

Design fan coil units with centrifugal fan

FLAT 2 - 5 kW



Galletti Flat: performance and design in a single indoor unit

FLAT by Galletti has been engineered to offer performance and design features placing it at the top of its category.

The uniqueness of FLAT lies both in the use of extremely high quality materials - which contribute to making this product exceptionally robust - and the assurance of constant performance over time.

FLAT optimizes the distribution of air in the room thanks to the integrated air outlet grille which makes it possible to direct the treated, filtered air in 4 directions. The main flap is equipped with a microswitch which shuts off the fan and the valves when the flap closes. The flap is useful for avoiding dust build-up in periods of non-use.

The adoption of UV-stabilized ABS in the parts making up the cabinet and antistatic ABS in the fan assembly (volute and centrifugal fan) guarantee that the product will maintain the same aesthetics and noise levels throughout its lifetime.

Particular care has been taken in the design of the fan drive assembly, which guarantees exceptionally quiet operation both in versions with 3-speed and 6-speed motors.

The conception underlying its construction makes it possible to combine models for vertical and horizontal installation: 2 versions enable FLAT to be installed on the floor, wall and ceiling.

PLUS

- ✓ Cabinet with a refined design
- ✓ Air outlet flap w/microswitch
- ✓ Use of UV-stabilized ABS
- ✓ Reversible water connections
- ✓ 3 or 6-speed motors
- ✓ ABS centrifugal fans
- ✓ Can be integrated into the ERGO
- ✓ Incorporable ioniser



AVAILABLE VERSIONS



FLAT L

Suspended wall installation, with cabinet, with vertical air flow.



FLAT U

Floor or ceiling mounted, with cabinet, with vertical air flow and air intake grille complete with filters.



MAIN COMPONENTS

Cabinet

RAL9010 colour, front panel made of sheet steel. Side panels and an upper grille with covers on either side manufactured from UV-stabilised ABS to maintain the colour intact over time. The upper grille consists of a flap and adjustable louvers. The flap features a microswitch that automatically shuts down the unit when the flap itself is closed.



Structure

Built from galvanised steel sheet of extra thickness, heat and sound insulated by means of Class 1 self-extinguishing panels. FLAT U version is suitable for either vertical or horizontal installation thanks to the dual condensate collection and drainage system.

Heat exchanger

High efficiency heat exchanger made with copper piping and aluminium fins, provided with brass manifolds and vent valve. The water connections are reversible at the time of installation. On request it is possible to mount an additional heat exchanger for 4-pipe systems.

Fans

Double suction centrifugal fans, statically and dynamically balanced, manufactured from anti-static ABS, with blades having an airfoil section and offset modules. The fans are housed in a low-noise ABS volute with high-efficiency profile.

Electric motor

It is mounted on vibration dampers, with permanently activated capacitor and thermal protection of the windings, and is directly coupled with the fans. It is available as either a 3- or 6-speed version in order to meet all the specific needs of performance, quietness, and power consumption.



Air filter

Honey-comb polypropylene washable air filter, easily removable for maintenance operations. On FLAT U version the air filters are fitted onto the air inlet grille.

ACCESSORIES

Electromechanical control panels

CB	On-board speed switch
TIB	Electromechanical controller, complete with speed selector, thermostat and summer/winter selecting switch
TC	Electromechanical thermostat for minimum water temperature in heating mode, mounted on the heat exchanger
CD	Recess wall-mounted speed selector
CDE	Wall-mounted speed selector
TD	Wall-mounted electromechanical controller, complete with speed selector, thermostat and summer/winter selecting switch.
TDC	Wall-mounted electromechanical controller, complete with speed selector and thermostat.
TD4T	Wall-mounted electromechanical controller, complete with speed selector, thermostat and summer/winter selecting switch for control of the fan coil and ON/OFF valves.

Wall-mounted microprocessor electronic control panels

MCBE	MYCOMFORT BASE electronic controller with display
MCME	MYCOMFORT MEDIUM electronic controller with display
MCLE	MYCOMFORT LARGE electronic controller with display
EVO	Wall-mounted microprocessor controller
KBFLAE	FLAT on-board installation kit
MCSWE	Water sensor for MYCOMFORT BASE, MEDIUM, LARGE, LED503 and EVO microprocessor controllers
MCSUE	Remote humidity sensor for EVO, MYCOMFORT MEDIUM and LARGE on-board controllers
LED503	Recess wall-mounted microprocessor controller

Power interface

KP	Power interface for connecting in parallel up to 4 fan coils to one controller
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Additional heat exchanger for 4-pipe systems

DF	1 row additional heat exchanger for 4-pipe systems (hot water circuit)
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Base supports and enclosing panels

ZL	Pair of base and enclosure elements
PV	Rear pre-painted panel for vertical installation fan coils with cabinet
PH	Rear pre-painted panel for horizontal installation fan coils with cabinet

Valves

KVK	2 or 3-way valve with ON/OFF or modulating electrothermal motor and hydraulic kit for standard heat exchanger
VKDF	2 or 3-way valve with ON/OFF or modulating electrothermal motor and hydraulic kit for DF heat exchanger

Auxiliary water drip trays, insulating shell

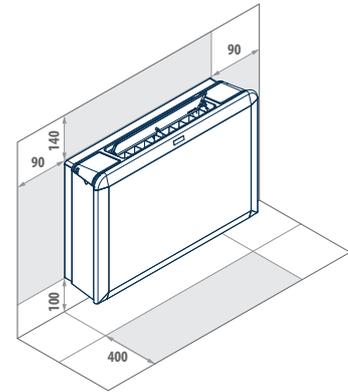
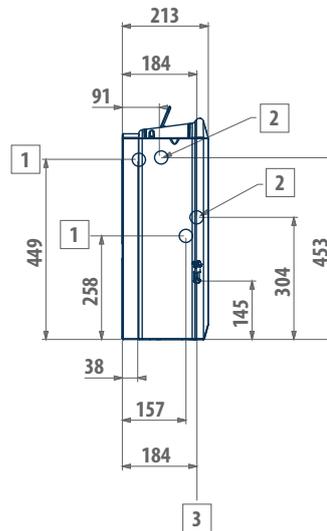
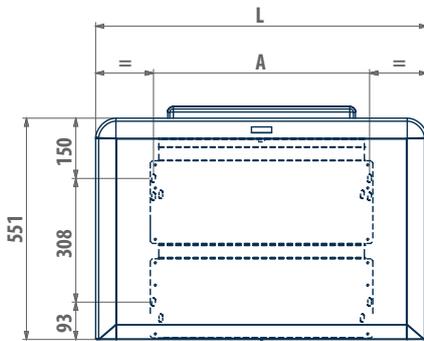
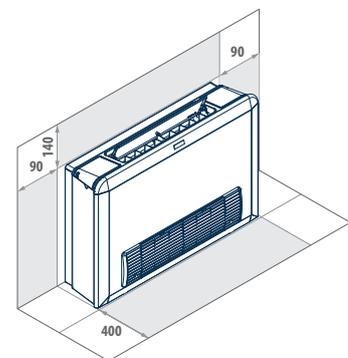
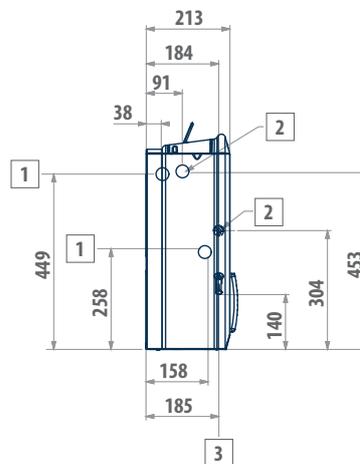
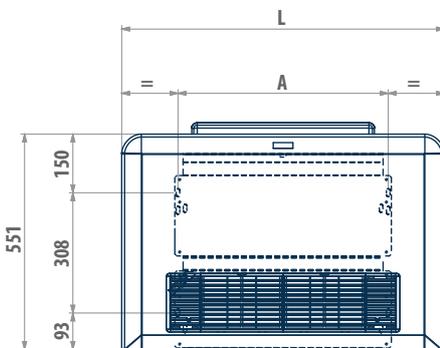
BV	Auxiliary water drip tray for vertical installation fan coil units
BH	Auxiliary water drip tray for horizontal installation fan coil units
GIVK	Valve insulation shell

Rated technical data

FLAT		10			20			30			40		
Fan speed		min	med	max									
Total cooling capacity (1) (E)	kW	1,30	1,46	1,93	1,39	1,74	2,27	1,47	2,04	2,71	1,69	2,32	2,92
Sensible cooling capacity (1) (E)	kW	0,95	1,06	1,40	1,04	1,32	1,72	1,12	1,57	2,09	1,30	1,79	2,25
Water flow (1)	l/h	224	251	331	239	299	390	251	351	465	290	398	501
Water pressure drop (1) (E)	kPa	5	6	10	6	8	13	3	5	7	4	6	10
Heating capacity (2) (E)	kW	1,57	1,75	2,31	1,81	2,19	2,86	1,85	2,46	3,27	2,10	2,78	3,48
Water pressure drop (2) (E)	kPa	4	5	9	5	7	11	2	4	6	3	5	8
Heating capacity (3)	kW	2,64	2,95	3,89	3,07	3,71	4,84	3,15	4,16	5,51	3,58	4,70	5,86
Water flow (3)	l/h	232	259	341	269	326	424	276	365	484	314	413	514
Water pressure drop (3)	kPa	4	5	8	5	7	12	2	4	6	3	5	8
Air flow	m ³ /h	197	226	305	216	284	378	240	344	467	283	407	520
Power input (E)	W	19	23	33	25	38	57	28	43	57	29	45	60
Sound power level (4) (E)	dB/A	32	36	44	38	44	50	30	38	44	33	42	48
Additional coil heating capacity DF (3) (E)	kW	1,54	1,66	2,01	1,64	1,88	2,24	2,02	2,42	2,95	3,58	4,70	5,86
Water flow (3)	l/h	135	146	177	144	165	197	177	213	259	314	413	514
Water pressure drop (3) (E)	kPa	4	4	6	4	5	7	8	11	15	3	5	8

FLAT		50			60			70		
Fan speed		min	med	max	min	med	max	min	med	max
Total cooling capacity (1) (E)	kW	2,08	2,61	3,32	2,24	2,97	4,16	2,56	3,35	4,46
Sensible cooling capacity (1) (E)	kW	1,65	2,06	2,60	1,80	2,39	3,37	2,08	2,75	3,70
Water flow (1)	l/h	357	448	569	384	510	714	440	575	766
Water pressure drop (1) (E)	kPa	3	4	6	3	5	8	4	6	11
Heating capacity (2) (E)	kW	2,67	3,20	4,03	3,10	3,97	5,47	3,49	4,44	5,88
Water pressure drop (2) (E)	kPa	2	3	5	2	4	7	3	5	9
Heating capacity (3)	kW	4,57	5,43	6,82	5,37	6,81	9,35	6,03	7,61	10,1
Water flow (3)	l/h	401	477	598	471	597	820	529	668	882
Water pressure drop (3)	kPa	3	3	5	3	5	8	4	6	10
Air flow	m ³ /h	370	466	593	406	552	800	482	659	911
Power input (E)	W	40	56	75	38	58	88	41	65	96
Sound power level (4) (E)	dB/A	36	42	50	42	48	56	43	51	58
Additional coil heating capacity DF (3) (E)	kW	2,92	3,28	3,84	3,09	3,60	4,47	3,41	3,96	4,77
Water flow (3)	l/h	256	287	337	271	316	393	299	347	418
Water pressure drop (3) (E)	kPa	3	3	4	3	4	5	3	4	6

- (1) Water temperature 7 / 12°C, air temperature D.B. 27°C, W.B. 19°C (47% relative humidity)
 (2) Inlet water temperature 50°C, water flow rate same as in cooling mode, air temperature 20°C
 (3) Water temperature 70 / 60°C, air temperature 20°C
 (4) Sound power measured according to standards ISO 3741 and ISO 3742
 (E) EUROVENT certified data
 Power supply 230-1-50 (V-ph-Hz)


Dimensional drawings
FLAT L

FLAT U


FLAT L - U	10	20	30	40	50	60	70
A	534	534	704	704	874	874	874
L	820	820	990	990	1160	1160	1160
1 - Water connections (female gas), standard heat exchanger	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
2 - Water connections (female gas), DF heat exchanger	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
3 - Drain outlet for vertical installation	16	16	16	16	16	16	16
Diameter of drain outlet for horizontal installation	17	17	17	17	17	17	17