

EN TECHNICAL MANUAL



UTN

HIGH PRESSURE FAN COILS

3 kW - 22 kW





AGalletti

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OPERATING LIMITS

Thermal carrier: **water** Water temperature: + 5°C to +95°C Air temperature: -20°C to + 43°C Power supply voltage: 230 V +/-10 % Max. pressure of primary fluid: 10 bar

The technical and dimensional data indicated in this catalougue are subject to modifications in the view of the improvement of the product.

1 MEAN FEATURES

The new range of UTN high pressure fan coils units has been designed for conditioning rooms that require the installation of ducted units. Proposed in 14 models with air flows from 600 to 4000 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-shared element for the recycle of external air, standard on all models (Ø 100 mm);
- > Wide range of accessories for effectively.

2 VERSIONS AND COMPONENTS

VERSIONS

- **UTN** air handling unit setup for 2-pipe systems air handling unit setup for 4-pipe systems (2 heat exchangers)
- N.B. both version may be manufactured, on request, with pre-painted panels.

COMPONENTS

> Load-bearing structure made of galvanized steel sheet of suitable thic kness, duly insulated with noise-proof/anticondensing material, self-estinguishing 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:

- > Inspections panels;
- > Setup for external air intake;
- > Fast-coupling slots.
- > Dual intake centrifugal fans made of alluminium, with statically and dinamically balanced impellers, coupled directly to the electric motor.
- > 3 speed electric motor, equipped with permanently fit condenser and thermal safety device, installed on vibrator damping supports.
- > Heat exchanger: high efficiency, made of copper tube and alluminium 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 by 180°.

- System for collecting and discharging condensate setup either for horizontal or vertical installation.
- > Terminal strip for fast on electrical connections.

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POSSIBLE CONFIGURATIONS 3







3 All copying, even partial, of this manual is strictly forbidden



4 AVAILABLE ACCESSORIES

CONTROL PA	INELS 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 pipe systems with valves
МСВ	Wall-mounted microprocessor control - GALLETTI model myComfort BASE
МСМ	Wall-mounted microprocessor control - GALLETTI model myComfort MEDIUM
MCL	MYCOMFORT LARGE
LED503	Recess wall-mounted microprocessor control
MCSWE	Water/air sensor for MYCOMFORT BASE, MYCOMFORT MEDIUM, MYCOMFORT LARGE and LED503 microprocessor controllers.
MCSUE	Humidity sensor for on-board microprocessor controls model myCOMFORT MEDIUM and myCOMFORT LARGE.
EV0	Wall-mounted microprocessor controller
TC	Fan stop thermostat: electromechanical thermostat for minimum water temperature during heating mode
IPM	Power interface for MYCOMFORT and LED503
TA	Electromechanical room thermostat
TA2	Electromechanical room thermostat with summer/winter selection
CSD	Wall-mounted control for proportional opening and closing of the motor driven air intake louver
AIR INTAKE	MODULES WITH FILTER
MAF	Air intake module with G2 flat filter
MAFO	Air intake module with G4 undulated filter
AIR INTAKE	AND OUTLET JUNCTION PANELS
PCOC	Junction panel with rectangular duct
PCOF	Junction panel with flexible circular duct Ø 200

G90 90° elbow outlet and inlet connector

MOTOR-D	RIVEN VALVES AND DRIP TRAYS
V	3-way motor-driven valve
Μ	ON/OFF and modulating motors, modulating motors for motor driven valves V
R	Hydraulic connector kit for installation of valve
VRCV	Water drip tray for vertical installation UTN
VRCH	Water drip tray for horizontal installation UTN
KSC	Condensate drainage pump
HOT WAT	ER POST-HEATING COILS
BP	Post-heating kit with hot water coil
ELECTRIC	CAL HEATING ELEMENTS
RE	Heating elements, safety devices, power relay box
MOTOR D	RIVEN EXTERNAL AIR INTAKE LOUVER
PA90	Motor-driven external air intake louver
VIBRATIO	N-DAMPING COUPLINGS
GA	PVC vibration-damping coupling
GAT	Heat-resistant silicone-coated cloth vibration-damping coupling
HOSES - I	PLUGS
TFA	Uninsulated hose Ø 200 mm
TFM	Insulated hose Ø 200 mm
TP	Plastic plug Ø 200 mm
AIR INTAK	KE AND OUTLET DUCTS
CA	Air intake duct with honeycomb grille
CAF	Air intake duct with honeycomb grille and G2 filter
CM	Insulated air outlet duct, with 2-way grille
AIR OUTL	ET AND INTAKE GRILLES
GM	Aluminium air outlet grille, with subframe
GR	Aluminium air intake grille, with subframe

RATED TECHNICAL DATA 5

UTN			6			6A			8			8A		
Fan speed		min	med	max										
Air flow (E)	m³/h	348	465	572	344	458	561	534	700	802	531	692	792	
Air flow DF version (E)	m³/h	346	463	568	342	455	556	532	694	794	529	686	784	
Available static pressure (E)	Ра	28	50	75	28	50	75	29	50	65	30	50	65	
Total cooling capacity (1)	kW	2,02	2,58	3,03	2,30	3,00	3,58	2,87	3,54	3,91	3,42	4,27	4,76	
Sensible cooling capacity(1)	kW	1,55	1,99	2,36	1,71	2,25	2,71	2,23	2,77	3,09	2,58	3,26	3,68	
Total cooling capacity (5)(E)	kW	1,94	2,46	2,84	2,22	2,88	3,39	2,74	3,36	3,65	3,29	4,09	4,50	
Sensible cooling capacity (5)(E)	kW	1,47	1,87	2,17	1,63	2,13	2,52	2,10	2,59	2,83	2,45	3,08	3,42	
Water flow (1)	l/h	347	442	521	395	515	614	493	607	671	587	732	817	
Water pressure drop (1) (E)	kPa	5	8	11	4	6	9	10	14	17	8	12	14	
Total cooling capacity DF version (1)	kW	2,01	2,56	3,01	2,29	2,98	3,55	2,86	3,51	3,88	3,40	4,24	4,72	
Sensible cooling capacity DF version (1)	kW	1,54	1,98	2,34	1,71	2,23	2,68	2,22	2,75	3,06	2,56	3,24	3,64	
Total cooling capacity DF version (5)(E)	kW	1,93	2,44	2,82	2,21	2,86	3,36	2,73	3,33	3,62	3,27	4,06	4,46	
Sensible cooling capacity DF version (5)(E)	kW	1,46	1,86	2,15	1,63	2,11	2,49	2,09	2,57	2,80	2,43	3,06	3,38	
Water flow DF version (1)	l/h	345	440	517	393	512	610	491	602	666	584	727	810	
Water pressure drop DF version (1) (E)	kPa	5	8	11	4	6	9	10	14	17	8	12	14	
FCEER (E)			D			D			E			E		
FCEER version DF (E)			E			D			E			E		
Heating capacity (2) (E)	kW	2,61	3,27	3,82	2,94	3,75	4,43	3,63	4,41	4,85	4,24	5,22	5,79	
Water pressure drop (2) (E)	kPa	4	7	9	3	5	7	8	12	14	7	10	12	
Heating capacity (3)	kW	4,46	5,56	6,48	5,01	6,36	7,49	6,16	7,48	8,22	7,17	8,82	9,78	
Water flow (3)	l/h	391	488	569	439	558	657	540	656	721	629	774	859	
Water pressure drop (3)	kPa	5	7	10	4	6	7	9	12	15	7	10	12	
DF heating capacity (3) (E)	kW	2,95	3,45	3,82	2,93	3,42	3,78	3,70	4,21	4,48	3,69	4,18	4,45	
DF Water flow (3)	l/h	259	302	335	257	300	332	324	369	393	324	367	391	
DF Water pressure drop (3) (E)	kPa	4	6	7	4	6	7	6	8	9	6	8	9	
FCCOP (E)			D			D			D			D		
FCCOP version DF (E)			D			D			D			D		
Standard coil - number of rows	n°		3			4			3			4		
Standard coil - hydraulic connections	"		3/4			3/4			3/4			3/4		
Standard coil - water content	dm3		1,29			1,64			1,29			1,64		
DF coil - number of rows	n°		1			1			1			1		
DF coil - hydraulic connections	"		3/4			3/4			3/4			3/4		
DF coil - water content	dm3		0,93			0,93			0,93			0,93		
Power supply	V-ph_Hz		230-1-50			230-1-50			230-1-50			230-1-50		
Maximum current absorption	А	0,400	0,550	0,820	0,400	0,550	0,820	0,700	0,810	1,210	0,700	0,810	1,210	
Power input (E)	W	84	122	188	84	122	188	135	185	265	135	185	265	
Power input DF version (E)	W	84	122	188	84	122	188	135	185	265	135	185	265	
Total sound power level (4)	dB/A	48	57	63	48	57	63	54	61	66	54	61	66	
Inlet + radiated sound power level (4) (E)	dB/A	46	54	61	46	54	61	52	59	64	52	59	64	
Outlet sound power level (4) (E)	dB/A	45	53	59	45	53	59	51	58	63	51	58	63	
Standard version weight	kg		31,5			32,5			32,5			33,3		
DF version weight	kg		33,7			34,7			34,7			35,5		

(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
(5) Expressed according to standards en1397
(E) EUROVENT certified data

RATED TECHNICAL DATA 5

UTN			12			12A			16			16A		
Fan speed		min	med	max										
Air flow (E)	m³/h	1.021	1134	1241	998	1107	1206	1.208	1384	1609	1.200	1371	1584	
Air flow DF version (E)	m³/h	1004	1115	1212	985	1088	1179	1194	1362	1573	1186	1349	1550	
Available static pressure (E)	Ра	41	50	59	41	50	59	38	50	67	38	50	66	
Total cooling capacity (1)	kW	5,33	5,77	6,17	5,87	6,37	6,81	6,32	7,01	7,83	6,97	7,79	8,75	
Sensible cooling capacity(1)	kW	3,99	4,32	4,63	4,45	4,85	5,21	5,14	5,77	6,55	5,53	6,24	7,10	
Total cooling capacity (5)(E)	kW	4,99	5,39	5,71	5,53	5,99	6,35	6,03	6,63	7,33	6,68	7,41	8,25	
Sensible cooling capacity (5)(E)	kW	3,65	3,94	4,17	4,11	4,47	4,75	4,85	5,39	6,05	5,24	5,86	6,60	
Water flow (1)	l/h	915	990	1059	1008	1093	1169	1085	1202	1344	1197	1336	1501	
Water pressure drop (1) (E)	kPa	18	21	24	15	17	19	17	20	24	11	13	16	
Total cooling capacity DF version (1)	kW	5,26	5,70	6,06	5,81	6,29	6,69	6,26	6,92	7,70	6,90	7,69	8,60	
Sensible cooling capacity DF version (1)	kW	3,94	4,27	4,54	4,40	4,78	5,11	5,09	5,69	6,43	5,47	6,15	6,96	
Total cooling capacity DF version (5)(E)	kW	4,92	5,32	5,60	5,47	5,91	6,23	5,97	6,54	7,20	6,61	7,31	8,10	
Sensible cooling capacity DF version (5)(E)	kW	3,60	3,89	4,08	4,06	4,40	4,65	4,80	5,31	5,93	5,18	5,77	6,46	
Water flow DF version (1)	l/h	904	978	1040	998	1079	1148	1075	1187	1322	1185	1319	1476	
Water pressure drop DF version (1) (E)	kPa	18	21	23	15	17	19	16	19	23	10	13	15	
FCEER (E)			E			E			E			E		
FCEER version DF (E)			F			E			E			E		
Heating capacity (2) (E)	kW	6,68	7,20	7,67	7,49	8,11	8,65	7,74	8,52	9,46	8,70	9,62	10,70	
Water pressure drop (2) (E)	kPa	15	17	19	12	14	15	13	16	20	9	10	13	
Heating capacity (3)	kW	11,31	12,22	13,02	12,71	13,76	14,68	13,10	14,40	15,98	14,74	16,28	18,10	
Water flow (3)	l/h	992	1072	1142	1115	1208	1289	1149	1264	1402	1293	1428	1588	
Water pressure drop (3)	kPa	16	18	21	13	15	17	14	16	20	9	11	13	
DF heating capacity (3) (E)	kW	5,98	6,28	6,53	5,93	6,21	6,44	8,01	8,53	9,13	7,98	8,50	9,07	
DF Water flow (3)	l/h	525	551	573	521	545	566	703	749	801	701	746	796	
DF Water pressure drop (3) (E)	kPa	14	16	17	12	13	14	10	11	13	24	27	30	
FCCOP (E)			E			E			Ε			D		
FCCOP version DF (E)			E			E			D			D		
Standard coil - number of rows	n°		3			4			3			4		
Standard coil - hydraulic connections	"		3/4			3/4			3/4			3/4		
Standard coil - water content	dm3		1,65			2,13			2,16			2,75		
DF coil - number of rows	n°		1			1			1			1		
DF coil - hydraulic connections	"		3/4			3/4			3/4			3/4		
DF coil - water content	dm3		1,05			1,05			1,17			1,17		
Power supply	V-ph_Hz		230-1-50			230-1-50			230-1-50			230-1-50		
Maximum current absorption	Α	1,350	1,600	2,100	1,350	1,600	2,100	1,400	1,800	2,500	1,400	1,800	2,500	
Power input (E)	W	345	385	460	345	385	460	290	380	505	290	380	505	
Power input DF version (E)	W	345	385	460	345	385	460	290	380	505	290	380	505	
Total sound power level (4)	dB/A	59	63	69	61	63	69	62	67	72	62	67	72	
Inlet + radiated sound power level (4) (E)	dB/A	56	60	66	56	60	66	60	64	70	60	64	70	
Outlet sound power level (4) (E)	dB/A	55	59	65	59	59	65	58	63	69	58	63	69	
Standard version weight	kg		40,6			41,7			47,3			48,7		
DF version weight	kg		43,2			44,3			50,3			51,7		

Water temperature 7 / 12°C, air temperature D.B. 27°C, W.B. 19°C (47% relative humidity)
Inlet water temperature 50°C, water flow rate same as in cooling mode, air temperature 20°C
Water temperature 70 / 60°C, air temperature 20°C
Sound power measured according to standards ISO 3741 and ISO 3742

(5) measured according to standards en1397
(E) EUROVENT certified data

RATED TECHNICAL DATA 5

UTN			22			22A			30			30A		
Fan speed		min	med	max										
Air flow (E)	m³/h	1.485	1898	2380	1.438	1819	2218	2.092	2641	3206	2.073	2604	3175	
Air flow DF version (E)	m³/h	1466	1871	2328	1425	1795	2182	2084	2626	3186	2065	2590	3155	
Available static pressure (E)	Pa	30	50	78	31	50	75	31	50	74	32	50	74	
Total cooling capacity (1)	kW	8,79	10,65	12,61	9,58	11,72	13,79	12,50	14,92	17,22	13,79	16,45	19,04	
Sensible cooling capacity(1)	kW	6,73	8,28	9,98	7,14	8,85	10,58	9,48	11,52	13,51	10,24	12,49	14,79	
Total cooling capacity (5)(E)	kW	8,42	10,12	11,86	9,21	11,19	13,04	11,63	13,83	15,92	12,92	15,36	17,74	
Sensible cooling capacity (5)(E)	kW	6,36	7,75	9,23	6,77	8,32	9,83	8,61	10,43	12,21	9,37	11,40	13,49	
Water flow (1)	l/h	1509	1827	2163	1644	2010	2366	2145	2561	2953	2365	2823	3270	
Water pressure drop (1) (E)	kPa	15	21	29	12	17	22	21	29	37	27	37	48	
Total cooling capacity DF version (1)	kW	8,70	10,53	12,41	9,51	11,58	13,61	12,46	14,86	17,14	13,74	16,38	18,96	
Sensible cooling capacity DF version (1)	kW	6,66	8,19	9,81	7,08	8,75	10,43	9,45	11,47	13,44	10,21	12,43	14,71	
Total cooling capacity DF version (5)(E)	kW	8,33	10,00	11,66	9,14	11,05	12,86	11,59	13,77	15,84	12,87	15,29	17,66	
Sensible cooling capacity DF version (5)(E)	kW	6,29	7,66	9,06	6,71	8,22	9,68	8,58	10,38	12,14	9,34	11,34	13,41	
Water flow DF version (1)	l/h	1493	1808	2130	1631	1987	2336	2138	2550	2940	2358	2811	3254	
Water pressure drop DF version (1) (E)	kPa	15	21	28	12	16	22	21	28	36	27	37	48	
FCEER (E)			Ε			Ε			F			F		
FCEER version DF (E)			Ε			Ε			F			Ε		
Heating capacity (2) (E)	kW	10,84	12,99	15,26	11,66	14,08	16,43	15,20	18,05	20,76	16,49	19,69	22,87	
Water pressure drop (2) (E)	kPa	12	17	23	10	14	18	17	23	30	22	30	39	
Heating capacity (3)	kW	18,33	21,97	25,78	19,65	23,72	27,67	25,60	30,41	34,96	27,68	33,07	38,43	
Water flow (3)	l/h	1609	1926	2262	1724	2081	2428	2246	2668	3068	2428	2900	3370	
Water pressure drop (3)	kPa	13	18	24	10	14	18	17	23	30	22	30	39	
DF heating capacity (3) (E)	kW	12,3	14,4	16,4	12,1	14,0	15,8	16,9	19,5	21,9	16,8	19,3	21,8	
DF Water flow (3)	l/h	1080	1260	1441	1061	1228	1385	1481	1711	1925	1472	1696	1913	
DF Water pressure drop (3) (E)	kPa	8	10	13	8	10	12	11	14	17	10	13	16	
FCCOP (E)			D			D			E			E		
FCCOP version DF (E)			D			D			E			E		
Standard coil - number of rows	n°		3			4			4			5		
Standard coil - hydraulic connections	"		1			1			1			1		
Standard coil - water content	dm3		2,99			3,83			4,51			5,52		
DF coil - number of rows	n°		2			2			2			2		
DF coil - hydraulic connections	н		1			1			1			1		
DF coil - water content	dm3		2,10			2,10			2,39			2,39		
Power supply	V-ph_Hz		230-1-50			230-1-50			230-1-50			230-1-50		
Maximum current absorption	А	1,800	2,350	3,500	1,800	2,350	3,500	3,800	4,600	5,600	3,800	4,600	5,600	
Power input (E)	W	370	535	750	370	535	750	870	1090	1300	870	1090	1300	
Power input DF version (E)	W	370	535	750	370	535	750	870	1090	1300	870	1090	1300	
Total sound power level (4)	dB/A	60	67	74	60	67	74	69	73	78	69	73	78	
Inlet + radiated sound power level (4) (E)	dB/A	58	65	72	58	65	72	67	71	76	67	71	76	
Outlet sound power level (4) (E)	dB/A	57	64	71	57	64	71	66	70	75	66	70	75	
Standard version weight	kg		65,3			67,2			77,0			79,5		
DF version weight	kg		70,9			72,8			83,4			85,9		

Water temperature 7 / 12°C, air temperature D.B. 27°C, W.B. 19°C (47% relative humidity)
Inlet water temperature 50°C, water flow rate same as in cooling mode, air temperature 20°C
Water temperature 70 / 60°C, air temperature 20°C
Sound power measured according to standards ISO 3741 and ISO 3742

(5) Expressed according to standards en1397
(E) EUROVENT certified data

RATED TECHNICAL DATA 5

UTN		40		40A				
Fan speed		min	med	max	min	med	max	
Air flow (E)	m³/h	3.129	3706	4422	3.067	3622	4287	
Air flow DF version (E)	m³/h	3073	3637	4321	3345	4002	4837	
Available static pressure (E)	Ра	35	50	71	36	50	71	
Total cooling capacity (1)	kW	16,08	18,23	20,69	17,95	20,42	23,18	
Sensible cooling capacity(1)	kW	12,71	14,58	16,79	13,98	16,14	18,64	
Total cooling capacity (5)(E)	kW	15,43	17,41	19,54	17,30	19,60	22,03	
Sensible cooling capacity (5)(E)	kW	12,06	13,76	15,64	13,33	15,32	17,49	
Water flow (1)	l/h	2761	3128	3551	3082	3505	3979	
Water pressure drop (1) (E)	kPa	17	21	26	16	20	25	
Total cooling capacity DF version (1)	kW	15,87	17,98	20,36	19,21	22,02	25,34	
Sensible cooling capacity DF version (1)	kW	12,52	14,36	16,48	15,07	17,57	20,64	
Total cooling capacity DF version (5)(E)	kW	15,22	17,16	19,21	18,56	21,20	24,19	
Sensible cooling capacity DF version (5)(E)	kW	11,87	13,54	15,33	14,42	16,75	19,49	
Water flow DF version (1)	l/h	2722	3085	3493	3297	3779	4347	
Water pressure drop DF version (1) (E)	kPa	17	21	26	18	23	29	
FCEER (E)								
FCEER version DF (E)								
Heating capacity (2) (E)	kW	20,46	23,06	26,05	22,43	25,40	28,72	
Water pressure drop (2) (E)	kPa	16	20	24	16	20	25	
Heating capacity (3)	kW	34,74	39,17	44,24	37,91	42,94	48,56	
Water flow (3)	l/h	3049	3435	3882	3327	3768	4262	
Water pressure drop (3)	kPa	17	21	27	17	21	26	
DF heating capacity (3) (E)	kW	20,8	23,0	25,4	21,9	24,3	27,1	
DF Water flow (3)	l/h	1824	2016	2229	1918	2132	2379	
DF Water pressure drop (3) (E)	kPa	11	14	16	12	15	18	
FCCOP (E)								
FCCOP version DF (E)								
Standard coil - number of rows	n°		4			5		
Standard coil - hydraulic connections	"		1			1		
Standard coil - water content	dm3		5,19			6,38		
DF coil - number of rows	n°		2			2		
DF coil - hydraulic connections	"		1			1		
DF coil - water content	dm3		2,68			2,68		
Power supply	V-ph_Hz		230-1-50			230-1-50		
Maximum current absorption	A	3,140	3,961	5,556	3,140	3,961	5,556	
Power input (E)	W	650	820	1150	650	820	1150	
Power input DF version (E)	W	650	820	1150	650	820	1150	
Total sound power level (4)	dB/A	70	74	79	70	74	79	
Inlet + radiated sound power level (4) (E)	dB/A	68	72	77	68	72	77	
Outlet sound power level (4) (E)	dB/A	67	71	76	67	71	76	
Standard version weight	kg	88.0			90,0			
DF version weight	kg		95,0			97,0		
	-							

Water temperature 7 / 12°C, air temperature D.B. 27°C, W.B. 19°C (47% relative humidity)
Inlet water temperature 50°C, water flow rate same as in cooling mode, air temperature 20°C
Water temperature 70 / 60°C, air temperature 20°C
Sound power measured according to standards ISO 3741 and ISO 3742

(5) measured according to standards en1397
(E) EUROVENT certified data

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6 **VENTILATION FEATURES**

ACCESSORIES: AIR PRESSURE DROP

The pressure drops shown below refer to accessories that are not affected by the various sizes of the thermal ventilating units.

Pressure drops refer to the accessory itself and are not related to the size of the thermal ventilating units.

Legend: Air flow Qa $\Delta \mathbf{Pa}$ Air pressure drop

												Qa [m³/h]	I								
	accessories	∆Pa	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100
	TFA - TFM	Ра	1	1	2	3	4	6	7	9	11	13	13	17	20	23	26	29	32	35	39
	CA2	Ра	1	3	5	8	11	15	20	25	31	37	44	-	-	-	-	-	-	-	-
T	CA3	Ра	-	-	1	2	3	5	7	9	12	15	19	23	27	31	36	41	47	52	59
	CAF2	Ра	4	8	12	17	22	29	36	44	53	62	72	-	-	-	-	-	-	-	-
	CAF3	Ра	2	4	5	8	10	13	17	20	24	29	33	39	44	50	56	62	69	76	83
	CM1	Ра	13	24	37	53	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CM2	Ра	1	1	2	3	5	6	7	9	11	13	16	-	-	-	-	-	-	-	-
	CM3	Ра	-	-	1	1	1	1	2	2	3	3	4	5	5	6	7	7	8	9	10

7 SOUND POWER LEVELS FOR OCTAVE BAND

Legend:

Psu Available static pressure

L_{wa} Vr

A-weighted sound power Fan speed: 3 = high 2 = medium 1 = low

Lw									
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LW _A
	Vr	dB	dB	dB	dB	dB	dB	dB	
	max	40,6	53,6	56,0	58,9	56,7	50,9	42,1	63
UTN 6 - 6A	med	36,5	49,2	51,2	52,0	48,2	44,9	36,5	57
	min	29,5	42,9	40,9	43,3	39,3	33,9	24,9	48
	max	43,6	47,0	60,0	62,0	60,7	54,8	46,2	66
UTN 8 - 8A	med	40,7	53,8	53,8	57,0	53,6	50,6	43,3	61
	min	33,8	47,7	47,0	49,8	47,0	41,9	33,5	54
	max	45,0	56,9	60,8	64,7	63,5	57,7	49,7	69
UTN 12 - 12A	med	41,5	52,6	56,9	59,0	54,7	50,9	40,5	63
	min	37,0	48,8	53,0	54,4	50,0	48,6	33,5	59
	max	50,7	62,1	64,8	68,1	66,5	62,5	56,2	72
UTN 16 - 16A	med	45,0	57,5	60,1	62,5	58,9	56,4	49,2	67
	min	40,5	53,4	55,9	57,5	54,3	50,3	42,4	62
	max	52,0	62,5	65,2	70,0	69,2	64,5	58,2	74
UTN 22 - 22A	med	46,2	57,7	59,9	62,8	60,5	57,1	50,0	67
	min	39,3	50,6	54,2	55,9	53,1	47,8	41,5	60
	max	61,0	70,5	70,0	72,5	71,1	69,6	63,8	78
UTN 30 - 30A	med	58,3	65,1	67,1	67,9	65,8	64,2	56,7	73
	min	52,1	61,3	62,3	63,8	62,6	60,7	49,1	69
	max	75,5	79,1	74,2	73,8	71,9	68,7	62,4	79,0
UTN 40 - 40A	med	71,1	75,3	69,9	69	67,0	62,7	55,5	74,0
	min	66,2	71,9	65,8	64,8	62,3	56,5	48,8	70,0



8 PERFORMANCES

In order to define the performances of UTN subject to conditions different from rated conditions, a computer program for the correct choice of the units is provided by Galletti SpA

With a few input data it will be possible to get information on the behaviour of an UTN referring to the desired operating conditions.

It will be sufficient to enter the following data:

- Dry bulb inlet air temperature
- Wet bulb inlet air temperature or alternatively the relative humidity
- Inlet water temperature
- Outlet water temperature or alternatively the water flow
- Ethylene glycol percentage (default 0)
- Fan speed
- Available static head (default 0)
- Directivity factor and distance

Output data • Air flow rate

- Total cooling / heating capacity
- Sensible cooling capacity
- Water flow
- Pressure drop, water side
- Outlet air temperature
- Sound power level
- Sound pressure level under the specified conditions
- Power input

The selection report generated by the software includes the drawing with overall dimensions and description of the unit

A (Gall2006 - C	Calculation	n program	n														x
File	Unit of m	neasure	Line prod	luct Sel	ection la	nguage	Docum	entation	?									
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	UTN Therm	noventilat	ina units														×	าก
						Return	air100 %					Betu	rn air100 %			Acces	sories	
II C. ^B	eturn air ratio	o 100%	+0	27	Bela	tive humid	litu		-Return a	ir ratio								
AII AII	iniet tempera	ature	1 1	10	-	47	- Syr		Air inlet te	emperature	*	C 20				MA.	/F /F0	
W	et bulb air ter	mperature	-'L	19	76	4/			-Freshair	ratio		. 20	_				.	
L.F	resh air ratio I	0%		07	- Rali	ativa humi	ditu		Air inlet te	emperature	1	20		-			DE A	
A	inlet tempera	ature	*C	27	- *	A7	any					Fre	sh air100 %	6 			JEM 30	
W	et bulb air ter	mperature		19	~			-	Water inle	t temperatur	e *(C 70	Wat	er flow				
						Fresh	air100 %		Water out	let temperati	ure •(C 60	I/h			GM		
Wa	iter inlet temp	perature	*C	7	Wa	ter flow	_							-		, Sin		
Wa	iter outlet tem	nperature	*C	12	l/h									=QW(U	J			
⊢S	ound pressur	re level-		_	Total A	ir flow		m3/ł	0	Model			×AII	•	I I	Calcul	ate	1
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	Legenda	Vel	QA	PT	PS	QW (C)	DPW (C)	TA (C)	PH	QW (H) D	PW (H)	TA (H)	LW	LP	PinL	W_In+R L	<u>.w_0</u> ^	
	idel N.C.	Min	m3/h	2400	1050	1/h	kPa 7	126	5210	1/h	kPa 7					dB(A)		
Ш	N 6A	Min	420	2790	2080	472	6	11.7	5950	522	5	61.8	40	43	84	40	4	
UT	N 8	Min	597	3130	2440	538	12	14.4	6680	586	10	53.2	54	49	135	52	E	
UT	N 8A	Min	596	3770	2860	647	10	12.2	7860	689	8	59.2	54	49	135	52	E	
UT	N 12	Min	1284	6320	4740	1085	25	15.6	13330	1169	21	50.8	59	54	345	56	E	
	N 12 A	Min	1259	7040	5390	1208	21	13.8	15170	1330	18	55.8	61	56	345	56	E	
	N 16 A	Min	1495	7420 9320	6710	1/27	22	14.3	15200	1333	18	50.2	62	57	290	60 60	E	
Шт	N 22	Min	1747	9990	7730	1714	14	13.0	20670	1814	16	55.2	60	55	370	58	E	
UT	N 22 A	Min	1695	11040	8310	1894	15	11.8	22430	1968	12	59.3	60	55	370	58	E	
UT	N 30	Min	2232	13140	10010	2255	23	13.1	26860	2357	19	55.7	69	64	870	67	E	
UT	N 30 A	Min	2217	14530	10860	2493	30	11.8	29180	2560	24	59.1	69	64	870	67	E	
UT	N 40	Min	3795	18540	14860	3182	22	14.9	39810	3494	22	51.2	70	65	650	68	E	
	N 40 A	Min Marel	3717	20830	16500	3575	21	13.3	43770	3840	22	55.0	70	65 52	122	68 E4	E	
101	NCA	Med	583	3700	2420	534 635	9	14.3	7720	582 677	10	59.3 59.3	57	52	122	54	E	
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9 INSTALLATION SUGGESTIONS

UTN units can be installed both vertically and horizzontally.

The UTN units are always supplied for the A-A placing.

If a different placing is needed the installer can modify it before mounting the unit (see chapter 3 "POSSIBLE CONFIGURATIONS").

Choose the unit position to have the best ductwork path.

The air sucted by the unit must be filtered: use the MAF or MAFO accessories. Fit any accessories on the standard unit before installing it.

It is suggested to use anti-vibration joint (available as option) between the unit and the ducts.

Ductworks, in particular the air outlet one, must be insulated to avoid moisture formation.

Keep free space around the fan coil to allow proper operation of the unit and ordinary and extraordinary maintenance.

Install the remote control panel, if any, in a position that can easily be reached by the user to set the functions and that is suitable for the proper detection of the temperature, if provided.

Therefore avoid:

- positions directly exposed to sunlight;

- positions exposed to hot or cold draughts;

- obstacles preventing the proper temperature detection. If the system is shut down during the winter months, drain off the water from

the system to prevent damage due to freezing; if antifreeze solutions are used, check the freezing point using the table shown at the foot of the page.

Glycol per centage in weight	Freezing temperature (°C)	Capacity correction factor	Pressure drop correction factor
0	0	1.00	1.00
10	-4	0.97	1.05
20	-10	0.92	1.10
30	-16	0.87	0.05
40	-24	0.82	1.20

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10 DIMENSIONAL DATA



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10 DIMENSIONAL DATA





11 WIRING DIAGRAMS

Wiring diagram notes

WARNING! Turn off the power supply before beginning any wiring connections. The dashed lines connections must be carried out by the installer.





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Wiring diagram notes

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12 MOTORS ELECTRICAL DATA

The following table describes the characteristics of the motors at available working conditions.

Legend:

Vr	Operation speed
P _{ASS}	Power input
I _{ASS}	Operation current

	Vr	I _{ass} (A)	P _{ass} (W)
	max	0,820	188
UTN 6 - 6A	med	0.550	122
	min	0.400	84
	max	1.210	265
UTN 8 - 8A	med	0.810	185
	min	0.700	135
	max	2.100	460
UTN 12 - 12A	med	1.600	345
	min	1.350	385
	max	2.500	505
UTN 16 - 16A	med	1.800	380
	min	1.400	290
	max	3.500	750
UTN 22 - 22A	med	2.350	535
	min	1.800	370
	max	5.600	1300
UTN 30 - 30A	med	4.600	1090
	min	3.800	870
	max	5.556	1150
UTN 40 - 40A	med	3.961	820
	min	3.140	650

13 ACCESSORIES

CD - Flush wall-mounted speed selector

Flush wall-mounted control panel is provided with a 4 positions (3speed + stop) rotation selector. The CD control panel allows the ON/OFF and fan speed selection of the high pressure fan coil unit.

CDE - wall mounted speed selector

Wall mounted control panel is provided with a 3 positions (3 speed) and switch ON/OFF . The CDE control panel allows the ON/OFF and fan speed selection of the high pressure fan coil unit.

TD - Wall mounted control with speed selector, thermostat and summer-winter selector Wall mounted control panel complete with fan speed selector, electromechanical thermostat and cooling / heating mode selector.

Fan speed control, regulation of the room temperature and cooling heating mode selection:

- manual setting of the fan speed;

- room temperature regulation both in cooling / heating mode, by means of fan start / stop, at a manually set temperature.

TDC - Wall mounted control with speed selector and thermostat

Wall mounted control panel complete with fan speed selector, electromechanical thermostat and cooling / heating mode selector.

Fan speed control, regulation of the room temperature and cooling / heating mode selection:

- manual setting of the fan speed;

- room temperature regulation both in cooling / heating mode, by means of fan start/stop, at a manually set temperature.











TD4T - Wall mounted control with speed selector, thermostat and summer-winter selector, for 2/4 pipe system with valves

Wall mounted control panel provided with fan speed selector, electromechanical thermostat, and cooling / heating mode selector; if installed it controls regulating valves.

Fan speed control and regulation of the room temperature:

- manual setting of the operation fan speed;

- regulation of the room temperature for 2 and 4 pipe systems, both in heating and cooling mode, by means of fan start/stop at a manually set temperature and by means of opening and closing of the regulating valve.

TC - Fan stop thermostat: elecromechanical thermostat for minimum water temperature during heating Fan stop thermostat with automatic resetting, it stops the fan motor assembly when the water temperature in the heat exchanger decreases under the set value (42°C).

Usefull only in the heating mode for installation on the finned pack of the heat exchanger.

TA - Wall mounted room thermostat

Room thermostat for wall installation.

Automatic regulation of the room temperature:

- only in the heating mode working on the fan motor assembly and on the regulating valve, if installed (ON/OFF operation);

- only in the cooling mode working on the fan motor assembly and on the regulating valve, if installed (ON/OFF operation);

- both in cooling and heating mode, with remote mode selection working on the fan motor assembly and on the regulating valve, if installed (ON/OFF operation).

TA2 - Wall mounted room thermostat with summer/winter selector

Wall mounted room thermostat with cooling / heating mode selector.

Automatic regulation of the room temperarure both in heating and cooling mode, working on the fan motor assembly and on the regulating valve if installed (ON/OFF operating).

KP - power interface for connection of up to 4 units to a single control panel

The KP master sleeve can be installed to control with a single control panel up to 4 units (connected in parallel). This accessory is designed for installation on a DIN drive, usually placed on electric board, can be matched with all UTN versions.

IPM - Power interface for the connections to the control panels MYCOMFORT , LED503 and EVO

The IPM power board permits to use MYCOMFORT, LED503 and EVO microprocessor-based control panels on the whole range of UTN air handling units, even for models with current consumation greayer than 1A. The capacity of the IPM contacts is 16A, IP30 rating.

The use of the IPM power board matched with the microprocessor controls is:

- compulsory for UTN 30, UTN 30A, UTN 40, UTN 40A.

MYCOMFORT BASE - wall-mounted microprocessor control, model MYCOMFORT BASE, having the following main features:

-Room air temperature reading and adjustment

- -Water temperature reading (water sensor as an optional)
- -Manual and automatic adjustment of fan speed

-Manual and automatic switching of heating and cooling mode depending on the water temperature within the heat exchanger or on the room temperature, with a neutral zone that can be selected in the range from 2° to 5°C. The controller is equipped with a large display (3") to show and set all the functions of the unit.

Using the installation kit available, myComfort can be mounted on the unit

TP- Plastic cap

Plastic cap ϕ 200 mm for the closing on the PCOF, of the air outlet not used.





















MYCOMFORT MEDIUM - GALLETTI wall-mounted microprocessor control, model MYCOMFORT MEDIUM, having the following main features :
-Room air temperature reading and adjustment
-Reading and adjustment of room humidity
-Water temperature reading (water sensor as an optional)
-Manual and automatic adjustment of fan speed
-Manual and automatic switching of heating and cooling mode depending on the water
temperature within the heat exchanger or on the room temperature, with a neutral zone that can be selected in the
range from 2° to 5°C.
-Serial port for Bus connection
The controller is equipped with a large display (3") to show and set all the functions of the unit.
Using the installation kit available, myComfort can be mounted on the unit

MYCOMFORT LARGE-GALLETTI wall-mounted microprocessor control, model MYCOMFORT LARGE, having the following main features :

-Room air temperature reading and adjustment

-Reading and adjustment of room humidity

-Water temperature reading (water sensor as an optional)

-Manual and automatic adjustment of fan speed

-Manual and automatic switching of heating and cooling mode depending on the water temperature within the heat exchanger or on the room temperature, with a neutral zone that can be selected in the range from 2° to 5° C.

-Clock and hourly timer-programmed operation

-2 Analogue outputs for controlling modulating devices 0-10V

-2 Digital outputs for controlling (On/Off) external devices (no-voltage contacts)

-Serial port for Bus connection

The controller is equipped with a large display (3") to show and set all the functions of the unit.

Using the installation kit available, myComfort can be mounted on the unit

EVO - wall-mounted microprocessor split controller

EVO controller is a system composed of:

-Circuit board comprising the power circuit, the microprocessor system and the removable screw connectors for the connection of the inlet and outlet devices;

- User interface comprising a graphic display and a keyboard (six keys) provided with clock and sensor to read the ambient temperature.

Main functions:

- M easurement and regulation of the room air temperature
- M easurement and regulation of the room humidity
- M easurement and temperature of water (water probes are optional)
- M anual/automatic regulation of the fan speed with ON -OFF step and modulating control
- A utomatic regulation of the valve opening with ON-OFF and modulating control

- M anual or automatic heating/cooling operation switch according to the water temperature inside the coil or to

the room temperature with selectable amplitude neutral area

- Clock and operating time bands
- 3 analogue outputs to control 0-10 V modulating devices
- E conomy function and minimum temperature
- 1 Digital output to control on/off external devices (potential-free contacts)
- Serial port for RS485 connection
- Serial port for OC connection
- 3 digital inputs for ON-OFF, Economy, Operating mode remote setting

The controller is provided with a programmable display that allows you to view and set the hydronic unit functions by means of the specific interface with parameter description.

MAF / MAFO - Air intake modules with filter

Made of galvanized steel sheet, these modules permit to filter the air sucked up by the unit and also to connect the unit to the intake channeling.

2 version are proposed depending on the guaranteed filtering degree:

MAF: air intake module with flat filter made of acrylic material, self-extinguishing in class 1, with filtering class G2. MAFO: air intake module with corrugated filter made of acrylic fiber, self-extinguishing in class 1, with filtering EU4.











LED503 - Recess wall-mounted microprocessor control

The proposed microprocessor control panels for Galletti indoor units is completed by the LED503 command

with LED display that is designed for recess wall mounting.

CONTROLLER

- The control software developed by the Galletti Software Dept., features:
- Manual fan speed selection;
- Automatic selection of fan speed according to the difference between
- the set temperature and the room air temperature;
- Manual selection of heating/cooling operating mode;
- Automatic selection of heating/cooling operating mode;
- Control of 1 or 2 ON/OFF valves;
- Control of additional heating element;
- On board timer function to detect the actual ambient temperature;
- Reading of air ambient temperature, set point, fan speed and mode
- selection on the LED display.

TFA - Not insulated flexible ducts

Uninsulated flexible duct for the connections to the air distribution with ϕ 200 mm diameter, supplied in 6 m lenght undivisible.

TFM- Insulated flexible ducts

Insulated flexible duct for the connections to the air distribution with ϕ 200 mm diameter, supplied in 6 m lenght undivisible. The insulation of the duct is optained by means of fiberglass, thickness 25 mm with 16 Kg/m³ density.

CA/CAF- Air inlet plenum box

Intake Plenum box in galvanised sheet metal complete with circular collars (Ø 200 mm) for the connection, by means of hoses and intake grids with fixed fins, to pocket type structures, to increase the free air flow cross section. Sized to be adaptable to the modular structure of the ceiling panels, they are equipped with 2 or 3 circular collars so that they can be connected, following their suitable combination, to all the heater fans of the UTN range. The CA version is equipped with just the grid alone whereas the CAF version is also equipped with a flat filter in acrylic material, with filtering rating G2, housed in the standard frame. The filter of this second type of intake box can be serviced (cleaned) on a periodic basis without having to access the unit fitted behind the ceiling panels or in a service room.

CM - Delivery plenum boxes

Delivery Plenum boxes in galvanised sheet metal complete with circular collars (Ø 200 mm, for the connection by means of hoses) and adjustable delivery grids. The boxes are duly insulated externally with calorized foam polyethylene in order to prevent the formation of condensate during the cooling cycle. Sized to be adaptable to the modular structure of the ceiling panels, they are equipped with 1, 2 or 3 circular collars so that they can be connected, following their suitable combination, to all the heater fans of the UTN

range. All versions are equipped with adjustable fins to optimise the distribution of the conditioned air.

CSD - Wall mounted control for proportional opening and closing of the PA90 motorized louver

The control board of the servomotor (named CSD, for flush wall mounting, to be ordered separately) is designed for remote installation and permits to close and open the louver from 0 to 100%.

GM - Alluminium air outlet grille

Air delivery grids with double row of adjustable fins in anodised aluminium, equipped with galvanised sheet metal frame that is used to wall-mount the grids or to fit them directly on the delivery head of the machine. The galvanised sheet metal frame is drilled at one end so that it can be secured directly to the delivery head of the heater fan

GR - Alluminium air inlet grille

Air intake grids with single row of fins in anodised aluminium, equipped with galvanised sheet metal frame that is used to wall-mount the grids or to fit them directly on the intake head of the machine. The galvanised sheet metal frame is drilled at one end so that it can be secured directly to the intake head of the

The galvanised sheet metal frame is drilled at one end so that it can be secured directly to the intake head of the heater fan (or to accessories such as the MAF and MAFO filtering units).

















RE - Supplementary heating elements

Useful as heating integration to the hot water system, the RE kit is made of an electric heater with safety thermostat (automatic and manual resetting) and power relay.

The RE electric heater kit has to be matched with the MYCOMFORT control panel and with the IPM power board.

PCOC - Connecting panel to rectangular ducts

Manufactured in galvanised sheet steel, the PCOC connection panels are used for the connection of rectangular ducts with flanges and with other flanged accessories. They can be installed on both the intake and delivery line. They are made up of a rectangular panel that is to be secured to the machine (or to another accessory with similar drilling, for example, MAF, MAFO, RE etc..) coupled to a flanged sleeve that represents the starting point for rectangular ducts of the type commonly used in distribution plants.

PCOF - Connecting panel to flexible ducts

Manufactured in galvanised sheet steel, the PCOF connection panels are used to connect to air distribution plants achieved by means of hoses or to other dedicated accessories. They can be installed on both the intake and delivery line (in this case the hose should be insulated).

They are made up of a rectangular panel that is to be secured to the machine or to another accessory with similar drilling (i.e. MAF, MAFO, RE etc..) complete with circular collars (Ø 200 mm) that represent the starting point for the hoses of the type commonly used in distribution plants.

					_				
n° of holes 2	2	3	4	4	5				
	and the second se	0							

V - M - R - 3-way valve, on-off actuator and hydraulic connections kit

IThe system allows the regulation of the ambient temperature by stopping the water flow into the heat exchanger. Available for 2 pipe and 4 pipe systems, the kit is made of the components below indicated:

Valve body (V): 3-way with in-built by-pass (4 connections):

- 3/4" for the models UTN 6, UTN 6A, UTN 8, UTN 8A

- 1" for the models UTN 12, UTN 12A, UTN 16, UTN 16A

Actuator (M): normally closed, electrothermal type, 230V single phase, with ON-OFF operation, it works directly on the valve shutter.

Hydraulic connections kit (R): made of copper tubes and brass connections, complete with balancing valve, is different according to the models (standard coil or additional coil in case of 4 pipe systems) and for the unit water connection side.

The hydraulic connections kit is not available for the UTN22 - 22A and UTN30 - 30A units.

VRCV / VRCH - Auxiliary trays for collecting condensate

Auxiliary trays for collecting condensate, used for collecting any condensate that might form on the adjusting valves, the hydraulic unions and the holdfasts during the cooling operating mode.

The trays are made of galvanized metal sheet, with condensate discharge pipe (ϕ 17 mm) setup for being connected to a flexible rubber tube, like that which has been envisaged for the condensate discharge trays of the basic unit. They are available for:

UTN units installed vertically, VRCV.

UTN units installed horizontally, VRCH.

KSC - Condensate removal kit

This device allows to overcome displacements in the condensate drain. The pump can drain water up to 8 l/h and it is completed by a non return valve on the discharge side.



GA / GAT - Vibration dampers

Manufactured in galvanized sheet steel, the GA/GAT connection panels are used to connect to rectangular ducts equipped with flanges and other flanged accessories.

They are made up of a rectangular panel that is to be secured to the machine or to another accessory with similar drilling (i.e. MAF, MAFO, RE etc...) coupled by means of a flexible bellow to a flanged sleeve that rapresents the starting point for rectangular ducts of the type commonly used in distribution plants.

If the vibration damping joint is used together with the electrical heating elements module (accessory RE) a GAT joint made of heat-resistant silicone material is to be fitted on the delivery line.















PA90 - Outdoor air inlet motorized louver

The outdoor air inlet motorized louvre is intended for replacing the air in the room directly from the air-handling unit. The amount of outdoor air that will be let into the room, after having been filtered and treated thermally, may be regulated proportionally from 0 to 100% by means of a servomotor controlled by a rotary potentiometer that is inside the specific CSD control, which is designed for flush wall-mounting installations.

Kit PA90, as shown in figure (1), essentially comprises the following components:

A) Outdoor air inlet louvre made of galvanized steel sheet and setup for being connected to the machine, at one end, and to the other required accessories.

B) Servomotor connected directly to the louvre's baffle, with a protection rating of IP54 and power supply of \sim 24V. The louvre may be opened or closed automatically at the signal of the external auxiliary contacts (not supplied) such as antifreeze thermostats, timers, etc., with the possibility of connecting multi-servomotors in parallel to an individual opening-closing control.

C) 230V - 24V voltage transformer, complete with support terminal strip housed inside the specific electrical box, which functions as a mechanical protection for preventing the access to the connecting terminal strip and to the transformer itself.

D) Self-threading fixing screws.

BP - Kit batterie di post riscaldamento

BP 1 or 2 row reheating exchangers are designed for installation on the air outlet of the UTN air conditioning and thermal ventilating units. NOTE:

The BP module has holes like those on the machine air intake, on the extremity turned toward the air outflow ducts. This allows you to attach all the accessories that can be directly applied on the machine (PCOC, PCOF, GAT, etc...).

MCSWE - Water temperature sensor for microprocessor controls model MYCOMFORT and EVO

Connected directly to the microprocessor control panel, this probe measures the water temperature inside the heat exchanger.

If the temperature registered is lower than 17° C the unit works in cooling mode and the temperature range of the control panel will be referred to the cooling mode (19 / 31°C); if the temperature registered is higher than 37°C the unit works in heating mode and the temperature range of the control panel will be referred to the heating mode (14 / 26°C).

If the temperature registered is between 17°C e 37°C the control panel will disable the unit operation.

MCSUE - Humidity sensor for on-board microprocessor controls model MYMYCOMFORT and EVO.

Directly connected to the microprocessor controllers EVO and MYCOMFORT, it enables the control of the heating element ventilation (if present, as support in heating mode) and the automatic cooling/heating changeover according to the water temperature.

G90 -90° elbow outlet and inlet connector

Made of galvanized steel sheet, the G90 accessories are made up of a 90° elbow fitted with rectangular flanges of the type normally used in distribution systems.

The G90 elbows may be connected to the UTN units on which the PCOC accessories have already been installed (panels with flanged sleeves for being connected to rectangular channelling), at intake and/or at delivery.











14 MAINTENANCE

The maintenance operations for the UTN air conditioning and hot-air heating units are limited to the periodic cleaning of the air filter (provided on MA/F and MA/FO accessories) and the heat exchanger, and the checking of the working efficiency of the condensate discharge.

Only skilled personnel may perform the aforesaid maintenance.

Pay utmost attention during the maintenance operations: accidentally coming into touch with some of the metallic parts might cause injuries therefore wear safety work gloves.

Every time the units are started after long dwell times, make sure that air is NOT present inside the heat exchanger.

The motor is maintenance-free since it is equipped with self-lubricating bearings.

For safety reasons, before performing any maintenance or cleaning operations, turn off the equipment and cut voltage by turning the line switch.



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