



Condensates tray



Hydraulic connections detail



EC fans



Detail from the terminals box in fancoil units



Certification Eurovent

* Type 4TD is not included in the scope of the Eurovent certification program

Fancoil Units

TFCUP Serie



New high-pressure fan coil units available for efficient air handling and ventilation

Modular fancoil unit with a compact design for air handling, to be installed horizontally in false ceilings with 2 or 4-tube systems.

- Compact unit with a reduced height of 235 / 285 mm
- Fan with EC motor, reduced sound level, and minimum energy consumption
- Coils for two or four tubes
- Airflow ranges of 200 – 1,700 m³/h
- Power range up to 10,0 kW for cooling and 10,5 kW for heating
- G2 filters with metal frame for rear or side extraction
- Discharge volume airflow spigot for duct connection
- Specially designed for offices, hotels, and commercial premises, among others

Accessories and Additional Equipment

- Control system with the possibility of setting the airflow to 0-100 %
- Insulation for the condensates tray
- Insulation for the condensates tray
- Valve kit
- Finish painted in any RAL CLASSIC colour
- UV lamps

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General Information

Application

- Modular Air-Handling Fancoil Unit, TFCUP series with a compact design (235 / 285 mm-high)
- Designed for horizontal installations in false ceilings with 2 or 4-tube systems
- Double-inlet centrifugal fans, driven by single-phase EC motors, powered at 230 V 50 Hz, and controlled by a 0-10 V voltage signal, which guarantees reduced sound impact and minimum energy consumption
- Electrical connections with quick-connection terminals
- Different coils can be incorporated with both 2-tube and 4-tube installations
- Cleanable G2 filter at the air inlet, with a galvanised-steel sheet frame, and simple back extraction for maintenance tasks
- Fitted with a tray screwed down from the outside for easy disassembly and cleaning. It is fitted with a Ø 25 mm drain
- Coils with copper tubes and aluminium fins, with female hydraulic connections of Ø ½"
- Induction spigot for connecting the duct integrated into the unit housing

Nominal sizes

Length: 600 / 625 mm
Height: 235 / 285 mm
Width: As per the table

Description

Variant

TFCUP: Galvanised-steel sheet housing, with closed-pore foam insulation in the coil area to avoid exterior condensation

Cooling and heating coil

- Just one coil for cooling and heating for 2-tube systems
- One coil for cooling and another for heating for 4-tube systems

Condensates tray

Condensate collection tray made of an ignition-resistant plastic material (V0), with the possibility of having additional exterior insulation

Other accessories

- Auxiliary tray to collect any drops of condensation from the valves.
- Different means of regulation, such as analogue or digital thermostat for regulating between 0 and 10 V, plus the option of connecting with the control system.
- The maximum water flow reaching the coils can be adjusted as required thanks to the various valve kit options
- UV lamps for sterilizing the coil and condensates tray

Materials and Finishes

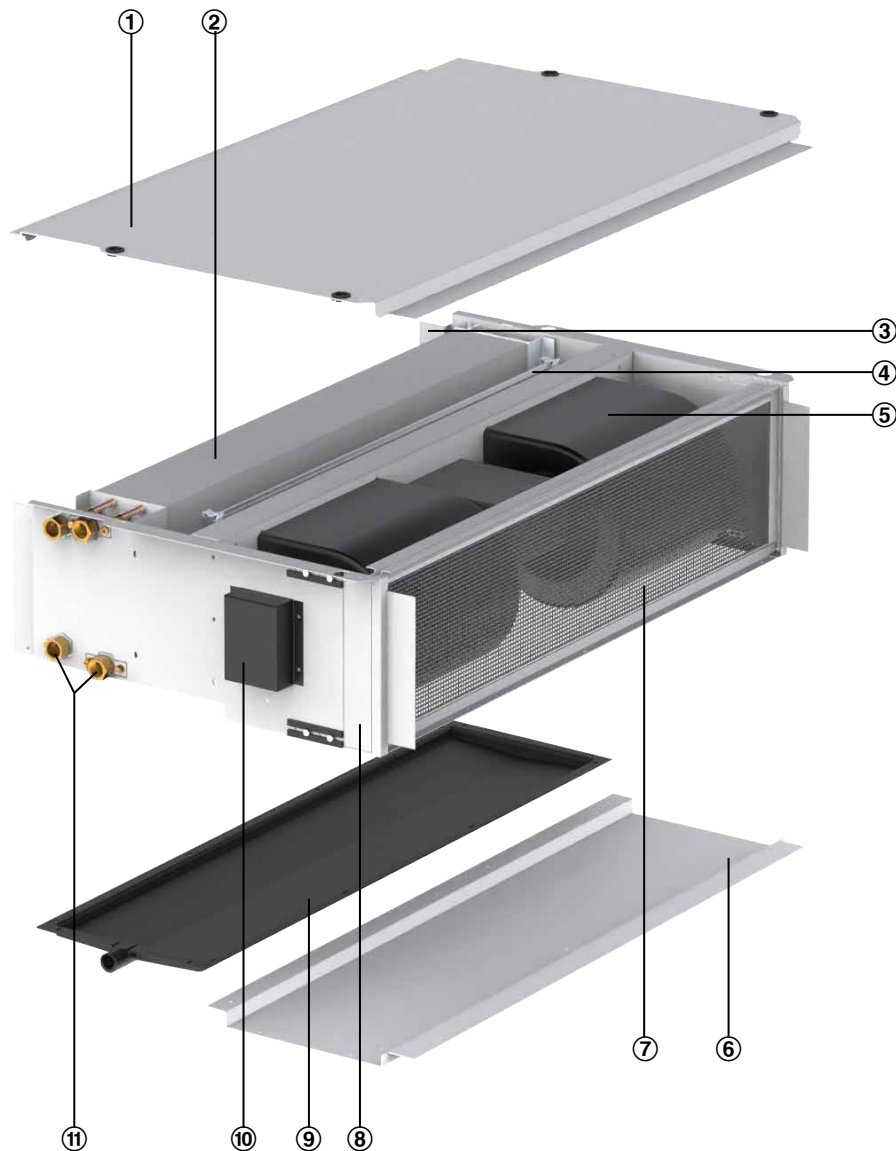
- Galvanised-steel sheet housing and spigot, with optional painted finish
- Coil with copper tubes and aluminium fins, with galvanised-steel sheet side frames
- Galvanised-steel sheet filter frame

Operation

Operation Description

Air enters the unit through the filter and passes through the fans. They then blow it through the cooling and/or heating coil, cooling it down or heating it up, to then blow it into the room.

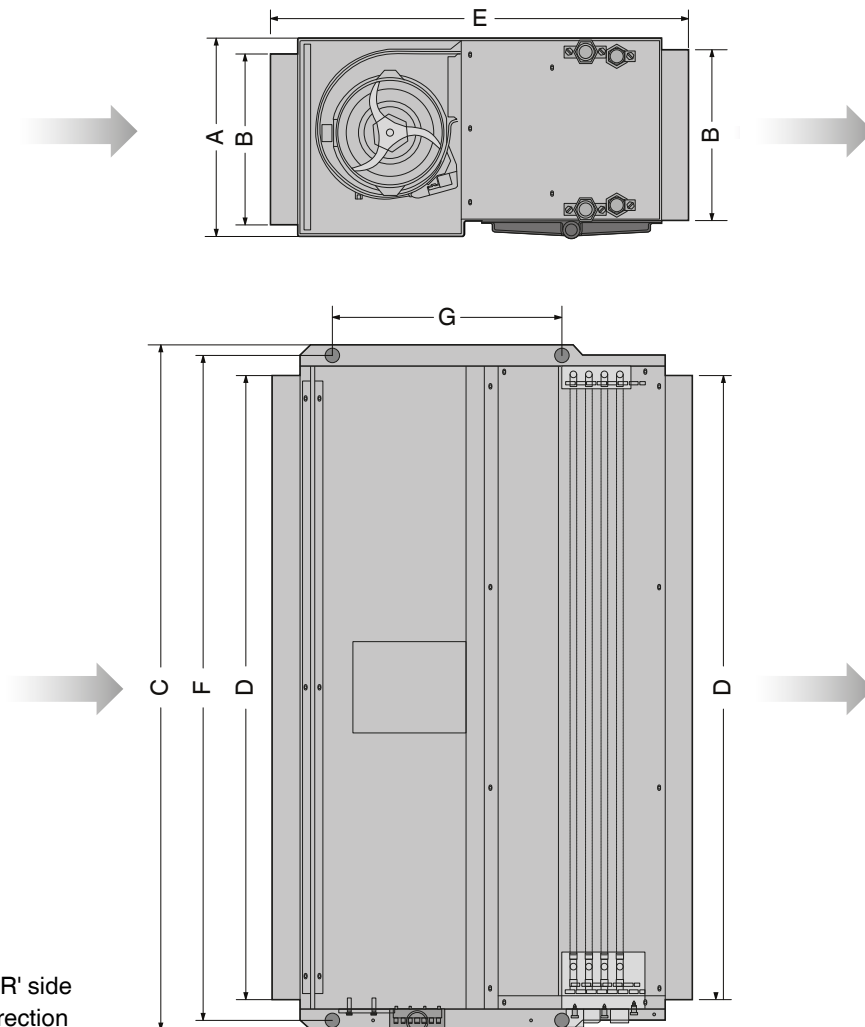
- | | |
|---|-------------------------|
| ① Lower cap | ⑥ Lower cap |
| ② Battery | ⑦ Filter |
| ③ Connection nozzle | ⑧ Filter access window |
| ④ UV lamp (accessory available for order, but not the standard variety) | ⑨ Condensates tray |
| ⑤ Motor-fan group | ⑩ Terminal box |
| | ⑪ Hydraulic connections |



Technical Data

Length	600 mm / 625 mm
Height	235 - 285 mm
Width	675, 885, 975, 1,205, 1,405 and 1,605 mm
Spigot width/height	590 - 1,520 mm / 195 - 245 mm
Maximum cooling capacity	Up to 10 kW
Maximum heating capacity	Up to 10.5 kW
Maximum pressure on the hydraulic connection side	16 bar
Maximum operating ambient temperature	40 °C
Connection voltage	230 V / I / 50 Hz

Size	A	B	C	D	E	F	G	Weight (kg)
1	235	195	675	590	600	646	305	20
2	235	195	885	800	600	856	305	23,5
3	235	195	975	890	600	946	305	27
4	235	195	1,205	1,120	600	1,176	305	33
4,5	235	195	1,205	1,120	625	1,176	305	35
5	235	195	1,405	1,320	600	1,376	305	37.5
6	285	245	1,405	1,320	600	1,376	305	41
7	285	245	1,605	1,520	600	1,576	305	44.5



Connections in the diagram, 'R' side
The arrows indicate the air direction

Quick Selection

The following selection tables contain data for the referenced variant.



2TP fancoils with one single coil for cooling and heating

Performance	Size 1			Size 2		
	4V	7V	9V	4V	7V	9V
Air flow rate (m ³ /h)	177	270	338	213	325	403
Available pressure (Pa)	21,4	50	78,2	21,4	50	76,7
Total cooling capacity (kW)	1,26	1,78	2,12	1,5	2,17	2,59
Sensible cooling capacity (kW)	0,89	1,28	1,54	1,07	1,56	1,87
Water flow (l/h)	220	310	360	260	370	440
Water pressure loss (kPa)	5,4	9,9	13,5	3,8	7,3	9,8
Heating capacity (kW)	1,29	1,86	2,24	1,58	2,28	2,74
Water flow (l/h)	270	400	470	270	400	480
Water pressure loss (kPa)	4,8	9,0	12,6	2,8	5,3	7,4
Consumed power (W)	10,4	24,5	41,8	11,1	27,2	46,4
Intensity (A)	0,1	0,2	0,3	0,1	0,2	0,4
Suction + radiated sound power (dB(A))	41	53	58	44	56	62
Sound power OUT (dB(A))	37	49	55	40	49	55

Performance	Size 3			Size 4		
	4V	7V	9V	4V	7V	9V
Air flow rate (m ³ /h)	457	665	830	543	800	966
Available pressure (Pa)	23,6	50	77,9	23	50	72,9
Total cooling capacity (kW)	3,01	4,00	4,68	3,56	4,78	5,48
Sensible cooling capacity (kW)	2,17	2,93	3,48	2,57	3,5	4,07
Water flow (l/h)	520	690	800	610	820	940
Water pressure loss (kPa)	11,2	18,4	24,3	8,0	13,4	17,1
Heating capacity (kW)	3,12	4,25	5,07	3,72	5,13	5,97
Water flow (l/h)	540	740	880	650	890	1.040
Water pressure loss (kPa)	10,1	17,4	23,7	7,3	12,9	16,8
Consumed power (W)	20,0	48,6	91,0	23,9	61,0	100,4
Intensity (A)	0,2	0,4	0,7	0,1	0,4	0,7
Suction + radiated sound power (dB(A))	48	60	66	47	58	63
Sound power OUT (dB(A))	45	54	60	45	55	60

Performance	Size 4,5			Size 5		
	4V	7V	9V	4V	7V	9V
Air flow rate (m ³ /h)	504	743	897	581	860	1.039
Available pressure (Pa)	23	50	72,9	22,8	50	73
Total cooling capacity (kW)	3,96	5,45	6,31	4,05	5,48	6,3
Sensible cooling capacity (kW)	2,75	3,84	4,49	2,88	3,98	4,62
Water flow (l/h)	680	930	1.080	700	940	1.080
Water pressure loss (kPa)	12,9	22,7	29,5	11,6	19,8	25,3
Heating capacity (kW)	3,8	5,4	6,35	4,08	5,67	6,61
Water flow (l/h)	670	940	1.100	710	980	1150
Water pressure loss (kPa)	10,4	19,0	25,2	10,0	17,8	23,4
Consumed power (W)	23,0	58,8	96,4	27,3	72,8	113,6
Intensity (A)	0,1	0,4	0,7	0,2	0,5	0,8
Suction + radiated sound power (dB(A))	48	59	63	48	59	64
Sound power OUT (dB(A))	45	56	60	45	56	61

Performance	Size 6			Size 7		
	4V	7V	9V	4V	7V	9V
Air flow rate (m ³ /h)	813	1.195	1.415	862	1.260	1.485
Available pressure (Pa)	23,2	50	70,1	23,4	50	69,4
Total cooling capacity (kW)	5,53	7,41	8,37	5,95	7,98	9,0
Sensible cooling capacity (kW)	3,96	5,41	6,17	4,25	5,8	6,6
Water flow (l/h)	950	1.270	1.440	1.020	1.370	1.550
Water pressure loss (kPa)	13,6	22,8	28,3	10,6	17,7	22,0
Heating capacity (kW)	5,61	7,73	8,85	6,03	8,29	9,47
Water flow (l/h)	980	1.340	1.540	1.050	1.440	1.650
Water pressure loss (kPa)	11,8	20,8	26,4	9,2	16,1	20,3
Consumed power (W)	38,3	105,5	169,9	39,4	107,6	173,3
Intensity (A)	0,3	0,8	1,3	0,3	0,8	1,3
Suction + radiated sound power (dB(A))	56	66	70	52	62	66
Sound power OUT (dB(A))	49	59	63	49	59	63

2TP reference values

Parameter	Cooling	Heating
Air inlet	27 °C	20 °C
Air relative humidity	47%	50%
Water inlet	7 °C	65 °C
Water outlet	12 °C	55 °C
Altitude above sea level	0.0 m	
Coolant	Water	
Sound power	As per Standard ISO 3742	

Product and types certified by Eurovent can be found on the website www.eurovent-certification.com

4TP fancoils with one single coil for cooling and heating



Performance	Size 1			Size 2		
	4V	7V	9V	4V	7V	9V
Air flow rate (m³/h)	165	252	316	199	304	378
Available pressure (Pa)	21,4	50	78,6	21,5	50	77,2
Total cooling capacity (kW)	1,18	1,69	2,01	1,41	2,06	2,46
Sensible cooling capacity (kW)	0,84	1,21	1,46	1,0	1,47	1,78
Water flow (l/h)	200	290	350	240	350	420
Water pressure loss (kPa)	4,8	9,0	12,3	3,4	6,6	9,0
Heating capacity (kW)	1,18	1,58	1,84	1,52	2,05	2,38
Water flow (l/h)	100	140	160	130	180	210
Water pressure loss (kPa)	2,5	4,2	5,5	5,0	8,4	11,0
Consumed power (W)	10,2	23,7	40,2	10,8	26,1	44,6
Intensity (A)	0,1	0,2	0,3	0,1	0,2	0,3
Suction + radiated sound power (dB(A))	41	53	58	41	53	59
Sound power OUT (dB(A))	37	49	54	37	49	55

Performance	Size 3			Size 4		
	4V	7V	9V	4V	7V	9V
Air flow rate (m³/h)	411	595	767	504	743	897
Available pressure (Pa)	23,9	50	83,2	23	50	72,9
Total cooling capacity (kW)	2,77	3,68	4,43	3,35	4,53	5,2
Sensible cooling capacity (kW)	1,99	2,69	3,28	2,41	3,32	3,84
Water flow (l/h)	80	630	760	580	780	890
Water pressure loss (kPa)	9,7	15,9	22,0	7,2	12,2	15,6
Heating capacity (kW)	2,63	3,37	3,97	3,15	4,08	4,61
Water flow (l/h)	230	290	350	280	360	400
Water pressure loss (kPa)	14,3	22,1	29,6	3,4	5,3	6,6
Consumed power (W)	19,0	45,9	95,3	23,0	58,8	96,4
Intensity (A)	0,2	0,4	0,7	0,1	0,4	0,7
Suction + radiated sound power (dB(A))	47	57	63	47	57	62
Sound power OUT (dB(A))	45	54	60	45	55	60

Performance	Size 4,5			Size 5		
	4V	7V	9V	4V	7V	9V
Air flow rate (m³/h)	462	684	827	630	945	1.135
Available pressure (Pa)	22,8	50	73,1	22,2	50	72,1
Total cooling capacity (kW)	3,68	5,1	5,93	4,32	5,88	6,71
Sensible cooling capacity (kW)	2,55	3,58	4,2	3,08	4,22	4,94
Water flow (l/h)	630	880	1.020	740	1.010	1.150
Water pressure loss (kPa)	11,4	20,2	26,4	13,0	22,4	28,3
Heating capacity (kW)	2,97	3,87	4,38	3,94	5,16	5,80
Water flow (l/h)	260	340	380	340	450	510
Water pressure loss (kPa)	3,0	4,8	6,0	5,8	9,3	11,4
Consumed power (W)	22,1	56,8	92,5	38,0	98,0	160,9
Intensity (A)	0,1	0,4	0,7	0,4	0,9	1,3
Suction + radiated sound power (dB(A))	48	58	63	54	64	68
Sound power OUT (dB(A))	45	55	60	49	59	64

Performance	Size 6			Size 7		
	4V	7V	9V	4V	7V	9V
Air flow rate (m ³ /h)	771	1.138	1.353	822	1.206	1.427
Available pressure (Pa)	22,9	50	70,7	23,2	50	70,0
Total cooling capacity (kW)	5,31	7,15	8,11	5,73	7,72	8,75
Sensible cooling capacity (kW)	3,79	5,2	5,96	4,08	5,6	6,4
Water flow (l/h)	910	1.230	1.390	980	1.330	1.500
Water pressure loss (kPa)	12,6	21,4	26,7	9,9	16,7	20,9
Heating capacity (kW)	4,91	6,37	7,13	5,31	6,87	7,67
Water flow (l/h)	430	560	620	460	600	670
Water pressure loss (kPa)	10,8	17,0	20,7	4,5	7,1	8,6
Consumed power (W)	37,4	103,6	166,7	38,5	105,8	170,5
Intensity (A)	0,3	0,8	1,2	0,3	0,8	1,3
Suction + radiated sound power (dB(A))	52	62	66	52	62	66
Sound power OUT (dB(A))	48	58	63	49	59	63

4TP reference values

Parameter	Cooling	Heating
Air inlet	27 °C	20 °C
Air relative humidity	47%	50%
Water inlet	7 °C	65 °C
Water outlet	12 °C	55 °C
Altitude above sea level	0.0 m	
Coolant	Water	
Sound power	As per Standard ISO 3742	

Product and types certified by Eurovent can be found on the website www.eurovent-certification.com

4TD fancoils with one single coil for cooling and heating (*)

Performance	Size 1			Size 2		
	4V	7V	9V	4V	7V	9V
Air flow rate (m ³ /h)	151	231	291	184	280	349
Available pressure (Pa)	21,4	50	79,4	21,6	50	77,8
Total cooling capacity (kW)	0,72	0,99	1,18	0,91	1,26	1,6
Sensible cooling capacity (kW)	0,55	0,79	0,94	0,69	0,98	1,23
Water flow (l/h)	70	100	120	90	130	160
Water pressure loss (kPa)	1,0	1,9	2,5	2,5	4,5	6,8
Heating capacity (kW)	0,83	1,12	1,31	1,11	1,5	1,74
Water flow (l/h)	50	70	80	60	90	100
Water pressure loss (kPa)	0,7	1,2	1,5	1,5	2,5	3,2
Consumed power (W)	9,9	22,8	38,5	10,5	25,0	42,6
Intensity (A)	0,1	0,2	0,3	0,1	0,2	0,3
Suction + radiated sound power (dB(A))	41	53	58	41	53	58
Sound power OUT (dB(A))	37	49	54	37	49	55

Performance	Size 3			Size 4		
	4V	7V	9V	4V	7V	9V
Air flow rate (m ³ /h)	366	530	705	462	684	827
Available pressure (Pa)	23,8	50	88,5	22,8	50	73,9
Total cooling capacity (kW)	1,82	2,48	3,07	2,01	2,99	3,51
Sensible cooling capacity (kW)	1,38	1,9	2,39	1,58	2,33	2,76
Water flow (l/h)	180	250	310	200	300	360
Water pressure loss (kPa)	7,4	12,8	18,7	3,4	6,83	9,1
Heating capacity (kW)	1,89	2,43	2,92	2,23	2,9	3,28
Water flow (l/h)	110	140	170	130	170	190
Water pressure loss (kPa)	4,0	6,24	8,62	0,9	1,5	1,8
Consumed power (W)	17,9	43,2	99,7	22,1	56,8	92,5
Intensity (A)	0,2	0,4	0,7	0,1	0,4	0,7
Suction + radiated sound power (dB(A))	47	57	62	47	57	62
Sound power OUT (dB(A))	45	54	59	44	55	60

Performance	Size 4,5			Size 5		
	4V	7V	9V	4V	7V	9V
Air flow rate (m ³ /h)	439	651	788	506	764	915
Available pressure (Pa)	22,78	50	73,28	21,9	50	71,7
Total cooling capacity (kW)	2,41	3,42	4,0	2,11	3,27	3,84
Sensible cooling capacity (kW)	1,79	2,57	3,02	1,69	2,58	3,04
Water flow (l/h)	240	350	400	210	330	390
Water pressure loss (kPa)	5,9	10,9	14,3	1,9	4,2	5,5
Heating capacity (kW)	2,15	2,81	3,18	2,59	3,42	3,85
Water flow (l/h)	130	160	190	150	200	220
Water pressure loss (kPa)	0,9	1,4	1,7	1,4	2,3	2,8
Consumed power (W)	21,5	55,6	90,3	25,9	69,5	106,6
Intensity (A)	0,1	0,4	0,6	0,2	0,5	0,8
Suction + radiated sound power (dB(A))	46	57	62	48	59	63
Sound power OUT (dB(A))	44	55	60	45	56	60

Performance	Size 6			Size 7		
	4V	7V	9V	4V	7V	9V
Air flow rate (m³/h)	779	1.038	1.282	822	1.206	1.387
Available pressure (Pa)	22,9	50	70,5	22,9	50	70,8
Total cooling capacity (kW)	5,31	7,15	8,11	5,73	7,72	8,75
Sensible cooling capacity (kW)	3,79	5,2	5,96	4,08	5,6	6,4
Water flow (l/h)	910	1.230	1.390	980	1.330	1.500
Water pressure loss (kPa)	12,6	21,4	26,7	9,9	16,7	20,9
Heating capacity (kW)	4,91	6,37	7,13	5,31	6,87	7,67
Water flow (l/h)	430	560	620	460	600	670
Water pressure loss (kPa)	10,8	17,0	20,7	4,5	7,1	8,6
Consumed power (W)	38,3	103,6	160,9	38,3	103,6	160,9
Intensity (A)	0,3	0,8	1,2	0,3	0,8	1,2
Suction + radiated sound power (dB(A))	52	62	66	52	62	66
Sound power OUT (dB(A))	48	58	63	49	58	63

4TD reference values

Parameter	Cooling	Heating
Air inlet	25 °C	20 °C
Air relative humidity	50 %	50 %
Water inlet	7 °C	60 °C
Water outlet	15.5 °C	45 °C
Altitude above sea level	0.0 m	
Coolant	Water	
Sound power	As per Standard ISO 3742	

(*) Type not included in the scope of the Eurovent certification program.

Specifications Text

This specifications text describes the product's general features. The product software can be used to calculate performances different from those specified here.

Modular fancoil unit, TFCU series, with a compact design for air handling, to be installed horizontally in false ceilings. The unit is made up of a housing with hanging elements, air-outlet spigot, double-inlet centrifugal fans driven by single-phase EC motors, terminal box, heating and/or cooling coils, filter, and condensates tray.

Special features

- Double-inlet centrifugal fans, driven by single-phase EC motors, powered at 230 V 50 Hz, and controlled by a 0-10 V voltage signal
- Cooling coils for 2-tube installations, or to combine cooling and heating for 4-tube installations
- G2 filter at the air inlet
- The tray is screwed on from the exterior, so it can be easily disassembled for cleaning
- It is fitted with a 25 mm Ø drain
- Coils with female hydraulic connections Ø 1/2"
- Induction spigot for duct connection

Materials and Finishes

- The housing, the spigot for duct connection, and the filter frame are made of galvanised-steel sheets
- The fans and the condensates tray are made of plastic
- Coils are made of copper tubes and aluminium fins

Nominal sizes

- Length: 600 / 625 mm
- Height: 235 / 285 mm
- Width: 675, 885, 975, 1.205, 1,405 and 1,605 mm (depending on size)
- Spigot for air inlet (width/height): 590 – 1.520 mm / 195 – 245 mm
- Maximum cooling capacity: Up to 10.0 kW
- Maximum heating capacity: Up to 10.5 kW
- Maximum pressure on the water side: 16 bar
- Maximum operating ambient temperature: 40 °C

Dimensions

Air flow	\dot{V}
Total cooling capacity	Q_{tot} kW
Sensible cooling capacity	Q_s kW
Water flow	V_w l/h
Water pressure loss	ΔP_w kPa
Total heating capacity	Q_w kW
Consumed power	W
Intensity	I A
Generated air noise	LWA dB(A)

Order code

TFCUP / 3 / 4TP / R / 0 / P1 / 9010 / 3 / 7 / 0 / UV

1 2 3 4 5 6 7 8 9 10 11

1 Series

TFCUP

2 Size

1; 2; 3; 4; 4,5; 5; 6; 7

3 Coils

2TP 2 powered tubes

4TP 4 powered tubes

4TD 4 districtclima tubes
(district cooling/heating)

4 Connections side

(in the direction of air flow)

R Derecha en el sentido del aire

L Izquierda en el sentido del aire

5 Condensates tray

No code: standard

KV Auxiliary tray for valves

D Condensates tray with insulation

D-KV Condensates and auxiliary tray for valves with insulation

A2 Stainless steel condensates tray with insulation

A2-KV Stainless steel condensates and auxiliary tray with insulation

6 Housing

No code: Galvanised-steel plate

P1 Powder-coated, specify colour

7 Gloss level

RAL 9010 50 %

RAL 9006 30 %

Other colours 70 %

8 Control system

No control

1 Ambient analogue thermostat (without display)

2 Ambient digital thermostat (includes display)

3¹⁾ Ambient white digital thermostat (includes display) with ModBus communication

4¹⁾ Ambient black digital thermostat (includes display) with ModBus communication

5 Ambient digital thermostat (includes display) with KNX communication

9 Valve kit

Without valves

1²⁾ With hydraulic kit consisting of 2-way control valve, lockshield valve with micrometer regulation for flow rate adjustment, flexible sleeves, and shut-off valves

2²⁾ With hydraulic kit consisting of 4-way control valve, flexible sleeves and shut-off valves

3²⁾ With the hydraulic kit consisting of a 2-way control valve with dynamic balancing, flexible sleeves, a shut-off valve, and a shut-off valve with a built-in filter

4²⁾ With the hydraulic kit assembled and sealed with a 2-way control valve with PICV dynamic balancing, a shut-off valve with built-in filter, a shut-off valve and cleaning bypass. It includes an insulating wrap for the external motor set and Velcro fastener (**)

5 Option 4TP and 4 TD systems

6 Option 4TP and 4 TD systems

7 Option 4TP and 4 TD systems

8 Option 4TP and 4 TD systems

10 Actuators

Without actuator

1 On-Off actuator(s) 24 V DC

2 On-Off actuator(s) 230 V AC

11 UV lamp

Without code: without UV lamp

UV With UV lamp

¹⁾ Remote control upon request

²⁾ Valve kit for 2T systems

Selection example

TFCUP-2-4TP-R-0-P1-9010-3-4-1-UV

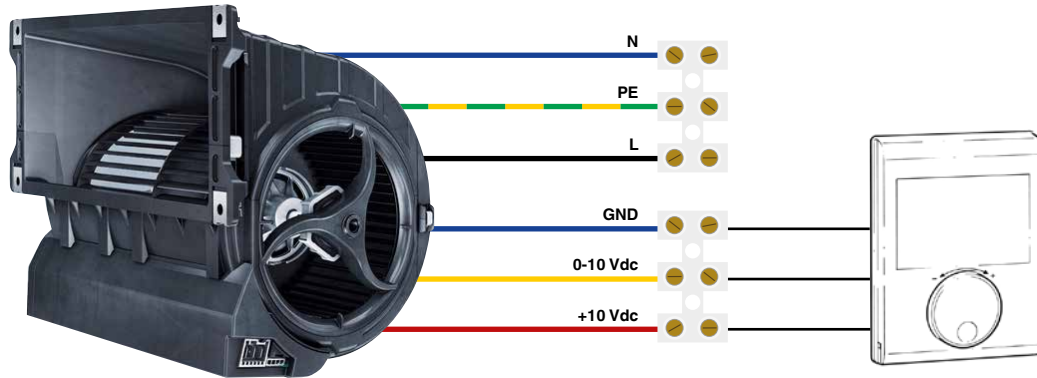
Fancoil unit size 2	TFCUP-2
Coil	4 powered tubes
Connection side	Right
Dimensions	885 × 235 × 600 mm
Condensates tray	Without insulation
Finish	RAL 9010 50 %
Control system	Ambient digital thermostat (includes display) with ModBus communication
Valve kit	With hydraulic kit consisting of 2-way valves
Actuators	On-Off actuators 24 V DC
UV lamp	Includes UV lamp

Data for Installation

Mechanical Fixings

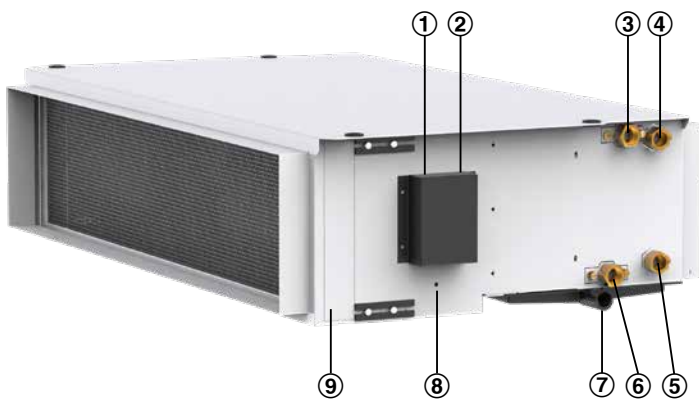
- Fixing the unit to the ceiling using 8 mm threaded rods, washers, nuts, and locknuts (not included).
- Fix in such a way that there is a slope of around 10 mm unit width towards the draining side.

Electrical Connections



Hydraulic connections

- Fluid will always enter via the lower manifold and come out via the upper manifold.
- After making the coil's hydraulic connection, it needs to be purged with the built-in purgers.
- When making the coils' hydraulic connection, make sure that the manifold is properly held, to avoid damaging the tubes.



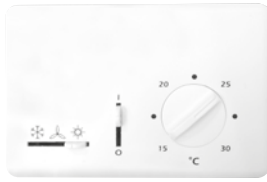
- ① Power connection
- ② Control connection
- ③ Cold outlet
- ④ Heat outlet
- ⑤ Heat inlet
- ⑥ Cold inlet
- ⑦ Drain
- ⑧ Fixing device for power and fan cables
- ⑨ Filter access window

Coil connection diameters

Size	Ø Colectors				
	2TP Hot/cold battery	Cold battery	4TP Hot battery	4TD Cold battery	Hot battery
1	1/2"	1/2"	1/2"	1/2"	1/2"
2	1/2"	1/2"	1/2"	1/2"	1/2"
3	1/2"	1/2"	1/2"	1/2"	1/2"
4	1/2"	1/2"	1/2"	1/2"	1/2"
4,5	1/2"	1/2"	1/2"	1/2"	1/2"
5	1/2"	1/2"	1/2"	1/2"	1/2"
6	3/4"	3/4"	1/2"	1/2"	1/2"
7	3/4"	3/4"	1/2"	1/2"	1/2"

Control systems

Ambient analogue thermostat, without display



It is fitted with a 0-10 V proportional output for regulating the fan, and two on-off outputs for valve activation. It is provided with a mode selector for cold, fan or heat operation. The thermostat operates by reaching the set temperature selected by the user. The set temperature can range between 15 and 30 °C. The temperature is measured by a sensor installed inside the thermostat. Optionally, an NTC-type sensor can be connected.

Ambient digital thermostat, with display



It is fitted with a 0-10 V proportional output for regulating the fan, and two on-off outputs for valve activation. The push buttons can be used to select the status, the operating mode, or the set temperature. The temperature is measured by a sensor installed inside the thermostat. Optionally, an NTC-type sensor can be connected.

A remote stop can be activated by window contact, card holder, motion sensor, etc.

It also offers options for time programming, selectable maximum and minimum temperatures, or fan maximum and minimum speed, both in heating and cooling modes.

Ambient digital thermostat with display and ModBus connection



It is fitted with a 0-10 V proportional output for regulating the fan, and 2 on-off outputs at 230 V for valve activation.

Modbus communication protocol, RTU mode, RS-485 (2 wire). The push buttons can be used to select the status, the operating mode, or the set temperature. The temperature is measured by a sensor installed inside the thermostat.

Optionally, an NTC-type sensor can be connected. A remote stop can be activated by window contact, card holder, motion sensor, etc.

It also offers options for time programming, selectable maximum and minimum temperatures, or fan maximum and minimum speed, both in heating and cooling modes.

Ambient digital thermostat with display and KNX connection



It is fitted with a 0-10 V proportional output for regulating the fan, and 2 on-off outputs for valve activation.

Power supply at 24 V AC with KNX communication protocol. The push buttons can be used to select the status, the operating mode, or the set temperature. The temperature is measured by a sensor installed inside the thermostat.

Optionally, an NTC-type sensor can be connected. A remote stop can be activated by window contact, card holder, motion sensor, etc.

It also offers options for time programming, selectable maximum and minimum temperatures, or fan maximum and minimum speed, both in heating and cooling modes.

Valve kit

The valve kit options include the following possible configurations. Depending on the configuration of the units, these will be supplied with a kit for 2T systems or with two kits for 4T systems.

Kit consisting of a 2-way control valve, a lockshield valve with micrometer regulation for flow rate adjustment, flexible sleeves, and shut-off valves.

Kit consisting of a 4-way control valve, flexible sleeves and shut-off valves.

Kit consisting of a 2-way control valve with dynamic balancing, flexible sleeves, a shut-off valve, and a shut-off valve with a built-in filter.

Hydraulic kit assembled and sealed with a 2-way control valve with PICV dynamic balancing, a shut-off valve with built-in filter, a shut-off valve and cleaning bypass. Insulating wrap for the external motor set and Velcro fastener.



Flow rate control 2-way valves with dynamic balancing, regardless of the hydraulic circuit pressure.



Ball valve with built-in filter.



Flexible connectors for joining two tube sections.



Hydraulic kit and protective housing

Actuators

An actuator for the on-off regulating valve, with a voltage of 24 V DC and 230 V AC can be supplied as option.



On-off actuator for hydraulically controlling the coils.

UV lamps

Alternatively, these units can include UV lamps to kill germs and bacteria.



UV lamp



Basic Information and Nomenclature

LN [mm] Nominal dimension	VW [l/h] Water flow – cooling/heating
LWA [dB(A)] Sound power level	ΔtW [K] Water temperature difference
Qtot [W] Total cooling capacity	ΔpW [kPa] Pressure loss, hydraulic connection side
QW [W] Total heating capacity	Δp_d [Pa] External static pressure

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The art of handling air

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