



# Fan coil unit with design cabinet, 17 cm in depth

# **FLAT S 1 - 3 kW**



# The solution tailored to design requirements of residential applications

Galletti's FLAT series now becomes SLIM. In fact, with a depth of only 17 cm, FLAT S ensures a compact size that makes it easy to integrate in any context, thus responding to the new design trends in the residential sector (and beyond).

The FLAT S mini series means innovation also in terms of engineering: it combines a guarantee of excellent lownoise performance with the advantage of an exclusive design that fits well with both residential and commercial settings.

The stylishly designed cabinet (colour RAL9010) is compact and manufactured from steel sheet and UV-stabilised ABS. The upper grille includes a flap and adjustable louvers fitted with a microswitch that automatically shuts down the unit when the flap itself is closed.

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.



## **PLUS**

- » Cabinet with a refined design, depth 17 cm
- » Microswitch on air flap
- » Use of UV-stabilized ABS
- » Can be integrated into GARDA
- » Reversible water connections
- » 3-speed motor
- » ABS centrifugal fans
- » Incorporable JONIX sanitizing module



### MAIN COMPONENTS

#### Cabinet

Design cabinet, RAL9010 colour, only 17 cm in depth, 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.

#### **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 at 3- or (on request) 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.

CONFIGURATOR													
The models are completely configurable by selecting the	Version	Field	1	2	3	4	5	6	7	8	9	10	11
version and the options. To the right is shown an example of configuration.	FLATS13		L	0	М	0	1	E	0	0	0	0	Α

To verify the compatibility of the options, use the selection software or the price list.

#### **CONFIGURATOR**

- Version
  - L Wall mounted with cabinet L
- Motor
- 3-speed motor
- EC motor
- 3 Main coil hydraulic side
  - Water connections on the left side
- Water connections on the right Additional coil hydraulic side / heating element
  - Absent
- Water connections on the left side
- Water connections on the right
- Valve

5

- 0 Absent
- VKS 3 ways valve 230 V ON/OFF complete hydraulic kit
  KV 2 ways valve 230 V ON/OFF
  VKMS 3 ways valve 24 V MODULATING complete hydraulic kit
  KVM 2 ways valve 24 V MODULATING

- NVM: 2 Ways Valve 24 V MUDULATING
  VKS24 3 way valve 24 V ON/OFF complete hydraulic kit
  KV24 2 way valve 24 V ON/OFF
  VKSND 3 way valve 230 V ON/OFF hydraulic kit on coil side
  VKMSND 3 ways valve 24V MODULATING hydraulic kit on coil side
  VKS24ND 3 ways valve 24 V ON/OFF hydraulic kit on coil side
  VKS24ND 3 ways valve 24 V ON/OFF hydraulic kit on coil side
  Control name!
- Control panel
  - Absent
  - CB On-board speed selector
- TB Speed selector and thermostat
- TIB Speed selector, thermostat and S/W selecting switch TED 2T microprocessor control for 2 pipes

- TED 4T microprocessor control for 4 pipes
- TED 10 microprocessor control for EC MCBE My comfort base MCME My comfort medium

- MCLE My comfort large EVOBOARD - Circuit board
- EVOBOARD circuit board + NAVEL Wi-Fi module
- Probes
- 0 Absent
- SA Remote air probe for MYCOMFORT, LED503 and EVO
- SW Water probe for MYCOMFORT, LED503 and EVO
- SU Humidity probe for MYCOMFORT and EVO
- SA+SW Remote air and water probes for MYCOMFORT, LED503 and EVO
- SA+SU Remote air and humidity probes for MYCOMFORT and EVO SA+SU+SW- Remote air, water, humidity probes for MYCOMFORT and EVO TC Thermostat for minimum water temperature SA Remote air probe for TED
- SW Water probe for TED
- SA + SW Air and water probes for TED
- Accessories
- 0 Absent JONIX
- BV Auxiliary drip tray GIVK Insulating shell
- Filter
  - 0 Standard filter air
- 10 Release 0
  - Ā Ā

A C C F C C	CONIC		
ACCES:	SOKIES		
Elecromechani	cal control panels	<b>Auxiliary wat</b>	er drip trays, insulating shell, condensate drainage pump
СВ	On-board speed switch	BVK	Auxiliary water drip tray for vertical installation fan coil units
CD	Recess wall-mounted speed switch	GIVKL	Insulating shell for VKS valve, water connections on the left
TC	Thermostat for minimum water temperature in heating mode (42 °C)	GIVKR	Insulating shell for VKS valve, water connections on the right
TIB	On-board speed switch, thermostat and summer/winter selecting switch	Base and encl	osure elements
Electronic micr	oprocessor control panels with display	ZLS	Pair of base and enclosure elements for FLAT S
COB	Finishing plate for LED 503 controller, RAL9005 black	Rear covering	panels
COG	Finishing plate for LED 503 controller, RAL7031 grey	PV	Rear painted panel for vertical installation with cabinet
COW	Finishing plate for LED 503 controller, RAL9003 white	Valves	
DIST	MY COMFORT controller spacer for wall mounting	KV	2-way valve, ON/OFF actuator, hydraulic kit on water connection side for main heat exchanger
EVO-2-TOUCH	2.8" touch screen user interface for EVO control	KV24DF	2-way valve, ON/OFF actuator, 24 V power supply, hydraulic kit on water connection
EVOBOARD	Circuit board for EVO control	RVZTDI	side for main and additional heat exchanger
EVODISP	User interface with display for EVO controller	V2VDF+STD	2-way valves, ON/OFF or MUDULATING actuator, 230 V or 24 V power supply, hydraulic
EYNAVEL	Device for Wi-Fi or Bluetooth communication between EVOBOARD and smartphone		kit, for main and additional heat exchanger
KBFLAE	MY COMFORT on-board installation KIT for FLAT	V2VSTD	2-way valve, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
LED503	Recessed wall-mounted electronic display controller LED 503		
MCBE	MYCOMFORT BASE electronic controller with display	V3VDF	3-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for additional heat exchanger
MCLE	Microprocessor control with display MY COMFORT LARGE		2-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic
MCME	MYCOMFORT MEDIUM electronic controller with display	V3VSTD	kit, for main heat exchanger
MCSUE	Humidity sensor for MY COMFORT (medium e large), EVO		3-way valve, ON/OFF actuator, 24 V power supply, complete hydraulic kit for additional
MCSWE	Water sensor for MYCOMFORT and EVO controllers	VKDF24	heat exchanger
	oprocessor control panels	VKMS	3-way valve, MODULATING actuator, 24 V power supply, complete hydraulic kit for main
KB F	On-board FLAT/FLAT S installation kit suitable for TED controller	CIVIN	heat exchanger
TED 2T	Electronic controller for AC fan control and one ON/OFF 230 V valve	VKMSND	3-way valve, MODULATING actuator, 24 V power supply, hydraulic kit without holder,
TED 4T	Electronic controller for AC fan control and two ON/OFF 230 V valves	VINISID	for main heat exchanger
TED SWA	Water temperature sensor for TED controls	VKSND	3-way valve, ON/OFF actuator, 230 V power supply, hydraulic kit without holder, for
	e and regulating louver controllers	110110	main heat exchanger
KP	Power interface for connecting in parallel up to 4 fun coil units to the one controller	VPIC	2-way valves pressure independent, ON/OFF or MODULATING actuator, 230 V or 24 V
	t exchanger for 4-pipe systems	C!4!4!	power supply, hydraulic kit, for main heat exchanger
DF	1-row additional coil for 4 pipes system	Sanitisation s	
		JONIX inside	Sanitizing module JONIX for on-board installation



## 2 PIPES - RATED TECHNICAL DATA

FLAT S				13			23			33			43	
Speed			min	med	max									
Total cooling capacity	(1)(E)	kW	0,85	0,96	1,22	1,08	1,33	1,72	1,40	1,74	2,29	1,75	2,12	2,75
Sensible cooling capacity	(1)(E)	kW	0,60	0,68	0,87	0,74	0,91	1,19	1,00	1,24	1,65	1,25	1,52	1,99
FCEER class	(E)		D											
Water flow	(2)	l/h	148	168	213	186	230	300	243	303	399	303	368	477
Water pressure drop	(2)(E)	kPa	3	3	5	5	7	11	3	5	7	5	7	10
Heating capacity	(3)(E)	kW	0,89	1,01	1,27	1,00	1,22	1,59	1,52	1,85	2,40	1,85	2,22	2,86
FCCOP class	(E)								D					
Water flow	(3)	l/h	155	176	221	174	211	277	264	321	417	321	386	497
Water pressure drop	(3)(E)	kPa	2	3	4	3	5	8	3	4	7	4	6	9
Rated air flow		m³/h	115	135	170	135	170	225	200	250	340	250	310	420
Power input	(E)	W	12	17	23	14	20	27	23	28	37	25	31	42
Total sound power level	(4)(E)	dB(A)	30	35	40	35	40	46	32	38	46	37	42	49

Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity) according to EN1397:2015
 Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity)
 Water temperature 45°C / 40°C, air temperature 20°C
 Sound power measured according to standards ISO 3741 and ISO 3742

## 4 PIPES - RATED TECHNICAL DATA

FLAT S				13			23			33			43	
Speed			min	med	max									
Total cooling capacity	(1)(E)	kW	0,85	0,96	1,22	1,08	1,33	1,72	1,40	1,74	2,29	1,75	2,12	2,75
Sensible cooling capacity	(1)(E)	kW	0,60	0,68	0,87	0,74	0,91	1,19	1,00	1,24	1,65	1,25	1,52	1,99
FCEER class	(E)								D					
Water flow	(2)	l/h	148	168	213	186	230	300	243	303	399	303	368	477
Water pressure drop	(2)(E)	kPa	3	3	5	5	7	11	3	5	7	5	7	10
Heating capacity	(3)(E)	kW	1,04	1,15	1,36	1,35	1,56	1,91	1,88	2,16	2,69	2,16	2,45	3,02
FCCOP class	(E)								D					
Water flow	(3)	l/h	91	100	119	118	136	167	165	189	235	189	215	264
Water pressure drop	(3)(E)	kPa	2	2	3	4	5	7	1	2	3	2	2	3
Rated air flow		m³/h	115	135	170	135	170	225	200	250	340	250	310	420
Power input	(E)	W	12	17	23	14	20	27	23	28	37	25	31	42
Total sound power level	(4)(E)	dB(A)	30	35	40	35	40	46	32	38	46	37	42	49

<sup>(1)</sup> Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity) according to EN1397:2015
(2) Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity)
(3) Water temperature 65°C / 55°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 (M.ph. Hz)

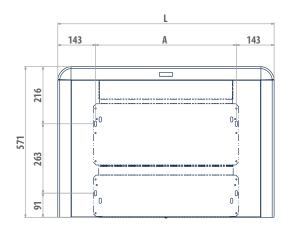
Power supply 230-1-50 (V-ph-Hz)

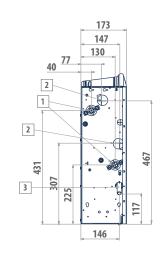
<sup>(</sup>E) EUROVENT certified data Power supply 230-1-50 (V-ph-Hz)

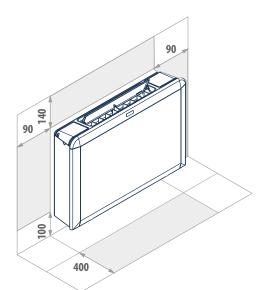


## **DIMENSIONAL DRAWINGS**

## FLAT S







#### LEGEND

1	Water connections standard heat exchanger ø 1/2"
2	DF 1-row additional heat exchanger water connections ø 1/2"
	Condensate discharge diameter for vertical installation ø 16 mm
nde	ensate discharge diameter for horizontal installation ø 17 mm

A	L	NG		
mm	mm	kg		
534	820	17		
704	990	21		
874	1160	23		
	mm 534 704	mm         mm           534         820           704         990		