

## Unit description

**KFA series 4-way cassette fan coil units** are terminals of a hydronic system for installation in false ceilings. They can be used with chilled or hot water to form an air conditioning system.

The air flow range: 300 - 2,000 CFM.

The output available range: 2.7 - 17.6 KW in the standard configuration.

## Unit composition

## Air grille-module (cassette panel assembly)

Aesthetic panel design, in ABS material with high mechanical characteristics and resistance to ageing.

With synthetic washable and removable air filter, motor-drive louvers.

## Unit body casing

Made of galvanized steel sheet metal, with pre-formed expanded polystyrene air passages suitable shaped to allow passage of air, thickness enough for thermal and acoustical insulation.

#### Heat exchanger

The high efficiency coils, made from 3/8" copper tubes and high exchange surface area aluminium hydrophilic fins, are 100% tested against leaks with dried air at 30 bar (3 MPa). With 3/4" pipe connections and air bleed vent.

#### Condensate recovery tray

In thermoforming high density expanded polystyrene, covered with a vacuum forming polyvinyl chloride, fitted with a condensates draining pump and a safety float.

#### Condensate drain pump

The drain pump with 700 mm of maximum head, with no return valve, integral with the unit and wired to the electronic board.

Float switch is connected with the electronic board to control the condensate and alarm level.

### Fan motor assembly

The centrifugal balanced fan blower with 3-speed motor.

#### Electrical box

Composed of a box outside the unit which contains the electronic control board whose connection terminals are easily accessible.

#### Microprocessor control system

- wireless remote control
- wired wall pad control
- motorized valve control (AC on/off, normal closed)
- auto restart
- operation mode control
- auto-diagnose, protections and error code display
- room air temp. sensor & coil temp. sensor
- Rs485 communication (optional PCB board)
- Controller:
- \* wireless remote controller standard
- \* wired wall pad optional

#### Alternative control system:

With independent pump control system, the unit to be controlled by fan coil thermostat or 3-speed switch.





remote controller (standard)

wired wall pad (optional)

# KFA SERIES CASSETTE FAN COIL UNIT (2 PIPE) SPECIFICATION

Code: KFA -			30\$	40S	50S	55M	60M	80M	100M	110L	120L	140L	170X	200X
System			2 pipe	2 pipe	2 pipe	2 pipe	2 pipe	2 pipe	2 pipe	2 pipe	2 pipe	2 pipe	2 pipe	2 pipe
CFM			300	400	500	550	600	800	1000	1100	1200	1400	1700	2000
	Н		2.70	3.52	4.00	4.50	5.28	6.50	7.05	8.80	10.55	12.32	15.90	17.60
Total cooling capacity	М	kW	2.05	2.72	3.03	3.41	4.02	4.95	5.38	6.63	7.95	9.29	12.10	13.50
	L		1.44	1.86	2.05	2.58	2.96	3.63	3.88	4.92	5.85	6.77	8.80	9.90
Sensible cooling capacity	Н		2.00	2.68	3.12	3.56	4.22	5.39	5.96	7.30	8.91	10.42	13.20	14.80
	М	kW	1.48	2.01	2.30	2.63	3.10	3.96	4.33	5.37	6.52	7.62	9.70	11.10
	L		1.01	1.34	1.50	1.96	2.25	2.80	3.07	3.79	4.62	5.42	6.90	7.80
Chilled water flow rate I/		l/h	464	605	688	774	908	1,118	1,212	1,513	1,814	2,119	2,724	3,027
Chilled water pressure drop		kPa	9	15	18	8	11	16	18	23	30	38	38	48
	Н		3.30	4.40	5.10	5.95	7.00	8.77	10.07	11.97	15.30	17.90	22.30	25.50
Heating capacity	М	kW	2.47	3.32	3.75	4.32	5.23	6.55	7.15	8.70	10.63	12.83	16.30	18.60
	L		1.72	2.27	2.47	3.20	3.72	4.65	5.03	6.29	7.60	8.90	11.40	13.00
Air flow	Н		510	680	850	935	1,020	1,360	1,700	1,870	2,040	2,380	2,890	3,400
	М	m³/h	380	520	640	700	770	1,030	1,270	1,400	1,530	1,790	2,200	2,600
	L		260	350	430	520	560	750	930	1,030	1,120	1,300	1,600	1,900
Sound pressure (1m)	Н		39	43	45	40	45	50	52	46	53	55	57	65
	М	dB(A)	35	37	39	35	37	44	46	39	45	46	52	58
	L		29	30	32	32	34	39	40	36	37	39	48	50
Power input W		W	54	62	65	71	95	120	127	160	190	210	290	340
Power supply			220-240V/1Phase/50(60)Hz			220-240V/1Phase/50(60)Hz				220-240V/1Phase/50(60)Hz			"	
Fan blower type			centrifugal			centrifugal				centrifugal			centrifugal	
Fan number nr.			1			1				1			1	
Coil rows number nr.		2			2				2			2		
Coil max. working pressure MPa			1.6			1.6				1.6			1.6	
		inch	3/8"			3/8"				3/8"			3/8"	
, ,		mm	580*580*250			710*710*290				832*832*290			950*950*290	
()		mm	680*680			830*830				980*980			1140*1140	
Weight kg			20 26 33 50											
Water inlet/outlet pipe inch			3/4" (FPT)											
Condensate discharge in		inch	1" (outer diamger)											

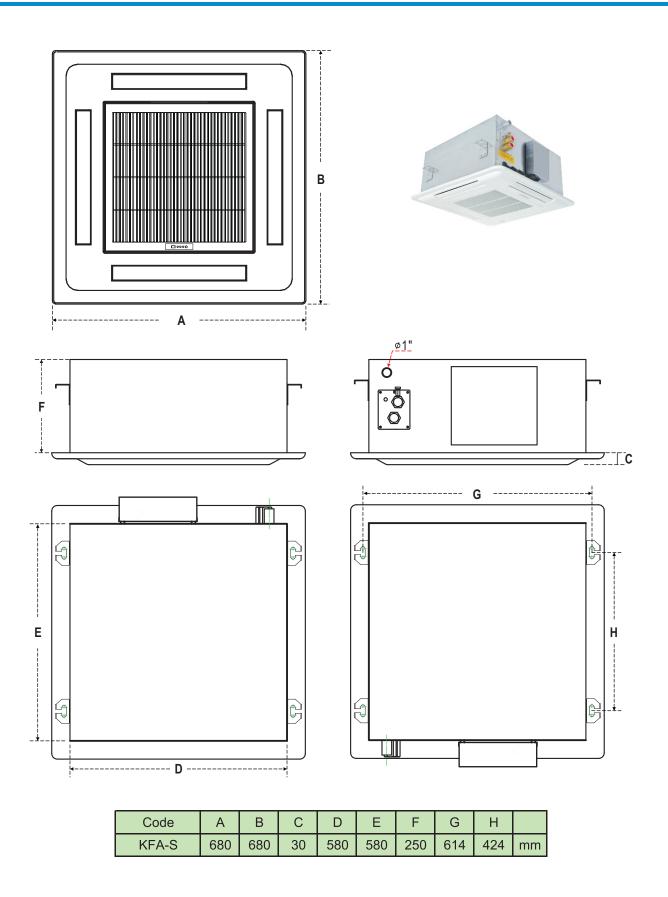
Cooling:

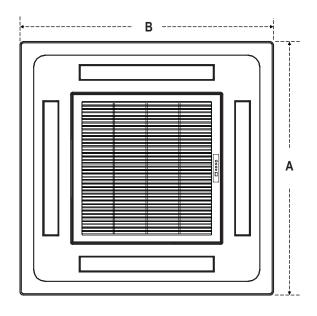
Inlet air temp.: DB+27°C/WB+19°C Inlet/outlet water temp. +7°C/+12°C

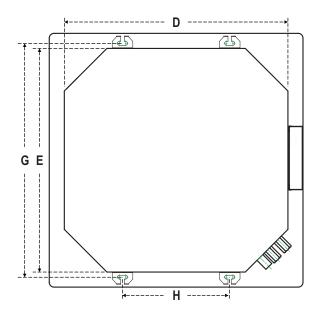
Heating:

Inlet air temp.: +20°C

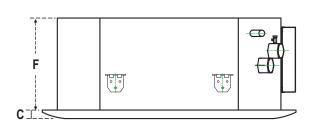
Inlet water temp.  $+50^{\circ}$ C; Same water flow rate as for the cooling;











Code	А	В	С	D	Е	F	G	Н	
KFA-M	830	830	30	710	710	290	737	338	mm
KFA-L	980	980	30	832	832	290	864	416	mm
KFA-X	1140	1140	30	950	950	290	992	488	mm