ACVBA
Heat pump
ACVA
Cooling only

CCVBA / ECVBA
Heat pump
CCVA / ECVA
Cooling only

R-410A

ACVBA / ACVA - Compact configuration
CCVBA / ECVBA CCVA / ECVA - Split configuration

Maximum flexibility for climate-control via ducts

Autonomous, compact and split vertical construction units suitable for connection to both indoor and outdoor sections of a network of air distribution ducts.

MAIN FEATURES

- Maximum cooling capacities ranging from 12.5 to 114.3 kW
- Scroll compressor
- R-410A refrigerant (split version: delivered with no refrigerant load)
- 2 independent cooling circuits (inquire about available models)

AVAILABLE VERSIONS

- Heat pump
- Cooling only

ADVANTAGES

- With continuous outdoor air intake to renew the air (Comfort Compatible)
- Option of operating as a multi-split set 2x1 (inquire about available models)
- 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)
- Cooling distance between indoor and outdoor unit (split configuration) up to 50 m in total
- Can be combined with the RCAH range of heat recovery units for compliance with the requirements of Spanish Regulation on Indoor Heating/Air-conditioning Installations - known by the acronym RITE

APPLICATIONS

- Designed to be installed inside the building to be air-conditioned, they are characterised by offering great flexibility in the installation
- Climate-control for industrial applications, industrial plans and the services sector

REGULATION

Control as standard: **TH TUNE**

Optional control: **PGD**

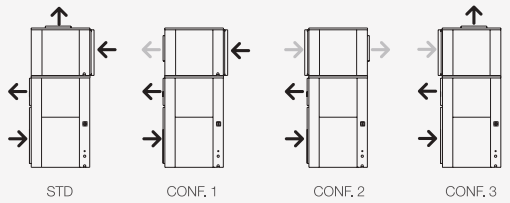
Optional control: **MINI PGD**

See regulation and control on page 22.

POSSIBLE AIR INLET/OUTLET CONFIGURATIONS

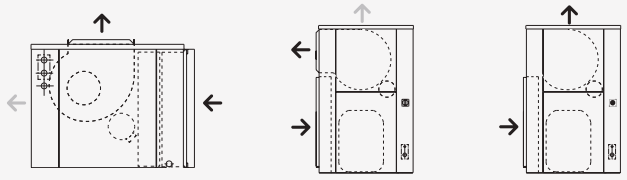
→ Standard
→ Optional

ACVA/ACVBA



ECVA/CCVA - ECVBA/CCVBA

ECVA-ECVBA 401 - 3502 | CCVA-CCVBA 401 - 3002 | CCVA-CCVBA 3502



ACVBA - ACVA SERIES *Compact configuration*

MODEL		401	501	701	721	751	801
Nominal cooling capacity (1)	kW	12.5	14.4	18.9	19.6	22.7	24.2
Nominal heating capacity (2)	kW	13.7	15.0	20.0	21.0	23.9	25.3
Total power input, cooling (1)	kW	5.7	7.3	8.4	9.27	10.9	10.9
Total power input, heating (2)	kW	5.1	6.5	7.9	8.2	10.3	9.6
EER/ COP	kW	2.2 / 2.7	2.0 / 2.3	2.3 / 2.5	2.1 / 2.6	2.1 / 2.3	2.2 / 2.6
Power supply (50 Hz ~)	V	400.3 + N	400.3 + N	400.3 + N	400.3 + N	400.3 + N	400.3 + N
Gas charge	kg	4.2	4.7	6.2	5.8	7.2	7.7
Airflow - static pressure (int.)	m^3/h - Pa	2,600-50	3,540-60	4,720-55	4,720-55	5,133-53	5,125 - 83
Airflow - static pressure (ext.)	m^3/h - Pa	3,950-50	4,900-50	6,800-50	6,800-50	7,400-50	7,714-57
Dimensions (length x width x height)	mm	937 x 750 x 1.603	1,087 x 750 x 1.603	1,130 x 800 x 1.900	1,130 x 800 x 1.900	1,130 x 800 x 1.900	1,130 x 800 x 1.900
Net weight	kg	276	290	367	392	423	440
MODEL		**1001**	**1201**	**1402**	**1502**	**1602**	**2002**
Nominal cooling capacity (1)	kW	30.1	34.9	37.8	43.4	50.2	63.1
Nominal heating capacity (2)	kW	31.7	38.2	39.5	44.2	51.9	65.5
Total power input, cooling (1)	kW	13.4	14.4	16.6	17.5	20.8	27.0
Total power input, heating (2)	kW	12.4	13.2	15.9	16.5	18.6	23.7
EER/ COP		2.2 / 2.6	2.4 / 2.9	2.3 / 2.5	2.5 / 2.7	2.4 / 2.8	2.3 / 2.8
Power supply (50 Hz ~)	V	400.3 + N	400.3 + N	400.3 + N	400.3 + N	400.3 + N	400.3 + N
Gas charge	kg	9.5	10.5	2 x 6.5	2 x 7.1	2 x 6.6	2 x 8
Airflow - static pressure (int.)	m^3/h - Pa	6,277-73	8,000-91	8,000-130	10,000-145	10,000-145	11,000-175
Airflow - static pressure (ext.)	m^3/h - Pa	10,000-50	12,500-50	13,600-88	15,600-110	16,000-110	22,000-123
Dimensions (length x width x height)	mm	1,700 x 870 x 1.900	937 x 750 x 1.603	2,000 x 939 x 1.997	2,000 x 939 x 1.997	2,000 x 939 x 1.997	2,600 x 980 x 2.174
Net weight	kg	553	558	730	810	820	1,080
MODEL		**2302**	**2402**				
Nominal cooling capacity (1)	kW	73.6	78.5				
Nominal heating capacity (2)	kW	81.9	81.9				
Total power input, cooling (1)	kW	28.3	34.2				
Total power input, heating (2)	kW	29.7	29.0				
EER/ COP		2.6 / 3.0	2.3 / 2.8				
Power supply (50 Hz ~)	V	400.3 + N	400.3 + N				
Gas charge	kg	2 x 10.3	2 x 9				
Airflow - static pressure (int.)	m^3/h - Pa	12,000-160	12,000-160				
Airflow - static pressure (ext.)	m^3/h - Pa	23,000 - 142	23,000 - 142				
Dimensions (length x width x height)	mm	2,600 x 980 x 2.174	2,600 x 980 x 2.174				
Net weight	kg	1,115	1,135				

(1) Nominal cooling conditions. Indoor dry temperature: 27ºC. Indoor wet temperature: 19ºC. Outdoor temperature: 35ºC.
(2) Nominal pumping conditions. Outdoor dry temperature: 7ºC. Outdoor wet temperature: 6ºC.

CCVBA - CCVA SERIES *Split configuration / Outdoor unit*

MODEL		401	501	701	721	751	801
Nominal cooling capacity (1)	kW	12.5	14.4	18.9	19.6	22.7	24.2
Nominal heating capacity (2)	kW	13.7	15.0	20.0	21.0	23.9	25.3
Total power input, cooling (1)	kW	5.3	6.4	7.4	8.4	9.8	9.9
Total power input, heating (2)	kW	4.7	5.7	7.0	7.3	9.3	8.6
EER/ COP		2.2 / 2.7	2.0 / 2.3	2.3 / 2.6	2.1 / 2.6	2.1 / 2.3	2.2 / 2.6
Power supply (50 Hz ~)	V	400.3 + N	400.3 + N	400.3 + N	400.3 + N	400.3 + N	400.3 + N
(3) Gas charge (including 0 m line)	kg	4.2	4	6.2	5.8	7.2	7.7
Cold connection. Liquid line (*)	Ø (")	1/2	1/2	1/2	1/2	5/8	5/8
Cold connection. Gas line (*)	Ø (")	3/4	7/8	7/8	7/8	7/8	7/8
Airflow - static pressure (ext.)	m^3/h - Pa	3,950-50	4,900-50	6,800-50	6,800-50	7,400-50	7,714-57
Dimensions (length x width x height)	mm	937 x 750 x 1.022	1,087 x 750 x 1.022	1,130 x 800 x 1.250	1,130 x 800 x 1.250	1,130 x 800 x 1.250	1,130 x 800 x 1.250
Net weight	kg	189	200	253	272	297	304

MODEL		1001	1201	1402	1502	1602	2002
Nominal cooling capacity (1)	kW	30.1	34.9	37.8	43.4	50.2	63.1
Nominal heating capacity (2)	kW	31.7	38.2	39.5	44.2	51.9	65.5
Total power input, cooling (1)	kW	12.4	13.1	14.4	15.3	18.5	23.9
Total power input, heating (2)	kW	11.5	12.0	14.2	14.8	16.7	21.0
EER/ COP		2.3 / 2.6	2.4 / 2.9	2.3 / 2.6	2.5 / 2.7	2.5 / 2.9	2.4 / 2.9
Power supply (50 Hz ~)	V	400.3 + N	400.3 + N	400.3 + N	400.3 + N	400.3 + N	400.3 + N
(3) Gas charge (including 0 m line)	kg	9.5	10.5	2 x 6.5	2 x 7.1	2 x 6.6	2 x 8
Cold connection. Liquid line (*)	Ø (")	5/8	5/8	1/2	5/8	5/8	5/8
Cold connection. Gas line (*)	Ø (")	1 1/8	1 1/8	7/8	7/8	1 1/8	1 1/8
Airflow - static pressure (ext.)	m^3/h - Pa	10,000-50	12,500-50	13,600-88	15,600-110	16,000-110	22,000-123
Dimensions (length x width x height)	mm	1,700 x 870 x 1.250	1,700 x 870 x 1.250	2,000 x 939 x 1.250	2,000 x 939 x 1.250	2,000 x 939 x 1.250	2,600 x 980 x 1.422
Net weight	kg	373	397	477	538	548	747

MODEL		2302	2402	3002	3502
Nominal cooling capacity (1)	kW	73.6	78.5	86.6	114.3
Nominal heating capacity (2)	kW	81.9	81.9	88.8	119.6
Total power input, cooling (1)	kW	25.0	30.6	30.7	38.6
Total power input, heating (2)	kW	24.6	26.0	26.9	31.1
EER/ COP		2.6 / 3.0	2.3 / 2.8	2.5 / 3.0	2.7 / 3.6
Power supply (50 Hz ~)	V	400.3 + N	400.3 + N	400.3 + N	400.3 + N
(3) Gas charge (including 0 m line)	kg	2 x 10.3	2 x 9	2 x 13.7	2 x 14.5
Cold connection. Liquid line (*)	Ø (")	5/8	5/8	5/8	7/8
Cold connection. Gas line (*)	Ø (")	1 1/8	1 1/8	1 3/8	1 3/8
Airflow - static pressure (ext.)	m^3/h - Pa	23,000-142	23,000-142	27,000-140	32,000-160
Dimensions (length x width x height)	mm	2,600 x 980 x 1.422	2,600 x 980 x 1.422	2,800 x 1.050 x 1.722	2,800 x 1.050 x 1.722
Net weight	kg	782	802	978	1,058

(1) Nominal cooling conditions. Indoor dry temperature: 27ºC. Indoor wet temperature: 19ºC. Outdoor temperature: 35ºC.
(2) Nominal pumping conditions. Outdoor dry temperature: 7ºC. Outdoor wet temperature: 6ºC.
(3) Only units which include, as standard, "Flare" valves (not as optional) are charged with refrigerant; others come pre-charged with dry nitrogen.
(*) For sizing of refrigerated lines depending on layout and total installation distance consult our Commercial Department.

ECVBA - ECVA SERIES *Split configuration / Indoor unit*

MODEL		401	501	701	721	751	801
Nominal cooling capacity (1)	kW	12.5	14.4	18.9	19.6	22.7	24.2
Nominal heating capacity (2)	kW	13.7	15.0	20.0	21.0	23.9	25.3
Total power input, cooling (1)	kW	0.4	0.9	1.0	0.9	1.1	1.0
Total power input, heating (2)	kW	0.4	0.8	0.9	0.9	1.0	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
Cold connection. Liquid line (*)	Ø (")	1/2	1/2	1/2	1/2	5/8	5/8
Cold connection. Gas line (*)	Ø (")	3/4	7/8	7/8	7/8	7/8	7/8
Airflow - static pressure (int.)	m^3/h - Pa	2,600-50	3,540-60	4,720-55	4,720-55	5,133-53	5,125-83
Dimensions (length x width x height)	mm	937 x 750 x 580	1,087 x 750 x 580	1,130 x 800 x 650	1,130 x 800 x 650	1,130 x 800 x 650	1,130 x 800 x 650
Net weight	kg	95	99	126	126	136	136

MODEL		1001	1201	1402	1502	1602	2002
Nominal cooling capacity (1)	kW	30.1	34.9	37.8	43.4	50.2	63.1
Nominal heating capacity (2)	kW	31.7	38.2	39.5	44.2	51.9	65.5
Total power input, cooling (1)	kW	1.0	1.3	2.2	2.2	2.3	3.1
Total power input, heating (2)	kW	0.9	1.2	1.7	1.7	1.9	2.7
Power supply (50 Hz ~)	V	400.3 + N	400.3 + N	400.3 + N	400.3 + N	400.3 + N	400.3 + N
Cold connection. Liquid line (*)	Ø (")	5/8	5/8	1/2	5/8	5/8	5/8
Cold connection. Gas line (*)	Ø (")	1 1/8	1 1/8	7/8	7/8	1 1/8	1 1/8
Airflow - static pressure (int.)	m^3/h - Pa	6,277-73	8,000-91	8,000-130	10,000-145	10,000-145	11,000-175
Dimensions (length x width x height)	mm	1,700 x 870 x 650	1,700 x 870 x 650	2,000 x 939 x 747	2,000 x 939 x 747	2,000 x 939 x 747	2,600 x 980 x 752
Net weight	kg	197	199	253	272	272	333

MODEL		2302	2402	3002	3502
Nominal cooling capacity (1)	kW	73.6	78.5	86.6	114.3
Nominal heating capacity (2)	kW	81.9	81.9	88.8	119.6
Total power input, cooling (1)	kW	3.3	3.6	4.0	4.0
Total power input, heating (2)	kW	2.4	2.9	4.0	4.0
Power supply (50 Hz ~)	V	400.3 + N	400.3 + N	400.3 + N	400.3 + N
Cold connection. Liquid line (*)	Ø (")	5/8	5/8	5/8	7/8
Cold connection. Gas line (*)	Ø (")	1 1/8	1 1/8	1 3/8	1 3/8
Airflow - static pressure (int.)	m^3/h - Pa	12,000-160	12,000-160	14,000-200	18,000-250
Dimensions (length x width x height)	mm	2,600 x 980 x 752	2,600 x 980 x 752	2,800 x 1.050 x 915	2,800 x 1.050 x 915
Net weight	kg	333	333	418	524

(1) Nominal cooling conditions. Indoor dry temperature: 27ºC. Indoor wet temperature: 19ºC. Outdoor temperature: 35ºC.
(2) Nominal pumping conditions. Outdoor dry temperature: 7ºC. Outdoor wet temperature: 6ºC.
(*) For sizing of refrigerated lines depending on layout and total installation distance consult our Commercial Department.

AVAILABLE OPTIONAL FEATURES

ENERGY SAVING

- Option of mixing module for freecooling with two and three dampers
- Thermal or enthalpy regulation with µPC control card and PGD control
- Compressor soft-start (depending on models)
- Soft-start of the indoor and/or outdoor fan (depending on models)
- Condensation 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)

NOISE LEVEL

- Double thermo-acoustic insulation
- Compressor acoustic insulation

UNIT INSTALLATION

- Magneto-thermal switches in the electrical panel
- Power supply at 60 Hz and voltages of 230, 208, etc.
- Option of manufacturing units with symmetric configuration
- Kit for outdoor installation
- Uprated motors
- Anti-freeze trace heater for condensate
- Hot gas bypass
- Heating coils for hot water
- Auxiliary electric heater
- Anti-corrosion treated coils
- Fireproof filter class M1
- Thermal insulation Euroclass A1 (M0)
- Prepared for disassembly
- Only for split configuration:
  - Oil separator
  - Quick-connect valves with refrigerant gas preloaded (split)
- Multi-split 2x1 operation (check for available models)

MAINTENANCE

- Service valves
- External pressure taps
- Detector of dirty filters
- Condenser filter
- Split filter

REGULATION AND CONTROL

- PGD and MINI PGD thermostat
- Alarm signalling
- Smoke detection
- Remote run/stop
- Separate electrical panel
- Option for master-slave operation
- Unit without thermostat
- Ambient temperature or wall-mounted sensor
- Return temperature sensor in duct
- Operation for redundant machine
- Centralised comprehensive management operation
- Operation without neutral
- Scheduling function and Modbus connection, etc. (refer to the Thermostats chapter)

As well as these options, please check with our Commercial Department for any other configuration or function not described as available.

OPTION FOR HIGHER EFFICIENT SYSTEM WITH THE APPLICATION OF PLUG FAN

PLUG FAN

- Greater energy efficiency
- Lower consumption
- Quieter
- High pressures available
- Low maintenance cost