

## FCLI

Cassette-type fancoils with Brushless Inverter motor (EC)  
 Continuous 0-100% air flow rate regulation  
 Ceiling and false ceiling installation, cooling power from 1900 up to 11000W



Aermec participate in the EUROVENT program: FCH the products are present on the site [www.eurovent-certification.com](http://www.eurovent-certification.com)

**Variable Multi Flow**

**VMF**

Models:  
 FCLI32, FCLI42, FCLI62  
 FCLI34, FCLI44, FCLI64

Models:  
 FCLI82, FCLI122, FCLI124



**GLLI10 - GLLI10N**  
 White: RAL 9010



**GLLI20 - GLLI20N**  
 White: RAL 9010

FCLI with accessory **FCLMC**



**FCLMC**  
 White: RAL 9010

- **ENERGY SAVINGS OF 50% COMPARED WITH A FAN COIL WITH TRADITIONAL 3-SPEED MOTOR**
- **VERY QUIET OPERATION**
- **TOTAL COMFORT: REDUCED TEMPERATURE AND HUMIDITY VARIATIONS IN THE AIR-CONDITIONED ROOMS**
- **STANDARD INTERNAL THREE-WAY VALVE, WITH FAST CONNECTION ACTUATOR AND POSITION VISUAL SIGNALLING**
- **VERSION WITH 2-WAY VALVE FOR VARIABLE WATER FLOW RATE SYSTEMS**
- **VERSION WITHOUT VALVES**

### Features

- Fan unit with Brushless motor (Continuous 0-100% speed variation);
- 5 sizes for 2-pipe versions: FCLI 32-42-62-82-122
- 4 sizes for 4-pipe versions: FCLI 34-44-64-124
- Standard preparation with standard internal three-way valve, with fast connection actuator and visual signalling of the position
- FCLI\_V2 preparation (available upon request), with internal two-way valve, suitable for variable water flow rate systems
- FCLI\_VL preparation (available upon request), without internal valve
- Requires matching with the obligatory accessories, grill and control panel, necessary for the operation
- High design aesthetics
- Grille dimensions that can be perfectly incorporated into standard suspended ceiling panel sizes (600x600 mm) and (840X840) for more powerful units.
- Fan for low sound emissions
- EUROVENT certification
- 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
- The condensation drip tray is in one piece, with V0 self-extinguishing level and joined by means of over-moulding technology to the insulation in expanded polystyrene with flame retardant additive
- Heat exchanger with shaped profile to increase the exchange surface, and easily accessible drain valves
- Possibility of direct release of external air regardless of indoor unit ventilation
- Air filter easily removed and cleaned, self-supporting structure, characterised by a high efficiency and low pressure drops, with a fire resistance class V0 (UL 94)
- Electrostatically pre-charged air filter regenerated with fire resistance class 2 (UL 900), (FEL 10 accessory)
- Full compliance with the accident prevention standards
- Ease of installation and maintenance

## Accessories

**GLLI compulsory accessories, are indispensable for the operation of the units:**

- **GLLI100 (600x600)**  
Delivery grille with manually adjustable fins and air intake. Requires the combination with a wall-mounted control panel. White RAL 9010.
- **GLLI100N (600x600)**  
Delivery grille without water probe, with manually adjustable fins and air intake, with advanced electronic thermostat "VMF System". **Designed for combination with the electric resistor RXLE accessory and requires a wired control panel (compulsory accessory VMF-E4)** in individual units or network masters. White RAL 9010.
- **GLLI100EH (600x600)**  
Delivery grille with manually adjustable fins and air intake. **Designed for combination with the electric heater RXLE accessory, manageable by an external thermostat, not supplied by Aermec, provided the minimum number of revolutions necessary for the correct operation of the heater is respected.** White RAL 9010.
- **GLLI20 (840x840)**  
Delivery grille with manually adjustable fins and air intake. Requires the combination with a wall-mounted control panel. White RAL 9010.
- **GLLI20N (840x840)**  
Delivery grille without water probe, with manually adjustable fins and air intake, **with advanced electronic thermostat "VMF System"**. The individual units or network masters require a wired control panel (**compulsory accessory VMF-E4**). White RAL 9010.

### Probes and accessories for control panels

A range of dedicated controls, wall-mounted or on the machine, is available but it is essential to choose between these panels for simple and complete tuning, for more details please refer to the dedicated sheet.

#### Probes and accessories for control panels

- **WMT21**: Electronic thermostat with LCD display (wall installation).
- **SWAI**: Water temperature probe for WMT21 control panels. Cable length L=2m
- **SW4**: Water temperature probe for the control of maximum / minimum temperature (2-pipe system) or for the control of minimum temperature in the heating coil (4-pipe system)

#### VMF system

- **VMF-E4**: Wall mounted user interface allowing control via a capacitive touch keyboard.
- **VMF-SW1**: additional water sensor for 4-pipe systems with E1 thermostats offering maximum control in the cooling range.

#### Electrical heater

- **RXLE - RXLE20**: electric heater for heating, can be installed on the single-fan FCLI units. **Requires GLLI100HE or GLLI100N.**

#### Valve kit

- **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.**

#### Accessory for Installation

- **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 KFLD20 can be assembled on a single unit.**
- **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 remain unvaried.**
- **FCLMC20IK**: Installation kit for Controller Inverter, compulsory for units with **FCLM20**.

For more details on the control panels and VMF system refer to the dedicated sheet

FCLI	32	34	42	44	62	64	82	122	124
<b>COMPULSARY GLL ACCESSORIES, ESSENTIAL FOR UNIT OPERATION:</b>									
GLLI100	•	•	•	•	•	•	-	-	-
GLLI100N	•	•	•	•	•	•	-	-	-
GLLI100EH	•	•	•	•	•	•	-	-	-
GLLI20	-	-	-	-	-	-	•	•	•
GLLI20N	-	-	-	-	-	-	•	•	•
<b>Probes and accessories for control panels</b>									
WMT21	•	•	•	•	•	•	•	•	•
SWAI	In combination with WMT21								
SW4	(1)	•	•	•	•	•	•	•	•
<b>VMF system</b>									
VMF-E4	(1)	•	•	•	•	•	•	•	•
VMF-SW1	(1)	•	•	•	•	•	•	•	•
<b>Electrical heater</b>									
RXLE	(2)	•	-	•	-	•	-	-	-
<b>Water valves</b>									
<b>3 way valve kit for 4 pipe systems</b>									
VHL1	-	•	-	•	-	•	-	-	-
VHL20	-	-	-	-	-	-	-	-	•
<b>2 way valve kit for 4 pipe systems</b>									
VHL2	-	•	-	•	-	•	-	-	-
VHL22	-	-	-	-	-	-	-	-	•
<b>Accessories for installation</b>									
FEL10	•	•	•	•	•	•	-	-	-
KFL	•	•	•	•	•	•	-	-	-
KFL20	-	-	-	-	-	-	•	•	•
KFLD	•	•	•	•	•	•	-	-	-
KFLD20	-	-	-	-	-	-	•	•	•
<b>Perimeter Case</b>									
FCLMC10	•	•	•	•	•	•	-	-	-
FCLMC20	-	-	-	-	-	-	•	•	•
FCLMC20IK	(3)	-	-	-	-	-	•	•	•

(1) Accessory for GLLI\_N

(2) Compulsory with GLLI100HE, GLLI100N

(3) FCLMC20 requires the combination with the FCLMC20IK accessory

## Technical data

FCL_I		32			34			42			44			62			64		
Fan speed		H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
<b>Heating Performance</b>																			
<b>2 pipe configuration</b>																			
Heating capacity (70°C)	(1) kW	4,00	2,95	2,22	/	/	/	7,34	4,47	3,32	/	/	/	10,49	6,37	5,19	/	/	/
Water flow rate	(1) l/h	350	258	194	/	/	/	642	391	290	/	/	/	918	558	454	/	/	/
Pressure drops	(1) kPa	10	6	4	/	/	/	24	10	6	/	/	/	42	17	12	/	/	/
Heating capacity (45°C)	(2) kW	1,99	1,47	1,10	/	/	/	3,65	2,23	1,65	/	/	/	5,22	3,17	2,58	/	/	/
Water flow rate	(2) l/h	345	254	192	/	/	/	633	386	287	/	/	/	905	550	448	/	/	/
Pressure drops	(2) kPa	10	6	4	/	/	/	23	10	6	/	/	/	41	17	11	/	/	/
<b>4 Pipe configuration with Additional Heat Exchanger</b>																			
Heating capacity (65°C)	(3) kW	/	/	/	2,32	1,96	1,74	/	/	/	2,74	2,04	1,75	/	/	/	3,19	2,51	2,21
Water flow rate	(3) l/h	/	/	/	203	171	152	/	/	/	240	178	153	/	/	/	279	219	194
Pressure drops	(3) kPa	/	/	/	9	7	5	/	/	/	12	7	5	/	/	/	19	12	10
<b>Cooling Performance</b>																			
Total cooling capacity	(4) kW	1,90	1,47	1,16	1,90	1,47	1,16	3,95	2,54	1,96	3,64	2,30	1,83	4,98	3,21	2,66	4,61	2,96	2,46
Sensible cooling capacity	(4) kW	0,99	1,25	1,52	1,52	1,25	0,99	3,16	1,82	1,38	2,91	1,62	1,30	3,81	2,24	1,87	3,53	2,08	1,73
Water flow rate	(4) l/h	327	253	200	327	253	200	679	437	337	626	396	314	856	551	458	793	510	424
Pressure drops	(4) kPa	11,7	7,4	4,8	12,7	8	5,2	32,4	14,7	9,2	31,7	13,9	9,2	47,8	21,6	15,5	50,3	22,7	16,3
<b>Fans</b>																			
Centrifugal Fan	n°	1																	
Air flow rate	m³/h	600	410	300	600	410	300	700	360	260	700	360	260	880	500	380	880	500	380
<b>Sound data</b>																			
Sound power level	(5) dB(A)	46	38	35	46	38	35	53	39	35	53	39	35	61	47	41	61	47	41
Sound pressure level	dB(A)	37	29	26	37	29	26	44	30	26	44	30	26	52	38	32	52	38	32
<b>Diameter connections</b>																			
Standard coil	Ø	3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Additional coil	Ø	/			1/2"			/			1/2"			/			1/2"		
Increased coil	Ø	/			/			/			/			/			/		
<b>Electrical Features</b>																			
Absorbed power	W	18	13	10	18	13	10	55	16	12	55	16	12	61	20	14	61	20	14
Max. input current	A	0,28			0,28			0,43			0,43			0,47			0,47		
Signal 0-10V	%	90	62	42	90	62	42	90	46	34	90	46	34	90	52	40	90	52	40
Power supply		230V~50Hz																	

FCL		82			122			124		
Fan speed		H	M	L	H	M	L	H	M	L
<b>Heating Performance</b>										
<b>2 pipe configuration</b>										
Heating capacity (70°C)	(1) kW	11,88	8,12	5,88	21,75	14,73	10,53	/	/	/
Water flow rate	(1) l/h	1039	710	514	1903	1289	921	/	/	/
Pressure drops	(1) kPa	26	13	7	42	21	11	/	/	/
Heating capacity (45°C)	(2) kW	5,91	4,04	2,92	10,82	7,33	5,24	/	/	/
Water flow rate	(2) l/h	1025	701	507	1877	1271	909	/	/	/
Pressure drops	(2) kPa	25	13	7	41	20	11	/	/	/
<b>4 Pipe configuration with Additional Heat Exchanger</b>										
Heating capacity (65°C)	(3) kW	/	/	/	/	/	/	11,17	8,31	6,30
Water flow rate	(3) l/h	/	/	/	/	/	/	977	727	551
Pressure drops	(3) kPa	/	/	/	/	/	/	25	14	9
<b>Cooling Performance</b>										
Total cooling capacity	(4) kW	6,00	4,04	2,80	11,00	7,51	5,36	8,80	6,21	4,57
Sensible cooling capacity	(4) kW	4,20	2,76	1,90	8,47	5,74	4,04	6,77	4,67	3,37
Water flow rate	(4) l/h	1032	695	482	1893	1292	921	1513	1068	786
Pressure drops	(4) kPa	34,7	17	8,8	60,1	30,2	16,4	52,3	28	16,1
<b>Fans</b>										
Centrifugal Fan	n°	1								
Air flow rate	m³/h	1100	680	460	1750	1100	750	1750	1100	750
<b>Sound data</b>										
Sound power level	(5) dB(A)	50	43	39	60	50	44	60	50	44
Sound pressure level	dB(A)	41	34	30	51	41	35	51	41	35
<b>Diameter connections</b>										
Standard coil	Ø	3/4"			3/4"			3/4"		
Additional coil	Ø	/			/			1/2"		
Increased coil	Ø	/			/			/		
<b>Electrical Features</b>										
Absorbed power	W	33	14	9	135	33	16	135	33	16
Max. input current	A	0,71			0,80			0,80		
Signal 0-10V	%	90	54	38	90	58	38	90	58	38
Power supply	V/ph/Hz	230V~50Hz								

H max. speed; M med.speed; L min.speed

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

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

(3) Room air 20°C b.s.; Water (in/out) 65°C/55°C (EUROVENT)

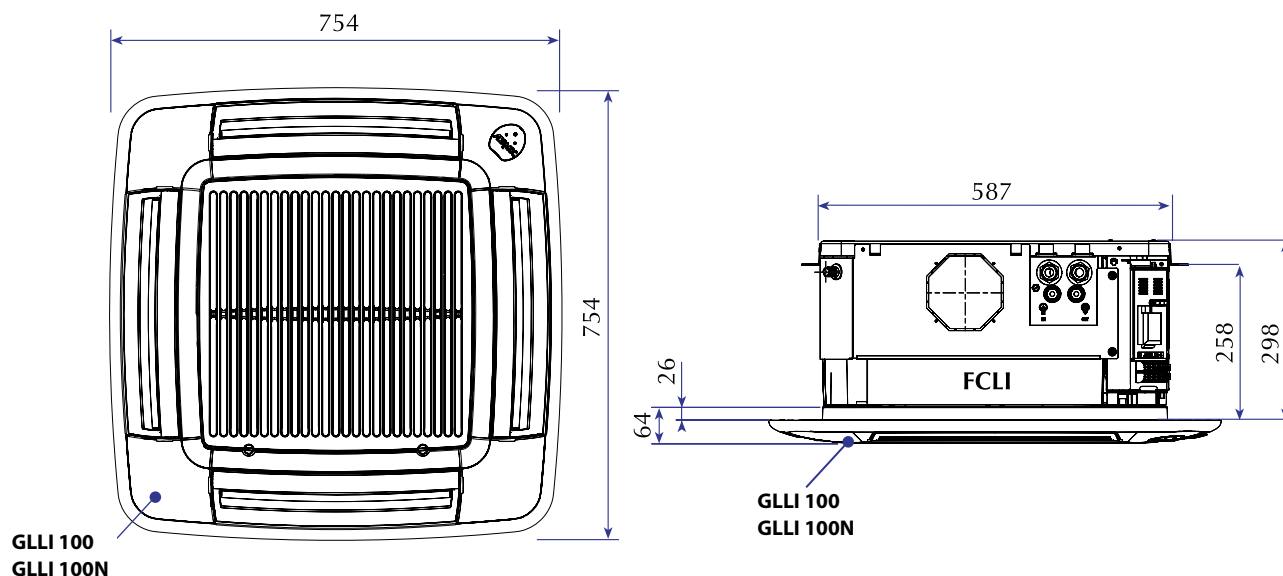
(4) Room air 27°C b.s./19°C b.u.; Water (in/out) 7°C/12°C (EUROVENT)

(5) Sound power level on the basis of measurements made in compliance with Eurovent 8/2

Sound pressure level (A-weighted) measured in the room with volume V=100 m³, reverberation time t = 0.5 s; Direction factor Q = 2; Distance r = 2.5m

## Dimensions (mm)

FCLI 32 - 34 - 42 - 44 - 62 - 64  
 FCLI 32 V2 - 34 V2 - 42 V2 - 44 V2 - 62 V2 - 64 V2  
 FCLI 32 VL - 34 VL - 42 VL - 44 VL - 62 VL - 64 VL



Mod. FCLI		32	34	42	44	62	64
Weight	kg	20,5	21	20,5	21	22	22,5

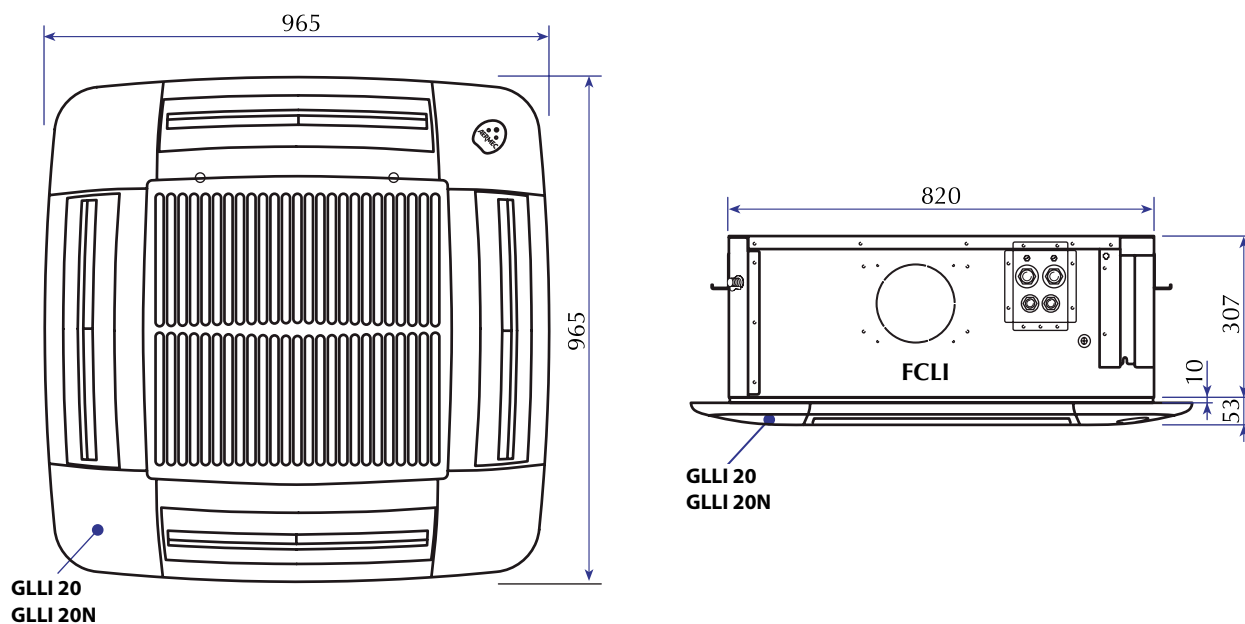
  

Mod. FCLI		32 V2	34 V2	42 V2	44 V2	62 V2	64 V2
Weight	kg	20,5	21	20,5	21	21	22,5

Mod. FCLI		32 VL	34 VL	42 VL	44 VL	62 VL	64 VL
Weight	kg	20	20,5	20	20,5	21,5	22

FCLI 82 - 122 - 124  
 FCLI 82 V2 - 122 V2 - 124 V2  
 FCLI 82 VL - 122 VL - 124 VL



Mod. FCLI		82	122	124
Weight	kg	35	36	36

Mod. FCLI		82 V2	122 V2	124 V2
Weight	kg	35	36	36

Mod. FCLI		32 VL	122 VL	124 VL
Weight	kg	34	35	35

All specifications are subject to change without prior notice. Although every effort has been made to ensure accuracy, Aermec does not assume responsibility or liability for eventual errors or omissions.

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