



## FCL

Cassette type fancoil

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

Aermec participate in the EUROVENT program: LCP/A/P/C the products are present on the site



Remote Control included for GLL20R



**GLL20 - GLL20R - GLL20N**  
White: RAL 9010

- **3 CONFIGURATIONS ON ONE CASSETTE-TYPE FANCOIL:**
  - 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 GLL20N)
- **STANDARD INTERNAL 3-WAY VALVE, WITH FAST CONNECTION ACTUATOR AND VISUAL POSITION SIGNALLING**
- **VERSION WITH 2-WAY VALVE FOR VARIABLE WATERFLOW RATE SYSTEMS**
- **VERSION WITH OUT VALVES**
- **HEAT EXCHANGE COIL WITH SHAPED PROFILE AND ENHANCED SURFACE**
- **FAN PURPOSELY DESIGNED FOR LOW SOUND EMISSIONS**
- **VERSION S FOR 2-PIPE AND 4-PIPE SYSTEMS**

### Features

- 3 sizes for 2-pipe versions:  
FCL 82-102-122
- 3 sizes for 4-pipe versions:  
FCL 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.
- configurations on one cassette-type fancoil:
  - with remote control, louvers that can be oriented manually and by means of electronic control if coupled with the accessory GLL20R;
  - with louvers that can be oriented manually if coupled with the accessory GLL20, also requires a wired control panel (accessory).
- High design aesthetics.
- Grill dimensions perfectly integrable in standard suspended ceiling panels of 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 in order to select the 3 speeds that best meet delivered power and quiet operation requirements.
- 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 driptay 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).
- Full compliance with safety regulations.
- Easy installation and maintenance.



**Accessories**

**Compulsary GLL accessories, essential for unit operation:**

- **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.
- **GLL20 (840x840)**  
Delivery grille with louvers manually adjustable and air intake. Combined with wall-mounted control panel. White RAL 9010.
- **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:**  
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)
- **VHL20\_24V :** motor-driven three-way valve for the heating battery in 4-pipe systems. Obligatory accessory in 4-pipe systems.
- **VHL22\_24V :** motor-driven two-way valve for the heating battery in 4-pipe systems. Obligatory accessory in 4-pipe systems with variable flow rates.

**Technical data**

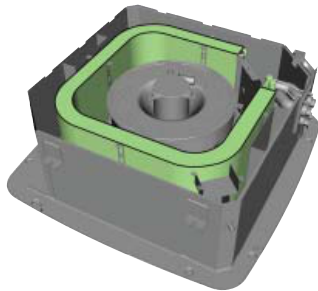
Mod. FCL 2-pipe version	Speed		82	102	122
* Heating Capacity 122°F	max	BTU/h	24226	36169	44358
* Water flow rate 122°F	max	gpm	4.54	6.81	8.33
* Pressure drop 122°F	max	ft wg	7.70	9.37	11.38
* Total cooling capacity	max	BTU/h	20473	30709	37534
* Sensible cooling capacity	max	BTU/h	14331	22725	28901
* Water flow rate	max	gpm	4.54	6.81	8.33
Pressure drop	max	ft wg	8.37	9.37	12.71
Air flow rate	speed 4	cfm	647	795	1030
	speed 3	cfm	489	594	795
	speed 2	cfm	400	489	647
	speed 1-min	Cfm	271	330	441
Number of fans		n°	1	1	1
Sound power	speed 1-max	dB(A)	50	54	60
	speed 4	dB(A)	41	45	51
	speed 3	dB(A)	36	39	45
	speed 2	dB(A)	34	36	41
Sound pressure	speed 1-min	dB(A)	30	31	35
Heat exchanger water content		gal	0.79	1.19	1.19
Coil connections		Ø	3/4"	3/4"	3/4"
Input power	max	W	150	155	175
Input current	max	A	0.70	0.69	0.75
Starting current		A	2.10	2.07	2.25



Research and innovation are essential prerequisite in maintain the leadership in the global market and Aermec, which order to holds this position, has always distinguished itself for the cutting edge solutions of its products. The innovative capacity and constant attention to research to meet market needs and trends, as well as anticipating the demands, are developed through highly skilled staff but also through the cooperation with prestigious universities and teachers of subjects related to air-conditioning. The devices of the future are developed and designed within the modern Aermec laboratories, equipped with sophisticated and constantly updated equipment, such as the new semi-anechoic chamber of the Research and Development Department.

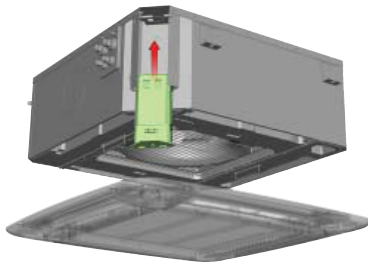
Technical data

COIL



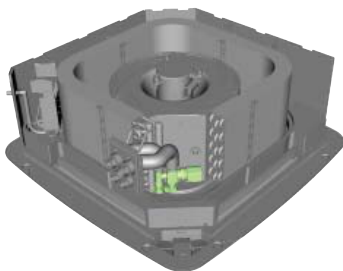
The triple loop heat exchange coil has allowed to increase the energy efficiency of heat exchange by 40% compared to traditional Cassette with circular coils.

ELECTRONIC BOX



The electronic box with bayonet fitting makes installation and maintenance operations extremely easy.

VALVE



The three-way valve is fitted as standard inside the machine. The two-way modulating valve is also available on request, suitable for innovative systems with variable water flow rate.

Mod. FCL 4-pipe version	Speed		84	104	124
* Heating Capacity 158°F	max	BTU/h	29003	34121	42652
* Water flow rate 158°F	max	gpm	3.22	3.79	4.73
* Pressure drop 158°F	max	ft wg	4.68	6.36	9.70
* Total cooling capacity	max	BTU/h	20473	24567	30027
* Sensible cooling capacity	max	BTU/h	14331	18084	23100
* Water flow rate	max	gpm	4.54	5.45	6.66
Pressure drop	max	ft wg	8.37	8.70	12.71
	speed 4	cfm	647	795	1030
	speed 3	cfm	489	594	795
	speed 2	cfm	400	489	647
Air flow rate	speed 1-min	cfm	271	330	441
Number of fans		n°	1	1	1
Sound power	speed 1-max	dB(A)	50	54	60
	speed 4	dB(A)	41	45	51
Sound pressure	speed 3	dB(A)	36	39	45
	speed 2	dB(A)	34	36	41
	speed 1-min	dB(A)	30	31	35
Heat exchanger water content		gal	0.79	1.19	1.19
Heat exchanger water content (hot circuit)		gal	0.40	0.40	0.40
Coil connections		Ø	3/4"	3/4"	3/4"
Coil connections (hot circuit)		Ø	1/2"	1/2"	1/2"
Input power	max	W	150	155	175
Input current	max	A	0.70	0.69	0.75
Starting current		A	2.10	2.07	2.25

- Electric power supply: 230V-60Hz  
The performance refers to the following conditions:

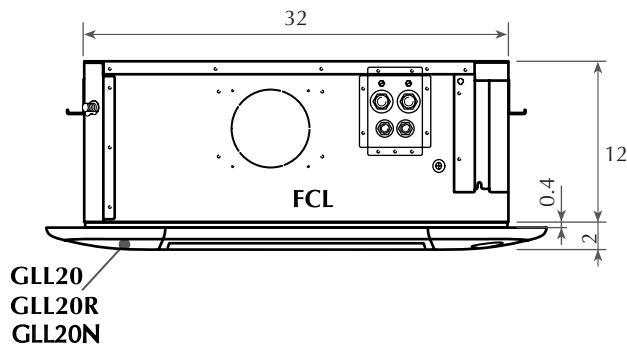
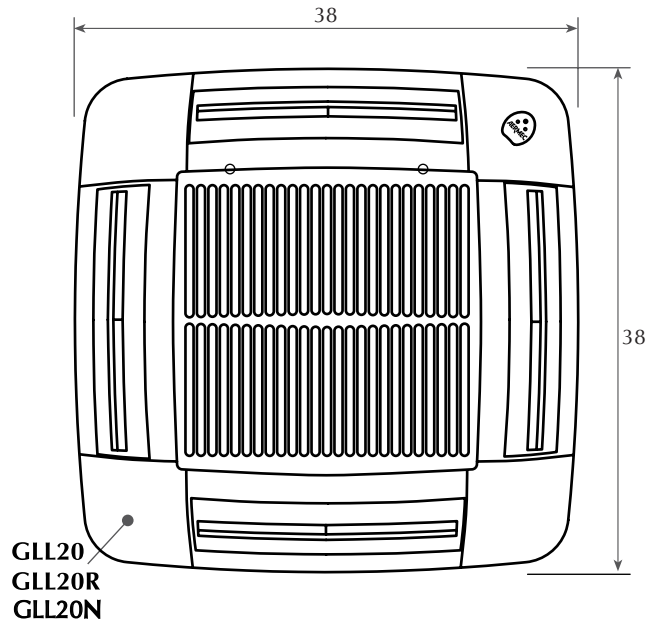
\* Heating (122°F) Inlet air temperature = 68°F d.b.  
Water inlet temperature = 122°F Water flow rate as in cooling mode

\* Heating (158°F) Inlet air temperature = 68°F d.b.  
Water inlet temperature = 158°F Water flow rate as in cooling mode ΔT = 18°F

\* Cooling:  
Inlet air temperature = 81°F d.b. Inlet air temperature = 66°F w.b. Water inlet temperature = 45°F ΔT = 9°F

Dimensions (inch)

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



<b>Mod. FCL</b>		<b>82</b>	<b>84</b>	<b>102</b>	<b>104</b>	<b>122</b>	<b>124</b>
<b>Weight</b>	lb	77	79	79	79	79	79
<b>Mod. FCL</b>		<b>82 V2</b>	<b>84 V2</b>	<b>102 V2</b>	<b>104 V2</b>	<b>122 V2</b>	<b>124 V2</b>
<b>Weight</b>	lb	77	79	79	79	79	79
<b>Mod. FCL</b>		<b>32 VL</b>	<b>34 VL</b>	<b>102 VL</b>	<b>104 VL</b>	<b>122 VL</b>	<b>124 VL</b>
<b>Weight</b>	lb	75	77	77	77	77	77