



inverter

ACHIBA

Heat pump

CCHIBA / ECHIBA

Heat pump



ACHIBA - Compact configuration
CCHIBA / ECHIBA - Split configuration

Inverter High Energy Efficiency at the Service of Energy Rehabilitation in the Commercial Sector

Autonomous, compact and split horizontal inverter units suitable for connection to a network of air distribution ducts both on indoor and outdoor units.

MAIN FEATURES

- Maximum cooling capacities ranging from 1.2 to 26.5 kW
- Variable airflow for the outdoor fan
- Three air speeds in the indoor fan
- High EER/COP and SCOP/SEER levels
- Unit 301 includes a rotary compressor
Other units have scroll compressors
- R-410A refrigerant (split version: delivered with no refrigerant load)

AVAILABLE VERSIONS

- Heat pump

ADVANTAGES

- DC inverter technology: maximum savings and comfort
- Low sound level
- High performance in heat pump for 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 fanw
- Oil separator (only for split units)
- Remote run/stop
- Remote cooling/heating
- Scheduling function

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 through air ducts for commercial premises, offices, small supermarkets

REGULATION

Control as standard: **TH TUNE** Optional control: **PGD** Optional control: **MINI PGD**



See regulation and control on page 19.

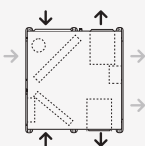
POSSIBLE AIR INLET/OUTLET CONFIGURATIONS

→ Standard

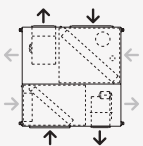
→ Optional

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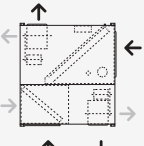
301



601, 741

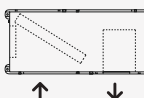


901

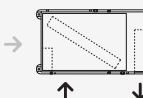


ECHIBA/CCHIBA

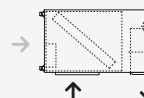
ECHIBA 301



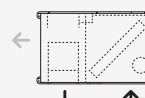
ECHIBA 601, 741



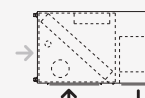
ECHIBA 901



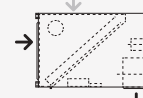
CCHIBA 301



CCHIBA 601, 741



CCHIBA 901

ACHIBA SERIES *Compact configuration*

MODEL		301	601	741	901
Min-Nom-Max Cooling Capacity (1)(3)	kW	1.2 x 7.4 x 8.1	3.8 x 12.9 x 17.3	4.9 x 16.6 x 22.4	6.2 x 20.6 x 26.5
Min-Nom-Max Heating Capacity (2)(3)	kW	1.3 x 7.5 x 8.3	4.0 x 13.0 x 18.6	5.2 x 15.7 x 24.2	6.7 x 20.4 x 28.9
EER (20 - 80 - 120 Hz ~) (mod. 301: EER 100 Hz / SEER)		2.5 / 4.6	2.87 x 2.51 x 2.40	2.83 x 2.53 x 2.27	2.93 x 2.42 x 2.22
COP (20 - 80 - 120 Hz ~) (mod. 301: COP 100 Hz / SCOP)		2.9 / 4.1	2.92 x 2.52 x 2.47	2.91 x 2.64 x 2.50	2.83 x 2.35 x 2.17
Seasonal cooling energy efficiency / η _{s, c}	%	151.2	123.6	123.1	122.5
Seasonal heating energy efficiency / η _{s, h}	%	135.8	117.1	116.2	115.5
Power supply (50 Hz ~)	V	230.1	400.3 + N	400.3 + N	400.3 + N
Gas charge	kg	3.5	6.3	7.2	9.4
Indoor airflows in cooling	m ³ /h	1,000 / 1,400 / 1,800	2,300 / 2,800 / 3,600	3,000 / 3,600 / 4,600	3,700 / 4,400 / 5,600
Indoor airflows in heating	m ³ /h	1,100 / 1,400 / 1,600	2,300 / 2,800 / 3,600	3,000 / 3,600 / 4,600	3,700 / 4,400 / 5,600
Max. int. airflow - static pressure	m ³ /h - Pa	1,800 - 50	3,600 - 70	4,600 - 80	5,500 - 90
External airflow (max-min)	m ³ /h	2,730 - 1,150	5,600 - 2,000	6,400 - 2,000	7,950 - 4,300
Available nominal static pressure	Pa	50	50	50	50
Dimensions (length x width x height)	mm	1,445 x 1,339 x 504	1,755 x 1,697 x 640	1,755 x 1,697 x 640	1,998 x 1,755 x 672
Net weight	kg	220	375	420	495

CCHIBA SERIES *Split configuration / Outdoor unit*

MODEL		301	601	741	901
Min-Nom-Max Cooling Capacity (1)(3)	kW	1.2 x 7.4 x 8.1	3.8 x 12.9 x 17.3	4.9 x 16.6 x 22.4	6.2 x 20.6 x 26.5
Min-Nom-Max Heating Capacity (2)(3)	kW	1.3 x 7.5 x 8.3	4.0 x 13.0 x 18.6	5.2 x 15.7 x 24.2	6.7 x 20.4 x 28.9
EER (20 - 80 - 120 Hz ~) (mod. 301: EER 100 Hz / SEER)		2.5 / 4.6	2.87 x 2.51 x 2.40	2.83 x 2.53 x 2.27	2.93 x 2.42 x 2.22
COP (20 - 80 - 120 Hz ~) (mod. 301: COP 100 Hz / SCOP)		2.9 / 4.1	2.92 x 2.52 x 2.47	2.91 x 2.64 x 2.50	2.83 x 2.35 x 2.17
Seasonal cooling energy efficiency / η _{s, c}	%	151.2	123.6	123.1	122.5
Seasonal heating energy efficiency / η _{s, h}	%	135.8	117.1	116.2	115.5
Power supply (50 Hz ~)	V	230.1	400.3 + N	400.3 + N	400.3 + N
(4) Gas charge (including 0 m line)	kg	3.5	6.3	7.2	9.4
Cold connection. Liquid line	Ø (")	1/2	1/2	5/8	5/8
Cold connection. Gas line	Ø (")	3/4	7/8	1 1/8	1 1/8
External airflow (max-min)	m ³ /h	2,730 - 1,150	5,600 - 2,000	6,400 - 2,000	7,950 - 4,300
Available nominal static pressure	Pa	50	50	50	50
Dimensions (length x width x height)	mm	1,405 x 825 x 504	1,755 x 1,004 x 640	1,755 x 1,004 x 640	1,750 x 1,057 x 662
Net weight	kg	148	240	295	312

(1) Nominal cooling conditions. Indoor dry temperature: 27°C. Indoor wet temperature: 19°C. Outdoor temperature: 35°C.

(2) Nominal heating conditions. Indoor dry temperature: 20°C. Outdoor temperature: 7°C. Outdoor wet temperature: 6°C.

(3) The maximum frequency for the model 301 is 110 Hz ~, while for the other models is 120 Hz ~.

The nominal frequency for the model 301 is 100 Hz ~, while for the other models is 80 Hz ~.

(4) Only split units which include, as standard, "Flare" valves (not as optional) are charged with refrigerant; others come pre-charged with dry nitrogen.

ECHIBA SERIES *Split configuration / Indoor unit*

MODEL		301	601	741	901
Min-Nom-Max Cooling Capacity (1)(3)	kW	1.2 x 7.4 x 8.1	3.8 x 12.9 x 17.3	4.9 x 16.6 x 22.4	6.2 x 20.6 x 26.5
Min-Nom-Max Heating Capacity (2)(3)	kW	1.3 x 7.5 x 8.3	4.0 x 13.0 x 18.6	5.2 x 15.7 x 24.2	6.7 x 20.4 x 28.9
Power supply (50 Hz ~)	V	230.1	400.3 + N	400.3 + N	400.3 + N
Cold connection. Liquid line	Ø (")	1/2	1/2	5/8	5/8
Cold connection. Gas line	Ø (")	3/4	7/8	1 1/8	1 1/8
Indoor airflows in cooling	m³/h	1,000 / 1,400 / 1,800	2,300 / 2,800 / 3,600	3,000 / 3,600 / 4,600	3,700 / 4,400 / 5,500
Indoor airflows in heating	m³/h	1,100 / 1,400 / 1,600	2,300 / 2,800 / 3,600	3,000 / 3,600 / 4,600	3,700 / 4,400 / 5,500
Max. int. airflow - static pressure	m³/h - Pa	1,800 - 50	3,600 - 70	4,600 - 80	5,500 - 90
Dimensions (length x width x height)	mm	1405 x 600 x 504	1,755 x 752 x 640	1,755 x 752 x 640	1,750 x 900 x 662
Net weight	kg	83	145	150	180

(1) Nominal cooling conditions. Indoor dry temperature: 27°C. Indoor wet temperature: 19°C. Outdoor temperature: 35°C.

(2) Nominal heating conditions. Indoor dry temperature: 20°C. Outdoor temperature: 7°C. Outdoor wet temperature: 6°C.

(3) The maximum frequency for the model 301 is 110 Hz ~, while for the other models is 120 Hz ~.

The nominal frequency for the model 301 is 100 Hz ~, while for the other models is 80 Hz ~.

AVAILABLE OPTIONAL FEATURES**ENERGY SAVING**

- Option of mixing module for semi-enthalpy freecooling 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)

**NOISE LEVEL**

- Double thermo-acoustic insulation
- Compressor acoustic insulation

**UNIT INSTALLATION**

- Option of manufacturing units with symmetric configuration
- Kit for outdoor installation
- Uprated motors
- Anti-freeze trace heater for condensate
- Heating coils for hot water
- Electric heater as backup in defrosting
- Anti-corrosion treated coils
- Prepared for disassembly
- Fireproof filter class M1
- Thermal insulation Euroclass A1 (M0)
- Only for split configuration:
 - Quick-connect valves with preload of refrigerant gas

**MAINTENANCE**

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

**REGULATION AND CONTROL**

- Alarm signalling
- Smoke detection
- Separate electrical panel
- Ambient temperature or wall-mounted sensor
- Discharge temperature sensor
- Centralised comprehensive management operation
- Operation without neutral
- Modbus connection

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