

FCA

Fan coils
Suspended ceiling installation



Aermec adheres to the EUROVENT Certification Programme. The products concerned appear in the EUROVENT Certified Products Guide.

Single units:
FCA / FCA-R 32, 34, 36, 38, 42, 44, 62, 64

**Three-way valve
inside the unit
as standard**



Standard on FCA-R



Twin units:
FCA / FCA-R 82, 84, 122, 124

Features

- 6 sizes
- 4-tube versions (double coil): FCA 34, 38, 44, 64, 84 and 124
- FCA-R version: with remote control. This version is equipped with electronic card which controls all operations (fan speed, season changeover, 3-way valves, drain pump, electric heater). Version available both for 2-pipes and 4-pipes installations
- 4-speed mixed flow (axial+centrifugal) fan unit
- Very quiet operation
- Aesthetically styled
- Grille dimensions respect standard suspending ceiling panel sizes
- Continuous fan operation to prevent layering of room air
- Prearranged for fresh air intake
- Facility for air conditioning also in an adjacent rooms
- Easy installation and maintenance
- Electrostatically pre-charged, self-bearing filter, featuring great efficiency and low pressure drops
- Washable air filter
- Easily removable air filter with fire resistance class 2 (UL 900)
- Standard valve for the cooling coil
- Full compliance with safety regulations

Accessories

- **GLA:** Air delivery/return grill. This accessory is **necessary** as units FCA are consigned without grill. RAL 9010 white colour.
- **GLA-R:** air delivery/intake grill. Equipped with an infrared receiver with emergency operation key and remote control. The grill fins operate manually. This accessory is **necessary** as units FCA-R are consigned without grill. RAL 9010 white colour.
- **FMT10:** Electronic thermostat for fan coils; can be connected to On/Off valves for closing coil water supply. Simplified controls with only 2 selectors for adjusting temperature and fan speed (3 speeds). Supplied with a standardized 3-module rectangular socket box (type 503) with a white cover. Air temperature sensor included. **Recessed installation. Not for FCA-R.**
- **FMT20:** Electronic thermostat with LCD for fan coils; can be connected to On/Off valves for closing coil water supply. Simplified controls with only 2 selectors for adjusting temperature and fan speed (3 speeds). Supplied with a standardized 3-module rectangular socket box (type 503) with a white cover. Air temperature sensor included. **Recessed installation. Not for FCA-R.**
- **KFA:** Kit composed of a metal flange of diameter 100 mm for a fresh air intake or for discharge into an adjoining room.
- **PCT2:** Control panel with electromechanical thermostat for 2-tube systems with thermostat ventilation. **Not for FCA-R.**
- **PCT3:** Control panel with electromechanical thermostat for 2-tube systems with ventilation always on. **Not for FCA-R.**
- **PCT4:** Control panel with electromechanical thermostat for 4-tube systems. **Not for FCA-R.**
- **PX:** Control panel with selector switch. **Not for FCA-R.**
- **PXAE:** Electronic thermostat for fan coils installed in two-pipe or four-pipe systems. Simplified commands with two selectors for temperature and ventilation control (three speeds with manual or automatic control). It can control up to two valves of the On-Off type. **Wall mounting. Not for FCA-R.**
- **PXAR:** Electronic thermostat for fan coils installed in two-pipe systems, and systems with two pipes with electric heater or four pipes (without electric heater). Simplified controls with just two selectors for the control of the temperature and the ventilation (3 speeds with manual or automatic control). The control of the electric heater can be activated using the speed selector. It can monitor the electric heater and one On-Off type valve or up to two On-Off type valves. **Wall mounting. Not for FCA-R.**
- **RXC:** Electric heating element installable on the single fan FCA units. (Need thermostat with el. heater control).
- **RXCE:** Electric heating element installable on the single fan FCA-R units.
- **RXCB:** Electric heating element installable on the double fan FCA units. (Need thermostat with el. heater control).
- **RXCEB:** Electric heating element installable on the double fan FCA-R units.
- **SIT 3-5:** Thermostat interface cards. They allow to set up a fancoils network (max. 10) commanded by a centralised panel (switch or thermostat). **SIT3:** commands the three fan speeds and must be installed on each fancoil in the network; it receives the commands from the switch or from the SIT5 card. Standard on twin FCA units. **SIT5:** commands the 3 fan speeds and up to two valves (four-pipe systems); it sends the thermostat commands to the fancoils network.
- **SW:** Probe for the electronic thermostats (excluding PXB) which permits operation of the unit only with water above 35 °C.
- **VHA1:** Three-way motorized valve for the heating coil in 4-tube systems. **Accessory obligatory in 4 pipe systems.**
- **WMT05:** Electronic thermostat for fan coils installed in 2-pipe systems. **Wall installation. Not for FCA-R.**
- **WMT10:** Electromechanical thermostat for fan coils, can be connected to On/Off valves for closing coil water supply. The panel is electrically protected by an internal fuse. The ventilation system is selected by applying jumpers during installation. **Wall installation. Not for FCA-R.**

Mod. FCA	Compatibility of accessories											
	32	34	36	38	42	44	62	64	82	84	122	124
GLA 10	✓	✓	✓	✓	✓	✓	✓	✓				
GLA 20									✓	✓	✓	✓
FMT10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FMT20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
KFA*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PCT 2	✓		✓		✓		✓		✓		✓	
PCT 3	✓		✓		✓		✓		✓		✓	
PCT 4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PX	✓		✓		✓		✓		✓		✓	
PX 2	✓		✓		✓		✓		✓		✓	
PXAE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PXAR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RXC	✓	✓	✓	✓	✓	✓	✓	✓				
RXCB									✓	✓	✓	✓
SIT 3	✓	✓	✓	✓	✓	✓	✓	✓				
SIT 5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SW 3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VHA1		✓		✓		✓		✓		✓		✓
WMT05	✓		✓		✓		✓		✓		✓	
WMT10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Mod. FCA-R	Compatibility of accessories											
	32	34	36	38	42	44	62	64	82	84	122	124
GLA 10R	✓	✓	✓	✓	✓	✓	✓	✓				
GLA 20R									✓	✓	✓	✓
KFA*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RXCE	✓	✓	✓	✓	✓	✓	✓	✓				
RXCEB									✓	✓	✓	✓
SW 4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VHA1		✓		✓		✓		✓		✓		✓

* It is possible to use both for air intake (one for all sizer) and air delivery in an adjacent room (one for single model and up to two for twin units).

Technical data

Mod. FCA		32 - 32R	34 - 34R	36 - 36R	38 - 38R	42 - 42R	44 - 44R	
Heating capacity	W (max.)	5000	3800	8375	3550	9500	3850	
	W (med.)	4500	3450	7160	3200	8000	3550	
	W (min.)	3800	3000	5690	2800	6400	3100	
Heating capacity*	W (max.) (E)	2900	3800	4950	3550	5650	3850	
Water flow rate	l/h	430	327	720	305	817	331	
Water pressure drops	kPa	8.0	16.0	17.0	14.0	22.0	16.0	
	W (max.) (E)	1900	1900	3500	3500	4100	4100	
	W (med.)	1700	1700	3170	3170	3350	3350	
Cooling capacity	W (min.)	1500	1500	2710	2710	2950	2950	
	W (max.) (E)	1800	1620	3040	3040	3600	3600	
	W (med.)	1600	1600	2650	2650	2950	2950	
Sensible cooling capacity	W (min.)	1350	1350	2160	2160	2400	2400	
	Water flow rate	l/h	327	327	602	602	705	705
	Water pressure drops	kPa (E)	9.0	11.0	19.0	19.0	25.0	25.0
Air flow rate	m ³ /h (max.)	680	680	680	680	800	800	
	m ³ /h (med.)	550	550	550	550	640	640	
	m ³ /h (min.)	410	410	410	410	480	480	
Fans	n.	1	1	1	1	1	1	
♪ Sound pressure	dB (A) (max.)	40.0	37.0	40.0	41.0	49.0	49.0	
	dB (A) (med.)	33.0	31.0	36.0	37.0	43.0	43.0	
	dB (A) (min.)	29.0	27.0	33.0	34.0	35.0	35.0	
Water content (standard coil)	l	0.5	0.5	1.1	1.1	1.1	1.1	
Water content (additional coil)	l	-	0.23	-	0.23	-	0.23	
Standard coil connections	ø Gas	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	
Additional coil connections	ø Gas	-	1/2"	-	1/2"	-	1/2"	
Max. power	W (E)	79	79	79	79	103	103	
Max. current	A	0.36	0.36	0.36	0.36	0.48	0.48	
Peak current	A	1.08	1.08	1.08	1.08	1.44	1.44	

Mod. FCA		62 - 62R	64 - 64R	82 - 82R	84 - 84R	122 - 122R	124 - 124R	
Heating capacity	W (max.)	11000	3900	15500	6800	16700	6950	
	W (med.)	9400	3600	13200	6300	14500	6400	
	W (min.)	7700	3250	10650	5700	12200	5800	
Heating capacity*	W (max.) (E)	6500	3900	9300	6800	10000	6950	
Water flow rate	l/h	946	335	1333	585	1436	598	
Water pressure drops	kPa	23.0	19.0	17.0	12.9	19.0	13.3	
	W (max.) (E)	4900	4900	7700	7700	8700	8700	
	W (med.)	3900	3900	6800	6800	7800	7800	
Cooling capacity	W (min.)	3400	3400	5800	5800	6750	6750	
	W (max.) (E)	4150	4150	6000	6000	6700	6700	
	W (med.)	3450	3450	5100	5100	5900	5900	
Sensible cooling capacity	W (min.)	2950	2950	4200	4200	5050	5050	
	Water flow rate	l/h	843	843	1316	1221	1496	1496
	Water pressure drops	kPa (E)	24.0	24.0	19.3	19.3	19.8	19.8
Air flow rate	m ³ /h (max.)	880	880	1230	1230	1350	1350	
	m ³ /h (med.)	710	710	980	980	1090	1090	
	m ³ /h (min.)	550	550	740	740	850	850	
Fans	n.	1	1	2	2	2	2	
♪ Sound pressure	dB (A) (max.)	53.0	54.0	52.0	52.0	54.0	54.0	
	dB (A) (med.)	48.0	48.0	46.0	46.0	48.0	48.0	
	dB (A) (min.)	40.0	42.0	38.0	38.0	41.0	41.0	
Water content (standard coil)	l	1.5	1.5	2.3	2.3	3.0	3.0	
Water content (additional coil)	l	-	0.2	-	0.5	-	0.5	
Standard coil connections	ø Gas	3/4"	3/4"	1"	1"	1"	1"	
Additional coil connections	ø Gas	-	1/2"	-	1/2"	-	1/2"	
Max. power	W (E)	105	105	150	150	156	156	
Max. current	A	0.46	0.46	0.84	0.84	0.87	0.87	
Peak current	A	1.38	1.38	2.51	2.51	2.61	2.61	

Power supply = 1~ 230V 50Hz.

(E) = EUROVENT certified performance

Performance values refer to the following conditions:

♪ Sound pressure measured in an 100 m³ semi-reverberant test chamber with reverberation time Tr = 0.5s.

■ Cooling:

- room air temperature 27 °C D.B., 19 °C W.B.;
- water inlet temperature 7 °C; max. speed;
- Δt water 5 °C.
- for medium and low speed, water flow rate remains same as at maximum speed.

■ Heating:

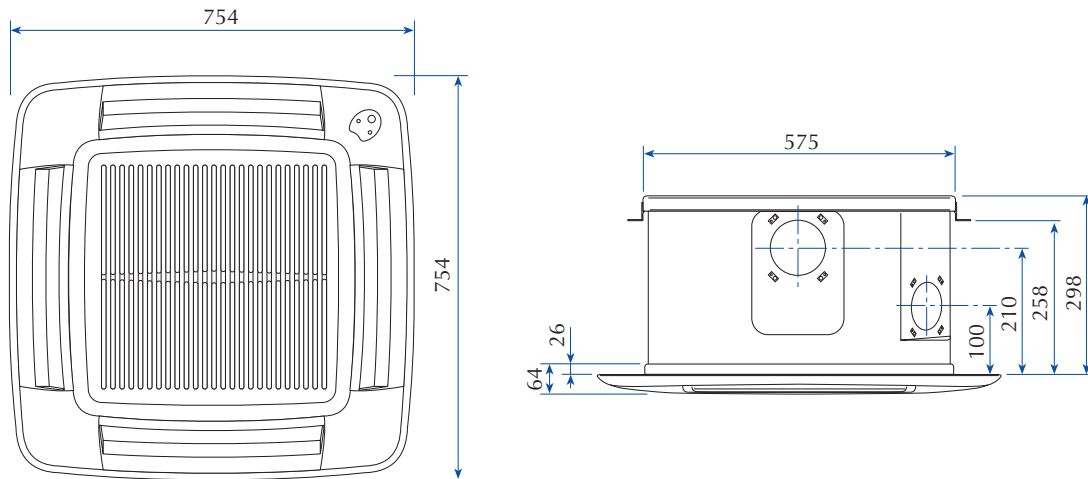
- room air temperature 20 °C; maximum speed;
- water inlet temperature 70 °C; Δt water 10 °C.

* = Heating:

- room air temperature 20 °C; maximum speed;
- water inlet temp.: 50 °C (FCA - FCA-R 32, 36, 42, 62, 82, 122);
- water inlet temp.: 70 °C (FCA - FCA-R 34, 38, 44, 64, 84, 124);
- water flow rate same as in cooling operation.

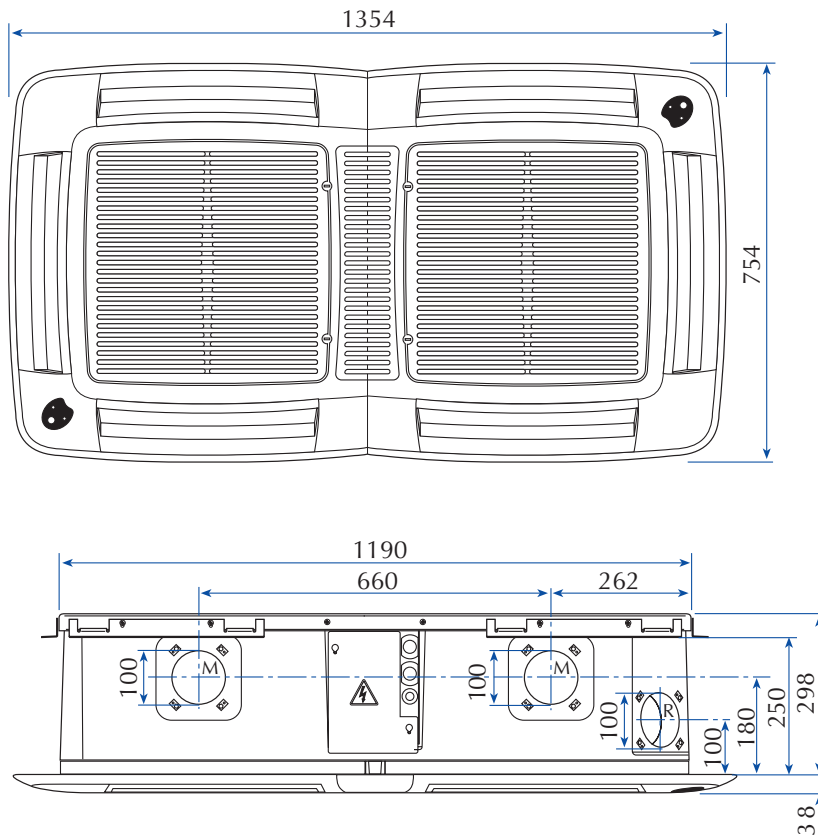
Dimensions (mm)

FCA - FCA-R 32 - 34 - 36 - 38 - 42 - 44 - 62 - 64



Mod. FCA		32 - 32R	34 - 34R	36 - 36R	38 - 38R	42 - 42R	44 - 44R	62 - 62R	64 - 64R
Weight	kg	16	16.5	17	17.5	17	17.5	18	18.5

FCA - FCA-R 82 - 84 - 122 - 124



Mod. FCA		82 - 82R	84 - 84R	122 - 122R	124 - 124R
Weight	kg	34	34	36	36

The technical data in this document are not binding.
Aermec S.p.A. reserves the right to make whatever modifications
it deems necessary to improve the product at any time.

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