

CE

CLIMATE DESIGNERS

# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

- 2-Pipe system: Clima Canal H19
- 4-Pipe system: Clima Quatro Canal H19
- to heat and / or cool
- connecting a ventilation system (option)
- easily assembled
- EC motor
- more quiet, more powerful, more economical, more durable
- wide range
- also suitable for low temperature heating systems







# \* 👌 LOW TEMPERATURE SYSTEM / HEATING AND COOLING

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# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

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Decription

# HEAT COOL VENTILATE\*

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Jaga Clima Canal H 19 (2-pipe system) and Clima Quatro Canal H 19 (4-pipe system) both heat and cool. They were designed for in-floor installation and the cooling is very effective with both sensible and total cooling systems.

The new electronic commutation motors or EC-motors make your fans more energy-efficient, more quiet, more powerful and more durable. The introduction of these motors is very important in a time when people are becoming increasingly more environmentally-aware.

The electronics in EC-motors ensure that the motor's Rpm is continually monitored and also that the power input is adjusted in order to be as energy-efficient as possible. The energy consumption is directly linked to the fan speed and thus also to the fan's flowrate: This means that the EC-motor's Rpm determines how much energy is being consumed.

- Jaga Clima Canal H19: 2-pipe system coil
- Jaga Clima Quatro Canal H19: 4-pipe system coil
- heating
- cooling
- ventilation: \* optional adaptor that can be connected to a ventilation duct.
- Low-Temperature System: suitable for heat pumps and condensing boilers
- available with Jaga's pre-installed and multifunctional controller "Jaga: Dynamic Product Controller JDPC".
- lengths: 105cm 41" 11/32 cm 41" 11/32 120cm 47" 1/4cm 47" 1/4 200cm 78" 47/64cm 78" 47/64 280cm 110" 15/64cm 110" 15/64
- width 34 cm 133" 55/64 133" 55/64
- adjustable in height from 19cm 7"31/64cm 7"31/64 to 23.5cm 9"1/4cm 9"1/4
- energy-efficient, maintenance free EC motor, fans : 24 VDC/ECM
- 0...10 V fan control for home automation
- suitable for both sensible and total cooling systems
- aluminum grille / wooden grille
- wooden panel that serves as a protective cover during and after the installation
- suitable for continuous installation, open spaces can be filled with empty trenches
- for heat pumps and condensing boilers

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# JAGA CLIMA CANAL H 19

### standard 2-pipe system

# 2-PIPE SYSTEM FOR HEATING AND COOLING

A 2-PIPE SYSTEM: can only cool or heat a building. The 2-pipe system has a common supply pipe for both heated and cooled water. This means that there is one pipe supplying and one pipe returning the cooled or heated water.

Jaga Clima Canal H19 provides excellent heating and the cooling is very effective with both sensible and total cooling systems

#### OPTION:

8

9

10

- made from electrolytic galvanized steel
- adjustable in height

1 Protective cover:

Wooden panel that protects the device during and after installation.

#### 2 Grille(s):

Grille panel (s) (36 cm in length ). Designed for easy maintenance.

- with anodized aluminum profiles
- optional: powder coated profiles, available in different colors.
- grille holders: EPDM rubber hardness 85.
- Wooden grille:
- in natural or varnished oak
- in natural or varnished beech

#### 3 Dynamic coil:

2-Pipe system: Round, seamless circular pipes in copper, connected to aluminium panels with a mutual distance of 1.8 mm and an integrated brass collector, including air venting

- operating pressure: max 10 bar
- connection 1/2"

#### 4 Flexible, stainless steel connectors:

- Installation recommended with stain-
- less steel hose, provided by others

### 5 Valve cover panel:

Made from electrolytic galvanized

steel. Hidden from view and dirt-proof.

indden nom view and ant prod

# 6 Outer trench:

- made from electrolytic galvanized steel.
- with stainless steel grille holderswith holes for both hydraulic and
- electrical connection

### 7 End cap

- made from electrolytic galvanized steel
- with stainless steel grille holder

### 8 EC Tangential fans:

- EC technology.
- with stainless steel fan guard

#### 9 Inner trench:

Made from electrolytic galvanized steel

- trench for the coil and the fan unitfor a safe condensate drain and
- optimal air flow
- reinforced with small cross bars

#### 10 External height adjustment

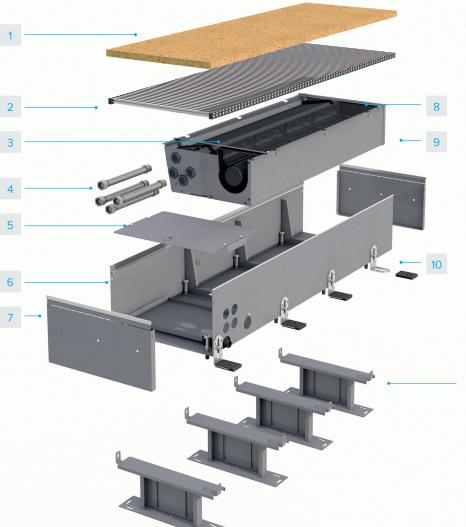
- L-profile.
- with rubber acoustic insulation
- if the Clima Canal is not installed directly on the floor, the cavity underneath needs to be filled with a solid mass( concrete or screed).

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# JAGA CLIMA QUATRO CANAL H 19

### standard 4-pipe system

# 4-PIPE SYSTEM FOR HEATING COOLING



A 4-PIPE SYSTEM: can both heat and /or cool different rooms at the same time(depending on what's required in each room). The 4-pipe system has separate supply and return pipes for cooled and heated water. In other words, there is a 1 supply and 1 return pipe for the heated water and 1 supply and 1 return pipe for the cooled water.

Clima Quatro Canal H19 provides excellent heating and the cooling is very effective with both sensible and total cooling systems.

#### **OPTION:**

- made from electrolytic galvanized steel
- adjustable in height

1 Protective cover:

Wooden panel that protects the device during and after installation.

### 2 Grille(s):

Grille panel (s) (36 cm in length ). Designed for easy maintenance.

- with anodized aluminum profiles
  optional: powder coated profiles, available in different colors.
- grille holders: EPDM rubber hardness 85.

Wooden grille:

- in natural or varnished oak
- in natural or varnished beech

#### 3 Dynamic coil:

4-Pipe system: Round, seamless circular pipes in copper, connected to aluminium panels with a mutual distance of 1.8 mm and an integrated brass collector, including air venting

- operating pressure: max 10 bar
- connection 1/2"

- 4 Flexible, stainless steel connectors:
  - Installation recommended with stainless steel hose, provided by others

#### 5 Valve cover panel:

Made from electrolytic galvanized steel. Hidden from view and dirt-proof.

# Outer trench:

- made from electrolytic galvanized steel.
- with stainless steel grille holders
- with holes for both hydraulic and electrical connection

#### 7 End cap

- made from electrolytic galvanized steel
- with stainless steel grille holder

### 8 EC Tangential fans:

- EC technology.
- with stainless steel fan guard

#### 9 Inner trench:

- Made from electrolytic galvanized steel
- trench for the coil and the fan unit
- for a safe condensate drain and optimal air flow
- reinforced with small cross bars

### 10 External height adjustment

L-profile.

- with rubber acoustic insulation
  if the Clima Canal is not installed
  directly on the floor, the cavity
- directly on the floor, the cavity underneath needs to be filled with a solid mass( concrete or screed).

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# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

# **Product description**

### A new generation of energy-efficient motors:

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Working in an environmentally-friendly manner and energy conservation are both very important nowadays. The introduction of "electronic commutation' or EC-motors is the next step towards lower energy consumption, less noise pollution and an increased durability.



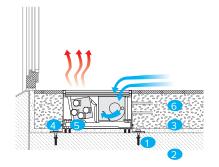
### Grill:

- Grille panels:
- specially designed for easy maintenance.
- · aerodynamic, anodized aluminum profiles
- color: natural
- optional: powder coated profiles, available in different colors
- sound attenuating grille holders: EPDM rubber hardness 85.

Wooden grille:

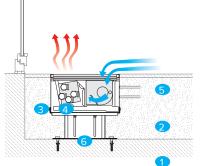
- in natural or varnished oak
- in natural or varnished beech

#### Installation in screed:



- 1. heat- and contact insulation
- 2. concrete floor
- 3. floor screed
- 4. device
- 5. coil on the window side
- 6. loor finish

#### Installation in a raised floor:



- 1. concrete floor
- 2. contact- and noise insulation
- 3. device
- 4. coil on the window side
- 5. raised floor
- 6. optional, adjustable pedestals

# Product description:

- energy- efficient and maintenance free EC- motor
- dynamic coil
- heats and cools
- 2-pipe system available in 4 lengths
- 4-pipe system available in 4 lengths
- electronic speed is set through a 0...10V signal
- suitable for both sensible and total cooling systems
- hydraulic and electric connection on the left hand side

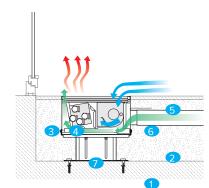
#### **Options:**

- empty trenches for continuous installation
- 90° corner pieces for continuous installation
- DIN-Rail mountable 24 VDC power supply/supplies
- built-in watertight 24VDC/30 power supply
- pre-installed valves and flexible hoses on the side: 2 hydraulic fittings (2-pipe) or 4 hydraulic fittings (4-pipe)
- external electrical connection
- ventilation connection
- adjustable raised floor pedestals

### Control:

- 0...10V connection for home automation
- pre-installed multifunctional controller: Jaga Dynamic Product Controller (JDPC)

#### Installation in a raised floor with air inlet



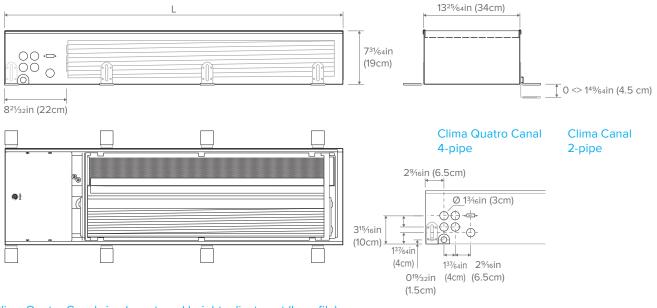
- 1. concrete floor
- 2. contact- and noise insulation
- 3. device
- 4. coil on the window side
- 5. raised floor
- 6. supply air duct
- 7. optional, adjustable pedestals



# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

Dimensions

# **Dimensions:**



# Clima Quatro Canal simple external height adjustment (L profile):



With screed (concrete or cement), edge insulation will have to be installed around the device in order to protect it and to deal with the stress that's caused by heating or cooling.

# Clima Canal H19, general technical data:

	Clima Canal (2-pipe) :	Code					
	Clima Quatro Canal (4-pipe) :	Code					
	(L) Length		41" 11/32	47" 1/4	78" 47/64	110" 15/64	
Dimensions	Width	inch		13" 2	5/64		
	Height			7" 3	1/64		
	Hydraulic			4 perforations	Ø 1" 3/16 cm	ı	
Perforations	Electric	inch		1 perforations	Ø 1" 3/16 cm	ı	
	Condensate drain			Ø 25/3	i/32 cm		
Electrical con-	Power supply	VDC	24				
nection	Electric power (max)	W	15	24	39	54	
Height adjust-	Standard height	inch	max 1" 49/64				
ment	Total height including pedestals	IIICII	9' 29/64 <> 19" 19/64				
	Coil connection	inch		1/.	2"		
Coil	Air vent		1/8"				
COII	Active length	inch	27" 1/64	33" 5/64	64" 9/16	96 1/16"	
	Fin spacing	inch	7/64				
Weight	(without accessories)	Lb	55	63	110	156	

### Grilles

# Aluminum grille

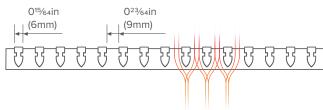
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Aluminum grille panel with aerodynamic transversal profiles, which are held in place by black anti-vibration EPDM grille holders.

### Versions:

- in anodized aluminum BNA
- in powder coated aluminum BNC (see Jaga's color chart)

### Grille dimensions0.24"



### Description:

- 6 x 0.55" mm profiles, 0.35" mm spacing
- aerodynamic profiles, for an optimal air flow.
- anodized or powder coated with a UV- resistant polyester coating.
- suitable for continuous installation

# Benefits:

- suitable for continuous installation
- with noise insulating EPDM rubber holders
- designed for easy maintenance
- aerodynamic profiles
- the aluminum profiles are low maintenance
- a natural finish (anodized aluminum) or a UV-resistant polyester coating with a gloss level of ± 75%, (code 02), which are available in different colors (see Jaga's color chart)

# Anodized aluminum



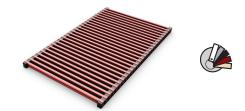
Anodized aluminum: Add to order code: BNA

Anodizing is an electrochemical process whereby an additional decorative, durable, corrosion-resistant and abrasion-resistant oxide layer is added to the metallic surface. This layer of aluminum oxide is not applied in the same manner as a layer of coating, but it's fully integrated with the underlying aluminum. It has an orderly, and porous structure that enables additional processes, such as coloring.

#### **Benefits:**

- refined look, while still maintaining its metallic properties
- high reflection for "cool buildings"
- durable, corrosion resistant and colorfast
- low maintenance
- easily recyclable "Cradle to Cradle"

# Powder coated aluminum



Powder coated aluminum: Add to order code: BNC / color code

Jaga has 2 environmentally friendly, electrostatic powder coating lines. No solvents are used in these powder coating lines. After having been thoroughly pretreated, the radiators are powder coated and heat cured. This makes them extremely UV- and scratch-resistant.

#### Coating:

An environmentally friendly, TGIC –free polyester powder coating, that has been optimized for architectural uses.

- gloss level: ± 75%
- GSB certificate of quality
- certification: Class 1 durability

### Jaga colors:

These are colors that were designed by Jaga for both a modern and classic finish.

### RAL:

The RAL system is a coded system that precisely defines different colors. RAL colors will always have exactly the same shade, even if they are produced by another manufacturer. The Jaga color chart and / or powder coated samples are available on demand.

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# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19 Grilles

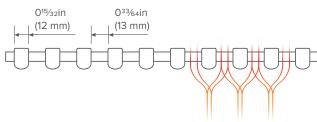
# Wooden grille

Wooden grille with aerodynamic transversal profiles, connected by a galvanized coil. The correct spacing is ensured by aluminum inserts.

### Version:

- natural beech or oak
- varnished beech or oak

### Grille dimensions0.51"



### **Description:**

- 12 x 0.6" mm profiles, 0.51" mm spacing
- aerodynamic profiles, for an optimal air flow
- in natural or varnished beech, oak
- connected through a galvanized coil
- 0.51" mm aluminum inserts
- natural (untreated), the customer can give the grille exactly the same finish as the floor's
- varnish, UV –resistant, scratch resistant

### **Benefits:**

- suitable for continuous installation.
- designed for easy maintenance
- aerodynamic profiles

# Natural oak



Natural oak: Add to order code: BON

# **Natural Beech**



Natural Beech: Add to order code: BBN

### Advantages:

- refined look, made from premium wood
- durable and color-fast
- requires little maintenance

Varnished oak



Varnished oak: Add to order code: BOV

# Varnished beech



Varnished Beech: Add to order code: BBV

#### Varnish:

A colorless, clear ,two-component, UV-resistant, acrylic resin based polyurethane varnish.

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# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

### Output

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ΙZ	technical info: heating with the 2-pipe system
13	technical info: cooling with the 2-pipe system
14	technical info: heating with the 4-pipe system
15	technical info: cooling with the 4-pipe system
Pressu	ire drop
16	technical info: pressure drop: 2-pipe system
17	technical info: pressure drop: 4-pipe system





# Technical info: heating with a 2-pipe system

Juga Cinne		ling						2 21
	(I)	170/150/68°F	130/110/68°F	95/85/68°F	e level	evel **	5	
Speed level	Control voltage	Heating output *	Heating output *	Heating output *	Sound pressure	Sound power level	Electrical power	Air flow
%	[V]	[Btu/h	[Btu/h	[Btu/h	Lp [dbA]	Lw [dbA]	[W]	(CFM)
L 105								
20	2	4344	2455	1039	17.0	25.0	1.5	57
40	4	6855	3875	1639	21.0	29.0	2.7	98
60	6	8953	5060	2141	27.0	35.0	4.8	139
80	8	10819	61115	2487	35.0	43.0	9.3	182
100	10	12531	7083	2996	40.0	48.0	15.0	207
L120								
20	2	5398	3051	1291	19.0	27.0	3.2	48
40	4	8519	4815	2037	22.0	30.0	6.7	105
60	6	11124	6288	2660	28.0	36.0	12.1	153
80	8	13444	7599	3215	36.0	44.0	18.4	207
100	10	15571	8801	3723	41.0	49.0	24.0	236
L200								
20	2	10539	5957	2520	21.1	29.1	4.6	105
40	4	16632	9400	3977	24.6	32.6	9.4	204
60	6	21719	12276	5194	30.5	38.5	16.9	292
80	8	26247	14835	6277	38.5	46.5	27.7	388
100	10	30400	17183	7270	43.5	51.5	38.9	443
L280								
20	2	15679	8862	3749	22.5	30.5	6.1	162
40	4	24744	13986	5917	26.1	34.1	12.1	302
60	6	32314	18264	7727	32.1	40.1	21.7	431
80	8	39051	22072	9338	40.1	48.1	37.0	570
100	10	45229	25564	10816	45.1	53.1	53.8	649
* Values measu	ired in accordan	ce with EN 164	30					

\* Values measured in accordance with EN 16430

\*\* Sound power level measured in accordance with ISO 3741:2010

\*\*\* Sound pressure level with a room attenuation 8 dB(A)



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2 - pipe



# JAGA CLIMA CANAL H 19

# Technical info: cooling with a 2-pipe system 7/12/27°, 16/18/27

# Jaga Clima Canal cooling

2 - pipe

		<b>J</b>							10.10.0
	(J)	45/55	5/80°F	60/6	5/80°F	e level	evel **	L.	
Speed level	Control voltage	* Sensible cooling output	* Total cool- ing output	*Sensible cooling output	* Total cool- ing output	Sound pressure	Sound power level	Electrical power	Air flow
%	[V]	[Btu/h	[Btu/h	[Btu/h	[Btu/h	Lp [dbA]	Lw [dbA]	[W]	(CFM)
L 105									
20	2	876	1316	546	546	17.0	25.0	1.5	57
40	4	1712	2540	1067	1067	21.0	29.0	2.7	98
60	6	2539	3722	1579	1579	27.0	35.0	4.8	139
80	8	3376	4887	2084	2084	35.0	43.0	9.3	182
100	10	4222	6040	2584	2584	40.0	48.0	15.0	207
L120									
20	2	1089	1635	679	679	19.0	27.0	3.2	48
40	4	2128	3157	1326	1326	22.0	30.0	6.7	105
60	6	3155	4624	1962	1962	28.0	36.0	12.1	153
80	8	4194	6073	2589	2589	36.0	44.0	18.4	207
100	10	5247	7506	3211	3211	41.0	49.0	24.0	236
L200									
20	2	2125	3193	1325	1325	21.1	29.1	4.6	105
40	4	4154	6163	2589	2589	24.6	32.6	9.4	204
60	6	6161	9029	3830	3830	30.5	38.5	16.9	292
80	8	8189	11856	5055	5055	38.5	46.5	27.7	388
100	10	10243	14654	6269	6269	43.5	51.5	38.9	443
L280									
20	2	3162	4750	1971	1971	22.5	30.5	6.1	162
40	4	6181	9170	3851	3851	26.1	34.1	12.1	302
60	6	9166	13433	5698	5698	32.1	40.1	21.7	431
80	8	12184	17640	7521	7521	40.1	48.1	37.0	570
100	10	15240	21802	9327	9327	45.1	53.1	53.8	649

\* Values measured in accordance with EN 16430

\*\* Sound power level measured in accordance with ISO 3741:2010

\*\*\* Sound pressure level with a room attenuation 8 dB(A)

# Technical info: heating with a 4-pipe system

# Jaga Clima Quatro Canal heating

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4 - pipe

	e e		130/110/68°F	95/85/68°F	e level	evel **	Ŀ	
Speed level	Control voltage	Heating output *	Heating output *	Heating output *	Sound pressure	Sound power level	Electrical power	Air flow
%	[V]	[Btu/h	[Btu/h	[Btu/h	Lp [dbA]	Lw [dbA]	[W]	(CFM)
L 105								
20	2	2896	1637	693	17.0	25.0	1.5	57
40	4	4570	2583	1093	21.0	29.0	2.7	98
60	6	5968	3373	1427	27.0	35.0	4.8	139
80	8	7213	4077	1725	35.0	43.0	9.3	182
100	10	8354	4722	1998	40.0	48.0	15.0	207
L120								
20	2	3599	2034	861	19.0	27.0	3.2	48
40	4	5679	3210	1358	22.0	30.0	6.7	105
60	6	7416	4192	1773	28.0	36.0	12.1	153
80	8	8962	5066	2143	36.0	44.0	18.4	207
100	10	10380	5867	2482	41.0	49.0	24.0	236
L200								
20	2	7026	3971	1680	21.1	29.1	4.6	105
40	4	11088	6267	2651	24.6	32.6	9.4	204
60	6	14479	8184	3462	30.5	38.5	16.9	292
80	8	17498	9890	4184	38.5	46.5	27.7	388
100	10	20267	11455	4846	43.5	51.5	38.9	443
L280								
20	2	10453	5908	2500	22.5	30.5	6.1	162
40	4	16496	9324	3945	26.1	34.1	12.1	302
60	6	21543	12176	5151	32.1	40.1	21.7	431
80	8	26034	14715	6225	40.1	48.1	37.0	570
100	10	30153	17043	7210	45.1	53.1	53.8	649

\* Values measured in accordance with EN 16430

\*\* Sound power level measured in accordance with ISO 3741:2010

\*\*\* Sound pressure level with a room attenuation 8 dB(A)



JAGA CLIMA QUATRO CANAL H 19

Technical info: cooling with a 4-pipe system

# Jaga Clima Quatro Canal cooling

4 - pipe

Jaya Cilli			hing				4 - pipe		
0.		45/55/80°F		60/6	5/80°F	e level	evel **	4	
Speed level	Control voltage	* Sensible cooling output	* Total cool- ing output	* Sensible cooling output	* Total cool- ing output	Sound pressure level	Sound power level	Electrical power	Air flow
%	[V]	[Btu/h	[Btu/h	[Btu/h	[Btu/h	Lp [dbA]	Lw [dbA]	[W]	(CFM)
L 105									
20	2	796	1196	496	496	17.0	25.0	1.5	57
40	4	1557	2309	970	970	21.0	29.0	2.7	98
60	6	2309	3383	1435	1435	27.0	35.0	4.8	139
80	8	3069	4443	1894	1894	35.0	43.0	9.3	182
100	10	3838	5491	2349	2349	40.0	48.0	15.0	207
L120									
20	2	990	1487	617	617	19.0	27.0	3.2	48
40	4	1934	2870	1205	1205	22.0	30.0	6.7	105
60	6	2869	4204	1783	1783	28.0	36.0	12.1	153
80	8	3813	5521	2354	2354	36.0	44.0	18.4	207
100	10	4770	6823	2919	2919	41.0	49.0	24.0	236
L200									
20	2	1932	2902	1205	1205	21.1	29.1	4.6	105
40	4	3776	5603	2353	2353	24.6	32.6	9.4	204
60	6	5601	8208	3482	3482	30.5	38.5	16.9	292
80	8	7445	10779	4596	4596	38.5	46.5	27.7	388
100	10	9312	13322	5699	5699	43.5	51.5	38.9	443
L280									
20	2	2874	4318	1792	1792	22.5	30.5	6.1	162
40	4	5619	8336	3501	3501	26.1	34.1	12.1	302
60	6	8333	12212	5180	5180	32.1	40.1	21.7	431
80	8	11076	16036	6837	6837	40.1	48.1	37.0	570
100	10	13855	19820	8479	8479	45.1	53.1	53.8	649

\* Values measured in accordance with EN 16430

\*\* Sound power level measured in accordance with ISO 3741:2010

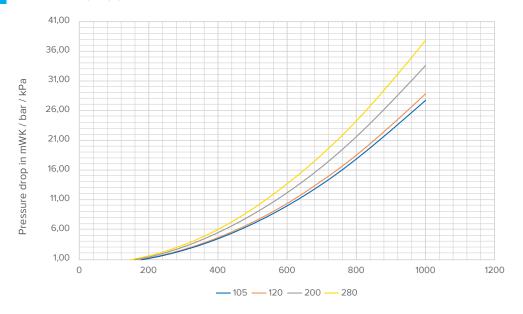
\*\*\* Sound pressure level with a room attenuation 8 dB(A)





Technical info: Pressure drop: 2-pipe system

## Pressure drop 2-pipe



Water flow	in kg / h	
------------	-----------	--

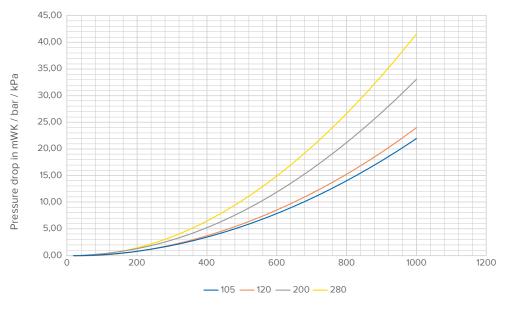
Flow		Heating 4-pipeCooling 4-pipe2-pipe						Cooling 4-pipe				
GPM	L105	L120	L200	L280	L105	L120	L200	L280	L105	L120	L200	L280
0.1833	0.0002	0.0002	0.0003	0.0004	0.0007	0.0007	0.0010	0.0012	0.0003	0.0003	0.0003	0.0004
0.3666	0.0009	0.0010	0.0013	0.0017	0.0026	0.0029	0.0040	0.0049	0.0011	0.0012	0.0014	0.0015
0.5499	0.0020	0.0022	0.0030	0.0037	0.0060	0.0065	0.0089	0.0111	0.0025	0.0026	0.0031	0.0034
0.9165	0.0055	0.0060	0.0083	0.0104	0.0166	0.0180	0.0247	0.0309	0.0069	0.0072	0.0084	0.0095
1.2831	0.0108	0.0118	0.0163	0.0204	0.0325	0.0353	0.0485	0.0605	0.0136	0.0142	0.0165	0.0186
1.8331	0.0221	0.0240	0.0332	0.0417	0.0663	0.0720	0.0989	0.1235	0.0278	0.0289	0.0338	0.0379
2.3830	0.0374	0.0407	0.0560	0.0704	0.1121	0.1217	0.1671	0.2087	0.0471	0.0488	0.0570	0.0642
2.9329	0.0566	0.0616	0.0849	0.1067	0.1697	0.1844	0.2532	0.3161	0.0713	0.0740	0.0864	0.0972
3.6661	0.0885	0.0963	0.1326	0.1667	0.2653	0.2880	0.3956	0.4939	0.1113	0.1155	0.1350	0.1518



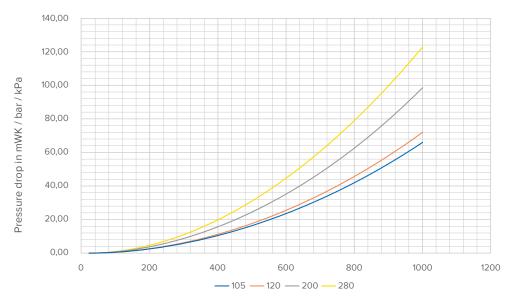
# JAGA CLIMA QUATRO CANAL H 19

# Technical info: pressure drop: 4-pipe system

## Pressure drop 4-pipe heating



Water flow in kg / h



### Pressure drop 4-pipe cooling

Water flow in kg / h

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# **Hydraulics**

20	connecting the hydraulics
Electra	

21 electrical connection

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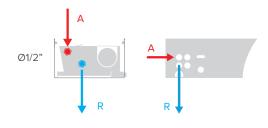


# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

# Hydraulic connections

# Hydraulic connection (standard)

# The 2-pipe's hydraulic connectionsS

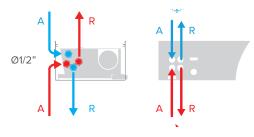


IMPORTANT! Connecting the hydraulics correctly is of the utmost importance and must be left to qualified personnel.

Connecting the hydraulics:

- make sure that the connections are airtight
- the coil is fitted with an air vent
- hydraulic connection: 1/2 "

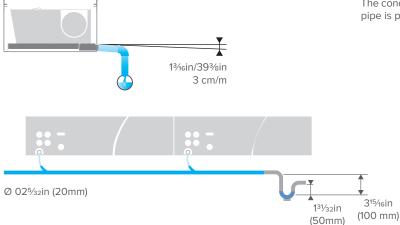
# The 4-pipe's hydraulic connectionsS



A = supply R = return

# Connecting the condensate drain (Ø20mm)

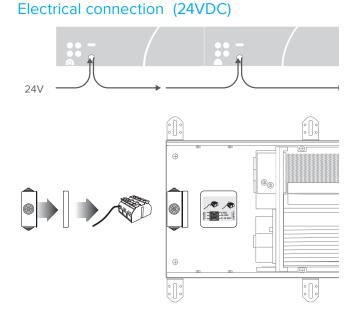
When connecting the condensate drain pipes to the device, the pipe system needs to be sufficiently supported in order to prevent stress on the device's condensate drain pan.



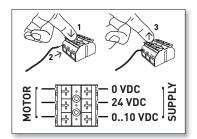
The condensate drain must be fitted with a P-trap. Make sure the drain pipe is properly sloped .



# **Electrical connection**



IMPORTANT! The unit's electrical connection must be done by professionals and in compliance with the norms that apply in the country of installation. Connecting the unit incorrectly will release Jaga NV from any liability for material damages or personal injury.



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# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

### **Options:**

24	power supplies
25	vent connection adapter
26	JDPC controller
27	empty trenches
28	90° corner piece
29	adjustable brackets with slotted holes
30	raised fleer pedectals
31	raised floor pedestals
32	specifications
33	specials
34	spare parts



# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

Option: power supplies

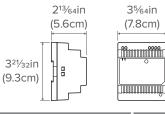
# Power supplies

# Central 24 VDC power supply



- DIN-rail mounted or wall mounted
- UL1310 Class 2
- Convection cooling

Required power = sum of the device's power consumption + 10%





Technical data	Code	7990.050	7990.051	7990.052
Power	Watt	36	60	100
Output voltage	VDC		24-28	
Output current	А	1,3	2,5	4,2
Input voltage	VAC	85-264	88	3-264
	VDC	120-370	124	4-370
Weight	Gr	31	00	350
Overload protection			120 - 145%	
LED Red			DC ok	

# Watertight 24 VDC/30 power supply



Watertight 24 VDC/30 Watt power supply with watertight connector. For built-in installation

- uniform UL60950 EN 60950 / Class 2
- Required power = sum of the device's power consumption + 10%

Technical data	Code	37603010002	
		for L 105 / 120	for L 200 / 280
Power	Watt	30	60
Output voltage	VDC	24	24
Output current	А	1,25	2.4
Input voltage	VAC	100-240	100-240

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## CLIMATE DESIGNERS

# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

# Option: vent connection adapter

# Option: vent connection adapter

Jaga Clima Canal H19 / JAGA Clima Quatro Canal H19 can be connected to an existing ventilation channel. ± 50 m3 / h is allowed.

# Metal ventilation adaptor

• Ø 8 / 10 / 12.5 cm

# Description:

- made from electrolytic galvanized steel
- DX51D Z275MAC-quality according EN 10142/10143
- diameter: 8, 10, of 12.5 cm
- is assembled ex works



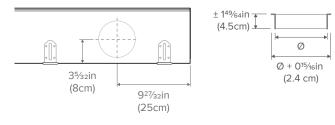
Description		Code
Metal adapter	Ø 8	
	Ø 10	
	Ø 12.5	

# Synthetic ventilation adaptor

• 52 x 132

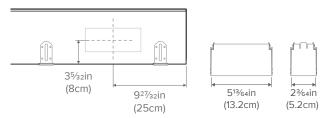


Description
Synthetic adapter 52 x 132



# Description:

- 52 x 132
- the adaptor is fitted with click connections and comes with 2 sealing rings.
- material: synthetic . color: blue
- assembled at the factory



### Focus points:

Sound absorption:

Sound is reflected by hard materials. Soft, porous materials are best suited for absorbing noises.

Contact sound insulation:

- sound travels very easily through hard metals.
- contact sound insulation mainly depends on the installation quality!

Contact points:

Make sure that sound and / or mechanical vibrations are not being transferred between different elements, i.e. between the built-in heating devices and a metal mounting frame, through pipes, air ducts, etc.

Hollow acoustic spaces:

If air can pass through, so can sound: Insulate around the built-in heating devices. Furthermore, prevent cavities between insulation and pipes, and alongside air ducts, as these cavities might act as small sound boxes.

# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

# JDPC Jaga Dynamic Product Controller

Multifunctional controller with one or more built-in fans. The Jaga Dynamic Product Controller is delivered preset and fully integrated into the device.



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•	he	eat /	cool /	standby,	with	automatic	changeover

- 1 fan speed for heating (starts at a water t° >28°C, can be easily changed)
- 1 fan speed for cooling (starts at a water t° <18°C, can be easily changed)
- Power supply voltage: 24VDC
- O-10V input for building management systems / thermostats or with a 3-mode touch screen control panel.

For advice: contact Jaga NV.. e-mail: aftersales@jaga.be / tel. 0032 11-29 41 11

JDPC Jaga	a Dynamic	Product	Controller
Code			

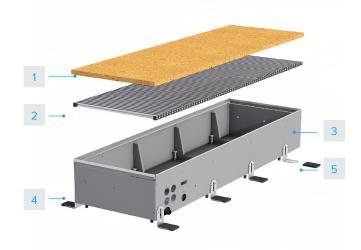
# jaga CLIMATE DESIGNERS

# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

# Option: empty trenches

# Option: empty trenches

Empty Quatro Canal trench to fill up open spaces. Suitable for both continuous and wall-to-wall installation. The grilles are designed to form a perfect continuous installation. The same goes for the standard trench casing without fan unit, coil and connection block.



### Description:

Open spaces between the different units or a unit and a wall can be filled with empty trenches.

- made from electrolytic galvanized steel
- the dimensions correspond with those of the basic devices.
- height adjustment for perfect alignment with the finished floor
- aluminum or wooden grille
- protective cover

### Suitable for:

curtain walls

3 Trench:

4 End cap:

• wall-to-wall installation etc.

#### Grille:

Aluminum grille, add to code: see page 8 Wooden grille, add to code: see page 9

Made from electrolytic galvanized steel.

Made from electrolytic galvanized steel.

L-profile with rubber acoustic insulation

• with stainless steel grill holders

• with perforations

5 External height adjustment:

### 1 Protective cover :

Wooden panel, protects the device during and after installation

#### 2 Grille(s):

Grille panel

Specially designed for easy maintenance.

- anodizes aluminum profiles.
- optional: powder coated profiles , available in different colors
- grille holders: EPDM rubber hardness 85.

### Dimensions

# 1325/64in (34cm) 7<sup>31</sup>⁄64in (19cm) $\square$ min max 7<sup>31</sup>/<sub>64</sub>in 9<sup>29</sup>/64in (19cm) (24cm) Œ Product code: L (cm) 105 120 200 280

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# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

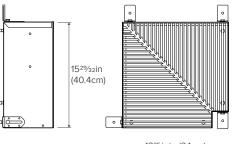
# Option: 90° corner piece

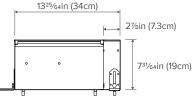
# Option: 90° corner piece

Corner piece for perfectly finished corners with continuous installation. The grille is also designed to form a perfect continuous installation.



### **Dimensions:**





### Description:

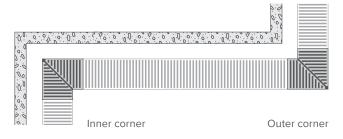
- one version for both inner and outer corners
- anodized or powder coated aluminum
- trench with stainless steel grille holders
- height adjustment for perfect alignment with the finished floor
- Suitable for: • continuous installation

### continuo

Grille:

Aluminum grille, add to code : see page 8

# Installation options:



Product code:		
Height		19
Width	cm	40.4
Depth		40.4



Option: adjustable brackets with slotted holes

# Option: adjustable brackets with slotted hole

With slotted hole for height adjustment.



#### **Description:**

- adjustable 0 <> 13 cm
- made from electrolytic galvanized steel
- freely adjustable
- easily assembled
- one set contains 2 brackets, including acoustic insulation

#### Installation:

 If the device is not installed directly on the floor, the cavity underneath needs to be filled with a solid mass( concrete or screed).

### Focus points:

Sound absorption:

Sound is reflected by hard materials. Soft porous materials are best suited for absorbing noises.

Contact sound insulation:

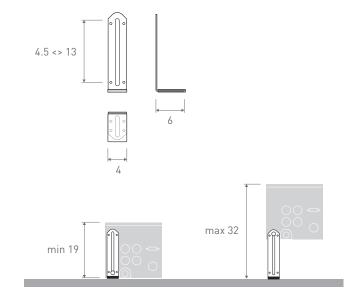
- sound travels very easily through hard materials.
- contact sound insulation mainly depends on the installation quality !

Contact points:

Make sure that sound and/or mechanical vibrations are not being transferred between different elements, i.e. between the built-in heating devices and a metal mounting frame, through pipes, air ducts etc.

#### Hollow acoustic spaces:

If air can pass through, so can sound: Insulate around the builtin heating devices in order to prevent hollow acoustic spaces. Furthermore, prevent cavities between insulation and pipes, and alongside air ducts, as these cavities might act as sound boxes.



# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

# option: raised floor pedestals

# Option: raised floor pedestals

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Jaga's adjustable raised floor pedestals enable you to perfectly align the device with the finished floor.



### Versions:

1 <sup>31</sup> / <sub>32</sub> in (5cm)	>	2 ¾ in (7 cm)
3 5⁄32 in (8 cm)	>	5 ½ in (13 cm)
5 1⁄8 in (13 cm)	>	9 ¼ in (23 cm)
7 % in (20 cm)	>	11 <sup>13</sup> ⁄16 in (30 cm)

## Description:

- made from electrolytic galvanized steel
- adjustable in height
- powder coated, dark grey RAL 7024.
- 4 versions
- easily assembled
- one set consists of 2 pedestals

#### Installation:

- use the correct type of screws and plugs when securing the pedestals to the floor.
- if the device is not installed directly on the floor, the cavity underneath needs to be filled with a solid mass. (concrete or screed.

### Focus points:

### Sound absorption:

Sound is reflected by hard materials. Soft, porous materials are best suited for absorbing noises.

Contact sound insulation:

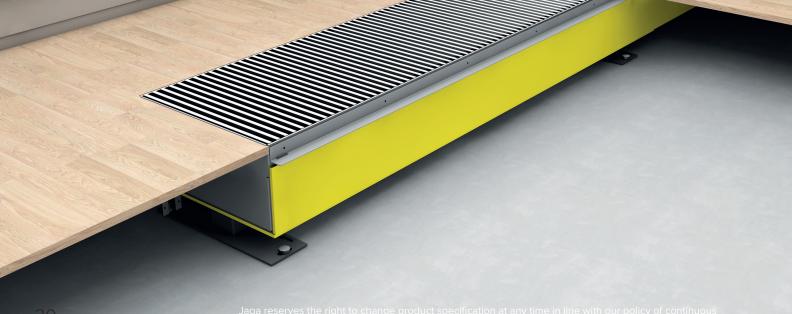
- sound travels very easily through hard metals.
- contact sound insulation mainly depends on the installation quality!

### Contact points:

Make sure that sound and/or mechanical vibrations are not being transferred between different elements, i.e. between the built-in heating devices and a metal mounting frame, through pipes, air ducts, etc.

### Hollow acoustic spaces:

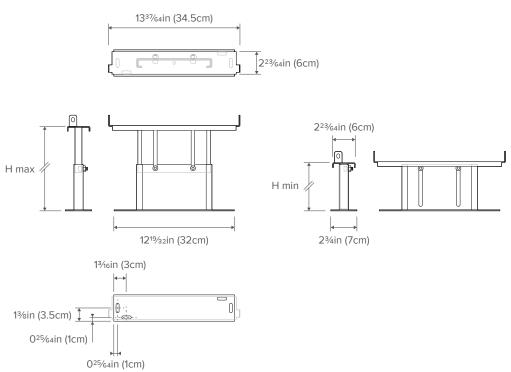
If air can pass through, so can sound: insulate around the built-in heating devices in order to prevent hollow acoustic spaces. Furthermore, prevent cavities between insulation and pipes, and also alongside air ducts, as these cavities might act as small sound boxes.



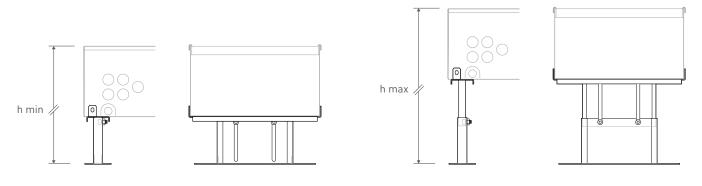


option: raised floor pedestals





# Adjustable height



Product-code:	5212.05070000	5212.08130000	5212.13230000	5212.20300000
Number of sets per device	2	2	2	3
Pedestals per device	4	4	4	6
Min height > Max height	1 <sup>31</sup> / <sub>32</sub> in (5cm) > 2 <sup>3</sup> / <sub>4</sub> in (7 cm)	3 <sup>5</sup> / <sub>32</sub> in (8 cm) > 5 ½ in (13 cm)	5 1/8 in (13 cm) > 9 1/16 in (23 cm)	7 % in (20 cm) > 11 <sup>13</sup> / <sub>16</sub> in (30 cm)
Height including the device h = min > h = max	9 <sup>29</sup> / <sub>64</sub> in (24 cm) > (10 <sup>15</sup> / <sub>64</sub> in cm)	10 % in (27 cm) > 12 % in (32 cm)	12 <sup>19</sup> / <sub>32</sub> in (32 cm) > 16 <sup>17</sup> / <sub>32</sub> in (42 cm)	15 <sup>23</sup> ⁄ <sub>64</sub> in (39 cm) > 19 <sup>19</sup> ⁄ <sub>64</sub> in (49 cm)
Width	13 <sup>47</sup> ⁄ <sub>64</sub> in (34.9 cm)			
Depth	2 ¾ in (7 cm			

# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

### specifications

# Clima Canal Quatro H 19 2-pipe / Clima Canal H 19 4-pipe

Pre-assembled heating, cooling appliance for installation in the floor, consisting of:

Standaard levering bestaande uit:

aqa

- a <sup>25</sup>%4 in (1 mm) thick duct of Sendzimir galvanized steel plate and a telescopically adjustable height adjustment with stainless steel grille holder, coated with a charcoal grey scratch-proof epoxypolyester lacquer, RAL 7024, duct 10% gloss
- aluminium floor grille panels L 14  $^{11\!\!/_{64}}$  ins (360 mm)
- wooden grille: beech or oak nature or varnished
- dynamice coil including air venting
- tangentiële ventilator(en)
- stainless steel flexible connections  $\frac{1}{2}$ ", length of 5 $^{29\!\!/_{32}}$  in (15 cm) upto 9 $^{27\!\!/_{32}}$  in (25 cm). For ease of cleaning and maintenance, the connecting flexibels must always be used .
- the shaft is equipped with 4 openings for the passage of the hydraulic lines and 1 opening for the electric cables. These openings - in the side – are sealed with black insulation tape.
- the shaft is also equipped with a condensate drain ø  $^{32\!/_2}$  mm
- two head ends are supplied, equipped with a stainless steel grille support and aluminium rivets with countersunk heads for finishing the ends of the inner duct
- The appliance is equipped as standard for heating and for connection to traditional water heating systems, but can also be used for cooling with a chilled water supply
- a minimum recess depth of 76 <sup>49</sup>/<sub>64</sub> in (195 mm) below finished floor level is required. The appliance is equipped with a height adjustment from 0 to 17 <sup>23</sup>/<sub>32</sub> in (45 mm) and a fine height adjustment up to + 3 <sup>5</sup>/<sub>32</sub> in (8 mm) to perfectly align the appliance with the finished floor.

#### Aluminium grille:

- Aluminium floor grille panels L 14  $^{11\!/_{64}}$  ins (360 mm) with EPDM holder 6  $^{1\!/_2}$  in (16.5 mm).
- Aluminium floor grille panels L 360 mm with EPDM holder 6  $^{1\!\!/_2}$  in (16.5 mm).
- profile: 2 <sup>23</sup>⁄<sub>64</sub> in (6 cm) x 5 <sup>33</sup>⁄<sub>64</sub> in (14 mm).
- spacing 15 <sup>23</sup>/<sub>64</sub> in (9 mm).
- material: anodized aluminium
- a natural finish (anodized aluminum) or a UV-resistant polyester coating with a gloss level of ± 75%, (code 02), which are available in different colors (see Jaga's color chart)

#### Roll-up wooden grille:

Wooden grille with aerodynamic transversal profiles, connected by a galvanized coil. The correct spacing is ensured by aluminum inserts.

- profile: 4 <sup>23</sup>/<sub>32</sub> in (12mm) x 5 <sup>29</sup>/<sub>32</sub> ins (15 mm).
- spacing 5 1/8 in (13 mm).
- Version: Natural beech or oak / Varnished beech or oak Dynamic coil
- 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 mutual distance of 1.8 mm and an integrated brass collector, including air venting.
- the heat exchanger electrostatically lacquered with black epoxy-polyester, gloss degree 70%.
- element pressure test: 20 bar.
- operating pressure: max 10 bar.
- standard connection left.

#### Fan(s)

One or more tangential ventilators, 24 VDC, with Sendzimir galvanized steel plate cover and integrated stainless steel air filter. Colour black, glossiness 70%.

#### Electric connection:

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

#### Options:

- empty duct(s) with height adjustment, comprising a duct of <sup>25</sup>/<sub>64</sub> in (1 mm) thick Sendzimir galvanized steel plate, coated with an charcoal-grey scratch-proof epoxypolyester lacquer, RAL 7024, 10% gloss, with stainless steel grille and protection panel
- connecting / finishing of corners 90 °Corner piece with height adjustment, comprising a duct of <sup>25</sup>/<sub>64</sub> in (1 mm) Sendzimir galvanized steel plate, coated with an charcoal-grey scratchproof epoxypolyester lacquer, RAL 7024, 10% gloss. Not available with a wooden grille.
- feet with height adjustment for raised floors: telescopically adjustable feet for raised or hollow floors, lacquered in the colour black RAL 7024
- mechanical ventilation connections.

### Adjustable heights:

- 1 31/32 in (5cm) > 2 3/4 in (7 cm)
- 3 5/32 in (8 cm) > 5 1/8 in (13 cm)
- 5 1/8 in (13 cm) > 9 1/16 in (23 cm)
- 7 7/8 in (20 cm) > 11 13/16 in (30 cm)

Number of sets per length of device:

- L 105 = 2 set
- L 120 = 2 set
- L 200 = 2 sets
- L 280 = 3 sets

# Controller:

JDPC Jaga Dynamic Product Controller

# Power supplie:

- 25 W
- 54 W
- 72 W

#### Required power = sum of the device's power consumption +10%

Only possible with raised floors:

External hydraulic connections 2-pipe:

- 2 x pipe Connection Fittings Nipple
- 2 x Stainless steel flexible
- External hydraulic connections 2-pipe with external electrical box:
- 2 x pipe Connection Fittings Nipple
- 2 x Stainless steel flexible
- junction box
- External hydraulic connections 4-pipe:
- 4 x pipe Connection Fittings Nipple
- 4 x Stainless steel flexible

External hydraulic connections 2-pipe with external electrical box:

- 4 x pipe Connection Fittings Nipple
- 4 x Stainless steel flexible
- junction box

### Manufacturer Jaga

Type: Clima Quatro Canal H19 (4-pipe) / Clima Canal H19 (2-pipe)

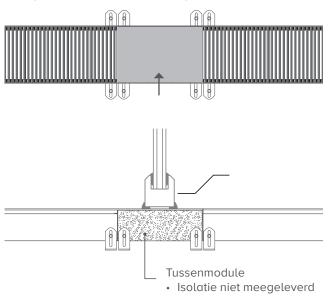
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# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

### specials

# Empty trench with insulating filler piece for removable partition walls (example)

Casing with cover plate and insulating filler piece for a continuous installation of partition walls.



### **Description:**

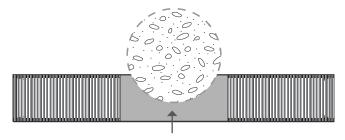
- made from galvanized steel
- continuous installation
- insulating filler piece
- adjustable in height for perfect alignment with the floor
- cover plate

### Suitable for:

- curtain walls.
- removable partition wall

Insulation not included

# Empty trench with cover plate and cut-out for columns or support beams (example)

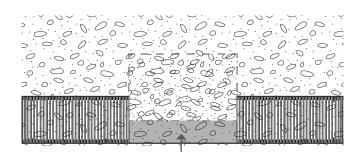


### Description:

- made from galvanized steel
- continuous installation
- adjustable in height for perfect alignment with the floor
- cover plate

## Suitable for::

• curtain walls with columns or support beams



# JAGA CLIMA QUATRO CANAL H 19 JAGA CLIMA CANAL H 19

### spare parts

# Spare parts

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Important: Contact a qualified installation technician and consult the JAGA warranty conditions before replacing any parts

	Description	L 105	L 120	L 200	L 280
Aluminum grille					
WINTER DISTORT	EPDM grille holder 1 piece				
	Alu grille profile 1 piece				
	Alu roosterprofieltje gelakt L 18 cm 1 piece				
ALU rooster 90° corner piece					
	Anodized aluminum				
Junio Carlos	Anodized aluminum Powder-coated				
Nooden grille					
	Natural Beech				
	Varnished Beech				
	Natural Oak				
	Varnished Oak				
Coil					
	4-pipe				
	2-pipe				
Fan					
J-shaped rubber dampers					
			22401.00	0040001	
Rubber cap for height adjustr	nent				
110			22165.00	0040004	

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