

Cassette fan coils

ACQVARIA 3 - 10 kW















systems





ceilina-mount

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
- » Air intake and diffusion grille in two colors (RAL9010 and RAL9030)
- » Reduced installation and commissioning time

Solidity and efficiency in a single product.

The range of hydronic cassette units ACQVARIA, with 3 speed motor, consists of five models for 2-pipe systems and four 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.



AVAILABLE VERSIONS

AQ**Q0B0*****0A

AQ**Q0BB*****0A

Unit with one coil for 2-pipe systems Unit with one coil for 4-pipe systems



MAIN COMPONENTS

Structure

Made of galvanised steel sheet with internal polyurethane foam coating and external closed-cell polyethylene foam 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



Air filter

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

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.

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.



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

oprocessor control panels with display
MY COMFORT controller spacer for wall mounting
2.8" touch screen user interface for EVO control
Circuit board for EVO contro
User interface with display for EVO controller
Device for Wi-Fi or Bluetooth communication between EVOBOARD and smartphone
Recessed wall-mounted electronic display controller LED 503
MYCOMFORT BASE electronic controller with display
Microprocessor control with display MY COMFORT LARGE
MYCOMFORT MEDIUM electronic controller with display
Humidity sensor for MY COMFORT (medium e large), EVO
Water sensor for MYCOMFORT and EVO controllers
oprocessor control panels
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 inter	rface and regulating louver controllers
KP	Power interface for connecting in parallel up to 4 fun coil units to the one controller
Valves	
PIC-AQi	PRESSURE-INDEPENDENT 2-way valves for models with 1 or 2 colls
V2-AQi	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-AQi	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	rintake 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



Cassette unit ACQVARIA

RATED TECHNICAL DATA 2 PIPES

ACQVAR i a				AQ10Q0B0			AQ20Q0B0		AQ40Q0B0			
Speed			min	med	max	min	med	max	min	med	max	
Total cooling capacity	(1)	kW	1,70	1,97	2,53	2,39	3,55	4,31	4,64	5,36	7,01	
Sensible cooling capacity	(1)	kW	1,33	1,60	2,14	1,66	2,53	3,18	3,42	3,99	5,29	
FCEER class				C			C		C			
Water flow	(1)	I/h	295	342	441	416	616	749	805	930	1223	
Water pressure drop	(1)	kPa	3	4	6	9	19	26	14	18	28	
Heating capacity	(2)	kW	1,97	2,33	3,10	2,29	3,44	4,30	5,16	6,06	8,17	
FCCOP class				C		E						
Water flow	(2)	I /h	342	404	539	399	597	747	897	1053	1420	
Water pressure drop	(2)	kPa	3	5	8	7	15	22	14	18	31	
Rated air flow		m³/h	297	379	557	306	487	640	801	997	1494	
Power input		W	18	23	42	32	40	50	47	64	108	
Total sound power level	(3)	dB(A)	33	37	45	40	44	50	35	40	51	

ACQVAR I A				AQ50Q0B0		AQ60Q0B0				
Speed			min	med	max	min	med	max		
Total cooling capacity	(1)	kW	5,16	6,11	8,24	6,34	8,61	9,73		
Sensible cooling capacity	(1)	kW	3,68	4,37	6,10	4,59	6,40	7,35		
FCEER class						C				
Water flow	(1)	I /h	893	1060	1434	1097	1498	1696		
Water pressure drop	(1)	kPa	12	17	28	17	29	36		
Heating capacity	(2)	kW	5,22	6,53	9,18	6,71	9,53	11,1		
FCCOP class				С			D			
Water flow	(2)	I /h	908	1136	1596	1167	1656	1930		
Water pressure drop	(2)	kPa	10	15	28	15	28	37		
Rated air flow		m³/h	718	902	1380	902	1380	1651		
Power input		W	47	64	108	64	108	147		
Total sound power level	(3)	dB(A)	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 EN1397:2015 (2) Water temperature 45°C / 40°C, air temperature 20°C (3) Sound power measured according to standards ISO 3741 and ISO 3742 Power supply 230–1–50 (V–ph–Hz)



RATED TECHNICAL DATA 4 PIPES

ACQVARIA			AQ10Q0BB			AQ20Q0BB			1	AQ40Q0BI	3	AQ60Q0BB			
Speed			min	med	max	min	med	max	min	med	max	min	med	max	
Total cooling capacity DF	(1)	kW	1,56	1,85	2,35	2,01	2,83	3,38	4,73	6,60	7,45	5,83	8,48	9,00	
Sensible cooling capacity DF	(1)	kW	1,24	1,49	1,94	1,49	2,22	2,77	3,47	5,04	5,81	4,29	6,56	6,98	
FCEER class DF			C				E			C		D			
Water flow		I /h	271	321	410	351	493	589	822	1148	1299	1010	1477	1571	
Water pressure drop		kPa	3	4	6	15	27	37	10	18	22	16	31	34	
Heating capacity	(2)	kW	2,53	2,88	3,55	2,75	3,62	4,22	7,20	9,60	10,6	7,88	11,7	12,4	
FCCOP dass				C		D			C			C			
Water flow	(2)	I /h	222	258	311	241	317	369	631	840	929	690	1026	1083	
Water pressure drop	(2)	kPa	4	5	8	6	9	12	12	19	23	14	27	30	
Rated air flow		m³/h	289	366	533	306	487	640	718	1147	1380	902	1544	1651	
Power input		W	18	23	42	35	55	73	47	86	108	64	128	147	
Total sound power level	(3)	dB(A)	33	37	45	40	44	50	35	47	51	40	54	56	

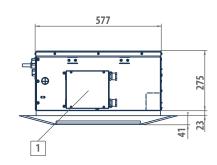
 ⁽¹⁾ Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity) according to EN1397:2015
(2) Water temperature 65°C / 55°C, air temperature 20°C
(3) Sound power measured according to standards ISO 3741 and ISO 3742
Power supply 230-1-50 (V-ph-Hz)

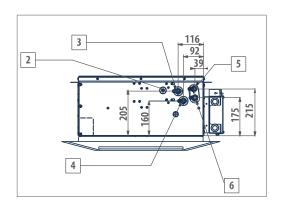


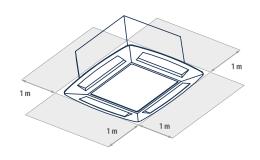
Cassette unit ACQVARIA

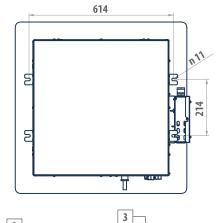
DIMENSIONAL DRAWINGS

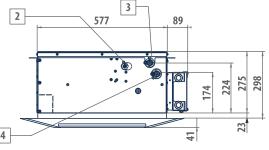
ACQVARIA 10-20

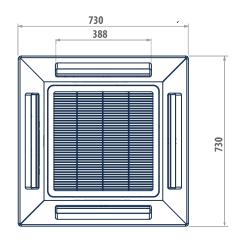












LEGEND

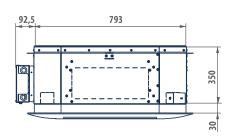
1	Electric box
2	Condensate discharge ø 10
3	Water outlet ø 1/2" female gas
4	Water inlet ø 1/2" female gas
5	Water outlet ø 1/2" DF female gas
6	Water inlet ø 1/2" DF female gas

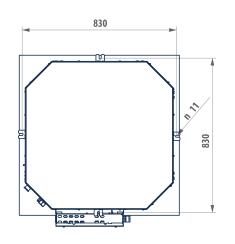
ACQVAR I A	≟≟ kg
AQ10Q0B0 = AQ20Q0B0 = AQ10Q0BB = AQ20Q0BB	23 + 2,5

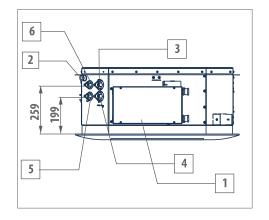


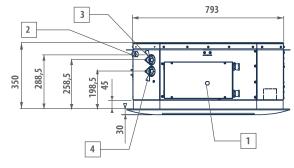
DIMENSIONAL DRAWINGS

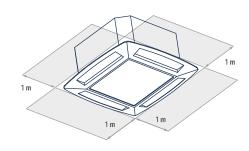
ACQVARIA 40, 50, 60 (Size 50 not available for dual coil version)

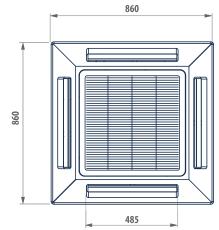












LEGEND

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

ACQVAR i A	📥 kg
AQ40Q0B0 - AQ50Q0B0 - AQ60Q0B0 - AQ40Q0BB - AQ60Q0BB	43 + 5



Cassette fan coils with BI DC motor

ACQVARIA i 3 – 10 kW





BLDC motor



Supervision GARDA











Touch screen Recess

ceilina-mount

PLUS

- » GreenTech Technology
- » Permanent magnet BLDC motor insures a precise, continuous control of operation
- » Low energy consumption
- » Fresh air with direct or mixed introduction
- » Condensate drainage pump for height differences of up to 0.9 m
- » Reduced installation and commissioning time

Comfort, low noise, and efficiency in perfect harmony!

The new series of hydronic cassette units ACQVARIA i, with inverter-controlled permanent magnet BLDC motor, consists of six models (10-20-30-40-50-60) for 2-pipe systems and four models (10-30-40-60) for 4-pipe systems. The engineering of the unit makes it possible to develop up to 5 kW in the cooling mode in a standard 600x600 mm modular suspended ceiling and over 10 kW in the 860x860 mm modularity, with exceptionally low noise

The well-known advantages of BLDC motors are combined with GreenTech technology (in models 10, 20, and 30), which integrates the inverter directly into the fan drive assembly.

levels in the phases for maintaining interior comfort.

ACQVARIA i leverages the entire Galletti, MYCOMFORT, EVO, and TED10 microprocessor controller platform that incorporate sophisticated adjustment logics based on air temperature, air humidity, and water temperature.

These benefits translate into greater accuracy in achieving and maintaining the desired comfort conditions through appropriate modulation of the fan speed as well as the reduction of noise emissions, which adapt to the actual thermal load.

Lastly, electricity consumption is reduced by up to 75% in comparison to conventional fixed-speed AC motors.

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 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.

The unit can be supplied complete with valves, including pressure-independent balancing and control valves, the use of which significantly reduces commissioning time.

AVAILABLE VERSIONS

AQ**QIB0*****0A AQ**QIBB*****0A Unit with one coil for 2-pipe systems Unit with one coil for 4-pipe systems





MAIN COMPONENTS

Structure

Made of galvanised steel sheet with internal polyurethane foam coating and external closed-cell polyethylene foam 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



Air filter

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

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

Inverter-controlled permanent magnet BLDC electric motor (integrated in the GreenTech models) directly connected to a centrifugal fan with backward-curving blades with profile optimised for stable operation at all speeds.

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.



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)









Electronic microprocessor control panels with display TED SWA Water temperature sensor for TED controls D**i**st MY COMFORT controller spacer for wall mounting Valves EVO-2-TOUCH 2.8" touch screen user interface for EVO control PIC-AQi PRESSURE-INDEPENDENT 2-way valves for models with 1 or 2 coils **EVOBOARD** Circuit board for EVO control 2-way valve, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic V2-AQi **EVODISP** User interface with display for EVO controller kit, for mode with 1 or 2 heat exchangers 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 EYNAVEL Device for Wi-Fi or Bluetooth communication between EVOBOARD and smartphone V3-AQi MCLE Microprocessor control with display MY COMFORT LARGE Plenum, air intake modules, air inlet and outlet connectors and cabinets Humidity sensor for MY COMFORT (medium e large), EVO MCSUE Spigot for introduction of mixed renewal air Water sensor for MYCOMFORT and EVO controllers BAR MCSWE MOB Cabinet for cassette Electronic microprocessor control panels Plenum for introduction of unmixed renewal air PAR Electronic controller for BLDC fan equipped with inverter and ON/OFF valves 230 V PMAA Air out et plenum



Cassette units ACQVARIA i

RATED TECHNICAL DATA 2 PIPES

ACQVAR i a i				AQ10	QIB0			AQ20	0 1 B0		AQ30Q I B0				
Speed			1	2	3	4	1	2	3	4	1	2	3	4	
Control voltage		٧	2,00	3,50	4,50	6,00	2,00	4,00	5,50	8,00	2,00	4,00	6,50	10,0	
Total cooling capacity	(1)	kW	1,33	1,93	2,24	2,63	1,49	2,68	3,40	4,39	1,54	2,76	3,95	5,23	
Sensible cooling capacity	(1)	kW	0,99	1,51	1,81	2,20	1,03	1,94	2,54	3,41	1,05	1,98	2,96	4,11	
FCEER class									A						
Water flow	(1)	I /h	229	331	385	452	256	460	584	754	264	473	678	898	
Water pressure drop	(1)	kPa	2	4	5	7	3	10	15	23	3	9	18	29	
Heating capacity	(2)	kW	1,49	2,27	2,70	3,25	1,42	2,69	3,48	4,58	1,47	2,77	4,09	5,55	
FCCOP class					A			1	В				В		
Water flow	(2)	I /h	258	395	470	565	248	468	605	797	255	481	711	965	
Water pressure drop	(2)	kPa	2	5	6	9	3	8	13	21	3	8	16	27	
Rated air flow		m³/h	212	397	454	583	187	397	551	796	190	397	650	980	
Power input		W	6	6	9	17	6	9	14	37	6	10	21	67	
Total sound power level	(3)	dB(A)	28	35	40	46	28	37	44	54	29	38	49	61	

ACQVAR i a i				AQ10	Q I B0			AQ20	Q I B0		AQ30 QI B0				
Speed			1	2	3	4	1	2	3	4	1	2	3	4	
Control voltage		٧	2,00	3,50	4,50	6,00	2,00	4,00	5,50	8,00	2,00	4,00	6,50	10,0	
Total cooling capacity	(1)	kW	1,33	1,93	2,24	2,63	1,49	2,68	3,40	4,39	1,54	2,76	3,95	5,23	
Sensible cooling capacity	(1)	kW	0,99	1,51	1,81	2,20	1,03	1,94	2,54	3,41	1,05	1,98	2,96	4,11	
FCEER class															
Water flow	(1)	I /h	229	331	385	452	256	460	584	754	264	473	678	898	
Water pressure drop	(1)	kPa	2	4	5	7	3	10	15	23	3	9	18	29	
Heating capacity	(2)	kW	1,49	2,27	2,70	3,25	1,42	2,69	3,48	4,58	1,47	2,77	4,09	5,55	
FCCOP class					A				В		В				
Water flow	(2)	I /h	258	395	470	565	248	468	605	797	255	481	711	965	
Water pressure drop	(2)	kPa	2	5	6	9	3	8	13	21	3	8	16	27	
Rated air flow		m³/h	212	397	454	583	187	397	551	796	190	397	650	980	
Power input		W	6	6	9	17	6	9	14	37	6	10	21	67	
Total sound power level	(3)	dB(A)	28	35	40	46	28	37	44	54	29	38	49	61	

⁽¹⁾ Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity) according to EN1397:2015 (2) Water temperature 45°C / 40°C, air temperature 20°C (3) Sound power measured according to standards ISO 3741 and ISO 3742 Power supply 230–1–50 (V–ph–Hz)



RATED TECHNICAL DATA 4 PIPES

ACQVAR I A i		AQ10Q B0					AQ20Q i B0				AQ30	Q I B0		AQ60QIBB					
Speed			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Control voltage		٧	2,00	3,50	4,50	6,00	2,00	4,00	6,50	10,0	2,00	3,00	5,00	10,0	2,00	4,00	6,50	10,0	
Total cooling capacity	(1)	kW	1,24	1,85	2,18	2,60	1,26	2,05	2,80	3,61	4,61	5,34	6,61	9,07	4,70	6,09	7,62	9,50	
Sensible cooling capacity	(1)	kW	0,92	1,46	1,79	2,23	0,92	1,62	2,38	3,31	3,34	3,94	5,03	7,29	3,37	4,50	5,82	7,56	
FCEER dass DF					A			A				ı	4		В				
Water flow		I/h	213	317	374	447	216	352	480	620	792	917	1135	1555	806	1045	1307	1631	
Water pressure drop		kPa	2	4	6	8	2	5	9	14	12	15	22	37	11	17	25	37	
Heating capacity	(2)	kW	2,03	2,90	3,34	3,86	2,04	3,14	4,06	4,98	7,01	7,96	9,53	12,3	7,15	8,96	10,8	12,9	
FCCOP dass					A		В			A				В					
Water flow	(2)	I/h	178	254	292	338	178	275	356	435	613	697	834	1078	626	785	947	1133	
Water pressure drop	(2)	kPa	3	6	8	11	3	7	11	16	11	14	19	30	12	18	24	33	
Rated air flow		m³/h	199	356	460	610	195	395	643	982	687	841	1137	1823	673	956	1314	1823	
Power input		W	6	6	9	17	6	11	21	67	15	18	36	150	15	25	60	150	
Total sound power level	(3)	dB(A)	28	35	40	46	29	38	49	61	35	39	45	57	36	43	50	58	

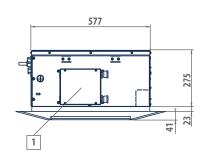
⁽¹⁾ Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity) according to EN1397:2015 (2) Water temperature 65°C / 55°C, air temperature 20°C (3) Sound power measured according to standards ISO 3741 and ISO 3742 Power supply 230–1–50 (V–ph–Hz)

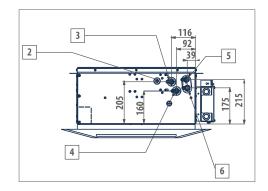


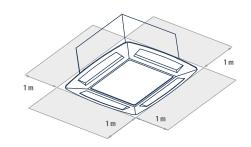
Cassette units ACQVARIA i

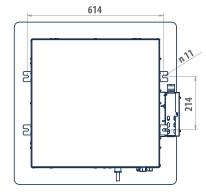
DIMENSIONAL DRAWINGS

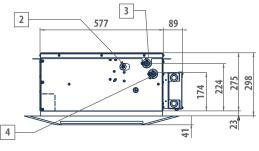
ACQVARIA i 10, 20, 30 (Size 20 not available for dual coil version)

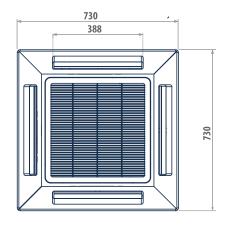












LEGEND		
1	Electric box	
2	Condensate discharge ø 10	
3	Water outlet ø 1/2" female gas	
4	Water inlet ø 1/2" female gas	
5	Water outlet ø 1/2" DF female gas	
6	Water inlet ø 1/2" DF female gas	

ACQVAR i a i	<u>≜</u> kg
AQ10Q i B0 - AQ20Q i B0 - AQ30Q i B0 - AQ10Q i BB - AQ30Q i BB	23 + 2,5

830

793

860

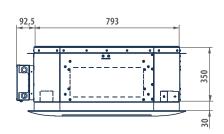
1

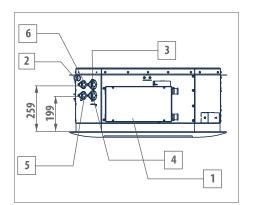
FC-95

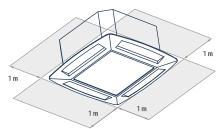


DIMENSIONAL DRAWINGS

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







860

350

3

1	Ellectric box	
2	Condensate discharge ø 10	
3	Water outlet ø 3/4" female gas	
4	Water inlet ø 3/4" female gas	
5	Water in l et ø 1/2" DF female gas	
6	Water outlet ø 1/2" DF female gas	

Mod.	<u>rå</u> kg
AQ40Q B0	43 + 5
AQ50Q B0	43 + 5
AQ60Q B0	43 + 5
AQ40Q I BB	43 + 5
AQ60Q I BB	43 + 5