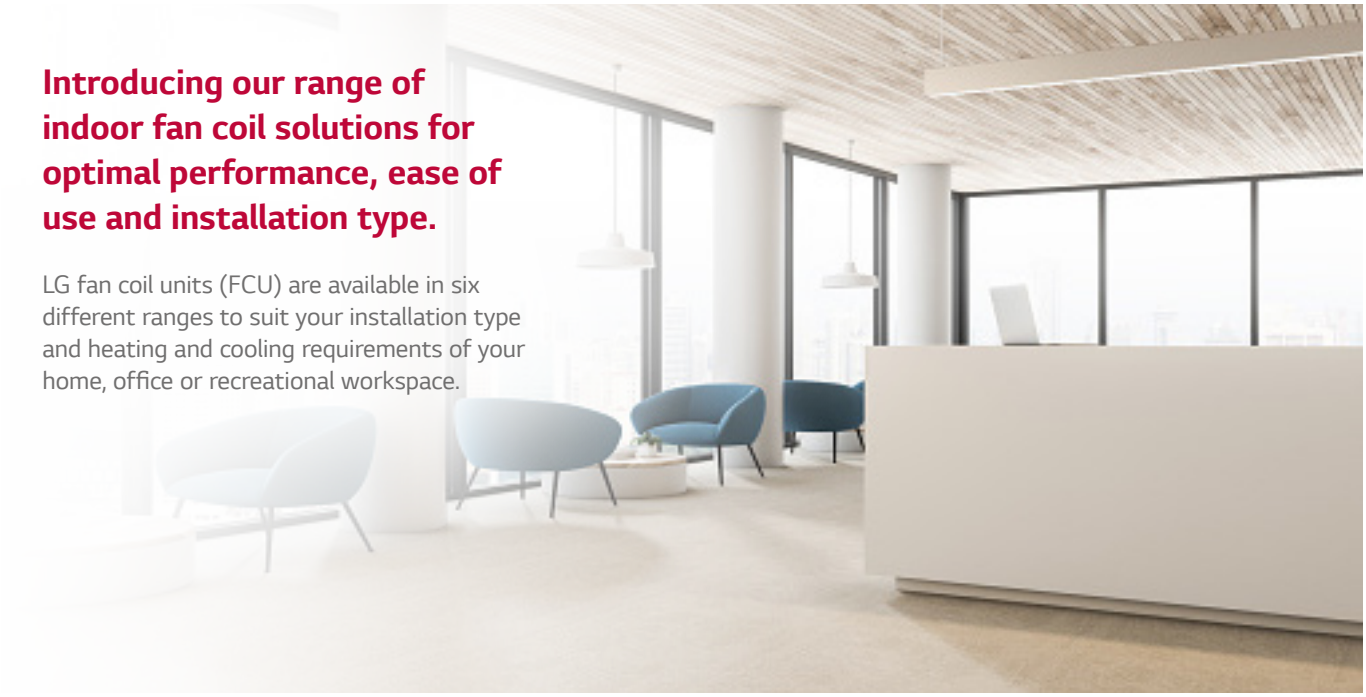
LG Business Solutions

Versatility meets simplicity

Versatile, highly efficient and stylish fan coil units designed to provide optimum control, integration and performance of the indoor climate for residential, recreational and professional environments

Innovation for a Better Life

LG Fan Coil Series



Introducing our range of indoor fan coil solutions for optimal performance, ease of use and installation type.

LG fan coil units (FCU) are available in six different ranges to suit your installation type and heating and cooling requirements of your home, office or recreational workspace.

VFL Model

VFC Model

VFU Model

LG Fan coil units are available with or without a cabinet, and are offered with a broad choice of wall mounting options. Our models accommodate choices for floor, wall, high wall, ceiling and recess mountings.

VFY Model

Medium head ductable units, ceiling recessed installation models.

VFZ Model

High head ductable units, ceiling recessed installation models.

4Way Cassette

Advanced design to fit into standard ceilings modules (600x600 mm)

The LG fan coil series can be applied to multiple water solutions:

LG GC Scroll Chiller

LG THERMA V Monobloc

LG THERMA V Split

VFL, VFC AND VFU MODELS

Crafted to surpass your every need

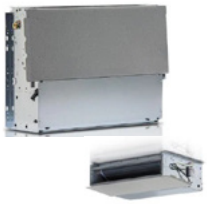
Our VFL, VFC and VFU lines use top quality materials and innovative features to ensure optimal flexibility and low operational noise output.

Our range has been designed to allow for a combination of vertical and horizontal installation types: with models for surface mounting on walls, floors & ceilings and recess mounting in walls or ceilings.

In its recess-mounted ductable version, the FCU line has a number of accessories that permit quick and economical installation with flexible ducts directly coupled with air diffusion grilles for maximum convenience.

VF series can be combined with a large range of on-board or wall-mounted control panels, depending on the level of performance and adjustment required.

VFL
Our in cabinet fan coil unit, suitable for wall mounting. Featuring vertical air flow, filter on the air intake securely attached to the cabinet with quarter-turn screws.
The VFL range is available in 7 model variations.



VFC
Our model for vertical and horizontal recess mounting, air intake in line with the outlet, thermally insulated galvanised sheet steel body. Plenum and connectors complete the air intake and the air flow into any room.
The VFC range is available in 8 model variations.

VFU
Version with cabinet, suitable for floor and ceiling mounting. The cabinet has air outlet grilles and air intake grilles with built-in filter.
The VFU range is available in 5 model variations.

VFL, VFC AND VFU MODELS MAIN COMPONENTS

Cabinet

Composed of a painted steel sheet panel, side panels, air outlet grille (swinging by 180°) and back suction grille built from ABS.
Round shapes and RAL9003 colour designed to satisfy all interior decorating needs, in line with architectural requirements and aesthetics.

Construction

Premium build quality with galvanized steel housings. All units are heat and sound insulated with Class 1 self-extinguishing panels. Further, VFU and VFC versions feature double drip trays for collecting condensation and excess water.

Heat Exchanger

Highly efficient heat exchanger made with copper piping and aluminium fins, fitted with brass manifolds and durable vent valve. The water connections are reversible at the time of installation. On request it is possible to mount an additional heat exchanger for 4-pipe systems.

Electric Motor

Mounted on vibration dampers, with permanently activated capacitor and thermal windings protection. Available with optimized 3 speed version for best performance, quietness, and efficient power consumption.

Fan

Double suction centrifugal fans, statically and dynamically balanced, manufactured from anti-static ABS. All blades feature an airfoil section and offset module for maximum efficiency. The fans are further housed in a low-noise ABS volute.

Air Filter

Honey-comb polypropylene washable air filter, easily removable for simple maintenance.
On the VFU version the air filters are fitted onto the air inlet grille.

VFL, VFC AND VFU MODELS ACCESSORIES

CONTROL PANELS

Electromechanical control panels	
CB	On-board speed switch
CD	Recess wall-mounted speed switch
TB	On-board speed thermostat and switch
TC	Thermostat for minimum water temperature in heating mode (42 °C)
Electronic microprocessor control panels with display	
DIST	MY COMFORT controller spacer for wall mounting
E2TK	Touch screen 2.8" user panel for EVO control EVO-2-TOUCH, frame in aluminium color black RAL9005
E2TY	Touch screen 2.8" user panel for EVO control EVO-2-TOUCH, frame in natural brushed aluminium
EVOBOARD	Circuit board for EVO control
EVODISP	User interface with display for EVO controller
EYNAVEL	Device for Wi-Fi or Bluetooth communication between EVOBOARD and smartphone
KBESTE	MY COMFORT on-board installation kit for VFL, VFC and VFU models
KL	LED503 on-board controller installation kit for VFL, VFC and VFU models
LED503	Recessed wall-mounted electronic display controller LED 503
MCBE	MYCOMFORT BASE electronic controller with display
MCLE	Microprocessor control with display MY COMFORT LARGE
MCME	MYCOMFORT MEDIUM electronic controller with display
MCSUE	Humidity sensor for MY COMFORT (medium e large), EVO
MCSWE	Water sensor for MYCOMFORT and EVO controllers
Electronic microprocessor control panels	
KB L DX	On-board VFL, VFC and VFU installation kit on the right side suitable for TED controller
KB L SX	On-board VFL, VFC and VFU installation kit on the left side suitable for TED controller
TED 2T	Electronic controller for AC fan control and one ON/OFF 230 V valve
TED 4T	Electronic controller for AC fan control and two ON/OFF 230 V valves
TED SWA	Water temperature sensor for TED controls

ACCESSORIES

Power interface and regulating louver controllers	
CSB	On-board controller for opening and closing the motor-driven regulating louver
CSD	Recess mounted controller for opening and closing the SM motor-driven regulating louver
KP	Power interface for connecting in parallel up to 4 fun coil units to the one controller
Additional heat exchanger for 4-pipe systems	
DF	1-row additional heat exchanger for 4-pipe systems (not suitable for VFL, VFC and VFU model "M" models)
Auxiliary water drip trays, insulating shell, condensate drainage pump	
BH	Auxiliary water drip tray for horizontal installation fan coil units
BV	Auxiliary water drip tray for vertical installation fan coil units
GIVKL	Insulating shell for VKS valve, water connections on the left
GIVKR	Insulating shell for VKS valve, water connections on the right
KSC	Condensate drainage pump kit
Base and enclosure elements	
D	Support elements for VFC
ZL	Pair of support covering elements for VFL
ZLG	Pair of support covering elements with front grille for VFL, VFC and VFU FL
Rear covering panels	
PH	Rear painted panel for horizontal installation with cabinet
PV	Rear painted panel for vertical installation with cabinet
Electrical heating elements	
RE	Heating element with installation kit, relay box and safety devices
Air inlet and outlet grilles	
GE	Aluminium external air intake grille with subframe
GEF	Aluminium external air intake grille with subframe and air filter
GM	Aluminium air outlet grille with 2-row fins and subframe
RGC	Plenum with circular collars for air outlet grille
Plenum and connectors	
RA90	Angular inlet connector
RAD	Straight inlet connector
RADC	Air inlet plenum with circular collars
RM90	Angular outlet connector
RM90C	Angular outlet insulated connector
RMCD	Straight outlet insulated connector
RMCD C	Air outlet plenum with circular collars
RMD	Straight outlet connector
External air intake louvers	
S	Manual external air intake louver
SM	Motor-driven louver, with motor on the right with transformer
SM	Motor-driven louver, with motor on the left with transformer
SMC	Motor driven louver, with motor on the right, with transformer
SMC	Motor driven louver, with motor on the left, with transformer
Valves	
KV	2-way valve, ON/OFF actuator, hydraulic kit on water connection side for main heat exchanger
KV24	2-way valve, ON/OFF actuator, 24 V power supply, hydraulic kit on water connection side for main heat exchanger
KV24DF	2-way valve, ON/OFF actuator, 24 V power supply, hydraulic kit on water connection side for main and additional heat exchanger
KVDF	2-way valve, ON/OFF actuator, 230 V power supply, hydraulic kit on water connection side for main and additional heat exchanger
KVM	2-way valve, MODULATING actuator, 24 V power supply, hydraulic kit on water connection side for main heat exchanger
KVMDF	2-way valve, MODULATING actuator, 24 V power supply, hydraulic kit on water connection side for main and additional heat exchanger
VKDF	3-way valve, ON/OFF actuator, 230 V power supply, complete hydraulic kit for additional heat exchanger
VKDF24	3-way valve, ON/OFF actuator, 24 V power supply, complete hydraulic kit for additional heat exchanger
VKDF24ND	3-way valve, ON/OFF actuator, 24 V power supply, hydraulic kit without holder, for additional heat exchanger
VKDFND	3-way valve, ON/OFF actuator, 230 V power supply, hydraulic kit without holder, for additional heat exchanger
VKMDF	3-way valve, MODULATING actuator, 24 V power supply, complete hydraulic kit for additional heat exchanger
VKMDFND	3-way valve, MODULATING actuator, 24 V power supply, hydraulic kit without holder, for additional heat exchanger
VKMS	3-way valve, MODULATING actuator, 24 V power supply, complete hydraulic kit for main heat exchanger
VKMSND	3-way valve, MODULATING actuator, 24 V power supply, hydraulic kit without holder, for main heat exchanger
VKS	3-way valve, ON/OFF actuator, 1230 V power supply, complete hydraulic kit for main heat exchanger
VKS24	3-way valve, ON/OFF actuator, 24 V power supply, complete hydraulic kit for main heat exchanger
VKS24ND	3-way valve, ON/OFF actuator, 24 V power supply, hydraulic kit without holder, for main heat exchanger
VKSND	3-way valve, ON/OFF actuator, 230 V power supply, hydraulic kit without holder, for main heat exchanger
VPIC	2-way valves pressure independent, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
Sanitisation system	
JONIX - on board	Sanitizing module JONIX for on-board installation

VFL. VFC AND VFU MODELS RATED TECHNICAL DATA

Model VFL / VFC / VFU with AC Motor													
		03			05			06			08		
Fan speed		**min**	**med**	**max**	**min**	**med**	**max**	**min**	**med**	**max**	**min**	**med**	**max**
Total cooling capacity (1)	kW	0.77	0.92	1.15	1.04	1.24	1.54	1.26	1.52	1.74	1.60	2.03	2.42
Sensible cooling capacity(1)	kW	0.59	0.70	0.87	0.79	0.97	1.20	0.95	1.14	1.30	1.18	1.57	1.88
Water flow(1)	l/h	132	158	197	179	213	264	216	261	299	275	348	415
Water pressure drop (1)	kPa	4	5	7	7	9	13	8	11	14	8	12	16
Heating capacity (2)	kW	1.11	1.30	1.55	1.43	1.73	2.14	1.71	2.04	2.20	2.07	2.68	3.20
Water pressure drop (2)	kPa	3	4	6	6	8	11	7	9	12	6	10	13
Heating capacity (3)	kW	1.94	2.27	2.68	2.47	2.99	3.71	2.93	3.50	3.74	3.52	4.57	5.47
Water flow (3)	l/h	171	199	235	216	263	325	257	307	329	308	401	480
Water pressure drop (3)	kPa	4	6	8	7	10	15	8	11	13	7	12	16
Air flow	m3/h	149	189	231	178	233	319	211	271	344	241	341	442
Power input	W	18	21	32	21	28	37	25	36	53	29	44	57
Sound power level (4)	dB/A	30	32	40	37	42	47	38	44	49	35	43	48
Additional coil heating capacity DF (3)	kW	1.35	1.50	1.70	1.50	1.70	1.90	1.56	1.78	2.02	2.06	2.53	2.92
Water flow (3)	l/h	118	132	149	132	149	167	137	156	177	181	222	257
Water pressure drop (3)	kPa	3	4	4	4	5	6	5	7	8	2	3	4

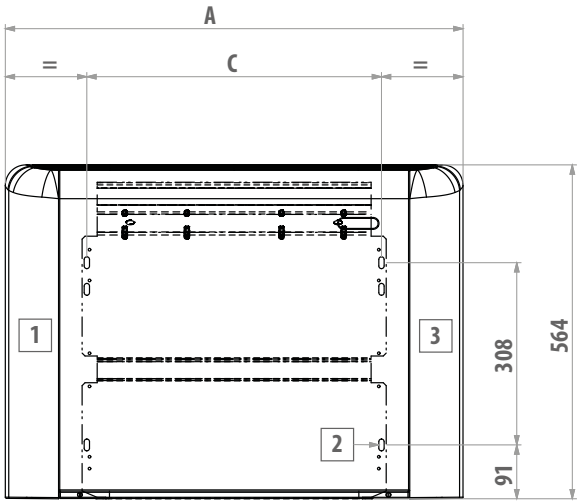
Model VFL / VFC / VFU with AC Motor																
		12			15			18			21			26		
Fan speed		**min**	**med**	**max**	**min**	**med**	**max**	**min**	**med**	**max**	**min**	**med**	**max**	**min**	**med**	**max**
Total cooling capacity (1)	kW	1.98	2.63	3.51	3.00	3.66	4.51	3.42	4.19	5.26	3.97	5.27	6.71	4.11	6.24	8.02
Sensible cooling capacity(1)	kW	1.45	2.04	2.75	2.23	2.82	3.53	2.34	3.00	3.82	2.84	3.83	4.91	3.05	4.63	5.96
Water flow(1)	l/h	340	451	602	515	628	774	587	719	902	682	905	1152	706	1071	1376
Water pressure drop (1)	kPa	4	7	12	7	10	14	9	13	19	5	8	12	6	13	20
Heating capacity (2)	kW	2.81	3.69	4.78	3.93	4.84	5.91	4.22	5.18	6.57	4.77	6.23	7.83	5.24	7.80	10.0
Water pressure drop (2)	kPa	4	6	10	6	8	12	7	10	16	4	6	10	5	11	16
Heating capacity (3)	kW	4.83	6.34	8.21	6.69	8.25	10.1	7.10	8.72	11.1	8.06	10.5	13.1	8.91	13.2	16.9
Water flow (3)	l/h	424	556	720	588	724	884	623	765	973	707	918	1152	782	1158	1486
Water pressure drop (3)	kPa	5	8	13	7	10	14	8	11	17	4	6	9	6	11	17
Air flow	m3/h	320	450	640	470	605	785	488	615	814	570	771	1011	642	1022	1393
Power input	W	40	50	65	50	65	90	52	73	107	86	127	182	109	169	244
Sound power level (4)	dB/A	35	43	52	43	49	56	44	51	58	47	54	61	49	60	67
Additional coil heating capacity DF (3)	kW	3.21	3.96	4.80	4.04	4.65	5.30	4.21	4.78	5.51	5.69	6.83	7.91	5.50	7.14	8.35
Water flow (3)	l/h	282	347	421	355	408	465	369	419	483	499	600	694	483	627	733
Water pressure drop (3)	kPa	10	14	20	6	8	10	9	11	14	17	23	30	14	23	30

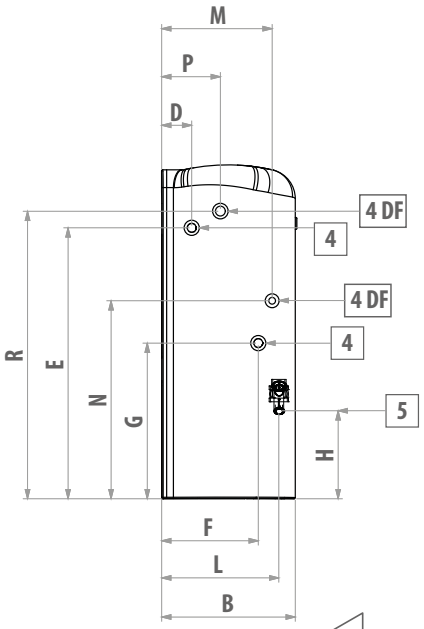
(1) Water temperature 7 / 12°C, air temperature D.B. 27°C, W.B. 19°C (47% relative humidity)
(2) Inlet water temperature 50°C, water flow rate same as in cooling mode, air temperature 20°C
(3) Water temperature 70 / 60°C, air temperature 20°C
(4) Sound power measured according to standards ISO 3741 and ISO 3742
Power supply 230-1-50 (V-ph-Hz)

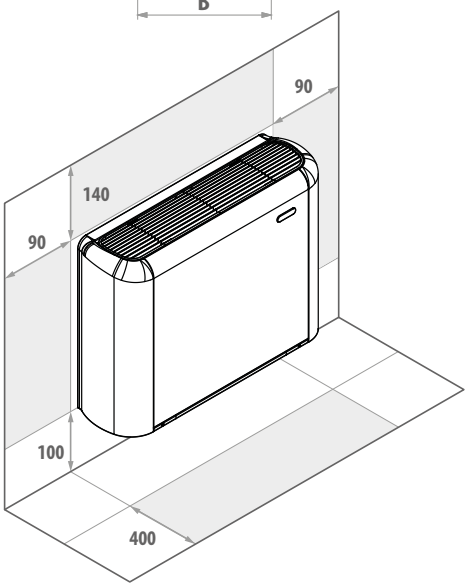
Not all the models are available in all capacities. Please see the below matrix to check availability:

	Capacity (kW)								
	03	**05**	**06**	**08**	**12**	**15**	**18**	**21**	**26**
Model	1.1	1.5	1.7	2.4	3.5	4.4	5.2	6.5	7.8
VFL		●	●	●	●	●	●	●	
VFC	●	●	●	●	●	●	●	●	
VFU					●	●	●	●	●

VFL MODEL DIMENSIONAL DRAWING



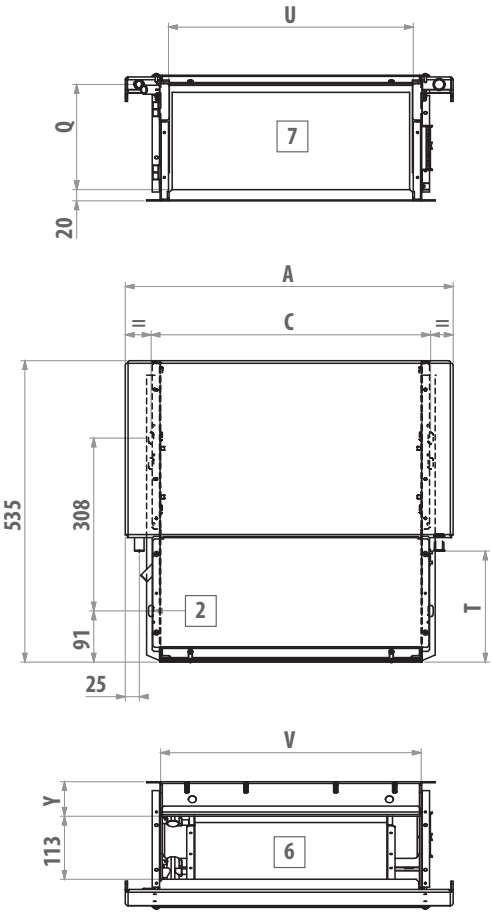


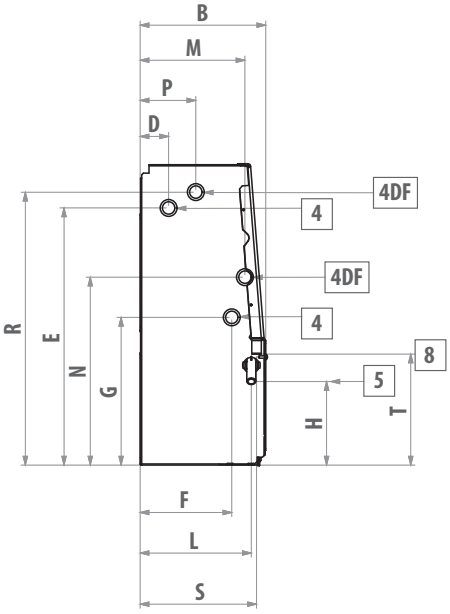


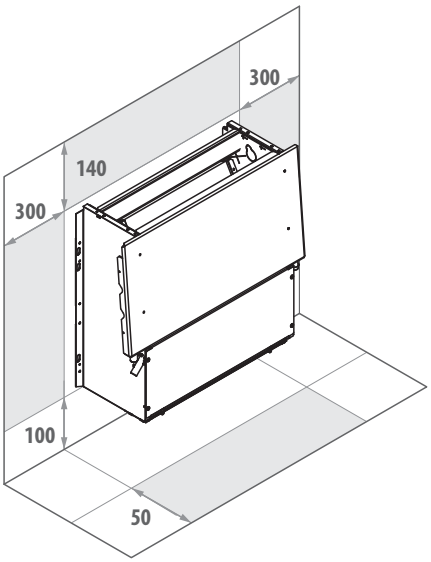
LEGEND	
1	Usable space for plumbing connections
2	Slots for installation on the wall
3	Usable space for electrical connections
4	Standard heat exchanger water connections
4DF	DF 1-row additional heat exchanger water connections
5	Condensate drainage

Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	L mm	M mm	N mm	P mm	R mm	4 "	4DF "	5 mm	kg
05 - 06	774	226	498	51	458	163	263	149	198	187	335	99	486	1/2	1/2	16	21
08	984	226	708	51	458	163	263	149	198	187	335	99	486	1/2	1/2	16	27
12 - 15	1194	226	918	51	458	163	263	149	198	187	335	99	486	1/2	1/2	16	33
18	1194	251	918	48	497	185	259	155	220	195	348	120	478	3/4	1/2	16	34
21	1404	251	1128	48	497	185	259	155	220	195	348	120	478	3/4	1/2	16	43

VFC MODEL DIMENSIONAL DRAWING



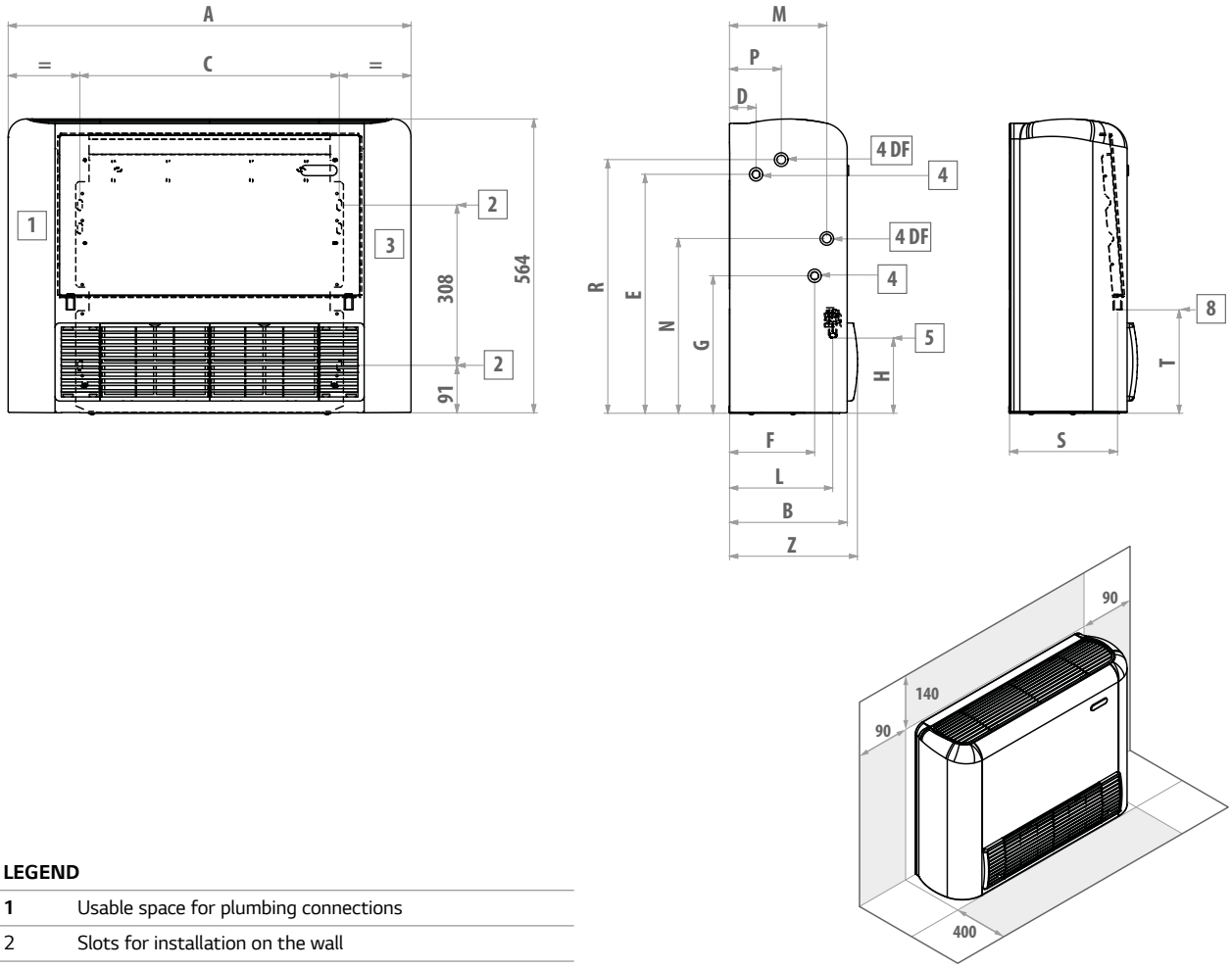




LEGEND	
2	Slots for installation on the wall
4	Standard heat exchanger water connections
4DF	DF 1-row DF additional heat exchanger water connections
5	Drain outlet for vertical installation
6	Air outlet
7	Air intake
8	Drain outlet for horizontal installation

	A	B	C	D	E	F	G	H	L	M	N	P	Q	R	S	T	U	V	Y	4	4DF	5
Size	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	"	"	mm	mm	mm	"	"	mm
03 - 05 - 06	584	224	498	51	458	163	263	149	198	187	335	99	189	486	208	198	436	464	61	1 / 2"	1 / 2"	16
08	794	224	708	51	458	163	263	149	198	187	335	99	189	486	208	198	646	674	61	1 / 2"	1 / 2"	16
12 - 15	1004	224	918	51	458	163	263	149	198	187	335	99	189	486	208	198	856	884	61	1 / 2"	1 / 2"	16
18	1004	249	918	48	497	185	259	155	220	195	348	120	215	478	234	208	856	884	67	3 / 4"	1 / 2"	16
21	1214	249	1128	48	497	185	259	155	220	195	348	120	215	478	234	208	1066	1094	67	3 / 4"	1 / 2"	16

VFU MODEL DIMENSIONAL DRAWING



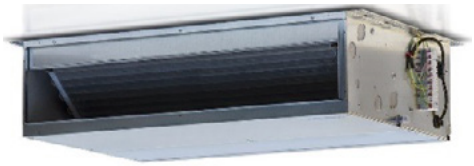
LEGEND

1	Usable space for plumbing connections
2	Slots for installation on the wall
3	Usable space for electrical connections
4	Standard heat exchanger water connections
4DF	DF 1-row DF additional heat exchanger water connections
5	Condensate drainage vertical installation
8	Condensate drainage horizontal installation

Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	L mm	M mm	N mm	P mm	R mm	S mm	T mm	Z mm	4 "	kg
12 - 15	1194	226	918	51	458	163	263	149	198	187	335	99	486	208	198	246	1/2	35
18	1194	251	918	48	497	185	259	155	220	195	348	120	478	234	208	271	3/4	36
21 - 26	1404	251	1128	48	497	185	259	155	220	195	348	120	478	234	208	271	3/4	45

VFY MODEL MEDIUM HEAD DUCT UNITS

Performance and compact design for recessed ceiling installations



The VFY ducted range has been manufactured for air conditioning interiors where the installation of high performance medium head units with reduced overall dimensions is necessary. The heat exchanger enables VFY model units to be used under a whole variety of operating conditions. The weight-bearing structure houses a 3- or 4-rows exchanger which can be combined with an additional 1 or 2 rows exchanger for exceptional performance even with low temperature differentials. The heat exchangers can be optimized for centralized applications such as district cooling. VFY model units is designed for horizontal ceiling installation. The main condensate drip tray is situated inside the structure of the unit and is at positive pressure relative to the drain outlet to facilitate condensate drainage.

A wide range of wall mounted controllers are available, including controllers of an electromechanical type and microprocessor controllers with display.

Heating elements complete with safety devices are available to supplement the hydronic system.

VFY MODEL DUCT UNITS COMPONENTS

Structure
Built from galvanized steel with heat and sound insulation through Class 1 self-extinguishing panels. Reduced height allows this unit to be mounted in a horizontal position in a false ceiling. The structure incorporates a drip tray and condensate drain outlet.

Heat exchanger
High efficiency 3 and 4 rows heat exchanger made with copper piping and aluminium fins blocked to piping by mechanical expansion provided with brass manifolds and air vent valve. The heat exchanger usually comes with water connections mounted on the left, but it can be turned by 180°C. High-efficiency heat exchangers optimized for district cooling applications are also available on request.

Electric Motor
Single-phase asynchronous multi-speed electric motor with permanently connected capacitor and thermal protector, mounted on vibration-damping supports.

Fan
Double suction centrifugal Fans made with ABS only aluminium, with statically and dynamically balanced forward-curving blades, directly coupled to the electric motor.

Air Filter
Washable air filter made of acrylic fibre, filtration class G2. G3 or G4, applied on the air intake; may be pulled out from below the unit.

VFY MODEL DUCT UNITS ACCESSORIES

ACCESSORIES

Electromechanical control panels	
CD	Recess wall-mounted speed switch
CDE	Wall mounted speed selector
TC	Thermostat for minimum water temperature in heating mode (42 °C)
Electronic microprocessor control panels with display	
COB	Finishing plate for LED 503 controller, RAL9005 black
COG	Finishing plate for LED 503 controller, RAL7031 grey
COW	Finishing plate for LED 503 controller, RAL9003 white
DIST	MY COMFORT controller spacer for wall mounting
EVO-2-TOUCH	2.8" touch screen user interface for EVO control
EVOBOARD	Circuit board for EVO control
EVODISP	User interface with display for EVO controller
EYNAVEL	Device for Wi-Fi or Bluetooth communication between EVOBOARD and smartphone
LED503	Recessed wall-mounted electronic display controller LED 503
MCBE	MYCOMFORT BASE electronic controller with display
MCLE	Microprocessor control with display MY COMFORT LARGE
MCME	MYCOMFORT MEDIUM electronic controller with display
MCSUE	Humidity sensor for MY COMFORT (medium e large), EVO
MCSWE	Water sensor for MYCOMFORT and EVO controllers
Electronic microprocessor control panels	
TED 2T	Electronic controller for AC fan control and one ON/OFF 230 V valve
TED 4T	Electronic controller for AC fan control and two ON/OFF 230 V valves
TED SWA	Water temperature sensor for TED controls
Power interface and regulating louver controllers	
KP	Power interface for connecting in parallel up to 4 fun coil units to the one controller
Electrical heating elements	
RE	Heating element with installation kit, relay box and safety devices
Air inlet and outlet grilles	
GA	Aluminium air intake grille, with frame
GM	Aluminium air outlet grille with 2-row fins and subframe
Valves	
V2VDF+STD	2-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main and additional heat exchanger
V2VSTD	2-way valve, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
V3VDF	3-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for additional heat exchanger
V3VSTD	2-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
VPIC	2-way valves pressure independent. ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
Plenum, air intake modules, air inlet and outlet connectors and cabinets	
MAF90	Air intake module with G3 air filter
MAFO	Air intake module with G4 air filter
MAFO90	Air intake module with G4 air filter
PAF	Intake and delivery plenum, not insulated, with spigot Ø 200 mm
PMA	Intake and delivery plenum, not insulated, with spigot Ø 200 mm
PMAC	Intake and delivery plenum, insulated, with spigot Ø 200 mm
R90	90° uninsulated air inlet/outlet connector
R90C	90° uninsulated air inlet/outlet connector
RD	Straight uninsulated air inlet/outlet connector
RDC	Straight insulated air inlet/outlet connector
Flexible ducts - caps	
TFA	Not insulated flexible ducts, Ø 200 mm (6 m length indivisible)
TFM	Insulated flexible ducts, Ø 200 mm (6 m length indivisible)
TP	Plastic cap Ø 200 mm
Air inlet and outlet plenum box	
CA	Air Inlet plenum box with double row grille
CAF	Air Inlet plenum box with double row grille 300 x 600 mm and filter G2
CM	Insulated air outlet plenum box with grille
Accessories	
KSC	Condensate drainage pump kit
VRC	Auxiliary water drip tray
Sanitisation system	
JONIX - mic	Sanitizing module JONIX™ (ducted installation)
JONIX - pln	Sanitizing module JONIX™ (installation on plenum)

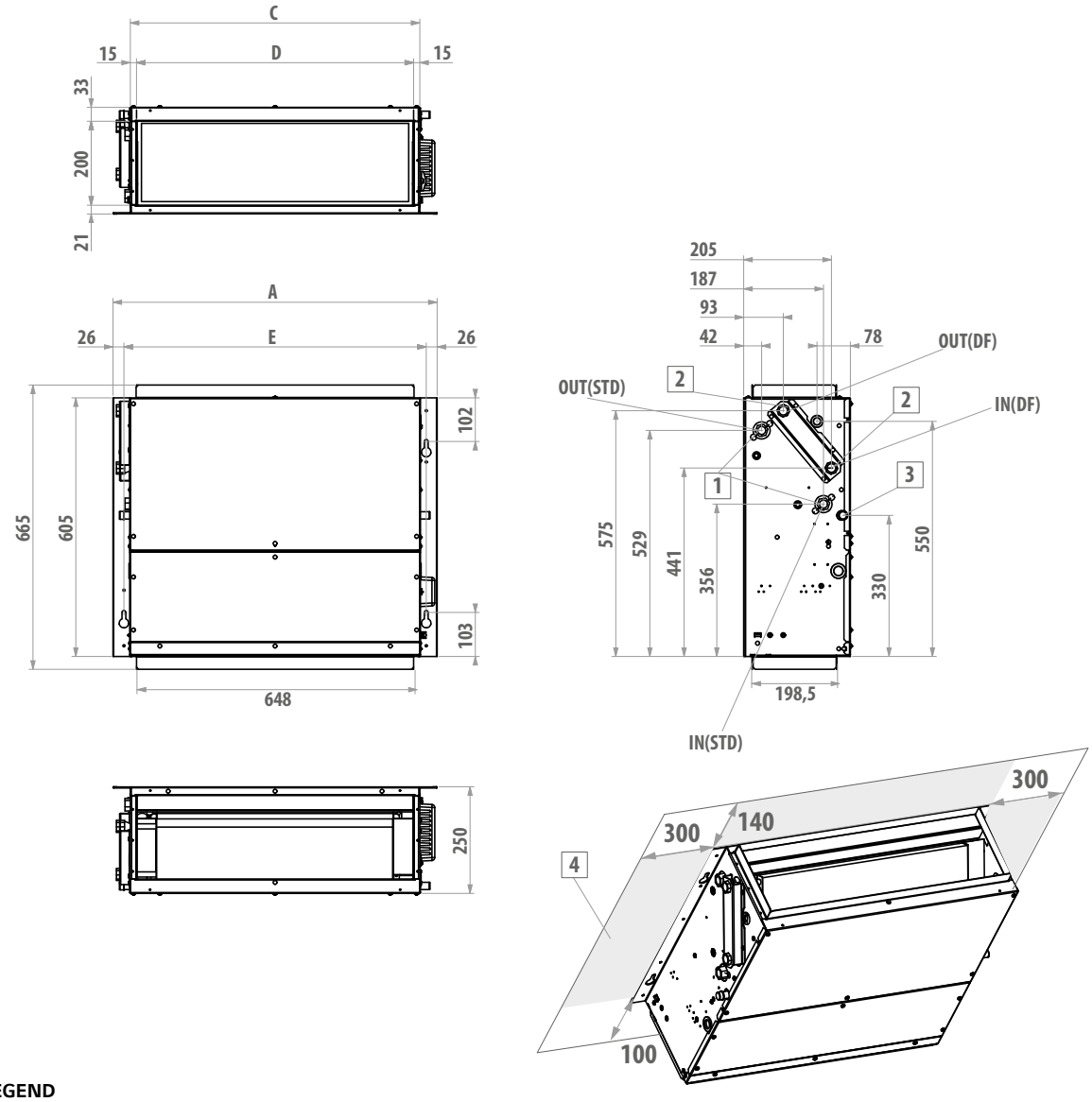
VFY MODEL DUCT UNITS RATED TECHNICAL DATA

Model VFY with AC motor

			06			07			08			10			15			18			24		
Speed			min	med	max	min	med	max	min	med	max	min	med	max	min	med	max	min	med	max	min	med	max
Declared speed			2,5,7			1,5,7			1,5,7			1,6,7			1,6,7			1,6,7			5,6,7		
Rated airflow		m3/ h	109	246	276	171	275	341	171	275	341	195	360	402	333	687	760	333	687	760	1050	1163	1289
Available static pressure		Pa	10	50	63	19	50	77	19	50	77	19	50	63	12	50	61	12	50	61	40	50	60
Power input		w	24	57	82	34	69	106	34	69	106	34	85	106	76	167	192	76	167	192	235	280	332
Total cooling capacity	(l)	kW	0.92	1.72	1.90	1.27	1.90	2.27	1.36	2.11	2.53	1.57	2.69	2.96	2.22	4.22	4.63	2.44	4.79	5.23	6.15	6.66	7.21
Sensible cooling capacity	(l)	kW	0.61	1.21	1.34	0.89	1.34	1.59	0.93	1.44	1.73	1.07	1.86	2.03	1.60	3.09	3.39	1.70	3.33	3.64	4.51	4.88	5.29
FCEER class			D																				
Waterflow	(2)	1/h	160	306	340	222	339	408	239	374	453	274	476	527	394	753	828	432	850	930	1095	1191	1295
Water pressure drop	(2)	kPa	2	5	6	3	6	8	4	8	12	3	7	9	2	7	8	3	10	12	13	16	18
Heating capacity	(3)	kW	0.88	1.81	1.99	1.33	1.98	2.35	1.40	2.20	2.68	1.59	2.80	3.10	2.54	4.76	5.17	2.63	5.03	5.49	6.68	7.22	7.80
FCCOP class			D																				
Water flow	(3)	1/ h	153	315	346	231	345	408	244	382	466	276	488	538	442	827	898	457	875	955	1162	1256	1357
Water pressure drop	(3)	kPa	1	4	5	2	5	7	3	7	10	2	6	8	2	7	8	3	9	11	12	14	16
Standard coil - number of rows			3			3			4			4			3			4			3		
Total sound power level	(4)	dB(A)	28	49	52	39	48	54	39	48	54	39	50	54	38	55	58	38	55	58	61	63	69
Inlet + radiated sound power level	(4)	dB(A)	26	47	50	37	46	52	37	46	52	37	48	52	36	53	56	36	53	56	59	61	67
Outlet sound power level	(4)	dB(A)	25	46	49	36	45	51	36	45	51	36	47	51	35	53	55	35	52	55	58	60	66

(1) Water temperature 7 / 12°C, air temperature D.B. 27°C, W.B. 19°C (47% relative humidity) according to EN1397:2015
(2) Water temperature 7 / 12°C, air temperature D.B. 27°C, W.B. 19°C (47% relative humidity)
(3) Water temperature 45 / 40°C, air temperature 20°C
(4) Sound power measured according to standards ISO 3741 and ISO 3742
Power supply 230-1-50 (V-ph-Hz)

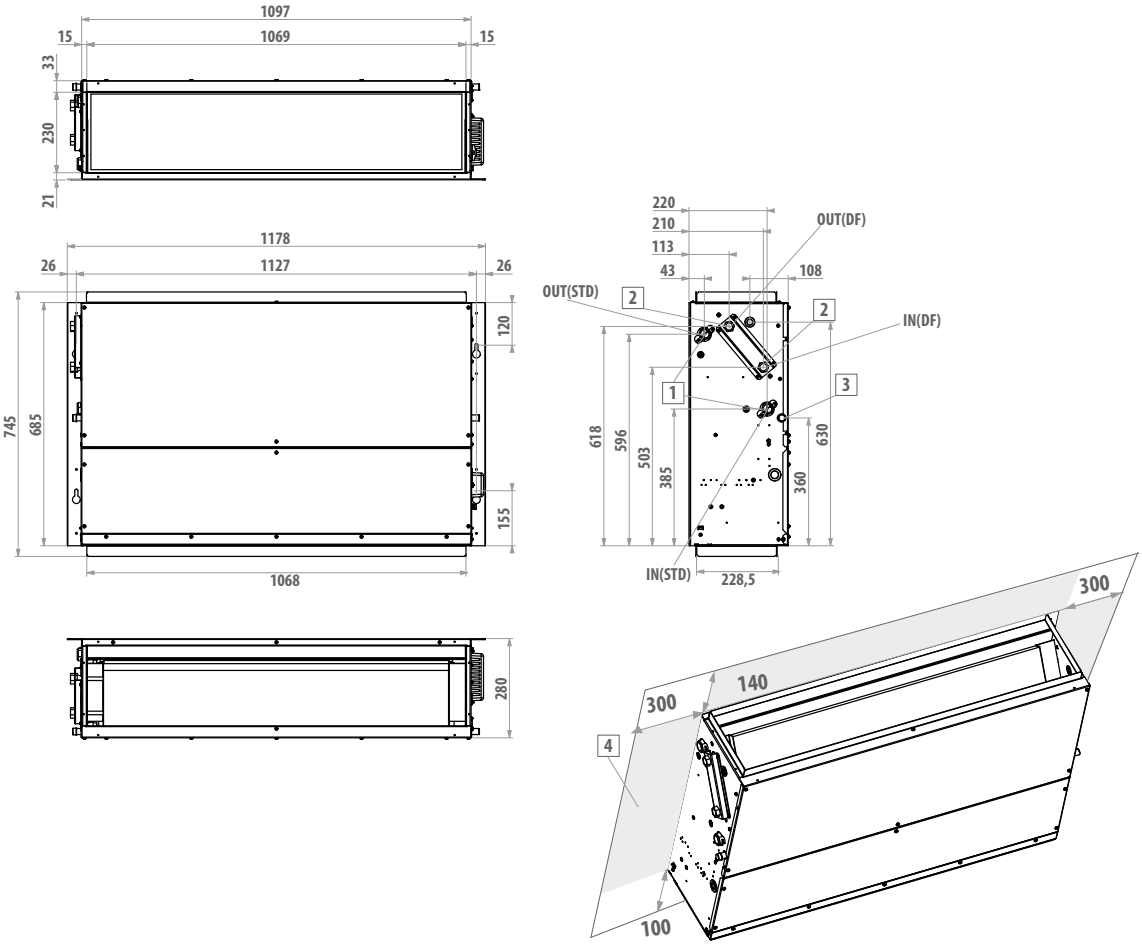
Y MODEL DUCT UNITS DIMENSIONAL DRAWING



LEGEND

1	Water connections standard heat exchanger ø 1/2" female gas
2	Water connections additional heat exchanger ø 1/2" female gas
3	Condensate discharge

Size	A mm	C mm	D mm	E mm	1 "	3 mm	kg
06	758	677	648	707	1/2	17	24
07 - 08	758	677	648	707	1/2	17	25
10	968	887	858	917	1/2	17	33



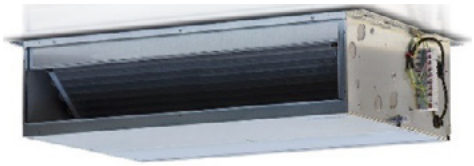
LEGEND

1	Water connections standard heat exchanger ø 3/4" female gas
2	Water connections additional heat exchanger ø 1/2" female gas
3	Condensate discharge

Size	1 "	2 "	kg	3 mm
15 - 18	3/4	1/2	45	17
24	3/4	1/2	51	17

VFZ MODEL HIGH-HEAD DUCT UNITS

Flexible installation profiles to accommodate your every need



The VFZ range of thermal ventilating units has been developed for air conditioning rooms where the use of ducted hydronic indoor units capable of assuring available heads of up to 180 Pa and cooling capacities of 3 to 23 kW is required. The units are characterised by a high flexibility of installation, as they can in fact be positioned either vertically or horizontally and the orientation of the air intake in the rear or front part of the unit itself can be modified by simply moving the inspection panel. All units have a standard configuration for the intake of fresh air and slots for rapidly fixing them to the wall or ceiling.

Their reduced height (280 mm for size 24 and 350 mm for larger sizes) enables them to be accommodated in normal false ceiling and the availability of a wide range of plumbing and ventilation accessories makes it easy to integrate them into air conditioning systems. The units are available in standard and high-efficiency models, depending on the finned block exchanger used, so that they can be better adapted to the needs of the room to be air-conditioned.

VFZ MODEL MAIN COMPONENTS

Structure

Made of galvanized sheet steel insulated with sound-deadening, heat-insulating, self-extinguishing closed-cell material to reduce noise emissions and prevent the formation of condensation the outside surface.

Condensation collection & drainage system

It consists of two insulated galvanized sheet steel trays designed for horizontal and vertical installation.

Heat exchanger

It is composed of copper tubing and aluminium fins fixed by expansion. The water connections are reversible. An additional exchanger is available for installing the unit in 4-pipe systems.

Electric motor

Three-speed electrical motor, mounted on vibration damping couplings, directly connected to the fans, with permanently activated capacitor and winding thermal protection.

Fan

The aluminium fans are of the centrifugal type, with double suction and staggered blades to reduce noise emissions. They are statically and dynamically balanced to minimize the stresses transmitted to the motor shaft.

Filter module

The air filter, made of regenerable acrylic fibre, is available as an accessory in filtration classes G2 or G4.

VFZ MODEL ACCESSORIES

ACCESSORIES

Electromechanical control panels	
CD	Recess wall-mounted speed switch
IPM	Circuit board for connection of UTN 30-30A-40-40A to control panels.
TA2	Electromechanical room thermostat with summer/winter selection
TC	Thermostat for minimum water temperature in heating mode (42 °C)
TD	Wall mounted control with speed selector, thermostat and summer-winter selector
TDC	Wall mounted control with speed selector and thermostat
Electronic microprocessor control panels with display	
COB	Finishing plate for LED 503 controller, RAL9005 black
COG	Finishing plate for LED 503 controller, RAL7031 grey
COW	Finishing plate for LED 503 controller, RAL9003 white
DIST	MY COMFORT controller spacer for wall mounting
EVO-2-TOUCH	2.8" touch screen user interface for EVO control
EVOBOARD	Circuit board for EVO control
EVODISP	User interface with display for EVO controller
EYNAVEL	Device for Wi-Fi or Bluetooth communication between EVOBOARD and smartphone
LED503	Recessed wall-mounted electronic display controller LED 503
MCBE	MYCOMFORT BASE electronic controller with display
MCLE	Microprocessor control with display MY COMFORT LARGE
MCME	MYCOMFORT MEDIUM electronic controller with display
MCSUE	Humidity sensor for MY COMFORT (medium e large), EVO
MCSWE	Water sensor for MYCOMFORT and EVO controllers
Electronic microprocessor control panels	
TED 2T	Electronic controller for AC fan control and one ON/OFF 230 V valve
TED 4T	Electronic controller for AC fan control and two ON/OFF 230 V valves
TED SWA	Water temperature sensor for TED controls
Power interface and regulating louver controllers	
CSD	Recess mounted controller for opening and closing the SM motor-driven regulating louver
KP	Power interface for connecting in parallel up to 4 fun coil units to the one controller
Auxiliary water drip trays, insulating shell, condensate drainage pump	
KSC	Condensate drainage pump kit
Electrical heating elements	
RE	Heating element with installation kit, relay box and safety devices
Air inlet and outlet grilles	
GA	Aluminium air intake grille, with frame
GM	Aluminium air outlet grille with 2-row fins and subframe
GR	Air intake grille with subframe
GRF	Air intake grille with subframe and filter
External air intake louvers	
PA90	Motor-driven external air intake louver
Valves	
V2VDF+STD	2-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main and additional heat exchanger
V2VSTD	2-way valve, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
V3VDF	3-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for additional heat exchanger
V3VSTD	2-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
VPIC	2-way valves pressure independent, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
Plenum, air intake modules, air inlet and outlet connectors and cabinets	
G90	90° connection for intake/delivery
MAF	Air intake module with G2 air filter
MAFO	Air intake module with G4 air filter
PCOC	Junction panel with rectangular duct
PCOF	Junction panel with flexible circular duct Ø 200
Flexible ducts - caps	
TFA	Not insulated flexible ducts, Ø 200 mm (6m length indivisible)
TFM	Insulated flexible ducts, Ø 200 mm (6m length indivisible)
TP	Plastic cap Ø 200 mm
Air inlet and outlet plenum box	
CA	Air Inlet plenum box with double row grille
CAF	Air Inlet plenum box with double row grille 300 x 600 mm and filter G2
CM	Insulated air outlet plenum box with grille
Accessories	
UYBP	Hot water post-heating exchanger kit
VRCH	Auxiliary water drip tray for horizontal installation units
VRCV	Auxiliary water drip tray for vertical installation units
Sanitisation system	
JONIX - mic	Sanitizing module JONIX™ (ducted installation)
JONIX - pln	Sanitizing module JONIX™ (installation on plenum)

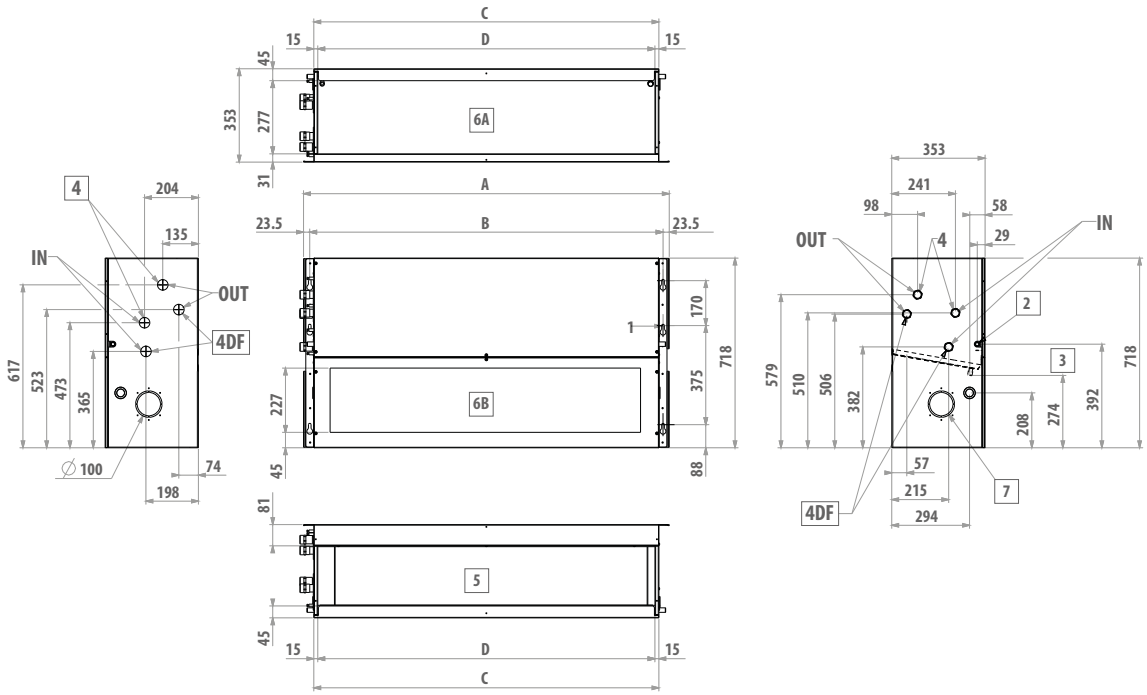
VFZ MODEL RATED TECHNICAL DATA

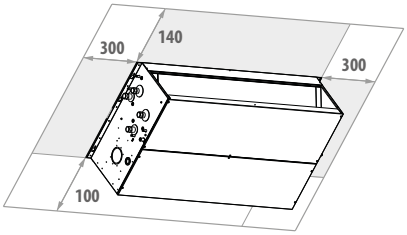
Model VFZ with AC motor

		24			40			54			76		
Fan speed		**min**	**med**	**max**	**min**	**med**	**max**	**min**	**med**	**max**	**min**	**med**	**max**
Air flow	m3/h	1208	1384	1609	1485	1898	2380	2092	2641	3206	3067	3622	4287
Available static pressure	Pa	38	50	67	30	50	78	31	50	74	36	50	71
Power input	W	290	380	505	370	535	750	870	1090	1300	650	820	1150
Total cooling capacity (1)	kW	6.32	7.01	7.83	8.79	10.7	12.6	12.5	14.9	17.2	18.0	20.4	23.2
Sensible cooling capacity (1)	kW	5.14	5.77	6.55	6.73	8.28	9.98	9.48	11.5	13.5	14.0	16.1	18.6
Water flow(1)	l/h	1085	1202	1344	1509	1827	2163	2145	2561	2953	3082	3505	3979
Water pressure drop (1)	kPa	17	20	24	15	21	29	21	29	37	16	20	25
Heating capacity (2)	kW	7.74	8.52	9.46	10.8	13.0	15.3	15.2	18.1	20.8	22.4	25.4	28.7
Water pressure drop (2)	kPa	13	16	20	12	17	23	17	23	30	16	20	25
Additional coil heating capacity DF (3)	kW	8.01	8.53	9.13	12.3	14.4	16.4	16.9	19.5	21.9	21.9	24.3	27.1
Water flow (3)	l/h	703	749	801	1080	1260	1441	1481	1711	1925	1918	2132	2379
Water pressure drop (3)	kPa	10	11	13	8	10	13	11	14	17	12	15	18
Standard coil - number of rows	n°	3			3			4			5		
Additional coil DF - number of rows	n°	1			2			2			2		
Total sound power level (4)	dB(A)	62	67	72	60	67	74	69	73	78	70	74	79
Inlet + radiated sound power level (4)	dB(A)	60	64	70	58	65	72	67	71	76	68	72	77
Outlet sound power level (4)	dB(A)	58	63	69	57	64	71	66	70	75	67	71	76

(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
Power supply 230-1-50 (V-ph-Hz

VFZ MODEL DUCT UNITS DIMENSIONAL DRAWING

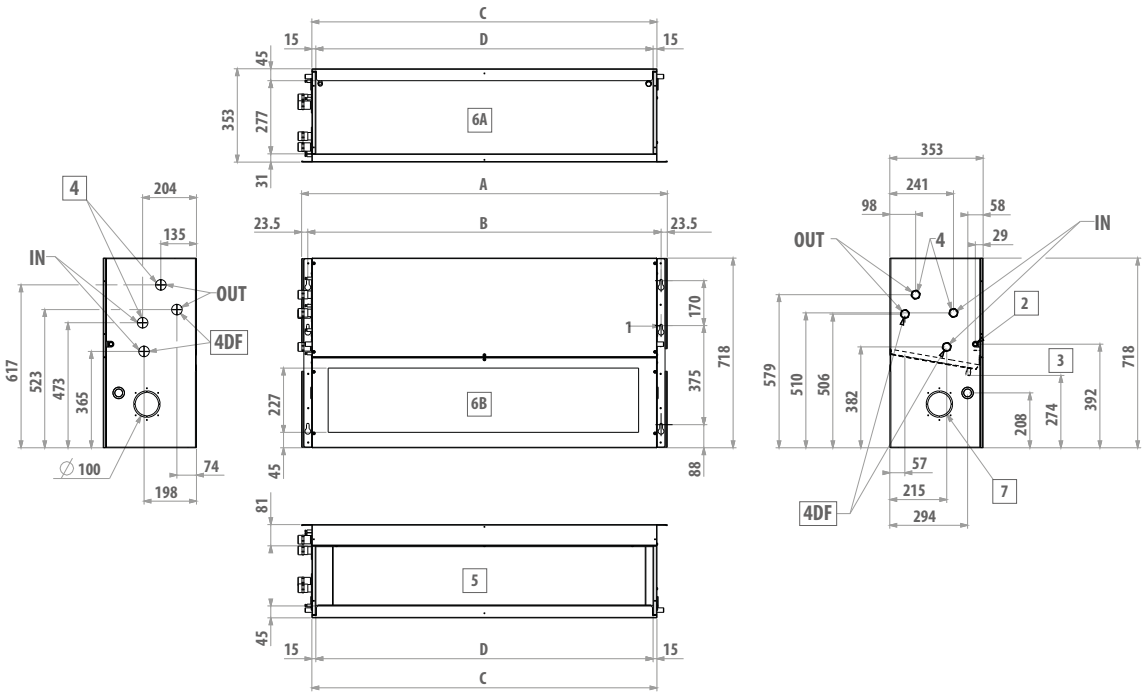


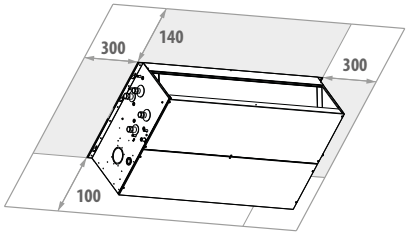


LEGEND

1	No. 6 quick-coupling slots
2	Condensate drainage horizontal installation
3	Condensate drainage vertical installation
4	Water connections on the right
4DF	Water connections additional heat exchanger
5	Air outlet
6	Air intake
6-A	supply condition
6-B	modifiable during installation
7	Circular pre-cut slot (Ø 100 mm) for intake of external air

Size	A mm	B mm	C mm	D mm	4 "	4DF "	2 mm	3 mm	kg
24	1174	1127	1096	1066	3/4	3/4	17	17	49





LEGEND

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4DF	Water connections additional heat exchanger
5	Air outlet
6	Air intake
6-A	supply condition
6-B	modifiable during installation
7	Circular pre-cut slot (Ø 100 mm) for intake of external air

VFZ	A	B	C	D	2	3	4	4DF
Size	mm	mm	mm	mm	mm	mm	"	"
40	1174	1127	1096	1066	17	17	1	1
54	1384	1337	1306	1276	17	17	1	1
76	1594	1547	1516	1486	17	17	1	1

LG Business Solutions

4 WAY CASSETTE

With flexible design and convenience in mind, the 4 way cassette comprises a comprehensive combination of technologically advanced functions to provide maximum comfort in any space.

4 WAY CASSETTE

Stylish Design Panel
(U-style 4Way cassette)

New 4 way cassette panel adapted a unibody shape and fits into the ceiling cell size.

Compact size
Panel size is fit into the ceiling tile

Interior fit

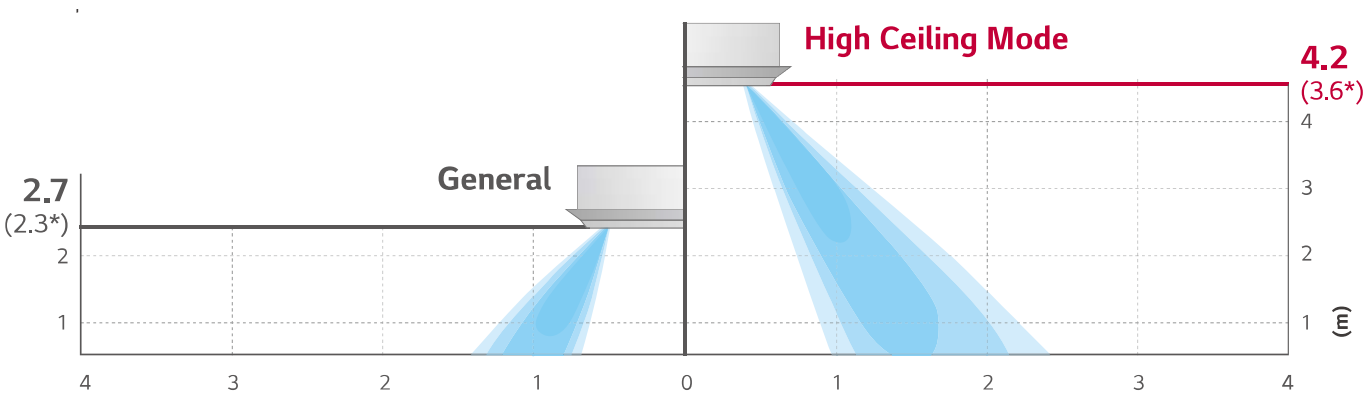
Lineless surface

Detachable corner

U-Style panel corresponds to the PT-QCHW0 panel for WF4A018 / 027 / 032 / 041 CG0A models.

High Ceiling Mode

Airflow in a space with 4.2m ceiling height is possible with this indoor unit. Furthermore, air flow can be strengthened by adjusting the fan speed.

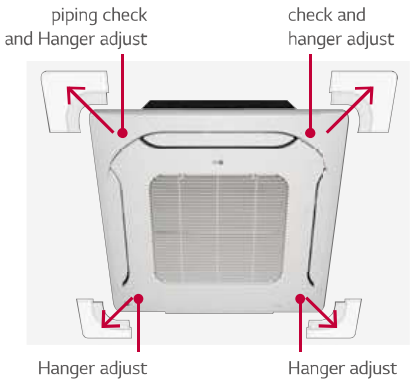


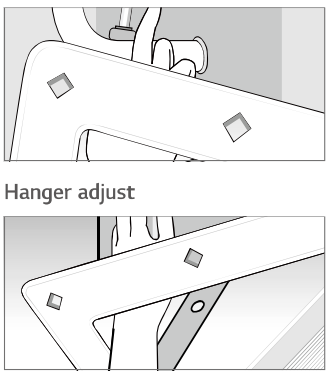
For models less than 9.0kW

Convenient Panel Installation

The detachable corner design makes it easy to adjust the hanger during installation and helps to easily check leakages in the drain connection pipe. Moreover, button type holder design makes it easy to install the panel to the body.

Detachable corner design





One push panel

The detachable corner design is only applicable to the U-Style panel

4 WAY CASSETTE

4 Way Ceiling Mounted Cassette								
Model			Unit	WF4A018CG0A	WF4A027CG0A	WF4A032CG0A	WF4A041CG0A	WF4A060CG0A
Power Supply			V, ø. Hz	220-230-240, 1, 50/60	220-230-240, 1, 50/60	220-230-240, 1, 50/60	220-230-240, 1, 50/60	220-230-240, 1, 50/60
Running Current by Voltage				0.37-0.37-0.37	0.38-0.38-0.38	0.40-0.40-0.40	0.35-0.42-0.42	0.62-0.69-0.69
Capacity	Cooling	Condition A	kW(kcal/h)	1.8(1,548)	2.7(2,322)	3.2(2,752)	4.1(3,525)	6.0(5,159)
		Condition B		1.2(1,032)	1.8(1,548)	2.2(1,892)	2.8(2,408)	4.0(3,439)
		Condition C		1.5(1,290)	2.3(1,978)	2.8(2,408)	3.6(3,095)	4.9(4,213)
		Condition D		0.7(602)	1.2(1,032)	1.4(1,204)	1.8(1,548)	2.5(2,150)
	Heating	Condition A	kW(kcal/h)	1.9(1,634)	2.7(2,322)	3.3(2,837)	4.5(3,869)	7.2(6,191)
		Condition B		2.2(1,892)	3.1(2,666)	3.9(3,353)	5.4(4,643)	8.5(7,309)
Water Flow Rate	Cooling	Condition A	LPM	5.7	8.2	10.0	13.5	19.0
		Condition B		4.6	6.6	8.0	10.8	14.4
		Condition C		5.7	8.2	10.0	13.5	19.0
		Condition D		3.4	4.9	6.0	8.1	12.1
	Heating	Condition A	LPM	6.1	8.6	10.0	13.5	22.5
		Condition B		5.7	8.2	10.0	13.5	19.0
Head Loss	Cooling	Condition A	kPa	21.5	32.0	47.7	43.7	38.2
		Condition B		13.7	20.3	30.3	27.8	23.6
		Condition C		21.5	32.0	47.7	43.7	38.2
		Condition D		8.1	12.0	17.9	16.4	17.0
	Heating	Condition A	kPa	30.3	40.7	53.8	56.5	57.2
		Condition B		26.2	36.5	53.8	56.5	42.1
Power Input		Nominal	W	12	15	20	43	73
Running Current		Nominal	A	0.37	0.38	0.40	0.42	0.69
Fan		Type	-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
		Air Flow Rate (H/M/L)	m³/min	6.5/5.5/5.0	7.0/6.5/6.0	8.5/8.0/7.0	12.0/10.0/8.0	19.0/17.0/15.0
Fan Motor		Type	-	BLDC	BLDC	BLDC	BLDC	BLDC
		Drive	-	CCW	CCW	CCW	CCW	CCW
		Output	W x No.	30x1	30x1	30x1	43x1	40x1
		FLA(Full Load Ampere)	A	0.37	0.38	0.40	0.42	0.69
Dimensions		Net (W x H x D)	mm	570 x 214 x 570	570 x 214 x 570	570 x 214 x 570	570 x 256 x 570	840 x 204 x 840
Weight		Net	kg	12.9	12.9	12.9	14.0	20.8
		Shipping	kg	15.7	15.7	15.7	16.3	24.9
Air Filter		Type	-	-	-	-	-	-
Temperature Control			-	Microprocessor. Thermostat for cooling and heating				
Sound Absorbing / Thermal Insulation Material			-	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene
Protection Device			-	Fuse	Fuse	Fuse	Fuse	Fuse
Water Connecting Pipes		Inlet	-	BSPF G 3/4"(male)	BSPF G 3/4"(male)	BSPF G 3/4"(male)	BSPF G 3/4"(male)	BSPF G 3/4"(male)
		Outlet	-	BSPF G 3/4"(male)	BSPF G 3/4"(male)	BSPF G 3/4"(male)	BSPF G 3/4"(male)	BSPF G 3/4"(male)
		Drain (O.D. / I.D.)	mm(inch)	Ø 32.0(1-1/4) / 25.0(31/32)	Ø 32.0(1-1/4) / 25.0(31/32)	Ø 32.0(1-1/4) / 25.0(31/32)	Ø 32.0(1-1/4) / 25.0(31/32)	Ø 32.0(1-1/4) / 25.0(31/32)
Sound Pressure Level		Cooling (H/M/L)	dB(A)	35/34/33	38/37/35	43/40/38	48/43/38	48/46/42
		Heating (H/M/L)	dB(A)	35/34/33	38/37/35	43/40/38	48/43/38	48/46/42
Sound Power Level		Cooling (H/M/L)	dB(A)	40/39/38	44/42/40	50/46/44	56/50/45	55/53/49
		Heating (H/M/L)	dB(A)	40/39/38	44/42/40	50/46/44	56/50/45	55/53/49
Connecting Cable		Communication Cable (VCTF-SB)	mm²×cores	1.0 ~ 1.5	1.0 ~ 1.5	1.0 ~ 1.5	1.0 ~ 1.5	1.0 ~ 1.5
Decoration Panel *1 (Accessory)		Name	-	PT-QCHW0	PT-QCHW0	PT-QCHW0	PT-QCHW0	PT-MCHW0
		Dimensions (W x H x D)	mm	620 x 34 x 620	620 x 34 x 620	620 x 34 x 620	620 x 34 x 620	950 x 35 x 950
		Colour	-	Morning fog	Morning fog	Morning fog	Morning fog	Morning fog
		RAL Code	-	120-4	120-4	120-4	120-4	120-4
Decoration Panel *2 (Accessory)		Name	-	-	-	-	-	-
		Dimensions (W x H x D)	mm	-	-	-	-	-
		Colour	-	-	-	-	-	-
			-	-	-	-	-	-

4 Way Ceiling Mounted Cassette							
Model			Unit	WF4A072CG0A	WF4A090CG0A	WF4A105CG0A	WF4A130CG0A
Power Supply			V, ϕ, Hz	220-230-240, 1, 50/60	220-230-240, 1, 50/60	220-230-240, 1, 50/60	220-230-240, 1, 50/60
Running Current by Voltage				0.75-0.88-0.88	0.89-0.89-0.89	1.4-1.39-1.39	1.7-1.88-1.88
Capacity	Cooling	Condition A	kW(kcal/h)	7.2(6,191)	9.0(7,739)	10.5(9,028)	13.0(11,178)
		Condition B		4.8(4,127)	6.0(5,159)	7.0(6,019)	8.7(7,481)
		Condition C		5.8(4,987)	7.3(6,277)	8.5(7,309)	10.5(9,028)
		Condition D		2.9(2,494)	3.7(3,181)	4.3(3,697)	5.3(4,557)
	Heating	Condition A	kW(kcal/h)	7.9(6,793)	9.7(8,340)	11.1(9,544)	13.3(11,436)
		Condition B		9.3(7,997)	11.5(9,888)	13.4(11,522)	15.7(13,500)
Water Flow Rate	Cooling	Condition A	LPM	21.0	28.0	33.0	37.8
		Condition B		15.9	21.2	25.0	28.6
		Condition C		21.0	28.0	33.0	37.8
		Condition D		13.4	17.8	21.0	24.1
	Heating	Condition A	LPM	24.5	28.0	33.0	39.1
		Condition B		21.0	28.0	33.0	37.8
Head Loss	Cooling	Condition A	kPa	45.9	56.3	80.4	68.2
		Condition B		28.4	31.5	44.0	38.9
		Condition C		45.9	56.3	80.4	68.2
		Condition D		20.4	23.5	31.3	26.4
	Heating	Condition A	kPa	67.6	48.9	68.3	71.7
		Condition B		49.6	48.9	68.3	68.3
Power Input		Nominal	W	93	103	167	246
Running Current		Nominal	A	0.88	0.89	1.39	1.88
Fan		Type	-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
		Air Flow Rate (H/M/L)	m^3/min	21.0/19.0/17.0	25.0/21.0/19.0	31.0/28.0/25.0	41.0/36.0/30.0
Fan Motor		Type	-	BLDC	BLDC	BLDC	BLDC
		Drive	-	CCW	CCW	CCW	CCW
		Output	W x No.	40x1	156x1	156x1	136x1
		FLA(Full Load Ampere)	A	0.88	0.89	1.39	1.88
Dimensions		Net (W x H x D)	mm	840 x 204 x 840	840 x 246 x 840	840 x 246 x 840	840 x 288 x 840
Weight		Net	kg	20.8	23.2	23.2	25.1
		Shipping	kg	24.9	27.5	27.5	29.7
Air Filter		Type	-	-	-	-	-
Temperature Control			-	Microprocessor. Thermostat for cooling and heating			
Sound Absorbing / Thermal Insulation Material			-	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene	Foamed polystyrene
Protection Device			-	Fuse	Fuse	Fuse	Fuse
Water Connecting Pipes		Inlet	-	BSPF G 3/4"(male)	BSPF G 3/4"(male)	BSPF G 3/4"(male)	BSPF G 3/4"(male)
		Outlet	-	BSPF G 3/4"(male)	BSPF G 3/4"(male)	BSPF G 3/4"(male)	BSPF G 3/4"(male)
		Drain (O.D. / I.D.)	mm(inch)	Ø 32.0(1-1/4) / 25.0(31/32)	Ø 32.0(1-1/4) / 25.0(31/32)	Ø 32.0(1-1/4) / 25.0(31/32)	Ø 32.0(1-1/4) / 25.0(31/32)
Sound Pressure Level		Cooling (H/M/L)	dB(A)	51/48/46	51/47/43	55/53/51	57/53/50
		Heating (H/M/L)	dB(A)	51/48/46	51/47/43	55/53/51	57/53/50
Sound Power Level		Cooling (H/M/L)	dB(A)	57/55/52	59/54/51	63/61/58	65/61/57
		Heating (H/M/L)	dB(A)	57/55/52	59/54/51	63/61/58	65/61/57
Connecting Cable		Communication Cable (VCTF-SB)	mm^2×cores	1.0 ~ 1.5	1.0 ~ 1.5	1.0 ~ 1.5	1.0 ~ 1.5
Decoration Panel #1 (Accessory)		Name	-	PT-MCHW0	PT-MCHW0	PT-MCHW0	PT-MCHW0
		Dimensions (W x H x D)	mm	950 x 35 x 950	950 x 35 x 950	950 x 35 x 950	950 x 35 x 950
		Colour	-	Morning fog	Morning fog	Morning fog	Morning fog
		RAL Code	-	120-4	120-4	120-4	120-4
Decoration Panel #2 (Accessory)		Name	-	-	-	-	-
		Dimensions (W x H x D)	mm	-	-	-	-
		Colour	-	-	-	-	-
			-	-	-	-	-