CF Range

HIGH EFFICIENCY HEAT RECOVERY UNIT
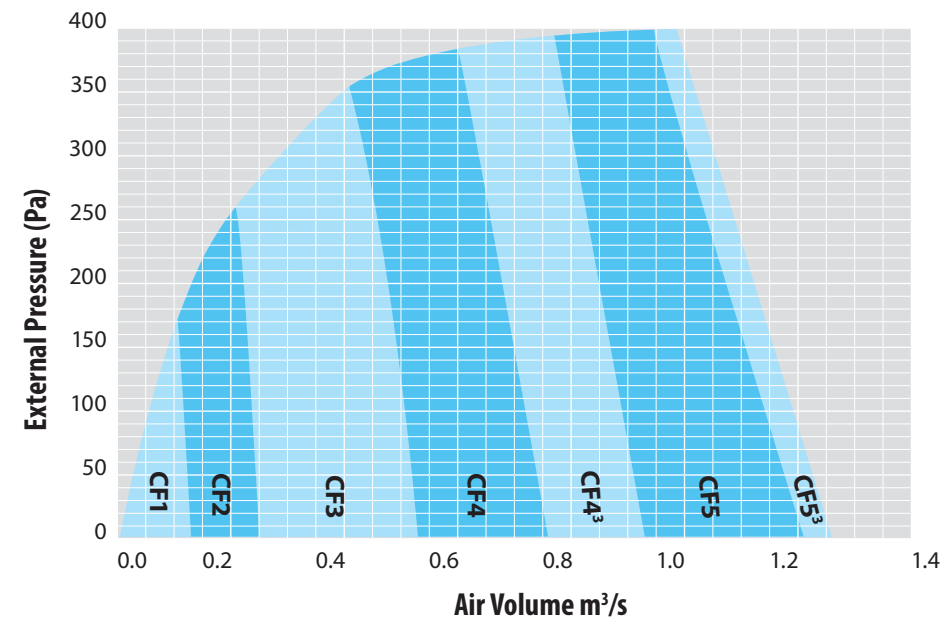
Heat Recovery Ventilation Unit Selection Guide
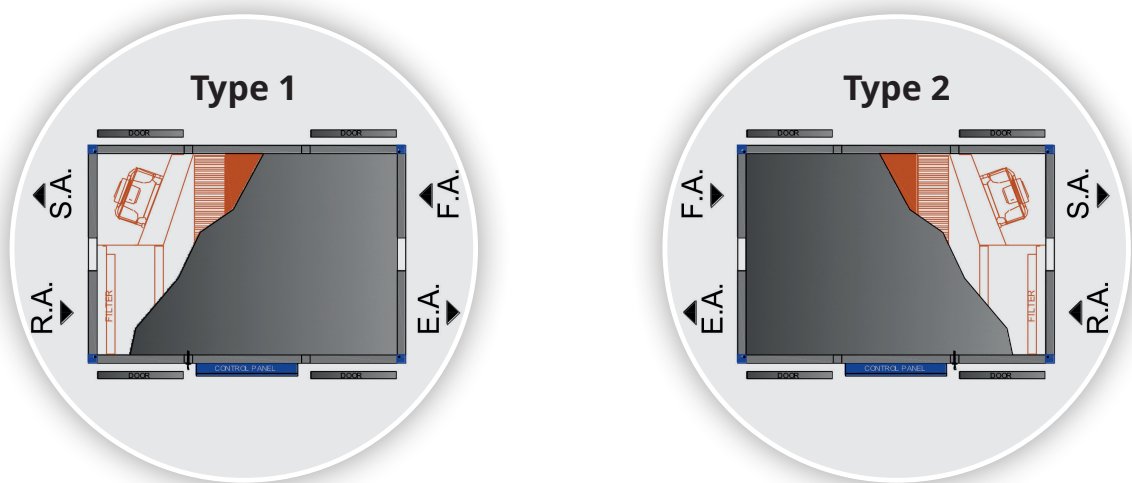
Model Range

Electrical Supply	CF Model	Operating Capacity (l/s)
SINGLE PHASE	CF1	
	CF2	
	CF3	
	CF4	
	CF5	
THREE PHASE	CF4³	
	CF5³	

Operating Capacity scale (l/s): 0 100 200 300 400 500 600 700 800 900 1000 1100 1200

*Min airflow for EH models differ from these charts. See tables on p3.

Performance Map

External Pressure (Pa) axis: 0, 50, 100, 150, 200, 250, 300, 350, 400

Air Volume m³/s axis: 0.0, 0.2, 0.4, 0.6, 0.8, 1.0, 1.2, 1.4

Model bands: CF1, CF2, CF3, CF4, CF4³, CF5, CF5³

Handing options

Type 1

S.A. F.A.
R.A. E.A.
DOOR DOOR FILTER CONTROL PANEL

Type 2

F.A. S.A.
E.A. R.A.
DOOR DOOR FILTER CONTROL PANEL

Heating options

Heat Recovery only (HR):

Model	H(1)	W(2)	L	Duct openings	Weight(3)			FLC (A)	Elec. Supply
					S	P	R		
CF1-HR	420	800	1455	320h x 300w	160	150	165	4.1	230v/1ph
CF2-HR	420	1050	1555	320h x 400w	220	210	230	5.4	230v/1ph
CF3-HR	500	1300	1830	400h x 500w	290	275	290	7.0	230v/1ph
CF4-HR	640	1550	2150	540h x 600w	480	470	485	9.2	230v/1ph
CF5-HR	780	1850	2290	680h x 750w	---	620	640	14.6	230v/1ph
CF4[3]-HR	640	1550	2150	540h x 600w	480	470	485	5.8	400v/3ph
CF5[3]-HR	780	1850	2290	680h x 750w	---	620	640	8.8	400v/3ph

Water Heating Coil (HW):

Model	H(1)	W(2)	L	Duct openings	Weight(3)			Heating (KW)	FLC (A)	Elec. Supply	Coil Conns
					S	P	R				
CF1-HW	420	800	1575	320h x 300w	180	170	185	1.5	4.1	230v/1ph	½" BSP(M)
CF2-HW	420	1050	1675	320h x 400w	240	230	250	2.5	5.4	230v/1ph	
CF3-HW	500	1300	1950	400h x 500w	330	315	335	4.0	7.0	230v/1ph	
CF4-HW	640	1550	2270	540h x 600w	530	520	540	10.0	9.2	230v/1ph	¾" BSP(M)
CF5-HW	780	1850	2410	680h x 750w	---	690	710	18.0	14.6	230v/1ph	
CF4[3]-HW	640	1550	2270	540h x 600w	530	520	540	10.0	5.8	400v/3ph	
CF5[3]-HW	780	1850	2410	680h x 750w	---	690	710	18.0	8.8	400v/3ph	

Electric Heating (EH):

Model	H(1)	W(2)	L	Duct openings	Weight(3)			Heating (KW)	FLC (A)	Elec. Supply	Min. M³/S
					S	P	R				
CF1-EH	420	800	1575	320h x 300w	180	170	185	1.0	8.4	230v/1ph	0.08
CF2-EH	420	1050	1675	320h x 400w	240	230	250	2.0	14.1	230v/1ph	0.12
CF3-EH	500	1300	1950	400h x 500w	330	315	335	4.0	24.4	230v/1ph	0.20
CF4-EH	640	1550	2270	540h x 600w	530	520	540	6.0	35.2	230v/1ph	0.40
CF5-EH	780	1850	2410	680h x 750w	---	690	710	6.0	40.6	230v/1ph	0.60
CF4[3]-EH	640	1550	2270	540h x 600w	530	520	540	9.0	18.8	400v/3ph	0.40
CF5[3]-EH	780	1850	2410	680h x 750w	---	690	710	12.0	26.2	400v/3ph	0.60

(1) Height of unit not including baseframe or roof. See page 2 for details
(2) Width of unit not including control panel, door furniture etc.
(3) Weight for suspended unit inclusive of acoustic treatment. **Acoustic treatment not included on Plantroom or Roof units.**
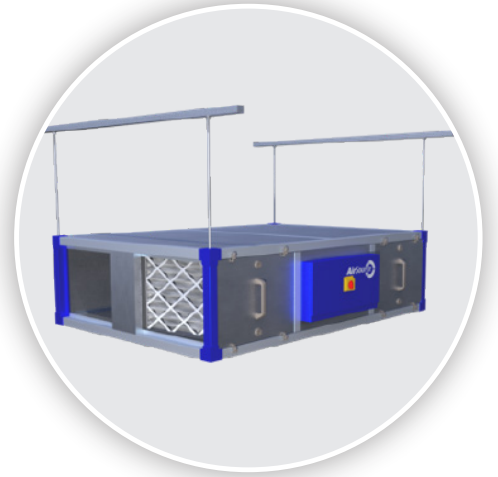
Location options

Suspension (S):

Suitable for suspension from the ceiling with droprod fixings provided in the casework.

Casework: Acoustically treated to reduce in room sound breakout.

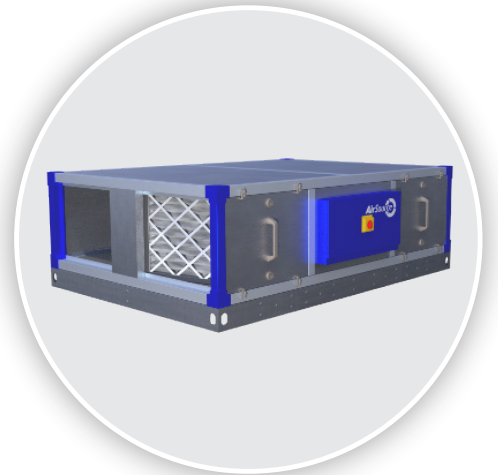Available in Models CF1 to CF4 with all heating options

Plantroom (P):

Suitable for plantroom location with 100mm high baseframe fitted.

Casework: Standard Insulation.

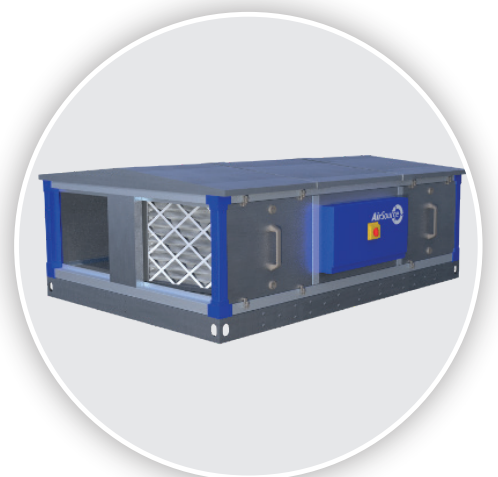Available in Models CF1 to CF5 with all heating options

Roof (R):

Weatherproof construction suitable for external location with apex roof and 100mm high baseframe fitted.

Optional cowls available for exhaust air & fresh air intake.

Casework: Standard Insulation.

Available in Models CF1 to CF5 with all heating options

Controls

All models are suitable for network or stand alone operation, and are supplied with a BACnet[3] over I.P. compatible BMS controls system fitted.

Various control modes are available to provide the following options:

» Constant Speed or CO_2 control

» Tempered Air or Space Heating (HW or EL versions only)

Terminals are provided for the following remote connections:

» Fire alarm

» Common fault

» Remote start / stop

» Coil valve actuator (if applicable)

» Room CO_2 / Temperature sensor (if applicable)

(3) BACnet requires enabling at additional cost.

Model Identification

Example of typical unit code:

CF3-1-HW-S-RB

Model Size
Handing
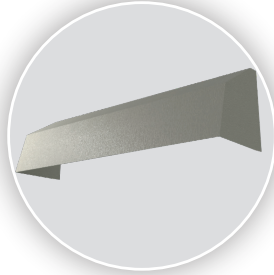Heating option
Location option
Control option
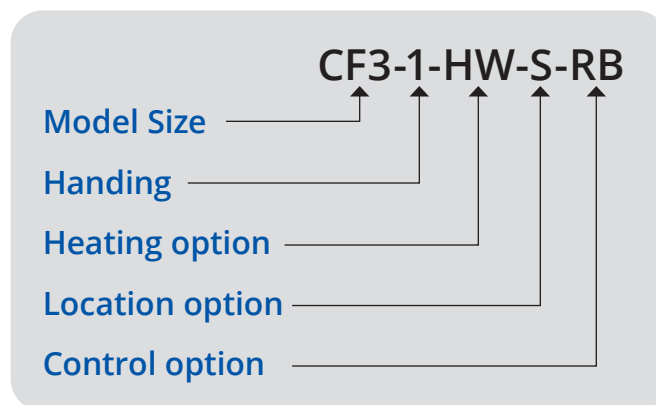
Optional items

Touch Screen Commissioning Tool:

Colour touch screen with 5m extension cable with USB(A) male connection for use when commissioning and carrying out maintenance. A female USB(A) connection is provided in the control panel front for convenience.

Intake / Discharge Cowls:

Weatherproof cowls for fresh air intake and exhaust discharge on Roof (R) mounted models.

Attenuation:
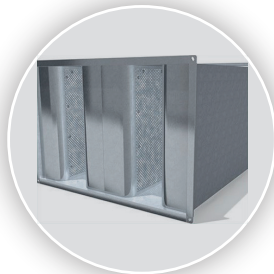
Standard attenuator sets can be provided offering proven performance in the most demanding applications.

BACnet Communication:

With this option enabled the unit can be controlled via BACnet over I.P. (Internet Protocol). This allows remote activation, setpoint adjustment and the monitoring of sensors, alarms and unit status

Room Temperature and CO_2 Sensor:

To avoid issues with compatibility and incorrect connection we offer remote room sensors for control of temperature only, or temp CO_2. The control panel will have outgoing terminals matched to the terminals in the sensor.

PIR Occupancy Detector:

A PIR sensor can be supplied to enable the unit only whilst the room is occupied. The control panel will have outgoing terminals matched to the terminals in the sensor.