



TEKNOGEN[®]
Hvac Systems

“Simply The Best Solutions”

Fancoil Units

Cassette type FCU

34 ÷ 238

Water terminal units

Indoor installation

Capacity from 2.0 to 13.5 kW

TFP-KM4

Cassette type FCU








The Cassette type terminal unit has been designed for installation in suspended ceilings without requiring any extra part for operation. The unit has an intake grille and four-way outlet with adjustable diffuser flaps for changing air-flow direction.

The Cassette type is therefore suited for use in environments such as shops, restaurants, hotels and gyms, where the excellent out flowing air control makes them ideal air-conditioning units:

- ✧ available in version for 2 and 4-pipe systems;
- ✧ available in electro-mechanical or electronic version with set-up for connection to HM Control or general supervisors;
- ✧ possibility of controlling several units from a single point;
- ✧ the unit comes with a condensate drain pump (500 mm vertical).

functions and features

				
Cooling-heating	Indoor Inst.	Built-in horizontal inst.	Refrig. Water	Group Control

available configurations

	(1)	(2)	(3)	(4)
TFP-KM4	34	V	S	D

(1)----The unit nominal air flow (340m³/h)

(2)----- V 2 pipe

P 4 pipe

(3)----- S power supply 230V/1Ph/50hz with electronic

W power supply 230V/1Ph/50hz with electronic-mechanic

A power supply 220V/1Ph/60Hz

(4)----- the unit without Electrical heater

D the unit with Electrical heater

accessories

- Wall pad for all type FCU
- 3V2-KM4---3-way valve kit for 2-pipe cassette type FCU
- 3V4-KM4---3-way valve kit for 4-pipe cassette type FCU

technical data

TFP-KM4-V model	UNIT	34	51	68	85	102	136	170	204	238
Cooling capacity (1)	KW	2.52	3.11	4.05	4.98	6.32	8.17	10.05	11.68	13.4
Sensible cooling capacity	kW	2.23	2.4	3.2	4.0	5.0	5.9	7.5	8.7	9.5
Fan Motor Power	W	26	31.7	58	61.1	80.5	100	150	192	241
Heating capacity(2)	KW	3.03	3.29	4.29	5.02	6.31	7.71	9.97	11.29	12.48
Air flow rate	m ³ /h	360	510	680	850	1020	1360	1700	2040	2380
Sound pressure level (3)	dB(A)	38	39	43	46	45	50	51	52	55
Power supply	V/Ph/Hz	230/1/50								

(1) Ambient air at 27°C; 50% R.H.; water at inlet 7°C and outlet 12°C

(2) Ambient air at 20°C; water at inlet 50°C and water flow same to cooling mode

(3) Sound levels refer to units with full load under nominal test conditions.

The sound pressure is measured at 1 m from the external surface of the unit in open field conditions.

TFP-KM4-V model	UNIT	68	85	102	136	170	204	238
Cooling capacity (1)	KW	3.2	4.5	5.2	5.8	7.7	8.5	9.0
Sensible cooling capacity	kW	2.3	3.1	3.5	4.2	5.6	6.3	7.0
Fan Motor Power	W	58	61.1	80.5	100	150	192	241
Heating capacity(2)	KW	1.55	2.2	2.5	2.9	4.1	4.6	4.95
Heating capacity(3)	KW	3.2	4.4	4.8	5.7	7.95	8.8	9.6
Air flow rate	m ³ /h	680	850	1020	1360	1700	2040	2380
Sound pressure level (4)	dB(A)	43	46	45	50	51	52	55
Power supply	V/Ph/Hz	230/1/50						

(1) Ambient air at 27°C; 50% R.H.; water at inlet 7°C and outlet 12°C

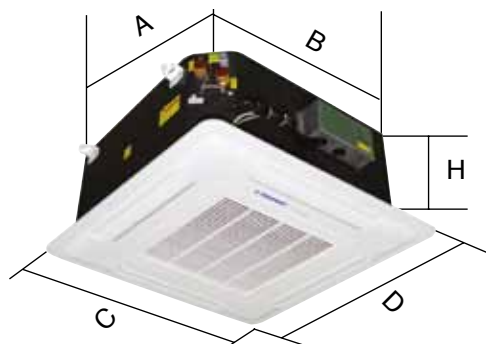
(2) Ambient air at 20°C; water at inlet 50°C and outlet 40°C.

(3) Ambient air at 20°C; water at inlet 70°C and outlet 60°C.

(4) Sound levels refer to units with full load under nominal test conditions.

The sound pressure is measured at 1 m from the external surface of the unit in open field conditions.

dimensions and functional spaces



MODEL	34-51	68-85	102-136	170-204-238
A	575		735	865
B	575		735	865
C	680		830	980
D	680		830	980
H	255	295	295	295

Universal type FCU

34 ÷ 238

Water terminal units

Indoor installation

Capacity from 1.8 to 12 kW

TFP-WA(M)U

Universal type FCU



The Universal type terminal unit has been designed for installation in 3 ways: floor standing; wall-mounted and ceiling suspended.

Available in which is with cabinet and FP-WAU which is without cabinet

- ※ Water connections reversibility during installation
- ※ 1-row additional coil for 4-pipe system (This is optional part.)
- ※ The available controls are simple and user-friendly, satisfying the most Varied of requirements, with top-of-the-range electronic control designed for connection to the HM Control or general supervisors.
- ※ Metallic protective cabinet with rustproof polyester pai

functions and features

Cooling-heating	Indoor Inst.	Horizontal inst.	Vertical inst.	Refrig. Water	Group Control

available configurations

TFP-WA(M)U	34	(1) R3	(2) TR	(3) EH	(4) L	(5) 3V2	(6) EDPH
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<p>(1) VARYING INTAKE R3=Bottom intake RF=Front intake</p>	<p>(2) CONTROLS TR =Fan terminal board (standard) SPS=3-speed switch TSC=thermostat switch PCW=Electronic PCB +wired wall pad</p>
<p>(3) WATER COIL / ELECTRICAL HEATER -----Not required Standard HC=Hot water coil 1Rows (4-pipe system) EH=Electrical heater</p>	<p>(4) WATER FITTINGS L=Water fittings to the left R=Water fittings to the right Water connections reversibility during installation</p>
<p>(5) VALVES -- = Not required Standard 2V2-U = ON/OFF 2 way valve for 2-pipe unit for WA(M)U 3V2L-U = ON/OFF 3 way valve for 2-pipe left unit for WA(M)U 3V2R -U= ON/OFF 3 way valve for 2-pipe right unit for WA(M)U 2V4- U= ON/OFF 2 way valve for 4-pipe unit for WA(M)U 3V4L-U = ON/OFF 3 way valve for 4-pipe left unit for WA(M)U 3V4R-U = ON/OFF 3 way valve for 4-pipe right unit for WA(M)U</p>	<p>(6) EXTERNAL DRAIN PAIN --= Not required Standard EDPHR-U = Auxiliary drain pan with right water connections for horizontal installation EDPHL-U = Auxiliary drain pan with left water connections for horizontal installation EDPV -U= Auxiliary drain pan for vertical installation</p>

technical data

TFP-WA(M)U-V model	UNIT	34	51	68	85	102	136	170	204	238
Cooling capacity (1)	kW	1.70	2.67	3.55	4.48	5.34	7.00	9.00	10.00	11.00
Sensible cooling capacity	kW	1.32	1.94	2.37	3.09	3.53	4.80	6.19	6.93	7.43
Heating capacity(2)	kW	2.15	2.98	3.90	4.74	5.45	7.63	9.20	10.70	11.38
Total power input	W	48	55	77	85	105	156	151	231	250
Air flow rate	m ³ /h	340	525	660	870	980	1300	1600	1950	2150
Sound pressure level (3)	dB(A)	37	39	41	43	45	46	48	50	52
Power supply	V/Ph/Hz	230/1/50								

(1) Ambient air at 27°C; 50% R.H.; water inlet 7°C and outlet 12°C

(2) Ambient air at 20°C; water inlet 50°C

(3) sound levels refer to units with full load under nominal test conditions.

The sound pressure is measured 1 m from the external surface of the unit in open field conditions.

TFP-WA(M)U-P model	UNIT	34	51	68	85	102	136	170	204	238
Cooling capacity (1)	kW	1.70	2.67	3.55	4.48	5.34	7.00	9.00	10.00	11.00
Sensible cooling capacity	kW	1.32	1.94	2.37	3.09	3.53	4.80	6.19	6.93	7.43
Heating capacity(2)	kW	1.40	2.30	3.50	5.25	5.78	7.27	9.00	12.30	13.30
Total power input	W	48	55	77	85	105	156	151	231	250
Air flow rate	m ³ /h	340	525	660	870	980	1300	1600	1950	2150
Sound pressure level (3)	dB(A)	39	41	42	44.5	46	47	49	51	53
Power supply	V/Ph/Hz	230/1/50								

(1) Ambient air at 27°C; 50% R.H.; water inlet 7°C and outlet 12°C

(2) Ambient air at 20°C; water inlet 70°C

(3) sound levels refer to units with full load under nominal test conditions.

The sound pressure is measured 1 m from the external surface of the unit in open field conditions.

dimensions and functional spaces

WU-238



MODEL	WMU-34	WMU-51	WMU-68	WMU-85	WMU-102	WMU-136	WMU-170	WMU-204	WMU-238
L	858	908	1058	1208	1258	1608	1758	1908	2058
H	473								
W	235								



MODEL	WU-34	WU-51	WU-68	WU-85	WU-102	WU-136	WU-170	WU-204	WU-238
L	608	658	808	958	1008	1358	1508	1658	1808
H	460								
W	230								

Ceiling concealed type FCU

34 ÷ 238

Water terminal units

Indoor installation

Capacity from 1.95 to 12 kW

TFP-WA



The ceiling concealed type water terminals is designed for installations where air is conducted at low pressure, their fans give enough static pressure to distribute air to different spaces, through conducting systems, grilles or diffusers.

- ※ Water connections reversibility during installation
- ※ 1-row additional coil for 4-pipe system (This is optional part.)
- ※ The available controls are simple and user-friendly, satisfying the most

Varied of requirements, with top-of-the-range electronic control designed for connection to the HM Control or general supervisors.

- ※ available in 4 kinds of ESP(12,30,50,70Pa).
- ※ easy installation and maintenance

functions and features

Cooling-heating	Indoor Inst.	Horizontalinst.	Refrig. Water	Group Control

available configurations

	(1)	(2)	(3)	(4)	(5)	
TFP-WA	34	R3	TR	EH	L	3V2-C

<p>(1) VARYING INTAKE R3=Bottom intake RF=Front intake</p>	<p>(2) CONTROLS TR =Fan terminal board (standard) SPS=3-speed switch TSC=thermostat switch PCW=Electronic PCB +wired wall pad</p>
<p>(3) WATER COIL / ELECTRICAL HEATER -----Not required Standard HC=Hot water coil 1Rows (4-pipe system) EH=Electrical heater</p>	<p>(4) WATER FITTINGS L=Water fittings to the left R=Water fittings to the right Water connections reversibility during installation</p>
<p>(5) VALVES -- = Not required Standard 2V2-C = ON/OFF 2 way valve for 2-pipe unit for WA 3V2-C = ON/OFF 3 way valve for 2-pipe unit for WA</p>	<p>2V4-C = ON/OFF 2 way valve for 4-pipe unit for WA 3V4-C = ON/OFF 3 way valve for 4-pipe unit for WA</p>

technical data

TFP-WA-V model	UNIT	34	51	68	85	102	136	170	204	238
Cooling Capacity (1)	kW	1.95	2.83	3.87	4.55	5.50	7.58	8.69	10.40	11.60
Sensible cooling capacity	kW	1.42	2.01	2.70	3.22	3.91	5.35	6.15	6.42	7.83
Heating capacity (2)	kW	3.48	4.70	5.92	7.65	9.10	12.60	14.90	17.40	19.80
Total power input	W	45	61	75	99	109	170	205	240	300
Air flow rate	m ³ /h	360	540	720	880	1030	1500	1780	2170	2500
Sound pressure level (3)	dB(A)	39	41	42	44.5	46	47	49	51	53
Power supply	V/Ph/Hz	230/1/50								

(1) Ambient air at 27°C; 50% R.H.; water at inlet 7°C and outlet 12°C

(2) Ambient air at 21°C; water at inlet 60°C and outlet 40°C

(3) Sound levels refer to units with full load under nominal test conditions.

The sound pressure is measured at 1 m from the external surface of the unit in open field conditions.

TFP-WA-P model	UNIT	34	51	68	85	102	136	170	204	238
Cooling Capacity (1)	kW	2.10	3.10	3.78	4.83	5.40	7.20	9.00	10.80	12.70
Sensible cooling capacity	kW	1.52	2.20	2.64	3.42	3.84	5.08	6.37	6.66	8.58
Heating capacity (2)	kW	1.88	2.75	3.57	4.25	5.41	6.45	8.62	10.50	12.10
Total power input	W	50	66	81	97	115	150	235	294	325
Air flow rate	m ³ /h	340	510	680	850	1020	1360	1700	2040	2380
Sound pressure level (3)	dB(A)	39	41	42	44.5	46	47	49	51	53
Power supply	V/Ph/Hz	230/1/50								

(1) Ambient air at 27°C; 50% R.H.; water at inlet 7°C and outlet 12°C

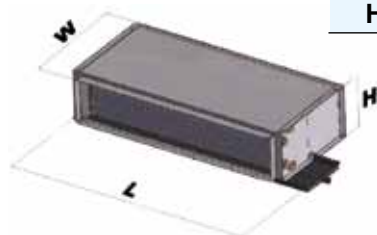
(2) Ambient air at 21°C; water at inlet 60°C

(3) Sound levels refer to units with full load under nominal test conditions.

The sound pressure is measured at 1 m from the external surface of the unit in open field conditions.

dimensions and functional spaces

MODEL	WA-34	WA-51	WA-68	WA-85	WA-102	WA-136	WA-170	WA-204	WA-238
L	635	755	865	945	1055	1325	1515	1635	1795
W	497								
H	250								



Duct type FCU-High ESP

136 ÷ 460

Water terminal units

Indoor installation

Capacity from 7.2 to 22.6 kW

TFP-WA-H








The Duct type water terminal units are ideal air-treatment terminal units for installations where ducted air distribution is necessary. The units are designed for ceiling suspended installation and are distinguished by their compactness and extremely low noise levels obtained thanks to internal insulation.

The main features are:

- ✘ Water connections reversibility during installation
- ✘ various available controls, from simple speed control through to the electronic control set-up for connection to HM Control or general supervisors;
- ✘ available in version for 2 and 4-pipe systems;
- ✘ wide choice of accessories (plenum for round ducts);
- ✘ electric heater section with different power plus electronic power modulation control;
- ✘ high head-pressure fans for ducted air distribution.

functions and features

				
Cooling-heating	Indoor Inst.	Horizontalinst.	Refrig. Water	Group Control

available configurations

TFP — (1) WA — (2) 170H — (3) TR

(1) WA-H---EXPOSED High ESP duct type FCU	(3) CONTROLS TR =Fan terminal board (standard) SPS=3-speed switch TSC=thermostat switch PCW=Electronic PCB +wired wall pad
(2) 170---nominal air flow (1700m3/h)	

accessories

TWO-WAY INTAKE PLENUM WITH DAMPER---02	AIR PURIFICATION MODULE---09-10
ELECTRIC HEATER MODULE---05	AUXILLIARY WATER COIL FOR HEATING MODULE---04
DISCHARGE (AND INTAKE) PLENUM--03/07	DISCHARGE PLENUM FOR ROUND DUCTING

technical data

TFP-WA-V-H model	UNIT	136	170	204	238	270	300	340	400	460
Cooling Capacity (1)	kW	7.50	9.30	11.40	12.80	14.60	15.90	17.70	20.10	22.60
Sensible cooling capacity	kW	5.40	6.60	8.10	9.10	10.50	11.50	12.80	14.60	16.30
Heating capacity (2)	kW	11.30	13.90	16.90	19.10	22.10	24.20	26.70	30.70	34.50
Total power input	W	162	205	223	267	308	388	459	572	688
Air flow rate	m ³ /h	1360	1700	2040	2380	2720	3060	3400	4080	4590
Sound pressure level (3)	dB(A)	49	50	50	51	52	54	55	58	60
Power supply	V/Ph/Hz	230/1/50								

(1) Ambient air at 27°C; 50% R.H.; water at inlet 7°C and outlet 12°C

(2) Ambient air at 21°C; water at inlet 60°C and outlet 40°C

(3) Sound levels refer to units with full load under nominal test conditions.

The sound pressure is measured at 1 m from the external surface of the unit in open field conditions.

TFP-WA-P-H model	UNIT	136	170	204	238	270	300	340	400	460
Cooling Capacity (1)	kW	7.50	9.30	11.40	12.80	14.60	15.90	17.70	20.10	22.60
Sensible cooling capacity	kW	5.40	6.60	8.10	9.10	10.50	11.50	12.80	14.60	16.30
Heating capacity (2)	kW	6.60	8.30	9.90	11.60	13.20	14.90	16.50	19.80	22.10
Total power input	W	162	205	223	267	308	388	459	572	688
Air flow rate	m ³ /h	1360	1700	2040	2380	2720	3060	3400	4080	4590
Sound pressure level (3)	dB(A)	49	50	50	51	52	54	55	58	60
Power supply	V/Ph/Hz	230/1/50								

(1) Ambient air at 27°C; 50% R.H.; water at inlet 7°C and outlet 12°C

(2) Ambient air at 21°C; water at inlet 60°C and outlet 40°C

(3) Sound levels refer to units with full load under nominal test conditions.

The sound pressure is measured at 1 m from the external surface of the unit in open field conditions.

dimensions and functional spaces



MODEL	138H	170H	204H
L	1050		1250
W	510		580
H	315		315
MODEL	238H	300H / 340H / 400H / 460H	
L	1250	1400	
W	580	710	
H	315	400	

High wall type FCU **04 ÷ 18**

Water terminal units

Indoor installation
Capacity from 1.4 to 4.8 kW

TFP-BG



The High wall type water terminals are designed to meet and exceed the demanding requirements for efficiency, quiet operation and good looks. The sleek profiles and elegantly styled cabinet will comply any interior design theme. The microprocessor assures accurate environmental control.

- ※ available in 2 versions of returned air grill;
- ※ 3 way (4 port) motorized valve can be easily mounted inside the cabinet. The valve function is controlled by microprocessor.

functions and features

Cooling-heating	Indoor Inst.	Horizontalinst.	Refrig. Water	Group Control

available configurations

TFP — (1) BG — (2) 04 — (3) V

(1) BG----High wall type FCU	(3) V----the unit with 3 way valve
(2) 04----- model size	---- the unit without 3 way valve

accessories

- Wall pad for all type FCU
- Electric heater for BG
- 3 way (4 ports) valve. Note: The valve can be installed inside of BG-04-09-15 cabinet.

technical data

TFP-BG model	UNIT	04	06	09	12	15	18
Cooling capacity (1)	KW	1.38	1.8	2.22	3	3.5	4.8
Sensible cooling capacity	kW	1.1	1.34	1.54	1.94	2.35	3.12
Heating capacity (2)	KW	1.6	2.1	2.62	3.33	3.95	5.2
Total power input	W	44.6	45	38.1	39	55.9	62
Air flow rate	m ³ /h	306	390	468	561	618	792
Water flow rate	L/h	250	340	420	566	660	906
Sound pressure level (3)	dB(A)	36	37	38	39	43	45
Electric heater (optional)	KW	0.50	1.00	1.20	1.20	1.60	1.60
Connection IN	INCH	1/2"					
Out	INCH	1/2"					
Power supply	V/Ph/Hz	230/1/50					

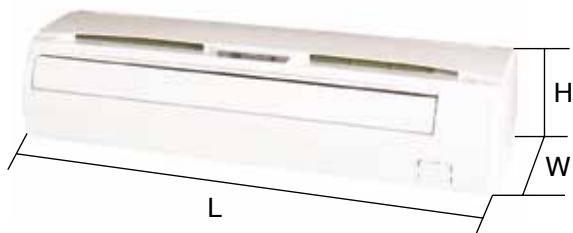
(1) Ambient air at 27°C; 50% R.H.; water at inlet 7°C and outlet 12°C

(2) Ambient air at 20°C; water at inlet 50°C and water flow same to cooling mode

(3) Sound levels refer to units with full load under nominal test conditions.

The sound pressure is measured at 1 m from the external surface of the unit in open field conditions.

dimensions and functional spaces



MODEL	BG-04-06	BG-09-12	BG-15-18
L	788	886	1080
W	268	290	330
H	180	180	197

TEKNOGEN[®]
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"Simply The Best Solutions"

BY HVAC SYSTEMS CO. LTD.

Libadiye Cad. Tahralı Sok. No: 7 Kavakyeli Plaza A Blok D: 22 Atasehir - Istanbul / Turkey
Tel: +90 216 324 51 59 - Fax: +90 216 324 99 32

www.byklima.com
info@byklima.com

www.teknogenhvac.com
info@teknogenhvac.com