

FAN COIL UNITS

BI2 DUCTED



Size	220, 320, 420, 520, 620, 720, 820, 1020, 1120, 1220
Type	ductable recessed
Design	slim



Reversible installation

Available with front or rear air intake, it can be installed both vertically and horizontally (for both versions). Its particularly reduced dimensions (height of only 21.5 cm) simplify positioning in the space of a suspended-ceiling.

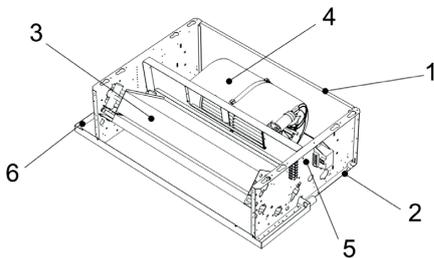
High prevalence

Thanks to its high available static pressure (up to 90 Pa), the unit is suitable for all ducted air conditioning requirements in residential, commercial and tertiary environments.



- Cooling**
- Heating**
- Dehumidification**
- Ventilation**

LAYOUT



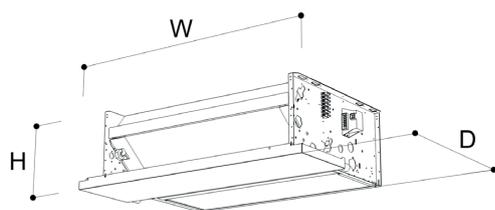
1. Anti-intrusion air intake grille with removable filters (Version B)
2. Anti-intrusion air intake grille with removable filters (Version F)
3. Heat exchanger battery
4. Centrifugal fan
5. Brushless DC electric motor
6. Condensate trap

INSTALLATION



Recessed in false ceiling, with grids (SLI versions only).

DIMENSIONS AND WEIGHT



		220	320	420	520	620	720	820	1020	1120	1220
W	mm	545	745	745	945	945	1145	1145	1345	1545	1545
H	mm	215	215	215	215	215	215	215	215	215	215
D	mm	450	450	450	450	450	450	450	450	450	450
WEIGHT	kg	B 11.5	B 14.3	B 15.1	B 20.6	B 21.6	B 23.5	B 25.0	B 28.1	B 30.1	B 33.6
		F 11.4	F 14.2	F 15.0	F 20.5	F 21.5	F 23.3	F 24.8	F 27.9	F 29.9	F 33.4

COMPATIBLE ACCESSORIES

Category	Code	Description	Compatibility
CONTROLS	B1135	Wall thermostat kit	○
	B1136	Wall-mounted Wi-Fi touch thermostat kit	○
ELECTRIC	B1137	Water temperature probe	○
	B1146	Integration electric heating element	220
	B1147	Integration electric heating element	320/420
	B1148	Integration electric heating element	520/620
	B1149	Integration electric heating element	720/820
	B1150	Integration electric heating element	1020
	B1151	Integration electric heating element	1120/1220
	CONDENSATION	B1142	Condensate pump kit for vertical installation
B1143		Condensate pump kit for horizontal installation	○
HYDRAULICS	B1140	4-wire 2-way valve kit for horizontal installation	○
	B1141	4-wire 2-way valve kit for vertical installation	○
	B1138	4-wire 3-way valve kit for horizontal installation	○
	B1139	4-wire 3-way valve kit for vertical installation	○
	B1145	Additional condensate pan kit, horizontal version	○
	B1144	Additional condensate pan kit, vertical version	○
DUCTING	B1152	Insulated air delivery plenum kit with 1 circular connection	220
	B1153	Insulated air delivery plenum kit with 2 circular connections	320/420
	B1154	Insulated air delivery plenum kit with 2 circular connections	520/620
	B1155	Insulated air delivery plenum kit with 3 circular connections	720/820
	B1156	Insulated air delivery plenum kit with 4 circular connections	1020
	B1157	Insulated air delivery plenum kit with 4 circular connections	1120/1220
	B1158	Air extraction plenum kit with 1 circular connection	220
	B1159	Air extraction plenum kit with 2 circular connections	320/420
	B1160	Air extraction plenum kit with 2 circular connections	520/620
	B1161	Air extraction plenum kit with 3 circular connections	720/820
	B1162	Air extraction plenum kit with 4 circular connections	1020
	B1163	Air extraction plenum kit with 4 circular connections	1120/1220
	B1164	Straight insulated air delivery plenum kit	220
	B1165	Straight insulated air delivery plenum kit	320/420
	B1166	Straight insulated air delivery plenum kit	520/620
	B1167	Straight insulated air delivery plenum kit	720/820
	B1168	Straight insulated air delivery plenum kit	1020
	B1169	Straight insulated air delivery plenum kit	1120/1220
	B1170	Straight air extraction plenum kit	220
	DUCTING	B1171	Straight air extraction plenum kit
B1172		Straight air extraction plenum kit	520/620
B1173		Straight air extraction plenum kit	720/820
B1174		Straight air extraction plenum kit	1020
B1175		Straight air extraction plenum kit	1120/1220
B1176		90° insulated air delivery plenum kit	220
B1177		90° insulated air delivery plenum kit	320/420
B1178		90° insulated air delivery plenum kit	520/620
B1179		90° insulated air delivery plenum kit	720/820
B1180		90° insulated air delivery plenum kit	1020
B1181		90° insulated air delivery plenum kit	1120/1220
B1182		90° air extraction plenum kit	220
B1183		90° air extraction plenum kit	320/420
B1184		90° air extraction plenum kit	520/620
B1185		90° air extraction plenum kit	720/820
B1186		90° air extraction plenum kit	1020
B1187		90° air extraction plenum kit	1120/1220
B1188		Telescopic extension kit 0-100 mm	220
B1189		Telescopic extension kit 0-100 mm	320/420
B1190		Telescopic extension kit 0-100 mm	520/620
B1191		Telescopic extension kit 0-100 mm	720/820
B1192		Telescopic extension kit 0-100 mm	1020
B1193		Telescopic extension kit 0-100 mm	1120/1220
B1194		Delivery grille kit	220
B1195		Delivery grille kit	320/420
B1196	Delivery grille kit	520/620	
B1197	Delivery grille kit	720/820	
B1198	Delivery grille kit	1020	
B1199	Delivery grille kit	1120/1220	
B1200	Extraction grille kit	220	
B1201	Extraction grille kit	320/420	
B1202	Extraction grille kit	520/620	
B1203	Extraction grille kit	720/820	
B1204	Extraction grille kit	1020	
B1205	Extraction grille kit	1120/1220	

● Standard accessory; ○ Optional accessory; - Incompatible accessory

When compatibility is only possible with certain sizes or models, the information is given in the table. Accessory description available at end of chapter.

TECHNICAL DATA						220			320			420			520			620		
DCT DC P F (front)						02546			02547			02548			02549			02550		
DCT DC P B (rear)						02536			02537			02538			02539			02540		
Fan speed						Low	Medium	High												
Total power output in cooling mode	a27/19 - w7/12	(a)	(E)	kW		1,37	1,5	1,58	1,65	1,74	1,84	1,93	2,05	2,17	2,75	2,98	3,12	3,08	3,34	3,52
Sensitive power output in cooling mode	a27/19 - w7/12	(a)	(E)	kW		1,11	1,21	1,28	1,39	1,47	1,56	1,54	1,64	1,74	2,18	2,37	2,49	2,39	2,6	2,75
Fluid flow rate	a27/19 - w7/12	(a)		l/h		242	264	280	289	306	325	338	361	383	485	527	552	541	589	621
Water side head loss	a27/19 - w7/12	(a)	(E)	kPa		7,1	8,3	9,1	3,7	4,0	4,5	11,9	13,3	14,6	9,3	10,7	11,7	10,0	11,5	12,6
Total power output in heating mode	a20/15 - w50/-	(b)	(E)	kW		1,79	1,96	2,08	2,5	2,64	2,81	2,76	2,94	3,12	3,91	4,26	4,47	4,31	4,69	4,96
Fluid flow rate	a20/15 - w50/-	(b)		l/h		242	264	280	289	306	325	338	361	383	485	527	552	541	589	621
Water side head loss	a20/15 - w50/-	(b)	(E)	kPa		6,4	7,6	8,4	3,3	3,7	4,1	10,6	11,9	13,3	8,5	9,9	10,7	9	10,5	11,5
Total power output in heating mode	a20/15 - w45/40	(c)	(E)	kW		1,5	1,64	1,74	2,13	2,26	2,4	2,34	2,49	2,64	3,31	3,6	3,78	3,64	3,96	4,19
Fluid flow rate	a20/15 - w45/40	(c)		l/h		253	276	291	362	381	403	396	421	445	558	605	635	615	666	705
Water side head loss	a20/15 - w45/40	(c)	(E)	kPa		8,7	10,2	11,2	4,9	5,4	6	14	15,6	17,3	10,9	12,6	13,8	11,2	13	14,4
Absorbed power			(E)	W		31	38	47	33	43	54	33	43	54	67	87	90	67	87	90
Sound power output in delivery Lw (A)			(E)	dB(A)		55	57	59	56	59	60	56	59	60	59	61	62	59	61	62
Sound pressure taken in + radiated Lw (A)			(E)			56	58	60	57	60	61	57	60	61	60	62	63	60	62	63
Sound pressure Lp (A)		(d)		dB(A)		46	48	50	47	50	51	47	50	51	50	52	53	50	52	53
Sound pressure taken in + radiated Lp (A)						47	49	51	48	51	52	48	51	52	51	53	54	51	53	54
Air flow rate		(f)	(E)	m3/h		249	275	330	323	345	370	340	365	390	530	585	620	560	615	655
Useful air head			(E)	Pa		41	50	57	43	50	57	43	50	57	41	50	56	41	50	56
Battery water content				l				0,7			1			1			1,3			1,3
Hydraulic fittings				inch				1/2" G F												
Electrical power supply				V/ph/Hz				230/1/50			230/1/50			230/1/50			230/1/50			230/1/50

The above services refer to the following operating conditions:

- (a) Cooling mode under standard conditions: air temperature 27°C dry bulb, 19°C wet bulb, water inlet temperature 7°C, water outlet temperature 12°C; reference static pressure 50 Pa.
- (b) Heating mode operating conditions 1: air temperature 20 °C dry bulb, 15 °C wet bulb max, water inlet temperature 50 °C, water flow rate equal to that of standard cooling conditions; reference static pressure 50 Pa.
- (c) Heating mode under standard conditions: air temperature 20 °C dry bulb, 15

°C wet bulb max, water inlet temperature 45 °C, water outlet temperature 40 °C; reference static pressure 50 Pa.

- (d) Sound pressure level valid for closed rooms with a volume of 100 m3 with a reverberation time of 0.5 s and installation on the floor/ceiling, sound emission on 1/2 sphere at 3 m distance
- (E) Eurovent certified data
- (f) Air flow rate measured with clean filters

TECHNICAL DATA						720			820			1020			1120			1220		
DCT DC P F (front)						02551			02552			02553			02554			02555		
DCT DC P B (rear)						02541			02542			02543			02544			02545		
Fan speed						Low	Medium	High												
Total power output in cooling mode	a27/19 - w7/12	(a)	(E)	kW		3,54	3,8	3,97	3,97	4,26	4,48	4,68	5	5,29	5,75	6,13	6,46	6,59	7	7,41
Sensitive power output in cooling mode	a27/19 - w7/12	(a)	(E)	kW		2,91	3,14	3,29	3,15	3,4	3,58	3,6	3,86	4,1	4,8	5,14	5,43	5,25	5,6	5,94
Fluid flow rate	a27/19 - w7/12	(a)		l/h		620	669	699	695	749	787	817	875	925	1010	1079	1141	1155	1230	1304
Water side head loss	a27/19 - w7/12	(a)	(E)	kPa		13,7	15,5	16,8	12,4	14,1	15,4	19,1	21,5	23,8	19,4	21,7	23,9	14,6	16,5	18,0
Total power output in heating mode	a20/15 - w50/-	(b)	(E)	kW		4,86	5,25	5,5	5,4	5,83	6,14	6,36	6,81	7,23	8,03	8,6	9,1	8,65	9,22	9,78
Fluid flow rate	a20/15 - w50/-	(b)		l/h		620	669	699	695	749	787	817	875	925	1010	1079	1141	1155	1230	1304
Water side head loss	a20/15 - w50/-	(b)	(E)	kPa		12,2	14,1	15,2	11	12,7	13,9	16,9	19,1	21,1	17,4	19,7	21,8	13,1	14,6	16,3
Total power output in heating mode	a20/15 - w45/40	(c)	(E)	kW		4,1	4,43	4,64	4,55	4,91	5,17	5,36	5,74	6,09	6,79	7,26	7,69	7,26	7,73	8,2
Fluid flow rate	a20/15 - w45/40	(c)		l/h		694	746	782	771	829	874	909	972	1033	1146	1224	1292	1227	1304	1382
Water side head loss	a20/15 - w45/40	(c)	(E)	kPa		14,9	17,1	18,6	13,3	15,2	16,7	20,4	23,1	25,6	21,8	24,6	27,2	14,5	16,2	18
Absorbed power			(E)	W		70	91	94	70	91	94	75	-	90	124	149	172	124	149	172
Sound power output in delivery Lw (A)			(E)	dB(A)		60	61	62	60	61	62	60	61	62	61	62	64	61	62	64
Sound pressure taken in + radiated Lw (A)			(E)			61	62	63	61	62	63	61	62	63	62	63	65	62	63	65
Sound pressure Lp (A)		(d)		dB(A)		51	52	53	51	52	53	51	52	53	52	53	55	52	53	55
Sound pressure taken in + radiated Lp (A)						52	53	54	52	53	54	52	53	54	53	54	56	53	54	56
Air flow rate		(f)	(E)	m3/h		640	700	740	680	740	785	740	800	855	1140	1235	1320	1220	1310	1400
Useful air head			(E)	Pa		42	50	56	42	50	56	42	50	57	43	50	57	43	50	57
Battery water content				l				1,6			1,6			1,9			2,2			2,2
Hydraulic fittings				inch				1/2" G F												
Electrical power supply				V/ph/Hz				230/1/50			230/1/50			230/1/50			230/1/50			230/1/50

The above services refer to the following operating conditions:

- (a) Cooling mode under standard conditions: air temperature 27°C dry bulb, 19°C wet bulb, water inlet temperature 7°C, water outlet temperature 12°C; reference static pressure 50 Pa.
- (b) Heating mode operating conditions 1: air temperature 20 °C dry bulb, 15 °C wet bulb max, water inlet temperature 50 °C, water flow rate equal to that of standard cooling conditions; reference static pressure 50 Pa.
- (c) Heating mode under standard conditions: air temperature 20 °C dry bulb, 15

°C wet bulb max, water inlet temperature 45 °C, water outlet temperature 40 °C; reference static pressure 50 Pa.

- (d) Sound pressure level valid for closed rooms with a volume of 100 m3 with a reverberation time of 0.5 s and installation on the floor/ceiling, sound emission on 1/2 sphere at 3 m distance
- (E) Eurovent certified data
- (f) Air flow rate measured with clean filters