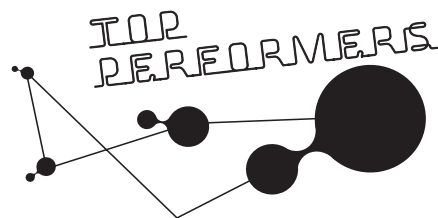




24V EC MOTOR

High performance technology

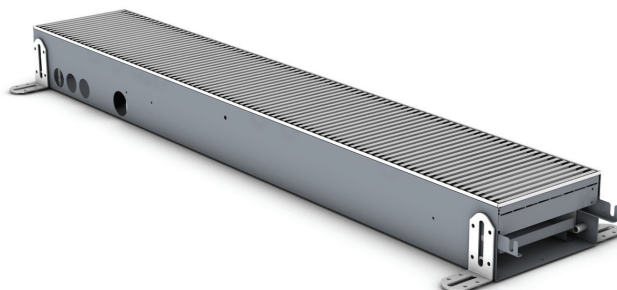


CLIMA CANAL HYBRID

- 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

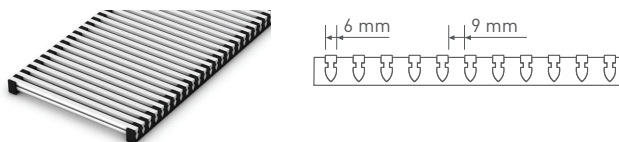


Benefits

- 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

Standard grille

Anodized aluminium

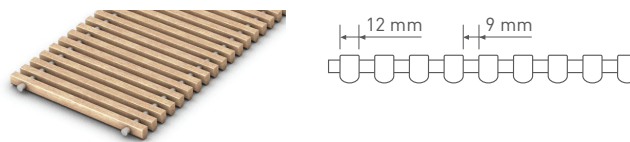


Options

- 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

Oak / Beech / Merbau



Clima Canal Hybrid: heating and cooling (Watt)

| Type | CODE | Speed | Clima Canal Hybrid | | | Clima Canal Hybrid | |
|------|-------|-------|--------------------|-----------------|-----------------|----------------------|--------------------------|
| | | | Heating | | | Cooling | |
| | | | 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% RH (relative humidity)

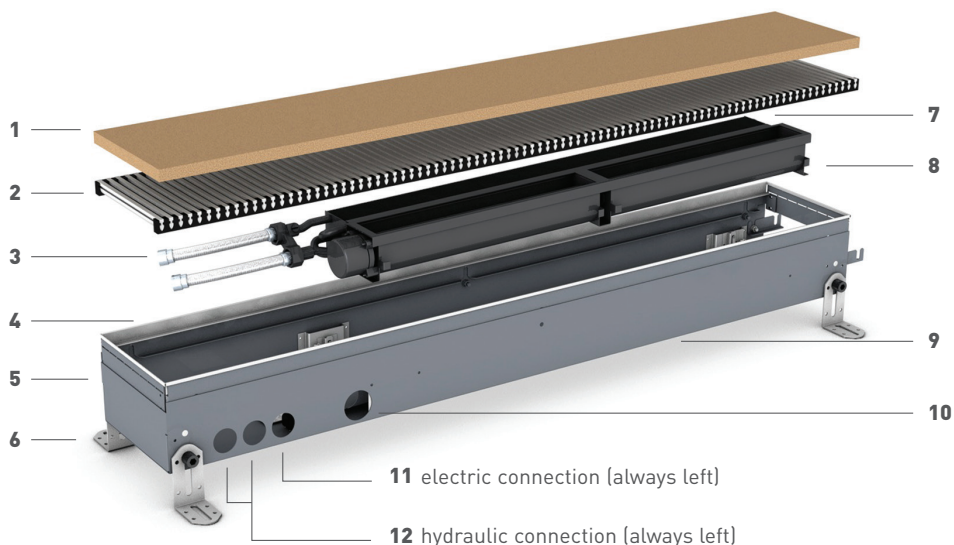
Clima Canal: heating (Watt)

| Type | CODE | Speed | Clima Canal | | |
|------|-------|-------|-----------------|-----------------|-----------------|
| | | | 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 |
| 4 | | Med | 4018 | 2403 | 1001 |

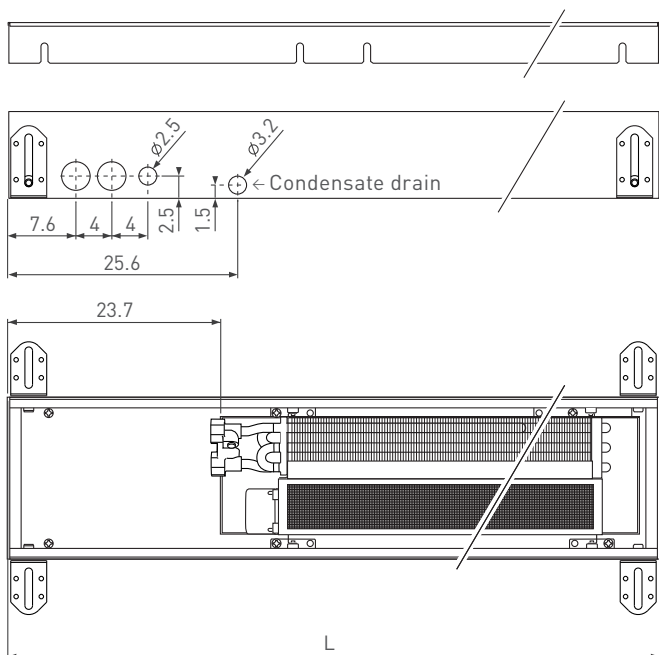
ex: Flow T° water 75°C, return T° water 65°C, air inlet 20°C

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-H₂O heat exchanger
- 8 Thermal Activator(s) (tangential mini activator)
- 9 housing
- 10 Hybrid: condensation collection tray for drainage of condensate

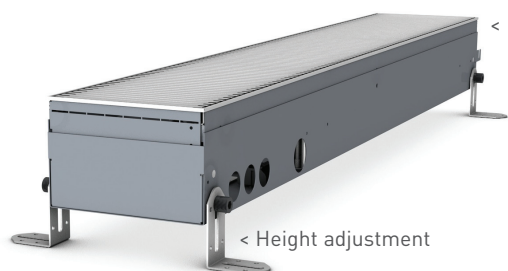


Dimensions (cm)



| Type | L (cm) | Clima Canal heating | Clima Canal Hybrid heating / cooling |
|------|--------|---------------------|--------------------------------------|
| | | 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 |

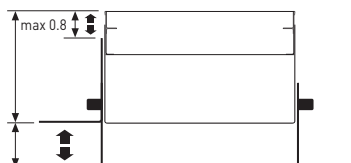
Height adjustment (cm)



< Fine adjustment height

Fine adjustment height (max 0.8 cm)
Clima Canal Hybrid: min 10 cm > max 10.8 cm
Clima Canal: min 8.5 cm > max 9.3 cm

Height adjustment:
max 4.5 cm

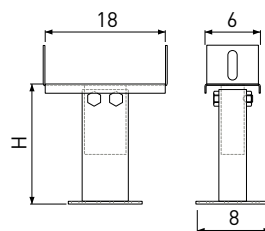


Option

Height adjustable feet for raised floors



- painted in the colour black RAL 7024
- easy installation using stainless steel spring system
- (1 set = 2 height adjustments)

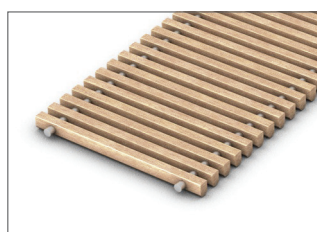


| Code | H (cm) |
|-------|---------|
| | 5 > 7 |
| | 8 > 13 |
| | 13 > 23 |
| | 20 > 30 |

Number of feet per radiator



Wooden grille

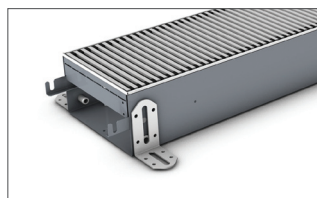


Available in:
Oak natural
Oak varnished
Beech natural
Beech varnished
Merbau natural
Merbau varnished



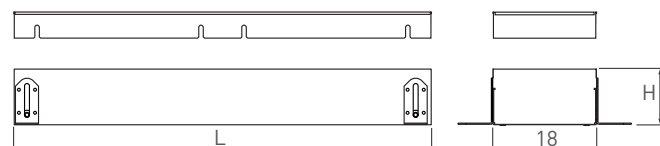
| Type Canal | CODE | Length (cm) |
|------------|-------|-------------|
| 1 | | 71.2 |
| 2 | | 107.2 |
| 3 | | 143.2 |
| 4 | | 179.2 |

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



To fill open spaces for a continuous installation

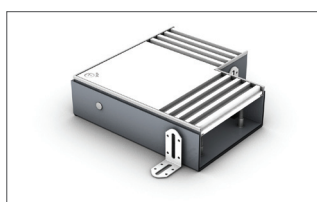
- without connection perforations
- with continuous grille
- with height adjustments and fine height adjustment



| 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 |

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 programme.
- activators: auto / continuous.

| CODE | Description |
|----------|-----------------------|
| 7990.073 | Jaga Clock Thermostat |



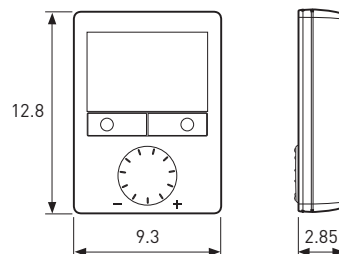
Control + Thermostat_control per room

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 changeover
- back-lighting display
- power supply DC 24V,
- control outputs DC 0-10 V
- minimum and maximum limits of the desired temperature



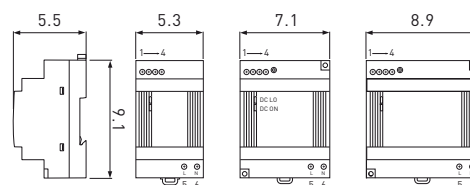
| CODE | Description |
|-------------|-------------------------|
| 8751.050006 | Room regulator with LCD |

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 | A | 1,3 | 2,5 | 4,2 |
| Power | Watt | 31,2 | 60 | 100,8 |
| Input voltage | VAC | 90-264 | 90-264 | 90-264 |
| Weight | g | 200 | 250 | 320 |
| Connections: | Screw connection | | | |
| Overload protection: | 120 - 145% | | | |
| LED Display: | Green LED = on, Red LED = DC output Low | | | |
| Operating temperature: | -25 to +71 ° C | | | |

Accessories

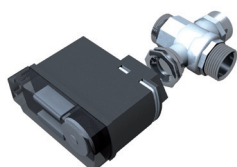
Jaga valve and motor 230 Volt



- 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 | 18 | | | |
| Clima Canal Minimal build-in height | | 8.5 | | | |
| Clima Canal Adjustment build-in height | | 8.5 > max 13 | | | |
| (Clima Canal Hybrid) Minimal build-in height | cm | 10 | | | |
| (Clima Canal Hybrid) Adjustment build-in height | cm | 10 > max 14.5 | | | |
| Fine adjustment height | cm | max 1 | | | |
| Activators | Qty | 1 | 2 | 2 | 2 |
| Control | | Jaga plug and play system or Room regulator with LCD screen | | | |
| Outputs | | | | | |
| Heating 75 / 65 / 20° C | | | | | |
| Min | Watt | 517 | 1137 | 1654 | 2274 |
| Med | Watt | 903 | 2009 | 2912 | 4018 |
| Max (boost) | Watt | 945 | 2075 | 3011 | 4145 |
| Heating 55 / 45 / 20° C | | | | | |
| Min | Watt | 310 | 682 | 992 | 1364 |
| Med | Watt | 546 | 1201 | 1744 | 2403 |
| Max (boost) | Watt | 563 | 1238 | 1798 | 2474 |
| Heating 35 / 30 / 20° C | | | | | |
| Min | Watt | 129 | 284 | 413 | 568 |
| Med | Watt | 227 | 500 | 728 | 1001 |
| Max (boost) | Watt | 234 | 516 | 749 | 1033 |
| Cooling (total) 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) only 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 |
| EC 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 | 1160 | | | |
| Speed med (8VDC control) | RPM | 1950 | | | |
| Speed max (10VDC control) | RPM | 2340 | | | |
| 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)



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 \varnothing 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: AISI 304

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-H₂O 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 electrostatically 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 / single-sided 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.

