

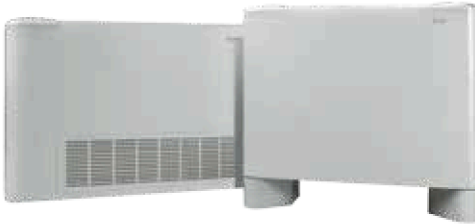
# CHAPTER 7

FAN COIL UNITS

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# FVW 13÷74 FLOYD®

**FAN COIL UNITS WITH CABINET AND 3-SPEED OR EC INVERTER RADIAL FANS.**



The hydronic Fan Coil units with cabinet of FVW series feature a refined, exclusive design combined with the highest efficiency and noiseless operation.

Part of an hydronic system equipped with a liquid Chiller, **FLOYD** generates cool air silently and with instantaneous reaction. During the winter, if combined with a boiler or heat pump, it provides warm air, making it possible to meet home or business heating needs. A filter, which absorbs and retains dust in suspension, allows to keep the air quality at a suitable level and its easy removal enables continuous cleaning cycles to be carried out, which are particularly important in order to guarantee suitable hygiene standards in highly frequented rooms. All installation needs are considered in the many standard features of the unit. It can be installed horizontally or vertically, with front, bottom or rear intake. There is also a series of accessories, also for 4-Pipe systems, that includes a control panel that is installed on-board or in the room.

Units are available both with 3-Speed or EC Inverter fans. The units equipped with EC Inverter motor are able to modulate the air flow ensuring a perfect adaptability to the load without any temperature fluctuations, achieving superior performance compared to the traditional solutions even from energy consumption point of view.

floyd®

**EC INVERTER FAN**

## VERSION

<b>FVW/VP</b>	<b>FVW/VH</b>	<b>FVW/VE</b>	<b>FVW/VO</b>
Vertical unit with bottom inlet and vertical delivery	Vertical unit with front inlet and vertical delivery	Horizontal unit with rear inlet and horizontal delivery	Horizontal unit with bottom inlet and horizontal delivery
<b>FVW/VP/EC</b>	<b>FVW/VH/EC</b>	<b>FVW/VE/EC</b>	<b>FVW/VO/EC</b>
Vertical unit with EC Inverter fans, bottom inlet and vertical delivery	Vertical unit with EC Inverter fans, front inlet and vertical delivery	Horizontal unit with EC Inverter fans, rear inlet and horizontal delivery	Horizontal unit with EC Inverter fans, bottom inlet and horizontal delivery

## FEATURES

- Structure made of galvanized sheet protected by a prepainted sheet covering cabinet and ABS details, complete with heat/sound insulation, regenerating filter, heat-resistant ABS polymer grills adjustable in 4 different directions and natural discharge condensation tray.
- Radial fan type directly coupled to a 6-Speed single phase electric motor, with 3 speeds connected in the standard configuration.
- Radial EC INVERTER fan (23÷74).
- Heat exchanger coils with copper pipes and aluminium fins with airvent on the distributors.

## ACCESSORIES

### LOOSE ACCESSORIES

Z	Couple of feet	DRM	Wall mounted manual electronic control panel	TME	Minimum temperature thermostat for DBM and DRM
C	Auxiliary moisture drain pan	VB	On board fan speed control panel	V2	3-Way on/off valve for 2-Pipe system
WS	Hot water coil for 4-Pipe system	VR	Wall mounted fan speed control panel	V4	3-Way on/off valves for 4-Pipe system
EH	Supplementary electrical heater	TA	Wall mounted ambient thermostat	MP	Moisture drain pump
PP	Rear panel	DBE	On board electromechanic control panel		
TP	Rear closure	DRE	Wall mounted electromechanic control panel		
S	Manual damper	DBV	On board automatic electronic control panel for EC version		
SG	Manual damper with grid	DRV	Wall mounted automatic electronic control panel for EC version		
SMF	ON/OFF motorized damper	MCC	Multicontrol connection card		
SMG	ON/OFF motorized damper with grid	BC	Universal connecting terminal		
RM	Wall connection for damper	TMB	Minimum temperature thermostat for VB and VR		
DBA	On board automatic electronic control panel				
DRA	Wall mounted automatic electronic control panel				
DBM	On board manual electronic control panel				

# FVW 13÷74 FLOYD®



MODEL			13	14	23	24	33	34	43
Cooling	Total cooling capacity (1),(2)	kW	1.31	1.49	1.77	2.05	2.47	2.77	3.11
	Sensible cooling capacity (1),(2)	kW	1.09	1.26	1.45	1.68	1.96	2.16	2.42
	Water flow (1),(2)	l/h	225	256	304	353	425	476	535
	Pressure drops (1),(2)	kPa	5	1	11	6	8	5	14
Heating	Heating capacity (2),(3)	kW	3.20	3.45	4.19	4.53	5.70	6.35	7.03
	Water flow (2),(3)	l/h	275	297	360	390	490	546	605
	Pressure drops (2),(3)	kPa	4	1	8	2	6	4	11
Rows	Quantity	n°	3	4	3	4	3	4	3
Water connections	In / Out	"G ½"	½"	½"	½"	½"	½"	½"	½"
	Max	m³/h	240	240	340	340	430	430	540
Air flow	Med	m³/h	190	190	260	260	340	340	420
	Min	m³/h	140	140	170	170	250	250	280
	Max	m³/h	---	---	340	340	430	430	540
Air flow (EC version)	Min	m³/h	---	---	150	150	180	180	230
	Heating capacity (2),(3)	kW	1.50	1.50	2.16	2.16	2.92	2.92	3.75
	Water flow (2),(3)	l/h	129	129	186	186	251	251	322
Additional coil	Pressure drops (2),(3)	kPa	5	5	9	9	15	15	26
	Rows	n°	1	1	1	1	1	1	1
	Water connections	"G ½"	½"	½"	½"	½"	½"	½"	½"
	Power supply	V/Ph/Hz	230/1/50						
Electrical heater	Absorbed power	kW	0.6	0.6	1.0	1.0	1.6	1.6	2.0
	Power supply	V/Ph/Hz	230/1/50						
Electrical characteristics	Max absorbed power	kW	0.03	0.03	0.05	0.05	0.05	0.05	0.07
	Power supply	V/Ph/Hz	230/1/50						
Electrical characteristics (EC version)	Max absorbed power	kW	---	---	0.02	0.02	0.03	0.03	0.04
	Max (4)	dB(A)	41	41	44	44	40	40	44
Sound pressure	Med (4)	dB(A)	34	34	38	38	34	34	37
	Min (4)	dB(A)	26	26	26	26	25	25	27
	Max (4)	dB(A)	---	---	44	44	40	40	44
Sound pressure (EC version)	Min (4)	dB(A)	---	---	25	25	24	24	26
	Transport weight	Kg	16	16	19	19	24	25	28
Weights	Operating weight	Kg	14	14	17	17	22	23	26

MODEL			44	53	54	63	64	73	74
Cooling	Total cooling capacity (1),(2)	kW	3.54	4.04	4.58	5.09	5.96	6.45	7.26
	Sensible cooling capacity (1),(2)	kW	2.71	3.12	3.47	3.86	4.63	5.07	5.57
	Water flow (1),(2)	l/h	609	695	788	875	1025	1109	1249
	Pressure drops (1),(2)	kPa	9	26	17	8	5	16	15
Heating	Heating capacity (2),(3)	kW	7.75	9.01	9.93	11.69	13.00	14.59	16.19
	Water flow (2),(3)	l/h	666	775	854	1005	1118	1255	1392
	Pressure drops (2),(3)	kPa	7	20	13	6	4	12	8
Rows	Quantity	n°	4	3	4	3	4	3	4
Water connections	In / Out	"G ½"	½"	½"	½"	½"	½"	½"	½"
	Max	m³/h	540	690	690	910	910	1180	1180
	Med	m³/h	420	530	530	730	730	810	810
Air flow	Min	m³/h	280	400	400	510	510	590	590
	Max	m³/h	540	690	690	910	910	1180	1180
	Min	m³/h	230	300	300	420	420	500	500
Air flow (EC version)	Heating capacity (2),(3)	kW	3.75	4.65	4.65	6.01	6.01	7.84	7.84
	Water flow (2),(3)	l/h	322	400	400	517	517	674	674
	Pressure drops (2),(3)	kPa	26	18	18	13	13	24	24
	Rows	n°	1	1	1	1	1	1	1
Water connections	"G ½"	½"	½"	½"	½"	½"	½"	½"	
	Power supply	V/Ph/Hz	230/1/50						
Electrical heater	Absorbed power	kW	2.0	2.5	2.5	3.0	3.0	4.0	4.0
	Power supply	V/Ph/Hz	230/1/50						
Electrical characteristics	Max absorbed power	kW	0.07	0.09	0.09	0.16	0.16	0.19	0.19
	Power supply	V/Ph/Hz	230/1/50						
Electrical characteristics (EC version)	Max absorbed power	kW	0.04	0.07	0.07	0.09	0.09	0.13	0.13
	Max (4)	dB(A)	44	46	46	48	48	52	52
Sound pressure	Med (4)	dB(A)	37	39	39	43	43	42	42
	Min (4)	dB(A)	27	33	33	34	34	34	34
	Max (4)	dB(A)	44	46	46	48	48	52	52
Sound pressure (EC version)	Min (4)	dB(A)	26	29	29	28	28	33	33
	Transport weight	Kg	29	33	34	43	44	54	56
Weights	Operating weight	Kg	27	31	32	41	42	52	54

DIMENSIONS			13	14	23	24	33	34	43	44	53	54	63	64	73	74
L	STD/EC	mm	650	650	780	780	1040	1040	1170	1170	1430	1430	1430	1430	1690	1690
W	STD/EC	mm	210	210	210	210	210	210	210	210	210	210	275	275	275	275
H	STD/EC	mm	500	500	500	500	500	500	500	500	500	500	570	570	570	570
D (5)	STD/EC	mm	90	90	90	90	90	90	90	90	90	90	90	90	90	90

## CLEARANCE AREA

FVW 13÷74 FLOYD®



Electrical board side

## NOTES

1. Ambient air temperature 27 °C d.b./19 °C w.b., water temperature 7/12 °C.
  2. Performances also valid for EC version.
  3. Ambient air temperature 20 °C d.b., water temperature 70/60 °C.
  4. Sound pressure level measured at 1 m from the unit with reverberation time 0,5 s.
  5. Feet height.
- N.B. Maximum operating pressure 1000 kPa.  
 N.B. Maximum inlet water temperature 90 °C.  
 N.B. Inhibited ethylene glycol can be added to the water.



FROM 1,3 KW TO 7,3 KW.

# FIW 13÷74

**FAN COIL UNITS FOR BUILT-IN INSTALLATION WITH 3-SPEED OR EC INVERTER RADIAL FANS.**



The hydronic Fan Coil units of FIW series are designed for built-in installation: vertical floor-mounted or horizontal ceiling-mounted in domestic environments or service sector including offices, hotels, restaurants, gyms and shops.

Part of an hydronic system equipped with a liquid Chiller, FIW Fan Coil generates cool air silently and with instantaneous reaction. During the winter, if combined with a boiler or heat pump, it provides warm air, making it possible to meet home or business heating needs. A filter, which absorbs and retains dust in suspension, allows to keep the air quality at a suitable level and its easy removal enables continuous cleaning cycles to be carried out, which are particularly important in order to guarantee suitable hygiene standards in highly frequented rooms. All installation needs are considered in the many standard features of the unit. It can be installed horizontally or vertically, with front, bottom or rear intake. There is also a series of accessories, also for 4-Pipe systems, that includes a control panel that is installed in the room.

Units are available both with 3-Speed or EC Inverter fans. The units equipped with EC Inverter motor are able to modulate the air flow ensuring a perfect adaptability to the load without any temperature fluctuations, achieving superior performance compared to the traditional solutions even from energy consumption point of view.

## EC INVERTER FAN

### VERSION

FIW/IV	FIW/IF	FIW/IO	FIW/II
Vertical unit with bottom inlet and vertical delivery	Vertical unit with front inlet and vertical delivery	Horizontal unit with rear inlet and horizontal delivery	Horizontal unit with bottom inlet and horizontal delivery
FIW/IV/EC	FIW/IF/EC	FIW/IO/EC	FIW/II/EC
Vertical unit with EC Inverter fans, bottom inlet and vertical delivery	Vertical unit with EC Inverter fans, front inlet and vertical delivery	Horizontal unit with EC Inverter fans, rear inlet and horizontal delivery	Horizontal unit with EC Inverter fans, bottom inlet and horizontal delivery

### FEATURES

- Structure made of galvanized sheet complete with heat/sound insulation, regenerating filter and natural discharge condensation tray.
- Radial fan type directly coupled to a 6-Speed single phase electric motor, with 3 speeds connected in the standard configuration.
- Radial EC INVERTER fan (23÷74).
- Heat exchanger coils with copper pipes and aluminium fins with airvent on the distributors.

### ACCESSORIES

#### LOOSE ACCESSORIES

C	Auxiliary moisture drain pan	MCC	Multicontrol connection card
WS	Hot water coil for 4-Pipe system	BC	Universal connecting terminal
EH	Supplementary electrical heater	TMB	Minimum temperature thermostat for VB and VR
S	Manual damper	TME	Minimum temperature thermostat for DBM and DRM
SG	Manual damper with grid	V2	3-Way on/off valve for 2-Pipe system
SMF	ON/OFF motorized damper	V4	3-Way on/off valves for 4-Pipe system
SMG	ON/OFF motorized damper with grid	MP	Moisture drain pump
RM	Wall connection for damper		
SF	Supply frame		
DRA	Wall mounted automatic electronic control panel		
DRM	Wall mounted manual electronic control panel		
VR	Wall mounted fan speed control panel		
TA	Wall mounted ambient thermostat		
DRE	Wall mounted electromechanic control panel		
DRV	Wall mounted automatic electronic control panel for EC version		

MODEL		13	14	23	24	33	34	43	
Cooling	Total cooling capacity (1),(2)	kW	1.31	1.49	1.77	2.05	2.47	2.77	3.11
	Sensible cooling capacity (1),(2)	kW	1.09	1.26	1.45	1.68	1.96	2.16	2.42
	Water flow (1),(2)	l/h	225	256	304	353	425	476	535
	Pressure drops (1),(2)	kPa	5	1	11	6	8	5	14
Heating	Heating capacity (2),(3)	kW	3.20	3.45	4.19	4.53	5.70	6.35	7.03
	Water flow (2),(3)	l/h	275	297	360	390	490	546	605
	Pressure drops (2),(3)	kPa	4	1	8	2	6	4	11
Rows	Quantity	n°	3	4	3	4	3	4	3
Water connections	In / Out	"G	½"	½"	½"	½"	½"	½"	½"
	Max	m³/h	240	240	340	340	430	430	540
Air flow	Med	m³/h	190	190	260	260	340	340	420
	Min	m³/h	140	140	170	170	250	250	280
Air flow (EC version)	Max	m³/h	---	---	340	340	430	430	540
	Min	m³/h	---	---	150	150	180	180	230
Additional coil	Heating capacity (2),(3)	kW	1.50	1.50	2.16	2.16	2.92	2.92	3.75
	Water flow (2),(3)	l/h	129	129	186	186	251	251	322
	Pressure drops (2),(3)	kPa	5	5	9	9	15	15	26
	Rows	n°	1	1	1	1	1	1	1
Water connections	"G	½"	½"	½"	½"	½"	½"	½"	
	Power supply	V/Ph/Hz	230/1/50						
Electrical heater	Absorbed power	kW	0.6	0.6	1.0	1.0	1.6	1.6	2.0
	Power supply	V/Ph/Hz	230/1/50						
Electrical characteristics	Max absorbed power	kW	0.03	0.03	0.05	0.05	0.05	0.05	0.07
	Power supply	V/Ph/Hz	230/1/50						
Electrical characteristics (EC version)	Max absorbed power	kW	---	---	0.02	0.02	0.03	0.03	0.04
	Max (4)	dB(A)	41	41	44	44	40	40	44
Sound pressure	Med (4)	dB(A)	34	34	38	38	34	34	37
	Min (4)	dB(A)	26	26	26	26	25	25	27
	Max (4)	dB(A)	---	---	44	44	40	40	44
Sound pressure (EC version)	Min (4)	dB(A)	---	---	25	25	24	24	26
	Transport weight	Kg	12	12	14	14	18	19	21
Weights	Operating weight	Kg	10	10	12	12	16	17	19

MODEL		44	53	54	63	64	73	74	
Cooling	Total cooling capacity (1),(2)	kW	3.54	4.04	4.58	5.09	5.96	6.45	7.26
	Sensible cooling capacity (1),(2)	kW	2.71	3.12	3.47	3.86	4.63	5.07	5.57
	Water flow (1),(2)	l/h	609	695	788	875	1025	1109	1249
	Pressure drops (1),(2)	kPa	9	26	17	8	5	16	15
Heating	Heating capacity (2),(3)	kW	7.75	9.01	9.93	11.69	13.00	14.59	16.19
	Water flow (2),(3)	l/h	666	775	854	1005	1118	1255	1392
	Pressure drops (2),(3)	kPa	7	20	13	6	4	12	8
Rows	Quantity	n°	4	3	4	3	4	3	4
Water connections	In / Out	"G	½"	½"	½"	½"	½"	½"	½"
	Max	m³/h	540	690	690	910	910	1180	1180
Air flow	Med	m³/h	420	530	530	730	730	810	810
	Min	m³/h	280	400	400	510	510	590	590
Air flow (EC version)	Max	m³/h	540	690	690	910	910	1180	1180
	Min	m³/h	230	300	300	420	420	500	500
Additional coil	Heating capacity (2),(3)	kW	3.75	4.65	4.65	6.01	6.01	7.84	7.84
	Water flow (2),(3)	l/h	322	400	400	517	517	674	674
	Pressure drops (2),(3)	kPa	26	18	18	13	13	24	24
	Rows	n°	1	1	1	1	1	1	1
Water connections	"G	½"	½"	½"	½"	½"	½"	½"	
	Power supply	V/Ph/Hz	230/1/50						
Electrical heater	Absorbed power	kW	2.0	2.5	2.5	3.0	3.0	4.0	4.0
	Power supply	V/Ph/Hz	230/1/50						
Electrical characteristics	Max absorbed power	kW	0.07	0.09	0.09	0.16	0.16	0.19	0.19
	Power supply	V/Ph/Hz	230/1/50						
Electrical characteristics (EC version)	Max absorbed power	kW	0.04	0.07	0.07	0.09	0.09	0.13	0.13
	Max (4)	dB(A)	44	46	46	48	48	52	52
Sound pressure	Med (4)	dB(A)	37	39	39	43	43	42	42
	Min (4)	dB(A)	27	33	33	34	34	34	34
	Max (4)	dB(A)	44	46	46	48	48	52	52
Sound pressure (EC version)	Min (4)	dB(A)	26	29	29	28	28	33	33
	Transport weight	Kg	22	24	25	33	34	42	44
Weights	Operating weight	Kg	20	22	23	31	32	40	42

DIMENSIONS		13	14	23	24	33	34	43	44	53	54	63	64	73	74
L	STD/EC mm	440	440	560	560	760	760	960	960	1160	1160	1135	1135	1410	1410
W	STD/EC mm	195	195	195	195	195	195	195	195	195	195	260	260	260	260
H	STD/EC mm	475	475	475	475	475	475	475	475	475	475	545	545	545	545

CLEARANCE AREA

FIW 13÷74



Electrical board side

NOTES

1. Ambient air temperature 27 °C d.b./19 °C w.b., water temperature 7/12 °C.
  2. Performances also valid for EC version.
  3. Ambient air temperature 20 °C d.b., water temperature 70/60 °C.
  4. Sound pressure level measured at 1 m from the unit with reverberation time 0,5 s.
- N.B. Maximum operating pressure 1000 kPa.  
 N.B. Maximum inlet water temperature 90 °C.  
 N.B. Inhibited ethylene glycol can be added to the water.

FROM 2,1 KW TO 5,4 KW.

# HWW/EC 22÷62 EURICE®

WALL MOUNTED FAN COIL UNITS WITH EC INVERTER TANGENTIAL FAN.



The hydronic Fan Coil units of the HWW/EC series are designed for wall-mounted installation in domestic environments or service sector including offices and shops. Part of an hydronic system equipped with a liquid Chiller, the HWW/EC wall-mounted Fan Coil unit generates cool air silently and with instantaneous reaction. During the winter, if combined with a boiler or heat pump, it provides warm air, making it possible to meet home or business heating needs.

A filter, which absorbs and retains dust in suspension, allows to keep the air quality at a suitable level and its easy removal enables continuous cleaning cycles to be carried out which are particularly important in order to guarantee suitable hygiene standards in highly frequented rooms.

HWW/EC is provided with remote control, 3-Way valve, flexible hydraulic hook-ups for easy installation and maintenance operations, and is also pre-set for master-slave functioning, with RS485 serial interface. The units are equipped with EC Inverter motor that can modulate the air flow ensuring a perfect adaptability to the load without any temperature fluctuations achieving superior performance compared to the traditional solutions even from energy consumption point of view.

eurice®

EC INVERTER FAN

## VERSION

HWW/EC

Base unit with 3-Way valve and remote control

## FEATURES

- High design appearance with rounded lines, structure in ABS with improved mechanical features resistant to aging.
- Heat exchanger coils with copper pipes and aluminium fins with elevated heat exchanging surfaces; equipped with air blowing in condensation drain.
- 3-Way water valve incorporated inside the unit.
- Tangential fan unit with EC INVERTER motor, maximum silent operations, air flow fins with adjustable horizontal direction and motorized deflector fin controllable via remote control.
- Microprocessor control with timer for on/off programming. Program for automatic operations, cooling, heating and ventilation; night wellness program and dehumidifier.
- Automatic restarting after power outage
- Flexible water connections for easy installation and maintenance operations.
- Easy removal and cleaning of air filter, maintaining appropriate air quality.
- Infrared remote control with wall support.

## ACCESSORIES

### LOOSE ACCESSORIES

- |     |   |
|-----|---|
| EH  | Supplementary electrical heater                 |
| DRC | Wall mounted automatic electronic control panel |

# HWW/EC 22÷62 EURICE®



MODEL			22	23	32	42	52	62
Cooling	Total cooling capacity (1)	kW	2.07	2.49	3.02	3.74	4.81	5.38
	Sensible cooling capacity (1)	kW	1.52	1.81	2.22	2.74	3.46	3.89
	Water flow (1)	l/h	355	427	525	642	826	924
	Pressure drops	kPa	22	28	39	38	45	52
Heating	Heating capacity (2)	kW	2.70	3.21	3.93	4.87	6.10	6.85
	Water flow (2)	l/h	355	427	525	642	826	924
	Pressure drops	kPa	18	23	32	29	34	40
Water connections	In / Out	"G	½"	½"	½"	½"	½"	½"
Air flow	Max	m³/h	500	500	645	788	980	1240
	Min	m³/h	290	290	370	570	600	600
Electrical heater	Power supply	V/Ph/Hz	230/1/50					
	Absorbed power	kW	0.8	0.8	1.0	1.6	1.6	1.6
Electrical characteristics	Power supply	V/Ph/Hz	230/1/50					
	Max absorbed power	kW	0.014	0.014	0.020	0.030	0.042	0.060
	Max (3)	dB(A)	37	37	43	46	40	45
Sound pressure	Min (3)	dB(A)	26	26	29	34	30	30
	Transport weight	Kg	14	15	15	16	18	18
Weights	Operating weight	Kg	12	13	13	14	16	16

1  
2  
3  
4  
5  
6  
7

DIMENSIONS			22	23	32	42	52	62
L	STD	mm	875	875	875	875	1060	1060
W	STD	mm	220	220	220	220	240	240
H	STD	mm	300	300	300	300	310	310

## CLEARANCE AREA

HWW/EC 22÷62 EURICE®



## NOTES

1. Ambient air temperature 27 °C d.b./19 °C w.b., water temperature 7/12 °C.
  2. Ambient air temperature 20 °C d.b., water temperature 50 °C.
  3. Sound pressure level measured at 1 m from the unit with reverberation time 0,5 s.
- N.B. Maximum operating pressure 1000 kPa.  
N.B. Maximum inlet water temperature 70 °C.  
N.B. Inhibited ethylene glycol can be added to the water.

Electrical board side

# TCW 22÷122

WATER CASSETTE WITH 3-SPEED OR EC INVERTER RADIAL FAN.



## EC INVERTER FAN

The Water Cassette of the TCW series has been designed to be installed in false ceilings, in domestic environments or the services sector including offices, hotels, restaurants, gyms and shops.

Part of an hydronic system equipped with a liquid Chiller, the TCW Water Cassette generates cool air silently and with instantaneous reaction. During the winter, if combined with a boiler or heat pump, it provides warm air, making it possible to meet home or business heating needs. A filter, which absorbs and retains dust in suspension, allows to keep the air quality at a suitable level, and its easy removal enables continuous cleaning cycles to be carried out, which are particularly important in order to guarantee suitable hygiene standards in highly frequented rooms. The TCW series, in addition to having a rich set of accessories to complete the unit, also has an attractive intake grid that integrates perfectly in the surrounding environment and adjustable deflectors to distribute the air in the room in an ideal manner. TCW Water Cassette features auxiliary moisture drain pan already included and are pre-set for master-slave functioning, with RS485 serial interface. Units are available both with 3-Speed and EC Inverter fans. The units equipped with EC Inverter motor are able to modulate the air flow ensuring a perfect adaptability to the load without any temperature fluctuations, achieving superior performance compared to the traditional solutions even from energy consumption point of view.

## VERSION

### TCW

Base unit with remote control

### TCW/WB

Unit with remote control for 4-Pipe system

### TCW/EC

Unit with EC Inverter fan and remote control

### TCW/WB/EC

Unit with EC Inverter fan and remote control for 4-Pipe system

## FEATURES

- Structure for insulated recess fitting, limited body depth (250/290 mm) and compact dimensions; specially designed for easy installation and maintenance of the hydraulic and electrical connections, accessible starting from the front panel grille.
- Casing in insulated galvanized sheet; combined air intake/suction grid; automatic adjustment of air diffusion on the four sides; suction in middle with regenerable filter; precut holes for connection to an external air intake and for connection to a branch duct for conditioning an adjoining room.
- Combined air diffusion/suction grid with air filter and adjustable air diffusion on the 4 sides with suction in middle.
- Radial fan turbine with direct feed. The motors, mounted on elastic suspension and equipped with internal thermal safety, are 3-Speed.
- Centrifugal fan turbine with direct feed. EC INVERTER motors, mounted on elastic suspension and equipped with internal thermal safety (32-53-73-122).
- Lift pump with float and detection at 3 levels (On-Off-Alarm) of condensation for lift in the upper part of the box. Discharge occurs by gravity, outside the appliance (lift height up to 500 mm).
- Heat exchanger in copper pipes and aluminium fins with air vent on the headers.
- Regenerable-type air filter, accessible after opening the combined air intake/suction grid.
- Microprocessor control with timer for on/off programming. Program for automatic operations, cooling, heating and ventilation; night wellness program and dehumidifier.
- Infrared remote control with wall support.

## ACCESSORIES

### LOOSE ACCESSORIES

- EH Supplementary electrical heater
- DRC Wall mounted automatic electronic control panel
- V2 3-Way on/off valve for 2-Pipe system
- V4 3-Way on/off valves for 4-Pipe system



# TCW 22÷122



MODEL		22	32	42	53	63	73	122	
Cooling 2-Pipe unit	Total cooling capacity (1)	kW	2.4	3.2	4.1	4.9	6.1	6.9	10.9
	Sensible cooling capacity (1)	kW	1.7	2.5	3.0	3.5	4.9	5.1	7.9
	Water flow (1)	l/h	413	550	705	843	1049	1187	1875
	Pressure drops (1)	kPa	10	20	28	42	28	39	43
Cooling 2-Pipe unit (EC version)	Total cooling capacity (1)	kW	---	3.2	---	4.6	---	6.8	10.9
	Sensible cooling capacity (1)	kW	---	2.4	---	3.2	---	5.0	7.9
	Water flow (1)	l/h	---	550	---	791	---	1170	1875
	Pressure drops (1)	kPa	---	20	---	39	---	39	38
Heating 2-Pipe unit	Heating capacity (2)	kW	4.9	6.6	7.8	9.7	11.9	12.7	18.9
	Water flow (2)	l/h	422	568	672	834	1023	1090	1624
	Pressure drops (2)	kPa	8	17	25	40	24	26	32
	Heating capacity (2)	kW	---	7.1	---	9.2	---	13.4	18.3
Heating 2-Pipe unit (EC version)	Water flow (2)	l/h	---	610	---	791	---	1152	1574
	Pressure drops (2)	kPa	---	20	---	34	---	31	25
	Total cooling capacity (1)	kW	---	---	3.1	3.9	---	5.8	7.9
Cooling 4-Pipe unit	Sensible cooling capacity (1)	kW	---	---	2.4	2.9	---	4.5	6.0
	Water flow (1)	l/h	---	---	533	671	---	998	1359
	Pressure drops (1)	kPa	---	---	21	23	---	46	29
	Total cooling capacity (1)	kW	---	---	---	3.8	---	5.8	7.1
Cooling 4-Pipe unit (EC version)	Sensible cooling capacity (1)	kW	---	---	---	2.8	---	4.2	5.2
	Water flow (1)	l/h	---	---	---	654	---	998	1221
	Pressure drops (1)	kPa	---	---	---	21	---	52	24
	Heating capacity (2)	kW	---	---	3.8	4.3	---	5.0	9.7
Heating 4-Pipe unit	Water flow (2)	l/h	---	---	326	370	---	430	834
	Pressure drops (2)	kPa	---	---	11	12	---	15	27
	Heating capacity (2)	kW	---	---	---	4.3	---	4.6	9.3
Heating 4-Pipe unit (EC version)	Water flow (2)	l/h	---	---	---	370	---	395	800
	Pressure drops (2)	kPa	---	---	---	11	---	14	19
	2-Pipe. In / Out	"G	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Water connections	4-Pipe. In / Out	"G	---	---	3/4"	3/4"	---	3/4"	3/4"
	Max	m³/h	380	580	730	810	1050	1300	2130
Air flow	Med	m³/h	240	290	520	617	820	960	1640
	Min	m³/h	200	200	450	450	700	700	1380
	Max	m³/h	---	580	---	810	---	1300	2100
Air flow (EC version)	Min	m³/h	---	200	---	200	---	360	820
	Power supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Electrical heater	Absorbed power	kW	1	1	2	2	3	3	4
	Power supply	V/Ph/Hz	230/1/50						
Electrical characteristics	Max absorbed power	kW	0.04	0.06	0.06	0.09	0.11	0.20	0.30
	Power supply	V/Ph/Hz	---	230/1/50	---	---	---	---	---
Electrical characteristics (EC version)	Max absorbed power	kW	---	0.03	---	0.04	---	0.09	0.20
	Max (3)	dB(A)	39	42	46	48	51	53	55
Sound pressure	Med (3)	dB(A)	33	36	40	43	44	48	48
	Min (3)	dB(A)	31	31	34	34	39	39	42
	Max (3)	dB(A)	---	42	---	48	---	53	54
Sound pressure (EC version)	Min (3)	dB(A)	---	29	---	30	---	34	36
	Transport weight	Kg	31	31	33	33	40	40	55
Weights	Operating weight	Kg	28	28	30	30	36	36	50

DIMENSIONS				22	32	42	53	63	73	122
BODY	L	STD/EC	mm	580	580	580	580	730	730	830
	W	STD/EC	mm	580	580	580	580	730	730	830
	H	STD/EC	mm	250	250	290	290	260	260	290
PANEL	L	STD/EC	mm	680	680	680	680	830	830	980
	W	STD/EC	mm	680	680	680	680	830	830	980
	H	STD/EC	mm	28	28	28	28	28	28	28

## CLEARANCE AREA

TCW 22÷122



## NOTES

1. Ambient air temperature 27 °C d.b./19 °C w.b., water temperature 7/12 °C.
  2. Ambient air temperature 20 °C d.b., water temperature 70/60 °C.
  3. Sound pressure level measured at 1 m from the unit with reverberation time 0,5 s.
- N.B. Maximum operating pressure 1000 kPa.  
N.B. Maximum inlet water temperature 80 °C.  
N.B. Inhibited ethylene glycol can be added to the water.

FROM 4,6 KW TO 43 KW.

# UTW 63÷544

**DUCTABLE FAN COIL UNITS WITH 3-SPEED OR EC INVERTER RADIAL FANS.**



The modular Fan Coil units of the UTW series are the ideal solution to meet the air treatment needs of systems including distribution through ducting or directly into the room and installation in false ceilings or in service rooms.

Part of a hydronic system equipped with a liquid Chiller, the UTW modular ductable Fan Coil unit generates cool air silently and with instantaneous reaction. During the winter, if combined with a boiler or heat pump, it provides warm air, making it possible to meet home or business heating needs. A filter, which absorbs and retains dust in suspension, allows to keep the air quality at a suitable level and its easy removal enables continuous cleaning cycles to be carried out, which are particularly important in order to guarantee suitable hygiene standards in highly frequented rooms.

This product range, available for 2-Pipe and 4-Pipe systems, is complete with various accessories such as: outdoor air intake plenum, mixing section with dampers room delivery plenum for flexible ducts and electrical heating section. Units are available both with 3-Speed and EC Inverter fans. The units equipped with EC Inverter motor are able to modulate the air flow ensuring a perfect adaptability to the load without any temperature fluctuations, achieving superior performance compared to the traditional solutions even from energy consumption point of view.

## EC INVERTER FAN

### VERSION

#### UTW

#### UTW/EC

Base unit

Unit with EC Inverter fans

### FEATURES

- Structure in galvanized sheet (63÷274) or in prepainted metal sheet (333÷544), entirely lined with heat/sound insulation material.
- Radial type fan with double intake, statically and dynamically balanced to reduce vibration and noise to a minimum, directly coupled on single-phase 3-Speed electric motor (63÷274) or with belt and pulley transmission, connected to 3-phase single speed electric motor (333÷544).
- Radial type fan with double intake and EC INVERTER fan type (63÷274).
- Heat exchanger in copper pipes and aluminium fins, complete with air vent and drain pan.
- Air filter made of recyclable synthetic material class EU3; inspection is foreseen from the bottom part (63÷274) or side part (63÷544).
- Air bleed valves, positioned on the water connections of the coil, make it possible to bleed air from the coil.
- Electrical panel comprising a terminal board for wiring to room control panel and power supply.

### ACCESSORIES

#### LOOSE ACCESSORIES

C	Auxiliary moisture drain pan	DRM	Wall mounted manual electronic control panel
CW	Auxiliary moisture drain pan for units with WSF accessory	VR	Wall mounted fan speed control panel
AF	Filtering section	TA	Wall mounted ambient thermostat
SF	Supply frame	DRE	Wall mounted electromechanic control panel
GRI/R	Intake grid with air filter	DRV	Wall mounted automatic electronic control panel for EC version
BM	Supply grid with adjustable fins	V2	3-Way on/off valve for 2-Pipe system
PR	Intake plenum	V4	3-Way on/off valves for 4-Pipe system
MB	Mixing box with damper		
PM	Supply plenum		
P3	Supply plenum for flexible ducts		
WS	Hot water coil for 4-Pipe system		
WSF	Hot water coil section for 4-Pipe system		
EH1	Supplementary electrical heater section		
EH2	Supplementary electrical heater section		
SM	Servo-motor for damper		
DRA	Wall mounted automatic electronic control panel		

# UTW 63÷544



MODEL		63	93	104	133	153	233	274	333	414	464	544		
Cooling	Total cooling capacity (1),(2)	kW	4.6	7.5	9.1	10.5	13.1	15.7	20.7	25.9	31.7	38.1	42.8	
	Sensible cooling capacity (1),(2)	kW	3.5	6.0	7.1	8.4	9.8	13.0	16.7	20.1	24.6	29.6	33.2	
	Water flow (1),(2)	l/h	791	1290	1565	1806	2253	2700	3560	4455	5452	6553	7362	
Heating	Pressure drops (1),(2)	kPa	14	19	21	18	24	24	26	29	14	29	26	
	Heating capacity (2),(3)	kW	9.8	15.5	19.7	21.6	25.9	35.5	46.3	60.1	75.8	91.8	97.1	
	Water flow (2),(3)	l/h	843	1333	1694	1858	2227	3053	3982	5169	6519	7895	8351	
Rows	Pressure drops (2),(3)	kPa	23	17	22	35	25	23	32	34	14	39	34	
	Quantity	n°	3	3	4	3	3	3	4	3	4	4	4	
Water connections	In / Out	"G	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	
	Heating capacity (2),(3)	kW	6.8	10.9	11.5	13.5	16.0	20.3	22.2	47.4	58.4	64.0	75.1	
Additional coil	Water flow (2),(3)	l/h	585	937	989	1161	1376	1746	1909	4076	5022	5504	6459	
	Pressure drops (2),(3)	kPa	10	11	12	15	14	19	23	10	15	10	14	
	Rows	n°	2	2	2	2	2	2	2	2	2	2	2	
Air flow	Water connections	"G	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	
	Max (4)	m³/h	1000	1600	1700	2200	2500	3900	4500	5500	6800	7700	9000	
	Med (4)	m³/h	800	1200	1300	1800	2000	3000	3800	---	---	---	---	
	Min (4)	m³/h	600	850	900	900	1300	1900	2000	---	---	---	---	
Air flow (EC version)	Max (4)	m³/h	1000	1600	1700	2200	2500	3900	4500	---	---	---	---	
	Min (4)	m³/h	530	760	810	810	1140	1700	1200	---	---	---	---	
EH1 Electrical heater	Power supply	V/Ph/Hz	400/3+N/50						---	---	---	---	---	
	Absorbed power	kW	3	4	4	4	6	6	6	---	---	---	---	
	Max. absorbed current	A	4.3	8.7	8.7	8.7	13.0	13.0	13.0	---	---	---	---	
	Steps	n°	1	1	1	1	1	1	1	---	---	---	---	
EH2 Electrical heater	Power supply	V/Ph/Hz	400/3+N/50						---	---	---	---	---	
	Absorbed power	kW	6	8	8	8	12	12	12	---	---	---	---	
	Max. absorbed current	A	8.7	17.4	17.4	17.4	26.1	26.1	26.1	---	---	---	---	
	Steps	n°	1	1	1	1	1	1	1	---	---	---	---	
Electrical characteristics	Power supply	V/Ph/Hz	230/1/50						400/3+N/50					
	Max absorbed power	kW	0.13	0.26	0.26	0.52	0.42	0.42	0.60	0.75	1.10	1.10	1.50	
	Max. absorbed current	A	1.0	2.1	2.1	2.1	2.1	3.9	6.1	1.8	2.6	2.6	3.3	
Electrical characteristics (EC version)	Power supply	V/Ph/Hz	230/1/50						---					
	Max absorbed power	kW	0.13	0.25	0.25	0.45	0.45	0.42	0.60	---	---	---	---	
	Max. absorbed current	A	---	---	---	---	---	---	---	---	---	---		
Sound pressure	Max (5)	dB(A)	45	44	45	47	49	51	55	56	57	57	58	
	Med (5)	dB(A)	40	38	39	43	44	45	51	---	---	---	---	
	Min (5)	dB(A)	34	30	31	28	35	35	37	---	---	---	---	
	Max (5)	dB(A)	45	44	45	47	49	51	55	---	---	---	---	
Sound pressure (EC version)	Min (5)	dB(A)	33	29	29	29	34	34	35	---	---	---	---	
	Transport weight	Kg	29	42	44	57	65	67	70	168	168	173	175	
Weights	Operating weight	Kg	27	40	42	55	63	65	68	166	166	171	173	

DIMENSIONS		63	93	104	133	153	233	274	333	414	464	544
L	STD/EC	mm	645	1005	1005	1105	1345	1345	1400	1400	1400	1400
W	STD/EC	mm	455	455	455	505	540	540	800	800	800	800
H	STD/EC	mm	295	295	295	325	325	375	375	800	800	1050

## CLEARANCE AREA

UTW 63÷544



## NOTES

- Ambient air temperature 27 °C d.b./19 °C w.b., water temperature 7/12 °C.
  - Performances also valid for EC version.
  - Ambient air temperature 20 °C d.b., water temperature 70/60 °C.
  - One speed 3-phase electrical motors for units 333, 414, 464, 544.
  - Sound pressure level measured at 1 m from the unit with reverberation time 0,5 s.
- N.B.** Maximum operating pressure 1000 kPa.  
**N.B.** Maximum inlet water temperature 90 °C.  
**N.B.** Inhibited ethylene glycol can be added to the water.