

24V EC MOTOR

High performance technology



CLIMA CANAL HYBRID

- Low Temperature radiator
- Heating and cooling
- Build-in height of 10 > 14.5 cm

CLIMA CANAL

- Low Temperature radiator
- Heating
- Build-in height of 8.5 > 13 cm





Benefits

- height adjustment and fine height adjustment
- Thermal Activators: 24 VDC
- electronic speed control via 0...10V signal
- sound pressure 29 dB(A), (med. speed = 80%)
- 2 flexible connections (Stainless steel) 15 cm
- aluminium grille (option wooden grille)
- mounting / protection panel
- can be installed as a continuous product, open spaces can be filled with empty ducts

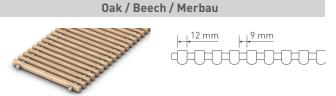
anodized aluminium

Standard grille

Options

- height adjustable feet for raised floors
- empty ducts for continuous installation
- corner piece for continuous installation
- wooden grille(s)
- 0...10V thermostat

Option: Wooden grille _



Clima Canal Hybrid: heating and cooling (Watt)

			Clima Canal Hybrid		Clima Ca	nal Hybrid	
Туре	CODE	Speed	Heating		Coo	ling	
			75 / 65 / 20° C	55 / 45 / 20° C	35 / 30 / 20° C	Total 7 / 12 / 25° C	Sensible 7 / 12 / 25° C*
1		Med	903	546	227	273	205
2		Med	2009	1201	500	545	410
3		Med	2912	1744	728	818	615
4		Med	4018	2403	1001	1090	820

ex: Flow T° water 75°C, return T° water 65°C, air inlet 20°C

Flow T° cooling water 7°C, return T° cooling water 12°C, air inlet T° 25°C dry bulb T°, * based on 50% RL (relative humidity)

Clima Canal: heating (Watt) _

				Clima Canal	
Туре	CODE	Speed	Heating		
			75 / 65 / 20° C	55 / 45 / 20° C	35 / 30 / 20° C
1		Med	903	546	227
2		Med	2009	1201	500
3		Med	2912	1744	728
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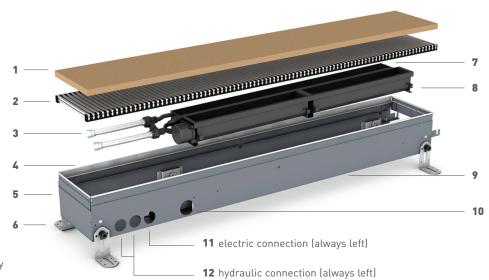


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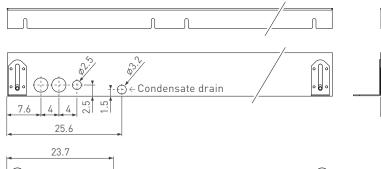
Clima Canal Hybrid_ Clima Canal_parts_dimensions

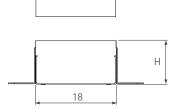
Parts

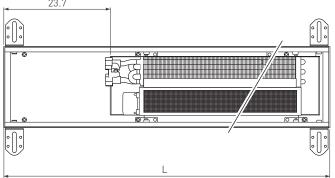
- 1 protection panel
- 2 ALU grille (standard)
- 3 Stainless steel flexible connections length 15 cm 1/2"
- 4 fine adjustment height
- 5 end piece housing
- 6 height adjustment
- 7 Low-H20 heat exchanger
- 8 Thermal Activator(s) (tangential mini activator)
- 9 housing
- 10 Hybrid: condensation collection tray for drainage of condensate



Dimensions (cm)

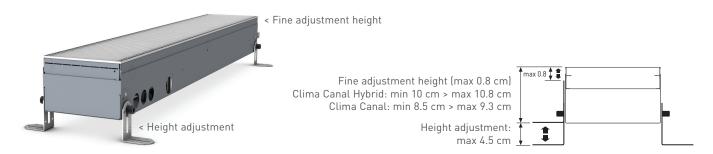






		Clima Canal heating	Clima Canal Hybrid heating / cooling
Туре	L (cm)	H (cm)	Hybrid H (cm)
1	72	8.5	10
2	108	8.5	10
3	144	8.5	10
4	180	8.5	10

Height adjustment (cm)





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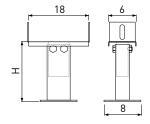
Option _

Clima Canal Hybrid_ Clima Canal_options

Height adjustable feet for raised floors



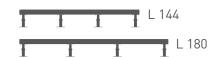
- painted in the colour black RAL
- easy installation using stainless steel spring system
- (1 set = 2 height adjustments)



Code	H (cm)
	5 > 7
	8 > 13
	13 > 23
	20 > 30

Number of feet per radiator





Wooden grille



Available in:
Oak natural
Oak varnished
Beech natural
Beech varnished
Merbau natural
Merbau varnished



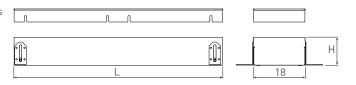
Type Canal	CODE	Length (cm)
1		71.2
2		107.2
3		143.2
4		179.2

Empty ducts (all Clima Canal Hybrid and Clima Canal (all standard lengths)



To fill open spaces for a continuous installation

- without connection perforations
- with continuous grille
- with height adjustments and fine height adjustment



Clima Canal Hybrid			
Type Canal	CODE	Height (cm)	Length (cm)
1		10 > 14.5	72
2		10 > 14.5	108
3		10 > 14.5	144
4		10 > 14.5	180

Clima Canal			
Type Canal	CODE	Height (cm)	Length (cm)
1		8.5 > 13	72
2		8.5 > 13	108
3		8.5 > 13	144
4		8.5 > 13	180

Corner piece



- for finishing angles
- includes cover plate painted in SS color
- height adjustment

Clima Canal Hybrid		
CODE	H (cm)	
	10 > 14.5	

Clima Canal		
CODE	H (cm)	
	8.5 > 13	



Clima Canal Hybrid_ Clima Canal_accessories

Control "plug and play system"_complete control per residence

Room controller



(Room controller)

- records thermostat signals.
- controls valves and activators.
- 1 Room controller per room or room thermostat
- regulation of ventilator speed.

CODE	Description
7990.010	Room controller

Heating system controller 🔥





(Heating system controller)

- controls the heating boiler and/ or pump and/or valve.

CODE	Description
7990.020	Heating system controller

Cooling system controller * (only for Hybrid)



(Cooling selector)

- controls the cooling unit and/or pump and/or valve.

CODE	Description	
7990.030	Cooling system controller	

Cooling / Heating system controller 🌞 🔥 (only for Hybrid)





(Heating / cooling selector)

- controls switching between cooling / heating (2 three-way valves).

CODE	Description
7990.040	Cooling / Heating system selection

Thermostat _

Jaga Clock Thermostat



Automatic thermostat.

- day- night- and week program-
- activators: auto / continuous.

CODE	Description
7990.073	Jaga Clock Thermostat



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Clima Canal Hybrid_ Clima Canal_accessories

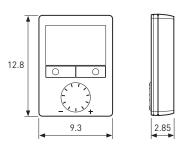
Control + Thermostat_control per room _

Room regulator with LCD screen

0...10 V control and thermostat for EC motors and valves. Alternative to the "plug and play system".



- 1 room regulator per room.
- automatic or manual heating / cooling changeove
- back-lighting display
- power supply DC 24V,
- control outputs DC 0-10 V
- minimum and maximum limits of the desired temperature



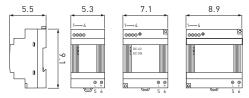
CODE	Description		
8751.050006	Room regulator with LCD		

Supply_



- small mounting depth
- safety: UL1310 Class 2
- convection cooling
- DIN-rail or wall mounting

CODE	Description		
7990.050	31,2 W		
7990.051	60 W		
7990.052	100,8 W		





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

Required power = sum of the capacities (power consumption) of the equipments

Technical data

	Type:	7990.050	7990.051	7990.052	
Phases		1	1	1	
Output voltage between	VDC	24-28	24-28	24-28	
Output current	А	1,3	2,5	4,2	
Power	Watt	/att 31,2 60		100,8	
Input voltage	VAC	90-264	90-264	90-264	
Weight	g	200	250	320	
Connections:		Screw connection			
Overload protection:	verload protection: 120 - 145%				
LED Display:	D Display: Green LED = on, Red LED = DC output Low				
Operating temperature:	erating temperature: -25 to +71 ° C				

Accessories_

Jaga valve and motor 230 Volt



- with varistor to protect against overload.
- with standard indicator (open/ closed)

CODE	Description	
7990.409	180°-G 1/2" F/NG 230 Volt 2 Watt	
7990.411	180°-G 3/4" F/NG 230 Volt 2 Watt	

Jaga three-way valve and motor 230 Volt (only for Hybrid)



- with varistor to protect against overload.
- with standard indicator (open/ closed)

CODE	Description			
7990.415	180°-G 3/4" F/NG 230 Volt 4 Watt			
7990.417	180°-G 1" F/NG 230 Volt 4 Watt			
7990.419	180°-G 1-1/4" F/NG 230 Volt 4 Watt			
7990.420	180°-G 1-1/2" F/NG 230 Volt 4 Watt			



Clima Canal Hybrid_ Clima Canal_technical data

		Type 1	Type 2	Type 3	Type 4
	,	Physical data			
Length	cm	72	108	144	180
Width (without grille)	cm		1	8	,
Clima Canal Minimal build-in height			8	.5	
Clima Canal Adjustment build-in height			8.5 > r	max 13	
(Clima Canal Hybrid) Minimal build-in height	cm		1	0	
(Clima Canal Hybrid) Adjustment build-in height	cm		10 > m	ax 14.5	
Fine adjustment height	cm		ma	ax 1	
Activators	Qty	1	2	2	2
Control		Jaga plug a	nd play system or R	oom regulator with	LCD screen
		Outputs			
	Не	ating 75 / 65 / 20° C			
Min	Watt	517	1137	1654	2274
Med	Watt	903	2009	2912	4018
Max (boost)	Watt	945	2075	3011	4145
	Не	ating 55 / 45 / 20° C			
Min	Watt	310	682	992	1364
Med	Watt	546	1201	1744	2403
Max (boost)	Watt	563	1238	1798	2474
	He	ating 35 / 30 / 20° C			
Min	Watt	129	284	413	568
Med	Watt	227	500	728	1001
Max (boost)	Watt	234	516	749	1033
Co	oling (total	l) only for Hybrid, 7 /	12 / 25° C		
Min	Watt	110	219	330	440
Med	Watt	273	545	818	1090
Max (boost)	Watt	284	576	849	1152
Cooling (:	sensible) o	nly for Hybrid, 7 / 12	/ 25° C 50% RH		
Min	Watt	83	165	248	330
Med	Watt	205	410	615	820
Max (boost)	Watt	213	433	638	866
	E	C Motor (24VDC)			
Sound pressure min speed	dB(A)	19	20	22	23
Sound pressure med speed	dB(A)	29	32	34	35
Sound pressure max speed	dB(A)	34	37	39	40
Speed min (4.5VDC control)	RPM		11	60	
Speed med (8VDC control)	RPM		19	250	
Speed max (10VDC control)	RPM		23	340	
Consumption min speed	Watt	1,56	1,98	2,30	2,83
Consumption med speed	Watt	3,17	4,80	6,70	8,25
Consumption max speed	Watt	4,37	6,70	10,30	12,10
Air flow min speed (c)	m3/h	40	83	123	165
Air flow med speed	m3/h	59	119	178	238
Air flow max speed	m3/h	70	142	213	284
Cooling flow (med) (only Hybrid)	L/h	47	94	140	187
Heating flow (med)	L/h	78	175	250	345

ex: Flow T° water 75°C, return T° water 65°C, air inlet 20°C Flow T° cooling water 7°C, return T° cooling water 12°C, air inlet T° 25°C dry bulb T°, 50% RH (relative humidity)



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Clima Canal Hybrid_ Clima Canal_product description

- inner duct with height adjustment and SS grille supports.
- anodized aluminium grille(s)
- Low-H₂O heat exchanger.
- Thermal activator(s), (tangential mini activator).
- 2 pieces stainless steel flexible connections 1/2", length of 15 upto 25 cm

Clima Canal Hybrid_heating and cooling:

 pre-assembled heating unit for building into the floor, comprising a 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, 10% gloss.

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, and for connection to mechanical ventilation systems.

- A minimum recess depth of 100 mm below finished floor level is required. The appliance is equipped with a height adjustment from 0 to 45 mm and a fine height adjustment up to + 8 mm to perfectly align the appliance with the finished floor.
- there are 4 connection openings in the outer duct for the passage of the hydraulic pipes and 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.
- all components are secured with special spring steel suspension hooks, so all the parts can be removed extremely quickly and easily for regular cleaning and maintenance without hydraulic or electrical disconnection.

Clima Canal_only heating:

 pre-assembled heating unit for building into the floor, comprising a 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, 10% gloss.

The appliance is equipped as standard for heating and for connection to traditional water heating systems, and for connection to mechanical ventilation systems.

- possible to achieve a minimum recess depth of 85mm without problems. The appliance is equipped with a height adjustment from 0 to 45 mm and a fine height adjustment up to + 8 mm to perfectly align the appliance with the finished floor.
- there are 3 connection openings in the outer duct for the passage of the hydraulic pipes and electric cables. These openings - in the side
 are sealed with black insulation tape..
- 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.
- all components are secured with special spring steel suspension hooks, so all the parts can be removed extremely quickly and easily for regular cleaning and maintenance without hydraulic or electrical disconnection.

General:

Aluminium grille

Aluminium floor grille panels L 360 mm with EPDM holder 16.5 mm.

- profile: 6 x 14 mm.
- spacing 9 mm.
- material: Aluminium

Roll-up wooden grille

Wooden profiles positioned crossways.

- profile: 12 x 15 mm.
- spacing 13 mm.

The wooden profiles are connected by way of a galvanised spring. The correct interspace is assured by aluminium spacers.

Versions: oak / beech / oak varnished / beech varnished / merbau / merbau varnished.

Low-H₃O heat exchanger

Round, seamless circular pipes in pure copper, connected to pure aluminium panels with a spacing of 1.8 mm and an integrated brass collector, including air venting.

- the heat exchanger electrostaticaly lacquered with black epoxypolyester, gloss degree 70%.
- element pressure test: 20 bar.
- operating pressure: max 10 bar.
- standard connection left.

Activators

One or more virtually noiseless tangential activators, 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.

How to install:

The installer will propose all the heating elements, while taking into account the following requirements:

- a heat loss calculation according to the standard;
- heat emission and measurement tables in compliance with the tables and Clima Canal fitting instructions supplied by the manufacturer
- the heating elements are connected to a two-pipe system / singlesided connection. Standard connections left
- install the Clima Canal with the convector side towards the exterior side of the room
- the distance between the Clima Canal and the window should allow for any pelmets. Curtains should never be hung above the Clima Canal. The heating element should be accessible at all times for maintenance.
- if the appliance is not mounted directly on the floor, the space between the underside of the appliance and the floor must be filled with a stable filling, e.g. concrete infilling.

Manufacturer: Jaga N.V. Type: Clima Canal Hybrid Clima Canal



Easy maintenance: When using the standard provided with the stainless steel flexible connections (length 15 cm 1/2"), the internal mechanism is completely removable.



