



SABIANA
IL CLIMA AMICO

A leading brand of  AFG



Carisma Fly High Wall Fan Coil Unit

Carisma Fly is the high wall fan coil unit **designed and manufactured in Italy** by Sabiana, in 4 sizes and many different models. Fly is easy to install like a standard fan coil: without decreasing the emission and without any extra frame, 2 way or 3 way valves and condensate pump can be mounted into the casing.

The **modern and appealing** design of the unit in RAL 9003 colour allows the use of Fly in any environment.

Fly is **available with standard AC motors or low energy EC motors** and in the following versions:

with wired wall control, infra-red remote control, MB electronic board for Modbus management and electric heating coil.

The units are for 2 pipe installations only.

All the Fly models perform very low electric consumption and extremely quite sound levels according to the request of today's new projects.

Technical characteristics of the main components:

Versions: all versions are available

without valves, with 2 way valve or with 3 way valve fitted in the unit.

There are four sizes available in the following versions:

CUP	without infra-red remote control and without valve;
CUP-2U	without infra-red remote control with fitted 2 way valve;
CUP-3U	without infra-red remote control with fitted 3 way valve.
CUP-T	with infra-red remote control and without valve;
CUP-T-2U	with infra-red remote control with fitted 2 way valve;
CUP-T-3U	with infra-red remote control with fitted 3 way valve.
CUP-MB	with MB board and without valve;
CUP-MB-2U	with MB board with fitted 2 way valve;
CUP-MB-3U	with MB board with fitted 3 way valve.

Caseing: made of auto-extinguishing ABS UL94 HB plastic with high specifications and great resistance to aging.

Filter: washable-regenerable synthetic filter, readily accessible.

Fan assembly: made of plastic tangential fan.

Electric motor: the motor is for single phase supply and has six speeds, three of which are connected, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings.

Internal thermal protection with automatic reset, protection IP 20, class B.

The speeds connected in the factory

are indicated by "MIN, MED and MAX" in the following tables.

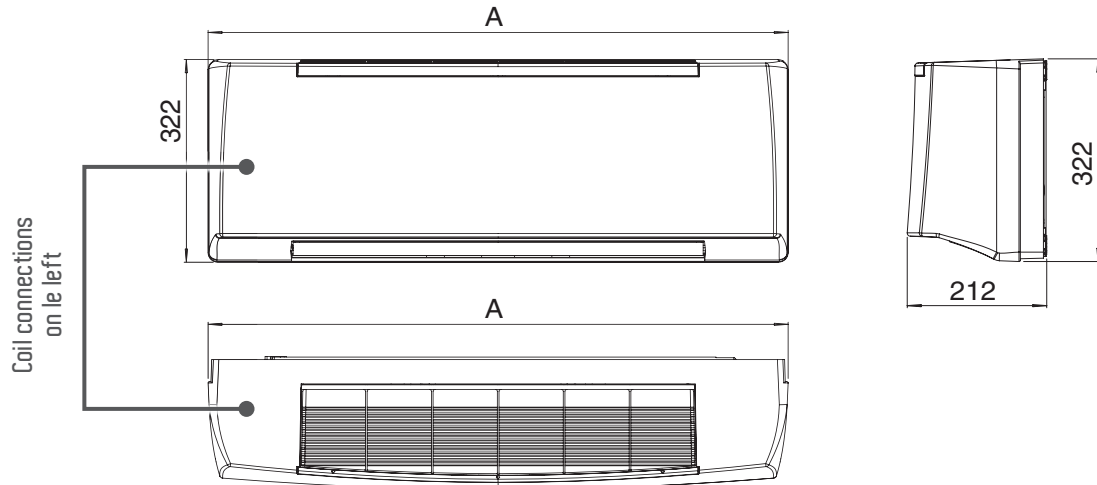
Coil: it is manufactured from drawn copper tube and the aluminium fins are mechanically bonded onto the tube by an expansion process. The coil has two 1/2 inch BSP internal connections and 1/8 inch BSP air vent and drain. The heat exchanger is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

The connections are on the left side facing the unit only.

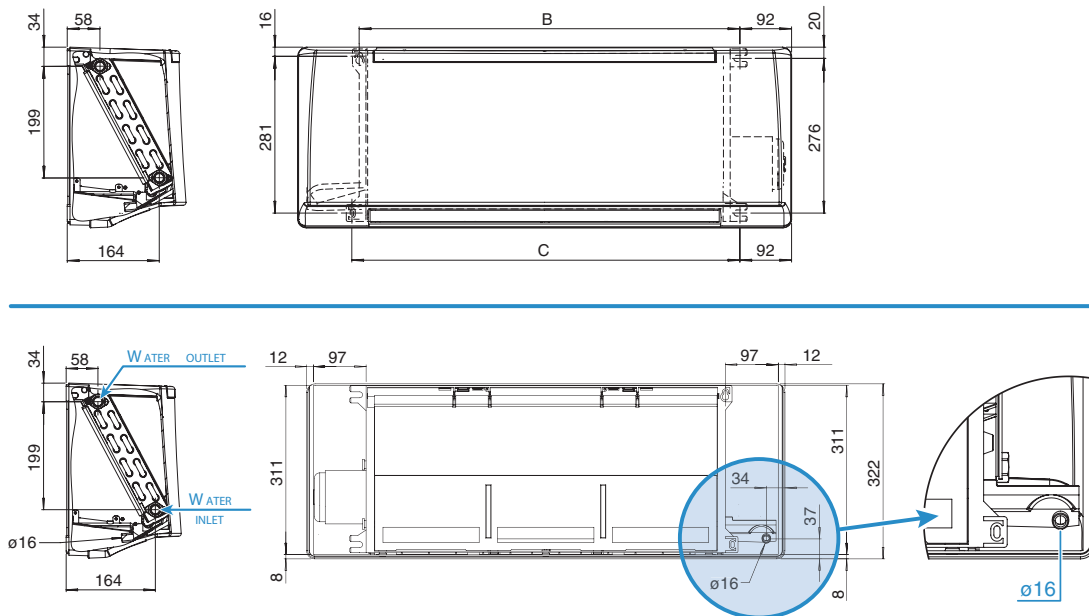
Condensate collection tray: made from polypropylene; the outside diameter of the condensate discharge pipe is 16mm.

Installation template: a cardboard installation template is supplied with every unit to help the mounting on the wall.

Dimensions, Weight, Water content



Mounting dimensions



MODEL	WEIGHT without valves Kg	WEIGHT with valves Kg	WATER CONTENT Litres	A mm	B mm	C mm
1	10	11	0,85	880	678	691
2	10	11	0,85	880	678	691
3	13	14	1,28	1185	983	996
4	13	14	1,28	1185	983	996



Certification

The following standard rating conditions are used:

COOLING (summer mode)

Entering air temperature: +27°C d.b. +19°C w.b.
Water temperature: +7°C E.W.T. +12°C L.W.T.

HEATING (winter mode)

Entering air temperature: +20°C
Entering water temperature: +50°C

Water flow rate as for the cooling conditions

MODEL	1						2					
	1 (E)	2 (E)	3	4 (E)	5	6	1 (E)	2	3 (E)	4	5 (E)	6
	MIN	MED		MAX			MIN		MED		MAX	
Speed												
Air flow	m ³ /h	205	270	340	375	470 500	250	305	365	400	480	545
Cooling total emission (E)	kW	1,24	1,50	1,76	1,87	2,15 2,23	1,43	1,63	1,84	1,95	2,18	2,35
Cooling sensible emission (E)	kW	0,92	1,14	1,36	1,46	1,72 1,80	1,07	1,25	1,43	1,53	1,75	1,92
Heating (E)	kW	1,60	2,00	2,39	2,58	3,04 3,17	1,88	2,20	2,39	2,70	3,09	3,38
Dp Cooling (E)	kPa	4,8	6,8	9,0	10,1	13,0 13,9	6,2	7,9	9,8	10,9	13,3	15,2
Dp Heating (E)	kPa	3,7	5,5	7,2	8,3	10,6 10,8	4,8	6,4	7,2	8,5	10,9	12,5
Fan (E)	W	12	14	17	18	24 30	12	14	18	20	24	32
Sound power Lw (E)	dB(A)	35	41	46	48	52 53	39	43	47	49	53	55
Sound pressure Lp (★)	dB(A)	26	32	37	39	43 44	30	34	38	40	44	46

MODEL	3						4					
	1 (E)	2 (E)	3	4 (E)	5	6	1	2 (E)	3	4 (E)	5	6 (E)
	MIN	MED		MAX				MED		MED		MAX
Velocità												
Portata aria	m ³ /h	280	375	480	545	730 780	300	440	500	610	675	790
Raffreddamento resa totale (E)	kW	1,89	2,32	2,78	3,03	3,63 3,78	1,99	2,62	2,86	3,26	3,46	3,81
Raffreddamento resa sensibile (E)	kW	1,35	1,69	2,06	2,27	2,81 2,95	1,43	1,93	2,12	2,47	2,66	2,98
Riscaldamento (E)	kW	2,26	2,84	3,49	3,86	4,79 5,03	2,40	3,26	3,61	4,20	4,53	5,07
Dp Raffreddamento (E)	kPa	11,2	16,2	22,5	26,2	36,4 39,1	12,3	20,2	23,6	29,9	33,4	39,7
Dp Riscaldamento (E)	kPa	8,7	12,6	17,7	21,2	29,3 31,9	9,7	15,9	19,1	23,7	27,2	31,5
Assorbimento Motore (E)	W	16	21	26	29	38 46	17	23	27	32	35	48
Potenza acustica Lw (E)	dB(A)	35	40	45	48	55 57	36	43	46	51	54	57
Pressione acustica Lp (★)	dB(A)	26	31	36	39	46 48	27	34	37	42	45	48

(E) = Eurovent certified performance.

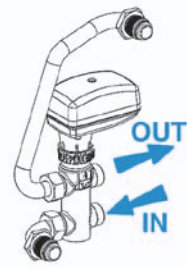
MIN-MED-MAX = Standard connected speeds.

(★) = The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

Accessories

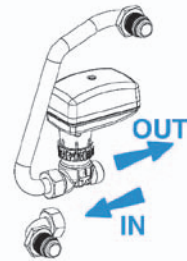
3 way valve

Control valve kit:
3 way valve, 230V ON-OFF,
with electric motor and mounting kit
with micrometric lockshield valve.



2 way valve

Control valve kit:
2 way valve, ON-OFF,
with electric motor and mounting kit.



Condensate drain pump



Wall electronic controls

CUP version

MO-3V	3 speed control
CR-T	3 speed control with electronic thermostat and manual summer/winter switch
TMO-T	3 speed control with electronic thermostat and summer/winter switch
TMO-T-AU	Automatic speed control with electronic thermostat and summer/winter switch
TMO-503-SV2	Automatic speed control with electronic thermostat to be mounted in the DIN 503 box (for units with valves)
T2T	Electromechanical thermostat with summer/winter switch (only for 2 pipe units)

N.B.: if the electric heater is mounted, use the **"IAQ"** controls.

Electronic controls for MB boards

CUP-MB version

T-MB	Wall control (to be used with MB board only)
RS-RT03-F	RT03 infra-red remote control with receiver supplied with separate packaging (to be used with MB board only)
RT03	RT03 infra-red remote control supplied with separate packaging (to be used with MB board only)
RS-F	Receiver for RT03 infra-red remote control supplied with separate packaging (to be used with MB board only)
PSM-DI	Multifunction control (to be used with MB board only)

Sabianet management system for a network of fan coils

Sabianet	Hardware/software supervisory system (to be used with MB board only)
ROUTER-S	Router for Sabianet
SIOS	Relay output board for Sabianet

The descriptions and illustrations provided in this publication are not binding: Sabiana reserves the right, whilst maintaining the essential characteristics of the types described and illustrated, to make, at any time, without the requirement to promptly update this piece of literature, any changes that it considers useful for the purpose of improvement or for any other manufacturing or commercial requirements.



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