

FCL

Cassette Type Fan Coil Unit

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

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

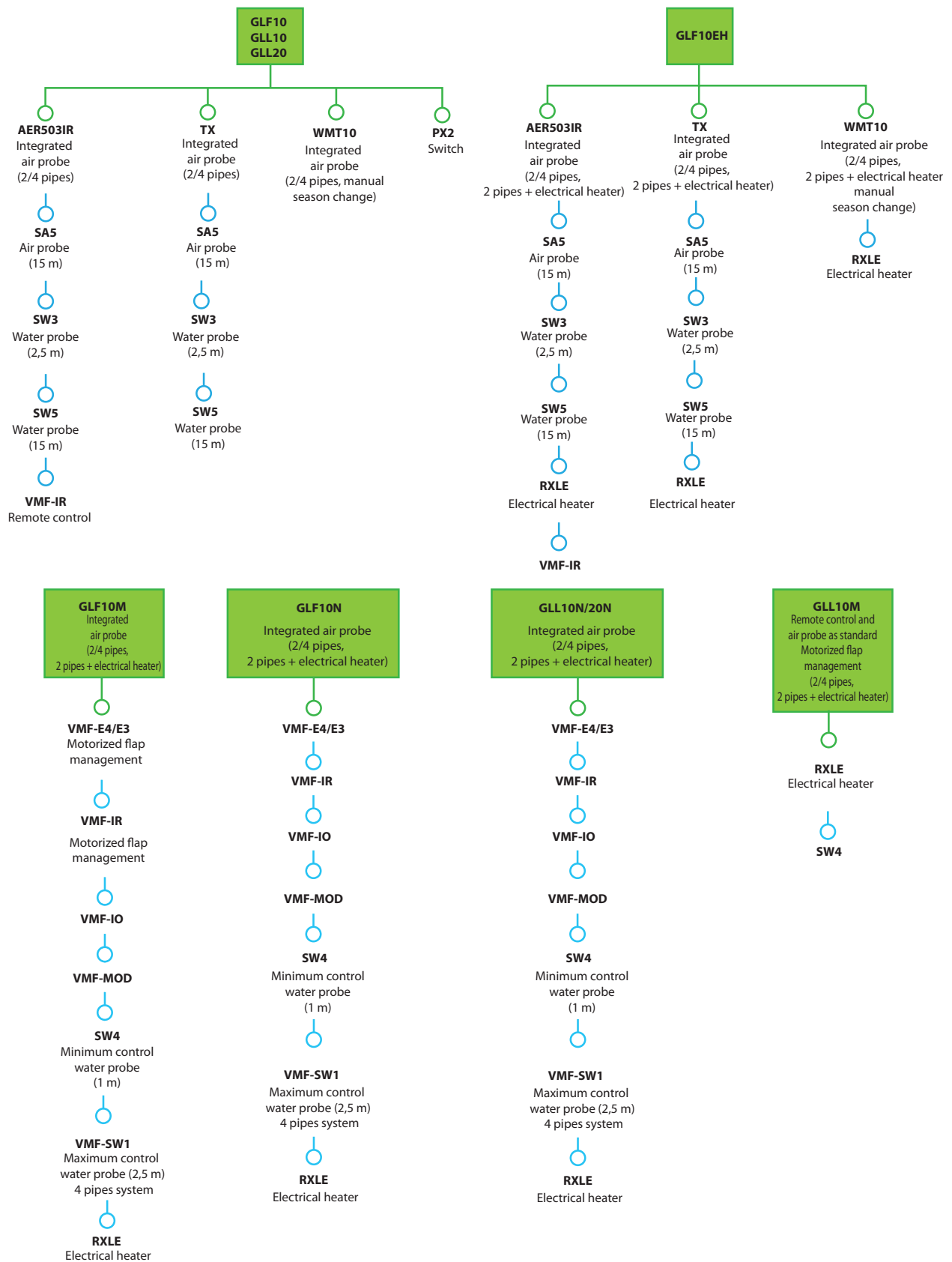
FCL Standard with internal 3-way valve

V2 With internal 2-way valve

VL Without internal valve

ACCESSORIES

Accessories that can be combined with the grilles



RXLE it can be installed only at the factory.

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 louvers. 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 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 orientated with the remote control. (size 840x840 mm 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.

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.

VMF system

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-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, VMF-E3 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: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

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. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

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.

SWS: 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 for 2/4 pipe. 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 it can be installed only at the factory

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

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	*	*	*	*	*	*	*	*

Model	Ver	72	82	84	102	104	122	124
GLL10 (1)	FCL,V2,VL	*						
GLL10M (2)	FCL,V2,VL	*						
GLL10N (3)	FCL,V2,VL	*						
GLL20 (1)	FCL,V2,VL		*	*	*	*	*	*
GLL20N (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) Compatibility with VMF system.

VMF system

Model	Ver	32	34	36	38	42	44	62	64
VMF-E3	FCL,V2,VL	*	*	*	*	*	*	*	*
VMF-E4DX	FCL,V2,VL	*	*	*	*	*	*	*	*
VMF-E4X	FCL,V2,VL	*	*	*	*	*	*	*	*
VMF-I0	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-E3	FCL,V2,VL	*	*	*	*	*	*	*
VMF-E4DX	FCL,V2,VL	*	*	*	*	*	*	*
VMF-E4X	FCL,V2,VL	*	*	*	*	*	*	*
VMF-I0	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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SIT3 (3)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SIT5 (4)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SW3 (2)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SW4	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SW5 (2)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Model	Ver	32	34	36	38	42	44	62	64	72	82	84	102	104	122	124
TX (1)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
WMT10 (1)	FCL,V2,VL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

(1) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

(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.

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.

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

2-pipe

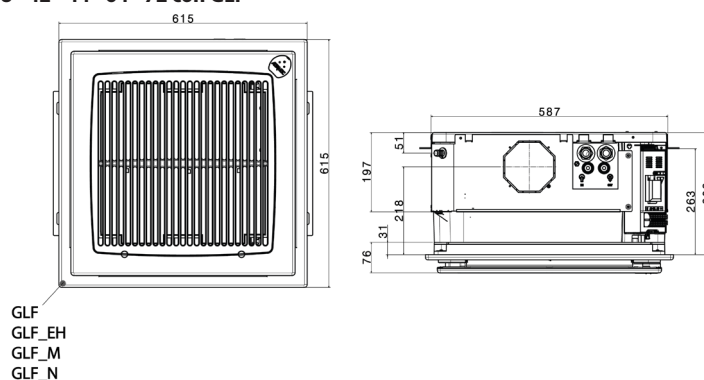
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
(3) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT
(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

4-pipe

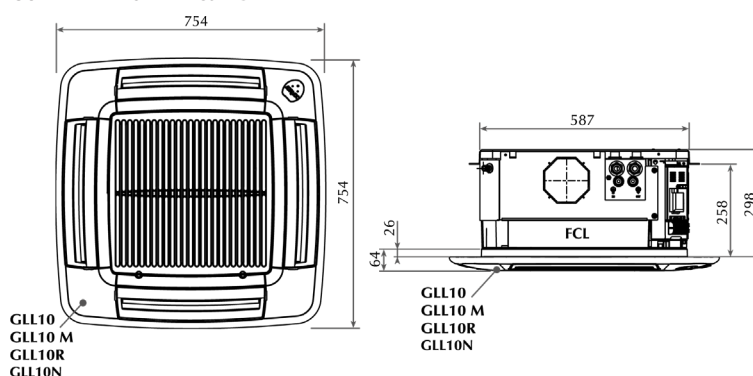
(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Room air temperature 27°C d.b./19°C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS

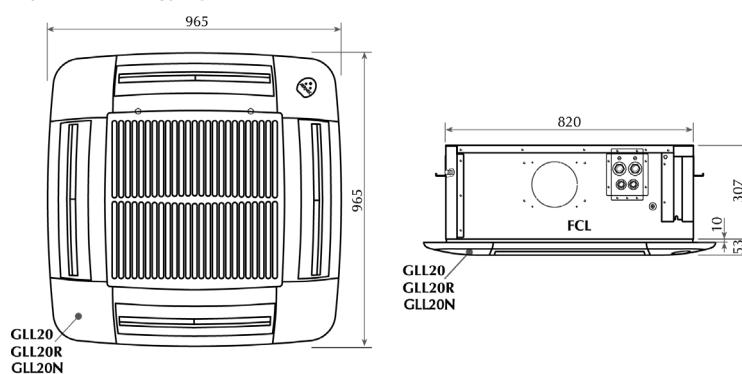
Dimensions FCL 32 - 34 - 36 - 38 - 42 - 44 - 64 - 72 con GLF



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.

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