network, via a PGD control

Network of 15-40 units

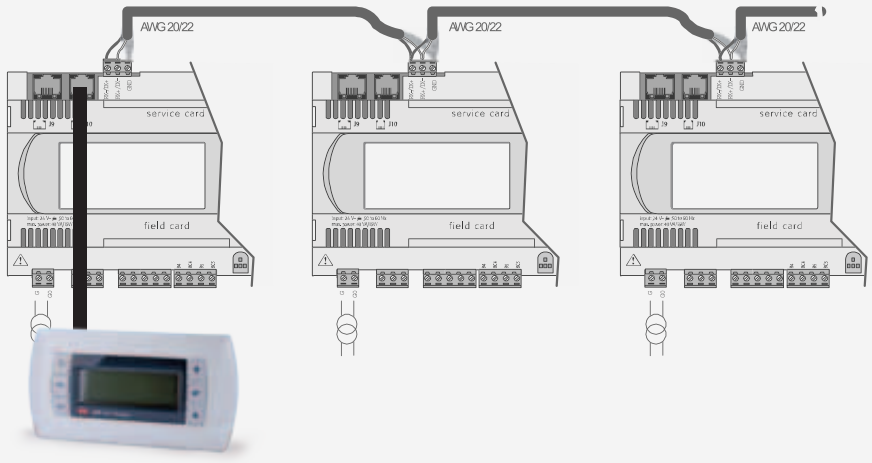
Centralised management for an ARIA pLAN unit network, via a PGD control



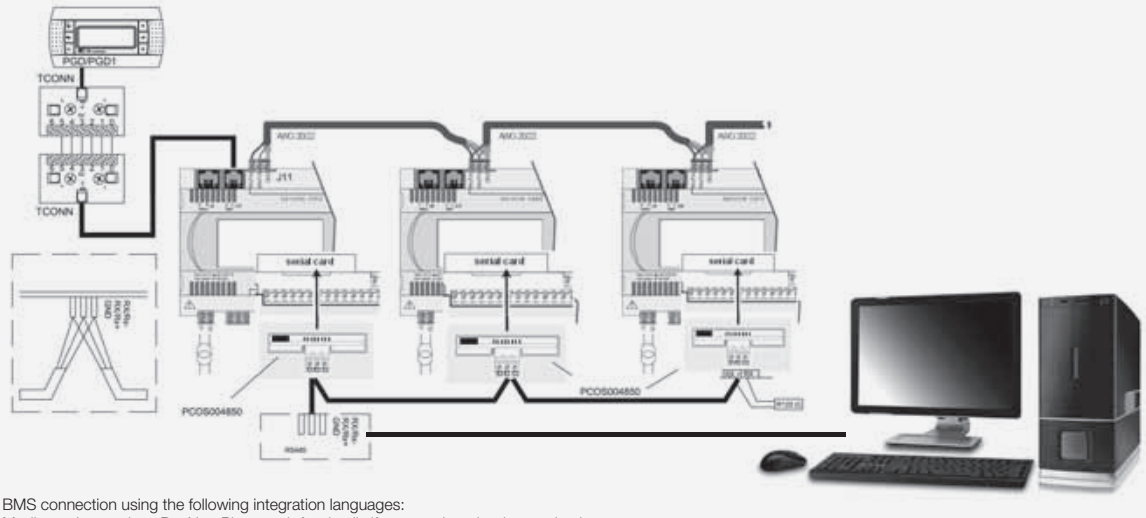
Connection to BMS with the following integration languages: “Modbus” “Lonworks” “BacNet”.
Please ask for details if you require other integration languages.

Centralised control for units with PGD thermostat and PCOC, PCO3 boards

Connection of several units using the pLAN network belonging to the PCOC, PCO3 board. Each of the machines connected in a network can be accessed from a single PGD thermostat. Maximum of 15 connection units.



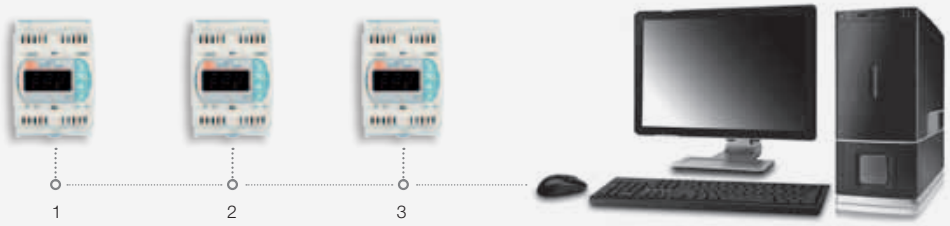
Connection of several units with PCOC, PCO3 cards via RS-485 cards towards a supervision system.



BMS connection using the following integration languages:
Modbus – Lonworks – BacNet. Please ask for details if you require other integration languages.

Centralised control for units with MICROCHILLER 2 thermostat

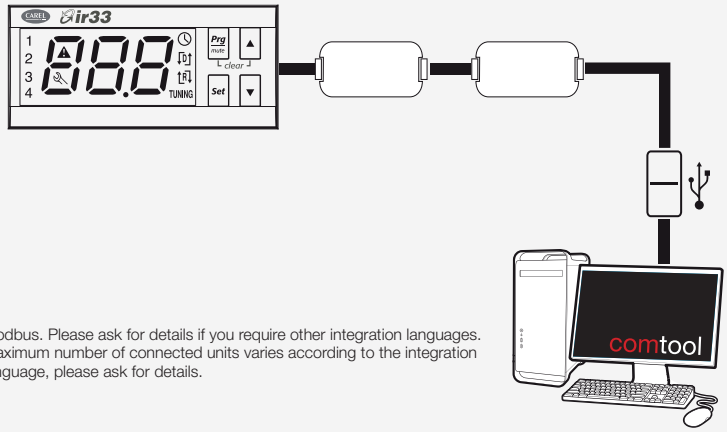
Output towards BMS supervision system via FCSER cards.



BMS connection using the following integration languages: Modbus. Please ask for details if you require other integration languages.
Maximum number of connected units varies according to the integration language, please ask for details.

Centralised control for units with DN33 thermostat

Output towards BMS supervision system using specific RS-485 card for DN33.



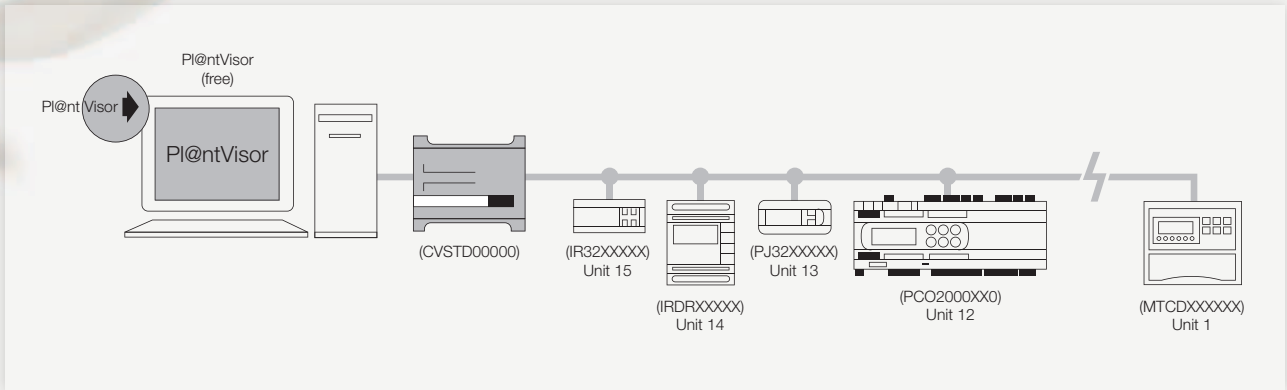
Modbus. Please ask for details if you require other integration languages.
Maximum number of connected units varies according to the integration language, please ask for details.

SUPERVISION SYSTEM (BMS) PLANT VISOR

Carel supervision and monitoring system designed to control facilities.
All thermostats with MODBUS output can be integrated via RS-485.

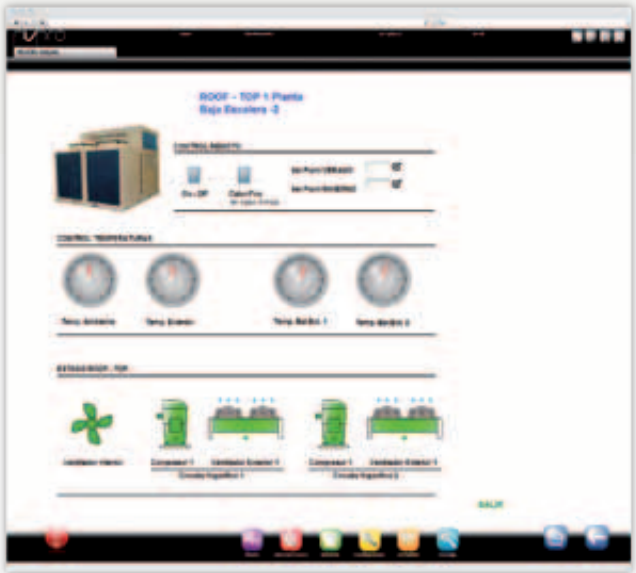
Main features:

Monitoring functions with visual and graphic elements
User management for access control and operations registration
Management of configurable reports
Alarm management
Local and remote connectivity
Scheduling function
Energy saving management
Option of screen personalisation, emulating installation (SCADA)
Activity planning and controls for instruments or groups of instruments



Maximum number of connected units varies according to the Plant Visor model.

Facility map screen (example):
a personalisation of the facility can be carried out.



Personalised screen for Roof Top, basic control of the unit: allows carrying out basic operations: ON-OFF, cold/heat selector, change temperature setpoints and display the status of the main components.

Roof Top unit detail screen: allows displaying all the variables and changing all the parameters via the Plant Visor.

Screen with a complete parameter list (access according to user level): allows reading/changing the values and saving them (backup).

Screen with a complete alarms list (access according to user level): allows displaying the alarms and resetting them.

Report management screen (access according to user level): allows configuring and making reports, according to date intervals and variables selected.

HYDROFAN SYSTEM

System designed to control water installations in a centralised, simple and efficient way.
Made up of a set of components, including a touch screen, to control installations with water chiller units, fan coils and ATUs.

SYSTEM COMPONENTS

Cards

Fcc base card
4 relay card
Card 2 x (0-10 V) + 2 relays
RS-485 serial card

Thermostat

AMBIENT AQUA

PGD TOUCH touch screen

The touch screen carries out the centralised control function. This offers the possibility of using a user and password access to control the elements in the facility.

Screen with all the network's elements (14 FCC, 1 AHU and 1 cooler appear in this installation).

We can access each fan coil, to turn it ON-OFF, modify setpoint, select automatic or manual low, medium or high speed and see the cold or heat status.

AHU detail screen, to turn to ON-OFF, modify setpoint, see valve opening and cold or heat status.

Cooler detail screen, to turn to ON-OFF, select cold or heat, see discharge and return temperature, and if the cooler has an alarm.

This screen can be used to configure a timetable to start and stop all the elements.

The touch screen can govern installations of up to 30 fan coils with 1 cooler. For installations with more elements consult possible configurations.

NOTES

NOTES

NOTES

NOTES

NOTES

NOTES

NOTES

HITECSA
COOL AIR

HIPLUS AIRE ACONDICIONADO S.L.

Masia Torrents, 2
Tel. +34 938 934 912
Fax +34 938 939 615
08800 Vilanova i la Geltrú
Barcelona, Spain

www.hitecsa.com