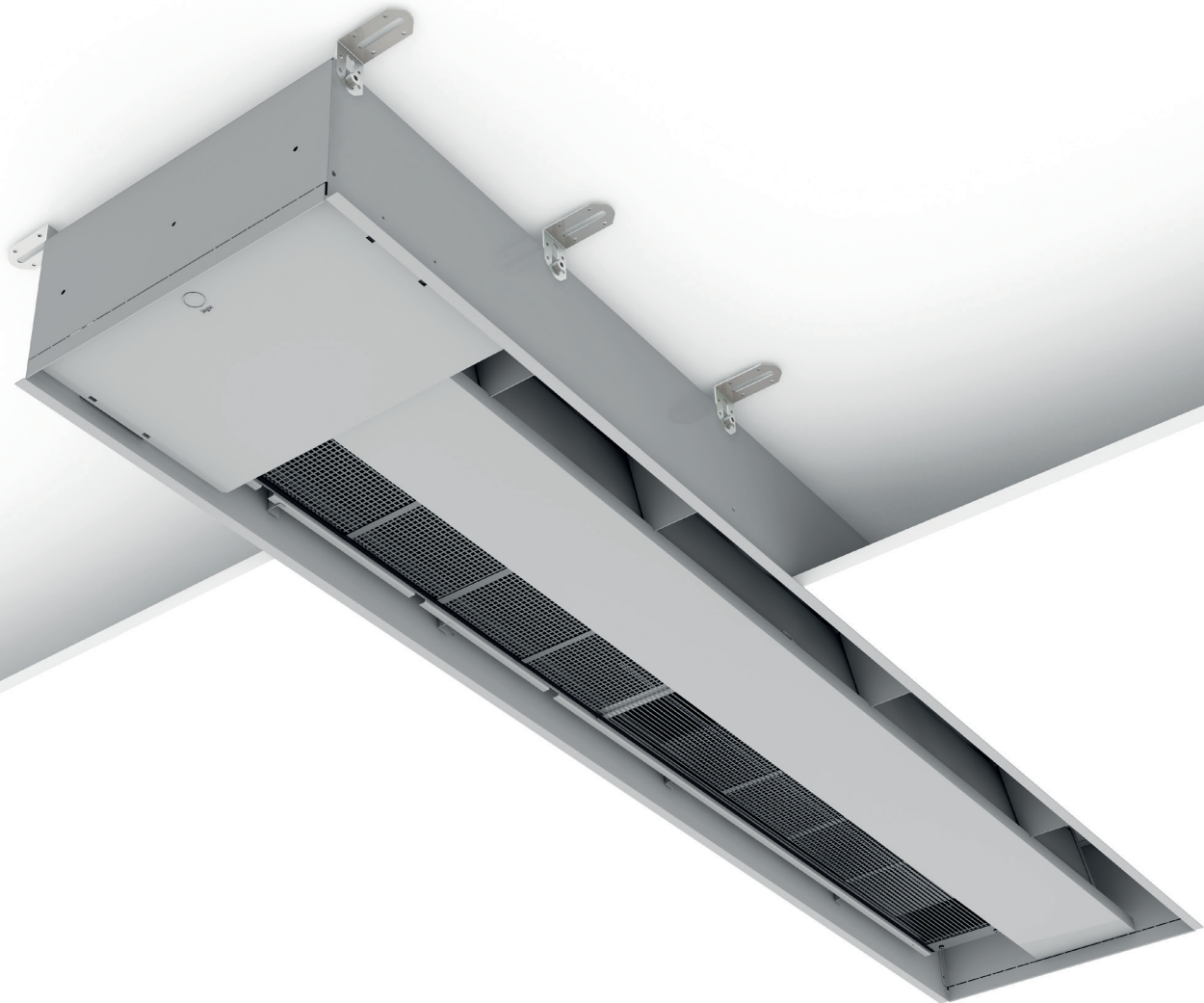
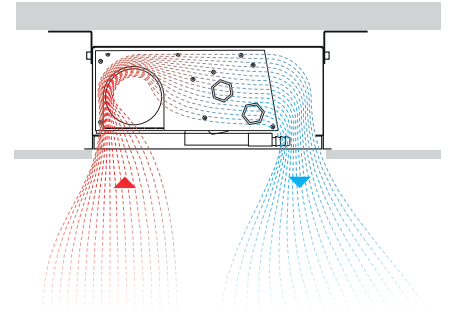




Extensive range for **heating** and **cooling**

- 2-of 4-pipe system
- electronic speed control with 0...10V signal
- energy-saving, maintenance-free EC motor, fan(s): 24 VDC/ECM
- optional connection for an existing ventilation system



jaga

CLIMATE
DESIGNERS

OM N





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JAGA Astra Beam is very suitable for climatizing renovation projects, climatizing houses, shops, offices and meeting rooms, schools, hotels, a winter garden, etc.

Product presentation:

Jaga Astra Beam offer the ideal climate solution, they provide comfortable heating and cooling at a very low noise level without hindering your outside view. An additional advantage is the optimal distribution of hot (or cool) air throughout the area..

- the units can be equipped with a ventilation connection to provide a completely invisible, comfortable and preheated fresh air supply

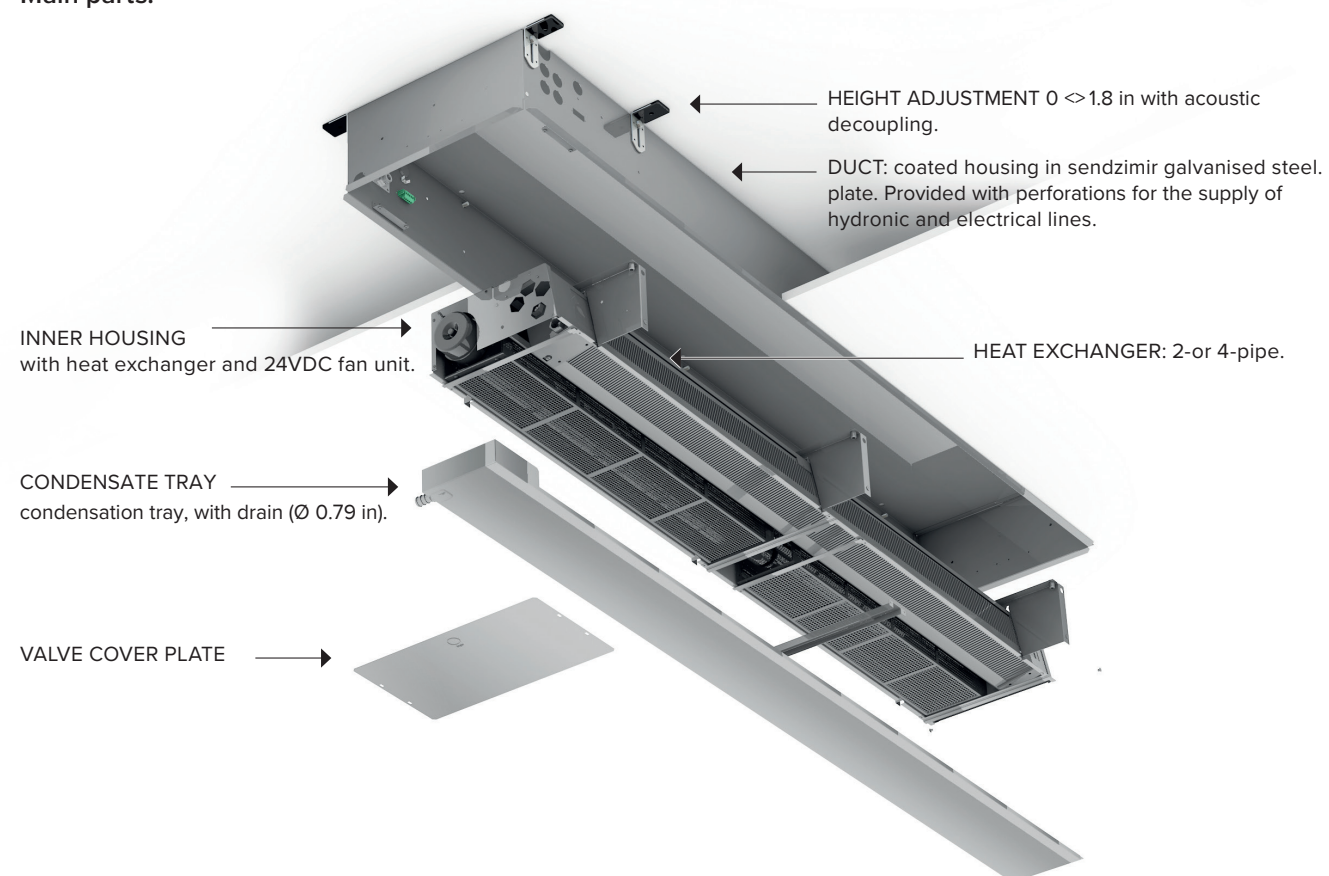
Options:

- outlet grille(s)
- empty housing (to fill open spaces for a continuous installation)
- power supply 24 VDC/VAC
- Jaga valve sets
- connection sleeve for a ventilation system
- JDPC.002 Jaga Dynamic Product Control
- roomthermostats: JRT 100 / JRT 100TW / JRT 200 / RDG 160

Advantages:

- for low temperature heating and light cooling
- suitable for non-condensing cooling and condensing cooling using cooling water
- long lifespan
- energy-efficient, maintenance-free EC motor (brushless)
- high efficiency in heating and cooling at a low noise level
- 2-pipe system or 4-pipe system
- electronic speed control with 0...10V signal
- width 16.5 in
- length 41.3, 47.2, 78.7, 110.2 in
- EC fans: 24 VDC/ECM

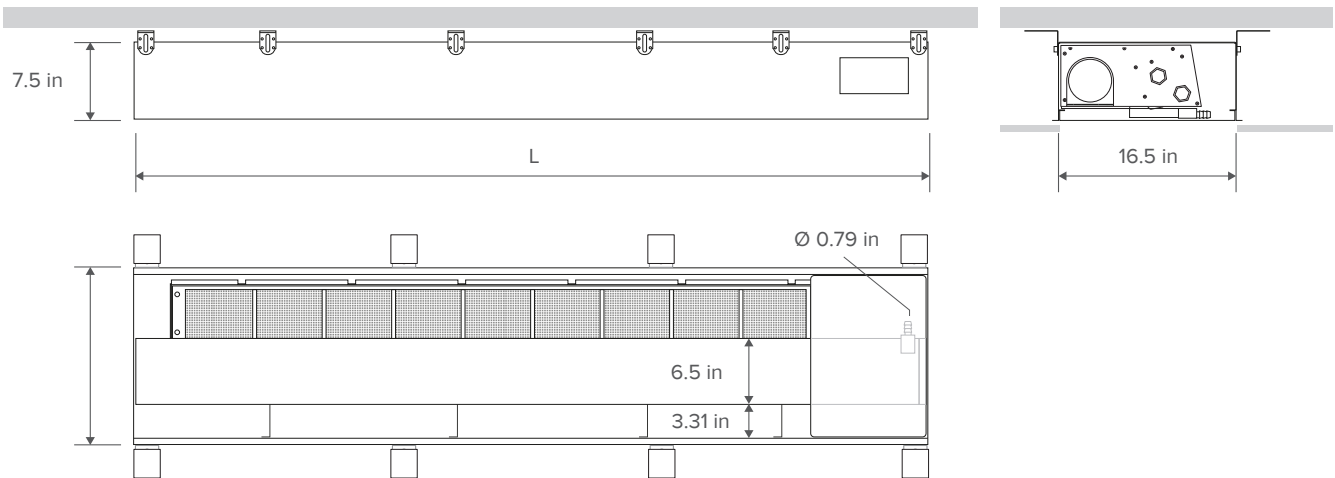
Main parts:



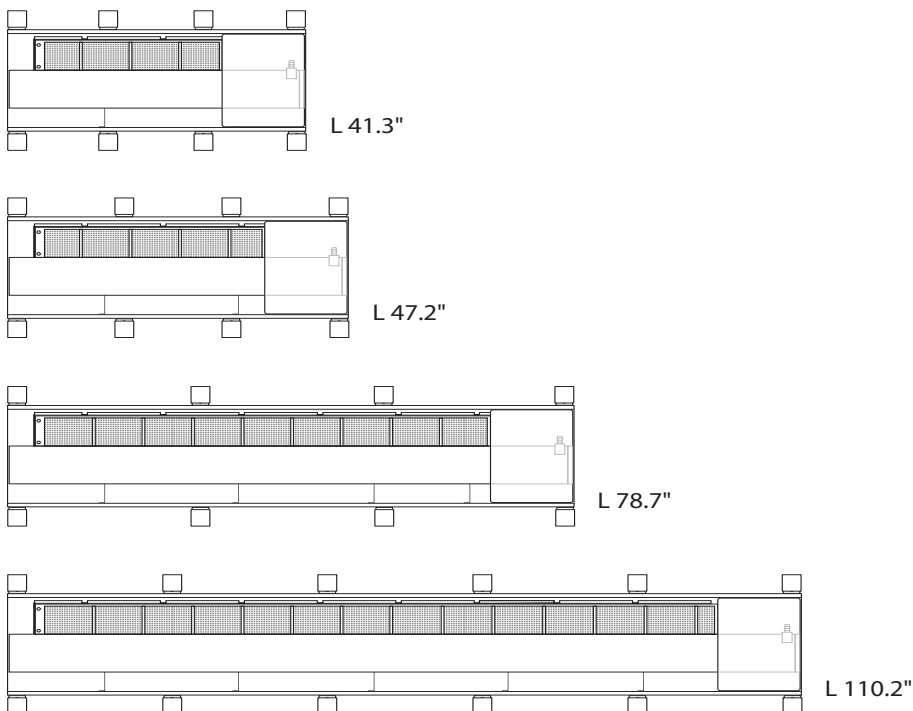


Dimensions:

Dimensions	(L) Length	in	41.3	47.2	78.7	110.2
	Width		16.5 in			
	Height		7.5			
Long side perforations	Hydronic pipes	in	perforations Ø 1.2 in, covered with insulating material			
	Electric cables		perforations Ø 1.2 in, covered with insulating material			
	Condensate drain		perforations (Ø 1.6 in), connection nipple Ø 0.8 in			



Range:





2 pipe system

Height in	Width in	Length in	Control voltage (fan speed) (V)	COOLING	COOLING (sensible) 81°F	COOLING (total) 81°F	HEATING 68°F	HEATING 68°F	Sound pressure Lp [dB(A)]	Sound power Lw [dB(A)]	Electrical Consumption [W]	Air flow rate (cfm)
				61/64 BTU/hr	45/54 BTU/hr	45/54 BTU/hr	113/95 BTU/hr	95/86 BTU/hr				
7.5	16.5	41.3	2	559	910	1289	1500	945	17.0	25.0	1.5	57
			4	1095	1780	2486	2370	1494	21.0	29.0	2.7	98
			6	1616	2643	3645	3093	1951	27.0	35.0	4.8	139
			8	2135	3512	4791	3741	2356	35.0	43.0	9.3	182
			10	2650	4399	5930	4331	2728	40.0	48.0	15.0	207
7.5	16.5	47.2	2	696	1132	1599	1865	1176	19.0	27.0	3.2	48
			4	1357	2213	3089	2943	1855	22.0	30.0	6.7	105
			6	2008	3280	4528	3846	2421	28.0	36.0	12.1	153
			8	2653	4365	5954	4648	2926	36.0	44.0	18.4	207
			10	3291	5463	7366	5381	3390	41.0	49.0	24.0	236
7.5	16.5	78.7	2	1357	2210	3124	3642	2295	21.1	29.1	4.6	105
			4	2653	4320	6036	5749	3621	24.6	32.6	9.4	204
			6	3925	6407	8846	7509	4730	30.5	38.5	16.9	292
			8	5180	8522	11625	9074	5715	38.5	46.5	27.7	388
			10	6428	10666	14383	10506	6619	43.5	51.5	38.9	443
7.5	16.5	110.2	2	2019	3287	4648	5418	3413	22.5	30.5	6.1	162
			4	3945	6428	8979	8552	5388	26.1	34.1	12.1	302
			6	5838	9534	13159	11168	7035	32.1	40.1	21.7	431
			8	7707	12678	17296	13497	8501	40.1	48.1	37.0	570
			10	9562	15874	21398	15635	9848	45.1	53.1	53.8	649



4 pipe system

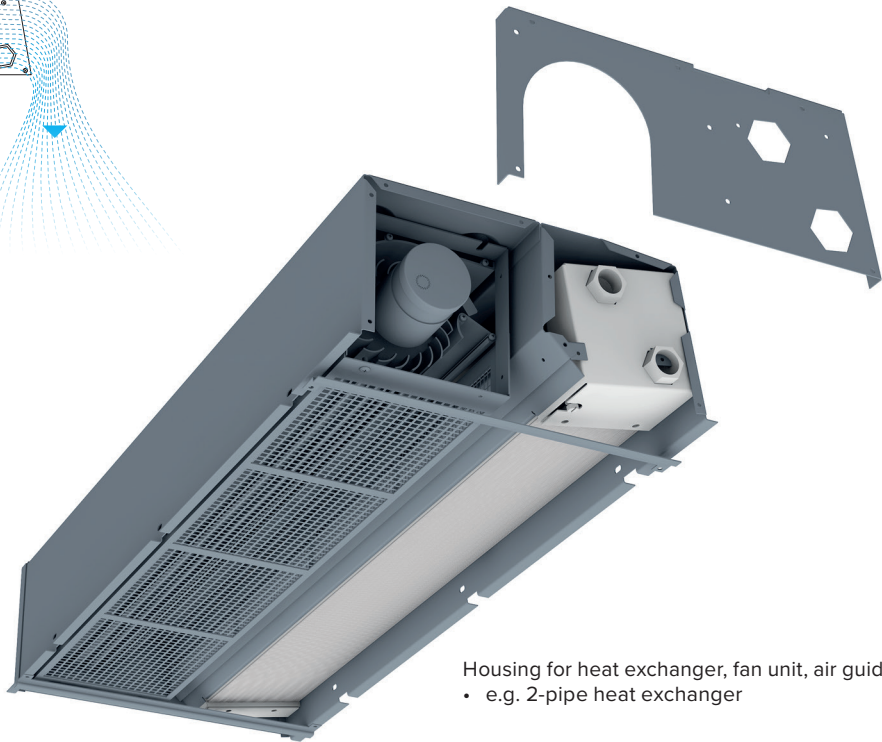
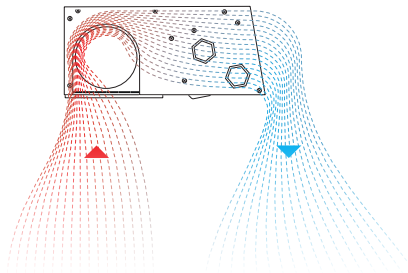
Height in	Width in	Length in	Control voltage (fan speed) (V)	COOLING	COOLING (sensible) 81°F	COOLING (total) 81°F	HEATING 68°F	HEATING 68°F	Sound pressure Lp [dB(A)]	Sound power Lw [dB(A)]	Absorbed electrical power [W]	Air flow rate (cfm)
				61/64 BTU/hr	45/54 BTU/hr	45/54 BTU/hr	113/95 BTU/hr	95/86 BTU/hr				
7.5	16.5	41.3	2	508	829	1170	1003	631	17.0	25.0	1.5	57
			4	992	1620	2261	1579	996	21.0	29.0	2.7	98
			6	1470	2401	3315	2063	1299	27.0	35.0	4.8	139
			8	1940	3195	4355	2493	1572	35.0	43.0	9.3	182
			10	2407	3997	5391	2888	1818	40.0	48.0	15.0	207
7.5	16.5	47.2	2	631	1030	1456	1245	784	19.0	27.0	3.2	48
			4	1234	2012	2810	1964	1238	22.0	30.0	6.7	105
			6	1828	2984	4119	2564	1616	28.0	36.0	12.1	153
			8	2411	3969	5412	3096	1951	36.0	44.0	18.4	207
			10	2994	4968	6697	3587	2261	41.0	49.0	24.0	236
7.5	16.5	78.7	2	1234	2008	2841	2428	1531	21.1	29.1	4.6	105
			4	2411	3928	5487	3833	2414	24.6	32.6	9.4	204
			6	3567	5824	8041	5006	3154	30.5	38.5	16.9	292
			8	4709	7748	10568	6049	3809	38.5	46.5	27.7	388
			10	5845	9698	13074	7004	4413	43.5	51.5	38.9	443
7.5	16.5	110.2	2	1835	2991	4225	3615	2274	22.5	30.5	6.1	162
			4	3587	5841	8164	5702	3591	26.1	34.1	12.1	302
			6	5306	8668	11962	7447	4692	32.1	40.1	21.7	431
			8	7008	11526	15724	8999	5667	40.1	48.1	37.0	570
			10	8692	14428	19454	10421	6564	45.1	53.1	53.8	649



Heat exchanger for heating and cooling

Round, seamless circular pipes in pure copper, connected to pure aluminium panels with a spacing of 0.04 in and an integrated brass collector, including air venting. The heat exchanger is electrostatically painted with black epoxy polyester powder, gloss level 70%.

- low energy costs
- very environmentally friendly
- 2-pipe version (with one circuit for heating and cooling)
- 4-pipe version (with separate circuits for heating and cooling)

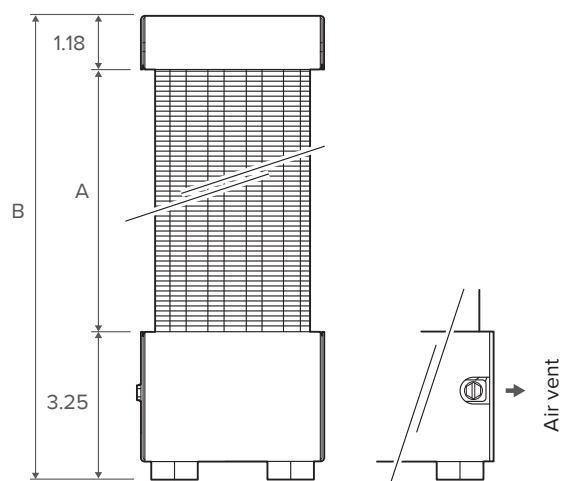
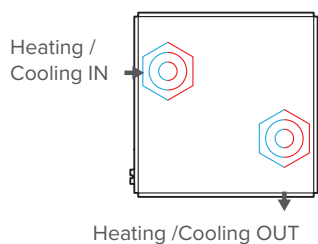


Housing for heat exchanger, fan unit, air guide and crossbars.
• e.g. 2-pipe heat exchanger

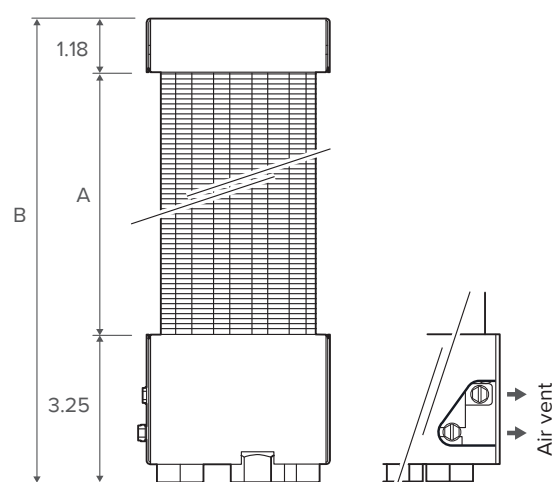
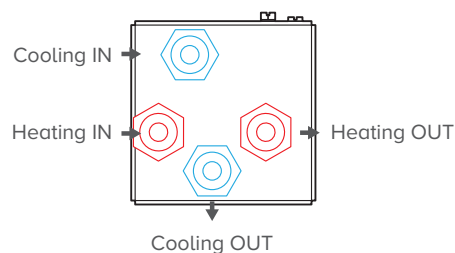
Astra Beam			41.3	47.2	78.7	110.2
Heat exchanger	B (± 0.2) length	in	3.1	3.7	6.9	10.0
	A (± 0.12) finned length	in	2.7	3.3	6.5	9.6
	Collector material		messing			
	Air vent 2-pipe	number	1			
	Air vent 4-pipe	number	2			
	Water content	gallon	0.26	0.34	0.61	0.87
	Pressure test element	psi	362.6			
	Workload	psi	174.0			
	Connection	inch	½ "			
	Colour		polyester powder black, gloss level 70%			
	Circulation pipes	number	16			
	Circulation pipes material		copper			
Fins	Fin size	in	3.9 x 3.4			
		in²	13.4			
	Fin spacing	in	0.1			
	Fin material		aluminium			



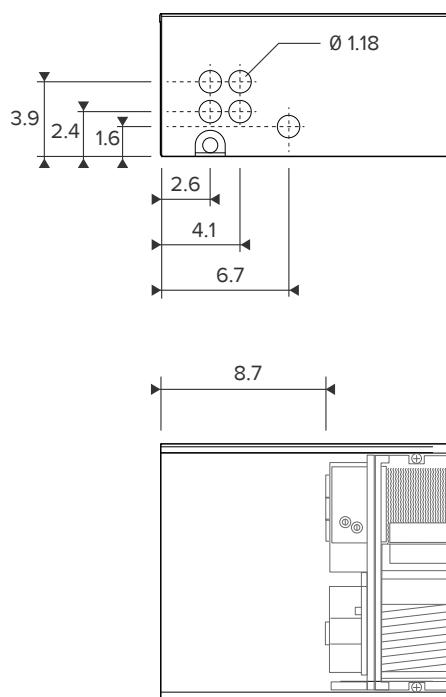
Astra Beam heat exchanger (2-pipe)



Astra Beam heat exchanger (4-pipe)



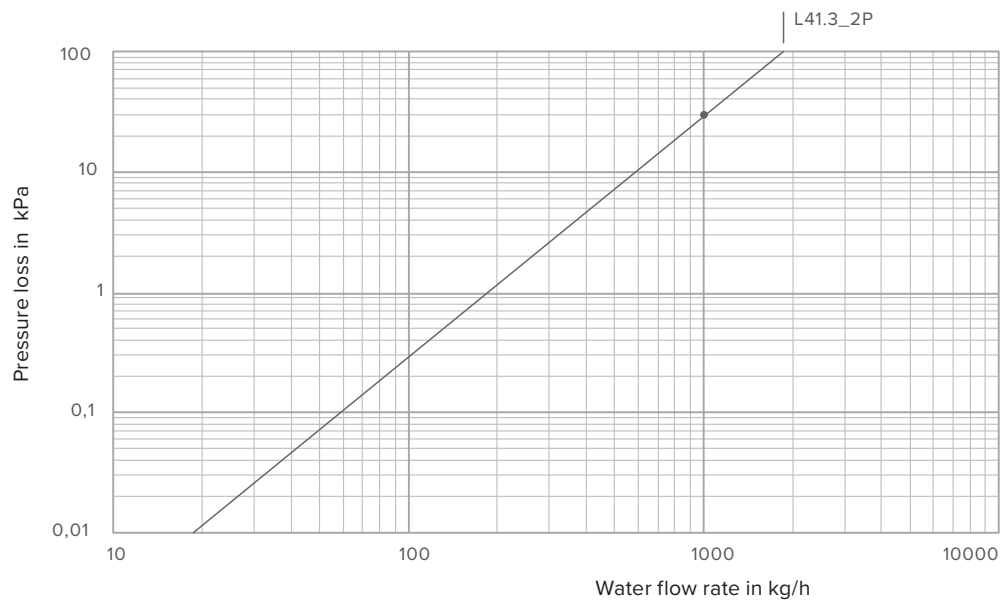
Hydronic transit dimensions:



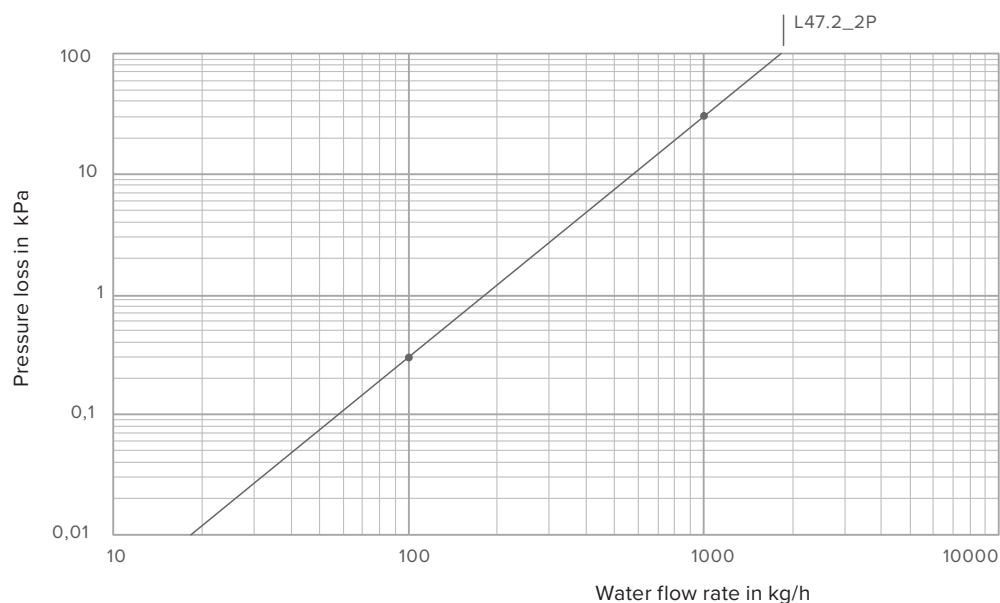


Astra Beam 2- pipe pressure drops heating/cooling

L413



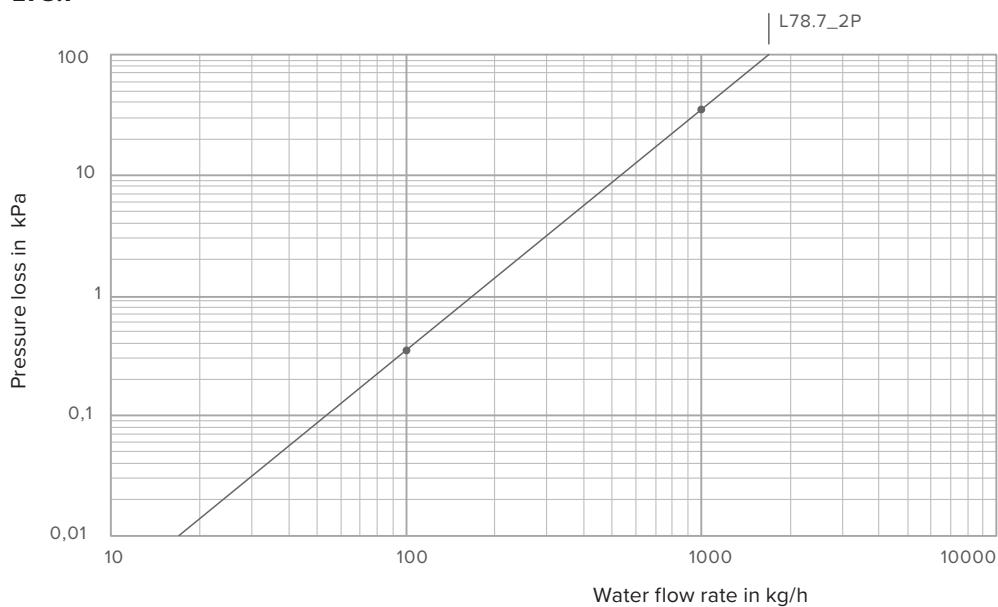
L472



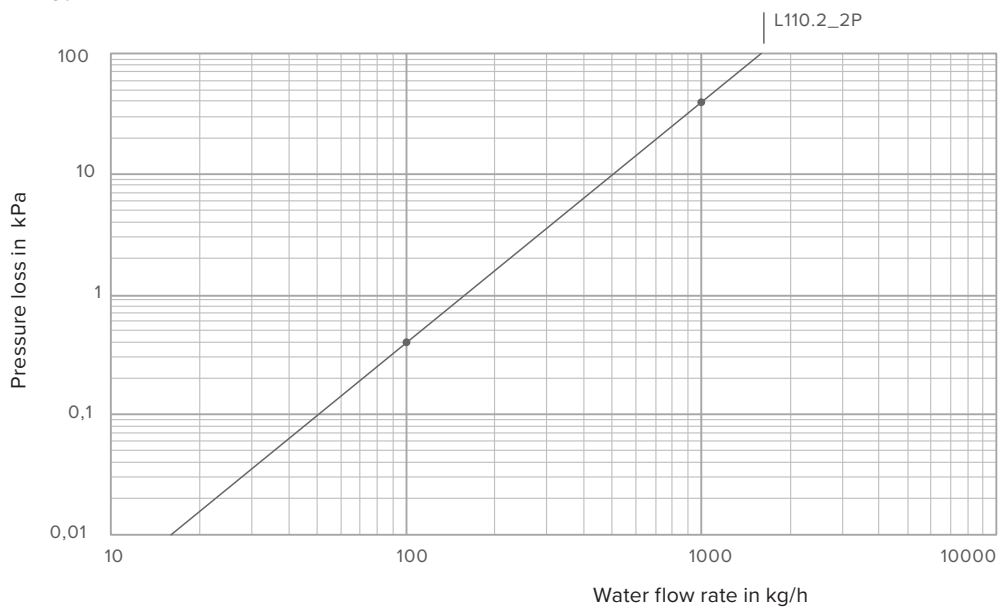


Astra Beam 2- pipe pressure drops heating/cooling

L78.7



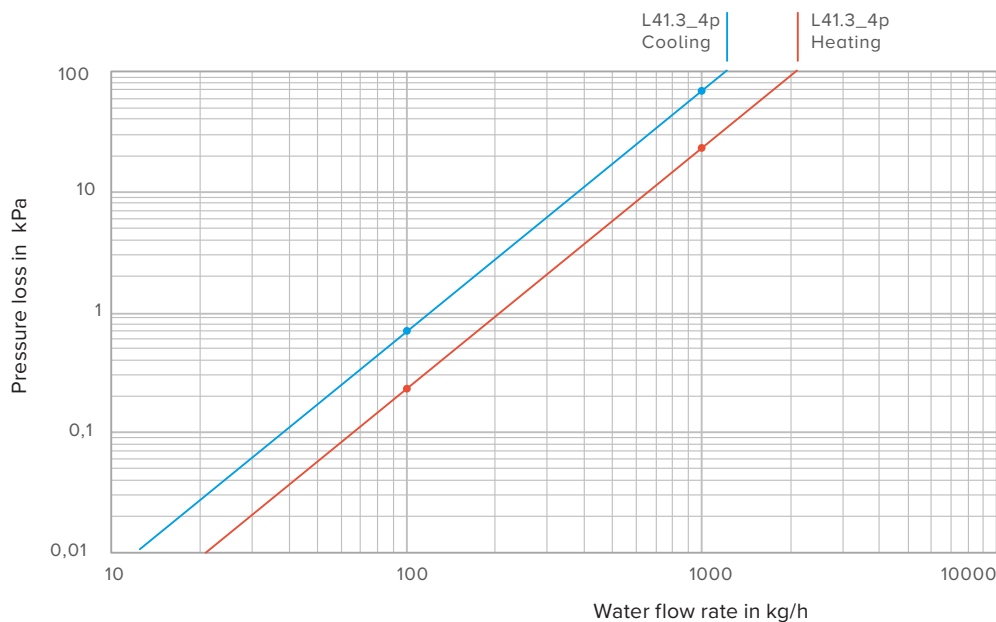
L110.2



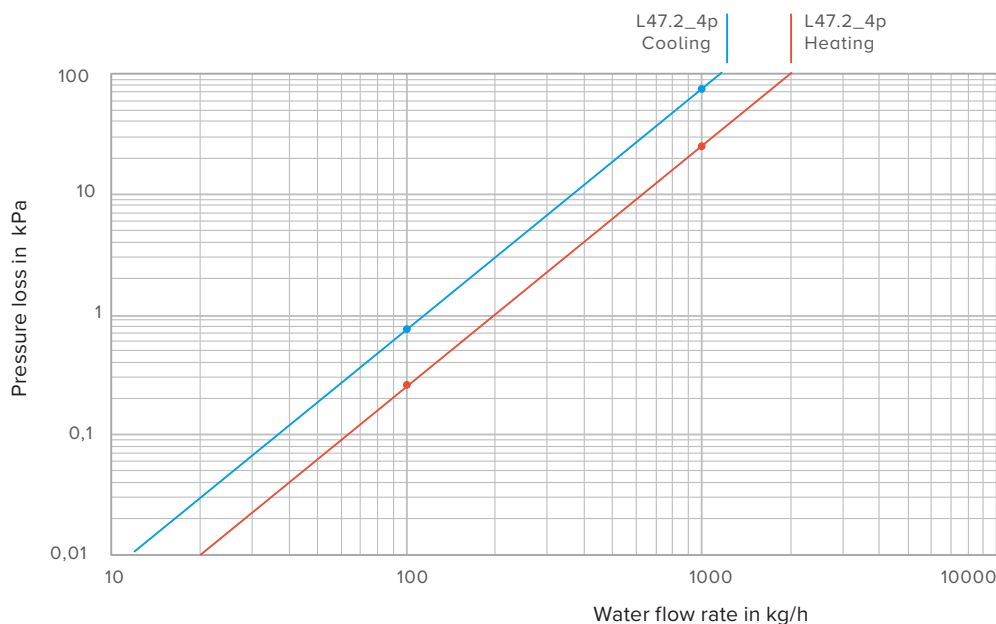


Astra Beam 4- pipe pressure drops heating/cooling

L413



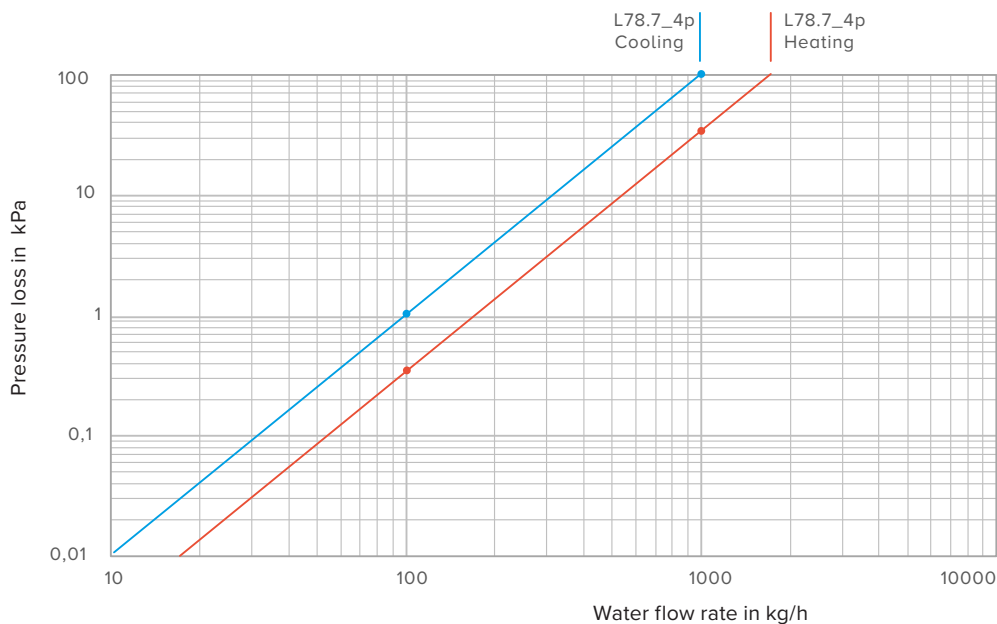
L472



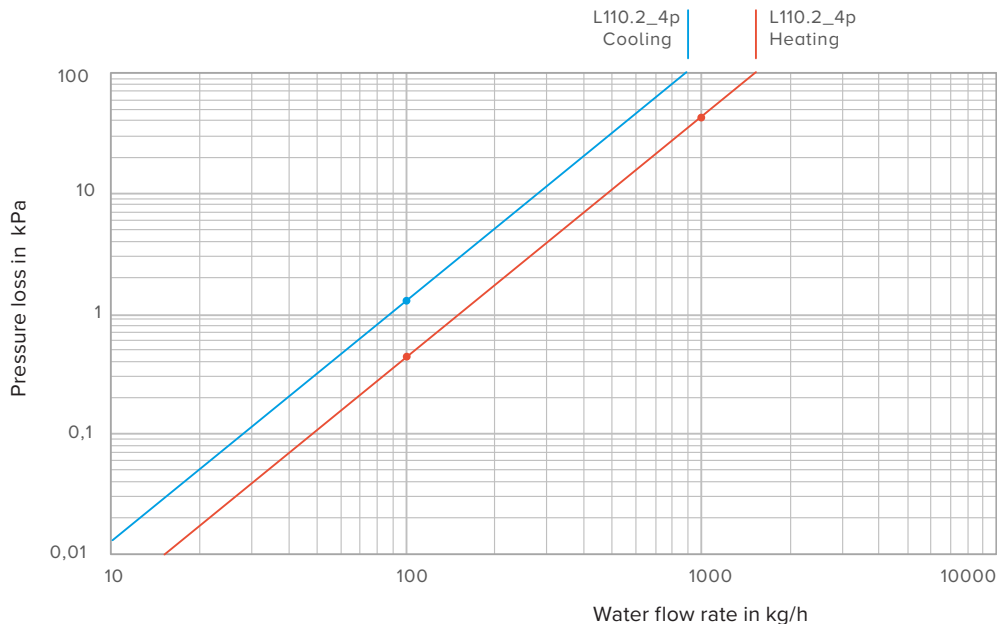


Astra Beam 4- pipe pressure drops heating/cooling

L78.7



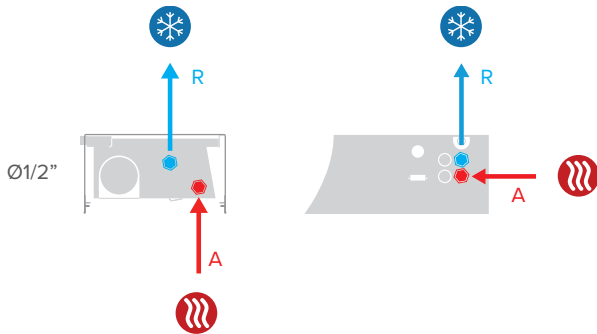
L110.2





Hydronic connection (standard)

2-pipe:

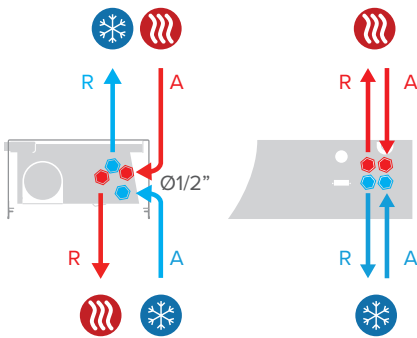


IMPORTANT! The correct connection of the hydraulics to the appliances is of course very important within an installation. Installation must be carried out by certified technicians. Incorrect installation could cause product failure, a reduced performance or an increased noise level.

Connection to the hydronic system:

- make sure the connections are airtight
- the heat exchanger is equipped with an air vent
- hydronic connection: 1/2"

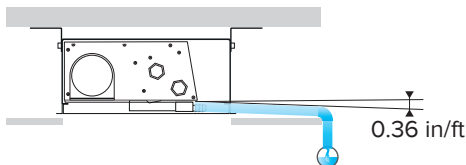
4-pipe:



A = supply
R = return

Connecting condensation drain (Ø0.79in)

When the condensate drain pipes are being connected, the pipe system must be sufficiently supported in order to prevent strain on the condensate drain tray.



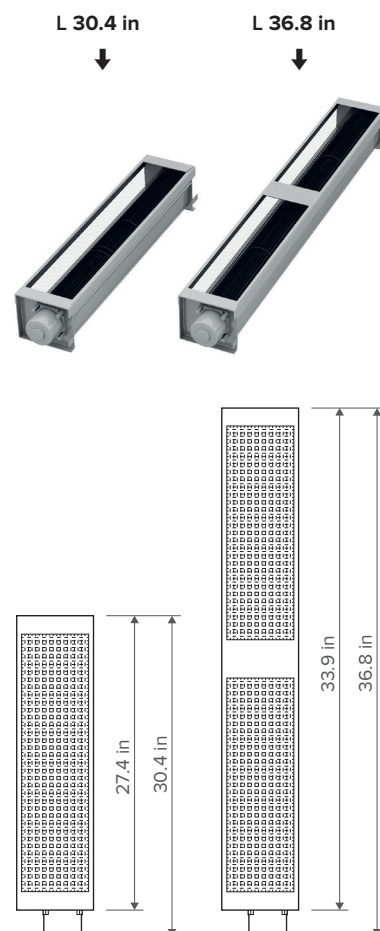
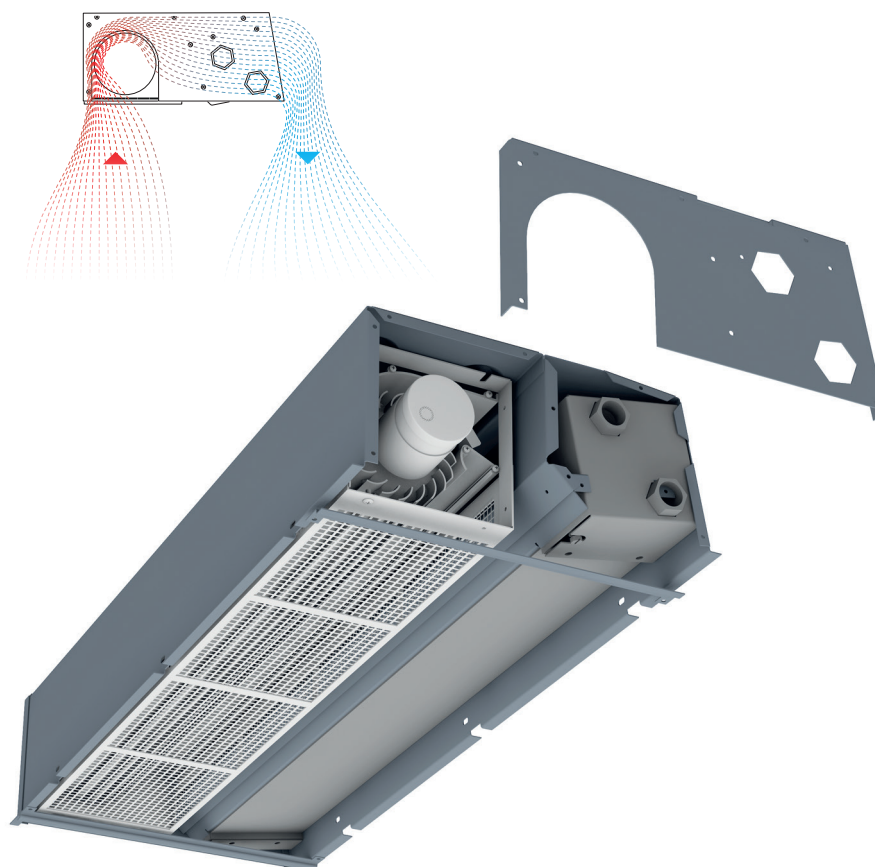
The condensate drain system must be set up with an adequate p-trap in order to prevent the infiltration of odours



Tangentiële ventilators

One or more virtually noiseless tangential ventilators, 24 VDC, with Sendzimir galvanized steel plate cover and integrated "Fan Dust Guard" Filter (keeps dirt and objects out of the fan). Color black, gloss level 70%.

- low energy costs
- ball bearing EC motor
- sound-absorbing EPDM suspension



Housing for heat exchanger, fan unit, air guide and crossbars.

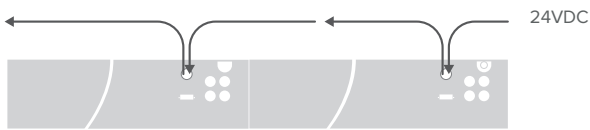
Astra Beam			41.3	47.2	78.7	100.2
Motor	Number of fans (motors) per unit		1	1	2	3
	Voltage		24 VDC			
	Type		EC			
	Suspension		EPDM suspension			
	Running hours		(suction ambient temperature) 50,000			
	Adjustable speed		0..10V			
Fan	Type		Tangential			
	Filter		Stainless steel dust filter, passage Ø 0.04 in			
	Length of impeller (in)	Fan L 30.4	27.4			
		Fan L 36.8	33.9			
	Number per channel	Fan L 30.4	1		1	2
		Fan L 36.8		1	1	1
	Weight (lbs)	Fan L 30.4	7.7			
		Fan L 36.8	8.7			

Conform: ce directive nbn en60335-1 based on en60335-1:2012 + a11:2014 + a12:2017 a13:2017 Nbn en60335-2-80 based on en60335-2-80:2003 a1:2004+a2:2009

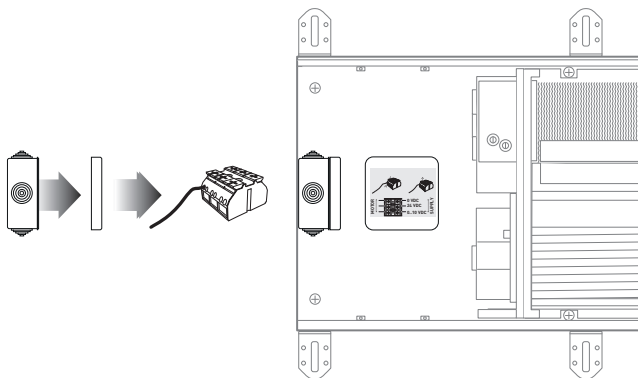


electrical connection
sound pressure reduction ifv. content of space
composite sound pressure multiple fans

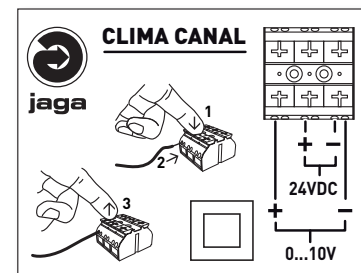
Connecting electricity: (24VDC)



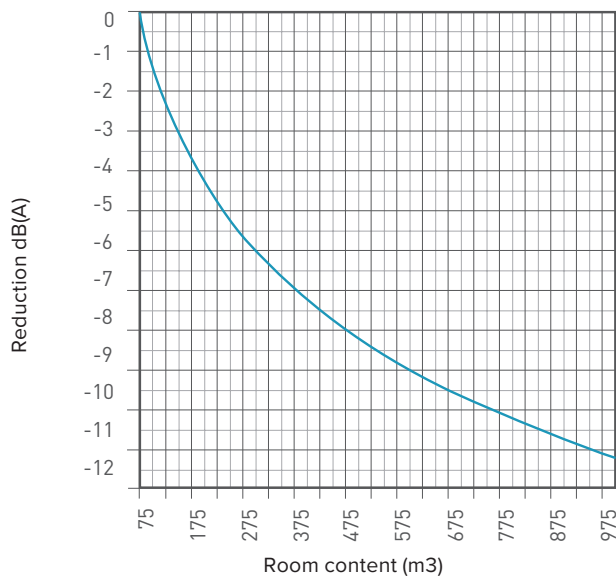
On the side of the hydronic connection, you can also find the terminal block for the electrical connection. The electrical connection is connected in the black block, which is located at the bottom of the protective cover. Standard connection on the left.



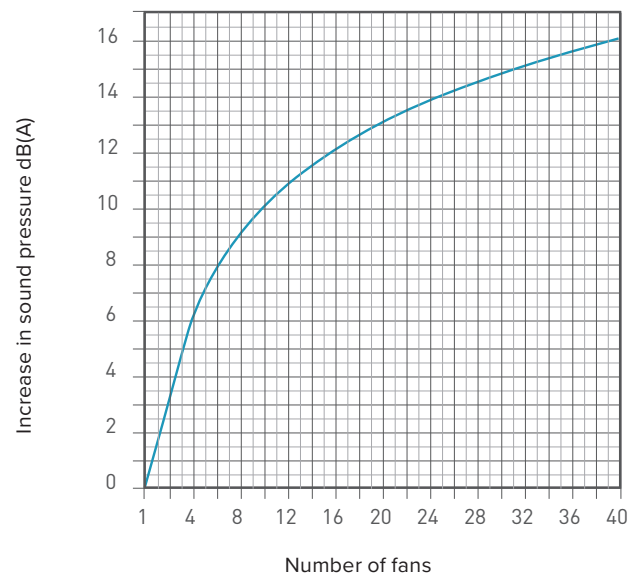
IMPORTANT! The electrical connections of the unit must be entrusted to qualified personnel and carried out in accordance with the standards in force in the country of installation. An incorrect electrical connection releases Jaga N.V. from any liability for material damage or physical injury.



Sound pressure reduction in function of. content locally



Compose sound pressure level of several fans





Maximum cable length in function of the number of units:

- maximal cable length for a voltage drop less than 5%.

Cable length (ft)		32.8	65.6	98.4	131.2	164.0	196.9	229.7	262.5	295.3
Type 1 (L41.3) (15W) number of Astra Beam	Ø 17 AWG	5	10	1						
	Ø 16 AWG	7	3	2	1					
	Ø 14 AWG	13	6	4	3	2		1		
Type 2 (L47.2) (24W) number of Astra Beam	Ø 17 AWG	3	1							
	Ø 16 AWG	4	2	1						
	Ø 14 AWG	8	4	2		1				
Type 3 (L78.7) (39W) number of Astra Beam	Ø 17 AWG	2	1							
	Ø 16 AWG	3	1							
	Ø 14 AWG	5	2	1						
Type 4 (L110.2) (54W) number of Astra Beam	Ø 17 AWG	1								
	Ø 16 AWG	2	1							
	Ø 14 AWG	3	1							



Option: Power supply DIN-rail assembly

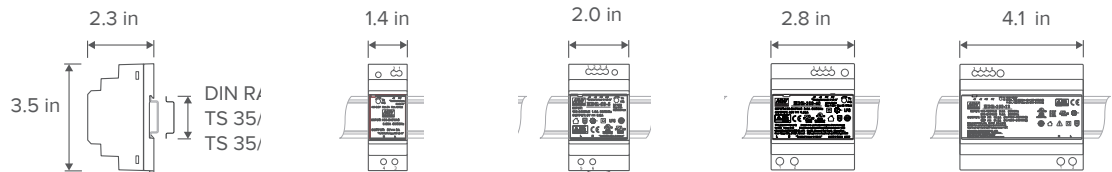
- for DIN-rail or wall mounting
- in a electrical switchboard
- in compliance with UL60950 / UL508 / IEC 60950-1 / TUV EN61558-2-16 / Class II
- output voltage 24 VDC
- input voltage 100 - 240 VAC
- screw connection
- LED indicator



Pin no	Connection
1	AC/L
2	AC/N
3/4	-V
5/6	+V

Required power = sum of the power consumption of the equipment.

Attention: The warranty is only valid when using the original Jaga power supply.



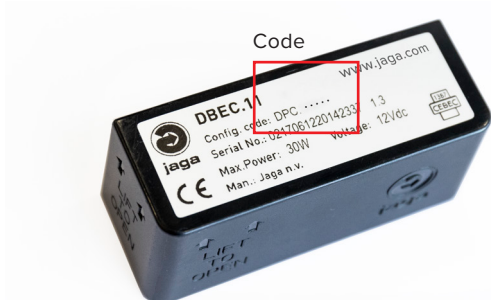
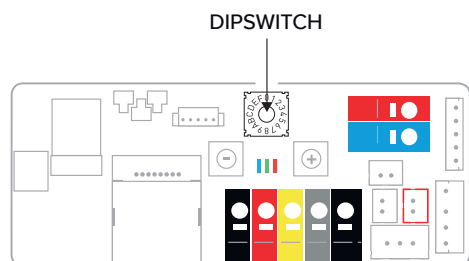
Technical dates	Code >	7990.054	7990.055	7990.056	7990.057
Rated power	Watt	36	60	92	150
Output voltage	VDC	24 (21.6 ~ 29)			
Output current	A	1.5	2.5	3.38	6.25
Input voltage	VAC	85 ~ 264			
		120 ~ 370			
Overload protection	%	105 ~ 160	105 ~ 160	102 ~ 110	105 ~ 135
LED		power on			
Operating temperature	°F	-22 ~ +158			
Operating altitude max.	ft	6562			



option: Jaga Dynamic Product Control: JDPC.002
explanation configuration order code

Jaga Dynamic Product Control JDPC.002

Multifunctional controller for dynamic heating and cooling units provided with one or more built-in fans. Available for all Jaga Astra Beam devices. The Jaga Dynamic Product Controller is pre-configured and delivered pre-assembled inside the unit. It is possible to change the default settings (minimum heating/cooling temperature and fan speed).



Available configurations:

Astra Beam B34		
A	Manually	DPC.CC21
		DPC.CC22
		DPC.CC24
		DPC.CC25
B	BMS	DPC.CC71
		DPC.CC72

Code configuration: e.p. **DPC.CC21**

Explanation No.:	I	Controller model	DPC.CC21
	II	Produkt model	DPC.CC21
	III	Positie dipswitch	DPC..CC21
	IV	H / C / auto H / C / control panel	DPC..CC21

Jaga Dynamic Product Control JDPC.002

I>

Controller model:

DPC.CC21

DPC

II>

Product model:

DPC.CC21

CC

Astra Beam 2-pijps / 4-pijps

III>

Position dipswitch

Operating mode:

DPC..CC21

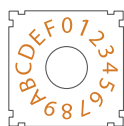
A	Man.	1	Manually: on/off	24 V system
		2	Manually: on/off with water T° sensor	24 V system
		7	0...10 V: with water T° sensor / kamer T° sensor	24 V system

IV>

Application code

DPC..CC21

H / C (no control panel)	1	Heating
	2	Heating + Cooling
H / C / control panel	4	Heating
	5	Heating + Cooling





option: adapter for connection to a ventilation duct.

Option: adapter for connection to a ventilation duct.

Jaga Astra Beam can be connected to an existing ventilation duct. ± 29.4 cfm is allowed.

Metal adapter for ventilation system

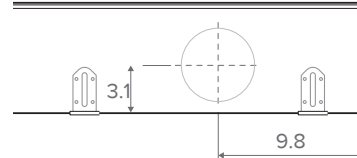
- $\varnothing 3.1 / 3.9 / 4.9$ in



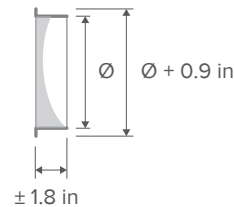
Description		Code
Metal adaptor	$\varnothing 3.1$	21165.00010080
	$\varnothing 3.9$	21165.00010100
	$\varnothing 4.9$	21265.00010125

Description:

- galvanized sheet steel
- DX51D Z275MAC quality - according to EN 10142/10143
- pre-assembled ex works



Dimensions:



Synthetic connector for ventilation system

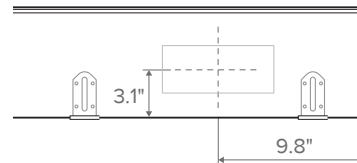
- 5.2×2.0 "



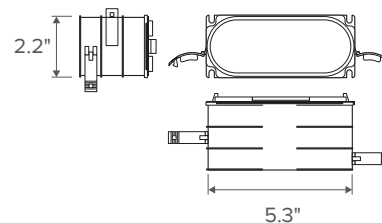
Description		Code
Synthetic adapter	5.2×2.0 "	21165.00030001

Description:

- quick and easy assembly - no tools, no adhesives: thanks to snap connectors between the air distribution manifold, the flexible ducting and the air valves.
- material synthetic, colour: blue
- pre-assembled ex works



Dimensions:





Pre-assembled unit for heating and cooling, for installation in the ceiling. A minimum installation depth of 7.7 in must be possible without problems.

- height 7.5 in
- width 16.5 in
- lengths: 41.3 / 47.2 / 78.7 / 110.2 in
- 2- or 4- pipe system
- heating: the appliance is equipped as standard for heating and for connection to traditional water heating systems
- cooling: the appliance is equipped as standard for cooling with a chilled water supply
- condensation drain: to avoid smells, connect the condensation outlet to a frequently-used drain-pipe fitted with a siphon trap
- connection to a mechanical ventilation is possible (see options).

Outlet grille:

- Astra Beam is supplied without an outlet grille, which must be provided by the customer. Minimum passage 60%.

Consisting of:

Shaft:

- a 0.04 in-thick duct of Sendzimir galvanized steel plate, coated with a charcoal grey scratch-proof epoxy-polyester lacquer, RAL 7024, 10% gloss. openings in the duct for the passage of the hydronic pipes and electric cables. These openings - in the side - are sealed with insulation tape.
- with consoles for the internal housing of the heat exchanger and the fan unit
- a condensate collector with drain Ø 0.79 in

Internal housing with:

- heat exchanger
- tangential fan (en)
- cross beams for anchoring the components

Heat exchanger:

- 4-pipe version (with separate circuits for heating and cooling)
- 2-pipe version (with one circuit for heating and cooling)
- round, seamless circular pipes in pure copper, connected to pure aluminium panels with a spacing of 0.07in and an integrated brass collector, including air venting. The heat exchanger is electrostatically painted with black epoxy polyester powder, gloss level 70%.
- element pressure test: 362.6 psi
- operating pressure: max 174 psi

Fan(s)

- one or more virtually noiseless tangential ventilators, 24 VDC, with Sendzimir galvanized steel plate cover and integrated "Fan Dust Guard" Filter (keeps dirt and objects out of the fan). Color black, gloss level 70%.
- ball bearing EC motor
- very environmentally friendly
- low energy costs
- sound-absorbing EPDM suspension

Electric connection:

- integrated electric connection box with manual tension spring system. Standard connection left.

Options:

Connection to a mechanical ventilation:

- galvanized sheet steel adapter for ventilation system:
 - diameter: 3.1, 3.9, of 4.9 in
 - DX51D Z275MAC-quality - according EN 10142/10143
- synthetic connector for ventilation system:
 - dimensions: 2.0 x 5.2", with snap connectors and two sealing rings.

Adjustable bracket / anchor with slotted hole adjustable 1.6 $\leftrightarrow$ 5.1 in:

- made of electrolytically galvanized sheet steel
- continuously adjustable
- easy assembly
- one set contains 2 brackets with sound decoupling

24 VDC Power supply:

- for DIN-rail or wall mounting
- UL1310 Class 2
- convection cooling
- versions: 36 / 60 / 92 / 150W

Valve sets:

- connection sets with Jaga two-way valve 24 VDC
- connection set with 2 lockshields 1/2"
- sleeve couplings G1/2"
- Jaga two-way valve and thermoelectric drive 230V, (only for mounting on the distributor)

Roomthermostats and controller:

JRT 100 / JRT 200:

- heating, cooling
- 0-10V out

JRT 100TW WiFi:

- roomthermostaat with touch-screen en  :
- heating, cooling
- 0-10V out

RDG 160T roomthermostaat AC 24 V:

- heating, cooling
- heating, cooling, automatic or manual

JDPC Jaga Dynamic Product Controller:

- heating / cooling / standby, with auto changeover
- supply voltage:: 24VDC
- 0-10V input for building management system / thermostats

Connection points on the outside of the housing:

- 2-pipe system
 - 2 x Hex Nipple - 2 x RVS flexibel
- 4-pipe system
 - 4 x Hex Nipple - 4 x RVS flexibel

Connection points on the outside of the housing with cable box::

- 2-pipe system
 - 2 x Hex Nipple - 2 x RVS flexibel - cable box
- 4-pipe system
 - 4 x Hex Nipple - 4 x RVS flexibel - cable box

Terms of Use:

Jaga Astra Beam are air conditioning units for indoor use, to provide the required heating and cooling capacity in the summer and during the winter (summer and winter, air conditioning). For rooms with household or similar use. Any other use is strictly prohibited.

Installing and / or using the Astra Beam in an explosive environment is prohibited. The device is not intended for installation or use in damp rooms, (IEC EN 60335-2-40).

It is forbidden to put objects through the inlet and outlet grilles. Always use the main switch to isolate the device from the mains for carrying out all maintenance work on the device, even if only for inspection.

Operating limits:

Installation that does not comply with the specified operational limits relieves Jaga NV of liability for discharge with regard to damage to objects and persons.

Storage conditions:

The packaged devices must be stored in a dry environment. Stack up to 4 packages on top of each other.

Manufacturer: Jaga N.V.

Astra Beam 2- or 4-pipe system

Made in Belgium



jaga
QUALITY

MADE IN BELGIUM