

FLATAIR

Horizontal packaged air conditioners




R410A

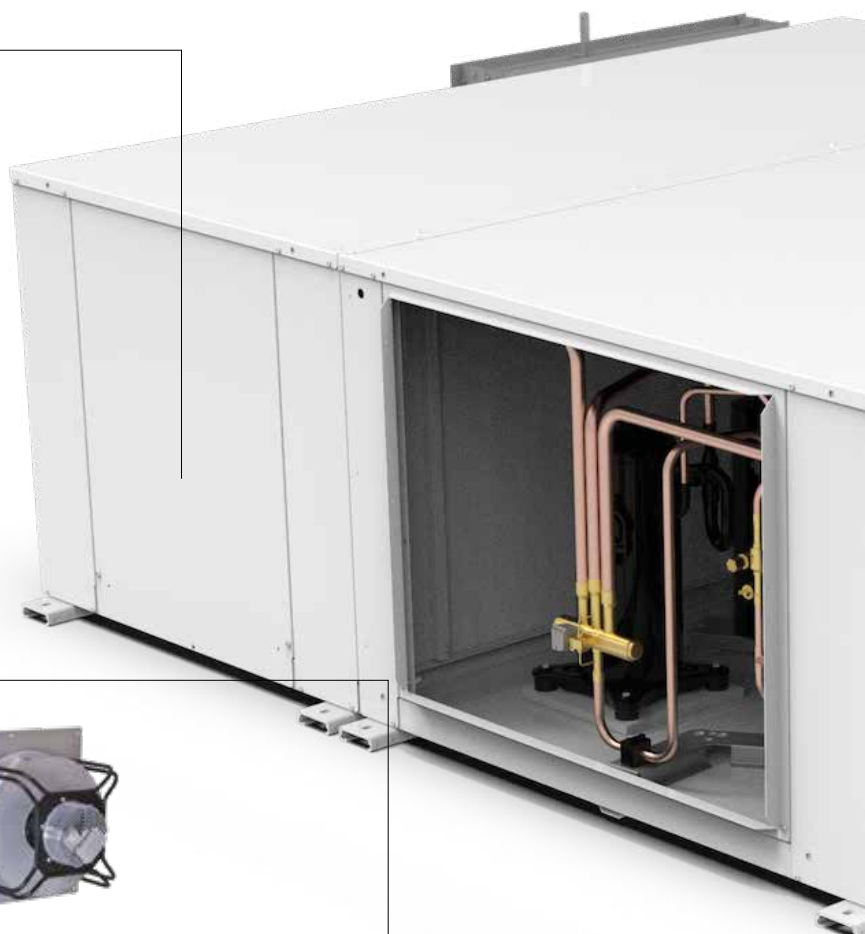


AIR COOLED *Inverter*
❄️ 22 - 33 kW
🔥 20 - 29 kW
🌀 3700 - 5600 m³/h

- # Horizontal design allowing complete indoor installation and **preserving the building's architecture**
- # Packaged and split versions allowing **high adaptability** in any building configuration.
- # **Optimised efficiency** at full and part load operation, thanks to variable speed compressor and EC fans on both sides.
- # Variable speed technology stabilising the air flow and providing accurate supply temperature for **improved indoor air quality**.

THERMODYNAMIC SYSTEM

- # Inverter scroll compressor allowing capacity modulation. 
- # Variable refrigerant control with electronic expansion valve.
- # Variable speed EC axial fans with optimised blade geometry to improve efficiency and reduce noise level.
- # Large surface exchangers for highly efficient heat transfer.
- # Dynamic defrost cycles.



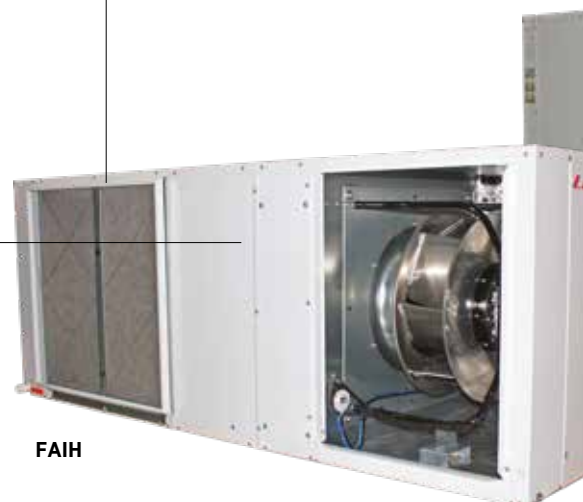
AIR TREATMENT

- # EC motor fans ensuring a precise temperature for better comfort and energy savings.
- # Analogue filter detection to inform when the filters must be changed.
- # IAQ kits for improved indoor air quality inside buildings:
 - G4 (standard)
 - M5 (ePM10) + F7 (ePM1) available as an option.



AUXILIARY HEATING

- # Electric heater made of welded blinged elements, with two safety switches to prevent overloading. Available in three different sizes:
 - Standard capacity
 - Medium capacity with one-stage regulation
 - High modulating capacity



FAIH

CONTROL

- # eClimatic electronic controller and intelligent control parameters optimising part-load efficiency.
- # Integrated communication solutions offering flexibility (master/slave, Modbus, BACnet).
- # Several display solutions for different access levels.

eCLIMATIC



DS

Service display



DM

Multi-unit display



DC

Comfort display



CASING & DESIGN

- # Horizontal design for false ceiling installation.
- # Casing built with pre-coated galvanized steel (White).
- # A1 (MO) fire-proof insulation.

ADAPTABILITY

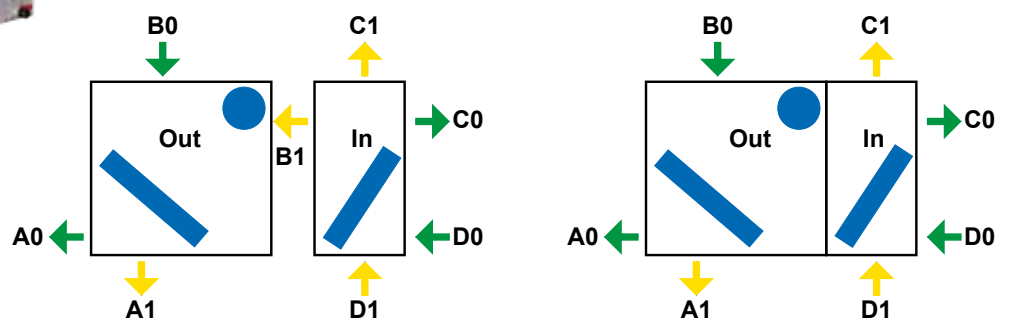
- # Horizontal design to be installed in false ceilings (complete indoor installation).
- # Packaged (FAMH) and split versions (FASH+FAIH), adaptable to any building configuration.
- # Allows connection up to 30m between condensing unit and air treatment unit.
- # Two available configurations:
 - Packaged unit (FAMH);
 - Split version, with outdoor condensing unit (FASH) and indoor air treatment unit (FAIH).

AIRFLOW



FASH

- # Several horizontal airflow configurations on both packaged and split versions.
- # Economiser option allows energy savings with free-cooling operation.
- # eDrive: high efficiency ventilation with direct transmission and variable speed drives.
- # Fresh air and free cooling management.



FA^(A) M^(B) H^(C) 020^(D) S^(E) M^(F) 2^(G) M^(H)

- (A) **FA** = FLATAIR
- (B) **M** = Packaged unit - **S** = Condensing unit (Outdoor unit / Split version) - **I** = Air treatment unit (Indoor unit / Split version)
- (C) **H** = Heat pump unit
- (D) Maximum cooling capacity in kW
- (E) **S** = 1 circuit - **D** = 2 circuits
- (F) **M** = R410A
- (G) **2** = Revision number
- (H) **M** = 400V/3/50Hz - **T** = 230V/1/50Hz



Air cooled version

Heat pump units

FLATAIR		FAMH : PACKAGED UNIT		FASH + FAIH : SPLIT VERSION	
		020	035	020	035
Nominal thermal performances - Cooling mode					
Cooling capacity ⁽¹⁾	kW	17,7	27,2	17,7	27,2
Total Power Input	kW	6,3	9,4	6,3	9,4
EER net ⁽¹⁾		2,81	2,91	2,81	2,91
Nominal thermal performances - Heating mode					
Heating capacity ⁽²⁾	kW	16,1	22,6	16,1	22,6
Total Power Input	kW	4,5	7,1	4,5	7,1
COP net ⁽²⁾		3,60	3,2	3,60	3,2
Seasonal efficiencies - Cooling mode					
Seasonal Energy Efficiency Ratio - SEER ⁽³⁾		4,25	4,39	4,25	4,39
Seasonal energy efficiency - η_{s,c} ⁽⁴⁾	%	167,1	172,5	167,1	172,5
Eurovent energy efficiency class - Part load operation		B	B	B	B
Seasonal efficiencies - Heating mode					
Seasonal Coefficient of Performance - SCOP ⁽⁵⁾		3,32	3,32	3,32	3,32
Seasonal energy efficiency - η_{s,h} ⁽⁶⁾	%	129,8	129,7	129,8	129,7
Eurovent energy efficiency class - Part load operation		A	B	A	B
Auxiliary heating					
Gas heating capacity - Standard / High	kW	-	-	-	-
Electric heater capacity - Standard / High		4,5 / 15			
Electric pre-heater capacity - Standard / High		-	-	-	-
Hot water coil capacity Air inlet 20°C/Water		-	-	-	-
Ventilation data					
Minimum airflow rate	m ³ /h	1800	2800	1800	2800
Nominal airflow rate		3700	5600	3700	5600
Maximum airflow rate		4500	6200	4500	6200
Acoustic data - Standard unit					
Outdoor sound power	dB(A)	83	89	83	89
Indoor blower outlet sound power		73	78	73	78
Electrical data					
Maximum power	kW	12,4	19,7	1,4 / 11,1	2,7 / 17
Maximum current	A	23,3	35,0	2,3 / 21,2	4,3 / 30,9
Starting current	A	23,3	35,0	2,3 / 21,2	4,3 / 30,9
Short circuit current	kA	10	10	10	10
Refrigeration circuit					
Number of circuits		1	1	1	1
Number of compressors		1	1	1	1
Refrigerant load	kg	6,6	8	6,6	8

(1) **Cooling mode** : According to EN14511 nominal conditions - Outdoor temperature 35°C DB - Indoor temperature 27°C DB / 19°C WB

(2) **Heating mode** : According to EN14511 nominal conditions - Outdoor temperature 7°C DB / 6°C WB - Indoor temperature 20°C DB

(3) SEER in accordance with standard EN14825.

(4) Space cooling energy efficiency following Ecodesign regulation EU 2016/2281

(5) SCOP in accordance with standard EN 14825 (average climate conditions).

(6) Space heating energy efficiency following Ecodesign regulation EU 2016/2281.



Air cooled version

FLATAIR		FAMH : PACKAGED UNIT		FASH : OUTDOOR UNIT		FAIH : INDOOR UNIT	
		020	035	020	035	020	035
A	mm	1980	2050	1205	1060	775	990
B		1500	1950	1500	1950	1500	1950
C		670	770	670	770	670	770
Weight of standard units							
Basic unit	kg	340	555	220	330	135	225

