

VEC

Coanda-effect fan coil for cassette installation



- **Very quiet**
- **Total comfort in every season**



DESCRIPTION

Thanks to a special air intake and flow grid, these units allow a coanda-effect air flow to be generated, parallel to the ceiling, creating optimal circulation inside the room to be air-conditioned. They are suitable to be installed inside a suspended ceiling.

FEATURES

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.

In addition to the traditional three-speed asynchronous motor for the "VECs", every unit can be supplied with a "VEC_I" Brushless-type inverter motor controlled by an inverter board.

Heat exchanger coil

With copper pipes and aluminium fins, the main coil has female gas water connections on the left side and the manifolds have air vents.

Units are available with a standard coil (20-50) and a larger coil (24-54). Only units with the standard coil can be combined with an additional electric or water coil with 1 row, both available as an accessory.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

Air filter

Fire resistance class 1 air filter.

ACCESSORY COMPULSORY

VEC_GL: Air intake and flow grid with adjustable Coanda-effect vents (white M9016 = lacquered white similar to Ral 9016).

Control panels and dedicated accessories

AERS031R: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric

heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

FMT10: Electronic thermostat for fan coil in 2/4 pipe systems.

PX2: Commutator switch.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

WMT05: Electronic thermostat with thermostated ventilation.

WMT06: Electronic thermostat with continuous ventilation.

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

VMF Components

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, VMF-E0X with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IR: User interface compatible with the AER503IR thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water temperature probe.

VMF-SW1: Extra water probe to be used for 4-pipe systems.

Common accessories

BV: Single row hot water heat exchanger.

RX: Armoured electric coil with safety thermostat.

VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It

can be installed on fan coils with connections on the right and on the left.

VCF41 - 42 - 43 - for main coil: 3-way motorised valve kit for the main coil. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

DSC: Condensate drainage device.

BC: Condensate drip.

VCF44 - 45 - for the secondary coil: The 3-way motorised valve kit for the secondary coil or an optional heat only coil. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

PCR1: Galvanised plate protection for the controls and the electrical element.

ACCESSORIES COMPATIBILITY

Accessories mandatory

Intake grid and distribution of the air

Model	Ver	20	24	30	34	40	44	50	54
VEC20GL (1)	.	*	*						
VEC30GL (1)	.			*	*				
VEC40GL (1)	.					*	*	*	*

(1) Mandatory accessory.

Control panels and dedicated accessories

Model	Ver	20	24	30	34	40	44	50	54
AER503IR (1)	.	*	*	*	*	*	*	*	*
FMT10	.	*	*	*	*	*	*	*	*
PX2	.	*	*	*	*	*	*	*	*
SA5 (2)	.	*	*	*	*	*	*	*	*
SIT3 (3)	.	*	*	*	*	*	*	*	*
SIT5 (4)	.	*	*	*	*	*	*	*	*
SW3 (2)	.	*	*	*	*	*	*	*	*
SW5 (2)	.	*	*	*	*	*	*	*	*
TX (1)	.	*	*	*	*	*	*	*	*
WMT05	.	*	*	*	*	*	*	*	*
WMT06	.	*	*	*	*	*	*	*	*
WMT10	.	*	*	*	*	*	*	*	*

(1) Wall-mount installation.

(2) Probe for AER503IR-TX thermostats, if fitted.

(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.

(4) Probe for AER503IR-TX thermostats, if fitted.

VMF Components

Model	Ver	20	24	30	34	40	44	50	54
VMF-E19	.	*	*	*	*	*	*	*	*
VMF-E3	.	*	*	*	*	*	*	*	*
VMF-E4X	.	*	*	*	*	*	*	*	*
VMF-IR	.	*	*	*	*	*	*	*	*
VMF-SW	.	*	*	*	*	*	*	*	*
VMF-SW1	.	*	*	*	*	*	*	*	*

Common accessories

Electric coil

Model	Ver	20	24	30	34	40	44	50	54
RX22 (1)	.	*	*						
RX32 (1)	.			*	*				
RX42 (1)	.					*	*		
RX52 (1)	.							*	*

(1) Requires a thermostat with heater management. Not available for sizes with an oversized main coil.

Protection for controls and electric resistance

Model	Ver	20	24	30	34	40	44	50	54
PCR1V	.	*	*	*	*	*	*	*	*

Water coil with 1 row

Model	Ver	20	24	30	34	40	44	50	54
BV122 (1)	.	*							
BV132 (1)	.			*					
BV142 (1)	.					*		*	

(1) Not available for sizes with oversized main coil.

3-way valve kit - main coil or accessory BV coil

	VEC20	VEC24	VEC30	VEC34	VEC40	VEC44	VEC50	VEC54
Main coil	VCF41 - VCF4124	VFC42 - VCF4224	VCF41 - VCF4124	VFC42 - VCF4224	VFC42 - VCF4224	VFC42 - VCF4224	VFC42 - VCF4224	VFC42 - VCF4224
Additional coil "BV"	VCF44 - VCF4424	-	VCF44 - VCF4424	-	VCF44 - VCF4424	-	VCF44 - VCF4424	-

2-way valve kit - main coil or accessory BV coil

	VEC20	VEC24	VEC30	VEC34	VEC40	VEC44	VEC50	VEC54
Main coil	VCFD1 - VCFD124	VCFD2 - VCFD224	VCFD1 - VCFD124	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224
Additional coil "BV"	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-

Valves ending with **24 ex. VCFD124**, are 24V.

Condensate drip

Ver	20	24	30	34	40	44	50	54
.	BC5 (1)	BC5 (1)	BC5 (1)	BC5 (1)	BC5 (1)	BC5 (1)	BC5 (1)	BC5 (1)

(1) For horizontal installation.

Condensate drainage

Ver	20	24	30	34	40	44	50	54
.	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4

PERFORMANCE SPECIFICATIONS VEC**2-pipe**

	VEC20			VEC24			VEC30			VEC34			VEC40			VEC44			VEC50			VEC54		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H

Heating performance 70 °C / 60 °C (1)

Heating capacity	kW	1,87	2,54	3,10	2,07	2,50	3,42	3,03	3,64	4,31	4,31	53,18	6,14	4,21	5,21	6,29	5,41	6,68	8,07	4,76	6,34	7,16	6,06	8,08	9,18
Water flow rate system side	l/h	164	223	272	181	219	300	266	319	378	378	454	538	369	457	551	474	586	708	417	556	628	532	709	805
Pressure drop system side	kPa	2	4	6	1	2	3	9	13	17	5	7	9	6	9	12	9	14	19	7	11	14	9	15	19

Heating performance 45 °C / 40 °C (2)

Heating capacity	kW	0,95	1,26	1,54	1,20	1,40	1,70	1,50	1,81	2,14	2,15	2,57	3,05	2,09	2,59	3,12	2,69	3,30	4,01	2,37	3,15	3,56	3,02	4,02	4,54
Water flow rate system side	l/h	163	217	265	206	241	292	258	311	368	370	442	525	359	445	537	463	568	690	408	542	612	519	691	781
Pressure drop system side	kPa	3	5	7	2	3	4	9	13	17	5	7	9	6	9	13	10	14	20	7	12	14	17	15	19

Cooling performance 7 °C / 12 °C (3)

Cooling capacity	kW	0,80	1,07	1,31	0,88	1,21	1,52	1,35	1,61	1,91	1,79	2,14	2,47	1,99	2,47	2,99	2,55	3,34	3,91	2,35	3,17	3,61	3,00	4,00	4,28
Sensible cooling capacity	kW	0,64	0,87	1,07	0,67	0,90	1,14	1,03	1,25	1,49	1,26	1,51	1,78	1,58	1,98	2,41	1,91	2,42	2,74	1,68	2,27	2,59	2,09	2,83	3,04
Water flow rate system side	l/h	138	184	225	151	208	261	232	277	329	308	368	425	342	425	514	439	574	673	404	545	621	516	688	736
Pressure drop system side	kPa	3	4	6	1	2	3	6	11	13	5	6	8	6	9	12	11	17	22	7	12	15	17	27	30

Fan

Type	type	Centrifugal																							
Fan motor	type	Asynchronous																							
Number	no.	1			1			2			2			2			2			2			2		
Air flow rate	m³/h	130	194	247	130	167	247	241	309	383	241	309	383	306	406	511	306	406	511	371	529	613	371	529	613
Input power	W	19	22	25	19	22	25	25	33	44	25	33	44	30	43	57	30	43	57	34	46	67	34	46	67
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3

Fan coil sound data (4)

Sound power level	dB(A)	35,0	42,0	48,0	35,0	42,0	48,0	37,0	43,0	49,0	37,0	43,0	49,0	38,0	43,0	48,0	38,0	43,0	48,0	43,0	50,0	53,0	43,0	50,0	53,0
Sound pressure	dB(A)	27,0	34,0	40,0	27,0	34,0	40,0	29,0	35,0	41,0	29,0	35,0	41,0	30,0	35,0	40,0	30,0	35,0	40,0	35,0	38,0	45,0	35,0	38,0	45,0

Diametre hydraulic ttings

Main coil	Ø	1/2"		3/4"		1/2"		3/4"		3/4"		3/4"		3/4"		3/4"		3/4"		3/4"		3/4"		
-----------	---	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	--

Power supply

Power supply	230V~50Hz																								
--------------	-----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

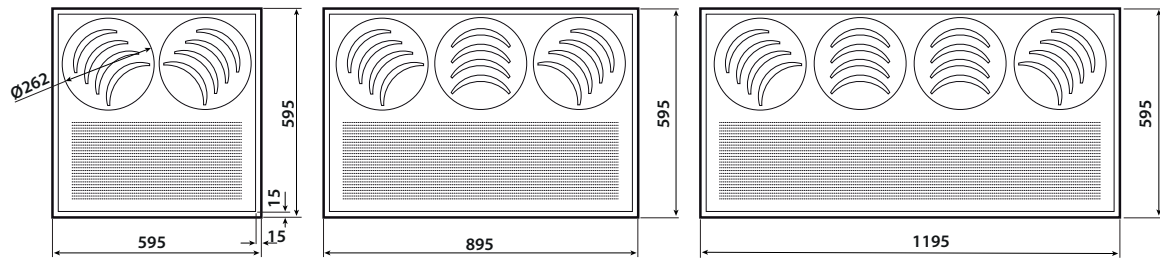
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C

(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT

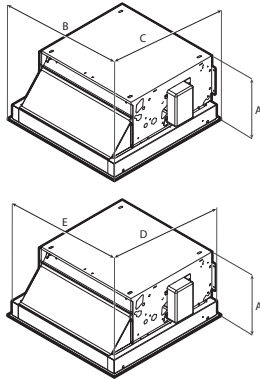
(3) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT

(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

GRID DIMENSIONS (MANDATORY ACCESSORY)



DIMENSIONS



Dimensions and weights of the unit with grid (maximum dimensions)

Size		20	24	30	34	40	44	50	54
Dimensions and weights									
A	. mm	283	283	283	283	283	283	283	283
B	. mm	595	595	895	895	1195	1195	1195	1195
C	. mm	595	595	595	595	595	595	595	595
Empty weight	. kg	16	16	21	21	25	25	25	25
Weight of the grid	. kg	3,7	3,7	5,7	5,7	7,0	7,0	7,0	7,0

Dimensions of the unit with grid (dimensions for installation)

Size		20	24	30	34	40	44	50	54
Dimensions and weights									
A	. mm	283	283	283	283	283	283	283	283
D	. mm	574	574	574	574	574	574	574	574
E	. mm	574	574	874	874	1174	1174	1174	1174

Aermec reserves the right to make any modifications deemed necessary.
All data is subject to change without notice. Aermec does not assume
responsibility or liability for errors or omissions.

Aermec S.p.A.

Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

VEC-I

Coanda-effect fan coil for cassette installation



- **Very quiet**
- **Electric saving equal to 50% with respect to a fan coil with 3-speed motor**
- **Total comfort: reduced variations in temperature and relative humidity in every season**



DESCRIPTION

Thanks to a special air intake and flow grid, these units allow a coanda-effect air flow to be generated, parallel to the ceiling, creating optimal circulation inside the room to be air-conditioned. They are suitable to be installed inside a suspended ceiling.

FEATURES

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

Continuous air flow rate variation is made possible by a 0-10V signal generated by Aermec adjustment and control commands or by independent regulation systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Apart from the inverter motor of the "VEC-I" models, each unit can be supplied with a single-phase asynchronous "VEC" motor.

Heat exchanger coil

With copper pipes and aluminium fins, the main coil has female gas water connections on the left side and the manifolds have air vents.

Units are available with a standard coil (20-50) and a larger coil (24-54). Only units with the standard coil can be combined with an additional electric or water coil with 1 row, both available as an accessory.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

Air filter

Fire resistance class **1** air filter.

ACCESSORY COMPULSORY

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

VMF Components

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-SW: Water temperature probe.

VMF-SW1: Extra water probe to be used for 4-pipe systems.

Common accessories

BV: Single row hot water heat exchanger.

RX: Armoured electric coil with safety thermostat.

VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.

VCF41 - 42 - 43 - for main coil: 3-way motorised valve kit for the main coil. The kit consists of a valve with its insulating shell, actuator and rele-

vant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

DSC: Condensate drainage device.

BC: Condensate drip.

PCR1: Galvanised plate protection for the controls and the electrical element.

ACCESSORIES COMPATIBILITY

Accessories mandatory

Intake grid and distribution of the air

Accessory	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
VEC20GL	*						
VEC30GL		*	*				
VEC40GL				*	*	*	*

Control panels and dedicated accessories

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
AER503IR	*	*	*	*	*	*	*	*
SA5	*	*	*	*	*	*	*	*
SW5	*	*	*	*	*	*	*	*
TX	*	*	*	*	*	*	*	*

VMF Components

Model	Ver	20	24	30	34	40	44	50	54
VMF-E19	.	*	*	*	*	*	*	*	*
VMF-E3	.	*	*	*	*	*	*	*	*
VMF-E4X	.	*	*	*	*	*	*	*	*
VMF-IR	.	*	*	*	*	*	*	*	*
VMF-SW	.	*	*	*	*	*	*	*	*
VMF-SW1	.	*	*	*	*	*	*	*	*

Common accessories

Electric coil

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
RX22	*	*		*				
RX32			*	*				
RX42					*	*		
RX52							*	*

Protection for controls and electric resistance

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
PCR1V	*	*	*	*	*	*	*	*

Water coil with 1 row

Accessory	VEC20I	VEC30I	VEC40I	VEC50I
BV122	*			
BV132		*		
BV142			*	*

3-way valve kit - main coil or accessory BV coil

	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
Main coil	VCF41 - VCF4124	VFC42 - VCF4224	VCF41 - VCF4124	VFC42 - VCF4224	VFC42 - VCF4224	VFC42 - VCF4224	VFC42 - VCF4224	VFC42 - VCF4224
Additional coil "BV"	VCF44 - VCF4424	-	VCF44 - VCF4424	-	VCF44 - VCF4424	-	VCF44 - VCF4424	-

2-way valve kit - main coil or accessory BV coil

	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
Main coil	VCFD1 - VCFD124	VCFD2 - VCFD224	VCFD1 - VCFD124	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224
Additional coil "BV"	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-

Valves ending with **24 ex. VCFD124**, are 24V.

Condensate drip

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
BCS	*	*	*	*	*	*	*	*

Condensate drainage

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
DSC4	*	*	*	*	*	*	*	*

PERFORMANCE SPECIFICATIONS VEC

2-pipe

		VEC20I			VEC24I			VEC30I			VEC34I			VEC40I			VEC44I			VEC50I			VEC54I		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	1,87	2,54	3,10	2,07	2,50	3,42	3,03	3,64	4,31	4,31	53,18	6,14	4,21	5,21	6,29	5,41	6,68	8,07	4,76	6,34	7,16	6,06	8,08	9,18
Water flow rate system side	l/h	164	223	272	181	219	300	266	319	378	378	454	538	369	457	551	474	586	708	417	556	628	532	709	805
Pressure drop system side	kPa	2	4	6	1	2	3	9	13	17	5	7	9	6	9	12	9	14	19	7	11	14	9	15	19
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	0,95	1,26	1,54	1,20	1,40	1,70	1,50	1,81	2,14	2,15	2,57	3,05	2,09	2,59	3,12	2,69	3,30	4,01	2,37	3,15	3,56	3,02	4,02	4,54
Water flow rate system side	l/h	163	217	265	206	241	292	258	311	368	370	442	525	359	445	537	463	568	690	408	542	612	519	691	781
Pressure drop system side	kPa	3	5	7	2	3	4	9	13	17	5	7	9	6	9	13	10	14	20	7	12	14	17	15	19
Cooling performance 7 °C / 12 °C (3)																									
Cooling capacity	kW	0,80	1,07	1,31	0,88	1,21	1,52	1,35	1,61	1,91	1,79	2,14	2,47	1,99	2,47	2,99	2,55	3,34	3,91	2,35	3,17	3,61	3,00	4,00	4,28
Sensible cooling capacity	kW	0,64	0,87	1,07	0,67	0,90	1,14	1,03	1,25	1,49	1,26	1,51	1,78	1,58	1,98	2,41	1,91	2,42	2,74	1,68	2,27	2,59	2,09	2,83	3,04
Water flow rate system side	l/h	138	184	225	151	208	261	232	277	329	308	368	425	342	425	514	439	574	673	404	545	621	516	688	736
Pressure drop system side	kPa	3	4	6	1	2	3	6	11	13	5	6	8	6	9	12	11	17	22	7	12	15	17	27	30
Fan																									
Type	type	Centrifugal																							
Fan motor	type	Inverter																							
Number	no.	1			1			2			2			2			2			2			2		
Air flow rate	m³/h	130	194	247	130	167	247	241	309	383	241	309	383	306	406	511	306	406	511	371	529	613	371	529	613
Input power	W	4	9	14	4	9	14	11	16	35	11	16	35	16	20	26	16	20	26	18	27	34	18	27	34
Signal 0-10V	%	48	70	90	48	70	90	58	66	90	58	66	90	54	72	90	54	72	90	56	78	90	56	78	90
Fan coil sound data (4)																									
Sound power level	dB(A)	35,0	42,0	48,0	35,0	42,0	48,0	37,0	43,0	49,0	37,0	43,0	49,0	38,0	43,0	48,0	38,0	43,0	48,0	43,0	50,0	53,0	43,0	50,0	53,0
Sound pressure	dB(A)	27,0	34,0	40,0	27,0	34,0	40,0	29,0	35,0	41,0	29,0	35,0	41,0	30,0	35,0	40,0	30,0	35,0	40,0	35,0	38,0	45,0	35,0	38,0	45,0
Diametre hydraulic yttings																									
Main coil	Ø	1/2"			3/4"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"		
Power supply																									
Power supply		230V~50Hz																							

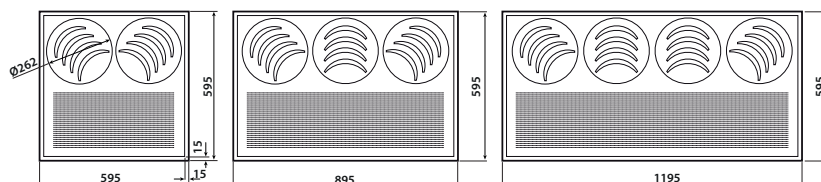
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C

(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT

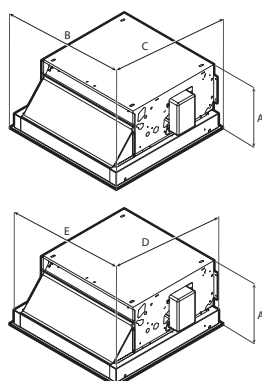
(3) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT

(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

GRID DIMENSIONS (MANDATORY ACCESSORY)



DIMENSIONS



Dimensions and weights of the unit with grid (maximum dimensions)

Size		20	24	30	34	40	44	50	54
Dimensions and weights									
A	mm	283	283	283	283	283	283	283	283
B	mm	595	595	895	895	1195	1195	1195	1195
C	mm	595	595	595	595	595	595	595	595
Empty weight	kg	16	16	21	21	25	25	25	25
Weight of the grid	kg	3,7	3,7	5,7	5,7	7,0	7,0	7,0	7,0

Dimensions of the unit with grid (dimensions for installation)

Size		20	24	30	34	40	44	50	54
Dimensions and weights									
A	mm	283	283	283	283	283	283	283	283
D	mm	574	574	574	574	574	574	574	574
E	mm	574	574	874	874	1174	1174	1174	1174

Aermec reserves the right to make any modifications deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

Aermec S.p.A.

Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

FCL

Fan coil for cassette installation

- **Standard internal three-way valve**
- **Version with 2-way valve for variable water flow rate systems**
- **Version without valves**



DESCRIPTION

4-way cassettes that can be installed in any type of 2- or 4-pipe system with any heat generator, even at low temperatures. Thanks to the selection of versions and configurations, it's easy to choose the best solution for every need.

FEATURES

Intake grid and distribution of the air

The recovery and air diffusion grille has an elegant design. In plastic, RAL 9010.

The dimensions of the first nine sizes respect the 600x600 mm modularity of false ceilings, whereas the larger sizes measuring 840x840 mm are designed for quiet operation and optimum performance.

Load-bearing structure

Models with a 600x600 mm module have a reinforced load-bearing structure with side panels in galvanised steel sheet, thermally insulated with internal polystyrene foam elements.

The structure of models with a 840x840 mm module is made entirely of galvanised steel sheet, thermally insulated with polyethylene foam on the inside and with an anti-condensate felt coating.

Ventilation group

Formed of a particularly quiet axial-centrifugal fan, statically and dynamically balanced.

The single-phase electric motor offers three or four speeds (depending on the size), is mounted on anti-vibration supports, and has a permanently enabled condenser.

Heat exchanger coil

Heat exchanger with shaped profile to increase the exchange surface, and easily accessible drain valves.

There are models with a single coil for 2-pipe systems, with the possibility to add an electric heater too, and models with two coils for 4-pipe systems.

There is the possibility to combine outside air with the inlet ambient air, and to distribute it in separate rooms.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Condensate drip

Condensation drip tray in one piece, with V0 self-extinguishing level and overmoulding to insulation in expanded polystyrene with flame retardant additive.

Air filter

Air filter easily removed and cleaned, self-supporting structure, characterised by a high efficiency and low pressure drops, with class-V0 fire resistance (UL 94).

Versions

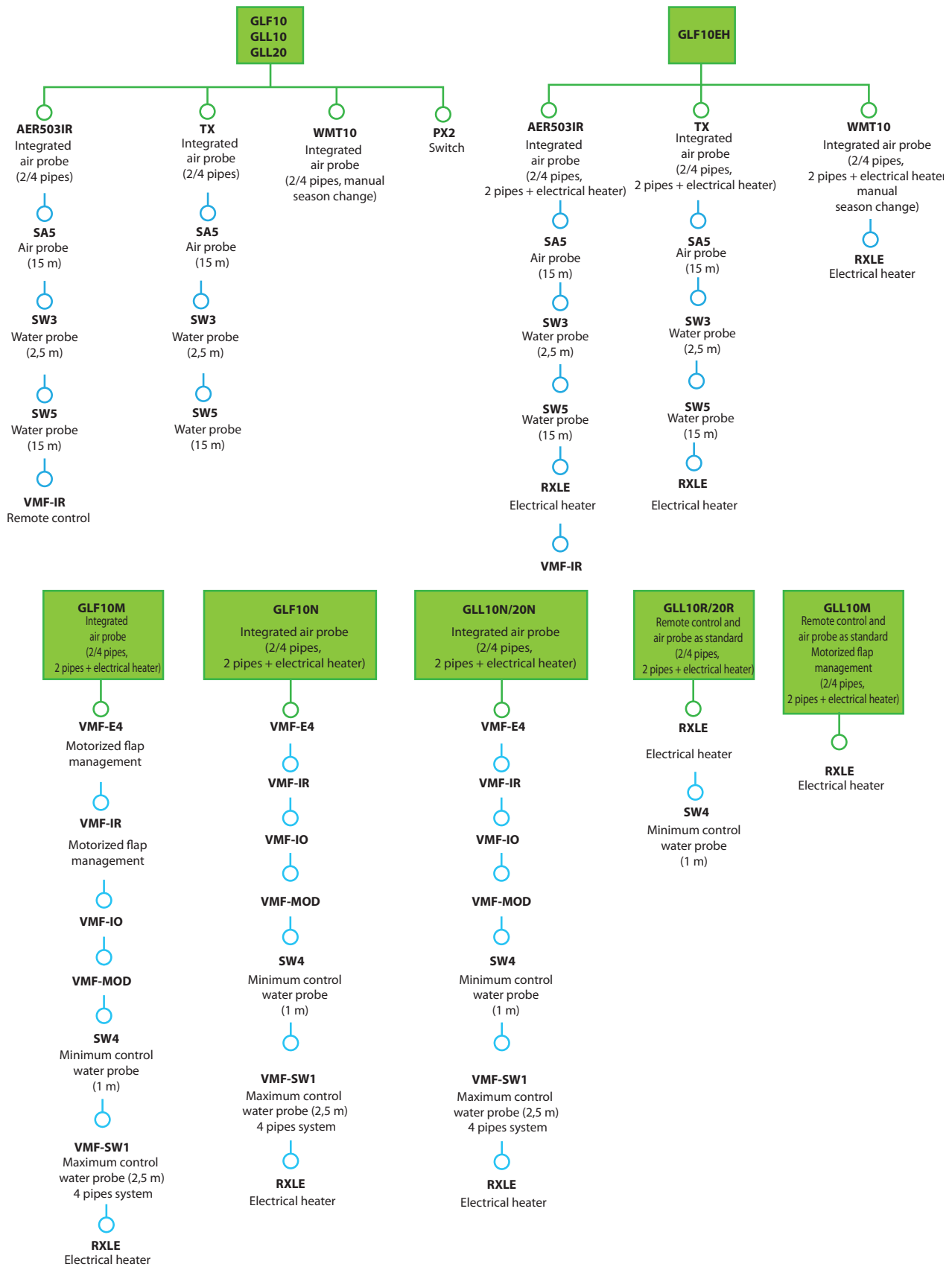
FCL Standard with internal 3-way valve

V2 With internal 2-way valve

VL Without internal valve

ACCESSORIES

Accessories that can be combined with the grilles



Intake grids and distribution of the air, compulsory accessory

GLF10: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLF10EH: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLF10M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. It is equipped with an infrared receiver with an emergency operation button, a thermostat card which also requires the installation of the VMF-E4 or VMF-IR remote control. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 840x840 not available).

GLF10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4 or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 800x800 mm not available).

GLL10: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLL10M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with an infrared receiver with an emergency operation button, and a remote control. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be orientated with the remote control.

GLL10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLL10R: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with an infrared receiver with an emergency operation button, and a remote control. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLL20: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLL20N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLL20R: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with an infrared receiver with an emergency operation button, and a remote control. Suitable for use

with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

VMF system

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-MOD: Expansion board for the management of modulating valves.

VMF-SW1: Extra water probe to be used for 4-pipe systems.

Control panels and their accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW4: Water temperature probe allowing automatic season change on electronic controllers supplied with water-side change over.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

Electric heaters

RXLE: Electric heater for heating, can be installed on board the units.

RXLE20: Electric heater for heating, can be installed on board the units.

Water valve kit

VCFLX4: 3-way valve kit for single-coil fan coil for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electro-thermal actuators, insulating shells for the valves, and the relative hydraulic couplings.

VHL1: 3-way motorised valve kit with 4 connections including the actuator. 230V~50Hz power supply.

VHL124: 3-way motorised valve kit with 4 connections including the actuator. 24V power supply.

VHL20: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 230V~50Hz power supply.

VHL2024: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.

VHL2: 2-way motorised valve kit with 2 connections including the actuator. Power supply 230V~50Hz;

VHL22: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. Power supply 230V~50Hz;
VHL2224: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.
VHL224: 2-way motorised valve kit with 2 connections including the actuator. 24V power supply.

Installation accessories

FEL10: Kit n°5 electrostatically pre-charged air filter, with fire resistance class 2 (UL 900).

KFL: Delivery flange, allowing the air to be directed to an adjacent room.

KFL20: Delivery flange, allowing the air to be directed to an adjacent room. Up to three KFL20 can be assembled on a single unit.

KFLD: Suction flange, allows to introduce external air directly into the room without mixing.

KFLD20: Suction flange, allows to introduce external air directly into the room without mixing. Up to two KFL20D can be assembled on a single unit.

FCLMC10: Perimeter housing in painted galvanised sheet metal, 600x600 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.

FCLMC20: Perimeter housing in painted sheet metal, 840x840 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.

ACCESSORIES COMPATIBILITY

Intake grids and distribution of the air

Model	Ver	32	34	36	38	42	44	62	64
GLF10 (1)	FCL,V2,VL	*	*	*	*	*	*	*	*
GLF10EH (2)	FCL,V2,VL	*	*	*	*	*	*	*	*
GLF10M (3)	FCL,V2,VL	*	*	*	*	*	*	*	*
GLF10N (3)	FCL,V2,VL	*	*	*	*	*	*	*	*

Model	Ver	72	82	84	102	104	122	124
GLF10 (1)	FCL,V2,VL	*						
GLF10EH (2)	FCL,V2,VL	*						
GLF10M (3)	FCL,V2,VL	*						
GLF10N (3)	FCL,V2,VL	*						

(1) Not compatible with the VMF system and electric heaters.

(2) Not compatible with the VMF system, but compatible with electric heaters.

(3) Compatible with the VMF system and electric heaters.

Intake grid and distribution of the air

Model	Ver	32	34	36	38	42	44	62	64
GLL10 (1)	FCL,V2,VL	*	*	*	*	*	*	*	*
GLL10M (2)	FCL,V2,VL	*	*	*	*	*	*	*	*
GLL10N (3)	FCL,V2,VL	*	*	*	*	*	*	*	*
GLL10R (2)	FCL,V2,VL	*	*	*	*	*	*	*	*

Model	Ver	72	82	84	102	104	122	124
GLL10 (1)	FCL,V2,VL	*						
GLL10M (2)	FCL,V2,VL	*						
GLL10N (3)	FCL,V2,VL	*						
GLL10R (2)	FCL,V2,VL	*						
GLL20 (1)	FCL,V2,VL		*	*	*	*	*	*
GLL20N (3)	FCL,V2,VL		*	*	*	*	*	*
GLL20R (4)	FCL,V2,VL		*	*	*	*	*	*

(1) Not compatible with the VMF system and electric heaters.

(2) Not compatible with the VMF system, but compatible with electric heaters.

(3) Compatibility with VMF system.

(4) Not compatible with the VMF system.

VMF system

Model	Ver	32	34	36	38	42	44	62	64
VMF-E4DX	FCL,V2,VL	*	*	*	*	*	*	*	*
VMF-E4X	FCL,V2,VL	*	*	*	*	*	*	*	*
VMF-IO	FCL,V2,VL	*	*	*	*	*	*	*	*
VMF-IR	FCL,V2,VL	*	*	*	*	*	*	*	*
VMF-MOD	FCL,V2,VL	*	*	*	*	*	*	*	*
VMF-SW1	FCL,V2,VL	*	*	*	*	*	*	*	*

Model	Ver	72	82	84	102	104	122	124
VMF-E4DX	FCL,V2,VL	*	*	*	*	*	*	*
VMF-E4X	FCL,V2,VL	*	*	*	*	*	*	*
VMF-IO	FCL,V2,VL	*	*	*	*	*	*	*
VMF-IR	FCL,V2,VL	*	*	*	*	*	*	*
VMF-MOD	FCL,V2,VL	*	*	*	*	*	*	*
VMF-SW1	FCL,V2,VL	*	*	*	*	*	*	*

Control panels and dedicated accessories

Model	Ver	32	34	36	38	42	44	62	64	72	82	84	102	104	122	124
AER503IR (1)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SA5 (2)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Model	Ver	32	34	36	38	42	44	62	64	72	82	84	102	104	122	124
SIT3 (3)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SIT5 (4)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SW3 (2)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SW4	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SW5 (2)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TX (1)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
WMT10	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

(1) Wall-mount installation.

(2) Probe for AER503IR-TX thermostats, if fitted.

(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.

(4) Probe for AER503IR-TX thermostats, if fitted.

For the compatibility of VMF components and command panels with the intake and delivery grilles, refer to the information given above.

3 way valve kit

Model	Ver	32	34	36	38	42	44	62	64
VHL1 (1)	FCL,V2,VL		*		*		*		*
VHL124 (1)	FCL,V2,VL		*		*		*		*

Model	Ver	72	82	84	102	104	122	124
VHL20 (1)	FCL,V2,VL			*		*		*
VHL2024 (1)	FCL,V2,VL			*		*		*

(1) Obligatory accessory in 4-pipe systems.

2 way valve kit

Model	Ver	32	34	36	38	42	44	62	64
VHL2 (1)	FCL,V2,VL		*		*		*		*
VHL224 (1)	FCL,V2,VL		*		*		*		*

Model	Ver	72	82	84	102	104	122	124
VHL22 (1)	FCL,V2,VL			*		*		*
VHL2224 (1)	FCL,V2,VL			*		*		*

(1) Compulsory accessory in 4-pipe systems with variable flow rate.

Valve Kit for 4 pipe systems

Model	Ver	32	34	36	38	42	44	62	64	72
VCFLX4 (1)	VL	*		*		*		*		*

(1) The valve must be commanded via command panels enabled for valve control.

Air filters

Model	Ver	32	34	36	38	42	44	62	64
FEL10	FCL,V2,VL	*	*	*	*	*	*	*	*

Model	Ver	72	82	84	102	104	122	124
FEL10	FCL,V2,VL	*						

Delivery flange

Model	Ver	32	34	36	38	42	44	62	64
KFL	FCL,V2,VL	*	*	*	*	*	*	*	*
KFLD	FCL,V2,VL	*	*	*	*	*	*	*	*

Model	Ver	72	82	84	102	104	122	124
KFL	FCL,V2,VL	*						
KFL20	FCL,V2,VL		*	*	*	*	*	*
KFLD	FCL,V2,VL	*						
KFLD20	FCL,V2,VL		*	*	*	*	*	*

Perimeter case

Model	Ver	32	34	36	38	42	44	62	64
FCLMC10 (1)	FCL,V2,VL	*	*	*	*	*	*	*	*

Model	Ver	72	82	84	102	104	122	124
FCLMC10 (1)	FCL,V2,VL	*						
FCLMC20 (1)	FCL,V2,VL		*	*	*	*	*	*

(1) Can only be combined with GLL/GLLI grilles

PERFORMANCE SPECIFICATIONS

2-pipe

[illegible]

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT

4-pipe

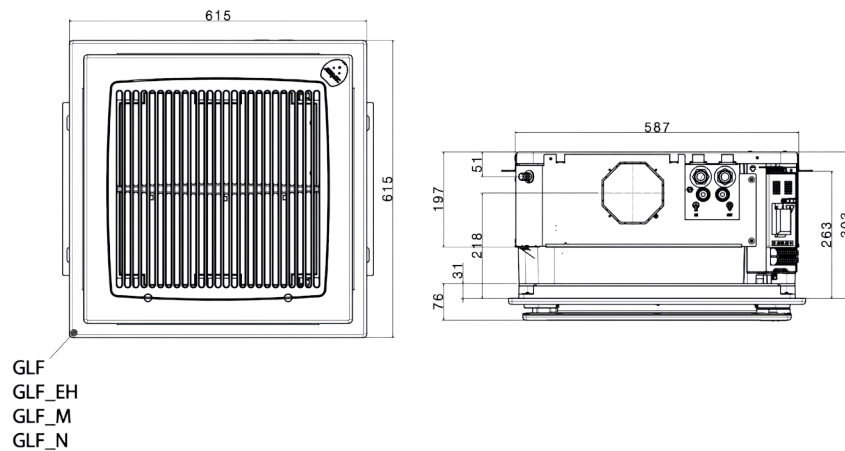
4-pipe

[illegible]

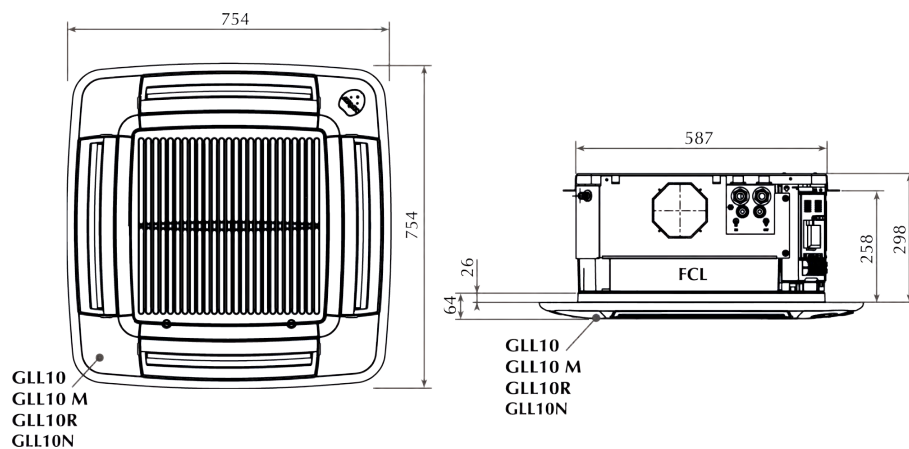
(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Room air temperature 27°C d.b./19°C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT

DIMENSIONS

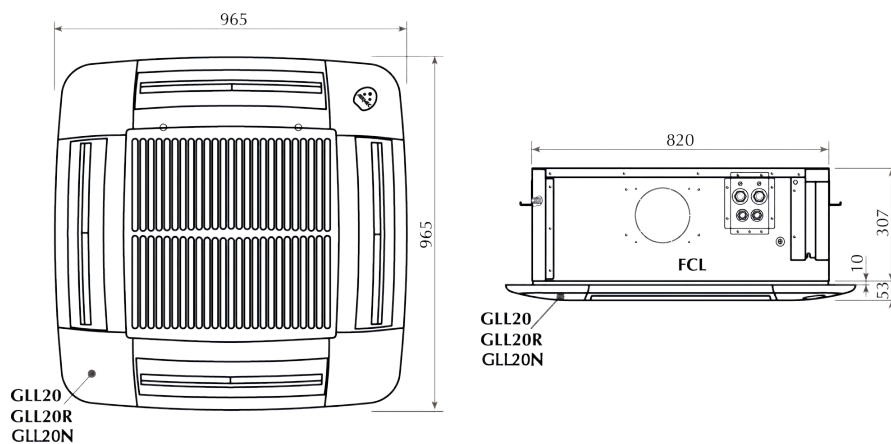
Dimensions FCL 32 - 34 - 36 - 38 - 42 - 44 - 64 - 72 con GLF



Dimensions FCL 32 - 34 - 36 - 38 - 42 - 44 - 64 - 72 con GLL



Dimensions FCL 82 - 84 - 102 - 104 - 122 - 124 con GLL



Size			102	104	122	124	32	34	36	38	42	44	62	64	72	82	84
Dimensions and weights																	
Empty weight	FCL	kg	36	36	36	36	20	21	20	21	21	21	22	22	22	35	36
	V2	kg	36	36	36	36	20	21	20	21	20	21	21	22	22	35	36
	VL	kg	35	35	35	35	20	20	20	20	20	20	22	22	22	34	35

Aermec reserves the right to make any modifications deemed necessary.
All data is subject to change without notice. Aermec does not assume
responsibility or liability for errors or omissions.

Aermec S.p.A.

Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

FCLI

Fan coil for cassette installation

- Electric saving equal to 50% with respect to a fan coil with 3-speed motor
- Total comfort: reduced temperature and relative humidity variations
- Standard internal three-way valve
- Version with 2-way valve for variable water flow rate systems
- Version without valves



DESCRIPTION

4-way cassettes that can be installed in any type of 2- or 4-pipe system with any heat generator, even at low temperatures. Thanks to the selection of versions and configurations, it's easy to choose the best solution for every need.

FEATURES

Intake grid and distribution of the air

The recovery and air diffusion grille has an elegant design. In plastic, RAL 9010.

The dimensions of the first 5 sizes comply with the 600x600 mm modularity of false ceilings, whereas the larger sizes measuring 840x840 mm are designed for quiet operation and optimum performance of these large models.

Load-bearing structure

Models with a 600x600 mm module have a reinforced load-bearing structure with side panels in galvanised steel sheet, thermally insulated with internal polystyrene foam elements.

The structure of models with a 840x840 mm module is made entirely of galvanised steel sheet, thermally insulated with polyethylene foam on the inside and with an anti-condensate felt coating.

Ventilation group

Formed of a particularly quiet axial-centrifugal fan, statically and dynamically balanced.

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Heat exchanger coil

Heat exchanger with shaped profile to increase the exchange surface, and easily accessible drain valves.

There are models with a single coil for 2-pipe systems, with the possibility to add an electric heater too, and models with two coils for 4-pipe systems.

There is the possibility to combine outside air with the inlet ambient air, and to distribute it in separate rooms.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Condensate drip

Condensation drip tray in one piece, with V0 self-extinguishing level and overmoulding to insulation in expanded polystyrene with flame retardant additive.

Air filter

Air filter easily removed and cleaned, self-supporting structure, characterised by a high efficiency and low pressure drops, with class-V0 fire resistance (UL 94).

Versions

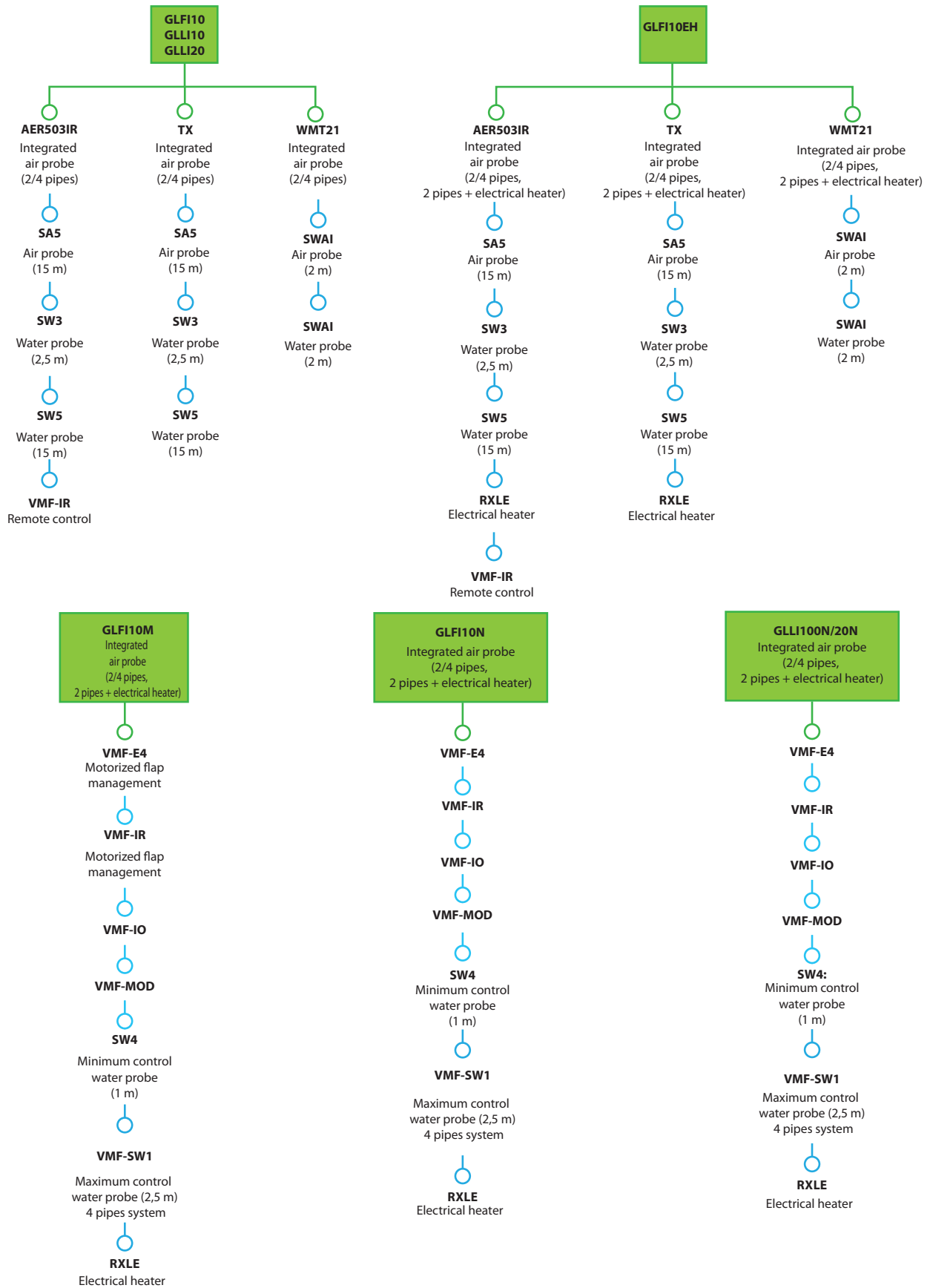
FCLI Standard

V2 With internal 2-way valve

VL Without internal valve but with microprocessor control

ACCESSORIES

Accessories that can be combined with the grilles



Intake grids and distribution of the air, compulsory accessory

GLFI10: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLFI10EH: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLFI10M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. It is equipped with an infrared receiver with an emergency operation button, a thermostat card which also requires the installation of the VMF-E4 panel or the VMF-IR remote control. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 840x840 mm not available).

GLFI10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4 or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 800x800 mm not available).

GLLI100: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLLI100EH: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLLI100N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X panel as well, and suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be orientated with the remote control.

GLLI20: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLLI20N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

VMF system

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water temperature probe.

VMF-SW1: Extra water probe to be used for 4-pipe systems.

Control panels and their accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

SW4: Water temperature probe allowing automatic season change on electronic controllers supplied with water-side change over.

SWAI: External air or water temperature probe.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

WMT21: Electronic thermostat for inverter fancoils.

Electric heaters

RXLE: Electric heater for heating, can be installed on board the units.

RXLE20: Electric heater for heating, can be installed on board the units.

Water valve kit

VCFLX4: 3-way valve kit for single-coil fan coil for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electro-thermal actuators, insulating shells for the valves, and the relative hydraulic couplings.

VHL1: 3-way motorised valve kit with 4 connections including the actuator. 230V~50Hz power supply.

VHL124: 3-way motorised valve kit with 4 connections including the actuator. 24V power supply.

VHL20: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 230V~50Hz power supply.

VHL2024: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.

VHL2: 2-way motorised valve kit with 2 connections including the actuator. Power supply 230V~50Hz;

VHL22: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. Power supply 230V~50Hz;

VHL2224: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.

VHL224: 2-way motorised valve kit with 2 connections including the actuator. 24V power supply.

Installation accessories

FEL10: Kit n°5 electrostatically pre-charged air filter, with fire resistance class 2 (UL 900).

KFL: Delivery flange, allowing the air to be directed to an adjacent room.

KFL20: Delivery flange, allowing the air to be directed to an adjacent room. Up to three KFL20 can be assembled on a single unit.

KFLD: Suction flange, allows to introduce external air directly into the room without mixing.

KFLD20: Suction flange, allows to introduce external air directly into the room without mixing. Up to two KFL20D can be assembled on a single unit.

FCLMC10: Perimeter housing in painted galvanised sheet metal, 600x600 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.

FCLMC20: Perimeter housing in painted sheet metal, 840x840 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.

FCLMC20IK: Installation kit for the inverter controller. Mandatory for units with FCLMC20.

ACCESSORIES COMPATIBILITY

Intake grids and distribution of the air

Model	Ver	32	34	42	44	62	64	82	122	124
GLFI10 (1)	FCLJ,V2,VL	*	*	*	*	*	*			
GLFI10EH (2)	FCLJ,V2,VL	*	*	*	*	*	*			
GLFI10M (3)	FCLJ,V2,VL	*	*	*	*	*	*			
GLFI10N (3)	FCLJ,V2,VL	*	*	*	*	*	*			

(1) Not compatible with the VMF system and electric heaters.

(2) Not compatible with the VMF system.

(3) Compatible with the VMF system and electric heaters.

Intake grid and distribution of the air

Model	Ver	32	34	42	44	62	64	82	122	124
GLLI100 (1)	FCLJ,V2,VL	*	*	*	*	*	*			
GLLI100EH (2)	FCLJ,V2,VL	*	*	*	*	*	*			
GLLI100N (3)	FCLJ,V2,VL	*	*	*	*	*	*			
GLLI20 (1)	FCLJ,V2,VL							*	*	*
GLLI20N (3)	FCLJ,V2,VL							*	*	*

(1) Not compatible with the VMF system and electric heaters.

(2) Not compatible with the VMF system, but compatible with electric heaters.

(3) Compatibility with VMF system.

VMF system

Model	Ver	32	34	42	44	62	64	82	122	124
VMF-E4DX	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*
VMF-E4X	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*
VMF-I0	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*
VMF-IR	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*
VMF-SW	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*
VMF-SW1	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*

Control panels and dedicated accessories

Model	Ver	32	34	42	44	62	64	82	122	124
AER503IR (1)	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*
SW4	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*
SWAI (2)	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*
TX (1)	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*
WMT21	FCLJ,V2,VL	*	*	*	*	*	*	*	*	*

(1) Wall-mount installation.

(2) Probe for thermostat WMT21.

For the compatibility of VMF components and command panels with the intake and delivery grilles, refer to the information given above.

3 way valve kit

Model	Ver	32	34	42	44	62	64	82	122	124
VHL1 (1)	VL		*		*		*			
VHL124 (1)	VL		*		*		*			
VHL20 (1)	VL									*
VHL2024 (1)	VL									*

(1) Obligatory accessory in 4-pipe systems.

2 way valve kit

Model	Ver	32	34	42	44	62	64	82	122	124
VHL2 (1)	VL		*		*		*			
VHL22 (1)	VL									*
VHL2224 (1)	VL									*
VHL224 (1)	VL		*		*		*			

(1) Compulsory accessory in 4-pipe systems with variable flow rate.

Valve Kit for 4 pipe systems

Model	Ver	32	34	42	44	62	64	82	122	124
VCFLX4 (1)	VL	*		*		*				

(1) The valve must be commanded via command panels enabled for valve control.

Air filters

Model	Ver	32	34	42	44	62	64	82	122	124
FEL10	FCLJ,V2,VL	*	*	*	*	*	*			

Delivery and suction flange

Model	Ver	32	34	42	44	62	64	82	122	124
KFL	FCLJ,V2,VL	*	*	*	*	*	*			
KFL20	FCLJ,V2,VL							*	*	*
KFLD	FCLJ,V2,VL	*	*	*	*	*	*			
KFLD20	FCLJ,V2,VL							*	*	*

Perimeter case

Model	Ver	32	34	42	44	62	64	82	122	124
FCLMC10 (1)	FCLJ,V2,VL	*	*	*	*	*	*			
FCLMC20 (1)	FCLJ,V2,VL							*	*	*
FCLMC20IK (2)	FCLJ,V2,VL							*	*	*

(1) Can only be combined with GLL/GLLI grilles

(2) Mandatory for units with FCLMC20.

PERFORMANCE SPECIFICATIONS

2-pipe

Pipe		FCL132			FCL142			FCL162			FCL182			FCL1122		
		1	2	3	1	2	4	1	2	4	1	2	4	1	2	4
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																
Heating capacity	kW	2,22	2,95	4,00	3,32	4,47	7,34	5,19	6,37	10,49	5,88	8,12	11,88	10,53	14,73	21,75
Water flow rate system side	l/h	194	258	350	290	391	642	454	558	918	514	710	1039	921	1289	1903
Pressure drop system side	kPa	4	6	10	6	10	24	12	17	42	7	13	26	11	21	42
Heating performance 45 °C / 40 °C (2)																
Heating capacity	kW	1,10	1,47	1,98	1,67	2,21	3,64	2,58	3,21	5,21	2,94	4,05	5,90	5,28	7,37	10,80
Water flow rate system side	l/h	192	254	345	287	386	633	448	550	905	507	701	1025	909	1271	1877
Pressure drop system side	kPa	4	6	11	5	9	21	10	17	41	7	13	23	12	21	41
Cooling performance 7 °C / 12 °C (3)																
Cooling capacity	kW	1,15	1,46	1,88	1,95	2,52	3,90	2,65	3,19	4,92	2,79	4,04	5,97	5,34	7,47	10,87
Sensible cooling capacity	kW	0,98	1,24	1,50	1,37	1,80	3,11	1,85	2,25	3,75	1,89	2,76	4,17	4,02	5,70	8,34
Water flow rate system side	l/h	200	253	327	337	437	679	458	551	856	482	695	1032	921	1292	1893
Pressure drop system side	kPa	4	4	13	7	11	25	12	16	36	7	12	28	10	19	38
Fan																
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Inverter			Inverter			Inverter			Inverter			Inverter		
Number	no.	1			1			1			1			1		
Air flow rate	m³/h	300	410	600	260	360	700	380	500	880	460	680	1100	750	1100	1750
Input power	W	10	13	18	12	16	55	14	20	61	10	14	33	16	33	135
Signal 0-10V	%	42	62	90	34	46	90	40	52	90	38	54	90	38	54	90
Cassettes sound data (4)																
Sound power level	dB(A)	35,0	38,0	46,0	35,0	38,0	53,0	41,0	47,0	61,0	44,0	43,0	50,0	44,0	50,0	60,0
Sound pressure	dB(A)	26,0	29,0	37,0	26,0	30,0	44,0	32,0	38,0	52,0	30,0	34,0	41,0	35,0	41,0	51,0
Diametre hydraulic yttings																
Main coil	Ø	3/4"			3/4"			3/4"			3/4"			3/4"		
Secondary coil	Ø	-			-			-			-			-		
Power supply																
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C

(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT

(3) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT

(4) For the cassettes, Aermec determines the value of the sound power on the basis of measurements carried out in accordance with the standard UNI EN 16583:15, in observance of the EUROVENT certification and the level of sound pressure (weighed A) measured in an environment with volume V=100m³, reverberation time t=0.5s direction factor Q=2; distance r=2.5m.

4-pipe

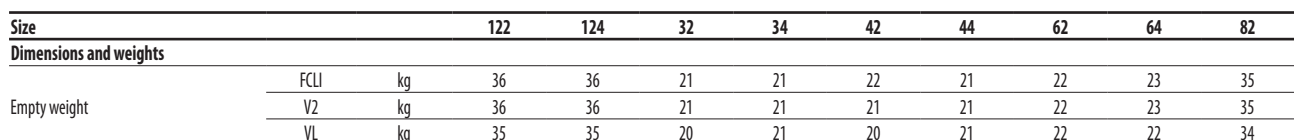
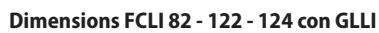
		FCL134			FCL144			FCL164			FCL1124		
		1	2	3	1	2	3	1	2	4	1	2	4
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)													
Heating capacity	kW	1,70	1,97	2,32	1,70	2,02	2,74	2,05	2,76	3,14	6,46	8,30	11,10
Water flow rate system side	l/h	152	171	203	153	178	240	194	219	279	551	727	977
Pressure drop system side	kPa	5	7	9	6	7	12	9	11	19	10	15	25
Cooling performance 7 °C / 12 °C (2)													
Cooling capacity	kW	1,15	1,46	1,88	1,80	2,32	3,59	2,29	2,76	4,25	4,55	6,19	8,67
Sensible cooling capacity	kW	0,98	1,24	1,50	1,26	1,66	2,87	1,59	1,93	3,22	3,35	4,64	6,64
Water flow rate system side	l/h	200	253	327	314	396	626	424	510	793	786	1068	1513
Pressure drop system side	kPa	4	7	10	6	10	23	16	23	50	10	20	38
Fan													
Type	type	Centrifugal											
Fan motor	type	Inverter											
Number	no.	1			1			1			1		
Air flow rate	m³/h	300	410	600	260	360	700	380	500	880	750	1100	1750
Input power	W	10	13	18	12	16	55	14	20	61	16	33	135
Signal 0-10V	%	42	62	90	34	46	90	40	52	90	38	58	90
Cassettes sound data (3)													
Sound power level	dB(A)	35,0	38,0	53,0	38,0	39,0	53,0	41,0	47,0	61,0	44,0	52,0	60,0
Sound pressure	dB(A)	26,0	29,0	44,0	29,0	30,0	44,0	32,0	38,0	52,0	35,0	41,0	51,0
Diametre hydraulic yittings													
Main coil	Ø	3/4"											
Secondary coil	Ø	1/2"											
Power supply													
Power supply		230V~50Hz											

(1) Room air temperature 20 °C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT

(2) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT

(3) For the cassettes, Aermec determines the value of the sound power on the basis of measurements carried out in accordance with the standard UNI EN 16583:15, in observance of the EUROVENT certification and the level of sound pressure (weighed A) measured in an environment with volume V=100m³, reverberation time t=0.5s direction factor Q=2; distance r=2.5m.

Dimensions FCL 32 - 34 - 42 - 44 - 62 - 64 con GLFI



FCLI_Y_UN50_06