

UTS

Slim terminal units

JUST 25 CM !





Bearing structure (= Main casing) made of extremely thick steel-sheet, resistant to rust, corrosion, chemical agents, solvents, aliphatics and alcohols. Self-supporting panels with holes for ceiling mounting + Internal thermo-acoustic insulation (class M1).

Reduced sizes, **only 250 mm thickness (all models)**.

- **Versions CH – CK – CA – CB** : Main casing made of galvanized steel.
- **Versions HA – HB – VA – VB** : Main casing made of white RAL 9002 pre-painted steel.

Drain pan with drainpipe \varnothing 30 mm (standard on the same side of coil connections) and heat insulation (class M1).

Coil with high efficiency (**Turbolenced Fins** with a high number of Reynolds) made of copper pipes and aluminium fins fixed by mechanical expansion. Coil connections provided with anti torsion system, manual air vent valves, manual water drain valves. Standard connections on the right side; on request (no additional charge) connections on the left side, anyway can be easily reversed even on working site.

Fan section including 1, 2 or 3 centrifugal fans with double air inlet aluminium blades (forward curved fins) directly coupled to the electric motor. Mounted on elastic and anti vibration supports. Fan section statically and dynamically balanced. Extensive diameter fans (= high air flow and high static pressure) with low revolutions (= low noise level).

Electric motor has 3 speeds, provided with heat protection (Klixon), running capacitor permanently switched on, IP 42, Class B, electric cables protected by double insulation.

Manufactured according to the international standards, 230V – 1Ph – 50Hz.

"Mammoth" type terminal board (min. 7 poles: 1 Ground + 3 speed + 1 Common + 2 for Bridge) installed outside the unit (for horizontal units, on the same side of the water connections ; for vertical units on the opposite side).

Clear unit outlets (air intake and air supply), without any grill/protection. **WARNING:** it is prohibited to make the unit operate if both unit outlets are not ducted or protected by grills or safety net (available as accessories on request: grills, panels, plenum, etc.).

The Air filter is an accessory: in this way, the client can choose an air filter section between the ones available as accessories (see SFA – SFO – SFC – SFD), or an air intake grill with air filter, or an air filter in the intake duct.

MOT



SCR

SSA

SMA

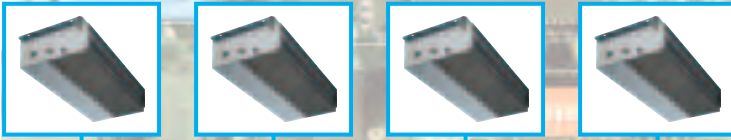
SGA

MOT

Motor "230V on/off" for air louver (for sections SSA - SMA)



EXCLUSIVE ACCESSORIES



- Multi-functions microprocessor controls, programmable with Display, Automatic Speeds, dirty filter Alert, Economy Function, Destratification, ...
- HTN & HTR Regulation: Control by Infrared control & Network system

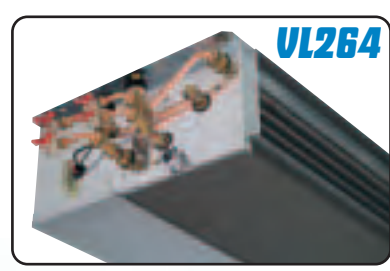
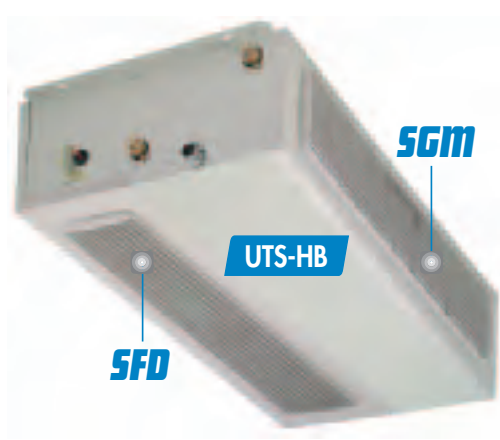
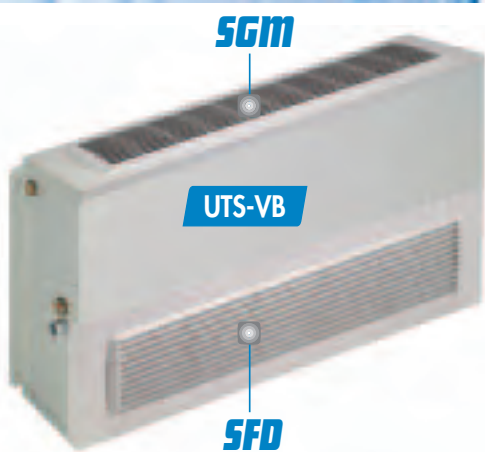


AND MANY OTHER ACCESSORIES AND SOLUTIONS ...



- SCR** Steel section with spigots "Ø" with variable diameter made of plastic material - Internal insulation ; suitable for both air intake/supply outlets
- SSA** Section with hand-controlled air louver, closing 0-100% (can be motorized) ; only for air intake outlet
- SMA** Mixing hand-controlled section with fresh air louver "external air 0-33% - internal air 100-67%" (can be motorized) ; only for air intake outlet
- SGA** Anti-vibration junction ; suitable for both air intake/supply outlets

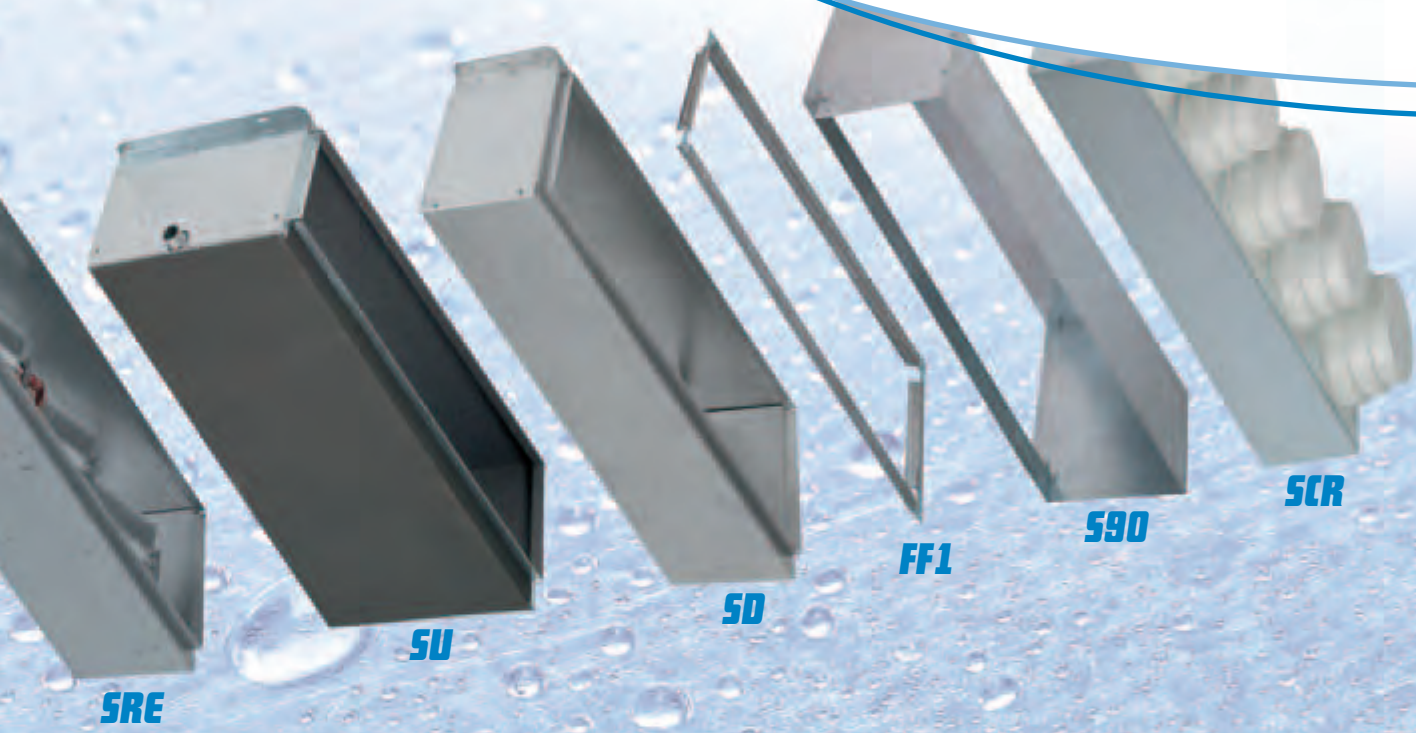
TERMINAL UNIT ... JUST 25 CM !



SFD Steel panel with ABS air intake grill + flat air filter with EU3 filtering level (EUROVENT 4/5) ; only for air intake outlet

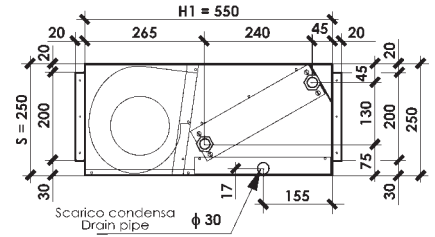
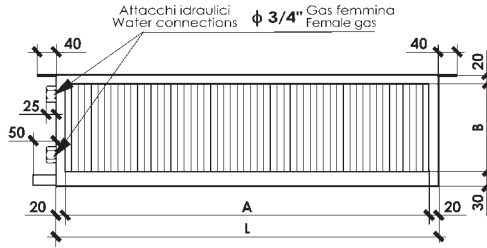
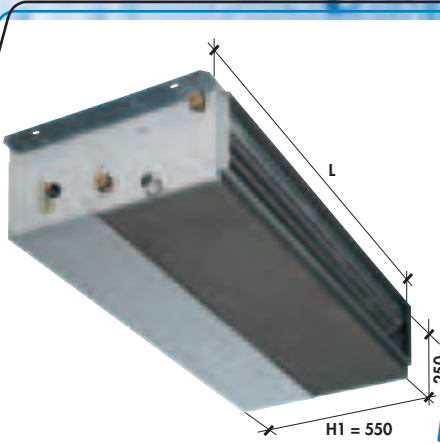
SGM Steel panel with ABS air supply grill ; without air filter ; only for air supply outlet

VL221 ... Wide 2 and 3 way valves range (230V & 24V):
... VL264 ON/OFF ; Floating 3 point ; Modulating 0-10V



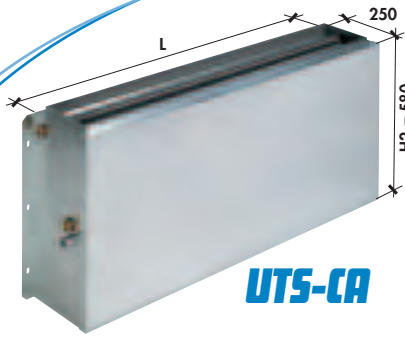
- SFA** Ductable air filter section + flat air filter with EU3 filtering level (EUROVENT 4/5) ; only for air intake outlet
- SFO** Ductable air filter section + HIGH EFFICENCY pleated air filter H=50mm with EU5 filtering level (EUROVENT 4/5) ; only for air intake outlet
- SRA1R** Additional Heating section with 1 row water coil (To realise 4-pipe system, from 2-pipe system unit)
- SRA3R** Additional Heating section with 3 rows water coil (To realise 4-pipe system, from 2-pipe system unit)
- SRE** Heating section with electrical heaters (230V or 400V on request) + Safety thermostat "TS" (without Power relay)
- SU** Section with drain pan, suitable for steam humidifying treatment (humidifier not provided) ; only for air supply outlet
- SD** Straight section (= empty section) ; suitable for both air intake/supply outlets
- FF1** Air flange with "duct FLANGE connection" made of galvanized steel; suitable for both air intake/supply outlets
- S90** 90° section ; suitable for both air intake/supply outlets

TECHNICAL DATA

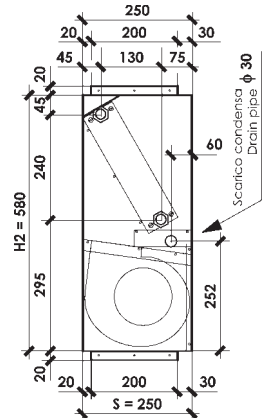


- For all sizes:
- S = 250 mm
 - H1 = 550 mm (horizontal versions)
 - H2 = 580 mm (vertical versions)

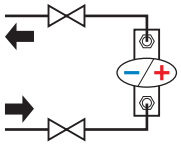
UTS-CH



UTS-CA



2 PIPE (1 coil)



Size			UTS 130	UTS 230	UTS 330	UTS 430	UTS 530	UTS 630
Cooling capacity	Total (1)	W	7.390	8.670	12.530	15.020	19.650	24.020
	Sensible (1)	W	5.970	6.810	10.440	12.110	16.370	19.350
Heating capacity	(2)	W	15.930	18.170	28.840	32.460	44.470	50.620
Air flow (3)		m ³ /h	1.317	1.432	2.489	2.706	4.038	4.390
Water flow (4)	Cooling	l/h	1.271	1.493	2.156	2.584	3.381	4.132
	Heating	l/h	1.370	1.563	2.480	2.792	3.825	4.354
Water pressure drops (5)	Cooling	kPa	38,9	31,7	32,3	25,6	49,0	43,4
	Heating	kPa	35,2	27,1	33,3	23,3	48,9	37,6
Sound levels (6)	Min-Med-Max	dB(A)	35 - 39 - 44	37 - 40 - 45	38 - 41 - 46	39 - 43 - 48	40 - 44 - 49	41 - 45 - 50
Speed number	No. (*)		6	6	3	3	3	3
Current input	MAX (7)	W - A	180W - 0,80A	180W - 0,80A	430W - 2,00A	430W - 2,00A	530W - 2,40A	530W - 2,40A
Power supply			230 V - 1 Ph - 50 Hz					
Unit length	L	mm	800	800	1.200	1.200	1.600	1.600
	A	mm	760	760	1.160	1.160	1.560	1.560
Air intake/supply outlets	B	mm	200	200	200	200	200	200
Water connections	ø (**)		3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Drain pipe	ø (mm)		30	30	30	30	30	30

No. (*) Available speed (only 3 connected)

ø (**) Female gas water coil connections



(8) AIR FLOW REDUCTION (coefficients defining the "Air flow / Static pressure diagrams")

Model	Speed	External static pressure					
		0 Pa	25 Pa	50 Pa	75 Pa	100 Pa	125 Pa
UTS 130 UTS 230	Max	1	0,97	0,92	0,85	0,73	0,50
	Med	0,78	0,75	0,70	0,61	0,45	\
	Min	0,55	0,52	0,49	0,42	0,27	\
UTS 330 UTS 430	Max	1	0,97	0,93	0,85	0,75	0,50
	Med	0,82	0,79	0,75	0,67	0,53	\
	Min	0,62	0,60	0,56	0,48	0,31	\
UTS 530 UTS 630	Max	1	0,96	0,92	0,86	0,75	0,50
	Med	0,85	0,82	0,77	0,71	0,59	\
	Min	0,70	0,67	0,63	0,56	0,41	\

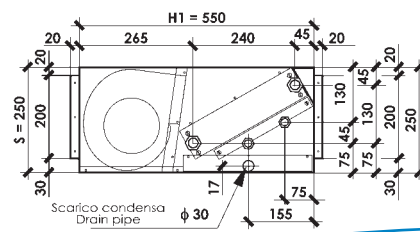
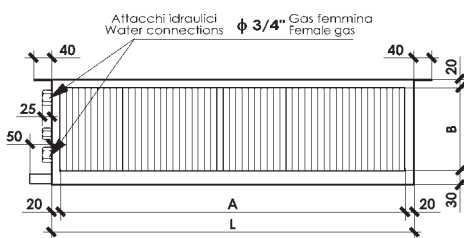
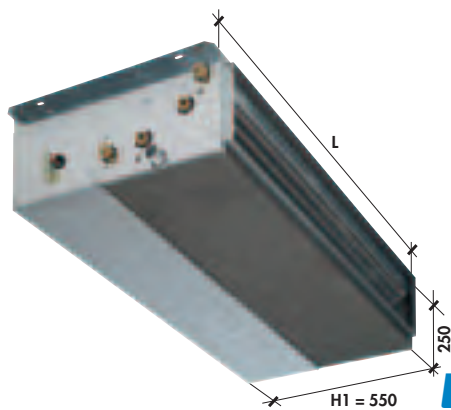


(9) COOLING/HEATING CAPACITY REDUCTION (depending on air flow reduction)

Air flow		1,00	0,95	0,90	0,85	0,80	0,75	0,70	0,65	0,60	0,55	0,50	0,45	0,40	0,35	0,30	0,25
Cooling capacity	Total	1,00	0,97	0,95	0,92	0,89	0,87	0,84	0,81	0,77	0,74	0,71	0,67	0,63	0,59	0,55	0,50
	Sensible	1,00	0,97	0,93	0,90	0,86	0,83	0,79	0,76	0,72	0,68	0,64	0,60	0,55	0,51	0,46	0,41
Heating capacity		1,00	0,97	0,94	0,91	0,87	0,84	0,81	0,77	0,74	0,70	0,66	0,62	0,58	0,53	0,49	0,44

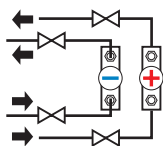
Technical data refer to the following conditions: Standard unit - Atmospheric pressure 1013 mbar - Power supply 230V/1Ph/50Hz. (1) - (2) - (3) - (4) - (5): Nominal technical data refer to the maximum speed and unit with free air flow (External static pressure = 0 Pa). (1) Cooling: Environment air temperature: 27°C d.b., 19°C w.b. - Entering water temp. 7°C, leaving water temp. 12°C - Max speed (nominal). For Med and Min fan speed and/or static pressure > 0 Pa see (8) + (9) (ref. entering water temp. 7°C and water flow as for the Max speed (4)). (2) Heating: Environment air temperature: 20°C - Entering water temperature 70°C, leaving water temperature 60°C - Max speed (nominal). For Med and Min fan speed and/or static pressure > 0 Pa see (8) + (9) (ref. entering water temp. 70°C and water flow as for the Max speed (4)). (1) (2) (9) Cooling and Heating capacities: Data calculated based on measurements made in calorimetric room ref. UNI 6552, UNI 6552/A242 standards. (3) (8) Air flow and Static pressure: Measurements made with casing ref. AMCA 210-74 Fig.11 standards and plenum + diaphragm ref. CNR-UNI 10023 standards. (5) Sound levels: Free field sound pressure, 2 m distance. Data calculated based on sound power measured in riverberation room ref. ISO 3741 - ISO 3742 standards. (7) Electrical data: Measurements with Wattmeter Jokogawa WT 110.

TECHNICAL DATA

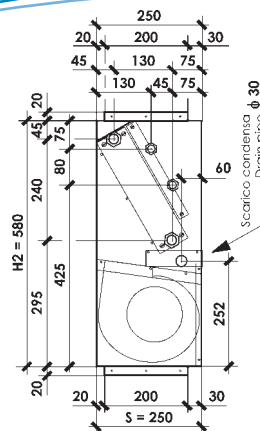
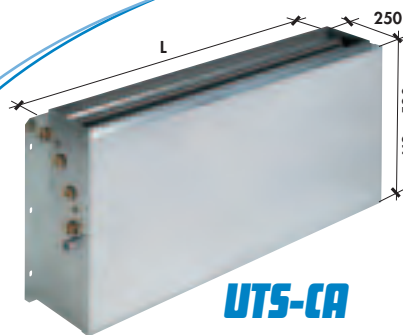


For all sizes:

- S = 250 mm
- H1 = 550 mm (horizontal versions)
- H2 = 580 mm (vertical versions)



4 PIPE (2 coils)



Size		UTS 131	UTS 231	UTS 331	UTS 431	UTS 531	UTS 631
Cooling capacity	Total (1) W	7.240	8.510	12.260	14.720	19.230	23.490
	Sensible (1) W	5.830	6.660	10.180	11.830	15.960	18.850
Heating capacity	(2) W	8.250	8.690	13.730	14.450	21.150	22.220
Air flow (3)	m ³ /h	1.275	1.390	2.405	2.620	3.900	4.235
Water flow (4)	Cooling l/h	1.245	1.464	2.109	2.532	3.308	4.040
	Heating l/h	710	748	1.181	1.243	1.819	1.911
Water pressure drops (5)	Cooling kPa	37,4	30,5	31,0	24,6	47,0	41,6
	Heating kPa	30,1	33,4	38,4	42,6	44,5	49,1
Sound levels (6)	Min-Med-Max dB(A)	35 - 39 - 44	37 - 40 - 45	38 - 41 - 46	39 - 43 - 48	40 - 44 - 49	41 - 45 - 50
Speed number	No. (*)	6	6	3	3	3	3
Current input	MAX (7) W - A	180W - 0,80A	180W - 0,80A	430W - 2,00A	430W - 2,00A	530W - 2,40A	530W - 2,40A
Power supply		230 V - 1 Ph - 50 Hz					
Unit length	L mm	800	800	1.200	1.200	1.600	1.600
	A mm	760	760	1.160	1.160	1.560	1.560
	B mm	200	200	200	200	200	200
Water connections	Cooling coil ø (**)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	Heating coil ø (**)	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Drain pipe	ø (mm)	30	30	30	30	30	30

No. (*) Available speed (only 3 connected)

ø (**) Female gas water coil connections



(8) AIR FLOW REDUCTION (coefficients defining the "Air flow / Static pressure diagrams")

Model	Speed	External static pressure					
		0 Pa	25 Pa	50 Pa	75 Pa	100 Pa	125 Pa
UTS 131 UTS 231	Max	1	0,96	0,90	0,80	0,62	0,25
	Med	0,78	0,74	0,66	0,54	0,23	\
	Min	0,54	0,51	0,46	0,35	0,14	\
UTS 331 UTS 431	Max	1	0,96	0,90	0,81	0,63	0,25
	Med	0,82	0,78	0,72	0,61	0,27	\
	Min	0,62	0,59	0,53	0,40	0,16	\
UTS 531 UTS 631	Max	1	0,96	0,91	0,82	0,64	0,25
	Med	0,85	0,81	0,75	0,66	0,30	\
	Min	0,70	0,66	0,61	0,49	0,21	\



(9) COOLING/HEATING CAPACITY REDUCTION (depending on air flow reduction)

Air flow	1,00	0,95	0,90	0,85	0,80	0,75	0,70	0,65	0,60	0,55	0,50	0,45	0,40	0,35	0,30	0,25	
Cooling capacity	Total	1,00	0,97	0,95	0,92	0,89	0,87	0,84	0,81	0,77	0,74	0,71	0,67	0,63	0,59	0,55	0,50
	Sensible	1,00	0,97	0,93	0,90	0,86	0,83	0,79	0,76	0,72	0,68	0,64	0,60	0,55	0,51	0,46	0,41
Heating capacity		1,00	0,97	0,94	0,91	0,87	0,84	0,81	0,77	0,74	0,70	0,66	0,62	0,58	0,53	0,49	0,44

Technical data refer to the following conditions: Standard unit - Atmospheric pressure 1013 mbar - Power supply 230V/1Ph/50Hz. (1) - (2) - (3) - (4) - (5): Nominal technical data refer to the maximum speed and unit with free air flow (External static pressure = 0 Pa).

(1) Cooling: Environment air temperature: 27°C d.b., 19°C w.b. - Entering water temp. 7°C, leaving water temp. 12°C - Max speed (nominal). For Med and Min fan speed and/or static pressure > 0 Pa see (8) + (9) (ref. entering water temp. 7°C and water flow as for the Max speed (4)).

(2) Heating: Environment air temperature: 20°C - Entering water temperature 70°C, leaving water temperature 60°C - Max speed (nominal). For Med and Min fan speed and/or static pressure > 0 Pa see (8) + (9) (ref. entering water temp. 70°C and water flow as for the Max speed (4)).

(1) (2) (9) Cooling and Heating capacities: Data calculated based on measurements made in calorimetric room ref. UNI 6552, UNI 6552/A242 standards.

(3) (8) Air flow and Static pressure: Measurements made with casing ref. AMCA 210-74 fig. 11 standards and plenum + diaphragm ref. CNR-UNI 10023 standards.

(6) Sound Levels: Free field sound pressure, 2 m distance. Data calculated based on sound power measured in reverberation room ref. ISO 3741 - ISO 3742 standards. (7) Electrical data: Measurements with Wattmeter Jokogawa WT 110.



Mech-Elec