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

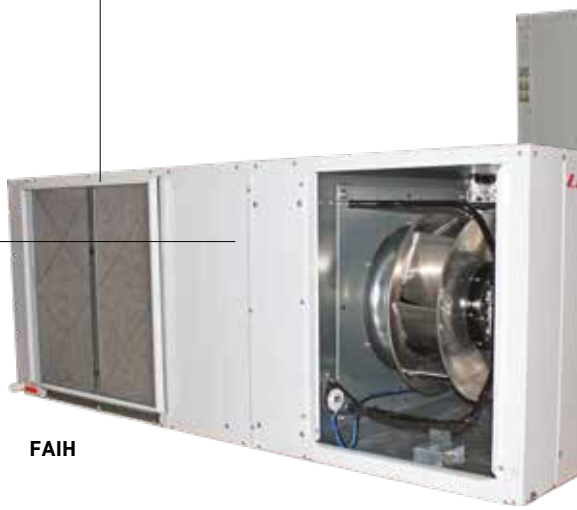
Inverter scroll compressor allowing capacity modulation.
Variable refrigerant control with electronic expansion valve.
Variable speed EC axial fans with optimised blade geometry to improve efficiency and reduce noise level.
Large surface exchangers for highly efficient heat transfer.
Dynamic defrost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

Electric heater made of welded blinded 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

Photos and illustrations are not contractual.

CONTROL

eClimatic electronic controller and intelligent control parameters optimising part-load efficiency.
Integrated communication solutions offering flexibility (master/slave, Modbus, BACnet LonWorks®).
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 (M0) fire-proof insulation.

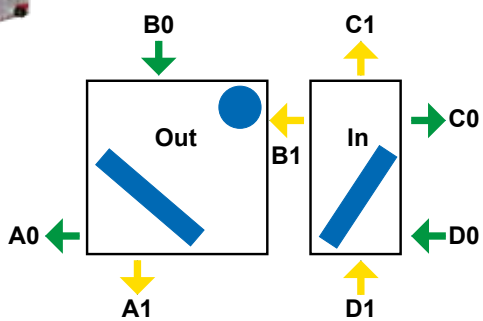
ADAPTABILITY

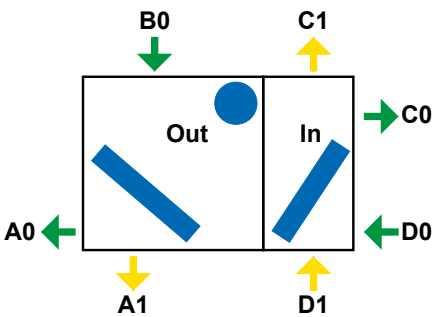
Horizontal design to be installed in false ceilings (complete indoor installation).
Packaged (FAMH) and split versions (FASH+FAIH), adaptable to any building configuration.
Allows connection up to 30m between condensing unit and air treatment unit.
Two available configurations:
- Packaged unit (FAMH);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

AIRFLOW

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.

FASH





R410A

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 - **ηs,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 - **ηs,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	kW	4,5 / 15			
Electric pre-heater capacity - Standard / High	kW	-	-	-	-
Hot water coil capacity Air inlet 20°C/Water	kW	-	-	-	-
Ventilation data					
Minimum airflow rate	m^3/h	1800	2800	1800	2800
Nominal airflow rate	m^3/h	3700	5600	3700	5600
Maximum airflow rate	m^3/h	4500	6200	4500	6200
Acoustic data - Standard unit					
Outdoor sound power	dB(A)	83	89	83	89
Indoor blower outlet sound power	dB(A)	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