Cassette fan coils

ACQVARIA 3 - 10 kW

2 pipes systems | 4 pipes systems | Recess ceiling-mount

Solidity and efficiency in a single product.

The range of hydronic cassette units ACQVARIA, with 3 speed motor, consists of six models for 2-pipe systems and six models for 4-pipe systems.
Designed in two dimensional frames (600x600 mm and 900x900 mm modularity), it is characterised by high performance and extremely low noise levels, as a result of the special care taken in the design of the heat exchangers and fan assemblies.
The suspended ceiling unit houses all the components, heat exchange coil, fan drive assembly, and condensate collection and drainage system. Its structure is designed for introducing fresh air into the space, mixing it with recovered air, and distributing the treated air from the cassette unit to adjacent rooms.
The condensate drainage pump, suitable for height differences of up to 90 cm, is controlled by a float switch with 3 activation levels for exceptionally low noise and safe operation.
The design and colour, RAL9003 or RAL9010, of the air intake and diffusion louvre guarantee optimal integration into the suspended ceiling panels. Easy access to the air filter for cleaning operations.
ACQVARIA cassette units can be combined with all wall-mounted, electronic, or microprocessor-programmable control panels with user interface.
On request, the EVO BOARD regulator; air, water, and humidity probes; and 2- or 3-way valves with ON-OFF or modulating actuator can be installed on the unit.
Are also available pressure-independent balancing and control valves, the use of which significantly reduces commissioning time.

PLUS

- Reliability and sturdiness in a compact design
- Fresh air with direct or mixed introduction
- Heat exchanger up to 3 rows
- Condensate drainage pump for height differences of up to 0.9 m
- Reduced installation and commissioning time

AVAILABLE VERSIONS

In addition to the 2 ABS grilles with adjustable fins it is available EFFETTO and EFFETTO AirClissi.

EFFETTO, module for intake and diffusion air with the Coandă effect

EFFETTO Airclissi, new design concept which integrates light with the Coandă effect air diffusion.

White RAL9003

White RAL9010

STANDARD

Grey - natural brushed aluminium

White - RAL 9010

Black - black RAL 9005

EFFETTO

Neutral light

EFFETTO + AirClissi

MAIN COMPONENTS

Structure
Made of galvanised steel sheet with internal polyurethane foam coating and external flocked PES to guarantee heat and sound insulation. Fresh air can be introduced into the room directly through the unit due to the provision of connections for neutral or mixed introduction. Accessories are available for connection to ducts. There are systems on the unit for anchoring it to the ceiling. The electrical wiring is housed in a containment box and is easily accessible from the side for easy connection

Heat exchanger
Copper pipe and high efficiency aluminium fins secured to the pipe by mechanical expansion. With at least two rows in the models for 2-pipe systems, it is available in the 2+1 configuration in the models for 4-pipe systems. The coil comes complete with manual air vent valves. On request, valves can be connected to the coil to regulate and balance the operation of the unit.

Fan drive assembly
Three-speed electrical motor, directly connected to a centrifugal fan with backward-curving blades with profile optimised for stable operation at all speeds.

Air filter
Honey-comb polypropylene washable air filter, easily removable for maintenance operations.

Condensate collection and drainage system
Located under the heat exchanger, the main drip tray is made of polystyrene and is inserted inside the profiles optimised for the distribution of air in the space. The condensate drainage pump is able to raise the condensate up to 0.9 m from the exit point from the unit. The operation of the pump is controlled by a float switch with three levels of action that activate it, stop it and, if the critical level is exceeded, stop the operation of the cassette unit fan and close the water valve. The supply is completed by the auxiliary water drip tray for the collection of condensate from the regulating valves.

Louvre
It is square shaped for the intake and diffusion of air in the space, and it is made of ABS, colour RAL9003 or RAL9010. The air intake louvre can be opened for access to the air filter. Air is diffused in the space through the 4 sides, each of which is equipped with an adjustable fin with suitable thermal insulation.
Also available from today the new alluminium design module EFFETTO for intake and diffusion air with the Coandă effect.

Control mode
Galletti renews the fan coil control modes by integrating, on the EVO platform, the new EVO-2-TOUCH user interface and the NAVEL device for management with a smartphone.

EVO-2-TOUCH
is a user-friendly user interface with a 2.8" capacitive display with built-in temperature and humidity probes.

NAVEL
is the device paired with EVOBOARD that makes possible Wi-Fi or Bluetooth communication with a smartphone containing GALLETTI APP (available for iOS and Android).

ACCESSORIES

Electronic microprocessor control panels with display	
DIST	MY COMFORT controller spacer for wall mounting
EVO-2-TOUCH	2.8" touch screen user interface for EVO control
EVOBOARD	Circuit board for EVO control
EVODISP	User interface with display for EVO controller
EYNAVEL	Device for Wi-Fi or Bluetooth communication between EVOBOARD and smartphone
LED503	Recessed wall-mounted electronic display controller LED 503
MCBE	MYCOMFORT BASE electronic controller with display
MCLE	Microprocessor control with display MY COMFORT LARGE
MCME	MYCOMFORT MEDIUM electronic controller with display
MCSUE	Humidity sensor for MY COMFORT (medium e large), EVO
MCSWE	Water sensor for MYCOMFORT and EVO controllers
Electronic microprocessor control panels	
TED 2T	Electronic controller for AC fan control and one ON/OFF 230 V valve
TED 4T	Electronic controller for AC fan control and two ON/OFF 230 V valves
TED SWA	Water temperature sensor for TED controls
Power interface and regulating louver controllers	
KP	Power interface for connecting in parallel up to 4 fun coil units to the one controller
Valves	
PIC-AQ	PRESSURE-INDEPENDENT 2-way valves
V2-AQ	2-way valve, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for model with 1 or 2 heat exchangers
V3-AQ	3-way valve, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for model with 1 or 2 heat exchangers
Plenum, air intake modules, air inlet and outlet connectors and cabinets	
BAR	Spigot for introduction of mixed renewal air
MOB	Cabinet for cassette
PAR	Plenum for introduction of unmixed renewal air
PMAA	Air outlet plenum

RATED TECHNICAL DATA 2 PIPES

ACQVARIA			AQ10Q0B0			AQ20Q0B0			AQ30Q0B0		
Speed			min	med	max	min	med	max	min	med	max
Total cooling capacity	(1)(E)	kW	1,70	1,97	2,53	2,39	3,55	4,31	3,40	4,61	5,00
Sensible cooling capacity	(1)(E)	kW	1,33	1,60	2,14	1,78	2,53	3,18	2,43	3,44	3,79
FCEER class	(E)			C			C			D	
Water flow	(1)	l/h	295	342	441	416	616	749	593	803	873
Water pressure drop	(1)(E)	kPa	3	4	6	9	19	26	9	16	18
Heating capacity	(2)(E)	kW	1,97	2,33	3,10	2,29	3,44	4,30	3,49	4,92	5,35
FCCOP class	(E)			C			D			E	
Water flow	(2)	l/h	342	404	539	399	597	747	607	855	930
Water pressure drop	(2)(E)	kPa	3	5	8	7	15	22	8	15	17
Rated air flow		m^3/h	297	379	557	306	487	640	479	717	805
Power input	(E)	W	18	23	42	32	40	50	57	74	89
Total sound power level	(3)(E)	dB(A)	33	37	45	39	43	50	47	55	58

ACQVARIA			AQ40Q0B0			AQ50Q0B0			AQ60Q0B0		
Speed			min	med	max	min	med	max	min	med	max
Total cooling capacity	(1)(E)	kW	4,64	5,36	7,01	5,16	6,11	8,24	6,34	8,61	9,73
Sensible cooling capacity	(1)(E)	kW	3,42	3,99	5,29	3,68	4,37	6,10	4,59	6,40	7,35
FCEER class	(E)						C				
Water flow	(1)	l/h	805	930	1223	893	1060	1434	1097	1498	1696
Water pressure drop	(1)(E)	kPa	14	18	28	12	16	26	16	26	32
Heating capacity	(2)(E)	kW	5,16	6,06	8,17	5,22	6,53	9,18	6,71	9,53	11,1
FCCOP class	(E)			D			C			D	
Water flow	(2)	l/h	897	1053	1420	908	1136	1596	1167	1656	1930
Water pressure drop	(2)(E)	kPa	14	18	30	10	15	26	15	26	33
Rated air flow		m^3/h	801	997	1494	718	902	1380	902	1380	1651
Power input	(E)	W	47	64	108	47	64	108	64	108	147
Total sound power level	(3)(E)	dB(A)	35	40	51	35	40	51	40	51	56

(1) Water temperature 7°C/12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity) according to EN1397:2021
(2) Water temperature 45°C / 40°C, air temperature 20°C
(3) Sound power measured according to standards ISO 3741 and ISO 3742
(E) EUROVENT certified data
Power supply 230-1-50 (V-ph-Hz)

RATED TECHNICAL DATA 4 PIPES

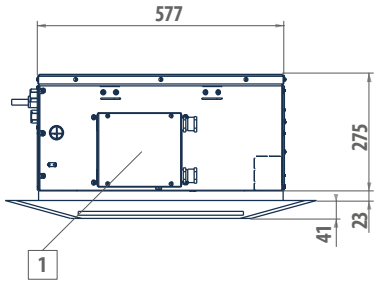
ACQVARIA			AQ10Q0BB			AQ20Q0BB			AQ30Q0BB		
Speed			min	med	max	min	med	max	min	med	max
Total cooling capacity DF	(1)(E)	kW	1,56	1,85	2,35	2,31	2,83	3,38	3,19	4,04	4,31
Sensible cooling capacity DF	(1)(E)	kW	1,24	1,49	1,94	1,85	2,22	2,77	2,45	3,27	3,46
FCEER class DF	(E)			C			E			E	
Water flow		l/h	271	321	410	403	493	589	556	707	754
Water pressure drop	(E)	kPa	3	4	6	8	16	22	15	24	25
Heating capacity	(2)(E)	kW	2,53	2,88	3,55	3,15	3,62	4,22	4,42	5,25	5,61
FCCOP class	(E)			C			D			D	
Water flow	(2)	l/h	222	258	311	271	317	369	380	452	483
Water pressure drop	(2)(E)	kPa	4	5	8	5	9	12	10	14	15
Rated air flow		m^3/h	289	366	533	306	487	640	479	717	805
Power input	(E)	W	18	23	42	35	55	73	44	67	75
Total sound power level	(3)(E)	dB(A)	33	37	45	39	43	50	47	56	58

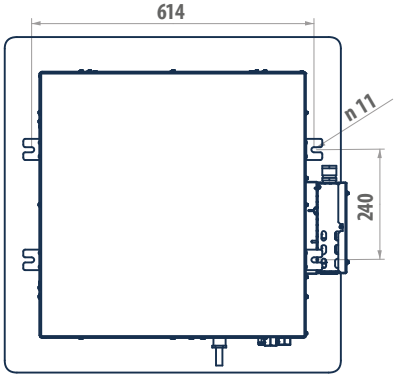
ACQVARIA			AQ35Q0BB			AQ40Q0BB			AQ60Q0BB		
Speed			min	med	max	min	med	max	min	med	max
Total cooling capacity DF	(1)(E)	kW	3,50	4,39	4,68	4,73	6,60	7,45	5,83	8,48	9,00
Sensible cooling capacity DF	(1)(E)	kW	2,56	3,17	3,50	3,47	5,04	5,81	4,29	6,56	6,98
FCEER class DF	(E)			D			C			D	
Water flow		l/h	602	755	805	822	1148	1299	1010	1477	1571
Water pressure drop	(E)	kPa	8	12	15	10	20	25	16	31	34
Heating capacity	(2)(E)	kW	2,57	2,94	3,18	6,57	8,76	9,67	8,64	11,7	12,4
FCCOP class	(E)			E			C			C	
Water flow	(2)	l/h	221	253	273	634	840	929	757	1026	1083
Water pressure drop	(2)(E)	kPa	7	12	14	12	19	23	16	27	30
Rated air flow		m^3/h	479	717	805	718	1147	1380	902	1544	1651
Power input	(E)	W	44	67	75	47	86	108	64	128	147
Total sound power level	(3)(E)	dB(A)	47	55	58	39	47	51	40	54	56

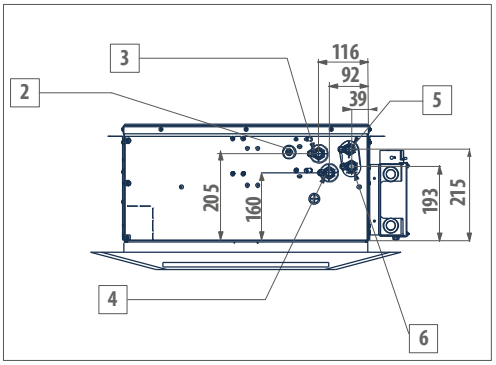
(1) Water temperature 7°C/12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity) according to EN1397:2021
(2) Water temperature 65°C / 55°C, air temperature 20°C
(3) Sound power measured according to standards ISO 3741 and ISO 3742
(E) EUROVENT certified data
Power supply 230-1-50 (V-ph-Hz)

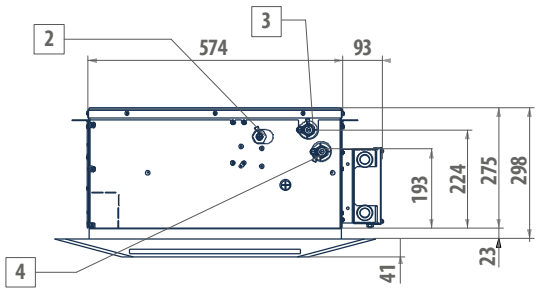
DIMENSIONAL DRAWINGS

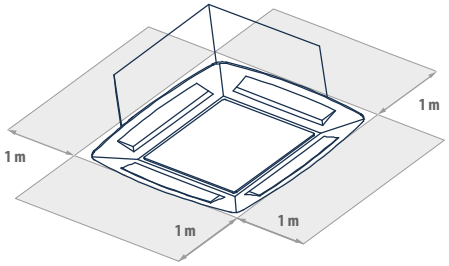
ACQVARIA 10-20-30-35

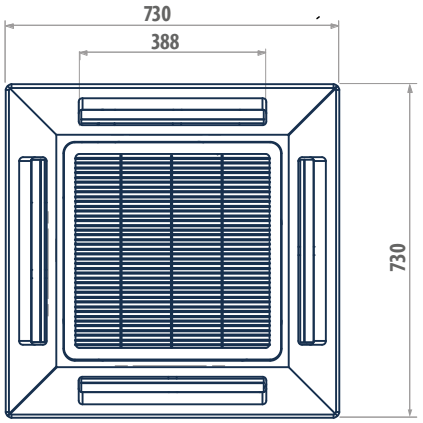












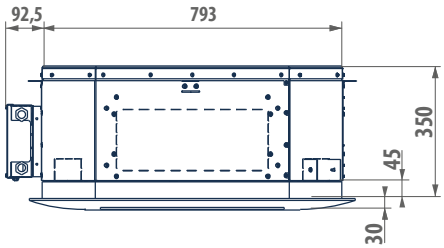
ACQVARIA	kg
AQ10Q0B0 - AQ10Q0BB	23 + 2,5
AQ20Q0B0 - AQ30Q0B0 - AQ20Q0BB - AQ30Q0BB - AQ35Q0BB	24 + 2,5

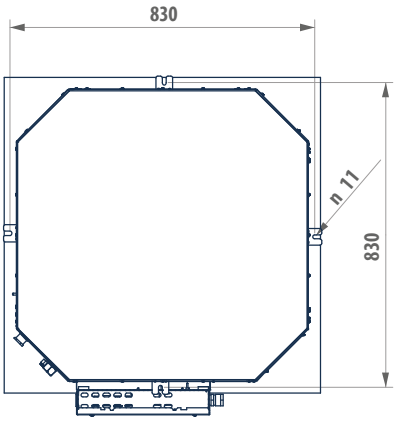
LEGEND	
1	Electric box
2	Condensate discharge ø 10
3	Water outlet ø 1/2" female gas
4	Water inlet ø 1/2" female gas
5	Water outlet ø 1/2" DF female gas
6	Water inlet ø 1/2" DF female gas

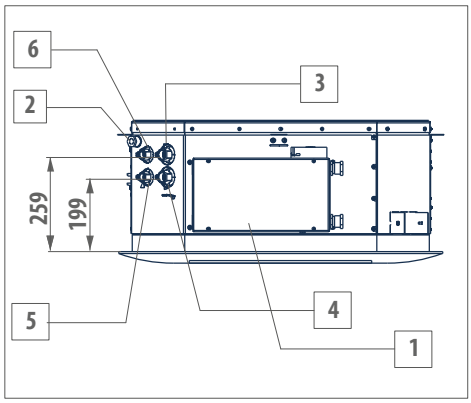
NOTE It is possible to combine the EFFETTO and EFFETTO AirClissi module with the ACQVARIA 60x60 cm cassette, for the dimensional drawing refer to page 85

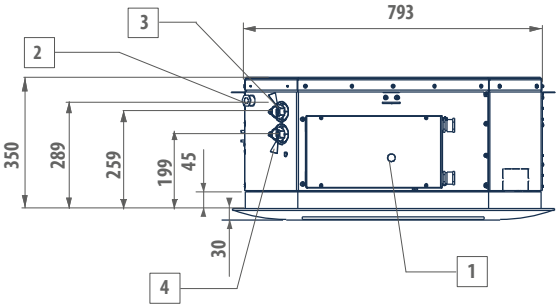
DIMENSIONAL DRAWINGS

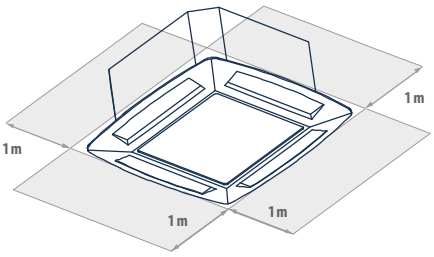
ACQVARIA 40, 50, 60 (Size 50 not available for dual coil version)

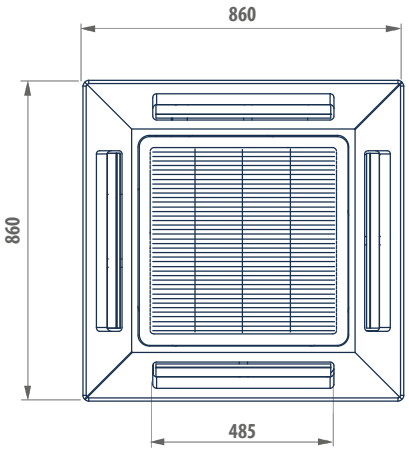












ACQVARIA	kg
AQ40Q0B0 - AQ40Q0BB	42 + 5
AQ50Q0B0 - AQ60Q0B0 - AQ60Q0BB	43 + 5

LEGEND	
1	Electric box
2	Condensate discharge ø 10
3	Water outlet ø 3/4" female gas
4	Water inlet ø 3/4" female gas
5	Water inlet ø 1/2" DF female gas
6	Water outlet ø 1/2" DF female gas