

FCL

Cassette type fancoil Ceiling and false ceiling installation, cooling power from 1900 up to 11000W

Models:
FCL 32 , FCL36 , FCL42 , FCL62 - FCL72
FCL 34 , FCL38 , FCL44 , FCL64

Models:
FCL 82 , FCL102 , FCL122
FCL 84 , FCL104 , FCL124



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www.eurovent-certification.com



VMF

GLL10 - GLL10M - GLL10R - GLL10N
White: RAL 9010

GLL20 - GLL20R - GLL20N
White: RAL 9010

FCL with accessory FCLMC



FCLMC
White: RAL 9010



Remote Control included for GLL10M
GLL10R - GLL20R

- **4 CONFIGURATIONS ON ONE CASSETTE-TYPE FAN COIL:**
 - WITH MOTORISED LOUVERS THAT CAN BE ORIENTED VIA THE REMOTE CONTROL (GLL10M ONLY)
 - WITH LOUVERS THAT CAN BE ORIENTED MANUALLY, REMOTE CONTROL
 - WITH LOUVERS THAT CAN BE ORIENTATED MANUALLY, WALL-MOUNTED CONTROL PANEL
 - WITH MANUALLY ADJUSTABLE FINS, VMF SYSTEM ELECTRONIC THERMOSTAT, WALL-MOUNTED CONTROL PANEL (VMF-E4), COMPLETE INTEGRATION WITH THE VMF SYSTEM (ONLY WITH GLL10N AND GLL20N)
- STANDARD INTERNAL 3-WAY VALVE, WITH FAST CONNECTION ACTUATOR AND VISUAL POSITION SIGNALLING
- VERSION WITH 2-WAY VALVE FOR VARIABLE WATER FLOW RATE SYSTEMS
- VERSION WITHOUT VALVES
- HEAT EXCHANGE COIL WITH SHAPED PROFILE AND ENHANCED SURFACE
- FAN PURPOSELY DESIGNED FOR LOW SOUND EMISSIONS
- VERSIONS FOR 2-PIPE AND 4-PIPE SYSTEMS
- ALSO AVAILABLE WITH ELECTRIC HEATER FOR HEATING

Features

- 8 sizes for 2-pipe versions:
FCL 32-36-42-62-72-82-102-122
- 7 sizes for 4-pipe versions:
FCL 34-38-44-64-84-104-124
- Standard preparation with standard internal three-way valve, with fast connection actuator and position visual signalling.
- FCL_V2 preparation (available upon request), with internal two-way valve, suitable for variable water flow rate systems.
- FCL_VL preparation (available upon request), without internal valve.
- 3 configurations on one cassette-type fan coil:
 - louvers that can be oriented by means of a remote control and electronic control if coupled with the accessory GLL10M;
 - with remote control, louvers that can be oriented manually and by means of electronic control if coupled with the accessory GLL10R or GLL20R;
 - with louvers that can be oriented manually if coupled with the accessory GLL10 or GLL20, also requires a wired control panel (accessory).
- High design aesthetics.
- Grille dimensions perfectly integrable in standard suspended ceiling panels of 600x600mm and 840x840mm for the most powerful units.
- Fan designed for low sound emissions.
- 3-speed and 4-speed mixed flow (axial + centrifugal) fan unit for larger sizes (FCL 42-44-62-64-72-82-84-102-104-122-124), in order to select the 3 speeds that best meet delivered power and quiet operation requirements.
- The load-bearing structure, reinforced with a galvanised steel side band, contains insulation elements in expanded polystyrene obtained from injection moulding for purposes of noise reduction and air routing (FCL 42-44-62-72-64).
- Structure made entirely of galvanised steel, containing insulation elements in closed cell expanded polystyrene and externally covered with anti-condensate felt (FCL 82-84-102-104-122-124).
- Condensation drip tray in one piece, with V0 self-extinguishing level and overmoulding to insulation in expanded polystyrene with flame retardant additive.
- Heat exchanger with shaped profile to increase the exchange surface, and easily accessible drain valves.
- Continuous fan operation to prevent stratification of room air.
- Possibility of direct release of external air regardless of indoor unit ventilation.
- Possibility to control the climate of adjacent rooms as well. The versions FCL 82-84-102-104-122-124 allow 3-direction delivery.
- 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).
- Electrostatically pre-charged air filter regenerated with fire resistance class 2 (UL 900), (FEL 10 accessory for GLL10, GLL10R, GLL10M).
- Full compliance with safety regulations.
- Easy installation and maintenance.

Accessories

Compulsory GLL accessories, essential for unit operation:

- **GLL10M (600x600)**
Delivery grille with adjustable louvers by means of a remote control and air intake, supplied with an infrared receiver with emergency operation switch. White RAL 9010.
- **GLL10R (600x600)**
GLL20R (840x840)
Delivery grille with louvers manually adjustable and air intake. With remote control, supplied with an infrared receiver with emergency operation switch. White RAL 9010.
- **GLL10 (600x600)**
GLL20 (840x840)
Delivery grille with louvers manually adjustable and air intake. Combined with wall-mounted control panel. White RAL 9010.
- **GLL10N (600x600)**
GLL20N (840x840)
Delivery grille with Manually adjustable fins and air intake, with "VMF System" advanced electronic thermostat. Individual units, or network master also requires a wired control panel (VMF-E4 compulsory accessory). White RAL 9010.
- **Control panels and VMF System:** the characteristics are described on the appropriate card.

Accessories:

- **FCLMC10**
FCLMC20
is a perimeter case in galvanised and painted sheet steel, which is used when the fan coil is installed outside the suspended ceiling. It is used for aesthetics and protection, therefore the technical features of the FCL and FCLN remain unvaried.
- **FEL10** : electrostatically pre-charged air filter, regenerated 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 KFLD20 can be assembled on a single unit.
- **RXLE - RXLE20** : electric heater for heating, can be installed on the single-fan FCL units. Requires GLL-M or GLL-R.
- **SIT 3-5** : Thermostat Interface Cards. They allow the creation of a network of fan coils (max. 6) commanded by a central control panel (selector or thermostat).

SIT3 : commands the 3 fan speeds and must be installed on each fan coil of the network; receives the commands from the selector or the SIT5 card.

SIT5 : commands the 3 fan speeds and up to 2 valves (four pipes systems); transmits the thermostat commands to the network of fan coils fitted with SIT3.

- **SW3** : Minimum water temperature probe, to be used with electronic PXAE thermostats.
- **SW4** : Minimum water temperature probe, to be used with the units fitted with a grille with remote control. Compulsory with GLL_M, GLL_R, GLL_N
- **SWA** : External SWA probe accessory for FMT20AW panels. Detects the ambient air temperature if connected to the connector (A); the probe in the panel will be automatically disabled. Detects the temperature of the water in the system, for ventilation consent, if connected to the connector (W) (Length L = 6m)
- **VHL1 - VHL20** : motor-driven three-way valve for the heating battery in 4-pipe systems. Obligatory accessory in 4-pipe systems.
- **VHL2 - VHL22** : motor-driven two-way valve for the heating battery in 4-pipe systems. Obligatory accessory in 4-pipe systems with variable flow rates.

Compatibility of accessories

Mod. FCL	32	34	36	38	42	44	62	64	72	82	84	102	104	122	124
GLL10	✓	✓	✓	✓	✓	✓	✓	✓	✓						
GLL10M**	✓	✓	✓	✓	✓	✓	✓	✓	✓						
GLL10R**	✓	✓	✓	✓	✓	✓	✓	✓	✓						
GLL10N**	✓	✓	✓	✓	✓	✓	✓	✓	✓						
GLL20										✓	✓	✓	✓	✓	✓
GLL20R**										✓	✓	✓	✓	✓	✓
GLL20N**										✓	✓	✓	✓	✓	✓
FCLMC10	✓	✓	✓	✓	✓	✓	✓	✓	✓						
FCLMC20										✓	✓	✓	✓	✓	✓
FEL10	✓	✓	✓	✓	✓	✓	✓	✓	✓						
KFL	✓	✓	✓	✓	✓	✓	✓	✓	✓						
KFL20***										✓	✓	✓	✓	✓	✓
KFLD	✓	✓	✓	✓	✓	✓	✓	✓	✓						
KFLD20***										✓	✓	✓	✓	✓	✓
RXLE**	✓		✓		✓		✓		✓						
RXLE20**										✓		✓		✓	
SW3*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SW4**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SWA*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VHL1		✓		✓		✓		✓							
VHL20											✓		✓		✓
VHL2		✓		✓		✓		✓							
VHL22											✓		✓		✓
SIT 3*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SIT 5*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FMT10*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FMT20AW*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PX*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PX2*- PX2C6****	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PXAE*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WMT10*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VMF-E4*****	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* Accessories that can only be used in combination with GLL10 and GLL20 grilles.

** SW4 mandatory with GLL_M, GLL_R, GLL_N

*** A maximum of three KFL20 / KFLD20 can be assembled on a single unit

**** PX2C6 = Multiple package of n°6 "PX2" control panels

***** Accessories that can only be used in combination with the GLL10N and GLL20N grilles for individual units or network master

Technical data

Mod. FCL	2-pipe versions		32	36	42	62	72	82	102	122
Heating capacity* 50°C (E)	vel. (max)	W	2380	3750	4950	6250	6750	7100	10600	13000
Water flow rate* 50°C	vel. (max)	l/h	327	516	679	857	939	1032	1548	1892
Pressure drops* (VL) 50°C (E)	vel. (max)	kPa	9	14	23	32	38	23	25	34
Total cooling capacity (E)	vel. (max.)	W	1900	3000	3950	4980	5460	6000	9000	11000
Sensible cooling capacity (E)	vel. (max.)	W	1520	2400	3160	3810	4100	4200	6660	8470
Water flow rate	vel. (max.)	l/h	327	516	679	857	939	1032	1548	1892
Pressure drops (VL) (E)	vel. (max.)	kPa	10	15	25	36	43	25	28	38
Air flow rate (E)	vel. 4	m³/h	-	-	700	880	900	1100	1350	1750
	vel. 3	m³/h	600	600	530	660	680	830	1010	1350
	vel. 2	m³/h	410	410	360	500	520	680	830	1100
	vel. 1 (min)	m³/h	300	300	260	380	400	460	560	750
Fans	n.		1	1	1	1	1	1	1	1
Sound power (E)	vel. (max.)	dB(A)	46	46	53	61	63	50	54	60
Sound pressure	vel. 4	dB(A)	-	-	44	52	54	41	45	51
	vel. 3	dB(A)	37	37	37	45	47	36	39	45
	vel. 2	dB(A)	29	29	29	38	40	34	36	41
	vel. 1 (min.)	dB(A)	26	26	26	32	34	30	31	35
Heat exchanger water content	l		1,2	1,5	1,5	2,1	2,1	3	4,5	4,5
Water connections	ø Gas		3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Kvs (standard version 3R valve)			2,5	2,5	2,5	2,5	2,5	4	4	4
Input power (E)	(max.)	W	45	45	75	83	93	150	155	175
Input current	(max.)	A	0,22	0,22	0,33	0,37	0,4	0,70	0,69	0,75
Starting current		A	0,66	0,66	0,99	1,11	1,2	2,10	2,07	2,25

Mod. FCL	4-pipe versions		34	38	44	64	84	104	124
Heating capacity 70°C (E)	vel. (max)	W	2600	2600	3070	3800	8500	10000	12500
Water flow rate 70°C	vel. (max)	l/h	224	224	264	327	731	860	1075
Pressure drops 70°C (VL) (E)	vel. (max)	kPa	11	11	14	21	14	19	29
Total cooling capacity (E)	vel. (max.)	W	1900	2770	3650	4610	6000	7200	8800
Sensible cooling capacity (E)	vel. (max.)	W	1520	2240	2920	3530	4200	5300	6770
Water flow rate	vel. (max.)	l/h	327	476	628	793	1032	1238	1514
Pressure drops (VL) (E)	vel. (max.)	kPa	10	13	22	31	25	26	38
Air flow rate (E)	vel. 4	m³/h	-	-	700	880	1100	1350	1750
	vel. 3	m³/h	600	600	530	660	830	1010	1350
	vel. 2	m³/h	410	410	360	500	680	830	1100
	vel. 1 (min)	m³/h	300	300	260	380	460	560	750
Fans	n.		1	1	1	1	1	1	1
Sound power (E)	vel. (max.)	dB(A)	46	46	53	61	50	54	60
Sound pressure	vel. 4	dB(A)	-	-	44	52	41	45	51
	vel. 3	dB(A)	37	37	37	45	36	39	45
	vel. 2	dB(A)	29	29	29	38	34	36	41
	vel. 1 (min.)	dB(A)	26	26	26	32	30	31	35
Heat exchanger water content	l		1,2	1,5	1,5	2,1	3	4,5	4,5
Heat exchanger water content (hot circuit)	l		0,3	0,5	0,5	0,6	1,5	1,5	1,5
Water connections	ø Gas		3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Water connections (hot circuit)	ø Gas		1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Kvs (standard version 3R valve)			2,5	2,5	2,5	2,5	4	4	4
Kvs (hot circuit valve)			1,6	1,6	1,6	1,6	2,5	2,5	2,5
Input power (E)	(max.)	W	45	45	75	83	150	155	175
Input current	(max.)	A	0,22	0,22	0,33	0,37	0,70	0,69	0,75
Starting current		A	0,66	0,66	0,99	1,11	2,10	2,07	2,25

Power supply = 230V ~ 50Hz

(E) = EUROVENT certificate performances

The performances are the same for all the configurations:
FCL (standard), FCL V2 and FCL VL.

Performance values refer to the following conditions:

♪ Level of sound pressure (A-weighted) measured in the room with volume V = 85 m³; reverberation time t = 0.5 s; direction factor Q = 2; distance r = 2.5 m.

■ Cooling:

- room air temperature 27°C B.S. ; 19°C B.U.
- inlet water temperature 7°C ; maximum speed
Δt water 5°C

■ Heating

- room air temperature 20°C
- inlet water temperature 70°C ; Δt water 10°C
- maximum speed
- water flow rate as in cool mode

■ Heating*:

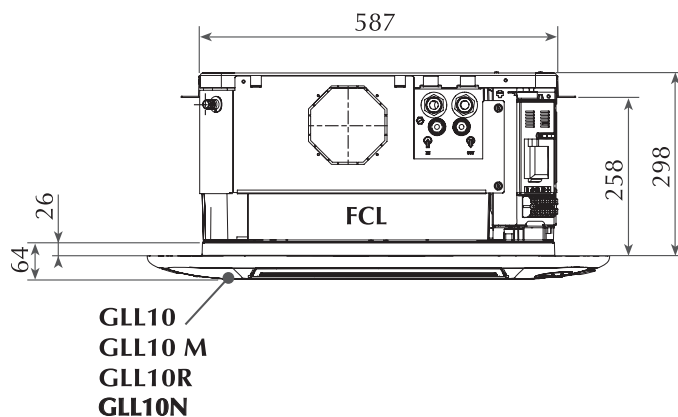
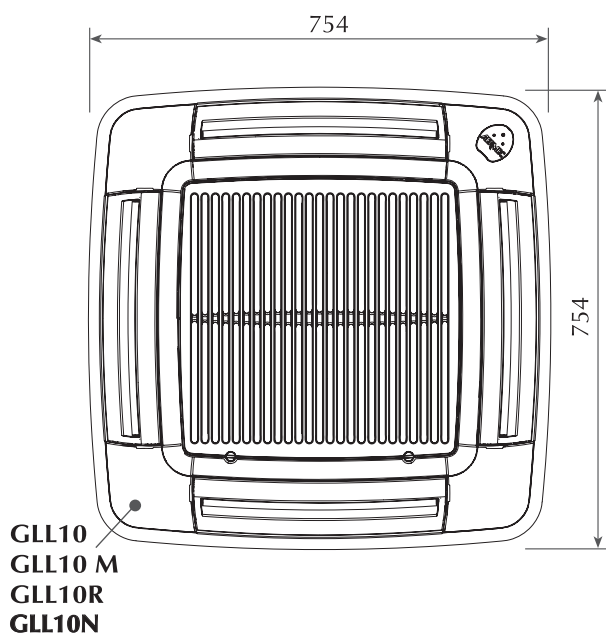
- room air temperature 20°C
- inlet water temperature 50°C
- maximum speed
- water flow rate as in cool mode

Dimensions (mm)

FCL 32 - 34 - 36 - 38 - 42 - 44 - 62 - 64 - 72

FCL 32 V2 - 34 V2 - 36 V2 - 38 V2 - 42 V2 - 44 V2 - 62 V2 - 64 V2 - 72 V2

FCL 32 VL - 34 VL - 36 VL - 38 VL - 42 VL - 44 VL - 62 VL - 64 VL - 72 VL



Mod. FCL		32	34	36	38	42	44	62	64	72
Weight	kg	20,5	21	20,5	21	20,5	21	22	22,5	22,5

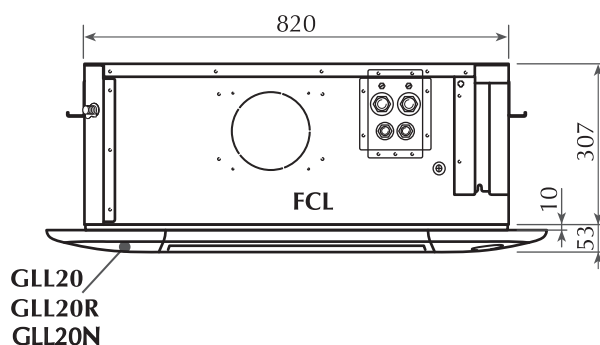
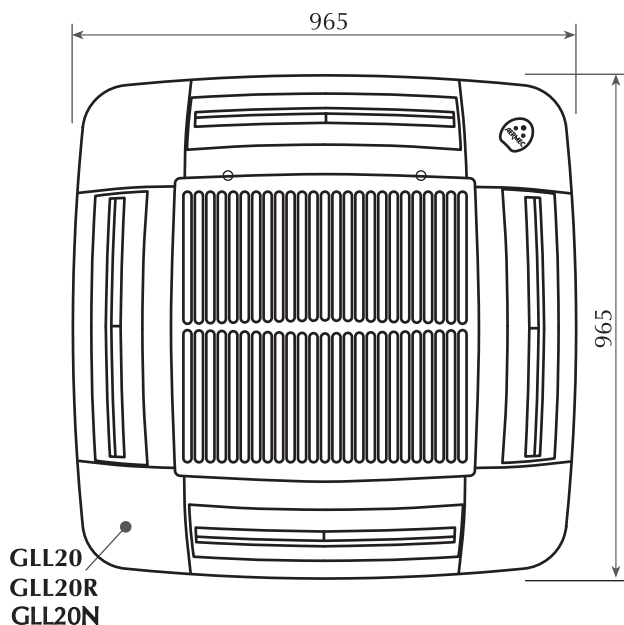
Mod. FCL		32 V2	34 V2	36 V2	38 V2	42 V2	44 V2	62 V2	64 V2	72 V2
Weight	kg	20,5	21	20,5	21	20,5	21	21	22,5	22,5

Mod. FCL		32 VL	34 VL	36 VL	38 VL	42 VL	44 VL	62 VL	64 VL	72 VL
Weight	kg	20	20,5	20	20,5	20	20,5	21,5	22	22

FCL 82 - 84 - 102 - 104 - 122 - 124

FCL 82 V2 - 84 V2 - 102 V2 - 104 V2 - 122 V2 - 124 V2

FCL 82 VL - 84 VL - 102 VL - 104 VL - 122 VL - 124 VL



Mod. FCL		82	84	102	104	122	124
Weight	kg	35	36	36	36	36	36

Mod. FCL		82 V2	84 V2	102 V2	104 V2	122 V2	124 V2
Weight	kg	35	36	36	36	36	36

Mod. FCL		32 VL	34 VL	102 VL	104 VL	122 VL	124 VL
Weight	kg	34	35	35	35	35	35

The technical data in this document are not binding. Aermec S.p.A. shall have the right to introduce at any time whatever modifications deemed necessary for the improvement of the product.

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italy
Tel. 0442633111 - Telefax 044293730
www.aermec.com