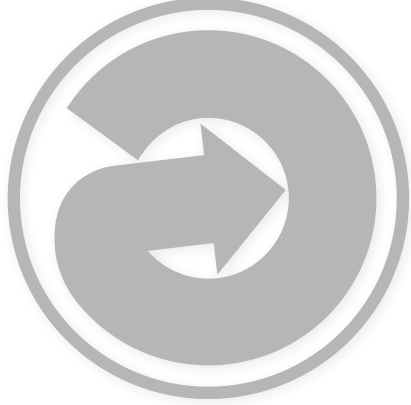
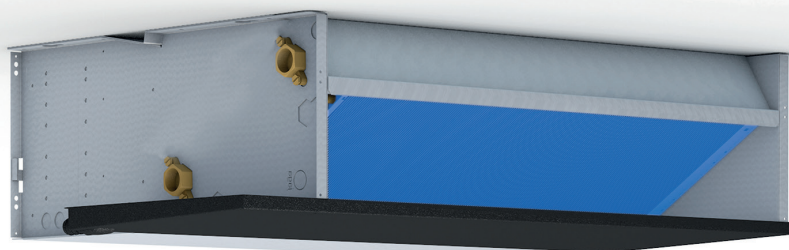




jaga

❄️🔥 BRIZA 22 HYBRID HEATING & COOLING



Built-in Ceiling:

BABC/BT



BABC/FT



Built-in Wall:

BABW/BT



BABW/BF



BABW/FT



BABW/FF



Europe 230V

INFO SHEET BRIZA 22 HYBRID, 'LOW TEMPERATURE SYSTEM'

With EC Greentech EBM-PAPST motor: faster, more powerful, more economical, more sustainable.



BRIZA 22 HYBRID

- heating and /or cooling
- high-quality aluminum-copper Dynamic heat exchanger with Hydrophilic coating
- for built-in to wall or ceiling
- 5 models, 5 lengths
- 2-Pipe of 4-Pipe- system
- easy installation
- various types of air inlet and exhaust air outlets options
- air mixing box for wall mounted model
- connection to a heat pump
- JAGA BRIZA 22 HYBRID is best suited for:

Renovation projects, air conditioning of residential houses, retail stores, office spaces and meeting rooms, schools, hotels, a winter garden, etc.

“Electronic commutation or EC technology: intelligent, low-energy and environmentally friendly.

EC motors cut operating costs, reduce the impact on the environment and impress with their quiet running.

Environmentally friendly technologies and energy efficiency: these are probably the most current terms! With the introduction of the electronic commutation or EC motors, we take a big step in the direction of lower energy consumption, less noise and a longer lifetime.

Some advantages:

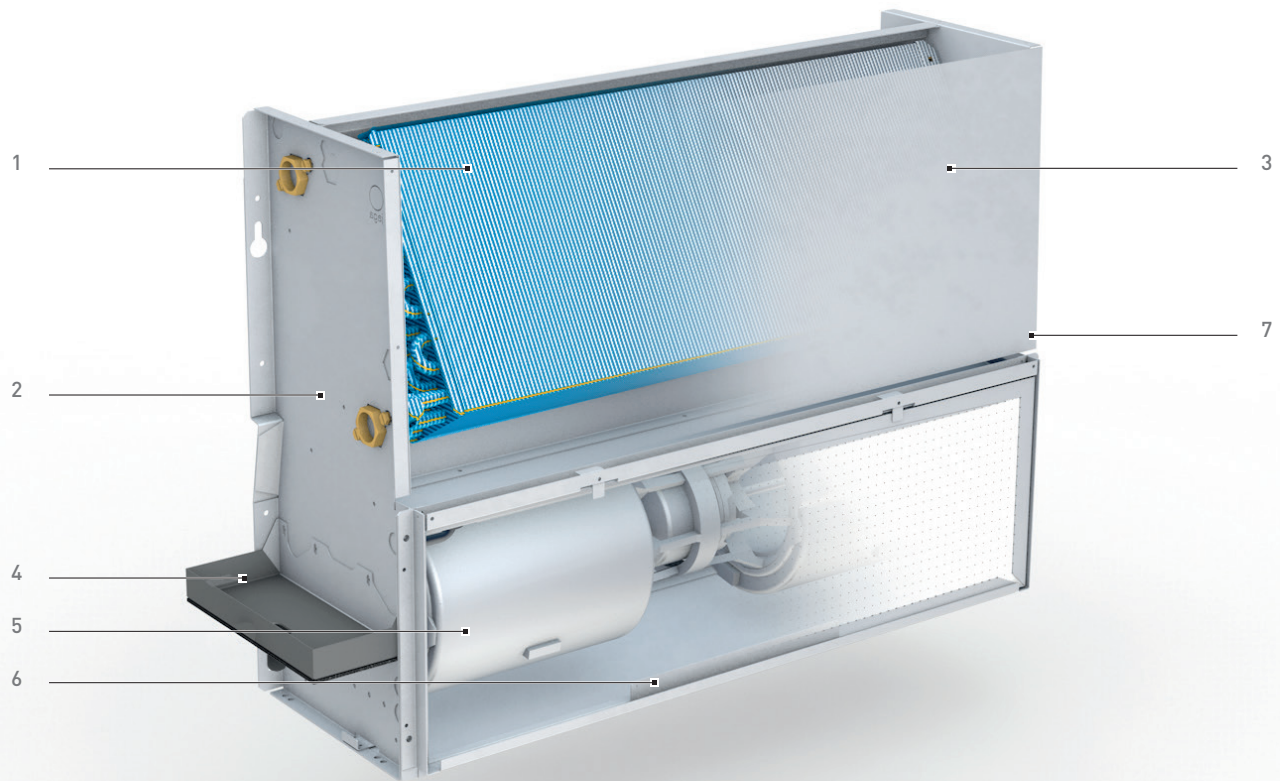
- high efficiency, energy saving
- little or no maintenance (brushless)
- low noise level
- 0-10V continuously adjustable and very accurately control at any required speed
- long lifespan



EC Greentech EBM-PAPST motor: faster, more powerful, more economical, more sustainable

Jaga N.V. uses the exclusive GreenTech EC technologie of EBM-PAPST.

Permanent magnet BLDC motor with inverter integrated in the fan assembly, protection rating IP44, insulation class F and ball bearings. BLDC motors directly integrated with the fan assembly and inverter and 32% reductions in electricity consumption compared to traditional AC motors. Polypropylene (PP) housing. Centrifugal fan with forward-curved blades made of glass-filled polyamide PA 6. Conformity with 2017 ErP Directive.



- 1 High-quality aluminum-copper Dynamic heat exchanger with Hydrophilic coating
- 2 Hydraulic connection: 3/4"G standard left
- 3 Casing in zinc plated steel fireproof insulated
- 4 Condensate drain wall installation, standard left
- 5 Centrifugal fan(s) with double inlet
- 6 Replaceable polypropylene filter to the front or bottom
- 7 Electrical connection right

New generation fans with energy-efficient operation:

Due to the better efficiency of the EC-motors, thanks to the presence of the commutation electronics, the power consumption is directly linked to the rotation speed and therefore the flow rate of the fan. The actual power consumption is determined by the (variable) speed.

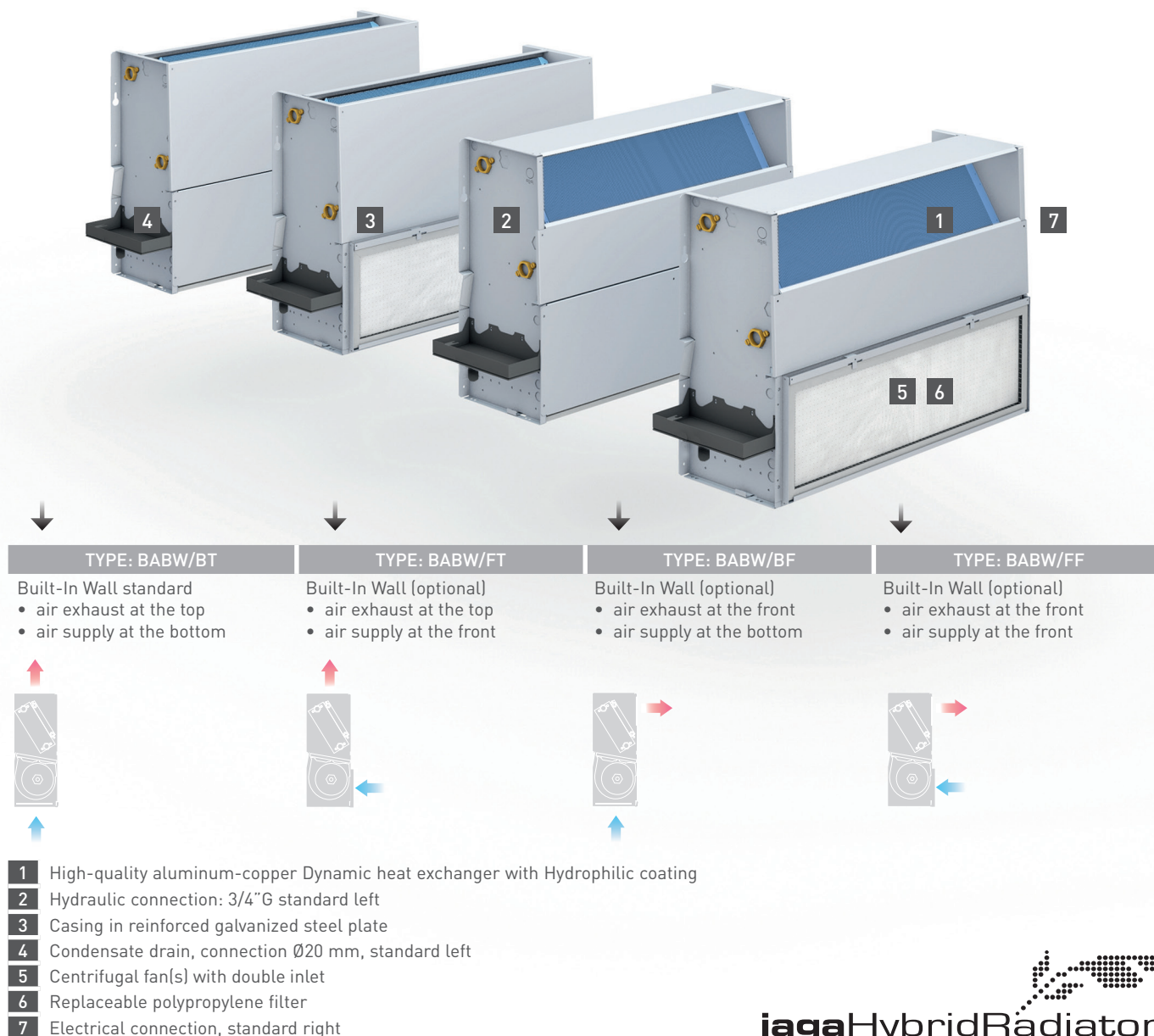
Product description:

- energy-saving maintenance-free EC motor
- heating & cooling
- 5 types / 5 lengths
- 2-pipe system of 4-pipe system
- condensate collector pan
- electronic speed control with 0 ... 10V signal
- centrifugal fans with double inlet
- removable polypropylene dust (class G2) filter
- suitable for non-condensing and condensing cooling by means of ice water
- hydraulic connection left, electrical connection to the right.
Also available with hydraulic connection right and electrical connection to the left.

Options:

- additional heat exchanger for heating with 4-pipe system
- inlet angle piece 90°
- exhaust angle pieces 90°
- air switch box with motorized damper with 0...10V control for outdoor air inlet
- EC thermostat 24VDC, 0...10V speed control
- roomthermostat Jaga JRT 100 or JRT 200
- 0...10V connection to home automation
- Jaga Fancoil Controller (available from March 2018)

Air inlet and outlet possibilities



New generation fans with energy-efficient operation:

Due to the better efficiency of the EC-motors, thanks to the presence of the commutation electronics, the power consumption is directly linked to the rotation speed and therefore the flow rate of the fan. The actual power consumption is determined by the (variable) speed.

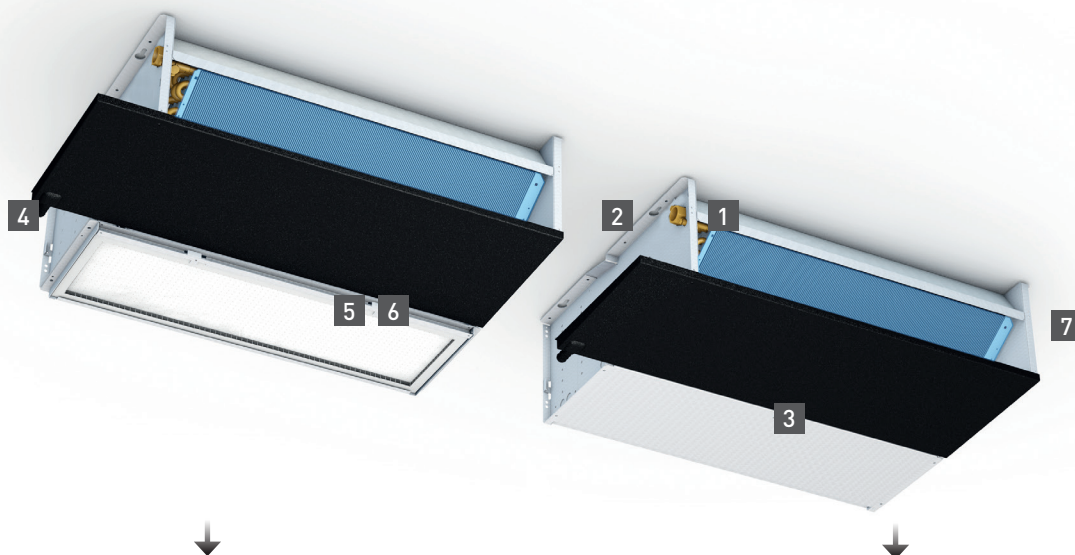
Product description:

- energy-saving maintenance-free EC motor
- 5 lengths
- Dynamic heat exchanger with Hydrophilic coating
- 2-pipe system of 4-pipe system
- condensate collector
- electronic speed control with 0 ... 10V signal
- centrifugal fans with double inlet
- removable polypropylene dust (class G2) filter
- suitable for non-condensing and condensing cooling by means of ice water
- hydraulic connection left, electrical connection to the right.
Also available with hydraulic connection right and electrical connection to the left.

Options:

- additional Dynamic heat exchanger with Hydrophilic coating for heating with 4-pipe system
- inlet angle piece 90°
- exhaust angle pieces 90°
- inlet plenum 180°
- exhaust plenums 180°
- EC thermostat 24VDC, 0..10V speed control
- roomthermostat Jaga JRT 100 or JRT 200
- 0...10V connection to home automation
- Jaga Fancoil Controller (available from March 2018)

Air inlet and outlet possibilities



TYPE: BABC/FT

B: Built-In Ceiling (optional)

- air supply at the front
- air exhaust at the top



TYPE: BABC/BT

A: Built-In Ceiling standard

- air supply at the bottom
- air exhaust at the top



- 1 High-quality aluminum-copper Dynamic heat exchanger with Hydrophilic coating
- 2 Hydraulic connection: 3/4"G standard left
- 3 Casing in reinforced galvanized steel plate
- 4 Front panel, condensate drain, connection Ø20 mm, standard left
- 5 Centrifugal fan(s) with double inlet
- 6 Replaceable polypropylene filter
- 7 Electrical connection, standard right

BRIZA 22 HYBRID built-in ceiling Range

Briza 22 Ceiling

Range

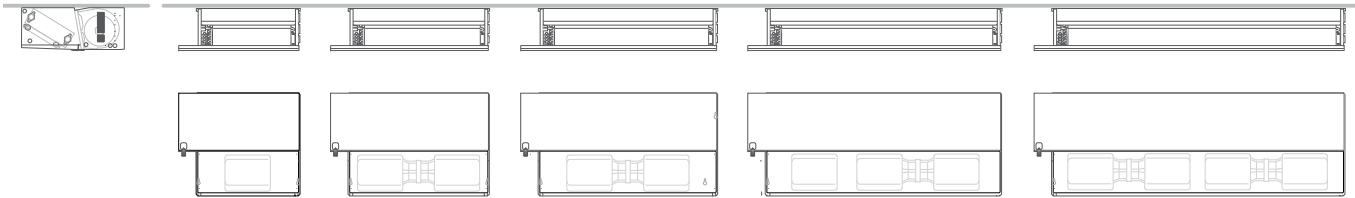
Model 55

Model 75

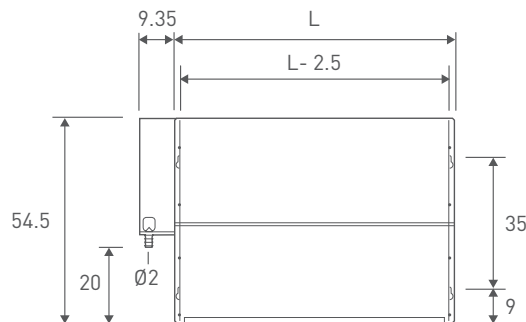
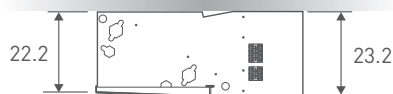
Model 95

Model 125

Model 155

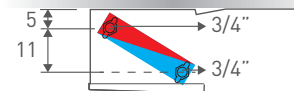


Dimensions (cm)



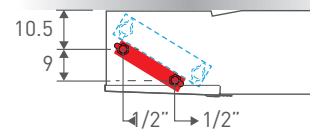
Standard Heat Exchanger

- 2-pipe heating / cooling
- 4-pipe cooling



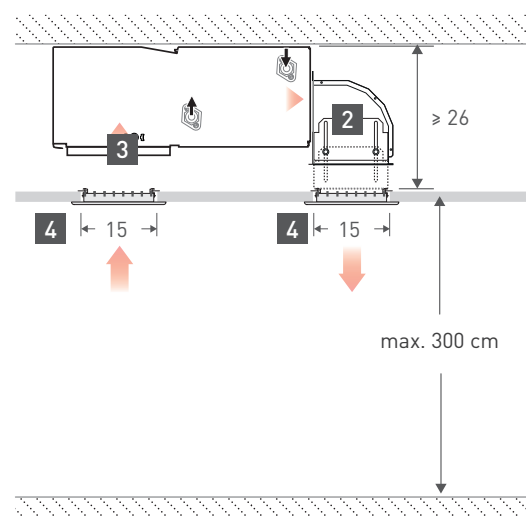
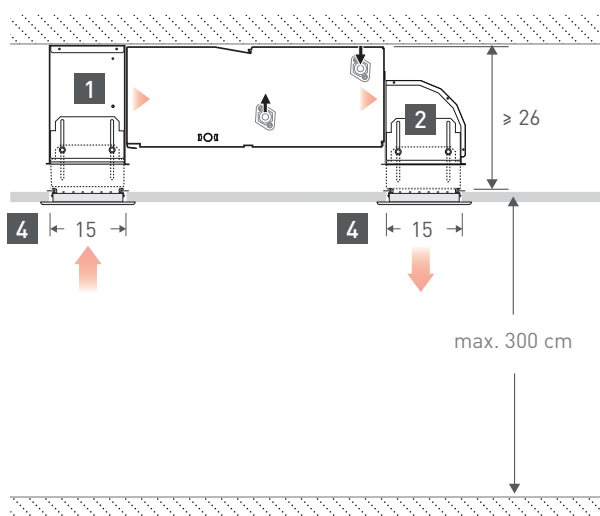
Additional Heat Exchanger

- 4-pipe heating element



Model	55	75	95	125	155
Code	BABC	BABC	BABC	BABC	BABC
L (cm)	55	75	95	125	155

Dimensions (cm) for installation into ceiling with Jaga 90° inlet / exhaust angle piece

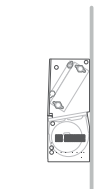
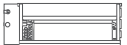
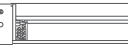
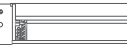
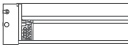
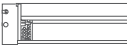
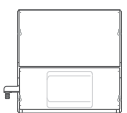


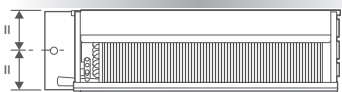
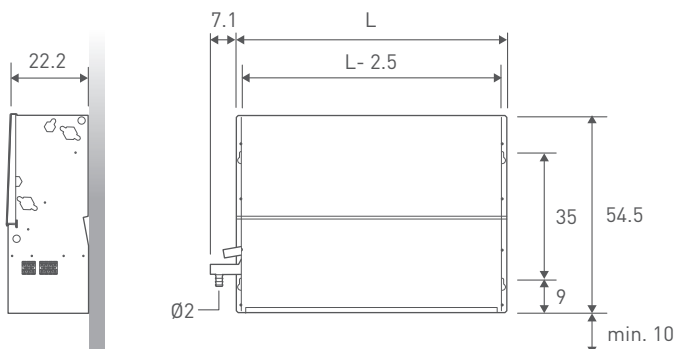
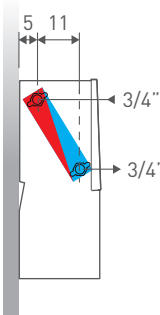
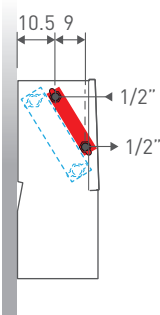
1	90° inlet angle piece	3	front grille with filter
2	90° exhaust angle piece	4	adjustable air inlet / exhaust grille

Jaga reserves the right to change product specification at any time in line with our policy of continuous improvement and innovation. Jaga N.V.,

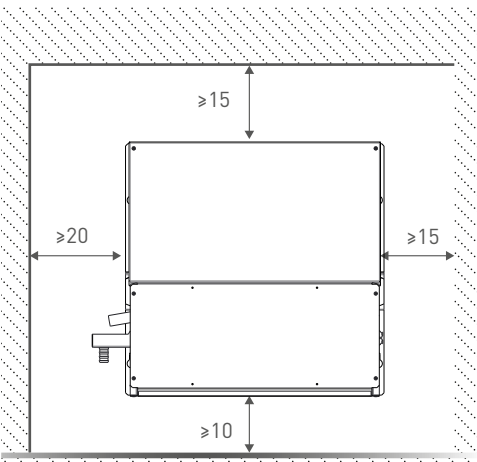
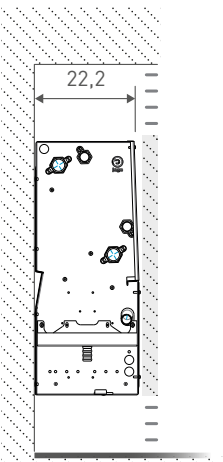
Jaga N.V., Verbindingslaan z/n, B-3590 Diepenbeek. www.jaga.be

Tel.: +32 (0)11 29 41 11, Fax: +32 (0)11 32 35 78, info@jaga.be. 11 October 2018 8:32 AM

Briza 22 Wall					
Range					
	Model 55	Model 75	Model 95	Model 125	Model 155
					
					

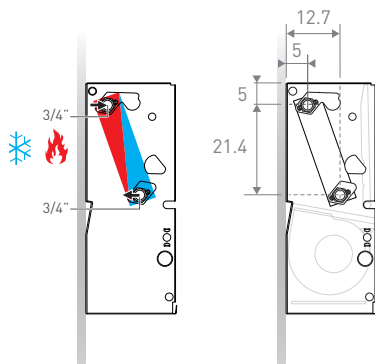
Dimensions (cm)					
		Standard Heat Exchanger		Additional Heat Exchanger	
		• 2-pipe heating / cooling		• 4-pipe heating element	
		• 4-pipe cooling			
					

Model	55	75	95	125	155
Code	BABW	BABW	BABW	BABW	BABW
L (cm)	55	75	95	125	155

Dimensions (cm) for installation into wall	
	

Dimensions hydraulic connections

2-pipe



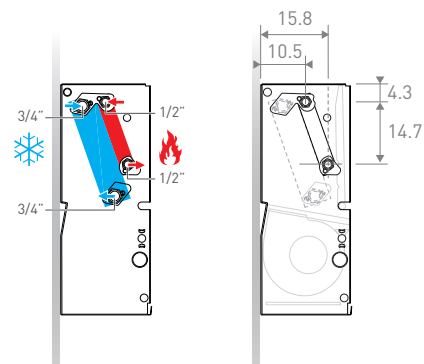
With a two-pipe system:

- there can be cooled or heated within one system (with multiple devices)
- one heat exchanger for heating or cooling
- one water circuit for heating or cooling

Connection:

- 1 valve set

4-pipe



With a four-pipe system:

- there can be cooled and/or heated within one system (with multiple devices)
- a heat exchanger (supplementary) for heating
- a heat exchanger (standard) for cooling
- the standard heat exchanger is connected to a cold-water circuit
- the supplementary heat exchanger in a hot water circuit

Connection:

- 2 valve sets



	page:
• possibilities and options	10 - 11
• technical data heating 2-pipe 🔥 75/65/20, 55/45/20, 35/30/20	
• technical data heating 4-pipe 🔥 75/65/20, 55/45/20, 35/30/20	12 - 21
• technical data cooling ❄️ 6/18/27 7/12/27	
• pressure lost	22
• general technical data	23
• cable length / cable thickness Ø i.f. number of devices	
• options	24 - 25 -26
• JFCC Jaga Fan Coil Control	
• thermostaten	28
• spare parts	29
• product description	30
• functioning limits	31
• what is sound power, sound pressure	32

Possibilities and options

Ceiling (BABC)

BT

standard in + standard out



FT

OPTION front air inlet + standard out



OPTION front air inlet

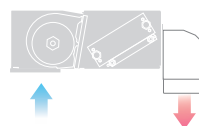
OPTION 90° angle piece

standard in + OPTION 90° air outlet



OPTION 90° air outlet

OPTION front air inlet + OPTION: 90° air outlet



OPTION front air inlet

OPTION 90° air outlet

OPTION 180° plenums

OPTION 180° air inlet + OPTION 180° air outlet



OPTION 180° air inlet

OPTION 180° outlet

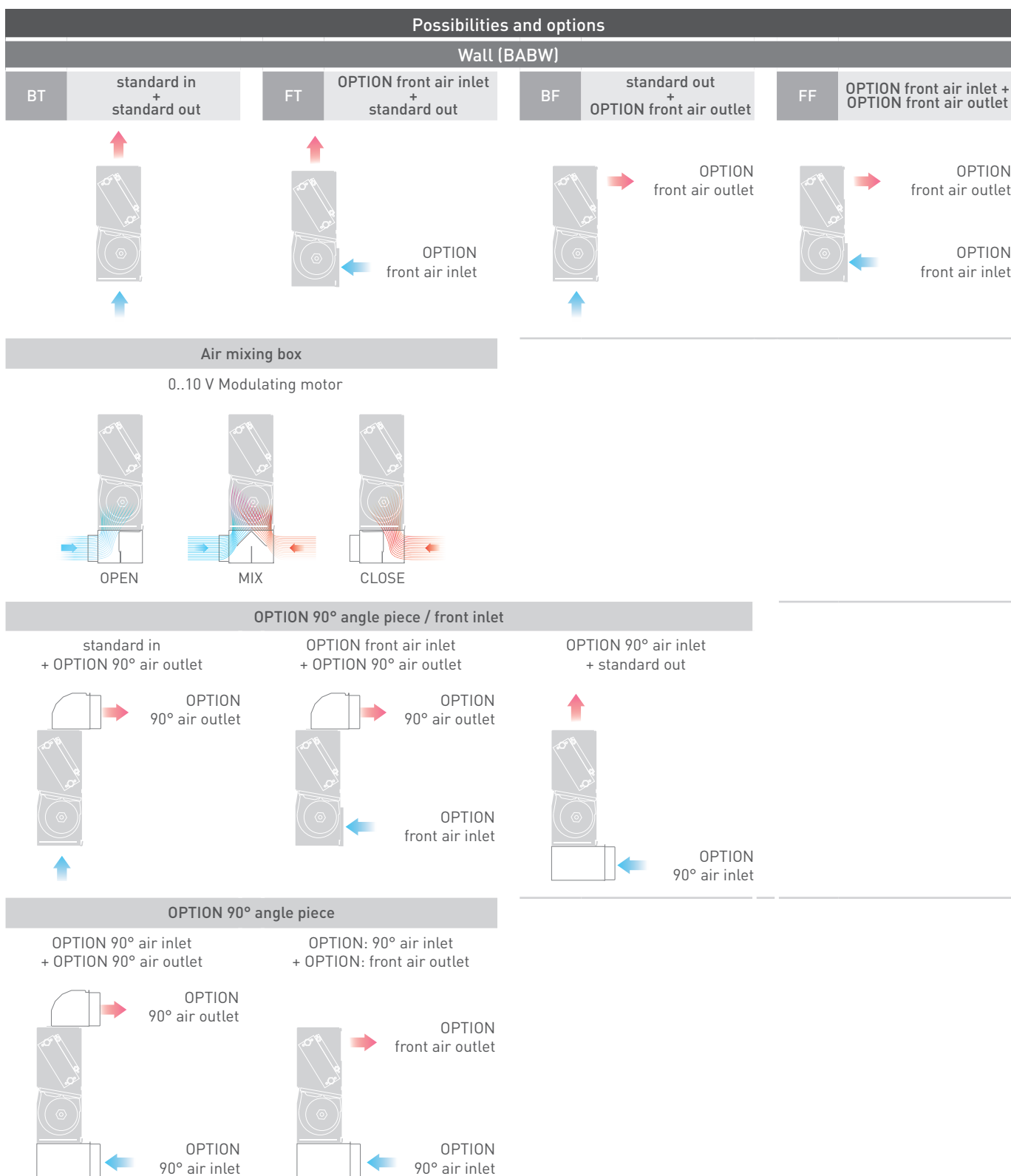
OPTION 90° angle piece

OPTION 90° air inlet + OPTION: 90° air outlet



OPTION 90° air inlet

OPTION 90° air outlet





BRIZA 22 • L55 • 2-PIPE SYSTEM • heating 75/65/20 or 80/60/20 ΔT (water-air) = 50K

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W]
[m3/h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	[W] *
485	51,0	59,0	42,0	0.36	10	6915
420	46,5	54,5	29,0	0.26	8	6260
330	42,5	50,5	17,0	0.16	6	5130
236	35,0	43,0	8,0	0.09	4	3690
123	25,5	33,5	3,7	0.06	2	2215

BRIZA 22 • L55 • 2-PIPE SYSTEM • heating 55/45/20 ΔT (water-air) = 30K

485	51,0	59,0	42,0	0,36	10	4149
420	46,5	54,5	29,0	0,26	8	3756
330	42,5	50,5	17,0	0,16	6	3078
236	35,0	43,0	8,0	0,09	4	2214
123	25,5	33,5	3,7	0,06	2	1329

BRIZA 22 • L55 • 2-PIPE SYSTEM • heating 35/30/20 ΔT (water-air) = 12.5K

485	51,0	59,0	42,0	0,36	10	1729
420	46,5	54,5	29,0	0,26	8	1565
330	42,5	50,5	17,0	0,16	6	1283
236	35,0	43,0	8,0	0,09	4	923
123	25,5	33,5	3,7	0,06	2	554

- Heating / Cooling capacity measured according EN1397
- Air flow measured according ISO5801
- Sound measurement according ISO 3741:2010 / ISO 5135:1997 / EUROVENT 8/2-1992, with an adopted room attenuation of 8dB(A) with a volume of 75m³/h / reverberation time 0.5sec

CALCULATION OF WATER FLOW:

q_m = Mass flow of water (kg/h)

P = Output power (W)

c_p = heat capacity of water (J/kg.K)

T_i = inlet water temperature (°C)

T_r = return water temperature (°C)

Formula:

$$q_m = \frac{P}{c_p (T_i - T_r)} \text{ (kg/s)}$$

$$q_m = \frac{P}{4186 (T_i - T_r)} \times 3600 \text{ (kg/h)}$$

Example: Briza 22, Type 02

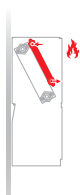
Regime 75 / 65 / 20

Fan Power 10VDC

Output power 6915 W

Calculation of waterflow q_m

$$q_m = \frac{6915}{4186 (75 - 65)} \times 3600 = 595 \text{ kg/h}$$



BRIZA 22 • L55 • 4-PIPE SYSTEM • heating 75/65/20 or 80/60/20 ΔT (water-air) = 50K

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W]	
[m3/h]	Lp [dbA]	Lw [dbA]	[W]	[A]	VDC [V]	[W] *	
485	51,0	59,0	42,0	0,36	10	2716	
420	46,5	54,5	29,0	0,26	8	2539	
330	42,5	50,5	17,0	0,16	6	2276	
236	35,0	43,0	8,0	0,09	4	1820	
123	25,5	33,5	3,7	0,06	2	1359	

BRIZA 22 • L55 • 4-PIPE SYSTEM • heating 55/45/20 ΔT (water-air) = 30K

485	51,0	59,0	42,0	0,36	10	1629	
420	46,5	54,5	29,0	0,26	8	1523	
330	42,5	50,5	17,0	0,16	6	1366	
236	35,0	43,0	8,0	0,09	4	1092	
123	25,5	33,5	3,7	0,06	2	815	

BRIZA 22 • L55 • 4-PIPE SYSTEM • heating 35/30/20 ΔT (water-air) = 12.5K

485	51,0	59,0	42,0	0,36	10	679	
420	46,5	54,5	29,0	0,26	8	635	
330	42,5	50,5	17,0	0,16	6	569	
236	35,0	43,0	8,0	0,09	4	455	
123	25,5	33,5	3,7	0,06	2	340	



BRIZA 22 • L55 • cooling 16/18/27

Air Flow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W] *	
[m3/h]	Lp [dbA]	Lw [dbA]	[W]	[A]	VDC [V]	total	sensible
485	51,0	59,0	42,0	0,36	10	1176	1176
420	46,5	54,5	29,0	0,26	8	1053	1053
330	42,5	50,5	17,0	0,16	6	865	865
236	35,0	43,0	8,0	0,09	4	626	626
123	25,5	33,5	3,7	0,06	2	389	389

BRIZA 22 • L55 • cooling 7/12/27

485	51,0	59,0	42,0	0,36	10	2934	2176
420	46,5	54,5	29,0	0,26	8	2657	1948
330	42,5	50,5	17,0	0,16	6	2209	1600
236	35,0	43,0	8,0	0,09	4	1618	1158
123	25,5	33,5	3,7	0,06	2	1018	720



BRIZA 22 • L75 • 2-PIPE SYSTEM • heating 75/65/20 or 80/60/2 ΔT (water-air) = 50K

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W]
[m3/h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	[W] *
595	49,0	57,0	45	0,41	10	8544
517	45,0	53,0	31	0,29	8	7804
410	39,0	47,0	18	0,17	6	6438
290	29,5	37,5	8,5	0,09	4	4640
155	20,5	28,5	3,6	0,05	2	2784

BRIZA 22 • L75 • 2-PIPE SYSTEM • heating 55/45/20 ΔT (water-air) = 30K

595	49,0	57,0	45	0,41	10	5126
517	45,0	53,0	31	0,29	8	4683
410	39,0	47,0	18	0,17	6	3863
290	29,5	37,5	8,5	0,09	4	2784
155	20,5	28,5	3,6	0,05	2	1670

BRIZA 22 • L75 • 2-PIPE SYSTEM • heating 35/30/20 ΔT (water-air) = 12.5K

595	49,0	57,0	45	0,41	10	2136
517	45,0	53,0	31	0,29	8	1951
410	39,0	47,0	18	0,17	6	1609
290	29,5	37,5	8,5	0,09	4	1160
155	20,5	28,5	3,6	0,05	2	696

- Heating / Cooling capacity measured according EN1397
- Air flow measured according ISO5801
- Sound measurement according ISO 3741:2010 / ISO 5135:1997 / EUROVENT 8/2-1992, with an adopted room attenuation of 8dB(A) with a volume of 75m³/h / reverberation time 0.5sec

CALCULATION OF WATER FLOW:

q_m = Mass flow of water (kg/h)

P = Output power (W)

c_p = heat capacity of water (J/kg.K)

T_i = inlet water temperature (°C)

T_r = return water temperature (°C)

Formula:

$$q_m = \frac{P}{c_p (T_i - T_r)} \text{ (kg/s)}$$

$$q_m = \frac{P}{4186 (T_i - T_r)} \times 3600 \text{ (kg/h)}$$

Example: Briza 22, Type 02

Regime 75 / 65 / 20

Fan Power 10VDC

Output power 6915 W

Calculation of waterflow q_m

$$q_m = \frac{6915}{4186 (75 - 65)} \times 3600 = 595 \text{ kg/h}$$



BRIZA 22 • L75 • 4-PIPE SYSTEM • heating 75/65/20 or 80/60/2 ΔT (water-air) = 50K

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W]	
[m3/h]	Lp [dbA]	Lw [dbA]	[W]	[A]	VDC [V]	[W] *	
595	49,0	57,0	45	0,41	10	3355	
517	45,0	53,0	31	0,29	8	3165	
410	39,0	47,0	18	0,17	6	2857	
290	29,5	37,5	8,5	0,09	4	2288	
155	20,5	28,5	3,6	0,05	2	1708	

BRIZA 22 • L75 • 4-PIPE SYSTEM • heating 55/45/20 ΔT (water-air) = 30K

595	49,0	57,0	45	0,41	10	2013	
517	45,0	53,0	31	0,29	8	1899	
410	39,0	47,0	18	0,17	6	1714	
290	29,5	37,5	8,5	0,09	4	1373	
155	20,5	28,5	3,6	0,05	2	1025	

BRIZA 22 • L75 • 4-PIPE SYSTEM • heating 35/30/20 ΔT (water-air) = 12.5K

595	49,0	57,0	45	0,41	10	839	
517	45,0	53,0	31	0,29	8	791	
410	39,0	47,0	18	0,17	6	714	
290	29,5	37,5	8,5	0,09	4	572	
155	20,5	28,5	3,6	0,05	2	427	



BRIZA 22 • L75 • cooling 16/18/27

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W] *	
[m3/h]	Lp [dbA]	Lw [dbA]	[W]	[A]	VDC [V]	total	sensible
595	49,0	57,0	45	0,41	10	1511	1511
517	45,0	53,0	31	0,29	8	1372	1372
410	39,0	47,0	18	0,17	6	1135	1135
290	29,5	37,5	8,5	0,09	4	824	824
155	20,5	28,5	3,6	0,05	2	507	507

BRIZA 22 • L75 • cooling 7/12/27

595	49,0	57,0	45	0,41	10	3741	2775
517	45,0	53,0	31	0,29	8	3436	2519
410	39,0	47,0	18	0,17	6	2876	2084
290	29,5	37,5	8,5	0,09	4	2114	1513
155	20,5	28,5	3,6	0,05	2	1317	932



BRIZA 22 • L95 • 2-PIPE SYSTEM • heating 75/65/20 or 80/60/20 ΔT (water-air) = 50K

AirFlow Q 0Pa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W]
[m3/h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	[W] *
764	46,5	54,5	50	0,44	10	12071
670	42,5	50,5	36	0,33	8	11083
523	37,0	45,0	20	0,19	6	9176
370	29,5	37,5	10	0,1	4	6620
200	22,0	30,0	4	0,05	2	3971

BRIZA 22 • L95 • 2-PIPE SYSTEM • heating 55/45/20 ΔT (water-air) = 30K

764	46,5	54,5	50	0,44	10	7243
670	42,5	50,5	36	0,33	8	6650
523	37,0	45,0	20	0,19	6	5506
370	29,5	37,5	10	0,1	4	3972
200	22,0	30,0	4	0,05	2	2383

BRIZA 22 • L95 • 2-PIPE SYSTEM • heating 35/30/20 ΔT (water-air) = 12.5K

764	46,5	54,5	50	0,44	10	3018
670	42,5	50,5	36	0,33	8	2771
523	37,0	45,0	20	0,19	6	2294
370	29,5	37,5	10	0,1	4	1655
200	22,0	30,0	4	0,05	2	993

- Heating / Cooling capacity measured according EN1397
- Air flow measured according ISO5801
- Sound measurement according ISO 3741:2010 / ISO 5135:1997 / EUROVENT 8/2-1992, with an adopted room attenuation of 8dB(A) with a volume of 75m³/h / reverberation time 0.5sec

CALCULATION OF WATER FLOW:

q_m = Mass flow of water (kg/h)

P = Output power (W)

c_p = heat capacity of water (J/kg.K)

T_i = inlet water temperature (°C)

T_r = return water temperature (°C)

Formula:

$$q_m = \frac{P}{c_p (T_i - T_r)} \text{ (kg/s)}$$

$$q_m = \frac{P}{4186 (T_i - T_r)} \times 3600 \text{ (kg/h)}$$

Example: Briza 22, Type 02

Regime 75 / 65 / 20

Fan Power 10VDC

Output power 6915 W

Calculation of waterflow q_m

$$q_m = \frac{6915}{4186 (75 - 65)} \times 3600 = 595 \text{ kg/h}$$



BRIZA 22 • L95 • 4-PIPE SYSTEM • heating 75/65/20 or 80/60/2 ΔT (water-air) = 50K

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W]	
[m ³ /h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	[W] *	
764	46,5	54,5	50	0,44	10	4740	
670	42,5	50,5	36	0,33	8	4495	
523	37,0	45,0	20	0,19	6	4072	
370	29,5	37,5	10	0,10	4	3264	
200	22,0	30,0	4	0,05	2	2436	

BRIZA 22 • L95 • 4-PIPE SYSTEM • heating 55/45/20 ΔT (water-air) = 30K

764	46,5	54,5	50	0,44	10	2844	
670	42,5	50,5	36	0,33	8	2697	
523	37,0	45,0	20	0,19	6	2443	
370	29,5	37,5	10	0,10	4	1959	
200	22,0	30,0	4	0,05	2	1462	

BRIZA 22 • L95 • 4-PIPE SYSTEM • heating 35/30/20 ΔT (water-air) = 12.5K

764	46,5	54,5	50	0,44	10	1185	
670	42,5	50,5	36	0,33	8	1124	
523	37,0	45,0	20	0,19	6	1018	
370	29,5	37,5	10	0,10	4	816	
200	22,0	30,0	4	0,05	2	609	



BRIZA 22 • L95 • cooling 16/18/27

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W] *	
[m ³ /h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	total	sensible
764	46,5	54,5	50	0,44	10	2189	2189
670	42,5	50,5	36	0,33	8	2002	2002
523	37,0	45,0	20	0,19	6	1662	1662
370	29,5	37,5	10	0,1	4	1210	1210
200	22,0	30,0	4	0,05	2	741	741

BRIZA 22 • L95 • cooling 7/12/27

764	46,5	54,5	50	0,44	10	5379	3990
670	42,5	50,5	36	0,33	8	4979	3650
523	37,0	45,0	20	0,19	6	4182	3030
370	29,5	37,5	10	0,1	4	3080	2205
200	22,0	30,0	4	0,05	2	1909	1350



BRIZA 22 • L125 • 2-PIPE SYSTEM • heating 75/65/20 or 80/60/20 ΔT (water-air) = 50K

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W]
[m3/h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	[W] *
1104	52,5	60,5	79	0,64	10	15965
963	49,0	57,0	59	0,48	8	14563
763	43,0	51,0	34	0,31	6	11940
538	36,0	44,0	18	0,19	4	8553
279	28,0	36,0	9	0,12	2	5036

BRIZA 22 • L125 • 2-PIPE SYSTEM • heating 55/45/20 ΔT (water-air) = 30K

1104	52,5	60,5	79	0,64	10	9579
963	49,0	57,0	59	0,48	8	8738
763	43,0	51,0	34	0,31	6	7164
538	36,0	44,0	18	0,19	4	5132
279	28,0	36,0	9	0,12	2	3022

BRIZA 22 • L125 • 2-PIPE SYSTEM • heating 35/30/20 ΔT (water-air) = 12.5K

1104	52,5	60,5	79	0,64	10	3991
963	49,0	57,0	59	0,48	8	3641
763	43,0	51,0	34	0,31	6	2985
538	36,0	44,0	18	0,19	4	2138
279	28,0	36,0	9	0,12	2	1259

- Heating / Cooling capacity measured according EN1397
- Air flow measured according ISO5801
- Sound measurement according ISO 3741:2010 / ISO 5135:1997 / EUROVENT 8/2-1992, with an adopted room attenuation of 8dB(A) with a volume of 75m³/h / reverberation time 0.5sec

CALCULATION OF WATER FLOW:

q_m = Mass flow of water (kg/h)

P = Output power (W)

c_p = heat capacity of water (J/kg.K)

T_i = inlet water temperature (°C)

T_r = return water temperature (°C)

Formula:

$$q_m = \frac{P}{c_p (T_i - T_r)} \text{ (kg/s)}$$

$$q_m = \frac{P}{4186 (T_i - T_r)} \times 3600 \text{ (kg/h)}$$

Example: Briza 22, Type 02

Regime 75 / 65 / 20

Fan Power 10VDC

Output power 6915 W

Calculation of waterflow q_m

$$q_m = \frac{6915}{4186 (75 - 65)} \times 3600 = 595 \text{ kg/h}$$



BRIZA 22 • L125 • 4-PIPE SYSTEM • heating 75/65/20 or 80/60/2 ΔT (water-air) = 50K

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W]	
[m ³ /h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	[W] *	
1104	52,5	60,5	79	0,64	10	6270	
963	49,0	57,0	59	0,48	8	5906	
763	43,0	51,0	34	0,31	6	5298	
538	36,0	44,0	18	0,19	4	4217	
279	28,0	36,0	9	0,12	2	3090	

BRIZA 22 • L125 • 4-PIPE SYSTEM • heating 55/45/20 ΔT (water-air) = 30K

1104	52,5	60,5	79	0,64	10	3762	
963	49,0	57,0	59	0,48	8	3544	
763	43,0	51,0	34	0,31	6	3179	
538	36,0	44,0	18	0,19	4	2530	
279	28,0	36,0	9	0,12	2	1854	

BRIZA 22 • L125 • 4-PIPE SYSTEM • heating 35/30/20 ΔT (water-air) = 12.5K

1104	52,5	60,5	79	0,64	10	1567	
963	49,0	57,0	59	0,48	8	1477	
763	43,0	51,0	34	0,31	6	1325	
538	36,0	44,0	18	0,12	4	1054	
279	28,0	36,0	9	0,12	2	772	



BRIZA 22 • L125 • cooling 16/18/27

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W] *	
[m ³ /h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	total	sensible
1104	52,5	60,5	79	0,64	10	2862	2862
963	49,0	57,0	59	0,48	8	2581	2581
763	43,0	51,0	34	0,31	6	2132	2132
538	36,0	44,0	18	0,19	4	1548	1548
279	28,0	36,0	9	0,12	2	940	940

BRIZA 22 • L125 • cooling 7/12/27

1104	52,5	60,5	79	0,64	10	7413	5498
963	49,0	57,0	59	0,48	8	6762	4957
763	43,0	51,0	34	0,31	6	5652	4095
538	36,0	44,0	18	0,19	4	4154	2974
279	28,0	36,0	9	0,12	2	2552	1805



BRIZA 22 • L155 • 2-PIPE SYSTEM • heating 75/65/20 or 80/60/2 ΔT (water-air) = 50K

AirFlow Q 0Pa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W]
[m3/h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	[W] *
1266	51,0	59,0	86	0,73	10	21189
1113	47,0	55,0	64	0,55	8	19257
884	41,0	49,0	35	0,31	6	15700
615	34,0	42,0	15	0,15	4	11198
337	25,0	33,0	6,3	0,08	2	6521

BRIZA 22 • L155 • 2-PIPE SYSTEM • heating 55/45/20 ΔT (water-air) = 30K

1266	51,0	59,0	86	0,73	10	12713
1113	47,0	55,0	64	0,55	8	11554
884	41,0	49,0	35	0,31	6	9420
615	34,0	42,0	15	0,15	4	6719
337	25,0	33,0	6,3	0,08	2	3913

BRIZA 22 • L155 • 2-PIPE SYSTEM • heating 35/30/20 ΔT (water-air) = 12.5K

1266	51,0	59,0	86	0,73	10	5297
1113	47,0	55,0	64	0,55	8	4814
884	41,0	49,0	35	0,31	6	3925
615	34,0	42,0	15	0,15	4	2800
337	25,0	33,0	6,3	0,08	2	1630

- Heating / Cooling capacity measured according EN1397
- Air flow measured according ISO5801
- Sound measurement according ISO 3741:2010 / ISO 5135:1997 / EUROVENT 8/2-1992, with an adopted room attenuation of 8dB(A) with a volume of 75m³/h / reverberation time 0.5sec

CALCULATION OF WATER FLOW:

q_m = Mass flow of water (kg/h)
P = Output power (W)
c_p = heat capacity of water (J/kg.K)
T_i = inlet water temperature (°C)
T_r = return water temperature (°C)

Formula:

$$q_m = \frac{P}{c_p (T_i - T_r)} \text{ (kg/s)}$$

$$q_m = \frac{P}{4186 (T_i - T_r)} \times 3600 \text{ (kg/h)}$$

Example: Briza 22, Type 02

Regime 75 / 65 / 20
Fan Power 10VDC
Output power 6915 W
Calculation of waterflow q_m

$$q_m = \frac{6915}{4186 (75 - 65)} \times 3600 = 595 \text{ kg/h}$$



BRIZA 22 • L155 • 4-PIPE SYSTEM • heating 75/65/20 or 80/60/2 ΔT (water-air) = 50K

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W]	
[m ³ /h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	[W] *	
1266	51,0	59,0	86	0,73	10	8321	
1113	47,0	55,0	64	0,55	8	7810	
884	41,0	49,0	35	0,31	6	6966	
615	34,0	42,0	15	0,15	4	5522	
337	25,0	33,0	6,3	0,08	2	4001	

BRIZA 22 • L155 • 4-PIPE SYSTEM • heating 55/45/20 ΔT (water-air) = 30K

1266	51,0	59,0	86	0,73	10	4993	
1113	47,0	55,0	64	0,55	8	4686	
884	41,0	49,0	35	0,31	6	4180	
615	34,0	42,0	15	0,15	4	3313	
337	25,0	33,0	6,3	0,08	2	2400	

BRIZA 22 • L155 • 4-PIPE SYSTEM • heating 35/30/20 ΔT (water-air) = 12.5K

1266	51,0	59,0	86	0,73	10	2080	
1113	47,0	55,0	64	0,55	8	1952	
884	41,0	49,0	35	0,31	6	1742	
615	34,0	42,0	15	0,15	4	1380	
337	25,0	33,0	6,3	0,08	2	1000	



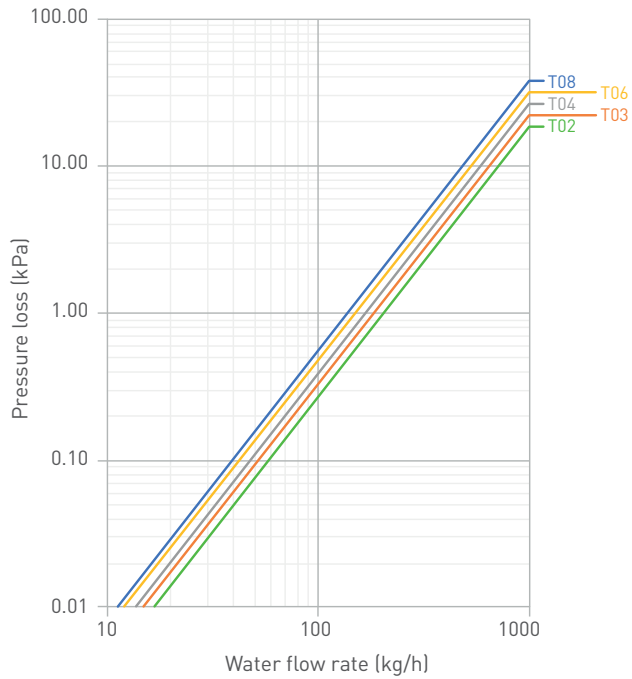
BRIZA 22 • L155 • cooling 16/18/27

AirFlow Q OPa	Sound pressure	Sound power	Power consumption	Current	Control voltage	OUTPUT P [W] *	
[m ³ /h]	Lp [dB(A)]	Lw [dB(A)]	[W]	[A]	VDC [V]	total	sensible
1266	51,0	59,0	86	0,73	10	3688	3688
1113	47,0	55,0	64	0,55	8	3299	3299
884	41,0	49,0	35	0,31	6	2718	2718
615	34,0	42,0	15	0,15	4	1971	1971
337	25,0	33,0	6,3	0,08	2	1191	1191

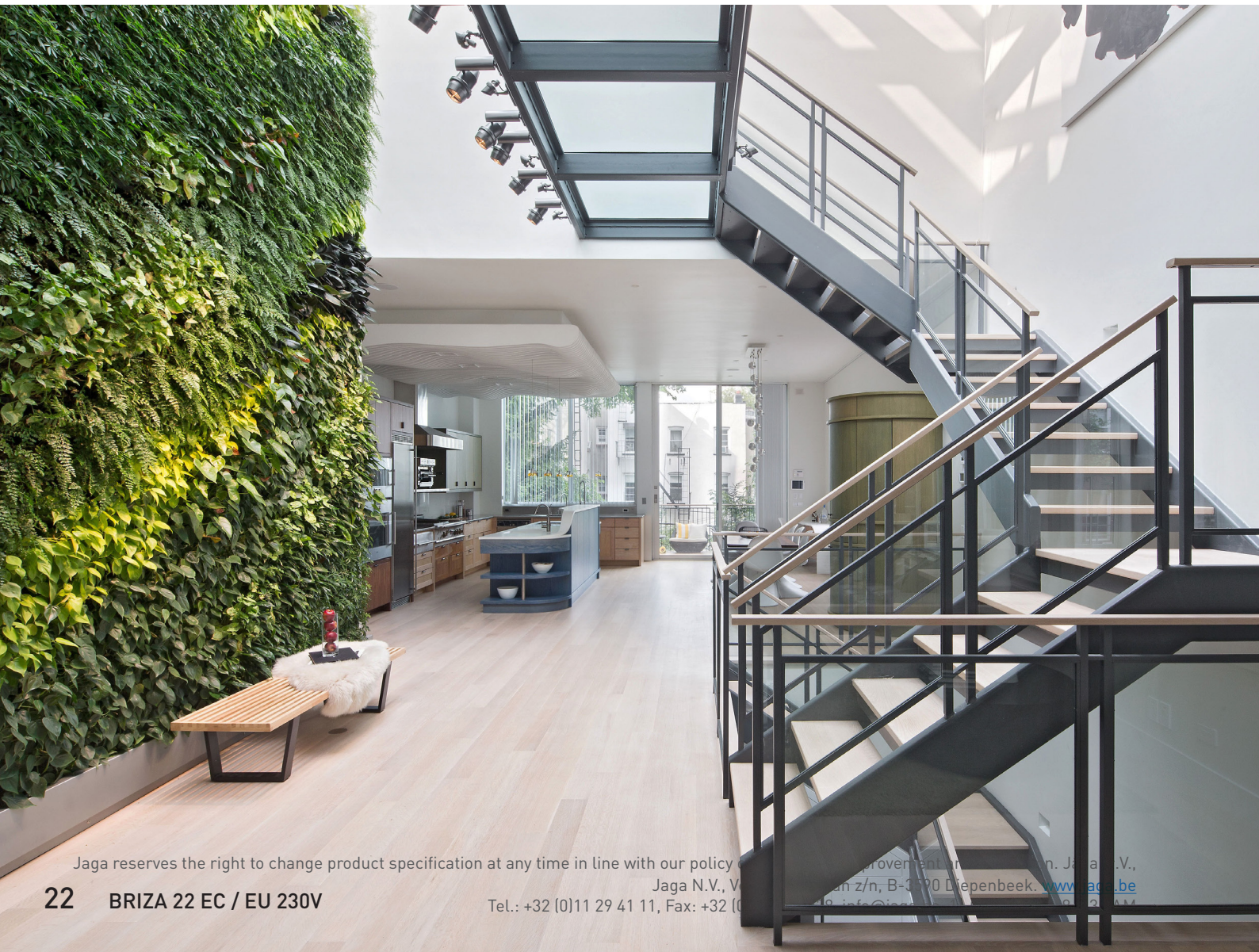
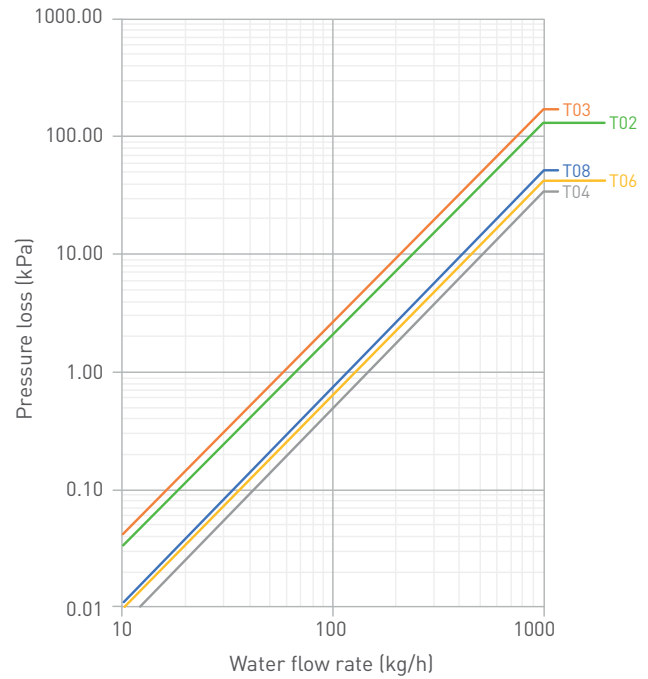
BRIZA 22 • L155 • cooling 7/12/27

1266	51,0	59,0	86	0,73	10	10064	7465
1113	47,0	55,0	64	0,55	8	9108	6677
884	41,0	49,0	35	0,31	6	7593	5501
615	34,0	42,0	15	0,15	4	5574	3990
337	25,0	33,0	6,3	0,08	2	3408	2410

Pressure loss curve standard heat exchanger Briza 22



Pressure loss curve additional heat exchanger Briza 22

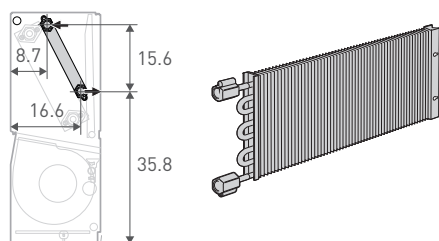


BRIZA 22 Built-In general technical data							
			55	75	95	125	155
Power supply	V-PH -HZ		230-1-50				
Width (L)	mm		550	750	950	1250	1550
Height			545				
Depth			222				
Weight	kg		17	21 .5	27	35 .5	44
Connection standard heat exchanger	inch		¾G(F)				
Connection optional heat exchanger			½G(F)				
Connection condensate drain	mm		20				
Number of rows of pipes (standard) heat exchanger			4				
Water capacity (default) heat exchanger	L		1,23	1,77	2,23	3,14	4,05
Water capacity (additional) heat exchanger			0,31	0,42	0,53	0,69	0,85
Number of fans			1	2	2	3	4
Power input	P _e in W	10 Vdc	42	45	50	79	86
		8 Vdc	29	31	36	59	64
		6 Vdc	17	18	20	34	35
		4 Vdc	8	8,5	10	18	15
		2 Vdc	3,7	3,6	4	9	6,3
Current consumption	I _N in A	10 Vdc	0,36	0,41	0,44	0,64	0,73
		8 Vdc	0,26	0,29	0,33	0,48	0,55
		6 Vdc	0,16	0,17	0,19	0,31	0,31
		4 Vdc	0,09	0,09	0,1	0,19	0,15
		2 Vdc	0,06	0,05	0,05	0,12	0,08
Head-pressure Pa (10 Vdc)	m³/h	0 Pa	485	595	764	1104	1266
		10 Pa	450	550	690	1005	1155
		20 Pa	425	520	640	950	1075
		30 Pa	400	480	590	890	995
		40 Pa	380	450	550	830	915
		50 Pa	350	410	495	770	830
		60 Pa	330	375	440	705	755
		70 Pa	300	335	385	635	675
		80 Pa	265	290	335	555	585
		90 Pa	240	240	275	475	480
		100 Pa	200	195	220	380	375
		110 Pa	170	140	150	305	275
		120 Pa	140	85	90	220	160
Specific Fancoil Power, with G2 Filter @ Speed 10 Volt	SFP (W/ l/s)	0Pa	0,315	0,272	0,235	0,257	0,244
		30Pa	0,28	0,268	0,24	0,27	0,241

Cable length / cable thickness Ø i.f. number of devices					
Cable thickness Ø 1mm²		Cable thickness Ø 1,5mm²		Cable thickness Ø 2,5mm²	
Number of devices	Length in meters	Number of devices	Length in meters	Number of devices	Length in meters
5	34	5	51	5	85
10	17	10	25	10	42
15	11	15	17	15	28
20	8	20	12	20	21
25	6	25	10	25	17
30	5	30	8	30	14
35	4	35	7	35	12
40	3	40	6	40	10

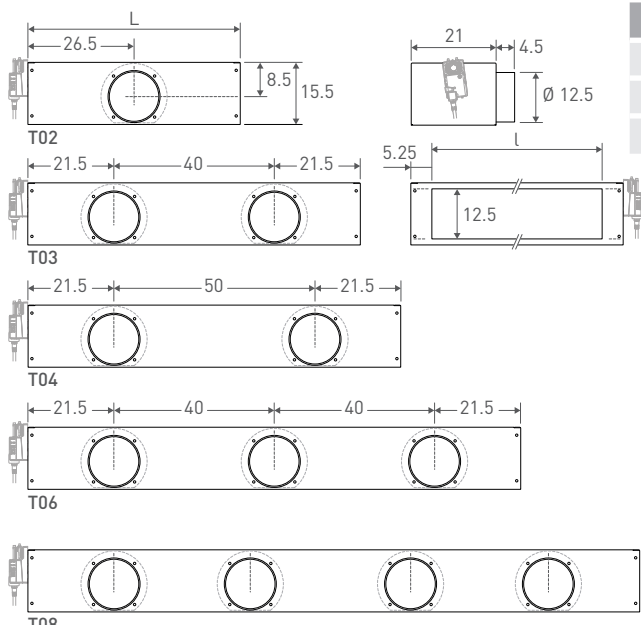
Options

Supplementary Dynamic Heat Exchanger with Hydrophilic coating (for 4-pipe system)

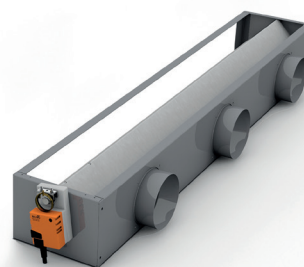


Model	55	75	95	125	155
Code	8721.5401	8721.5402	8721.5403	8721.5404	8721.5405

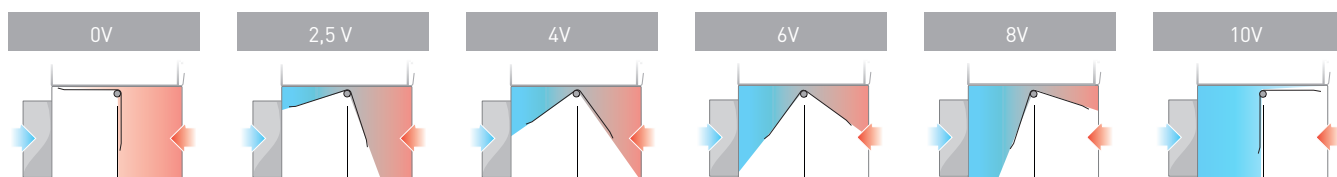
Motorised damper with 0..10V modulating motor.



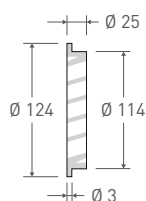
Model	55	75	95	125	155
Code	8763.0301	8763.0302	8763.0303	8763.0304	8763.0305
L (cm)	53	83	93	123	153
l	42.5	72.5	82.5	112.5	142.5



- 24VDC motorized air mixer, with modulating adjustable damper. (damper position determined by modulating 0...10V signal)



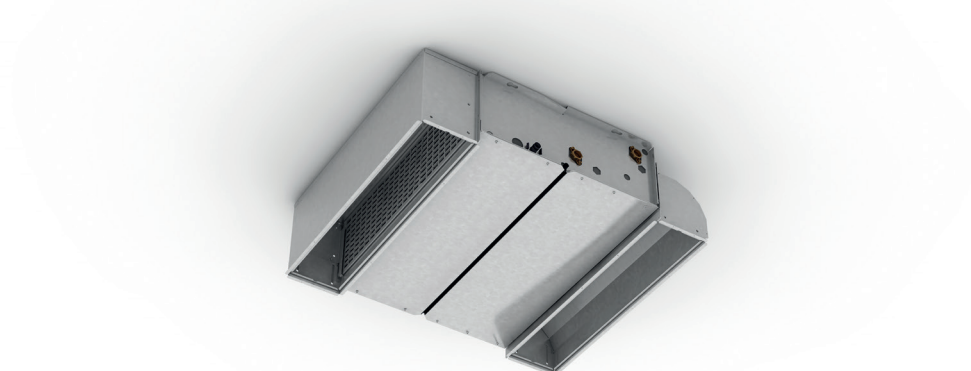
OPTION code 8776.1750



Wall ventilation grille Ø125 mm Aluminium.
Standard color: Aluminium. Other colors on demand (RAL).

Options

90° Angle piece

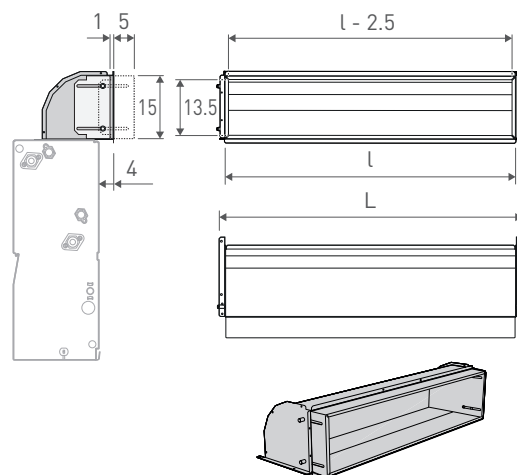
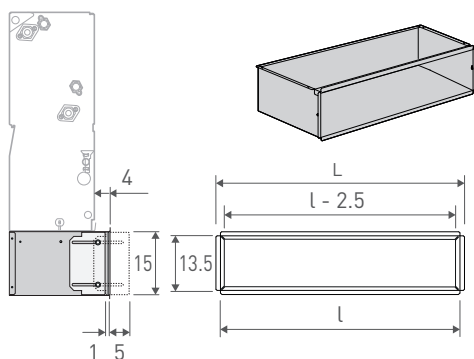


Inlet angle piece 90°

Model	55	75	95	125	155
Code	8787.0101	8787.0102	8787.0103	8787.0104	8787.0105
L (cm)	53	73	93	123	153
l	50	70	90	120	150

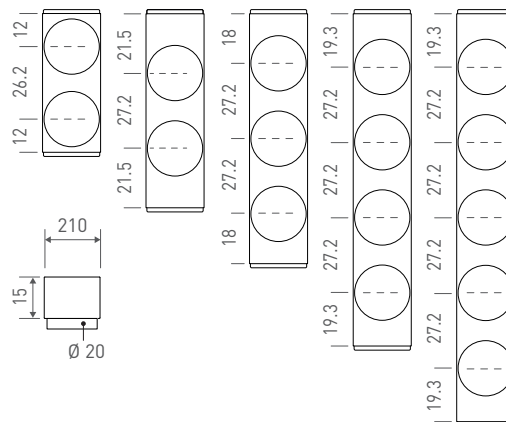
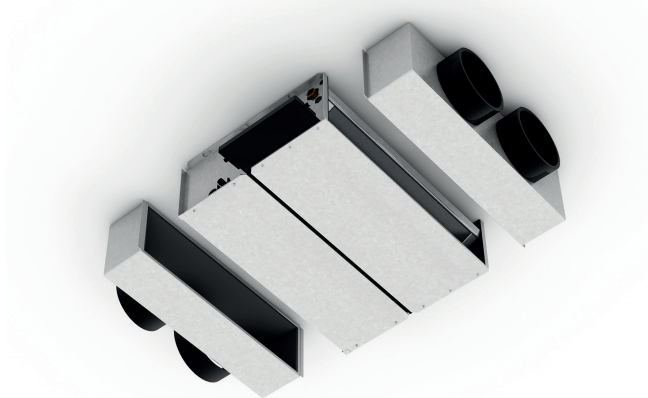
Exhaust angle piece 90°

Model	55	75	95	125	155
Code	8788.0101	8788.0102	8788.0103	8788.0104	8788.0105
L (cm)	53	73	93	123	153
l	50	70	90	120	150



Options

180° Plenum



Inlet plenum 180°

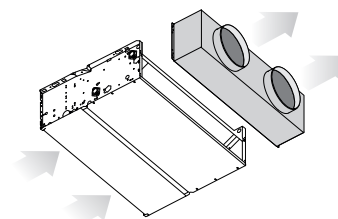
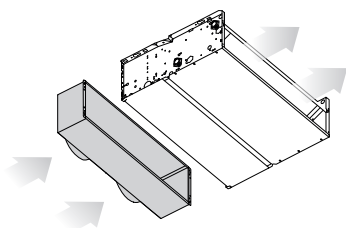
- inlet plenum with circular connection Ø 200 mm
- mounting on the inlet side of the device
- from galvanized steel
- pressure losses are negligibly

Model	55	75	95	125	155
Code	8764.0501	8764.0502	8764.0503	8764.0504	8764.0505

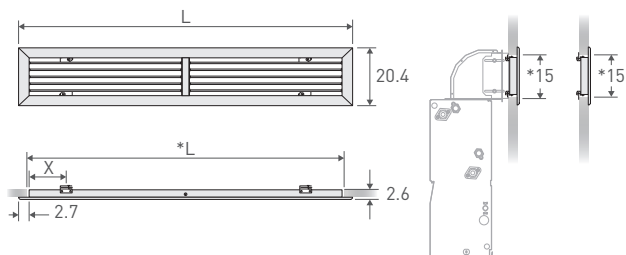
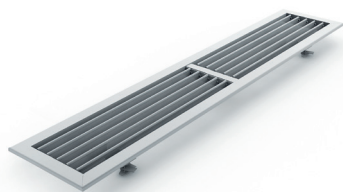
Exhaust Plenum 180°

- plenum with circular connection Ø 200 mm
- inner side acoustically and thermally insulated
- mounting on the outlet side of the device
- from galvanized steel
- pressure losses are negligibly

Model	55	75	95	125	155
Code	8764.0601	8764.0602	8764.0603	8764.0604	8764.0605



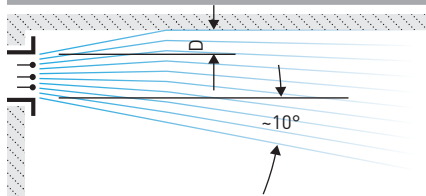
Adjustable air inlet grille / exhaust grille



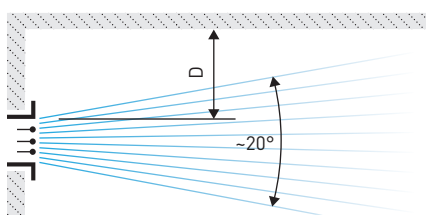
* minimum dimensions cut-out for mounting of grille

Model	55	75	95	125	155
Code	8789.201	8789.202	8789.203	8789.204	8789.205
L	53.2	73.2	93.2	123.2	153.2
*L	50	70	90	120	150

With ceiling deflection



Without ceiling deflection





BRIZA 22 HYBRID options

Jaga Fancoil Controller JFCC

- [available from September 2018]

Installation

Electrical connections: IMPORTANT!

- the warranty is only valid when using the original Jaga power supply.
- Jaga Briza EC are fan coils for the treatment of air in indoor environments.
- the electrical connection of the unit must be carried out by qualified personnel, in compliance with the regulations applicable in the country where the unit is installed.
- installation that does not meet the operating limits specified relieves Jaga N.V. from liability concerning damage to objects and persons.


jagaHybridRadiator

Options

The JRT-100 and JRT-200 provides reliable and precise temperature control, and are easily to program and operate with the help of a large LCD screen with clear and easily recognizable icons.

Room thermostat, AC 24 V, voor ventilatorconvectoren (3-snelheden of variabele snelheid), universeel gebruik en warmtepompen. 7-dagen tijd switch. Uitgang DC 0..10V of AAN/UIT

Roomthermostat JRT_100

Code 8751.050012

OPTION external room-temperature sensor



- for 2- and 4-pipe fan coil units
- (4-pipe) heating - cooling mode / auto switching heating - cooling
- (2 pipe) heat - cooling mode
- 0-10V output
- automatic or manual fan speed control
- mounting on wall mounting box
- 3 programmable time zones (5.1 + 1): working days (1-5), Saturday (6) and Sunday (7)
- controls valves with 24V AC / DC thermoelectric engine
- It is possible (at manual control) to allow the fan to run once "set point" is reached.

Roomthermostat JRT_200

Code 8751.050013



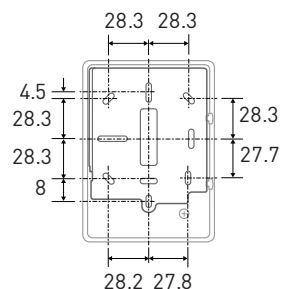
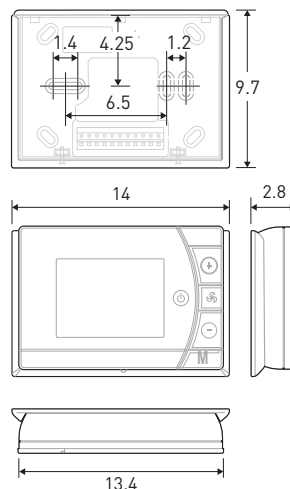
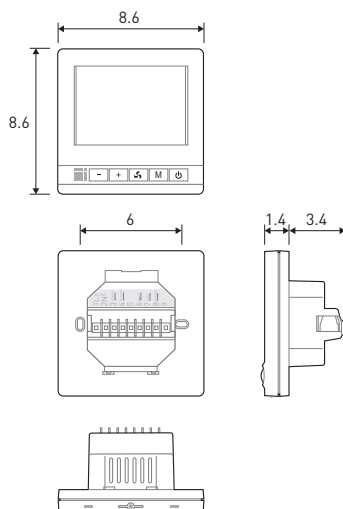
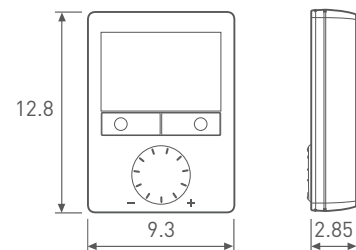
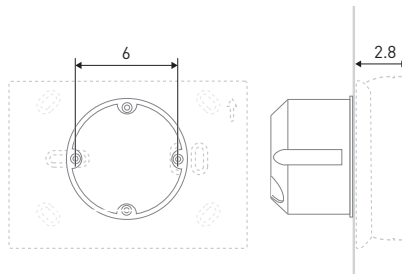
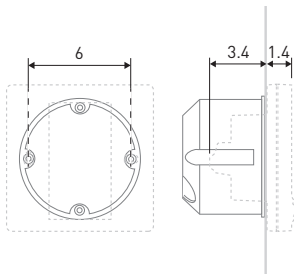
- for 2- and 4-pipe fan coil units
- (4-pipe) heating - cooling mode / auto switching heating - cooling
- (2 pipe) heat - cooling mode
- 0-10V output
- automatic or manual fan speed control
- direct mounting to a wall recessed box or direct to the wall
- 3 programmable time zones (5.1 + 1): working days (1-5), Saturday (6) and Sunday (7)
- controls valves with 24V AC / DC thermoelectric engine

Roomthermostat RDG 160T

Code 8751.050013

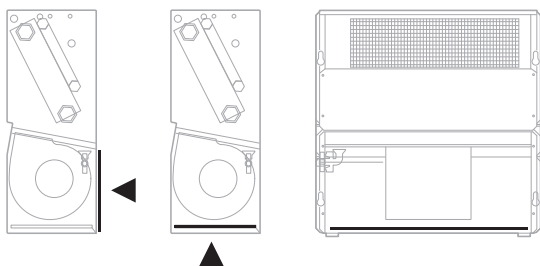


- 1 RDG 160T roomthermostaat
- thermostat heating - cooling
- auto or manual heating / cooling change-over
- 24 VDC power supply
- 0..10 V DC control outputs
- 0..10V DC valve control
- full modulating Fan-speed, automatic or manual in three steps (3V - 6V - 8V)
- auto Timer mode with 8 programmable timers
- unlimited adjustment possibilities: 74 features and diagnostic test



Spare-parts

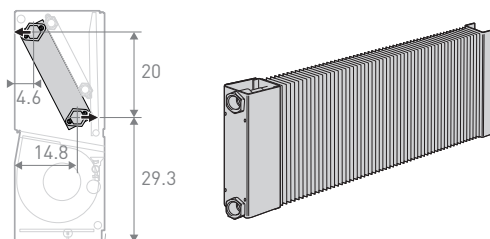
Filter



	Model				
	55	75	95	125	155
Code	8721.401	8721.402	8721.403	8721.404	8721.405

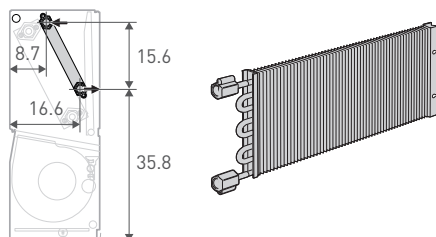
Material according DIN 53438

Standard Heat Exchanger 2-pipe heating / 4-pipe cooling



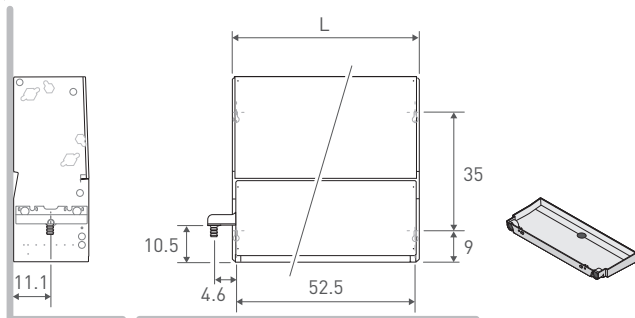
	Model				
	55	75	95	125	155
Code	8776.0301	8776.0302	8776.0303	8776.0304	8776.0305

OPTIONAL Supplementary Heat exchanger (heating for 4-pipessystem)



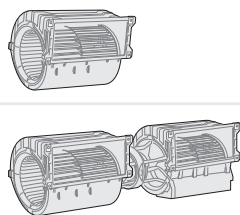
	Model				
	55	75	95	125	155
Code	8721.5401	8721.5402	8721.5403	8721.5404	8721.5405

OPTIONAL condensate collector wall



	Model				
	55	75	95	125	155
Code	38776.171301				

Fan module



Code	Model				
	55	75	95	125	155
24560.02200010	1X	-	-	1X	-
24560.02200011	-	1X	1X	1X	2X

Expected lifespan fans:

With an operation of 24 hours a day and 7 days a week at 70% power at a temperature of 20 °, the expected lifetime is 84.482 hours, or about 10 years. After this there is a 1 % chance of dropout.



BRIZA 22 HYBRID

product description Built-In Wall

Description Briza 22 Build in Wall:

Pre-mounted air conditioning unit, in five lengths, for installation in wall. Available in four versions, each in 2- or 4-pipe connection.

Build-in Wall **BABW/BT** (Standard version)

- air exhaust at the top
- air supply at the bottom

Build-in Wall **BABW/FT** (Optional version)

- air exhaust at the top
- air supply at the front

Build-in Wall **BABW/BF** (Optional version)

- air exhaust at the front
- air supply at the bottom

Build-in Wall **BABW/FF** (Optional version)

- air exhaust at the front
- air supply at the front

Description Briza 22 Built-In Ceiling

Pre-mounted air conditioning unit, in five lengths, for installation in ceiling. Available in two versions, each in 2- or 4-pipe connection.

Build-in Wall **BABC/BT** (Standard version)

- air exhaust at the top
- air supply at the bottom

Build-in Wall **BABW/FT** (Optional version)

- air exhaust at the top
- air supply at the front

Heating: standard equipped for connection to traditional water heaters.

Cooling: standard equipped for connection to chilled water supply.

Ventilation: connecting to mechanical ventilation.

The casing consists of a of reinforced galvanized steel plate and a condensate drain pan with natural drainage, complete with - self-extinguishing - anti-condensation insulation on the side, back and front panels of the unit.

- the wall version is equipped as standard with a condensation drain pan on the left, connection Ø 20mm.
- the ceiling version: the unit is equipped with a condensation collecting in the front panel, and a condensate drain with natural drainage on the left side of the device, connection Ø 20mm
- om geurhinder te voorkomen moet de condensafvoer aangesloten worden op een regelmatig gebruikte afvoerbuiss met geur-afsluiter.

Dynamische warmtewisselaar:

Hoogwaardige Dynamische aluminium-koper warmtewisselaar met Hydrofiele coating. De warmtewisselaar bestaat uit rijen ronde naadloze circulatiebuizen uit zuiver rood koper, verbonden met aluminium lamellen met een tussenafstand van 2,08 mm en een geïntegreerde hydraulische verdeler, inclusief ontluchter. Druk test: 26 bar.

Dynamic heat exchanger:

The heat exchanger consists of a coil with three round rows seamless circulation tubes of pure red copper, connected with pure aluminium fins brass 2:08 mm spaced, and cast collectors equipped with a patented low pressure loss hydraulic distributor.

Pressure test: 26 bar.

Hydraulic connection:

2-pipe systeem:

- standard heat exchanger GF 3/4 "connection on the left. Also available with hydraulic connection to the right.

4-pipe systeem:

- standard heat exchanger GF 3/4 "connection on the left. Also available with hydraulic connection to the right.
- additional 2de heat exchanger GF 1/2", connection on the left.

Also available with hydraulic connection to the right.

GREEN-TECH Fan unit(s):

Cylindrical rotor fans with **GreenTech EC technology**: Energy-saving, easy operation, low noise.

Motor:

- from aluminum, mounted with vibration dampers on both sides. 230 VAC, 50-60 Hz, (see identification plate). Protection class motor IP44, electronic IP20, depending on installation and position. Control input 0-10 V or PWM, electrically insulated. Voltage output 10 V, 1.1 mA, electrically insulated.

Fan impeller:

- forward curved, from PA synthetic

Elektrical connection:

- standard to the right of the appliance.
- by means of terminals (earthing, - / + 230, 0 ... 10 V), . Supply Voltage 208-230 V / 50 - 60 Hz.

Dust filter:

Renewable polypropylene synthetic filter (filter class G2), removable from the front of the unit.

Terms of Use:

Air-conditioning unit for indoor use, to provide in the summer and during the winter the required heating and cooling (summer and winter, air conditioning).

For indoor spaces with domestic or similar use.

Informatie met betrekking tot oneigenlijk gebruik:

Jaga Briza 22 wand- en plafondinbouweenheid, is ontworpen voor verwarmen en koelen van binnenruimten met huishoudelijk of soortgelijk gebruik, en vervaardigd om enkel en alleen te functioneren als een eind unit voor luchtbehandeling met optionele in- en uitblaasplenum. Elk ander gebruik is strikt verboden. Het installeren en/of gebruiken van de Jaga Briza 22 in een explosieve omgeving is verboden. Het toestel is niet bedoeld voor plaatsing of gebruik in vochtige ruimtes, v.b. wasruimtes, zwembaden (IEC EN 60335-2-40).

Conforms to the following guidelines:

- the provisions of the Machinery Directive 2006/42/EC
- Low Voltage Directive 2014/35/EC,
- Electromagnetic Compatibility Directive 2014/30/EC

Operating limits:

Max Temperature supply water: 90 ° C.

Maximum pressure heat exchanger: 20 bar.

Supply voltage: 230 V ± 10%.

Options:

- motorised damper: air switch box with motorized damper with 0...10V control for outdoor air inlet
- wall ventilation grille Ø 125mm
- inlet angle piece 90°
- exhaust angle piece 90°
- adjustable air inlet grille / exhaust grille for 90° angle pieces
- inlet plenum 180° with round flanges, connection Ø 200 mm
- exhaust plenums 180° with round flanges connection Ø200 mm
- additional condensate collector

Control options:

- EC thermostat 24VDC, 0..10V speed control
- room-thermostat Jaga JRT 100 or JRT 200
- 0...10V connection to home automation
- Jaga JFCC controller (available March 2018)

Manufactured by Jaga n.v. Belgium.

Type: BRIZA 22 HYBRID BUILD-IN WALL

Type: BRIZA 22 HYBRID BUILD-IN CEILING



Jaga reserves the right to change product specification at any time in line with our policy of continuous improvement and innovation. Jaga N.V.,

Jaga N.V., Verbindingslaan z/n, B-3590 Diepenbeek. www.jaga.be

Tel.: +32 (0)11 29 41 11, Fax: +32 (0)11 32 35 78, info@jaga.be. 11 October 2018 8:32 AM



BRIZA 22 HYBRID functioning limits

Functioning limits:

- inlet water temperature +3 > +90 °
- maximum exchanger pressure: 6 bar

If the fan coil operates continuously in cooling mode in an environment with high relative humidity, condensation may form on the air delivery and on the exterior of the appliance. Such condensation may be deposited on the floor and any underlying objects. To avoid condensation from forming on the external structure of the appliance when the fan running, the water temperature must not be lower then the limits indicated in the table below, which depend on the temperature and humidity conditions of the ambient air. The above limits refer to operation with the fan running on maximum speed. If the fan is switched off for long and cold water passes through the coil, condensation may form on the exterior of the appliance; therefore, insert the 3-way or 2-way valve accessory.

Wet bulb room-temperature (°C)	Dry bulb room-temperature (°C)					
	21	23	25	27	29	31
Minimum water inlet temperature (°C)						
15	3					
17						
19						
21	6	5	4	3		
23	-	8	7	6	5	



What is sound power, sound pressure

Sound power is noise production of the device itself (sound source). The sound power is thus considered as a fixed value independent of the installation situation.

Sound pressure is the perceptible sound. This depends on the installation situation and on several factors:

- the location of the device
- the environmental condition
- the distance to the measured sound source
- the reflection of the sound (depending on the size and the height of the room and the materials used)

Note: The sound power is always higher than the perceived sound pressure.

Reverberation time:

Reverberation time is the time - in seconds - which is necessary to lower the sound pressure level of 60 dB after the sound source is switched off. This shows that the reverberation time in a large room will be larger than in a small room. Particularly the acoustics and decoration of the room determines the reverberation time.

Sound power

sound pressure

