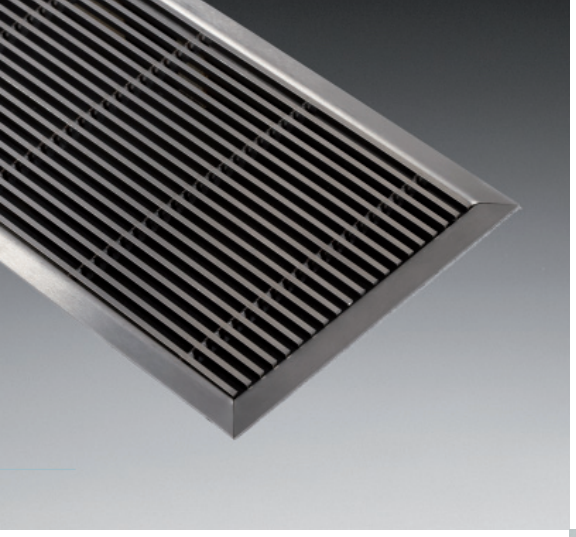
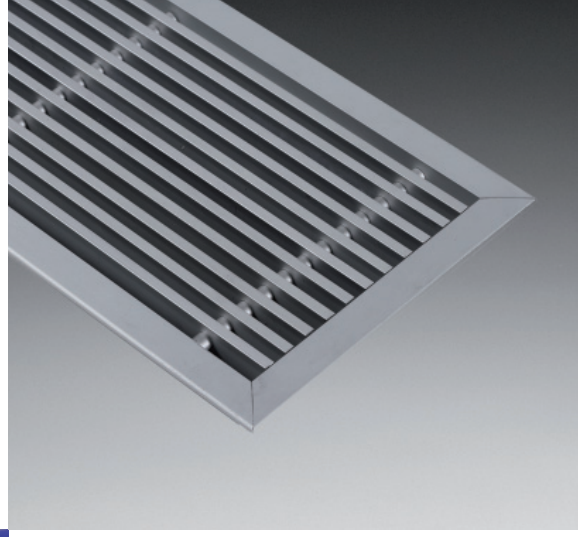
Clima Canal



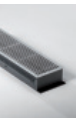


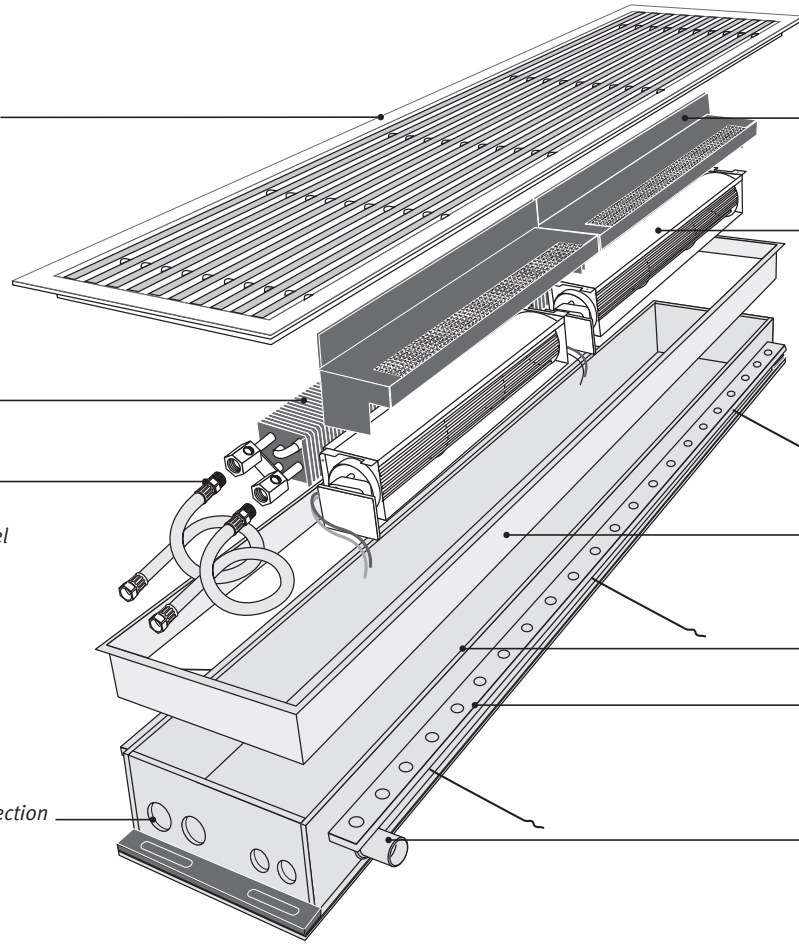
Clima Canal

1. Stainless steel grille
2. Aluminium grille
3. Wall model
4. Floor model
5. Wooden grille
6. Low-H_2O heat exchanger and activator

Clima Canal_Composition

Standard delivery





Grille
in aluminium, stainless steel
or wood

Detachable activator guard
with integrated SS filter

Thermal activator, 24 Volt DC,
clickable with springs.

Low-H_2O heat exchanger

Anchoring hooks.

Flexible connections
in EPDM, length 40 cm
(as an option in stainless steel
available)

Height adjustment for
depths from 8.5 to 13 cm

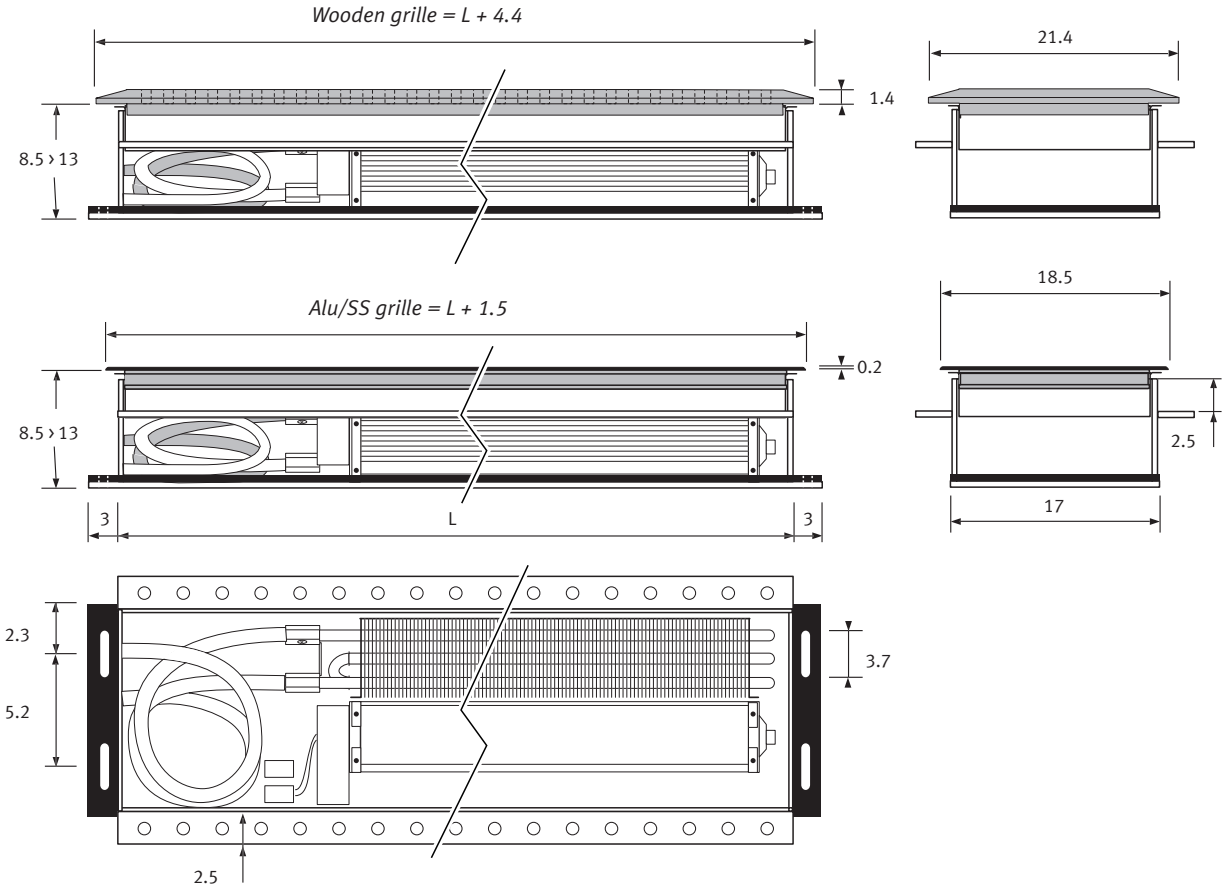
Housing from hard PVC

Anchoring strip

Electrical and hydraulic connection
always on the left hand side

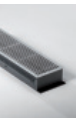
Condensation drain pipe ø 32/2

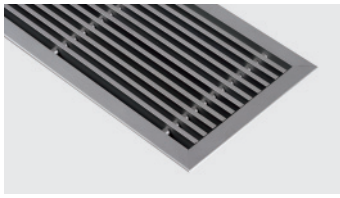
Clima Canal_Dimensions in cm



Size	01	02	03	04
L	57	97	137	177

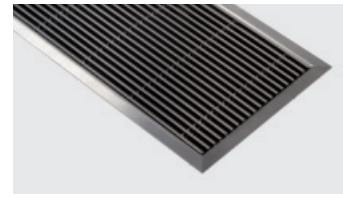
Clima Canal Floor model_Heating and/or cooling





SNA
Anodized aluminium natural colour

SNC/ colour code
Alu lacquered in 32 colours.
- gloss level 70%.
- extra hard-wearing and UV-resistant polyester lacquer on anodized aluminium. Only the colour codes beginning with 4 and colour 006 are suitable (extra hard-wearing).
- adjust colour code (see colour chart page 193), *colour*
f.e. CLCW. 008 057 17.xxx/SNC.



SSS
Stainless steel.

SON Oak natural
SBN Beech natural
SMN Merbau natural

SOV Oak varnished
SBV Beech varnished
SMV Merbau varnished

Clima Canal floor model_aluminium grille/stainless steel or SS

Heating and/or cooling

Size	CODE	H	L	B	Heating WATT 75/65/20	Cooling total WATTS *7/12/25 - 50% RV	Cooling perceptible WATTS *7/12/25 - 50% RV
01	CLCF. 008 057 17/...	8.5 › 13	57	17	**800**	320	240
02	CLCF. 008 097 17/...	8.5 › 13	97	17	**1600**	640	480
03	CLCF. 008 137 17/...	8.5 › 13	137	17	**2400**	960	720
04	CLCF. 008 177 17/...	8.5 › 13	177	17	**3200**	1280	960

fill in grille code

**Flow T° cooling water 7°C / Return T° cooling water 12°C / Air inlet T° 25°C - 50% relative humidity*

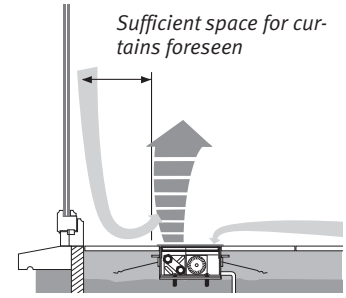
Clima Canal floor model_wooden grille

Heating and/or cooling

Size	CODE	H	L	B	Heating WATT 75/65/20	Cooling total WATTS *7/12/25 - 50% RV	Cooling perceptible WATTS *7/12/25 - 50% RV
01	CLCF. 008 057 17/...	8.5 › 13	57	17	**800**	320	240
02	CLCF. 008 097 17/...	8.5 › 13	97	17	**1600**	640	480
03	CLCF. 008 137 17/...	8.5 › 13	137	17	**2400**	960	720
04	CLCF. 008 177 17/...	8.5 › 13	177	17	**3200**	1280	960

fill in grille code

**Flow T° cooling water 7°C / Return T° cooling water 12°C / Air inlet T° 25°C - 50% relative humidity*



The guarantee is only valid if the original Jaga control is used in each room.
For other control devices: contact Jaga.

jaga

Clima Canal Wall mounted model_Only for heating

SNA
Anodized aluminium natural colour

SNC/ colour code
Alu lacquered in 32 colours.
- gloss level 70%.
- extra hard-wearing and UV-resistant polyester lacquer on anodized aluminium. Only the colour codes beginning with 4 and colour 006 are suitable (extra hard-wearing).
- adjust colour code (see colour chart page 193), ┌*colour*
f.e. CLCW. 008 057 17.xxx/SNC.

SSS
Stainless steel

SON Oak natural
SBN Beech natural
SMN Merbau natural

SOV Oak varnished
SBV Beech varnished
SMV Merbau varnished

Clima canal wall model_aluminium grille/stainless steel or SS

Size	CODE	H	L	B	WATTS 75/65/20
01	CLCW. 008 057 17/...	8.5 › 13	57	17	**800**
02	CLCW. 008 097 17/...	8.5 › 13	97	17	**1600**
03	CLCW. 008 137 17/...	8.5 › 13	137	17	**2400**
04	CLCW. 008 177 17/...	8.5 › 13	177	17	**3200**

fill in grille code ┘

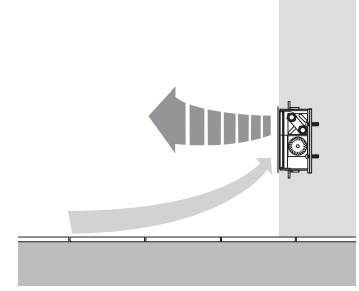
Clima Canal Wall model_wood grille

Size	CODE	H	L	B	WATT 75/65/20
01	CLCW. 008 057 17/...	8.5 › 13	57	17	**800**
02	CLCW. 008 097 17/...	8.5 › 13	97	17	**1600**
03	CLCW. 008 137 17/...	8.5 › 13	137	17	**2400**
04	CLCW. 008 177 17/...	8.5 › 13	177	17	**3200**

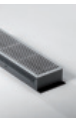
fill in grille code ┘

Clima Canal wall model for cooling: special model on request

The guarantee is only valid if the original Jaga control is used in each room.
For other control devices: contact Jaga.



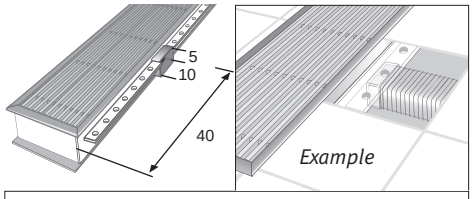
Clima Canal
Options



Fresh air supply (ventilation)

Air channel connection piece

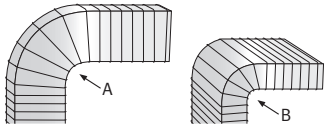
Standard position connection piece



CODE	Description.	Surcharge
.../VEN	connection piece for air duct	

Add to the code of the Clima Canal /VEN
ex. CLCF. 008 097 17/SNA/VEN

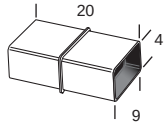
Flexible air duct



Material: galvanized steel.
Not combustible: DIN 4102 Class A1.
Flexible bending even around tight corners with minimum bending radii:
A = 13.5 cm, B = 8 cm.

CODE	Dimensions in cm
7990.080	4.8 x 9.8 x 200

Inner sleeve for air duct



Material: galvanized steel.

CODE	Dimensions in cm
7990.081	4 x 9 X 20

Accessories

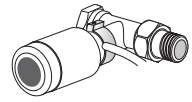
Two-way valves

Jaga valve and 230 Volt motor

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

- *With varistor to protect against overvoltage.*
- *With position indicator (open/closed).*

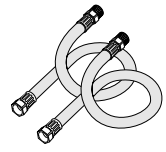
Jaga-Danfoss valve and 230 Volt motor



CODE	Description.
7990.408	180°-G 1/2"F / NG 230 Volt 3 Watt
7990.410	180°-G 3/4"F / NG 230 Volt 3 Watt
7990.412	180°-G 4/4"F / NG 230 Volt 3 Watt

- *With position indicator (open/closed).*

S/S flexible connection



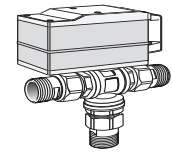
Material: top quality stainless steel, length 20 cm (extendable to +/- 25 cm).
Replaces standard EPDM flexibles.

CODE	Description
.../SSC	S/S flexible connection

Add to the code of the Clima Canal /SSC
f.e. CLCF. 008 097 17/SNA/SSC

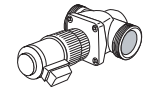
Three-way valves

Jaga three-way valve and 230 Volt motor



CODE	Description.
7990.415	180°-G 3/4"F / NG 230 Volt 4 VA
7990.417	180°-G 4/4"F / NG 230 Volt 4 VA
7990.419	180°-G 5/4"F / NG 230 Volt 4 VA
7990.420	180°-G 6/4"F / NG 230 Volt 4 VA

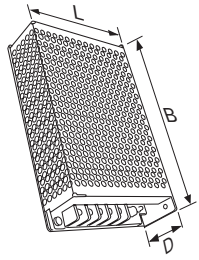
Jaga-Danfoss three-way valve and 230 Volt motor



CODE	Description
7990.414	180°-G 3/4"F / NG 230 Volt 9 VA
7990.416	180°-G 4/4"F / NG 230 Volt 9 VA
7990.418	180°-G 5/4"F / NG 230 Volt 9 VA

Clima Canal
Accessories

Power supplies 230 Volt AC › 24 Volt DC



CODE	Watt	L	B	D
7990.050	25	9.9	9.7	3.6
7990.051	60	15.9	9.7	3.6
7990.052	100	19.9	9.8	3.6
7990.053	150	19.9	11.0	5.0

Stabilised DC supply.

Required power of the supply:

Clima Canal Size 01

3.5 watts

Clima Canal Size 02

7 watts

Clima Canal Size 03

10.5 watts

Clima Canal Size 04

14 watts

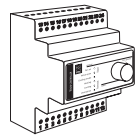
Example

(2 x size 02) + (3 x size 04)=
(2 x 7 watts) + (3 x 14 watts)= 56 watts

To choose supply, including safety margin:
60 Watts

Controllers “plug and play system”

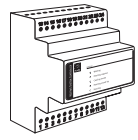
Room controller



The guarantee is only valid if the original Jaga control is used.
For other control devices: contact JAGA.

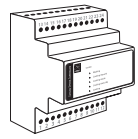
CODE	Description
7990.010	room controller *(Room controller)*

Heating system controller



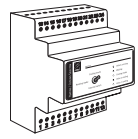
CODE	Description
7990.020	heating system controller *(Heating system controller)*

cooling system controller



CODE	Description
7990.030	cooling system controller *(Cooling system controller)*

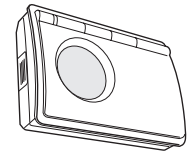
cooling / heating selector



CODE	Description
7990.040	cooling / heating selector *(Heating / Cooling selector)*

Thermostats

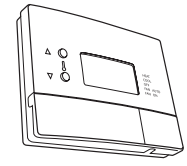
Jaga clock thermostat



Automatic thermostat day - night and week programme Activators: auto / continuous
Batteries included

CODE	Description
7990.073	clock thermostat *heating / cooling*

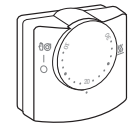
Jaga-Danfoss clock thermostat



Automatic thermostat day - night and week programme activators: auto / continuous.

CODE	Description
7990.071	clock thermostat *heating / cooling*

Jaga-Danfoss thermostat

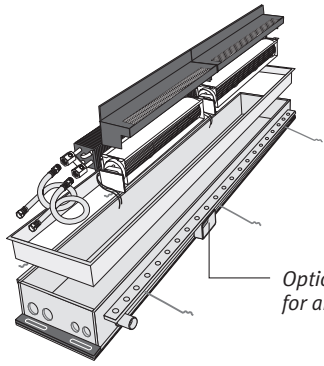


Manual thermostat auto / continuous

CODE	Description
7990.072	thermostat *heating / cooling*

Clima Canal_Order from parts_Floor model

Floor model without grille

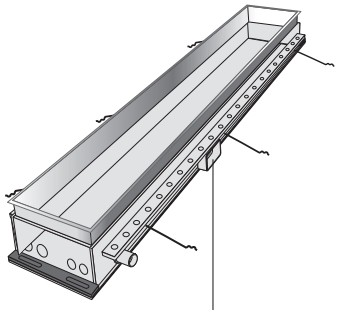


Clima Canal ready for installation without grille.

Size	CODE
01	7530. 008 057 17
02	7530. 008 097 17
03	7530. 008 137 17
04	7530. 008 177 17

Option: connection piece for air duct: see p.102

Housing ready to install

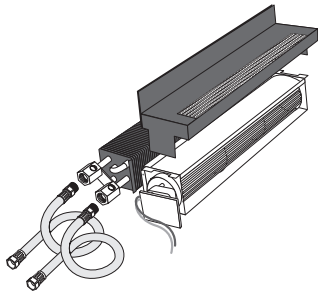


Ready-to-fit housing including height adjustment, anchoring strips and protection block.
Without internal mechanism and grille.

Size	CODE
01	CLCD. 008 057 17
02	CLCD. 008 097 17
03	CLCD. 008 137 17
04	CLCD. 008 177 17

Option: connection piece for air duct: see p.102

Internal mechanism



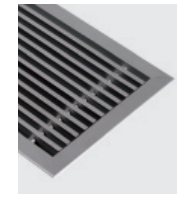
Complete internal mechanism without housing and grille.

Size	CODE
01	CLCU. 008 057 17
02	CLCU. 008 097 17
03	CLCU. 008 137 17
04	CLCU. 008 177 17

Floor grilles

Alu grilles natural

Size	CODE
01	7090.SNA1
02	7090.SNA2
03	7090.SNA3
04	7090.SNA4



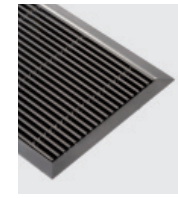
Alu grilles lacquered

Size	CODE
01	7090.SNC1/...
02	7090.SNC2/...
03	7090.SNC3/...
04	7090.SNC4/...

fill in colour code

Grille stainless steel

Size	CODE
01	7091.SSS1
02	7091.SSS2
03	7091.SSS3
04	7091.SSS4



Wood grilles

SON Oak natural
SBN Beech natural
SMN Merbau natural

SOV Oak varnished
SBV Beech varnished
SMV Merbau varnished

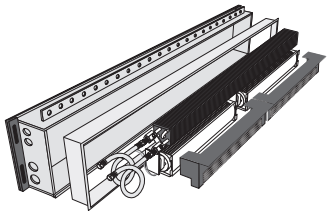
Size	CODE	SON SBN SMN	SOV SBV SMV
01	7090. ... 1		
02	7090. ... 2		
03	7090. ... 3		
04	7090. ... 4		

fill in grille code

Prices for spare parts exclude packaging costs.

Clima Canal_Order from parts_Wall model

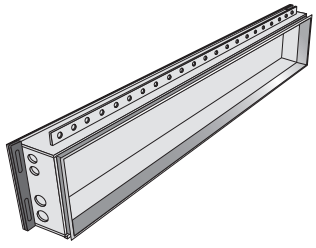
Wall model without grille



Clima Canal ready for installation without grille.

Size	CODE
01	7530. 008 057 17
02	7530. 008 097 17
03	7530. 008 137 17
04	7530. 008 177 17

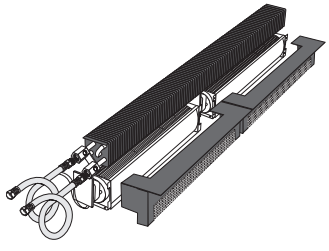
Housing ready to install



Ready-to-fit housing including height adjustment, anchoring strips and protection block.
Without internal mechanism and grille.

Size	CODE
01	CLCD. 008 057 17
02	CLCD. 008 097 17
03	CLCD. 008 137 17
04	CLCD. 008 177 17

Internal mechanism



Complete internal mechanism without housing and grille.

Size	CODE
01	CLCU. 008 057 17
02	CLCU. 008 097 17
03	CLCU. 008 137 17
04	CLCU. 008 177 17

Wall grilles

Alu grilles natural

Size	CODE
01	7091.SNA1
02	7091.SNA2
03	7091.SNA3
04	7091.SNA4

Alu grilles lacquered

Size	CODE
01	7091.SNC1/...
02	7091.SNC2/...
03	7091.SNC3/...
04	7091.SNC4/...

fill in colour code

Grille stainless steel

Size	CODE
01	7091.SSS1
02	7091.SSS2
03	7091.SSS3
04	7091.SSS4

Wood grilles

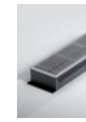
SON Oak natural
SBN Beech natural
SMN Merbau natural
SOV Oak varnished
SBV Beech varnished
SMV Merbau varnished

Size	CODE	SON SBN SMN	SOV SBV SMV
01	7091. ... 1		
02	7091. ... 2		
03	7091. ... 3		
04	7091. ... 4		

fill in grille code

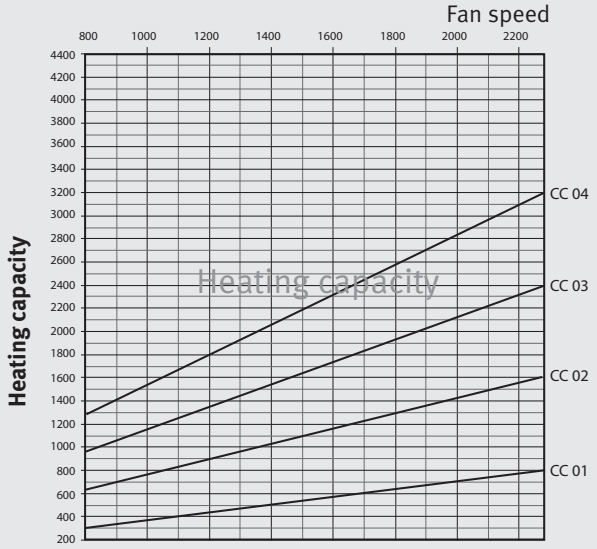
Prices for spare parts exclude packaging costs.

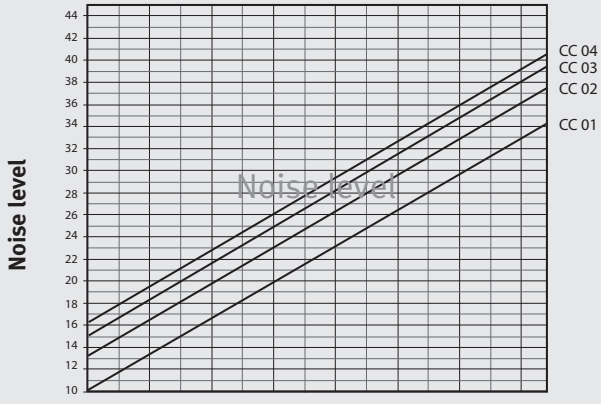
Clima Canal
Calculation module capacity / sound level

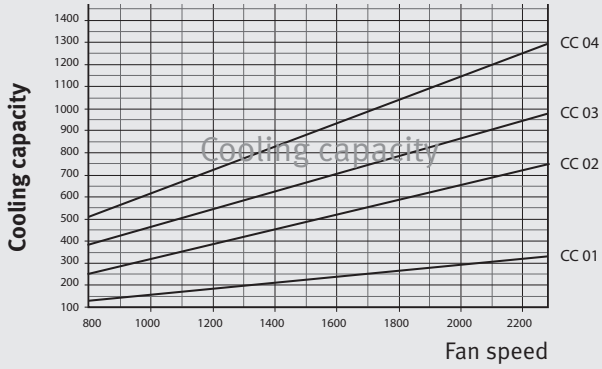


You can get this handy estimating module free by emailing climacanal@jaga.co.uk or by downloading via
http://www.theradiatorfactory.com/trf/clccalc.zip
When filling out the parameters (see red fields) all data and charts are automatically recalculated.

Example image screen:







Correction factor - calculation

Heating

	°C		ΔT	Factor
Flow T°:	75	›		
Return T°:	65	›	50	1,00
Room T°:	20	›		

Cooling

	°C		ΔT	Factor
Flow T°:	7	›		
Return T°:	12	›	15,5	1,00
Room T°:	25	›		

Requested capacities
Enter 1 or more values

Heating:	1500	watts
Cooling:	0	watts
Sound level	0	dB(A)

Possible solution with 1 unit

	CC-1	CC-2	CC-3	CC-4	
Fan speed maximum	 2300	2150 2300	1400 2300	1000 2300	tpm
Heating maximum	 808	1519 1615	1549 2423	1537 3231	watts
Cooling maximum	 323	608 646	620 969	615 1292	watts
Noise level maximum	 34	34 37	24 39	18 40	dB(A)
Max. air volume		160	240	320	m³/h

Possible solutions with multiple units.
Total number of activators required:

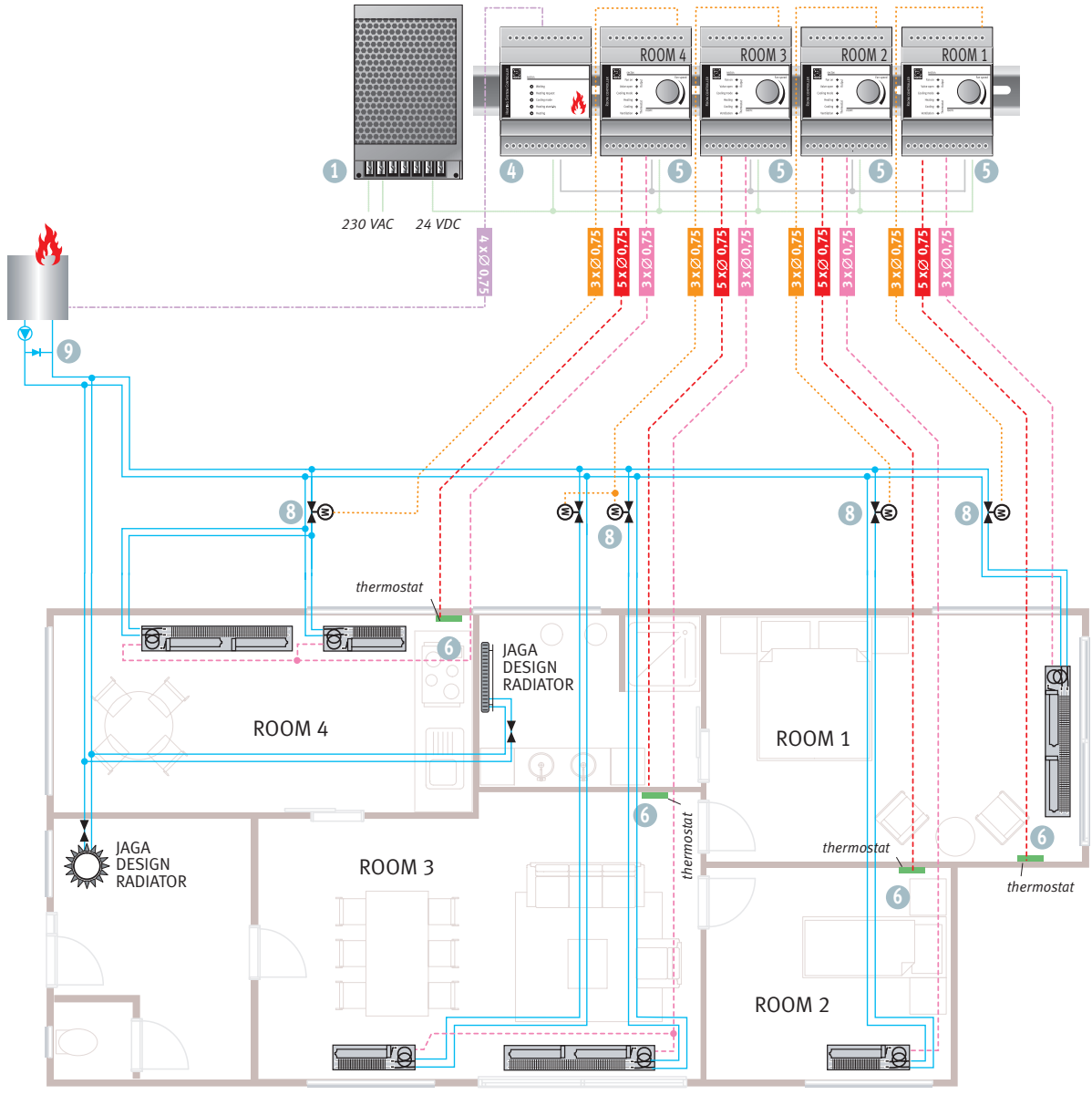
2 p.

To be distributed over different Clima Canal models.

Cooling capacities are relative capacities without taking account of relative humidity. This calculation model is only indicative and as such is not suitable for exact estimation.

Clima Canal

Example 1
heating only
(diagrams)

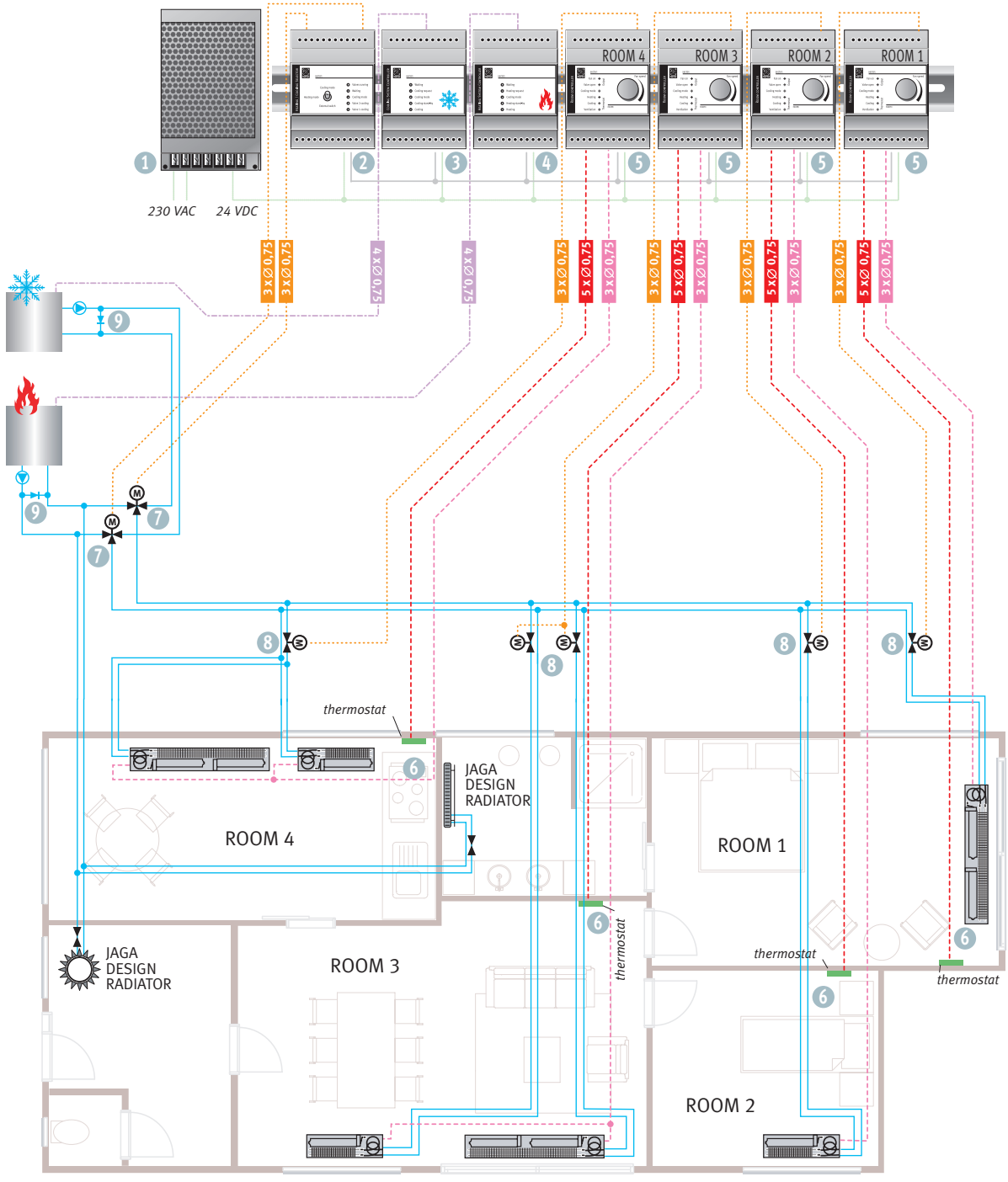


Clima Canal

Example 2

heating / cooling

(diagrams)

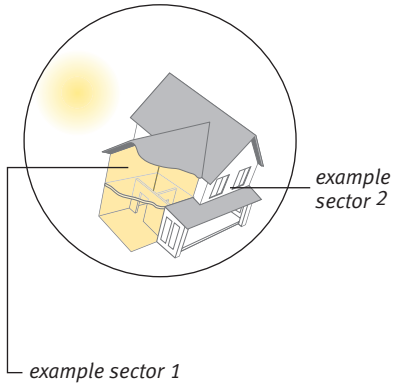


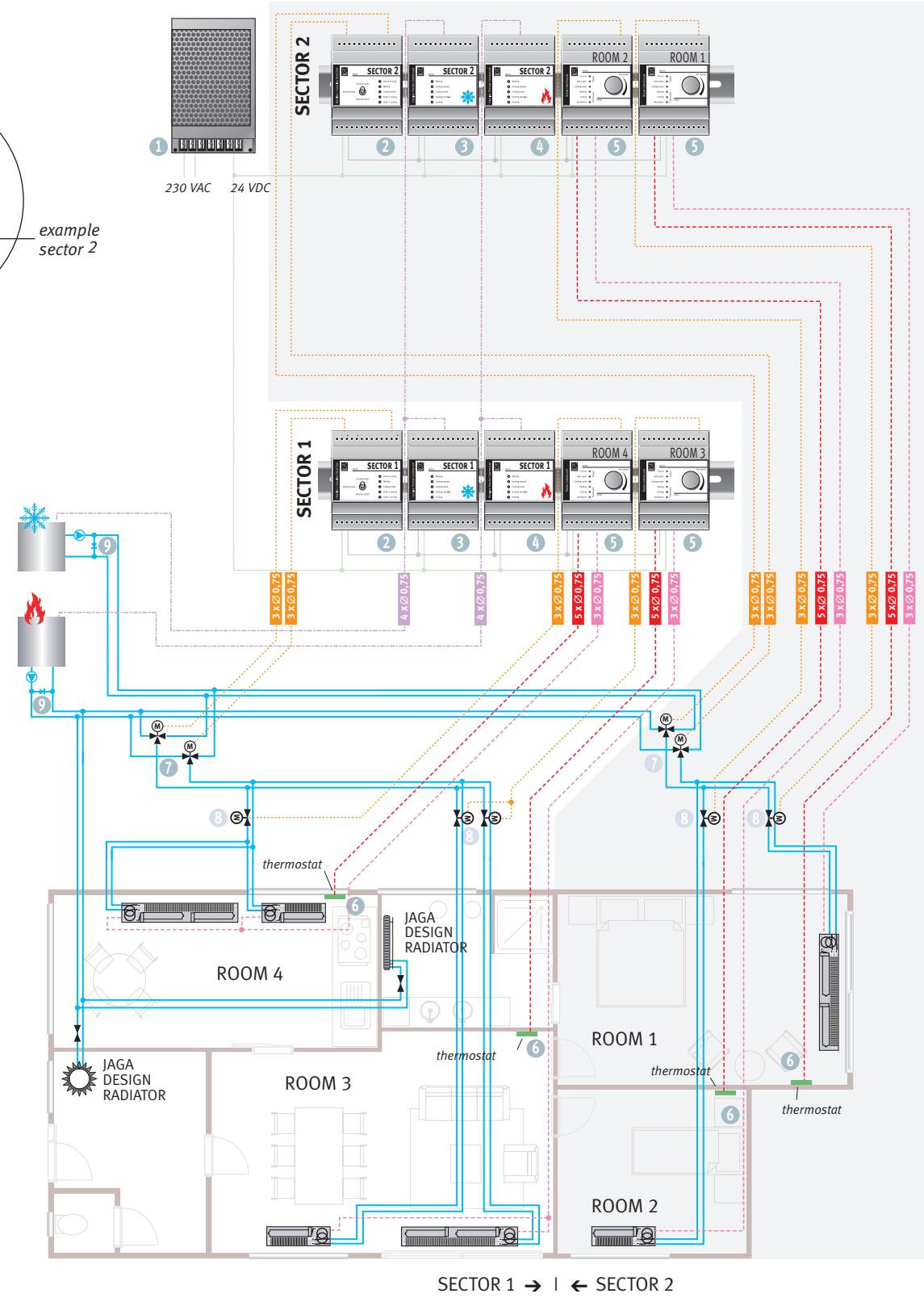
Clima Canal

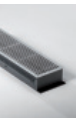
Example 3

heating + cooling in several sectors

(diagrams)

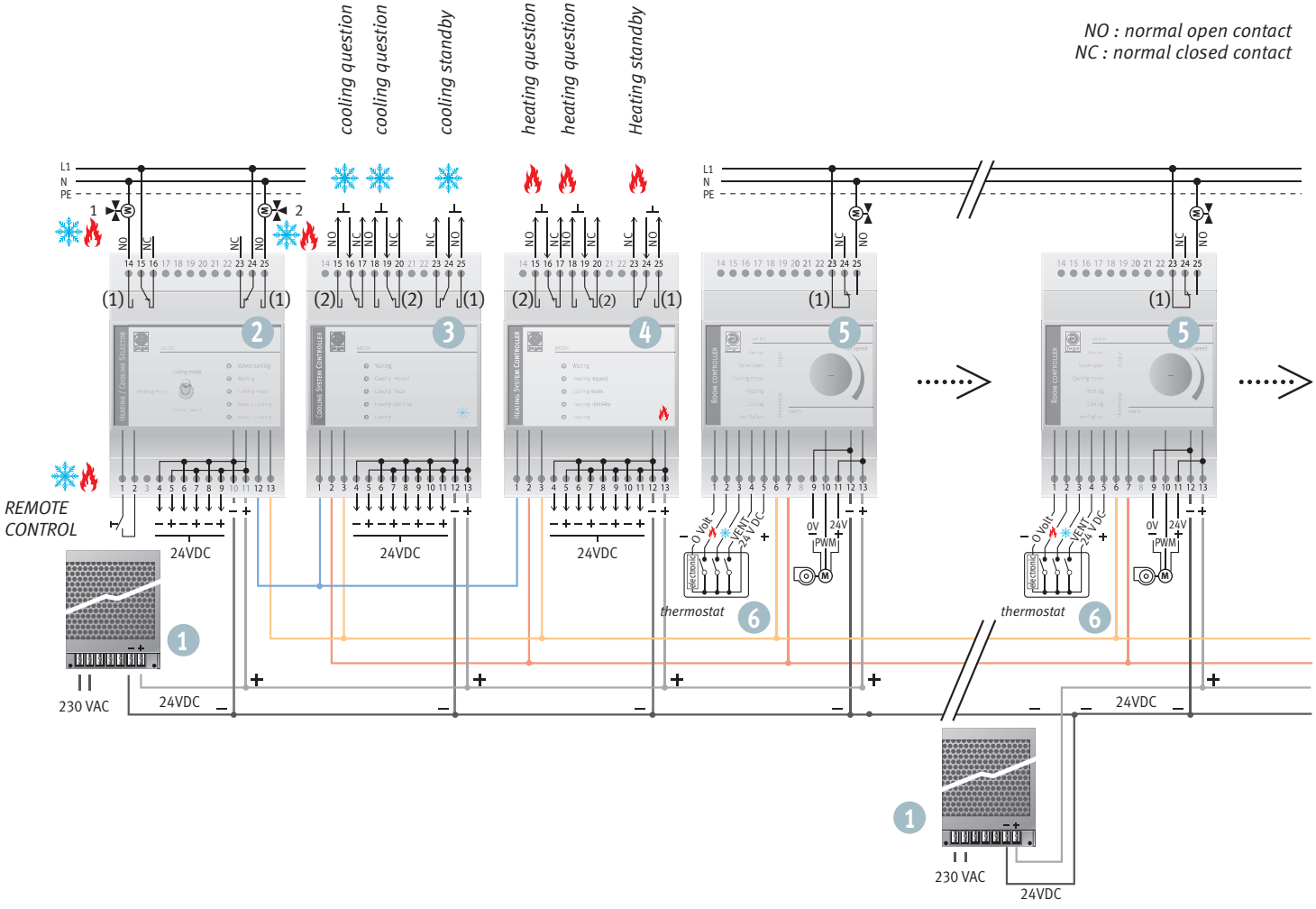






Clima Canal_Connection drawings

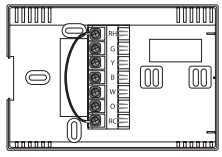
Switch box

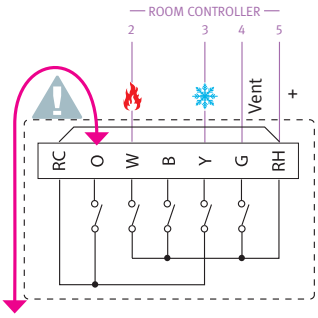


	(1) TYPE 1 1 alternating contact		(2) TYPE 2 1 alternating contact	
	Ohms	Inductive	Ohms	Inductive
Charge	250 VAC/10A	250VAC/7,5A	250VAC/5A	250VAC/2A
Nominal charge	24VDC/10A	24VDC/5A	24VDC/5A	24VDC/3A
Max. switch off tension	380VAC/125VDC		380VAC/125VDC	
Max. switch off charge	2500VA/300W	1875VA/150W	1250VA/150W	500VA/90W
Maximum current	10A		5A	
Switch on current (16 ms)	40A		20A	
Min. admissible charge	5VDC 100mA		5VDC 100mA	

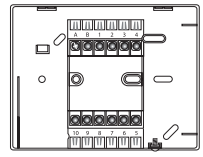
Clima Canal

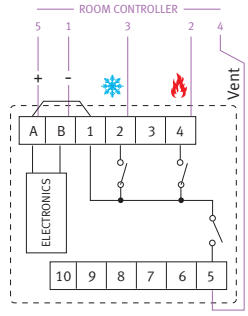
Jaga clock thermostat



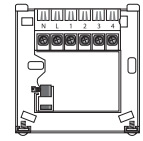


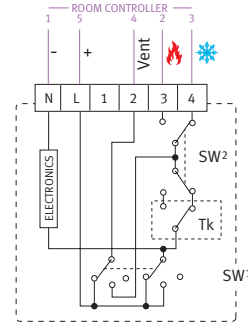
Jaga-Danfoss clock thermostat





Jaga-Danfoss thermostat

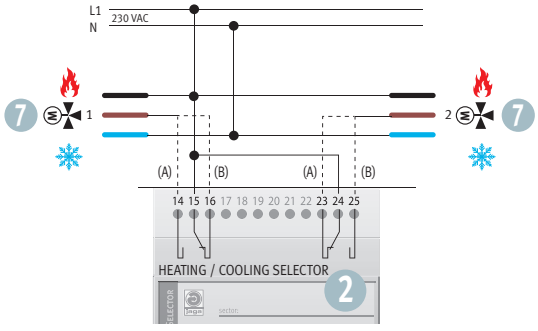




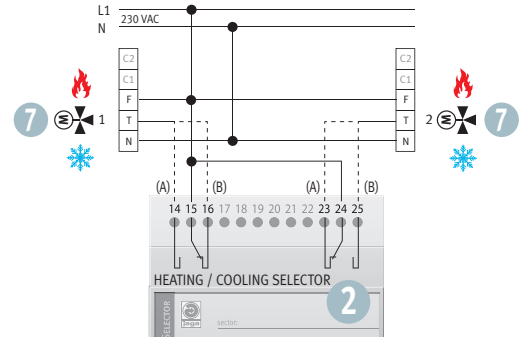
do not connect the 'O' with '–'

Jaga three-way valves

for valves till 5/4"



for valve 6/4"



Make the connection (A) or (B), in function of the desired rotary current.

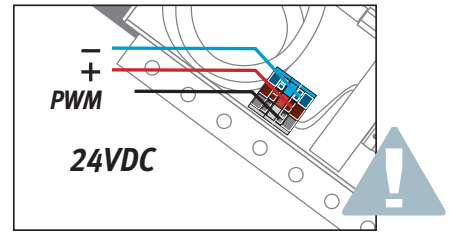
Maximum cable length in function of number of motors

(max. lose of tension 5%)

dimensions in meter

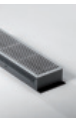
Motors	5	10	15	20	25	30	35	40	45	50
2.5 mm²	229	114	76	57	46	38	33	29	25	23
1.5 mm²	137	69	46	34	27	23	20	17	15	14
1.0 mm²	91	46	30	23	18	15	13	11	10	9
0.75 mm²	69	34	23	17	14	11	10	9	8	7
0.50 mm²	46	23	15	11	9	8	7	6	5	5

Electric connection in Clima Canal

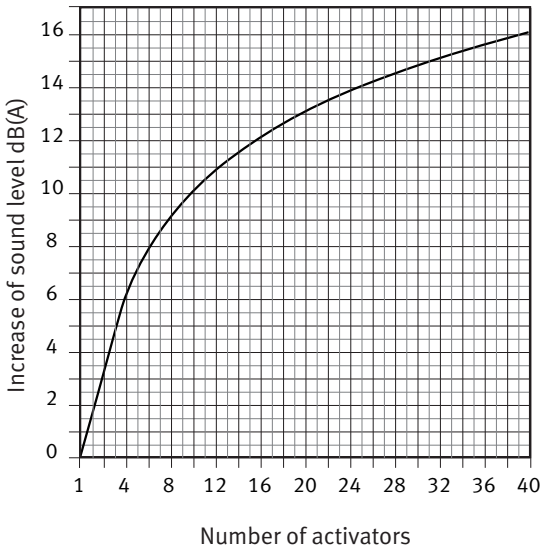


24V DC: don't switch + for -

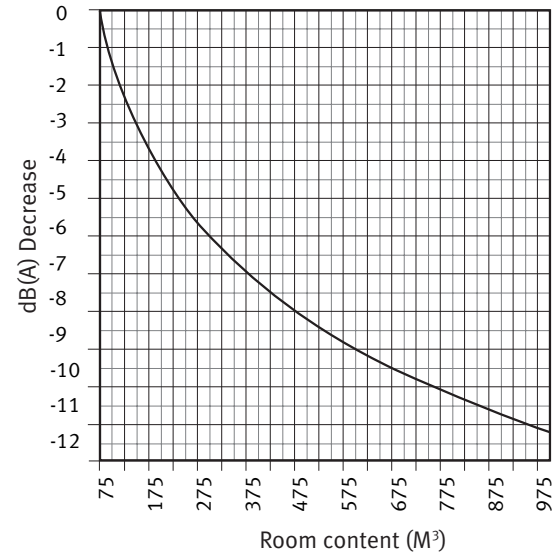
Clima Canal_Correction factors



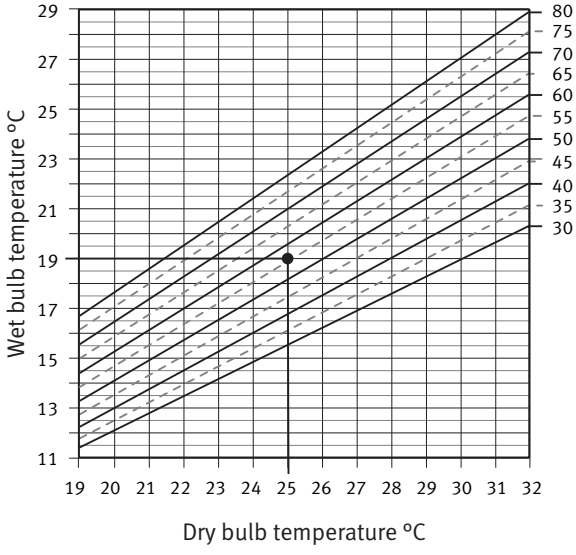
Combined sound level of multiple activators



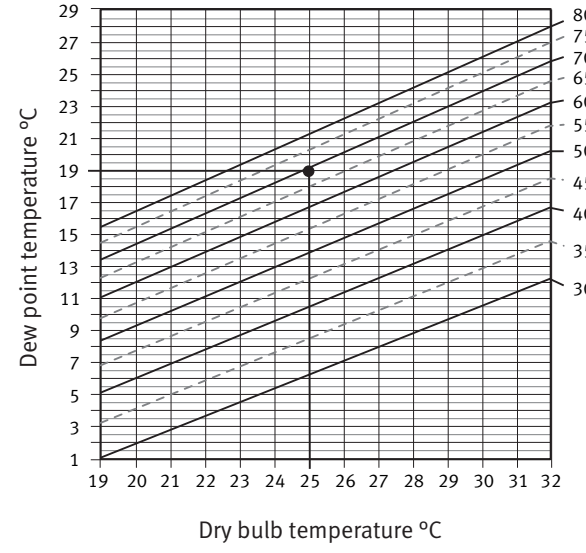
Reduction sound level depending on the content of the room

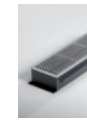


Dry/wet bulb temperature



Determination of the condensation temperature





Clima Canal_Correction factors

Calculation heating

The outputs in this price list are calculated at 75/65/20°C.
At other temperatures the correction factor must be calculated as follows:

$$\frac{\frac{T_a + T_r}{2} - T_l}{50}$$

T_a = flow temperature
T_r = return temperature
T_l = room temperature

Calculation:

$$\frac{\frac{70 + 50}{2} - 20}{50} = 0.8$$

Example

T_a = 70°C
T_r = 50°C
T_l = 20°C

In these circumstances one 800 watts unit will still provide 800 x 0.8 = 640 watts.

Calculation cooling (total cooling)

The outputs in this price list are calculated at 7/12/25°C.
At other temperatures the correction factor must be calculated as follows:

$$\frac{T_l - \frac{T_a + T_r}{2}}{15.5}$$

T_a = flow temperature
T_r = return temperature
T_l = air inlet temperature

Calculation:

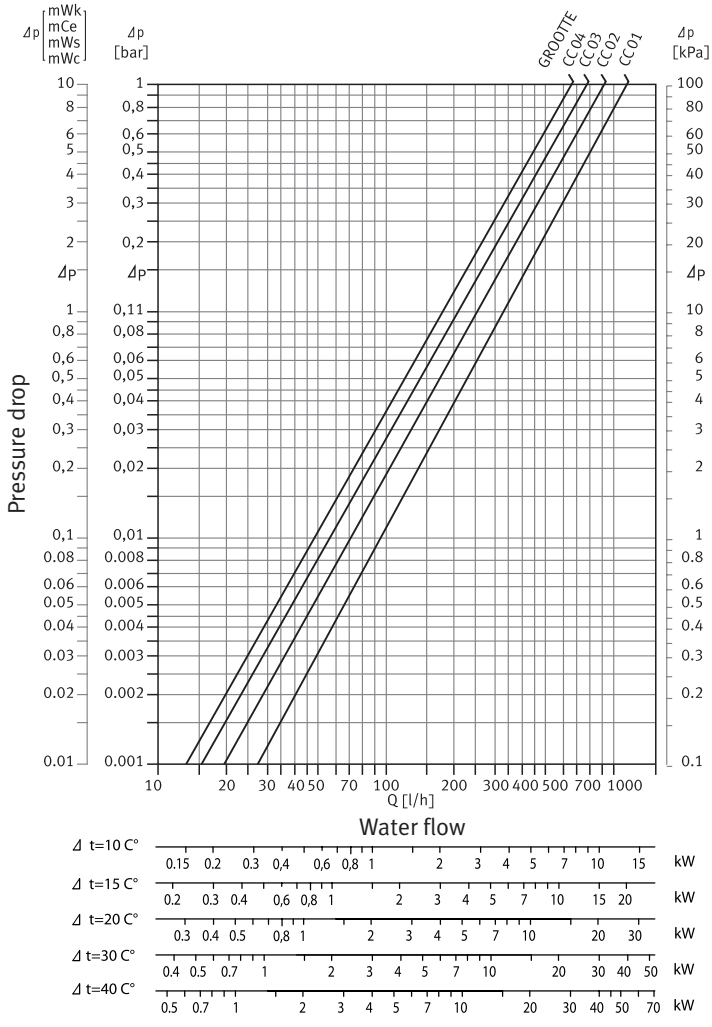
$$\frac{25 - \frac{10 + 14}{2}}{15.5} = 0.839$$

Example

T_a = 10°C
T_r = 14°C
T_l = 25°C

In these circumstances one 320 watts unit will still provide 320 x 0.839 = 268 watts.

Pressure drop

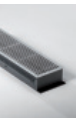


Water content in Litre

Size	L
01	0.120
02	0.279
03	0.439
04	0.598

Clima Canal_Technical info sound

Sound output in db(A) per frequency range



Clima Canal 01

Fan speed RPM ›	2300	2000	1650	1200
Frequency (Hz)				
63	11	8	9	4
125	8	13	11	5
250	18	14	11	6
500	29	26	17	9
1000	31	27	18	7
2000	24	19	13	3
4000	15	12	7	0

Clima Canal 02

Fan speed RPM ›	2300	2000	1650	1200
Frequency (Hz)				
63	14	11	12	7
125	11	16	14	8
250	21	17	14	9
500	32	29	20	12
1000	34	30	21	10
2000	27	22	16	6
4000	18	15	10	3

Clima Canal 03

Fan speed RPM ›	2300	2000	1650	1200
Frequency (Hz)				
63	16	13	14	9
125	13	18	16	10
250	23	19	16	11
500	34	31	22	14
1000	36	32	23	12
2000	29	24	18	8
4000	20	17	12	5

Clima Canal 04

Fan speed RPM ›	2300	2000	1650	1200
Frequency (Hz)				
63	17	14	15	10
125	14	19	17	11
250	24	20	17	12
500	35	32	23	15
1000	37	33	24	13
2000	30	25	19	9
4000	21	18	13	6

Noise level in function of speed

Size	dB(A)					
						Boost
RPM ›	800	1100	1400	1700	2000	2300
01	10	14	19	24	29	34
02	13	17	22	27	32	37
03	15	19	24	29	34	39
04	16	20	25	30	35	40

Air flow per unit
In function of speed

Size	m³/u					
						Boost
RPM ›	800	1100	1400	1700	2000	2300
01	28	39	49	60	70	81
02	56	77	99	120	141	162
03	85	116	148	180	211	243
04	113	155	197	239	282	324