

jaga



*TOP
PERFORMERS*

FREEDOM

€ 2016-2017.EX



TOP PERFORMERS
LOW-H₂O

FREEDOM

Freedom of choice in energy source, installation and application

Effective at the lowest water temperatures

Freedom is super-efficient in combination with any energy source. The lower the water temperature, the clearer the benefits of its power and flexibility! It is the perfect solution for use with heat pumps and new heating systems operating at very low water temperatures.

Compact elegant design

Freestanding Freedom radiators present Jaga's innovative and environmentally friendly Hybrid technology in its most compact and beautiful design yet. From its compact design, it packs a powerful punch and performs much more effectively than a bulky traditional radiator or fan convector and can be sympathetically integrated into any interior design concept.

Heating and cooling

Despite its compact design, Freedom can meet your heating and cooling requirements! It's suitable for non-condensing and condensing cooling using chilled water. Freedom comes fitted with a condensate tray as standard.



COMPACT
Freedom Clima

SMALLEST
Freedom Micro



FREEDOM





THE BEST TECHNOLOGY AND BEAUTIFUL DESIGN IN HARMONY

The casing shell is based on a gently curved, double-skin aluminium profile, resulting in an extremely strong radiator with a stylish and unique design. Elegant aluminium or stainless steel grilles complete the refined finish. Freedom represents the pinnacle of energy-efficiency, sustainability and beautiful design!



PERFECT FOR FREE COOLING

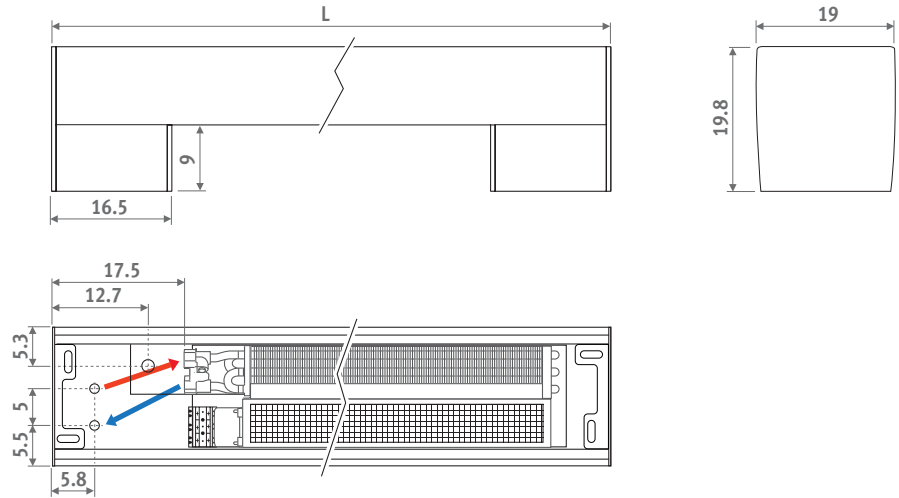
When using water/water heat pumps, summer cooling can be provided using groundwater. This extremely eco-friendly form of cooling will become more and more popular, and may become compulsory in some countries. Freedom is one of the most efficient and environmentally-friendly solutions for this type of climate control



ORDERING CODE

code	height	length	width	colour	colour	grille
FDCF.	020	062	19.	XXX.	XXX	/XXX
	enter casing colour ref.					
	enter cover panel colour ref.					
	enter grille code					

DIMENSIONS (in cm)



STANDARD DELIVERY

Fully pre-mounted free-standing radiator consisting of:

- aluminium casing
- aluminium cover panels
- aluminium grilles
- dynamic heat exchanger with flexible stainless steel connections 1/2", 15 cm long
- 24 VDC tangential activator(s), with integrated stainless steel filter
- hydraulic and electrical connections integrated in the left foot

COLOURS

Scratch resistant epoxy-polyester finish with a structured satin gloss surface. High UV resistance.

Standard colours:

- traffic white RAL 9016 (133), soft touch lightly structured satin lacquer
- sandblast grey (001), fine texture metallic lacquer

Other colours: see colour chart on www.theradiatorfactory.com

HYDRAULIC CONNECTION

- the heat exchangers are same-end connection and are always connected to a two pipe installation on the left hand side, using the stainless steel flexible hoses
- always install Freedom Clima with the heat exchanger on the window side or on the wall side, not on the room side
- allow extra space for curtains between the Freedom casing and the window.
- insulate valve and pipes to prevent condensation when cooling

ELECTRICAL CONNECTION

- 24 VDC clamp connector for electrical connection on the left, to be connected to an external power supply
- speedcontrol activator(s) 0-10 V:
 - Jaga room controller (4 zone(s))
 - thermostat (for heating and cooling) with 0-10 VDC output control (1 zone)
 - through home automation 0-10 VDC

OUTPUTS & PRICES

L	HEATING									COOLING						STANDARD COLOUR		OTHER COLOUR*	
	Watts 75/65/20°C			Watts 55/45/20°C			Watts 35/30/20°C			Watts total 7/12°C - 25°C D.B. 50% R.H.			Watts sensible 7/12°C - 25°C D.B. 50% R.H.			€ Grille Alu /BNA	€ Grille Alu lacquered /BNC/2XX	€ Grille Alu /BNA	€ Grille Alu lacquered /BNC/2XX
	max.	med.	min.	max.	med.	min.	max.	med.	min.	max.	med.	min.	max.	med.	min.				
074	1219	984	653	731	591	392	305	246	163	274	192	131	206	142	95	600,60	690,70	750,80	863,30
110	2438	1969	1305	1463	1181	783	609	492	327	548	385	263	413	285	191	825,80	949,70	1032,20	1187,10
145	3657	2953	1958	2194	1772	1175	914	738	490	822	577	394	619	427	287	1151,20	1323,80	1439,00	1654,70
181	4876	3937	2611	2925	2363	1567	1219	984	653	1096	769	525	826	569	382	1301,30	1496,50	1626,50	1870,70

EN442 output at 20°C room temperature

Correction factors & pressure drop: see "Technical info" chapter

* Applicable when a required colour is not standard See page 323/7

TECHNICAL DATA

L	FAN Number	SOUND PRESSURE*			RATED INPUT			AIR FLOW			WATER FLOW		WEIGHT kg	WATER CONTENT l
		dB(A)			Watts			m³/h			l/h heating	l/h cooling		
		max.	med.	min.	max.	med.	min.	max.	med.	min.				
074	1	41.9	34.6	25.6	4.4	3.2	1.7	100	75	45	107	47	11.5	0.12
110	1	46.1	37.2	26.2	6.7	4.8	2.0	201	151	90	214	94	16.7	0.28
145	2	47.5	39.1	28.9	10.3	6.7	3.5	301	226	135	321	141	20.7	0.44
181	2	49.1	40.2	29.2	12.1	8.3	3.6	401	301	180	428	188	26.7	0.60

* With an assumed room attenuation of 8 dB(A) / content of the room 75 m³ / reverberation time 0.5 sec. / measured at 1 m height and 2 m from the appliance.

Weight and water content without packaging or options

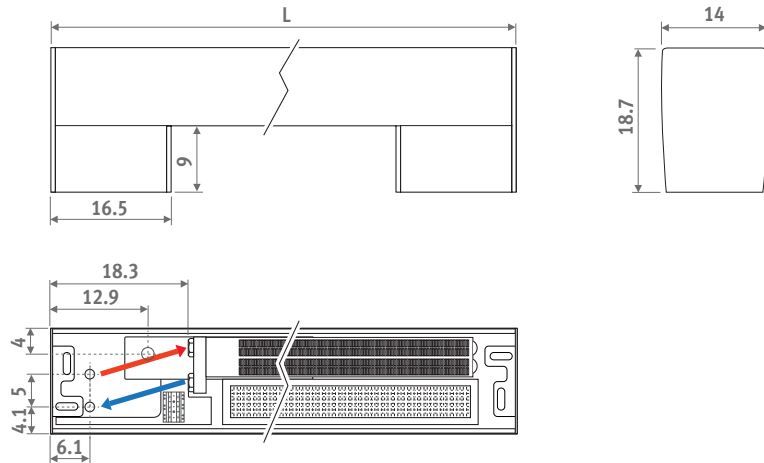
FREEDOM MICRO



ORDERING CODE

code	height	length	width	colour	colour	grille
FDMF.	019	062	14.	XXX.	XXX	/XXX
	enter casing colour ref.					
	enter cover panel colour ref.					
	enter grille code					

DIMENSIONS (in cm)



STANDARD DELIVERY

Fully pre-mounted free-standing radiator consisting of:

- aluminium casing
- aluminium cover panels
- grille in stainless steel
- dynamic heat exchanger with flexible stainless steel connections 1/2", 15 cm long
- 24 VDC tangential activator(s), with integrated stainless steel filter
- hydraulic and electrical connections integrated in the left foot
- automatic activator on/off switch by means of temperature sensor

COLOURS

Scratch resistant epoxy-polyester finish with a structured satin gloss surface. High UV resistance.

Standard colours:

- traffic white RAL 9016 (133), soft touch lightly structured satin lacquer
- sandblast grey (001), fine texture metallic lacquer

Other colours: see colour chart on www.theradiatorfactory.com

HYDRAULIC CONNECTION

- the heat exchangers are same-end connection and are always connected to a two pipe installation on the left hand side, using the stainless steel flexible hoses
- always install Freedom Micro with the heat exchanger on the window side or on the wall side, not on the room side
- allow extra space for curtains between the Freedom casing and the window.
- insulate valve and pipes to prevent condensation when cooling

ELECTRICAL CONNECTION

- 24 VDC clamp connector for electrical connection on the left, to be connected to an external power supply
- Install a thermostat with a volt-free contact to control the water supply with the help of a zone valve.
- Freedom Micro automatically switches on the activators via a temperature sensor.

OUTPUTS & PRICES

L	HEATING			COOLING		STANDARD COLOUR		OTHER COLOUR*	
	Watts 75/65/20°C	Watts 55/45/20°C	Watts 35/30 /20°C	Watts total 7/12°C - 25°C D.B. 50% R.H.	Watts sensible 7/12°C - 25°C D.B. 50% R.H.	€ Grille SS /SSS	€ Grille SS lacquered /SSC/2XX	€ Grille SS /SSS	€ Grille SS lacquered /SSC/2XX
062	424	254	106	64	48	580,60	638,70	725,70	798,40
097	848	509	212	129	97	851,60	936,60	1064,40	1170,70
132	1272	763	318	193	145	1137,10	1250,80	1421,30	1563,50
167	1696	1018	424	257	193	1427,90	1570,70	1784,80	1963,40
202	2120	1272	530	322	242	1708,20	1879,00	2135,20	2348,60

EN442 output at 20°C room temperature

Correction factors & pressure drop: see "Technical info" chapter

* Applicable when a required colour is not standard See page 323/7

TECHNICAL DATA


L	FAN	SOUND PRESSURE* dB(A)	RATED INPUT Watts	AIR FLOW m³/h	WATER FLOW		WEIGHT kg	WATER CONTENT l
	Number				l/h heating	l/h cooling		
062	1	31.0	1.4	52	37	11	8.2	0.09
097	1	31.5	1.9	104	75	22	12.2	0.18
132	1	36.5	2.0	156	112	33	15.7	0.27
167	2	34.5	3.8	208	149	44	19.5	0.36
202	2	37.7	4.0	260	186	55	23.1	0.45

* With an assumed room attenuation of 8 dB(A) / content of the room 75 m³ / reverberation time 0.5 sec. / measured at 1 m height and 2 m from the appliance.

Weight and water content without packaging or options

FREEDOM

CODE STRUCTURE - OVERVIEW COLOUR COMBINATIONS



Freedom Clima FDCF. 020 181 19. 133. 001 /BNA
Freedom Micro FDMF. 019 167 14 133. 001 /SSS

code height length width colour Casing: colour cover panels grille code

Standard colours:
 traffic white RAL 9016 (133)
 sandblast grey (001)

Other colours:
 see colour chart on
www.theradiatorfactory.com

Freedom Clima:
 Grille aluminium natural: BNA
 Grille aluminium lacquered: BNC/2XX
 enter colour code ↴

Freedom Micro:
 Grille stainless steel SSS
 Grille stainless steel lacquered: BNC/2XX
 enter colour code ↴

EXAMPLES

with standard colours



with other colours



Create your own



Design your own print
 For more information: info@jaga.be

COMPOSITION

Natural anodized aluminium grilles with aerodynamically designed fin profiles for improved air movement

Stainless steel grilles with aerodynamically designed fin profiles for improved air movement

Dynamic Low-H₂O heat exchanger in copper and aluminium, electrostatically black painted. With "click" steel fastening for easy maintenance

Stainless steel flexible connections 1/2", 15 cm long

Condensate tray with outlet spigot ø 10 mm

Electrical connection

Integrated air filter in stainless steel, with steel click fixing for easy maintenance

Tangential activator(s) with ball-bearing 24VDC EC-motorsaving up to 50% in electricity consumption. With soundproof EPDM damper

Inner casing in black painted steel plate

Cover-up panels in aluminium

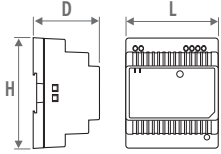
Casing in double-skin aluminium

FREEDOM CLIMA & MICRO - OPTIONS

POWER SUPPLY



The guarantee is only valid if the original Jaga power supply is used.



CODE	H	L	D
7990.050	9.3	7.8	5.6
7990.051	9.3	7.8	5.6
7990.052	9.3	10.0	5.6
7990.053	12.5	12.6	8.3

- for DIN-rail or wall mounting
- conformity: UL60950 - EN 60950 / Class 2
- output voltage 24 VDC
- input voltage 100 - 240 VAC
- screw connection
- LED indicator

CODE	output Watts	Output current A	€
7990.050	36	1.5	85,20
7990.051	60	2.5	109,10
7990.052	100	4.2	132,70
7990.053	240	10.0	147,00

Required power = sum of the power consumption of the devices

CONNECTION SETS

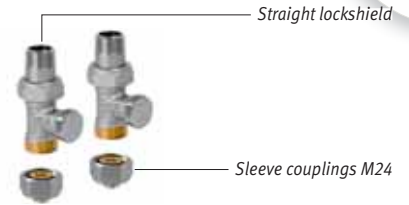
With Jaga valve and lockshield M24



- 24 VDC thermoelectric drive
- valve G1/2" x M24 180°
- lockshield G1/2" x M24 180°
- pressure drop graph Jaga valve: see p. 176

set 94	TWO PIPE	€
CODY.AA4.24.3...	24 VDC	85,50
CODY.AA4.10.3...	24 VDC (0-10 V)	158,70
fill in sleeve coupling code see p. 167		

With 2 lockshields M24



set 91	TWO PIPE	€
CODY.LOS.00.3...		38,00
fill in sleeve coupling code see p. 167		

MAXIMUM CABLE LENGTH

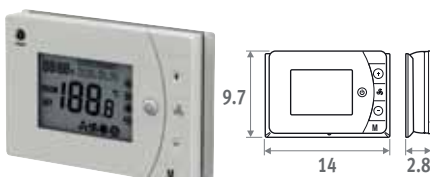
in function of the number of devices: see <http://catalogue.theradiatorfactory.com/ex#freedom>

FREEDOM CLIMA - OPTIONS

CLOCK THERMOSTATS HEATING / COOLING

- automatic thermostat for 2-pipe: heating/cooling or auto
- ventilator speed: min./med./max. or auto
- power supply 24 VDC
- output control(s) 0-10 VDC
- 1 clock thermostat per room
- 3 programmable zones: 5+1+1
- LCD display with background lighting
- protection category IP30

Jaga clock thermostat for wall mounting



- suitable for use in combination with control for multiple rooms (7990.035)
- 2 potential-free contacts heating/cooling (f.e. valve control 24 VDC or 230 VAC)
- with key card contact / window contact
- can be mounted on a junction box with screw holes at 6 cm

CODE	€
8751.050013 wall mounted	71,30

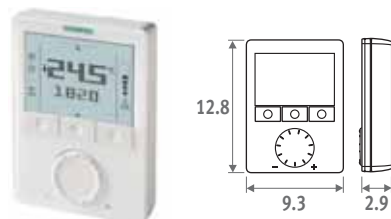
Jaga clock thermostat for recessed/panel mounting



- DO NOT USE in combination with control for multiple rooms (7990.035)
- control valves 24 VDC heating/cooling
- thermostat to be mounted in a junction box
 - spacing holes at 6 cm
 - minimum depth 4.5 cm
 - inner dimension 5 x 5 cm or Ø 6 cm

CODE	€
8751.050012 recessed/panel mounted	75,50

Siemens clock thermostat for wall mounting



- unlimited adjustment possibilities: 74 features and diagnostic test

Detailed information: downloads.theradiatorfactory.com/downloadcenter/general/SiemensRDG160T.zip

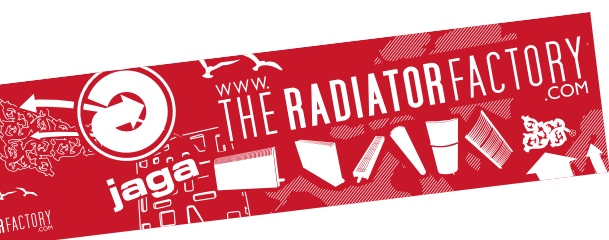
CODE	€
8751.050009 wall mounted	223,70

CONTROL FOR MULTIPLE ROOMS



- control for:
 - max. 4 zones
 - heating AND cooling with three-way valves
 - heating OR cooling with one two-way valve per room
 - fans via 0-10 VDC signal
 - only manual speed control of the fan(s) per room by separate rotary knob
- use thermostats fitted with a potential-free contact
- with built-in power supply 24 VDC - 50 watts, use an external power supply when higher output is required (see above)
- contacts by screw connectors
- LED display per area
- din rail mountable
- degree of protection: IP20 - EN 60529

CODE	€
7990.035	471,90



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All prices in Euro, exclude VAT. Prices valid from 1st August 2016.
Replaces all existing price lists.