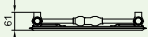
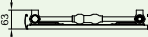


Technical data Verteo® Profil/Plan/Line radiators

Brief product description			RAL GZ- Reg. No.	Heights (BH) mm	Lengths (BL) mm	Depths (BT) mm
Verteo Profil (FSN)						
Type 10	single row		0903	1200 - 2200	300 - 800	61
Type 20 x2	double row without convector with cover with serial flow concept		0904	1200 - 2400	300 - 800	64
Type 21 x2	double row with convector with cover with serial flow concept		0905	1200 - 2400	300 - 800	64
Type 22 x2	double row with two convectors with cover with serial flow concept		0906	1200 - 2400	300 - 800	100
Verteo Plan / Verteo Line (PSN / PLS)						
Type 10	single row		1210	1200 - 2200	300 - 800	63
Type 20 x2	double row without convector with cover with serial flow concept		0907	1200 - 2400	300 - 800	66
Type 21 x2	double row with convector with cover with serial flow concept		0908	1200 - 2400	300 - 800	66
Type 22 x2	double row with two convectors with cover with serial flow concept		0909	1200 - 2400	300 - 800	102

Verteo Profil / Verteo Plan / Verteo Line

Connections

4 x 1/2" internal thread at bottom
2 x 1/2" internal thread at top
connection from top and bottom possible.
Flow always on left, return always on right.
50 mm centre connection makes the
installation of a valve shut-off block possible.

Operating conditions

max. operating temperature 110 °C,
max. operating pressure 10 bar
(test pressure 13 bar)

Scope of delivery

Incl. lugs, primed and powder-coated.
Side covers. Installation accessories (short
wall brackets, screws, dowels, dehinging
safety devices, sound insulation clips,
blanking and air vent plugs, spacers)
included without surcharge.

Fixing

Lug mounting with 4 lugs. Quick and
easy installation with wall brackets included
as standard in the delivery.
Orientation in horizontal and vertical
direction possible.

Paint finish

Kermi white (RAL 9016)
Customised colouring also possible
with the Kermi colour concept.



Verteo®.

Comfort in a modern form

- With energy-saving x2 technology
- In slimline upright version
- Smooth front section, finely profiled front panel or distinctive profiled look
- Wide range of sizes and colours available



Verteo® Profil / Plan / Line

General description



Scope of delivery

- Kermi Verteo Profil / Verteo Plan / Verteo Line
incl. lugs, primed and powder-coated
- Side covers
- Installation set included without surcharge

Fixing

- Lug mounting with 4 lugs
- Quick and easy installation with wall brackets included as standard
in the delivery
- Orientation in horizontal and vertical direction possible

Paint finish

- Brilliant two-coat painting, emission-free
and environmentally friendly, no drips
- according to DIN 55900-FWA: degreased, iron-phosphated,
primed with electrodeposition paint (EDP) and powder coated (EPS)
- Standard: Kermi white (RAL 9016)
- Colour finish according to Kermi colour concept

Quality

- RAL-tested
- All radiators are checked for watertightness
- Max. operating pressure: 10 bar
- Test pressure: 13 bar
- Max. operating temperature: 110 °C
- Certification according to DIN EN ISO 9001:2015

Packaging

- Packed in box and shrink-wrapped in film, ready to install
- Protective packaging, i.e. packaging does not need to be removed
for installation

Connection

- 4 x G 1/2" internal thread at bottom
- 2 x G 1/2" internal thread at top
- Connection from top and bottom possible
- 50 mm centre connection makes the installation of a valve shut-off
block possible

Please note: Operating conditions and water quality according to VDI 2035 must be respected, as well as the industry-standard installation regulations.

Verteo® Plan / Line

Weight, water content

Type 10								Type 20						
Height mm		1200	1400	1600	1800	2000	2200	1200	1400	1600	1800	2000	2200	2400
Length mm	kg	11,48	13,21	14,94	16,67	18,41	20,14	17,91	20,62	23,33	26,05	28,76	31,47	34,18
	l	2,05	2,18	2,30	2,43	2,56	2,69	4,10	4,35	4,61	4,86	5,12	5,38	5,63
300	kg	14,44	16,65	18,87	21,08	23,30	25,52	22,82	26,33	29,85	33,36	36,88	40,39	43,91
	l	2,73	2,90	3,07	3,24	3,41	3,59	5,46	5,80	6,14	6,49	6,83	7,17	7,51
400	kg	17,39	20,09	22,79	25,49	28,19	30,89	27,73	32,04	36,36	40,68	45,00	49,32	53,64
	l	3,41	3,63	3,84	4,05	4,27	4,48	6,83	7,25	7,68	8,11	8,54	8,96	9,39
500	kg	20,35	23,54	26,72	29,90	33,08	36,27	32,63	37,75	42,88	48,00	53,12	58,24	63,37
	l	4,10	4,35	4,61	4,86	5,12	5,38	8,19	8,70	9,22	9,73	10,24	10,76	11,27
600	kg	23,31	26,98	30,64	34,31	37,98	41,64	37,54	43,47	49,39	55,32	61,24	67,17	73,10
	l	4,78	5,08	5,38	5,68	5,97	6,27	9,56	10,15	10,75	11,35	11,95	12,55	13,15
700	kg	26,27	30,42	34,57	38,72	42,87	47,02	42,45	49,18	55,91	62,64	69,36	76,09	82,82
	l	5,46	5,80	6,14	6,49	6,83	7,17	10,92	11,60	12,29	12,97	13,66	14,34	15,02

Type 21									Type 22						
Height mm		1200	1400	1600	1800	2000	2200	2400	1200	1400	1600	1800	2000	2200	2400
Length mm	kg	19,49	22,21	24,92	28,42	31,13	33,84	36,55	22,37	25,08	27,79	32,20	35,03	37,85	40,68
	l	4,10	4,35	4,61	4,86	5,12	5,38	5,63	4,10	4,35	4,61	4,86	5,12	5,38	5,63
300	kg	25,19	28,71	32,22	36,93	40,44	43,96	47,47	28,86	32,37	35,89	41,89	45,52	49,15	52,78
	l	5,46	5,80	6,14	6,49	6,83	7,17	7,51	5,46	5,80	6,14	6,49	6,83	7,17	7,51
400	kg	30,89	35,21	39,53	45,43	49,75	54,07	58,39	35,35	39,67	43,99	51,59	56,02	60,45	64,89
	l	6,83	7,25	7,68	8,11	8,54	8,96	9,39	6,83	7,25	7,68	8,11	8,54	8,96	9,39
500	kg	36,59	41,71	46,84	53,94	59,06	64,18	69,30	41,84	46,96	52,08	61,28	66,52	71,75	76,99
	l	8,19	8,70	9,22	9,73	10,24	10,76	11,27	8,19	8,70	9,22	9,73	10,24	10,76	11,27
600	kg	42,29	48,22	54,14	62,44	68,37	74,29	80,22	48,33	54,26	60,18	70,97	77,01	83,05	89,09
	l	9,56	10,15	10,75	11,35	11,95	12,55	13,15	9,56	10,15	10,75	11,35	11,95	12,55	13,15
700	kg	47,99	54,72	61,45	70,95	77,68	84,41	91,14	54,82	61,55	68,28	80,67	87,51	94,35	101,20
	l	10,92	11,60	12,29	12,97	13,66	14,34	15,02	10,92	11,60	12,29	12,97	13,66	14,34	15,02
800	kg														
	l														

Verteo® Plan / Line

Heat output in watts

Type 10							Type 20							
Height mm	1200	1400	1600	1800	2000	2200	1200	1400	1600	1800	2000	2200	2400	
Length mm	Heat output in watts/room temperature 20 °C													
300	Radiator exponent	1,4617	1,4677	1,4738	1,4798	1,4768	1,4738	1,3429	1,3197	1,2965	1,3163	1,3361	1,3323	1,3285
	watts 75/65 °C	398	453	509	564	620	676	569	652	733	811	888	963	1036
	70/55 °C	311	353	396	439	483	526	453	521	588	649	708	768	827
	55/45 °C	187	212	238	262	289	316	284	330	375	411	445	484	521
	45/40 °C	124	140	157	173	190	208	195	227	260	283	305	332	358
400	Radiator exponent	1,4224	1,4287	1,4350	1,4414	1,4370	1,4327	1,3365	1,3183	1,3001	1,3174	1,3346	1,3279	1,3213
	watts 75/65 °C	501	571	640	710	780	850	734	841	945	1046	1145	1241	1335
	70/55 °C	394	448	502	556	611	667	585	672	758	836	913	991	1067
	55/45 °C	240	273	305	337	371	405	368	425	483	529	574	625	674
	45/40 °C	161	182	203	224	247	270	252	293	334	365	394	429	464
500	Radiator exponent	1,3830	1,3897	1,3963	1,4029	1,3973	1,3916	1,3301	1,3170	1,3038	1,3184	1,3331	1,3235	1,3140
	watts 75/65 °C	598	682	765	848	932	1016	894	1024	1151	1274	1394	1512	1626
	70/55 °C	473	539	604	668	735	802	713	819	923	1019	1112	1208	1301
	55/45 °C	293	333	372	411	453	495	450	518	587	645	700	763	824
	45/40 °C	198	225	251	276	305	334	309	357	406	444	480	525	569
600	Radiator exponent	1,3437	1,3506	1,3575	1,3645	1,3575	1,3505	1,3238	1,3156	1,3074	1,3195	1,3315	1,3192	1,3068
	watts 75/65 °C	692	789	885	981	1078	1175	1050	1203	1352	1497	1638	1776	1910
	70/55 °C	551	627	703	778	856	934	839	962	1083	1197	1307	1420	1530
	55/45 °C	346	393	439	485	534	585	530	609	688	757	823	898	972
	45/40 °C	236	268	299	330	364	399	364	420	475	521	565	619	672
700	Radiator exponent	1,3043	1,3116	1,3188	1,3260	1,3177	1,3094	1,3174	1,3142	1,3111	1,3205	1,3300	1,3148	1,2995
	watts 75/65 °C	783	892	1001	1110	1219	1329	1203	1378	1549	1715	1877	2035	2189
	70/55 °C	628	714	800	886	975	1064	962	1103	1240	1371	1498	1628	1756
	55/45 °C	399	453	506	559	617	675	609	699	787	867	944	1031	1118
	45/40 °C	276	313	349	385	425	467	420	482	543	597	648	711	775
800	Radiator exponent	1,2650	1,2725	1,2801	1,2876	1,2780	1,2683	1,3110	1,3129	1,3147	1,3216	1,3285	1,3104	1,2923
	watts 75/65 °C	871	992	1113	1235	1356	1479	1353	1551	1742	1929	2112	2289	2463
	70/55 °C	703	799	896	993	1092	1193	1083	1241	1394	1541	1686	1833	1978
	55/45 °C	453	514	574	635	700	768	687	787	883	974	1063	1163	1263
	45/40 °C	317	359	400	441	488	537	474	543	609	671	730	803	877

Caution: For rooms with interrupted heating mode, a reheating factor, space-dependent where applicable, must be determined according to DIN EN 12831.

$$\Phi_{RH} = A \times f_{RH}$$

The radiators are dimensioned according to these tables with the standard heating load Φ_{HL} determined taking account of the additional heat load (Φ_{RH}). This additional heating output must be agreed with the customer/principal.

Radiator dimensioning: A conversion table with correction factors for deviating design temperatures can be found using the keyword the keyword "Radiator dimensioning / correction factors", see page 156 / 157.

Verteo Plan/Line	Radiation component
Type 10	50 %
Type 20	45 %
Type 21	30 %
Type 22	30 %



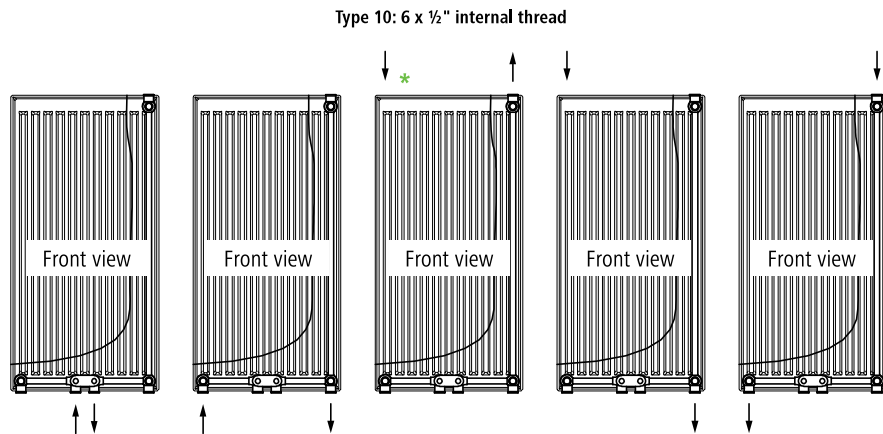
		Type 21						Type 22							
Height mm		1200	1400	1600	1800	2000	2200	2400	1200	1400	1600	1800	2000	2200	2400
Length mm		Heat output in watts / room temperature 20 °C													
300	Radiator exponent	1,3784	1,3907	1,3337	1,3302	1,3268	1,3283	1,3297	1,3968	1,3350	1,3204	1,3330	1,3457	1,3429	1,3402
	watts 75/65 °C	616	692	698	764	830	897	965	777	879	925	1018	1106	1191	1273
	70/55 °C	488	547	557	610	663	716	770	613	701	739	812	880	948	1014
	55/45 °C	302	337	350	384	418	451	485	377	441	467	511	552	595	637
	45/40 °C	205	228	240	264	287	310	333	254	302	322	351	377	407	436
400	Radiator exponent	1,3718	1,3801	1,3262	1,3351	1,3379	1,3392	1,3333	1,3879	1,3360	1,3005	1,3122	1,3138	1,3150	1,3516
	watts 75/65 °C	806	905	1018	1117	1209	1294	1392	1039	1166	1324	1453	1576	1691	1807
	70/55 °C	639	716	813	891	963	1031	1110	821	929	1062	1163	1261	1353	1437
	55/45 °C	397	443	513	560	606	648	699	507	585	676	737	799	857	899
	45/40 °C	269	300	353	384	415	444	480	343	401	468	509	551	591	613
500	Radiator exponent	1,3653	1,3694	1,3215	1,3400	1,3422	1,3356	1,3369	1,3790	1,3370	1,3020	1,3150	1,3192	1,3188	1,3630
	watts 75/65 °C	993	1115	1254	1376	1489	1593	1713	1302	1452	1638	1798	1950	2092	2236
	70/55 °C	788	884	1002	1096	1186	1270	1365	1030	1157	1313	1438	1559	1673	1774
	55/45 °C	490	549	633	688	744	799	858	638	728	836	911	986	1058	1105
	45/40 °C	333	373	436	471	509	548	588	432	499	579	629	679	729	752
600	Radiator exponent	1,3587	1,3588	1,3168	1,3450	1,3465	1,3321	1,3404	1,3700	1,3381	1,3035	1,3179	1,3247	1,3226	1,3744
	watts 75/65 °C	1177	1322	1487	1632	1766	1890	2033	1566	1736	1950	2140	2321	2490	2661
	70/55 °C	935	1050	1189	1299	1405	1508	1619	1241	1383	1563	1711	1854	1989	2107
	55/45 °C	583	655	753	814	881	949	1017	771	869	994	1083	1170	1257	1308
	45/40 °C	397	446	519	557	602	652	696	524	596	688	746	805	865	887
700	Radiator exponent	1,3522	1,3481	1,3121	1,3499	1,3508	1,3286	1,3440	1,3611	1,3391	1,3050	1,3207	1,3301	1,3264	1,3857
	watts 75/65 °C	1359	1527	1718	1885	2040	2186	2351	1830	2020	2259	2480	2689	2886	3084
	70/55 °C	1080	1215	1375	1499	1622	1745	1872	1453	1609	1810	1982	2146	2304	2438
	55/45 °C	676	761	872	938	1015	1100	1174	906	1011	1151	1253	1352	1454	1507
	45/40 °C	461	520	602	641	693	756	803	617	693	796	863	929	1000	1019
800	Radiator exponent	1,3456	1,3375	1,3382	1,3452	1,3521	1,3498	1,3475	1,3522	1,3401	1,3702	1,3643	1,3583	1,3777	1,3971
	watts 75/65 °C	1540	1730	1867	2043	2221	2399	2580	2094	2302	2528	2781	3023	3255	3478
	70/55 °C	1226	1379	1488	1626	1766	1908	2053	1665	1834	2004	2206	2401	2576	2744
	55/45 °C	768	867	935	1019	1104	1194	1286	1041	1152	1245	1374	1498	1597	1689
	45/40 °C	525	594	641	697	754	816	879	711	789	846	935	1021	1082	1139

Verteo® Profil / Plan / Line

Connection options / pressure loss

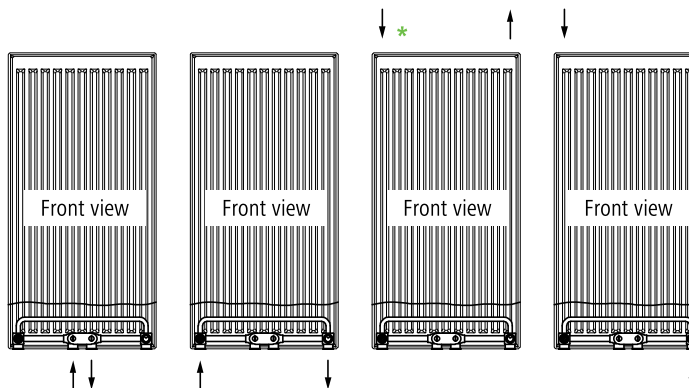
Connection options

Please note: For Verteo type 10 with a connection from the top, we recommend fixing the radiator using wall bracket set long.

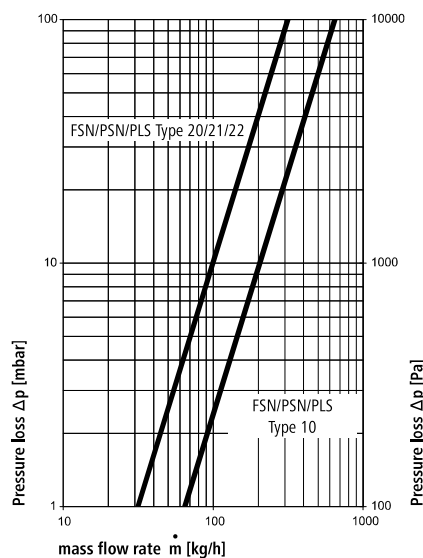


Type 20, 21, 22: 6 x ½" internal thread

*** Please note:** With connection at top
Output reduced by up to 15 %.



Verteo volume flow rate chart



Verteo® Profil / Plan / Line

Connection dimensions

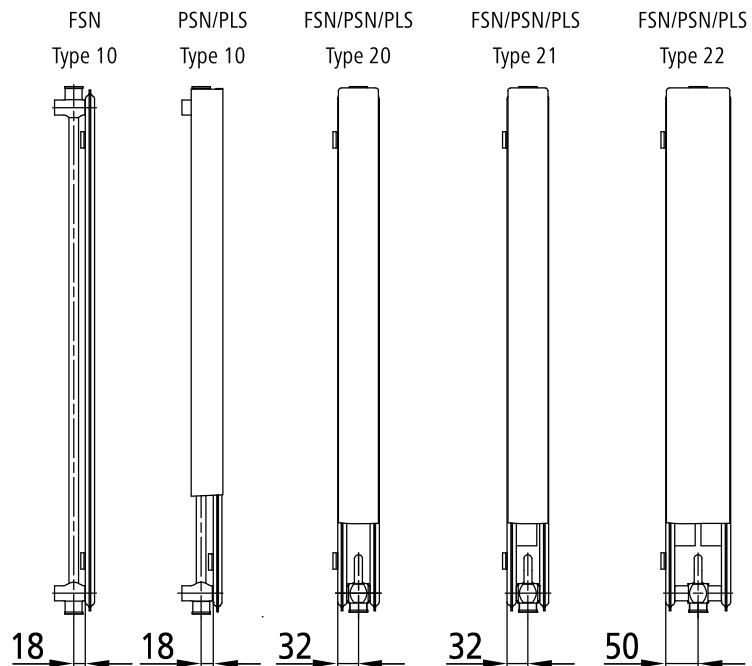
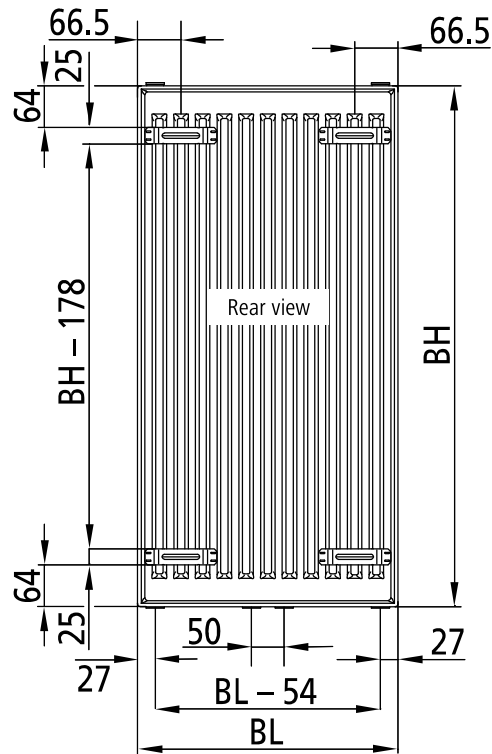
Connection dimensions

Distance to wall

Type 10: 60 mm

Type 20/21/22: 30 mm

for the fixing accessories included in scope of delivery (wall bracket set short).



Verteo® wall fixing

Installation with wall bracket (short)

1. Description

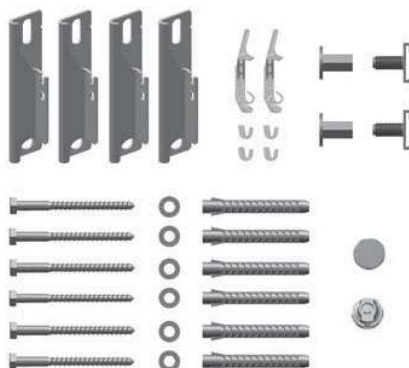
Wall bracket short

Set comprising:

- 4 wall brackets short,
- 6 screws,
- 6 washers,
- 6 dowels,
- 2 spacers,
- 4 sound insulation clips for wall bracket,
- 2 dehinging safety devices,
- 1 air vent plug,
- 1 blanking plugs.

Suitable for requirement classes I, II, and III*.

* Requirement class III is satisfied by the additional use of shift restraints ZK00200001 and ZK00820001 (not for Type 10).



Product codes

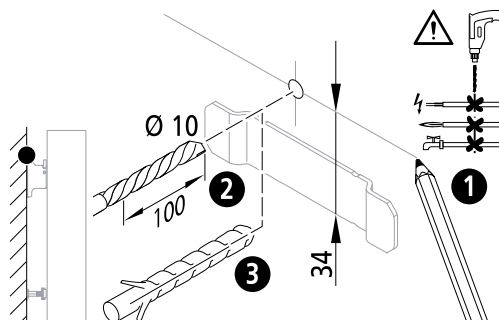
ZB0268 0001 For type 20, 21, 22,
Distance to wall 30 mm

ZB0268 0002 For type 10,
Distance to wall 60 mm

One set required per radiator.

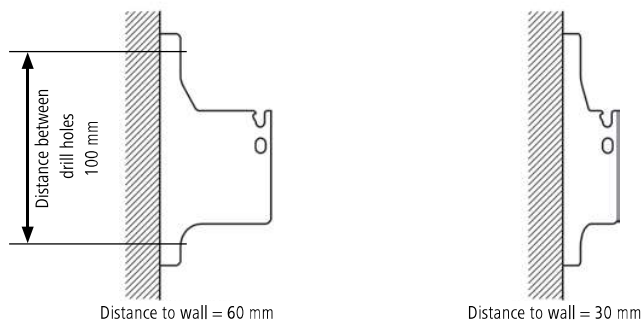
2. Drill hole positioning

- Mark drill holes (connection dimensions and lug positions, see page 69)
- Drill 2 holes with 10 mm Ø
- Insert dowel



Caution! The fastening materials are intended for sufficiently stable substrates. However, the suitable fixing method in each case must always be checked on site and the fixing material must be adjusted to the structural situation!

3. Possible distances to wall



Verteo® wall fixing

Installation with wall bracket (long)

1. Description

Wall bracket long

Set comprising:

- 2 wall brackets,
- 2 dehinging safety devices for wall bracket,
- 3 sound insulation clips.

Set-type	10	11 - 33
Distance to wall in mm	50	30 or 50

Suitable for requirement classes I, II, and III*.

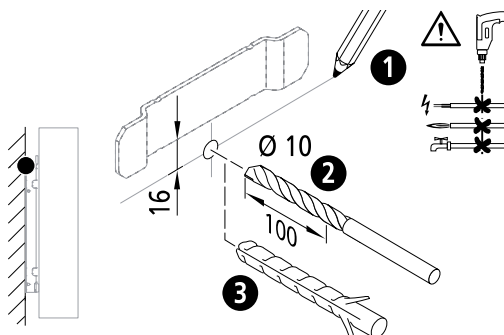
* Requirement class III is satisfied by the additional use of shift restraints ZK00200001 and ZK00820001.



Product codes	
ZB0261 0006	white, height 1200 mm
ZB0261 0007	white, height 1400 mm
ZB0261 0001	white, height 1600 mm
ZB0261 0002	white, height 1800 mm
ZB0261 0003	white, height 2000 mm
ZB0261 0004	white, height 2200 mm
ZB0261 0005	white, height 2400 mm

2. Drill hole positioning

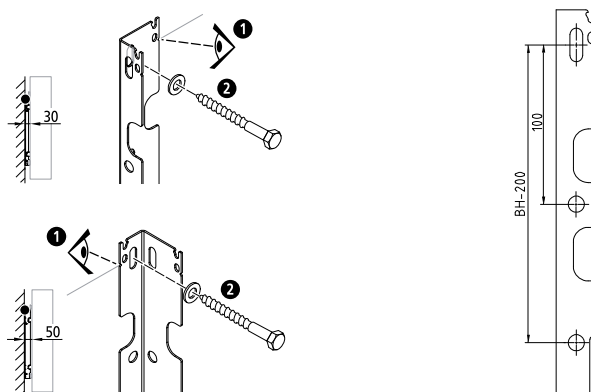
- Mark drill holes (connection dimensions and lug positions, see page 69)
- Drill 2 holes with 10 mm Ø
- Insert dowel



Caution! The fastening materials are intended for sufficiently stable substrates. However, the suitable fixing method in each case must always be checked on site and the fixing material must be adjusted to the structural situation!

3. Distance to wall

- Selecting the distance to wall (30 or 50 mm)



Verteo® floor fixing

Installation with support bracket set

1. Description

Support bracket set

Set comprising:
2 support brackets
2 hooks (with washer and nut)

Matching plastic covers for:
Installation on unfinished floors, product code ZB01190001,
Installation on finished floors, Product code ZB00290001

Please note:

For length = 300 mm, a centre connection is not possible when using the support bracket.

Suitable for requirement classes I, II and III.
Prevent tipping by using short wall bracket (included with radiator).



Use of support bracket

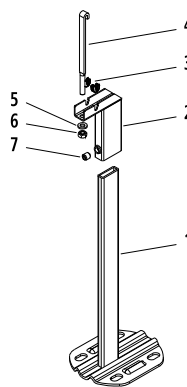
Connection	Length 300	Length 400	Length 500 - 800
Centre connection, pipes out of the wall	With separate flow and return fittings, thermostatic sensor head pointing forwards	With thermostatic sensor head ZV0038... or with wall adapter	✓
Centre connection, pipes out of the floor	With separate flow and return fittings, thermostatic sensor head pointing forwards	With thermostatic sensor head ZV0038... or with wall adapter	✓
Side connection, pipes out of the wall	✓	✓	✓
Side connection, pipes out of the floor	✓	✓	✓

For further information, see installation instructions for support bracket

2. Packaging and scope of delivery

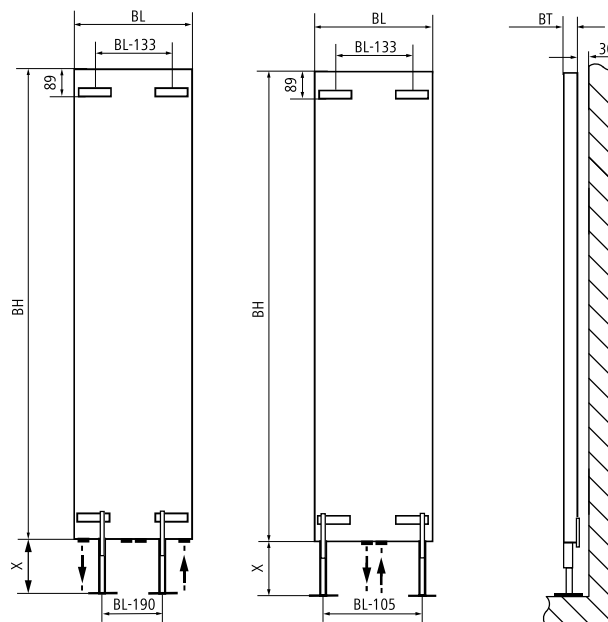
- Check package content of the support bracket for completeness.

Name	Quantity
1 Bracket base 245 mm	2
2 Holder for support bracket	2
3 Sound insulation clip	4
4 Hook for standing bracket	2
5 Washer 6.4 mm	2
6 Hex nut M6	2
7 Grub screw M8 x 8	2



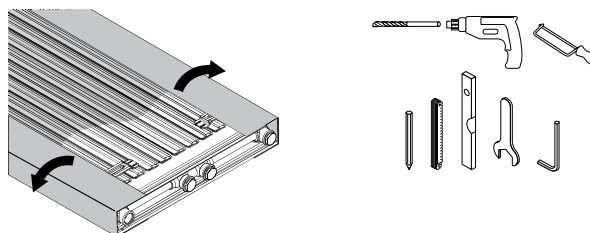
3. Position of radiator lugs and drill holes

	Type 20	Type 21	Type 22	PSS/PSR
Depth (BT)	64/66	64/66	100/102	66
Distance X	110 - 300	110 - 300	110 - 300	110 - 300



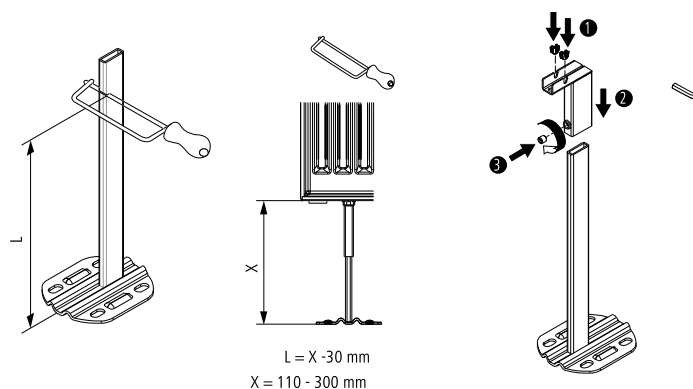
4. Installation brackets

- Get needed tools ready
- Remove the packaging on the base and rear of the radiator around the upper and lower lugs



5. Pre-assembly of the support bracket

- Shorten the support feet (1) to the required length L using the following formula: $L = X - 30 \text{ mm}$ (from $L = 245 \text{ mm}$ no more shortening necessary)
- Mount the sound insulation clips (3) in the recesses provided on the holder (2)
- Slide holder (2) onto the stand bracket base (1)
- Screw the grub screw (7) with two rotations into the designated drill hole in the holder (2)

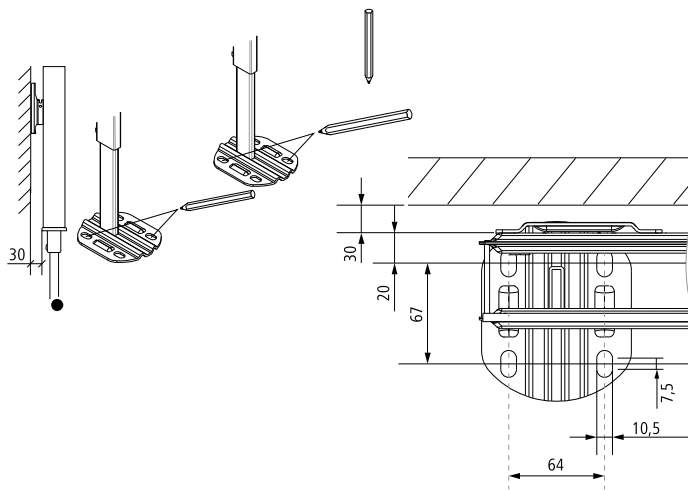


Verteo® floor fixing

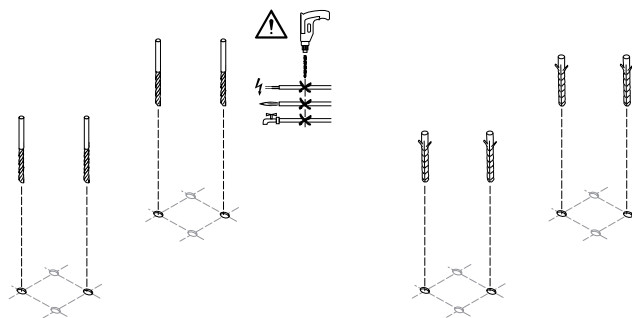
Installation with support bracket set

6. Installing the support bracket without a pre-installed radiator

- Mark the distance between the drill holes for fixing the support bracket (see also 3. Position of radiator lugs and drill holes)

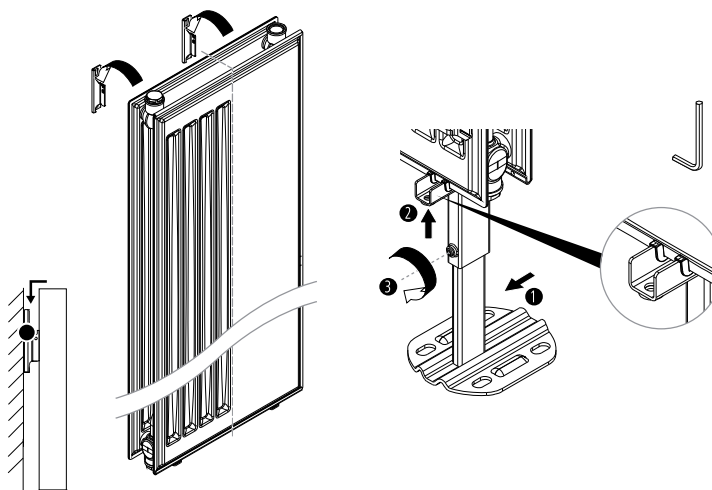


- Drill holes and attach suitable dowels

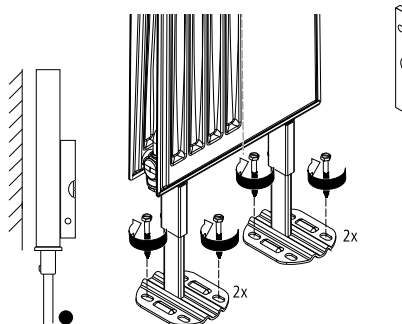


Caution! The fastening materials are intended for sufficiently stable substrates. However, the appropriate fastening method must always be checked on site and the fastening materials adapted to the structural situation!

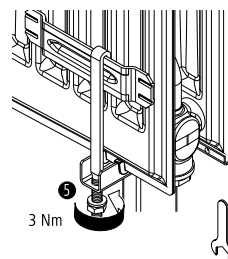
- Install the radiator according to this diagram
- Slide the pre-installed support bracket into the lower part of the radiator by the lugs and secure it with the grub screw (7). The sound insulation clips (3) are placed on the bottom edge of the radiator.



- Place the support brackets on the drill holes, align them, and secure them to the floor with suitable screws (2 screws per bracket)



- Insert the hook (4) through the slot on the holder (2) and hook it into the lower lug on the radiator. Screw together with the hex nut (6) and the washer (7) and tighten with 3 Nm



- Then re-tighten the threaded screw (7) with 3 Nm

