



















## **# fondital**



Fondital is the first manufacturer of die-cast aluminium radiators worldwide as well as the international leader in heating systems.

This is the result of the focus on sustainable innovation in R&D, production renewal related to study of the products, the constant development and training of human resources and the attention to well-being of its employees.

Fondital establishes with its clients strategic partnerships that go beyond a simple supplier-client relationship, but are based on information sharing and customer orientation, maintaining focus on environmental sustainability.











### VISION

We want to be an innovative company in the production of efficient and sustainable products, creating strong partnerships with our stakeholders, enhancing our local roots to be a global reference.



### MISSION

Our mission is to produce heating systems and structural castings for the automotive sector, manufacturing high-quality products using the latest industrial technologies. We are committed to operating efficiently, minimising our energy consumption and promoting sustainable processes that respect the environment. We also want to be a centre of expertise and added value for the territory in which we operate.

### FONDITAL WORLDWIDE

Fondital is market leader internationally. Multilingual staff and representation offices assure a constant presence on the global market, as evidence of its customer oriented vision. Fondital is constantly growing,

thanks to its ability to interpret customer needs and changes, and to the ability to constantly adapt its supply to the new end market needs with process and product innovations.



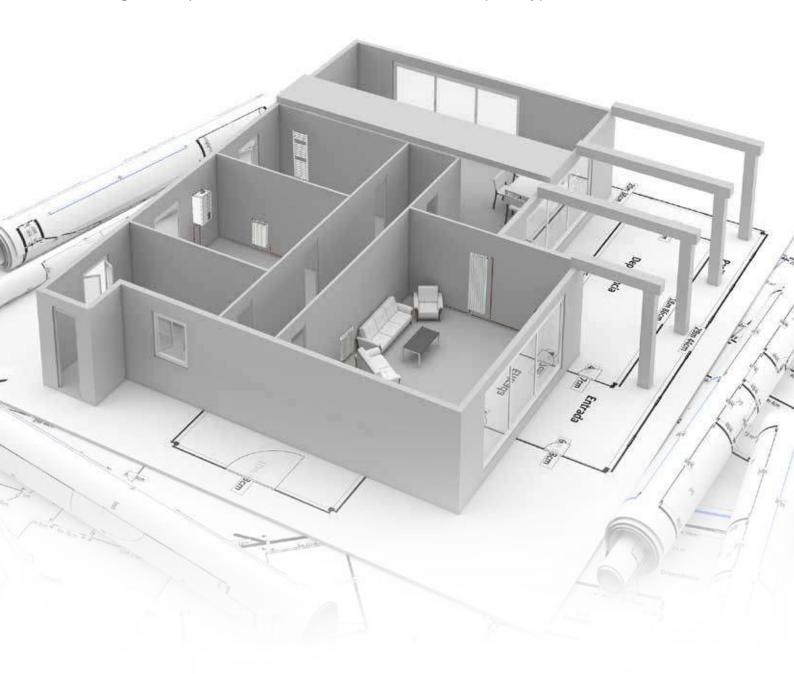


## **FONDITAL AND BIM:**

### INNOVATION IN PROJECT DESIGN

The entire catalogue of radiators and boilers has been added to BIMobject, the world's largest platform of BIM content.

Therefore, you can download the product files and insert them into the desired project by directly accessing all the specific and detailed information for each prototype.





Download the Fondital products from www.bimobject.com/en/fondital

### PAINTING AND FINISHING PHASES

The painting process of Fondital radiators was developed in detail with the aim of ensuring an exemplary final result in terms of both aesthetic look and metal protection. Painting is crucial to protect the metal from the corrosion that could be triggered by particles in the air of the room where the radiator is installed.

With the aim to obtain flawless results, Fondital relies on a process including two coating phases: the first one is an anaphoretic coating dip and is essential for metal protection, while the second one is carried out by spraying and increases the protection degree, lending the product the desired finish and look.



## FONDITAL PRODUCTS



CONDENSING BOILERS DIE-CAST RADIATORS





STANDARD BOILERS

**EXTRUDED** RADIATORS







WATER HEATER

TOWEL RAIL RADIATORS







**HEAT PUMPS** 

DESIGN RADIATORS







SOLAR THERMAL SYSTEMS ELECTRIC RADIATORS







HOT WATER STORAGE TANKS CONVECTIVE GAS STOVES



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#### **SYMBOLS**



#### **LOW THERMAL INERTIA**

The low thermal inertia proper of aluminum, makes the Fondital Radiators the perfect heating body to achieve an installation capable of giving a quick and precise response to temperature variations in the room. This aspect, best highlighted in low temperature installations, is reflected in a better comfort and considerable savings both energetic and economic.



#### **LOW WATER CONSUMPTION**

Compared with steel or iron radiators, Fondital's aluminum radiators stand out for a lower water content. This characteristic allows the installation to reach the desired temperature quicker using a lower quantity of combustible at the same time, resulting once again in an energetic and economic saving for the user.



#### **VERSATILITY**

The technical properties of aluminum, make Fondital radiators perfectly compatible with all tecent technologies in heating production, as consensing boilers and heat pumps, prooving to be the perfect solution both in replacements and new buildings.



#### **EASY TO STOCK AND INSTALL**

Fondital radiators, assemblable at will based on different demands, allow you to have a more functional warehouse, in terms of number of section for battery. Furthermore, in case you need to adjust the energetic demand of a space, you'd be able to simply add or remove aluminum sections without any intrusive renovation work. Moreover, aluminum's lightweight allows an easier handling and installation of the radiator.



#### **100% MADE IN ITALY QUALITY**

Fondital manufactures its radiators in Italy, using just certificated raw materials. The aluminum used to create the radiators is provided directly in liquid state by Raffmetal, and respects the UNI EN 1676:1998 European legislations, with values of the chemical composition specific of EN AB 46100 and EN AB 46000 alloys.



#### **CORROSION RESISTANCE**

Durability tested at 200 hours in a saline environment, twice as long as required by UNI EN 442.



#### 100% RECYCLABLE ECO-FRIENDLY PRODUCT

The aluminum used to produce Fondital's radiators is 100% recycled and 100% recyclable itself. This is the only possible way to provide to our customers a totally eco-friendly product, made in complete respect of the environment.



#### **DOUBLE PAINTING: ANAPHORESIS + EPOXY POWDERS**

The signature look of Fondital's radiators is made possible by a double painting process that ensures the brightness and integrity of the radiator through time. In detail, applying the first coating of anaphoretic painting ensures a better grip throughout the surface of the radiator, making its quality and color unalterable. The second epoxy powder coating gives the standard white RAL 9010 color, making every single section the same shade and brightness, ensuring a perfect match even when assemblying sections form different batteries.



#### **WORKING PRESSURE**

Fondital's radiators are internationally thought and able to adapt to every market, this is reflected in their operating characteristics: Max working pressure 16 bar, testing pressure of 24 bar on 100% of production, burst pressure reached in laboratory of 60 bar.



#### WARRANTY

Using certificated aluminum alloys and the innovative production and control process that Fondital operates, allow us to offer a 10 years warranty on die cast and home-furnishing radiators, extending up to 20 years for the models treated with the anti-corrosion system Aleternum, and 12-15 years for design radiators.



#### **PATENTS**

Standing out among the numerous international patents that Fondital's products possess, the new thermoelectric joining technology, that makes our radiators even more resistant, better looking and ecofriendly, and the anti-corrosion internal treatment Aleternum, that ensures a perfect functioning in a wider water pH range, compared with the one of untreated aluminum or steel.



#### **BOTTOM CONNECTION**

An installation kit is available to connect the radiator in systems with hydraulic connections from the bottom, according to standard, at a distance of 50 mm of steel plate radiators. The kit includes an integral valve with thermostat option.





## **DIE-CAST RADIATORS**

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## Aleternum® B4





Low thermal inertia



Low water content



Versatility



Maximum working pressure



4 internatonal patents

#### Non-disassemblable product.





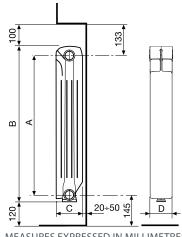


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Standard supply	800: from 3 to 10 sections 700: from 3 to 12 sections 600/500/350: from 3 to 14 sections
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar
Aleternum treatment	Supplied as standard

All models **Aleternum B4** are guaranteed **20 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output								
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70				
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.				
350/100	47,2	67,9	89,9	113,1	137,3				
500/100	64,1	92,8	123,8	156,5	190,9				
600/100	74,0	107,5	143,6	182,0	222,3				
700/100	83,1	120,7	161,3	204,5	249,8				
800/100	91,1	132,7	177,7	225,6	276,0				



MEASURES	<b>EXPRESSED</b>	INIA	ALL LIMETRE
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Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.	n	Km
350/100	V701014	97	407	350	80	G1	0,20	1,2598	0,6506
500/100	V701034	97	558	500	80	G1	0,26	1,2890	0,7991
600/100	V701044	97	658	600	80	G1	0,31	1,2981	0,8950
700/100	V701054	97	758	700	80	G1	0,36	1,2998	0,9986
800/100	V701064	97	858	800	80	G1	0,39	1,3085	1,0635

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 $^{\circ}$ C

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

Item		Description	Code
8.8	A 80	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal	550103
0.0	A 81	The radiator fixing kit includes: 2 Rh G ½" adapters; 2 Lh G ½" adapters, galvanized and painted; 4 sealing gaskets; 1 G ½" manual bleed valve with seal; 1 G ½" blind plug with seal; 3 brackets	550104
•	A 2/1	RH/LH G 1"Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105
0	A 11/1	1" Seals for plugs (without asbestos)	530108
a ii	A 20	Kit with two adjustable coated brackets	550037

For other accessories, see from page  $73\,$ 









Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure



3 internatonal patents

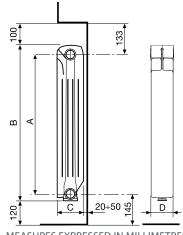




Standard supply	800: from 3 to 10 sections 700: from 3 to 12 sections 600/500/350: from 3 to 14 sections
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar

All models **Calidor Super B4** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output							
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔΤ 70			
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.			
350/100	47,2	67,9	89,9	113,1	137,3			
500/100	64,1	92,8	123,8	156,5	190,9			
600/100	74,0	107,5	143,6	182,0	222,3			
700/100	83,1	120,7	161,3	204,5	249,8			
800/100	91,1	132,7	177,7	225,6	276,0			



MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.	n	Km
350/100	V690014	97	407	350	80	G1	0,20	1,2598	0,6506
500/100	V690034	97	558	500	80	G1	0,26	1,2890	0,7991
600/100	V690044	97	658	600	80	G1	0,31	1,2981	0,8950
700/100	V690054	97	758	700	80	G1	0,36	1,2998	0,9986
800/100	V690064	97	858	800	80	G1	0,39	1,3085	1,0635

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 $^{\circ}$ C

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

Item		Description	Code
8.8	A 80	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal	550103
0.0	A 81	The radiator fixing kit includes: 2 Rh G ½" adapters; 2 Lh G ½" adapters, galvanized and painted; 4 sealing gaskets; 1 G ½" manual bleed valve with seal; 1 G ½" blind plug with seal; 3 brackets	550104
•	A 2/1	RH/LH G 1"Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105
0	A 11/1	1" Seals for plugs (without asbestos)	530108
a ii	A 20	Kit with two adjustable coated brackets	550037

For other accessories, see from page 73











Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure



3 internatonal patents



SIDE KIT, AVAILABLE ON REQUEST AS AN ACCESSORY (AVAILABLE IN WHITE RAL 9010 ONLY)

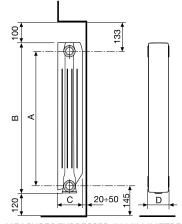




Standard supply	800: from 3 to 10 sections 700: from 3 to 12 sections 600/500/350: from 3 to 14 sections			
Colours	RAL 9010 White			
Maximum working pressure	16 bar			
Test pressure	24 bar			

All models **Blitz Super B4** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

			Heat output		
Model	ΔT 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.
350/100	48,0	69,4	92,4	116,8	142,3
500/100	63,7	92,7	124,0	157,2	192,1
600/100	73,8	107,3	143,5	181,9	222,3
700/100	82,6	120,9	162,5	206,8	253,6
800/100	90,3	132,4	178,2	227,1	278,8



MEASURES EXPRESSED IN MILLIMETRES

Model	Code RAL 9010	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
	White	(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.	n	Km
350/100	V693014	97	407	350	80	G1	0,24	1,2818	0,6139
500/100	V693034	97	557	500	80	G1	0,27	1,3027	0,7587
600/100	V693044	97	657	600	80	G1	0,29	1,3015	0,8822
700/100	V693054	97	757	700	80	G1	0,35	1,3238	0,9155
800/100	V693064	97	857	800	80	G1	0,38	1,3301	0,9796

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 °C

Characteristic equation of the model  $\Phi=Km \Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

ltem		Description	Code
000	A 80	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal	550103
0.00	A 81	The radiator fixing kit includes: 2 Rh G ½" adapters; 2 Lh G ½" adapters, galvanized and painted; 4 sealing gaskets; 1 G ½" manual bleed valve with seal; 1 G ½" blind plug with seal; 3 brackets	550104
	A 2/1	RH/LH G 1" Nipple	510011
0	A 10/1	"Seals for nipples (without asbestos)	
0	A 11/1	"Seals for plugs (without asbestos)	
	A 20	Kit with two adjustable coated brackets	550037
	-	Side kit 350 mm - Colour: White RAL 9010	550360
HM.	-	Side kit 500 mm - Colour: White RAL 9010	550361
	-	Side kit 600 mm - Colour: White RAL 9010	
	-	Side kit 700 mm - Colour: White RAL 9010	550363
FW-0.5	-	Side kit 800 mm - Colour: White RAL 9010	550364













BLACK COFFEE TEXTURED MATT PEARLED ARDESIA TEXTURED MATT



Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure



Available in 3 colors

CC

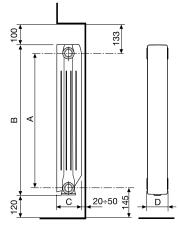


Standard supply	800: from 3 to 10 sections 700: from 3 to 12 sections 600/500/350: from 3 to 14 sections		
Colours	Black coffee textured matt Pearl pearled Ardesia textured matt		
Maximum working pressure	16 bar		
Test pressure	24 bar		

Combinable with the models **Garda S/90 coloured**, see p. 40

All models **Blitz Super B4** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

			Heat output		
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.
350/100	48,0	69,4	92,4	116,8	142,3
500/100	63,7	92,7	124,0	157,2	192,1
600/100	73,8	107,3	143,5	181,9	222,3
700/100	82,6	120,9	162,5	206,8	253,6
800/100	90,3	132,4	178,2	227,1	278,8



MEASURES EXPRESSED IN MILLIMETRES

Model	Code (*)	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.	n	Km
350/100	VC05xxx14	97	407	350	80	G1	0,24	1,2818	0,6139
500/100	VC05xxx34	97	557	500	80	G1	0,27	1,3027	0,7587
600/100	VC05xxx44	97	657	600	80	G1	0,29	1,3015	0,8822
700/100	VC05xxx54	97	757	700	80	G1	0,35	1,3238	0,9155
800/100	VC05xxx64	97	857	800	80	G1	0,38	1,3301	0,9796

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 °C

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta\mathsf{T}^{\mathsf{n}}$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body  $N^0$ 1695.

#### (\*) Add the code of the colour instead of xxx

( )	,					
BLACK COFFEE TEXTURED MATT	PEARL PEARLED	ARDESIA TEXTURED MATT				
Cod. 3V0	Cod. 4N0	Cod. 3B0				

Item		Description	Code
	-	Plug and 1/2" adapters kit - Colour: BLACK COFFEE TEXTURED MATT 2 Rh G ½" adapters; 2 Lh G ½" adapters; 4 sealing gaskets; 1 G ½" bleed valve; 1 Rh G 1" blind plug with seat for sealing gasket; 1 Lh G 1" blind plug with seat for sealing gasket; 2 brackets	550129V
	-	Plug and 1/2" adapters kit - Colour: PEARL PEARLED 2 Rh G ½" adapters; 2 Lh G ½" adapters; 4 sealing gaskets; 1 G ½" bleed valve; 1 Rh G 1" blind plug with seat for sealing gasket; 1 Lh G 1" blind plug with seat for sealing gasket; 2 brackets	550129NP
	-	Plug and 1/2" adapters kit - Colour: ARDESIA TEXTURED MATT 2 Rh G ½" adapters; 2 Lh G ½" adapters; 4 sealing gaskets; 1 G ½" bleed valve; 1 Rh G 1" blind plug with seat for sealing gasket; 1 Lh G 1" blind plug with seat for sealing gasket; 2 brackets	550129E
	A 2/1	RH/LH G 1"Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105
0	A 11/1	1" Seals for plugs (without asbestos)	530108













Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure



3 internatonal patents







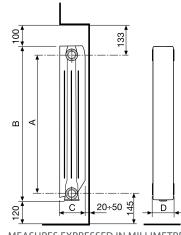
14 sections		
е		

4RRP

Standard supply	500: from 3 to 14 sections
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar

All models Blitz B3 are guaranteed 10 years from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output							
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70			
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.			
500/100	62,3	89,9	119,5	150,8	183,6			



MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.		Km
500/100	V659034	97	557	500	80	G1	0,26	1,2767	0,8097

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 °C

Characteristic equation of the model  $\Phi=\text{Km }\Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

ltem		Description	Code
000	A 80	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal	550103
8.8	A 81	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal; 3 brackets	550104
	A 2/1	RH/LH G 1" Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105
0	A 11/1	1" Seals for plugs (without asbestos)	530108
	A 20	Kit with two adjustable coated brackets	550037
	-	Side kit 500 mm - Colour: White RAL 9010	550361

For other accessories, see from page 73









Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure



3 internatonal patents

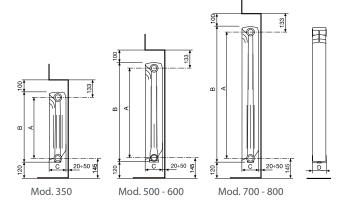




Standard supply	800: from 3 to 10 sections 700: from 3 to 12 sections 600/500/350: from 3 to 14 sections
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar

All models Exclusivo are guaranteed 10 years from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output								
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔΤ 70				
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.				
350/100	47,3	68,6	91,5	115,8	141,3				
500/100	59,5	86,0	114,5	144,6	176,2				
600/100	68,9	100,0	133,5	169,1	206,4				
700/100	77,1	112,0	149,5	189,4	231,3				
800/100	85,2	124,0	166,0	210,7	257,7				



#### MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.	n	Km
350/100	V680014	97	407	350	80	G1	0,21	1,2910	0,5865
500/100	V710034	97	556	500	80	G1	0,26	1,2823	0,7588
600/100	V710044	97	657	600	80	G1	0,29	1,2953	0,8410
700/100	V666054	97	757	700	80	G1	0,39	1,2970	0,9358
800/100	V666064	97	857	800	80	G1	0,43	1,3070	0,9992

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 $^{\circ}$ C

Characteristic equation of the model  $\Phi=Km\ \Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

ltem		Description	Code
0.0	A 80	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal	550103
	A 81	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal; 3 brackets	550104
	A 2/1	RH/LH G 1"Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105
0	A 11/1	1" Seals for plugs (without asbestos)	530108
	A 20	Kit with two adjustable coated brackets	550037

For other accessories, see from page 73



## Master





Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure



3 internatonal patents



Mod. 350/700/800



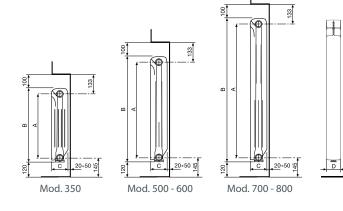
Mod. 500/600



Standard supply	800: from 3 to 10 sections 700: from 3 to 12 sections 600/500/350: from 3 to 14 sections
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar

All models **Master** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output								
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔΤ 70				
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.				
350/100	47,2	67,9	89,9	113,1	137,3				
500/100	59,5	86,0	114,4	144,5	176,1				
600/100	67,8	98,5	131,5	166,5	203,3				
700/100	77,7	112,3	149,5	188,9	230,2				
800/100	85,1	123,6	165,0	209,0	255,3				



#### MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.	n	Km
350/100	V686014	97	407	350	80	G1	0,20	1,2598	0,6506
500/100	V715034	97	557	500	80	G1	0,25	1,2813	0,7613
600/100	V715044	97	657	600	80	G1	0,29	1,2957	0,8270
700/100	V662054	97	757	700	80	G1	0,39	1,2819	0,9928
800/100	V662064	97	857	800	80	G1	0,42	1,2962	1,0360

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 $^{\circ}$ C

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta\mathsf{T}^n$ 

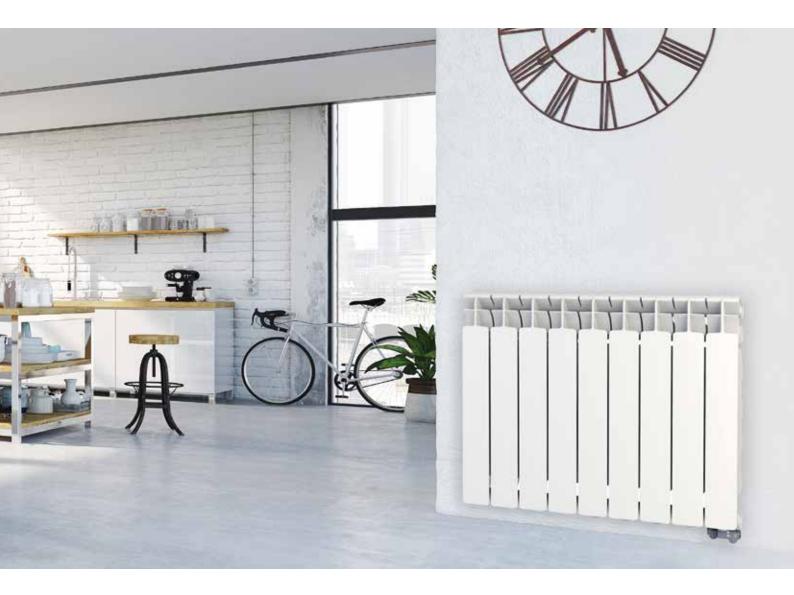
The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

Item		Description	Code
0.0	A 80	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal	550103
<b>6.6</b>	A 81	The radiator fixing kit includes: 2 Rh G ½" adapters; 2 Lh G ½" adapters, galvanized and painted; 4 sealing gaskets; 1 G ½" manual bleed valve with seal; 1 G ½" blind plug with seal; 3 brackets	550104
	A 2/1	RH/LH G 1" Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105
0	A 11/1	1" Seals for plugs (without asbestos)	530108
	A 20	Kit with two adjustable coated brackets	550037

For other accessories, see from page 73



### RADIATOR WITH BOTTOM CONNECTION





Low thermal inertia



Low water content



**Bottom connection** 



Easy to stock and install



Maximum working pressure



**Exclusive patent** 





#### Radiator with bottom connection is made of:

- standard composition (A)
- single section with right (B) or left (C) bottom connection
- valve (D)

The three articles need to be ordered separately and assembled by the installer.

For the codes, see the following page.





All models are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.



#### **RADIATOR WITH A RIGHT BOTTOM CON-NECTION**

ELEMENT:

RADIATOR MODEL WITH ACCESSORY KIT RIGHT BOTTOM CONNECTION INCLUDED (B) VALVE KIT (D) (TO BE ORDERED SEPARATELY)

#### RADIATOR WITH A LEFT BOTTOM CON-**NECTION**

ELEMENT:

RADIATOR MODEL WITH ACCESSORY KIT LEFT BOTTOM CONNECTION INCLUDED (C)

VALVE KIT (D) (TO BE ORDERED SEPARATELY)



#### **CODE OBTAINING EXAMPLE**

To create a composition Calidor Super B4 600/100 with 10 sections with right bottom connection and a bottom connection valve with bypass, please order:

- 1 radiator Calidor Super B4 600/100 with **9** sections: **V69004409** (see page 15)
- 1 section with right bottom connection: **V690044DX** (see the following tables)
- 1 bottom connection valve kit with bypass: **520205DS** (see the table at the end of the page)

V710044SX

Model Calidor Super B4	Code
350/100 DX	V686014DX
350/100 SX	V686014SX
500/100 DX	V690034DX
500/100 SX	V690034SX
600/100 DX	V690044DX
600/100 SX	V690044SX
700/100 DX	V690054DX
700/100 SX	V690054SX
800/100 DX	V690064DX
800/100 SX	V690064SX

Model Blitz Super B4	Code
350/100 DX	V693014DX
350/100 SX	V693014SX
500/100 DX	V693034DX
500/100 SX	V693034SX
600/100 DX	V693044DX
600/100 SX	V693044SX
700/100 DX	V693054DX
700/100 SX	V693054SX
800/100 DX	V693064DX
800/100 SX	V693064SX

For the heat output values see corresponding model on page 15

Exclusivo	Code
350/100 DX	V680014DX
350/100 SX	V680014SX
500/100 DX	V710034DX
500/100 SX	V710034SX
600/100 DX	V710044DX

For the heat output values see corresponding model on page 17

Model Master	Code
350/100 DX	V686014DX
350/100 SX	V686014SX
500/100 DX	V715034DX
500/100 SX	V715034SX
600/100 DX	V715044DX
600/100 SX	V715044SX

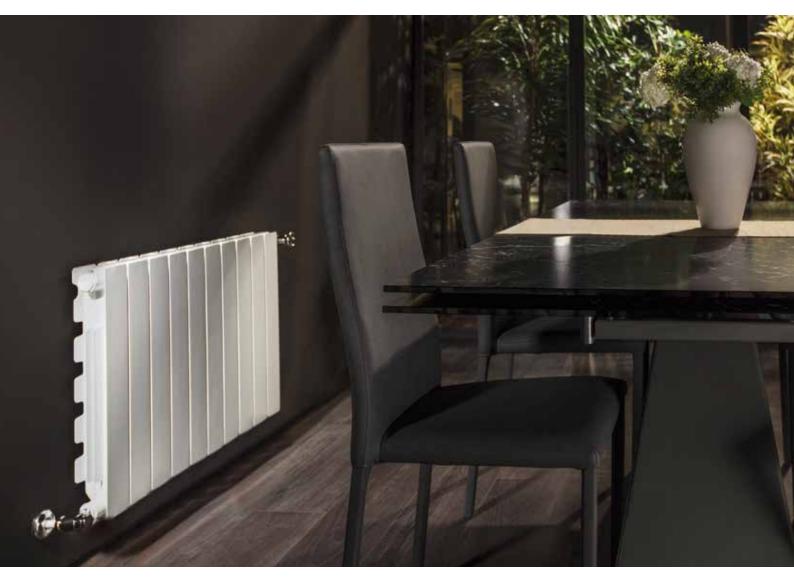
For the heat output values see corresponding model on page 23

600/100 SX

For the heat output values see corresponding model on page 25

ltem	Description	Code
	RH-LH VALVE BOTTOM TO WALL FITTING KIT  - H-valve with 50-mm pitch  - 3/4 Eurocone threads  - Material nickel-plated brass with check valve  - With screws/O-rings to install bottom fitting element	520215M
	RH-LH VALVE BOTTOM TO FLOOR FITTING KIT  - H-valve with 50-mm pitch  - 3/4 Eurocone threads  - Material nickel-plated brass with check valve  - With screws/O-rings to install bottom fitting element	520216P
	RH-LH VALVE BOTTOM FITTING KIT WITH BYPASS  - H-valve with 50-mm pitch  - 3/4 Eurocone threads  - Material nickel-plated brass with closing device and adjustable bypass  - With screws/O-rings to install bottom fitting element  - Adjustable bypass for single-pipe system	520205DS







Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure



3 internatonal patents

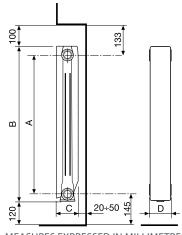




Standard supply	800: from 3 to 10 sections 700: from 3 to 12 sections 600/500: from 3 to 14 sections
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar

All models **Blitz80 B2** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output								
Model	ΔΤ 30	ΔΤ 40	ΔΤ 50	ΔΤ 60	ΔΤ 70				
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.				
500/80	51,3	74,2	98,8	124,8	152,2				
600/80	58,6	85,1	113,5	143,7	175,5				
700/80	67,2	97,6	130,4	165,3	201,9				
800/80	74,5	108,2	144,7	183,3	224,0				



MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.	n	Km
500/80	V617134	77	557	500	80	G1	0,25	1,2833	0,6524
600/80	V617144	77	657	600	80	G1	0,28	1,2935	0,7203
700/80	V617154	77	757	700	80	G1	0,39	1,2993	0,8088
800/80	V617164	77	857	800	80	G1	0,44	1,2995	0,8966

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 °C

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

Item		Description	Code
0.0	A 80	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal	550103
0.00	A 81	The radiator fixing kit includes: 2 Rh G ½" adapters; 2 Lh G ½" adapters, galvanized and painted; 4 sealing gaskets; 1 G ½" manual bleed valve with seal; 1 G ½" blind plug with seal; 3 brackets	550104
	A 2/1	RH/LH G 1" Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105
0	A 11/1	1" Seals for plugs (without asbestos)	530108
	A 20	Kit with two adjustable coated brackets	550037

For other accessories, see from page  $73\,$ 



## Calledon 80





Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure



3 internatonal patents



Mod. 500



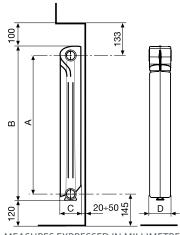
Mod. 600/700/800



Standard supply	800: from 3 to 10 sections 700: from 3 to 12 sections 600/500/350: from 3 to 14 sections
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar

All models **Calidor80 B2** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output								
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔΤ 70				
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.				
500/80	51,8	75,1	100,2	126,9	154,8				
600/80	59,8	86,4	114,9	145,1	176,6				
700/80	68,7	99,6	132,7	167,8	204,7				
800/80	75,6	109,9	147,1	186,5	228,0				



MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.	n	Km
500/80	V622134	77	556	500	80	G1	0,24	1,2935	0,6358
600/80	V622144	77	658	600	80	G1	0,28	1,2774	0,7765
700/80	V622154	77	757	700	80	G1	0,39	1,2878	0,8608
800/80	V622164	77	858	800	80	G1	0,42	1,3031	0,8984

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 °C

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

Item		Description	Code
8.8	A 80	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal	550103
0.0	A 81	The radiator fixing kit includes: 2 Rh G ½" adapters; 2 Lh G ½" adapters, galvanized and painted; 4 sealing gaskets; 1 G ½" manual bleed valve with seal; 1 G ½" blind plug with seal; 3 brackets	550104
•	A 2/1	RH/LH G 1"Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105
0	A 11/1	1" Seals for plugs (without asbestos)	530108
a ii	A 20	Kit with two adjustable coated brackets	550037

For other accessories, see from page  $73\,$ 



# arde**/**te





Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure



3 internatonal patents

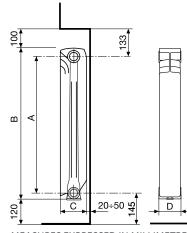




600/500: from 3 to 14 sections
RAL 9010 White
16 bar
24 bar

All models **Ardente C2** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output					
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70	
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.	
500/100	57,0	82,4	109,8	138,7	169,0	
600/100	66,2	95,7	127,5	161,2	196,5	



MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.	n	Km
500/100	V639034	97	556	500	80	G1	0,26	1,2835	0,7240
600/100	V639044	97	656	600	80	G1	0,29	1,2851	0,8361

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 $^{\circ}\text{C}$

Characteristic equation of the model  $\Phi=\text{Km }\Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

Item		Description	Code
8.0	A 80	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal	550103
0.0	A 81	The radiator fixing kit includes: 2 Rh G ½" adapters; 2 Lh G ½" adapters, galvanized and painted; 4 sealing gaskets; 1 G ½" manual bleed valve with seal; 1 G ½" blind plug with seal; 3 brackets	550104
	A 2/1	RH/LH G 1" Nipple	
0	A 10/1	1" Seals for nipples (without asbestos)	
0	A 11/1	1" Seals for plugs (without asbestos)	
	A 20	Kit with two adjustable coated brackets	550037

For other accessories, see from page  $73\,$ 







#### **Advantages of aluminium**

- Lightweight radiator
- Modern and appealing design
- 100% recyclable
- Great thermal conductor









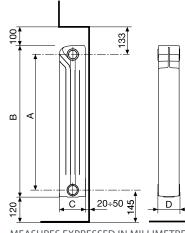
#### **Advantages of steel**

- High resistance to corrosion
- Maximum working pressure 40 bar
- Bursting pressure 120 bar
- Radiator maximum lifetime: 30 years
- Possible use of different vector fluids as water, oil, antifreeze liquid and steam

Standard supply	500: 6, 8, 10, 12 sections
Colours	RAL 9010 White
Maximum working pressure	40 bar

All models **Alustal** are guaranteed **20 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output					
Model	ΔΤ 30	ΔT 50	ΔΤ 70			
	W/sect.	W/sect.	W/sect.			
500/100	59,4	116,8	182,0			



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Model Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient	
	(C) mm	(B) mm	(A) mm	(D) mm	inches	litres/sect.	n	Km	
500/100	V901034	97	559	500	80	G1	0,18	1,3248	0,6557

## Maximum working pressure: 4000 kpa (40 bar)

Characteristic equation of the model  $\Phi=\text{Km }\Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442.

Item		Description	Code
0.0	A 80	The radiator fixing kit includes: 2 Rh G $\frac{1}{2}$ " adapters; 2 Lh G $\frac{1}{2}$ " adapters, galvanized and painted; 4 sealing gaskets; 1 G $\frac{1}{2}$ " manual bleed valve with seal; 1 G $\frac{1}{2}$ " blind plug with seal	550103
<b>6.6</b>	A 81	The radiator fixing kit includes: 2 Rh G ½" adapters; 2 Lh G ½" adapters, galvanized and painted; 4 sealing gaskets; 1 G ½" manual bleed valve with seal; 1 G ½" blind plug with seal; 3 brackets	550104
	A 2/1	RH/LH G 1" Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105
0	A 11/1	1" Seals for plugs (without asbestos)	530108
	A 20	Kit with two adjustable coated brackets	550037

For other accessories, see from page 73





# **EXTRUDED RADIATORS**

Garda S/90	page 38
Garda S/90 - Coloured	page 40
Garda Dual 80	page 42
Garda S/90 Aleternum	page 44
Garda Dual 80 Aleternum	page 46
Garda S/90 AC	page 48











Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure

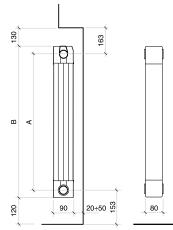




Standard supply	3, 4, 5, 6-element
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar
Included in the package	Water diaphragm (retainer cap)

All models **Garda S/90** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output									
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70					
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.					
900	90,9	134,4	182,0	233,3	287,7					
1000	97,2	143,9	195,0	250,0	308,5					
1200	111,3	164,6	223,0	285,8	352,5					
1400	124,8	184,6	250,0	320,3	395,1					
1600	135,9	202,4	275,0	354,8	439,2					
1800	150,0	221,6	300,0	384,2	473,6					
2000	159,5	237,9	324,0	418,0	518,0					



MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		mm	(B) mm	(A) mm	mm	inches	litres/sect.	n	Km
900	83A014	90	966	900	80	G1	0,43	1,3605	0,8886
1000	83B014	90	1066	1000	80	G1	0,47	1,3630	0,9426
1200	83C014	90	1266	1200	80	G1	0,55	1,3610	1,0864
1400	83D014	90	1466	1400	80	G1	0,62	1,3600	1,2227
1600	83E014	90	1666	1600	80	G1	0,70	1,3843	1,2260
1800	83F014	90	1866	1800	80	G1	0,78	1,3570	1,4846
2000	83G014	90	2066	2000	80	G1	0,86	1,3905	1,4083

#### Maximum working pressure: 1600 kpa (16 bar)

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta\mathsf{T}^n$ 

Stated heat output values are in accordance with European Standard EN 442-1:2014 and certified by Cetiat - Notified body No. 1623.

Item		Description	Code				
	A 72	"Plug/Adapters/Brackets kit, colour white ough brackets, not painted): Bleed valve ½"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters ½"; 2 Lh adapters ½"; 4 O-ring seals; Supporting brackets					
00000	A 73	¾" Plug/Adapters/Brackets kit, colour white (Rough brackets, not painted):  1 Bleed valve ¾"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters ¾"; 2 Lh adapters ¾"; 4 O-ring seals; 2 Supporting brackets	550119				
•	A 30/1	Rubber lockshield plug (water diaphragm)	521011				
0	A 32/1	O-ring seal for nipples, plugs and adapters	530102				
9	A 33/1	Nipple for home furnishing radiators	521012				
CB+(L+B)	A 36/4	4 Element towel rail - Colour: White RAL 9010	570014				
C	A 36/5	5 Element towel rail - Colour: White RAL 9010	570024				
	A 36/6	6 Element towel rail - Colour: White RAL 9010	570124				

For other accessories, see from page 73











BLACK COFFEE TEXTURED MATT PEARL PEARLED ARDESIA TEXTURED MATT



Low thermal inertia



Low water content



Versatility



Easy to stock and install



**Maximum working pressure** 



Available in 3 colors



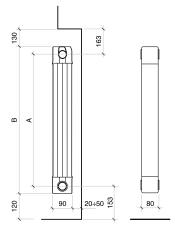


Standard supply	3, 4, 5, 6 sections
Colours	Ardesia textured matt Black coffee textured matt Pearl pearled
Maximum working pressure	16 bar
Test pressure	24 bar
Included in the package	Water diaphragm (retainer cap)

Combinable with the models **Blitz Super B4 coloured**, see p. 18

All models **Garda S/90** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output								
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70				
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.				
1600	135,9	202,4	275,0	354,8	439,2				
1800	150,0	221,6	300,0	384,2	473,6				
2000	159,5	237,9	324,0	418,0	518,0				



MEASURES EXPRESSED IN MILLIMETRES

Model	Code (*)	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		mm	(B) mm	(A) mm	mm	inches	litres/sect.	n	Km
1600	81EGSxxx	90	1666	1600	80	G1	0,70	1,3843	1,2260
1800	81FGSxxx	90	1866	1800	80	G1	0,78	1,3570	1,4846
2000	81GGSxxx	90	2066	2000	80	G1	0,86	1,3905	1,4083

## Maximum working pressure: 1600 kpa (16 bar)

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta\mathsf{T}^n$ 

Stated heat output values are in accordance with European Standard EN 442-1:2014 and certified by Cetiat - Notified body No. 1623.

#### (\*) Add the code of the colour instead of xxx

BLACK COFFEE TEXTURED MATT	PEARL PEARLED	ARDESIA TEXTURED MATT
Cod. 054	Cod. 024	Cod. 044

Item		Description	Code
	-	1/2" Plug/Adapters/Brackets kit  1 Bleed valve ½"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters ½"; 2 Lh adapters ½"; 4 O-ring seals;  2 Supporting brackets - Colour: BLACK COFFEE TEXTURED MATT	550137V
	-	½" Plug/Adapters/Brackets kit 1 Bleed valve ½"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters ½"; 2 Lh adapters ½"; 4 O-ring seals; 2 Supporting brackets - Colour: PEARL PEARLED	550137NP
	-	½" Plug/Adapters/Brackets kit 1 Bleed valve ½"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters ½"; 2 Lh adapters ½"; 4 O-ring seals; 2 Supporting brackets - Colour: ARDESIA TEXTURED MATT	550137E
•	A 30/1	Rubber lockshield plug (water diaphragm)	521011
0	A 32/1	O-ring seal for nipples, plugs and adapters	530102
9	A 33/1	Nipple for home furnishing radiators	521012













Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure

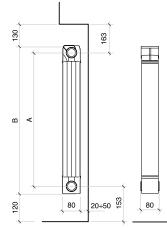




Standard supply	3, 4, 5, 6-element
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar
Included in the package	Water diaphragm (retainer cap)

All models **Garda Dual 80** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output							
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔΤ 70			
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.			
900	86,6	128,5	174,4	223,8	276,4			
1000	92,9	138,6	189,1	243,6	301,9			
1200	105,8	157,7	215,0	276,9	343,1			
1400	118,6	176,8	241,0	310,4	384,4			
1600	130,2	194,7	266,0	343,2	425,8			
1800	142,1	211,5	288,0	370,6	458,7			
2000	152,4	227,3	310,0	399,4	494,9			



MEASURES EXPRESSED IN MILLIMETRES

Model Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient	
		mm	(B) mm	(A) mm	mm	inches	litres/sect.	n	Km
900	82F014	80	966	900	80	G1	0,47	1,3695	0,8217
1000	82G014	80	1066	1000	80	G1	0,52	1,3908	0,8198
1200	82H014	80	1266	1200	80	G1	0,60	1,3889	0,9391
1400	821014	80	1466	1400	80	G1	0,70	1,3875	1,0585
1600	82L014	80	1666	1600	80	G1	0,79	1,3980	1,1213
1800	82M014	80	1866	1800	80	G1	0,88	1,3832	1,2864
2000	82N014	80	2066	2000	80	G1	0,96	1,3902	1,3473

#### Maximum working pressure: 1600 kpa (16 bar)

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta\mathsf{T}^n$ 

Stated heat output values are in accordance with European Standard EN 442-1:2014 and certified by Cetiat - Notified body No. 1623.

ltem		Description	Code
	A 72	½" Plug/Adapters/Brackets kit, colour white (Rough brackets, not painted):  1 Bleed valve ½"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters ½"; 2 Lh adapters ½"; 4 O-ring seals; 2 Supporting brackets	550118
00000	A 73	¾" Plug/Adapters/Brackets kit, colour white (Rough brackets, not painted):  1 Bleed valve ¾"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters ¾"; 2 Lh adapters ¾"; 4 O-ring seals; 2 Supporting brackets	550119
•	A 30/1	Rubber lockshield plug (water diaphragm)	521011
0	A 32/1	O-ring seal for nipples, plugs and adapters	530102
9	A 33/1	Nipple for home furnishing radiators	521012
Carlina	A 36/4	4 Element towel rail - Colour: White RAL 9010	570014
C #1/1-11 )	A 36/5	5 Element towel rail - Colour: White RAL 9010	570024
C	A 36/6	6 Element towel rail - Colour: White RAL 9010	570124

For other accessories, see from page 73









Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure

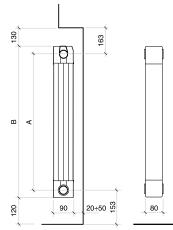




Standard supply	3, 4, 5, 6-element
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar
Included in the package	Water diaphragm (retainer cap)
Aleternum treatment	Supplied as standard

All models **Garda S/90 Aleternum** are guaranteed **20 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

		Heat output								
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70					
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.					
900	90,9	134,4	182,0	233,3	287,7					
1000	97,2	143,9	195,0	250,0	308,5					
1200	111,3	164,6	223,0	285,8	352,5					
1400	124,8	184,6	250,0	320,3	395,1					
1600	135,9	202,4	275,0	354,8	439,2					
1800	150,0	221,6	300,0	384,2	473,6					
2000	159,5	237,9	324,0	418,0	518,0					



MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		mm	(B) mm	(A) mm	mm	inches	litres/sect.	n	Km
900	83AA14	90	966	900	80	G1	0,43	1,3605	0,8886
1000	83BA14	90	1066	1000	80	G1	0,47	1,3630	0,9426
1200	83CA14	90	1266	1200	80	G1	0,55	1,3610	1,0864
1400	83DA14	90	1466	1400	80	G1	0,62	1,3600	1,2227
1600	83EA14	90	1666	1600	80	G1	0,70	1,3843	1,2260
1800	83FA14	90	1866	1800	80	G1	0,78	1,3570	1,4846
2000	83GA14	90	2066	2000	80	G1	0,86	1,3905	1,4083

#### Maximum working pressure: 1600 kpa (16 bar)

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta\mathsf{T}^n$ 

Stated heat output values are in accordance with European Standard EN 442-1:2014 and certified by Cetiat - Notified body No. 1623.

ltem		Description	Code
	A 72	1/2" Plug/Adapters/Brackets kit, colour white (Rough brackets, not painted): 1 Bleed valve 1/2"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters 1/2"; 2 Lh adapters 1/2"; 4 O-ring seals; 2 Supporting brackets	550118
00000	A 73	3/4" Plug/Adapters/Brackets kit, colour white (Rough brackets, not painted):  1 Bleed valve 3/4"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters 3/4"; 2 Lh adapters 3/4"; 4 O-ring seals; 2 Supporting brackets	550119
•	A 30/1	Rubber lockshield plug (water diaphragm)	521011
0	A 32/1	O-ring seal for nipples, plugs and adapters	530102
9	A 33/1	Nipple for home furnishing radiators	521012
	A 36/4	4 Element towel rail - Colour: White RAL 9010	570014
C	A 36/5	5 Element towel rail - Colour: White RAL 9010	570024
	A 36/6	6 Element towel rail - Colour: White RAL 9010	570124

For other accessories, see from page 73



# COLOR Aleternum







Low thermal inertia



Low water content



Versatility



Easy to stock and install



**Maximum working pressure** 

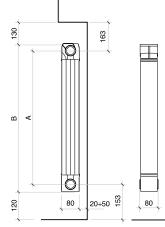




Standard supply	3, 4, 5, 6-element
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar
Included in the package	Water diaphragm (retainer cap)
Aleternum treatment	Supplied as standard

All models **Garda Dual 80 Aleternum** are guaranteed **20 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	Heat output								
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70				
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.				
900	86,6	128,5	174,4	223,8	276,4				
1000	92,9	138,6	189,1	243,6	301,9				
1200	105,8	157,7	215,0	276,9	343,1				
1400	118,6	176,8	241,0	310,4	384,4				
1600	130,2	194,7	266,0	343,2	425,8				
1800	142,1	211,5	288,0	370,6	458,7				
2000	152,4	227,3	310,0	399,4	494,9				



MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		mm	(B) mm	(A) mm	mm	inches	litres/sect.	n	Km
900	82FA14	80	966	900	80	G1	0,47	1,3695	0,8217
1000	82GA14	80	1066	1000	80	G1	0,52	1,3908	0,8198
1200	82HA14	80	1266	1200	80	G1	0,60	1,3889	0,9391
1400	82IA14	80	1466	1400	80	G1	0,70	1,3875	1,0585
1600	82LA14	80	1666	1600	80	G1	0,79	1,3980	1,1213
1800	82MA14	80	1866	1800	80	G1	0,88	1,3832	1,2864
2000	82NA14	80	2066	2000	80	G1	0,96	1,3902	1,3473

#### Maximum working pressure: 1600 kpa (16 bar)

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta\mathsf{T}^n$ 

Stated heat output values are in accordance with European Standard EN 442-1:2014 and certified by Cetiat - Notified body No. 1623.

ltem		Description	Code
	A 72	1/2" Plug/Adapters/Brackets kit, colour white (Rough brackets, not painted): 1 Bleed valve 1/2"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters 1/2"; 2 Lh adapters 1/2"; 4 O-ring seals; 2 Supporting brackets	550118
00000	A 73	3/4" Plug/Adapters/Brackets kit, colour white (Rough brackets, not painted):  1 Bleed valve 3/4"; 1 Rh blanking plug; 1 Lh blanking plug; 2 Rh adapters 3/4"; 2 Lh adapters 3/4"; 4 O-ring seals; 2 Supporting brackets	550119
•	A 30/1	Rubber lockshield plug (water diaphragm)	521011
0	A 32/1	O-ring seal for nipples, plugs and adapters	530102
9	A 33/1	Nipple for home furnishing radiators	521012
	A 36/4	4 Element towel rail - Colour: White RAL 9010	570014
C	A 36/5	5 Element towel rail - Colour: White RAL 9010	570024
	A 36/6	6 Element towel rail - Colour: White RAL 9010	570124

For other accessories, see from page 73









Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure





Standard supply	3, 5, 7, 9 sections
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar
Included in the package	Water diaphragm (retainer cap)

All models **Garda S/90 AC** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.





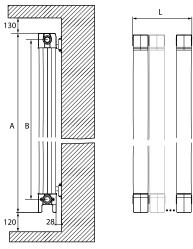
BOTTOM CENTRE CONNECTION

**BOTTOM SIDE CONNECTION** 

To connect the radiator with a valve at the bottom on one side, you will need to join two Garda S/90 AC radiators using dedicated accessories

Art. 550111E + Art. 520118.

	Heat output							
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔΤ 70			
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.			
1200/3	334	494	669	857	1058			
1200/5	556	823	1115	1429	1763			
1200/7	779	1152	1561	2001	2468			
1200/9	1001	1481	2007	2572	3173			
1400/3	374	554	750	961	1185			
1400/5	624	923	1250	1602	1975			
1400/7	874	1292	1750	2242	2765			
1400/9	1123	1661	2250	2883	3555			



MEASURES EXPRESSED IN MILLIMETRES

	Heat output							
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔΤ 70			
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.			
1600/3	408	607	825	1064	1318			
1600/5	680	1012	1375	1774	2196			
1600/7	951	1417	1925	2484	3074			
1600/9	1223	1822	2475	3193	3953			
1800/3	450	665	900	1153	1421			
1800/5	750	1108	1500	1921	2368			
1800/7	1050	1551	2100	2689	3315			
1800/9	1350	1995	2700	3458	4262			

Model	Code	Depth	Height	Centre distance	Length *	Connection diameters	Water capacity	Exponent	Coefficient
model	Couc	mm	(B) mm	(A) mm	(L) mm	inches	litres/sect.	n	Km
1200/3	83CF1403	90	1287	1187	260	G1/2	1,65	1,3610	3,2592
1200/5	83CF1405	90	1287	1187	420	G1/2	2,75	1,3610	5,4320
1200/7	83CF1407	90	1287	1187	580	G1/2	3,85	1,3610	7,6048
1200/9	83CF1409	90	1287	1187	740	G1/2	4,95	1,3610	9,7776
1400/3	83DF1403	90	1487	1387	260	G1/2	1,86	1,3600	3,6681
1400/5	83DF1405	90	1487	1387	420	G1/2	3,10	1,3600	6,1135
1400/7	83DF1407	90	1487	1387	580	G1/2	4,34	1,3600	8,5589
1400/9	83DF1409	90	1487	1387	740	G1/2	5,58	1,3600	11,0043
1600/3	83EF1403	90	1687	1587	260	G1/2	2,10	1,3843	3,6780
1600/5	83EF1405	90	1687	1587	420	G1/2	3,50	1,3843	6,1300
1600/7	83EF1407	90	1687	1587	580	G1/2	4,90	1,3843	8,5820
1600/9	83EF1409	90	1687	1587	740	G1/2	6,30	1,3843	11,034
1800/3	83FF1403	90	1887	1787	260	G1/2	2,34	1,3570	4,4538
1800/5	83FF1405	90	1887	1787	420	G1/2	3,90	1,3570	7,4230
1800/7	83FF1407	90	1887	1787	580	G1/2	5,46	1,3570	10,3922
1800/9	83FF1409	90	1887	1787	740	G1/2	7,02	1,3570	13,3614

 $<sup>\</sup>ensuremath{^{*}}$  The measure includes the overall dimensions of the side caps.

#### Maximum working pressure: 1600 kpa (16 bar)

Characteristic equation of the model  $\Phi=\text{Km}\ \Delta T^n$  Reference EN 442-1:2014.





# 50 mm centre distance valves with by-pass - nickel-plated finish

ltem	Description	Code
	Angle valve with thermostat option	847V81210Q
	Straight valve with thermostat option	847V81610Q

# 50 mm centre distance valves with by-pass - $\boldsymbol{white}$ finish

Item	Description	Code
	Angle valve with thermostat option	847V81210E
marke.	Straight valve with thermostat option	847V81610E

## Complementary accessories

Item	Description	Code
The second second	Extension kit with O-ring	550140
	Thermostatic head with liquid sensor - Colour: white/chrome	847A40300A
FQ.	Angle adapter for thermostatic head	847M02610A

# Components supplied with the **radiator**

ltem	Description	Code
THE STATE OF THE S	Fixing system kit and plugs	550128
	Blind plug with groove, 1" $\div \frac{1}{2}$ right thread	525013
	Blind plug with groove, 1" $\div \frac{1}{2}$ left thread	525113
-	Reduction with groove, 1" $\div \frac{1}{2}$ right thread	526241
٥	Reduction with groove, 1" $\div \frac{1}{2}$ left thread	526341

## Components supplied with the valve

Item	Description	Code
	Plastic probe 11 mm - 110 mm long	847NV81109A
	Flow diverter	847A31301A
The state of	Nut and pipe union for valve - Colour: Chrome	847A34450B
0	½"O-Ring for pipe union connection	847A15029A

# Components for battery composition with **side connections**

ltem	Description	Code
	½" Plug to close central element	520118
	Plastic wrench for plugs	560257
	Nipple metal wrench kit 1" and ¾" (50 cm) with lever and plastic wrench for plugs	550092
	Nipple metal wrench 1" (80 cm) without lever	550090
-	Nipple metal wrench 1" (100 cm) without lever	550093

## **Copper** pipe adapters

Pipe size	Connection	Nickel	Chrome
(Ø mm)		Code	Code
10	3⁄4" EK	847A43301Q	847A33501B
12	³¼″ EK	847A43302Q	847A33502B
14	3/4" EK	847A43303Q	847A33503B
15	3/4" EK	847A43304Q	847A33504B
16	³¼″ EK	847A43305Q	847A33505B
18	3⁄4" EK	-	847A33506B





## **Multilayer** pipe adapters

Pipe size	Connection	Nickel	Chrome
(Ø mm)		Code	Code
14 x 2	3⁄4" EK	847A39301Q	847A58701B
16 x 2	3⁄4″ EK	847A39302Q	847A58702B
17 x 2	3⁄4" EK	847A39304Q	847A58704B
18 x 2	3/4" EK	847A39306Q	847A58706B
20 x 2	3/4" EK	847A39308Q	847A58708B
16 x 2.25	³¼″ EK	847A39303Q	847A58703B
20 x 2.25	³¼″ EK	847A39309Q	847A58709B
20 x 2.5	³¼″ EK	847A39307Q	847A58707B
16 x 2.6	34" EK	847A39315Q	-
20 x 2.9	³¼″ EK	847A39316Q	-





## **PEX** pipe adapters

Pipe size	Connection	Nickel	Chrome
(Ø mm)		Code	Code
12 x 1	3⁄4" EK	847A39420Q	847A58810B
16 x 1.5	3⁄4″ EK	847A39405Q	847A58811B
12 x 2	³¼″ EK	847A39401Q	847A58800B
14 x 2	3⁄4″ EK	847A39402Q	847A58801B
16 x 2	3/4" EK	847A39406Q	847A58803B
17 x 2	3⁄4" EK	847A39408Q	847A58805B
18 x 2	3/4" EK	847A39410Q	847A58806B
20 x 2	3/4" EK	847A39413Q	847A58808B
16 x 2.2	3⁄4″ EK	847A39407Q	847A58804B
15 x 2.5	3⁄4″ EK	847A39404Q	847A58802B
18 x 2.5	³¼″ EK	847A39411Q	847A58807B
20 x 2.5	3/4" EK	847A39415Q	847A58809B







# TOWEL RAILS

Cool page 54





# Coo Aleternum







Low thermal inertia



Low water content



Versatility



Available in 24 colours



Double painting: anaphoresis + epoxy powders



**Corrosion resistance** 

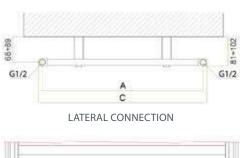
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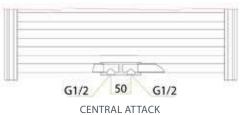


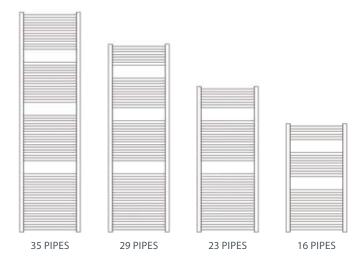
Centre-to-centre distances (mm)	400 - 450 - 500 -550 - 600
Heights (mm)	858 - 1152 - 1488 - 1740
Colours	see colors table
Maximum working pressure	16 bar
Test pressure	24 bar
Included in the package	Installation kit
Aleternum treatment	Supplied as standard

All models **Cool** are guaranteed **12 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.









	Height		Heat output					
Model	neight	ΔT 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70		
	mm	W	W	W	W	W		
860/400	858	188	266	348	433	521		
860/450	858	196	280	370	464	562		
860/500	858	211	302	399	501	607		
860/550	858	226	324	428	537	651		
860/600	858	241	346	457	574	696		
1160/400	1152	248	350	458	571	687		
1160/450	1152	265	380	502	630	763		
1160/500	1152	288	412	544	684	829		
1160/550	1152	310	444	587	737	894		
1160/600	1152	333	477	630	791	959		

	11 at orbot		ŀ	leat outpu	at output		
Model	Height	ΔT 30	ΔT 40	ΔT 50	ΔT 60	ΔΤ 70	
	mm	W	W	W	W	W	
1490/400	1488	322	455	595	741	892	
1490/450	1488	347	497	658	826	1002	
1490/500	1488	378	542	717	900	1092	
1490/550	1488	410	587	776	975	1182	
1490/600	1488	441	632	835	1049	1271	
1740/400	1740	379	539	707	883	1065	
1740/450	1740	413	590	778	976	1181	
1740/500	1740	451	645	850	1066	1291	
1740/550	1740	489	699	922	1156	1400	
1740/600	1740	527	754	994	1247	1509	

	Height	Depth	Centre distance	Length	Water capacity	Exponent	Coefficient
Model mm	mm	mm	mm	litres	n	Km	
860/400	858	26	400	428	2,4	1,2015	3,1596
860/450	858	26	450	478	2,7	1,2443	2,8430
860/500	858	26	500	528	2,9	1,2468	3,0374
860/550	858	26	550	578	3,2	1,2492	3,2277
860/600	858	26	600	628	3,4	1,2517	3,4143
1160/400	1152	26	400	428	3,4	1,2029	4,1431
1160/450	1152	26	450	478	3,8	1,2479	3,8033
1160/500	1152	26	500	528	4,1	1,2487	4,1156
1160/550	1152	26	550	578	4,5	1,2495	4,4259
1160/600	1152	26	600	628	4,9	1,2502	4,7339
1490/400	1488	26	400	428	4,4	1,2045	5,3470
1490/450	1488	26	450	478	4,8	1,2520	4,9057
1490/500	1488	26	500	528	5,2	1,2509	5,3720
1490/550	1488	26	550	578	5,7	1,2497	5,8423
1490/600	1488	26	600	628	6,1	1,2486	6,3166
1740/400	1740	26	400	428	5,3	1,2182	6,0193
1740/450	1740	26	450	478	5,7	1,2406	6,0741
1740/500	1740	26	500	528	6,3	1,2408	6,6300
1740/550	1740	26	550	578	6,8	1,2410	7,1851
1740/600	1740	26	600	628	7,5	1,2412	7,7391

Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 °C

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body  $N^0$ 1695.



# **CODE OBTAINING EXAMPLE**

Cool radiator 860/400, gloss White colour

Ex: **EA42E0 04** 

Cool radiator 1160/500, gloss Ardesia colour

Ex: **EA52G0 2B** 

 $To obtain the \ radiator \ code, it is \ necessary \ to \ add \ to \ the \ code \ the \ two \ final \ numbers \ concerning \ the \ finishing \ and \ the \ desired \ colour.$ 

	Side connec	tion version	Central conn	Central connection version		
Model	RAL 9010 White	Colours	RAL 9010 White	Colours		
860/400	EA42E0 04	EA52E0 xx	EA62E0 04	EA62E0 xx		
860/450	EA42A0 04	EA52A0 xx	EA62A0 04	EA62A0 xx		
860/500	EA42B0 04	EA52B0 xx	EA62B0 04	EA62B0 xx		
860/550	EA42C0 04	EA52C0 xx	EA62C0 04	EA62C0 xx		
860/600	EA42D0 04	EA52D0 xx	EA62D0 04	EA62D0 xx		
1160/400	EA42L0 04	EA52L0 xx	EA62L0 04	EA62L0 xx		
1160/450	EA42F0 04	EA52F0 xx	EA62F0 04	EA62F0 xx		
1160/500	EA42G0 04	EA52G0 xx	EA62G0 04	EA62G0 xx		
1160/550	EA42H0 04	EA52H0 xx	EA62H0 04	EA62H0 xx		
1160/600	EA42I0 04	EA52I0 xx	EA62I0 04	EA62I0 xx		
1490/400	EA42Q0 04	EA52Q0 xx	EA62Q0 04	EA62Q0 xx		
1490/450	EA42M0 04	EA52M0 xx	EA62M0 04	EA62M0 xx		
1490/500	EA42N0 04	EA52N0 xx	EA62N0 04	EA62N0 xx		
1490/550	EA42O0 04	EA52O0 xx	EA62O0 04	EA62O0 xx		
1490/600	EA42P0 04	EA52P0 xx	EA62P0 04	EA62P0 xx		
1740/400	EA42V0 04	EA52V0 xx	EA62V0 04	EA62V0 xx		
1740/450	EA42R0 04	EA52R0 xx	EA62R0 04	EA62R0 xx		
1740/500	EA42S0 04	EA52S0 xx	EA62S0 04	EA62S0 xx		
1740/550	EA42T0 04	EA52T0 xx	EA62T0 04	EA62T0 xx		
1740/600	EA42U0 04	EA52U0 xx	EA62U0 04	EA62U0 xx		

#### **COLOURS**

See table on the following page

#### **FINISHES**

GLOSS MATT TEXTURED MATT PEARLED

ltem		Description	Code
A 77		Installation kit for Cool 3 points lateral connection with bleed valve and 1 plug - Colour: White (supplied as standard with White glossy radiators colour code 04)	550124
00 00 00	A 79	Installation kit for Cool 3 points central connection with bleed valve and 3 plugs - Colour: White (supplied as standard with White glossy radiators colour code 04)	550126
	A 78 Installation kit for Cool 3 points lateral connection with bleed valve and 1 plug - Colour: Chrome (a as standard with the coloured radiators, excluding White glossy colour code 04)		550125
92 92 92 7	A 89	Installation kit for Cool 3 points central connection with bleed valve and 3 plugs - Colour: Chrome (supplied as standard with the coloured radiators, excluding White glossy colour code 04)	550127
II	-	White supports for Cool - n° 2	570135
ŦŦ	-	Chrome supports for Cool - n° 2	570135C
	-	Towel rail Cool 450/500/550 - Colour: White	570133
2 3	-	Towel rail COOL 600 - Colour: White	570134
	-	Towel rail Cool 450/500/550 - Colour: Chrome	570133C
p #	-	Towel rail COOL 600 - Colour: Chrome	570134C

# **TONDERA** series for central connection

Description	Colour White RAL 9010	Colour Chrome
	Code	Code
50 mm angle lockshield valve and thermostatic valve assembly, interchangeable copper and multilayer pipe connection, non-drip end. RIGHT	8496811	8496812
50 mm angle lockshield valve and thermostat valve assembly, interchangeable copper and multilayer pipe connection, non-drip end. RIGHT	8496841	8496842



Description	Colour Gold Code
	Code
Reversible screw for TONDERA from RH to LH	8490471

For other accessories, see from page 73

	GLOSS	MATT	TEXTURED MATT	PEARLED
WHITE				
	Cod. 04			Cod. 4M
CORVINO				
	Cod. 2L		Cod. 3L	
METROPOLITAN				
			Cod. 3T	
BLACK COFFEE				
			Cod. 3V	
PEARL				
	Cod. 2N	Cod. 5N		Cod. 4N
ORGANZA				
	Cod. 2D	Cod. 5D		
TURTLE				
		Cod. 5P	Cod. 3P	
COPPER				
	Cod. 2C		Cod. 3C	
TERRA BRUCIATA				
	Cod. 2S			
SILVER				
	Cod. 2F		Cod. 3F	
GRAFITE				
			Cod. 3R	
ARDESIA				
	Cod. 2B		Cod. 3B	
RUBINO				
	Cod. 2A			
HELOISE				
			Cod. 3H	
TURQUOISE BEACH				
	Cod. 2I			

The colours shown are merely indicative and not binding, as they may slightly differ, due to the printing process.

Coloured versions: price increase 45% of a gloss White (RAL 9010)







Mood	page 60
Tribeca	page 64
Pop - Home and bathroom furnishing configuration	page 68
Pop - Standard configuration	page 70





# Mood Aleternum







Low thermal inertia



Low water content



Versatility



Maximum working pressure



Available in 24 colours







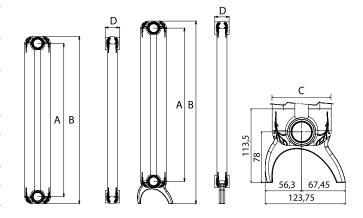
#### **Radiator Mood: with decoration**

The Mood model with supporting feet is supplied with centre distances from 1000 to 2000 mm.

The supporting feet for this model only have an aesthetic function. The radiator must be secured to the wall with brackets.

All models **Mood** are guaranteed **15 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	235 - 335 - 350 - 435 500 - 535 - 600	from 4 to 20 elements
Standard supply	685 - 700 - 800 - 835	from 4 to 16 elements
	900 - 935 - 1000 - 1135 1200 - 1400 - 1435 - 1600 1735 - 1800 - 1935 - 2000	from 4 to 9 elements
Colours	see colors table	
Maximum working pressure	16 bar	
Test pressure	24 bar	
Aleternum treatment	Supplied as standard	



#### MEASURES EXPRESSED IN MILLIMETRES

			Heat output		
Model	ΔT 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.
235	16,0	23,1	30,6	38,6	46,9
335	21,1	30,5	40,5	51,1	62,3
350	21,8	31,5	41,9	52,9	64,4
435	25,6	37,1	49,4	62,5	76,1
500	28,5	41,3	55,1	69,7	85,0
535	30,1	43,6	58,2	73,6	89,8
600	32,9	47,8	63,8	80,8	98,6
685	36,6	53,3	71,2	90,2	110,2
700	37,3	54,2	72,5	91,8	112,2
800	41,6	60,6	81,1	102,8	125,8
835	43,1	62,8	84,1	106,7	130,5
900	45,9	67,0	89,7	113,9	139,3

	Heat output						
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70		
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.		
935	47,5	69,2	92,7	117,7	144,0		
1000	50,3	73,4	98,3	124,9	152,8		
1135	56,2	82,0	110,0	139,8	171,2		
1200	59,9	87,5	115,7	149,3	182,8		
1400	67,9	99,2	133,3	169,6	207,9		
1435	69,5	101,6	136,4	173,5	212,7		
1600	77,1	112,6	151,2	192,3	235,6		
1735	83,4	121,8	163,4	207,8	254,6		
1800	86,4	126,3	169,4	215,4	263,9		
1935	92,9	135,7	181,9	231,3	283,3		
2000	96,1	140,2	188,1	239,0	292,7		

Model	Depth	Height *	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
	(C) mm	(B) mm	(A) mm	(D) mm/sect.	inches	litres/sect.		Km
235	90	284	235	50	G1	0,43	1,2665	0,2158
335	90	384	335	50	G1	0,58	1,2792	0,2718
350	90	399	350	50	G1	0,71	1,2800	0,2799
435	90	484	435	50	G1	0,85	1,2849	0,3243
500	90	549	500	50	G1	0,95	1,2885	0,3566
535	90	584	535	50	G1	1,00	1,2905	0,3734
600	90	649	600	50	G1	1,10	1,2942	0,4037
685	90	734	685	50	G1	1,15	1,2990	0,4418
700	90	749	700	50	G1	1,18	1,2999	0,4484
800	90	849	800	50	G1	1,34	1,3055	0,4907
835	90	884	835	50	G1	1,38	1,3075	0,5050
900	90	949	900	50	G1	1,50	1,3091	0,5353
935	90	984	935	50	G1	1,56	1,3100	0,5514
1000	90	1049	1000	50	G1	1,66	1,3115	0,5812
1135	90	1184	1135	50	G1	1,88	1,3149	0,6420
1200	90	1249	1200	50	G1	1,98	1,3164	0,6709
1400	90	1449	1400	50	G1	2,28	1,3213	0,7583
1435	90	1484	1435	50	G1	2,36	1,3210	0,7771
1600	90	1649	1600	50	G1	2,60	1,3192	0,8673
1735	90	1784	1735	50	G1	2,85	1,3178	0,9430
1800	90	1849	1800	50	G1	2,95	1,3171	0,9801
1935	90	1984	1935	50	G1	3,10	1,3156	1,0585
2000	90	2049	2000	50	G1	3,22	1,3150	1,0970

 $<sup>^{*}</sup>$  The height of the radiator with supporting feet is 54 mm higher than that indicated in the table.

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 °C

Characteristic equation of the model  $\Phi{=}\mathsf{Km}\;\Delta\mathsf{T}^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body  $N^{o}$ 1695.



## **CODE OBTAINING EXAMPLE**

Mood radiator 600 from 10 sections gloss White colour Ex: **EA10C0 + 04 + 10** 

Mood radiator 600 from 12 sections gloss Ardesia colour. Ex: **EA10C0 + 2B + 12** 

To obtain the radiator code, it is necessary to add the code to the four final digits relating to the colour and number of elements.

Model	Code
235	EA11A0 xx xx
335	EA11B0 xx xx
350	EA10A0 xx xx
435	EA11C0 xx xx
500	EA10B0 xx xx
535	EA11D0 xx xx
600	EA10C0 xx xx
685	EA11E0 xx xx
700	EA10D0 xx xx
800	EA10E0 xx xx
835	EA11F0 xx xx
900	EA10F0 xx xx

Model	Code
935	EA11G0 xx xx
1000	EA10G0 xx xx
1135	EA11H0 xx xx
1200	EA10H0 xx xx
1400	EA10I0 xx xx
1435	EA11I0 xx xx
1600	EA10L0 xx xx
1735	EA11L0 xx xx
1800	EA10M0 xx xx
1935	EA11M0 xx xx
2000	EA10N0 xx xx

Model with sup- port	Code
1000	EA30G0 xx xx
1135	EA31H0 xx xx
1200	EA30H0 xx xx
1400	EA30I0 xx xx
1435	EA31I0 xx xx
1600	EA30L0 xx xx
1735	EA31L0 xx xx
1800	EA30M0 xx xx
1935	EA31M0 xx xx
2000	EA30N0 xx xx

#### **COLOURS**

See table on the following page

FINISHES GLOSS MATT

TEXTURED MATT PEARLED

Item	Description	Colour	Code
SESSER		White glossy (Cod. 04)	550122
99		White pearled (Cod. 4M)	550122MP
		Corvino textured matt (Cod. 3L)	550122L
		Corvino glossy (Cod. 2L)	550122LL
00		Pearl pearled (Cod. 4N)	550122NP
00	en la sul en la	Pearl glossy (Cod. 2N)	550122NL
	Fixing kit with pincers + plugs and adapters: 1 Flat ½ bleed valve	Pearl matt (Cod. 5N)	550122NO
88	2 Plastic covers	Organza glossy (Cod. 2D)	550122DL
0	1 Flat ½ plug	Organza matt (Cod. 5D)	550122DO
	2 ½ Rh adapters	Turtle matt (Cod. 5P)	550122PO
x3	2 ½ Lh adapters	Turtle textured matt (Cod. 3P)	550122P
	3 Metal sheet brackets	Copper glossy (Cod. 2C)	550122CL
	4 1" O-ring seals	Copper textured matt (Cod. 3C)	550122C
0.00		Silver glossy (Cod. 2F)	550122FL
500 500 500		Silver textured matt (Cod. 3F)	550122F
the fire fire		Ardesia glossy (Cod. 2B)	550122EL
66 66 65	Coloured versions: apply a surcharge of 45% on the	Ardesia textured matt (Cod. 3B)	550122E
2 2 2	pure white gloss (RAL 9010) coating	Rubino glossy (Cod. 2A)	550122BL
Star Star Star	pure writte gloss (NAL 2010) coating	Heloise textured matt (Cod. 3H)	550122H
Bin: Bin:		Turquoise beach glossy (Cod. 2I)	550122IL
& for		Graphite textured matt (Cod. 3R)	550122R
1 1 1		Terra bruciata glossy (Cod. 2S)	550122SL
0.0 0.0		Black coffee textured matt (Cod. 3V)	550122V
		Metropolitan textured matt (Cod. 3T)	550122T

ltem		Description	Code
		Towel rail kit with decoration of 237 mm	570125
		Towel rail kit with decoration of 337 mm	570126
11-14	-	Towel rail kit with decoration of 437 mm	570127
		Towel rail kit with decoration of 537 mm	570128
	A 30/2	Lockshield plug for Mood - Tribeca 50 mm (water diaphragm)	521011M
0	A 32/1	O-ring seal for nipples, plugs and adapters	530102
	A 33/1	Nipple for home furnishing radiators	521012
	A 74	Fixing kit for horizontal installation, colour white n° 4	550120
	A 75	Fixing kit for horizontal installation, colour white n° 4	550121

	4			
4				J
			5	4
V		4		
. 4				

	GLOSS	MATT	TEXTURED MATT	PEARLED
WHITE				
	Cod. 04			Cod. 4M
CORVINO				
	Cod. 2L		Cod. 3L	
METROPOLITAN				
			Cod. 3T	
BLACK COFFEE				
			Cod. 3V	
PEARL				
	Cod. 2N	Cod. 5N		Cod. 4N
ORGANZA				
	Cod. 2D	Cod. 5D		
TURTLE				
		Cod. 5P	Cod. 3P	
COPPER				
	Cod. 2C		Cod. 3C	
TERRA BRUCIATA				
	Cod. 2S			
SILVER				
	Cod. 2F		Cod. 3F	
GRAFITE				
			Cod. 3R	
ARDESIA				
DEJI/(	Cod. 2B		Cod. 3B	
	254.25		200.35	
RUBINO				
	Cod. 2A			
HELOISE				
ILLUISE			Cod. 3H	
			Cod. SFI	
TURQUOISE BEACH				
	Cod. 2I			

The colours shown are merely indicative and not binding, as they may slightly differ, due to the printing process.

Coloured versions: price increase 45% of a gloss White (RAL 9010)



# Tribeca Aleternum





Low thermal inertia



Low water content



Versatility



Maximum working pressure



Available in 24 colours







Tribeca radiator: without decoration.

All models **Tribeca** are guaranteed **15 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	235 - 335 - 350 - 435 500 - 535 - 600	from 4 to 20 elements		
Standard supply	685 - 700 - 800 - 835	from 4 to 16 elements		
	900 - 935 - 1000 - 1135 1200 - 1400 - 1435 1600 - 1735 - 1935	from 4 to 9 elements		
	1800 - 2000	from 4 to 12 elements		
Colours	see colors table			
Maximum working pressure	16 bar	16 bar		
Test pressure	24 bar			
Aleternum treatment	Supplied as standard			

00	125	
ВА		
120	20÷50 45	- D -

MEASIIRE	S FXPRFSSF	D IN MII	LIMETRES

		Heat output			
Model	ΔΤ 30	ΔT 40	ΔT 50	ΔT 60	ΔT 70
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.
235	16,0	23,1	30,6	38,6	46,9
335	21,1	30,5	40,5	51,1	62,3
350	21,8	31,5	41,9	52,9	64,4
435	25,6	37,1	49,4	62,5	76,1
500	28,5	41,3	55,1	69,7	85,0
535	30,1	43,6	58,2	73,6	89,8
600	32,9	47,8	63,8	80,8	98,6
685	36,6	53,3	71,2	90,2	110,2
700	37,3	54,2	72,5	91,8	112,2
800	41,6	60,6	81,1	102,8	125,8
835	43,1	62,8	84,1	106,7	130,5
900	45,9	67,0	89,7	113,9	139,3

	Heat output					
Model	ΔΤ 30	ΔΤ 40	ΔT 50	ΔT 60	ΔT 70	
	W/sect.	W/sect.	W/sect.	W/sect.	W/sect.	
935	47,5	69,2	92,7	117,7	144,0	
1000	50,3	73,4	98,3	124,9	152,8	
1135	56,2	82,0	110,0	139,8	171,2	
1200	59,9	87,5	115,7	149,3	182,8	
1400	67,9	99,2	133,3	169,6	207,9	
1435	69,5	101,6	136,4	173,5	212,7	
1600	77,1	112,6	151,2	192,3	235,6	
1735	83,4	121,8	163,4	207,8	254,6	
1800	86,4	126,3	169,4	215,4	263,9	
1935	92,9	135,7	181,9	231,3	283,3	
2000	96,1	140,2	188,1	239,0	292,7	

Model	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
	(C) mm	(B) mm	(A) mm	(D) mm/sect.	inches	litres/sect.		Km
235	90	284	235	50	G1	0,43	1,2665	0,2158
335	90	384	335	50	G1	0,58	1,2792	0,2718
350	90	399	350	50	G1	0,71	1,2800	0,2799
435	90	484	435	50	G1	0,85	1,2849	0,3243
500	90	549	500	50	G1	0,95	1,2885	0,3566
535	90	584	535	50	G1	1,00	1,2905	0,3734
600	90	649	600	50	G1	1,10	1,2942	0,4037
685	90	734	685	50	G1	1,15	1,2990	0,4418
700	90	749	700	50	G1	1,18	1,2999	0,4484
800	90	849	800	50	G1	1,34	1,3055	0,4907
835	90	884	835	50	G1	1,38	1,3075	0,5050
900	90	949	900	50	G1	1,50	1,3091	0,5353
935	90	984	935	50	G1	1,56	1,3100	0,5514
1000	90	1049	1000	50	G1	1,66	1,3115	0,5812
1135	90	1184	1135	50	G1	1,88	1,3149	0,6420
1200	90	1249	1200	50	G1	1,98	1,3164	0,6709
1400	90	1449	1400	50	G1	2,28	1,3213	0,7583
1435	90	1484	1435	50	G1	2,36	1,3210	0,7771
1600	90	1649	1600	50	G1	2,60	1,3192	0,8673
1735	90	1784	1735	50	G1	2,85	1,3178	0,9430
1800	90	1849	1800	50	G1	2,95	1,3171	0,9801
1935	90	1984	1935	50	G1	3,10	1,3156	1,0585
2000	90	2049	2000	50	G1	3,22	1,3150	1,0970

## Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 $^{\circ}\text{C}$

Characteristic equation of the model  $\Phi=Km \Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body № 1695.



## **CODE OBTAINING EXAMPLE**

Tribeca radiator 600 from 10 sections gloss White colour Ex: **EA20C0 + 04 + 10** 

Tribeca radiator 600 from 12 sections gloss Ardesia colour Ex: **EA20C0 + 2B + 12** 

To obtain the radiator code, it is necessary to add the code to the four final digits relating to the colour and number of elements.

Model	Code
235	EA21A0 xx xx
335	EA21B0 xx xx
350	EA20A0 xx xx
435	EA21C0 xx xx
500	EA20B0 xx xx
535	EA21D0 xx xx
600	EA20C0 xx xx
685	EA21E0 xx xx

Model	Code
700	EA20D0 xx xx
800	EA20E0 xx xx
835	EA21F0 xx xx
900	EA20F0 xx xx
935	EA21G0 xx xx
1000	EA20G0 xx xx
1135	EA21H0 xx xx
1200	EA20H0 xx xx

Model	Code
1400	EA20I0 xx xx
1435	EA21I0 xx xx
1600	EA20L0 xx xx
1735	EA21L0 xx xx
1800	EA20M0 xx xx
1935	EA21M0 xx xx
2000	EA20N0 xx xx

#### **COLOURS**

See table on the following page

FINISHES
GLOSS
MATT
TEXTURED MATT
PEARLED

Item	Description	Colour	Code
ST STATE		White glossy (Cod. 04)	550122
		White pearled (Cod. 4M)	550122MP
		Corvino textured matt (Cod. 3L)	550122L
		Corvino glossy (Cod. 2L)	550122LL
00		Pearl pearled (Cod. 4N)	550122NP
00		Pearl glossy (Cod. 2N)	550122NL
	Fixing kit with pincers + plugs and adapters:  1 Flat ½ bleed valve	Pearl matt (Cod. 5N)	550122NO
(e)	2 Plastic covers	Organza glossy (Cod. 2D)	550122DL
8	1 Flat ½ plug	Organza matt (Cod. 5D)	550122DO
	2 ½ Rh adapters	Turtle matt (Cod. 5P)	550122PO
x3	2 ½ Lh adapters	Turtle textured matt (Cod. 3P)	550122P
	3 Metal sheet brackets 3 Plastic covers	Copper glossy (Cod. 2C)	550122CL
	3 White Rh pincers	Copper textured matt (Cod. 3C)	550122C
	3 White Lh pincers	Silver glossy (Cod. 2F)	550122FL
\$40 \$40 \$40	4 1" O-ring seals	Silver textured matt (Cod. 3F)	550122F
the fire fire	1 Retainer rubber cap	Ardesia glossy (Cod. 2B)	550122EL
66 65	Coloured versions: apply a surcharge of 45% on the	Ardesia textured matt (Cod. 3B)	550122E
	pure white gloss (RAL 9010) coating	Rubino glossy (Cod. 2A)	550122BL
Sa Sa Sa	pure write gloss (tine 5010) coating	Heloise textured matt (Cod. 3H)	550122H
Bin= Bin=		Turquoise beach glossy (Cod. 2I)	550122IL
& & m =		Graphite textured matt (Cod. 3R)	550122R
1 1 1		Terra bruciata glossy (Cod. 2S)	550122SL
4 8 4 4		Black coffee textured matt (Cod. 3V)	550122V
		Metropolitan textured matt (Cod. 3T)	550122T

ltem		Description	Code
		Towel rail kit with decoration of 237 mm	570125
		Towel rail kit with decoration of 337 mm	570126
11.18	-	Towel rail kit with decoration of 437 mm	570127
	1	Towel rail kit with decoration of 537 mm	570128
	A 30/2	Lockshield plug for Mood - Tribeca 50 mm (water diaphragm)	521011M
0	A 32/1	O-ring seal for nipples, plugs and adapters	530102
	A 33/1	Nipple for home furnishing radiators	521012
	A 74	Fixing kit for horizontal installation, colour white n° 4	550120
	A 75	Fixing kit for horizontal installation, colour white n° 4	550121

For other accessories, see from page 73

	GLOSS	MATT	TEXTURED MATT	PEARLED
WHITE				
	Cod. 04			Cod. 4M
CORVINO				
	Cod. 2L		Cod. 3L	
METROPOLITAN				
			Cod. 3T	
BLACK COFFEE				
			Cod. 3V	
PEARL				
	Cod. 2N	Cod. 5N		Cod. 4N
ORGANZA				
	Cod. 2D	Cod. 5D		
TURTLE				
		Cod. 5P	Cod. 3P	
COPPER				
	Cod. 2C		Cod. 3C	
TERRA BRUCIATA				
	Cod. 2S			
SILVER				
	Cod. 2F		Cod. 3F	
GRAFITE				
			Cod. 3R	
ARDESIA				
	Cod. 2B		Cod. 3B	
RUBINO				
	Cod. 2A			
HELOISE				
			Cod. 3H	
TURQUOISE BEACH				
	Cod. 2I			

The colours shown are merely indicative and not binding, as they may slightly differ, due to the printing process.

Coloured versions: price increase 45% of a gloss White (RAL 9010)



# Pop

# HOME AND BATHROOM FURNISHING CONFIGURATION **EXCLUSIVE DESIGN**







**Patented technology** 



Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure







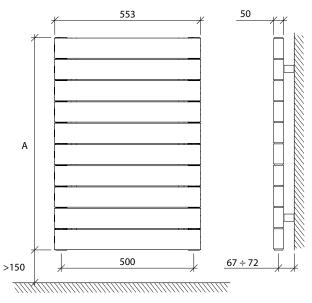
#### **Towel rack**

It is possible to purchase as many as you need and they can be installed in the most convenient and desired position. The handle position can be changed even after installation.

Standard supply	500: 5, 6, 8, 10, 12, 14, 16, 18, 20 and 22 sections
Colours	RAL 9010 White
Maximum working pressure	16 bar
Test pressure	24 bar

All models **Pop** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

ΔT 60 W 279,5 335,4	ΔT 70 W 338,0 405,6
279,5	338,0
335,4	405.6
	100,0
447,2	540,8
559,0	676,0
670,8	811,2
782,6	946,4
894,4	1081,6
1006,2	1216,8
1118,0	1352,0
1229,8	1487,2
	559,0 670,8 782,6 894,4 1006,2 1118,0



MEASURES EXPRESSED IN MILLIMETRES

Model	Code	Depth	Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		mm	mm	mm	(A)mm	inches	litres	n	Km
500/50 - 5	V33103405	50	400	500	553	G1	1,75	1,2332	1,7930
500/50 - 6	V33103406	50	480	500	553	G1	2,10	1,2332	2,1516
500/50 - 8	V33103408	50	640	500	553	G1	2,80	1,2332	2,8688
500/50 - 10	V33103410	50	800	500	553	G1	3,50	1,2332	3,5860
500/50 - 12	V33103412	50	960	500	553	G1	4,20	1,2332	4,3032
500/50 - 14	V33103414	50	1120	500	553	G1	4,90	1,2332	5,0204
500/50 - 16	V33103416	50	1280	500	553	G1	5,60	1,2332	5,7376
500/50 - 18	V33103418	50	1440	500	553	G1	6,30	1,2332	6,4548
500/50 - 20	V33103420	50	1600	500	553	G1	7,00	1,2332	7,1720
500/50 - 22	V33103422	50	1760	500	553	G1	7,70	1,2332	7,8892

#### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 °C

Characteristic equation of the model  $\Phi=\text{Km }\Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

Item		Description	
<b>M.M.</b>	-	Mounting kit - Home and bathroom furnishing configuration	550143
1 ( ta)	-	Towel rack kit	550145
800	A 80	The radiator fixing kit includes: 2 Rh G ½" adapters; 2 Lh G ½" adapters, galvanized and painted; 4 sealing gaskets; 1 G ½" manual bleed valve with seal; 1 G ½" blind plug with seal	550103
	A 2/1	RH/LH G 1" Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105





# Pop

# STANDARD CONFIGURATION EXCLUSIVE DESIGN





Patented technology



Low thermal inertia



Low water content



Versatility



Easy to stock and install



Maximum working pressure



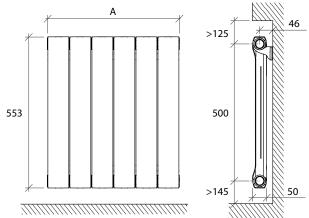


Standard supply	500: 5, 6, 8, 10, 12, 14, 16, 18, 20 and 22 sections		
Colours	RAL 9010 White		
Maximum working pressure	16 bar		
Test pressure	24 bar		

All models **Pop** are guaranteed **10 years** from installation date on manufacturing faults, provided that the installation has been performed in compliance with the current norms and respecting the instructions relating to the installation, the correct use and the correct maintenance as illustrated on this catalogue.

	50_		
ES			
		1	

	Heat output						
Model	ΔΤ 30	ΔΤ 40	ΔT 50	ΔT 60	ΔΤ 70		
	W	W	W	W	W		
500/50 - 5	181,5	262,5	349,5	441,5	538,0		
500/50 - 6	217,8	315,0	419,4	529,8	645,6		
500/50 - 8	290,4	420,0	559,2	706,4	860,8		
500/50 - 10	363,0	525,0	699,0	883,0	1076,0		
500/50 - 12	435,6	630,0	838,8	1059,6	1291,2		
500/50 - 14	508,2	735,0	978,6	1236,2	1506,4		
500/50 - 16	580,8	840,0	1118,4	1412,8	1721,6		
500/50 - 18	653,4	945,0	1258,2	1589,4	1936,8		
500/50 - 20	726,0	1050,0	1398,0	1766,0	2152,0		
500/50 - 22	798,6	1155,0	1537,8	1942,6	2367,2		



#### MEASURES EXPRESSED IN MILLIMETRES

Model Code	Code	Depth Code		Height	Centre distance	Length	Connection diameters	Water capacity	Exponent	Coefficient
		mm	mm	mm	(A)mm	inches	litres	n	Km	
500/50 - 5	V33103405	50	553	500	400	G1	1,75	1,2839	2,3010	
500/50 - 6	V33103406	50	553	500	480	G1	2,10	1,2839	2,7612	
500/50 - 8	V33103408	50	553	500	640	G1	2,80	1,2839	3,6816	
500/50 - 10	V33103410	50	553	500	800	G1	3,50	1,2839	4,6020	
500/50 - 12	V33103412	50	553	500	960	G1	4,20	1,2839	5,5224	
500/50 - 14	V33103414	50	553	500	1120	G1	4,90	1,2839	6,4428	
500/50 - 16	V33103416	50	553	500	1280	G1	5,60	1,2839	7,3632	
500/50 - 18	V33103418	50	553	500	1440	G1	6,30	1,2839	8,2836	
500/50 - 20	V33103420	50	553	500	1600	G1	7,00	1,2839	9,2040	
500/50 - 22	V33103422	50	553	500	1760	G1	7,70	1,2839	10,1244	

### Maximum working pressure: 1600 kpa (16 bar) Maximum working temperature: 120 °C

Characteristic equation of the model  $\Phi=\text{Km }\Delta T^n$ 

The thermal efficiency values shown comply with the European Standard EN 442-1:2014 and are certified by the MRT Lab of the Milan Polytechnic, notified body №1695.

Item		Description	Code
	-	Mouting kit - Standard configuration	550144
800	A 80	The radiator fixing kit includes: 2 Rh G ½" adapters; 2 Lh G ½" adapters, galvanized and painted; 4 sealing gaskets; 1 G ½" manual bleed valve with seal; 1 G ½" blind plug with seal	550103
•	A 2/1	RH/LH G 1"Nipple	510011
0	A 10/1	1" Seals for nipples (without asbestos)	530105







Accessories on request	page 74
Fittings for copper pipes	page 78
Fittings for multilayer pipes	page 79
Fittings for polyethylene pipes	page 81
Thermostatic head	page 81





## ACCESSORIES ON REQUEST

ltem		Description	Code
630	A 1 /1	Rh 1"G automatic air-purging valve. Chromed (always to be installed with the vent in upward position)	520201
600	A 1/1	Lh 1"G automatic air-purging valve. Chromed (always to be installed with the vent in upward position)	520202
	A 4/1	Rh G 1" closing plug, galvanized and painted	
	A 4/ I	Lh G 1" closing plug, galvanized and painted	525114
(6)		Rh adapter 3/8 - Colour: White	526014
		Lh adapter 3/8 - Colour: White	526114
6	A 6/1	Rh adapter 1/2 - Colour: White	526214
	7(0)1	Lh adapter 1/2 - Colour: White	526314
0		Rh adapter 3/4 - Colour: White	526414
		Lh adapter 3/4 - Colour: White	526514
6		Rh 1/4 valve plug - Colour: White	525214
	A 8/1	Lh 1/4 valve plug - Colour: White	525314
	7(0)1	Rh 1/8 valve plug - Colour: White	525414
		Lh 1/8 valve plug - Colour: White	525514
	A 13	Retouch spray 400 ml - Colour: White RAL 9010	540024
	A 16	175 mm Wall anchor bracket	550020
	A 18	Rh bracket to be screwed on to the wall	550035
	A 10	Lh bracket to be screwed on to the wall	550036
	A 26/1	Nipple wrench 1"G	550090
	A 27	Nipple metal wrench 1" (100 cm) without lever	550093
	-	Nipple metal wrench kit 1" and ¾" (50 cm) with lever and plastic wrench for plugs	550092
0	A 40/2	Plastic wrench	560257
6	A 52	G½" air valve, chromed	520203
0	-	½"Blind plug	525602

### **ALFA** series valve 1/2" connection (Valves supplied without fitting)

Description	Colour White - Chrome	Colour Chrome	Colour Gold
	Code	Code	Code
Angle valve, iron pipe connection	8493051	8493052	8493053
Straight valve, iron pipe connection	8493061	8493062	8493063
Angle lockshield valve, iron pipe connection	8493031	8493032	8493033
Straight lockshield retainer, iron pipe connection	8493041	8493042	8493043
Angle valve retainer, copper/PE/multilayer pipe connection	8493151	8493152	8493153
Straight valve, copper/PE/multilayer pipe connection	8493161	8493162	8493163
Angle lockshield retainer, copper/PE/multilayer pipe connection	8493131	8493132	8493133
Straight lockshield retainer, copper/PE/multilayer pipe connection	8493141	8493142	8493143









### **BETA** series valve 1/2" connection (Valves supplied without fitting)

Description	Colour White - Chrome	Colour Chrome
	Code	Code
Angle valve, iron pipe connection	8483351	8483352
Straight valve, iron pipe connection	8483361	8483362
Angle lockshield valve, iron pipe connection	8493531	8493532
Straight lockshield retainer, iron pipe connection	8493541	8493542
Angle valve retainer, copper/PE/multilayer pipe connection	8483451	8483452
Straight valve, copper/PE/multilayer pipe connection	8483461	8483462
Angle lockshield retainer, copper/PE/multilayer pipe connection	8493631	8493632
Straight lockshield retainer, copper/PE/multilayer pipe connection	8493641	8493642











### **GAMMA** series valve ½" connection (Valves supplied without fitting)

Description	Colour White - Chrome	Colour Chrome
	Code	Code
Angle valve, iron pipe connection	8484351	8484352
Straight valve, iron pipe connection	8484361	8484362
Angle lockshield valve, iron pipe connection	8494531	8494532
Straight lockshield retainer, iron pipe connection	8494541	8494542
Angle valve retainer, copper/PE/multilayer pipe connection	8484451	8484452
Straight valve, copper/PE/multilayer pipe connection	8484461	8484462
Angle lockshield retainer, copper/PE/multilayer pipe connection	8494631	8494632
Straight lockshield retainer, copper/PE/multilayer pipe connection	8494641	8494642



### **TONDERA** series valves ½" connection (Valves supplied without fitting)

Description	Colour White	Colour Chrome
	Code	Code
Angle valve with thermostat option, copper and multilayer pipe connection, non-drip end	8496131	8496132
Thermostatic angle valve, copper and multilayer pipe connection, non-drip end	8496331	8496332
Manual adjustment angle valve, copper and multilayer pipe connection, non-drip end	8496231	8496232
Angle lockshield valve, copper and multilayer pipe connection, non-drip end	8496731	8496732
Straight valve with thermostat option, copper and multilayer pipe connection, non-drip end	8496151	8496152
Thermostatic straight valve, copper and multilayer pipe connection, non-drip end	8496351	8496352
Manual adjustment straight valve, copper and multilayer pipe connection, non-drip end	8496251	8496252
Straight lockshield valve, copper and multilayer pipe connection, non-drip end	8496751	8496752





### MINIMAL series valves 1/2" connection (Valves supplied without fitting)

Description	Colour White	Colour Chrome
	Code	Code
Angle valve with thermostat option, interchangeable copper and multilayer pipe connection, non-drip end	8493851	8493852
Thermostatic angle valve, interchangeable copper and multilayer pipe connection, non-drip end	8493651	8493652
Angle lockshield retainer, copper/PE/multilayer pipe connection	8493631	8493632
Angle valve with thermostat option, iron pipe connection, non-drip end	8493751	8493752
Thermostatic angle valve, iron pipe connection, non-drip end	8493551	8493552
Angle lockshield valve, iron pipe connection	8493531	8493532





### LIBERTY series valve 1/2" connection (Valves supplied without fitting) \*

Description	Colour White	Colour RAL 1036	Colour Cast iron	Colour Bronze
	Code	Code	Code	Code
Angle valve, iron pipe connection, non-drip end	8493251	8493256	8493254	8493255
Angle lockshield valve, iron pipe connection, non-drip end	8493231	8493236	8493234	8493235



Description	Colour Gold *	Colour Bronze
	Code	Code
Adapter for copper and multilayer LIBERTY series pipes Pipe size (Ø mm) 3/4" x 24/19	8493283	8493285

<sup>\*</sup> Can be used with valves and lockshield valves in white, RAL 1036 and cast iron



### **OLD STYLE** series valve ½" connection (Valves supplied without fitting)

Description	Colour White	Colour Chrome	Colour Bronze
	Code	Code	Code
Thermostatic angle valve, iron pipe connection, non-drip end	8493671	8493672	8493675
Angle valve, iron pipe connection, non-drip end	8493371	8493372	8493375
Angle lockshield valve, iron pipe connection, non-drip end	8493411	8493412	8493415
Thermostatic straight valve, iron pipe connection, non-drip end	8493681	8493682	8493685
Straight valve, iron pipe connection, non-drip end	8493381	8493382	8493385
Straight lockshield valve, iron pipe connection, non-drip end	8493421	8493422	8493425
Thermostatic angle valve, copper and multilayer pipe connection, non-drip end	8493691	8493692	8493695
Angle valve, copper and multilayer pipe connection, non-drip end	8493391	8493392	8493395
Angle lockshield valve, copper and multilayer pipe connection, non-drip end	8493431	8493432	8493435
Thermostatic straight valve, copper and multilayer pipe connection, non-drip end	8493701	8493702	8493705
Straight valve, copper and multilayer pipe connection, non-drip end	8493401	8493402	8493405
Straight lockshield valve, copper and multilayer pipe connection, non-drip end	8493441	8493442	8493445







### FITTINGS FOR COPPER PIPES

### Fittings for copper pipes for ALFA, BETA and MINIMAL series valves

Pipe size	Colour Chrome	Colour Gold
(Ø mm)	Code	Code
10	849381210	849381310
12	849381212	849381312
14	849381214	849381314

Pipe size	Colour Chrome	Colour Gold
(Ø mm)	Code	Code
15	849381215	849381315
16	849381216	849381316
18	849381218	849381318



### Fittings for copper pipes for **GAMMA** and **TONDERA** series valves

Pipe size	Colour Chrome	
(Ø mm)	Code	
10	849481210	
12	849481212	
14	849481214	

Pipe size	Colour Chrome	
(Ø mm)	Code	
15	849481215	
16	849481216	
18	849481218	



### Fittings for copper pipes for **LIBERTY** series valves

Pipe size	Colour Gold *	Colour Bronze
(Ø mm)	Code	Code
10	849381310	849381510
12	849381312	849381512
14	849381314	849381514

Pipe size	Colour Gold *	Colour Bronze
(Ø mm)	Code	Code
15	849381315	849381515
16	849381316	849381516
18	849381318	849381518



### Fittings for copper pipes for **OLD STYLE** series valves

Pipe size	Colour Chrome *	Colour Bronze	
(Ø mm)	Code	Code	
10	849481210	849481510	
12	849481212	849481512	
14	849481214	849481514	

Pipe size	Colour Chrome *	Colour Bronze	
(Ø mm)	Code	Code	
15	849481215	849481515	
16	849481216	849481516	
18	849481218	849481518	



<sup>\*</sup> Can be used with valves and lockshield valves in white, RAL 1036 and cast iron

<sup>\*</sup> Can be used with valves and lockshield valves in chrome and white

## FITTINGS FOR MULTILAYER PIPES

### Fittings for multilayer pipes for ALFA and BETA series valves

Pipe size	Connection	Colour Chrome	Colour Gold
(Ø int Ø ext.)		Code	Code
9,5/10-14	24 - 19	849383210	849383310
11,5/12-16	24 - 19	8493832115	8493833115





### Fittings for multilayer pipes for **GAMMA** and **TONDERA** series valves

Pipe size	Connection	Colour Chrome
(Ø int Ø ext.)		Code
7,5/8-12	24 - 19	84948320812
9,5/10-14	24 - 19	849483210
9,5/10-15	24 - 19	84948321015
10,5/11-15	24 - 19	84948321115
10,5/11-16	24 - 19	84948321116
11,5/12-16	24 - 19	8494832115

Pipe size	Connection	Colour Chrome		
(Ø int Ø ext.)		Code		
11,5/12-17	24 - 19	84948321217		
12,5/13-17	24 - 19	84948321317		
12,5/13-18	24 - 19	84948321318		
13,5/14-18	24 - 19	84948321418		
14,5/15-20	24 - 19	84948321520		
15/15,5-20	24 - 19	849483215520		
15,5/16-20	24 - 19	84948321620		



### Fittings for multilayer pipes for **LIBERTY** series valves

Pipe size	Connection	Colour Gold *	Colour Bronze	
(Ø int Ø ext.)		Code	Code	
7,5/8-12	24 - 19	84938330812	84938350812	
9,5/10-14	24 - 19	849383310	84938351014	
9,5/10-15	24 - 19	84938331015	84938351015	
10,5/11-15	24 - 19	84938331115	84938351115	
10,5/11-16	24 - 19	84938331116	84938351116	
11,5/12-16	24 - 19	8493833115	84938351216	
11,5/12-17	24 - 19	84938331217	84938351217	
12,5/13-17	24 - 19	84938331317	84938351317	
12,5/13-18	24 - 19	84938331318	84938351318	
13,5/14-18	24 - 19	84938331418	84938351418	
14,5/15-20	24 - 19	84938331520	84938351520	
15/15,5-20	24 - 19	849383315520	849383515520	
15,5/16-20	24 - 19	84938331620	84938351620	





<sup>\*</sup> Can be used with valves and lockshield valves in white, RAL 1036 and cast iron

### Fittings for multilayer pipes for **MINIMAL** series valves

Pipe size	Connection	Colour Chrome		
(Ø int Ø ext.)		Code		
7,5/8-12	24 - 19	84938320812		
9,5/10-14	24 - 19	849383210		
9,5/10-15	24 - 19	84938321015		
10,5/11-15	24 - 19	84938321115		
10,5/11-16	24 - 19	84938321116		
11,5/12-16	24 - 19	8493832115		

Pipe size	Connection	Colour Chrome		
(Ø int Ø ext.)		Code		
11,5/12-17	24 - 19	84938321217		
12,5/13-17	24 - 19	84938321317		
12,5/13-18	24 - 19	84938321318		
13,5/14-18	24 - 19	84938321418		
14,5/15-20	24 - 19	84938321520		
15/15,5-20	24 - 19	849383215520		
15,5/16-20	24 - 19	84938321620		



### Fittings for multilayer pipes for OLD STYLE series valves

Pipe size	Connection	Colour Bronze		
(Ø int Ø ext.)		Code		
7,5/8-12	24 - 19	84948350812		
9,5/10-14	24 - 19	84948351014		
9,5/10-15	24 - 19	84948351015		
10,5/11-15	24 - 19	84948351115		
10,5/11-16	24 - 19	84948351116		
11,5/12-16	24 - 19	84948351216		
11,5/12-17	24 - 19	84948351217		
12,5/13-17	24 - 19	84948351317		
12,5/13-18	24 - 19	84948351318		
13,5/14-18	24 - 19	84948351418		
14,5/15-20	24 - 19	84948351520		
15/15,5-20	24 - 19	849483515520		
15,5/16-20	24 - 19	84948351620		

Pipe size	Connection	Colour Chrome		
(Ø int Ø ext.)		Code		
7,5/8-12	24 - 19	84948320812		
9,5/10-14	24 - 19	849483210		
9,5/10-15	24 - 19	84948321015		
10,5/11-15	24 - 19	84948321115		
10,5/11-16	24 - 19	84948321116		
11,5/12-16	24 - 19	8494832115		
11,5/12-17	24 - 19	84948321217		
12,5/13-17	24 - 19	84948321317		
12,5/13-18	24 - 19	84948321318		
13,5/14-18	24 - 19	84948321418		
14,5/15-20	24 - 19	84948321520		
15/15,5-20	24 - 19	849483215520		
15,5/16-20	24 - 19	84948321620		



### FITTINGS FOR POLYETHYLENE PIPES

Fittings for polyethylene pipes for ALFA and BETA series valves

Pipe size	Colour Chrome		
(Ø int Ø ext.)	Code		
12 - 16	849382212		
13 - 18	849382213		
14 - 18	849382214		

Pipe size	Colour Gold		
(Ø int Ø ext.)	Code		
12 - 16	849382312		
13 - 18	849382313		
14 - 18	849382314		



Fittings for polyethylene pipes for **GAMMA** series valves

Pipe size	Colour Chrome
(Ø int Ø ext.)	Code
12 - 16	849482212
13 - 18	849482213
14 - 18	849482214



### THERMOSTATIC HEAD

Thermostatic head for **BETA**, **GAMMA**, **TONDERA** and **MINIMAL** series valves

Description	Colour White - Chrome	
	Code	
Thermostatic head for BETA, GAMMA, TONDERA and MINIMAL with liquid sensor	8480931	









# ELECTRIC RADIATORS

eBlitz Wi-Fi	page 84
eBlitz Core	page 86
Maniva	page 87
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eGarda	page 90





## eBlitz Wi-Fi

### THERMODYNAMIC FLUID FILLED ELECTRIC RADIATOR





- Radiator manageable remotely via Android and Apple smartphones by downloading the Domus One App
- **Description** Compatible with Alexa
- **▶** Aluminium alloy body:
  - quickly reaches the desired temperature
- **▶** Backlight LCD interface incorporated
- NTC temperature probe and electronic temperature regulation
- In order to optimise consumption, the radiator provides:
  - Daily and weekly programming with Adaptive Start Control
  - Open window detection function
  - Consumption display

### Safety:

- Keyboard lock
- Built-in ON / OFF switch
- Power reserve >2h
- Fixing system included









All models **eBlitz Wi-Fi** are guaranteed **2 years** for electrical components, **10 years** on aluminium body from the installation date against manufacturing defects.



The right side houses the new backlight adjustment and control system with digital display and easytoreach buttons regardless of installation type.

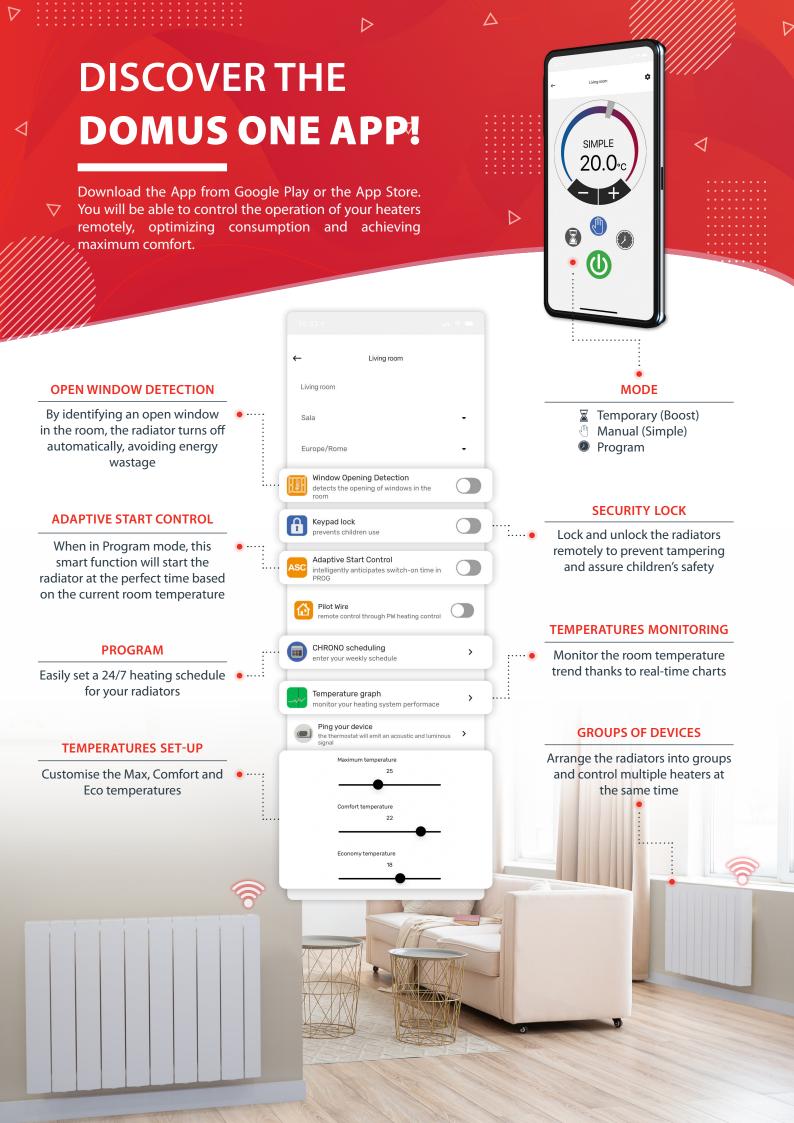
alexa



Power wire:

- Phase
- Neutral
- Pilot wire

Model	Code for Pilot Wire	Power	Sections	Voltage	Frequency	Length	Height	Depth
		W	no.	V	Hz	mm	mm	mm
750	FBG0M1XR84	750	4	230	50/60	390	583	80
1000	FBG0M1XRA5	1000	5	230	50/60	470	583	80
1250	FBG0M1XRD7	1250	7	230	50/60	630	583	80
1500	FBG0M1XRF9	1500	9	230	50/60	790	583	80
1800	FBG0M1XRIB	1800	11	230	50/60	950	583	80



## eBlitz Core

CERAMIC CORE ELECTRIC RADIATOR





- **▶** Aluminium alloy body:
  - quickly reaches the desired temperature
- **▶** Backlight LCD interface incorporated
- NTC temperature probe and electronic temperature regulation
- In order to optimise consumption, the radiator provides:
  - Daily and weekly programming with Adaptive Start Control
  - Open window detection function
  - Consumption display

#### Safety:

- Keyboard lock
- Power reserve >2h
- Fixing system included









All models **eBlitz Core** are guaranteed **2 years** for electrical components, **10 years** on aluminium body from the installation date against manufacturing defects.



The right side houses the new backlight adjustment and control system with digital display and easy-toreach buttons regardless of installation type.



### Power wire:

- Phase
- Neutral
- Pilot wire

Model	Code for Pilot Wire	Power W	Sections no.	Voltage V	Frequency Hz	Length mm	Height mm	Depth mm
1000	FBZ0M7FDA5	1000	5	230	50/60	473	577	97
1500	FBZ0M7FDF7	1500	7	230	50/60	628	577	97
2000	FBZ0M7FDK9	2000	9	230	50/60	788	577	97

## Maniva

### THERMODYNAMIC FLUID FILLED ELECTRIC RADIATOR



- **▶** Excellent weight/power ratio
- Aluminium alloy body:
  - quickly reaches the desired temperature
- **▶** Light and easy to install
- Modern design and state-of-the-art electronics with hourly and weekly programmable time frame
- Energy saving:
  - Open window detection function
  - consumption display
- Child safety lock
- **▶** Fixing system included

### PRODUCT AVAILABLE WHILE STOCKS LAST





All models **Maniva** are guaranteed **2 years** for electrical components, **5 years** on aluminium body from the installation date against manufacturing defects.



Power wire:

- Phase
- Neutral
- Pilot wire

( (



Code for Pil		Power	Sections	Voltage	Frequency	Length	Height	Depth	
Model	Wire	W	no.	V	Hz	mm	mm	mm	
3110	FMD0M1EDA7	1000	7	230	50/60	605	427	97	
3115	FMD0M1EDFC	1500	12	230	50/60	1005	427	97	
3118	FMD0M1EDID	1800	13	230	50/60	1085	427	97	
5807	FME0M1ED74	700	4	230	50/60	365	578	80	
5810	FME0M1EDA6	1000	6	230	50/60	525	578	80	
5812	FME0M1EDC9	1200	9	230	50/60	765	578	80	
5815	FME0M1EDFA	1500	10	230	50/60	845	578	80	
5818	FME0M1EDIC	1800	12	230	50/60	1120	578	80	

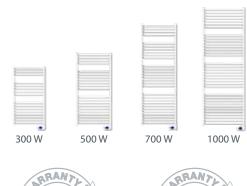


## eCool ED

### ELECTRIC TOWEL RADIATOR WITH DIGITAL CONTROL



- Aluminium alloy body: with low thermal inertia
- **▶** LCD backlight interface
- Daily and weekly programming options
- Open window detection function
- **▶** Child safety lock
- **▶** Fixing system included
- Schuko plug
- ▶ Anticorrosion internal treatment Aleternum provided







All models **eCool ED** are guaranteed **2 years** for electrical components, **5 years** on aluminium body from the installation date against manufacturing defects.



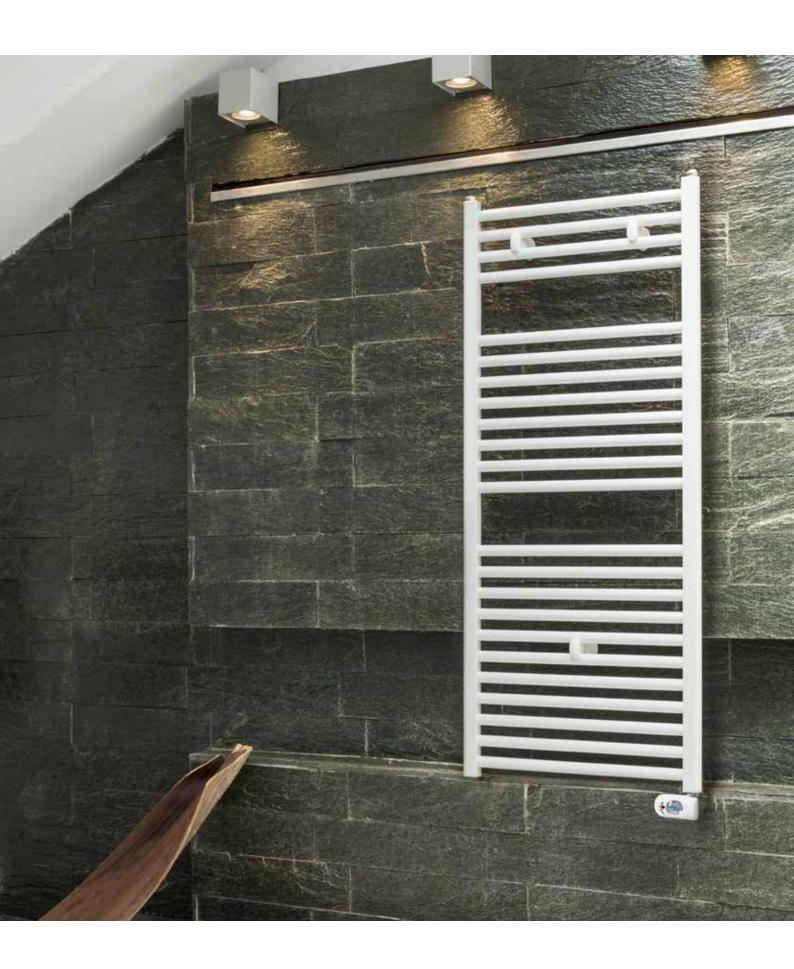
UK or Schuko plug available





Madal	Code for	Code for UK	Power	Voltage	Frequency	Length	Height	Depth	
Model	Schuko Plug	Plug	w	W V		mm	mm	mm	
300	FCA0M1YD30	FCAI21YD30	300	230	50/60	478	933	45	
500	FCA0M1YD50	FCAI21YD50	500	230	50/60	528	1143	45	
700	FCA0M1YD70	FCAI21YD70	700	230	50/60	528	1563	45	
1000	FCA0M1YDA0	FCAI21YDA0	1000	230	50/60	628	1815	45	

Item	Description	Code
(a) (B)	Infrared remote control with wall support (Batteries not included) Features: Comfort, Night, Antifreeze and Stand-by	0ZTELINF01





## eGardo FLUID FILLED ELECTRIC RADIATORS





- **▶** Aluminium alloy body:
  - quickly reaches the desired temperature
- **▶** Colours: White RAL 9010 and Anthracite grey
- Interface with touch radio control
- **▶** NTC temperature probe and electronic temperature regulation
- In order to optimise consumption, the radiator provides:
  - Daily and weekly programming options
  - Open window detection function
  - Consumption display
- Safety:
  - Remote control lock





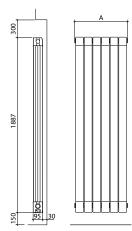
All models eGarda are guaranteed 2 years for electrical components, 5 years on aluminium body from the installation date against manufacturing defects.



Power wire:

- Phase
- Neutral
- Pilot wire





MEASURES EXPRESSED IN MILLIMETRES

Model	Codo for Dilat Wire	Power	Voltage	Frequency	Interfere	Calauri	Consumption in	
Model	Code for Pilot Wire	W	V	Hz	Interface	Colour	Standby Mode	
1500 W	FGA0M1ERF4	1500	230	50	Remote control	White	< 0,5 W	
2000 W	FGA0M1ERK6	2000	230	50	Remote control	White	< 0,5 W	
N 1500 W	FGB0M1ERF4	1500	230	50	Remote control	Antracite	< 0,5 W	
N 2000 W	FGB0M1ERK6	2000	230	50	Remote control	Antracite	< 0,5 W	

Model	Sections	Length	Height	Depth	Net weight	Gross weight
Model	no.	mm	mm	mm	kg	kg
1500 W	4	340	1887	95	17.5	20
2000 W	6	500	1887	95	25.5	29
N 1500 W	4	340	1887	95	17.5	20
N 2000 W	6	500	1887	95	25.5	29

### INCLUDED IN THE PACKAGE

Item	Description
x2	Fixing system
	Remote control with batteries included





# **S** CONVECTIVE GAS STOVES

Gazelle Evo page 94





## [raze]e



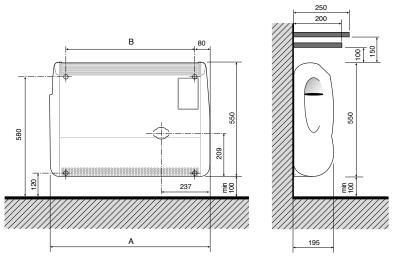


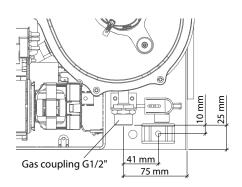
- Seasonal energy efficiency class A
- ▶ Heat exchanger body made of die-cast aluminium with heat reducer
- User interface with encoder, four buttons, large and backlit LC display
- **▶** Premix burner with electronic ignition
- Fans with brushless motor and high efficiency
- **▶** Maximum power consumption ≤ 30W
- Possibility to connect a remote controller (optional)
- **▶** Temperature probe complementary (optional)





Available in the following models: 3000 - 5000 - 7000





### MEASURES EXPRESSED IN MILLIMETRES

Model	Gas type	Code		
3000	NATURAL GAS	GEXX301PR2		
3000	PROPANE	GEXX361PR2		
5000	NATURAL GAS	GEXX501PR2		
5000	PROPANE	GEXX561PR2		
7000	NATURAL GAS	GEXX701PR2		
7000	PROPANE	GEXX761PR2		

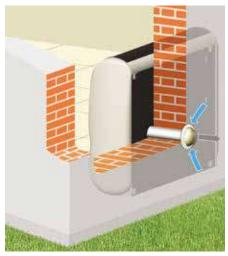
Technical specifications	um	3000	5000	7000
Туре	-	C13, C53	C13, C53	C13, C53
Gas type	-	NATURAL GAS PROPANE	NATURAL GAS PROPANE	NATURAL GAS PROPANE
Size (L x H x D)	-	547x550x195	667x550x195	772x550x195
Gross weight	kg	20,0	24,0	28,0
Seasonal space heating energy efficiency class	-	Α	Α	A
Seasonal energy efficiency of ambient heating (ηs)	%	89	88	88
Rated heat output (Prated)	kW	2,7	4,5	5,9
Minimum heat output (Pmin)	kW	1,9	2,8	4,2
Efficiency at rated heat output (ηth,nom)	%	93,7	92,2	91,8
Efficiency at reduced heat output (nth,min)	%	94,5	94,9	94,0
Rated heat input	W	2900	4900	6400
Reduced heat input	W	2000	3000	4500
Rated heat output	W	2720	4520	5880
Reduced heat input	W	1890	2850	4230
Efficiency at rated heat output (Nat. Gas)	%	93,7	92,2	91,8
Efficiency at rated heat output (Propane)	%	93,5	92,3	91,7
Efficiency at reduced heat output (Nat. Gas)	%	94,5	94,9	94,0
Efficiency at reduced heat output (Propane)	%	94,7	95,1	93,8
NOx emission class	-	5	5	5
Power supply voltage/frequency	V/Hz	230 - 50	230 - 50	230 - 50
Maximum absorbed power ERP	W	24	24	30
Electric protection rating	IP	20	20	20
Outside diameter of straight outlet pipes (C13)	mm	2 x 55/2 **	2 x 55/2 **	2 x 55/2 **
Outside diameter of split pipes (C53)	mm	35 or 60	35 or 60	35 or 60
Gas coupling diameter	inches	G 1/2 M	G 1/2 M	G 1/2 M
Standard consumption (Nat. Gas)	-	0,31 m³/h	0,52 m³/h	0,68 m³/h
Standard consumption (Propane)	-	0,23 kg/h	0,38 kg/h	0,50 kg/h

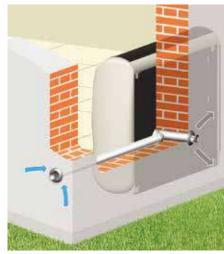
<sup>\*\* 2</sup> x 55/2 refers to 2 tubes together (one for air intake and one for flue gas outlet) both the shape of a semicircle with a 55 mm diameter.

For the gas categories of the products contact Fondital S.p.A.



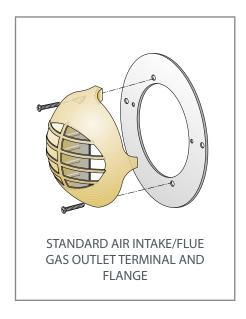
# EXAMPLES OF PIPING APPLICATION FOR AIR INTAKE AND FLUE GAS OUTLET

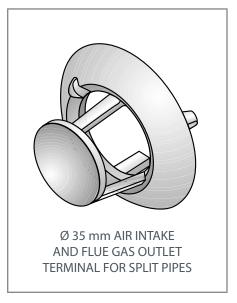


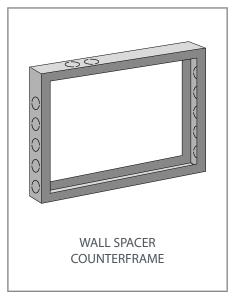










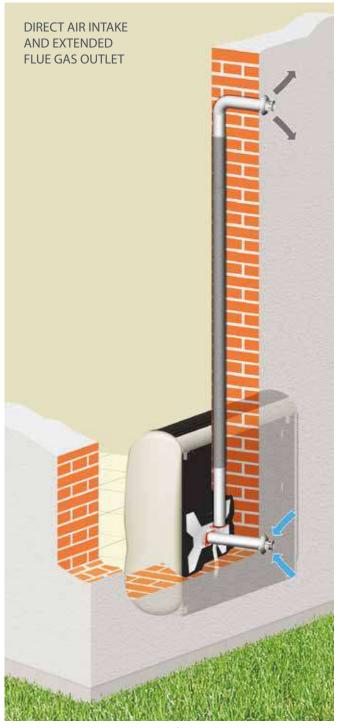


# WALL FIXING SYSTEM WITH BRACKET FOR AIR INTAKE AND FLUE GAS OUTLET (SOME EXAMPLES)

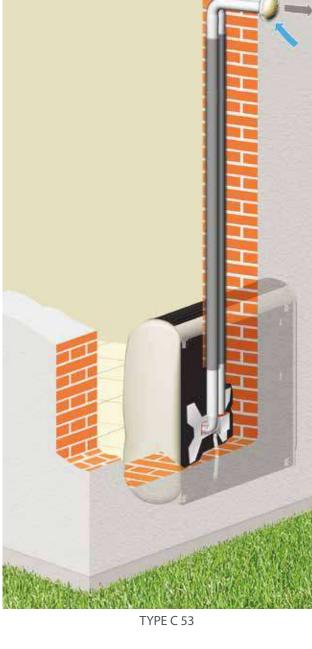
**EXTENDED AIR** 

**GAS OUTLET** 

ITAKE AND FLUE



TYPE C 53



The given examples are purely indicative.

Note: Properly insulate the flue gas outlets and install a condensate drain where needed.







### Length of the pipes for air intake and flue gas outlet

The maximum permissible length of the pipes depends of the load loss of the individual parts of the system installed to create the air intake and flue gas outlet of the machine.

The sum of the load loss of each part, based on the figures indicated in table 2 and 3, must not exceed the value of the "Maximum length permitted". The sum must include both the air intake as the flue gas outlet pipes and changes according the diameter of the pipes used (35 mm or 60 mm).

Gazelle Evo	TYPE (***)	um	3000	5000	7000
	C13		2 (**)	2 (**)	2 (**)
Lunghezza massima ammessa (*)	C53 - Ø 35 mm		13	7	6
	C53 - Ø 35 mm + Ø 60 mm	m	100	100	70

#### Tab. 1

(\*) air intake + flue gas outlet

(\*\*) Use of the pipes supplied by the producer: one for air and one for flue gas, both same semicircle shaped with a 55 mm diameter. Pipes of 1 meter length are available as accessories.

(\*\*\*) see page 96 and 97.

### **ATTENTION:**

When the pipes used are ENTIRELY of diameter 35 mm, refer to the load loss indicators in table 2. When the pipes used are of diameter 35 mm and 60 mm, refer to the load loss indicators in table 3.

### Load loss through pipes of exclusively diameter 35 mm

		30	00	5000		7000	
Description	Code	Α	F	А	F	А	F
		m	m	m	m	m	m
Wall safety grid for terminal	6Y41309000	0	0	0	0	0	0
Single wall terminal for Ø 35 mm	6YTERSDO00	0	0,5	0	0,5	0	0,5
Adapter for split flue gas outlet (semicircle / Ø 35 mm)	6YRIDSDO00	0	0	0	0	0	0
Starting elbow for split flue gas outlet Ø 35 mm	6YCURSDO00	0,5	1	0,5	1	0,5	1
Ø 35 mm double socket-and-spigot pipe length 0,50 m F/F - Colour: White	6YTUBSDO13	0,5	0,5	0,5	0,5	0,5	0,5
Ø 35 mm double socket-and -spigot pipe length 1 m M/F - Colour: White	6YTUBSDO00	0,5	1	0,5	1	0,5	1
90° elbow for Ø 35 mm tube. M/F - Colour: White	6YCURSDO05	0	0	0	0,5	0	0,5
Ø 35 mm F/F condensate drain for horizontal installation (complete with seals) - Colour: White	6YSCACON00	0	0	0	0	0	0
Ø 35 mm socket-and-spigot pipe 0,90m. 90° elbow. M/F - Colour: White	6YTUBSDO02	0,5	1	0,5	1	0,5	1
$\emptyset$ 35 mm F/F condensate drain for horizontal installation (complete with seals)	6YSCACON05	0	0	0	0	0	0
Ø 35 mm F/F coupling sleeve for pipe connection (complete with seals)	6YMANSCA00	0	0	0	0	0	0
90°, Ø 35 mm, F/F condensate drain for vertical pipes (complete with seals)	6YSCACON06	0,5	1	0,5	1	0,5	1

#### Tab. 2

A = air intake

F = flue gas outlet

### Load loss through pipes of mixed diameter 35 mm and 60 mm

		30	000	5000		7000	
Description	Code	Α	F	Α	F	Α	F
		m	m	m	m	m	m
Adapter for split flue gas outlet (semicircle / Ø 35 mm)	6YRIDSDO00	0	0,5	0,5	0,5	0	0,5
Starting elbow for split flue gas outlet Ø 35 mm	6YCURSDO00	8	13,5	11,5	21	7,5	14
Ø 35 mm double socket-and-spigot pipe length 0,50 m F/F - Colour: White	6YTUBSDO13	4	7,5	5	10	3	6,5
Ø 35 mm double socket-and -spigot pipe length 1 m M/F - Colour: White	6YTUBSDO00	8,5	15	10	20,5	6,5	12,5
90° elbow for Ø 35 mm tube. M/F - Colour: White	6YCURSDO05	2	3,5	3	5	2	3,5
$\emptyset$ 35 mm F/F condensate drain for horizontal installation (complete with seals) - Colour: White	6YSCACON00	1,5	3	2	4	1,5	2,5
Ø 35 mm socket-and-spigot pipe 0,90m. 90° elbow. M/F - Colour: White	6YTUBSDO02	9,5	16,5	12	23,5	7,5	15
Ø 60 mm ÷ Ø 35 mm F/M adapter - Colour: White	6YRIDSDO03	0	5,5	0	8,5	0	5,5
Ø 60 mm ÷ Ø 35 mm F/F adapter - Colour: White	6YRIDSDO01	0	5,5	0	8,5	0	5,5
Ø 35 mm F/F condensate drain for horizontal installation (complete with seals)	6YSCACON05	0,5	1	0,5	1,5	0,5	1
Ø 35 mm F/F coupling sleeve for pipe connection (complete with seals)	6YMANSCA00	0	0,5	0,5	0,5	0	0,5
90°, Ø 35 mm, F/F condensate drain for vertical pipes (complete with seals)	6YSCACON06	8	13,5	11,5	21	7,5	14
Ø 60 mm pipe length 0.50 m M/F - Colour: White	6YTUBSDO07	0	0,5	0,5	0,5	0,5	0,5
Ø 60 mm pipe length 1.00 m M/F - Colour: White	6YTUBSDO09	0,5	1	1	1	0,5	1
Ø 60 mm pipe length 2.00 m M/F - Colour: White	6YTUBSDO11	1	2	1,5	2	1	2
Ø 60 mm, 90° elbow for pipe M/F - Colour: White	6YCURSDO01	0,5	1	1	2	0,5	1,5
Ø 60 mm, 45° elbow for pipe M/F - Colour: White	6YCURSDO03	0,5	1	1	1,5	0,5	1
Ø 60 mm condensate flue gas outlet M/F - Colour: White	6YSCACON02	0	0	0	0	0	0
Ø 60 mm air intake or flue gas outlet brace terminal, F (aluminium)	6YTERCON00	2,5	2,5	3,5	4	2,5	2,5
Ø 60 mm upright flue gas terminal, F (aluminium)	6YTERSCA00	-	2	-	3	-	2
Single wall terminal for Ø 35 mm	6YTERSDO00	0	7	0	11	0	7,5

#### Tab. 3

A = air intake

F = flue gas outlet

### **CALCULATION EXAMPLE**

With pipe diameter of 35 mm e 60 mm (apply the load loss indicated in table 3)

#### Gazelle EVO 5000

Split air intake and flue gas outlet pipes Ø 35 mm and Ø 60 mm Direct air intake behind the appliance Roof flue gas outlet with pipe length 3 meters Maximum length allowed: 100 meters

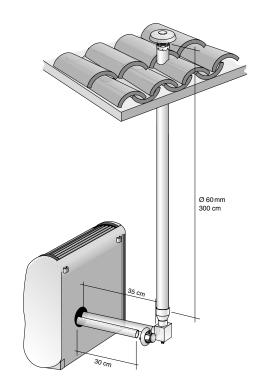
#### Air intake load loss

Adapter for split flue gas outlet (semicircle / Ø 35 mm): 0,5 m Ø 35 mm double pipe length 30 cm:  $10 \times 0,30 \text{ m} = 3,0 \text{ m}$ Single wall terminal for Ø 35 mm: 0,0 m Total air intake load loss: 3,5 m

### Flue gas outlet load loss

Adapter for split flue gas outlet (semicircle / Ø 35 mm): 0,5 m Ø 35 mm double pipe length 35 cm: 20,5 x 0,35 m = 7,2 m Ø 35 mm, 90° F/F condensate drain for vertical pipes: 21,0 m Ø 60 mm  $\div$  Ø 35 mm F/M adapter: 8,5 m Ø 60 mm pipe length 1 m M/F x 3 : 3 x 1 m = 3,0 m Ø 60 mm upright flue gas terminal, F : 3,0 m Total flue gas outlet loss: 43,2 m

Total (air intake + outlet): 3.5 m + 43.2 m = 46.7 m $46.7 \text{ m} < 100 \text{ m} \rightarrow \text{ALLOWED SOLUTION}$ 





## **ACCESSORIES**

ltem	Description	Pack	Code
	Standard pipe, length 1 m	2 pc.	6YTUBOAL01
	Wall safety grid for terminal	1 pc.	6Y41309000
	Single wall terminal for Ø 35 mm	2 pc.	6YTERSDO00
6	Adapter for split flue gas outlet (semicircle / Ø 35 mm)	2 pc.	6YRIDSDO00
	Starting elbow for split flue gas outlet Ø 35 mm	2 pc.	6YCURSDO00
	Ø 35 mm double socket-and-spigot pipe length 0,50 m F/F - Colour: White	6 pc.	6YTUBSDO13
	Ø 35 mm double socket-and-spigot pipe length 0,50 m F/F - Colour: White	1 pc.	6YTUBSDO93
	Ø 35 mm double socket-and -spigot pipe length 1 m M/F - Colour: White	6 pc.	6YTUBSDO00
	Ø 35 mm double socket-and -spigot pipe length 1 m M/F - Colour: White	1 pc.	6YTUBSDO90
118 mm	90° elbow for Ø 35 mm tube. M/F - Colour: White	3 pc.	6YCURSDO05
155 7373	90° elbow for Ø 35 mm tube. M/F - Colour: White	1 pc.	6YCURSDO95
118 mm	Ø 35 mm socket-and-spigot pipe 0,90m. 90° elbow. M/F - Colour: White	6 pc.	6YTUBSDO02
to the total of th	Ø 35 mm socket-and-spigot pipe 0,90m. 90° elbow. M/F - Colour: White	1 pc.	6YTUBSDO92
	Ø 35 mm F/F condensate drain for horizontal installation (complete with seals) - Colour: White	2 pc.	6YSCACON00
	Ø 35 mm F/F condensate drain for horizontal installation (complete with seals) - Colour: White	1 pc.	6YSCACON90
	Ø 60 mm ÷ Ø 35 mm F/M adapter - Colour: White	2 pc.	6YRIDSDO03
	Ø 60 mm ÷ Ø 35 mm F/F adapter - Colour: White	2 pc.	6YRIDSDO01

ltem	Description	Pack	Code
A	Ø 35 mm appliance/adapter seal for pipe	10 pc.	6YGUASDO00
B 00	Ø 35 mm external seal for connecting pipes	10 pc.	6YGUASDO02
C	Ø 35 mm adapter/elbow seal	10 pc.	6YGUASDO04
x2	Ø 35 mm split pipe kit with supporting bracket for in-wall pipes The kit includes: N° 1 supporting bracket N° 2 starting elbows for split flue gas outlet N° 2 2 adapters for split flue gas outlet N° 2 single Ø 35 mm flue gas terminals N° 1 air shutter - N° 2 A-type seals N° 2 B-type seals - N° 2 C-type seals N° 8 3,9 x 9,5 screws N° 2 3,9 x 9,5 screws for terminal fixing N° 4 dowels	1 pc.	6YKITSDO01
	Ø 35 mm F/F condensate drain for horizontal installation (complete with seals)	1 pc.	6YSCACON05
	90°, Ø 35 mm, F/F condensate drain for vertical pipes (complete with seals)	1 pc.	6YSCACON06
	Ø 35 mm F/F coupling sleeve for pipe connection (complete with seals)	2 pc.	6YMANSCA00
SEC.	Supporting bracket (with screws and dowels)	1 pc.	6YPIAMUR00
x2 - x2 x2 x2 x2	split pipe kit Ø 35 mm The kit includes: N° 2 adapters - N° 2 starting elbows N° 1 air diaphragm N° 2 B-type seals for connecting pipes N° 2 Ø 35 mm single flue gas terminals N° 6 screws - N° 2 fixing brackets	1 pc.	6YKITSDO00
See mm See mm Grimm Grimm	Counterframe for split outlet (mod. 3000)	1 pc.	6YTELAIO03
	Counterframe for split outlet (mod. 5000)	1 pc.	6YTELAIO04
	Counterframe for split outlet (mod. 7000)	1 pc.	6YTELAIO05





ltem	Description	Pack	Code
	Ø 60 mm pipe length 0.50 m M/F - Colour: White	6 pc.	6YTUBSDO07
	Ø 60 mm pipe length 1.00 m M/F - Colour: White	6 pc.	6YTUBSDO09
	Ø 60 mm pipe length 1.00 m M/F - Colour: White	1 pc.	6YTUBSDO99
	Ø 60 mm pipe length 2.00 m M/F - Colour: White	6 pc.	6YTUBSDO11
	Ø 60 mm, 90° elbow for pipe M/F - Colour: White	4 pc.	6YCURSDO01
	Ø 60 mm, 90° elbow for pipe M/F - Colour: White	1 pc.	6YCURSDO91
	Ø 60 mm, 45° elbow for pipe M/F - Colour: White	4 pc.	6YCURSDO03
	Ø 60 mm, 45° elbow for pipe M/F - Colour: White	1 pc.	6YCURSDO93
	Ø 60 mm condensate flue gas outlet M/F - Colour: White	2 pc.	6YSCACON02
	Ø 60 mm air intake or flue gas outlet brace terminal, F (aluminium)	2 pc.	6YTERCON00
0	Ø 60 mm upright flue gas terminal, F (aluminium)	2 pc.	6YTERSCA00
	Ø 60 mm pipe clip - Colour: White	10 pc.	6YCOLSCA00
PR .	Remote control, ErP V class (118x85x32 mm)		0CREMOTO04
0	Ambient temperature probe (12x12x20 mm, with 50cm cable)	1 pc.	0KITSAMB00

## **INCLUDED ACCESSORIES**

Item	Description	Pack	Code
1	Air intake/flue gas outlet terminal flange	1 pc.	6YLAMTER00
	Standard pipe, length 59 cm	2 pc.	6YTUBOAL00
	Plastic terminal	1 pc.	6YTERMIN02
	Installation kit	1 pc.	6YKITIST37





# Anti-corrosion treatment for radiators © Company of the control o



Aleternum® internal coating by Fondital

Corrosion is the primary cause of malfunctions in heating systems. Not only does it deteriorate the components of the system, but over the years corrosion significantly reduces efficiency, increasing consumption and, as a result, operating costs.

For example, corrosion in a heating system containing cast iron or steel radiators produces a sludge that accumulates at the bottom of the radiators, obstructing the radiators themselves and the pipes, resulting in a partial or total loss in thermal performance and uneven heat distribution.

In conventional aluminium radiators, corrosion produces gas pockets which prevent the radiator from heating evenly and may limit thermal performance.

To stop corrosion even before it starts, Fondital has developed Aleternum®, an exclusive resin-based internal coating to protect the radiator water chamber.

Aleternum® by Fondital brings the heating system into a new era, in which total\* protection is a guarantee of safety and high efficiency. Your heating system will always be as good as new!

### WHAT IS CORROSION?



t is the chemical and physical interaction between a metal and a water-based medium, which causes changes in the properties of the metal and which often leads to a loss in the functionality of the metal itself, of the medium or of the system consisting of these two elements.

### Metal + Water + Oxidant = Corrosion

Depending on the part of the metal affected, corrosion is classified as follows:

- diffused corrosion (or generalised corrosion): if the entire surface of the metal is affected by corrosion;
- uniform corrosion: if the entire surface of the metal is affected by corrosion and the effects of corrosion are equal over the entire surface;
- localised corrosion: where only certain areas of the metal are affected by corrosion. There are numerous different patterns of localised corrosion, among which: ulcers, craters, cavities, pin holes and cracks.

plan view	profile view		
	Uniform Corrosion – g		
	Uniform Corrosion –		
•••	Localised Co		
	Pitting	craters	
• • • •		pin holes	
		cavities	382
	Stress corrosion cracking (SCC)	Simple cracks	] } (
		Ramified cracks	1 6 6
2 <u>v</u> 2	Corrosion - erosion		

- ➤ The complete anti-corrosion treatment\*
- > Ideal for a broad ph spectrum

Conventional aluminium radiators require pH levels between 7 and 8. The new coating eliminates this limitation, allowing aluminium radiators with the Aleternum coating to operate at a wider pH range than both untreated aluminium and steel (which is subject to corrosive attack at pH levels below 8). Aleternum® radiators by Fondital may be used in heating systems with high or potentially high pH levels.



- > No gas pocket formation (no gas)
- > 100% Aluminium 100% recyclable
- > Burst pression up to 60 bar ideal for multi-storey buildings
- > Will not become obstructed no cold spots
- > Light and easy to install
- May be installed in mixed heating systems
- > Extended warranty up to 20 years.
- > Better euro/watt ratio than steel and bimetal radiators
- > Patented system

<sup>\*</sup> Anticorrosive characteristics are ensured if the product is installed in a closed-circuit heating installation, in which all the cleaning and water treatment operations have to be made according to installation standards specific for closed circuit heating installations.



## THERMOELECTRICALLY-WELDED CAP

Thermoelectric process, a PATENT PENDING technology, ensures a stable joint between the aluminium die-cast section and its base. Metal in the joint area is absolutely uniform and the two components are perfectly integrated into each other. Thermoelectric joining

technology is carried out at controlled temperatures that prevent spatter and porosity. The result is a radiator that is as solid as a 100% single piece in aluminium, even more sturdy and reliable than ever.

### TRADITIONAL CAP



### THERMOELECTRICALLY-WELDED CAP





- ✓ NO DIRT ACCUMULATIONS
- ✓ NO WELDING RESIDUES
- ✓ EVEN BETTER AESTHETICS
- ✓ NO GASKETS
- ✓ ENTIRELY IN ALUMINIUM
- ✓ INTERNATIONAL PATENT
- ✓ 100% ALUMINIUM

### RADIATOR SIZING AND INSTALLATION

To correctly determine the heat output of the radiators to be installed, you must comply with the rules in force.. To determine the number of sections required for each radiator, you must remember that their nominal heat output is associated with a  $\Delta T$  (difference between the average water temperature and ambient temperature) of 50 K or of 30 K. It is therefore advisable to ensure a  $\Delta T$  of less than 50 K by decreasing the water outlet temperature (for example, a  $\Delta T$  of 40 to 30 K). This will ensure energy savings as well as increase the degree of comfort.

The radiator heat output for different  $\Delta T$  values is calculated using the formula:  $\Phi = Km \times \Delta Tn$ 

The radiator heat output for different  $\Delta T$  values is calculated using the formula: Calidor Super B4 500/100 radiator with water temperature: inlet 60 ° C, outlet 44 ° C and ambient temperature of 20 °C.  $\Delta T$ = (inlet water temperature + outlet water temperature) / 2 - ambient temperature = (60 + 44) / 2 - 20= 32 K.

When determining the number of sections, remember that in the case of installations with water inlet and outlet at the base or installations with one-way or two-way valve, heat output may decrease by up to  $10 \div 12\%$  and 20% respectively, due to the particular water distribution in the radiators.

If the radiator is installed under shelves, in niches or - worse - in the event of radiator covers, heat output may decrease by around 10-12 %.

### RADIATOR INSTALLATION, USE AND MAINTENANCE

The heating systems must be designed, installed, operated and maintained according to the rules in force. In particular, remember the following during installation:

- The radiators may be used with water and steam systems (max temperature of 120°C);
- the maximum working pressure for die-cast radiators is 16 bar (1600 kPa);
- The radiators must be installed according to the minimum permitted distances: 12 cm above the floor, 2÷5 cm from the wall behind, 10 cm from any niches or shelves;
- If the wall at the back is not sufficiently insulated, fit any additional insulation to minimize dispersion of heat out through the wall;
- Each radiator must be fitted with a vent valve, preferably an automatic one (especially if the radiator has to be isolated from the system);
- The water must have a pH of 7 or 8 (between 5 and 10 only for the model Aleternum) and must not have any properties that can corrode metal in general. As regards treating water in domestic heating systems, it is advisable to use specific products that are suitable for multimetal plants, in order to optimize performance and safety, preserve these conditions over time, ensure regular operation of auxiliary equipment as well, and minimize energy consumption, in compliance with the applicable laws and standards. Compliance with this standard is a legal requirement. Use specific products suitable for multi-metal systems such as, for example, CILLIT HS 23 Combi, SENTINEL X 100 or FERNOX F1.
- to tighten the nipples apply a tightening torque between 50 and 80 Nm. Do not exceed 80 Nm.

#### When using the radiator, remember:

Never use abrasive products to clean the surfaces;

 $\Phi$  (32K) = Km x  $\Delta$ Tn = 0,7991 x (32)1,2890 = 69,62 W

- Do not use humidifiers in porous materials such as terracotta;
- Avoid fully closing the valve and thereby isolating the radiator from the system;
- If the radiator requires excessive purging, this means there is a fault with the heating system. Contact a qualified technician or call the manufacturer's technical office directly.



The manufacturer reserves the right to implement modifications without notice.

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