

HIGH PRESSURE FAN COIL UNITS

UTN

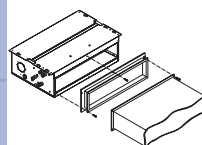
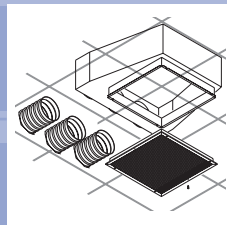
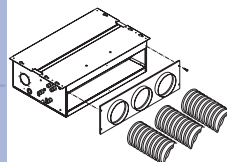


12 models ductable for horizontal and vertical installation
Air flow from 600 to 3000 m³/h (pressione utile from 80 to 180 Pa)
Cooling capacity from 2,8 to 18,3 kW
Heating capacity from 7,2 to 45 kW
Standard units made of anodized sheet metal panels:
UTN 2-pipe systems (1 heat exchangers)
UTNDF 4-pipe systems (2 heat exchangers)

Unit that can be connected to circular flexible ducts (Φ 200mm)
or to rectangular section ducts
The air suction side can be modified at the moment of the installation
Precut hole for the connection to a fresh air intake
Reduced height (280 mm up to model 16A)

Available options upon request:

- ✓ **electromechanical and microprocessor control panels for wall installation**
- ✓ **air suction modules with filters**
- ✓ **accessories for the connection to air ducts: air inlet and outlet box, air inlet and outlet grilles, dampers**
- ✓ **motor driven 3 way ON/OFF valves**
- ✓ **additional electric heaters**



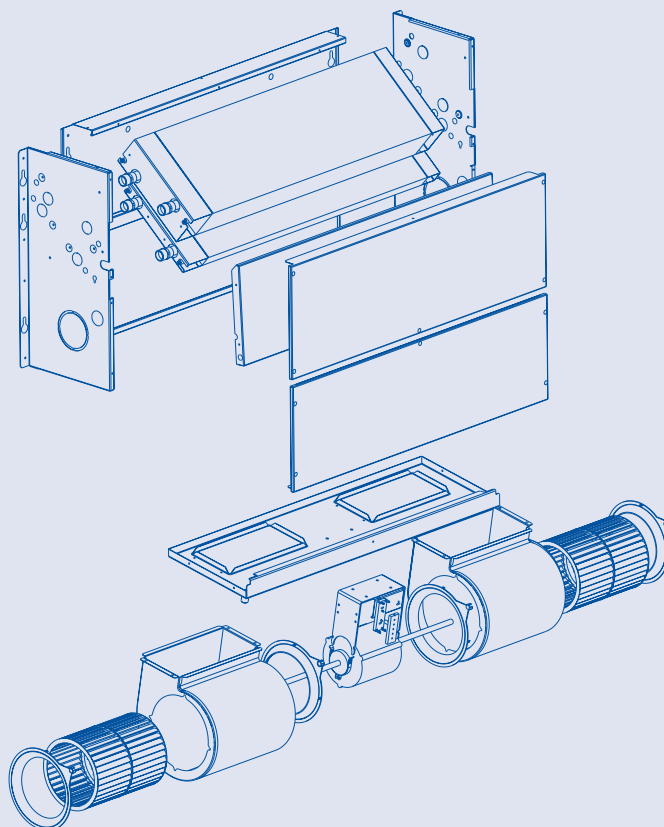
The new range of **UTN high pressure fan coil units** was implemented for conditioning rooms that require the installation of channeled units.

Proposed in 12 models with air flows from 600 to 3000 m³ /h, the **UTN** units are characterized by a wide applicative flexibility thanks to the special constructive solutions:

- possibility of installation both in horizontal and vertical position thanks to the special conformation of the condensate discharge system;
- the air intake direction may be modified during installation;
- reduced height (280 mm up to model 16A);
- pre-sheared element for the recycle of external air, standard on all models (F 100 mm);
- wide range of accessories for effectively meeting any installation requirement.

Main technical features

- **Load-bearing structure** made of galvanized steel sheet of suitable thickness, duly insulated with noise-proof/anticondensing material, self-extinguishing in Class 1; the insulating material is characterized by a thickness of 10 mm and a density of 90 kg/m³. The unit is completed by the following:
 - inspection panels
 - setup for external air inlet
 - fast-coupling slots.
- **Dual intake centrifugal fans** made of aluminium, with statically and dynamically balanced impellers, coupled directly to the electric motor.
- **3-speed electric motor**, equipped with permanently fit condenser and thermal safety device, installed on vibration-damping supports.
- **Heat exchanger**: high-efficiency, made of copper tube and aluminium fins secured to the tubes by mechanical expansion. It is fitted with brass manifolds and air valves. The heat exchanger, normally supplied with left-hand attachments, may be turned 180°.
- **System for collecting and discharging condensate** setup either for horizontal or vertical installation.
- **Terminal strip** for fast-on electrical connection.



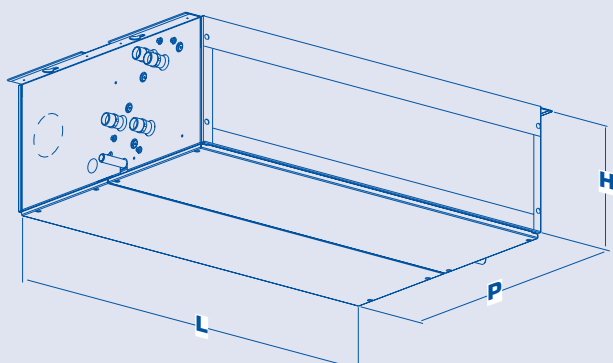
Versions

UTN air handling unit setup for 2-pipe systems

UTNDF air handling unit setup for 4-pipe systems (2 heat exchangers)

Both versions may be manufactured, on request, with pre-painted panels.

Overall dimensions



UTN	06	08	12	16	22	30
H	280	280	280	280	351	351
L	676	676	886	1096	1096	1096
P	579	79	579	579	737	737

Accessories

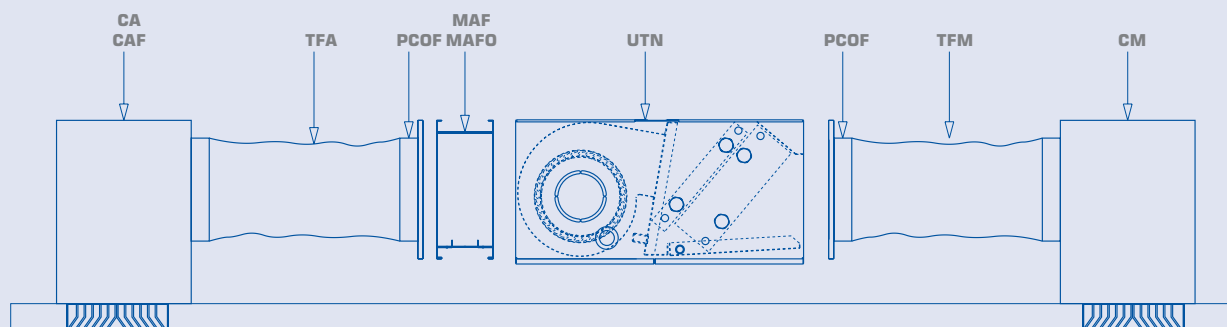
The wide and complete range of accessories completes the UTN air handling units as far as operation is concerned, adapting these units to any plant-engineering requirement, from the solution with the rectangular-section channels to the one with the round flexible ducts.

The standard machines are supplied without control panel and without air filter.

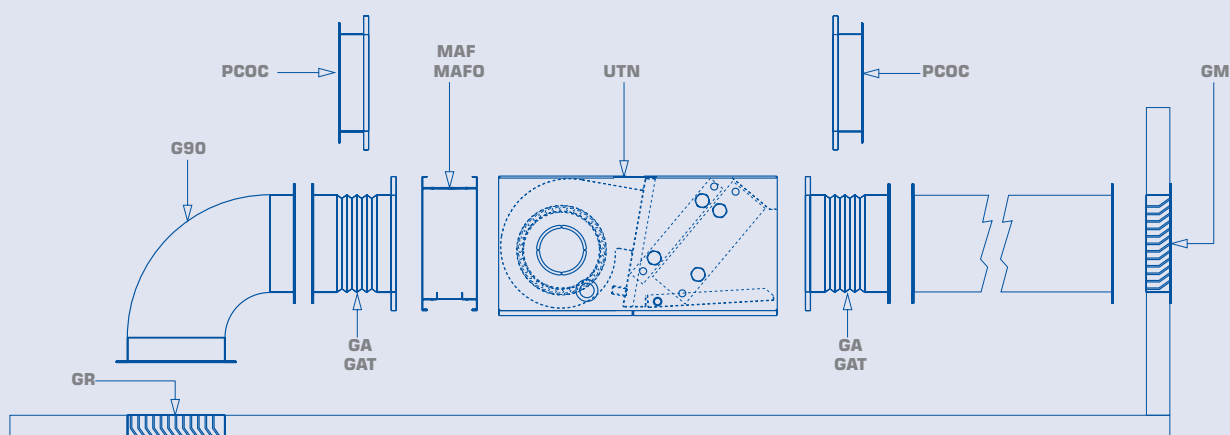
Control Panels and Thermostats	
CD	Flush wall-mounted speed selector
CDE	Wall-mounted speed selector
TD	Wall mounted control with speed selector, electromechanical thermostat and summer winter selector
TDC	Wall mounted control with speed selector and electromechanical thermostat
TD4T	Wall mounted control with speed selector, electromechanical thermostat and summer winter selector for 2/4 oipipe systems with valves
MICROD	Microprocessor wall mounted control for the automatic control of the fan coil
MICROPROD	Microprocessor wall mounted control for the automatic control of the fan coil, valves and electric heater
SW	Water temperature electronic probe for MICROD and e MICROPROD
TC	Fan stop thermostat: electromechanical thermostat for minimum water temperature during heating mode
IPM	Power interface for MICROD and MICROPROD
TA	Electromechanical room thermostat
TA2	Electromechanical room thermostat with summer / winter selector
CSD	Wall mounted control for proportional opening and closing of the motor driven air intake louver PA90
Air suction modules with filters	
MAF	Air suction module with flat filter G2
MAFO	Air suction module with waved filter G4

Connection Panels	
PCOC	connecting panel to recangular ducts
PCOF	connecting panel to flexible ducts Φ 200
3-way valves and drip trays	
V	3 way valve (possibility of motor driven)
M	Electrothermal motor for motor driven valve
R	Hydraulic connection mounting kit valve V
VRCV	Auxiliary drip tray fur vertical installation units
VRCH	Auxiliary drip tray fur horizontal installation units
Electric Heaters	
RE	Electric heater, with safety thermostat and power relay
Motor driven fresh air intake louver	
PA90	motor driven fresh air intake louver
Vibration Dampers	
GA	PVC vibration damper
GAT	Silicone cloth heat proof vibration dampers
Flexible Ducts - Caps	
TFA	Not insulated flexible ducts, Φ 200
TFM	Insulated flexible ducts, Φ 200
TFA	Plastic caps Φ 200
Air Inlet and Outlet Plenum Box	
CA	Air inlet plenum box with double row grille
CAF	Air inlet plenum box with double row grille and filter G2
CM	Insulated air outlet plenum box with 2 way grille
Air inlet and outlet grilles	
GM	Aluminium air outlet grille with counterframe
GR	Air suction aluminium grille with counterframe
Post heating heat exchanger kit	
BP	Post heating water coil

Example of installation UTN - Air distribution with circular flexible ducts



Example of installation UTN - Air distribution with rectangular ducts



RATED TECHNICAL DATA

UTN	(fan speed)		06	06A	08	08A	12	12A	16	16A	22	22A	30	30A
Air flow	(high)	m³/h	600	600	800	800	1250	1250	1600	1600	2200	2200	3000	3000
Available static pressure	(high)	Pa	80	75	90	85	88	82	100	95	130	110	185	175
Total cooling capacity		kW	2,80	3,20	3,90	4,80	6,20	7,00	7,80	8,82	11,90	13,70	16,4	18,3
Sensible cooling capacity		kW	2,15	2,46	3,08	3,71	4,65	5,36	6,52	7,16	9,36	10,5	12,8	14,1
Water flow		l/h	484	553	674	829	1071	1209	1339	1514	2056	2367	2833	3140
Water pressure drop		kPa	10	8	17	15	24	20	24	16	26	22	34	45
Heating capacity	(high)	kW	7,20	8,30	10,1	12,1	16,1	18,5	19,6	22,4	30,0	33,7	40,9	45,0
Water flow		l/h	634	731	890	1066	1418	1630	1726	1974	2642	2970	3603	3695
Water pressure drop		kPa	12	10	20	17	29	26	28	19	30	24	38	50
DF heating capacity (4 pipe)	(high)	kW	4,01	4,01	5,63	5,63	8,24	8,24	11,5	11,5	19,7	19,7	26,2	26,2
Water flow		l/h	353	353	496	496	726	726	1013	1013	1735	1735	2309	2309
Water pressure drop		kPa	10	10	13	13	21	21	19	19	17	17	22	22
Standard heat exchanger - rows		n°	3	4	3	4	3	4	3	4	3	4	4	5
Standard heat exchanger - hydraulic connections		in	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"
Standard heat exchanger - water content		l	1,06	1,41	1,06	1,41	1,42	1,90	1,79	2,38	2,50	3,34	4,02	5,03
DF heat exchanger - rows		n°	1	1	1	1	1	1	1	1	2	2	2	2
DF heat exchanger - hydraulic connections		in	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"
DF heat exchanger - water content		l	0,35	0,35	0,47	0,47	0,59	0,59	1,42	1,42	1,42	1,42	1,72	1,72
Power supply	V - ph - Hz		230 - 1 - 50											
Maximum power input	W		180	180	250	250	410	410	500	500	700	700	1100	1100
Maximum current absorption	A		0,8	0,8	1,2	1,2	2	2	2,5	2,5	3,5	3,5	5,5	5,5
Sound power	dB A		51,5	51,5	54,5	64,5	57,5	57,5	60,5	60,5	62,5	62,5	66,5	66,5

The aforesaid performances are related to the following conditions:

Air flow:

- referred to the available static pressure value at the maximum speed

Cooling mode:

- air flow
- water inlet temperature 7°C,
- water outlet temperature 12°C,
- air temperature 27°C D.B.
- air temperature 19°C W.B. (47% relative humidity)

Heating mode:

- air flow
- water inlet temperature 80°C,
- water outlet temperature 70°C,
- air inlet temperature 20°C

Sound pressure level measured at 1,5 m distance, directional factor 2.

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