



Counterflow plate heat recovery exchanger



BASIC FEATURES

ALFA 95 FLAT

Highly efficient under-ceiling heat recovery unit designed for applications in commercial interiors, such as **shops, offices, coffee bars, restaurants and sport facilities.**

- **4 sizes with air flows: 400, 700, 1500 and 2000 m³/h**
- Ecodesign directive 1253/2014 compliant
- All sizes complies with criteria for Passive House Component certification
- Sizes 700, 1500 and 2000m³/h are certified components by the Passive House Institute
- Aluminium counterflow exchanger with heat recovery efficiency of up to 93 % (EN308)
- Energy-efficient EC fans with low SFP and quiet operation
- Compact size with low installation height
- Integrated electric pre-heater (optional)
- Integrated electric/water after-heater, modular C/O or DX coils concept (optional)
- AirGENIO Superior control system with an option of CAV, VAV or DCV mode, other supplementary modes, antifreeze protection, BMS control via ModBUS RTU, TCP or BACnet.

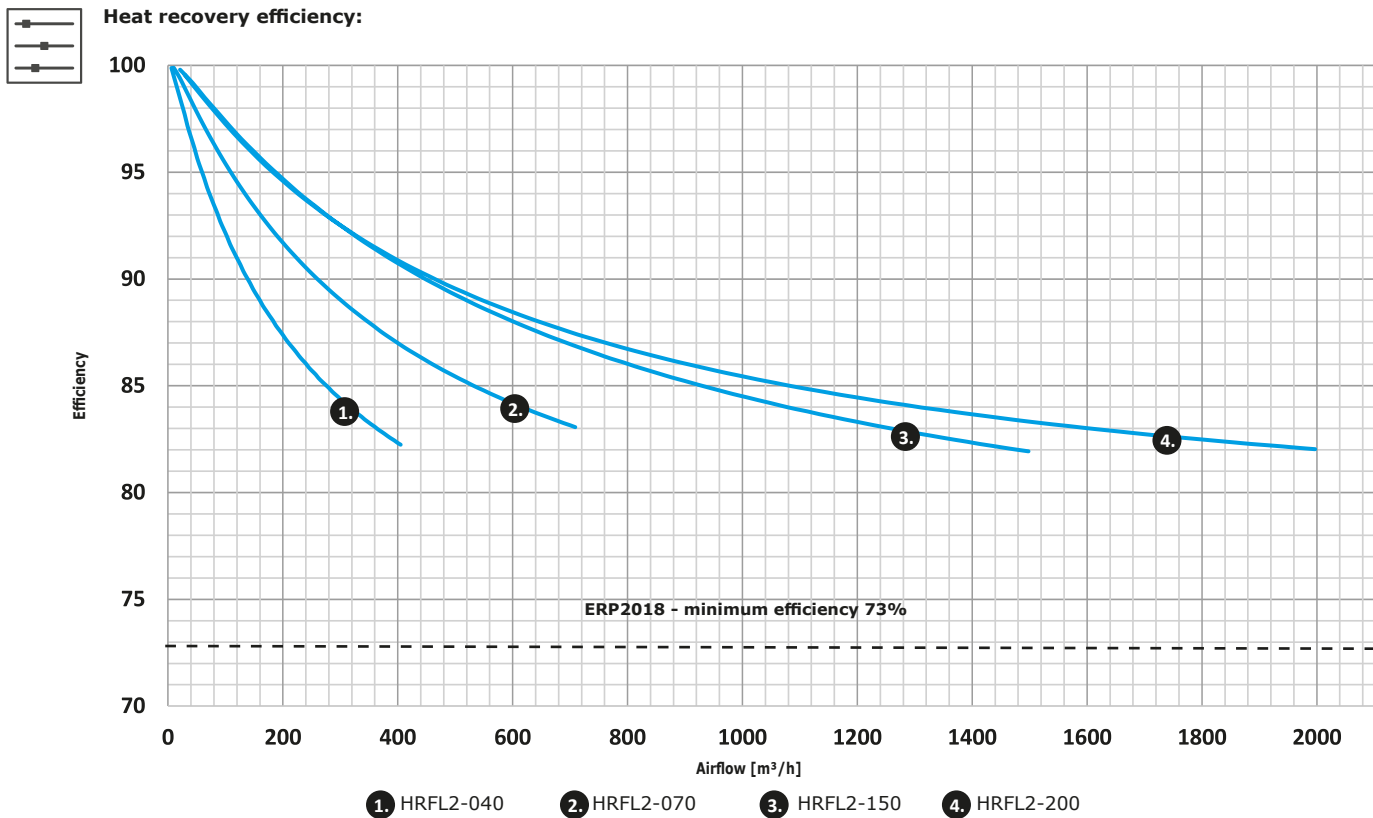
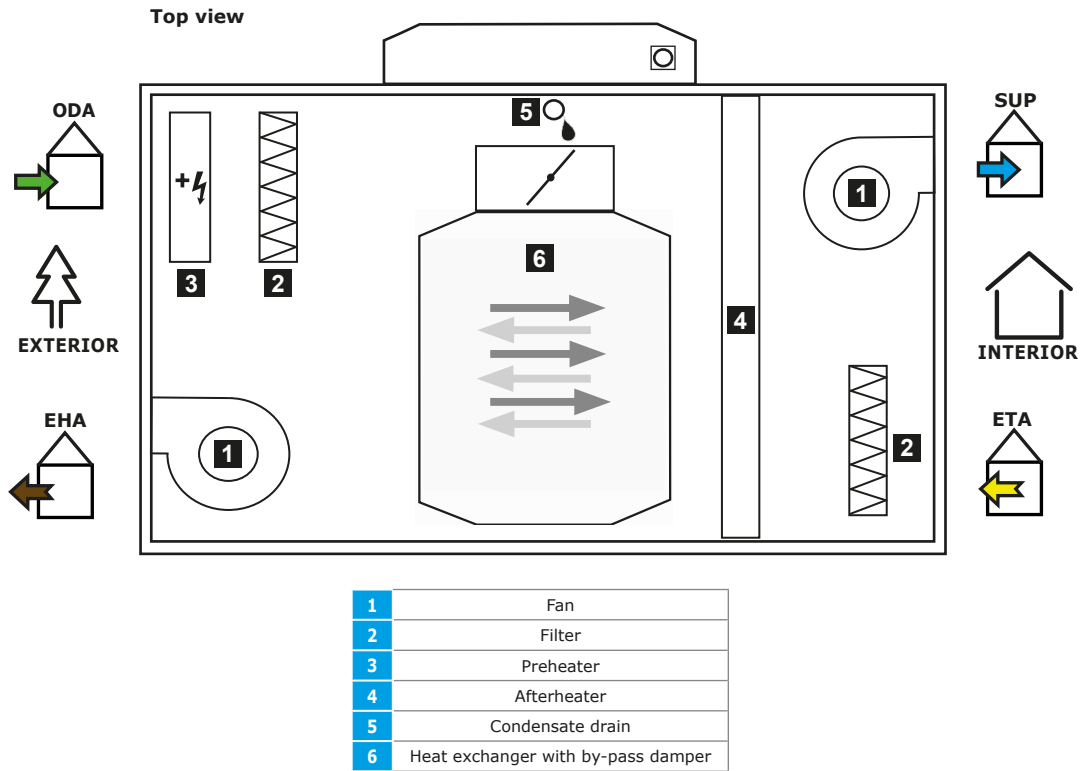
ALFA 95 FLAT heat recovery unit is designed to be operated in a dry indoor environment (relative humidity not exceeding 80 %) and at an ambient temperature in the range from +5 °C up to +60 °C.

The unit is designed for transporting standard atmospheric air that is free of dust, grease, chemical emissions and other impurities. The transported air relative humidity must not exceed 90 %.

The casing of the unit is made from sandwich panels. When unit installed in the duct system its IP rating is 20.

The design of the ventilation project must be **always designed by a qualified HVAC designer, engineer or architect.**

Operational diagram

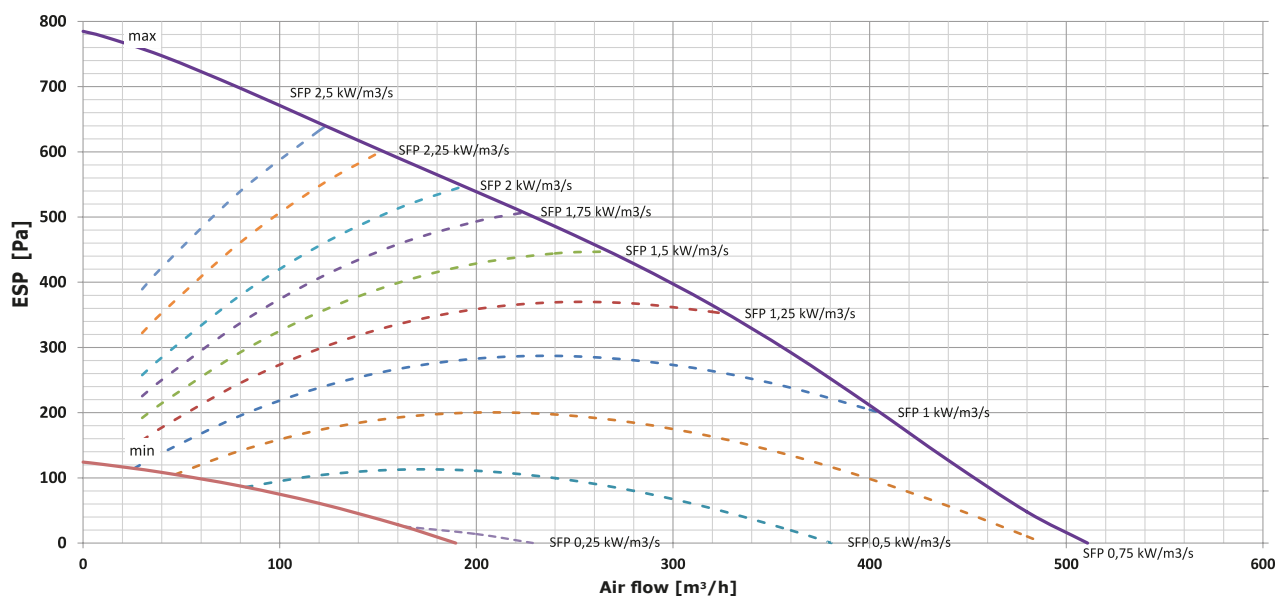




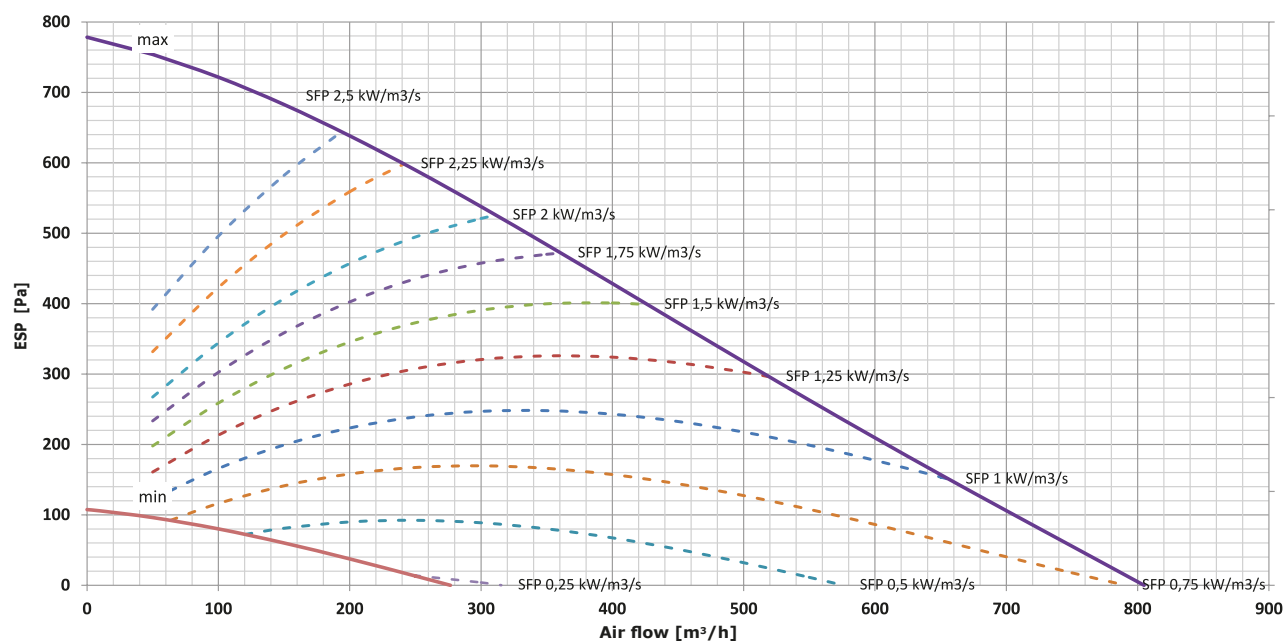
PRIMARY PARAMETERS

SFP=Unit Power input/supply airflow (kW/m³/s)

HRFL2-040



HRFL2-070

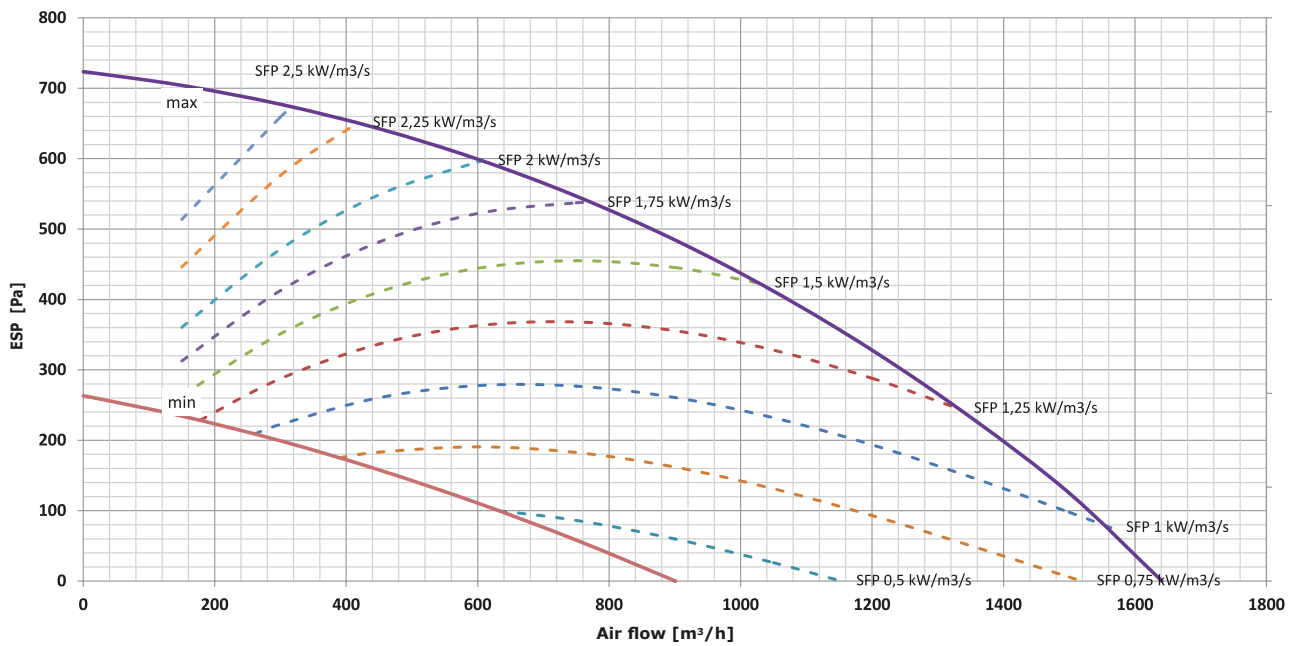




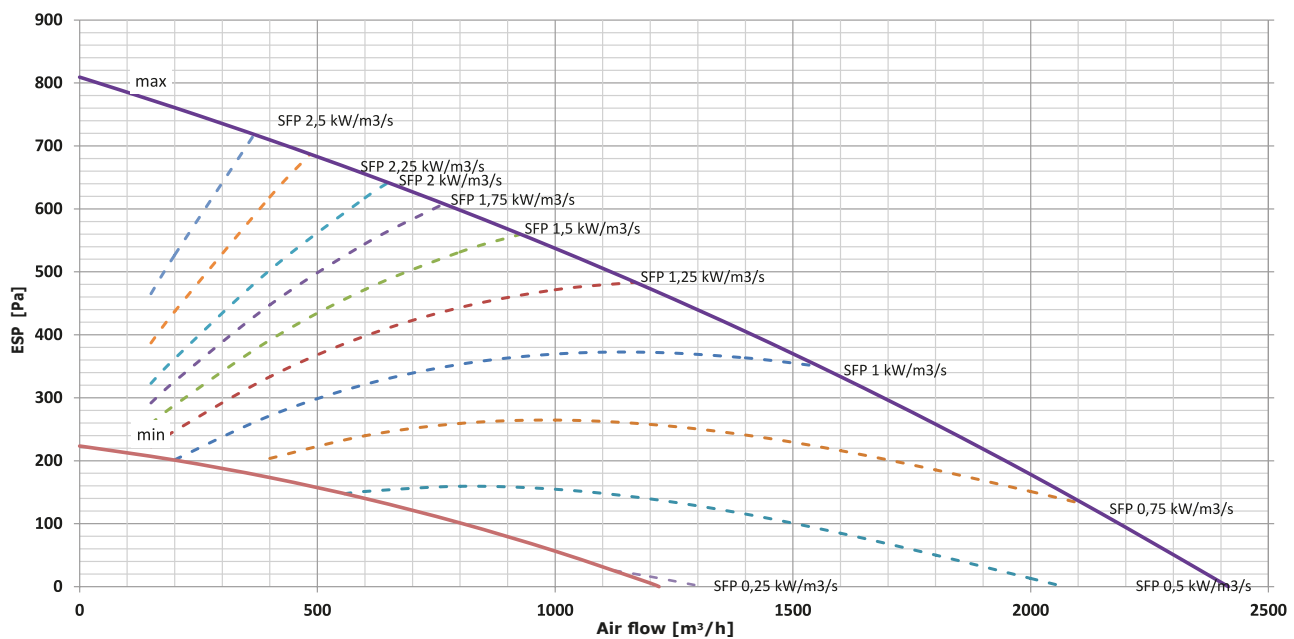
PRIMARY PARAMETERS

SFP=Unit Power input/supply airflow (kW/m³/s)

HRFL2-150



HRFL2-200





Noise specifications:

HRFL2-040

Airflow [m³/h]	Pressure [Pa]	Sound power level per frequency band								Overall	
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} [dB]	L _{PA} [dB] at 3m
400	150	36	43	53	56	47	44	38	34	59	37
300		33	40	52	50	42	40	33	31	55	33
200		31	38	47	44	38	36	31	30	50	29
150		30	38	45	42	36	34	30	29	48	27

Branch	Airflow [m³/h]	Pressure [Pa]	Sound power level per frequency band								Overall
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} [dB]
EHA	400	150	53	60	65	70	66	65	62	61	74
SUP			53	60	65	70	65	64	62	61	74
ETA			47	53	55	57	47	42	36	47	61
ODA			46	52	55	56	46	42	35	46	60

HRFL2-070

Airflow [m³/h]	Pressure [Pa]	Sound power level per frequency band								Overall	
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} [dB]	L _{PA} [dB] at 3m
700	200	39	47	56	54	50	50	47	38	60	38
500		38	47	52	51	46	45	39	29	57	35
300		38	48	55	48	42	41	35	26	57	35
200		37	48	55	46	41	40	34	26	57	35

Branch	Airflow [m³/h]	Pressure [Pa]	Sound power level per frequency band								Overall
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} [dB]
EHA	700	200	59	62	70	73	67	67	63	55	76
SUP			58	63	70	73	67	67	63	55	77
ETA			50	53	60	57	46	39	33	26	63
ODA			49	53	59	56	46	39	32	26	62

Noise specifications:

HRFL2-150

Airflow [m ³ /h]	Pressure [Pa]	Sound power level per frequency band								Overall	
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} [dB]	L _{PA} [dB] at 3m
1400	200	46	57,8	59	60	59	59	52	43	66	44
1000		41	53,5	56	54	54	53	47	37	61	39
700		38	50,6	52	49	50	47	41	32	57	35
300		36	46,8	46	44	44	40	34	26	52	30

Branch	Airflow [m ³ /h]	Pressure [Pa]	Sound power level per frequency band								Overall
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} [dB]
EHA	1400	200	63	66	74	80	75	76	69	65	84
SUP			63	65	74	81	75	76	69	65	84
ETA			54	58	61	62	58	50	47	33	66
ODA			54	58	60	62	58	51	47	33	66

HRFL2-200

Airflow [m ³ /h]	Pressure [Pa]	Sound power level per frequency band								Overall	
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} [dB]	L _{PA} [dB] at 3m
1800	200	45	58	60	56	55	53	47	34	64	42
1500		42	58	58	54	53	52	46	33	63	41
1000		44	57	56	52	52	50	43	31	61	39
500		47	54	53	51	51	47	37	29	59	37

Branch	Airflow [m ³ /h]	Pressure [Pa]	Sound power level per frequency band								Overall
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} [dB]
EHA	1800	200	61	70	76	73	75	69	63	57	80
SUP			59	69	75	72	74	68	63	57	80
ETA			49	61	61	58	51	48	39	28	65
ODA			47	60	61	56	51	47	38	28	65

Basic technical parameters of the heat recovery units:

Model without electric pre-heater:

Model without coil / with water heating coil / C-O coil / DX coil

Type	Voltage [V]	Frequency [Hz]	Rated input [kW]	Total current [A]
HRFL2-040	230 V	50 Hz	0,23	2,2
HRFL2-070	230 V	50 Hz	0,33	2,5
HRFL2-150	230 V	50 Hz	1,1	6,8
HRFL2-200	230 V	50 Hz	1,1	6,3

Model with electric coil (post-heater)

Type	Voltage [V]	Frequency [Hz]	Rated input [kW]	Total current [A]
HRFL2-040	230 V	50 Hz	1,1	5,7
HRFL2-070	230 V	50 Hz	1,8	8,6
HRFL2-150	230 V	50 Hz	3,8	18,5
HRFL2-200	400 V	50 Hz	5,9	12,3

Model with electric pre-heater:

Model without coil / with water heating coil / with change-over coil

Type	Voltage [V]	Frequency [Hz]	Rated input [kW]	Total current [A]
HRFL2-040	230 V	50 Hz	1,7	8,3
HRFL2-070	230 V	50 Hz	3,1	14,3
HRFL2-150	400 V	50 Hz	6,4	13,3
HRFL2-200	400 V	50 Hz	8,3	16,7

Model with electric preheater (post-heater)

Type	Voltage [V]	Frequency [Hz]	Rated input [kW]	Total current [A]
HRFL2-040	230 V	50 Hz	2,5	11,8
HRFL2-070	400 V	50 Hz	4,5	11,8
HRFL2-150	400 V	50 Hz	9,1	18,5
HRFL2-200	400 V	50 Hz	13,1	22,5

Type	Weight of unit [kg]			Weight of accessories [kg]	
	Without reheating	With electric reheating	With water reheating	C/O module	DX module
HRFL2-040	70	75	75	25.5	24
HRFL2-070	90	95	95	32	30
HRFL2-150	165	170	170	37	35
HRFL2-200	240	245	245	43	40

Characteristics of electric motors (1 fan only)

Type	Voltage [V]	Frequency [Hz]	Rated input [W]	Total current [A]	Speed [r/min]	Protection IP	Insulation class
HRFL2-040	230 V	50 Hz	115	1,1	3640	54	B
HRFL2-070	230 V	50 Hz	165	1,25	2530	44	B
HRFL2-150	230 V	50 Hz	455	2,8	2600	54	B
HRFL2-200	230 V	50 Hz	500	3,15	1890	54	B

Characteristics of electric coil

Type	Voltage [V]	Frequency [Hz]	Rated input [kW]	ΔT [°C]
HRFL2-040	230 V	50 Hz	0,8	6,3
HRFL2-070	230 V	50 Hz	1,4	6,3
HRFL2-150	230 V	50 Hz	2,7	5,3
HRFL2-200	400 V	50 Hz	4,8	6,3

Characteristics of electric preheater

Type	Voltage [V]	Frequency [Hz]	Rated input [kW]	ΔT [°C]
HRFL2-040	230 V	50 Hz	1,4	10
HRFL2-070	230 V	50 Hz	2,7	10
HRFL2-150	400 V	50 Hz	5,3	10
HRFL2-200	400 V	50 Hz	7,2	10

Characteristics of water heating coil

Type	Rated capacity [kW]	Water pressure loss [kPa]	Air pressure loss [Pa]	Connection diameter	Air flow [m³/h]
HRFL2-040	2,68	1	15	G3/4"	400
HRFL2-070	4,88	5	18	G3/4"	700
HRFL2-150	9,87	26	27	G3/4"	1400
HRFL2-200	14,4	7	16	G3/4"	2000

* For water temperature gradient 90/70 and inlet air temperature 15°C.

Correction coefficients of the powers of the hot water coil*						
Air inlet temperature [°C]	Water regime					
	90/70	85/65	80/60	75/55	70/50	65/45
0	1,29	1,20	1,10	1	0,91	0,82
5	1,19	1,10	1	0,91	0,82	0,73
10	1,10	1	0,91	0,82	0,73	0,63
15	1	0,91	0,82	0,73	0,63	0,53
20	0,91	0,82	0,73	0,63	0,54	0,45

* To apply to the rated power in the characteristics of the LPHW coil.

Characteristics of water cooling / heating coil (C/O)

Type	Rated capacity [kW]	Water pressure loss [kPa]	Air pressure loss [Pa]	Connection diameter	Air flow [m³/h]
HRFL2-040	2,51	0,29	80	3/4"	400
HRFL2-070	4,6	0,59	71	3/4"	700
HRFL2-150	9,41	0,69	99	3/4"	1400
HRFL2-200	15,7	1,67	83	3/4"	2000

* For water temperature gradient 60/40 and inlet air temperature 15°C.

Characteristics of water cooling / heating coil (C/O)

Type	Rated capacity [kW]	Water pressure loss [kPa]	Air pressure loss [Pa]	Connection diameter	Air flow [m³/h]
HRFL2-040	1,94	2,65	91	3/4"	400
HRFL2-070	3,68	5,4	80	3/4"	700
HRFL2-150	7,34	6,57	112	3/4"	1400
HRFL2-200	12,62	15,79	94	3/4"	2000

* For water temperature gradient 7/12 and inlet air temperature 25°C with 70% of relative humidity.

Correction coefficients of the powers of the hot water coil (C/O)*				
Air inlet temperature [°C]	Water regime			
	60/40	55/50	45/40	35/30
0	1,59	1,95	1,55	1,15
5	1,39	1,76	1,46	0,95
10	1,20	1,56	1,16	0,76
15	1,00	1,37	0,97	0,57
20	0,80	1,17	0,78	0,38

* To apply to the rated power in the characteristics of the water coil.

Correction coefficients of the powers of the cool water coil (C/O)*			
Air inlet temperature [°C]	Water regime / Wasserhaushalt		
	7/12	6/11	5/10
20	0,35	0,43	0,54
25	1,00	1,12	1,25
30	1,86	1,98	2,10

* To apply to the rated power in the characteristics of the water coil.

Characteristics of direct evaporator (DX)

Refrigerant R32

Type	Air flow [m³/h]	Rated capacity [kW]	Outlet air temperature [°C]	RH after coil [%]	Refrigerant pressure loss [kPa]	Air pressure loss [Pa]	Connection diameter of gas coil	Connection diameter of liquid coil
HRFL2-040	400	1.8	14.7	78	38.2	55	7 mm	7 mm
HRFL2-070	700	3.4	13.4	85	37.4	83	3/8"	3/8"
HRFL2-150	1400	7.0	13.2	86	32.6	90	5/8"	1/2"
HRFL2-200	2000	10.2	13	86	29.4	71	3/4"	1/2"

* For inlet air temperature 25°C with 47% of relative humidity and evaporation temperature 5°C, refrigerant R32.

Refrigerant R410a

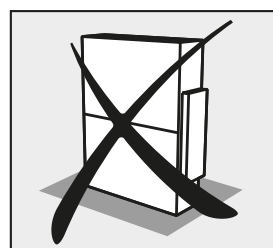
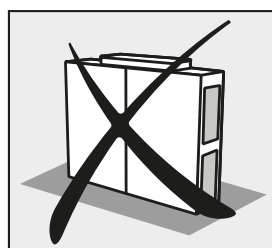
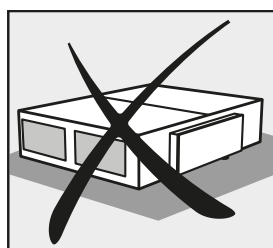
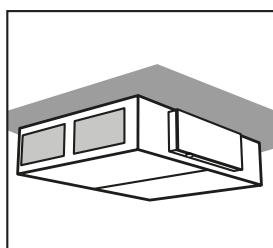
Type	Air flow [m³/h]	Rated capacity [kW]	Outlet air temperature [°C]	RH after coil [%]	Refrigerant pressure loss [kPa]	Air pressure loss [Pa]	Connection diameter of gas coil	Connection diameter of liquid coil
HRFL2-040	400	1.7	15	78	60.0	54	3/8"	3/8"
HRFL2-070	700	3.3	13.7	85	58.3	81	5/8"	1/2"
HRFL2-150	1400	6.6	13.6	85	51.1	88	5/8"	1/2"
HRFL2-200	2000	9.8	13.4	86	46.4	70	3/4"	1/2"

* For inlet air temperature 25°C with 47% of relative humidity and evaporation temperature 5°C, refrigerant R410A.

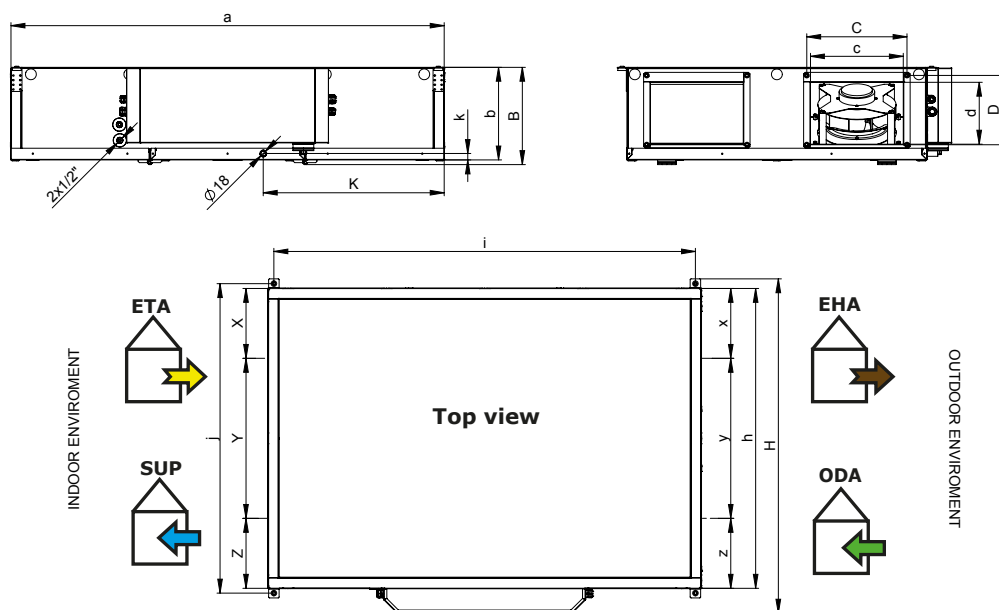
**INSTALLATION AND ASSEMBLY**

ALFA FLAT units must be installed according to the pictures (see below).

The unit must be installed in such a way that the direction of the air blown corresponds to the direction of air circulation in the distribution system. The unit must be installed so as to give free access for maintenance, service or dismantling. This is to allow access to service flaps and possibility to open them, access to the lid of the control panel, access to the lateral connections and access to the filter cover.

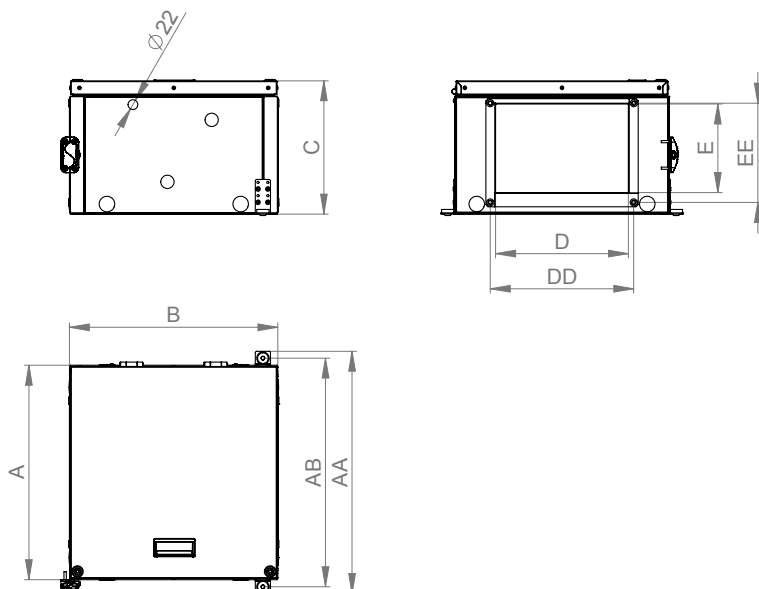


DIMENSIONS



Type	H	h	a	B	b	i	j	K	k	c	d	C	D	X	x	Y	y	Z	z	condensation ø	weight (kg)
400	780	670	1190	310	300	1120	700	485	21	250	150	274	174	166	166	332	332	166	166	18	75
700	1080	970	1400	310	300	1330	1000	590	21	300	200	324	224	242	242	517	517	242	242	18	95
1500	1385	1270	1700	390	380	1630	1305	720	21	500	250	524	274	323	323	625	625	323	323	18	170
2000	1710	1600	2000	470	460	1930	1630	902	21	600	300	624	324	433	433	735	735	433	433	18	245

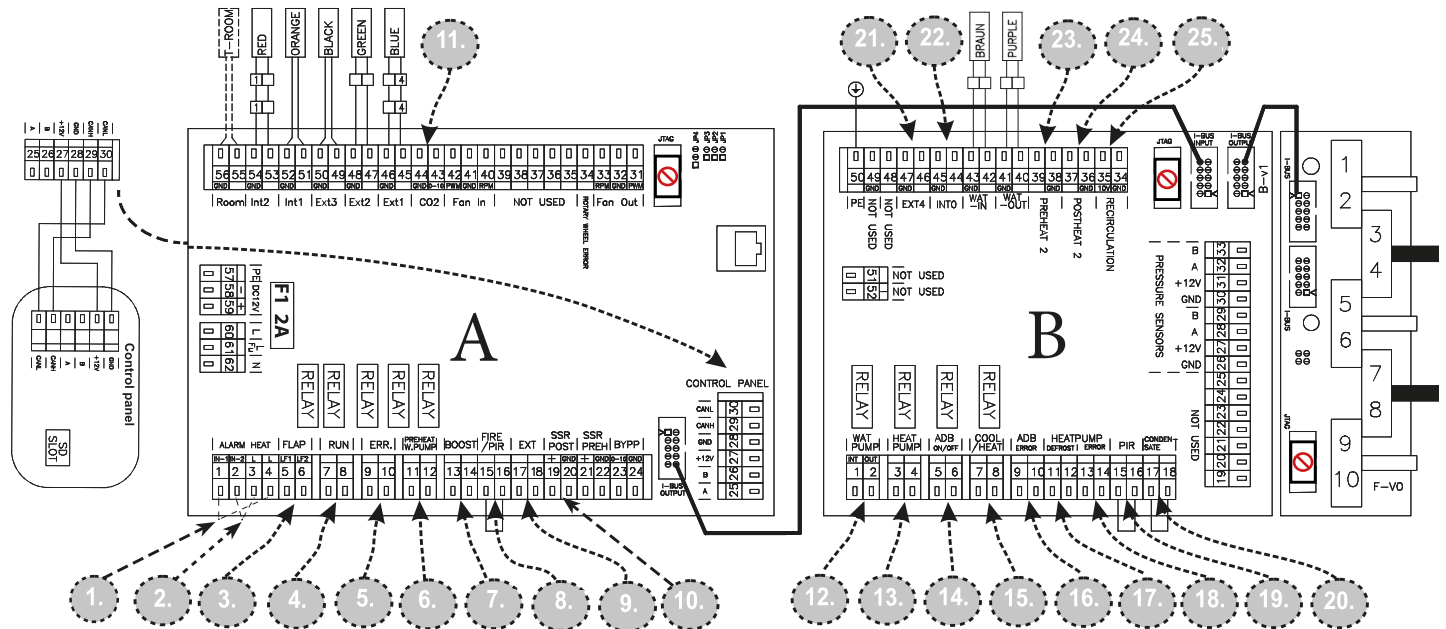
External module: C/O, DX



Type	A	B	C	D	E	DD	EE	AB	AA	ø condensation
HRFL2-040	334	470	295	250	150	274	174	366	397	22
HRFL2-070	484	470	300	300	200	324	224	516	547	22
HRFL2-150	636	470	380	500	250	524	274	668	699	22
HRFL2-200	800	470	460	600	300	624	324	832	863	22



WIRING DIAGRAMS



1.	A (1,4)	SAFETY THERMOSTAT POSTHEATING
2.	A (2,3)	SAFETY PREHEATING THERMOSTAT
3.	A (5-6)	LF1 - FLAP INLET (output L-open), LF2 - FLAP OUTLET (output L-open)
4.	A (7-8)	RUN CONTACT (output - NO/NC settable)
5.	A (9-10)	ERROR CONTACT (output NO)
6.	A (11-12)	PREHEATER WATER PUMP (11 - Lint, 12 - Lout)
7.	A (13-14)	BOOST (input NO)
8.	A (15-16)	FIRE (input NC)
9.	A (17-18)	EXTERNAL CONTROL ON/OFF (input NC)
10.	A (19,20)	OUTPUT PERFORMANCE OF POSTHEATING (0-10V OR PWM)
11.	A (43-44)	AQS SENSOR 0-10V (input)
12.	B (1-2)	WATER PUMP (1 - Lint, 2 - Lout)
13.	B (3-4)	HEAT PUMP CONTROL settable (output - ON/OFF)
14.	B (5-6)	ADIABATIC MODULE (output - ON/OFF)
15.	B (7-8)	COOL / HEAT settable (CO = NC/NO - DX = output settable)
16.	B (9-10)	ADIABATIC MODULE ERROR (input NO)
17.	B (11-12)	HEAT PUMP DEFROST settable (input NC/NO)
18.	B (13-14)	HEAT PUMP ERROR settable (input NC/NO)
19.	B (15-16)	PIR (input NC)
20.	B (17-18)	CONDENSATE OVERFLOW (input NC)
21.	B (46-47)	EXTERNAL TEMPERATURE SENSOR (external postheater - input)
22.	B (44-45)	EXTERNAL TEMPERATURE SENSOR (adiabatic module / recirc. chamber - input)
23.	B (38-39)	EXTERNAL PREHEATER (output 0-10V)
24.	B (36-37)	EXTERNAL POSTHEATER (output 0-10V)
25.	B (34-35)	RECIRCULATION CHAMBER (output 0-10V)



CONTROL

AirGENIO SUPERIOR - Main control functions

- Touch-screen control panel for easy control and complete overview of device operational status (recommended connecting data cable to control panel is UTP cable and it should not exceed 50m length).
- Manual stepless fans control (PWM)
- CAV, VAV or DCV ventilation in automatic mode
- BOOST mode - intensive airflow for a pre-set time period
- Freecooling mode - night ventilation (cooling)
- Occupancy mode - reducing ventilation intensity according to the PIR sensor
- FIRE protection mode with settable logic
- Stepless by-pass control (temperature control: freecooling, antifreeze protection)
- Integrated timer (day, week, year)
- Optional connection of sensors: CO2, RH, VOC (0-10)
- Clogged filter indication by pressure sensors
- Stepless pre-heating control and post-heating control
- Electric coil control (PWM) and LPHW coil control (0-10V)
- Change-over control with automatic detection of the heating / cooling (0-10V)
- Wide choice of different ways for DX coil control*
- Possible control of external pre-heater and post-heater
- Offset fan adjustment (over-pressure / underpressure)
- BMS control via Modbus RTU / TCP or BACnet
- Remote control via smart device



*AirGENIO SUPERIOR control system allows a different ways of DX coil control

- ON-OFF
- 0-10 V
- 0-10 V - 0-10 V signal control
- On/Off - On/Off switching
- Off/On - Off/On switching
- 0-10 V + On/Off - On/Off switching + 0-10 V signal control
- 0-10 V + Off/On - Off/On switching + 0-10 V signal control

With reverse control cycle (heating - cooling mode)

- 10-0 V + On/Off - On/Off switching + 0-10 V signal control cooling, heating 10-0 V
- 10-0 V Off/On - Off/On switching + 0-10 V signal control cooling, heating 10-0 V

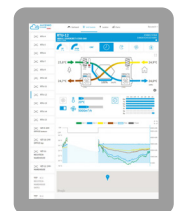
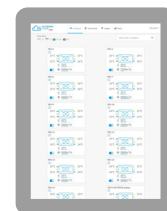
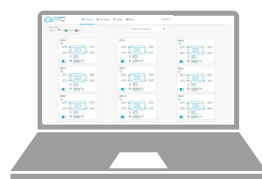
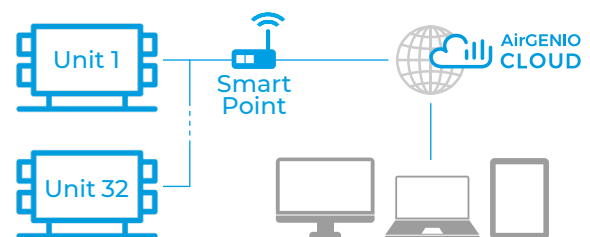
2V Service software:

- Easy and quick commissioning from your computer
- Error log - error display and identification
- Easy service (device status loading/reset to backup setting)
- Fast FW update
- OFFLINE version

AirGENIO CLOUD - Connections you can trust

2V cloud service operated on secure cloud server.

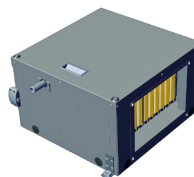
- Control, monitoring and servicing
- Web communication interface with clear and structured layout
- Easy customization of settings
- History logs providing accurate and timely info
- Smart notifications and warning/error messages clearly displayed in overview dashboard
- Backup and restore settings





ACCESSORIES

External modul – Additional heating/cooling modul for HRFL2 unit



Type	HRFL2 + modul C/O	HRFL2 + DX module
HRFL2-040HPCBE75-EE1S-...	✓	✓
HRFL2-040HPCBE75-ES0S-...	✓	✓
HRFL2-040HPCBE75-EV1S-...	not possible	✓
HRFL2-040HPCBE75-XE1S-...	✓	✓
HRFL2-040HPCBE75-XS0S-...	✓	✓
HRFL2-040HPCBE75-XV1S-...	not possible	✓
HRFL2-070HPCBE75-EE1S-...	✓	✓
HRFL2-070HPCBE75-ES0S-...	✓	✓
HRFL2-070HPCBE75-EV1S-...	not possible	✓
HRFL2-070HPCBE75-XE1S-...	✓	✓
HRFL2-070HPCBE75-XS0S-...	✓	✓
HRFL2-070HPCBE75-XV1S-...	not possible	✓
HRFL2-150HPCBE75-EE1S-...	✓	✓
HRFL2-150HPCBE75-ES0S-...	✓	✓
HRFL2-150HPCBE75-EV1S-...	not possible	✓
HRFL2-150HPCBE75-XE1S-...	✓	✓
HRFL2-150HPCBE75-XS0S-...	✓	✓
HRFL2-150HPCBE75-XV1S-...	not possible	✓
HRFL2-200HPCBE75-EE1S-...	✓	✓
HRFL2-200HPCBE75-ES0S-...	✓	✓
HRFL2-250HPCBE75-EV1S-...	not possible	✓
HRFL2-200HPCBE75-XE1S-...	✓	✓
HRFL2-200HPCBE75-XS0S-...	✓	✓
HRFL2-200HPCBE75-XV1S-...	not possible	✓

MOFL1-040HX00000-XC3X-0A0

0 – Standard RAL

C3 – Change over coil

D3 – Direct evaporator

040 – Nominal air flow 400 m³/h

070 – Nominal air flow 700 m³/h

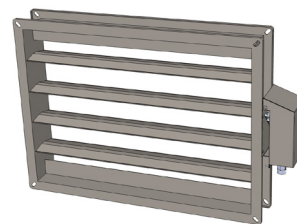
150 – Nominal air flow 1500 m³/h

200 – Nominal air flow 2000 m³/h

External modul

Four-sided closing flap with servo drive

The **MLKR** rectangular control flap is designed for controlling and closing the HVAC systems. The flap is designed for operation in the basic environment for conveying air free of rough dust, grease, chemical fumes, and other contaminants. The flanged damper frame and blades are made of galvanized plate.



Unit type	Four-sided closing flap with servo drive
HRFL2-040	MLKR-0250-0150-SR*
HRFL2-070	MLKR-0300-0200-SR*
HRFL2-150	MLKR-0500-0250-SR*
HRFL2-200	MLKR-0600-0300-SR*

* **SR** - servodrive with spring, **SX** - servodrive without spring

Electric heater

EOKO – The heater output is controlled by the HRFL2 unit control system via 0-10V



Recommended combinations:

Unit type	Type of el. Pre-heater
HRFL2-040	EOKO2-200-3,6-3-D
HRFL2-070	EOKO2-250-4,5-3-D
HRFL2-150	EOKO2-315-6,0-3-D
HRFL2-200	EOKO2-400-9,0-3-D

Adapter four-sided to circular

PR-O – adapter from four-sided to circular pipes made from a galvanised metal sheet



Unit type	Circular adapter
HRFL2-040	HRB-PR-01
HRFL2-070	HRB-PR-02
HRFL2-150	HRB-PR-03
HRFL2-200	HRB-PR-04

Filtration inserts (VDI 6022, ISO16890)

replacement filtration inserts of various filtration classes and configurations.



Unit type	Filter Coarse 90%	Filter ePM 1 60%	Filter ePM 1 80%
HRFL2-040	FILTR-HRFL2-040 M5	FILTR-HRFL2-040 F7	FILTR-HRFL2-040 F9
HRFL2-070	FILTR-HRFL2-070 M5	FILTR-HRFL2-070 F7	FILTR-HRFL2-070 F9
HRFL2-150	FILTR-HRFL2-150 M5	FILTR-HRFL2-150 F7	FILTR-HRFL2-150 F9
HRFL2-200	FILTR-HRFL2-200 M5	FILTR-HRFL2-200 F7	FILTR-HRFL2-200 F9

Mixing valve

The **SMU** mixing unit is designed for controlling the heat-output of water-type heat exchangers. It is used especially for controlling standalone water-type air heaters, heaters inbuilt into the ventilation units.

Recommended values for individual types of the **ALFA 95 FLAT** units:

SMU2-024-06,3-SC

- SC** – with short circuit
- WO** – without short circuit
- 00,6** – mixing valve – k_{VS} 0,6
- 01,6** – mixing valve – k_{VS} 1,6
- 02,5** – mixing valve – k_{VS} 2,5
- 04,0** – mixing valve – k_{VS} 4,0
- 06,3** – mixing valve – k_{VS} 6,3
- 12,0** – mixing valve – k_{VS} 12,0
- 24,0** – mixing valve – k_{VS} 24,0

024 – 24V stepless control

SMU2 – mixing unit



Duct sensor CO₂ *CI-CO2-22DC-11*

The transmitter is ideally suited for duct mounting in the fields of building management and demand controlled ventilation. The elegant, compact housing enables easy installation directly at the ventilation duct using a mounting flange.



Duct sensor of relative humidity *CI-RH-22DTH-11M*

Duct sensor for measuring relative humidity in air-conditioning systems.



Spatial sensor CO₂ *CI-CO2-R*

Sensor combines CO₂. The snap-in mounting concept stands for easy installation.



Spatial sensor RH *CI-RH-R*

Capacitive relative humidity sensor with 0-10V analog and relay output.



Signal combiner *CI-AQS-COMBI*

Signal combiner for AQS sensors uses 0-10V logic which you can connect up to 10 different sensors. The input signal with the highest voltage will be the signal that is on the output terminal.



AirGENIO CLOUD smart point *AirGENIO-SMART-POINT*

2VV cloud service operated on secure cloud server



PIR sensor**CI-PS 1003**

Spatial infrared sensor for automatic ventilation based on presence of people in the ventilated area.

Power supply of this sensor must be outsourced. Unit doesn't support this kind of power supply (15-24V DC).

**Condensate pump****SET-ASPEN-MAXI-ORANGE**

Pump is designed to be installed in false ceilings.

Note:

Use of pump is recommended where gravity assisted condensate collection is not achievable.

Accessory supplied loose for fitting on site.

Pipework from pump not included.

**Siphon for condensate****SK-HL138**

Siphon with a ball for installation on the wall or flush mounting.





KEY TO CODING

HRFL2-040 H P CB E 75-X S0 S-0A0

0A0 2VV Version

S Control

S AirGENIO Superior controls

S0 After heater

S0 Without after heater

E1 Electric after heater

V1 Water after heater

X Preheater

X Without preheater

E Electric preheater

75 Filtration (inlet / outlet)

75 inlet ePM 2,5 65%; Coarse 90%

E Type of fans

E EC fans

CB By-pass

CB Counterflow plate heat exchanger with bypass

P Version of access

P Right access

H Installation

Horizontal installation

040 Nominal airflow

040 Nominal flow rate 400 m³/h

070 Nominal flow rate 700 m³/h

150 Nominal flow rate 1500 m³/h

200 Nominal flow rate 2000 m³/h

HRFL2 Unit Type

Commercial recovery unit **ALFA 95 FLAT**