

Zehnder Charleston

Prices and Technology 2025 - Zehnder Baltics OÜ

always the best climate



always the best climate

Our mission is to provide a healthy indoor climate with top quality solutions. Living spaces are kept at a comfortable temperature by our radiators and heating & cooling ceilings whereas our ventilation solutions make sure that you can breathe fresh clean air 24/7.

zehnder



Trusted partner

We provide our customers with tailored services from planning to installation of excellent solutions for the best indoor climate since 1895.



Know what's next

Consistent focus on innovation has always been the motor for our business. We strive to provide intelligent solutions for ventilation, heating, and cooling.



Swiss quality and precision

Swiss quality and precision are reflected in all our products. Our design standards create timeless elegance in living spaces for yesterday, today, and tomorrow.



Know why, know how

It is our ongoing mission to share our expertise and know how with our customers by providing expert trainings. Our dedicated Zehnder academies bring indoor climate to life.



Dr. Hans-Peter Zehnder & Milva Inderbitzin-Zehnder

From family business to international company

From a small family-run mechanical workshop in Gränichen, Switzerland, Zehnder grew into a leading international corporation. The company roots are deeply intertwined with the entrepreneurial spirit of the Zehnder family. These are visible in Zehnder's corporate culture, the customer focus, respect, trust, curiosity, and openness.

Your global partner for indoor climate

4.000
employees

16
production
plants

more than
1.400
patents and
registered designs



Decorative radiators

Our decorative radiators do not only make a home feel cozy but have also eye-catching designs.



Comfortable indoor ventilation

Our ventilation systems ensure a healthy indoor climate but operate with high energy efficiency, boost wellbeing, and retain the property value.



Heating and cooling ceilings

Our heating and cooling ceiling systems are energy efficient and versatile to fit multiple environments.



Industrial air cleaning

Our clean air solutions are transforming working environments and improving the performance of businesses everywhere.

About Zehnder Charleston	Zehnder Charleston - discover the original		4
	Zehnder Charleston Benefits		6
	Zehnder Charleston Individual Solutions		8
	Zehnder Charleston Variety		9
	Zehnder Charleston How to choose & calculate		10
Zehnder Charleston radiators	Zehnder Charleston		12
	Zehnder Charleston Clinic		44
	Zehnder Charleston Retrofit		74
	Zehnder Charleston Turned		106
	Zehnder Charleston Bench		108
	Zehnder Charleston Electric		112
Accessories	Individual sets		116
	Valves		122
	Rail		127
	Miscellaneous		128
General	Keyword list		129
	Pressure loss graph		133
	Conversion table		134
	Packaging		136
	Coloursystem		138

 Hot water operation

 Electric operation

General Sales and Delivery Conditions:

Our General Sales and Delivery Conditions apply. You can find these under “Legal notice” on our homepage at <https://www.zehnder.ee/muugi-ja-tarnetingimused/>.

A radiator with tradition. The Zehnder Charleston.

Discover the original. Zehnder applied for the patent for Europe's first tube radiator as early as 1930 – marking the birth of Zehnder Charleston.

This began a success story that continues to the present day. Maybe it's due to the high quality "Made in Germany", maybe it's the timeless contemporary designs, maybe it's the countless customized solutions – or maybe it's all these things: Zehnder Charleston is and remains the classic, or better put, the original tube radiator.

Today, with an over 100 year company history, Zehnder is the specialist in heating, cooling, and fresh clean air. In addition to radiators for the bathroom, living room and buildings, our product portfolio also includes heating and cooling radiators, climate-controlling systems and Clean Air Solutions to filter dust.

As you can see: With Zehnder, you are choosing experience and know-how, a product portfolio that has something for everyone – and an expert service, that is tailored to your requirements and needs.

What's your project? The original Zehnder Charleston helps you realize your goals.



Today as always, a firm favourite.

Even an original has to move with the times. For Zehnder Charleston, this meant having to switch over to modern industrial production methods: the manufacturing of Zehnder Charleston with LaZer made. This innovative laser welding method for the production of sectional radiators is setting new standards for quality and technology in terms of precision, quality and functionality.



Masterful. The Zehnder factory.

For all the technological progress, there are some things that only “good old-fashioned handicraft” can accomplish: In the Zehnder factory, special productions are made to individual requirements and wishes – masterfully.



Made in Germany. Put through its paces.

You can rightly expect that Zehnder Charleston is made – and tested – in Germany. For example, all radiators are fully tested for leaks. And delivery is also done with care: Sturdy cardboard packaging carries the radiator safely to its destination and a further packaging of stretch film protects it during and after installation.

Zehnder Charleston.

Benefits of the classic radiator.



1

The Original

Often copied, but never bettered: When Zehnder registered its patent for Europe's first steel tubular radiator on March 18, 1930, no-one could have known that this invention would still be at the cutting edge over almost 90 years later. Zehnder Charleston was, is and remains without doubt a truly timeless classic.



2

Made in Germany

Innovation, design, quality – you should expect nothing but the best from Zehnder. All radiators are 100 % approved against leaks and can even be delivered galvanized for humid rooms. The specially developed primer and powder coating process guarantees a smooth and durable surface.



3

Cosy warmth - everywhere

Zehnder Charleston ensures a balanced and pleasant room climate. Its large heating surface enables the Zehnder Charleston to powerful radiant heat and rapid warm-up period ensure cosy warmth straight away. And all this with the minimum of dust movement, which is good news for people with allergies.



4

Clean, hygienic and health

The distance between the elements enables easy cleaning of the radiator. Zehnder Charleston meets the highest hygiene standards (Certified by Düsseldorf University). The paint contains no solvents.

5

Warmth as you want it

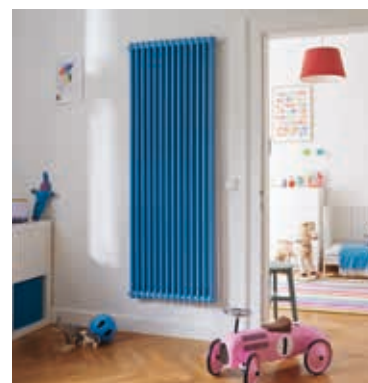
Curved, single or multi-angle or as a room divider: Thanks to its countless special designs, Zehnder Charleston can fit in all buildings. Even the building heights of 30 - 600 cm can be undercut or exceeded as required.



6

More than just white

Zehnder Charleston is available in over 700 colours and surfaces, from classic tones, contemporary and metallic colours through to metal surfaces, such as Technoline – this means you have to make no compromises when it comes to aesthetics. All these lacquers are free of solvents and heavy metals, and therefore do not release any toxic fumes.



7

Quick and simple

Thanks to the Zehnder EasyFix assembly system, all radiators can be installed simply, safely and quickly. This saves installation time, and money. The location of the mounting points behind the tubes can barely be seen – another aesthetic benefit.



8

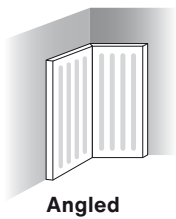
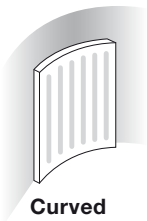
Delivered as ordered

A bar code-based logistics system ensures reliable, punctual delivery. A robust fully cardboard packaging prevents any kind of transport damages, and an extra film covering protects the radiator during and after installation. It is only removed during the move-in.



Individual solutions

Homes, studios, offices, banks, hospitals...Buildings have highly varied uses, and their architecture can be just as varied. So it's good when top plans even work out for warmth: Zehnder's radiators allow you to realise your ideas in the most diverse of architectural designs.



....and further Zehnder Charleston variations for any building situation!



Zehnder Charleston Bench

Purpose: Lifestyle feature for your living area & comfortable warmth



Zehnder Charleston Completo

Purpose: For new builds when pre-installation in the unfinished structure is needed



Zehnder Charleston Turned

Purpose: Comfortable heat in a fresh & slim design even in large living spaces



Zehnder Charleston Electric

Purpose: demand-based warmth and low energy consumption. Efficient and user-friendly

How to CONFIGURE your Charleston radiator

1	Choose model & number of elements (e.g. 3060-22 elements)	page 15-34
2	Choose connection option (e.g. 3570- Flow left/ return right)	page 94-97
3	Choose wall or floor mounting type (e.g. SMB wall bracket)	page 98-101
4	Choose colour of radiator (e.g. 0325 Technoline gloss)	page 138-139



Zehnder Charleston

How to CALCULATE your Charleston radiator

Calculation example of a standard version

Price per element		Amount of elements		Colour		Connection		Accessories
3030		14		RAL 9016		Nº 1270		CVD0 + BH in RAL 9016
25.56 €		357.84 €		0 € (Standard)		0 € (Standard)		25.57 €
2026		32		RAL 7016		Nº V001		SMB
23.17 €		741.44 €		20% = 148.29 €		221.45 €		57.05 €



Zehnder Charleston



	Overview of models	Product description	List prices	Special versions	Fixings	Technical data	Installation points	Connections
Zehnder Charleston								
 ▪ Classic tubular radiator ▪ Element length 46 mm ▪ Flexible connection options	14	13	15	35	98	37	42	94

Zehnder Charleston



Zehnder Charleston



Completo version

Product description

Zehnder Charleston – the original tube radiator. The construction of individual elements gives the multi-column radiator enormous possibilities for adapting to the architectural circumstances found in new and old buildings. Nowadays, Zehnder Charleston generally comes with a custom finish, delivered in a single piece with connections to order. In the case of excess lengths or lengths on request, the radiator can also be delivered to the building site in several parts and assembled on site.

Zehnder Charleston meets individual expectations for the widest range of applications and has therefore been successfully used in all areas of buildings for decades. From private homes to public buildings, schools, homes, prisons, offices, shops as well as workshops and industrial buildings. Its versatility and variability are what allow the Charleston to create such varied looks, combined with the hygienic suitability (certificate) and cleanability, safety aspects during mounting and installation. Special versions by agreement supplement the products on offer. No other radiator is as flexible in all regards – and everything is made in Germany.

Technical specifications

- Steel round tubes Ø 25 mm
- Header in sheet steel
- Length of the individual element 46 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Maximum operating pressure 10 bar
- Maximum operating temperature 110 °C

Customisation options

- Large choice of connection types, including integrated valve
- Mounting sets for all applications
- Special colours and antibacterial coating
- Galvanised and painted
- Energy saving thermal radiation shield for installation in front of windows
- Special shapes: angled or curved, etc
- High pressure version up to max. 18 bar
- Operating temperature at 120 °C on request

Advantages

- Residue-free laser welding technology LaZer made
- Classic elegance
- Accident-safe
- Cleaning with Zehnder lambswool cleaning brush
- Simple and secure with non-lift-out feature: Installation with Zehnder EasyFix
- Radiant heat with feel-good factor
- Energy-efficient for use in low temperature heating systems

Scope of delivery for standard version

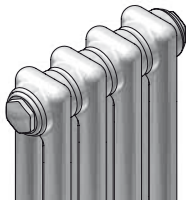
- Primed and painted in RAL 9016
- Connections 4 x ½" female thread at front
- Connection S001: 1 blanking plug ½", directional air vent ½"
- Complete packaging in stretch film and carton
- Heights greater than 2200 mm with stabilising brace welded at the factory

Scope of delivery for Completo version

- Primed and painted in RAL 9016
- Valve unit integrated on side, with valve insert AV 9, max. flow rate 250 kg/h
- Connections 2 x ½" female thread from bottom 50 mm
- Integrated baffle
- 1 directional air vent ½"
- Complete packaging in stretch film and carton

Zehnder Charleston

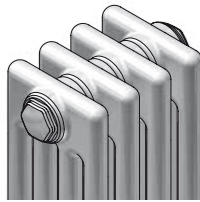
Zehnder Charleston



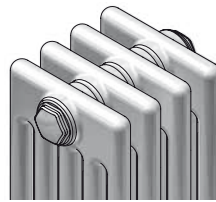
2-column



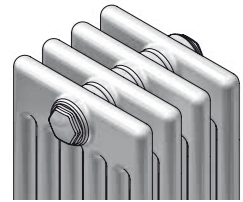
3-column



4-column



5-column



6-column

Height 1) mm	Depth mm				
	62	100	136	173	210
260	2026	3026	4026	5026	6026
300	2030	3030	4030	5030	6030
350	2035	3035	4035	5035	6035
400	2040	3040	4040	5040	6040
450	2045	3045	4045	5045	6045
500	2050	3050	4050	5050	6050
550	2055	3055	4055	5055	6055
600	2060	3060	4060	5060	6060
750	2075	3075	4075	5075	6075
900	2090	3090	4090	5090	6090
1000	2100	3100	4100	5100	6100
1100	2110	3110	4110	5110	6110
1200	2120	3120	4120	5120	6120
1500	2150	3150	4150	5150	6150
1800	2180	3180	4180	5180	6180
2000	2200	3200	4200	5200	6200
2200	2220	3220	4220	5220	6220
2500	2250	3250	4250	5250	6250
2800	2280	3280	4280	5280	6280
3000	2300	3300	4300	5300	6300

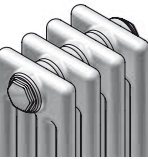
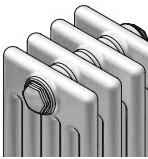
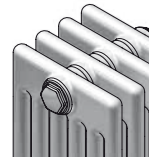
1) The values shown here are the so-called nominal height; the exact height varies by a few mm for 2-column radiators and for some of the 3-column radiators as well, see "Technical specifications"; larger heights over 3000 mm or intermediate heights are available on request.

Maximum radiator lengths on piece (per block)

Zehnder Charleston (also see price tables from page 21 onwards)							
Model	Height mm						
	260 - 600	> 600 - 750	> 750 - 900	> 900 - 1000	> 1000 - 2000	> 2000 - 2500	> 2500 - 3000
2-, 3-column	64	64	64	64	22	22	22
140	64	64	64	60	22	22	22
210	64	64	50	50	22	22	17
280	64	55	46	42	22	17	14

Zehnder Charleston

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		260									
											
Model		2026		3026		4026		5026		6026	
Depth	mm	62		100		136		173		210	
Exponent	n	1,25		1,25		1,25		1,25		1,27	
Max. number of elements		64		64		64		64		64	
Price/element	€	23.17		24.96		27.77		33.85		39.43	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	85	92.68	112	99.84	146	111.08	181	135.40	214	157.72
5	230	106	115.85	140	124.80	183	138.85	226	169.25	268	197.15
6	276	127	139.02	168	149.76	219	166.62	271	203.10	321	236.58
7	322	148	162.19	196	174.72	256	194.39	316	236.95	375	276.01
8	368	169	185.36	224	199.68	292	222.16	361	270.80	428	315.44
9	414	190	208.53	252	224.64	329	249.93	406	304.65	482	354.87
10	460	211	231.70	279	249.60	365	277.70	451	338.50	535	394.30
11	506	233	254.87	307	274.56	402	305.47	497	372.35	589	433.73
12	552	254	278.04	335	299.52	438	333.24	542	406.20	642	473.16
13	598	275	301.21	363	324.48	475	361.01	587	440.05	696	512.59
14	644	296	324.38	391	349.44	511	388.78	632	473.90	749	552.02
15	690	317	347.55	419	374.40	548	416.55	677	507.75	803	591.45
16	736	338	370.72	447	399.36	584	444.32	722	541.60	856	630.88
17	782	359	393.89	475	424.32	621	472.09	767	575.45	910	670.31
18	828	380	417.06	503	449.28	657	499.86	812	609.30	963	709.74
19	874	401	440.23	531	474.24	694	527.63	857	643.15	1017	749.17
20	920	422	463.40	558	499.20	730	555.40	902	677.00	1070	788.60
21	966	444	486.57	586	524.16	767	583.17	948	710.85	1124	828.03
22	1012	465	509.74	614	549.12	803	610.94	993	744.70	1177	867.46
23	1058	486	532.91	642	574.08	840	638.71	1038	778.55	1231	906.89
24	1104	507	556.08	670	599.04	876	666.48	1083	812.40	1284	946.32
25	1150	528	579.25	698	624.00	913	694.25	1128	846.25	1338	985.75
26	1196	549	602.42	726	648.96	949	722.02	1173	880.10	1391	1 025.18
27	1242	570	625.59	754	673.92	986	749.79	1218	913.95	1445	1 064.61
28	1288	591	648.76	782	698.88	1022	777.56	1263	947.80	1498	1 104.04
29	1334	612	671.93	810	723.84	1059	805.33	1308	981.65	1552	1 143.47
30	1380	633	695.10	837	748.80	1095	833.10	1353	1 015.50	1605	1 182.90
31	1426	655	718.27	865	773.76	1132	860.87	1399	1 049.35	1659	1 222.33
32	1472	676	741.44	893	798.72	1168	888.64	1444	1 083.20	1712	1 261.76
33	1518	697	764.61	921	823.68	1205	916.41	1489	1 117.05	1766	1 301.19
34	1564	718	787.78	949	848.64	1241	944.18	1534	1 150.90	1819	1 340.62
35	1610	739	810.95	977	873.60	1278	971.95	1579	1 184.75	1873	1 380.05
36	1656	760	834.12	1005	898.56	1314	999.72	1624	1 218.60	1926	1 419.48
37	1702	781	857.29	1033	923.52	1351	1 027.49	1669	1 252.45	1980	1 458.91
38	1748	802	880.46	1061	948.48	1387	1 055.26	1714	1 286.30	2033	1 498.34
39	1794	823	903.63	1089	973.44	1424	1 083.03	1759	1 320.15	2087	1 537.77
40	1840	844	926.80	1116	998.40	1460	1 110.80	1804	1 354.00	2140	1 577.20

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

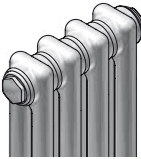
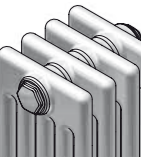
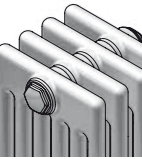
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		300									
											
Model		2030		3030		4030		5030		6030	
Depth	mm	62		100		136		173		210	
Exponent	n	1,24		1,25		1,25		1,25		1,26	
Max. number of elements		64		64		64		64		64	
Price/element	€	23.56		25.56		28.40		33.88		39.47	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	95	94.24	128	102.24	168	113.60	207	135.52	246	157.88
5	230	118	117.80	160	127.80	210	142.00	259	169.40	307	197.35
6	276	142	141.36	192	153.36	252	170.40	311	203.28	368	236.82
7	322	166	164.92	224	178.92	294	198.80	362	237.16	430	276.29
8	368	189	188.48	256	204.48	336	227.20	414	271.04	491	315.76
9	414	213	212.04	288	230.04	378	255.60	466	304.92	552	355.23
10	460	236	235.60	320	255.60	419	284.00	517	338.80	613	394.70
11	506	260	259.16	352	281.16	461	312.40	569	372.68	675	434.17
12	552	284	282.72	384	306.72	503	340.80	621	406.56	736	473.64
13	598	307	306.28	416	332.28	545	369.20	673	440.44	797	513.11
14	644	331	329.84	448	357.84	587	397.60	724	474.32	859	552.58
15	690	354	353.40	480	383.40	629	426.00	776	508.20	920	592.05
16	736	378	376.96	512	408.96	671	454.40	828	542.08	981	631.52
17	782	402	400.52	544	434.52	713	482.80	879	575.96	1043	670.99
18	828	425	424.08	576	460.08	755	511.20	931	609.84	1104	710.46
19	874	449	447.64	608	485.64	797	539.60	983	643.72	1165	749.93
20	920	472	471.20	640	511.20	838	568.00	1034	677.60	1226	789.40
21	966	496	494.76	672	536.76	880	596.40	1086	711.48	1288	828.87
22	1012	520	518.32	704	562.32	922	624.80	1138	745.36	1349	868.34
23	1058	543	541.88	736	587.88	964	653.20	1190	779.24	1410	907.81
24	1104	567	565.44	768	613.44	1006	681.60	1241	813.12	1472	947.28
25	1150	590	589.00	800	639.00	1048	710.00	1293	847.00	1533	986.75
26	1196	614	612.56	832	664.56	1090	738.40	1345	880.88	1594	1 026.22
27	1242	638	636.12	864	690.12	1132	766.80	1396	914.76	1656	1 065.69
28	1288	661	659.68	896	715.68	1174	795.20	1448	948.64	1717	1 105.16
29	1334	685	683.24	928	741.24	1216	823.60	1500	982.52	1778	1 144.63
30	1380	708	706.80	960	766.80	1257	852.00	1551	1 016.40	1839	1 184.10
31	1426	732	730.36	992	792.36	1299	880.40	1603	1 050.28	1901	1 223.57
32	1472	756	753.92	1024	817.92	1341	908.80	1655	1 084.16	1962	1 263.04
33	1518	779	777.48	1056	843.48	1383	937.20	1707	1 118.04	2023	1 302.51
34	1564	803	801.04	1088	869.04	1425	965.60	1758	1 151.92	2085	1 341.98
35	1610	826	824.60	1120	894.60	1467	994.00	1810	1 185.80	2146	1 381.45
36	1656	850	848.16	1152	920.16	1509	1 022.40	1862	1 219.68	2207	1 420.92
37	1702	874	871.72	1184	945.72	1551	1 050.80	1913	1 253.56	2269	1 460.39
38	1748	897	895.28	1216	971.28	1593	1 079.20	1965	1 287.44	2330	1 499.86
39	1794	921	918.84	1248	996.84	1635	1 107.60	2017	1 321.32	2391	1 539.33
40	1840	944	942.40	1280	1 022.40	1676	1 136.00	2068	1 355.20	2452	1 578.80

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

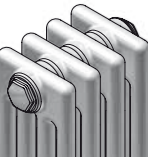
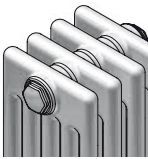
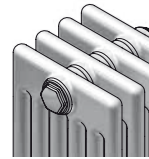
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		350									
											
Model		2035		3035		4035		5035		6035	
Depth	mm	62		100		136		173		210	
Exponent	n	1,24		1,25		1,25		1,26		1,26	
Max. number of elements		64		64		64		64		64	
Price/element	€	23.99		26.27		29.36		34.65		40.71	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	110	95.96	148	105.08	194	117.44	240	138.60	284	162.84
5	230	138	119.95	185	131.35	243	146.80	300	173.25	355	203.55
6	276	165	143.94	222	157.62	291	176.16	360	207.90	426	244.26
7	322	193	167.93	259	183.89	340	205.52	420	242.55	497	284.97
8	368	220	191.92	296	210.16	388	234.88	480	277.20	568	325.68
9	414	248	215.91	333	236.43	437	264.24	540	311.85	639	366.39
10	460	275	239.90	370	262.70	485	293.60	599	346.50	710	407.10
11	506	303	263.89	407	288.97	534	322.96	659	381.15	781	447.81
12	552	330	287.88	444	315.24	582	352.32	719	415.80	852	488.52
13	598	358	311.87	481	341.51	631	381.68	779	450.45	923	529.23
14	644	385	335.86	518	367.78	679	411.04	839	485.10	994	569.94
15	690	413	359.85	555	394.05	728	440.40	899	519.75	1065	610.65
16	736	440	383.84	592	420.32	776	469.76	959	554.40	1136	651.36
17	782	468	407.83	629	446.59	825	499.12	1019	589.05	1207	692.07
18	828	495	431.82	666	472.86	873	528.48	1079	623.70	1278	732.78
19	874	523	455.81	703	499.13	922	557.84	1139	658.35	1349	773.49
20	920	550	479.80	740	525.40	970	587.20	1198	693.00	1420	814.20
21	966	578	503.79	777	551.67	1019	616.56	1258	727.65	1491	854.91
22	1012	605	527.78	814	577.94	1067	645.92	1318	762.30	1562	895.62
23	1058	633	551.77	851	604.21	1116	675.28	1378	796.95	1633	936.33
24	1104	660	575.76	888	630.48	1164	704.64	1438	831.60	1704	977.04
25	1150	688	599.75	925	656.75	1213	734.00	1498	866.25	1775	1 017.75
26	1196	715	623.74	962	683.02	1261	763.36	1558	900.90	1846	1 058.46
27	1242	743	647.73	999	709.29	1310	792.72	1618	935.55	1917	1 099.17
28	1288	770	671.72	1036	735.56	1358	822.08	1678	970.20	1988	1 139.88
29	1334	798	695.71	1073	761.83	1407	851.44	1738	1 004.85	2059	1 180.59
30	1380	825	719.70	1110	788.10	1455	880.80	1797	1 039.50	2130	1 221.30
31	1426	853	743.69	1147	814.37	1504	910.16	1857	1 074.15	2201	1 262.01
32	1472	880	767.68	1184	840.64	1552	939.52	1917	1 108.80	2272	1 302.72
33	1518	908	791.67	1221	866.91	1601	968.88	1977	1 143.45	2343	1 343.43
34	1564	935	815.66	1258	893.18	1649	998.24	2037	1 178.10	2414	1 384.14
35	1610	963	839.65	1295	919.45	1698	1 027.60	2097	1 212.75	2485	1 424.85
36	1656	990	863.64	1332	945.72	1746	1 056.96	2157	1 247.40	2556	1 465.56
37	1702	1018	887.63	1369	971.99	1795	1 086.32	2217	1 282.05	2627	1 506.27
38	1748	1045	911.62	1406	998.26	1843	1 115.68	2277	1 316.70	2698	1 546.98
39	1794	1073	935.61	1443	1 024.53	1892	1 145.04	2337	1 351.35	2769	1 587.69
40	1840	1100	959.60	1480	1 050.80	1940	1 174.40	2396	1 386.00	2840	1 628.40

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

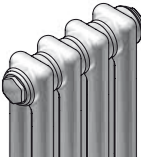
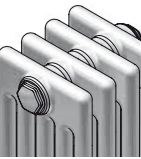
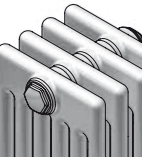
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		400									
mm											
											
Model		2040		3040		4040		5040		6040	
Depth	mm	62		100		136		173		210	
Exponent	n	1,24		1,25		1,26		1,26		1,27	
Max. number of elements		64		64		64		64		64	
Price/element	€	24.47		27.05		29.89		35.36		41.95	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	125	97.88	168	108.20	220	119.56	272	141.44	322	167.80
5	230	156	122.35	210	135.25	275	149.45	340	176.80	403	209.75
6	276	188	146.82	252	162.30	330	179.34	408	212.16	483	251.70
7	322	219	171.29	294	189.35	385	209.23	476	247.52	564	293.65
8	368	250	195.76	336	216.40	440	239.12	544	282.88	644	335.60
9	414	281	220.23	378	243.45	495	269.01	612	318.24	725	377.55
10	460	312	244.70	419	270.50	549	298.90	679	353.60	805	419.50
11	506	344	269.17	461	297.55	604	328.79	747	388.96	886	461.45
12	552	375	293.64	503	324.60	659	358.68	815	424.32	966	503.40
13	598	406	318.11	545	351.65	714	388.57	883	459.68	1047	545.35
14	644	437	342.58	587	378.70	769	418.46	951	495.04	1127	587.30
15	690	468	367.05	629	405.75	824	448.35	1019	530.40	1208	629.25
16	736	500	391.52	671	432.80	879	478.24	1087	565.76	1288	671.20
17	782	531	415.99	713	459.85	934	508.13	1155	601.12	1369	713.15
18	828	562	440.46	755	486.90	989	538.02	1223	636.48	1449	755.10
19	874	593	464.93	797	513.95	1044	567.91	1291	671.84	1530	797.05
20	920	624	489.40	838	541.00	1098	597.80	1358	707.20	1610	839.00
21	966	656	513.87	880	568.05	1153	627.69	1426	742.56	1691	880.95
22	1012	687	538.34	922	595.10	1208	657.58	1494	777.92	1771	922.90
23	1058	718	562.81	964	622.15	1263	687.47	1562	813.28	1852	964.85
24	1104	749	587.28	1006	649.20	1318	717.36	1630	848.64	1932	1 006.80
25	1150	780	611.75	1048	676.25	1373	747.25	1698	884.00	2013	1 048.75
26	1196	812	636.22	1090	703.30	1428	777.14	1766	919.36	2093	1 090.70
27	1242	843	660.69	1132	730.35	1483	807.03	1834	954.72	2174	1 132.65
28	1288	874	685.16	1174	757.40	1538	836.92	1902	990.08	2254	1 174.60
29	1334	905	709.63	1216	784.45	1593	866.81	1970	1 025.44	2335	1 216.55
30	1380	936	734.10	1257	811.50	1647	896.70	2038	1 060.80	2415	1 258.50
31	1426	968	758.57	1299	838.55	1702	926.59	2105	1 096.16	2496	1 300.45
32	1472	999	783.04	1341	865.60	1757	956.48	2173	1 131.52	2576	1 342.40
33	1518	1030	807.51	1383	892.65	1812	986.37	2241	1 166.88	2657	1 384.35
34	1564	1061	831.98	1425	919.70	1867	1 016.26	2309	1 202.24	2737	1 426.30
35	1610	1092	856.45	1467	946.75	1922	1 046.15	2377	1 237.60	2818	1 468.25
36	1656	1124	880.92	1509	973.80	1977	1 076.04	2445	1 272.96	2898	1 510.20
37	1702	1155	905.39	1551	1 000.85	2032	1 105.93	2513	1 308.32	2979	1 552.15
38	1748	1186	929.86	1593	1 027.90	2087	1 135.82	2581	1 343.68	3059	1 594.10
39	1794	1217	954.33	1635	1 054.95	2142	1 165.71	2649	1 379.04	3140	1 636.05
40	1840	1248	978.80	1676	1 082.00	2196	1 195.60	2716	1 414.40	3220	1 678.00

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45
 Surcharge for Completo, valve at top, connections V007/V008 €: 294.26
 Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		450									
Model		2045		3045		4045		5045		6045	
Depth	mm	62		100		136		173		210	
Exponent	n	1,24		1,25		1,26		1,26		1,27	
Max. number of elements		64		64		64		64		64	
Price/element	€	24.96		27.99		31.08		37.15		43.41	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	140	99.84	188	111.96	246	124.32	304	148.60	360	173.64
5	230	175	124.80	234	139.95	307	155.40	379	185.75	449	217.05
6	276	210	149.76	281	167.94	368	186.48	455	222.90	539	260.46
7	322	245	174.72	328	195.93	430	217.56	531	260.05	629	303.87
8	368	280	199.68	375	223.92	491	248.64	607	297.20	719	347.28
9	414	315	224.64	422	251.91	552	279.72	683	334.35	809	390.69
10	460	349	249.60	468	279.90	613	310.80	758	371.50	898	434.10
11	506	384	274.56	515	307.89	675	341.88	834	408.65	988	477.51
12	552	419	299.52	562	335.88	736	372.96	910	445.80	1078	520.92
13	598	454	324.48	609	363.87	797	404.04	986	482.95	1168	564.33
14	644	489	349.44	656	391.86	859	435.12	1062	520.10	1258	607.74
15	690	524	374.40	702	419.85	920	466.20	1137	557.25	1347	651.15
16	736	559	399.36	749	447.84	981	497.28	1213	594.40	1437	694.56
17	782	594	424.32	796	475.83	1043	528.36	1289	631.55	1527	737.97
18	828	629	449.28	843	503.82	1104	559.44	1365	668.70	1617	781.38
19	874	664	474.24	890	531.81	1165	590.52	1441	705.85	1707	824.79
20	920	698	499.20	936	559.80	1226	621.60	1516	743.00	1796	868.20
21	966	733	524.16	983	587.79	1288	652.68	1592	780.15	1886	911.61
22	1012	768	549.12	1030	615.78	1349	683.76	1668	817.30	1976	955.02
23	1058	803	574.08	1077	643.77	1410	714.84	1744	854.45	2066	998.43
24	1104	838	599.04	1124	671.76	1472	745.92	1820	891.60	2156	1 041.84
25	1150	873	624.00	1170	699.75	1533	777.00	1895	928.75	2245	1 085.25
26	1196	908	648.96	1217	727.74	1594	808.08	1971	965.90	2335	1 128.66
27	1242	943	673.92	1264	755.73	1656	839.16	2047	1 003.05	2425	1 172.07
28	1288	978	698.88	1311	783.72	1717	870.24	2123	1 040.20	2515	1 215.48
29	1334	1013	723.84	1358	811.71	1778	901.32	2199	1 077.35	2605	1 258.89
30	1380	1047	748.80	1404	839.70	1839	932.40	2274	1 114.50	2694	1 302.30
31	1426	1082	773.76	1451	867.69	1901	963.48	2350	1 151.65	2784	1 345.71
32	1472	1117	798.72	1498	895.68	1962	994.56	2426	1 188.80	2874	1 389.12
33	1518	1152	823.68	1545	923.67	2023	1 025.64	2502	1 225.95	2964	1 432.53
34	1564	1187	848.64	1592	951.66	2085	1 056.72	2578	1 263.10	3054	1 475.94
35	1610	1222	873.60	1638	979.65	2146	1 087.80	2653	1 300.25	3143	1 519.35
36	1656	1257	898.56	1685	1 007.64	2207	1 118.88	2729	1 337.40	3233	1 562.76
37	1702	1292	923.52	1732	1 035.63	2269	1 149.96	2805	1 374.55	3323	1 606.17
38	1748	1327	948.48	1779	1 063.62	2330	1 181.04	2881	1 411.70	3413	1 649.58
39	1794	1362	973.44	1826	1 091.61	2391	1 212.12	2957	1 448.85	3503	1 692.99
40	1840	1396	998.40	1872	1 119.60	2452	1 243.20	3032	1 486.00	3592	1 736.40

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

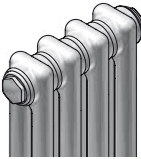
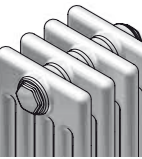
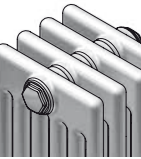
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Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm	500									
												
Model			2050		3050		4050		5050		6050	
Depth	mm		62		100		136		173		210	
Exponent	n		1,25		1,25		1,26		1,27		1,28	
Max. number of elements			64		64		64		64		64	
Price/element	€		25.54		28.73		32.23		37.83		44.51	
Length			Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm		W	€	W	€	W	€	W	€	W	€
4	184		154	102.16	207	114.92	271	128.92	334	151.32	396	178.04
5	230		192	127.70	258	143.65	338	161.15	418	189.15	495	222.55
6	276		231	153.24	310	172.38	406	193.38	501	226.98	594	267.06
7	322		269	178.78	362	201.11	474	225.61	585	264.81	693	311.57
8	368		308	204.32	413	229.84	541	257.84	668	302.64	792	356.08
9	414		346	229.86	465	258.57	609	290.07	752	340.47	891	400.59
10	460		384	255.40	516	287.30	676	322.30	835	378.30	990	445.10
11	506		423	280.94	568	316.03	744	354.53	919	416.13	1089	489.61
12	552		461	306.48	620	344.76	812	386.76	1002	453.96	1188	534.12
13	598		500	332.02	671	373.49	879	418.99	1086	491.79	1287	578.63
14	644		538	357.56	723	402.22	947	451.22	1169	529.62	1386	623.14
15	690		576	383.10	774	430.95	1014	483.45	1253	567.45	1485	667.65
16	736		615	408.64	826	459.68	1082	515.68	1336	605.28	1584	712.16
17	782		653	434.18	878	488.41	1150	547.91	1420	643.11	1683	756.67
18	828		692	459.72	929	517.14	1217	580.14	1503	680.94	1782	801.18
19	874		730	485.26	981	545.87	1285	612.37	1587	718.77	1881	845.69
20	920		768	510.80	1032	574.60	1352	644.60	1670	756.60	1980	890.20
21	966		807	536.34	1084	603.33	1420	676.83	1754	794.43	2079	934.71
22	1012		845	561.88	1136	632.06	1488	709.06	1837	832.26	2178	979.22
23	1058		884	587.42	1187	660.79	1555	741.29	1921	870.09	2277	1 023.73
24	1104		922	612.96	1239	689.52	1623	773.52	2004	907.92	2376	1 068.24
25	1150		960	638.50	1290	718.25	1690	805.75	2088	945.75	2475	1 112.75
26	1196		999	664.04	1342	746.98	1758	837.98	2171	983.58	2574	1 157.26
27	1242		1037	689.58	1394	775.71	1826	870.21	2255	1 021.41	2673	1 201.77
28	1288		1076	715.12	1445	804.44	1893	902.44	2338	1 059.24	2772	1 246.28
29	1334		1114	740.66	1497	833.17	1961	934.67	2422	1 097.07	2871	1 290.79
30	1380		1152	766.20	1548	861.90	2028	966.90	2505	1 134.90	2970	1 335.30
31	1426		1191	791.74	1600	890.63	2096	999.13	2589	1 172.73	3069	1 379.81
32	1472		1229	817.28	1652	919.36	2164	1 031.36	2672	1 210.56	3168	1 424.32
33	1518		1268	842.82	1703	948.09	2231	1 063.59	2756	1 248.39	3267	1 468.83
34	1564		1306	868.36	1755	976.82	2299	1 095.82	2839	1 286.22	3366	1 513.34
35	1610		1344	893.90	1806	1 005.55	2366	1 128.05	2923	1 324.05	3465	1 557.85
36	1656		1383	919.44	1858	1 034.28	2434	1 160.28	3006	1 361.88	3564	1 602.36
37	1702		1421	944.98	1910	1 063.01	2502	1 192.51	3090	1 399.71	3663	1 646.87
38	1748		1460	970.52	1961	1 091.74	2569	1 224.74	3173	1 437.54	3762	1 691.38
39	1794		1498	996.06	2013	1 120.47	2637	1 256.97	3257	1 475.37	3861	1 735.89
40	1840		1536	1 021.60	2064	1 149.20	2704	1 289.20	3340	1 513.20	3960	1 780.40

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		550									
Model		2055		3055		4055		5055		6055	
Depth mm		62		100		136		173		210	
Exponent n		1,25		1,26		1,26		1,27		1,28	
Max. number of elements		64		64		64		64		64	
Price/element €		26.12		29.52		33.43		39.23		46.62	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	168	104.48	226	118.08	295	133.72	364	156.92	432	186.48
5	230	210	130.60	282	147.60	369	167.15	456	196.15	540	233.10
6	276	252	156.72	338	177.12	443	200.58	547	235.38	648	279.72
7	322	294	182.84	395	206.64	516	234.01	638	274.61	756	326.34
8	368	336	208.96	451	236.16	590	267.44	729	313.84	864	372.96
9	414	378	235.08	507	265.68	664	300.87	820	353.07	972	419.58
10	460	419	261.20	563	295.20	737	334.30	911	392.30	1080	466.20
11	506	461	287.32	620	324.72	811	367.73	1002	431.53	1188	512.82
12	552	503	313.44	676	354.24	885	401.16	1093	470.76	1296	559.44
13	598	545	339.56	732	383.76	959	434.59	1184	509.99	1404	606.06
14	644	587	365.68	789	413.28	1032	468.02	1275	549.22	1512	652.68
15	690	629	391.80	845	442.80	1106	501.45	1367	588.45	1620	699.30
16	736	671	417.92	901	472.32	1180	534.88	1458	627.68	1728	745.92
17	782	713	444.04	958	501.84	1253	568.31	1549	666.91	1836	792.54
18	828	755	470.16	1014	531.36	1327	601.74	1640	706.14	1944	839.16
19	874	797	496.28	1070	560.88	1401	635.17	1731	745.37	2052	885.78
20	920	838	522.40	1126	590.40	1474	668.60	1822	784.60	2160	932.40
21	966	880	548.52	1183	619.92	1548	702.03	1913	823.83	2268	979.02
22	1012	922	574.64	1239	649.44	1622	735.46	2004	863.06	2376	1 025.64
23	1058	964	600.76	1295	678.96	1696	768.89	2095	902.29	2484	1 072.26
24	1104	1006	626.88	1352	708.48	1769	802.32	2186	941.52	2592	1 118.88
25	1150	1048	653.00	1408	738.00	1843	835.75	2278	980.75	2700	1 165.50
26	1196	1090	679.12	1464	767.52	1917	869.18	2369	1 019.98	2808	1 212.12
27	1242	1132	705.24	1521	797.04	1990	902.61	2460	1 059.21	2916	1 258.74
28	1288	1174	731.36	1577	826.56	2064	936.04	2551	1 098.44	3024	1 305.36
29	1334	1216	757.48	1633	856.08	2138	969.47	2642	1 137.67	3132	1 351.98
30	1380	1257	783.60	1689	885.60	2211	1 002.90	2733	1 176.90	3240	1 398.60
31	1426	1299	809.72	1746	915.12	2285	1 036.33	2824	1 216.13	3348	1 445.22
32	1472	1341	835.84	1802	944.64	2359	1 069.76	2915	1 255.36	3456	1 491.84
33	1518	1383	861.96	1858	974.16	2433	1 103.19	3006	1 294.59	3564	1 538.46
34	1564	1425	888.08	1915	1 003.68	2506	1 136.62	3097	1 333.82	3672	1 585.08
35	1610	1467	914.20	1971	1 033.20	2580	1 170.05	3189	1 373.05	3780	1 631.70
36	1656	1509	940.32	2027	1 062.72	2654	1 203.48	3280	1 412.28	3888	1 678.32
37	1702	1551	966.44	2084	1 092.24	2727	1 236.91	3371	1 451.51	3996	1 724.94
38	1748	1593	992.56	2140	1 121.76	2801	1 270.34	3462	1 490.74	4104	1 771.56
39	1794	1635	1 018.68	2196	1 151.28	2875	1 303.77	3553	1 529.97	4212	1 818.18
40	1840	1676	1 044.80	2252	1 180.80	2948	1 337.20	3644	1 569.20	4320	1 864.80

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

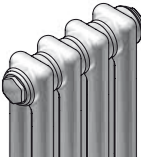
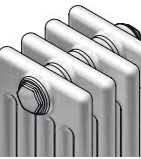
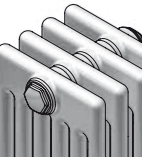
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		600									
mm											
											
Model		2060		3060		4060		5060		6060	
Depth	mm	62		100		136		173		210	
Exponent	n	1,25		1,26		1,27		1,27		1,29	
Max. number of elements		64		64		64		64		64	
Price/element	€	26.68		30.34		34.90		41.02		48.36	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	182	106.72	244	121.36	320	139.60	395	164.08	468	193.44
5	230	227	133.40	305	151.70	399	174.50	493	205.10	585	241.80
6	276	272	160.08	366	182.04	479	209.40	592	246.12	702	290.16
7	322	318	186.76	427	212.38	559	244.30	691	287.14	819	338.52
8	368	363	213.44	488	242.72	639	279.20	789	328.16	936	386.88
9	414	408	240.12	549	273.06	719	314.10	888	369.18	1053	435.24
10	460	453	266.80	609	303.40	798	349.00	986	410.20	1170	483.60
11	506	499	293.48	670	333.74	878	383.90	1085	451.22	1287	531.96
12	552	544	320.16	731	364.08	958	418.80	1184	492.24	1404	580.32
13	598	589	346.84	792	394.42	1038	453.70	1282	533.26	1521	628.68
14	644	635	373.52	853	424.76	1118	488.60	1381	574.28	1638	677.04
15	690	680	400.20	914	455.10	1197	523.50	1479	615.30	1755	725.40
16	736	725	426.88	975	485.44	1277	558.40	1578	656.32	1872	773.76
17	782	771	453.56	1036	515.78	1357	593.30	1677	697.34	1989	822.12
18	828	816	480.24	1097	546.12	1437	628.20	1775	738.36	2106	870.48
19	874	861	506.92	1158	576.46	1517	663.10	1874	779.38	2223	918.84
20	920	906	533.60	1218	606.80	1596	698.00	1972	820.40	2340	967.20
21	966	952	560.28	1279	637.14	1676	732.90	2071	861.42	2457	1 015.56
22	1012	997	586.96	1340	667.48	1756	767.80	2170	902.44	2574	1 063.92
23	1058	1042	613.64	1401	697.82	1836	802.70	2268	943.46	2691	1 112.28
24	1104	1088	640.32	1462	728.16	1916	837.60	2367	984.48	2808	1 160.64
25	1150	1133	667.00	1523	758.50	1995	872.50	2465	1 025.50	2925	1 209.00
26	1196	1178	693.68	1584	788.84	2075	907.40	2564	1 066.52	3042	1 257.36
27	1242	1224	720.36	1645	819.18	2155	942.30	2663	1 107.54	3159	1 305.72
28	1288	1269	747.04	1706	849.52	2235	977.20	2761	1 148.56	3276	1 354.08
29	1334	1314	773.72	1767	879.86	2315	1 012.10	2860	1 189.58	3393	1 402.44
30	1380	1359	800.40	1827	910.20	2394	1 047.00	2958	1 230.60	3510	1 450.80
31	1426	1405	827.08	1888	940.54	2474	1 081.90	3057	1 271.62	3627	1 499.16
32	1472	1450	853.76	1949	970.88	2554	1 116.80	3156	1 312.64	3744	1 547.52
33	1518	1495	880.44	2010	1 001.22	2634	1 151.70	3254	1 353.66	3861	1 595.88
34	1564	1541	907.12	2071	1 031.56	2714	1 186.60	3353	1 394.68	3978	1 644.24
35	1610	1586	933.80	2132	1 061.90	2793	1 221.50	3451	1 435.70	4095	1 692.60
36	1656	1631	960.48	2193	1 092.24	2873	1 256.40	3550	1 476.72	4212	1 740.96
37	1702	1677	987.16	2254	1 122.58	2953	1 291.30	3649	1 517.74	4329	1 789.32
38	1748	1722	1 013.84	2315	1 152.92	3033	1 326.20	3747	1 558.76	4446	1 837.68
39	1794	1767	1 040.52	2376	1 183.26	3113	1 361.10	3846	1 599.78	4563	1 886.04
40	1840	1812	1 067.20	2436	1 213.60	3192	1 396.00	3944	1 640.80	4680	1 934.40

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

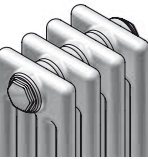
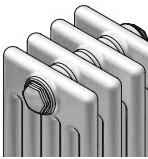
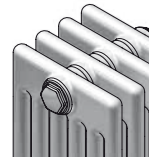
Warning: Weight over 100 kg

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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		750									
											
Model		2075		3075		4075		5075		6075	
Depth	mm	62		100		136		173		210	
Exponent	n	1,25		1,26		1,27		1,29		1,30	
Max. number of elements		64		64		64		64		55	
Price/element	€	28.40		32.85		39.47		47.00		55.10	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	220	113.60	298	131.40	390	157.88	480	188.00	572	220.40
5	230	275	142.00	372	164.25	487	197.35	600	235.00	715	275.50
6	276	330	170.40	446	197.10	585	236.82	720	282.00	858	330.60
7	322	385	198.80	521	229.95	682	276.29	840	329.00	1001	385.70
8	368	440	227.20	595	262.80	780	315.76	960	376.00	1144	440.80
9	414	495	255.60	669	295.65	877	355.23	1080	423.00	1287	495.90
10	460	550	284.00	743	328.50	974	394.70	1200	470.00	1430	551.00
11	506	605	312.40	818	361.35	1072	434.17	1320	517.00	1573	606.10
12	552	660	340.80	892	394.20	1169	473.64	1440	564.00	1716	661.20
13	598	715	369.20	966	427.05	1267	513.11	1560	611.00	1859	716.30
14	644	770	397.60	1041	459.90	1364	552.58	1680	658.00	2002	771.40
15	690	825	426.00	1115	492.75	1461	592.05	1800	705.00	2145	826.50
16	736	880	454.40	1189	525.60	1559	631.52	1920	752.00	2288	881.60
17	782	935	482.80	1264	558.45	1656	670.99	2040	799.00	2431	936.70
18	828	990	511.20	1338	591.30	1754	710.46	2160	846.00	2574	991.80
19	874	1045	539.60	1412	624.15	1851	749.93	2280	893.00	2717	1 046.90
20	920	1100	568.00	1486	657.00	1948	789.40	2400	940.00	2860	1 102.00
21	966	1155	596.40	1561	689.85	2046	828.87	2520	987.00	3003	1 157.10
22	1012	1210	624.80	1635	722.70	2143	868.34	2640	1 034.00	3146	1 212.20
23	1058	1265	653.20	1709	755.55	2241	907.81	2760	1 081.00	3289	1 267.30
24	1104	1320	681.60	1784	788.40	2338	947.28	2880	1 128.00	3432	1 322.40
25	1150	1375	710.00	1858	821.25	2435	986.75	3000	1 175.00	3575	1 377.50
26	1196	1430	738.40	1932	854.10	2533	1 026.22	3120	1 222.00	3718	1 432.60
27	1242	1485	766.80	2007	886.95	2630	1 065.69	3240	1 269.00	3861	1 487.70
28	1288	1540	795.20	2081	919.80	2728	1 105.16	3360	1 316.00	4004	1 542.80
29	1334	1595	823.60	2155	952.65	2825	1 144.63	3480	1 363.00	4147	1 597.90
30	1380	1650	852.00	2229	985.50	2922	1 184.10	3600	1 410.00	4290	1 653.00
31	1426	1705	880.40	2304	1 018.35	3020	1 223.57	3720	1 457.00	4433	1 708.10
32	1472	1760	908.80	2378	1 051.20	3117	1 263.04	3840	1 504.00	4576	1 763.20
33	1518	1815	937.20	2452	1 084.05	3215	1 302.51	3960	1 551.00	4719	1 818.30
34	1564	1870	965.60	2527	1 116.90	3312	1 341.98	4080	1 598.00	4862	1 873.40
35	1610	1925	994.00	2601	1 149.75	3409	1 381.45	4200	1 645.00	5005	1 928.50
36	1656	1980	1 022.40	2675	1 182.60	3507	1 420.92	4320	1 692.00	5148	1 983.60
37	1702	2035	1 050.80	2750	1 215.45	3604	1 460.39	4440	1 739.00	5291	2 038.70
38	1748	2090	1 079.20	2824	1 248.30	3702	1 499.86	4560	1 786.00	5434	2 093.80
39	1794	2145	1 107.60	2898	1 281.15	3799	1 539.33	4680	1 833.00	5577	2 148.90
40	1840	2200	1 136.00	2972	1 314.00	3896	1 578.80	4800	1 880.00	5720	2 204.00

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		900									
Model		2090		3090		4090		5090		6090	
Depth	mm	62		100		136		173		210	
Exponent	n	1,25		1,27		1,28		1,30		1,31	
Max. number of elements		64		64		64		50		46	
Price/element	€	29.99		35.35		45.29		53.54		61.98	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	256	119.96	348	141.40	456	181.16	564	214.16	668	247.92
5	230	320	149.95	435	176.75	570	226.45	705	267.70	835	309.90
6	276	384	179.94	522	212.10	684	271.74	846	321.24	1002	371.88
7	322	448	209.93	609	247.45	798	317.03	987	374.78	1169	433.86
8	368	512	239.92	696	282.80	912	362.32	1128	428.32	1336	495.84
9	414	576	269.91	783	318.15	1026	407.61	1269	481.86	1503	557.82
10	460	639	299.90	870	353.50	1140	452.90	1410	535.40	1670	619.80
11	506	703	329.89	957	388.85	1254	498.19	1551	588.94	1837	681.78
12	552	767	359.88	1044	424.20	1368	543.48	1692	642.48	2004	743.76
13	598	831	389.87	1131	459.55	1482	588.77	1833	696.02	2171	805.74
14	644	895	419.86	1218	494.90	1596	634.06	1974	749.56	2338	867.72
15	690	959	449.85	1305	530.25	1710	679.35	2115	803.10	2505	929.70
16	736	1023	479.84	1392	565.60	1824	724.64	2256	856.64	2672	991.68
17	782	1087	509.83	1479	600.95	1938	769.93	2397	910.18	2839	1 053.66
18	828	1151	539.82	1566	636.30	2052	815.22	2538	963.72	3006	1 115.64
19	874	1215	569.81	1653	671.65	2166	860.51	2679	1 017.26	3173	1 177.62
20	920	1278	599.80	1740	707.00	2280	905.80	2820	1 070.80	3340	1 239.60
21	966	1342	629.79	1827	742.35	2394	951.09	2961	1 124.34	3507	1 301.58
22	1012	1406	659.78	1914	777.70	2508	996.38	3102	1 177.88	3674	1 363.56
23	1058	1470	689.77	2001	813.05	2622	1 041.67	3243	1 231.42	3841	1 425.54
24	1104	1534	719.76	2088	848.40	2736	1 086.96	3384	1 284.96	4008	1 487.52
25	1150	1598	749.75	2175	883.75	2850	1 132.25	3525	1 338.50	4175	1 549.50
26	1196	1662	779.74	2262	919.10	2964	1 177.54	3666	1 392.04	4342	1 611.48
27	1242	1726	809.73	2349	954.45	3078	1 222.83	3807	1 445.58	4509	1 673.46
28	1288	1790	839.72	2436	989.80	3192	1 268.12	3948	1 499.12	4676	1 735.44
29	1334	1854	869.71	2523	1 025.15	3306	1 313.41	4089	1 552.66	4843	1 797.42
30	1380	1917	899.70	2610	1 060.50	3420	1 358.70	4230	1 606.20	5010	1 859.40
31	1426	1981	929.69	2697	1 095.85	3534	1 403.99	4371	1 659.74	5177	1 921.38
32	1472	2045	959.68	2784	1 131.20	3648	1 449.28	4512	1 713.28	5344	1 983.36
33	1518	2109	989.67	2871	1 166.55	3762	1 494.57	4653	1 766.82	5511	2 045.34
34	1564	2173	1 019.66	2958	1 201.90	3876	1 539.86	4794	1 820.36	5678	2 107.32
35	1610	2237	1 049.65	3045	1 237.25	3990	1 585.15	4935	1 873.90	5845	2 169.30
36	1656	2301	1 079.64	3132	1 272.60	4104	1 630.44	5076	1 927.44	6012	2 231.28
37	1702	2365	1 109.63	3219	1 307.95	4218	1 675.73	5217	1 980.98	6179	2 293.26
38	1748	2429	1 139.62	3306	1 343.30	4332	1 721.02	5358	2 034.52	6346	2 355.24
39	1794	2493	1 169.61	3393	1 378.65	4446	1 766.31	5499	2 088.06	6513	2 417.22
40	1840	2556	1 199.60	3480	1 414.00	4560	1 811.60	5640	2 141.60	6680	2 479.20

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45
 Surcharge for Completo, valve at top, connections V007/V008 €: 294.26
 Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		1000									
Model		2100		3100		4100		5100		6100	
Depth mm		62		100		136		173		210	
Exponent n		1,25		1,27		1,29		1,30		1,31	
Max. number of elements		64		64		60		50		42	
Price/element €		31.08		36.91		48.97		57.07		66.80	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	278	124.32	381	147.64	500	195.88	616	228.28	732	267.20
5	230	348	155.40	476	184.55	625	244.85	770	285.35	915	334.00
6	276	417	186.48	571	221.46	750	293.82	924	342.42	1098	400.80
7	322	487	217.56	666	258.37	875	342.79	1078	399.49	1281	467.60
8	368	556	248.64	761	295.28	1000	391.76	1232	456.56	1464	534.40
9	414	626	279.72	856	332.19	1125	440.73	1386	513.63	1647	601.20
10	460	695	310.80	951	369.10	1250	489.70	1540	570.70	1830	668.00
11	506	765	341.88	1047	406.01	1375	538.67	1694	627.77	2013	734.80
12	552	834	372.96	1142	442.92	1500	587.64	1848	684.84	2196	801.60
13	598	904	404.04	1237	479.83	1625	636.61	2002	741.91	2379	868.40
14	644	973	435.12	1332	516.74	1750	685.58	2156	798.98	2562	935.20
15	690	1043	466.20	1427	553.65	1875	734.55	2310	856.05	2745	1 002.00
16	736	1112	497.28	1522	590.56	2000	783.52	2464	913.12	2928	1 068.80
17	782	1182	528.36	1617	627.47	2125	832.49	2618	970.19	3111	1 135.60
18	828	1251	559.44	1712	664.38	2250	881.46	2772	1 027.26	3294	1 202.40
19	874	1321	590.52	1807	701.29	2375	930.43	2926	1 084.33	3477	1 269.20
20	920	1390	621.60	1902	738.20	2500	979.40	3080	1 141.40	3660	1 336.00
21	966	1460	652.68	1998	775.11	2625	1 028.37	3234	1 198.47	3843	1 402.80
22	1012	1529	683.76	2093	812.02	2750	1 077.34	3388	1 255.54	4026	1 469.60
23	1058	1599	714.84	2188	848.93	2875	1 126.31	3542	1 312.61	4209	1 536.40
24	1104	1668	745.92	2283	885.84	3000	1 175.28	3696	1 369.68	4392	1 603.20
25	1150	1738	777.00	2378	922.75	3125	1 224.25	3850	1 426.75	4575	1 670.00
26	1196	1807	808.08	2473	959.66	3250	1 273.22	4004	1 483.82	4758	1 736.80
27	1242	1877	839.16	2568	996.57	3375	1 322.19	4158	1 540.89	4941	1 803.60
28	1288	1946	870.24	2663	1 033.48	3500	1 371.16	4312	1 597.96	5124	1 870.40
29	1334	2016	901.32	2758	1 070.39	3625	1 420.13	4466	1 655.03	5307	1 937.20
30	1380	2085	932.40	2853	1 107.30	3750	1 469.10	4620	1 712.10	5490	2 004.00
31	1426	2155	963.48	2949	1 144.21	3875	1 518.07	4774	1 769.17	5673	2 070.80
32	1472	2224	994.56	3044	1 181.12	4000	1 567.04	4928	1 826.24	5856	2 137.60
33	1518	2294	1 025.64	3139	1 218.03	4125	1 616.01	5082	1 883.31	6039	2 204.40
34	1564	2363	1 056.72	3234	1 254.94	4250	1 664.98	5236	1 940.38	6222	2 271.20
35	1610	2433	1 087.80	3329	1 291.85	4375	1 713.95	5390	1 997.45	6405	2 338.00
36	1656	2502	1 118.88	3424	1 328.76	4500	1 762.92	5544	2 054.52	6588	2 404.80
37	1702	2572	1 149.96	3519	1 365.67	4625	1 811.89	5698	2 111.59	6771	2 471.60
38	1748	2641	1 181.04	3614	1 402.58	4750	1 860.86	5852	2 168.66	6954	2 538.40
39	1794	2711	1 212.12	3709	1 439.49	4875	1 909.83	6006	2 225.73	7137	2 605.20
40	1840	2780	1 243.20	3804	1 476.40	5000	1 958.80	6160	2 282.80	7320	2 672.00

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

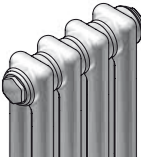
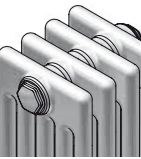
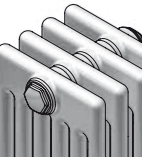
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Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm	1100									
												
Model			2110		3110		4110		5110		6110	
Depth	mm		62		100		136		173		210	
Exponent	n		1,25		1,28		1,29		1,31		1,32	
Max. number of elements			22		22		22		22		22	
Price/element	€		32.23		41.67		54.28		66.24		78.77	
Length			Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm		W	€	W	€	W	€	W	€	W	€
4	184		299	128.92	412	166.68	540	217.12	668	264.96	792	315.08
5	230		374	161.15	515	208.35	675	271.40	835	331.20	990	393.85
6	276		449	193.38	618	250.02	810	325.68	1002	397.44	1188	472.62
7	322		523	225.61	721	291.69	945	379.96	1169	463.68	1386	551.39
8	368		598	257.84	824	333.36	1080	434.24	1336	529.92	1584	630.16
9	414		673	290.07	927	375.03	1215	488.52	1503	596.16	1782	708.93
10	460		747	322.30	1030	416.70	1350	542.80	1670	662.40	1980	787.70
11	506		822	354.53	1133	458.37	1485	597.08	1837	728.64	2178	866.47
12	552		897	386.76	1236	500.04	1620	651.36	2004	794.88	2376	945.24
13	598		972	418.99	1339	541.71	1755	705.64	2171	861.12	2574	1 024.01
14	644		1046	451.22	1442	583.38	1890	759.92	2338	927.36	2772	1 102.78
15	690		1121	483.45	1545	625.05	2025	814.20	2505	993.60	2970	1 181.55
16	736		1196	515.68	1648	666.72	2160	868.48	2672	1 059.84	3168	1 260.32
17	782		1270	547.91	1751	708.39	2295	922.76	2839	1 126.08	3366	1 339.09
18	828		1345	580.14	1854	750.06	2430	977.04	3006	1 192.32	3564	1 417.86
19	874		1420	612.37	1957	791.73	2565	1 031.32	3173	1 258.56	3762	1 496.63
20	920		1494	644.60	2060	833.40	2700	1 085.60	3340	1 324.80	3960	1 575.40
21	966		1569	676.83	2163	875.07	2835	1 139.88	3507	1 391.04	4158	1 654.17
22	1012		1644	709.06	2266	916.74	2970	1 194.16	3674	1 457.28	4356	1 732.94
23	1058		1719	741.29	2369	958.41	3105	1 248.44	3841	1 523.52	4554	1 811.71
24	1104		1793	773.52	2472	1 000.08	3240	1 302.72	4008	1 589.76	4752	1 890.48
25	1150		1868	805.75	2575	1 041.75	3375	1 357.00	4175	1 656.00	4950	1 969.25
26	1196		1943	837.98	2678	1 083.42	3510	1 411.28	4342	1 722.24	5148	2 048.02
27	1242		2017	870.21	2781	1 125.09	3645	1 465.56	4509	1 788.48	5346	2 126.79
28	1288		2092	902.44	2884	1 166.76	3780	1 519.84	4676	1 854.72	5544	2 205.56
29	1334		2167	934.67	2987	1 208.43	3915	1 574.12	4843	1 920.96	5742	2 284.33
30	1380		2241	966.90	3090	1 250.10	4050	1 628.40	5010	1 987.20	5940	2 363.10
31	1426		2316	999.13	3193	1 291.77	4185	1 682.68	5177	2 053.44	6138	2 441.87
32	1472		2391	1 031.36	3296	1 333.44	4320	1 736.96	5344	2 119.68	6336	2 520.64
33	1518		2466	1 063.59	3399	1 375.11	4455	1 791.24	5511	2 185.92	6534	2 599.41
34	1564		2540	1 095.82	3502	1 416.78	4590	1 845.52	5678	2 252.16	6732	2 678.18
35	1610		2615	1 128.05	3605	1 458.45	4725	1 899.80	5845	2 318.40	6930	2 756.95
36	1656		2690	1 160.28	3708	1 500.12	4860	1 954.08	6012	2 384.64	7128	2 835.72
37	1702		2764	1 192.51	3811	1 541.79	4995	2 008.36	6179	2 450.88	7326	2 914.49
38	1748		2839	1 224.74	3914	1 583.46	5130	2 062.64	6346	2 517.12	7524	2 993.26
39	1794		2914	1 256.97	4017	1 625.13	5265	2 116.92	6513	2 583.36	7722	3 072.03
40	1840		2988	1 289.20	4120	1 666.80	5400	2 171.20	6680	2 649.60	7920	3 150.80

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

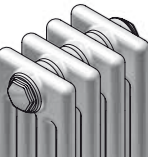
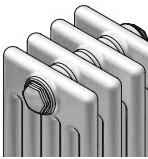
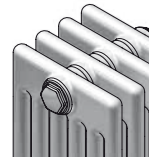
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Zehnder Charleston

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		1200									
											
Model		2120		3120		4120		5120		6120	
Depth	mm	62		100		136		173		210	
Exponent	n	1,26		1,29		1,30		1,31		1,32	
Max. number of elements		22		22		22		22		22	
Price/element	€	34.65		48.66		61.28		76.63		89.31	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	331	138.60	460	194.64	588	245.12	716	306.52	840	357.24
5	230	414	173.25	575	243.30	735	306.40	895	383.15	1050	446.55
6	276	497	207.90	690	291.96	882	367.68	1074	459.78	1260	535.86
7	322	579	242.55	805	340.62	1029	428.96	1253	536.41	1470	625.17
8	368	662	277.20	920	389.28	1176	490.24	1432	613.04	1680	714.48
9	414	745	311.85	1035	437.94	1323	551.52	1611	689.67	1890	803.79
10	460	827	346.50	1150	486.60	1470	612.80	1790	766.30	2100	893.10
11	506	910	381.15	1265	535.26	1617	674.08	1969	842.93	2310	982.41
12	552	993	415.80	1380	583.92	1764	735.36	2148	919.56	2520	1 071.72
13	598	1076	450.45	1495	632.58	1911	796.64	2327	996.19	2730	1 161.03
14	644	1158	485.10	1610	681.24	2058	857.92	2506	1 072.82	2940	1 250.34
15	690	1241	519.75	1725	729.90	2205	919.20	2685	1 149.45	3150	1 339.65
16	736	1324	554.40	1840	778.56	2352	980.48	2864	1 226.08	3360	1 428.96
17	782	1406	589.05	1955	827.22	2499	1 041.76	3043	1 302.71	3570	1 518.27
18	828	1489	623.70	2070	875.88	2646	1 103.04	3222	1 379.34	3780	1 607.58
19	874	1572	658.35	2185	924.54	2793	1 164.32	3401	1 455.97	3990	1 696.89
20	920	1654	693.00	2300	973.20	2940	1 225.60	3580	1 532.60	4200	1 786.20
21	966	1737	727.65	2415	1 021.86	3087	1 286.88	3759	1 609.23	4410	1 875.51
22	1012	1820	762.30	2530	1 070.52	3234	1 348.16	3938	1 685.86	4620	1 964.82
23	1058	1903	796.95	2645	1 119.18	3381	1 409.44	4117	1 762.49	4830	2 054.13
24	1104	1985	831.60	2760	1 167.84	3528	1 470.72	4296	1 839.12	5040	2 143.44
25	1150	2068	866.25	2875	1 216.50	3675	1 532.00	4475	1 915.75	5250	2 232.75
26	1196	2151	900.90	2990	1 265.16	3822	1 593.28	4654	1 992.38	5460	2 322.06
27	1242	2233	935.55	3105	1 313.82	3969	1 654.56	4833	2 069.01	5670	2 411.37
28	1288	2316	970.20	3220	1 362.48	4116	1 715.84	5012	2 145.64	5880	2 500.68
29	1334	2399	1 004.85	3335	1 411.14	4263	1 777.12	5191	2 222.27	6090	2 589.99
30	1380	2481	1 039.50	3450	1 459.80	4410	1 838.40	5370	2 298.90	6300	2 679.30
31	1426	2564	1 074.15	3565	1 508.46	4557	1 899.68	5549	2 375.53	6510	2 768.61
32	1472	2647	1 108.80	3680	1 557.12	4704	1 960.96	5728	2 452.16	6720	2 857.92
33	1518	2730	1 143.45	3795	1 605.78	4851	2 022.24	5907	2 528.79	6930	2 947.23
34	1564	2812	1 178.10	3910	1 654.44	4998	2 083.52	6086	2 605.42	7140	3 036.54
35	1610	2895	1 212.75	4025	1 703.10	5145	2 144.80	6265	2 682.05	7350	3 125.85
36	1656	2978	1 247.40	4140	1 751.76	5292	2 206.08	6444	2 758.68	7560	3 215.16
37	1702	3060	1 282.05	4255	1 800.42	5439	2 267.36	6623	2 835.31	7770	3 304.47
38	1748	3143	1 316.70	4370	1 849.08	5586	2 328.64	6802	2 911.94	7980	3 393.78
39	1794	3226	1 351.35	4485	1 897.74	5733	2 389.92	6981	2 988.57	8190	3 483.09
40	1840	3308	1 386.00	4600	1 946.40	5880	2 451.20	7160	3 065.20	8400	3 572.40

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

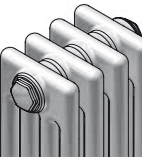
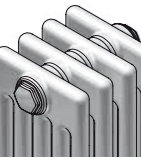
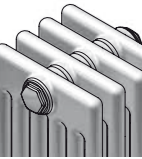
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Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		1500									
mm											
											
Model		2150		3150		4150		5150		6150	
Depth	mm	62		100		136		173		210	
Exponent	n	1,28		1,31		1,31		1,32		1,32	
Max. number of elements		22		22		22		22		22	
Price/element	€	44.11		63.02		82.38		102.91		122.63	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	416	176.44	560	252.08	720	329.52	876	411.64	1024	490.52
5	230	520	220.55	700	315.10	900	411.90	1095	514.55	1280	613.15
6	276	624	264.66	840	378.12	1080	494.28	1314	617.46	1536	735.78
7	322	728	308.77	980	441.14	1260	576.66	1533	720.37	1792	858.41
8	368	832	352.88	1120	504.16	1440	659.04	1752	823.28	2048	981.04
9	414	936	396.99	1260	567.18	1620	741.42	1971	926.19	2304	1 103.67
10	460	1040	441.10	1400	630.20	1800	823.80	2190	1 029.10	2560	1 226.30
11	506	1144	485.21	1540	693.22	1980	906.18	2409	1 132.01	2816	1 348.93
12	552	1248	529.32	1680	756.24	2160	988.56	2628	1 234.92	3072	1 471.56
13	598	1352	573.43	1820	819.26	2340	1 070.94	2847	1 337.83	3328	1 594.19
14	644	1456	617.54	1960	882.28	2520	1 153.32	3066	1 440.74	3584	1 716.82
15	690	1560	661.65	2100	945.30	2700	1 235.70	3285	1 543.65	3840	1 839.45
16	736	1664	705.76	2240	1 008.32	2880	1 318.08	3504	1 646.56	4096	1 962.08
17	782	1768	749.87	2380	1 071.34	3060	1 400.46	3723	1 749.47	4352	2 084.71
18	828	1872	793.98	2520	1 134.36	3240	1 482.84	3942	1 852.38	4608	2 207.34
19	874	1976	838.09	2660	1 197.38	3420	1 565.22	4161	1 955.29	4864	2 329.97
20	920	2080	882.20	2800	1 260.40	3600	1 647.60	4380	2 058.20	5120	2 452.60
21	966	2184	926.31	2940	1 323.42	3780	1 729.98	4599	2 161.11	5376	2 575.23
22	1012	2288	970.42	3080	1 386.44	3960	1 812.36	4818	2 264.02	5632	2 697.86
23	1058	2392	1 014.53	3220	1 449.46	4140	1 894.74	5037	2 366.93	5888	2 820.49
24	1104	2496	1 058.64	3360	1 512.48	4320	1 977.12	5256	2 469.84	6144	2 943.12
25	1150	2600	1 102.75	3500	1 575.50	4500	2 059.50	5475	2 572.75	6400	3 065.75
26	1196	2704	1 146.86	3640	1 638.52	4680	2 141.88	5694	2 675.66	6656	3 188.38
27	1242	2808	1 190.97	3780	1 701.54	4860	2 224.26	5913	2 778.57	6912	3 311.01
28	1288	2912	1 235.08	3920	1 764.56	5040	2 306.64	6132	2 881.48	7168	3 433.64
29	1334	3016	1 279.19	4060	1 827.58	5220	2 389.02	6351	2 984.39	7424	3 556.27
30	1380	3120	1 323.30	4200	1 890.60	5400	2 471.40	6570	3 087.30	7680	3 678.90
31	1426	3224	1 367.41	4340	1 953.62	5580	2 553.78	6789	3 190.21	7936	3 801.53
32	1472	3328	1 411.52	4480	2 016.64	5760	2 636.16	7008	3 293.12	8192	3 924.16
33	1518	3432	1 455.63	4620	2 079.66	5940	2 718.54	7227	3 396.03	8448	4 046.79
34	1564	3536	1 499.74	4760	2 142.68	6120	2 800.92	7446	3 498.94	8704	4 169.42
35	1610	3640	1 543.85	4900	2 205.70	6300	2 883.30	7665	3 601.85	8960	4 292.05
36	1656	3744	1 587.96	5040	2 268.72	6480	2 965.68	7884	3 704.76	9216	4 414.68
37	1702	3848	1 632.07	5180	2 331.74	6660	3 048.06	8103	3 807.67	9472	4 537.31
38	1748	3952	1 676.18	5320	2 394.76	6840	3 130.44	8322	3 910.58	9728	4 659.94
39	1794	4056	1 720.29	5460	2 457.78	7020	3 212.82	8541	4 013.49	9984	4 782.57
40	1840	4160	1 764.40	5600	2 520.80	7200	3 295.20	8760	4 116.40	10240	4 905.20

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

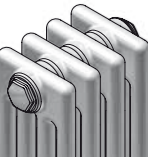
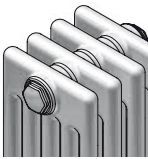
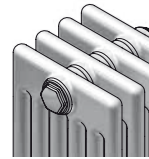
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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		1800									
											
Model		2180		3180		4180		5180		6180	
Depth mm		62		100		136		173		210	
Exponent n		1,31		1,33		1,33		1,32		1,33	
Max. number of elements		22		22		22		22		22	
Price/element €		52.12		77.79		98.88		121.39		144.15	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	496	208.48	664	311.16	852	395.52	1036	485.56	1212	576.60
5	230	620	260.60	830	388.95	1065	494.40	1295	606.95	1515	720.75
6	276	744	312.72	996	466.74	1278	593.28	1554	728.34	1818	864.90
7	322	868	364.84	1162	544.53	1491	692.16	1813	849.73	2121	1 009.05
8	368	992	416.96	1328	622.32	1704	791.04	2072	971.12	2424	1 153.20
9	414	1116	469.08	1494	700.11	1917	889.92	2331	1 092.51	2727	1 297.35
10	460	1240	521.20	1660	777.90	2130	988.80	2590	1 213.90	3030	1 441.50
11	506	1364	573.32	1826	855.69	2343	1 087.68	2849	1 335.29	3333	1 585.65
12	552	1488	625.44	1992	933.48	2556	1 186.56	3108	1 456.68	3636	1 729.80
13	598	1612	677.56	2158	1 011.27	2769	1 285.44	3367	1 578.07	3939	1 873.95
14	644	1736	729.68	2324	1 089.06	2982	1 384.32	3626	1 699.46	4242	2 018.10
15	690	1860	781.80	2490	1 166.85	3195	1 483.20	3885	1 820.85	4545	2 162.25
16	736	1984	833.92	2656	1 244.64	3408	1 582.08	4144	1 942.24	4848	2 306.40
17	782	2108	886.04	2822	1 322.43	3621	1 680.96	4403	2 063.63	5151	2 450.55
18	828	2232	938.16	2988	1 400.22	3834	1 779.84	4662	2 185.02	5454	2 594.70
19	874	2356	990.28	3154	1 478.01	4047	1 878.72	4921	2 306.41	5757	2 738.85
20	920	2480	1 042.40	3320	1 555.80	4260	1 977.60	5180	2 427.80	6060	2 883.00
21	966	2604	1 094.52	3486	1 633.59	4473	2 076.48	5439	2 549.19	6363	3 027.15
22	1012	2728	1 146.64	3652	1 711.38	4686	2 175.36	5698	2 670.58	6666	3 171.30
23	1058	2852	1 198.76	3818	1 789.17	4899	2 274.24	5957	2 791.97	6969	3 315.45
24	1104	2976	1 250.88	3984	1 866.96	5112	2 373.12	6216	2 913.36	7272	3 459.60
25	1150	3100	1 303.00	4150	1 944.75	5325	2 472.00	6475	3 034.75	7575	3 603.75
26	1196	3224	1 355.12	4316	2 022.54	5538	2 570.88	6734	3 156.14	7878	3 747.90
27	1242	3348	1 407.24	4482	2 100.33	5751	2 669.76	6993	3 277.53	8181	3 892.05
28	1288	3472	1 459.36	4648	2 178.12	5964	2 768.64	7252	3 398.92	8484	4 036.20
29	1334	3596	1 511.48	4814	2 255.91	6177	2 867.52	7511	3 520.31	8787	4 180.35
30	1380	3720	1 563.60	4980	2 333.70	6390	2 966.40	7770	3 641.70	9090	4 324.50
31	1426	3844	1 615.72	5146	2 411.49	6603	3 065.28	8029	3 763.09	9393	4 468.65
32	1472	3968	1 667.84	5312	2 489.28	6816	3 164.16	8288	3 884.48	9696	4 612.80
33	1518	4092	1 719.96	5478	2 567.07	7029	3 263.04	8547	4 005.87	9999	4 756.95
34	1564	4216	1 772.08	5644	2 644.86	7242	3 361.92	8806	4 127.26	10302	4 901.10
35	1610	4340	1 824.20	5810	2 722.65	7455	3 460.80	9065	4 248.65	10605	5 045.25
36	1656	4464	1 876.32	5976	2 800.44	7668	3 559.68	9324	4 370.04	10908	5 189.40
37	1702	4588	1 928.44	6142	2 878.23	7881	3 658.56	9583	4 491.43	11211	5 333.55
38	1748	4712	1 980.56	6308	2 956.02	8094	3 757.44	9842	4 612.82	11514	5 477.70
39	1794	4836	2 032.68	6474	3 033.81	8307	3 856.32	10101	4 734.21	11817	5 621.85
40	1840	4960	2 084.80	6640	3 111.60	8520	3 955.20	10360	4 855.60	12120	5 766.00

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

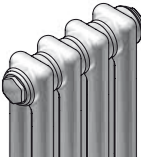
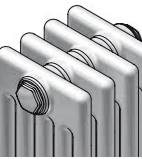
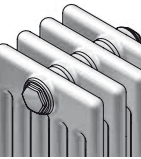
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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm	2000									
												
Model			2200		3200		4200		5200		6200	
Depth	mm		62		100		136		173		210	
Exponent	n		1,31		1,33		1,32		1,32		1,32	
Max. number of elements			22		22		22		22		22	
Price/element	€		58.88		84.13		110.46		135.43		160.43	
Length			Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm		W	€	W	€	W	€	W	€	W	€
4	184		552	235.52	732	336.52	936	441.84	1140	541.72	1336	641.72
5	230		690	294.40	915	420.65	1170	552.30	1425	677.15	1670	802.15
6	276		828	353.28	1098	504.78	1404	662.76	1710	812.58	2004	962.58
7	322		966	412.16	1281	588.91	1638	773.22	1995	948.01	2338	1 123.01
8	368		1104	471.04	1464	673.04	1872	883.68	2280	1 083.44	2672	1 283.44
9	414		1242	529.92	1647	757.17	2106	994.14	2565	1 218.87	3006	1 443.87
10	460		1380	588.80	1830	841.30	2340	1 104.60	2850	1 354.30	3340	1 604.30
11	506		1518	647.68	2013	925.43	2574	1 215.06	3135	1 489.73	3674	1 764.73
12	552		1656	706.56	2196	1 009.56	2808	1 325.52	3420	1 625.16	4008	1 925.16
13	598		1794	765.44	2379	1 093.69	3042	1 435.98	3705	1 760.59	4342	2 085.59
14	644		1932	824.32	2562	1 177.82	3276	1 546.44	3990	1 896.02	4676	2 246.02
15	690		2070	883.20	2745	1 261.95	3510	1 656.90	4275	2 031.45	5010	2 406.45
16	736		2208	942.08	2928	1 346.08	3744	1 767.36	4560	2 166.88	5344	2 566.88
17	782		2346	1 000.96	3111	1 430.21	3978	1 877.82	4845	2 302.31	5678	2 727.31
18	828		2484	1 059.84	3294	1 514.34	4212	1 988.28	5130	2 437.74	6012	2 887.74
19	874		2622	1 118.72	3477	1 598.47	4446	2 098.74	5415	2 573.17	6346	3 048.17
20	920		2760	1 177.60	3660	1 682.60	4680	2 209.20	5700	2 708.60	6680	3 208.60
21	966		2898	1 236.48	3843	1 766.73	4914	2 319.66	5985	2 844.03	7014	3 369.03
22	1012		3036	1 295.36	4026	1 850.86	5148	2 430.12	6270	2 979.46	7348	3 529.46
23	1058		3174	1 354.24	4209	1 934.99	5382	2 540.58	6555	3 114.89	7682	3 689.89
24	1104		3312	1 413.12	4392	2 019.12	5616	2 651.04	6840	3 250.32	8016	3 850.32
25	1150		3450	1 472.00	4575	2 103.25	5850	2 761.50	7125	3 385.75	8350	4 010.75
26	1196		3588	1 530.88	4758	2 187.38	6084	2 871.96	7410	3 521.18	8684	4 171.18
27	1242		3726	1 589.76	4941	2 271.51	6318	2 982.42	7695	3 656.61	9018	4 331.61
28	1288		3864	1 648.64	5124	2 355.64	6552	3 092.88	7980	3 792.04	9352	4 492.04
29	1334		4002	1 707.52	5307	2 439.77	6786	3 203.34	8265	3 927.47	9686	4 652.47
30	1380		4140	1 766.40	5490	2 523.90	7020	3 313.80	8550	4 062.90	10020	4 812.90
31	1426		4278	1 825.28	5673	2 608.03	7254	3 424.26	8835	4 198.33	10354	4 973.33
32	1472		4416	1 884.16	5856	2 692.16	7488	3 534.72	9120	4 333.76	10688	5 133.76
33	1518		4554	1 943.04	6039	2 776.29	7722	3 645.18	9405	4 469.19	11022	5 294.19
34	1564		4692	2 001.92	6222	2 860.42	7956	3 755.64	9690	4 604.62	11356	5 454.62
35	1610		4830	2 060.80	6405	2 944.55	8190	3 866.10	9975	4 740.05	11690	5 615.05
36	1656		4968	2 119.68	6588	3 028.68	8424	3 976.56	10260	4 875.48	12024	5 775.48
37	1702		5106	2 178.56	6771	3 112.81	8658	4 087.02	10545	5 010.91	12358	5 935.91
38	1748		5244	2 237.44	6954	3 196.94	8892	4 197.48	10830	5 146.34	12692	6 096.34
39	1794		5382	2 296.32	7137	3 281.07	9126	4 307.94	11115	5 281.77	13026	6 256.77
40	1840		5520	2 355.20	7320	3 365.20	9360	4 418.40	11400	5 417.20	13360	6 417.20

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

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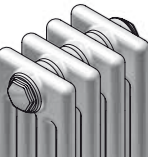
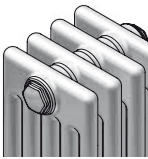
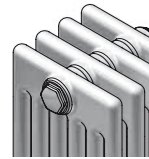
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Zehnder Charleston

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		2200									
											
Model		2220		3220		4220		5220		6220	
Depth	mm	62		100		136		173		210	
Exponent	n	1,31		1,32		1,32		1,32		1,32	
Max. number of elements		22		22		22		22		17	
Price/element	€	65.32		94.65		122.90		150.50		178.66	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	604	261.28	800	378.60	1024	491.60	1248	602.00	1460	714.64
5	230	755	326.60	1000	473.25	1280	614.50	1560	752.50	1825	893.30
6	276	906	391.92	1200	567.90	1536	737.40	1872	903.00	2190	1 071.96
7	322	1057	457.24	1400	662.55	1792	860.30	2184	1 053.50	2555	1 250.62
8	368	1208	522.56	1600	757.20	2048	983.20	2496	1 204.00	2920	1 429.28
9	414	1359	587.88	1800	851.85	2304	1 106.10	2808	1 354.50	3285	1 607.94
10	460	1510	653.20	2000	946.50	2560	1 229.00	3120	1 505.00	3650	1 786.60
11	506	1661	718.52	2200	1 041.15	2816	1 351.90	3432	1 655.50	4015	1 965.26
12	552	1812	783.84	2400	1 135.80	3072	1 474.80	3744	1 806.00	4380	2 143.92
13	598	1963	849.16	2600	1 230.45	3328	1 597.70	4056	1 956.50	4745	2 322.58
14	644	2114	914.48	2800	1 325.10	3584	1 720.60	4368	2 107.00	5110	2 501.24
15	690	2265	979.80	3000	1 419.75	3840	1 843.50	4680	2 257.50	5475	2 679.90
16	736	2416	1 045.12	3200	1 514.40	4096	1 966.40	4992	2 408.00	5840	2 858.56
17	782	2567	1 110.44	3400	1 609.05	4352	2 089.30	5304	2 558.50	6205	3 037.22
18	828	2718	1 175.76	3600	1 703.70	4608	2 212.20	5616	2 709.00	6570	3 215.88
19	874	2869	1 241.08	3800	1 798.35	4864	2 335.10	5928	2 859.50	6935	3 394.54
20	920	3020	1 306.40	4000	1 893.00	5120	2 458.00	6240	3 010.00	7300	3 573.20
21	966	3171	1 371.72	4200	1 987.65	5376	2 580.90	6552	3 160.50	7665	3 751.86
22	1012	3322	1 437.04	4400	2 082.30	5632	2 703.80	6864	3 311.00	8030	3 930.52
23	1058	3473	1 502.36	4600	2 176.95	5888	2 826.70	7176	3 461.50	8395	4 109.18
24	1104	3624	1 567.68	4800	2 271.60	6144	2 949.60	7488	3 612.00	8760	4 287.84
25	1150	3775	1 633.00	5000	2 366.25	6400	3 072.50	7800	3 762.50	9125	4 466.50
26	1196	3926	1 698.32	5200	2 460.90	6656	3 195.40	8112	3 913.00	9490	4 645.16
27	1242	4077	1 763.64	5400	2 555.55	6912	3 318.30	8424	4 063.50	9855	4 823.82
28	1288	4228	1 828.96	5600	2 650.20	7168	3 441.20	8736	4 214.00	10220	5 002.48
29	1334	4379	1 894.28	5800	2 744.85	7424	3 564.10	9048	4 364.50	10585	5 181.14
30	1380	4530	1 959.60	6000	2 839.50	7680	3 687.00	9360	4 515.00	10950	5 359.80
31	1426	4681	2 024.92	6200	2 934.15	7936	3 809.90	9672	4 665.50	11315	5 538.46
32	1472	4832	2 090.24	6400	3 028.80	8192	3 932.80	9984	4 816.00	11680	5 717.12
33	1518	4983	2 155.56	6600	3 123.45	8448	4 055.70	10296	4 966.50	12045	5 895.78
34	1564	5134	2 220.88	6800	3 218.10	8704	4 178.60	10608	5 117.00	12410	6 074.44
35	1610	5285	2 286.20	7000	3 312.75	8960	4 301.50	10920	5 267.50	12775	6 253.10
36	1656	5436	2 351.52	7200	3 407.40	9216	4 424.40	11232	5 418.00	13140	6 431.76
37	1702	5587	2 416.84	7400	3 502.05	9472	4 547.30	11544	5 568.50	13505	6 610.42
38	1748	5738	2 482.16	7600	3 596.70	9728	4 670.20	11856	5 719.00	13870	6 789.08
39	1794	5889	2 547.48	7800	3 691.35	9984	4 793.10	12168	5 869.50	14235	6 967.74
40	1840	6040	2 612.80	8000	3 786.00	10240	4 916.00	12480	6 020.00	14600	7 146.40

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

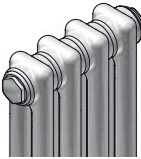
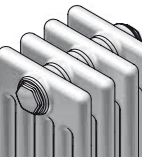
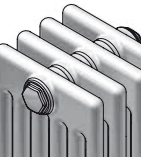
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		2500									
mm											
											
Model		2250		3250		4250		5250		6250	
Depth mm		62		100		136		173		210	
Exponent n		1,30		1,32		1,31		1,31		1,32	
Max. number of elements		22		22		22		22		17	
Price/element €		72.93		107.06		137.86		168.39		200.67	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	684	291.72	900	428.24	1156	551.44	1408	673.56	1648	802.68
5	230	855	364.65	1125	535.30	1445	689.30	1760	841.95	2060	1 003.35
6	276	1026	437.58	1350	642.36	1734	827.16	2112	1 010.34	2472	1 204.02
7	322	1197	510.51	1575	749.42	2023	965.02	2464	1 178.73	2884	1 404.69
8	368	1368	583.44	1800	856.48	2312	1 102.88	2816	1 347.12	3296	1 605.36
9	414	1539	656.37	2025	963.54	2601	1 240.74	3168	1 515.51	3708	1 806.03
10	460	1710	729.30	2250	1 070.60	2890	1 378.60	3520	1 683.90	4120	2 006.70
11	506	1881	802.23	2475	1 177.66	3179	1 516.46	3872	1 852.29	4532	2 207.37
12	552	2052	875.16	2700	1 284.72	3468	1 654.32	4224	2 020.68	4944	2 408.04
13	598	2223	948.09	2925	1 391.78	3757	1 792.18	4576	2 189.07	5356	2 608.71
14	644	2394	1 021.02	3150	1 498.84	4046	1 930.04	4928	2 357.46	5768	2 809.38
15	690	2565	1 093.95	3375	1 605.90	4335	2 067.90	5280	2 525.85	6180	3 010.05
16	736	2736	1 166.88	3600	1 712.96	4624	2 205.76	5632	2 694.24	6592	3 210.72
17	782	2907	1 239.81	3825	1 820.02	4913	2 343.62	5984	2 862.63	7004	3 411.39
18	828	3078	1 312.74	4050	1 927.08	5202	2 481.48	6336	3 031.02	7416	3 612.06
19	874	3249	1 385.67	4275	2 034.14	5491	2 619.34	6688	3 199.41	7828	3 812.73
20	920	3420	1 458.60	4500	2 141.20	5780	2 757.20	7040	3 367.80	8240	4 013.40
21	966	3591	1 531.53	4725	2 248.26	6069	2 895.06	7392	3 536.19	8652	4 214.07
22	1012	3762	1 604.46	4950	2 355.32	6358	3 032.92	7744	3 704.58	9064	4 414.74
23	1058	3933	1 677.39	5175	2 462.38	6647	3 170.78	8096	3 872.97	9476	4 615.41
24	1104	4104	1 750.32	5400	2 569.44	6936	3 308.64	8448	4 041.36	9888	4 816.08
25	1150	4275	1 823.25	5625	2 676.50	7225	3 446.50	8800	4 209.75	10300	5 016.75
26	1196	4446	1 896.18	5850	2 783.56	7514	3 584.36	9152	4 378.14	10712	5 217.42
27	1242	4617	1 969.11	6075	2 890.62	7803	3 722.22	9504	4 546.53	11124	5 418.09
28	1288	4788	2 042.04	6300	2 997.68	8092	3 860.08	9856	4 714.92	11536	5 618.76
29	1334	4959	2 114.97	6525	3 104.74	8381	3 997.94	10208	4 883.31	11948	5 819.43
30	1380	5130	2 187.90	6750	3 211.80	8670	4 135.80	10560	5 051.70	12360	6 020.10
31	1426	5301	2 260.83	6975	3 318.86	8959	4 273.66	10912	5 220.09	12772	6 220.77
32	1472	5472	2 333.76	7200	3 425.92	9248	4 411.52	11264	5 388.48	13184	6 421.44
33	1518	5643	2 406.69	7425	3 532.98	9537	4 549.38	11616	5 556.87	13596	6 622.11
34	1564	5814	2 479.62	7650	3 640.04	9826	4 687.24	11968	5 725.26	14008	6 822.78
35	1610	5985	2 552.55	7875	3 747.10	10115	4 825.10	12320	5 893.65	14420	7 023.45
36	1656	6156	2 625.48	8100	3 854.16	10404	4 962.96	12672	6 062.04	14832	7 224.12
37	1702	6327	2 698.41	8325	3 961.22	10693	5 100.82	13024	6 230.43	15244	7 424.79
38	1748	6498	2 771.34	8550	4 068.28	10982	5 238.68	13376	6 398.82	15656	7 625.46
39	1794	6669	2 844.27	8775	4 175.34	11271	5 376.54	13728	6 567.21	16068	7 826.13
40	1840	6840	2 917.20	9000	4 282.40	11560	5 514.40	14080	6 735.60	16480	8 026.80

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		2800									
Model		2280		3280		4280		5280		6280	
Depth mm		62		100		136		173		210	
Exponent n		1,30		1,30		1,30		1,30		1,30	
Max. number of elements		22		22		22		17		14	
Price/element €		83.08		120.19		157.21		188.69		227.06	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	756	332.32	1004	480.76	1292	628.84	1568	754.76	1836	908.24
5	230	945	415.40	1255	600.95	1615	786.05	1960	943.45	2295	1 135.30
6	276	1134	498.48	1506	721.14	1938	943.26	2352	1 132.14	2754	1 362.36
7	322	1323	581.56	1757	841.33	2261	1 100.47	2744	1 320.83	3213	1 589.42
8	368	1512	664.64	2008	961.52	2584	1 257.68	3136	1 509.52	3672	1 816.48
9	414	1701	747.72	2259	1 081.71	2907	1 414.89	3528	1 698.21	4131	2 043.54
10	460	1890	830.80	2510	1 201.90	3230	1 572.10	3920	1 886.90	4590	2 270.60
11	506	2079	913.88	2761	1 322.09	3553	1 729.31	4312	2 075.59	5049	2 497.66
12	552	2268	996.96	3012	1 442.28	3876	1 886.52	4704	2 264.28	5508	2 724.72
13	598	2457	1 080.04	3263	1 562.47	4199	2 043.73	5096	2 452.97	5967	2 951.78
14	644	2646	1 163.12	3514	1 682.66	4522	2 200.94	5488	2 641.66	6426	3 178.84
15	690	2835	1 246.20	3765	1 802.85	4845	2 358.15	5880	2 830.35	6885	3 405.90
16	736	3024	1 329.28	4016	1 923.04	5168	2 515.36	6272	3 019.04	7344	3 632.96
17	782	3213	1 412.36	4267	2 043.23	5491	2 672.57	6664	3 207.73	7803	3 860.02
18	828	3402	1 495.44	4518	2 163.42	5814	2 829.78	7056	3 396.42	8262	4 087.08
19	874	3591	1 578.52	4769	2 283.61	6137	2 986.99	7448	3 585.11	8721	4 314.14
20	920	3780	1 661.60	5020	2 403.80	6460	3 144.20	7840	3 773.80	9180	4 541.20
21	966	3969	1 744.68	5271	2 523.99	6783	3 301.41	8232	3 962.49	9639	4 768.26
22	1012	4158	1 827.76	5522	2 644.18	7106	3 458.62	8624	4 151.18	10098	4 995.32
23	1058	4347	1 910.84	5773	2 764.37	7429	3 615.83	9016	4 339.87	10557	5 222.38
24	1104	4536	1 993.92	6024	2 884.56	7752	3 773.04	9408	4 528.56	11016	5 449.44
25	1150	4725	2 077.00	6275	3 004.75	8075	3 930.25	9800	4 717.25	11475	5 676.50
26	1196	4914	2 160.08	6526	3 124.94	8398	4 087.46	10192	4 905.94	11934	5 903.56
27	1242	5103	2 243.16	6777	3 245.13	8721	4 244.67	10584	5 094.63	12393	6 130.62
28	1288	5292	2 326.24	7028	3 365.32	9044	4 401.88	10976	5 283.32	12852	6 357.68
29	1334	5481	2 409.32	7279	3 485.51	9367	4 559.09	11368	5 472.01	13311	6 584.74
30	1380	5670	2 492.40	7530	3 605.70	9690	4 716.30	11760	5 660.70	13770	6 811.80
31	1426	5859	2 575.48	7781	3 725.89	10013	4 873.51	12152	5 849.39	14229	7 038.86
32	1472	6048	2 658.56	8032	3 846.08	10336	5 030.72	12544	6 038.08	14688	7 265.92
33	1518	6237	2 741.64	8283	3 966.27	10659	5 187.93	12936	6 226.77	15147	7 492.98
34	1564	6426	2 824.72	8534	4 086.46	10982	5 345.14	13328	6 415.46	15606	7 720.04
35	1610	6615	2 907.80	8785	4 206.65	11305	5 502.35	13720	6 604.15	16065	7 947.10
36	1656	6804	2 990.88	9036	4 326.84	11628	5 659.56	14112	6 792.84	16524	8 174.16
37	1702	6993	3 073.96	9287	4 447.03	11951	5 816.77	14504	6 981.53	16983	8 401.22
38	1748	7182	3 157.04	9538	4 567.22	12274	5 973.98	14896	7 170.22	17442	8 628.28
39	1794	7371	3 240.12	9789	4 687.41	12597	6 131.19	15288	7 358.91	17901	8 855.34
40	1840	7560	3 323.20	10040	4 807.60	12920	6 288.40	15680	7 547.60	18360	9 082.40

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

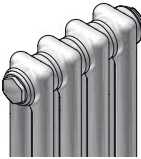
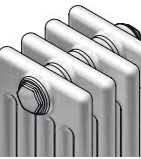
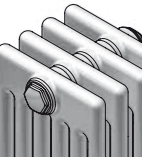
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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		3000									
mm											
											
Model		2300		3300		4300		5300		6300	
Depth	mm	62		100		136		173		210	
Exponent	n	1,30		1,30		1,30		1,30		1,30	
Max. number of elements		22		22		22		17		14	
Price/element	€	88.17		130.14		168.20		202.09		241.59	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	804	352.68	1076	520.56	1380	672.80	1680	808.36	1964	966.36
5	230	1005	440.85	1345	650.70	1725	841.00	2100	1 010.45	2455	1 207.95
6	276	1206	529.02	1614	780.84	2070	1 009.20	2520	1 212.54	2946	1 449.54
7	322	1407	617.19	1883	910.98	2415	1 177.40	2940	1 414.63	3437	1 691.13
8	368	1608	705.36	2152	1 041.12	2760	1 345.60	3360	1 616.72	3928	1 932.72
9	414	1809	793.53	2421	1 171.26	3105	1 513.80	3780	1 818.81	4419	2 174.31
10	460	2010	881.70	2690	1 301.40	3450	1 682.00	4200	2 020.90	4910	2 415.90
11	506	2211	969.87	2959	1 431.54	3795	1 850.20	4620	2 222.99	5401	2 657.49
12	552	2412	1 058.04	3228	1 561.68	4140	2 018.40	5040	2 425.08	5892	2 899.08
13	598	2613	1 146.21	3497	1 691.82	4485	2 186.60	5460	2 627.17	6383	3 140.67
14	644	2814	1 234.38	3766	1 821.96	4830	2 354.80	5880	2 829.26	6874	3 382.26
15	690	3015	1 322.55	4035	1 952.10	5175	2 523.00	6300	3 031.35	7365	3 623.85
16	736	3216	1 410.72	4304	2 082.24	5520	2 691.20	6720	3 233.44	7856	3 865.44
17	782	3417	1 498.89	4573	2 212.38	5865	2 859.40	7140	3 435.53	8347	4 107.03
18	828	3618	1 587.06	4842	2 342.52	6210	3 027.60	7560	3 637.62	8838	4 348.62
19	874	3819	1 675.23	5111	2 472.66	6555	3 195.80	7980	3 839.71	9329	4 590.21
20	920	4020	1 763.40	5380	2 602.80	6900	3 364.00	8400	4 041.80	9820	4 831.80
21	966	4221	1 851.57	5649	2 732.94	7245	3 532.20	8820	4 243.89	10311	5 073.39
22	1012	4422	1 939.74	5918	2 863.08	7590	3 700.40	9240	4 445.98	10802	5 314.98
23	1058	4623	2 027.91	6187	2 993.22	7935	3 868.60	9660	4 648.07	11293	5 556.57
24	1104	4824	2 116.08	6456	3 123.36	8280	4 036.80	10080	4 850.16	11784	5 798.16
25	1150	5025	2 204.25	6725	3 253.50	8625	4 205.00	10500	5 052.25	12275	6 039.75
26	1196	5226	2 292.42	6994	3 383.64	8970	4 373.20	10920	5 254.34	12766	6 281.34
27	1242	5427	2 380.59	7263	3 513.78	9315	4 541.40	11340	5 456.43	13257	6 522.93
28	1288	5628	2 468.76	7532	3 643.92	9660	4 709.60	11760	5 658.52	13748	6 764.52
29	1334	5829	2 556.93	7801	3 774.06	10005	4 877.80	12180	5 860.61	14239	7 006.11
30	1380	6030	2 645.10	8070	3 904.20	10350	5 046.00	12600	6 062.70	14730	7 247.70
31	1426	6231	2 733.27	8339	4 034.34	10695	5 214.20	13020	6 264.79	15221	7 489.29
32	1472	6432	2 821.44	8608	4 164.48	11040	5 382.40	13440	6 466.88	15712	7 730.88
33	1518	6633	2 909.61	8877	4 294.62	11385	5 550.60	13860	6 668.97	16203	7 972.47
34	1564	6834	2 997.78	9146	4 424.76	11730	5 718.80	14280	6 871.06	16694	8 214.06
35	1610	7035	3 085.95	9415	4 554.90	12075	5 887.00	14700	7 073.15	17185	8 455.65
36	1656	7236	3 174.12	9684	4 685.04	12420	6 055.20	15120	7 275.24	17676	8 697.24
37	1702	7437	3 262.29	9953	4 815.18	12765	6 223.40	15540	7 477.33	18167	8 938.83
38	1748	7638	3 350.46	10222	4 945.32	13110	6 391.60	15960	7 679.42	18658	9 180.42
39	1794	7839	3 438.63	10491	5 075.46	13455	6 559.80	16380	7 881.51	19149	9 422.01
40	1840	8040	3 526.80	10760	5 205.60	13800	6 728.00	16800	8 083.60	19640	9 663.60

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

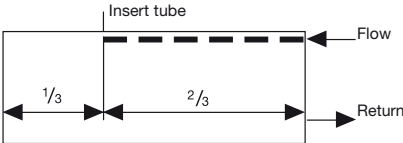
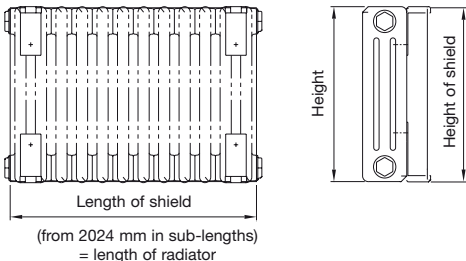
Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

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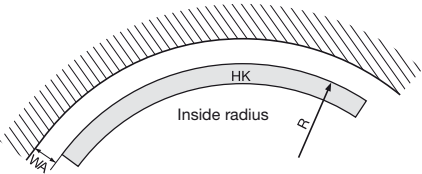
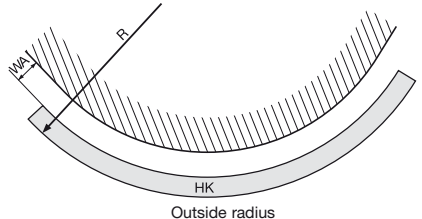
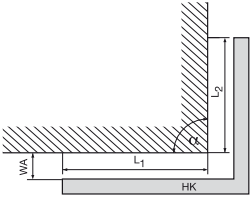
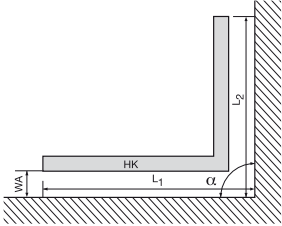
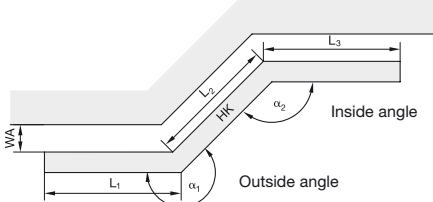
Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

			Price €	
High pressure version max. 18 bar (not for Completto version) - with welded plugs - with welded plugs and tied rod - for radiators comprising several blocks additionally per welded joint		2- to 3-column 4- to 6-column (at top and bottom)	253.12 per RAD 372.29 per RAD 126.73	
Operating temperature 120 °C			On request	
Connections			see page 107 ff.	
Insert tube for Zehnder Charleston radiators with same-side connections, a flow insert tube is factory-installed in 2/3 of the radiator length from the following element numbers or lengths, in order to guarantee the thermal outputs shown in the catalogue.			281.37 per RAD	
2-column from 87 elements = length 4002 mm 3-column from 85 elements = length 3910 mm 4-column from 81 elements = length 3726 mm 5-column from 71 elements = length 3266 mm 6-column from 55 elements = length 2530 mm				
Intermediate heights calculated on next-higher catalogue height			On request	
Angled or curved design (see page 36)			On request	
Radiator designs over height 3000 mm			On request	
Welded lugs, price per lug			35.07	
Galvanising (see also explanations on galvanising in section "General") with subsequent standard finish (RAL 9016), maximum dimensions: 3000 x 850 x 450 mm			On request	
Completto version with valve inserts for clip seal (Danfoss thermostat) instead of M 30 x 1,5 threaded connection			No surcharge	
Completto Q-Tech Charleston Completto Q-Tech is built in factory-made, for an automatic hydraulic balancing of pressure differences that can occur when, e.g. connecting or turning off system parts. By the integrated diaphragm-sensed flow-control in the valve insert, the differential pressure is constantly kept above the pre-setting and standard cross section value. Therefore it is possible to quickly and easily do the hydraulic balancing of new and old systems or unknown pipe networks. The pre-setting of the needed flow for the customer needs on site, is achieved by turning the regulation ring with the pre-setting key which is integrated in the scope of delivery. Large flows of 10 to 170 l/h and very big differential pressure (max. 1,5 bar). The Q-Tech valve cannot be retrofitted with AV6, AV9 or other valves. Not available for monotube connection.			144.57 (Surcharge on the corresponding price for Completto connection, see page 45)	
Thermal radiation shield Heights from 260 mm to 750 mm and a maximum length of the thermal radiation shield of up to 2024 mm; for large lengths, the thermal radiation shields are supplied in 2 or more pieces. The thermal radiation shield consists of special 6 mm safety glass with thermal coating, rounded corners, finely polished edges, including holders for on-site attachment to the last row of columns. Bracket painted with powder-coating in the colour of the radiator.				
				
Number of elements Zehnder Charleston	Number of shields	Number of brackets		
7 to 30	1	4		
31 to 44	1	6		
45 to 60	2	8		
61 to 88	2	12		
89 to 114	3	18		
115 to 130	3	18		
			Basic price per reflective cover plate	221.97
			Price per metre, thermal radiation shield: H = 260 - 450 mm H = 500 - 750 mm H = Height of shield	107.60 163.87

Basis for calculating the surcharge is the standard finish

Zehnder Charleston

Curved version		
Version	Sketch/template	Prices €
Zehnder Charleston radiators are available with the following minimum external curve radii: 2-column: 400 mm 3-column: 650 mm 4-column: 750 mm 5-column: 900 mm 6-column: 1000 mm The first three elements are not curved for the Zehnder Charleston Completto.		On request
		On request
Angled version		
Version	Sketch/template	Prices €
Special version angled, available from 90° to 179°. When making a price enquiry, please provide the following dimensions on the dimensional drawing: L_1, L_2, L_3 in mm, angle α_1, α_2 in degrees. Please provide sturdy templates when placing your order.		On request
		On request
		On request

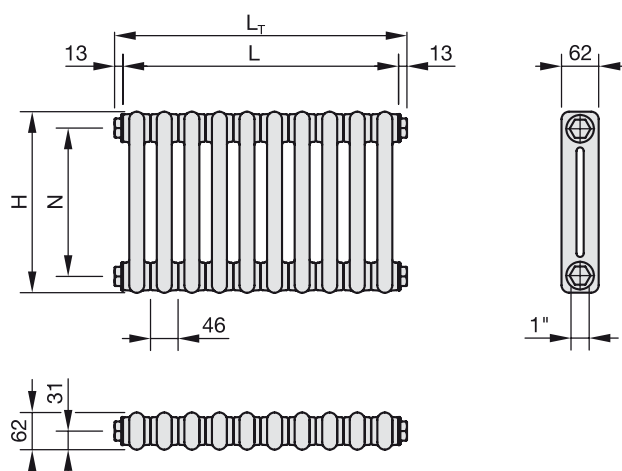
When ordering or requesting prices of curved and angled radiators, please enclose a template or dimensional drawing with all dimensions indicated.

HK = Radiator
 WA = Wall clearance
 R = Radius
 α_1 , α_2 = Angle [°]
 L_1 , L_2 , L_3 = Lengths

Dimensions in mm

Zehnder Charleston

Model 2-column



- H = Height
- L = Length = elements x 46 mm
- L_T = Total length = elements x 46 mm + 2 x 13 mm
- N = Boss spacing = H - 58 mm
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s_k = Proportion of radiation
- q_{ms} = Nominal flow rate
- n = Exponent
- Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

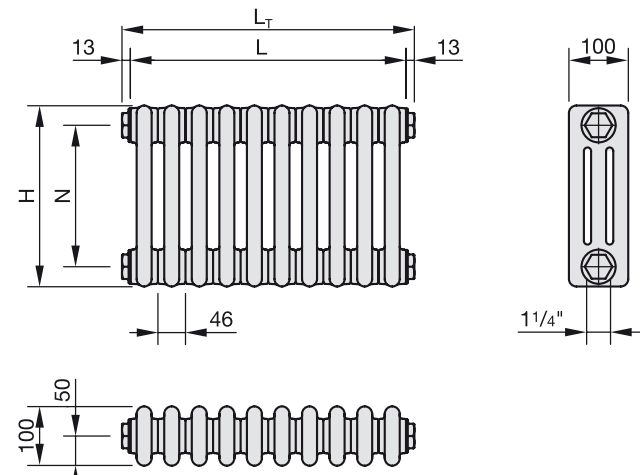
Dimensions in mm

Technical specifications per element

Model	H	N	T	A	V	M	s _k	q _{ms}	Exp.	Φ _s =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
	mm	mm	mm	m ²	dm ³	kg	%	kg/h	n			
2026	260	202	62	0,04	0,3	0,40	25	2,0	1,25	21,1	17,1	11,1
2030	292	234	62	0,04	0,4	0,44	25	2,0	1,24	23,6	19,1	12,4
2035	342	284	62	0,05	0,4	0,51	24	2,0	1,24	27,5	22,3	14,5
2040	392	334	62	0,06	0,4	0,55	25	3,0	1,24	31,2	25,3	16,4
2045	442	384	62	0,07	0,5	0,62	24	3,0	1,24	34,9	28,3	18,4
2050	492	434	62	0,07	0,5	0,69	23	3,0	1,25	38,4	31,1	20,1
2055	542	484	62	0,08	0,6	0,75	23	4,0	1,25	41,9	33,9	22,0
2060	592	534	62	0,09	0,6	0,82	23	4,0	1,25	45,3	36,6	23,7
2075	742	684	62	0,11	0,7	1,01	22	5,0	1,25	55,0	44,5	28,8
2090	892	834	62	0,14	0,8	1,21	22	5,0	1,25	63,9	51,7	33,5
2100	992	934	62	0,15	0,9	1,34	22	6,0	1,25	69,5	56,2	36,4
2110	1092	1034	62	0,17	1,0	1,47	22	6,0	1,25	74,7	60,4	39,2
2120	1192	1134	62	0,18	1,1	1,60	22	7,0	1,26	82,7	66,8	43,1
2150	1492	1434	62	0,23	1,3	2,00	23	9,0	1,28	104,0	83,7	53,7
2180	1792	1734	62	0,28	1,5	2,39	23	11,0	1,31	124,0	99,3	63,0
2200	1992	1934	62	0,31	1,7	2,65	23	12,0	1,31	138,0	110,5	70,1
2220	2192	2134	62	0,34	1,9	2,92	23	13,0	1,31	151,0	120,9	76,7
2250	2492	2434	62	0,39	2,1	3,31	23	15,0	1,30	171,0	137,2	87,3
2280	2792	2734	62	0,44	2,4	3,70	23	16,0	1,30	189,0	151,6	96,5
2300	2992	2934	62	0,47	2,5	3,97	23	17,0	1,30	201,0	161,2	102,7

Zehnder Charleston

Model 3-column



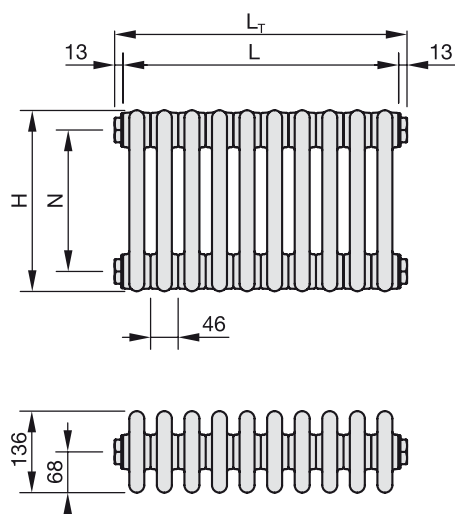
- H = Height
- L = Length = elements x 46 mm
- L_T = Total length = elements x 46 mm + 2 x 13 mm
- N = Boss spacing = H - 66 mm
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s_k = Proportion of radiation
- q_{ms} = Nominal flow rate
- n = Exponent
- Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

Dimensions in mm

Technical specifications per element												
Model	H	N	T	A	V	M	s _k	q _{ms}	Exp.	Φ _s =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
	mm	mm	mm	m ²	dm ³	kg	%	kg/h	n			
3026	260	194	100	0,06	0,5	0,56	21	2,0	1,25	27,9	22,6	14,6
3030	300	234	100	0,07	0,6	0,63	20	3,0	1,25	32,0	25,9	16,8
3035	350	284	100	0,08	0,6	0,73	20	3,0	1,25	37,0	29,9	19,4
3040	400	334	100	0,09	0,7	0,83	19	4,0	1,25	41,9	33,9	22,0
3045	450	384	100	0,10	0,7	0,93	19	4,0	1,25	46,8	37,9	24,5
3050	500	434	100	0,11	0,8	1,03	18	4,0	1,25	51,6	41,7	27,0
3055	550	484	100	0,12	0,9	1,13	18	5,0	1,26	56,3	45,5	29,4
3060	600	534	100	0,14	0,9	1,23	18	5,0	1,26	60,9	49,2	31,8
3075	750	684	100	0,17	1,1	1,52	18	6,0	1,26	74,3	60,0	38,7
3090	900	834	100	0,21	1,3	1,81	18	7,0	1,27	87,0	70,1	45,1
3100	1000	934	100	0,23	1,4	2,01	18	8,0	1,27	95,1	76,7	49,3
3110	1100	1034	100	0,25	1,5	2,21	18	9,0	1,28	103,0	82,9	53,2
3120	1200	1134	100	0,28	1,6	2,40	18	10,0	1,29	115,0	92,4	59,0
3150	1500	1434	100	0,35	2,0	2,99	18	12,0	1,31	140,0	112,1	71,1
3180	1800	1734	100	0,42	2,4	3,58	18	14,0	1,33	166,0	132,5	83,5
3200	2000	1934	100	0,47	2,6	3,97	18	16,0	1,33	183,0	146,0	92,0
3220	2200	2134	100	0,51	2,9	4,36	18	17,0	1,32	200,0	159,9	101,1
3250	2500	2434	100	0,58	3,2	4,95	18	19,0	1,32	225,0	179,9	113,7
3280	2800	2734	100	0,65	3,6	5,54	18	22,0	1,30	251,0	201,3	128,2
3300	3000	2934	100	0,70	3,9	5,93	18	23,0	1,30	269,0	215,8	137,4

Zehnder Charleston

Model 4-column



- H = Height
- L = Length = elements x 46 mm
- L_T = Total length = elements x 46 mm + 2 x 13 mm
- N = Boss spacing = H - 66 mm
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s_k = Proportion of radiation
- q_{ms} = Nominal flow rate
- n = Exponent
- Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

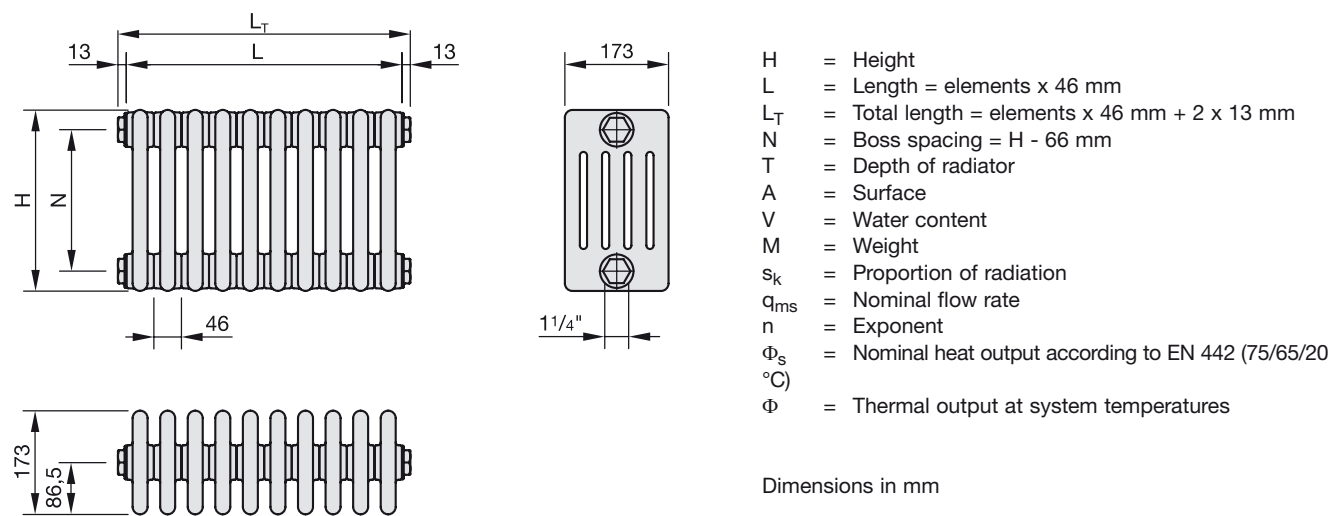
Dimensions in mm

Technical specifications per element

Model	H	N	T	A	V	M	s _k	q _{ms}	Exp.	Φ _s =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
	mm	mm	mm	m ²	dm ³	kg	%	kg/h	n			
4026	260	194	136	0,08	0,7	0,77	18	3,0	1,25	36,5	29,5	19,1
4030	300	234	136	0,09	0,7	0,88	18	4,0	1,25	41,9	33,9	22,0
4035	350	284	136	0,11	0,8	1,01	17	4,0	1,25	48,5	39,2	25,4
4040	400	334	136	0,12	0,9	1,16	16	5,0	1,26	54,9	44,3	28,6
4045	450	384	136	0,14	1,0	1,29	16	5,0	1,26	61,3	49,5	32,0
4050	500	434	136	0,15	1,0	1,42	16	6,0	1,26	67,6	54,6	35,2
4055	550	484	136	0,17	1,1	1,55	16	6,0	1,26	73,7	59,5	38,4
4060	600	534	136	0,19	1,2	1,67	15	7,0	1,27	79,8	64,3	41,4
4075	750	684	136	0,23	1,4	2,06	15	8,0	1,27	97,4	78,5	50,5
4090	900	834	136	0,28	1,7	2,45	15	10,0	1,28	114,0	91,7	58,8
4100	1000	934	136	0,31	1,8	2,70	15	11,0	1,29	125,0	100,4	64,2
4110	1100	1034	136	0,34	2,0	2,96	15	12,0	1,29	135,0	108,5	69,3
4120	1200	1134	136	0,37	2,1	3,22	15	13,0	1,30	147,0	117,9	75,1
4150	1500	1434	136	0,47	2,6	3,99	15	15,0	1,31	180,0	144,1	91,5
4180	1800	1734	136	0,56	3,1	4,76	15	18,0	1,33	213,0	170,0	107,1
4200	2000	1934	136	0,63	3,4	5,28	15	20,0	1,32	234,0	187,1	118,3
4220	2200	2134	136	0,69	3,8	5,79	15	22,0	1,32	256,0	204,6	129,4
4250	2500	2434	136	0,78	4,3	6,56	15	25,0	1,31	289,0	231,4	146,9
4280	2800	2734	136	0,88	4,8	7,33	15	28,0	1,30	323,0	259,1	165,0
4300	3000	2934	136	0,94	5,1	7,85	15	30,0	1,30	345,0	276,7	176,2

Zehnder Charleston

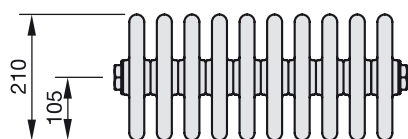
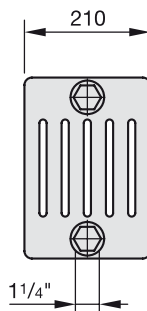
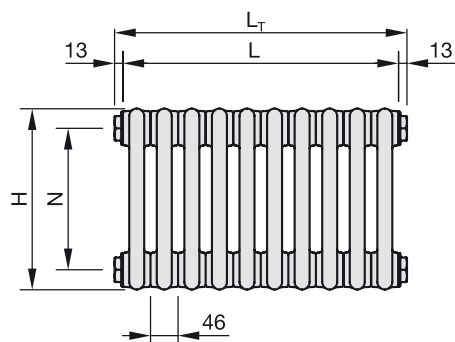
Model 5-column



Technical specifications per element												
Model	H	N	T	A	V	M	s _k	q _{ms}	Exp.	Φ _s =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
	mm	mm	mm	m ²	dm ³	kg	%	kg/h	n			
5026	260	194	173	0,10	0,8	0,88	17	4,0	1,25	45,1	36,5	23,6
5030	300	234	173	0,12	0,9	1,01	16	4,0	1,25	51,7	41,8	27,1
5035	350	284	173	0,13	1,0	1,18	15	5,0	1,26	59,9	48,4	31,2
5040	400	334	173	0,15	1,1	1,51	15	6,0	1,26	67,9	54,8	35,4
5045	450	384	173	0,17	1,2	1,67	14	7,0	1,26	75,8	61,2	39,5
5050	500	434	173	0,19	1,3	1,83	14	7,0	1,27	83,5	67,3	43,3
5055	550	484	173	0,20	1,3	2,00	14	8,0	1,27	91,1	73,4	47,3
5060	600	534	173	0,23	1,5	2,16	13	8,0	1,27	98,6	79,5	51,1
5075	750	684	173	0,29	1,8	2,65	13	10,0	1,29	120,0	96,4	61,6
5090	900	834	173	0,35	2,1	3,14	13	12,0	1,30	141,0	113,1	72,0
5100	1000	934	173	0,39	2,3	3,47	13	13,0	1,30	154,0	123,5	78,7
5110	1100	1034	173	0,43	2,5	3,79	13	14,0	1,31	167,0	133,7	84,9
5120	1200	1134	173	0,47	2,7	4,12	13	15,0	1,31	179,0	143,3	91,0
5150	1500	1434	173	0,59	3,3	5,10	13	19,0	1,32	219,0	175,1	110,7
5180	1800	1734	173	0,70	3,9	6,08	13	22,0	1,32	259,0	207,0	130,9
5200	2000	1934	173	0,78	4,3	6,73	13	25,0	1,32	285,0	227,8	144,1
5220	2200	2134	173	0,86	4,7	7,39	13	27,0	1,32	312,0	249,4	157,7
5250	2500	2434	173	0,98	5,3	8,37	13	30,0	1,31	352,0	281,9	178,9
5280	2800	2734	173	1,10	5,9	9,35	13	34,0	1,30	392,0	314,4	200,2
5300	3000	2934	173	1,18	6,4	10,00	13	36,0	1,30	420,0	336,9	214,5

Zehnder Charleston

Model 6-column



- H = Height
- L = Length = elements x 46 mm
- L_T = Total length = elements x 46 mm + 2 x 13 mm
- N = Boss spacing = H - 66 mm
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s_k = Proportion of radiation
- q_{ms} = Nominal flow rate
- n = Exponent
- Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

Dimensions in mm

Technical specifications per element

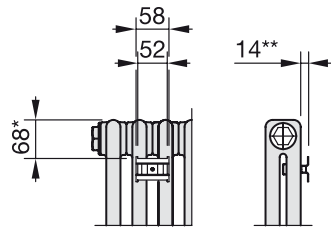
Model	H mm	N mm	T mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _s =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
6026	260	194	210	0,12	1,0	1,26	18	5,0	1,27	53,5	43,1	27,8
6030	300	234	210	0,14	1,1	1,42	15	5,0	1,26	61,3	49,5	32,0
6035	350	284	210	0,16	1,2	1,62	14	6,0	1,26	71,0	57,3	37,0
6040	400	334	210	0,19	1,3	1,79	14	7,0	1,27	80,5	64,9	41,8
6045	450	384	210	0,21	1,4	1,99	13	8,0	1,27	89,8	72,4	46,6
6050	500	434	210	0,23	1,5	2,19	13	9,0	1,28	99,0	79,7	51,1
6055	550	484	210	0,26	1,6	2,38	12	9,0	1,28	108,0	86,9	55,7
6060	600	534	210	0,28	1,8	2,58	12	10,0	1,29	117,0	94,0	60,1
6075	750	684	210	0,35	2,1	3,17	12	12,0	1,30	143,0	114,7	73,0
6090	900	834	210	0,42	2,5	3,76	12	14,0	1,31	167,0	133,7	84,9
6100	1000	934	210	0,47	2,7	4,16	12	16,0	1,31	183,0	146,5	93,0
6110	1100	1034	210	0,52	3,0	4,55	12	17,0	1,32	198,0	158,3	100,1
6120	1200	1134	210	0,56	3,2	4,95	12	18,0	1,32	210,0	167,9	106,2
6150	1500	1434	210	0,70	4,0	6,13	12	22,0	1,32	256,0	204,6	129,4
6180	1800	1734	210	0,85	4,7	7,31	12	26,0	1,33	303,0	241,8	152,4
6200	2000	1934	210	0,94	5,2	8,10	12	29,0	1,32	334,0	267,0	168,8
6220	2200	2134	210	1,03	5,6	8,89	12	31,0	1,32	365,0	291,8	184,5
6250	2500	2434	210	1,18	6,3	10,07	12	35,0	1,32	412,0	329,3	208,3
6280	2800	2734	210	1,33	7,0	11,25	12	39,0	1,30	459,0	368,2	234,4
6300	3000	2934	210	1,41	7,5	12,04	12	42,0	1,30	491,0	393,8	250,8

Zehnder Charleston

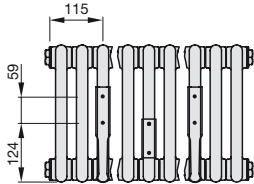
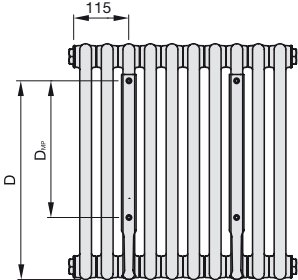
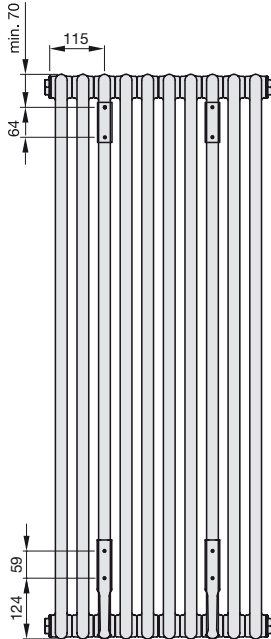
Dimensions for the bores when using CVD brackets (upper drill hole)

Number of fixings	2 axes / 4 brackets	3 axes / 6 brackets	4 axes / 8 brackets
		If there is an odd number of sections then the middle axis is offset by 23 mm.	

Detail of suspension



Dimensions for the bores when using EasyFix brackets¹⁾

For height mm	SMB 2T H = 245-299	SMB 30-75 H = 300-1000	SMB 2T H = 1001-3000															
		 <table data-bbox="775 1706 1083 1888"><thead><tr><th>H</th><th>D_{MP}</th><th>D</th></tr></thead><tbody><tr><td>300 - 369</td><td>134</td><td>241</td></tr><tr><td>370 - 484</td><td>204</td><td>309</td></tr><tr><td>485 - 679</td><td>309</td><td>414</td></tr><tr><td>680 - 1000</td><td>518</td><td>623</td></tr></tbody></table>	H	D _{MP}	D	300 - 369	134	241	370 - 484	204	309	485 - 679	309	414	680 - 1000	518	623	
H	D _{MP}	D																
300 - 369	134	241																
370 - 484	204	309																
485 - 679	309	414																
680 - 1000	518	623																

¹⁾ For connection type 3370/5510 and V001-V004, the bracket must be offset inwards by one element

- = Position of drill hole
- L = Length
- H = Height
- * = Smallest possible dimension
- ** = Front edge of bracket to radiator
- D = Dimension from bottom edge of radiator to upper drill hole
- D_{MP} = Spacing of drill holes
- Dimensions in mm

For the recommended number of brackets, see page 89 onwards.



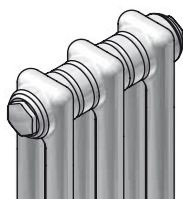
Zehnder Charleston Clinic



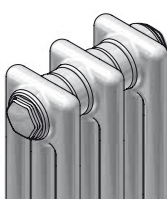
	Overview of models	Product description	List prices	Special versions	Fixings	Technical data	Installation points	Connections
Zehnder Charleston Clinic								
 • Element length 65 m • Larger element spacings • Particularly easy to clean	45	46	47	67	99	68	73	94

Zehnder Charleston Clinic

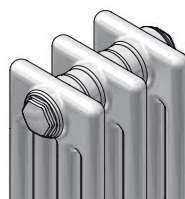
Zehnder Charleston Clinic



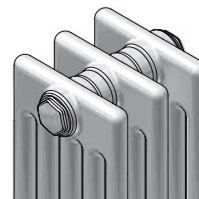
2-column



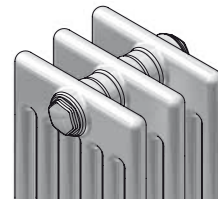
3-column



4-column



5-column



6-column

Height ¹⁾ mm	Depth mm				
	62	100	136	173	210
260	K2026	K3026	K4026	K5026	K6026
300	K2030	K3030	K4030	K5030	K6030
350	K2035	K3035	K4035	K5035	K6035
400	K2040	K3040	K4040	K5040	K6040
450	K2045	K3045	K4045	K5045	K6045
500	K2050	K3050	K4050	K5050	K6050
550	K2055	K3055	K4055	K5055	K6055
600	K2060	K3060	K4060	K5060	K6060
750	K2075	K3075	K4075	K5075	K6075
900	K2090	K3090	K4090	K5090	K6090
1000	K2100	K3100	K4100	K5100	K6100
1100	K2110	K3110	K4110	K5110	K6110
1200	K2120	K3120	K4120	K5120	K6120
1500	K2150	K3150	K4150	K5150	K6150
1800	K2180	K3180	K4180	K5180	K6180
2000	K2200	K3200	K4200	K5200	K6200
2200	K2220	K3220	K4220	K5220	K6220
2500	K2250	K3250	K4250	K5250	K6250
2800	K2280	K3280	K4280	K5280	K6280
3000	K2300	K3300	K4300	K5300	K6300

¹⁾ The values shown here are the so-called nominal height; the exact height varies by a few mm for 2-column radiators and for some of the 3-column radiators as well, see "Technical specifications"; larger heights over 3000 mm or intermediate heights are available on request.

Maximum radiator lengths on piece (per block)

Zehnder Charleston Clinic (also see price tables from page 56 onwards)			
Model	Height mm		
	260 - 1000	> 1000 - 2500	> 2500 - 3000
2-, 5-column	44	16	16
6-column	44	16	14

Zehnder Charleston Clinic



Zehnder Charleston Clinic

Product description

There are rooms where cleanliness and hygiene are high priorities, such as hospitals and doctors' surgeries, for example. Zehnder Charleston Clinic is there to help. Ample clearance between the individual elements of the radiator ensures cleaning is a simple process. The Zehnder EasyFix fixing system for simple and anti-lift assembly ensures easy installation. Available in almost any colour and finish from the Zehnder colour chart.

Technical specifications

- Steel round tubes Ø 25 mm
- Header in sheet steel
- Length of the individual element 65 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Maximum operating pressure 10 bar
- Maximum operating temperature 110 °C

Customisation options

- Large choice of connection types, including integrated valve
- Mounting sets for all applications
- Special colours and antibacterial coating
- Galvanised and painted
- Energy saving thermal radiation shield for installation in front of windows
- Special shapes: angled or curved, with handrail, etc
- High pressure version up to max. 18 bar
- Operating temperature at 120 °C on request

Advantages

- Ample spaces between tubes make cleaning easy
- Residue-free laser welding technology LaZer made
- Classic elegance
- Accident-safe
- Cleaning with Zehnder lambswool cleaning brush
- Simple and secure with non-lift-out feature: Installation with Zehnder EasyFix
- Radiant heat with feel-good factor
- Energy-efficient for use in low temperature heating systems

Scope of delivery for standard version

- Primed and painted in RAL 9016
- Connections 4 x ½" female thread at front
- Connection S001: 1 blanking plug ½", directional air vent ½"
- Complete packaging in stretch film and carton
- Heights greater than 2200 mm with stabilising brace welded at the factory

Scope of delivery for Completto version

- Primed and painted in RAL 9016
- Valve unit integrated on side, with valve insert AV 9, max. flow rate 250 kg/h
- Connections 2 x ½" female thread from bottom 50 mm
- Integrated baffle
- 1 directional air vent ½"
- Complete packaging in stretch film and carton

Zehnder Charleston Clinic

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		260									
Model		K2026		K3026		K4026		K5026		K6026	
Depth mm		62		100		136		173		210	
Exponent n		1,30		1,27		1,26		1,25		1,28	
Max. number of elements		44		44		44		44		44	
Price/element €		55.89		63.49		69.69		78.43		87.20	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	96	223.56	125	253.96	162	278.76	198	313.72	232	348.80
5	306	120	279.45	156	317.45	202	348.45	247	392.15	291	436.00
6	371	143	335.34	187	380.94	242	418.14	296	470.58	349	523.20
7	436	167	391.23	218	444.43	283	487.83	346	549.01	407	610.40
8	501	191	447.12	250	507.92	323	557.52	395	627.44	465	697.60
9	566	215	503.01	281	571.41	364	627.21	445	705.87	523	784.80
10	631	239	558.90	312	634.90	404	696.90	494	784.30	581	872.00
11	696	263	614.79	343	698.39	444	766.59	543	862.73	639	959.20
12	761	287	670.68	374	761.88	485	836.28	593	941.16	697	1 046.40
13	826	311	726.57	406	825.37	525	905.97	642	1 019.59	755	1 133.60
14	891	335	782.46	437	888.86	566	975.66	692	1 098.02	813	1 220.80
15	956	359	838.35	468	952.35	606	1 045.35	741	1 176.45	872	1 308.00
16	1021	382	894.24	499	1 015.84	646	1 115.04	790	1 254.88	930	1 395.20
17	1086	406	950.13	530	1 079.33	687	1 184.73	840	1 333.31	988	1 482.40
18	1151	430	1 006.02	562	1 142.82	727	1 254.42	889	1 411.74	1046	1 569.60
19	1216	454	1 061.91	593	1 206.31	768	1 324.11	939	1 490.17	1104	1 656.80
20	1281	478	1 117.80	624	1 269.80	808	1 393.80	988	1 568.60	1162	1 744.00
21	1346	502	1 173.69	655	1 333.29	848	1 463.49	1037	1 647.03	1220	1 831.20
22	1411	526	1 229.58	686	1 396.78	889	1 533.18	1087	1 725.46	1278	1 918.40
23	1476	550	1 285.47	718	1 460.27	929	1 602.87	1136	1 803.89	1336	2 005.60
24	1541	574	1 341.36	749	1 523.76	970	1 672.56	1186	1 882.32	1394	2 092.80
25	1606	598	1 397.25	780	1 587.25	1010	1 742.25	1235	1 960.75	1453	2 180.00
26	1671	621	1 453.14	811	1 650.74	1050	1 811.94	1284	2 039.18	1511	2 267.20
27	1736	645	1 509.03	842	1 714.23	1091	1 881.63	1334	2 117.61	1569	2 354.40
28	1801	669	1 564.92	874	1 777.72	1131	1 951.32	1383	2 196.04	1627	2 441.60
29	1866	693	1 620.81	905	1 841.21	1172	2 021.01	1433	2 274.47	1685	2 528.80
30	1931	717	1 676.70	936	1 904.70	1212	2 090.70	1482	2 352.90	1743	2 616.00
31	1996	741	1 732.59	967	1 968.19	1252	2 160.39	1531	2 431.33	1801	2 703.20
32	2061	765	1 788.48	998	2 031.68	1293	2 230.08	1581	2 509.76	1859	2 790.40
33	2126	789	1 844.37	1030	2 095.17	1333	2 299.77	1630	2 588.19	1917	2 877.60
34	2191	813	1 900.26	1061	2 158.66	1374	2 369.46	1680	2 666.62	1975	2 964.80
35	2256	837	1 956.15	1092	2 222.15	1414	2 439.15	1729	2 745.05	2034	3 052.00
36	2321	860	2 012.04	1123	2 285.64	1454	2 508.84	1778	2 823.48	2092	3 139.20
37	2386	884	2 067.93	1154	2 349.13	1495	2 578.53	1828	2 901.91	2150	3 226.40
38	2451	908	2 123.82	1186	2 412.62	1535	2 648.22	1877	2 980.34	2208	3 313.60
39	2516	932	2 179.71	1217	2 476.11	1576	2 717.91	1927	3 058.77	2266	3 400.80
40	2581	956	2 235.60	1248	2 539.60	1616	2 787.60	1976	3 137.20	2324	3 488.00

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

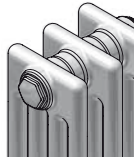
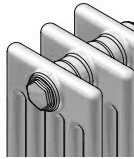
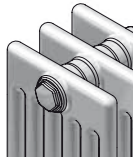
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		300									
mm											
											
Model		K2030		K3030		K4030		K5030		K6030	
Depth	mm	62		100		136		173		210	
Exponent	n	1,29		1,27		1,26		1,25		1,29	
Max. number of elements		44		44		44		44		44	
Price/element	€	56.32		63.91		70.61		78.94		87.66	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	106	225.28	142	255.64	183	282.44	224	315.76	264	350.64
5	306	133	281.60	177	319.55	229	353.05	280	394.70	330	438.30
6	371	159	337.92	212	383.46	275	423.66	336	473.64	395	525.96
7	436	186	394.24	248	447.37	321	494.27	392	552.58	461	613.62
8	501	212	450.56	283	511.28	366	564.88	448	631.52	527	701.28
9	566	239	506.88	319	575.19	412	635.49	504	710.46	593	788.94
10	631	265	563.20	354	639.10	458	706.10	560	789.40	659	876.60
11	696	292	619.52	389	703.01	504	776.71	616	868.34	725	964.26
12	761	318	675.84	425	766.92	550	847.32	672	947.28	791	1 051.92
13	826	345	732.16	460	830.83	595	917.93	728	1 026.22	857	1 139.58
14	891	371	788.48	496	894.74	641	988.54	784	1 105.16	923	1 227.24
15	956	398	844.80	531	958.65	687	1 059.15	840	1 184.10	989	1 314.90
16	1021	424	901.12	566	1 022.56	733	1 129.76	896	1 263.04	1054	1 402.56
17	1086	451	957.44	602	1 086.47	779	1 200.37	952	1 341.98	1120	1 490.22
18	1151	477	1 013.76	637	1 150.38	824	1 270.98	1008	1 420.92	1186	1 577.88
19	1216	504	1 070.08	673	1 214.29	870	1 341.59	1064	1 499.86	1252	1 665.54
20	1281	530	1 126.40	708	1 278.20	916	1 412.20	1120	1 578.80	1318	1 753.20
21	1346	557	1 182.72	743	1 342.11	962	1 482.81	1176	1 657.74	1384	1 840.86
22	1411	583	1 239.04	779	1 406.02	1008	1 553.42	1232	1 736.68	1450	1 928.52
23	1476	610	1 295.36	814	1 469.93	1053	1 624.03	1288	1 815.62	1516	2 016.18
24	1541	636	1 351.68	850	1 533.84	1099	1 694.64	1344	1 894.56	1582	2 103.84
25	1606	663	1 408.00	885	1 597.75	1145	1 765.25	1400	1 973.50	1648	2 191.50
26	1671	689	1 464.32	920	1 661.66	1191	1 835.86	1456	2 052.44	1713	2 279.16
27	1736	716	1 520.64	956	1 725.57	1237	1 906.47	1512	2 131.38	1779	2 366.82
28	1801	742	1 576.96	991	1 789.48	1282	1 977.08	1568	2 210.32	1845	2 454.48
29	1866	769	1 633.28	1027	1 853.39	1328	2 047.69	1624	2 289.26	1911	2 542.14
30	1931	795	1 689.60	1062	1 917.30	1374	2 118.30	1680	2 368.20	1977	2 629.80
31	1996	822	1 745.92	1097	1 981.21	1420	2 188.91	1736	2 447.14	2043	2 717.46
32	2061	848	1 802.24	1133	2 045.12	1466	2 259.52	1792	2 526.08	2109	2 805.12
33	2126	875	1 858.56	1168	2 109.03	1511	2 330.13	1848	2 605.02	2175	2 892.78
34	2191	901	1 914.88	1204	2 172.94	1557	2 400.74	1904	2 683.96	2241	2 980.44
35	2256	928	1 971.20	1239	2 236.85	1603	2 471.35	1960	2 762.90	2307	3 068.10
36	2321	954	2 027.52	1274	2 300.76	1649	2 541.96	2016	2 841.84	2372	3 155.76
37	2386	981	2 083.84	1310	2 364.67	1695	2 612.57	2072	2 920.78	2438	3 243.42
38	2451	1007	2 140.16	1345	2 428.58	1740	2 683.18	2128	2 999.72	2504	3 331.08
39	2516	1034	2 196.48	1381	2 492.49	1786	2 753.79	2184	3 078.66	2570	3 418.74
40	2581	1060	2 252.80	1416	2 556.40	1832	2 824.40	2240	3 157.60	2636	3 506.40

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

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Zehnder Charleston Clinic

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		350									
Model		K2035		K3035		K4035		K5035		K6035	
Depth mm		62		100		136		173		210	
Exponent n		1,29		1,28		1,26		1,25		1,29	
Max. number of elements		44		44		44		44		44	
Price/element €		56.61		64.22		71.77		80.03		88.95	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	122	226.44	162	256.88	210	287.08	257	320.12	302	355.80
5	306	152	283.05	203	321.10	263	358.85	321	400.15	378	444.75
6	371	182	339.66	244	385.32	315	430.62	385	480.18	453	533.70
7	436	213	396.27	284	449.54	368	502.39	449	560.21	529	622.65
8	501	243	452.88	325	513.76	420	574.16	514	640.24	604	711.60
9	566	274	509.49	365	577.98	473	645.93	578	720.27	680	800.55
10	631	304	566.10	406	642.20	525	717.70	642	800.30	755	889.50
11	696	334	622.71	447	706.42	578	789.47	706	880.33	831	978.45
12	761	365	679.32	487	770.64	630	861.24	770	960.36	906	1 067.40
13	826	395	735.93	528	834.86	683	933.01	835	1 040.39	982	1 156.35
14	891	426	792.54	568	899.08	735	1 004.78	899	1 120.42	1057	1 245.30
15	956	456	849.15	609	963.30	788	1 076.55	963	1 200.45	1133	1 334.25
16	1021	486	905.76	650	1 027.52	840	1 148.32	1027	1 280.48	1208	1 423.20
17	1086	517	962.37	690	1 091.74	893	1 220.09	1091	1 360.51	1284	1 512.15
18	1151	547	1 018.98	731	1 155.96	945	1 291.86	1156	1 440.54	1359	1 601.10
19	1216	578	1 075.59	771	1 220.18	998	1 363.63	1220	1 520.57	1435	1 690.05
20	1281	608	1 132.20	812	1 284.40	1050	1 435.40	1284	1 600.60	1510	1 779.00
21	1346	638	1 188.81	853	1 348.62	1103	1 507.17	1348	1 680.63	1586	1 867.95
22	1411	669	1 245.42	893	1 412.84	1155	1 578.94	1412	1 760.66	1661	1 956.90
23	1476	699	1 302.03	934	1 477.06	1208	1 650.71	1477	1 840.69	1737	2 045.85
24	1541	730	1 358.64	974	1 541.28	1260	1 722.48	1541	1 920.72	1812	2 134.80
25	1606	760	1 415.25	1015	1 605.50	1313	1 794.25	1605	2 000.75	1888	2 223.75
26	1671	790	1 471.86	1056	1 669.72	1365	1 866.02	1669	2 080.78	1963	2 312.70
27	1736	821	1 528.47	1096	1 733.94	1418	1 937.79	1733	2 160.81	2039	2 401.65
28	1801	851	1 585.08	1137	1 798.16	1470	2 009.56	1798	2 240.84	2114	2 490.60
29	1866	882	1 641.69	1177	1 862.38	1523	2 081.33	1862	2 320.87	2190	2 579.55
30	1931	912	1 698.30	1218	1 926.60	1575	2 153.10	1926	2 400.90	2265	2 668.50
31	1996	942	1 754.91	1259	1 990.82	1628	2 224.87	1990	2 480.93	2341	2 757.45
32	2061	973	1 811.52	1299	2 055.04	1680	2 296.64	2054	2 560.96	2416	2 846.40
33	2126	1003	1 868.13	1340	2 119.26	1733	2 368.41	2119	2 640.99	2492	2 935.35
34	2191	1034	1 924.74	1380	2 183.48	1785	2 440.18	2183	2 721.02	2567	3 024.30
35	2256	1064	1 981.35	1421	2 247.70	1838	2 511.95	2247	2 801.05	2643	3 113.25
36	2321	1094	2 037.96	1462	2 311.92	1890	2 583.72	2311	2 881.08	2718	3 202.20
37	2386	1125	2 094.57	1502	2 376.14	1943	2 655.49	2375	2 961.11	2794	3 291.15
38	2451	1155	2 151.18	1543	2 440.36	1995	2 727.26	2440	3 041.14	2869	3 380.10
39	2516	1186	2 207.79	1583	2 504.58	2048	2 799.03	2504	3 121.17	2945	3 469.05
40	2581	1216	2 264.40	1624	2 568.80	2100	2 870.80	2568	3 201.20	3020	3 558.00

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		400									
Model		K2040		K3040		K4040		K5040		K6040	
Depth	mm	62		100		136		173		210	
Exponent	n	1,29		1,28		1,27		1,26		1,29	
Max. number of elements		44		44		44		44		44	
Price/element	€	57.11		64.38		72.73		80.94		90.64	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	137	228.44	183	257.52	237	290.92	289	323.76	340	362.56
5	306	171	285.55	229	321.90	296	363.65	362	404.70	426	453.20
6	371	205	342.66	274	386.28	355	436.38	434	485.64	511	543.84
7	436	239	399.77	320	450.66	414	509.11	506	566.58	596	634.48
8	501	274	456.88	366	515.04	474	581.84	578	647.52	681	725.12
9	566	308	513.99	411	579.42	533	654.57	651	728.46	766	815.76
10	631	342	571.10	457	643.80	592	727.30	723	809.40	851	906.40
11	696	376	628.21	503	708.18	651	800.03	795	890.34	936	997.04
12	761	410	685.32	548	772.56	710	872.76	868	971.28	1021	1 087.68
13	826	445	742.43	594	836.94	770	945.49	940	1 052.22	1106	1 178.32
14	891	479	799.54	640	901.32	829	1 018.22	1012	1 133.16	1191	1 268.96
15	956	513	856.65	686	965.70	888	1 090.95	1085	1 214.10	1277	1 359.60
16	1021	547	913.76	731	1 030.08	947	1 163.68	1157	1 295.04	1362	1 450.24
17	1086	581	970.87	777	1 094.46	1006	1 236.41	1229	1 375.98	1447	1 540.88
18	1151	616	1 027.98	823	1 158.84	1066	1 309.14	1301	1 456.92	1532	1 631.52
19	1216	650	1 085.09	868	1 223.22	1125	1 381.87	1374	1 537.86	1617	1 722.16
20	1281	684	1 142.20	914	1 287.60	1184	1 454.60	1446	1 618.80	1702	1 812.80
21	1346	718	1 199.31	960	1 351.98	1243	1 527.33	1518	1 699.74	1787	1 903.44
22	1411	752	1 256.42	1005	1 416.36	1302	1 600.06	1591	1 780.68	1872	1 994.08
23	1476	787	1 313.53	1051	1 480.74	1362	1 672.79	1663	1 861.62	1957	2 084.72
24	1541	821	1 370.64	1097	1 545.12	1421	1 745.52	1735	1 942.56	2042	2 175.36
25	1606	855	1 427.75	1143	1 609.50	1480	1 818.25	1808	2 023.50	2128	2 266.00
26	1671	889	1 484.86	1188	1 673.88	1539	1 890.98	1880	2 104.44	2213	2 356.64
27	1736	923	1 541.97	1234	1 738.26	1598	1 963.71	1952	2 185.38	2298	2 447.28
28	1801	958	1 599.08	1280	1 802.64	1658	2 036.44	2024	2 266.32	2383	2 537.92
29	1866	992	1 656.19	1325	1 867.02	1717	2 109.17	2097	2 347.26	2468	2 628.56
30	1931	1026	1 713.30	1371	1 931.40	1776	2 181.90	2169	2 428.20	2553	2 719.20
31	1996	1060	1 770.41	1417	1 995.78	1835	2 254.63	2241	2 509.14	2638	2 809.84
32	2061	1094	1 827.52	1462	2 060.16	1894	2 327.36	2314	2 590.08	2723	2 900.48
33	2126	1129	1 884.63	1508	2 124.54	1954	2 400.09	2386	2 671.02	2808	2 991.12
34	2191	1163	1 941.74	1554	2 188.92	2013	2 472.82	2458	2 751.96	2893	3 081.76
35	2256	1197	1 998.85	1600	2 253.30	2072	2 545.55	2531	2 832.90	2979	3 172.40
36	2321	1231	2 055.96	1645	2 317.68	2131	2 618.28	2603	2 913.84	3064	3 263.04
37	2386	1265	2 113.07	1691	2 382.06	2190	2 691.01	2675	2 994.78	3149	3 353.68
38	2451	1300	2 170.18	1737	2 446.44	2250	2 763.74	2747	3 075.72	3234	3 444.32
39	2516	1334	2 227.29	1782	2 510.82	2309	2 836.47	2820	3 156.66	3319	3 534.96
40	2581	1368	2 284.40	1828	2 575.20	2368	2 909.20	2892	3 237.60	3404	3 625.60

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		450									
Model		K2045		K3045		K4045		K5045		K6045	
Depth mm		62		100		136		173		210	
Exponent n		1,29		1,28		1,27		1,26		1,29	
Max. number of elements		44		44		44		44		44	
Price/element €		57.47		64.69		73.87		82.38		91.80	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	152	229.88	203	258.76	263	295.48	322	329.52	378	367.20
5	306	190	287.35	254	323.45	329	369.35	402	411.90	473	459.00
6	371	227	344.82	305	388.14	394	443.22	482	494.28	568	550.80
7	436	265	402.29	356	452.83	460	517.09	563	576.66	662	642.60
8	501	303	459.76	406	517.52	526	590.96	643	659.04	757	734.40
9	566	341	517.23	457	582.21	591	664.83	724	741.42	851	826.20
10	631	379	574.70	508	646.90	657	738.70	804	823.80	946	918.00
11	696	417	632.17	559	711.59	723	812.57	884	906.18	1041	1 009.80
12	761	455	689.64	610	776.28	788	886.44	965	988.56	1135	1 101.60
13	826	493	747.11	660	840.97	854	960.31	1045	1 070.94	1230	1 193.40
14	891	531	804.58	711	905.66	920	1 034.18	1126	1 153.32	1324	1 285.20
15	956	569	862.05	762	970.35	986	1 108.05	1206	1 235.70	1419	1 377.00
16	1021	606	919.52	813	1 035.04	1051	1 181.92	1286	1 318.08	1514	1 468.80
17	1086	644	976.99	864	1 099.73	1117	1 255.79	1367	1 400.46	1608	1 560.60
18	1151	682	1 034.46	914	1 164.42	1183	1 329.66	1447	1 482.84	1703	1 652.40
19	1216	720	1 091.93	965	1 229.11	1248	1 403.53	1528	1 565.22	1797	1 744.20
20	1281	758	1 149.40	1016	1 293.80	1314	1 477.40	1608	1 647.60	1892	1 836.00
21	1346	796	1 206.87	1067	1 358.49	1380	1 551.27	1688	1 729.98	1987	1 927.80
22	1411	834	1 264.34	1118	1 423.18	1445	1 625.14	1769	1 812.36	2081	2 019.60
23	1476	872	1 321.81	1168	1 487.87	1511	1 699.01	1849	1 894.74	2176	2 111.40
24	1541	910	1 379.28	1219	1 552.56	1577	1 772.88	1930	1 977.12	2270	2 203.20
25	1606	948	1 436.75	1270	1 617.25	1643	1 846.75	2010	2 059.50	2365	2 295.00
26	1671	985	1 494.22	1321	1 681.94	1708	1 920.62	2090	2 141.88	2460	2 386.80
27	1736	1023	1 551.69	1372	1 746.63	1774	1 994.49	2171	2 224.26	2554	2 478.60
28	1801	1061	1 609.16	1422	1 811.32	1840	2 068.36	2251	2 306.64	2649	2 570.40
29	1866	1099	1 666.63	1473	1 876.01	1905	2 142.23	2332	2 389.02	2743	2 662.20
30	1931	1137	1 724.10	1524	1 940.70	1971	2 216.10	2412	2 471.40	2838	2 754.00
31	1996	1175	1 781.57	1575	2 005.39	2037	2 289.97	2492	2 553.78	2933	2 845.80
32	2061	1213	1 839.04	1626	2 070.08	2102	2 363.84	2573	2 636.16	3027	2 937.60
33	2126	1251	1 896.51	1676	2 134.77	2168	2 437.71	2653	2 718.54	3122	3 029.40
34	2191	1289	1 953.98	1727	2 199.46	2234	2 511.58	2734	2 800.92	3216	3 121.20
35	2256	1327	2 011.45	1778	2 264.15	2300	2 585.45	2814	2 883.30	3311	3 213.00
36	2321	1364	2 068.92	1829	2 328.84	2365	2 659.32	2894	2 965.68	3406	3 304.80
37	2386	1402	2 126.39	1880	2 393.53	2431	2 733.19	2975	3 048.06	3500	3 396.60
38	2451	1440	2 183.86	1930	2 458.22	2497	2 807.06	3055	3 130.44	3595	3 488.40
39	2516	1478	2 241.33	1981	2 522.91	2562	2 880.93	3136	3 212.82	3689	3 580.20
40	2581	1516	2 298.80	2032	2 587.60	2628	2 954.80	3216	3 295.20	3784	3 672.00

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		500									
Model		K2050		K3050		K4050		K5050		K6050	
Depth	mm	62		100		136		173		210	
Exponent	n	1,29		1,28		1,27		1,26		1,29	
Max. number of elements		44		44		44		44		44	
Price/element	€	58.45		65.31		75.45		83.73		93.38	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	166	233.80	224	261.24	289	301.80	354	334.92	416	373.52
5	306	208	292.25	280	326.55	362	377.25	442	418.65	520	466.90
6	371	250	350.70	335	391.86	434	452.70	530	502.38	624	560.28
7	436	291	409.15	391	457.17	506	528.15	619	586.11	728	653.66
8	501	333	467.60	447	522.48	578	603.60	707	669.84	832	747.04
9	566	374	526.05	503	587.79	651	679.05	796	753.57	936	840.42
10	631	416	584.50	559	653.10	723	754.50	884	837.30	1040	933.80
11	696	458	642.95	615	718.41	795	829.95	972	921.03	1144	1 027.18
12	761	499	701.40	671	783.72	868	905.40	1061	1 004.76	1248	1 120.56
13	826	541	759.85	727	849.03	940	980.85	1149	1 088.49	1352	1 213.94
14	891	582	818.30	783	914.34	1012	1 056.30	1238	1 172.22	1456	1 307.32
15	956	624	876.75	839	979.65	1085	1 131.75	1326	1 255.95	1560	1 400.70
16	1021	666	935.20	894	1 044.96	1157	1 207.20	1414	1 339.68	1664	1 494.08
17	1086	707	993.65	950	1 110.27	1229	1 282.65	1503	1 423.41	1768	1 587.46
18	1151	749	1 052.10	1006	1 175.58	1301	1 358.10	1591	1 507.14	1872	1 680.84
19	1216	790	1 110.55	1062	1 240.89	1374	1 433.55	1680	1 590.87	1976	1 774.22
20	1281	832	1 169.00	1118	1 306.20	1446	1 509.00	1768	1 674.60	2080	1 867.60
21	1346	874	1 227.45	1174	1 371.51	1518	1 584.45	1856	1 758.33	2184	1 960.98
22	1411	915	1 285.90	1230	1 436.82	1591	1 659.90	1945	1 842.06	2288	2 054.36
23	1476	957	1 344.35	1286	1 502.13	1663	1 735.35	2033	1 925.79	2392	2 147.74
24	1541	998	1 402.80	1342	1 567.44	1735	1 810.80	2122	2 009.52	2496	2 241.12
25	1606	1040	1 461.25	1398	1 632.75	1808	1 886.25	2210	2 093.25	2600	2 334.50
26	1671	1082	1 519.70	1453	1 698.06	1880	1 961.70	2298	2 176.98	2704	2 427.88
27	1736	1123	1 578.15	1509	1 763.37	1952	2 037.15	2387	2 260.71	2808	2 521.26
28	1801	1165	1 636.60	1565	1 828.68	2024	2 112.60	2475	2 344.44	2912	2 614.64
29	1866	1206	1 695.05	1621	1 893.99	2097	2 188.05	2564	2 428.17	3016	2 708.02
30	1931	1248	1 753.50	1677	1 959.30	2169	2 263.50	2652	2 511.90	3120	2 801.40
31	1996	1290	1 811.95	1733	2 024.61	2241	2 338.95	2740	2 595.63	3224	2 894.78
32	2061	1331	1 870.40	1789	2 089.92	2314	2 414.40	2829	2 679.36	3328	2 988.16
33	2126	1373	1 928.85	1845	2 155.23	2386	2 489.85	2917	2 763.09	3432	3 081.54
34	2191	1414	1 987.30	1901	2 220.54	2458	2 565.30	3006	2 846.82	3536	3 174.92
35	2256	1456	2 045.75	1957	2 285.85	2531	2 640.75	3094	2 930.55	3640	3 268.30
36	2321	1498	2 104.20	2012	2 351.16	2603	2 716.20	3182	3 014.28	3744	3 361.68
37	2386	1539	2 162.65	2068	2 416.47	2675	2 791.65	3271	3 098.01	3848	3 455.06
38	2451	1581	2 221.10	2124	2 481.78	2747	2 867.10	3359	3 181.74	3952	3 548.44
39	2516	1622	2 279.55	2180	2 547.09	2820	2 942.55	3448	3 265.47	4056	3 641.82
40	2581	1664	2 338.00	2236	2 612.40	2892	3 018.00	3536	3 349.20	4160	3 735.20

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		550									
Model		K2055		K3055		K4055		K5055		K6055	
Depth mm		62		100		136		173		210	
Exponent n		1,29		1,29		1,28		1,27		1,29	
Max. number of elements		44		44		44		44		44	
Price/element €		59.38		66.46		77.03		85.35		95.65	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	181	237.52	244	265.84	315	308.12	386	341.40	452	382.60
5	306	226	296.90	305	332.30	394	385.15	482	426.75	565	478.25
6	371	271	356.28	366	398.76	473	462.18	578	512.10	678	573.90
7	436	316	415.66	427	465.22	552	539.21	675	597.45	791	669.55
8	501	362	475.04	488	531.68	630	616.24	771	682.80	904	765.20
9	566	407	534.42	549	598.14	709	693.27	868	768.15	1017	860.85
10	631	452	593.80	610	664.60	788	770.30	964	853.50	1130	956.50
11	696	497	653.18	671	731.06	867	847.33	1060	938.85	1243	1 052.15
12	761	542	712.56	732	797.52	946	924.36	1157	1 024.20	1356	1 147.80
13	826	588	771.94	793	863.98	1024	1 001.39	1253	1 109.55	1469	1 243.45
14	891	633	831.32	854	930.44	1103	1 078.42	1350	1 194.90	1582	1 339.10
15	956	678	890.70	915	996.90	1182	1 155.45	1446	1 280.25	1695	1 434.75
16	1021	723	950.08	976	1 063.36	1261	1 232.48	1542	1 365.60	1808	1 530.40
17	1086	768	1 009.46	1037	1 129.82	1340	1 309.51	1639	1 450.95	1921	1 626.05
18	1151	814	1 068.84	1098	1 196.28	1418	1 386.54	1735	1 536.30	2034	1 721.70
19	1216	859	1 128.22	1159	1 262.74	1497	1 463.57	1832	1 621.65	2147	1 817.35
20	1281	904	1 187.60	1220	1 329.20	1576	1 540.60	1928	1 707.00	2260	1 913.00
21	1346	949	1 246.98	1281	1 395.66	1655	1 617.63	2024	1 792.35	2373	2 008.65
22	1411	994	1 306.36	1342	1 462.12	1734	1 694.66	2121	1 877.70	2486	2 104.30
23	1476	1040	1 365.74	1403	1 528.58	1812	1 771.69	2217	1 963.05	2599	2 199.95
24	1541	1085	1 425.12	1464	1 595.04	1891	1 848.72	2314	2 048.40	2712	2 295.60
25	1606	1130	1 484.50	1525	1 661.50	1970	1 925.75	2410	2 133.75	2825	2 391.25
26	1671	1175	1 543.88	1586	1 727.96	2049	2 002.78	2506	2 219.10	2938	2 486.90
27	1736	1220	1 603.26	1647	1 794.42	2128	2 079.81	2603	2 304.45	3051	2 582.55
28	1801	1266	1 662.64	1708	1 860.88	2206	2 156.84	2699	2 389.80	3164	2 678.20
29	1866	1311	1 722.02	1769	1 927.34	2285	2 233.87	2796	2 475.15	3277	2 773.85
30	1931	1356	1 781.40	1830	1 993.80	2364	2 310.90	2892	2 560.50	3390	2 869.50
31	1996	1401	1 840.78	1891	2 060.26	2443	2 387.93	2988	2 645.85	3503	2 965.15
32	2061	1446	1 900.16	1952	2 126.72	2522	2 464.96	3085	2 731.20	3616	3 060.80
33	2126	1492	1 959.54	2013	2 193.18	2600	2 541.99	3181	2 816.55	3729	3 156.45
34	2191	1537	2 018.92	2074	2 259.64	2679	2 619.02	3278	2 901.90	3842	3 252.10
35	2256	1582	2 078.30	2135	2 326.10	2758	2 696.05	3374	2 987.25	3955	3 347.75
36	2321	1627	2 137.68	2196	2 392.56	2837	2 773.08	3470	3 072.60	4068	3 443.40
37	2386	1672	2 197.06	2257	2 459.02	2916	2 850.11	3567	3 157.95	4181	3 539.05
38	2451	1718	2 256.44	2318	2 525.48	2994	2 927.14	3663	3 243.30	4294	3 634.70
39	2516	1763	2 315.82	2379	2 591.94	3073	3 004.17	3760	3 328.65	4407	3 730.35
40	2581	1808	2 375.20	2440	2 658.40	3152	3 081.20	3856	3 414.00	4520	3 826.00

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

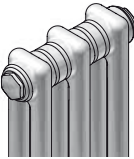
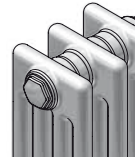
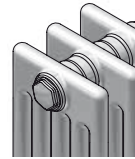
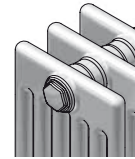
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		600									
mm											
											
Model		K2060		K3060		K4060		K5060		K6060	
Depth	mm	62		100		136		173		210	
Exponent	n	1,29		1,29		1,28		1,27		1,29	
Max. number of elements		44		44		44		44		44	
Price/element	€	60.00		68.06		78.66		87.20		97.74	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	195	240.00	264	272.24	342	314.64	416	348.80	492	390.96
5	306	244	300.00	330	340.30	427	393.30	520	436.00	615	488.70
6	371	293	360.00	396	408.36	512	471.96	624	523.20	738	586.44
7	436	342	420.00	462	476.42	598	550.62	728	610.40	861	684.18
8	501	390	480.00	528	544.48	683	629.28	832	697.60	984	781.92
9	566	439	540.00	594	612.54	769	707.94	936	784.80	1107	879.66
10	631	488	600.00	660	680.60	854	786.60	1040	872.00	1230	977.40
11	696	537	660.00	726	748.66	939	865.26	1144	959.20	1353	1 075.14
12	761	586	720.00	792	816.72	1025	943.92	1248	1 046.40	1476	1 172.88
13	826	634	780.00	858	884.78	1110	1 022.58	1352	1 133.60	1599	1 270.62
14	891	683	840.00	924	952.84	1196	1 101.24	1456	1 220.80	1722	1 368.36
15	956	732	900.00	990	1 020.90	1281	1 179.90	1560	1 308.00	1845	1 466.10
16	1021	781	960.00	1056	1 088.96	1366	1 258.56	1664	1 395.20	1968	1 563.84
17	1086	830	1 020.00	1122	1 157.02	1452	1 337.22	1768	1 482.40	2091	1 661.58
18	1151	878	1 080.00	1188	1 225.08	1537	1 415.88	1872	1 569.60	2214	1 759.32
19	1216	927	1 140.00	1254	1 293.14	1623	1 494.54	1976	1 656.80	2337	1 857.06
20	1281	976	1 200.00	1320	1 361.20	1708	1 573.20	2080	1 744.00	2460	1 954.80
21	1346	1025	1 260.00	1386	1 429.26	1793	1 651.86	2184	1 831.20	2583	2 052.54
22	1411	1074	1 320.00	1452	1 497.32	1879	1 730.52	2288	1 918.40	2706	2 150.28
23	1476	1122	1 380.00	1518	1 565.38	1964	1 809.18	2392	2 005.60	2829	2 248.02
24	1541	1171	1 440.00	1584	1 633.44	2050	1 887.84	2496	2 092.80	2952	2 345.76
25	1606	1220	1 500.00	1650	1 701.50	2135	1 966.50	2600	2 180.00	3075	2 443.50
26	1671	1269	1 560.00	1716	1 769.56	2220	2 045.16	2704	2 267.20	3198	2 541.24
27	1736	1318	1 620.00	1782	1 837.62	2306	2 123.82	2808	2 354.40	3321	2 638.98
28	1801	1366	1 680.00	1848	1 905.68	2391	2 202.48	2912	2 441.60	3444	2 736.72
29	1866	1415	1 740.00	1914	1 973.74	2477	2 281.14	3016	2 528.80	3567	2 834.46
30	1931	1464	1 800.00	1980	2 041.80	2562	2 359.80	3120	2 616.00	3690	2 932.20
31	1996	1513	1 860.00	2046	2 109.86	2647	2 438.46	3224	2 703.20	3813	3 029.94
32	2061	1562	1 920.00	2112	2 177.92	2733	2 517.12	3328	2 790.40	3936	3 127.68
33	2126	1610	1 980.00	2178	2 245.98	2818	2 595.78	3432	2 877.60	4059	3 225.42
34	2191	1659	2 040.00	2244	2 314.04	2904	2 674.44	3536	2 964.80	4182	3 323.16
35	2256	1708	2 100.00	2310	2 382.10	2989	2 753.10	3640	3 052.00	4305	3 420.90
36	2321	1757	2 160.00	2376	2 450.16	3074	2 831.76	3744	3 139.20	4428	3 518.64
37	2386	1806	2 220.00	2442	2 518.22	3160	2 910.42	3848	3 226.40	4551	3 616.38
38	2451	1854	2 280.00	2508	2 586.28	3245	2 989.08	3952	3 313.60	4674	3 714.12
39	2516	1903	2 340.00	2574	2 654.34	3331	3 067.74	4056	3 400.80	4797	3 811.86
40	2581	1952	2 400.00	2640	2 722.40	3416	3 146.40	4160	3 488.00	4920	3 909.60

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

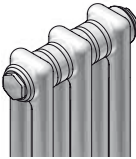
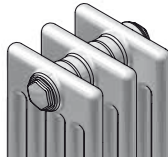
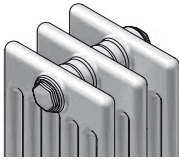
Warning: Weight over 100 kg

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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		750									
											
Model		K2075		K3075		K4075		K5075		K6075	
Depth mm		62		100		136		173		210	
Exponent n		1,29		1,30		1,29		1,28		1,30	
Max. number of elements		44		44		44		44		44	
Price/element €		63.26		72.01		84.18		94.73		106.00	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	237	253.04	324	288.04	420	336.72	512	378.92	604	424.00
5	306	296	316.30	406	360.05	525	420.90	640	473.65	755	530.00
6	371	355	379.56	487	432.06	630	505.08	768	568.38	906	636.00
7	436	414	442.82	568	504.07	735	589.26	896	663.11	1057	742.00
8	501	474	506.08	649	576.08	840	673.44	1024	757.84	1208	848.00
9	566	533	569.34	730	648.09	945	757.62	1152	852.57	1359	954.00
10	631	592	632.60	811	720.10	1050	841.80	1280	947.30	1510	1 060.00
11	696	651	695.86	892	792.11	1155	925.98	1408	1 042.03	1661	1 166.00
12	761	710	759.12	973	864.12	1260	1 010.16	1536	1 136.76	1812	1 272.00
13	826	770	822.38	1054	936.13	1365	1 094.34	1664	1 231.49	1963	1 378.00
14	891	829	885.64	1135	1 008.14	1470	1 178.52	1792	1 326.22	2114	1 484.00
15	956	888	948.90	1217	1 080.15	1575	1 262.70	1920	1 420.95	2265	1 590.00
16	1021	947	1 012.16	1298	1 152.16	1680	1 346.88	2048	1 515.68	2416	1 696.00
17	1086	1006	1 075.42	1379	1 224.17	1785	1 431.06	2176	1 610.41	2567	1 802.00
18	1151	1066	1 138.68	1460	1 296.18	1890	1 515.24	2304	1 705.14	2718	1 908.00
19	1216	1125	1 201.94	1541	1 368.19	1995	1 599.42	2432	1 799.87	2869	2 014.00
20	1281	1184	1 265.20	1622	1 440.20	2100	1 683.60	2560	1 894.60	3020	2 120.00
21	1346	1243	1 328.46	1703	1 512.21	2205	1 767.78	2688	1 989.33	3171	2 226.00
22	1411	1302	1 391.72	1784	1 584.22	2310	1 851.96	2816	2 084.06	3322	2 332.00
23	1476	1362	1 454.98	1865	1 656.23	2415	1 936.14	2944	2 178.79	3473	2 438.00
24	1541	1421	1 518.24	1946	1 728.24	2520	2 020.32	3072	2 273.52	3624	2 544.00
25	1606	1480	1 581.50	2028	1 800.25	2625	2 104.50	3200	2 368.25	3775	2 650.00
26	1671	1539	1 644.76	2109	1 872.26	2730	2 188.68	3328	2 462.98	3926	2 756.00
27	1736	1598	1 708.02	2190	1 944.27	2835	2 272.86	3456	2 557.71	4077	2 862.00
28	1801	1658	1 771.28	2271	2 016.28	2940	2 357.04	3584	2 652.44	4228	2 968.00
29	1866	1717	1 834.54	2352	2 088.29	3045	2 441.22	3712	2 747.17	4379	3 074.00
30	1931	1776	1 897.80	2433	2 160.30	3150	2 525.40	3840	2 841.90	4530	3 180.00
31	1996	1835	1 961.06	2514	2 232.31	3255	2 609.58	3968	2 936.63	4681	3 286.00
32	2061	1894	2 024.32	2595	2 304.32	3360	2 693.76	4096	3 031.36	4832	3 392.00
33	2126	1954	2 087.58	2676	2 376.33	3465	2 777.94	4224	3 126.09	4983	3 498.00
34	2191	2013	2 150.84	2757	2 448.34	3570	2 862.12	4352	3 220.82	5134	3 604.00
35	2256	2072	2 214.10	2839	2 520.35	3675	2 946.30	4480	3 315.55	5285	3 710.00
36	2321	2131	2 277.36	2920	2 592.36	3780	3 030.48	4608	3 410.28	5436	3 816.00
37	2386	2190	2 340.62	3001	2 664.37	3885	3 114.66	4736	3 505.01	5587	3 922.00
38	2451	2250	2 403.88	3082	2 736.38	3990	3 198.84	4864	3 599.74	5738	4 028.00
39	2516	2309	2 467.14	3163	2 808.39	4095	3 283.02	4992	3 694.47	5889	4 134.00
40	2581	2368	2 530.40	3244	2 880.40	4200	3 367.20	5120	3 789.20	6040	4 240.00

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

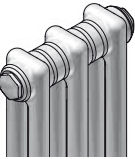
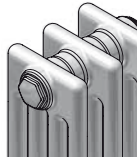
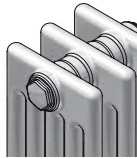
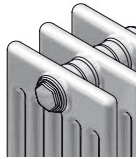
Warning: Weight over 100 kg

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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		900									
mm											
											
Model		K2090		K3090		K4090		K5090		K6090	
Depth	mm	62		100		136		173		210	
Exponent	n	1,30		1,31		1,30		1,29		1,30	
Max. number of elements		44		44		44		44		44	
Price/element	€	86.70		99.79		118.53		131.49		147.98	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	278	346.80	385	399.16	500	474.12	608	525.96	716	591.92
5	306	347	433.50	482	498.95	625	592.65	760	657.45	895	739.90
6	371	416	520.20	578	598.74	750	711.18	912	788.94	1074	887.88
7	436	486	606.90	674	698.53	875	829.71	1064	920.43	1253	1 035.86
8	501	555	693.60	770	798.32	1000	948.24	1216	1 051.92	1432	1 183.84
9	566	625	780.30	867	898.11	1125	1 066.77	1368	1 183.41	1611	1 331.82
10	631	694	867.00	963	997.90	1250	1 185.30	1520	1 314.90	1790	1 479.80
11	696	763	953.70	1059	1 097.69	1375	1 303.83	1672	1 446.39	1969	1 627.78
12	761	833	1 040.40	1156	1 197.48	1500	1 422.36	1824	1 577.88	2148	1 775.76
13	826	902	1 127.10	1252	1 297.27	1625	1 540.89	1976	1 709.37	2327	1 923.74
14	891	972	1 213.80	1348	1 397.06	1750	1 659.42	2128	1 840.86	2506	2 071.72
15	956	1041	1 300.50	1445	1 496.85	1875	1 777.95	2280	1 972.35	2685	2 219.70
16	1021	1110	1 387.20	1541	1 596.64	2000	1 896.48	2432	2 103.84	2864	2 367.68
17	1086	1180	1 473.90	1637	1 696.43	2125	2 015.01	2584	2 235.33	3043	2 515.66
18	1151	1249	1 560.60	1733	1 796.22	2250	2 133.54	2736	2 366.82	3222	2 663.64
19	1216	1319	1 647.30	1830	1 896.01	2375	2 252.07	2888	2 498.31	3401	2 811.62
20	1281	1388	1 734.00	1926	1 995.80	2500	2 370.60	3040	2 629.80	3580	2 959.60
21	1346	1457	1 820.70	2022	2 095.59	2625	2 489.13	3192	2 761.29	3759	3 107.58
22	1411	1527	1 907.40	2119	2 195.38	2750	2 607.66	3344	2 892.78	3938	3 255.56
23	1476	1596	1 994.10	2215	2 295.17	2875	2 726.19	3496	3 024.27	4117	3 403.54
24	1541	1666	2 080.80	2311	2 394.96	3000	2 844.72	3648	3 155.76	4296	3 551.52
25	1606	1735	2 167.50	2408	2 494.75	3125	2 963.25	3800	3 287.25	4475	3 699.50
26	1671	1804	2 254.20	2504	2 594.54	3250	3 081.78	3952	3 418.74	4654	3 847.48
27	1736	1874	2 340.90	2600	2 694.33	3375	3 200.31	4104	3 550.23	4833	3 995.46
28	1801	1943	2 427.60	2696	2 794.12	3500	3 318.84	4256	3 681.72	5012	4 143.44
29	1866	2013	2 514.30	2793	2 893.91	3625	3 437.37	4408	3 813.21	5191	4 291.42
30	1931	2082	2 601.00	2889	2 993.70	3750	3 555.90	4560	3 944.70	5370	4 439.40
31	1996	2151	2 687.70	2985	3 093.49	3875	3 674.43	4712	4 076.19	5549	4 587.38
32	2061	2221	2 774.40	3082	3 193.28	4000	3 792.96	4864	4 207.68	5728	4 735.36
33	2126	2290	2 861.10	3178	3 293.07	4125	3 911.49	5016	4 339.17	5907	4 883.34
34	2191	2360	2 947.80	3274	3 392.86	4250	4 030.02	5168	4 470.66	6086	5 031.32
35	2256	2429	3 034.50	3371	3 492.65	4375	4 148.55	5320	4 602.15	6265	5 179.30
36	2321	2498	3 121.20	3467	3 592.44	4500	4 267.08	5472	4 733.64	6444	5 327.28
37	2386	2568	3 207.90	3563	3 692.23	4625	4 385.61	5624	4 865.13	6623	5 475.26
38	2451	2637	3 294.60	3659	3 792.02	4750	4 504.14	5776	4 996.62	6802	5 623.24
39	2516	2707	3 381.30	3756	3 891.81	4875	4 622.67	5928	5 128.11	6981	5 771.22
40	2581	2776	3 468.00	3852	3 991.60	5000	4 741.20	6080	5 259.60	7160	5 919.20

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		1000									
Model		K2100		K3100		K4100		K5100		K6100	
Depth mm		62		100		136		173		210	
Exponent n		1,30		1,32		1,31		1,30		1,30	
Max. number of elements		16		16		16		16		16	
Price/element €		88.12		102.97		122.83		136.18		153.80	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	304	352.48	428	411.88	552	491.32	672	544.72	792	615.20
5	306	380	440.60	535	514.85	690	614.15	840	680.90	990	769.00
6	371	456	528.72	642	617.82	828	736.98	1008	817.08	1188	922.80
7	436	532	616.84	749	720.79	966	859.81	1176	953.26	1386	1 076.60
8	501	608	704.96	856	823.76	1104	982.64	1344	1 089.44	1584	1 230.40
9	566	684	793.08	963	926.73	1242	1 105.47	1512	1 225.62	1782	1 384.20
10	631	760	881.20	1070	1 029.70	1380	1 228.30	1680	1 361.80	1980	1 538.00
11	696	836	969.32	1177	1 132.67	1518	1 351.13	1848	1 497.98	2178	1 691.80
12	761	912	1 057.44	1284	1 235.64	1656	1 473.96	2016	1 634.16	2376	1 845.60
13	826	988	1 145.56	1391	1 338.61	1794	1 596.79	2184	1 770.34	2574	1 999.40
14	891	1064	1 233.68	1498	1 441.58	1932	1 719.62	2352	1 906.52	2772	2 153.20
15	956	1140	1 321.80	1605	1 544.55	2070	1 842.45	2520	2 042.70	2970	2 307.00
16	1021	1216	1 409.92	1712	1 647.52	2208	1 965.28	2688	2 178.88	3168	2 460.80
17	1086	1292	1 498.04	1819	1 750.49	2346	2 088.11	2856	2 315.06	3366	2 614.60
18	1151	1368	1 586.16	1926	1 853.46	2484	2 210.94	3024	2 451.24	3564	2 768.40
19	1216	1444	1 674.28	2033	1 956.43	2622	2 333.77	3192	2 587.42	3762	2 922.20
20	1281	1520	1 762.40	2140	2 059.40	2760	2 456.60	3360	2 723.60	3960	3 076.00
21	1346	1596	1 850.52	2247	2 162.37	2898	2 579.43	3528	2 859.78	4158	3 229.80
22	1411	1672	1 938.64	2354	2 265.34	3036	2 702.26	3696	2 995.96	4356	3 383.60
23	1476	1748	2 026.76	2461	2 368.31	3174	2 825.09	3864	3 132.14	4554	3 537.40
24	1541	1824	2 114.88	2568	2 471.28	3312	2 947.92	4032	3 268.32	4752	3 691.20
25	1606	1900	2 203.00	2675	2 574.25	3450	3 070.75	4200	3 404.50	4950	3 845.00
26	1671	1976	2 291.12	2782	2 677.22	3588	3 193.58	4368	3 540.68	5148	3 998.80
27	1736	2052	2 379.24	2889	2 780.19	3726	3 316.41	4536	3 676.86	5346	4 152.60
28	1801	2128	2 467.36	2996	2 883.16	3864	3 439.24	4704	3 813.04	5544	4 306.40
29	1866	2204	2 555.48	3103	2 986.13	4002	3 562.07	4872	3 949.22	5742	4 460.20
30	1931	2280	2 643.60	3210	3 089.10	4140	3 684.90	5040	4 085.40	5940	4 614.00
31	1996	2356	2 731.72	3317	3 192.07	4278	3 807.73	5208	4 221.58	6138	4 767.80
32	2061	2432	2 819.84	3424	3 295.04	4416	3 930.56	5376	4 357.76	6336	4 921.60
33	2126	2508	2 907.96	3531	3 398.01	4554	4 053.39	5544	4 493.94	6534	5 075.40
34	2191	2584	2 996.08	3638	3 500.98	4692	4 176.22	5712	4 630.12	6732	5 229.20
35	2256	2660	3 084.20	3745	3 603.95	4830	4 299.05	5880	4 766.30	6930	5 383.00
36	2321	2736	3 172.32	3852	3 706.92	4968	4 421.88	6048	4 902.48	7128	5 536.80
37	2386	2812	3 260.44	3959	3 809.89	5106	4 544.71	6216	5 038.66	7326	5 690.60
38	2451	2888	3 348.56	4066	3 912.86	5244	4 667.54	6384	5 174.84	7524	5 844.40
39	2516	2964	3 436.68	4173	4 015.83	5382	4 790.37	6552	5 311.02	7722	5 998.20
40	2581	3040	3 524.80	4280	4 118.80	5520	4 913.20	6720	5 447.20	7920	6 152.00

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

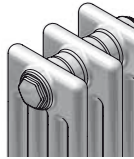
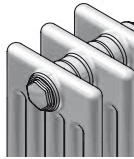
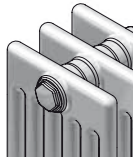
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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		1100									
mm											
											
Model		K2110		K3110		K4110		K5110		K6110	
Depth	mm	62		100		136		173		210	
Exponent	n	1,30		1,32		1,32		1,31		1,30	
Max. number of elements		16		16		16		16		16	
Price/element	€	91.33		108.72		129.19		146.84		167.93	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	330	365.32	468	434.88	604	516.76	740	587.36	868	671.72
5	306	413	456.65	585	543.60	755	645.95	925	734.20	1085	839.65
6	371	496	547.98	702	652.32	906	775.14	1110	881.04	1302	1 007.58
7	436	578	639.31	819	761.04	1057	904.33	1295	1 027.88	1519	1 175.51
8	501	661	730.64	936	869.76	1208	1 033.52	1480	1 174.72	1736	1 343.44
9	566	743	821.97	1053	978.48	1359	1 162.71	1665	1 321.56	1953	1 511.37
10	631	826	913.30	1170	1 087.20	1510	1 291.90	1850	1 468.40	2170	1 679.30
11	696	909	1 004.63	1287	1 195.92	1661	1 421.09	2035	1 615.24	2387	1 847.23
12	761	991	1 095.96	1404	1 304.64	1812	1 550.28	2220	1 762.08	2604	2 015.16
13	826	1074	1 187.29	1521	1 413.36	1963	1 679.47	2405	1 908.92	2821	2 183.09
14	891	1156	1 278.62	1638	1 522.08	2114	1 808.66	2590	2 055.76	3038	2 351.02
15	956	1239	1 369.95	1755	1 630.80	2265	1 937.85	2775	2 202.60	3255	2 518.95
16	1021	1322	1 461.28	1872	1 739.52	2416	2 067.04	2960	2 349.44	3472	2 686.88
17	1086	1404	1 552.61	1989	1 848.24	2567	2 196.23	3145	2 496.28	3689	2 854.81
18	1151	1487	1 643.94	2106	1 956.96	2718	2 325.42	3330	2 643.12	3906	3 022.74
19	1216	1569	1 735.27	2223	2 065.68	2869	2 454.61	3515	2 789.96	4123	3 190.67
20	1281	1652	1 826.60	2340	2 174.40	3020	2 583.80	3700	2 936.80	4340	3 358.60
21	1346	1735	1 917.93	2457	2 283.12	3171	2 712.99	3885	3 083.64	4557	3 526.53
22	1411	1817	2 009.26	2574	2 391.84	3322	2 842.18	4070	3 230.48	4774	3 694.46
23	1476	1900	2 100.59	2691	2 500.56	3473	2 971.37	4255	3 377.32	4991	3 862.39
24	1541	1982	2 191.92	2808	2 609.28	3624	3 100.56	4440	3 524.16	5208	4 030.32
25	1606	2065	2 283.25	2925	2 718.00	3775	3 229.75	4625	3 671.00	5425	4 198.25
26	1671	2148	2 374.58	3042	2 826.72	3926	3 358.94	4810	3 817.84	5642	4 366.18
27	1736	2230	2 465.91	3159	2 935.44	4077	3 488.13	4995	3 964.68	5859	4 534.11
28	1801	2313	2 557.24	3276	3 044.16	4228	3 617.32	5180	4 111.52	6076	4 702.04
29	1866	2395	2 648.57	3393	3 152.88	4379	3 746.51	5365	4 258.36	6293	4 869.97
30	1931	2478	2 739.90	3510	3 261.60	4530	3 875.70	5550	4 405.20	6510	5 037.90
31	1996	2561	2 831.23	3627	3 370.32	4681	4 004.89	5735	4 552.04	6727	5 205.83
32	2061	2643	2 922.56	3744	3 479.04	4832	4 134.08	5920	4 698.88	6944	5 373.76
33	2126	2726	3 013.89	3861	3 587.76	4983	4 263.27	6105	4 845.72	7161	5 541.69
34	2191	2808	3 105.22	3978	3 696.48	5134	4 392.46	6290	4 992.56	7378	5 709.62
35	2256	2891	3 196.55	4095	3 805.20	5285	4 521.65	6475	5 139.40	7595	5 877.55
36	2321	2974	3 287.88	4212	3 913.92	5436	4 650.84	6660	5 286.24	7812	6 045.48
37	2386	3056	3 379.21	4329	4 022.64	5587	4 780.03	6845	5 433.08	8029	6 213.41
38	2451	3139	3 470.54	4446	4 131.36	5738	4 909.22	7030	5 579.92	8246	6 381.34
39	2516	3221	3 561.87	4563	4 240.08	5889	5 038.41	7215	5 726.76	8463	6 549.27
40	2581	3304	3 653.20	4680	4 348.80	6040	5 167.60	7400	5 873.60	8680	6 717.20

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

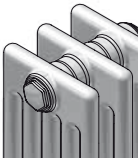
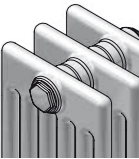
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Zehnder Charleston Clinic

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		1200									
											
Model		K2120		K3120		K4120		K5120		K6120	
Depth mm		62		100		136		173		210	
Exponent n		1,30		1,33		1,32		1,31		1,30	
Max. number of elements		16		16		16		16		16	
Price/element €		94.51		117.17		137.65		159.01		180.12	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	364	378.04	508	468.68	660	550.60	804	636.04	944	720.48
5	306	456	472.55	635	585.85	825	688.25	1005	795.05	1180	900.60
6	371	547	567.06	762	703.02	990	825.90	1206	954.06	1416	1 080.72
7	436	638	661.57	889	820.19	1155	963.55	1407	1 113.07	1652	1 260.84
8	501	729	756.08	1016	937.36	1320	1 101.20	1608	1 272.08	1888	1 440.96
9	566	820	850.59	1143	1 054.53	1485	1 238.85	1809	1 431.09	2124	1 621.08
10	631	911	945.10	1270	1 171.70	1650	1 376.50	2010	1 590.10	2360	1 801.20
11	696	1002	1 039.61	1397	1 288.87	1815	1 514.15	2211	1 749.11	2596	1 981.32
12	761	1093	1 134.12	1524	1 406.04	1980	1 651.80	2412	1 908.12	2832	2 161.44
13	826	1184	1 228.63	1651	1 523.21	2145	1 789.45	2613	2 067.13	3068	2 341.56
14	891	1275	1 323.14	1778	1 640.38	2310	1 927.10	2814	2 226.14	3304	2 521.68
15	956	1367	1 417.65	1905	1 757.55	2475	2 064.75	3015	2 385.15	3540	2 701.80
16	1021	1458	1 512.16	2032	1 874.72	2640	2 202.40	3216	2 544.16	3776	2 881.92
17	1086	1549	1 606.67	2159	1 991.89	2805	2 340.05	3417	2 703.17	4012	3 062.04
18	1151	1640	1 701.18	2286	2 109.06	2970	2 477.70	3618	2 862.18	4248	3 242.16
19	1216	1731	1 795.69	2413	2 226.23	3135	2 615.35	3819	3 021.19	4484	3 422.28
20	1281	1822	1 890.20	2540	2 343.40	3300	2 753.00	4020	3 180.20	4720	3 602.40
21	1346	1913	1 984.71	2667	2 460.57	3465	2 890.65	4221	3 339.21	4956	3 782.52
22	1411	2004	2 079.22	2794	2 577.74	3630	3 028.30	4422	3 498.22	5192	3 962.64
23	1476	2095	2 173.73	2921	2 694.91	3795	3 165.95	4623	3 657.23	5428	4 142.76
24	1541	2186	2 268.24	3048	2 812.08	3960	3 303.60	4824	3 816.24	5664	4 322.88
25	1606	2278	2 362.75	3175	2 929.25	4125	3 441.25	5025	3 975.25	5900	4 503.00
26	1671	2369	2 457.26	3302	3 046.42	4290	3 578.90	5226	4 134.26	6136	4 683.12
27	1736	2460	2 551.77	3429	3 163.59	4455	3 716.55	5427	4 293.27	6372	4 863.24
28	1801	2551	2 646.28	3556	3 280.76	4620	3 854.20	5628	4 452.28	6608	5 043.36
29	1866	2642	2 740.79	3683	3 397.93	4785	3 991.85	5829	4 611.29	6844	5 223.48
30	1931	2733	2 835.30	3810	3 515.10	4950	4 129.50	6030	4 770.30	7080	5 403.60
31	1996	2824	2 929.81	3937	3 632.27	5115	4 267.15	6231	4 929.31	7316	5 583.72
32	2061	2915	3 024.32	4064	3 749.44	5280	4 404.80	6432	5 088.32	7552	5 763.84
33	2126	3006	3 118.83	4191	3 866.61	5445	4 542.45	6633	5 247.33	7788	5 943.96
34	2191	3097	3 213.34	4318	3 983.78	5610	4 680.10	6834	5 406.34	8024	6 124.08
35	2256	3189	3 307.85	4445	4 100.95	5775	4 817.75	7035	5 565.35	8260	6 304.20
36	2321	3280	3 402.36	4572	4 218.12	5940	4 955.40	7236	5 724.36	8496	6 484.32
37	2386	3371	3 496.87	4699	4 335.29	6105	5 093.05	7437	5 883.37	8732	6 664.44
38	2451	3462	3 591.38	4826	4 452.46	6270	5 230.70	7638	6 042.38	8968	6 844.56
39	2516	3553	3 685.89	4953	4 569.63	6435	5 368.35	7839	6 201.39	9204	7 024.68
40	2581	3644	3 780.40	5080	4 686.80	6600	5 506.00	8040	6 360.40	9440	7 204.80

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

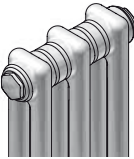
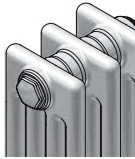
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Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		1500							
											
Model		K2150		K3150		K4150		K5150		K6150	
Depth	mm	62		100		136		173		210	
Exponent	n	1,33		1,33		1,31		1,30		1,31	
Max. number of elements		16		16		16		16		16	
Price/element	€	105.78		134.24		162.85		190.58		219.54	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	460	423.12	632	536.96	816	651.40	996	762.32	1172	878.16
5	306	575	528.90	790	671.20	1020	814.25	1245	952.90	1465	1 097.70
6	371	690	634.68	948	805.44	1224	977.10	1494	1 143.48	1758	1 317.24
7	436	805	740.46	1106	939.68	1428	1 139.95	1743	1 334.06	2051	1 536.78
8	501	920	846.24	1264	1 073.92	1632	1 302.80	1992	1 524.64	2344	1 756.32
9	566	1035	952.02	1422	1 208.16	1836	1 465.65	2241	1 715.22	2637	1 975.86
10	631	1150	1 057.80	1580	1 342.40	2040	1 628.50	2490	1 905.80	2930	2 195.40
11	696	1265	1 163.58	1738	1 476.64	2244	1 791.35	2739	2 096.38	3223	2 414.94
12	761	1380	1 269.36	1896	1 610.88	2448	1 954.20	2988	2 286.96	3516	2 634.48
13	826	1495	1 375.14	2054	1 745.12	2652	2 117.05	3237	2 477.54	3809	2 854.02
14	891	1610	1 480.92	2212	1 879.36	2856	2 279.90	3486	2 668.12	4102	3 073.56
15	956	1725	1 586.70	2370	2 013.60	3060	2 442.75	3735	2 858.70	4395	3 293.10
16	1021	1840	1 692.48	2528	2 147.84	3264	2 605.60	3984	3 049.28	4688	3 512.64
17	1086	1955	1 798.26	2686	2 282.08	3468	2 768.45	4233	3 239.86	4981	3 732.18
18	1151	2070	1 904.04	2844	2 416.32	3672	2 931.30	4482	3 430.44	5274	3 951.72
19	1216	2185	2 009.82	3002	2 550.56	3876	3 094.15	4731	3 621.02	5567	4 171.26
20	1281	2300	2 115.60	3160	2 684.80	4080	3 257.00	4980	3 811.60	5860	4 390.80
21	1346	2415	2 221.38	3318	2 819.04	4284	3 419.85	5229	4 002.18	6153	4 610.34
22	1411	2530	2 327.16	3476	2 953.28	4488	3 582.70	5478	4 192.76	6446	4 829.88
23	1476	2645	2 432.94	3634	3 087.52	4692	3 745.55	5727	4 383.34	6739	5 049.42
24	1541	2760	2 538.72	3792	3 221.76	4896	3 908.40	5976	4 573.92	7032	5 268.96
25	1606	2875	2 644.50	3950	3 356.00	5100	4 071.25	6225	4 764.50	7325	5 488.50
26	1671	2990	2 750.28	4108	3 490.24	5304	4 234.10	6474	4 955.08	7618	5 708.04
27	1736	3105	2 856.06	4266	3 624.48	5508	4 396.95	6723	5 145.66	7911	5 927.58
28	1801	3220	2 961.84	4424	3 758.72	5712	4 559.80	6972	5 336.24	8204	6 147.12
29	1866	3335	3 067.62	4582	3 892.96	5916	4 722.65	7221	5 526.82	8497	6 366.66
30	1931	3450	3 173.40	4740	4 027.20	6120	4 885.50	7470	5 717.40	8790	6 586.20
31	1996	3565	3 279.18	4898	4 161.44	6324	5 048.35	7719	5 907.98	9083	6 805.74
32	2061	3680	3 384.96	5056	4 295.68	6528	5 211.20	7968	6 098.56	9376	7 025.28
33	2126	3795	3 490.74	5214	4 429.92	6732	5 374.05	8217	6 289.14	9669	7 244.82
34	2191	3910	3 596.52	5372	4 564.16	6936	5 536.90	8466	6 479.72	9962	7 464.36
35	2256	4025	3 702.30	5530	4 698.40	7140	5 699.75	8715	6 670.30	10255	7 683.90
36	2321	4140	3 808.08	5688	4 832.64	7344	5 862.60	8964	6 860.88	10548	7 903.44
37	2386	4255	3 913.86	5846	4 966.88	7548	6 025.45	9213	7 051.46	10841	8 122.98
38	2451	4370	4 019.64	6004	5 101.12	7752	6 188.30	9462	7 242.04	11134	8 342.52
39	2516	4485	4 125.42	6162	5 235.36	7956	6 351.15	9711	7 432.62	11427	8 562.06
40	2581	4600	4 231.20	6320	5 369.60	8160	6 514.00	9960	7 623.20	11720	8 781.60

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		1800									
Model		K2180		K3180		K4180		K5180		K6180	
Depth mm		62		100		136		173		210	
Exponent n		1,35		1,34		1,31		1,29		1,32	
Max. number of elements		16		16		16		16		16	
Price/element €		115.37		151.91		182.56		213.51		246.74	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	556	461.48	756	607.64	976	730.24	1188	854.04	1396	986.96
5	306	695	576.85	945	759.55	1220	912.80	1485	1 067.55	1745	1 233.70
6	371	834	692.22	1134	911.46	1464	1 095.36	1782	1 281.06	2094	1 480.44
7	436	973	807.59	1323	1 063.37	1708	1 277.92	2079	1 494.57	2443	1 727.18
8	501	1112	922.96	1512	1 215.28	1952	1 460.48	2376	1 708.08	2792	1 973.92
9	566	1251	1 038.33	1701	1 367.19	2196	1 643.04	2673	1 921.59	3141	2 220.66
10	631	1390	1 153.70	1890	1 519.10	2440	1 825.60	2970	2 135.10	3490	2 467.40
11	696	1529	1 269.07	2079	1 671.01	2684	2 008.16	3267	2 348.61	3839	2 714.14
12	761	1668	1 384.44	2268	1 822.92	2928	2 190.72	3564	2 562.12	4188	2 960.88
13	826	1807	1 499.81	2457	1 974.83	3172	2 373.28	3861	2 775.63	4537	3 207.62
14	891	1946	1 615.18	2646	2 126.74	3416	2 555.84	4158	2 989.14	4886	3 454.36
15	956	2085	1 730.55	2835	2 278.65	3660	2 738.40	4455	3 202.65	5235	3 701.10
16	1021	2224	1 845.92	3024	2 430.56	3904	2 920.96	4752	3 416.16	5584	3 947.84
17	1086	2363	1 961.29	3213	2 582.47	4148	3 103.52	5049	3 629.67	5933	4 194.58
18	1151	2502	2 076.66	3402	2 734.38	4392	3 286.08	5346	3 843.18	6282	4 441.32
19	1216	2641	2 192.03	3591	2 886.29	4636	3 468.64	5643	4 056.69	6631	4 688.06
20	1281	2780	2 307.40	3780	3 038.20	4880	3 651.20	5940	4 270.20	6980	4 934.80
21	1346	2919	2 422.77	3969	3 190.11	5124	3 833.76	6237	4 483.71	7329	5 181.54
22	1411	3058	2 538.14	4158	3 342.02	5368	4 016.32	6534	4 697.22	7678	5 428.28
23	1476	3197	2 653.51	4347	3 493.93	5612	4 198.88	6831	4 910.73	8027	5 675.02
24	1541	3336	2 768.88	4536	3 645.84	5856	4 381.44	7128	5 124.24	8376	5 921.76
25	1606	3475	2 884.25	4725	3 797.75	6100	4 564.00	7425	5 337.75	8725	6 168.50
26	1671	3614	2 999.62	4914	3 949.66	6344	4 746.56	7722	5 551.26	9074	6 415.24
27	1736	3753	3 114.99	5103	4 101.57	6588	4 929.12	8019	5 764.77	9423	6 661.98
28	1801	3892	3 230.36	5292	4 253.48	6832	5 111.68	8316	5 978.28	9772	6 908.72
29	1866	4031	3 345.73	5481	4 405.39	7076	5 294.24	8613	6 191.79	10121	7 155.46
30	1931	4170	3 461.10	5670	4 557.30	7320	5 476.80	8910	6 405.30	10470	7 402.20
31	1996	4309	3 576.47	5859	4 709.21	7564	5 659.36	9207	6 618.81	10819	7 648.94
32	2061	4448	3 691.84	6048	4 861.12	7808	5 841.92	9504	6 832.32	11168	7 895.68
33	2126	4587	3 807.21	6237	5 013.03	8052	6 024.48	9801	7 045.83	11517	8 142.42
34	2191	4726	3 922.58	6426	5 164.94	8296	6 207.04	10098	7 259.34	11866	8 389.16
35	2256	4865	4 037.95	6615	5 316.85	8540	6 389.60	10395	7 472.85	12215	8 635.90
36	2321	5004	4 153.32	6804	5 468.76	8784	6 572.16	10692	7 686.36	12564	8 882.64
37	2386	5143	4 268.69	6993	5 620.67	9028	6 754.72	10989	7 899.87	12913	9 129.38
38	2451	5282	4 384.06	7182	5 772.58	9272	6 937.28	11286	8 113.38	13262	9 376.12
39	2516	5421	4 499.43	7371	5 924.49	9516	7 119.84	11583	8 326.89	13611	9 622.86
40	2581	5560	4 614.80	7560	6 076.40	9760	7 302.40	11880	8 540.40	13960	9 869.60

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

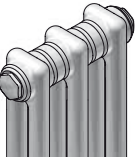
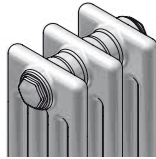
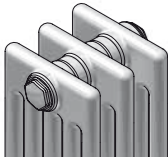
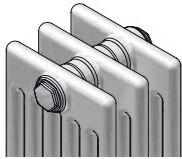
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		2000									
mm											
Model		K2200		K3200		K4200		K5200		K6200	
Depth	mm	62		100		136		173		210	
Exponent	n	1,34		1,33		1,32		1,31		1,31	
Max. number of elements		16		16		16		16		16	
Price/element	€	123.45		160.06		196.43		230.33		266.17	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	624	493.80	836	640.24	1080	785.72	1320	921.32	1548	1 064.68
5	306	780	617.25	1045	800.30	1350	982.15	1650	1 151.65	1935	1 330.85
6	371	936	740.70	1254	960.36	1620	1 178.58	1980	1 381.98	2322	1 597.02
7	436	1092	864.15	1463	1 120.42	1890	1 375.01	2310	1 612.31	2709	1 863.19
8	501	1248	987.60	1672	1 280.48	2160	1 571.44	2640	1 842.64	3096	2 129.36
9	566	1404	1 111.05	1881	1 440.54	2430	1 767.87	2970	2 072.97	3483	2 395.53
10	631	1560	1 234.50	2090	1 600.60	2700	1 964.30	3300	2 303.30	3870	2 661.70
11	696	1716	1 357.95	2299	1 760.66	2970	2 160.73	3630	2 533.63	4257	2 927.87
12	761	1872	1 481.40	2508	1 920.72	3240	2 357.16	3960	2 763.96	4644	3 194.04
13	826	2028	1 604.85	2717	2 080.78	3510	2 553.59	4290	2 994.29	5031	3 460.21
14	891	2184	1 728.30	2926	2 240.84	3780	2 750.02	4620	3 224.62	5418	3 726.38
15	956	2340	1 851.75	3135	2 400.90	4050	2 946.45	4950	3 454.95	5805	3 992.55
16	1021	2496	1 975.20	3344	2 560.96	4320	3 142.88	5280	3 685.28	6192	4 258.72
17	1086	2652	2 098.65	3553	2 721.02	4590	3 339.31	5610	3 915.61	6579	4 524.89
18	1151	2808	2 222.10	3762	2 881.08	4860	3 535.74	5940	4 145.94	6966	4 791.06
19	1216	2964	2 345.55	3971	3 041.14	5130	3 732.17	6270	4 376.27	7353	5 057.23
20	1281	3120	2 469.00	4180	3 201.20	5400	3 928.60	6600	4 606.60	7740	5 323.40
21	1346	3276	2 592.45	4389	3 361.26	5670	4 125.03	6930	4 836.93	8127	5 589.57
22	1411	3432	2 715.90	4598	3 521.32	5940	4 321.46	7260	5 067.26	8514	5 855.74
23	1476	3588	2 839.35	4807	3 681.38	6210	4 517.89	7590	5 297.59	8901	6 121.91
24	1541	3744	2 962.80	5016	3 841.44	6480	4 714.32	7920	5 527.92	9288	6 388.08
25	1606	3900	3 086.25	5225	4 001.50	6750	4 910.75	8250	5 758.25	9675	6 654.25
26	1671	4056	3 209.70	5434	4 161.56	7020	5 107.18	8580	5 988.58	10062	6 920.42
27	1736	4212	3 333.15	5643	4 321.62	7290	5 303.61	8910	6 218.91	10449	7 186.59
28	1801	4368	3 456.60	5852	4 481.68	7560	5 500.04	9240	6 449.24	10836	7 452.76
29	1866	4524	3 580.05	6061	4 641.74	7830	5 696.47	9570	6 679.57	11223	7 718.93
30	1931	4680	3 703.50	6270	4 801.80	8100	5 892.90	9900	6 909.90	11610	7 985.10
31	1996	4836	3 826.95	6479	4 961.86	8370	6 089.33	10230	7 140.23	11997	8 251.27
32	2061	4992	3 950.40	6688	5 121.92	8640	6 285.76	10560	7 370.56	12384	8 517.44
33	2126	5148	4 073.85	6897	5 281.98	8910	6 482.19	10890	7 600.89	12771	8 783.61
34	2191	5304	4 197.30	7106	5 442.04	9180	6 678.62	11220	7 831.22	13158	9 049.78
35	2256	5460	4 320.75	7315	5 602.10	9450	6 875.05	11550	8 061.55	13545	9 315.95
36	2321	5616	4 444.20	7524	5 762.16	9720	7 071.48	11880	8 291.88	13932	9 582.12
37	2386	5772	4 567.65	7733	5 922.22	9990	7 267.91	12210	8 522.21	14319	9 848.29
38	2451	5928	4 691.10	7942	6 082.28	10260	7 464.34	12540	8 752.54	14706	10 114.46
39	2516	6084	4 814.55	8151	6 242.34	10530	7 660.77	12870	8 982.87	15093	10 380.63
40	2581	6240	4 938.00	8360	6 402.40	10800	7 857.20	13200	9 213.20	15480	10 646.80

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		2200									
Model		K2220		K3220		K4220		K5220		K6220	
Depth mm		62		100		136		173		210	
Exponent n		1,34		1,33		1,32		1,31		1,31	
Max. number of elements		16		16		16		16		16	
Price/element €		130.30		170.51		209.45		245.94		285.41	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	688	521.20	916	682.04	1184	837.80	1448	983.76	1700	1 141.64
5	306	860	651.50	1145	852.55	1480	1 047.25	1810	1 229.70	2125	1 427.05
6	371	1032	781.80	1374	1 023.06	1776	1 256.70	2172	1 475.64	2550	1 712.46
7	436	1204	912.10	1603	1 193.57	2072	1 466.15	2534	1 721.58	2975	1 997.87
8	501	1376	1 042.40	1832	1 364.08	2368	1 675.60	2896	1 967.52	3400	2 283.28
9	566	1548	1 172.70	2061	1 534.59	2664	1 885.05	3258	2 213.46	3825	2 568.69
10	631	1720	1 303.00	2290	1 705.10	2960	2 094.50	3620	2 459.40	4250	2 854.10
11	696	1892	1 433.30	2519	1 875.61	3256	2 303.95	3982	2 705.34	4675	3 139.51
12	761	2064	1 563.60	2748	2 046.12	3552	2 513.40	4344	2 951.28	5100	3 424.92
13	826	2236	1 693.90	2977	2 216.63	3848	2 722.85	4706	3 197.22	5525	3 710.33
14	891	2408	1 824.20	3206	2 387.14	4144	2 932.30	5068	3 443.16	5950	3 995.74
15	956	2580	1 954.50	3435	2 557.65	4440	3 141.75	5430	3 689.10	6375	4 281.15
16	1021	2752	2 084.80	3664	2 728.16	4736	3 351.20	5792	3 935.04	6800	4 566.56
17	1086	2924	2 215.10	3893	2 898.67	5032	3 560.65	6154	4 180.98	7225	4 851.97
18	1151	3096	2 345.40	4122	3 069.18	5328	3 770.10	6516	4 426.92	7650	5 137.38
19	1216	3268	2 475.70	4351	3 239.69	5624	3 979.55	6878	4 672.86	8075	5 422.79
20	1281	3440	2 606.00	4580	3 410.20	5920	4 189.00	7240	4 918.80	8500	5 708.20
21	1346	3612	2 736.30	4809	3 580.71	6216	4 398.45	7602	5 164.74	8925	5 993.61
22	1411	3784	2 866.60	5038	3 751.22	6512	4 607.90	7964	5 410.68	9350	6 279.02
23	1476	3956	2 996.90	5267	3 921.73	6808	4 817.35	8326	5 656.62	9775	6 564.43
24	1541	4128	3 127.20	5496	4 092.24	7104	5 026.80	8688	5 902.56	10200	6 849.84
25	1606	4300	3 257.50	5725	4 262.75	7400	5 236.25	9050	6 148.50	10625	7 135.25
26	1671	4472	3 387.80	5954	4 433.26	7696	5 445.70	9412	6 394.44	11050	7 420.66
27	1736	4644	3 518.10	6183	4 603.77	7992	5 655.15	9774	6 640.38	11475	7 706.07
28	1801	4816	3 648.40	6412	4 774.28	8288	5 864.60	10136	6 886.32	11900	7 991.48
29	1866	4988	3 778.70	6641	4 944.79	8584	6 074.05	10498	7 132.26	12325	8 276.89
30	1931	5160	3 909.00	6870	5 115.30	8880	6 283.50	10860	7 378.20	12750	8 562.30
31	1996	5332	4 039.30	7099	5 285.81	9176	6 492.95	11222	7 624.14	13175	8 847.71
32	2061	5504	4 169.60	7328	5 456.32	9472	6 702.40	11584	7 870.08	13600	9 133.12
33	2126	5676	4 299.90	7557	5 626.83	9768	6 911.85	11946	8 116.02	14025	9 418.53
34	2191	5848	4 430.20	7786	5 797.34	10064	7 121.30	12308	8 361.96	14450	9 703.94
35	2256	6020	4 560.50	8015	5 967.85	10360	7 330.75	12670	8 607.90	14875	9 989.35
36	2321	6192	4 690.80	8244	6 138.36	10656	7 540.20	13032	8 853.84	15300	10 274.76
37	2386	6364	4 821.10	8473	6 308.87	10952	7 749.65	13394	9 099.78	15725	10 560.17
38	2451	6536	4 951.40	8702	6 479.38	11248	7 959.10	13756	9 345.72	16150	10 845.58
39	2516	6708	5 081.70	8931	6 649.89	11544	8 168.55	14118	9 591.66	16575	11 130.99
40	2581	6880	5 212.00	9160	6 820.40	11840	8 378.00	14480	9 837.60	17000	11 416.40

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		2500									
mm											
Model		K2250		K3250		K4250		K5250		K6250	
Depth	mm	62		100		136		173		210	
Exponent	n	1,33		1,33		1,32		1,31		1,30	
Max. number of elements		16		16		16		16		16	
Price/element	€	140.24		186.96		229.05		269.68		314.36	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	780	560.96	1040	747.84	1340	916.20	1640	1 078.72	1924	1 257.44
5	306	975	701.20	1300	934.80	1675	1 145.25	2050	1 348.40	2405	1 571.80
6	371	1170	841.44	1560	1 121.76	2010	1 374.30	2460	1 618.08	2886	1 886.16
7	436	1365	981.68	1820	1 308.72	2345	1 603.35	2870	1 887.76	3367	2 200.52
8	501	1560	1 121.92	2080	1 495.68	2680	1 832.40	3280	2 157.44	3848	2 514.88
9	566	1755	1 262.16	2340	1 682.64	3015	2 061.45	3690	2 427.12	4329	2 829.24
10	631	1950	1 402.40	2600	1 869.60	3350	2 290.50	4100	2 696.80	4810	3 143.60
11	696	2145	1 542.64	2860	2 056.56	3685	2 519.55	4510	2 966.48	5291	3 457.96
12	761	2340	1 682.88	3120	2 243.52	4020	2 748.60	4920	3 236.16	5772	3 772.32
13	826	2535	1 823.12	3380	2 430.48	4355	2 977.65	5330	3 505.84	6253	4 086.68
14	891	2730	1 963.36	3640	2 617.44	4690	3 206.70	5740	3 775.52	6734	4 401.04
15	956	2925	2 103.60	3900	2 804.40	5025	3 435.75	6150	4 045.20	7215	4 715.40
16	1021	3120	2 243.84	4160	2 991.36	5360	3 664.80	6560	4 314.88	7696	5 029.76
17	1086	3315	2 384.08	4420	3 178.32	5695	3 893.85	6970	4 584.56	8177	5 344.12
18	1151	3510	2 524.32	4680	3 365.28	6030	4 122.90	7380	4 854.24	8658	5 658.48
19	1216	3705	2 664.56	4940	3 552.24	6365	4 351.95	7790	5 123.92	9139	5 972.84
20	1281	3900	2 804.80	5200	3 739.20	6700	4 581.00	8200	5 393.60	9620	6 287.20
21	1346	4095	2 945.04	5460	3 926.16	7035	4 810.05	8610	5 663.28	10101	6 601.56
22	1411	4290	3 085.28	5720	4 113.12	7370	5 039.10	9020	5 932.96	10582	6 915.92
23	1476	4485	3 225.52	5980	4 300.08	7705	5 268.15	9430	6 202.64	11063	7 230.28
24	1541	4680	3 365.76	6240	4 487.04	8040	5 497.20	9840	6 472.32	11544	7 544.64
25	1606	4875	3 506.00	6500	4 674.00	8375	5 726.25	10250	6 742.00	12025	7 859.00
26	1671	5070	3 646.24	6760	4 860.96	8710	5 955.30	10660	7 011.68	12506	8 173.36
27	1736	5265	3 786.48	7020	5 047.92	9045	6 184.35	11070	7 281.36	12987	8 487.72
28	1801	5460	3 926.72	7280	5 234.88	9380	6 413.40	11480	7 551.04	13468	8 802.08
29	1866	5655	4 066.96	7540	5 421.84	9715	6 642.45	11890	7 820.72	13949	9 116.44
30	1931	5850	4 207.20	7800	5 608.80	10050	6 871.50	12300	8 090.40	14430	9 430.80
31	1996	6045	4 347.44	8060	5 795.76	10385	7 100.55	12710	8 360.08	14911	9 745.16
32	2061	6240	4 487.68	8320	5 982.72	10720	7 329.60	13120	8 629.76	15392	10 059.52
33	2126	6435	4 627.92	8580	6 169.68	11055	7 558.65	13530	8 899.44	15873	10 373.88
34	2191	6630	4 768.16	8840	6 356.64	11390	7 787.70	13940	9 169.12	16354	10 688.24
35	2256	6825	4 908.40	9100	6 543.60	11725	8 016.75	14350	9 438.80	16835	11 002.60
36	2321	7020	5 048.64	9360	6 730.56	12060	8 245.80	14760	9 708.48	17316	11 316.96
37	2386	7215	5 188.88	9620	6 917.52	12395	8 474.85	15170	9 978.16	17797	11 631.32
38	2451	7410	5 329.12	9880	7 104.48	12730	8 703.90	15580	10 247.84	18278	11 945.68
39	2516	7605	5 469.36	10140	7 291.44	13065	8 932.95	15990	10 517.52	18759	12 260.04
40	2581	7800	5 609.60	10400	7 478.40	13400	9 162.00	16400	10 787.20	19240	12 574.40

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm		2800									
Model		K2280		K3280		K4280		K5280		K6280	
Depth mm		62		100		136		173		210	
Exponent n		1,32		1,33		1,32		1,31		1,30	
Max. number of elements		16		16		16		16		14	
Price/element €		152.36		202.66		252.26		294.00		345.97	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	876	609.44	1160	810.64	1500	1 009.04	1832	1 176.00	2148	1 383.88
5	306	1095	761.80	1450	1 013.30	1875	1 261.30	2290	1 470.00	2685	1 729.85
6	371	1314	914.16	1740	1 215.96	2250	1 513.56	2748	1 764.00	3222	2 075.82
7	436	1533	1 066.52	2030	1 418.62	2625	1 765.82	3206	2 058.00	3759	2 421.79
8	501	1752	1 218.88	2320	1 621.28	3000	2 018.08	3664	2 352.00	4296	2 767.76
9	566	1971	1 371.24	2610	1 823.94	3375	2 270.34	4122	2 646.00	4833	3 113.73
10	631	2190	1 523.60	2900	2 026.60	3750	2 522.60	4580	2 940.00	5370	3 459.70
11	696	2409	1 675.96	3190	2 229.26	4125	2 774.86	5038	3 234.00	5907	3 805.67
12	761	2628	1 828.32	3480	2 431.92	4500	3 027.12	5496	3 528.00	6444	4 151.64
13	826	2847	1 980.68	3770	2 634.58	4875	3 279.38	5954	3 822.00	6981	4 497.61
14	891	3066	2 133.04	4060	2 837.24	5250	3 531.64	6412	4 116.00	7518	4 843.58
15	956	3285	2 285.40	4350	3 039.90	5625	3 783.90	6870	4 410.00	8055	5 189.55
16	1021	3504	2 437.76	4640	3 242.56	6000	4 036.16	7328	4 704.00	8592	5 535.52
17	1086	3723	2 590.12	4930	3 445.22	6375	4 288.42	7786	4 998.00	9129	5 881.49
18	1151	3942	2 742.48	5220	3 647.88	6750	4 540.68	8244	5 292.00	9666	6 227.46
19	1216	4161	2 894.84	5510	3 850.54	7125	4 792.94	8702	5 586.00	10203	6 573.43
20	1281	4380	3 047.20	5800	4 053.20	7500	5 045.20	9160	5 880.00	10740	6 919.40
21	1346	4599	3 199.56	6090	4 255.86	7875	5 297.46	9618	6 174.00	11277	7 265.37
22	1411	4818	3 351.92	6380	4 458.52	8250	5 549.72	10076	6 468.00	11814	7 611.34
23	1476	5037	3 504.28	6670	4 661.18	8625	5 801.98	10534	6 762.00	12351	7 957.31
24	1541	5256	3 656.64	6960	4 863.84	9000	6 054.24	10992	7 056.00	12888	8 303.28
25	1606	5475	3 809.00	7250	5 066.50	9375	6 306.50	11450	7 350.00	13425	8 649.25
26	1671	5694	3 961.36	7540	5 269.16	9750	6 558.76	11908	7 644.00	13962	8 995.22
27	1736	5913	4 113.72	7830	5 471.82	10125	6 811.02	12366	7 938.00	14499	9 341.19
28	1801	6132	4 266.08	8120	5 674.48	10500	7 063.28	12824	8 232.00	15036	9 687.16
29	1866	6351	4 418.44	8410	5 877.14	10875	7 315.54	13282	8 526.00	15573	10 033.13
30	1931	6570	4 570.80	8700	6 079.80	11250	7 567.80	13740	8 820.00	16110	10 379.10
31	1996	6789	4 723.16	8990	6 282.46	11625	7 820.06	14198	9 114.00	16647	10 725.07
32	2061	7008	4 875.52	9280	6 485.12	12000	8 072.32	14656	9 408.00	17184	11 071.04
33	2126	7227	5 027.88	9570	6 687.78	12375	8 324.58	15114	9 702.00	17721	11 417.01
34	2191	7446	5 180.24	9860	6 890.44	12750	8 576.84	15572	9 996.00	18258	11 762.98
35	2256	7665	5 332.60	10150	7 093.10	13125	8 829.10	16030	10 290.00	18795	12 108.95
36	2321	7884	5 484.96	10440	7 295.76	13500	9 081.36	16488	10 584.00	19332	12 454.92
37	2386	8103	5 637.32	10730	7 498.42	13875	9 333.62	16946	10 878.00	19869	12 800.89
38	2451	8322	5 789.68	11020	7 701.08	14250	9 585.88	17404	11 172.00	20406	13 146.86
39	2516	8541	5 942.04	11310	7 903.74	14625	9 838.14	17862	11 466.00	20943	13 492.83
40	2581	8760	6 094.40	11600	8 106.40	15000	10 090.40	18320	11 760.00	21480	13 838.80

Surcharge for Completto, valve at top, connections V001/V002 €: 221.45

Surcharge for Completto, valve at top, connections V007/V008 €: 294.26

Surcharge for Completto, valve at bottom, connections V003/V004 €: 313.24

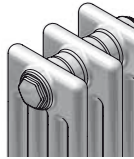
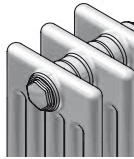
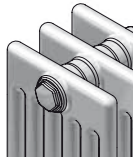
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		3000									
mm											
Model		K2300		K3300		K4300		K5300		K6300	
Depth	mm	62		100		136		173		210	
Exponent	n	1,32		1,33		1,32		1,31		1,30	
Max. number of elements		16		16		16		16		14	
Price/element	€	158.43		214.51		265.32		309.97		363.32	
Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	940	633.72	1244	858.04	1604	1 061.28	1960	1 239.88	2300	1 453.28
5	306	1175	792.15	1555	1 072.55	2005	1 326.60	2450	1 549.85	2875	1 816.60
6	371	1410	950.58	1866	1 287.06	2406	1 591.92	2940	1 859.82	3450	2 179.92
7	436	1645	1 109.01	2177	1 501.57	2807	1 857.24	3430	2 169.79	4025	2 543.24
8	501	1880	1 267.44	2488	1 716.08	3208	2 122.56	3920	2 479.76	4600	2 906.56
9	566	2115	1 425.87	2799	1 930.59	3609	2 387.88	4410	2 789.73	5175	3 269.88
10	631	2350	1 584.30	3110	2 145.10	4010	2 653.20	4900	3 099.70	5750	3 633.20
11	696	2585	1 742.73	3421	2 359.61	4411	2 918.52	5390	3 409.67	6325	3 996.52
12	761	2820	1 901.16	3732	2 574.12	4812	3 183.84	5880	3 719.64	6900	4 359.84
13	826	3055	2 059.59	4043	2 788.63	5213	3 449.16	6370	4 029.61	7475	4 723.16
14	891	3290	2 218.02	4354	3 003.14	5614	3 714.48	6860	4 339.58	8050	5 086.48
15	956	3525	2 376.45	4665	3 217.65	6015	3 979.80	7350	4 649.55	8625	5 449.80
16	1021	3760	2 534.88	4976	3 432.16	6416	4 245.12	7840	4 959.52	9200	5 813.12
17	1086	3995	2 693.31	5287	3 646.67	6817	4 510.44	8330	5 269.49	9775	6 176.44
18	1151	4230	2 851.74	5598	3 861.18	7218	4 775.76	8820	5 579.46	10350	6 539.76
19	1216	4465	3 010.17	5909	4 075.69	7619	5 041.08	9310	5 889.43	10925	6 903.08
20	1281	4700	3 168.60	6220	4 290.20	8020	5 306.40	9800	6 199.40	11500	7 266.40
21	1346	4935	3 327.03	6531	4 504.71	8421	5 571.72	10290	6 509.37	12075	7 629.72
22	1411	5170	3 485.46	6842	4 719.22	8822	5 837.04	10780	6 819.34	12650	7 993.04
23	1476	5405	3 643.89	7153	4 933.73	9223	6 102.36	11270	7 129.31	13225	8 356.36
24	1541	5640	3 802.32	7464	5 148.24	9624	6 367.68	11760	7 439.28	13800	8 719.68
25	1606	5875	3 960.75	7775	5 362.75	10025	6 633.00	12250	7 749.25	14375	9 083.00
26	1671	6110	4 119.18	8086	5 577.26	10426	6 898.32	12740	8 059.22	14950	9 446.32
27	1736	6345	4 277.61	8397	5 791.77	10827	7 163.64	13230	8 369.19	15525	9 809.64
28	1801	6580	4 436.04	8708	6 006.28	11228	7 428.96	13720	8 679.16	16100	10 172.96
29	1866	6815	4 594.47	9019	6 220.79	11629	7 694.28	14210	8 989.13	16675	10 536.28
30	1931	7050	4 752.90	9330	6 435.30	12030	7 959.60	14700	9 299.10	17250	10 899.60
31	1996	7285	4 911.33	9641	6 649.81	12431	8 224.92	15190	9 609.07	17825	11 262.92
32	2061	7520	5 069.76	9952	6 864.32	12832	8 490.24	15680	9 919.04	18400	11 626.24
33	2126	7755	5 228.19	10263	7 078.83	13233	8 755.56	16170	10 229.01	18975	11 989.56
34	2191	7990	5 386.62	10574	7 293.34	13634	9 020.88	16660	10 538.98	19550	12 352.88
35	2256	8225	5 545.05	10885	7 507.85	14035	9 286.20	17150	10 848.95	20125	12 716.20
36	2321	8460	5 703.48	11196	7 722.36	14436	9 551.52	17640	11 158.92	20700	13 079.52
37	2386	8695	5 861.91	11507	7 936.87	14837	9 816.84	18130	11 468.89	21275	13 442.84
38	2451	8930	6 020.34	11818	8 151.38	15238	10 082.16	18620	11 778.86	21850	13 806.16
39	2516	9165	6 178.77	12129	8 365.89	15639	10 347.48	19110	12 088.83	22425	14 169.48
40	2581	9400	6 337.20	12440	8 580.40	16040	10 612.80	19600	12 398.80	23000	14 532.80

Surcharge for Completo, valve at top, connections V001/V002 €: 221.45

Surcharge for Completo, valve at top, connections V007/V008 €: 294.26

Surcharge for Completo, valve at bottom, connections V003/V004 €: 313.24

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Surcharge for special colours, category 1 = 20%, category 2 = 30%

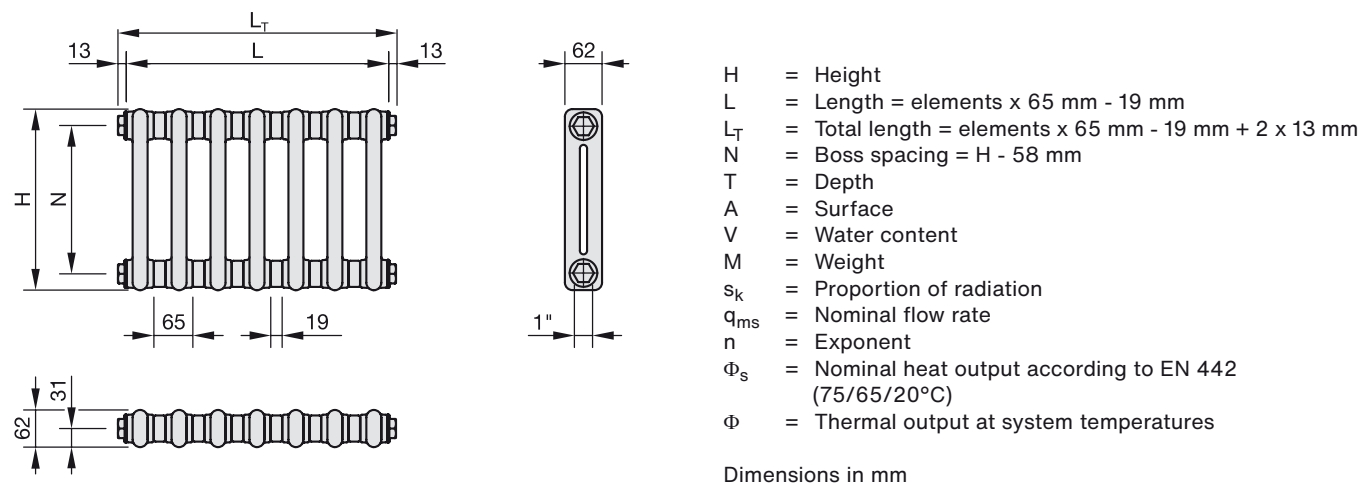
Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

			Price €																					
High pressure version max. 18 bar (not for Completto version) - with welded plugs - with welded plugs and tied rod - for radiators comprising several blocks additionally per welded joint			2- to 3-column 4- to 6-column (at top and bottom)																					
Operating temperature 120 °C			253.12 per RAD 372.29 per RAD 126.73																					
Connections			On request																					
Insert tube for Zehnder Charleston radiators with same-side connections, a flow insert tube is factory-installed in $\frac{2}{3}$ of the radiator length from the following element numbers or lengths, in order to guarantee the thermal outputs shown in the catalogue.			281.37 per RAD																					
2-column from 87 elements = length 5636 mm 3-column from 85 elements = length 5506 mm 4-column from 81 elements = length 5246 mm 5-column from 71 elements = length 4596 mm 6-column from 55 elements = length 3556 mm																								
Intermediate heights calculated on next-higher catalogue height																								
Angled or curved design (see page 36)																								
Radiator designs over height 3000 mm			On request																					
Welded lugs, price per lug			39.22																					
Galvanising (see also explanations on galvanising in section "General") Galvanising with subsequent standard finish (RAL 9016) maximum dimensions: 3000 x 850 x 450 mm			On request																					
Completto version with valve inserts for clip seal (Danfoss thermostat) instead of M 30 x 1,5 threaded connection			No surcharge																					
Completto Q-Tech Charleston Completto Q-Tech is built in factory-made, for an automatic hydraulic balancing of pressure differences that can occur when, e.g. connecting or turning off system parts. By the integrated diaphragm-sensed flow-control in the valve insert, the differential pressure is constantly kept above the pre-setting and standard cross section value. Therefore it is possible to quickly and easily do the hydraulic balancing of new and old systems or unknown pipe networks. The pre-setting of the needed flow for the customer needs on site, is achieved by turning the regulation ring with the pre-setting key which is integrated in the scope of delivery. Large flows of 10 to 170 l/h and very big differential pressure (max. 1,5 bar). The Q-Tech valve cannot be retrofitted with AV6, AV9 or other valves.			144.57 (Surcharge on the corresponding price for Completto connection see page 45)																					
Thermal radiation shield for heights from 260 mm to 750 mm and a maximum length of the thermal radiation shield of up to 2024 mm; for large lengths, the thermal radiation shields are supplied in 2 or more pieces. The thermal radiation shield consists of special 6 mm safety glass with thermal coating, rounded corners, finely polished edges, including holders for on-site attachment to the last row of columns. Bracket painted with powder-coating in the colour of the radiator.																								
<table border="1"> <thead> <tr> <th>Number of elements Zehnder Charleston Clinic</th> <th>Number of shields</th> <th>Number of brackets</th> </tr> </thead> <tbody> <tr> <td>5 to 21</td> <td>1</td> <td>4</td> </tr> <tr> <td>22 to 31</td> <td>1</td> <td>6</td> </tr> <tr> <td>32 to 42</td> <td>2</td> <td>8</td> </tr> <tr> <td>43 to 61</td> <td>2</td> <td>12</td> </tr> <tr> <td>62 to 84</td> <td>3</td> <td>18</td> </tr> <tr> <td>85 to 92</td> <td>3</td> <td>18</td> </tr> </tbody> </table>				Number of elements Zehnder Charleston Clinic	Number of shields	Number of brackets	5 to 21	1	4	22 to 31	1	6	32 to 42	2	8	43 to 61	2	12	62 to 84	3	18	85 to 92	3	18
Number of elements Zehnder Charleston Clinic	Number of shields	Number of brackets																						
5 to 21	1	4																						
22 to 31	1	6																						
32 to 42	2	8																						
43 to 61	2	12																						
62 to 84	3	18																						
85 to 92	3	18																						
Basic price per reflective cover plate																								
Price per metre, thermal radiation shield: H = 260 - 450 mm H = 500 - 750 mm H = Height of shield																								
221.97																								
107.60 163.87																								

Basis for calculating the surcharge is the standard finish

Zehnder Charleston Clinic

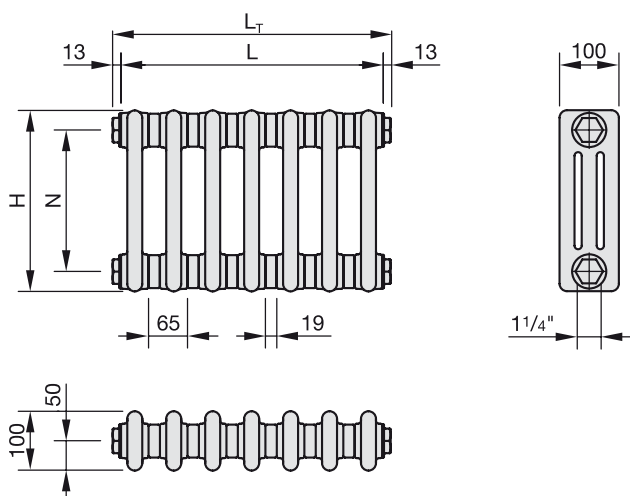
Model 2-column Clinic



Technical specifications per element												
Model	H	N	T	A	V	M	sk	qms	Exp.	Φs=ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
	mm	mm	mm	m ²	dm ³	kg	%	kg/h	n			
K2026	260	202	62	0,04	0,4	0,47	25	2,1	1,30	23,9	19,2	12,2
K2030	292	234	62	0,05	0,4	0,51	25	2,3	1,29	26,5	21,3	13,6
K2035	342	284	62	0,06	0,4	0,58	24	2,5	1,29	30,4	24,4	15,6
K2040	392	334	62	0,07	0,5	0,62	25	2,8	1,29	34,2	27,5	17,6
K2045	442	384	62	0,07	0,5	0,69	24	3,0	1,29	37,9	30,5	19,5
K2050	492	434	62	0,08	0,6	0,75	23	3,3	1,29	41,6	33,4	21,4
K2055	542	484	62	0,09	0,6	0,82	23	3,6	1,29	45,2	36,3	23,2
K2060	592	534	62	0,10	0,6	0,88	23	3,9	1,29	48,8	39,2	25,1
K2075	742	684	62	0,12	0,8	1,08	22	4,8	1,29	59,2	47,6	30,4
K2090	892	834	62	0,14	0,9	1,28	22	5,8	1,30	69,4	55,7	35,4
K2100	992	934	62	0,16	1,0	1,41	22	6,4	1,30	76,0	61,0	38,8
K2110	1092	1034	62	0,18	1,0	1,54	22	7,1	1,30	82,6	66,3	42,2
K2120	1192	1134	62	0,19	1,1	1,67	22	7,8	1,30	91,1	73,1	46,5
K2150	1492	1434	62	0,24	1,3	2,07	23	9,9	1,33	115,0	91,8	57,8
K2180	1792	1734	62	0,29	1,6	2,46	23	12,1	1,35	139,0	110,5	69,2
K2200	1992	1934	62	0,32	1,8	2,72	23	13,5	1,34	156,0	124,3	78,1
K2220	2192	2134	62	0,35	1,9	2,98	23	14,9	1,34	172,0	137,0	86,1
K2250	2492	2434	62	0,40	2,2	3,38	23	16,8	1,33	195,0	155,6	98,1
K2280	2792	2734	62	0,45	2,4	3,77	23	18,8	1,32	219,0	175,1	110,7
K2300	2992	2934	62	0,48	2,6	4,03	23	20,2	1,32	235,0	187,9	118,8

Zehnder Charleston Clinic

Model 3-column Clinic



- H = Height
- L = Length = elements x 65 mm - 19 mm
- L_T = Total length = elements x 65 mm - 19 mm + 2 x 13 mm
- N = Boss spacing = H - 66 mm
- T = Depth
- A = Surface
- V = Water content
- M = Weight
- s_k = Proportion of radiation
- q_{ms} = Nominal flow rate
- n = Exponent
- Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

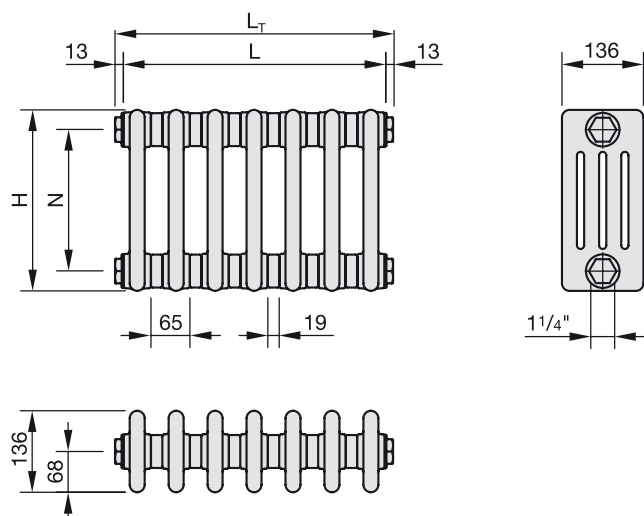
Dimensions in mm

Technical specifications per element

Model	H mm	N mm	T mm	A m ²	V dm ³	M kg	s_k %	q_{ms} kg/h	Exp. n	$\Phi_s = \Delta T \text{ 50 K}$ EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
K3026	260	194	100	0,06	0,6	0,63	21	2,7	1,27	31,2	25,2	16,2
K3030	300	234	100	0,07	0,6	0,71	20	3,1	1,27	35,4	28,5	18,4
K3035	350	284	100	0,08	0,7	0,80	20	3,5	1,28	40,6	32,7	21,0
K3040	400	334	100	0,10	0,7	0,91	19	4,0	1,28	45,7	36,8	23,6
K3045	450	384	100	0,11	0,8	1,01	19	4,4	1,28	50,8	40,9	26,2
K3050	500	434	100	0,12	0,9	1,10	18	4,8	1,28	55,9	45,0	28,8
K3055	550	484	100	0,13	0,9	1,20	18	5,3	1,29	61,0	49,0	31,3
K3060	600	534	100	0,14	1,0	1,30	18	5,7	1,29	66,0	53,0	33,9
K3075	750	684	100	0,18	1,2	1,59	18	6,9	1,30	81,1	65,0	41,4
K3090	900	834	100	0,21	1,3	1,89	18	8,2	1,31	96,3	77,1	48,9
K3100	1000	934	100	0,24	1,5	2,08	18	9,0	1,32	107,0	85,5	54,1
K3110	1100	1034	100	0,26	1,6	2,28	18	9,8	1,32	117,0	93,5	59,1
K3120	1200	1134	100	0,29	1,7	2,48	18	10,8	1,33	127,0	101,3	63,9
K3150	1500	1434	100	0,36	2,0	3,06	18	13,7	1,33	158,0	126,1	79,5
K3180	1800	1734	100	0,43	2,4	3,65	18	16,5	1,34	189,0	150,6	94,6
K3200	2000	1934	100	0,47	2,6	4,04	18	18,4	1,33	209,0	166,8	105,1
K3220	2200	2134	100	0,52	2,9	4,44	18	20,2	1,33	229,0	182,7	115,2
K3250	2500	2434	100	0,56	3,3	5,02	18	22,7	1,33	260,0	207,5	130,8
K3280	2800	2734	100	0,66	3,7	5,61	18	24,9	1,33	290,0	231,4	145,8
K3300	3000	2934	100	0,71	4,0	6,00	18	26,7	1,33	311,0	248,2	156,4

Zehnder Charleston Clinic

Model 4-column Clinic



- H = Height
- L = Length = elements x 65 mm - 19 mm
- L_T = Total length = elements x 65 mm - 19 mm + 2 x 13 mm
- N = Boss spacing = H - 66 mm
- T = Depth
- A = Surface
- V = Water content
- M = Weight
- s_k = Proportion of radiation
- q_{ms} = Nominal flow rate
- n = Exponent
- Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

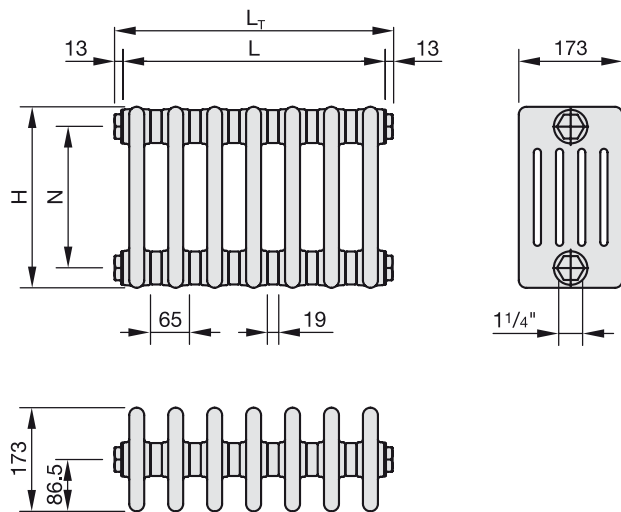
Dimensions in mm

Technical specifications per element

Model	H mm	N mm	T mm	A m ²	V dm ³	M kg	s_k %	q_{ms} kg/h	Exp. n	$\Phi_s = \Delta T \text{ 50 K}$ EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
K4026	260	194	136	0,09	0,7	0,85	18	3,4	1,26	40,4	32,6	21,1
K4030	300	234	136	0,10	0,8	0,95	18	3,9	1,26	45,8	37,0	23,9
K4035	350	284	136	0,11	0,9	1,08	17	4,5	1,26	52,5	42,4	27,4
K4040	400	334	136	0,13	0,9	1,23	16	5,1	1,27	59,2	47,7	30,7
K4045	450	384	136	0,15	1,0	1,36	16	5,7	1,27	65,7	53,0	34,1
K4050	500	434	136	0,16	1,1	1,49	16	6,2	1,27	72,3	58,3	37,5
K4055	550	484	136	0,18	1,2	1,62	16	6,8	1,28	78,8	63,4	40,7
K4060	600	534	136	0,19	1,3	1,75	15	7,4	1,28	85,4	68,7	44,1
K4075	750	684	136	0,24	1,5	2,13	15	9,1	1,29	105,0	84,4	53,9
K4090	900	834	136	0,29	1,8	2,52	15	10,8	1,30	125,0	100,3	63,8
K4100	1000	934	136	0,32	1,9	2,78	15	11,9	1,31	138,0	110,5	70,1
K4110	1100	1034	136	0,35	2,1	3,03	15	13,0	1,32	151,0	120,7	76,3
K4120	1200	1134	136	0,38	2,2	3,29	15	14,1	1,32	165,0	131,9	83,4
K4150	1500	1434	136	0,47	2,7	4,06	15	17,4	1,31	204,0	163,4	103,7
K4180	1800	1734	136	0,57	3,1	4,83	15	20,6	1,31	244,0	195,4	124,0
K4200	2000	1934	136	0,63	3,4	5,35	15	22,9	1,32	270,0	215,8	136,5
K4220	2200	2134	136	0,70	3,7	5,86	15	25,0	1,32	296,0	236,6	149,6
K4250	2500	2434	136	0,79	4,3	6,64	15	28,4	1,32	335,0	267,8	169,3
K4280	2800	2734	136	0,87	4,9	7,41	15	32,2	1,32	375,0	299,8	189,6
K4300	3000	2934	136	0,95	5,4	7,92	15	34,5	1,32	401,0	320,6	202,7

Zehnder Charleston Clinic

Model 5-column Clinic



- H = Height
L = Length = elements x 65 mm - 19 mm
L_T = Total length = elements x 65 mm - 19 mm + 2 x 13mm
N = Boss spacing = H - 66 mm
T = Depth
A = Surface
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

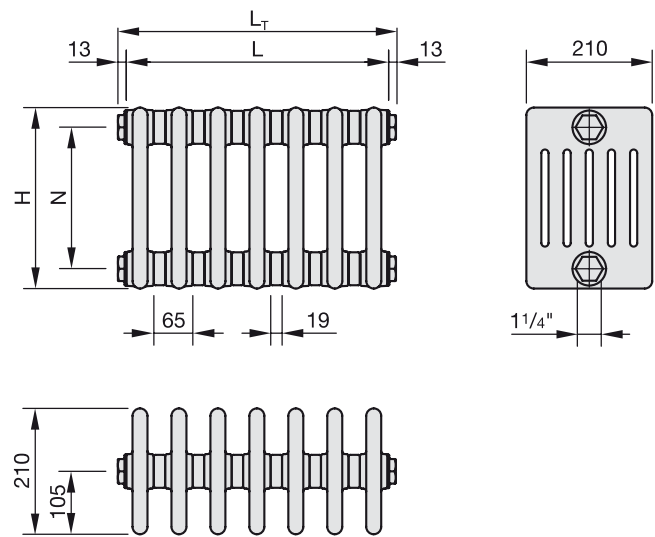
Dimensions in mm

Technical specifications per element

Model	H mm	N mm	T mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _s =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
K5026	260	194	173	0,11	0,9	0,95	17	4,2	1,25	49,4	40,0	25,9
K5030	300	234	173	0,12	1,0	1,08	16	4,8	1,25	56,0	45,3	29,4
K5035	350	284	173	0,14	1,1	1,25	15	5,5	1,25	64,2	51,9	33,6
K5040	400	334	173	0,16	1,2	1,58	15	6,2	1,26	72,3	58,4	37,7
K5045	450	384	173	0,18	1,3	1,74	14	6,9	1,26	80,4	64,9	41,9
K5050	500	434	173	0,20	1,4	1,91	14	7,7	1,26	88,4	71,4	46,1
K5055	550	484	173	0,22	1,5	2,07	14	8,4	1,27	96,4	77,7	50,0
K5060	600	534	173	0,24	1,6	2,23	13	9,1	1,27	104,0	83,8	54,0
K5075	750	684	173	0,30	1,9	2,72	13	11,2	1,28	128,0	103,0	66,1
K5090	900	834	173	0,36	2,2	3,21	13	13,2	1,29	152,0	122,1	78,0
K5100	1000	934	173	0,40	2,4	3,54	13	14,6	1,30	168,0	134,8	85,8
K5110	1100	1034	173	0,44	2,6	3,87	13	16,0	1,31	185,0	148,1	94,0
K5120	1200	1134	173	0,48	2,8	4,19	13	17,4	1,31	201,0	160,9	102,1
K5150	1500	1434	173	0,59	3,3	5,17	13	21,2	1,30	249,0	199,7	127,2
K5180	1800	1734	173	0,71	3,9	6,15	13	25,2	1,29	297,0	238,6	152,5
K5200	2000	1934	173	0,79	4,3	6,81	13	27,8	1,31	330,0	264,2	167,7
K5220	2200	2134	173	0,87	4,7	7,46	13	30,5	1,31	362,0	289,9	183,9
K5250	2500	2434	173	0,99	5,4	8,44	13	34,7	1,31	410,0	328,3	208,3
K5280	2800	2734	173	1,11	6,1	9,42	13	39,4	1,31	458,0	366,7	232,7
K5300	3000	2934	173	1,19	6,6	10,08	13	42,1	1,31	490,0	392,4	249,0

Zehnder Charleston Clinic

Model 6-column Clinic



- H = Height
- L = Length = elements x 65 mm - 19 mm
- L_T = Total length = elements x 65 mm - 19 mm + 2 x 13 mm
- N = Boss spacing = H - 66 mm
- T = Depth
- A = Surface
- V = Water content
- M = Weight
- s_k = Proportion of radiation
- q_{ms} = Nominal flow rate
- n = Exponent
- Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

Dimensions in mm

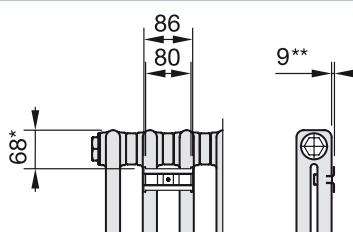
Technical specifications per element												
Model	H	N	T	A	V	M	s _k	q _{ms}	Exp.	Φ _s =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
	mm	mm	mm	m ²	dm ³	kg	%	kg/h	n			
K6026	260	194	210	0,13	1,0	1,33	18	5,0	1,28	58,1	46,8	30,0
K6030	300	234	210	0,15	1,1	1,49	15	5,7	1,29	65,9	52,9	33,8
K6035	350	284	210	0,17	1,3	1,69	14	6,6	1,29	75,5	60,7	38,8
K6040	400	334	210	0,19	1,4	1,87	14	7,4	1,29	85,1	68,4	43,7
K6045	450	384	210	0,22	1,5	2,06	13	8,3	1,29	94,6	76,0	48,6
K6050	500	434	210	0,24	1,6	2,26	13	9,1	1,29	104,0	83,6	53,4
K6055	550	484	210	0,26	1,8	2,46	12	10,0	1,29	113,0	90,8	58,0
K6060	600	534	210	0,29	1,9	2,65	12	10,8	1,29	123,0	98,8	63,2
K6075	750	684	210	0,36	2,2	3,25	12	13,2	1,30	151,0	121,1	77,1
K6090	900	834	210	0,43	2,6	3,84	12	15,7	1,30	179,0	143,6	91,4
K6100	1000	934	210	0,48	2,8	4,23	12	17,3	1,30	198,0	158,8	101,1
K6110	1100	1034	210	0,52	3,1	4,62	12	18,9	1,30	217,0	174,1	110,8
K6120	1200	1134	210	0,57	3,3	5,02	12	20,5	1,30	236,0	189,3	120,5
K6150	1500	1434	210	0,71	4,0	6,20	12	25,2	1,31	293,0	234,6	148,9
K6180	1800	1734	210	0,85	4,8	7,38	12	30,0	1,32	349,0	279,0	176,4
K6200	2000	1934	210	0,95	5,2	8,17	12	33,2	1,31	387,0	309,9	196,7
K6220	2200	2134	210	1,04	5,7	8,96	12	36,4	1,31	425,0	340,3	216,0
K6250	2500	2434	210	1,19	6,4	10,14	12	41,4	1,30	481,0	385,8	245,7
K6280	2800	2734	210	1,34	7,1	11,32	12	46,2	1,30	537,0	430,7	274,3
K6300	3000	2934	210	1,42	7,6	12,11	12	49,4	1,30	575,0	461,2	293,7

Zehnder Charleston Clinic

Dimensions for the bores when using CVD brackets (upper drill hole)¹⁾

Number of fixings	2 axes / 4 brackets	3 axes / 6 brackets	4 axes / 8 brackets
		 If there is an odd number of sections then the middle axis is offset by 23 mm.	

Detail of suspension



Dimensions for the bores when using EasyFix brackets¹⁾

	SMB 2T H = 245-299 mm	SMB 30-75 H = 300-1000 mm	SMB 2T H = 1001-3000 mm															
		 <table><tr><th>H</th><th>D_{MP}</th><th>D</th></tr><tr><td>300 - 369</td><td>134</td><td>241</td></tr><tr><td>370 - 484</td><td>204</td><td>309</td></tr><tr><td>485 - 679</td><td>309</td><td>414</td></tr><tr><td>680 - 1000</td><td>518</td><td>623</td></tr></table>	H	D _{MP}	D	300 - 369	134	241	370 - 484	204	309	485 - 679	309	414	680 - 1000	518	623	
H	D _{MP}	D																
300 - 369	134	241																
370 - 484	204	309																
485 - 679	309	414																
680 - 1000	518	623																

¹⁾ For connection type 3370/5510 and V001-V004, the bracket must be offset inwards by one element

- = Position of drill hole
 - L = Length
 - H = Height
 - * = Smallest possible dimension
 - ** = Front edge of bracket to radiator
 - D = Dimension from bottom edge of radiator to upper drill hole
 - D_{MP} = Spacing of drill holes
- Dimensions in mm

For the recommended number of brackets, see page 99 onwards.

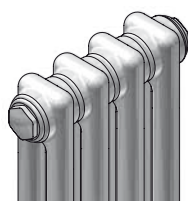
Zehnder Charleston Retrofit



		Overview of models	Product description	List prices	Fixings	Technical data	Connections
Zehnder Charleston Retrofit							
	■ Suitable for connections of old DIN standard, aluminium and cast radiators ■ Retrofitting without changing the connection pipework ■ Optimum flexible heat output	75	76	78	98	92	94

Zehnder Charleston Retrofit

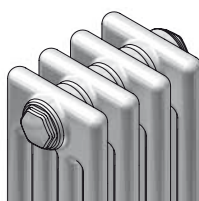
Zehnder Charleston Retrofit



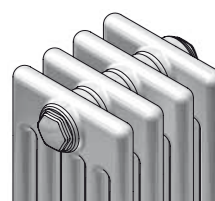
2-column



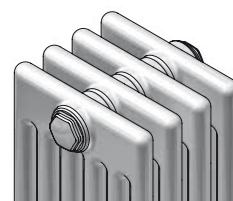
3-column



4-column



5-column



6-column

Height mm	Depth mm				
	62	100	136	173	210
266	-	-	-	-	6027
366	-	3037	4037	5037	6037
408	2041	-	-	-	-
416	-	3042	4042	-	6042
458	2046	-	-	-	-
558	2056	-	-	-	-
566	-	3057	4057	5057	6057
588	2059	-	-	-	-
596	-	3059	4059	-	-
628	2063	-	-	-	-
636	-	3064	4064	-	-
658	2066	-	-	-	-
666	-	3067	4067	5067	6067
677	2068	-	-	-	-
685	-	3069	4069	5069	6069
758	2076	-	-	-	-
766	-	3077	4077	5077	6077
788	2079	-	-	-	-
796	-	3079	4079	-	-
858	2086	-	-	-	-
866	-	3087	4087	5087	6087
877	2088	-	-	-	-
885	-	3089	4089	5089	6089
928	2093	-	-	-	-
936	-	3094	4094	-	-
958	2096	-	-	-	-
966	-	3097	4097	5097	6097
1066	-	3107	4107	5107	6107
1658	2166	-	-	-	-
1666	-	3167	4167	-	-
1858	2186	-	-	-	-
1866	-	3187	4187	-	-
2058	2206	-	-	-	-
2066	-	3207	4207	-	-

1) The values shown here are the so-called nominal height; the exact height varies by a few mm for 2-column radiators and for some of the 3-column radiators as well, see "Technical specifications".

Maximum radiator lengths on piece (per block)

Zehnder Charleston Retrofit (also see price tables from page 78 onwards)

Model	Height mm						
	260 - 600	> 600 - 750	> 750 - 900	> 900 - 1000	> 1000 - 2000	> 2000 - 2500	> 2500 - 3000
2-, 3-column	64	64	64	64	22	22	22
4-column	64	64	64	60	22	22	22
5-column	64	64	50	50	22	22	17
6-column	64	55	46	42	22	17	14

Zehnder Charleston Retrofit



Completto version

Product description

The original tubular radiator, specifically for renovations. Flexible installation for renovation projects as retrofit models are available for existing pipework, thus it is not necessary to adjust the piping. Suitable for connection to old steel tube radiators, cast iron radiators or aluminium radiators.

The element construction gives Zehnder Charleston Retrofit its transparent appearance and timeless elegance. The tubular radiator provides comfortable radiant heat and transforms the living space into an oasis of relaxation. The Zehnder Charleston Retrofit models make installation easy, especially for renovation projects: retrofit models are available for existing connections. Available in almost any colour and finish from the Zehnder colour chart.

Technical specifications

- Steel round tubes Ø 25 mm
- Header in sheet steel
- Length of the individual element 46 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Maximum operating pressure 10 bar
- Maximum operating temperature 110 °C

Customisation options

- Special colours and antibacterial coating
- Galvanised and painted
- High pressure version up to max. 18 bar
- Operating temperature at 120 °C on request

Advantages

- Flexible installation on existing pipework means time savings
- Residue-free laser welding technology LaZer made
- Classic elegance
- Radiant heat with feel-good factor
- Energy-efficient for use in low temperature heating systems

Scope of delivery for standard version

- Primed and painted in RAL 9016
- Connections 4 x ½" female thread at front
- Connection S001: 1 blanking plug ½", directional air vent ½"
- Complete packaging in stretch film and carton

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		408		458		558		588		628	
													
Model		2041		2046		2056		2059		2063			
Depth	mm	62		62		62		62		62			
Exponent	n	1,26		1,26		1,25		1,25		1,24			
Max. number of elements		64		64		64		64		64			
Price/element	€	34.94		35.84		37.43		38.17		39.04			
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	130	139.76	144	143.36	172	149.72	180	152.68	191	156.16		
5	230	162	174.70	180	179.20	215	187.15	225	190.85	239	195.20		
6	276	194	209.64	216	215.04	258	224.58	270	229.02	286	234.24		
7	322	227	244.58	252	250.88	301	262.01	315	267.19	334	273.28		
8	368	259	279.52	288	286.72	344	299.44	360	305.36	382	312.32		
9	414	292	314.46	324	322.56	387	336.87	405	343.53	429	351.36		
10	460	324	349.40	360	358.40	430	374.30	450	381.70	477	390.40		
11	506	356	384.34	396	394.24	473	411.73	495	419.87	525	429.44		
12	552	389	419.28	432	430.08	516	449.16	540	458.04	572	468.48		
13	598	421	454.22	468	465.92	559	486.59	585	496.21	620	507.52		
14	644	454	489.16	504	501.76	602	524.02	630	534.38	668	546.56		
15	690	486	524.10	540	537.60	645	561.45	675	572.55	716	585.60		
16	736	518	559.04	576	573.44	688	598.88	720	610.72	763	624.64		
17	782	551	593.98	612	609.28	731	636.31	765	648.89	811	663.68		
18	828	583	628.92	648	645.12	774	673.74	810	687.06	859	702.72		
19	874	616	663.86	684	680.96	817	711.17	855	725.23	906	741.76		
20	920	648	698.80	720	716.80	860	748.60	900	763.40	954	780.80		
21	966	680	733.74	756	752.64	903	786.03	945	801.57	1002	819.84		
22	1012	713	768.68	792	788.48	946	823.46	990	839.74	1049	858.88		
23	1058	745	803.62	828	824.32	989	860.89	1035	877.91	1097	897.92		
24	1104	778	838.56	864	860.16	1032	898.32	1080	916.08	1145	936.96		
25	1150	810	873.50	900	896.00	1075	935.75	1125	954.25	1193	976.00		
26	1196	842	908.44	936	931.84	1118	973.18	1170	992.42	1240	1 015.04		
27	1242	875	943.38	972	967.68	1161	1 010.61	1215	1 030.59	1288	1 054.08		
28	1288	907	978.32	1008	1 003.52	1204	1 048.04	1260	1 068.76	1336	1 093.12		
29	1334	940	1 013.26	1044	1 039.36	1247	1 085.47	1305	1 106.93	1383	1 132.16		
30	1380	972	1 048.20	1080	1 075.20	1290	1 122.90	1350	1 145.10	1431	1 171.20		
31	1426	1004	1 083.14	1116	1 111.04	1333	1 160.33	1395	1 183.27	1479	1 210.24		
32	1472	1037	1 118.08	1152	1 146.88	1376	1 197.76	1440	1 221.44	1526	1 249.28		
33	1518	1069	1 153.02	1188	1 182.72	1419	1 235.19	1485	1 259.61	1574	1 288.32		
34	1564	1102	1 187.96	1224	1 218.56	1462	1 272.62	1530	1 297.78	1622	1 327.36		
35	1610	1134	1 222.90	1260	1 254.40	1505	1 310.05	1575	1 335.95	1670	1 366.40		
36	1656	1166	1 257.84	1296	1 290.24	1548	1 347.48	1620	1 374.12	1717	1 405.44		
37	1702	1199	1 292.78	1332	1 326.08	1591	1 384.91	1665	1 412.29	1765	1 444.48		
38	1748	1231	1 327.72	1368	1 361.92	1634	1 422.34	1710	1 450.46	1813	1 483.52		
39	1794	1264	1 362.66	1404	1 397.76	1677	1 459.77	1755	1 488.63	1860	1 522.56		
40	1840	1296	1 397.60	1440	1 433.60	1720	1 497.20	1800	1 526.80	1908	1 561.60		

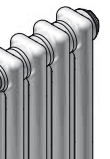
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm	658		677		758		788		858	
												
Model			2066		2068		2076		2079		2086	
Depth			mm	62	62	62	62	62	62	62		
Exponent			n	1,24	1,24	1,24	1,24	1,23	1,23	1,23		
Max. number of elements				64	64	64	64	64	64	64		
Price/element			€	39.76	40.51	41.21	41.57	42.01				
Length			Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price
Elements		mm	W	€	W	€	W	€	W	€	W	€
4	184	199	159.04	204	162.04	224	164.84	231	166.28	248	168.04	
5	230	249	198.80	255	202.55	280	206.05	289	207.85	310	210.05	
6	276	298	238.56	305	243.06	336	247.26	347	249.42	372	252.06	
7	322	348	278.32	356	283.57	392	288.47	405	290.99	434	294.07	
8	368	398	318.08	407	324.08	448	329.68	462	332.56	496	336.08	
9	414	447	357.84	458	364.59	504	370.89	520	374.13	558	378.09	
10	460	497	397.60	509	405.10	560	412.10	578	415.70	620	420.10	
11	506	547	437.36	560	445.61	616	453.31	636	457.27	682	462.11	
12	552	596	477.12	611	486.12	672	494.52	694	498.84	744	504.12	
13	598	646	516.88	662	526.63	728	535.73	751	540.41	806	546.13	
14	644	696	556.64	713	567.14	784	576.94	809	581.98	868	588.14	
15	690	746	596.40	764	607.65	840	618.15	867	623.55	930	630.15	
16	736	795	636.16	814	648.16	896	659.36	925	665.12	992	672.16	
17	782	845	675.92	865	688.67	952	700.57	983	706.69	1054	714.17	
18	828	895	715.68	916	729.18	1008	741.78	1040	748.26	1116	756.18	
19	874	944	755.44	967	769.69	1064	782.99	1098	789.83	1178	798.19	
20	920	994	795.20	1018	810.20	1120	824.20	1156	831.40	1240	840.20	
21	966	1044	834.96	1069	850.71	1176	865.41	1214	872.97	1302	882.21	
22	1012	1093	874.72	1120	891.22	1232	906.62	1272	914.54	1364	924.22	
23	1058	1143	914.48	1171	931.73	1288	947.83	1329	956.11	1426	966.23	
24	1104	1193	954.24	1222	972.24	1344	989.04	1387	997.68	1488	1 008.24	
25	1150	1243	994.00	1273	1 012.75	1400	1 030.25	1445	1 039.25	1550	1 050.25	
26	1196	1292	1 033.76	1323	1 053.26	1456	1 071.46	1503	1 080.82	1612	1 092.26	
27	1242	1342	1 073.52	1374	1 093.77	1512	1 112.67	1561	1 122.39	1674	1 134.27	
28	1288	1392	1 113.28	1425	1 134.28	1568	1 153.88	1618	1 163.96	1736	1 176.28	
29	1334	1441	1 153.04	1476	1 174.79	1624	1 195.09	1676	1 205.53	1798	1 218.29	
30	1380	1491	1 192.80	1527	1 215.30	1680	1 236.30	1734	1 247.10	1860	1 260.30	
31	1426	1541	1 232.56	1578	1 255.81	1736	1 277.51	1792	1 288.67	1922	1 302.31	
32	1472	1590	1 272.32	1629	1 296.32	1792	1 318.72	1850	1 330.24	1984	1 344.32	
33	1518	1640	1 312.08	1680	1 336.83	1848	1 359.93	1907	1 371.81	2046	1 386.33	
34	1564	1690	1 351.84	1731	1 377.34	1904	1 401.14	1965	1 413.38	2108	1 428.34	
35	1610	1740	1 391.60	1782	1 417.85	1960	1 442.35	2023	1 454.95	2170	1 470.35	
36	1656	1789	1 431.36	1832	1 458.36	2016	1 483.56	2081	1 496.52	2232	1 512.36	
37	1702	1839	1 471.12	1883	1 498.87	2072	1 524.77	2139	1 538.09	2294	1 554.37	
38	1748	1889	1 510.88	1934	1 539.38	2128	1 565.98	2196	1 579.66	2356	1 596.38	
39	1794	1938	1 550.64	1985	1 579.89	2184	1 607.19	2254	1 621.23	2418	1 638.39	
40	1840	1988	1 590.40	2036	1 620.40	2240	1 648.40	2312	1 662.80	2480	1 680.40	

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		877		928		958		1658		1858	
													
Model		2088		2093		2096		2166		2186			
Depth		mm		62		62		62		62			
Exponent		n		1,23		1,22		1,22		1,29			
Max. number of elements		64		64		64		22		22			
Price/element		€		42.62		43.27		43.53		51.59		54.72	
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	252	170.48	264	173.08	270	174.12	460	206.36	516	218.88		
5	230	316	213.10	330	216.35	338	217.65	575	257.95	645	273.60		
6	276	379	255.72	396	259.62	406	261.18	690	309.54	774	328.32		
7	322	442	298.34	462	302.89	473	304.71	805	361.13	903	383.04		
8	368	505	340.96	528	346.16	541	348.24	920	412.72	1032	437.76		
9	414	568	383.58	594	389.43	608	391.77	1035	464.31	1161	492.48		
10	460	631	426.20	660	432.70	676	435.30	1150	515.90	1290	547.20		
11	506	694	468.82	726	475.97	744	478.83	1265	567.49	1419	601.92		
12	552	757	511.44	792	519.24	811	522.36	1380	619.08	1548	656.64		
13	598	820	554.06	858	562.51	879	565.89	1495	670.67	1677	711.36		
14	644	883	596.68	924	605.78	946	609.42	1610	722.26	1806	766.08		
15	690	947	639.30	990	649.05	1014	652.95	1725	773.85	1935	820.80		
16	736	1010	681.92	1056	692.32	1082	696.48	1840	825.44	2064	875.52		
17	782	1073	724.54	1122	735.59	1149	740.01	1955	877.03	2193	930.24		
18	828	1136	767.16	1188	778.86	1217	783.54	2070	928.62	2322	984.96		
19	874	1199	809.78	1254	822.13	1284	827.07	2185	980.21	2451	1 039.68		
20	920	1262	852.40	1320	865.40	1352	870.60	2300	1 031.80	2580	1 094.40		
21	966	1325	895.02	1386	908.67	1420	914.13	2415	1 083.39	2709	1 149.12		
22	1012	1388	937.64	1452	951.94	1487	957.66	2530	1 134.98	2838	1 203.84		
23	1058	1451	980.26	1518	995.21	1555	1 001.19	2645	1 186.57	2967	1 258.56		
24	1104	1514	1 022.88	1584	1 038.48	1622	1 044.72	2760	1 238.16	3096	1 313.28		
25	1150	1578	1 065.50	1650	1 081.75	1690	1 088.25	2875	1 289.75	3225	1 368.00		
26	1196	1641	1 108.12	1716	1 125.02	1758	1 131.78	2990	1 341.34	3354	1 422.72		
27	1242	1704	1 150.74	1782	1 168.29	1825	1 175.31	3105	1 392.93	3483	1 477.44		
28	1288	1767	1 193.36	1848	1 211.56	1893	1 218.84	3220	1 444.52	3612	1 532.16		
29	1334	1830	1 235.98	1914	1 254.83	1960	1 262.37	3335	1 496.11	3741	1 586.88		
30	1380	1893	1 278.60	1980	1 298.10	2028	1 305.90	3450	1 547.70	3870	1 641.60		
31	1426	1956	1 321.22	2046	1 341.37	2096	1 349.43	3565	1 599.29	3999	1 696.32		
32	1472	2019	1 363.84	2112	1 384.64	2163	1 392.96	3680	1 650.88	4128	1 751.04		
33	1518	2082	1 406.46	2178	1 427.91	2231	1 436.49	3795	1 702.47	4257	1 805.76		
34	1564	2145	1 449.08	2244	1 471.18	2298	1 480.02	3910	1 754.06	4386	1 860.48		
35	1610	2209	1 491.70	2310	1 514.45	2366	1 523.55	4025	1 805.65	4515	1 915.20		
36	1656	2272	1 534.32	2376	1 557.72	2434	1 567.08	4140	1 857.24	4644	1 969.92		
37	1702	2335	1 576.94	2442	1 600.99	2501	1 610.61	4255	1 908.83	4773	2 024.64		
38	1748	2398	1 619.56	2508	1 644.26	2569	1 654.14	4370	1 960.42	4902	2 079.36		
39	1794	2461	1 662.18	2574	1 687.53	2636	1 697.67	4485	2 012.01	5031	2 134.08		
40	1840	2524	1 704.80	2640	1 730.80	2704	1 741.20	4600	2 063.60	5160	2 188.80		

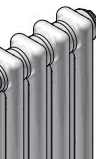
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		2058		366		416		566		596	
													
Model		2206		3037		3042		3057		3059			
Depth mm		62		100		100		100		100			
Exponent n		1,28		1,28		1,28		1,27		1,27			
Max. number of elements		22		64		64		64		64			
Price/element €		59.68		38.01		39.20		42.58		43.51			
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	568	238.72	154	152.04	174	156.80	231	170.32	242	174.04		
5	230	710	298.40	193	190.05	218	196.00	289	212.90	303	217.55		
6	276	852	358.08	232	228.06	261	235.20	347	255.48	363	261.06		
7	322	994	417.76	270	266.07	305	274.40	405	298.06	424	304.57		
8	368	1136	477.44	309	304.08	348	313.60	462	340.64	484	348.08		
9	414	1278	537.12	347	342.09	392	352.80	520	383.22	545	391.59		
10	460	1420	596.80	386	380.10	435	392.00	578	425.80	605	435.10		
11	506	1562	656.48	425	418.11	479	431.20	636	468.38	666	478.61		
12	552	1704	716.16	463	456.12	522	470.40	694	510.96	726	522.12		
13	598	1846	775.84	502	494.13	566	509.60	751	553.54	787	565.63		
14	644	1988	835.52	540	532.14	609	548.80	809	596.12	847	609.14		
15	690	2130	895.20	579	570.15	653	588.00	867	638.70	908	652.65		
16	736	2272	954.88	618	608.16	696	627.20	925	681.28	968	696.16		
17	782	2414	1 014.56	656	646.17	740	666.40	983	723.86	1029	739.67		
18	828	2556	1 074.24	695	684.18	783	705.60	1040	766.44	1089	783.18		
19	874	2698	1 133.92	733	722.19	827	744.80	1098	809.02	1150	826.69		
20	920	2840	1 193.60	772	760.20	870	784.00	1156	851.60	1210	870.20		
21	966	2982	1 253.28	811	798.21	914	823.20	1214	894.18	1271	913.71		
22	1012	3124	1 312.96	849	836.22	957	862.40	1272	936.76	1331	957.22		
23	1058	3266	1 372.64	888	874.23	1001	901.60	1329	979.34	1392	1 000.73		
24	1104	3408	1 432.32	926	912.24	1044	940.80	1387	1 021.92	1452	1 044.24		
25	1150	3550	1 492.00	965	950.25	1088	980.00	1445	1 064.50	1513	1 087.75		
26	1196	3692	1 551.68	1004	988.26	1131	1 019.20	1503	1 107.08	1573	1 131.26		
27	1242	3834	1 611.36	1042	1 026.27	1175	1 058.40	1561	1 149.66	1634	1 174.77		
28	1288	3976	1 671.04	1081	1 064.28	1218	1 097.60	1618	1 192.24	1694	1 218.28		
29	1334	4118	1 730.72	1119	1 102.29	1262	1 136.80	1676	1 234.82	1755	1 261.79		
30	1380	4260	1 790.40	1158	1 140.30	1305	1 176.00	1734	1 277.40	1815	1 305.30		
31	1426	4402	1 850.08	1197	1 178.31	1349	1 215.20	1792	1 319.98	1876	1 348.81		
32	1472	4544	1 909.76	1235	1 216.32	1392	1 254.40	1850	1 362.56	1936	1 392.32		
33	1518	4686	1 969.44	1274	1 254.33	1436	1 293.60	1907	1 405.14	1997	1 435.83		
34	1564	4828	2 029.12	1312	1 292.34	1479	1 332.80	1965	1 447.72	2057	1 479.34		
35	1610	4970	2 088.80	1351	1 330.35	1523	1 372.00	2023	1 490.30	2118	1 522.85		
36	1656	5112	2 148.48	1390	1 368.36	1566	1 411.20	2081	1 532.88	2178	1 566.36		
37	1702	5254	2 208.16	1428	1 406.37	1610	1 450.40	2139	1 575.46	2239	1 609.87		
38	1748	5396	2 267.84	1467	1 444.38	1653	1 489.60	2196	1 618.04	2299	1 653.38		
39	1794	5538	2 327.52	1505	1 482.39	1697	1 528.80	2254	1 660.62	2360	1 696.89		
40	1840	5680	2 387.20	1544	1 520.40	1740	1 568.00	2312	1 703.20	2420	1 740.40		

Warning: Weight over 100 kg

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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		636		666		685		766		796	
													
Model		3064		3067		3069		3077		3079			
Depth	mm	100		100		100		100		100			
Exponent	n	1,27		1,26		1,26		1,26		1,26			
Max. number of elements		64		64		64		64		64			
Price/element	€	44.93		46.03		46.66		47.85		49.49			
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	257	179.72	268	184.12	274	186.64	303	191.40	310	197.96		
5	230	321	224.65	335	230.15	343	233.30	379	239.25	387	247.45		
6	276	385	269.58	401	276.18	412	279.96	454	287.10	464	296.94		
7	322	449	314.51	468	322.21	480	326.62	530	334.95	542	346.43		
8	368	514	359.44	535	368.24	549	373.28	606	382.80	619	395.92		
9	414	578	404.37	602	414.27	617	419.94	681	430.65	697	445.41		
10	460	642	449.30	669	460.30	686	466.60	757	478.50	774	494.90		
11	506	706	494.23	736	506.33	755	513.26	833	526.35	851	544.39		
12	552	770	539.16	803	552.36	823	559.92	908	574.20	929	593.88		
13	598	835	584.09	870	598.39	892	606.58	984	622.05	1006	643.37		
14	644	899	629.02	937	644.42	960	653.24	1060	669.90	1084	692.86		
15	690	963	673.95	1004	690.45	1029	699.90	1136	717.75	1161	742.35		
16	736	1027	718.88	1070	736.48	1098	746.56	1211	765.60	1238	791.84		
17	782	1091	763.81	1137	782.51	1166	793.22	1287	813.45	1316	841.33		
18	828	1156	808.74	1204	828.54	1235	839.88	1363	861.30	1393	890.82		
19	874	1220	853.67	1271	874.57	1303	886.54	1438	909.15	1471	940.31		
20	920	1284	898.60	1338	920.60	1372	933.20	1514	957.00	1548	989.80		
21	966	1348	943.53	1405	966.63	1441	979.86	1590	1 004.85	1625	1 039.29		
22	1012	1412	988.46	1472	1 012.66	1509	1 026.52	1665	1 052.70	1703	1 088.78		
23	1058	1477	1 033.39	1539	1 058.69	1578	1 073.18	1741	1 100.55	1780	1 138.27		
24	1104	1541	1 078.32	1606	1 104.72	1646	1 119.84	1817	1 148.40	1858	1 187.76		
25	1150	1605	1 123.25	1673	1 150.75	1715	1 166.50	1893	1 196.25	1935	1 237.25		
26	1196	1669	1 168.18	1739	1 196.78	1784	1 213.16	1968	1 244.10	2012	1 286.74		
27	1242	1733	1 213.11	1806	1 242.81	1852	1 259.82	2044	1 291.95	2090	1 336.23		
28	1288	1798	1 258.04	1873	1 288.84	1921	1 306.48	2120	1 339.80	2167	1 385.72		
29	1334	1862	1 302.97	1940	1 334.87	1989	1 353.14	2195	1 387.65	2245	1 435.21		
30	1380	1926	1 347.90	2007	1 380.90	2058	1 399.80	2271	1 435.50	2322	1 484.70		
31	1426	1990	1 392.83	2074	1 426.93	2127	1 446.46	2347	1 483.35	2399	1 534.19		
32	1472	2054	1 437.76	2141	1 472.96	2195	1 493.12	2422	1 531.20	2477	1 583.68		
33	1518	2119	1 482.69	2208	1 518.99	2264	1 539.78	2498	1 579.05	2554	1 633.17		
34	1564	2183	1 527.62	2275	1 565.02	2332	1 586.44	2574	1 626.90	2632	1 682.66		
35	1610	2247	1 572.55	2342	1 611.05	2401	1 633.10	2650	1 674.75	2709	1 732.15		
36	1656	2311	1 617.48	2408	1 657.08	2470	1 679.76	2725	1 722.60	2786	1 781.64		
37	1702	2375	1 662.41	2475	1 703.11	2538	1 726.42	2801	1 770.45	2864	1 831.13		
38	1748	2440	1 707.34	2542	1 749.14	2607	1 773.08	2877	1 818.30	2941	1 880.62		
39	1794	2504	1 752.27	2609	1 795.17	2675	1 819.74	2952	1 866.15	3019	1 930.11		
40	1840	2568	1 797.20	2676	1 841.20	2744	1 866.40	3028	1 914.00	3096	1 979.60		

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

 Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		866		885		936		966		1066	
													
Model		3087		3089		3094		3097		3107			
Depth mm		100		100		100		100		100			
Exponent n		1,26		1,26		1,25		1,25		1,25			
Max. number of elements		64		64		64		64		22			
Price/element €		50.08		50.70		51.29		51.81		58.45			
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	337	200.32	343	202.80	360	205.16	370	207.24	400	233.80		
5	230	421	250.40	429	253.50	450	256.45	462	259.05	500	292.25		
6	276	505	300.48	515	304.20	540	307.74	554	310.86	600	350.70		
7	322	589	350.56	601	354.90	630	359.03	647	362.67	700	409.15		
8	368	674	400.64	686	405.60	720	410.32	739	414.48	800	467.60		
9	414	758	450.72	772	456.30	810	461.61	832	466.29	900	526.05		
10	460	842	500.80	858	507.00	900	512.90	924	518.10	1000	584.50		
11	506	926	550.88	944	557.70	990	564.19	1016	569.91	1100	642.95		
12	552	1010	600.96	1030	608.40	1080	615.48	1109	621.72	1200	701.40		
13	598	1095	651.04	1115	659.10	1170	666.77	1201	673.53	1300	759.85		
14	644	1179	701.12	1201	709.80	1260	718.06	1294	725.34	1400	818.30		
15	690	1263	751.20	1287	760.50	1350	769.35	1386	777.15	1500	876.75		
16	736	1347	801.28	1373	811.20	1440	820.64	1478	828.96	1600	935.20		
17	782	1431	851.36	1459	861.90	1530	871.93	1571	880.77	1700	993.65		
18	828	1516	901.44	1544	912.60	1620	923.22	1663	932.58	1800	1 052.10		
19	874	1600	951.52	1630	963.30	1710	974.51	1756	984.39	1900	1 110.55		
20	920	1684	1 001.60	1716	1 014.00	1800	1 025.80	1848	1 036.20	2000	1 169.00		
21	966	1768	1 051.68	1802	1 064.70	1890	1 077.09	1940	1 088.01	2100	1 227.45		
22	1012	1852	1 101.76	1888	1 115.40	1980	1 128.38	2033	1 139.82	2200	1 285.90		
23	1058	1937	1 151.84	1973	1 166.10	2070	1 179.67	2125	1 191.63	2300	1 344.35		
24	1104	2021	1 201.92	2059	1 216.80	2160	1 230.96	2218	1 243.44	2400	1 402.80		
25	1150	2105	1 252.00	2145	1 267.50	2250	1 282.25	2310	1 295.25	2500	1 461.25		
26	1196	2189	1 302.08	2231	1 318.20	2340	1 333.54	2402	1 347.06	2600	1 519.70		
27	1242	2273	1 352.16	2317	1 368.90	2430	1 384.83	2495	1 398.87	2700	1 578.15		
28	1288	2358	1 402.24	2402	1 419.60	2520	1 436.12	2587	1 450.68	2800	1 636.60		
29	1334	2442	1 452.32	2488	1 470.30	2610	1 487.41	2680	1 502.49	2900	1 695.05		
30	1380	2526	1 502.40	2574	1 521.00	2700	1 538.70	2772	1 554.30	3000	1 753.50		
31	1426	2610	1 552.48	2660	1 571.70	2790	1 589.99	2864	1 606.11	3100	1 811.95		
32	1472	2694	1 602.56	2746	1 622.40	2880	1 641.28	2957	1 657.92	3200	1 870.40		
33	1518	2779	1 652.64	2831	1 673.10	2970	1 692.57	3049	1 709.73	3300	1 928.85		
34	1564	2863	1 702.72	2917	1 723.80	3060	1 743.86	3142	1 761.54	3400	1 987.30		
35	1610	2947	1 752.80	3003	1 774.50	3150	1 795.15	3234	1 813.35	3500	2 045.75		
36	1656	3031	1 802.88	3089	1 825.20	3240	1 846.44	3326	1 865.16	3600	2 104.20		
37	1702	3115	1 852.96	3175	1 875.90	3330	1 897.73	3419	1 916.97	3700	2 162.65		
38	1748	3200	1 903.04	3260	1 926.60	3420	1 949.02	3511	1 968.78	3800	2 221.10		
39	1794	3284	1 953.12	3346	1 977.30	3510	2 000.31	3604	2 020.59	3900	2 279.55		
40	1840	3368	2 003.20	3432	2 028.00	3600	2 051.60	3696	2 072.40	4000	2 338.00		

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm	1666		1866		2066		366		416	
												
Model			3167		3187		3207		4037		4042	
Depth			mm		100		100		136		136	
Exponent			n		1,31		1,32		1,28		1,28	
Max. number of elements			22		22		22		64		64	
Price/element			€		74.17		81.81		41.90		43.53	
Length			Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price
Elements	mm		W	€	W	€	W	€	W	€	W	€
4	184		616	296.68	684	327.24	752	356.44	202	167.60	228	174.12
5	230		770	370.85	855	409.05	940	445.55	253	209.50	285	217.65
6	276		924	445.02	1026	490.86	1128	534.66	304	251.40	342	261.18
7	322		1078	519.19	1197	572.67	1316	623.77	354	293.30	399	304.71
8	368		1232	593.36	1368	654.48	1504	712.88	405	335.20	456	348.24
9	414		1386	667.53	1539	736.29	1692	801.99	455	377.10	513	391.77
10	460		1540	741.70	1710	818.10	1880	891.10	506	419.00	570	435.30
11	506		1694	815.87	1881	899.91	2068	980.21	557	460.90	627	478.83
12	552		1848	890.04	2052	981.72	2256	1 069.32	607	502.80	684	522.36
13	598		2002	964.21	2223	1 063.53	2444	1 158.43	658	544.70	741	565.89
14	644		2156	1 038.38	2394	1 145.34	2632	1 247.54	708	586.60	798	609.42
15	690		2310	1 112.55	2565	1 227.15	2820	1 336.65	759	628.50	855	652.95
16	736		2464	1 186.72	2736	1 308.96	3008	1 425.76	810	670.40	912	696.48
17	782		2618	1 260.89	2907	1 390.77	3196	1 514.87	860	712.30	969	740.01
18	828		2772	1 335.06	3078	1 472.58	3384	1 603.98	911	754.20	1026	783.54
19	874		2926	1 409.23	3249	1 554.39	3572	1 693.09	961	796.10	1083	827.07
20	920		3080	1 483.40	3420	1 636.20	3760	1 782.20	1012	838.00	1140	870.60
21	966		3234	1 557.57	3591	1 718.01	3948	1 871.31	1063	879.90	1197	914.13
22	1012		3388	1 631.74	3762	1 799.82	4136	1 960.42	1113	921.80	1254	957.66
23	1058		3542	1 705.91	3933	1 881.63	4324	2 049.53	1164	963.70	1311	1 001.19
24	1104		3696	1 780.08	4104	1 963.44	4512	2 138.64	1214	1 005.60	1368	1 044.72
25	1150		3850	1 854.25	4275	2 045.25	4700	2 227.75	1265	1 047.50	1425	1 088.25
26	1196		4004	1 928.42	4446	2 127.06	4888	2 316.86	1316	1 089.40	1482	1 131.78
27	1242		4158	2 002.59	4617	2 208.87	5076	2 405.97	1366	1 131.30	1539	1 175.31
28	1288		4312	2 076.76	4788	2 290.68	5264	2 495.08	1417	1 173.20	1596	1 218.84
29	1334		4466	2 150.93	4959	2 372.49	5452	2 584.19	1467	1 215.10	1653	1 262.37
30	1380		4620	2 225.10	5130	2 454.30	5640	2 673.30	1518	1 257.00	1710	1 305.90
31	1426		4774	2 299.27	5301	2 536.11	5828	2 762.41	1569	1 298.90	1767	1 349.43
32	1472		4928	2 373.44	5472	2 617.92	6016	2 851.52	1619	1 340.80	1824	1 392.96
33	1518		5082	2 447.61	5643	2 699.73	6204	2 940.63	1670	1 382.70	1881	1 436.49
34	1564		5236	2 521.78	5814	2 781.54	6392	3 029.74	1720	1 424.60	1938	1 480.02
35	1610		5390	2 595.95	5985	2 863.35	6580	3 118.85	1771	1 466.50	1995	1 523.55
36	1656		5544	2 670.12	6156	2 945.16	6768	3 207.96	1822	1 508.40	2052	1 567.08
37	1702		5698	2 744.29	6327	3 026.97	6956	3 297.07	1872	1 550.30	2109	1 610.61
38	1748		5852	2 818.46	6498	3 108.78	7144	3 386.18	1923	1 592.20	2166	1 654.14
39	1794		6006	2 892.63	6669	3 190.59	7332	3 475.29	1973	1 634.10	2223	1 697.67
40	1840		6160	2 966.80	6840	3 272.40	7520	3 564.40	2024	1 676.00	2280	1 741.20

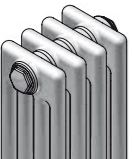
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		566		596		636		666		685	
													
Model		4057		4059		4064		4067		4069			
Depth mm		136		136		136		136		136			
Exponent n		1,27		1,27		1,27		1,26		1,26			
Max. number of elements		64		64		64		64		64			
Price/element €		48.97		51.89		54.14		55.36		57.11			
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	303	195.88	317	207.56	336	216.56	350	221.44	360	228.44		
5	230	379	244.85	397	259.45	421	270.70	438	276.80	450	285.55		
6	276	454	293.82	476	311.34	505	324.84	526	332.16	539	342.66		
7	322	530	342.79	555	363.23	589	378.98	613	387.52	629	399.77		
8	368	606	391.76	634	415.12	673	433.12	701	442.88	719	456.88		
9	414	681	440.73	714	467.01	757	487.26	788	498.24	809	513.99		
10	460	757	489.70	793	518.90	841	541.40	876	553.60	899	571.10		
11	506	833	538.67	872	570.79	925	595.54	964	608.96	989	628.21		
12	552	908	587.64	952	622.68	1009	649.68	1051	664.32	1079	685.32		
13	598	984	636.61	1031	674.57	1093	703.82	1139	719.68	1169	742.43		
14	644	1060	685.58	1110	726.46	1177	757.96	1226	775.04	1259	799.54		
15	690	1136	734.55	1190	778.35	1262	812.10	1314	830.40	1349	856.65		
16	736	1211	783.52	1269	830.24	1346	866.24	1402	885.76	1438	913.76		
17	782	1287	832.49	1348	882.13	1430	920.38	1489	941.12	1528	970.87		
18	828	1363	881.46	1427	934.02	1514	974.52	1577	996.48	1618	1 027.98		
19	874	1438	930.43	1507	985.91	1598	1 028.66	1664	1 051.84	1708	1 085.09		
20	920	1514	979.40	1586	1 037.80	1682	1 082.80	1752	1 107.20	1798	1 142.20		
21	966	1590	1 028.37	1665	1 089.69	1766	1 136.94	1840	1 162.56	1888	1 199.31		
22	1012	1665	1 077.34	1745	1 141.58	1850	1 191.08	1927	1 217.92	1978	1 256.42		
23	1058	1741	1 126.31	1824	1 193.47	1934	1 245.22	2015	1 273.28	2068	1 313.53		
24	1104	1817	1 175.28	1903	1 245.36	2018	1 299.36	2102	1 328.64	2158	1 370.64		
25	1150	1893	1 224.25	1983	1 297.25	2103	1 353.50	2190	1 384.00	2248	1 427.75		
26	1196	1968	1 273.22	2062	1 349.14	2187	1 407.64	2278	1 439.36	2337	1 484.86		
27	1242	2044	1 322.19	2141	1 401.03	2271	1 461.78	2365	1 494.72	2427	1 541.97		
28	1288	2120	1 371.16	2220	1 452.92	2355	1 515.92	2453	1 550.08	2517	1 599.08		
29	1334	2195	1 420.13	2300	1 504.81	2439	1 570.06	2540	1 605.44	2607	1 656.19		
30	1380	2271	1 469.10	2379	1 556.70	2523	1 624.20	2628	1 660.80	2697	1 713.30		
31	1426	2347	1 518.07	2458	1 608.59	2607	1 678.34	2716	1 716.16	2787	1 770.41		
32	1472	2422	1 567.04	2538	1 660.48	2691	1 732.48	2803	1 771.52	2877	1 827.52		
33	1518	2498	1 616.01	2617	1 712.37	2775	1 786.62	2891	1 826.88	2967	1 884.63		
34	1564	2574	1 664.98	2696	1 764.26	2859	1 840.76	2978	1 882.24	3057	1 941.74		
35	1610	2650	1 713.95	2776	1 816.15	2944	1 894.90	3066	1 937.60	3147	1 998.85		
36	1656	2725	1 762.92	2855	1 868.04	3028	1 949.04	3154	1 992.96	3236	2 055.96		
37	1702	2801	1 811.89	2934	1 919.93	3112	2 003.18	3241	2 048.32	3326	2 113.07		
38	1748	2877	1 860.86	3013	1 971.82	3196	2 057.32	3329	2 103.68	3416	2 170.18		
39	1794	2952	1 909.83	3093	2 023.71	3280	2 111.46	3416	2 159.04	3506	2 227.29		
40	1840	3028	1 958.80	3172	2 075.60	3364	2 165.60	3504	2 214.40	3596	2 284.40		

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		766		796		866		885		936	
													
Model		4077		4079		4087		4089		4094			
Depth		mm		136		136		136		136			
Exponent		n		1,26		1,26		1,26		1,25			
Max. number of elements		64		64		64		64		64			
Price/element		€		58.17		59.21		62.96		64.43		66.09	
Length		Φ _s		Price		Φ _s		Price		Φ _s		Price	
Elements	mm	W		€		W		€		W		€	
4	184	397	232.68	412	236.84	444	251.84	448	257.72	472	264.36		
5	230	496	290.85	515	296.05	555	314.80	560	322.15	590	330.45		
6	276	595	349.02	618	355.26	666	377.76	672	386.58	708	396.54		
7	322	694	407.19	721	414.47	777	440.72	784	451.01	826	462.63		
8	368	794	465.36	824	473.68	888	503.68	896	515.44	944	528.72		
9	414	893	523.53	927	532.89	999	566.64	1008	579.87	1062	594.81		
10	460	992	581.70	1030	592.10	1110	629.60	1120	644.30	1180	660.90		
11	506	1091	639.87	1133	651.31	1221	692.56	1232	708.73	1298	726.99		
12	552	1190	698.04	1236	710.52	1332	755.52	1344	773.16	1416	793.08		
13	598	1290	756.21	1339	769.73	1443	818.48	1456	837.59	1534	859.17		
14	644	1389	814.38	1442	828.94	1554	881.44	1568	902.02	1652	925.26		
15	690	1488	872.55	1545	888.15	1665	944.40	1680	966.45	1770	991.35		
16	736	1587	930.72	1648	947.36	1776	1 007.36	1792	1 030.88	1888	1 057.44		
17	782	1686	988.89	1751	1 006.57	1887	1 070.32	1904	1 095.31	2006	1 123.53		
18	828	1786	1 047.06	1854	1 065.78	1998	1 133.28	2016	1 159.74	2124	1 189.62		
19	874	1885	1 105.23	1957	1 124.99	2109	1 196.24	2128	1 224.17	2242	1 255.71		
20	920	1984	1 163.40	2060	1 184.20	2220	1 259.20	2240	1 288.60	2360	1 321.80		
21	966	2083	1 221.57	2163	1 243.41	2331	1 322.16	2352	1 353.03	2478	1 387.89		
22	1012	2182	1 279.74	2266	1 302.62	2442	1 385.12	2464	1 417.46	2596	1 453.98		
23	1058	2282	1 337.91	2369	1 361.83	2553	1 448.08	2576	1 481.89	2714	1 520.07		
24	1104	2381	1 396.08	2472	1 421.04	2664	1 511.04	2688	1 546.32	2832	1 586.16		
25	1150	2480	1 454.25	2575	1 480.25	2775	1 574.00	2800	1 610.75	2950	1 652.25		
26	1196	2579	1 512.42	2678	1 539.46	2886	1 636.96	2912	1 675.18	3068	1 718.34		
27	1242	2678	1 570.59	2781	1 598.67	2997	1 699.92	3024	1 739.61	3186	1 784.43		
28	1288	2778	1 628.76	2884	1 657.88	3108	1 762.88	3136	1 804.04	3304	1 850.52		
29	1334	2877	1 686.93	2987	1 717.09	3219	1 825.84	3248	1 868.47	3422	1 916.61		
30	1380	2976	1 745.10	3090	1 776.30	3330	1 888.80	3360	1 932.90	3540	1 982.70		
31	1426	3075	1 803.27	3193	1 835.51	3441	1 951.76	3472	1 997.33	3658	2 048.79		
32	1472	3174	1 861.44	3296	1 894.72	3552	2 014.72	3584	2 061.76	3776	2 114.88		
33	1518	3274	1 919.61	3399	1 953.93	3663	2 077.68	3696	2 126.19	3894	2 180.97		
34	1564	3373	1 977.78	3502	2 013.14	3774	2 140.64	3808	2 190.62	4012	2 247.06		
35	1610	3472	2 035.95	3605	2 072.35	3885	2 203.60	3920	2 255.05	4130	2 313.15		
36	1656	3571	2 094.12	3708	2 131.56	3996	2 266.56	4032	2 319.48	4248	2 379.24		
37	1702	3670	2 152.29	3811	2 190.77	4107	2 329.52	4144	2 383.91	4366	2 445.33		
38	1748	3770	2 210.46	3914	2 249.98	4218	2 392.48	4256	2 448.34	4484	2 511.42		
39	1794	3869	2 268.63	4017	2 309.19	4329	2 455.44	4368	2 512.77	4602	2 577.51		
40	1840	3968	2 326.80	4120	2 368.40	4440	2 518.40	4480	2 577.20	4720	2 643.60		

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		966		1066		1666		1866		2066	
													
Model		4097		4107		4167		4187		4207			
Depth mm		136		136		136		136		136			
Exponent n		1,25		1,25		1,31		1,32		1,32			
Max. number of elements		60		22		22		22		22			
Price/element €		68.63		76.04		88.37		102.42		113.04			
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	484	274.52	528	304.16	792	353.48	880	409.68	968	452.16		
5	230	605	343.15	660	380.20	990	441.85	1100	512.10	1210	565.20		
6	276	726	411.78	792	456.24	1188	530.22	1320	614.52	1452	678.24		
7	322	847	480.41	924	532.28	1386	618.59	1540	716.94	1694	791.28		
8	368	968	549.04	1056	608.32	1584	706.96	1760	819.36	1936	904.32		
9	414	1089	617.67	1188	684.36	1782	795.33	1980	921.78	2178	1 017.36		
10	460	1210	686.30	1320	760.40	1980	883.70	2200	1 024.20	2420	1 130.40		
11	506	1331	754.93	1452	836.44	2178	972.07	2420	1 126.62	2662	1 243.44		
12	552	1452	823.56	1584	912.48	2376	1 060.44	2640	1 229.04	2904	1 356.48		
13	598	1573	892.19	1716	988.52	2574	1 148.81	2860	1 331.46	3146	1 469.52		
14	644	1694	960.82	1848	1 064.56	2772	1 237.18	3080	1 433.88	3388	1 582.56		
15	690	1815	1 029.45	1980	1 140.60	2970	1 325.55	3300	1 536.30	3630	1 695.60		
16	736	1936	1 098.08	2112	1 216.64	3168	1 413.92	3520	1 638.72	3872	1 808.64		
17	782	2057	1 166.71	2244	1 292.68	3366	1 502.29	3740	1 741.14	4114	1 921.68		
18	828	2178	1 235.34	2376	1 368.72	3564	1 590.66	3960	1 843.56	4356	2 034.72		
19	874	2299	1 303.97	2508	1 444.76	3762	1 679.03	4180	1 945.98	4598	2 147.76		
20	920	2420	1 372.60	2640	1 520.80	3960	1 767.40	4400	2 048.40	4840	2 260.80		
21	966	2541	1 441.23	2772	1 596.84	4158	1 855.77	4620	2 150.82	5082	2 373.84		
22	1012	2662	1 509.86	2904	1 672.88	4356	1 944.14	4840	2 253.24	5324	2 486.88		
23	1058	2783	1 578.49	3036	1 748.92	4554	2 032.51	5060	2 355.66	5566	2 599.92		
24	1104	2904	1 647.12	3168	1 824.96	4752	2 120.88	5280	2 458.08	5808	2 712.96		
25	1150	3025	1 715.75	3300	1 901.00	4950	2 209.25	5500	2 560.50	6050	2 826.00		
26	1196	3146	1 784.38	3432	1 977.04	5148	2 297.62	5720	2 662.92	6292	2 939.04		
27	1242	3267	1 853.01	3564	2 053.08	5346	2 385.99	5940	2 765.34	6534	3 052.08		
28	1288	3388	1 921.64	3696	2 129.12	5544	2 474.36	6160	2 867.76	6776	3 165.12		
29	1334	3509	1 990.27	3828	2 205.16	5742	2 562.73	6380	2 970.18	7018	3 278.16		
30	1380	3630	2 058.90	3960	2 281.20	5940	2 651.10	6600	3 072.60	7260	3 391.20		
31	1426	3751	2 127.53	4092	2 357.24	6138	2 739.47	6820	3 175.02	7502	3 504.24		
32	1472	3872	2 196.16	4224	2 433.28	6336	2 827.84	7040	3 277.44	7744	3 617.28		
33	1518	3993	2 264.79	4356	2 509.32	6534	2 916.21	7260	3 379.86	7986	3 730.32		
34	1564	4114	2 333.42	4488	2 585.36	6732	3 004.58	7480	3 482.28	8228	3 843.36		
35	1610	4235	2 402.05	4620	2 661.40	6930	3 092.95	7700	3 584.70	8470	3 956.40		
36	1656	4356	2 470.68	4752	2 737.44	7128	3 181.32	7920	3 687.12	8712	4 069.44		
37	1702	4477	2 539.31	4884	2 813.48	7326	3 269.69	8140	3 789.54	8954	4 182.48		
38	1748	4598	2 607.94	5016	2 889.52	7524	3 358.06	8360	3 891.96	9196	4 295.52		
39	1794	4719	2 676.57	5148	2 965.56	7722	3 446.43	8580	3 994.38	9438	4 408.56		
40	1840	4840	2 745.20	5280	3 041.60	7920	3 534.80	8800	4 096.80	9680	4 521.60		

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		366		566		666		685		766	
													
Model		5037		5057		5067		5069		5077			
Depth mm		173		173		173		173		173			
Exponent n		1,28		1,27		1,26		1,26		1,26			
Max. number of elements		64		64		64		64		50			
Price/element €		49.61		57.47		65.91		71.64		72.66			
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	250	198.44	374	229.88	432	263.64	444	286.56	492	290.64		
5	230	313	248.05	468	287.35	540	329.55	555	358.20	615	363.30		
6	276	375	297.66	561	344.82	648	395.46	666	429.84	738	435.96		
7	322	438	347.27	655	402.29	756	461.37	777	501.48	861	508.62		
8	368	500	396.88	748	459.76	864	527.28	888	573.12	984	581.28		
9	414	563	446.49	842	517.23	972	593.19	999	644.76	1107	653.94		
10	460	625	496.10	935	574.70	1080	659.10	1110	716.40	1230	726.60		
11	506	688	545.71	1029	632.17	1188	725.01	1221	788.04	1353	799.26		
12	552	750	595.32	1122	689.64	1296	790.92	1332	859.68	1476	871.92		
13	598	813	644.93	1216	747.11	1404	856.83	1443	931.32	1599	944.58		
14	644	875	694.54	1309	804.58	1512	922.74	1554	1 002.96	1722	1 017.24		
15	690	938	744.15	1403	862.05	1620	988.65	1665	1 074.60	1845	1 089.90		
16	736	1000	793.76	1496	919.52	1728	1 054.56	1776	1 146.24	1968	1 162.56		
17	782	1063	843.37	1590	976.99	1836	1 120.47	1887	1 217.88	2091	1 235.22		
18	828	1125	892.98	1683	1 034.46	1944	1 186.38	1998	1 289.52	2214	1 307.88		
19	874	1188	942.59	1777	1 091.93	2052	1 252.29	2109	1 361.16	2337	1 380.54		
20	920	1250	992.20	1870	1 149.40	2160	1 318.20	2220	1 432.80	2460	1 453.20		
21	966	1313	1 041.81	1964	1 206.87	2268	1 384.11	2331	1 504.44	2583	1 525.86		
22	1012	1375	1 091.42	2057	1 264.34	2376	1 450.02	2442	1 576.08	2706	1 598.52		
23	1058	1438	1 141.03	2151	1 321.81	2484	1 515.93	2553	1 647.72	2829	1 671.18		
24	1104	1500	1 190.64	2244	1 379.28	2592	1 581.84	2664	1 719.36	2952	1 743.84		
25	1150	1563	1 240.25	2338	1 436.75	2700	1 647.75	2775	1 791.00	3075	1 816.50		
26	1196	1625	1 289.86	2431	1 494.22	2808	1 713.66	2886	1 862.64	3198	1 889.16		
27	1242	1688	1 339.47	2525	1 551.69	2916	1 779.57	2997	1 934.28	3321	1 961.82		
28	1288	1750	1 389.08	2618	1 609.16	3024	1 845.48	3108	2 005.92	3444	2 034.48		
29	1334	1813	1 438.69	2712	1 666.63	3132	1 911.39	3219	2 077.56	3567	2 107.14		
30	1380	1875	1 488.30	2805	1 724.10	3240	1 977.30	3330	2 149.20	3690	2 179.80		
31	1426	1938	1 537.91	2899	1 781.57	3348	2 043.21	3441	2 220.84	3813	2 252.46		
32	1472	2000	1 587.52	2992	1 839.04	3456	2 109.12	3552	2 292.48	3936	2 325.12		
33	1518	2063	1 637.13	3086	1 896.51	3564	2 175.03	3663	2 364.12	4059	2 397.78		
34	1564	2125	1 686.74	3179	1 953.98	3672	2 240.94	3774	2 435.76	4182	2 470.44		
35	1610	2188	1 736.35	3273	2 011.45	3780	2 306.85	3885	2 507.40	4305	2 543.10		
36	1656	2250	1 785.96	3366	2 068.92	3888	2 372.76	3996	2 579.04	4428	2 615.76		
37	1702	2313	1 835.57	3460	2 126.39	3996	2 438.67	4107	2 650.68	4551	2 688.42		
38	1748	2375	1 885.18	3553	2 183.86	4104	2 504.58	4218	2 722.32	4674	2 761.08		
39	1794	2438	1 934.79	3647	2 241.33	4212	2 570.49	4329	2 793.96	4797	2 833.74		
40	1840	2500	1 984.40	3740	2 298.80	4320	2 636.40	4440	2 865.60	4920	2 906.40		
Warning: Weight over 100 kg													

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		866		885		966		1066		266	
													
Model		5087		5089		5097		5107		6027			
Depth mm		173		173		173		173		210			
Exponent n		1,26		1,26		1,25		1,25		1,28			
Max. number of elements		50		50		50		22		64			
Price/element €		74.62		76.41		80.04		92.93		55.36			
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	544	298.48	556	305.64	600	320.16	648	371.72	219	221.44		
5	230	680	373.10	695	382.05	750	400.20	810	464.65	274	276.80		
6	276	816	447.72	834	458.46	900	480.24	972	557.58	328	332.16		
7	322	952	522.34	973	534.87	1050	560.28	1134	650.51	383	387.52		
8	368	1088	596.96	1112	611.28	1200	640.32	1296	743.44	438	442.88		
9	414	1224	671.58	1251	687.69	1350	720.36	1458	836.37	492	498.24		
10	460	1360	746.20	1390	764.10	1500	800.40	1620	929.30	547	553.60		
11	506	1496	820.82	1529	840.51	1650	880.44	1782	1 022.23	602	608.96		
12	552	1632	895.44	1668	916.92	1800	960.48	1944	1 115.16	656	664.32		
13	598	1768	970.06	1807	993.33	1950	1 040.52	2106	1 208.09	711	719.68		
14	644	1904	1 044.68	1946	1 069.74	2100	1 120.56	2268	1 301.02	766	775.04		
15	690	2040	1 119.30	2085	1 146.15	2250	1 200.60	2430	1 393.95	821	830.40		
16	736	2176	1 193.92	2224	1 222.56	2400	1 280.64	2592	1 486.88	875	885.76		
17	782	2312	1 268.54	2363	1 298.97	2550	1 360.68	2754	1 579.81	930	941.12		
18	828	2448	1 343.16	2502	1 375.38	2700	1 440.72	2916	1 672.74	985	996.48		
19	874	2584	1 417.78	2641	1 451.79	2850	1 520.76	3078	1 765.67	1039	1 051.84		
20	920	2720	1 492.40	2780	1 528.20	3000	1 600.80	3240	1 858.60	1094	1 107.20		
21	966	2856	1 567.02	2919	1 604.61	3150	1 680.84	3402	1 951.53	1149	1 162.56		
22	1012	2992	1 641.64	3058	1 681.02	3300	1 760.88	3564	2 044.46	1203	1 217.92		
23	1058	3128	1 716.26	3197	1 757.43	3450	1 840.92	3726	2 137.39	1258	1 273.28		
24	1104	3264	1 790.88	3336	1 833.84	3600	1 920.96	3888	2 230.32	1313	1 328.64		
25	1150	3400	1 865.50	3475	1 910.25	3750	2 001.00	4050	2 323.25	1368	1 384.00		
26	1196	3536	1 940.12	3614	1 986.66	3900	2 081.04	4212	2 416.18	1422	1 439.36		
27	1242	3672	2 014.74	3753	2 063.07	4050	2 161.08	4374	2 509.11	1477	1 494.72		
28	1288	3808	2 089.36	3892	2 139.48	4200	2 241.12	4536	2 602.04	1532	1 550.08		
29	1334	3944	2 163.98	4031	2 215.89	4350	2 321.16	4698	2 694.97	1586	1 605.44		
30	1380	4080	2 238.60	4170	2 292.30	4500	2 401.20	4860	2 787.90	1641	1 660.80		
31	1426	4216	2 313.22	4309	2 368.71	4650	2 481.24	5022	2 880.83	1696	1 716.16		
32	1472	4352	2 387.84	4448	2 445.12	4800	2 561.28	5184	2 973.76	1750	1 771.52		
33	1518	4488	2 462.46	4587	2 521.53	4950	2 641.32	5346	3 066.69	1805	1 826.88		
34	1564	4624	2 537.08	4726	2 597.94	5100	2 721.36	5508	3 159.62	1860	1 882.24		
35	1610	4760	2 611.70	4865	2 674.35	5250	2 801.40	5670	3 252.55	1915	1 937.60		
36	1656	4896	2 686.32	5004	2 750.76	5400	2 881.44	5832	3 345.48	1969	1 992.96		
37	1702	5032	2 760.94	5143	2 827.17	5550	2 961.48	5994	3 438.41	2024	2 048.32		
38	1748	5168	2 835.56	5282	2 903.58	5700	3 041.52	6156	3 531.34	2079	2 103.68		
39	1794	5304	2 910.18	5421	2 979.99	5850	3 121.56	6318	3 624.27	2133	2 159.04		
40	1840	5440	2 984.80	5560	3 056.40	6000	3 201.60	6480	3 717.20	2188	2 214.40		

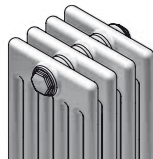
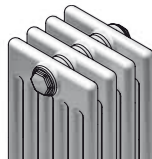
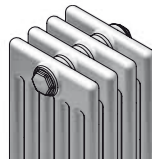
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		366		416		566		666		685	
													
Model		6037		6042		6057		6067		6069			
Depth		mm		210		210		210		210		210	
Exponent		n		1,28		1,28		1,27		1,26		1,26	
Max. number of elements		64		64		64		55		55			
Price/element		€		58.79		60.85		67.80		77.32		81.35	
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	296	235.16	334	243.40	444	271.20	512	309.28	528	325.40		
5	230	370	293.95	418	304.25	555	339.00	640	386.60	660	406.75		
6	276	444	352.74	501	365.10	666	406.80	768	463.92	792	488.10		
7	322	518	411.53	585	425.95	777	474.60	896	541.24	924	569.45		
8	368	592	470.32	668	486.80	888	542.40	1024	618.56	1056	650.80		
9	414	666	529.11	752	547.65	999	610.20	1152	695.88	1188	732.15		
10	460	740	587.90	835	608.50	1110	678.00	1280	773.20	1320	813.50		
11	506	814	646.69	919	669.35	1221	745.80	1408	850.52	1452	894.85		
12	552	888	705.48	1002	730.20	1332	813.60	1536	927.84	1584	976.20		
13	598	962	764.27	1086	791.05	1443	881.40	1664	1 005.16	1716	1 057.55		
14	644	1036	823.06	1169	851.90	1554	949.20	1792	1 082.48	1848	1 138.90		
15	690	1110	881.85	1253	912.75	1665	1 017.00	1920	1 159.80	1980	1 220.25		
16	736	1184	940.64	1336	973.60	1776	1 084.80	2048	1 237.12	2112	1 301.60		
17	782	1258	999.43	1420	1 034.45	1887	1 152.60	2176	1 314.44	2244	1 382.95		
18	828	1332	1 058.22	1503	1 095.30	1998	1 220.40	2304	1 391.76	2376	1 464.30		
19	874	1406	1 117.01	1587	1 156.15	2109	1 288.20	2432	1 469.08	2508	1 545.65		
20	920	1480	1 175.80	1670	1 217.00	2220	1 356.00	2560	1 546.40	2640	1 627.00		
21	966	1554	1 234.59	1754	1 277.85	2331	1 423.80	2688	1 623.72	2772	1 708.35		
22	1012	1628	1 293.38	1837	1 338.70	2442	1 491.60	2816	1 701.04	2904	1 789.70		
23	1058	1702	1 352.17	1921	1 399.55	2553	1 559.40	2944	1 778.36	3036	1 871.05		
24	1104	1776	1 410.96	2004	1 460.40	2664	1 627.20	3072	1 855.68	3168	1 952.40		
25	1150	1850	1 469.75	2088	1 521.25	2775	1 695.00	3200	1 933.00	3300	2 033.75		
26	1196	1924	1 528.54	2171	1 582.10	2886	1 762.80	3328	2 010.32	3432	2 115.10		
27	1242	1998	1 587.33	2255	1 642.95	2997	1 830.60	3456	2 087.64	3564	2 196.45		
28	1288	2072	1 646.12	2338	1 703.80	3108	1 898.40	3584	2 164.96	3696	2 277.80		
29	1334	2146	1 704.91	2422	1 764.65	3219	1 966.20	3712	2 242.28	3828	2 359.15		
30	1380	2220	1 763.70	2505	1 825.50	3330	2 034.00	3840	2 319.60	3960	2 440.50		
31	1426	2294	1 822.49	2589	1 886.35	3441	2 101.80	3968	2 396.92	4092	2 521.85		
32	1472	2368	1 881.28	2672	1 947.20	3552	2 169.60	4096	2 474.24	4224	2 603.20		
33	1518	2442	1 940.07	2756	2 008.05	3663	2 237.40	4224	2 551.56	4356	2 684.55		
34	1564	2516	1 998.86	2839	2 068.90	3774	2 305.20	4352	2 628.88	4488	2 765.90		
35	1610	2590	2 057.65	2923	2 129.75	3885	2 373.00	4480	2 706.20	4620	2 847.25		
36	1656	2664	2 116.44	3006	2 190.60	3996	2 440.80	4608	2 783.52	4752	2 928.60		
37	1702	2738	2 175.23	3090	2 251.45	4107	2 508.60	4736	2 860.84	4884	3 009.95		
38	1748	2812	2 234.02	3173	2 312.30	4218	2 576.40	4864	2 938.16	5016	3 091.30		
39	1794	2886	2 292.81	3257	2 373.15	4329	2 644.20	4992	3 015.48	5148	3 172.65		
40	1840	2960	2 351.60	3340	2 434.00	4440	2 712.00	5120	3 092.80	5280	3 254.00		

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height		mm		766		866		885		966		1066	
													
Model		6077		6087		6089		6097		6107			
Depth mm		210		210		210		210		210			
Exponent n		1,26		1,26		1,26		1,25		1,25			
Max. number of elements		46		46		46		42		22			
Price/element €		86.26		90.18		91.95		93.70		110.45			
Length		Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price	Φ _s	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	588	345.04	648	360.72	660	367.80	708	374.80	772	441.80		
5	230	735	431.30	810	450.90	825	459.75	885	468.50	965	552.25		
6	276	882	517.56	972	541.08	990	551.70	1062	562.20	1158	662.70		
7	322	1029	603.82	1134	631.26	1155	643.65	1239	655.90	1351	773.15		
8	368	1176	690.08	1296	721.44	1320	735.60	1416	749.60	1544	883.60		
9	414	1323	776.34	1458	811.62	1485	827.55	1593	843.30	1737	994.05		
10	460	1470	862.60	1620	901.80	1650	919.50	1770	937.00	1930	1 104.50		
11	506	1617	948.86	1782	991.98	1815	1 011.45	1947	1 030.70	2123	1 214.95		
12	552	1764	1 035.12	1944	1 082.16	1980	1 103.40	2124	1 124.40	2316	1 325.40		
13	598	1911	1 121.38	2106	1 172.34	2145	1 195.35	2301	1 218.10	2509	1 435.85		
14	644	2058	1 207.64	2268	1 262.52	2310	1 287.30	2478	1 311.80	2702	1 546.30		
15	690	2205	1 293.90	2430	1 352.70	2475	1 379.25	2655	1 405.50	2895	1 656.75		
16	736	2352	1 380.16	2592	1 442.88	2640	1 471.20	2832	1 499.20	3088	1 767.20		
17	782	2499	1 466.42	2754	1 533.06	2805	1 563.15	3009	1 592.90	3281	1 877.65		
18	828	2646	1 552.68	2916	1 623.24	2970	1 655.10	3186	1 686.60	3474	1 988.10		
19	874	2793	1 638.94	3078	1 713.42	3135	1 747.05	3363	1 780.30	3667	2 098.55		
20	920	2940	1 725.20	3240	1 803.60	3300	1 839.00	3540	1 874.00	3860	2 209.00		
21	966	3087	1 811.46	3402	1 893.78	3465	1 930.95	3717	1 967.70	4053	2 319.45		
22	1012	3234	1 897.72	3564	1 983.96	3630	2 022.90	3894	2 061.40	4246	2 429.90		
23	1058	3381	1 983.98	3726	2 074.14	3795	2 114.85	4071	2 155.10	4439	2 540.35		
24	1104	3528	2 070.24	3888	2 164.32	3960	2 206.80	4248	2 248.80	4632	2 650.80		
25	1150	3675	2 156.50	4050	2 254.50	4125	2 298.75	4425	2 342.50	4825	2 761.25		
26	1196	3822	2 242.76	4212	2 344.68	4290	2 390.70	4602	2 436.20	5018	2 871.70		
27	1242	3969	2 329.02	4374	2 434.86	4455	2 482.65	4779	2 529.90	5211	2 982.15		
28	1288	4116	2 415.28	4536	2 525.04	4620	2 574.60	4956	2 623.60	5404	3 092.60		
29	1334	4263	2 501.54	4698	2 615.22	4785	2 666.55	5133	2 717.30	5597	3 203.05		
30	1380	4410	2 587.80	4860	2 705.40	4950	2 758.50	5310	2 811.00	5790	3 313.50		
31	1426	4557	2 674.06	5022	2 795.58	5115	2 850.45	5487	2 904.70	5983	3 423.95		
32	1472	4704	2 760.32	5184	2 885.76	5280	2 942.40	5664	2 998.40	6176	3 534.40		
33	1518	4851	2 846.58	5346	2 975.94	5445	3 034.35	5841	3 092.10	6369	3 644.85		
34	1564	4998	2 932.84	5508	3 066.12	5610	3 126.30	6018	3 185.80	6562	3 755.30		
35	1610	5145	3 019.10	5670	3 156.30	5775	3 218.25	6195	3 279.50	6755	3 865.75		
36	1656	5292	3 105.36	5832	3 246.48	5940	3 310.20	6372	3 373.20	6948	3 976.20		
37	1702	5439	3 191.62	5994	3 336.66	6105	3 402.15	6549	3 466.90	7141	4 086.65		
38	1748	5586	3 277.88	6156	3 426.84	6270	3 494.10	6726	3 560.60	7334	4 197.10		
39	1794	5733	3 364.14	6318	3 517.02	6435	3 586.05	6903	3 654.30	7527	4 307.55		
40	1840	5880	3 450.40	6480	3 607.20	6600	3 678.00	7080	3 748.00	7720	4 418.00		

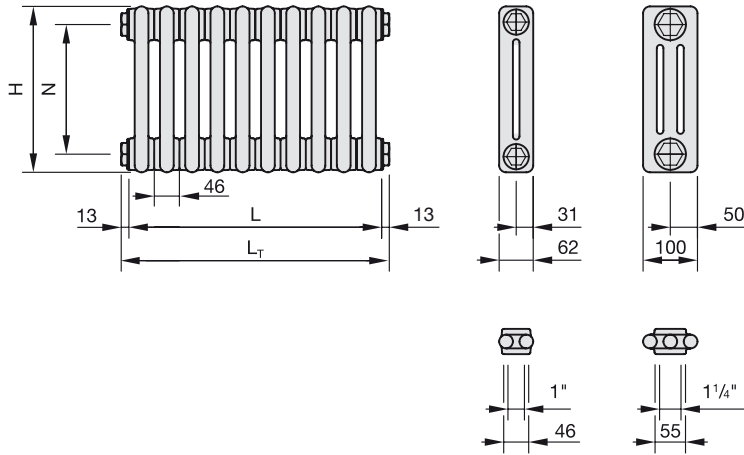
Warning: Weight over 100 kg

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Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Retrofit models 2- to 6-column



- H = Height
 L = Length = elements x 46 mm
 L_T = Total length = elements x 46 mm + 2 x 13 mm
 N = Boss spacing
 T = Depth
 V = Water content
 M = Weight
 s_k = Proportion of radiation
 q_{ms} = Nominal flow rate
 n = Exponent
 Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
 Φ = Thermal output at system temperatures

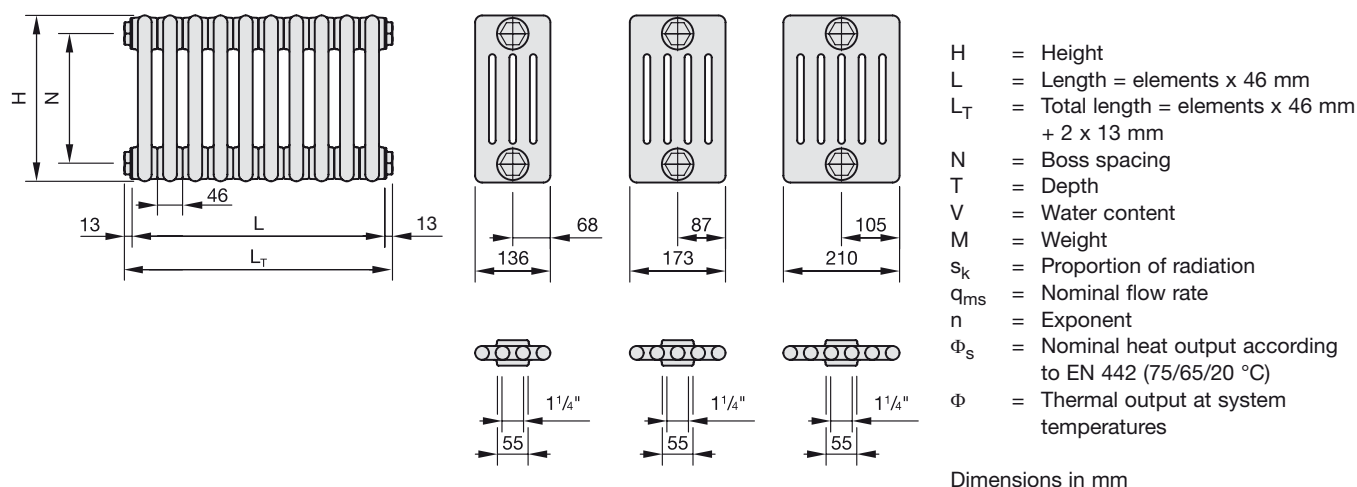
Dimensions in mm

Technical specifications per element

Model	H	N	T	V	M	s _k	q _{ms}	Exp.	Φ _s =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
	mm	mm	mm	dm ³	kg	%	kg/h	n			
2041	408	350	62	0,40	0,65	24	3,0	1,26	32,4	26,3	17,1
2046	458	400	62	0,50	0,72	24	3,0	1,26	36,0	29,2	19,0
2056	558	500	62	0,60	0,86	23	4,0	1,25	43,0	34,8	22,5
2059	588	530	62	0,60	0,90	23	3,9	1,25	45,0	36,4	23,8
2063	628	570	62	0,70	0,95	22	4,0	1,24	47,7	38,7	25,3
2066	658	600	62	0,70	0,99	22	4,0	1,24	49,7	40,2	26,0
2068	677	619	62	0,65	1,11	23	4,4	1,24	50,9	41,3	27,0
2076	758	700	62	0,70	1,19	22	4,8	1,24	56,0	45,4	29,7
2079	788	730	62	0,71	1,22	22	4,9	1,23	57,8	46,9	30,8
2086	858	800	62	0,75	1,34	22	5,2	1,23	62,0	50,3	33,1
2088	877	819	62	0,80	1,40	22	5,4	1,23	63,1	51,2	33,7
2093	928	870	62	0,80	1,33	22	5,7	1,22	66,0	53,7	35,4
2096	958	900	62	0,90	1,40	22	6,0	1,22	67,6	54,7	35,4
2166	1658	1600	62	1,40	2,22	23	10,0	1,29	115,0	92,4	59,5
2186	1858	1800	62	1,50	2,60	23	11,1	1,29	129,0	103,7	66,7
2206	2058	2000	62	1,70	2,90	23	12,3	1,28	142,0	114,3	73,8
3037	366	300	100	0,60	0,89	19	3,0	1,28	38,6	31,2	20,2
3042	416	350	100	0,70	0,99	19	4,0	1,28	43,5	35,2	22,8
3057	566	500	100	0,90	1,31	18	5,0	1,27	57,8	46,7	30,1
3059	596	530	100	0,90	1,37	18	5,2	1,27	60,5	48,8	31,6
3064	636	570	100	1,00	1,45	18	5,4	1,27	64,2	51,8	33,6
3067	666	600	100	1,00	1,52	18	6,0	1,26	66,9	54,0	34,9
3069	685	619	100	0,97	1,68	18	5,9	1,26	68,6	55,4	36,0
3077	766	700	100	1,15	1,76	18	6,5	1,26	75,7	61,1	39,8
3079	796	730	100	1,15	1,80	18	6,7	1,26	77,4	62,5	40,7
3087	866	800	100	1,19	1,98	18	7,3	1,26	84,2	68,0	44,2
3089	885	819	100	1,21	2,12	18	7,5	1,26	85,8	69,3	45,1
3094	936	870	100	1,30	2,05	18	7,8	1,25	90,0	72,8	47,5
3097	966	900	100	1,30	2,15	18	8,0	1,25	92,4	74,5	47,9
3107	1066	1000	100	1,50	2,36	18	9,0	1,25	100,0	80,6	51,9
3167	1666	1600	100	2,00	3,30	18	13,4	1,31	154,0	123,3	78,9
3187	1866	1800	100	2,40	3,95	18	15,0	1,32	171,0	136,7	87,1
3207	2066	2000	100	2,60	4,35	18	16,3	1,32	188,0	150,3	95,8

Zehnder Charleston Retrofit

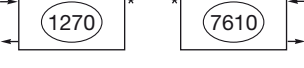
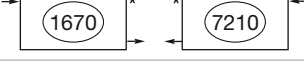
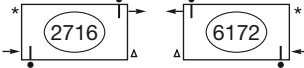
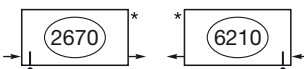
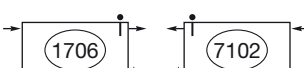
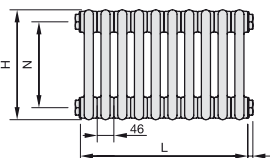
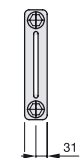
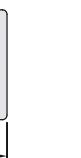
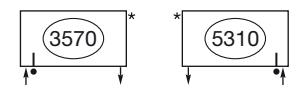
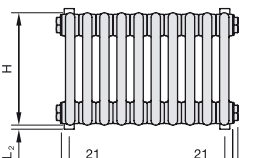
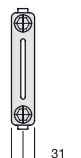
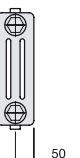
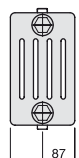
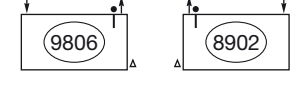
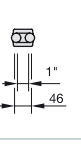
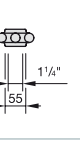
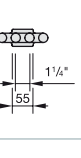
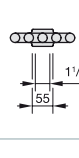
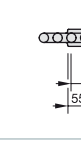
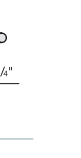
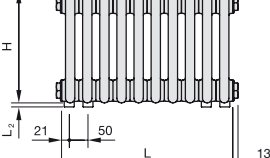
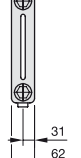
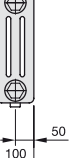
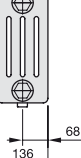
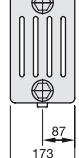
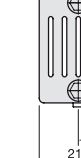
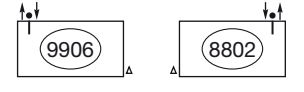
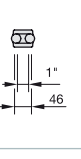
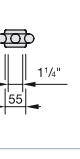
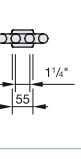
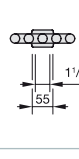
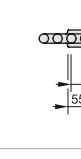
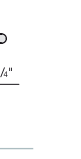
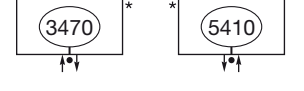
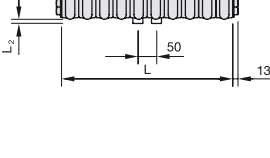
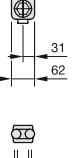
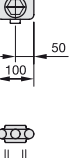
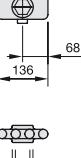
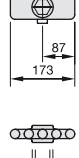
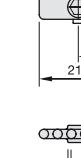
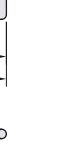
Retrofit models 2- to 6-column



Technical specifications per element

Model	H	N	T	V	M	s _k	q _{ms}	Exp.	Φ _s =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
	mm	mm	mm	dm ³	kg	%	kg/h	n			
4037	366	300	136	0,80	1,14	16	4,0	1,28	50,6	40,9	26,5
4042	416	350	136	0,90	1,28	16	5,0	1,28	57,0	46,0	29,7
4057	566	500	136	1,10	1,69	15	6,0	1,27	75,7	61,0	39,3
4059	596	530	136	1,20	1,78	15	6,8	1,27	79,3	63,9	41,5
4064	636	570	136	1,20	1,82	15	7,2	1,27	84,1	67,8	44,0
4067	666	600	136	1,30	1,96	15	7,0	1,26	87,6	70,6	45,4
4069	685	619	136	1,27	2,02	15	7,7	1,26	89,9	72,6	47,2
4077	766	700	136	1,45	2,24	15	8,6	1,26	99,2	80,1	52,1
4079	796	730	136	1,45	2,30	15	8,8	1,26	103,0	83,2	54,1
4087	866	800	136	1,56	2,51	15	9,3	1,26	111,0	89,7	58,3
4089	885	819	136	1,59	2,56	15	9,5	1,26	112,0	90,5	58,8
4094	936	870	136	1,70	2,70	15	10,1	1,25	118,0	95,5	62,3
4097	966	900	136	1,70	2,79	15	10,0	1,25	121,0	97,4	62,4
4107	1066	1000	136	1,90	3,06	15	11,0	1,25	132,0	106,1	67,8
4167	1666	1600	136	2,10	4,40	15	17,1	1,31	198,0	158,6	101,4
4187	1866	1800	136	3,10	5,12	15	18,8	1,32	220,0	175,9	112,1
4207	2066	2000	136	3,40	5,62	15	20,8	1,32	242,0	193,5	123,3
5037	366	300	173	1,00	1,49	15	5,0	1,28	62,5	50,5	32,6
5057	566	500	173	1,40	2,17	14	8,0	1,27	93,5	75,4	48,5
5067	666	600	173	1,60	2,52	13	9,0	1,26	108,0	86,9	55,7
5069	685	619	173	1,70	2,90	13	9,5	1,26	111,0	89,7	58,3
5077	766	700	173	1,85	2,99	13	10,6	1,26	123,0	99,3	64,6
5087	866	800	173	2,00	3,36	13	11,8	1,26	136,0	109,8	71,5
5089	885	819	173	2,10	3,60	13	12,0	1,26	139,0	112,3	73,0
5097	966	900	173	2,10	3,54	13	13,0	1,25	150,0	120,3	76,6
5107	1066	1000	173	2,30	3,88	13	14,0	1,25	162,0	129,9	82,7
6027	266	200	210	1,10	1,44	16	5,0	1,28	54,7	44,1	28,4
6037	366	300	210	1,10	1,80	14	6,0	1,28	74,0	59,8	38,6
6042	416	350	210	1,30	2,01	13	7,0	1,28	83,5	67,3	43,3
6057	566	500	210	1,70	2,62	12	9,0	1,27	111,0	89,3	57,3
6067	666	600	210	1,90	3,02	12	11,0	1,26	128,0	102,7	65,4
6069	685	619	210	2,00	3,30	12	11,4	1,26	132,0	106,6	69,3
6077	766	700	210	2,15	3,61	12	12,6	1,26	147,0	118,7	77,2
6087	866	800	210	2,40	4,05	12	13,9	1,26	162,0	130,8	85,1
6089	885	819	210	2,50	4,20	12	14,2	1,26	165,0	133,3	86,7
6097	966	900	210	2,60	4,25	12	15,0	1,25	177,0	141,7	89,9
6107	1066	1000	210	2,80	4,65	12	16,0	1,25	193,0	154,3	97,6

Zehnder Charleston, Zehnder Charleston Clinic, Charleston Retrofit¹⁾

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Connection 2-tube with external valve		
same-side or opposite end    No additional charge   		            
from bottom to bottom  Please note: For Completto, see p. 45	131.89	            
from top to top 	163.28	            
from bottom to bottom, at side 50 mm  Please note: For Completto, see p. 45	131.89	            
from top to top, at side 50 mm 	163.28	            
from bottom to bottom, central 50 mm  Please note: For Completto, see page 45	193.56	            
		Central arrangement of connection fitting only with even number of elements ²⁾

When orders are placed without indication of the connection type, the standard connection 4 x 1/2" (S001) will be delivered. Possible connections: 1270/7610 and 1670/7210.

- H = Height
L = Length
N = Boss spacing
L₂ = Excess length thread,
1/2" = 5; 3/4" = 15
- * = Venting
Δ = Draining
• = Internal installations
- Dimensions in mm

- ¹⁾ The dimensions shown also apply to Zehnder Charleston Clinic (without graphic illustration), unless noted otherwise.
²⁾ With an uneven number of elements:
One additional element on the return side

Zehnder Charleston, Zehnder Charleston Clinic, Charleston Retrofit¹⁾

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Connection 1-tube with external valve		
for horizontal lance valve	No additional charge	Specify valve unit when placing order
for vertical lance valve	52.98	Specify valve unit when placing order
Completo connection with integrated valve (prices without thermostat)		
valve at top, connection on side 50 mm	221.45	
valve at bottom, connection on side 50 mm	313.24 ⁵⁾	Reduced thermal output of the first element due to insufficient circulation.

When orders are placed without indication of the connection type, the standard connection 4 x 1/2" (S001) will be delivered. Possible connections: 1270/7610 and 1670/7210.

H = Height
L = Length
N = Boss spacing
L₂ = Excess length thread,
1/2" = 5; 3/4" = 15

* = Venting
Δ = Draining
• = Internal installations

Dimensions in mm

- 1) The dimensions shown also apply to Zehnder Charleston Clinic (without graphic illustration), unless noted otherwise.
- 2) For Zehnder Charleston Clinic 88 mm
- 3) Only valid for Zehnder thermostat LH2
- 4) For Zehnder Charleston Clinic 31 mm
- 5) When exceeding the max. number of elements (see page 18), the radiator is nippedled factory-made.

Zehnder Charleston, Zehnder Charleston Clinic, Charleston Retrofit¹⁾

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Completo connection with integrated valve (prices without thermostat)		
valve at top, connection central 50 mm 	294.26	Possible as of 6 elements Central arrangement of the connections only with even number of elements ⁴⁾
valve at top, opposite end connection 	221.45	
valve at top, connection from top to top on side 50 mm 	403.48 ⁵⁾	
valve at bottom, connection from top to top on side 50 mm 	458.75 ⁵⁾	

When orders are placed without indication of the connection type, the standard connection 4 x 1/2" (S001) will be delivered. Possible connections: 1270/7610 and 1670/7210.

Valve parameters: Special control valve OV 1" (for 2-column) or OV 5/4" (for 3- to 6-column) is installed at the factory.

Max. recommended flow rate 250 kg/h. Data for special control valve on page 157.

H = Height
L = Length
N = Boss spacing
* = Venting
Δ = Draining

¹⁾ The dimensions shown also apply to Zehnder Charleston Clinic (without graphic illustration), unless noted otherwise.

²⁾ Only applies to Zehnder thermostat LH2

³⁾ For Zehnder Charleston Clinic 31 mm

⁴⁾ With an uneven number of elements: One additional element on the return side

⁵⁾ When exceeding the max. number of elements (see specific page of radiator), the radiator is nippedled factory-made.

Dimensions in mm

Zehnder Charleston, Zehnder Charleston Clinic, Charleston Retrofit¹⁾

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Connection 2-tube with external valve		
Convenient operation for easy-access, same-side	185.23	Indicate boss spacing N when placing order Connection as of height ≥ 1200 mm possible

- H = Height
- L = Length
- N = 500, 600, 619, 700, 800, 819, 900 mm
- * = Venting
- Δ = Draining

Dimensions in mm

Individual length due to section construction ✓

5 depths (2- to 6-column) ✓

Approx. 960 mm (standard) ✓

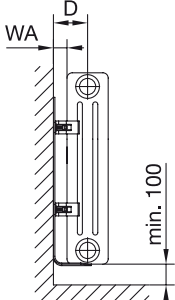
Heights of 1200 mm - 3000 mm ✓

NEW!

Improved welding process for even more seamless look. ✓

Zehnder Charleston, Zehnder Charleston Retrofit

with EasyFix

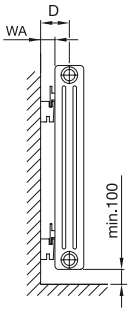
Illustration	Sketch Side view	Model					
		Application	Wall clearance WA mm	Brackets in set	Article no. ³⁾ Set white	€/Set White Colour	
Fixing details for accessory set SMB							
Set SMB 30-75 	 Distance D: 2-column 66 mm 3-column 85 mm 4-column 103 mm 5-column 122 mm 6-column 140 mm	H = 300-369					
		All models					
		L = 4-22 el. L = 23-39 el. L = 40-50 el. L = 51-60 el.	35	2 x SMB30 3 x SMB30 4 x SMB30 5 x SMB30	173521 173621 173721 173821	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08
		H = 370-484					
		All models					
		L = 4-22 el. L = 23-39 el. L = 40-50 el. L = 51-60 el.		35	2 x SMB40 3 x SMB40 4 x SMB40 5 x SMB40	173531 173631 173731 173831	25.33 38.03 50.70 63.35
		H = 485-679					
		All models					
		L = 4-22 el. L = 23-39 el. L = 40-50 el. L = 51-60 el.	35		2 x SMB50 3 x SMB50 4 x SMB50 5 x SMB50	173541 173641 173741 173841	25.33 38.03 50.70 63.35
		H = 680-1000					
		2- to 4-column					
		L = 4-22 el. L = 23-39 el. L = 40-55 el. L = 56-65 el.		35	2 x SMB75 3 x SMB75 4 x SMB75 5 x SMB75	173551 173651 173751 173851	25.33 38.03 50.70 63.35
		5- to 6-column					
		L = 4-15 el. L = 16-29 el. L = 30-42 el. L = 43-55 el.	35		2 x SMB75 3 x SMB75 4 x SMB75 5 x SMB75	173551 173651 173751 173851	25.33 38.03 50.70 63.35
H = 1001-1500							
2- to 4-column							
L = 4-15 el. L = 16-30 el. L = 31-45 el. L = 46-60 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T		173511 173611 173711 173811	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08	
5- to 6-column							
L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.		35	2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T	173511 173611 173711 173811	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08	
H = 1501-2200							
2- to 4-column							
L = 4-11 el. L = 12-21 el. L = 22-31 el. L = 32-41 el.	35		2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T	173511 173611 173711 173811	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08	
5- to 6-column							
L = 4-10 el. L = 11-16 el. L = 17-21 el. L = 22-27 el.		35	2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T	173511 173611 173711 173811	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08	

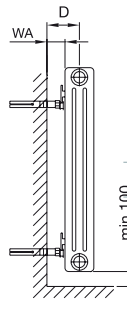
H = Height of radiator in mm L = Length of radiator in elements D = Dimension from wall to middle of connection
 WA = Wall clearance
²⁾ Further allocations of the bracket SMB 2T for heights from 245 mm and up to 3000 mm on request.
³⁾ The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.

Zehnder Charleston, Zehnder Charleston Retrofit

Illustration	Sketch Side view	Model				
		Application	Wall clearance WA mm	Brackets in set	Article no. ³⁾ Set white	€/Set White Colour

Fixing details for accessory sets CVD, BKE

		All models							
		Height 260 - 1000 mm with retaining spring							
		28	L = 4-20 el. L = 21-40 el. L = 41-60 el.	4 x BH + CVD 0 6 x BH + CVD 0 8 x BH + CVD 0	774401 774601 774801	25.57 37.23 48.86	67.32 99.82 132.34		
		Height 1001 - 1500 mm with retaining spring							
		28	L = 4-20 el. L = 21-40 el. L = 41-60 el.	4 x BH + CVD 0 8 x BH + CVD 0 10 x BH + CVD 0	774401 774801 774901	25.57 48.86 60.52	67.32 132.34 164.85		
		2- to 5-column							
		Height 1501 - 2200 mm with retaining spring							
				L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	28	4 x BH + CVD 0 6 x BH + CVD 0 8 x BH + CVD 0 10 x BH + CVD 0	774401 774601 774801 774901	25.57 37.23 48.86 60.52	67.32 99.82 132.34 164.85
		6-column							
		Height 1501 - 2200 mm with retaining spring							
		L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	28	4 x BH + CVD 0 8 x BH + CVD 0 10 x BH + CVD 0 14 x BH + CVD 0	774401 774801 774901 -	25.57 48.86 60.52 -	67.32 132.34 164.85 -		

		All models							
		Height 260 - 1000 mm with retaining spring							
				L = 4-20 el. L = 21-40 el. L = 41-60 el.	46	4 x BH + BKE160 6 x BH + BKE160 8 x BH + BKE160	774461 774661 774861	41.07 57.51 73.99	64.72 92.78 120.85
		Height 1001 - 1500 mm with retaining spring							
				L = 4-20 el. L = 21-40 el. L = 41-60 el.	46	4 x BH + BKE160 8 x BH + BKE160 10 x BH + BKE160	774461 774861 774961	41.07 73.99 90.38	64.72 120.85 148.91
		2- to 5-column							
		Height 1501 - 2200 mm with retaining spring							
				L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	46	4 x BH + BKE160 6 x BH + BKE160 8 x BH + BKE160 10 x BH + BKE160	774461 774661 774861 774961	41.07 57.51 73.99 90.38	64.72 92.78 120.85 148.91
		6-column							
		Height 1501 - 2200 mm with retaining spring							
		L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	46	4 x BH + BKE160 8 x BH + BKE160 10 x BH + BKE160 14 x BH + BKE160	774461 774861 774961 -	41.07 73.99 90.38 -	64.72 120.85 148.91 -		

L = Length of radiator in mm

D = Dimension from wall to middle of connection

WA = Wall clearance

²⁾ Average distances are given for D and WA for set BKE, as bracket installation depth is variable.

³⁾ The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.

Zehnder Charleston, Zehnder Charleston Retrofit

Illustration	Sketch Side view	Model			
		Application	Brackets in set	Article no. ³⁾ Set white	€/Set White Colour
For other fixing options using accessories, see page 116 onwards.					
Wall bracket AK ³⁾ 	For adjustable wall clearance, short and long version possible, standard: Short, RAL 9016, for details see “Accessories”	All models			
		Height 260 - 1000 mm			
		L = 4-20 el. L = 21-40 el. L = 41-60 el.	4 x BH + AK 1 6 x BH + AK 1 8 x BH + AK 1	Bracket BH: 774001 Bracket AK1: 796011	3.11 14.04
		Height 1001 - 1500 mm			
		L = 4-20 el. L = 21-40 el. L = 41-60 el.	4 x BH + AK 1 8 x BH + AK 1 10 x BH + AK 1	Bracket BH: 774001 Bracket AK 1: 796011	3.11 14.04
T-bracket AKK 	For mounting, for adjustable wall clearance, combination with bracket TKK is recommended, standard: RAL 9016, for details, see “Accessories”	All models			
		Height 260 - 500 mm			
		L = 4-20 el. L = 21-30 el. L = 31-40 el. L = 41-50 el. L = 51-60 el.	2 x AKK 3 x AKK 4 x AKK 5 x AKK 6 x AKK	By length	10.15 - 16.15
Free-standing floor support STF 	For mounting on unfinished or finished floor, different lengths possible, standard: RAL 9016, for details, see “Accessories”	All models			
		Height H: 260 to < 600 mm ²⁾			
		L = 4-20 el. L = 21-40 el. L = 41-60 el. L = 61-80 el.	2 x STF 2 / STF 3 3 x STF 2 / STF 3 4 x STF 2 / STF 3 5 x STF 2 / STF 3	By height	STF2: 45.64- 50.98 STF3: 44.32 - 49.64
Floor support HFK 	For mounting on unfinished or finished floor, standard: RAL 9016, for details see “Accessories”	All models			
		Height H: 190 to < 600 mm ²⁾			
		L = 4-20 el. L = 21-40 el. L = 41-60 el. L = 61-80 el.	2 x HFK 3 x HFK 4 x HFK 5 x HFK	By height	50.00 / 55.72

H = Height of radiator in mm L = Length of radiator in elements D = Dimension from wall to middle of connection

²⁾ Provided from a height of 600 mm for requirements class 2 additional brackets
³⁾ An on-site locking device may be required depending on the installation and connection situation and net weight of the radiator

Zehnder Charleston, Zehnder Charleston Retrofit

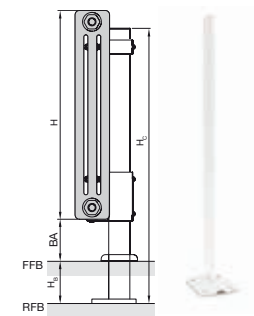
Description		Version	Article number	Price €	Application
Welded foot bracket for Charleston Height-adjustable, for mounting on unfinished or finished floor. Number of brackets = fixing axes on radiator incl. cover		In colour of radiator 120 - 170 mm 170 - 350 mm	1100013810 1100013870	130.05 130.05	Zehnder Charleston ²⁾ max. height 600 mm
Welded foot bracket for Charleston Height: fix 150 mm for mounting on unfinished or finished floor. Number of brackets = fixing axes on radiator Cover separately (see page 119)		In colour of radiator 150mm	-	141.10	Zehnder Charleston ²⁾ max. height 600 mm
Traditional welded feet for Charleston H = 100 mm, for mounting on finished floors Number of brackets = fixing axes on radiator		In colour of radiator	-	57.46	Zehnder Charleston 3-6 column Free-standing installation up to and including a height of 600 mm (requirements classes 1 and 2)

Screws and anchors are not included in the scope of delivery

¹⁾ Cut the round tubes to length by 5 mm each at the building site to reduce the minimum height to 130 mm.

²⁾ Provide additional bracket from a height of 600 mm for requirements class 2, request a separate allocation for requirements class 3 (e.g. school)

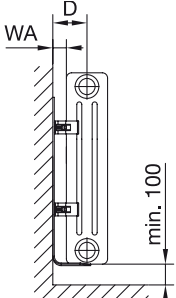
Zehnder Charleston, Zehnder Charleston Retrofit

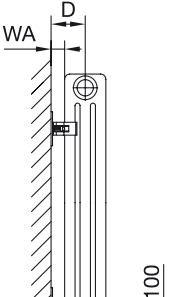
Description		Height H _C mm	Article number	Price €	Application
Free-standing floor bracket HDS reinforced floor bracket for heavy requirements (e. g. schools) on finished and unfinished floors, available in RAL 9016 or special finish.					
Floor bracket rectangular tube 60 x 10 mm and welded-on footplate in standard colour RAL 9016 or special finish. BA = ground clearance HB = floor structure height HB + BA = max. 300 mm HC = console height H = radiator height, 260 - 600 mm Dimensions in mm			370 mm 420 mm 470 mm 520 mm 570 mm 620 mm 670 mm 720 mm 770 mm 820 mm	722201 722211 722221 722231 722241 722251 722261 722271 722281 722291	53.08 53.08 53.08 53.08 53.08 53.08 53.08 53.08 57.70 57.70
Recommended console height H_C					
Installation location	H _C 2-column	H _C 3- to 6-column			
Finished floor (FFB)	= H + BA - max. 72 mm	= H + BA - max. 80 mm			
Unfinished floor (RFB)	= H + H _B + BA - max. 72 mm	= H + H _B + BA - max. 80 mm			
Clamp bracket set in standard colour RAL 9016 or special finish, consisting of: 1x bottom clamp bracket with attenuator 1x top clamp bracket 1x plastic plug, white, for standpipe 2x plastic cover, white, for brackets					
Plastic cover for HDS footplate 137 x 15 mm, white, suitable for retrofitting					
Plastic cover for HDS standpipe 90 x 41 mm, white, suitable for retrofitting					
			722301	19.04	for installation on finished floor
			722311	17.32	for installation on unfinished floor

¹⁾ The article number of the item in special finish is created by replacing the end digit 1 by the end digit 9 (not available for plastic covers)
Surcharge for special finishing: 50 % on the price of RAL 9016

Zehnder Charleston Clinic

with EasyFix

Illustration	Sketch Side view	Model														
		Application	Wall clearance WA mm	Brackets in set	Article no. ³⁾ Set White	€/Set White Colour										
Fixing details for accessory set SMB																
Set SMB 30-75 	 Distance D: <table><tr><td>2-column</td><td>66 mm</td></tr><tr><td>3-column</td><td>85 mm</td></tr><tr><td>4-column</td><td>103 mm</td></tr><tr><td>5-column</td><td>122 mm</td></tr><tr><td>6-column</td><td>140 mm</td></tr></table>	2-column	66 mm	3-column	85 mm	4-column	103 mm	5-column	122 mm	6-column	140 mm	H = 300-369				
		2-column	66 mm													
		3-column	85 mm													
		4-column	103 mm													
		5-column	122 mm													
		6-column	140 mm													
		All models														
		L = 4-16 el. L = 17-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB30 3 x SMB30 4 x SMB30 5 x SMB30	173521 173621 173721 173821	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08									
		H = 370-484														
		All models														
		L = 4-16 el. L = 17-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB40 3 x SMB40 4 x SMB40 5 x SMB40	173531 173631 173731 173831	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08									
		H = 485-679														
		All models														
		L = 4-16 el. L = 17-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB50 3 x SMB50 4 x SMB50 5 x SMB50	173541 173641 173741 173841	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08									
		H = 680-1000														
		All models														
		L = 4-14 el. L = 15-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB75 3 x SMB75 4 x SMB75 5 x SMB75	173551 173651 173751 173851	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08									
		H = 1001-1500														
		2- to 4-column														
		L = 4-14 el. L = 15-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T	173511 173611 173711 173811	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08									
		5- to 6-column														
		L = 4-10 el. L = 11-20 el. L = 21-30 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T	173511 173611 173711	25.33 38.03 50.70	38.04 57.05 76.03									
		H = 1501-2200														
		2- to 4-column														
L = 4-11 el. L = 12-21 el. L = 22-31 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T	173511 173611 173711	25.33 38.03 50.70	38.04 57.05 76.03											
5- to 6-column																
L = 4-8 el. L = 9-15 el. L = 16-22 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T	173511 173611 173711	25.33 38.03 50.70	38.04 57.05 76.03											

Set SMB 2T²⁾ 	 Distance D: <table><tr><td>2-column</td><td>66 mm</td></tr><tr><td>3-column</td><td>85 mm</td></tr><tr><td>4-column</td><td>103 mm</td></tr><tr><td>5-column</td><td>122 mm</td></tr><tr><td>6-column</td><td>140 mm</td></tr></table>	2-column	66 mm	3-column	85 mm	4-column	103 mm	5-column	122 mm	6-column	140 mm	H = 300-369				
		2-column	66 mm													
		3-column	85 mm													
		4-column	103 mm													
		5-column	122 mm													
		6-column	140 mm													
		All models														
		L = 4-16 el. L = 17-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB30 3 x SMB30 4 x SMB30 5 x SMB30	173521 173621 173721 173821	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08									
		H = 370-484														
		All models														
		L = 4-16 el. L = 17-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB40 3 x SMB40 4 x SMB40 5 x SMB40	173531 173631 173731 173831	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08									
		H = 485-679														
All models																
L = 4-16 el. L = 17-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB50 3 x SMB50 4 x SMB50 5 x SMB50	173541 173641 173741 173841	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08											
H = 680-1000																
All models																
L = 4-14 el. L = 15-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB75 3 x SMB75 4 x SMB75 5 x SMB75	173551 173651 173751 173851	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08											
H = 1001-1500																
2- to 4-column																
L = 4-14 el. L = 15-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T	173511 173611 173711 173811	25.33 38.03 50.70 63.35	38.04 57.05 76.03 95.08											
5- to 6-column																
L = 4-10 el. L = 11-20 el. L = 21-30 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T	173511 173611 173711	25.33 38.03 50.70	38.04 57.05 76.03											
H = 1501-2200																
2- to 4-column																
L = 4-11 el. L = 12-21 el. L = 22-31 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T	173511 173611 173711	25.33 38.03 50.70	38.04 57.05 76.03											
5- to 6-column																
L = 4-8 el. L = 9-15 el. L = 16-22 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T	173511 173611 173711	25.33 38.03 50.70	38.04 57.05 76.03											

H = Height of radiator in mm

L = Length of radiator in elements

D = Dimension from wall to middle of connection

WA = Wall clearance

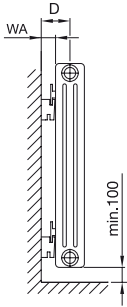
²⁾ Further allocations of the bracket SMB 2T for heights from 245 mm and up to 3000 mm on request.

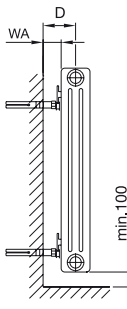
³⁾ The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.

Zehnder Charleston Clinic

Illustration	Sketch Side view	Model				
		Application	Wall clearance WA mm	Brackets in set	Article no. ²⁾ set White	€/Set White Colour

Accessory sets CVD, BKE

		All models					
		Height 260 - 1500 mm with retaining spring					
		L = 4-15 el. L = 16-30 el. L = 31-44 el.	24	4 x BHK + CVD 0 6 x BHK + CVD 0 8 x BHK + CVD 0	775421 775621 775821	46.50 68.55 90.68	88.05 130.90 173.78
		2- to 5-column					
		Height 1501 - 2200 mm with retaining spring					
L = 4-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	24	4 x BHK + CVD 0 6 x BHK + CVD 0 8 x BHK + CVD 0 10 x BHK + CVD 0	775421 775621 775821 775921	46.50 68.55 90.68 112.76	88.05 130.90 173.78 216.62		
6-column							
Height 1501 - 2200 mm with retaining spring							
L = 4-7 el. L = 8-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	24	4 x BHK + CVD 0 6 x BHK + CVD 0 8 x BHK + CVD 0 10 x BHK + CVD 0 12 x BHK + CVD 0	775421 775621 775821 775921 -	46.50 68.55 90.68 112.76 -	88.05 130.90 173.78 216.62 -		
All models							
Height 260 - 1500 mm with retaining spring							
L = 4-15 el. L = 16-30 el. L = 31-44 el.	46	4 x BHK+BKE160 6 x BHK+BKE160 8 x BHK+BKE160	775461 775661 775861	61.98 88.87 115.77	86.29 125.14 164.03		
2- to 5-column							
Height 1501 - 2200 mm with retaining spring							
L = 4-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	46	4 x BHK+BKE160 6 x BHK+BKE160 8 x BHK+BKE160 10 x BHK+BKE160	775461 775661 775861 775961	61.98 88.87 115.77 142.68	86.29 125.14 164.03 202.89		
6-column							
Height 1501 - 2200 mm with retaining spring							
L = 4-7 el. L = 8-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	46	4 x BHK+BKE160 6 x BHK+BKE160 8 x BHK+BKE160 10 x BHK+BKE160 12 x BHK+BKE160	775461 775661 775861 775961 -	61.98 88.87 115.77 142.68 -	86.29 125.14 164.03 202.89 -		

		All models					
		Height 260 - 1500 mm with retaining spring					
		L = 4-15 el. L = 16-30 el. L = 31-44 el.	46	4 x BHK+BKE160 6 x BHK+BKE160 8 x BHK+BKE160	775461 775661 775861	61.98 88.87 115.77	86.29 125.14 164.03
		2- to 5-column					
		Height 1501 - 2200 mm with retaining spring					
L = 4-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	46	4 x BHK+BKE160 6 x BHK+BKE160 8 x BHK+BKE160 10 x BHK+BKE160	775461 775661 775861 775961	61.98 88.87 115.77 142.68	86.29 125.14 164.03 202.89		
6-column							
Height 1501 - 2200 mm with retaining spring							
L = 4-7 el. L = 8-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	46	4 x BHK+BKE160 6 x BHK+BKE160 8 x BHK+BKE160 10 x BHK+BKE160 12 x BHK+BKE160	775461 775661 775861 775961 -	61.98 88.87 115.77 142.68 -	86.29 125.14 164.03 202.89 -		

H = Height of radiator in elements

D = Dimension from wall to middle of connection

WA = Wall clearance

²⁾ Average distances are given for D and WA for set BKE, as bracket installation depth is variable.

³⁾ The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.

Zehnder Charleston Clinic

Illustration	Description	Model					
		Application	Amount + type of brackets	Article no. Piece	Price/piece €		
For other fixing options using accessories, see page 116 onwards.							
Wall bracket AK 3)	For adjustable wall clearance, short and long version possible, standard: Short, RAL 9016, for details see "Accessories"	All models					
		Height 260 - 1500 mm					
		L = 4-15 el. L = 16-30 el. L = 31-44 el.	4 x BHK + AK 1 6 x BHK + AK 1 8 x BHK + AK 1	Bracket BHK: 775011 Bracket AK 1: 796011	8.34 14.04		
		2- to 5-column					
		Height 1501 - 2200 mm					
		L = 4-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	4 x BHK + AK 1 6 x BHK + AK 1 8 x BHK + AK 1 10 x BHK + AK 1	Bracket BHK: 775011 Bracket AK 1: 796011	8.34 14.04		
		T-bracket AKK	For mounting, for adjustable wall clearance, combination with bracket TTK is recommended, standard: RAL 9016. For details, see "Accessories"	All models			
				Height 260 - 600 mm			
L = 4-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	2 x AKK 3 x AKK 4 x AKK 5 x AKK			By length	10.15 - 16.15		
Free-standing floor support STF							
Free-standing floor support STF	For mounting on unfinished or finished floor, different lengths possible, standard: RAL 9016. For details, see "Accessories"	All models					
		Height H: 260 to < 600 mm 2)					
		L = 4-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	2 x STF2K / STF3K 3 x STF2K / STF3K 4 x STF2K / STF3K 5 x STF2K / STF3K	By height	STF2K: 42.55 / 47.87 STF3K: 42.73 / 48.12		

L = Length of radiator in sections

²⁾ Provided from a height of 600 mm for requirements class 2 additional brackets

³⁾ An on-site locking device may be required depending on the installation and connection situation and net weight of the radiator

Zehnder Charleston Turned



Zehnder Charleston Turned

Product description

Zehnder Charleston Turned, the original steel tubular radiator with a new look, boasts a fresh design and great performance. The orientation, rotated by 90°, lends the classic radiator a new dimension and gives Zehnder Charleston Turned an exceptionally slim design. Due to its outstanding performance, the steel tubular radiator turns large living spaces into an oasis of well-being. Available in almost any colour and finish from the Zehnder colour chart.

Scope of delivery for standard version

- Primed and painted in RAL 9016
- Connections 3 x 1/2" female thread
- Directional air vent 1/2"
- Welded-on lugs and centre brace
- Complete packaging in stretch film and carton

Advantages

- Innovative design due to its orientation rotated by 90°
- Significantly higher thermal output due to the optimal waterflow properties of the horizontal tubes
- Easy installation via welded-on lugs in the same colour as the radiator (provided ex factory)
- Lasting attractive looks with no tube deformation due to a welded-on centre brace in the same colour as the radiator (provided ex factory)
- Wide range of applications due to various connection options
- High level of thermal output ideal for old buildings with a high heat load
- Residue-free laser welding technology "LaZer made" guarantees maximum quality, high-end design and reliable operation of the heating system

Zehnder Charleston Turned

Technical specifications

- Steel round tubes Ø 25 mm
- Header in sheet steel
- Height of the individual element 46 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Maximum operating pressure 10 bar
- Maximum operating temperature 110 °C



2-column

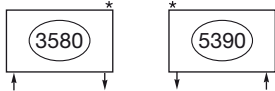
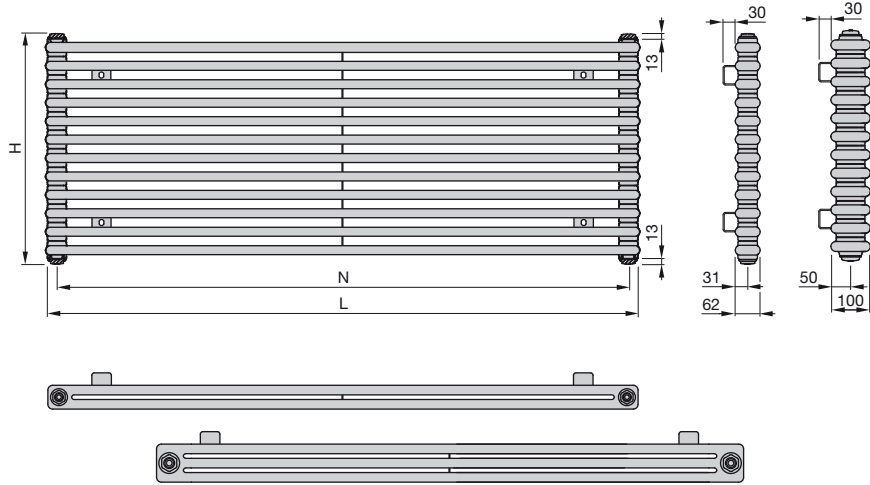
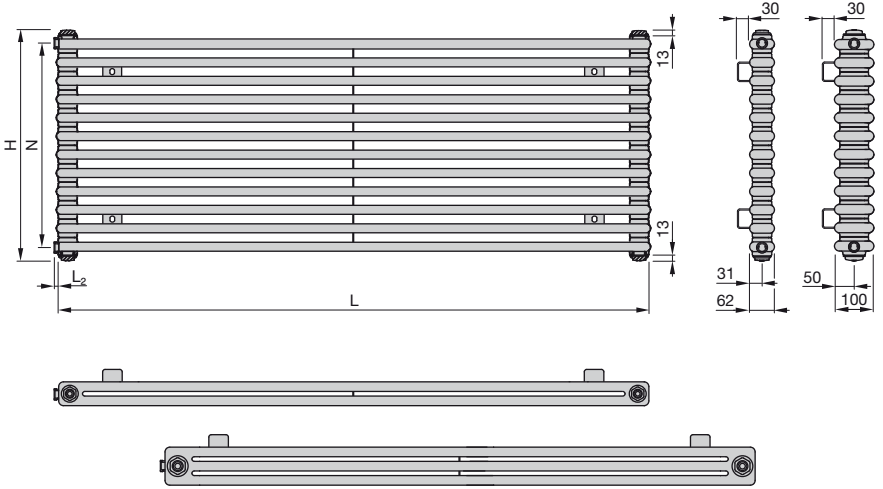
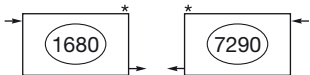
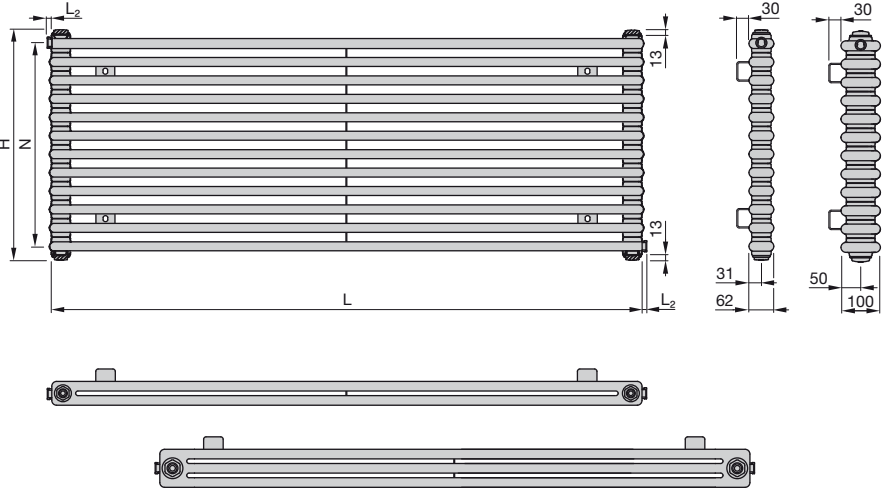


3-column

Height mm	Length ¹⁾ mm	Depth mm	
		62	100
302	1500	T2150/6	T3150/6
	1800	T2180/6	T3180/6
394	1500	T2150/8	T3150/8
	1800	T2180/8	T3180/8
486	1500	T2150/10	T3150/10
	1800	T2180/10	T3180/10
578	1500	T2150/12	T3150/12
	1800	T2180/12	T3180/12

¹⁾ The values shown here are the so-called nominal length; the exact length for 2-column radiators is 8 mm lower; see page 116.

Zehnder Charleston Turned

Connection type	Dimensional drawings: front view, side view and top view (bottom)
Connection 2-tube with external valve	
bottom connection 	
same-side 	
opposite side 	

H = Height
 L = Length
 N = Boss spacing
 * = Venting
 L₂ = Excess length thread,
 1280/7690 = 5 mm;
 1680/7290 = 15 mm

Dimensions in mm

Zehnder Charleston Bench



Zehnder Charleston Bench

Product description

Zehnder Charleston Bench is the version of a heated bench with vertical tube guide. This radiator is part of the product family of Zehnder Charleston and can additionally be used as seating in either private or public spaces.

The radiator can be installed on unfinished or finished floors, the connection is provided from the floor as standard, the seat (see example in figure) added on site depending on the installation situation.

The aspects of hygienic suitability (certificate) and cleanability also naturally apply to Zehnder Charleston Bench.

Scope of delivery for standard version

- Primed and painted in RAL 9016
- Connections 3 x 1/2" female thread
- Directional air vent 1/2"
- Welded-on lugs and centre brace
- Complete packaging in stretch film and carton

Customisation options

- Choice of connection types, including integrated valve
- Special colours and antibacterial coating
- Galvanised and painted
- Energy-saving thermal radiation shield for installation in front of windows
- Special shapes: angled or curved
- High pressure version up to max. 18 bar

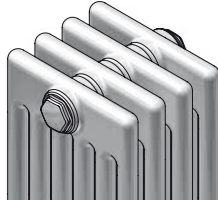
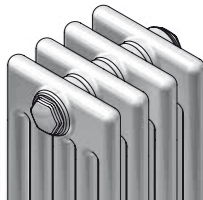
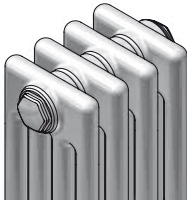
Advantages

- Residue-free laser welding technology LaZer made
- Combination of bench and radiator
- Galvanised and painted
- Energy-saving thermal radiation shield for installation in front of windows
- Special shapes: angled or curved
- High pressure version up to max. 18 bar

Zehnder Charleston Bench

Technical specifications

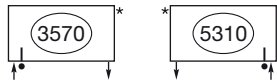
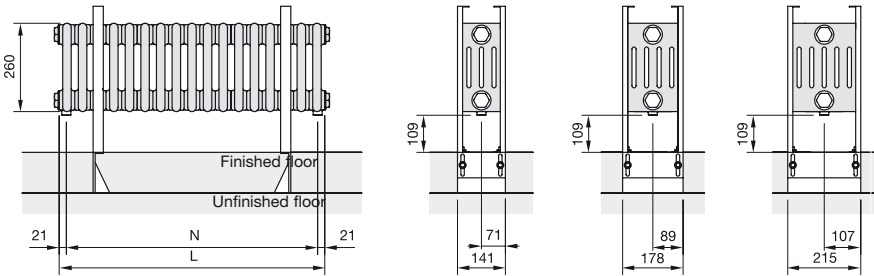
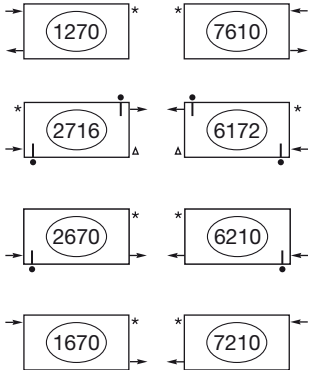
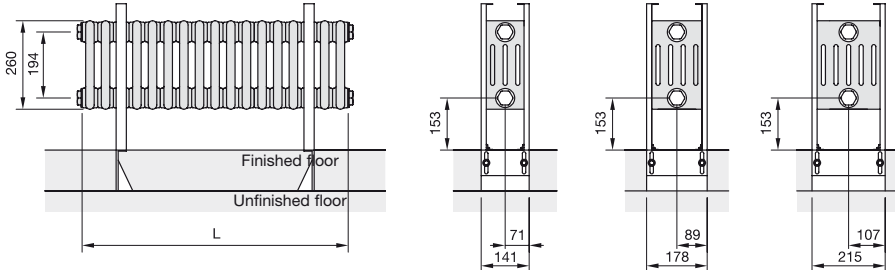
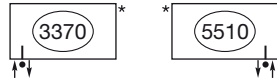
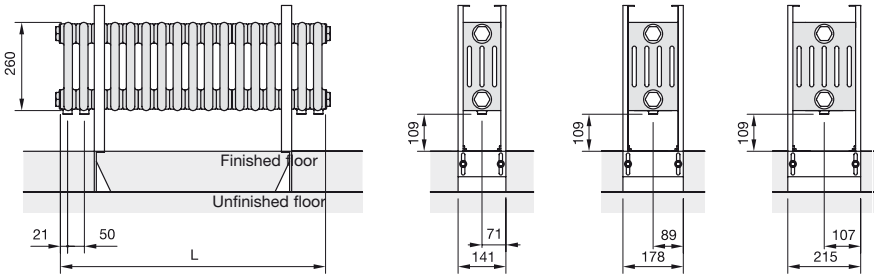
- Steel round tubes Ø 25 mm
- Header in sheet steel
- Length of the individual element 46 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Maximum operating pressure 10 bar
- Maximum operating temperature 110 °C



Bench height total ¹⁾ mm	Length mm	4-column	5-column	6-column
430	1012	CB 4026-22	CB 5026-22	CB 6026-22
	1242	CB 4026-27	CB 5026-27	CB 6026-27
	1426	CB 4026-31	CB 5026-31	CB 6026-31
	1610	CB 4026-35	CB 5026-35	CB 6026-35
	1748	CB 4026-38	CB 5026-38	CB 6026-38
	2024	CB 4026-44	CB 5026-44	CB 6026-44
	2300	CB 4026-50	CB 5026-50	CB 6026-50

¹⁾ Dimension applies from finished floor.

Zehnder Charleston Bench

Connection type	Dimensional drawings: Front view and side views
Connection 2-tube with external valve	
standard connection from bottom¹⁾  Diagram showing two rectangular units, 3570 and 5310, connected at the bottom. Unit 3570 has a venting symbol (*). Unit 5310 has a venting symbol (*) and a draining symbol (Δ).	 Front view and side views of the standard connection from bottom. The front view shows a series of vertical tubes with a total height of 260 mm. The side views show the profile of the units with dimensions: 109 mm for the top section, 71 mm for the middle section, 89 mm for the bottom section, and 141 mm for the total width. The units are mounted on a finished floor with an unfinished floor below. The distance between the units is N, and the total length is L. The mounting holes are 21 mm from the edges.
same or opposite end  Diagram showing four pairs of units connected at the same or opposite ends. The pairs are: 1270 and 7610, 2716 and 6172, 2670 and 6210, and 1670 and 7210. Each unit has a venting symbol (*). The connections are shown with arrows indicating flow direction.	 Front view and side views of the same or opposite end connections. The front view shows a series of vertical tubes with a total height of 260 mm. The side views show the profile of the units with dimensions: 153 mm for the top section, 71 mm for the middle section, 89 mm for the bottom section, and 141 mm for the total width. The units are mounted on a finished floor with an unfinished floor below. The distance between the units is L. The mounting holes are 21 mm from the edges.
from bottom to bottom, on side, 50 mm  Diagram showing two rectangular units, 3370 and 5510, connected at the bottom. Unit 3370 has a venting symbol (*). Unit 5510 has a venting symbol (*) and a draining symbol (Δ). The connection is shown on the side with a 50 mm offset.	 Front view and side views of the from bottom to bottom on side connection. The front view shows a series of vertical tubes with a total height of 260 mm. The side views show the profile of the units with dimensions: 109 mm for the top section, 71 mm for the middle section, 89 mm for the bottom section, and 141 mm for the total width. The units are mounted on a finished floor with an unfinished floor below. The distance between the units is L. The mounting holes are 21 mm from the edges.

¹⁾ When ordered without specification of the connection type, the standard connection from bottom to bottom will be supplied, suitable for connection 3570/5310.

- N = Boss spacing
- L = Length
- * = Venting
- Δ = Draining
- = Internal installations

Dimensions in mm

Zehnder Charleston Bench

Connection type	Dimensional drawings: Front view and side views
Connection 1-tube with external valve - See note on the single-pipe system in the keyword list	
for horizontal baffle plate ²⁾	
for vertical baffle plate ²⁾	

²⁾ Specify valve unit when placing order

High pressure version max. 18 bar (not for Completto connection)	with welded-on plug: 2- to 3-column with welded-on plug + tied rod: 4 to 6-column
Angled or curved design	
Intermediate lengths	
Galvanising with subsequent standard finish (RAL 9016) (see also explanations on galvanising in section “General”)	
Version with thermal radiation shield (→ section Zehnder Charleston)	
Completto connection with integrated valve (prices without thermostat) details and further Completto connections, see page 96 onwards.	
Basis for calculating the surcharge is the standard finish	

- L = Length
- * = Venting
- Δ = Draining

Dimensions in mm

Zehnder Charleston Bench

Curved version		
Version	Sketch/template	Prices €
Curved Zehnder Charleston Bench radiators are available with the following minimum outside curve radii: 4-column: 750 mm 5-column: 900 mm 6-column: 1000 mm When making a price enquiry, please include a sketch with the dimensions radius R, length and wall clearance in mm.		On request
		On request

Angled version		
Version	Sketch/template	Prices €
Zehnder Charleston Bench angled, available from 90° to 179°. When making a price inquiry, please provide the following dimensions: L₁, L₂, L₃, wall clearance WA in mm and angle α₁, α₂ in degrees.		On request
		On request
		On request

When placing an order for curved and angled radiators, please enclose sketch or template.

HK = Radiator
WA = Wall clearance
R = Radius
α₁, α₂ = Angles (°)
L₁, L₂, L₃ = Lengths

Dimensions in mm

Zehnder Charleston

Electric operation



Control unit radio remote-controlled Model 2



Product description

Electric Zehnder Charleston is an oil filled multi-column radiator available in 6 sizes ideal for installation in loft conversions. The complementary Zehnder Charleston Electric Plinth low level model is perfectly suited to conservatories and in front of low-level windows. Radiator with powder coating, in colour RAL 9016 as standard or in special colour.

Standard scope of delivery:

- Primed and painted in RAL 9016
- Remote control device in white
- Connecting cable 1,20 m without plug
- Mounting accessories

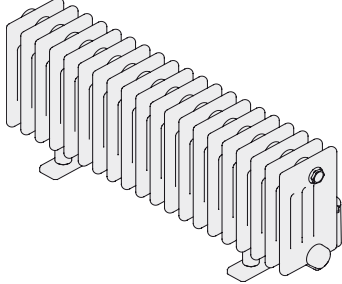
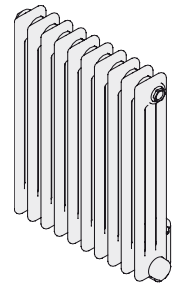
Advantages

- Energy-efficient and comfortable heating via innovative “open window detection”
- High energy efficiency due to compliance with the European Ecodesign Directive saves energy costs
- Low energy consumption of only 0,5 W in stand-by mode for increased energy efficiency
- User-friendly remote control device allows simple operation
- Comfortable operation as needed by customisable daily and weekly programme
- Timer function for on-demand operation
- Increased safety due to parental control

	Wall version	Plinthe version
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Technical specifications

- Oil-filled multi-column electric radiator
- Vertical steel round tubes Ø 25 mm, 3 and 5 columns versions available
- Connection cable without plug, appliance class II
- With integrated electric heating element and remote control
- Protection class IP44
- Supply voltage: 230 V
- Fixing: model NZ 060-XXX/GF delivered ready to install with 2 wall brackets in colour of radiator. Model NZ 030-100/GF delivered ready to install with 2 feet in colour of radiator.



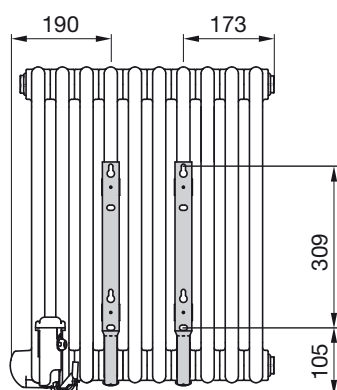
Length ¹⁾ mm	Height mm	Height mm ²
	600	300
502	NZ-060-053/GF	
594	NZ-060-062/GF	
732	NZ-060-076/GF	
870	NZ-060-089/GF	
962		NZ-030-1007GF
1008	NZ-060-103/GF	
1284	NZ-060-131/GF	

¹⁾ Total length incl. immersion heater ²⁾ Without foot

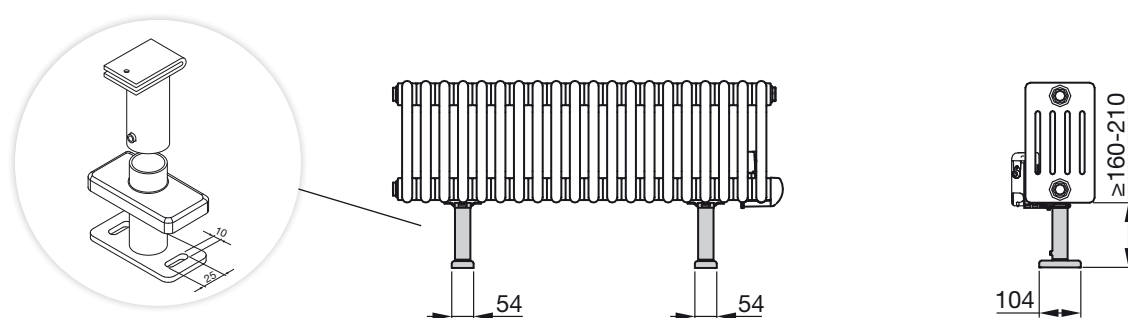
Zehnder Charleston

Electric operation

Dimensions for Wall version



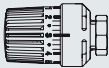
Dimensions for Plinth version



Dimensions in mm, plinth incl. cover

Accessories



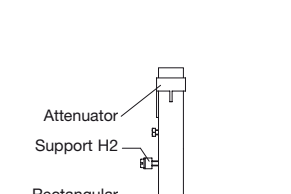
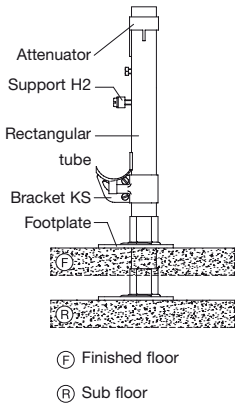
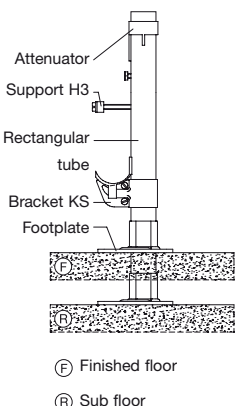
Zehnder accessories				
	Brackets	Valves	Rail	Miscellaneous
	116	122	127	127

Individual sets for wall and floor mounting

Description		Version	Article number	Price €	Application
Set CVD for Charleston Fixing set, consisting of: - Bracket CVD 0 - Support BH - Attenuator - Locking mechanism		RAL 9016 4 x CVD 0 / BH 6 x CVD 0 / BH 8 x CVD 0 / BH 10 x CVD 0 / BH Special finish 4 x CVD 0 / BH 6 x CVD 0 / BH 8 x CVD 0 / BH 10 x CVD 0 / BH	774401 774601 774801 774901 774409 774609 774809 774909	25.57 37.23 48.86 60.52 67.32 99.82 132.34 164.85	Zehnder Charleston
Set CVD for Charleston Clinic Fixing set, consisting of: - Bracket CVD 0 - Support BHK - Attenuator - Locking mechanism		RAL 9016 4 x CVD 0 / BHK 6 x CVD 0 / BHK 8 x CVD 0 / BHK 10 x CVD 0 / BHK Special finish 4 x CVD 0 / BHK 6 x CVD 0 / BHK 8 x CVD 0 / BHK 10 x CVD 0 / BHK	775421 775621 775821 775921 775429 775629 775829 775929	46.50 68.55 90.68 112.76 88.05 130.90 173.78 216.62	Zehnder Charleston Clinic
Set BKE for Charleston Wall hole Ø 18 mm, bracket length 160 mm. Depth regulation and plastic head off-centre, height-adjustable 0 - 7 mm. Fixing set, consisting of: - Build-in bracket BKE - Support BH (white) - Incl. 2 retaining springs BSF1		Galvanised/RAL 9016 4 x BKE / BH 6 x BKE / BH 8 x BKE / BH 10 x BKE / BH Special finish 4 x BKE / BH 6 x BKE / BH 8 x BKE / BH 10 x BKE / BH	774461 774661 774861 774961 774469 774669 774869 774969	41.07 57.51 73.99 90.38 64.72 92.78 120.85 148.91	Zehnder Charleston
Set BKE for Charleston Clinic Wall hole Ø 18 mm, bracket length 160 mm. Depth regulation and plastic head off-centre, height-adjustable 0 - 7 mm. Fixing set, consisting of: - Build-in bracket BKE - Support BHK (white) - Incl. 2 retaining springs BSF1		Galvanised/RAL 9016 4 x BKE / BHK 6 x BKE / BHK 8 x BKE / BHK 10 x BKE / BHK Special finish 4 x BKE / BHK 6 x BKE / BHK 8 x BKE / BHK 10 x BKE / BHK	775461 775661 775861 775961 775469 775669 775869 775969	61.98 88.87 115.77 142.68 86.29 125.14 164.03 202.89	Zehnder Charleston Clinic
Set support for TSK In connection with wall brackets to guard against movement, meets high requirements according to VDI 6036, available in two different lengths: TSK130 = length 130 mm (for 2-column), TSK160 = length 160 mm (for 3-6-column or larger wall clearances)		RAL 9016 2 x TSK130 2 x TSK160 Special finish 2 x TSK130 2 x TSK160	774701 774721 774709 774729	9.21 9.52 13.80 14.25	Zehnder Charleston
Set support for TSKC In connection with wall brackets to guard against movement, meets high requirements according to VDI 6036, available in two different lengths: TSKC130 = length 130 mm (for 2-column), TSKC160 = length 160 mm (for 3-6-column or larger wall clearances)		RAL 9016 2 x TSKC130 2 x TSKC160 Special finish 2 x TSKC130 2 x TSKC160	774711 774731 774719 774739	9.21 9.52 13.80 14.25	Zehnder Charleston Clinic

Screws and anchors are not included in the scope of delivery. Only some accessories in special finishes available as a set, see individual brackets.

Individual brackets for floor mounting

Description		Version	Article number	Price €	Application
Foot bracket set HFK incl. cover H = 140 - 170 ¹⁾ mm		RAL 9016			Zehnder Charleston
		2 x HFK	754551	114.41	
		3 x HFK	754561	152.86	
		Special finish			
		RAL 9016			Zehnder Charleston
		2 x HFK	754431	134.00	
		3 x HFK	754441	201.00	
		Special finish			
		2 x HFK	754439	175.34	Zehnder Charleston
		3 x HFK	754449	263.04	
Free-standing floor bracket STF 2 for tightening With bracket, without bench frame, RAL 9016 Comprising: - Attenuator, plastic - Support H2, plastic - Rectangular tube - Bracket KS - Footplate - Sealing cap, plastic Can be combined with: - Cover AD1 for footplate - Cover AR for rectangular tube * The desired dimension depends on the sum of the floor construction, ground clearance and height of the radiator.		Dimension*			Zehnder Charleston (2-column), up to H < 600 mm ²⁾
		360 mm	719011	45.64	
		410 mm	719021	45.64	
		460 mm	719031	45.64	
		510 mm	719041	45.64	
		560 mm	719051	45.64	
		610 mm	719061	45.64	
		660 mm	719071	50.98	
		710 mm	719081	50.98	
		760 mm	719091	50.98	
		810 mm	719101	50.98	
		860 mm	719111	50.98	
		910 mm	719121	50.98	
		960 mm	719131	50.98	
		1010 mm	719141	50.98	
		1060 mm	719151	50.98	
		1110 mm	719161	50.98	
		1160 mm	719171	50.98	
Free-standing floor bracket STF 3 for tightening With bracket, without bench frame, RAL 9016 Comprising: - Attenuator, plastic - Support H3, plastic - Rectangular tube - Bracket KS - Footplate - Sealing cap, plastic Can be combined with: - Cover AD1 for footplate - Cover AR for rectangular tube * The desired dimension depends on the sum of the floor construction, ground clearance and height of the radiator.		Dimension*			Zehnder Charleston 3 to 6-column, up to H < 600 mm ²⁾
		360 mm	721011	44.32	
		410 mm	721021	44.32	
		460 mm	721031	44.32	
		510 mm	721041	44.32	
		560 mm	721051	44.32	
		610 mm	721061	44.32	
		660 mm	721071	49.64	
		710 mm	721081	49.64	
		760 mm	721091	49.64	
		810 mm	721101	49.64	
		860 mm	721111	49.64	
		910 mm	721121	49.64	
		960 mm	721131	49.64	
		1010 mm	721141	49.64	
		1060 mm	721151	49.64	
		1110 mm	721161	49.64	
		1160 mm	721171	49.64	

Screws and anchors are not included in the scope of delivery. Surcharge for custom-made colour: 50% surcharge on price of RAL 9016

¹⁾ Cut the round tubes to length by 5 mm each at the building site to reduce the minimum height to 130 mm.

²⁾ Provide additional bracket from a height of 600 mm for the requirements class 2.

H = Total height of bracket

Individual floor brackets for floor mounting

Description		Version	Article number	Price €	Application
Floor brackets STF 2 K for tightening With bracket, without bench frame, RAL 9016 Comprising: - Attenuator, plastic - Support HK2 - Rectangular tube - Bracket KS - Footplate - Sealing cap, plastic Can be combined with: - Cover AD1 for footplate - Cover AR for rectangular tube * The desired dimension depends on the sum of the floor construction, ground clearance and height of the radiator.		Dimension* 360 mm 410 mm 460 mm 510 mm 560 mm 610 mm 660 mm 710 mm 760 mm 810 mm 860 mm 910 mm 960 mm 1010 mm 1060 mm 1110 mm 1160 mm	605011 605021 605031 605041 605051 605061 605071 605081 605091 605101 605111 605121 605131 605141 605151 605161 605171	42.55 42.55 42.55 42.55 42.55 42.55 47.87 47.87 47.87 47.87 47.87 47.87 47.87 47.87 47.87 47.87 47.87	Zehnder Charleston Clinic (2-column), up to H < 600 mm ¹⁾
Floor bracket STF 3 K for tightening With bracket, without bench frame, RAL 9016 Comprising: - Attenuator, plastic - Support HK3 - Rectangular tube - Bracket KS - Footplate - Sealing cap, plastic Can be combined with: - Cover AD1 for footplate - Cover AR for rectangular tube * The desired dimension depends on the sum of the floor construction, ground clearance and height of the radiator.		Dimension* 360 mm 410 mm 460 mm 510 mm 560 mm 610 mm 660 mm 710 mm 760 mm 810 mm 860 mm 910 mm 960 mm 1010 mm 1060 mm 1110 mm 1160 mm	609011 609021 609031 609041 609051 609061 609071 609081 609091 609101 609111 609121 609131 609141 609151 609161 609171	42.73 42.73 42.73 42.73 42.73 42.73 48.12 48.12 48.12 48.12 48.12 48.12 48.12 48.12 48.12 48.12 48.12	Zehnder Charleston Clinic 3 to 6-column, up to H < 600 mm ¹⁾
Plastic cover, AD1 For footplate Not included in price of STF, suitable for retrofitting		Plastic, white	703000	15.32	Floor brackets STF
Cover AR For rectangular tube Not included in price of STF.		Plastic, white	704000	3.98	Floor brackets STF
Bench frame for floor bracket STF		Galvanised	713002	29.19	Floor brackets STF

Screws and anchors are not included in the scope of delivery

Surcharge for custom-made colour: 50% surcharge on price of RAL 9016

¹⁾ Provide additional bracket from a height of 600 mm for the requirements class 2.

Sets for floor mounting for subsequent orders

Description		Version	Article number	Price €	Application
Cover for foot bracket Charleston, welded (height adjustable) and foot bracket HFK Diameter 106 mm for round tube bracket Ø 25 mm		Plastic, white Special finish	753031 753039	14.62 18.94	Zehnder Charleston
Cover for foot bracket Charleston, welded fix 150 mm Diameter 106 mm for round tube bracket Ø 30 mm		Plastic, white Special finish	753041 753049	14.62 18.94	Zehnder Charleston

Spare parts for wall mounting brackets

Description	Version	Article number	Price €	Application
Wall bracket CVD 0 ¹⁾ With attenuator, clearances 10/15 mm	RAL 9016 Special finish	795031 795039	2.70 7.93	For all radiators with suspension brackets or plates
Wall bracket CVD 1 ¹⁾ With attenuator, clearances 25/30 mm		795041 795049	2.70 7.93	For all radiators with suspension brackets or plates
Wall bracket CVD 2 ¹⁾ With attenuator, clearances 30/45/50 mm		795051 795059	5.89 11.06	For all radiators with suspension brackets or plates
Support BH Clamp bracket for tightening instead of welded lugs; variable positioning	RAL 9016 Special finish	774001 774009	3.11 8.34	Zehnder Charleston (not Clinic version)
Support BHK Clamp bracket for tightening instead of welded lugs; variable positioning	RAL 9016 Special finish	775011 775019	8.34 13.52	Zehnder Charleston Clinic
Spacer DS Adjustable for wall clearance 15-60 mm	Plastic, white	780000	2.58	Zehnder Charleston Zehnder Charleston Clinic
Retaining spring for CVD For wall brackets CVD 0, CVD 1 and CVD 2 with support BH/BHK or lugs with height 20 mm. Price valid for 2 retaining springs	Spring steel	948012	2.30	Zehnder Charleston
Security clip BFS 1 For drilling templates BKE with support BH/BHK	Spring steel	777010	4.12	Zehnder Charleston

1) An on-site locking device may be required depending on the installation and connection situation and the net weight of the radiator. In this case, retaining springs (suitable for the relevant product) or an on-site locking device must be provided.

Valves, return screw connections, thermostats

Description		Version	Article number	Price €	Application
Adaptor nipple From ½" female thread to ¾" external thread for screwing with O-ring seal			837110	9.01	For all radiators
Directional air vent, nickel-plated, self-sealing		¼" ⅜" ½" ⅝"	816010 816020 816030 816040	4.17 4.17 4.17 4.17	
Directional air vent, chrome-plated, self-sealing Suitable for max. operating pressure of 18 bar		½"	816070	7.09	
Zehnder thermostat "LH2" Thermostat with integrated fluid sensor, tested according to EN 215. Can be restricted and locked to individual reference value of 7 to 28 °C. Version with zero setting and threaded connection for thermostat M 30 x 1,5		White Chrome	819140 819148	35.02 60.35	For all radiators with threaded connection M 30 x 1,5 mm
Zehnder thermostat "DH" Thermostat with integrated expansion material sensor, reference value range 7 to 28 °C. Version with zero setting		White Chrome	819050 819058	35.02 53.36	
Zehnder thermostat "SH" Elegant thermostat with integrated fluid sensor, tested according to EN 215, reference value range 7 to 28 °C. Version with zero setting. Thermostat threaded connection M 30 x 1,5 with coupling nut in chrome.		White Chrome Stainless steel	819080 819088 819082	38.09 53.47 53.47	
Zehnder thermostat „Design Line“ Thermostat with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5		White Chrome Stainless steel optic Copper Bronze 1) Technoline Special finish	841271 841278 853720 853850 853860 991699 841279	64.11 64.11 131.65 171.72 171.72 135.07 73.79	
Thermostatic head M 30 x 1.5 mm		White Chrome	853931 853938	36.10 65.00	
Blanking plug, nickel-plated, self-sealing		½"	974020	2.39	For all radiators
Blanking plug, chrome-plated Suitable for operating pressure up to max. 18 bar		½"	974058	6.28	
Angle adapter for thermostat M 30 x 1,5		White	819500	13.92	For all radiators with threaded connection M 30 x 1,5 mm

All fittings etc. suitable for operating temperature max. 110 °C and operating pressure max. 10 bar, unless indicated otherwise.

1) Suitable for connection fitting and valve body in brass.

Zehnder Design Line valves

Description		Version	Article number	Price €	Application
Valve set type A Angled flow and lockshield, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, manual handwheel, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		Chrom	838888	76.44	For all radiators with ½" female thread
Valve set type B Angled flow and lockshield, manual handwheel thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	838891 838898	119.66 119.66	
Valve set type C Straight flow and lockshield, manual handwheel thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	838941 838948	119.66 119.66	
Valve set type D Reverse flow and angled lockshield, manual handwheel thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	838951 838958	125.37 125.37	
Valve set type G Angled-angled flow head to the left, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, manual handwheel, lockshield angled, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	838981 838988	133.41 133.41	
Ventilset Typ I Angled-angled flow head to the right, manual handwheel, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, lockshield angled, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	838991 838998	133.41 133.41	

Zehnder Design Line valves

Description		Version	Article number	Price €	Application
Valve type O 50 mm straight, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7 and by-pass, turnable for manual handwheel to the left or right, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	839041 839048	132.50 132.50	For all radiators with ½" female thread
Valve type P 50 mm angled, with by-pass, to the right thermostatic insert M 30 x 1,5 mm, with pre-setting 1-7 and by-pass, manual handwheel, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	839051 839058	132.50 132.50	
Valve type Q 50 mm angled, with by-pass, to the left thermostatic insert M 30 x 1,5 mm with pre-setting 1-7 and by-pass, manual handwheel, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	839101 839108	132.50 132.50	
Valve type U 50 mm swiveling design valve straight or angled, with by-pass, thermostatic insert M 30 x 1.5 mm with pre-setting 1-7, manual handwheel to the left or to the right, including 2 pc ¾" Eurocone nuts Ø 16.8 mm in finish of valve body, without adaptors for pipes		White Chrome	839171 839178	242.19 242.19	
H50 valve for Completto versions Lockshield valve 50 mm straight, without bypass, with 2 pcs adaptors ¾" to ½" to radiator connection, including 2 pcs ¾" Euroconus nuts Ø 16.8 mm in finish of valve body, without adaptors for pipes NEW		White Chrome Technoline	991671 991678 991679	114.48 114.48 148.40	
H50 valve for Completto versions Lockshield valve 50 mm angled, without bypass, with 2 pcs adaptors ¾" to ½" to radiator connection, including 2 pcs ¾" Euroconus nuts Ø 16.8 mm in finish of valve body, without adaptors for pipes NEW		White Chrome Technoline	991681 991688 991689	114.48 114.48 148.40	

Zehnder Design Line Coloured Valves

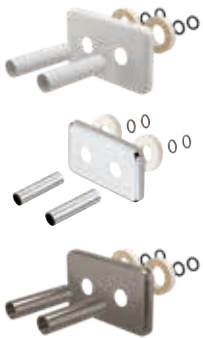
Description		Version	Article number	Price €	Application
Zehnder thermostat "Design Line" Thermostat with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5		Special finish	841279	73.79	For all radiators with ½" female thread, in colour of radiator
Valve set type B Angled flow and lockshield, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes. Thermostat Design Line with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5.		Special finish			
		Valve set with manual handwheel	838899	119.62	
		Valve set including Design Line thermostat	839439	193.45	
Valve type O 50 mm straight, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7 and by-pass, turnable to the left or right, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes. Thermostat Design Line with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5.		Special finish			
		Valve set with manual handwheel	839049	132.50	
		Valve set including Design Line thermostat	839409	206.29	
Valve type P 50 mm angled, with by-pass, to the right thermostatic insert M 30 x 1,5 mm, with pre-setting 1-7 and by-pass, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes. Thermostat Design Line with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5.		Special finish			
		Valve set with manual handwheel	839059	132.50	
		Valve set including Design Line thermostat	839419	206.29	
Valve type Q 50 mm angled, with by-pass, to the left thermostatic insert M 30 x 1,5 mm with pre-setting 1-7 and by-pass, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes. Thermostat Design Line with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5.		Special finish			
		Valve set with manual handwheel	839109	132.50	
		Valve set including Design Line thermostat	839429	206.29	

All valves etc. suitable for operating temperature max. 110 °C and operating pressure max. 10 bar, if not indicated differently.
 For further information, please see information in the keyword list.

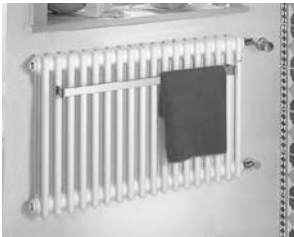
Zehnder Design Line Accessories

Description		Version	Article number	Price €	Application
Nut ½", 2 pcs Fe - ¾" Eurocone		White Chrome	842001 842008	24.23 24.23	Adapter for screw fittings with ½" external thread
Adaptors, 2 pcs Multilayer 16 x 2,0 mm		Brass	842060	11.41	
Adaptors, 2 pcs PEX 12 x 1,0 mm		Brass	842070	11.41	
Adaptors, 2 pcs Copper Ø 10 mm Copper Ø 12 mm Copper Ø 14 mm Copper Ø 15 mm Copper Ø 16 mm		Brass	842080 842090 842100 842110 842120	7.13 7.13 7.13 7.13 7.13	Matching to Zehnder Design Line valves and union nuts (2 x ¾" Eurocone, Ø 16,8 mm) which are included in the scope of delivery
Nuts Ø 18 mm - ¾" Eurocone + adaptors copper Ø 18 mm 2 pcs			842140	35.63	
Nuts Ø 20,8 mm - ¾" Eurocone + adaptors multilayer Ø 20 x 2 mm 2 pcs			842150	35.63	
Adaptors, 2 pcs Multilayer Ø 14 mm			842160	11.41	
Adaptors, 2 pcs Multilayer Ø 16 x 2,25 mm			842170	11.41	
Universal Adaptor set (without nuts ¾" Eurocone - Ø 16,8 mm) - 2 pcs Alu/Pex multilayer 16 x 2.0 mm - 2 pcs PEX 12 x 1 mm - 2 pcs CU 12 mm - 2 pcs CU 14 mm - 2 pcs CU 15 mm		Brass	842180	39.90	

Zehnder Design Line Accessories

Description		Version	Article number	Price €	Application
Sleeving kit L = 70 mm L = 160 mm		Chrome Chrome	853738 853668	24.23 31.33	For radiator installation
Sleeving kit 50 mm for Ø DN 18 L = 70 mm for Ø DN 18 L = 160 mm for Ø DN 25 L = 70 mm for Ø DN 25 L = 160 mm		White Chrome Technoline White Chrome Technoline White Chrome Technoline White Chrome Technoline	816321 816328 816329 816331 816338 816339 816341 816348 816349 816351 816358 816359	47.17 47.17 70.70 47.17 47.17 70.70 61.48 61.48 85.22 61.48 61.48 85.22	For radiator installation
Collar Ø45 mm for Ø ½" for Ø 10 mm for Ø 12 mm for Ø 14 mm for Ø 15 mm for Ø 16 mm for Ø 18 mm		White Chrome White Chrome White Chrome White Chrome White Chrome White Chrome White Chrome	816241 816248 816251 816258 816261 816268 816271 816278 816281 816288 816291 816298 816301 816308	2.85 7.13 2.85 7.13 2.85 7.13 2.85 7.13 2.85 7.13 2.85 7.13	For existing connections

Rail, Miscellaneous

Description		Version	Article number	Price €	Application
Towel rail Charleston with anti-crash device Depth 45 mm Rail to be shortened on site, attachments and towel bar in chrome. Length 366 mm (at least 9 elements) Length 918 mm (at least 20 elements)		Chrome Length 366 mm Length 918 mm	966018 966028	205.08 220.56	Zehnder Charleston Zehnder Charleston Clinic
Connection plugs for 2-column radiators For hard marsonite seal Plug painted RAL 9016 Right-hand thread as standard on flow side of the radiator		Right-hand thread 1" x 1/8" right 1" x 1/4" right 1" x 3/8" right 1" x 1/2" right 1" x 3/4" right Left-hand thread 1" x 1/8" left 1" x 1/4" left 1" x 3/8" left 1" x 1/2" left 1" x 3/4" left	908101 908201 908301 908401 908501 909101 909201 909301 909401 909501	8.66 8.66 8.66 8.66 8.66 8.66 8.66 8.66 8.66 8.66	Zehnder Charleston All versions
Connection plugs for 3 to 6-column radiators For hard marsonite seal Plug painted RAL 9016 Right-hand thread as standard on flow side of the radiator		Right-hand thread 5/4" x 1/8" right 5/4" x 1/4" right 5/4" x 3/8" right 5/4" x 1/2" right 5/4" x 3/4" right 5/4" x 1" right Left-hand thread 5/4" x 1/8" left 5/4" x 1/4" left 5/4" x 3/8" left 5/4" x 1/2" left 5/4" x 3/4" left 5/4" x 1" left	908111 908211 908311 908411 908511 908611 909111 909211 909311 909411 909511 909611	8.66 8.66 8.66 8.66 8.66 8.66 8.66 8.66 8.66 8.66 8.66 8.66	
Clip-in baffle		1" 5/4"	911110 911120	3.38 3.38	
Blind plugs for 2-column radiators For hard marsonite seal Plug painted RAL 9016 Right-hand thread as standard on flow side of the radiator		Right-hand thread 1" Left-hand thread 1"	906001 907001	8.15 8.15	
Blind plugs for 3 to 6-column radiators For hard marsonite seal Plug painted RAL 9016 Right-hand thread as standard on flow side of the radiator		Right-hand thread 5/4" right Left-hand thread 5/4" left	906011 907011	8.15 8.15	
Blind plugs With soft seal, RAL 9016		Right-hand thread 1" 5/4" Left-hand thread 1" 5/4"	906021 906031 907021 907031	7.02 7.02 7.02 7.02	

All fittings, plugs, etc. suitable for max. operating temperature of 110 °C and max. operating pressure of 10 bar, unless noted otherwise.

Miscellaneous

Description			Version	Article number	Price €	Application									
Connection plugs With soft seal, RAL 9016 Connection ½"			Right-hand thread 1 " 5/4 " Left-hand thread 1 " 5/4 "	908421 908431 909421 909431	7.02 7.02 7.02 7.02	Zehnder Charleston Zehnder Charleston Clinic									
Plug key Steel			1 " 5/4 "	901010 901020	409.56 517.32										
Plug key For painted plugs with soft seal			Plastic	901030	11.93		Zehnder Charleston								
Fitting			2-column 1 " 3 to 6-column 5/4 "	911020 911030	2.58 2.88		Zehnder Charleston Zehnder Charleston Clinic								
1 set coupling tools 2-column 1 " 3 to 6-column 5/4 " 2-column 1 " 3 to 6-column 5/4 "			Dimensions 750 mm 750 mm 1250 mm 1250 mm	903020 903030 905020 905030	486.78 688.49 589.47 856.70										
Seals Hard marsonite seal 0,75 mm			2-column 1 " 3 to 6-column 5/4 "	915020 915030	1.29 1.29										
Soft seal, plastic white Joint seal, only seals on unpainted sealing surfaces Approved fastening torques: <table><tr><td>Boss size</td><td>Plugs Lens seal</td><td>Joint joint seal</td></tr><tr><td>1 "</td><td>30 - 35 Nm</td><td>45 - 55 Nm</td></tr><tr><td>5/4 "</td><td>50 - 70 Nm</td><td>70 - 80 Nm</td></tr></table>			Boss size	Plugs Lens seal	Joint joint seal	1 "		30 - 35 Nm	45 - 55 Nm	5/4 "	50 - 70 Nm	70 - 80 Nm	For 1 " boss For 5/4 " boss	915021 915031	1.44 1.44
Boss size	Plugs Lens seal	Joint joint seal													
1 "	30 - 35 Nm	45 - 55 Nm													
5/4 "	50 - 70 Nm	70 - 80 Nm													
Lambswool cleaning brush				601020 601030	55.16 55.16	Zehnder Charleston Zehnder Charleston Clinic Charleston electric operation									
Lacquer aerosol Original paint, air-drying For improving the surface finish, 150 ml RAL 9001 (Cream White) RAL 9002 (Grey White) RAL 9010 (Pure White) RAL 9016 (Traffic White)			Colour: RAL 9001 RAL 9002 RAL 9010 RAL 9016	977020 977050 977080 977090	31.52 31.52 31.52 31.52										
Lacquer pens Original paint, air-drying For repairing minor damage RAL 9010 (Pure White) RAL 9016 (Traffic White)			Colour: RAL 9010 RAL 9016 On request	675020 675130 675000	26.83 26.83 26.83										

Keyword list

Accessories

A wide range of accessories are available for various additional uses, such as hanging up towels. For more information, see the section on "Accessories".

Accessory set

To make accessories simple to choose, accessory sets are offered for each radiator. Detailed information is provided in the relevant section.

Antimicrobial coating

Especially for use in hygienically sensitive areas. This coating is based on the well-known bacteria-inhibiting and killing effect of silver ions embedded in the painted surface and offers safe and reliable long-term protection against the growth and spread of micro-organisms on radiator surfaces. This coating is completely safe for people and animals to touch. It has scientifically proven properties and is primarily offered for Zehnder Charleston Clinic.

Baffle

To avoid reduced output, e.g. with a riding connection, internal installations, e.g. baffles, deflector plates, guide plates, are required. Detailed information is available on request.

Advantages

See "Product description".

Brackets

Appropriate brackets are offered as an accessory set for the respective radiators. Detailed information is given alongside the relevant products and in the "Accessories" section. Also see notes under "Fixings".

CE marking

The CE marking on Zehnder radiators shows that they are manufactured in accordance with the prevailing European standard EN 442 and that the product has been subjected to the prescribed conformity evaluation procedure.



Product/product family	CE - Year
Zehnder Charleston	CE - 05
Zehnder Charleston Clinic	CE - 05
Zehnder Charleston Retrofit	CE - 05
Zehnder Charleston Turned	CE - 18
Zehnder Charleston Bench	CE - 05
Zehnder Radiator Bench	CE - 05
Zehnder Charleston electric version	CE - 17

Clear Lacquer Version (Technoline)

See "Colours"

Connections

Each Zehnder radiator is supplied complete with connections. Unless stated otherwise, all connections are female threads. Unless a different dimension is specified, the supplied connections are 1/2". Orders without a connection type number will always be delivered with the respective standard connection. Plastic plugs inserted to protect the thread must be removed and replaced with an directional air vent / draining valve or blind plug.

Conversion

Factor for converting the nominal heat output to thermal outputs at other system temperatures, see "Thermal output".

Corrosion protection

See "Finish" and "Surface protection".

Colours

Zehnder radiators are available in almost every colour conceivable. From all possible colours, the Zehnder colour chart shows a selection of colours from various colour systems, such as RAL colours, sanitary colours or colours from the NCS-S system. The standard paint for the entire Zehnder radiator programme is the colour RAL 9016, Traffic White.

17 common colours make up Zehnder colour category 1, with an additional charge of 20%, 30 others colour make up category 2, with an additional charge of 30% on the standard finish. All other paintable colours are available for a surcharge on request. Another coating option is the clear lacquer version for Zehnder Charleston (Technoline), which falls in category 2. This essentially concerns one unique colour for each radiator. For this reason, different surface structures and visual colour differences can also occur at a later point in time. These colour deviations are not a fault and are therefore not subject to claims under warranty as described in our General Sales and Delivery Conditions.

Structural paints (structured paint surface) are possible on Zehnder radiators and also fall under category 2.

The Zehnder colour chart is printed on the inside of the rear catalogue cover.

For more information, see "Finish".

Description

The description for a product contains all the information needed to create a specification or tender. The text-block structure simplifies the composition of all necessary features according to on-site requirements.

Dimensions

The dimensions indicated in the documentation are correct at the time of printing. Subject to change without notice.

Electric operation and Ecodesign Directive

Electric radiators are fixed units that comprise the actual radiator body, a filling medium (heat transfer fluid), a heating element and associated controls. This unit is subject to a special function test and must not be changed. The heat transfer fluid is frost-proof up to -20°C. The electric radiators are subject to the Ecodesign Directive. The aim of this Directive is to reduce the environmental effects of products that consume energy, with the entire product life-cycle taken into account. A points system is used to evaluate the extent to which the Directive has been fulfilled. Various functions, such as standby power consumption ≤ 0,5 W, weekly programme and open window detection, help to fulfil the minimum legal requirements (that is, they help to achieve the minimum number of points). Devices that meet the minimum requirements and are thus compliant with the Ecodesign Directive.

Please note:

- The electrical installation must comply with local regulations.
- In stationary installation (without plug), a switch must be installed (all-phase isolation from the mains with min. 3 mm contact spacing).
- For electric-only radiators, the defined filling quantity must not be changed.
- The electric heating element must only be opened and the mains cable only replaced by the manufacturer.
- When using radiators with electric heating elements, the qualified electrician is the competent partner for the protective measures to be taken.
- Follow the operating instructions.

Keyword list

Environment

The certification of our environmental management system to DIN EN ISO 14 001 by an independent institution obliges us to make continuous improvements to our environmental services through reducing or avoiding environmental burdens and waste, encouraging the utilisation and protection of resources as well as observing all environmental laws and regulations applicable to us.

Finish

Ready-painted radiators in this price list have a two-coat finish (to DIN 55900, Part 1 and 2, comprising primer and top coat). The top coat is a powder coating. The high-quality Zehnder powder coating produces an especially smooth and extremely durable surface. Further information on the applications and limits of radiators is contained in information sheet number 7 of the BDH (Bundesindustrieverband Deutschland, Haus-, Energie- und Umwelttechnik e.V.).

Please always use the original RAL, NCS colour samples or original colour charts of the sanitary manufacturers for exact colour matching. For technical production reasons, minor colour deviations are possible in paints on steel surfaces, also when taking the prevailing lighting conditions into account. Deviations can also occur when comparing painted steel surfaces (radiators) with ceramic products.

The colours shown here (see inside of rear cover) are not binding for printing reasons. Radiators in metallic colours, e.g. RAL 9006, RAL 9007 and Anthracite are unique products and visual differences may appear in the colour, depending on the radiator.

Fixings

To ensure that radiators are fitted safely, the weight of the radiator and other aspects must be considered when choosing the right quality and quantity of fixings. Additional loads and foreseeable misuse of a radiator must be considered or ruled out by planning and implementation in line with the known building use. The installation situation and accessibility are just as important criteria as wall material, bracket shape, location of the suspension points, locking device, add-on elements and the like.

Detailed information on the required number of fixing axes in accordance with VDI 6036 requirements class 2 is given for the respective products in the section on "Installation accessories". Recommendations for additional requirements classes on request. See also the key word VDI 6036.

Flow connection

This concerns the connection on the radiator through which the hot water flows into the radiator.

Galvanising

Only ½" connections or larger are possible. Curved or angled radiators cannot be galvanised. Galvanisation creates structures on the surface. These are caused by the technological process and therefore are not a fault. We cannot guarantee a clean, smooth surface. Galvanised radiators are generally delivered with a top coat. For explanation, see "Surface protection".
Maximum dimension galvanised: 3000 x 850 x 450 mm

Ground clearance

A reduction in the distance between the radiator and the floor can result in reduced output. For more information, see "Reduced output".

Guide plate

See "Baffle".

High pressure

Even with suitable radiators and accessory parts, pressure loads up to a maximum of 18 bar are only permitted if pressure surges can be excluded.

Hydraulic balancing

By hydraulic balancing the various system resistances are set so that the radiators are supplied with the necessary quantity of water at all operational points, in order to achieve the desired thermal output.

Hygiene version

Numerous Zehnder radiators are suitable for use in hygienically sensitive areas. Hygiene certificates can be requested for this. The keyword "Antimicrobial coating" is also of interest for the topic of hygiene.

Immersion tube

Some types of connection require the installation of an immersion tube to achieve optimal heat distribution.

Inlet and outlet resistance

The resistance coefficient (zeta value) is used to calculate the pressure loss. For more information, see "Pressure loss".

Installation in series

The installation in series of radiators refers to the series connection of several radiators. Detailed information is given alongside the relevant products.

Joining

Zehnder Charleston radiators in lengths above the set maximum number of elements are supplied in sub-blocks and must be joined together on site. For detailed information, see section on "Zehnder Charleston".

Lance valve

The lances must be shortened or extended, depending on the radiator and connection types. Detailed information is available on request. See keyword "Single-tube systems".

Length restrictions

Avoiding damage during transport significantly increases the cost of packaging, which must be charged for accordingly.

Made to measure

Zehnder radiators can be customised (e.g. angled, curved, with welded brackets). Special shapes require templates to be made from solid materials (cardboard, packing paper) in order to guarantee quick and trouble-free processing. The support of the area manager can be used for a small charge.

Where necessary, the customer will receive a scale drawing of the version to be installed and final pricing for inspection and approval, after which the order will be manufactured. The order cannot be cancelled once placed.

Minimum water flow

If the flow of water through a radiator is heavily reduced, the heat output can fall far below the calculated or indicated value. For this reason, a minimum water flow should always be ensured. The approximate minimum water flows $q_{m \min}$ in % of the nominal flow rate q_{ms} which does not cause the thermal output to deviate from the standard characteristic curve by more than 5% is 17%.

Operating pressure

The maximum permissible operating pressure of a radiator depends on its geometry, the material used and the finish. The permissible operating pressure varies according to the product, see table: Suitable fittings, plugs and directional air vents must be ensured in connection with high pressure applications in excess of 10 bar. See "High pressure".

Keyword list

Product/product family	Standard version [bar]	High pressure version [bar]
Zehnder Charleston	10	18
Zehnder Charleston Clinic	10	18
Zehnder Charleston Retrofit	10	18
Zehnder Charleston Turned	10	-
Zehnder Charleston Bench	10	18
Zehnder Radiator Bench	10	18

Operating temperature

The coating of Zehnder radiators can be used for central heating systems up to 110 °C. It is suitable for use in district heating, low temperature and condensing systems.

Packaging

The packaging of Zehnder radiators serves as protection against damage during transport and on building sites. It must be removed before starting the system for the first time in order to avoid any damage caused by condensation.

Pressure loss

The pressure loss is determined using a zeta value of 2,5 per radiator for connection sizes from $\frac{3}{8}$ " to $\frac{3}{4}$ " and a flow velocity of 1 m/sec. The inherent resistance of a radiator can be ignored. In special cases (e.g. where an integrated valve is fitted), information on pressure losses is provided.

Prices

Terms of delivery for quoted prices are: FQA Lahr. All prices are gross prices. Where prices are not stated or only shown with the proviso 'current list price', the valid list prices will be calculated on the day of delivery. Also see General Sales and Delivery Conditions.

Quality check

Zehnder Group Deutschland GmbH is certified to DIN ISO 9001 and is therefore subject to stringent quality controls carried out by independent institutions in the areas of Design/Development, Production, Assembly and Customer Service.

Reduced output

The thermal output can be affected depending on where the radiator is installed. The standard thermal output is measured in an unobstructed setting with a ground clearance of 110 mm and a wall clearance of 50 mm. Any reduction in these clearances, as well as installation in alcoves and the application of covers and grilles can, depending on the model, lead to a reduction in thermal output. In the case of grilles, this reduction can differ between 5 and 12%, depending on the radiator.

Reflective cover plates

The disadvantage of installing a radiator in front of external glazing is that heat is lost directly through the glass. The back of a radiator emits heat in the form of thermal radiation in the same way as the front. For wall mounted radiators, the thermal radiation is reflected or absorbed by the wall, whereas this long-wave radiation radiates almost unimpeded through the pane of glass when radiators are installed in front of windows, even at greater distances. In order to avoid this unnecessary loss of heat and energy, radiators are available with a reflective cover plate fitted to the side of the radiator facing the window.

Returns

Radiators and accessories cannot be returned.

Return connection

This concerns the connection on the radiator through which the hot

water leaves the radiator and passes along the return line to the heat generator.

Scope of delivery

The scope of delivery for the standard version of a radiator can be found in the respective product description.

Seal

In the case of sealed connections and plugs, it may be necessary to tighten up the connection and blind plugs depending on the water quality, e.g. in a remote heating connection, after testing the pressure or heating the system for the first time. The sealing materials supplied or used by Zehnder are intended for use in closed heating systems.

Single-tube system

We recommend using single-tube valves with an adjustable bypass or a ballast system (riser), i.e. with an adjustable water volume over the radiator. Essentially, a reduced output of at least 25% must be considered when using single-tube lance valves. Function is often guaranteed only for certain models and up to specific lengths. Maximum lengths and an indication of how the radiators function with various makes of valve is available on request.

Standard thermal output

The standard thermal output of a radiator is determined in an independent, certified test laboratory according to standard EN 442 at the standard operating temperatures of 75/65/20 °C. The conversion of the thermal output to other system temperatures is done on the basis of the standard thermal output according to EN 12831.

For easy dimensioning, additional outputs for frequently used temperatures are shown alongside the standard thermal output:

- 70/55/20 °C
- 55/45/20 °C

Standard colour/finish

The standard colour for Zehnder radiators is RAL 9016. For more information, see "Painting".

Storage

Zehnder radiators must be stored for the long-term or temporarily in dry and chemical-free rooms.

Structural finish

See "Finish".

Surface protection

We recommend that installation areas affected by damp or chemicals are only fitted with radiators that are galvanised and then given a powder coating. A polyzinc coating with subsequent powder-coating increases the corrosion protection of the radiator, depending on the surface geometry. Possible applications are available on request. (see also "Galvanising")

System temperatures

These are the temperatures at which the hot water heating system is operated (flow, return and room temperature).

Technical specifications

The dimensions indicated in the documentation are correct at the time of printing. We reserve the right to make amendments that improve the product.

Technoline

See "Colours"

Test pressure

Each radiator is checked for leaks by subjecting it to 1,3 times its rated maximum operating pressure before delivery. For orders that

Keyword list

do not indicate the required operating pressure, the radiator will be delivered with the operating pressure of the standard version.

Thermal output Φ

The thermal output of a radiator model is given by the standard characteristic curve:

$$\Phi = K_M \cdot \Delta T^n$$



EN 442 defines the test procedure and the measurement method in identically arranged test laboratories. A single, pan-European measuring method therefore replaces the previous measurements that varied from country to country.

The output given under the following conditions in accordance with EN 442 applies as the nominal heat output Φ_s :

Flow temperature	$t_1 = 75\text{ °C}$
Return temperature	$t_2 = 65\text{ °C}$
Mean water temperature	$t_m = 70\text{ °C}$
Room temperature	$t_r = 20\text{ °C}$
Excess temperature ($t_m - t_r$)	$\Delta T = 50\text{ K}$

Thermal outputs Φ (different ΔT than 50 K)

For all excess temperatures other than $\Delta T_n = 50\text{ K}$, the thermal output is calculated in accordance with the formulae

$$\Phi = \Phi_s \times f_1 \text{ or } \Phi = \Phi_s \times \left(\frac{\Delta T}{\Delta T_n} \right)^n$$

ΔT is to be calculated logarithmically as follows:

$$\Delta T = \frac{(t_1 - t_r) - (t_2 - t_r)}{\ln \left(\frac{t_1 - t_r}{t_2 - t_r} \right)} = \frac{t_1 - t_2}{\ln \left(\frac{t_1 - t_r}{t_2 - t_r} \right)}$$

The excess temperature ΔT_n under standard conditions (75/65/20 °C) is, as a logarithmic excess temperature

$$\Delta T_n = \frac{75 - 65}{\ln \left(\frac{75 - 20}{65 - 20} \right)} = 49,83\text{ K}$$

The entire calculation process can be avoided by using the tables on page 156.

These can be used to directly read off the f_1 factor for known system temperatures (t_1, t_2, t_r) and radiator exponents. For other system temperatures, f_1 must be determined mathematically according to the specified formulae.

Examples for the dimensioning of radiators

Example of Zehnder Charleston:

Model 3050 (3-column) - 20 elements

$\Phi_s = 1032\text{ W}$, exponent $n = 1,25$

$t_1 = 60\text{ °C}$, $t_2 = 40\text{ °C}$, $t_r = 20\text{ °C}$

Determining ΔT :

$$\Delta T = \frac{(60 - 40)}{\ln \left(\frac{60 - 20}{40 - 20} \right)} = \frac{20}{0,693} = 28,85\text{ K}$$

$$\phi = 1032\text{ W} \times \left(\frac{28,85}{49,83} \right)^{1,25} = 1032\text{ W} \times 0,579^{1,25} = 1032\text{ W} \times 0,505 = \underline{\underline{521\text{ W}}}$$

Tolerances

Industry standard tolerances and tolerances based on production technology are subject to change for all indicated dimensions and fall within the tolerances defined in EN 442. The maximum tolerance must be considered during pre-assembly of the pipework or fixing materials. We reserve the right to make technical amendments during the validity of the documentation as part of product improvement.

TopCare

See keyword "Antimicrobial surface".

VDI 6036

Application of the directive VDI 6036 assists all participants in the process to make a comprehensive and comparable assessment of the installation situation. As an accepted rule of technology, this directive and the resulting assessment can also be drawn on for regulation purposes in the event of damages. Directive VDI 6036 classifies applications for radiator fastenings into various requirements classes with different loads. Additional loads for various intensities of misuse can be added to the net weight and water content of the radiator as required. Zehnder issues standard assignment recommendations for requirements classes 1 and 2, and for stable wall constructions (e.g. concrete) for selected fixing pieces - unless otherwise marked. Assignment recommendations for requirements class 3 and for special custom applications (requirements class 4) on request.

Example applications from VDI 6036:

Requirements class 2 (normal and increased requirements):

owner-occupied homes, rented flats, kindergartens, hospitals, retirement and nursing homes, office buildings, doctors' surgeries/lawyers offices, retail outlets.

Requirements class 3 (high-level requirements):

schools, sports facilities, youth centres, meeting places, railway stations, barracks

Requirements class 4 (very high-level requirements or special burdens):

prisons, psychiatric institutions, special agreements

Wall clearance

This is the distance between the wall and the back of the radiator. For more information, see "Reduced output".

Warranty

The warranty period for the products shown in this price list is two years. Additional information is provided in the General Sales and Delivery Conditions.

Water quality

Operating conditions and water quality according to VDI 2035 must be maintained.

Claims under guarantee will be rejected if substances (e.g. chemicals, antifreeze, etc.) are added to the heating water which have an aggressive effect on the sealing material. In case of non compliance, no liability can be accepted in accordance with point 8 of our General Sales and Delivery Conditions for sealing material, nor for any resulting defects and consequences. Claims under guarantee in accordance with point 8 of our General Sales and Delivery Conditions will also be rendered invalid in case of:

- Operation with steam,
- Periodical or long-term draining of the system,
- Excessive sludge in the radiators and
- Occasional or constant of oxygen into the system.

Wetrooms

See "Surface protection"

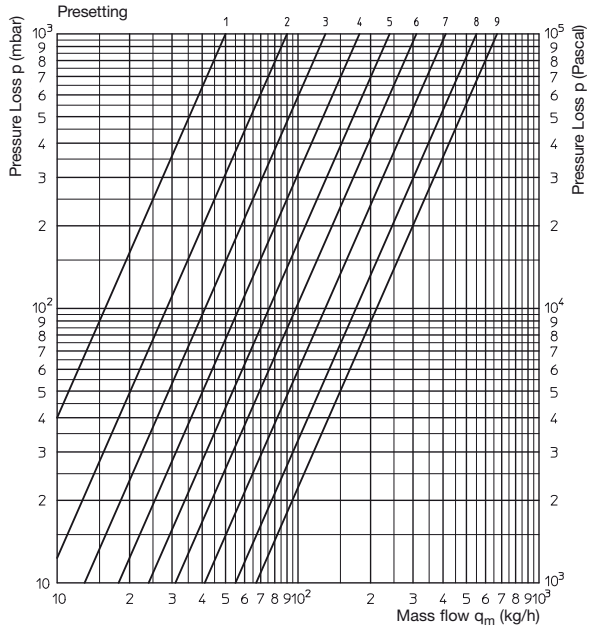
Keyword list

Legend		
Icon	Unit	Description
H	mm	Height
L	mm	Length
T	mm	Depth
H Lam.	mm	Height of fins
N	mm	Boss spacing
A	m ²	Surface
V	dm ³	Water content
M	kg	Empty weight
N _s	-	Number of elements
t ₁	°C	Flow temperature
t ₂	°C	Return temperature
t _r	°C	Room air temperature
t _m	°C	Mean water temperature (t ₁ +t ₂)/2
ΔT	K	Excess temperature t _m - t _r
Φ	W=(J/s)	Thermal output
Φ _S	W	Nominal heat output
Φ _L	W	Nominal heat output of the module
C _p	J/(kg K)	Specific heat capacity
n	-	Radiator indicator, exponent
S _k	%	Proportion of radiation
C _k	-	Conversion factor to Φ _S
q _m	kg/h/(kg/s)	Water flow
q _{ms}	kg/h/(kg/s)	Nominal flow rate
v	m/s	Velocity
Δp	kPa	Pressure loss, pressure drop
ξ	-	Resistance coefficient
ln	-	Natural logarithm

Physical unit	
°C	Degrees, Celsius
K	Kelvin, unit for temperature difference
m	Metres
mm	Millimetres
m/s	Metres/second, flow rate
Pa	Pascal, 1 Pa = 0,102 mmWS
mmWS	mm water column
W	Watt, unit of power 1 W = 0,6 kilocalories/hour old unit of power, 1 kcal/h = 1,163 W
c	Specific heat capacity of water = 1 kcal/kg K = 4,187 kJ/kg K
kJ	Kilojoule, 1 kJ = 0,239 kcal

Pressure loss graph

Valve insert AV 9 (Oventrop)



Presetting	1	2	3	4	5	6	7	8	9
kv-value	0,05	0,09	0,14	0,20	0,26	0,32	0,43	0,57 ¹⁾	0,67 ²⁾

¹⁾ Charleston Completo 0,54

²⁾ Charleston Completo 0,63

Conversion table, f₁ factor

t ₁ t _r n			t ₂ 75					70					65					60					55				
			1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40	1,20	1,27	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40
90	10	15	1,562	1,591	1,621	1,651	1,682	1,491	1,516	1,542	1,568	1,594	1,419	1,449	1,462	1,483	1,505	1,346	1,363	1,380	1,397	1,414	1,270	1,283	1,296	1,309	1,322
	15	18	1,432	1,454	1,476	1,498	1,521	1,363	1,380	1,398	1,416	1,435	1,291	1,311	1,319	1,333	1,347	1,218	1,228	1,238	1,248	1,259	1,142	1,149	1,155	1,162	1,168
	18	20	1,356	1,373	1,390	1,408	1,426	1,286	1,300	1,313	1,327	1,341	1,215	1,229	1,235	1,245	1,255	1,142	1,148	1,155	1,161	1,168	1,066	1,069	1,072	1,075	1,078
	20	22	1,305	1,319	1,334	1,349	1,364	1,236	1,247	1,258	1,269	1,280	1,165	1,175	1,180	1,187	1,195	1,092	1,096	1,100	1,104	1,108	1,016	1,017	1,017	1,018	1,019
	22	24	1,254	1,266	1,278	1,290	1,303	1,185	1,194	1,202	1,211	1,220	1,115	1,122	1,125	1,130	1,135	1,042	1,043	1,045	1,047	1,049	0,966	0,966	0,963	0,962	0,960
85	10	15	1,501	1,526	1,552	1,579	1,606	1,432	1,454	1,476	1,498	1,521	1,363	1,387	1,398	1,416	1,435	1,291	1,305	1,319	1,333	1,347	1,218	1,228	1,238	1,248	1,259
	15	18	1,372	1,391	1,409	1,428	1,447	1,305	1,319	1,334	1,349	1,364	1,236	1,251	1,258	1,269	1,280	1,165	1,172	1,180	1,187	1,195	1,092	1,096	1,100	1,104	1,108
	18	20	1,296	1,311	1,325	1,339	1,354	1,229	1,240	1,251	1,261	1,272	1,160	1,171	1,175	1,182	1,190	1,090	1,094	1,098	1,102	1,105	1,017	1,017	1,018	1,019	1,020
	20	22	1,246	1,258	1,269	1,281	1,293	1,179	1,187	1,196	1,204	1,212	1,111	1,118	1,121	1,125	1,130	1,040	1,042	1,044	1,045	1,047	0,967	0,966	0,964	0,963	0,962
	22	24	1,196	1,205	1,214	1,223	1,233	1,130	1,135	1,141	1,147	1,153	1,061	1,065	1,067	1,069	1,072	0,991	0,991	0,990	0,990	0,989	0,918	0,915	0,911	0,908	0,905
80	10	15	1,147	1,153	1,160	1,166	1,173	1,080	1,084	1,087	1,091	1,094	1,012	1,013	1,013	1,014	1,014	0,942	0,940	0,937	0,935	0,933	0,869	0,864	0,859	0,854	0,849
	15	18	1,439	1,461	1,483	1,505	1,528	1,372	1,391	1,409	1,428	1,447	1,305	1,325	1,334	1,349	1,364	1,236	1,247	1,258	1,269	1,280	1,165	1,172	1,180	1,187	1,195
	18	20	1,312	1,326	1,342	1,357	1,372	1,246	1,258	1,269	1,281	1,293	1,179	1,191	1,196	1,204	1,212	1,111	1,116	1,121	1,125	1,130	1,040	1,042	1,044	1,045	1,047
	20	22	1,236	1,247	1,258	1,270	1,281	1,171	1,179	1,187	1,195	1,203	1,105	1,111	1,114	1,119	1,124	1,037	1,038	1,040	1,041	1,043	0,966	0,965	0,964	0,962	0,961
	22	24	1,187	1,195	1,204	1,212	1,221	1,122	1,127	1,133	1,138	1,144	1,056	1,059	1,061	1,063	1,066	0,988	0,987	0,986	0,986	0,986	0,918	0,914	0,911	0,908	0,904
75	10	15	1,137	1,143	1,149	1,156	1,162	1,073	1,076	1,079	1,082	1,086	1,007	1,008	1,008	1,008	1,008	0,939	0,937	0,934	0,932	0,930	0,869	0,864	0,859	0,854	0,849
	15	18	1,088	1,092	1,096	1,100	1,103	1,024	1,025	1,026	1,027	1,028	0,959	0,956	0,955	0,954	0,952	0,891	0,887	0,883	0,878	0,874	0,821	0,814	0,808	0,801	0,794
	18	20						1,312	1,326	1,342	1,357	1,372	1,246	1,262	1,269	1,281	1,293	1,179	1,187	1,196	1,204	1,212	1,111	1,116	1,121	1,125	1,130
	20	22						1,187	1,195	1,204	1,212	1,221	1,122	1,130	1,133	1,138	1,144	1,056	1,058	1,061	1,063	1,066	0,988	0,987	0,987	0,986	0,986
	22	24						1,113	1,118	1,122	1,127	1,133	1,049	1,051	1,053	1,055	1,057	0,983	0,982	0,981	0,981	0,980	0,915	0,912	0,908	0,905	0,902
70	10	15						1,064	1,066	1,069	1,072	1,075	1,000	1,000	1,000	1,000	1,000	0,935	0,932	0,929	0,927	0,924	0,867	0,862	0,857	0,852	0,847
	15	18						1,015	1,016	1,016	1,017	1,018	0,952	0,949	0,948	0,946	0,944	0,887	0,882	0,878	0,874	0,869	0,820	0,813	0,806	0,799	0,793
	18	20						0,967	0,966	0,964	0,963	0,962	0,904	0,899	0,897	0,893	0,889	0,839	0,833	0,827	0,821	0,815	0,772	0,764	0,756	0,748	0,740
	20	22											1,187	1,198	1,204	1,212	1,221	1,122	1,127	1,133	1,138	1,144	1,056	1,058	1,061	1,063	1,066
	22	24											1,064	1,068	1,069	1,072	1,075	1,000	1,000	1,000	1,000	1,000	0,935	0,932	0,929	0,927	0,924
65	10	15											0,991	0,991	0,990	0,990	0,990	0,928	0,925	0,922	0,919	0,917	0,863	0,858	0,853	0,847	0,842
	15	18											0,943	0,940	0,939	0,936	0,934	0,880	0,876	0,871	0,867	0,862	0,816	0,809	0,802	0,795	0,789
	18	20											0,896	0,890	0,887	0,883	0,879	0,833	0,827	0,821	0,815	0,808	0,769	0,761	0,752	0,744	0,736
	20	22											0,848	0,840	0,837	0,831	0,826	0,787	0,779	0,771	0,763	0,756	0,723	0,713	0,703	0,694	0,684
	22	24																1,064	1,066	1,069	1,072	1,075	1,000	1,000	1,000	1,000	1,000
60	10	15																0,943	0,941	0,939	0,936	0,934	0,880	0,876	0,871	0,867	0,862
	15	18																0,872	0,867	0,862	0,857	0,852	0,810	0,803	0,796	0,789	0,782
	18	20																0,825	0,818	0,812	0,805	0,799	0,763	0,755	0,746	0,738	0,730
	20	22																0,779	0,770	0,762	0,755	0,747	0,717	0,707	0,698	0,688	0,679
	22	24																0,733	0,723	0,714	0,705	0,696	0,672	0,661	0,650	0,639	0,629
55	10	15																					0,943	0,941	0,939	0,936	0,934
	15	18																					0,825	0,818	0,812	0,805	0,799
	18	20																					0,755	0,747	0,738	0,729	0,721
	20	22																					0,710	0,700	0,690	0,680	0,670
	22	24																					0,664	0,653	0,642	0,631	0,621

Conversion factor f_1 for converting the standard thermal output to EN 442 at 75/65/20 °C for other system temperatures: $\Phi = \Phi_s \cdot f_1$

$$f_1 = \left[\frac{(t_1 - t_2)}{\ln \left(\frac{t_1 - t_r}{t_2 - t_r} \right) \cdot 49,83 \text{ K}} \right]^n$$

The radiator exponent depends on the model and type of radiator and can therefore be found in the table containing the technical specifications for the respective radiator. For exponents other than those given, the correction factor can be interpolated or precisely calculated according to the above formulae. An exponent of 1,3 can be used for the approximate calculation.

System temperatures not shown must be mathematically determined using the formulae given, or can be made available on request.

For more information about thermal outputs, see keyword list.

Legend		
Icon	Unit	Description
t ₁	°C	Flow temperature
t ₂	°C	Return temperature
t _r	°C	Room air temperature
Φ	W=(J/s)	Thermal output
Φ _S	W	Nominal heat output
n	-	Radiator indicator, exponent
ln	-	Natural logarithm

Physical unit	
K	Kelvin, unit for temperature difference

Conversion table, f1 factor

t ₂ t ₁ t _r n		50					45					40					35					30				
		1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40
90	10	1,193	1,201	1,210	1,219	1,228	1,112	1,117	1,122	1,127	1,132	1,028	1,029	1,030	1,031	1,032	0,939	0,937	0,934	0,932	0,929	0,844	0,839	0,833	0,827	0,821
	15	1,064	1,067	1,070	1,073	1,075	0,983	0,982	0,981	0,981	0,980	0,897	0,893	0,889	0,885	0,881	0,805	0,798	0,791	0,784	0,777	0,706	0,696	0,686	0,676	0,666
	18	0,988	0,987	0,987	0,986	0,986	0,906	0,902	0,898	0,894	0,891	0,819	0,812	0,805	0,798	0,792	0,725	0,715	0,706	0,696	0,687	0,621	0,608	0,596	0,585	0,573
	20	0,937	0,935	0,932	0,930	0,927	0,854	0,849	0,843	0,838	0,832	0,766	0,758	0,749	0,741	0,733	0,670	0,659	0,648	0,638	0,627	0,562	0,549	0,536	0,523	0,511
	22	0,887	0,882	0,878	0,874	0,869	0,803	0,796	0,789	0,781	0,774	0,714	0,704	0,694	0,684	0,675	0,615	0,603	0,591	0,579	0,567	0,502	0,487	0,473	0,460	0,447
	24	0,836	0,830	0,824	0,818	0,812	0,752	0,743	0,734	0,726	0,717	0,661	0,650	0,638	0,628	0,617	0,559	0,546	0,533	0,520	0,507	0,438	0,423	0,408	0,395	0,381
85	10	1,142	1,149	1,155	1,162	1,168	1,064	1,067	1,070	1,073	1,075	0,983	0,982	0,981	0,981	0,980	0,897	0,893	0,889	0,885	0,881	0,805	0,798	0,791	0,784	0,777
	15	1,016	1,017	1,017	1,018	1,019	0,937	0,935	0,932	0,930	0,927	0,854	0,849	0,843	0,838	0,832	0,766	0,758	0,749	0,741	0,733	0,670	0,659	0,648	0,638	0,627
	18	0,941	0,939	0,936	0,934	0,931	0,862	0,856	0,851	0,846	0,840	0,778	0,770	0,761	0,754	0,746	0,687	0,677	0,666	0,656	0,646	0,587	0,574	0,562	0,550	0,537
	20	0,891	0,887	0,883	0,878	0,874	0,811	0,804	0,797	0,790	0,784	0,726	0,717	0,707	0,698	0,689	0,634	0,622	0,611	0,599	0,588	0,531	0,517	0,503	0,490	0,477
	22	0,842	0,836	0,830	0,824	0,818	0,761	0,753	0,744	0,736	0,727	0,675	0,664	0,653	0,643	0,632	0,581	0,568	0,555	0,543	0,530	0,472	0,457	0,443	0,430	0,416
	24	0,792	0,785	0,777	0,770	0,762	0,711	0,701	0,691	0,682	0,672	0,624	0,612	0,600	0,588	0,577	0,526	0,512	0,499	0,486	0,473	0,410	0,395	0,381	0,367	0,354
80	10	1,092	1,096	1,100	1,104	1,108	1,016	1,017	1,017	1,018	1,019	0,937	0,935	0,932	0,930	0,927	0,854	0,849	0,843	0,838	0,832	0,766	0,758	0,749	0,741	0,733
	15	0,967	0,966	0,964	0,963	0,962	0,891	0,887	0,883	0,878	0,874	0,811	0,804	0,797	0,790	0,784	0,726	0,717	0,707	0,698	0,689	0,634	0,622	0,611	0,599	0,588
	18	0,893	0,889	0,885	0,881	0,877	0,817	0,810	0,803	0,797	0,790	0,736	0,727	0,718	0,709	0,700	0,649	0,638	0,627	0,615	0,604	0,554	0,540	0,527	0,514	0,502
	20	0,844	0,839	0,833	0,827	0,821	0,768	0,759	0,751	0,743	0,735	0,686	0,676	0,665	0,655	0,644	0,598	0,585	0,573	0,561	0,549	0,499	0,484	0,471	0,457	0,444
	22	0,796	0,788	0,781	0,773	0,766	0,719	0,709	0,699	0,690	0,680	0,636	0,624	0,613	0,601	0,590	0,546	0,532	0,519	0,506	0,494	0,442	0,427	0,413	0,399	0,386
	24	0,748	0,739	0,730	0,721	0,712	0,670	0,659	0,648	0,637	0,627	0,586	0,573	0,561	0,548	0,536	0,493	0,479	0,465	0,452	0,438	0,383	0,368	0,353	0,340	0,326
75	10	1,040	1,042	1,044	1,045	1,047	0,967	0,966	0,964	0,963	0,962	0,891	0,887	0,883	0,878	0,874	0,811	0,804	0,797	0,790	0,784	0,726	0,717	0,707	0,698	0,689
	15	0,918	0,914	0,911	0,908	0,904	0,844	0,839	0,833	0,827	0,821	0,768	0,759	0,751	0,743	0,735	0,686	0,676	0,665	0,655	0,644	0,598	0,585	0,573	0,561	0,549
	18	0,845	0,839	0,833	0,827	0,822	0,772	0,763	0,755	0,747	0,739	0,694	0,684	0,673	0,663	0,653	0,611	0,599	0,587	0,575	0,563	0,520	0,506	0,492	0,479	0,466
	20	0,797	0,789	0,782	0,775	0,767	0,723	0,714	0,704	0,695	0,685	0,645	0,634	0,622	0,611	0,600	0,561	0,548	0,535	0,522	0,510	0,467	0,452	0,438	0,424	0,411
	22	0,749	0,740	0,732	0,723	0,714	0,676	0,665	0,654	0,643	0,633	0,597	0,584	0,572	0,560	0,548	0,511	0,497	0,483	0,470	0,457	0,412	0,397	0,383	0,369	0,355
	24	0,702	0,692	0,682	0,672	0,662	0,628	0,616	0,604	0,592	0,581	0,548	0,535	0,521	0,508	0,496	0,460	0,445	0,431	0,417	0,404	0,355	0,340	0,326	0,312	0,299
70	10	0,988	0,987	0,987	0,986	0,986	0,918	0,914	0,911	0,908	0,904	0,844	0,839	0,833	0,827	0,821	0,768	0,759	0,751	0,743	0,735	0,686	0,676	0,665	0,655	0,644
	15	0,867	0,862	0,857	0,852	0,847	0,797	0,789	0,782	0,775	0,767	0,723	0,714	0,704	0,695	0,685	0,645	0,634	0,622	0,611	0,600	0,561	0,548	0,535	0,522	0,510
	18	0,796	0,788	0,781	0,773	0,766	0,726	0,716	0,707	0,697	0,688	0,652	0,640	0,629	0,618	0,607	0,572	0,559	0,546	0,534	0,522	0,485	0,471	0,457	0,443	0,430
	20	0,749	0,740	0,731	0,722	0,713	0,678	0,668	0,657	0,646	0,636	0,604	0,592	0,579	0,567	0,555	0,524	0,510	0,496	0,483	0,470	0,434	0,419	0,405	0,391	0,378
	22	0,702	0,692	0,682	0,672	0,662	0,632	0,620	0,608	0,596	0,585	0,557	0,543	0,530	0,517	0,505	0,475	0,460	0,446	0,433	0,420	0,382	0,367	0,352	0,338	0,325
	24	0,656	0,644	0,633	0,622	0,611	0,585	0,572	0,560	0,547	0,535	0,509	0,495	0,482	0,468	0,455	0,426	0,411	0,397	0,383	0,369	0,327	0,312	0,298	0,284	0,272
65	10	0,935	0,932	0,929	0,927	0,924	0,867	0,862	0,857	0,852	0,847	0,797	0,789	0,782	0,775	0,767	0,723	0,714	0,704	0,695	0,685	0,645	0,634	0,622	0,611	0,600
	15	0,816	0,809	0,802	0,795	0,789	0,749	0,740	0,731	0,722	0,713	0,678	0,668	0,657	0,646	0,636	0,604	0,592	0,579	0,567	0,555	0,524	0,510	0,496	0,483	0,470
	18	0,746	0,737	0,728	0,719	0,710	0,679	0,668	0,657	0,647	0,636	0,608	0,596	0,584	0,572	0,560	0,533	0,519	0,506	0,493	0,480	0,450	0,436	0,421	0,408	0,394
	20	0,699	0,689	0,679	0,669	0,659	0,633	0,621	0,609	0,597	0,586	0,562	0,549	0,536	0,523	0,511	0,486	0,472	0,458	0,444	0,431	0,401	0,386	0,372	0,358	0,344
	22	0,654	0,642	0,631	0,620	0,609	0,587	0,574	0,561	0,549	0,537	0,516	0,502	0,488	0,475	0,462	0,439	0,424	0,410	0,396	0,382	0,351	0,336	0,321	0,308	0,295
	24	0,608	0,596	0,584	0,572	0,560	0,542	0,528	0,515	0,502	0,489	0,470	0,456	0,441	0,428	0,415	0,391	0,376	0,362	0,348	0,335	0,299	0,284	0,270	0,257	0,244
60	10	0,880	0,876	0,871	0,867	0,862	0,816	0,809	0,802	0,795	0,789	0,749	0,740	0,731	0,722	0,713	0,678	0,668	0,657	0,646	0,636	0,604	0,592	0,579	0,567	0,555
	15	0,763	0,755	0,746	0,738	0,730	0,699	0,689	0,679	0,669	0,659	0,633	0,621	0,609	0,597	0,586	0,562	0,549	0,536	0,523	0,511	0,486	0,472	0,458	0,444	0,431
	18	0,694	0,684	0,674	0,664	0,654	0,631	0,619	0,607	0,596	0,584	0,564	0,551	0,538	0,525	0,513	0,493</									

Zehnder Charleston packaging to order

Delivered as ordered

A barcode-based logistics system ensures reliable, punctual delivery. Sturdy, fully cardboard packaging prevents any kind of damage during transport and storage. An extra stretch film covering protects Zehnder Charleston during and after installation, and is only removed when you move in.

Zehnder Charleston radiators are always safely protected with stretch film and cardboard packaging:

- When in transit
- When in storage
- Until the end of the construction phase



Reliability

- Short delivery times: 8 - 10 working days
- Express programme: 4 - 5 working days
- Fast, reliable warehouse administration
- Normally on-time delivery

Zehnder Charleston label

- Important information such as the name of the building site, floor, room, radiator model, connection type
- Logistics optimised through use of barcodes



Zehnder Charleston label

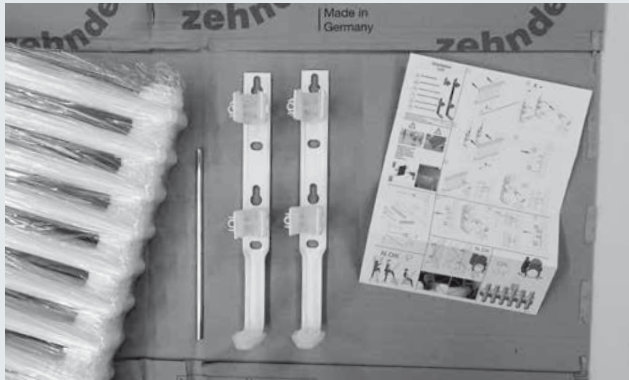
Zehnder Charleston Modell: 3060 – 21 Anschluss: V001 Farbe: 9016 / RAL 9016 SO: 1002046832 000110 Kundenbestell – Nr.: 4024478474 Projekt: Raum:	Kundenadresse: Max Mustermann Musterstrasse 1 DE – 00000 Musterhausen Gesamtanzahl HK: 0017 Produktionsdatum: 31.10.20 Route: DE – S – 011	N 707597 0010	 2082848
Zehnder Charleston Modell: 3060 – 21 Farbe: 9016 / RAL 9016 SO: 1002046832 000110 Kundenbestell – Nr.: 4024478474 Projekt: Raum:	CE Höhe [mm]: 600 Länge [mm]: 992 Tiefe [mm]: 100 Bruttogewicht [kg]: 31,9/127,6 Leistung ΔT50K [Watt]: 1279,2 Zubehör: 2x SMB50	 12 V001 12 ↑↑↓	 2082848

Zehnder Charleston packaging to order

Benefits on the building site



Zehnder Charleston is laid on the original Zehnder box before installation on the building site.



The standard accessories ordered with the radiator are enclosed.



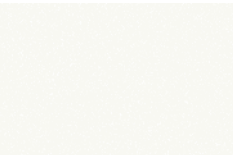
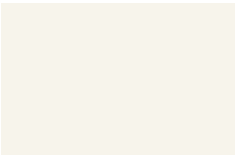
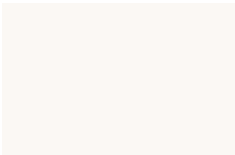
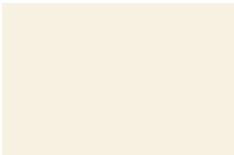
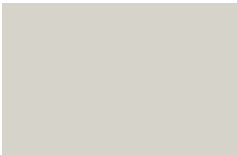
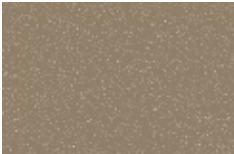
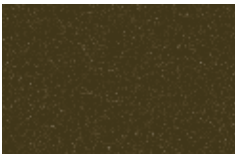
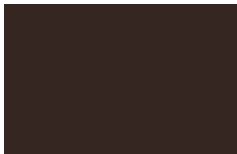
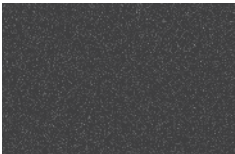
Stretch film remains in place during installation and protects the radiator until you move in.



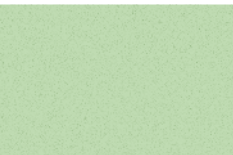
Original packaging serves as additional protection of Zehnder Charleston during the entire building phase, until you are ready to move in.

Warm colours

Colour category 1: CORE

				
White Quartz 0521	Pure White RAL 9010	Edelweiss 0067	Cream RAL 9001	Telegrey 4 7247 Ref. tone.: RAL 7047
				
Beige Quartz 0523	Golden Sand 0258	Yellow Grey 7234 Ref. tone.: RAL 7034	Pearl Beige 1235 Ref. tone.: RAL 1035	Beach Gold 0272
				
Concrete Grey 0265	Beige Grey 0267	Bronze 0276	Brown Quartz 0529	Dark Brown 0270
				
Grey Aluminium 9007	Anthracite 0346	Umbra Grey 7222 Ref. tone.: RAL 7022	Volcanic 0336	

Colour category 2: TREND

			
Pastel Green 6219 Ref. tone.: RAL 6019	Reseda Green 6211 Ref. tone.: RAL 6011	Cement Grey 7233 Ref. tone.: RAL 7033	Olive Green 6203 Ref. tone.: RAL 6003
			
Terracotta Faded 0299	Terracotta 0292	Ruby Red RAL 3003	

Surcharge for colour category 2: 30 %

Unlike to the colour standard (here RAL tone) the Zehnder no. also includes the features matt respectively glossy. Therefore the RAL standard and Zehnder no. differ in many colours. Please note that the prices always relate to the given finishes matt or glossy, deviating finishes will be calculated like colours outside of the colour cart. These colours are finished with a gloss finish; all other colours are matt-finished.

Other special finishes in the RAL, RAL-D, NCS-S, Sanitary, DB colour systems are available as required, surcharges on request.

Cool colours

Colour category 1: CORE

White Matt 0556	Light Beige 0253	Light Grey 0262	White Aluminium 9006	Light Jeans 0264
Titane 0335	Inox Look 0332	Telegrey 2 7246 Ref. tone.: RAL 7046	Blue Grey 7231 Ref. tone.: RAL 7031	Anthracite Grey RAL 7016
Black Quartz 0550	Black Matt 0557	Traffic Black 9217 Ref. tone.: RAL 9017	Jet Black RAL 9005	

Colour category 2: TREND

Pastel Blue 5224 Ref. tone.: RAL 5024	Pigeon Blue 5214 Ref. tone.: RAL 5014	Gentian Blue 5210 Ref. tone.: RAL 5010	Sapphire Blue 5203 Ref. tone.: RAL 5003	Blue Night 0289

Surcharge for colour category 2: 30 %

FINISHES

Technoline (Clear) 0325	Chrome (Surface) 0008	Stainless steel brushed 9517

STANDARD

Traffic White RAL 9016

EXPLANATION

Colour name Zehnder-Nr. Colour norm

💎 These colours are finished with a gloss finish; all other colours are matt-finished.

Some colours and finishes are only available for selected products. RAL-codes are descriptions of manufacturer. Special colour shades on request. Despite extreme care in the production of this color chart as well as in the painting process of our radiators, slight colour deviations, depending on the production series and compared to other colour carriers (ceramic, paper, metal ...) possible.

