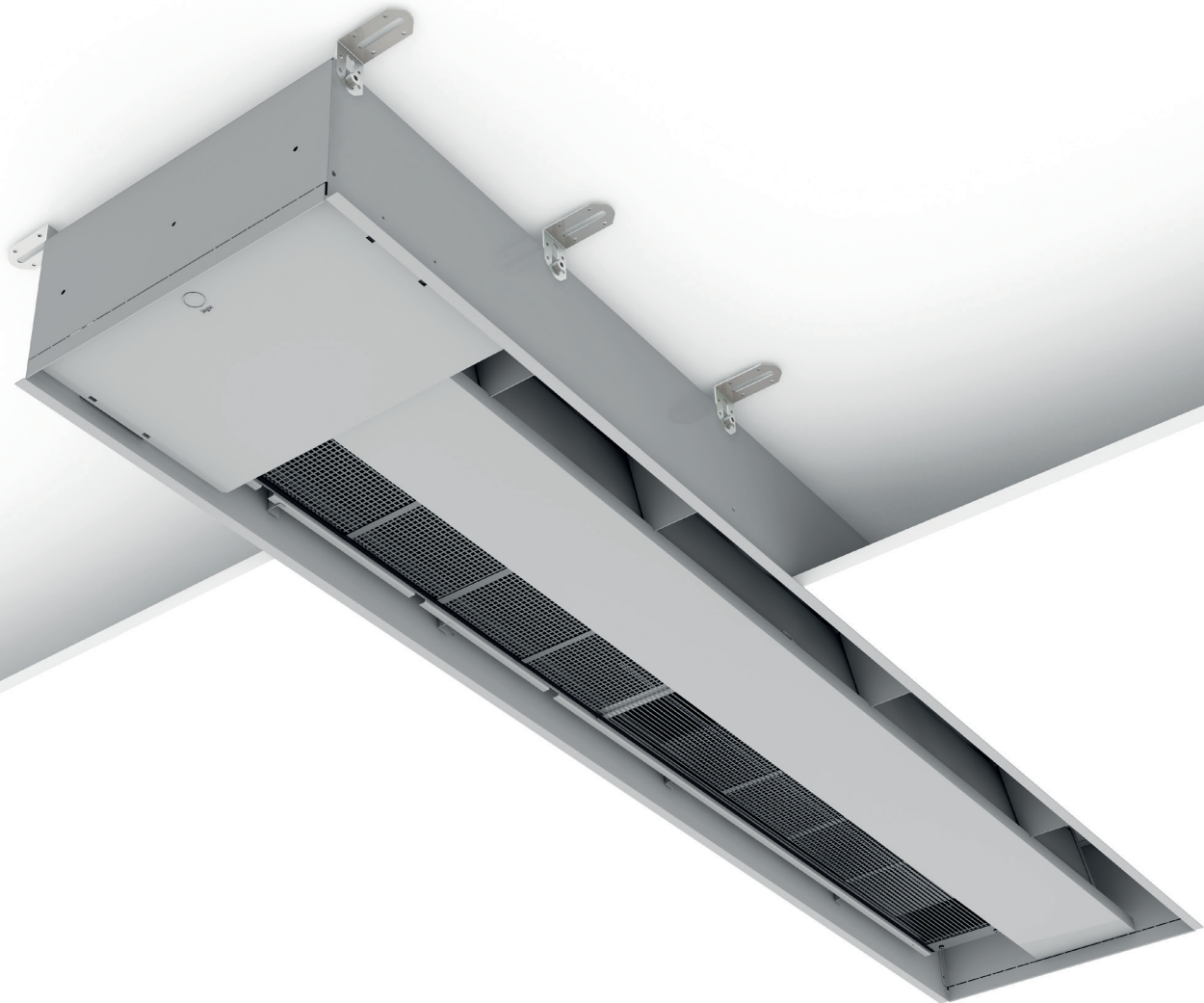
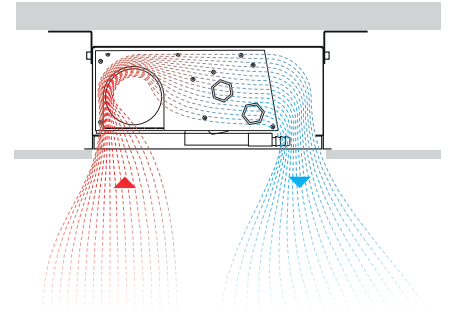




Extensive range for **heating** and **cooling**

- 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

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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

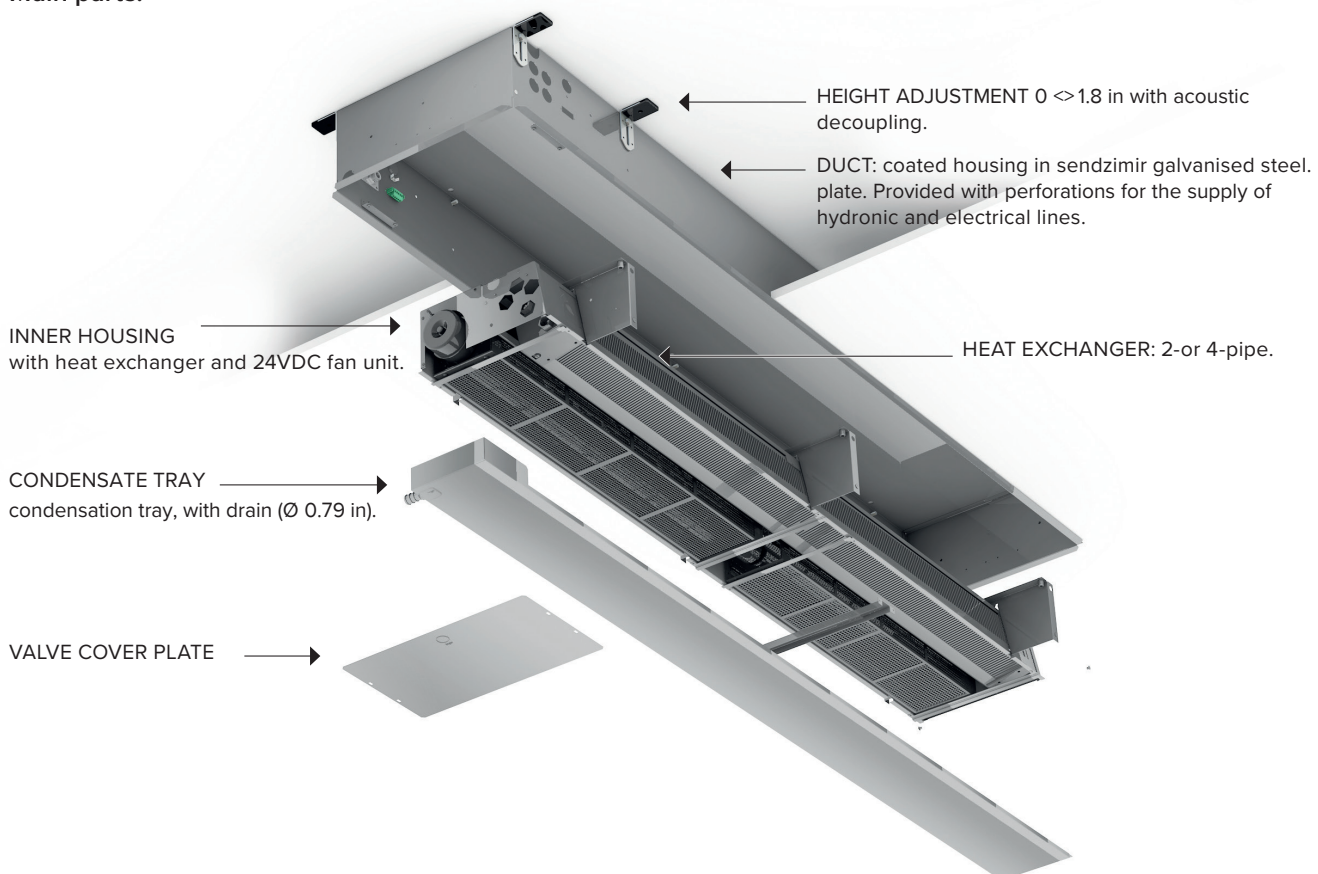
Options:

- 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

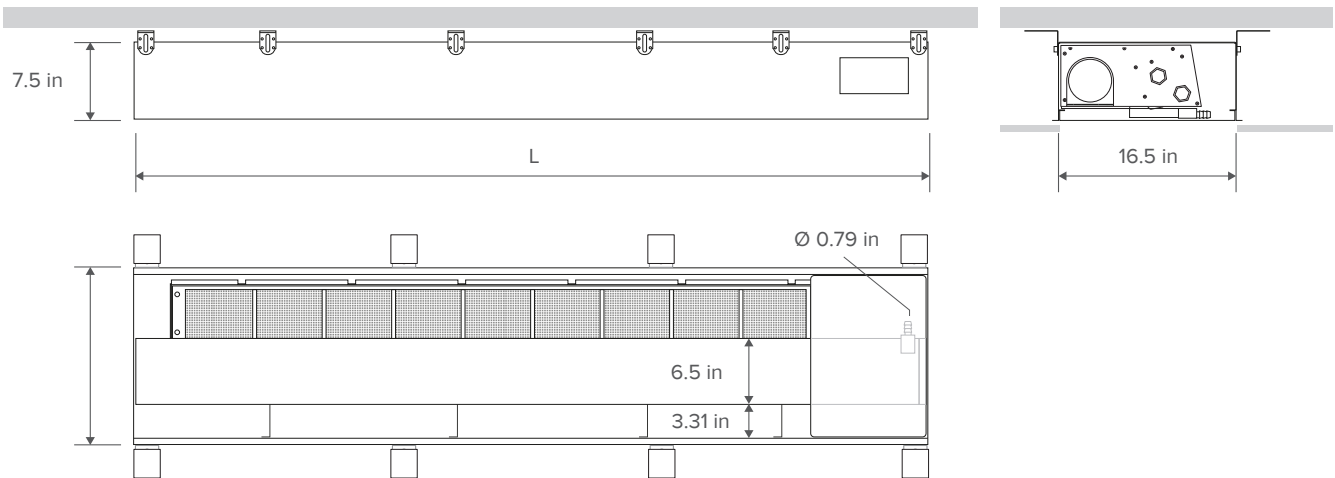
Main parts:



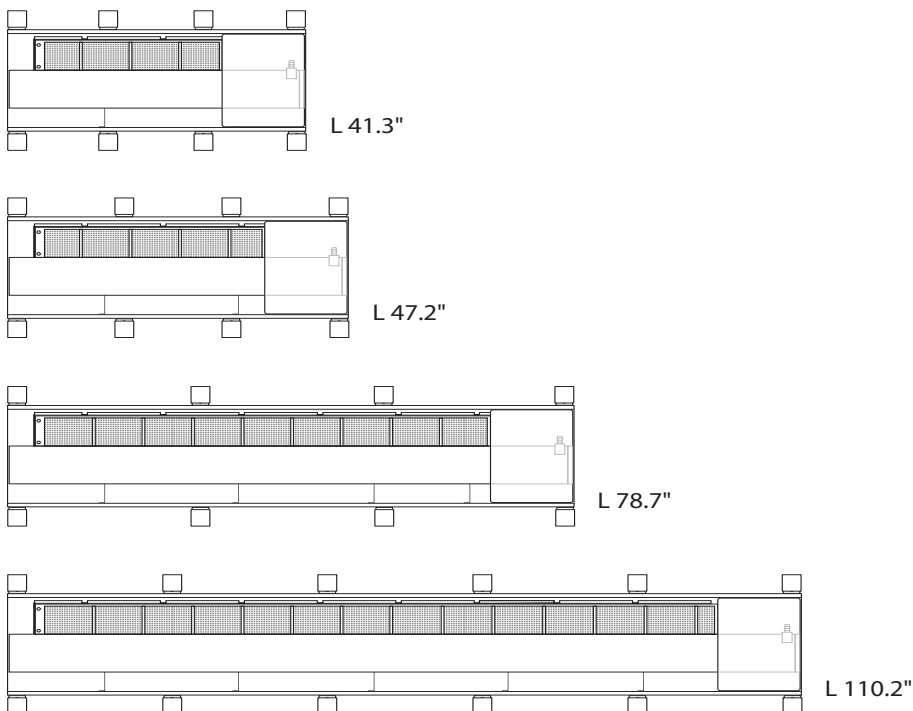


Dimensions:

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-TUBOS EMISIONES Y DATOS TÉCNICOS

Altura cm	Longitud cm	Velocidad V	LIGHT COOLING	DEEP COOLING (sensible)	DEEP COOLING (total)	CALEFACCIÓN	CALEFACCIÓN	Presión sonora dB(A)	Potencia sonora dB(A)	Potencia absorbida W	Caudal de aire m³/h
			16/18 W	7/12 W	7/12 W	45/35 W	35/30 W				
19	105	2	164	267	378	440	277	17.0	25.0	1.5	97
		6	474	775	1069	907	572	27.0	35.0	4.8	236
		10	777	1290	1739	1270	800	40.0	48.0	15.0	351
	120	2	204	332	469	547	345	19.0	27.0	3.2	82
		6	589	962	1328	1128	710	28.0	36.0	12.1	260
		10	965	1602	2160	1578	994	41.0	49.0	24.0	401
	200	2	398	648	916	1068	673	21.1	29.1	4.6	179
		6	1151	1879	2594	2202	1387	30.5	38.5	16.9	496
		10	1885	3128	4218	3081	1941	43.5	51.5	38.9	752
	280	2	592	964	1363	1589	1001	22.5	30.5	6.1	276
		6	1712	2796	3859	3275	2063	32.1	40.1	21.7	732
		10	2804	4655	6275	4585	2888	45.1	53.1	53.8	1103

Nivel de presión sonora según la norma ISO 3741:2010, a 2 m del equipo y con una atenuación supuesta en la sala de 8 dB(A) / volumen de la sala 100 m³ / tiempo de reverberación 0,5 seg. **Calefacción: temperatura ambiente 20°C / Refrigeración: temperatura ambiente 27°C**



4-TUBOS EMISIONES Y DATOS TÉCNICOS

Altura cm	Longitud cm	Velocidad V	LIGHT COOLING	DEEP COOLING (sensible)	DEEP COOLING (total)	CALEFACCIÓN	CALEFACCIÓN	Presión sonora dB(A)	Potencia sonora dB(A)	Potencia absorbida W	Caudal de aire m³/h
			16/18 W	7/12 W	7/12 W	45/35 W	35/30 W				
19	105	2	149	243	343	294	185	17.0	25.0	1.5	97
		6	431	704	972	605	381	27.0	35.0	4.8	236
		10	706	1172	1581	847	533	40.0	48.0	15.0	351
	120	2	185	302	427	365	230	19.0	27.0	3.2	82
		6	536	875	1208	752	474	28.0	36.0	12.1	260
		10	878	1457	1964	1052	663	41.0	49.0	24.0	401
	200	2	362	589	833	712	449	21.1	29.1	4.6	179
		6	1046	1708	2358	1468	925	30.5	38.5	16.9	496
		10	1714	2844	3834	2054	1294	43.5	51.5	38.9	752
	280	2	538	877	1239	1060	667	22.5	30.5	6.1	276
		6	1556	2542	3508	2184	1376	32.1	40.1	21.7	732
		10	2549	4231	5705	3056	1925	45.1	53.1	53.8	1103

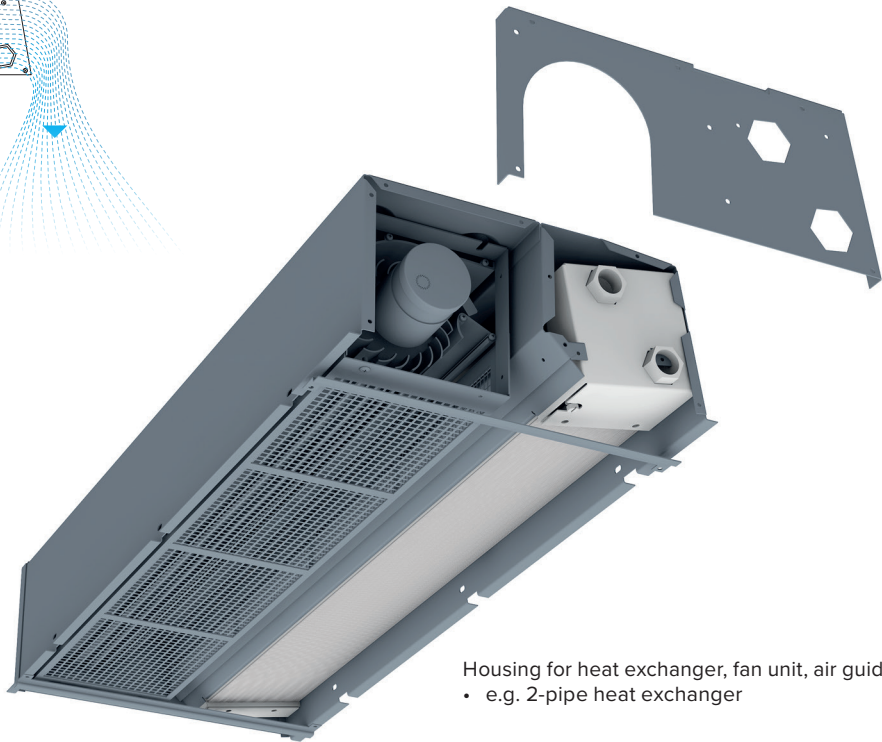
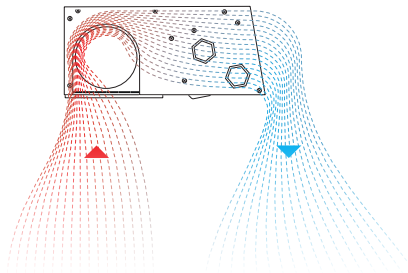
Nivel de presión sonora según la norma ISO 3741:2010, a 2 m del equipo y con una atenuación supuesta en la sala de 8 dB(A) / volumen de la sala 100 m³ / tiempo de reverberación 0,5 seg. Calefacción: temperatura ambiente 20°C / Refrigeración: temperatura ambiente 27°C



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)

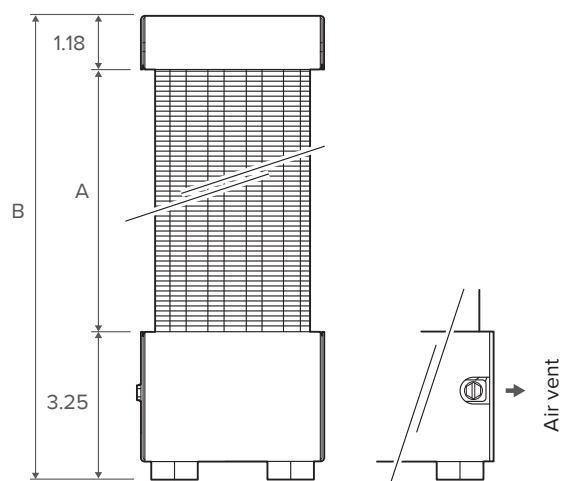
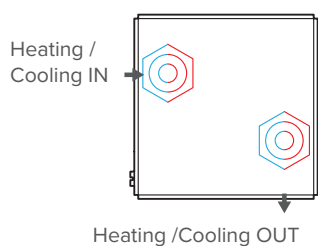


Housing for heat exchanger, fan unit, air guide and crossbars.
• e.g. 2-pipe heat exchanger

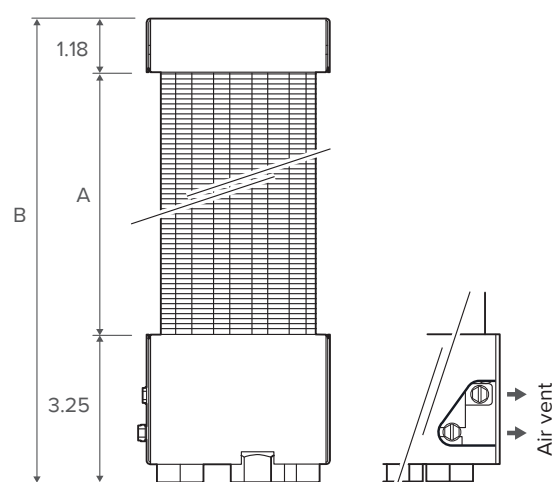
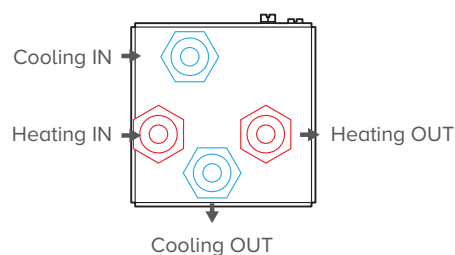
Astra Beam			41.3	47.2	78.7	110.2
Heat exchanger	B (± 0.2) length	in	3.1	3.7	6.9	10.0
	A (± 0.12) finned length	in	2.7	3.3	6.5	9.6
	Collector material		messing			
	Air vent 2-pipe	number	1			
	Air vent 4-pipe	number	2			
	Water content	gallon	0.26	0.34	0.61	0.87
	Pressure test element	psi	362.6			
	Workload	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			



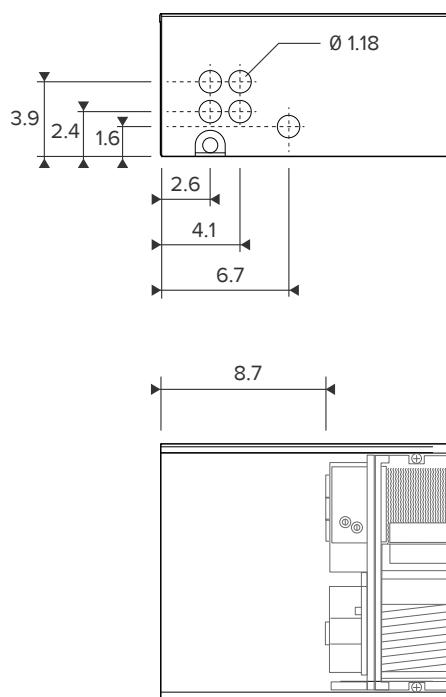
Astra Beam heat exchanger (2-pipe)



Astra Beam heat exchanger (4-pipe)



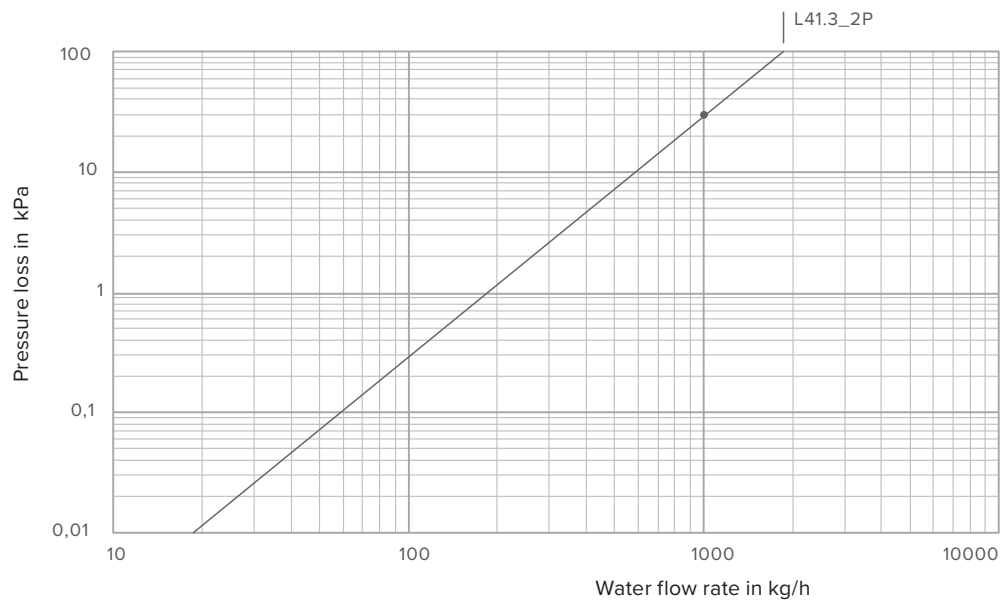
Hydronic transit dimensions:



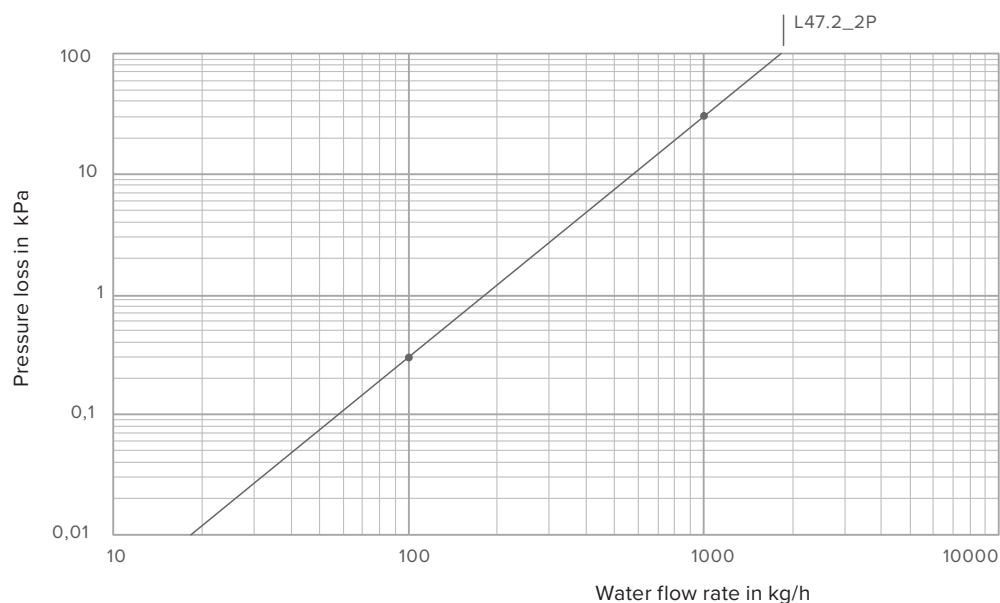


Astra Beam 2- pipe pressure drops heating/cooling

L413



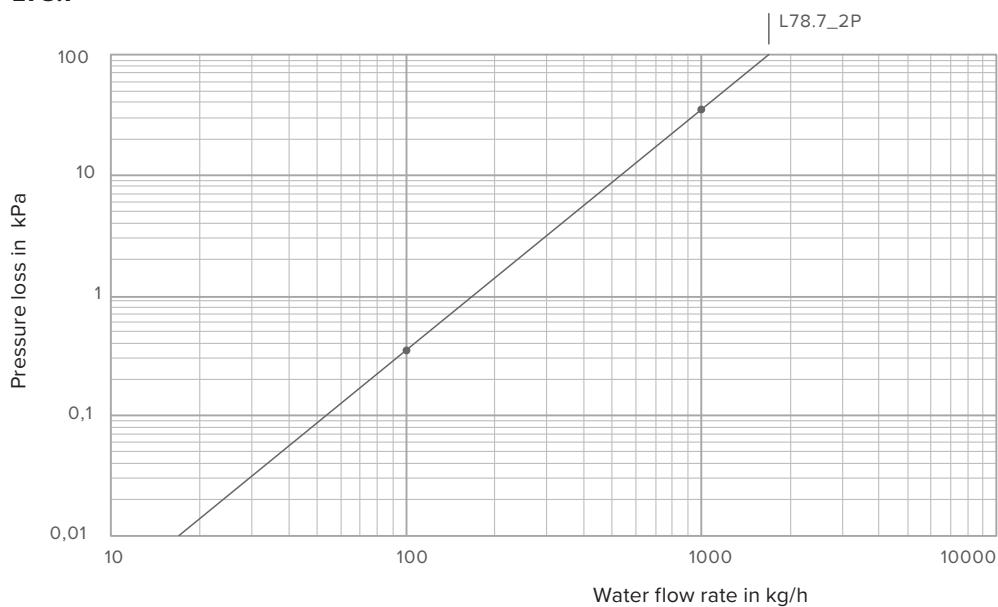
L472



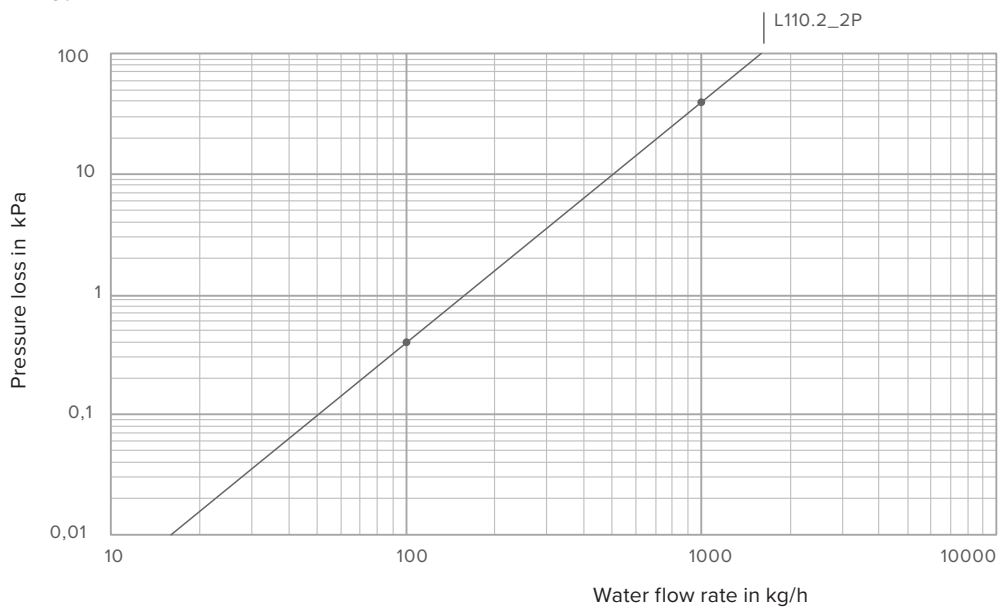


Astra Beam 2- pipe pressure drops heating/cooling

L78.7



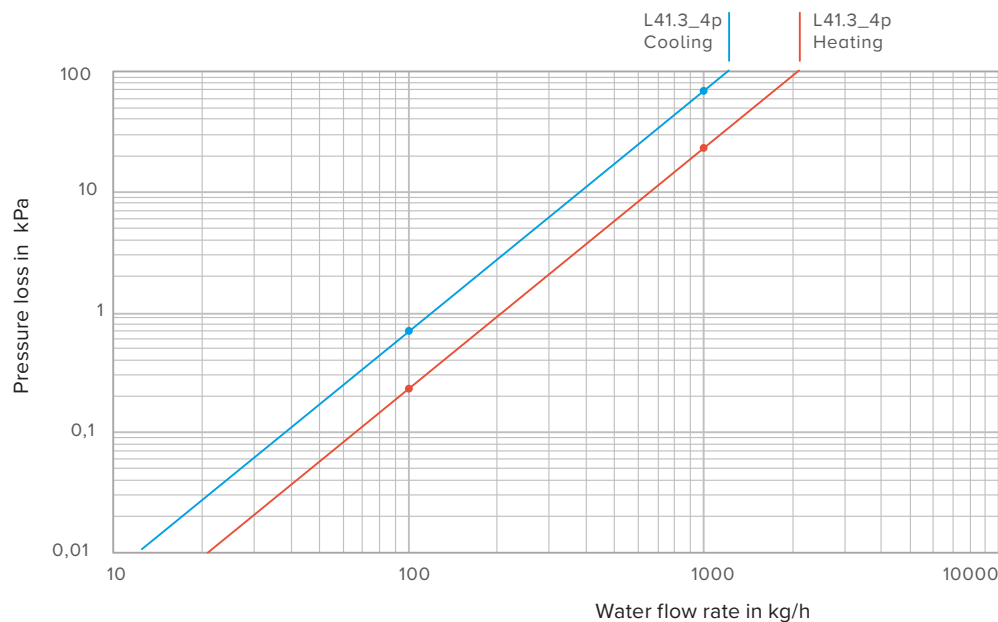
L110.2



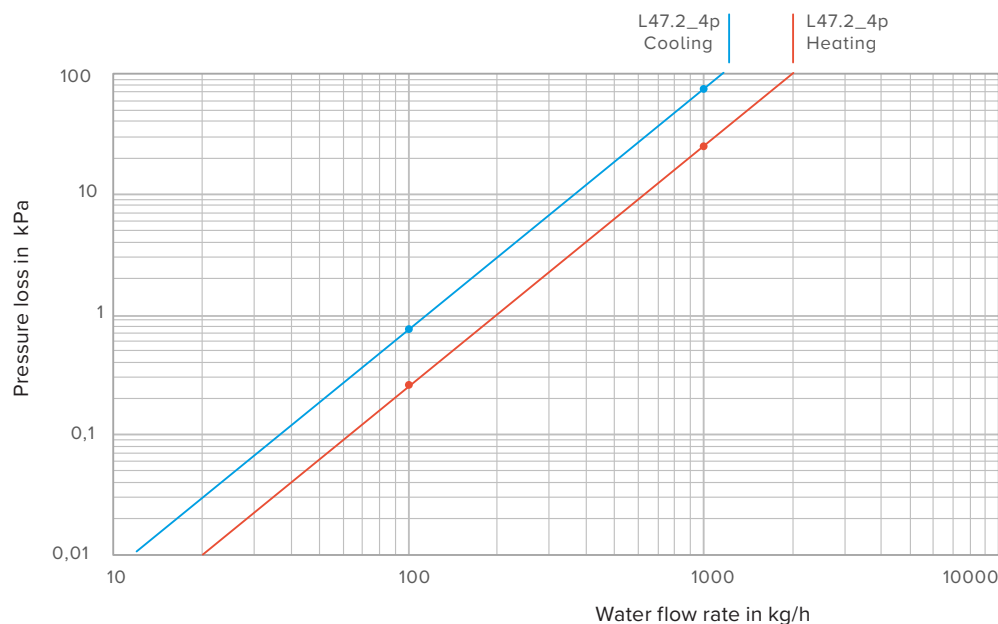


Astra Beam 4- pipe pressure drops heating/cooling

L413



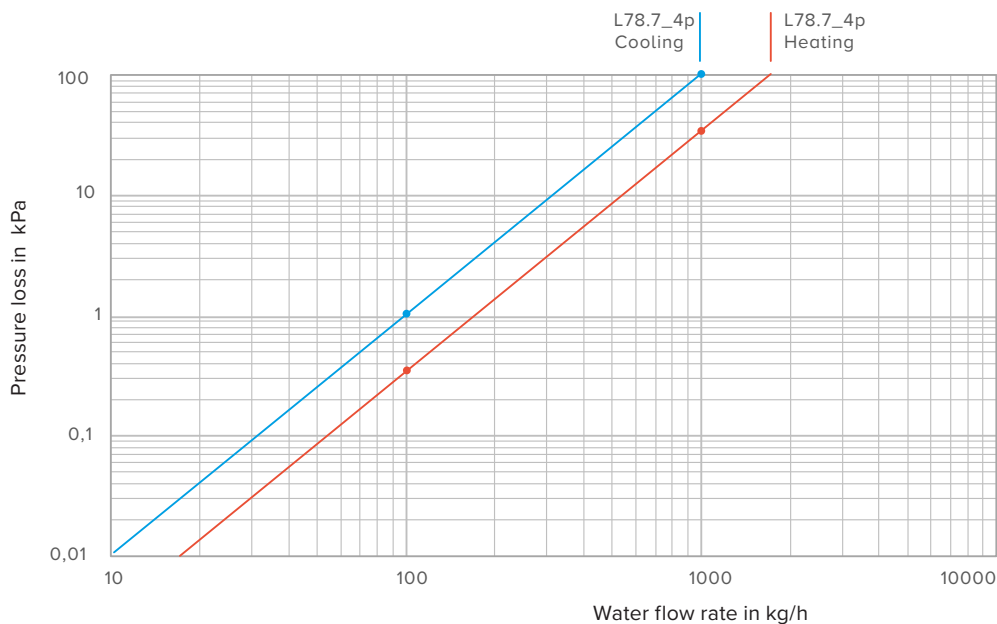
L472



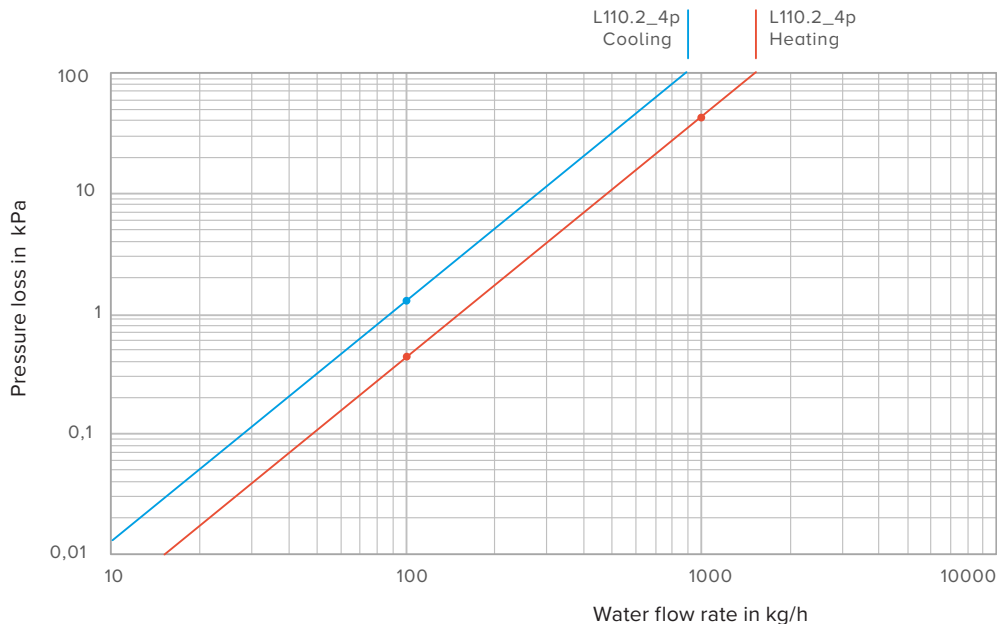


Astra Beam 4- pipe pressure drops heating/cooling

L78.7



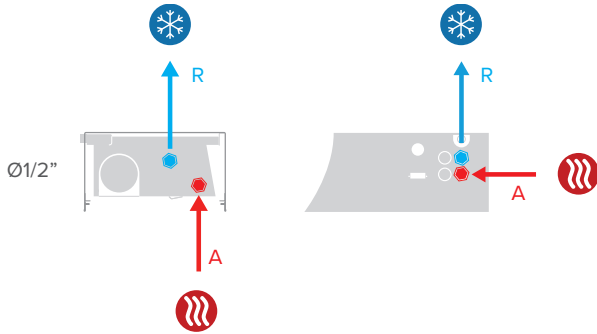
L110.2





Hydronic connection (standard)

2-pipe:

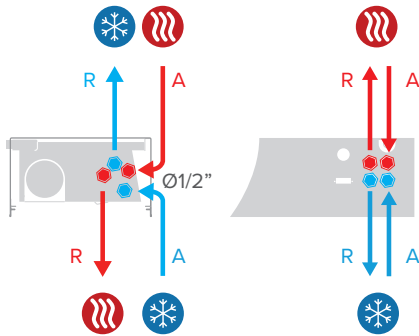


IMPORTANT! The correct connection of the hydraulics to the appliances is of course very important within an installation. Installation must be carried out by certified technicians. Incorrect installation could cause product failure, a reduced performance or an increased noise level.

Connection to the hydronic system:

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

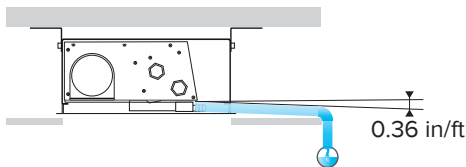
4-pipe:



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.



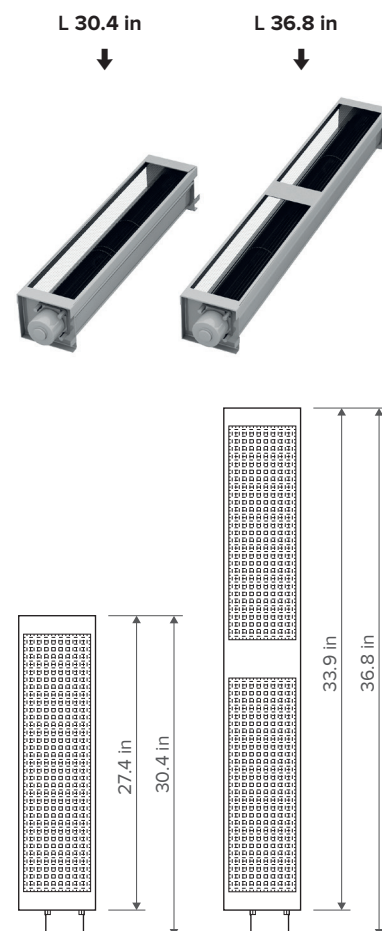
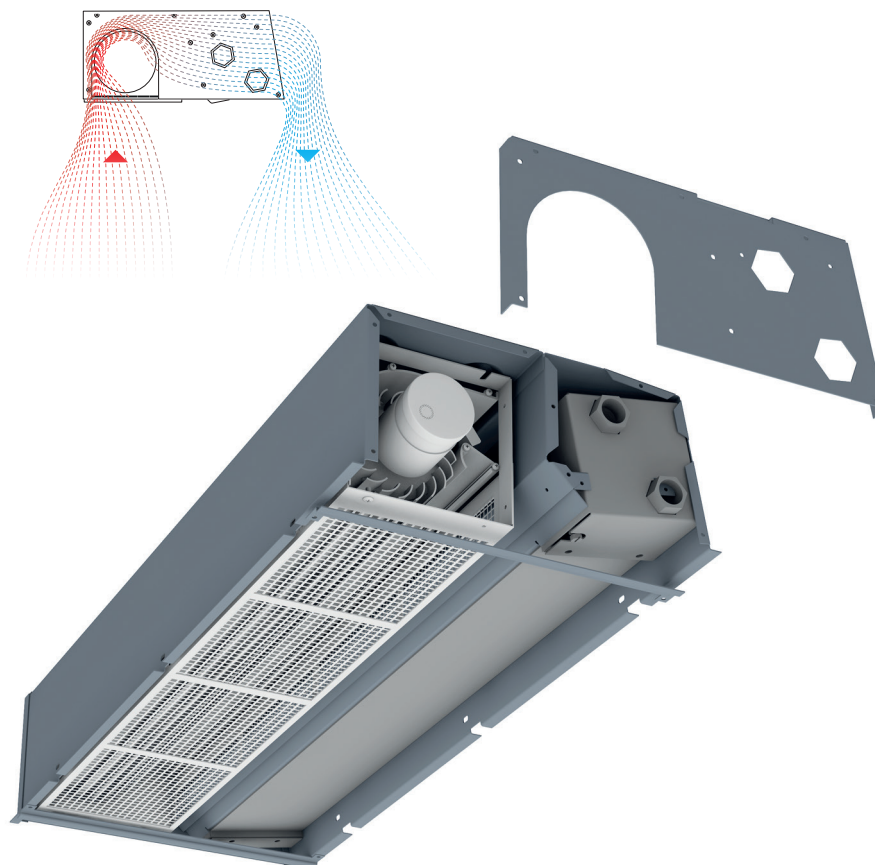
The condensate drain system must be set up with an adequate p-trap in order to prevent the infiltration of odours



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.

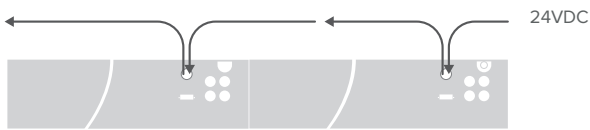
Astra Beam			41.3	47.2	78.7	100.2
Motor	Number of fans (motors) per unit		1	1	2	3
	Voltage		24 VDC			
	Type		EC			
	Suspension		EPDM suspension			
	Running hours		(suction ambient temperature) 50,000			
	Adjustable speed		0..10V			
Fan	Type		Tangential			
	Filter		Stainless steel dust filter, passage 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

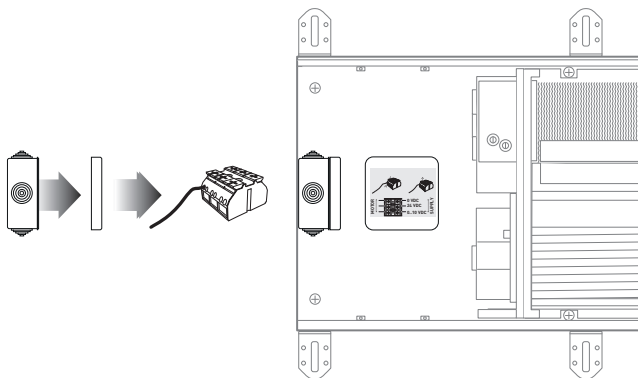


electrical connection
sound pressure reduction ifv. content of space
composite sound pressure multiple fans

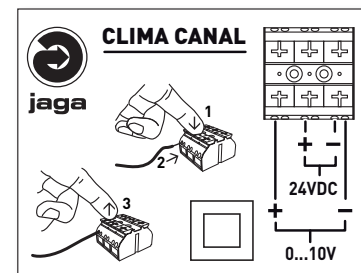
Connecting electricity: (24VDC)



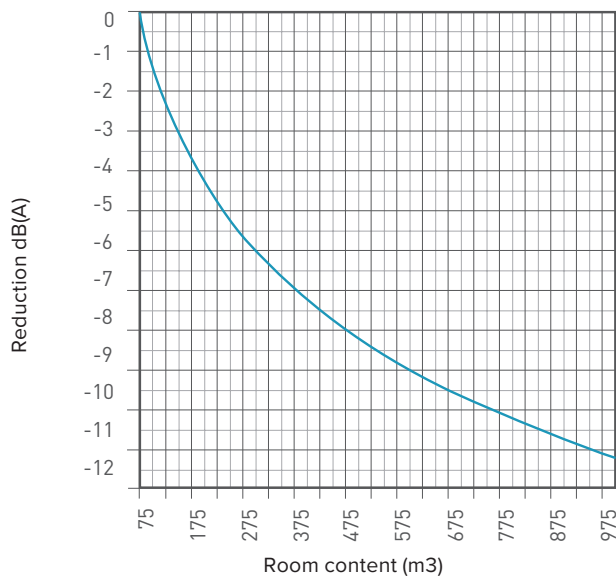
On the side of the hydronic connection, you can also find the terminal block for the electrical connection. The electrical connection is connected in the black block, which is located at the bottom of the protective cover. Standard connection on the left.



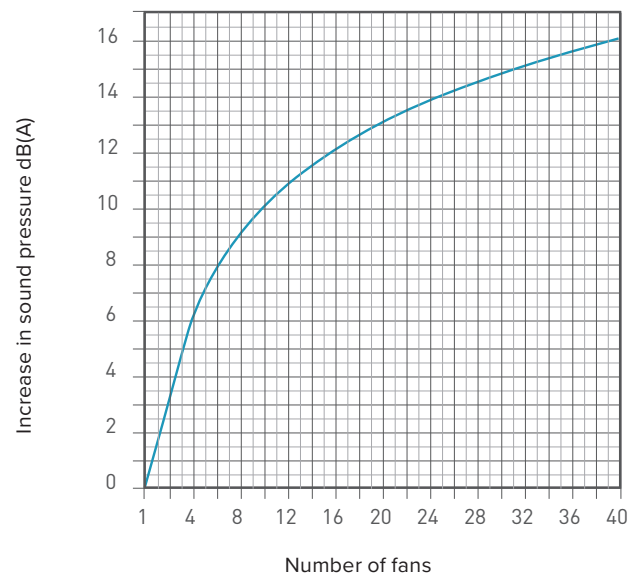
IMPORTANT! The electrical connections of the unit must be entrusted to qualified personnel and carried out in accordance with the standards in force in the country of installation. An incorrect electrical connection releases Jaga N.V. from any liability for material damage or physical injury.



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

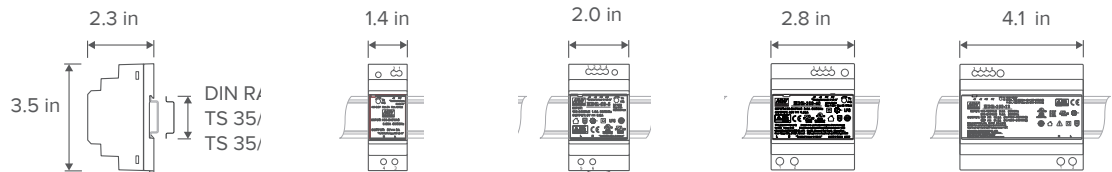
- for DIN-rail or wall mounting
- in a electrical switchboard
- in compliance with UL60950 / UL508 / IEC 60950-1 / TUV EN61558-2-16 / Class II
- output voltage 24 VDC
- input voltage 100 - 240 VAC
- screw connection
- LED indicator



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.



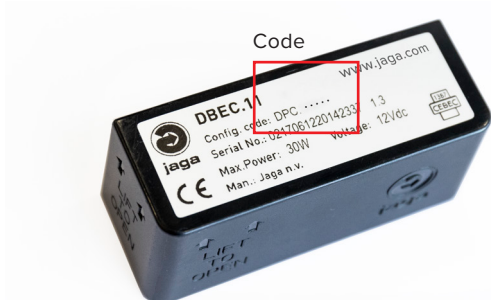
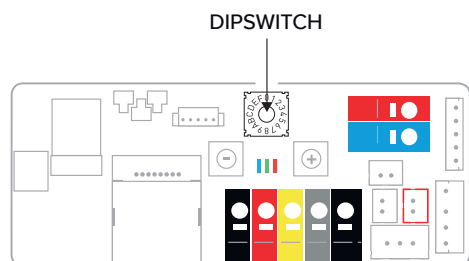
Technical dates	Code >	7990.054	7990.055	7990.056	7990.057
Rated power	Watt	36	60	92	150
Output voltage	VDC	24 (21.6 ~ 29)			
Output current	A	1.5	2.5	3.38	6.25
Input voltage	VAC	85 ~ 264			
		120 ~ 370			
Overload protection	%	105 ~ 160	105 ~ 160	102 ~ 110	105 ~ 135
LED		power on			
Operating temperature	°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
				2
				7
				Manually: on/off
				Manually: on/off with water T° sensor
				0...10 V: with water T° sensor / kamer T° sensor
				24 V system
				24 V system
				24 V system
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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

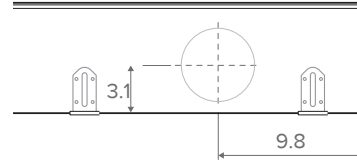
- $\varnothing 3.1 / 3.9 / 4.9$ in



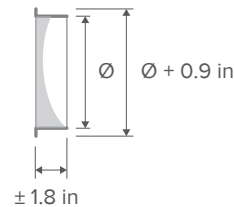
Description		Code
Metal adaptor	$\varnothing 3.1$	21165.00010080
	$\varnothing 3.9$	21165.00010100
	$\varnothing 4.9$	21265.00010125

Description:

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



Dimensions:



Synthetic connector for ventilation system

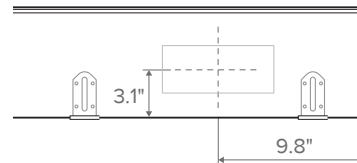
- 5.2×2.0 "



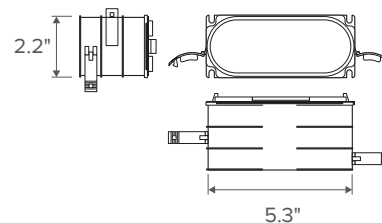
Description		Code
Synthetic adapter	5.2×2.0 "	21165.00030001

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