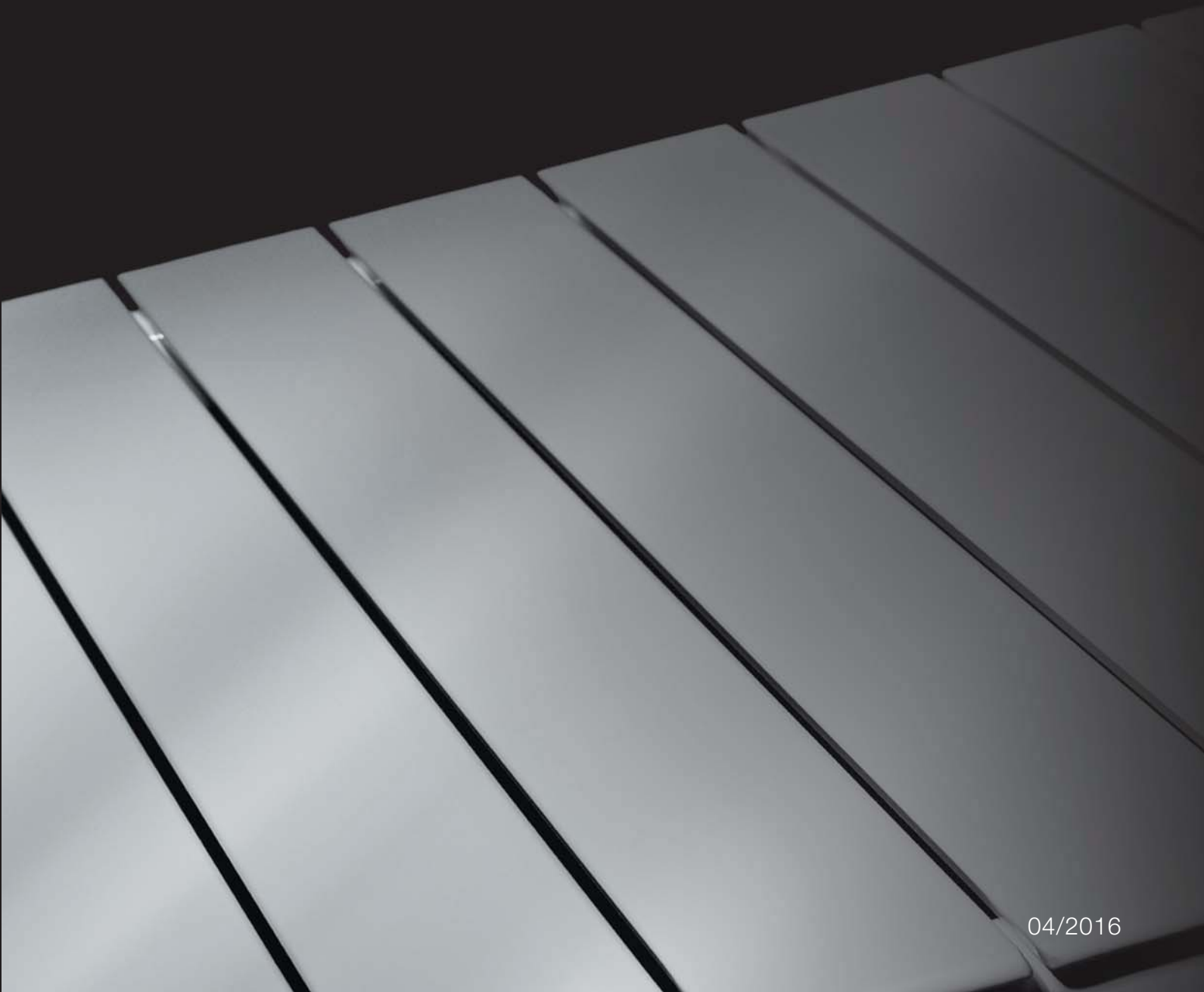
KORADO®

... heat for you

KORATHERM

Design radiators



04/2016

KORADO, a.s.
Bří Hubálků 869
560 02 Česká Třebová
Czech Republic

e-mail: info@korado.cz
http://www.korado.com

Ev. č.: 04/16.631.9 EN

TABLE OF CONTENTS

WHY KORATHERM? 5

VERSIONS ..... 6 - 7

GENERAL INFORMATION 8

WAYS OF CONNECTION 9

PRODUCT RANGE - KORATHERM VERTIKAL, VERTIKAL - M, REFLEX 10

PRODUCT RANGE - KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM 11

HEAT OUTPUT, BASIC TECHNICAL PARAMETERS -
KORATHERM VERTIKAL, VERTIKAL - M ..... 12 - 15

HEAT OUTPUT, BASIC TECHNICAL PARAMETERS -
KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM ..... 16 - 19

HEAT OUTPUT, BASIC TECHNICAL PARAMETERS - KORATHERM REFLEX 20

RADIATOR WEIGHT, WATER VOLUME - KORATHERM VERTIKAL, VERTIKAL - M 21

RADIATOR WEIGHT, WATER VOLUME -
KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM ..... 22 - 23

DATA FOR WALL MOUNTING ..... 24 - 27

DATA FOR MOUNTING ON THE FLOOR 28

GENERAL INFORMATION - HORIZONTAL VKM 29

SVÚOM PRAHA - INFORMATION ..... 30 - 31

KORATHERM ACCESSORIES 32

DATA FOR YOUR ORDER 33

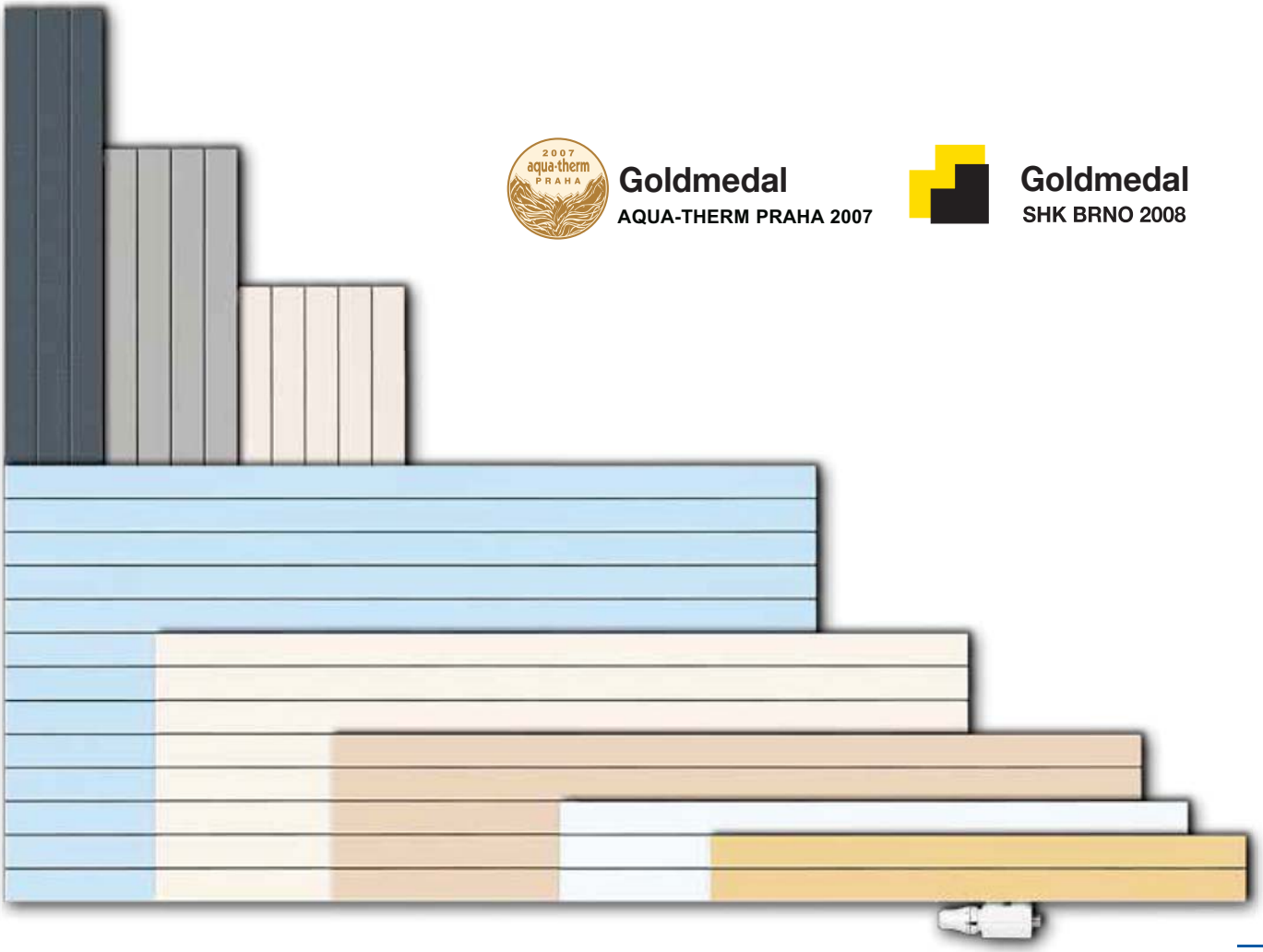
COLOUR CARD 34

KORATHERM - EFFICIENT, ELEGANT...

WHY **KORATHERM** ?

KORATHERM design radiators are a new product line which considerably extends the portfolio of decorative and designer radiators produced by KORADO, a.s. The wide range of products in the KORATHERM range is based on six basic models.

Line-shaped, horizontal and vertical heat profiles can be arranged into many types. The varied colour range together with a variable solution of connection to these radiators into the heating system will certainly satisfy the requirements of even the most demanding customers.



Goldmedal
AQUA-THERM PRAHA 2007

Goldmedal
SHK BRNO 2008

KORATHERM VERTIKAL, VERTIKAL - M, REFLEX

The KORATHERM VERTIKAL, KORATHERM VERTIKAL - M and KORATHERM REFLEX models combine a modern design with an effective way of providing warmth to heating a room. Due to the modern design the front surface produces a higher radiant type of heat and thereby gives a feel of thermal comfort.

The progressive bottom middle connection of the model KORATHERM VERTIKAL - M enables its ease of integration into the interior. Thanks to its structural design, KORATHERM REFLEX is not only a pleasant, but also highly practical addition to any reception area or entrance hall in a residential or public building.

KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM

Unobtrusive luxury with a unique combination of elegance and heat output - this is **KORATHERM HORIZONTAL - M**. It is a suitable solution for heating rooms with large-space glass surfaces such as shop-windows, reception rooms, open plan living areas, larger rooms with high ceilings, panoramic windows, halls, etc.

With regard to the heat output, **KORATHERM HORIZONTAL** represents a comfortable alternative to a conventional panel radiator. An extensive range of colours and an individual appearance with a characteristic line-design of heating profiles naturally challenges it to be integrated into any modern interior.

With regard to the heat output, **KORATHERM HORIZONTAL VKM** represents a comfortable alternative to a conventional panel radiator. An extensive range of colours and an individual appearance with a characteristic line-design of heating profiles naturally challenges it to be integrated into any modern interior.

GENERAL INFORMATION

Description

KORATHERM design radiators are designed for double-pipe heating systems with forced circulation of the heat transfer agent.

Closed steel profiles are used for the heating elements with a rectangular cross-section of 70 x 11 mm, distribution and collection profiles have an oval cross-section of 50 x 30 mm or as the case may be, a cross section in the shape of the letter "D" with dimensions of 40 x 30 mm. Some types are supplemented with convector fins 45 mm deep.

Version

KORATHERM design radiators are manufactured in three basic versions, which the individual models are then based on:

VERTIKAL Version

The heating panel sections are aligned vertically. All models are delivered with full side covers.

KORATHERM VERTIKAL allows a side connection from the top down with a connecting pitch derived from the height H. The radiator is fitted with 4 side connections with an inside thread G1/2, an air vent and a blanking plug with a thread G1/2.

KORATHERM VERTIKAL – M – this model allows a bottom middle connection with a connecting pitch 50 mm. This radiator is fitted with 2 bottom connections with an inside thread G1/2 and a connection in the upper part of the panel for an air vent with a thread G1/2.

HORIZONTAL Version

The heating panel sections are aligned horizontally. The type 10 is supplied with a full top cover, the types 11, 20, 21, 22 with a top gril.

KORATHERM HORIZONTAL allows a side connection from the bottom down with a connecting pitch derived from the length L. This radiator is fitted with 2 bottom connections with an inside thread G1/2, an air vent and a blanking plug with a thread G1/4.

KORATHERM HORIZONTAL – M allows a bottom middle connection with a connecting pitch 50 mm.

KORATHERM HORIZONTAL VKM allows a bottom middle connection with a connecting pitch 50 mm. This model is fitted with an integrated tappings and an inserted valve.

REFLEX Version

The heating panel sections are aligned vertically and the heating surface includes a mirror 220 mm x 1800 mm which is attached to a base made of zinc-coated sheet metal. It is delivered in types 10 and 20 with full side covers.

KORATHERM REFLEX allows a side connection from the top down with a constant connecting pitch 1750 mm.
The radiator is fitted with 4 side connections with an inside thread G1/2, an air vent and a blanking plug with a thread G1/2.

Overview of types

Model	Type 10	Type 11	Type 20	Type 21	Type 22
KORATHERM VERTIKAL	K10V	K11V	K20V		
KORATHERM VERTIKAL - M	K10VM	K11VM	K20VM		
KORATHERM HORIZONTAL	K10H	K11H	K20H	K21H	K22H
KORATHERM HORIZONTAL - M		K11HM	K20HM	K21HM	K22HM
KORATHERM HORIZONTAL VKM		K11HVKM	K20HVKM	K21HVKM	K22HVKM
KORATHERM REFLEX	K10R		K20R		

Operating conditions

The maximum operating temperature of the heat transfer agent is 110°C.
The maximum operational overpressure is 4,0 bar and the testing overpressure is 5,2 bar.
Radiators must be installed in a professional way in hot water systems which are carried out professionally according to VDI 2035 with regard to the protection against damage caused by corrosion and scale.

The following main water quality attributes must be adhered to:
- pH range 8.5 - 9.5 (this applies for systems which do not contain aluminium)
- overall water hardness (content of Ca + Mg ions) up to 1mmol/l
- salinity within the range 300 - 500 µS/cm
- oxygen content max. 0.1 mg/l.

Pressure losses

Type	Resistance coefficient ξ_T [-]	Flow coefficient A_T [m²]
K10V, K11V, K10R	5,6	$1,2 \times 10^{-4}$
K20V, K20R	12,9	$7,9 \times 10^{-5}$
K10VM, K11VM	173,5	$2,16 \times 10^{-5}$
K20VM	73,8	$3,31 \times 10^{-5}$
K10H, K11H	5,6	$1,2 \times 10^{-4}$
K20H, K21H, K22H	15,5	$7,22 \times 10^{-5}$
K11HM	135,3	$2,44 \times 10^{-5}$
K20HM, K21HM, K22HM	105,7	$2,76 \times 10^{-5}$

KHVKM see pg. 29

Heat outputs

The heat outputs stated are measured according to the EN 442 norm in an accredited testing room.

Surface finish

The cataphoretic coating technology used for the base layers ensures longterm resistance to corrosion and mechanical damage. The base layer and high quality final surface coating guarantee the high level of hygiene of the surface of the radiator and is applied with the maximum level of regard for the environment. This process is performed in accordance with the requirements of the DIN 55 900 norm.
The basic colour shade is white RAL 9016. Design radiators can be supplied in other colour shades according to the KORATHERM colour card subject to special order.

Basic equipment

All models are supplied wrapped in protective packaging with the required identification, an air vent or, as the case may be, a blanking plug and covers.
Mounting brackets for radiators in HORIZONTAL version are delivered on customer's demand, subject to special order.
Radiators in VERTICAL and REFLEX version are delivered with the mounting set Z-U558 as standard.

Installation

Maximum emphasis is put on KORATHERM decorative radiators' variability and universality regarding their design and implementation. Design radiators are supplied with welded mounting strips for wall installation (see pages 24-27), but it is possible to order the HORIZONTAL model even without these strips. This way, these models are suitable for mounting on the floor (see pg. 28.)

Packaging

Design radiators are supplied in uniform packaging, which consists of multi-layer cardboard, protective plastic corners and printed shrink wrap. The packaging can be left on during mounting of the radiator allowing for its protection when building work is still underway.

Quality

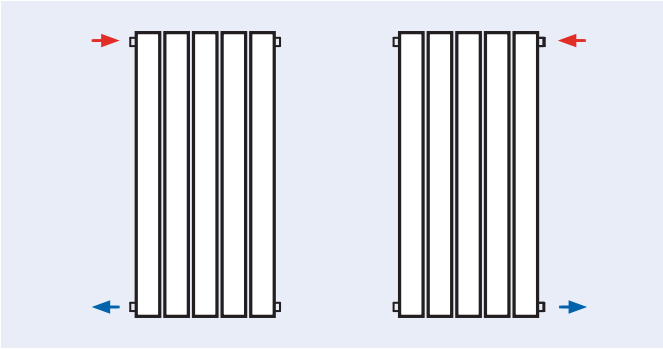
All types are tested for leaks.
Test overpressure is 1.3 times the maximum operating overpressure. The quality management system, which has been introduced according to ISO 9001:2008 guarantees KORADO customers a high and lasting level of quality of products and services provided.

Guarantee Period

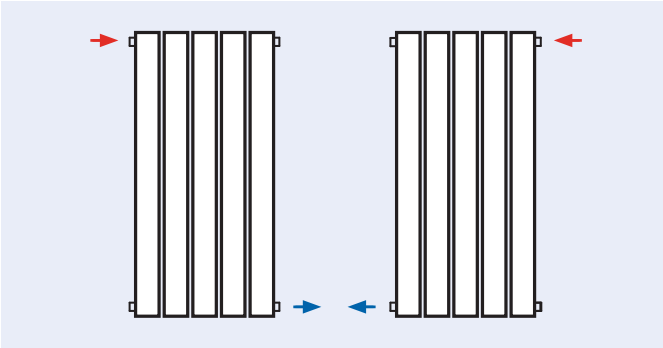
The guarantee relates to leaks and to the stated values of all technical parameters of KORATHERM design radiators in hot water systems for 5 years from the date of sale. The guarantee does not relate to deformation and damage of the radiators caused during transportation, handling and storage or to mechanical or other damage caused by unskilled installers.

WAYS OF CONNECTION

KORATHERM VERTIKAL, REFLEX

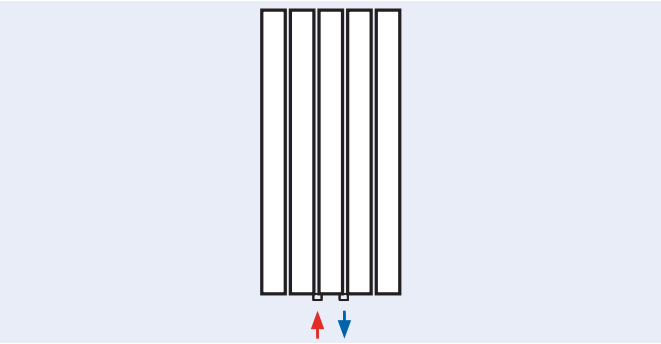


One side connection
φ=1



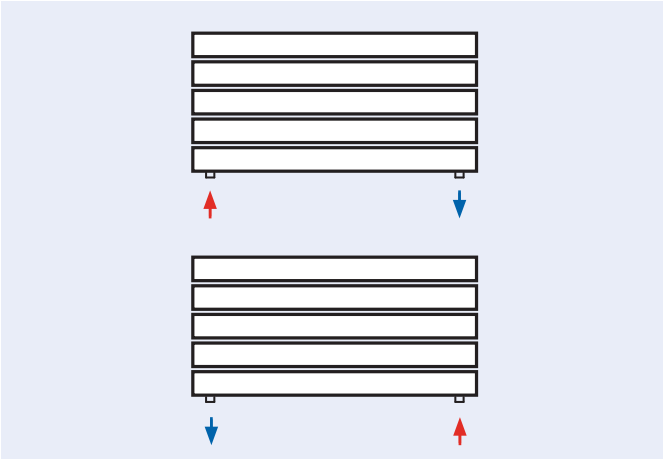
Diagonal double side connection
φ=1

KORATHERM VERTIKAL - M



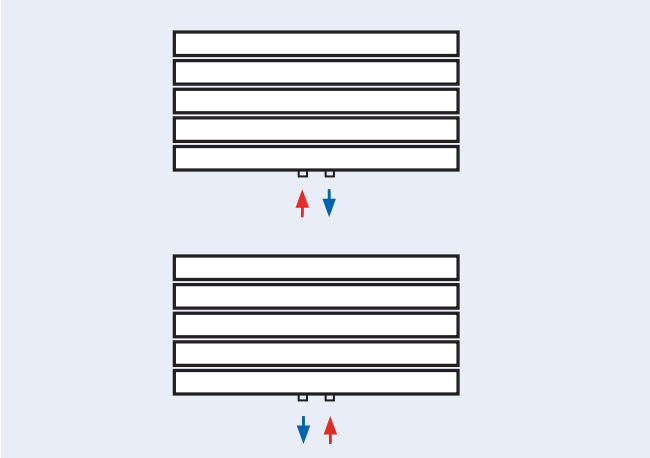
Central bottom connection
φ=1

KORATHERM HORIZONTAL



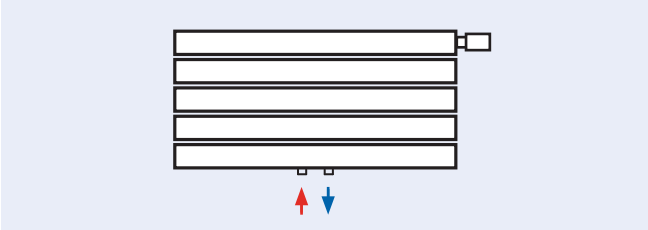
Bottom connection
φ=1

KORATHERM HORIZONTAL - M



Central bottom connection
φ=1

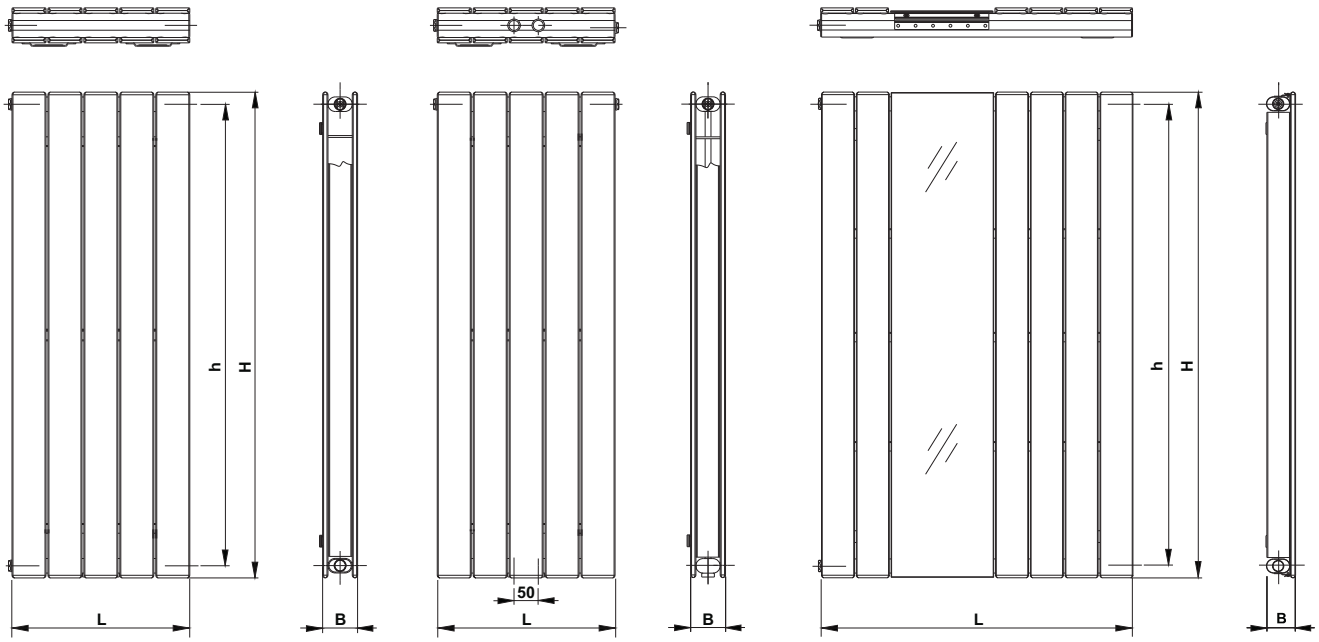
KORATHERM HORIZONTAL VKM



Central bottom connection
φ=1

KORATHERM VERTIKAL, VERTIKAL - M, REFLEX

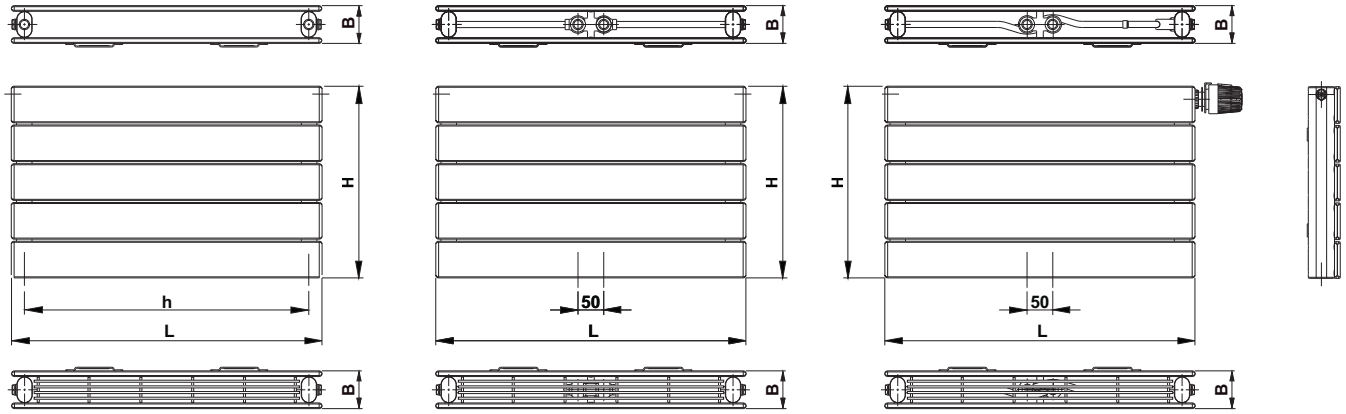
PRODUCT RANGE

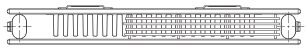
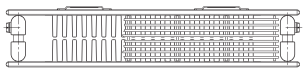


Type		Height **H** [mm]	Length **L** [mm]	Depth **B** [mm]	Q_N [W]
K10V **K10VM**		500 ÷ 2000	144 ÷ 958	62	90 ÷ 2264
K10R		1800	514 ÷ 958		791 ÷ 1676
K11V **K11VM**		500 ÷ 2000	144 ÷ 958	62	118 ÷ 2380
K20V **K20VM**		500 ÷ 2000	144 ÷ 958	74	137 ÷ 2935
K20R		1800	514 ÷ 958		1415 ÷ 2801

KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM

PRODUCT RANGE



Type		Height **H** [mm]	Length **L** [mm]	Depth **B** [mm]	Q_N [W]
K10H		144 ÷ 958	500 ÷ 3000	62	100 ÷ 2946
K11H		144 ÷ 958	500 ÷ 3000	62	123 ÷ 3639
K11HM		366 ÷ 884	600 ÷ 2000		337 ÷ 2426
K11HVKM					
K20H		144 ÷ 958	500 ÷ 3000	74	166 ÷ 3363
K20HM		366 ÷ 884	500 ÷ 2000		370 ÷ 3228
K20HVKM					
K21H		144 ÷ 958	500 ÷ 3000	74	194 ÷ 3432
K21HM		218 ÷ 884	500 ÷ 2000		277 ÷ 3195
K21HVKM					
K22H		144 ÷ 958	500 ÷ 3000	117	256 ÷ 3604
K22HM		218 ÷ 884	500 ÷ 2000		356 ÷ 3344
K22HVKM					

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

KORATHERM VERTIKAL, VERTIKAL - M

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

20 °C	Number of profiles i [pcs]	t_1/t_2 [°C]	Type								
			K10V	K11V	K20V	K10V	K11V	K20V	K10V	K11V	K20V
			K10VM	K11VM	K20VM	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM
Height **H** [mm]			500			600			700		
Connecting pitch **h** [mm]			450			550			650		
			50			50			50		
Length **L** [mm]			Heat output Q [W]								
144	2	90/70	113	147	172	134	173	203	155	198	233
		75/65	90	118	137	107	139	161	124	159	185
		70/55	73	96	110	86	112	129	100	128	149
		55/45	47	62	70	56	73	82	64	83	95
218	3	90/70	171	223	261	203	262	307	235	300	353
		75/65	136	179	207	162	210	244	187	240	281
		70/55	110	145	166	131	170	196	151	194	225
		55/45	71	94	106	84	110	125	97	126	143
366	5	90/70	286	374	438	340	439	516	394	503	593
		75/65	229	301	348	272	353	410	315	403	471
		70/55	185	244	279	219	286	329	254	326	378
		55/45	119	159	178	141	185	209	163	211	240
514	7	90/70	402	526	615	478	617	725	553	706	833
		75/65	322	423	489	382	495	576	442	566	662
		70/55	260	342	392	308	401	462	356	458	531
		55/45	167	223	250	198	260	294	229	297	337
588	8	90/70	460	601	703	546	706	829	633	808	953
		75/65	368	483	559	437	567	659	506	648	757
		70/55	297	392	449	352	459	529	407	524	607
		55/45	192	255	286	227	298	336	262	339	386
662	9	90/70	518	677	792	615	795	933	713	910	1073
		75/65	414	544	630	492	638	742	569	730	853
		70/55	334	441	505	397	517	595	459	590	683
		55/45	216	287	322	255	335	379	295	382	435
884	12	90/70	691	904	1057	821	1062	1247	951	1215	1433
		75/65	553	727	841	657	852	991	760	974	1139
		70/55	447	589	674	530	690	795	613	788	913
		55/45	288	383	429	341	448	506	394	510	580
958	13	90/70	749	980	1146	890	1150	1351	1031	1316	1553
		75/65	600	787	911	712	924	1074	824	1056	1234
		70/55	484	638	731	574	748	861	664	854	989
		55/45	312	415	465	370	485	548	427	553	629

BASIC TECHNICAL PARAMETERS

Type	K10V	K11V	K20V	K10V	K11V	K20V	K10V	K11V	K20V
	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM
Height **H** [mm]	500			600			700		
Nominal heat output Q_N [W/m]	626	822	951	743	964	1121	860	1102	1288
Temperature exponent **n** [-]	1,2638	1,2399	1,2994	1,2682	1,2459	1,3015	1,2725	1,2518	1,3037

For weight and water volume see page 21.

Characteristic equation: $\Phi_L = K_T \bullet H^b \bullet \Delta T^{(c_0+c_1 \bullet H)}$

KORATHERM VERTIKAL, VERTIKAL - M

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

20 °C	Number of profiles i [pcs]	t_1/t_2 [°C]	Type								
			K10V	K11V	K20V	K10V	K11V	K20V	K10V	K11V	K20V
			K10VM	K11VM	K20VM	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM
Height **H** [mm]			800			900			1000		
Connecting pitch **h** [mm]			750			850			950		
			50			50			50		
Length **L** [mm]			Heat output Q [W]								
144	2	90/70	176	222	263	197	246	293	218	270	322
		75/65	141	178	209	157	197	233	174	216	256
		70/55	113	144	168	127	159	186	140	174	205
		55/45	73	93	107	81	103	118	90	112	130
218	3	90/70	267	337	399	299	373	444	330	408	488
		75/65	213	270	317	238	298	352	263	327	387
		70/55	171	218	254	192	241	282	212	263	310
		55/45	110	141	161	123	155	179	135	169	197
366	5	90/70	448	565	669	501	626	745	555	686	819
		75/65	358	453	532	400	501	591	442	548	650
		70/55	288	366	426	322	404	474	355	442	521
		55/45	185	236	271	206	261	301	227	284	330
514	7	90/70	629	794	940	704	879	1046	779	963	1151
		75/65	502	636	747	562	704	831	621	770	913
		70/55	404	514	598	452	568	665	499	621	731
		55/45	260	332	380	290	366	422	319	399	464
588	8	90/70	720	908	1076	806	1006	1197	891	1102	1316
		75/65	574	727	854	643	805	950	710	881	1045
		70/55	463	588	685	517	650	761	571	710	837
		55/45	297	380	435	331	419	483	365	457	531
662	9	90/70	810	1022	1211	907	1132	1347	1003	1240	1482
		75/65	647	819	962	724	906	1070	800	992	1176
		70/55	521	662	771	582	731	857	643	799	942
		55/45	334	427	490	373	472	544	411	514	598
884	12	90/70	1082	1365	1617	1211	1512	1799	1340	1656	1979
		75/65	864	1094	1284	966	1210	1429	1068	1324	1571
		70/55	695	883	1029	777	977	1144	859	1068	1258
		55/45	446	571	654	498	630	727	549	687	798
958	13	90/70	1172	1479	1752	1312	1639	1950	1452		2145
		75/65	936	1185	1392	1047	1312	1548	1157		1702
		70/55	754	957	1115	842	1058	1240	930		1363
		55/45	484	619	709	540	682	787	595		865

BASIC TECHNICAL PARAMETERS

Type	K10V	K11V	K20V	K10V	K11V	K20V	K10V	K11V	K20V
	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM
Height **H** [mm]	800			900			1000		
Nominal heat output $\mathbf{Q_N}$ [W/m]	977	1237	1453	1093	1369	1616	1208	1498	1777
Temperature exponent **n** [-]	1,2769	1,2578	1,3058	1,2813	1,2638	1,3079	1,2857	1,2698	1,3101

For weight and water volume see page 21.

Characteristic equation: $\Phi_L = K_T \bullet H^b \bullet \Delta T^{(c_0+c_1 \bullet H)}$

KORATHERM VERTIKAL, VERTIKAL - M

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

20 °C	Number of profiles i [pcs]	t_1/t_2 [°C]	Type								
			K10V	K11V	K20V	K10V	K11V	K20V	K10V	K11V	K20V
			K10VM	K11VM	K20VM	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM
Height **H** [mm]			1100			1200			1400		
Connecting pitch **h** [mm]			1050			1150			1350		
			50			50			50		
Length **L** [mm]			Heat output Q [W]								
144	2	90/70	239	293	352	260	316	381	302	361	438
		75/65	191	234	279	207	252	302	240	287	347
		70/55	153	189	223	166	203	241	193	231	277
		55/45	98	121	141	106	130	153	123	147	175
218	3	90/70	362	444	532	394	478	576	457	546	663
		75/65	289	354	422	314	382	457	364	435	525
		70/55	232	285	338	252	307	365	292	349	419
		55/45	148	183	214	161	197	231	187	223	264
366	5	90/70	608	745	894	661	803	967	768	917	1113
		75/65	485	595	709	527	641	767	611	731	881
		70/55	389	479	567	423	516	613	491	587	703
		55/45	249	308	359	270	331	388	313	375	444
514	7	90/70	854	1046	1255	928	1128	1359	1078	1288	1563
		75/65	681	836	996	740	900	1077	858	1026	1237
		70/55	547	673	797	594	724	861	689	824	988
		55/45	350	432	505	380	464	545	440	526	623
588	8	90/70	977	1197	1436	1062	1290	1554	1234	1474	1788
		75/65	779	956	1139	846	1030	1232	982	1174	1415
		70/55	626	770	911	680	828	985	788	943	1130
		55/45	400	495	577	434	531	623	503	602	713
662	9	90/70	1100	1348	1617	1196	1453	1750	1389	1659	2013
		75/65	876	1076	1282	953	1159	1387	1106	1321	1593
		70/55	704	867	1026	765	933	1109	888	1061	1272
		55/45	451	557	650	489	598	702	566	678	803
884	12	90/70	1469	1800	2159	1597	1940	2337	1855	2216	2688
		75/65	1170	1437	1712	1272	1548	1852	1476	1764	2128
		70/55	941	1158	1370	1022	1245	1481	1185	1417	1699
		55/45	602	744	868	653	798	937	756	905	1072
958	13	90/70	1592		2339	1731		2532	2010		2913
		75/65	1268		1856	1379		2007	1600		2306
		70/55	1019		1485	1108		1605	1284		1841
		55/45	652		941	708		1015	820		1162

BASIC TECHNICAL PARAMETERS

Type	K10V	K11V	K20V	K10V	K11V	K20V	K10V	K11V	K20V
	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM
Height **H** [mm]	1100			1200			1400		
Nominal heat output Q_N [W/m]	1324	1626	1937	1439	1751	2095	1670	1996	2407
Temperature exponent **n** [-]	1,2877	1,2754	1,3142	1,2898	1,2809	1,3184	1,2939	1,2920	1,3266

For weight and water volume see page 21.

Characteristic equation: $\Phi_L = K_T \bullet H^b \bullet \Delta T^{(c_0+c_1 \bullet H)}$

KORATHERM VERTIKAL, VERTIKAL - M

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

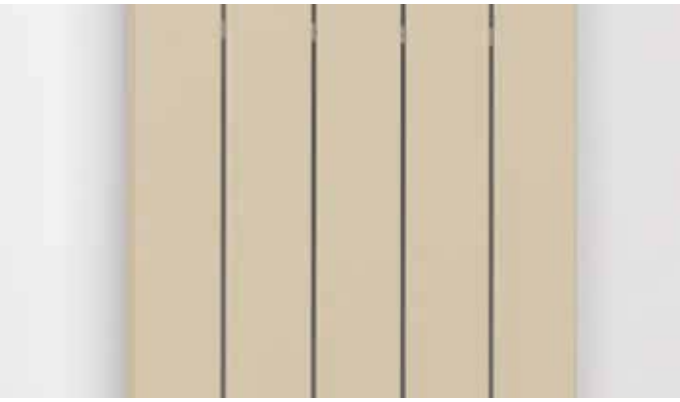
20 °C	Number of profiles i [pcs]	t_1/t_2 [°C]	Type								
			K10V	K11V	K20V	K10V	K11V	K20V	K10V	K11V	K20V
			K10VM	K11VM	K20VM	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM
Height **H** [mm]			1600			1800			2000		
Connecting pitch **h** [mm]			1550			1750			1950		
			50			50			50		
Length **L** [mm]			Heat output Q [W]								
144	2	90/70	344	404	494	386	446	550	428	487	605
		75/65	274	322	391	307	355	435	340	388	478
		70/55	220	258	312	246	285	347	273	311	381
		55/45	140	165	197	157	182	219	174	198	240
218	3	90/70	521	612	748	584	676	832	648	738	915
		75/65	414	487	592	465	538	658	515	587	724
		70/55	332	391	472	373	431	525	413	471	577
		55/45	212	250	298	237	275	331	263	300	364
366	5	90/70	874	1027	1256	981	1134	1397	1088	1238	1537
		75/65	695	818	994	780	903	1105	865	985	1215
		70/55	558	656	793	626	724	882	693	791	969
		55/45	356	419	500	398	462	556	441	504	611
514	7	90/70	1227	1442	1764	1377	1593	1962	1528	1739	2158
		75/65	977	1148	1396	1095	1268	1552	1215	1384	1706
		70/55	784	922	1114	879	1017	1238	974	1110	1361
		55/45	500	588	702	560	649	780	620	708	857
588	8	90/70	1404	1650	2018	1576	1822	2244	1748	1990	2469
		75/65	1117	1314	1596	1253	1450	1775	1389	1583	1952
		70/55	897	1055	1274	1005	1164	1417	1114	1270	1557
		55/45	572	673	804	640	742	893	709	810	981
662	9	90/70	1581	1858	2272	1774	2051	2527	1968	2240	2779
		75/65	1258	1479	1797	1411	1632	1999	1564	1782	2198
		70/55	1009	1187	1435	1132	1310	1595	1254	1430	1753
		55/45	644	758	905	721	836	1005	798	911	1104
884	12	90/70	2111	2481	3033	2369	2739	3374	2628	2991	3711
		75/65	1680	1975	2400	1884	2180	2669	2089	2380	2935
		70/55	1348	1586	1916	1511	1750	2130	1675	1910	2341
		55/45	859	1012	1208	962	1116	1342	1066	1217	1475
958	13	90/70	2288		3287	2567		3656	2848		
		75/65	1820		2601	2041		2892	2264		
		70/55	1461		2076	1638		2308	1815		
		55/45	931		1309	1043		1454	1155		

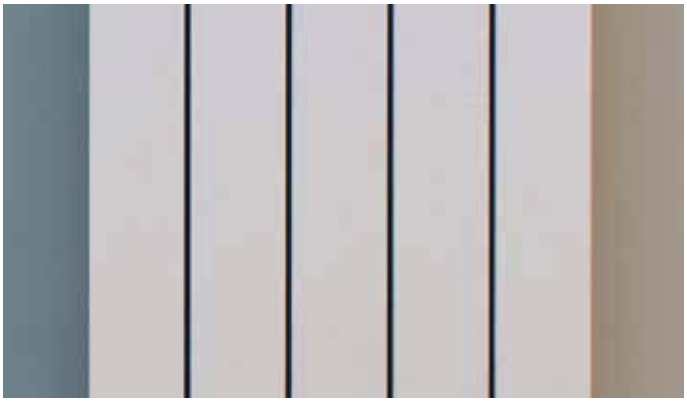
BASIC TECHNICAL PARAMETERS

Type	K10V	K11V	K20V	K10V	K11V	K20V	K10V	K11V	K20V
	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM	K10VM	K11VM	K20VM
Height **H** [mm]	1600			1800			2000		
Nominal heat output Q_N [W/m]	1900	2234	2715	2131	2466	3019	2363	2692	3320
Temperature exponent **n** [-]	1,2966	1,2937	1,3283	1,2993	1,2955	1,3299	1,3020	1,2973	1,3316

For weight and water volume see page 21.

Characteristic equation: $\Phi_L = K_T \bullet H^b \bullet \Delta T^{(c_0+c_1 \bullet H)}$





KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

20 °C			Type									
			K10H	K11H	K20H	K21H	K22H	K10H	K11H	K20H	K21H	K22H
											K21HM	K22HM
											K21HVKM	K22HVKM
Height **H** [mm]			144					218				
Number of profiles **i** [pcs]			2					3				
Length **L** [mm]	Connecting pitch **h** [mm]	t_1/t_2 [°C]	Heat output Q [W]									
500	450	90/70	123	152	205	239	314	164	220	293	342	438
	50	75/65	100	123	166	194	256	133	178	237	277	356
		70/55	81	100	135	158	209	108	145	192	225	291
		55/45	53	66	88	104	139	71	95	126	148	193
600	550	90/70	148	182	246	287	377	197	263	352	411	526
	50	75/65	119	148	199	232	307	160	213	284	332	427
		70/55	97	120	162	189	251	130	174	231	270	350
		55/45	64	79	106	125	167	86	114	151	178	232
700	650	90/70	172	213	287	335	440	230	307	410	479	614
	50	75/65	139	172	232	271	358	186	249	331	387	498
		70/55	114	140	189	221	293	152	203	269	315	408
		55/45	75	92	124	145	195	100	133	177	207	271
800	750	90/70	197	243	328	383	503	263	351	469	548	702
	50	75/65	159	197	265	310	409	213	284	378	442	570
		70/55	130	160	216	252	335	173	231	308	360	466
		55/45	86	106	141	166	222	114	152	202	237	309
900	850	90/70	221	274	369	431	566	296	395	527	616	789
	50	75/65	179	221	298	348	460	239	320	426	498	641
		70/55	146	181	242	284	377	195	260	346	405	524
		55/45	96	119	159	187	250	128	171	227	266	348
1000	950	90/70	246	304	410	479	629	329	439	586	684	877
	50	75/65	199	246	331	387	511	266	355	473	553	712
		70/55	162	201	269	315	418	217	289	385	450	583
		55/45	107	132	177	208	278	143	190	252	296	387
1100	1050	90/70	271	334	451	527	692	362	483	645	753	965
	50	75/65	219	271	364	426	562	293	391	520	608	783
		70/55	179	221	296	347	460	238	318	423	495	641
		55/45	118	145	195	228	306	157	209	278	326	425
1200	1150	90/70	295	365	492	574	755	395	527	703	821	1052
	50	75/65	239	295	397	464	613	319	426	568	664	854
		70/55	195	241	323	378	502	260	347	462	540	699
		55/45	128	159	212	249	334	171	228	303	355	464
1400	1350	90/70	344	426	574	670	880	461	615	820	958	1228
	50	75/65	279	344	463	542	715	372	497	662	774	997
		70/55	227	281	377	442	586	304	405	539	631	816
		55/45	150	185	248	291	389	200	267	353	414	541
1600	1550	90/70	394	487	656	766	1006	526	702	938	1095	1403
	50	75/65	318	394	530	619	818	426	568	757	885	1139
		70/55	260	321	431	505	670	347	463	616	721	932
		55/45	171	211	283	332	445	228	305	404	474	618
1800	1750	90/70	443	547	738	862	1132	592	790	1055	1232	1578
	50	75/65	358	443	596	697	920	479	639	851	995	1282
		70/55	292	361	485	568	753	390	521	693	811	1049
		55/45	192	238	318	374	501	257	343	454	533	696
2000	1950	90/70	492	608	820	957	1258	658	878	1172	1369	1754
	50	75/65	398	492	662	774	1022	532	710	946	1106	1424
		70/55	325	401	539	631	837	434	579	770	901	1165
		55/45	214	264	354	415	556	285	381	505	592	773
2300	2250	90/70	566	699	943	1101	1446	757	1010	1348	1574	2017
	50	75/65	458	566	761	890	1175	612	817	1088	1272	1638
		70/55	373	461	620	725	962	499	665	885	1036	1340
		55/45	246	304	407	477	640	328	438	581	681	889
2600	2550	90/70	640	791	1066	1245	1635	855	1142	1524	1780	2280
	50	75/65	517	640	861	1006	1329	692	923	1230	1438	1851
		70/55	422	522	700	820	1088	564	752	1001	1171	1515
		55/45	278	344	460	540	723	371	495	656	769	1005
3000	2950	90/70	738	912	1230	1436	1887	987	1317	1758	2053	2631
	50	75/65	597	738	993	1161	1533	798	1065	1419	1659	2136
		70/55	487	602	808	946	1255	650	868	1155	1351	1748
		55/45	321	396	530	623	834	428	571	757	888	1160

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

BASIC TECHNICAL PARAMETERS

Type	K10H	K11H	K20H	K21H	K22H	K10H	K11H	K20H	K21H	K22H
									K21HM	K22HM
									K21HVKM	K22HVKM
Height **H** [mm]	144					218				
Number of profiles **i** [pcs]	2					3				
Nominal heat output Q_N [W/m]	199	246	331	387	511	266	355	473	553	712
Temperature exponent **n** [-]	1,2021	1,2024	1,2130	1,2059	1,1771	1,2049	1,2052	1,2150	1,2096	1,1818

For weight and water volume see page 22 and 23.

Characteristic equation: $\Phi_L = K_T \bullet H^b \bullet \Delta T^{(c_0+c_1 \bullet H)}$

KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

20 °C			Type									
			K10H	K11H	K20H	K21H	K22H	K10H	K11H	K20H	K21H	K22H
				K11HM	K20HM	K21HM	K22HM		K11HM	K20HM	K21HM	K22HM
				K11HVKM	K20HVKM	K21HVKM	K22HVKM		K11HVKM	K20HVKM	K21HVKM	K22HVKM
Height **H** [mm]			366					514				
Number of profiles **i** [pcs]			5					7				
Length **L** [mm]	Connecting pitch **h** [mm]	t_1/t_2 [°C]	Heat output Q [W]									
500	450	90/70	244	348	459	534	659	327	470	617	709	856
	50	75/65	198	281	370	431	535	264	379	498	572	693
		70/55	161	229	301	350	437	214	308	404	465	566
		55/45	106	150	197	229	289	140	202	265	305	373
600	550	90/70	293	417	550	640	791	393	564	740	851	1027
	50	75/65	237	337	444	517	641	316	455	597	686	832
		70/55	193	275	361	420	524	257	370	485	558	679
		55/45	127	180	236	275	346	168	242	318	366	448
700	650	90/70	342	487	642	747	923	458	658	864	993	1198
	50	75/65	277	393	518	603	748	369	531	697	801	970
		70/55	225	320	421	490	611	300	431	566	651	792
		55/45	148	210	276	321	404	196	283	371	427	522
800	750	90/70	391	557	734	854	1055	523	752	987	1134	1370
	50	75/65	316	450	592	689	855	422	606	796	915	1109
		70/55	257	366	481	560	699	342	493	647	744	905
		55/45	169	240	315	367	462	224	323	424	488	597
900	850	90/70	440	626	826	960	1187	589	846	1110	1276	1541
	50	75/65	356	506	666	775	962	474	682	896	1030	1247
		70/55	289	412	542	630	786	385	555	728	837	1018
		55/45	190	271	355	413	520	251	363	477	549	672
1000	950	90/70	489	696	917	1067	1319	654	940	1234	1418	1712
	50	75/65	395	562	740	861	1069	527	758	995	1144	1386
		70/55	322	458	602	700	873	428	616	809	930	1131
		55/45	211	301	394	459	577	279	404	530	610	746
1100	1050	90/70	538	765	1009	1174	1451	720	1034	1357	1560	1883
	50	75/65	435	618	814	947	1176	580	834	1095	1258	1525
		70/55	354	503	662	770	961	471	678	890	1023	1244
		55/45	232	331	434	505	635	307	444	583	671	821
1200	1150	90/70	587	835	1101	1280	1583	785	1128	1481	1702	2054
	50	75/65	474	674	888	1033	1283	632	910	1194	1373	1663
		70/55	386	549	722	840	1048	513	740	971	1116	1357
		55/45	254	361	473	551	693	335	485	636	732	896
1400	1350	90/70	685	974	1284	1494	1846	916	1316	1727	1985	2397
	50	75/65	553	787	1036	1205	1497	738	1061	1393	1602	1940
		70/55	450	641	842	980	1223	599	863	1133	1303	1583
		55/45	296	421	552	643	808	391	565	741	853	1045
1600	1550	90/70	782	1113	1468	1707	2110	1047	1503	1974	2269	2739
	50	75/65	632	899	1184	1378	1710	843	1213	1592	1830	2218
		70/55	515	732	963	1121	1397	685	986	1294	1489	1810
		55/45	338	481	631	734	924	447	646	847	975	1194
1800	1750	90/70	880	1252	1651	1921	2374	1178	1691	2221	2552	3081
	50	75/65	711	1012	1332	1550	1924	949	1364	1791	2059	2495
		70/55	579	824	1083	1261	1572	770	1110	1456	1675	2036
		55/45	380	541	709	826	1039	503	727	953	1097	1343
2000	1950	90/70	978	1391	1835	2134	2638	1309	1879	2468	2836	3424
	50	75/65	790	1124	1480	1722	2138	1054	1516	1990	2288	2772
		70/55	643	915	1203	1401	1747	856	1233	1618	1861	2262
		55/45	423	601	788	918	1155	559	808	1059	1219	1493
2300	2250	90/70	1125	1600	2110	2454	3033	1505	2161	2838	3261	3937
	50	75/65	909	1293	1702	1980	2459	1212	1743	2289	2631	3188
		70/55	740	1053	1384	1611	2009	984	1418	1861	2140	2601
		55/45	486	691	906	1056	1328	643	929	1218	1402	1716
2600	2550	90/70	1271	1809	2385	2774	3429	1701	2443	3208	3687	4451
	50	75/65	1027	1461	1924	2239	2779	1370	1971	2587	2974	3604
		70/55	836	1190	1564	1821	2271	1113	1603	2103	2419	2941
		55/45	549	781	1025	1193	1501	726	1050	1377	1585	1940
3000	2950	90/70	1467	2087	2752	3201	3957	1963	2819	3701	4254	
	50	75/65	1185	1686	2220	2583	3207	1581	2274	2985	3432	
		70/55	965	1373	1805	2101	2620	1284	1849	2427	2791	
		55/45	634	902	1182	1377	1732	838	1211	1589	1829	

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

BASIC TECHNICAL PARAMETERS

Type	K10H	K11H	K20H	K21H	K22H	K10H	K11H	K20H	K21H	K22H
		K11HM	K20HM	K21HM	K22HM		K11HM	K20HM	K21HM	K22HM
		K11HVKM	K20HVKM	K21HVKM	K22HVKM		K11HVKM	K20HVKM	K21HVKM	K22HVKM
Height **H** [mm]	366					514				
Number of profiles **i** [pcs]	5					7				
Nominal heat output Q_N [W/m]	395	562	740	861	1069	527	758	995	1144	1386
Temperature exponent **n** [-]	1,2105	1,2108	1,2190	1,2172	1,1914	1,2277	1,2185	1,2200	1,2179	1,1978

For weight and water volume see page 22 and 23.

Characteristic equation: $\Phi_L = K_T \bullet H^b \bullet \Delta T^{(c_0+c_1 \bullet H)}$

KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

20 °C			Type									
			K10H	K11H	K20H	K21H	K22H	K10H	K11H	K20H	K21H	K22H
				K11HM	K20HM	K21HM	K22HM		K11HM	K20HM	K21HM	K22HM
				K11HVKM	K20HVKM	K21HVKM	K22HVKM		K11HVKM	K20HVKM	K21HVKM	K22HVKM
Height **H** [mm]			588					662				
Number of profiles **i** [pcs]			8					9				
Length **L** [mm]	Connecting pitch **h** [mm]	t_1/t_2 [°C]	Heat output Q [W]									
500	450	90/70	370	529	695	792	947	415	587	772	873	1034
	50	75/65	298	427	561	639	766	333	473	623	705	836
		70/55	241	347	456	520	625	270	384	506	573	681
		55/45	157	227	298	340	412	175	251	331	375	449
600	550	90/70	444	635	834	951	1136	498	705	926	1048	1240
	50	75/65	357	512	673	767	919	400	568	747	845	1003
		70/55	289	416	547	624	750	323	461	607	687	818
		55/45	188	272	358	409	494	210	301	397	450	538
700	650	90/70	518	741	973	1109	1325	581	822	1081	1223	1447
	50	75/65	417	597	785	895	1072	466	662	872	986	1170
		70/55	338	485	638	728	875	377	538	708	802	954
		55/45	220	317	418	477	576	245	351	464	525	628
800	750	90/70	592	846	1112	1267	1515	664	939	1235	1397	1654
	50	75/65	476	682	897	1022	1226	533	757	996	1127	1338
		70/55	386	555	729	831	1000	431	615	810	917	1090
		55/45	251	363	477	545	659	280	402	530	600	718
900	850	90/70	666	952	1251	1426	1704	747	1057	1390	1572	1861
	50	75/65	536	768	1009	1150	1379	599	851	1121	1268	1505
		70/55	434	624	820	935	1125	485	691	911	1031	1227
		55/45	283	408	537	613	741	315	452	596	675	808
1000	950	90/70	740	1058	1390	1584	1893	829	1174	1544	1747	2067
	50	75/65	595	853	1121	1278	1532	666	946	1245	1409	1672
		70/55	482	693	911	1039	1250	539	768	1012	1146	1363
		55/45	314	454	597	681	824	350	502	662	751	897
1100	1050	90/70	814	1164	1529	1743	2083	912	1292	1698	1921	2274
	50	75/65	655	938	1233	1406	1685	733	1041	1370	1550	1839
		70/55	531	763	1002	1143	1374	593	845	1113	1260	1499
		55/45	345	499	656	749	906	385	552	729	826	987
1200	1150	90/70	888	1270	1668	1901	2272	995	1409	1853	2096	2481
	50	75/65	714	1024	1345	1534	1838	799	1135	1494	1691	2006
		70/55	579	832	1094	1247	1499	647	922	1214	1375	1636
		55/45	377	544	716	817	988	420	602	795	901	1077
1400	1350	90/70	1036	1481	1946	2218	2651	1161	1644	2162	2445	2894
	50	75/65	833	1194	1569	1789	2145	932	1324	1743	1973	2341
		70/55	675	971	1276	1455	1749	755	1076	1417	1604	1908
		55/45	440	635	835	953	1153	490	703	927	1051	1256
1600	1550	90/70	1184	1693	2224	2535	3029	1327	1879	2470	2795	3308
	50	75/65	952	1365	1794	2045	2451	1066	1514	1992	2254	2675
		70/55	772	1109	1458	1663	1999	863	1229	1619	1833	2181
		55/45	502	726	954	1089	1318	560	803	1060	1201	1436
1800	1750	90/70	1332	1905	2502	2852	3408	1493	2114	2779	3144	3721
	50	75/65	1071	1535	2018	2300	2758	1199	1703	2241	2536	3010
		70/55	868	1248	1640	1871	2249	970	1383	1822	2062	2453
		55/45	565	816	1074	1226	1482	630	904	1192	1351	1615
2000	1950	90/70	1480	2116	2780	3168	3787	1659	2349	3088	3493	4135
	50	75/65	1190	1706	2242	2556	3064	1332	1892	2490	2818	3344
		70/55	965	1386	1823	2079	2499	1078	1537	2024	2292	2726
		55/45	628	907	1193	1362	1647	700	1004	1325	1501	1795
2300	2250	90/70	1702	2434	3197	3644	4355	1908	2701	3551	4017	
	50	75/65	1369	1962	2578	2939	3524	1532	2176	2864	3241	
		70/55	1110	1594	2096	2390	2874	1240	1767	2328	2635	
		55/45	722	1043	1372	1566	1894	805	1155	1523	1726	
2600	2550	90/70	1924	2751	3614	4119		2157	3053	4014		
	50	75/65	1547	2218	2915	3323		1732	2460	3237		
		70/55	1254	1802	2369	2702		1402	1998	2631		
		55/45	817	1179	1551	1770		910	1305	1722		
3000	2950	90/70	2220	3174	4170			2488	3523			
	50	75/65	1785	2559	3363			1998	2838			
		70/55	1447	2080	2734			1617	2305			
		55/45	942	1361	1790			1050	1506			

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

BASIC TECHNICAL PARAMETERS

Type	K10H	K11H	K20H	K21H	K22H	K10H	K11H	K20H	K21H	K22H
		K11HM	K20HM	K21HM	K22HM		K11HM	K20HM	K21HM	K22HM
		K11HVKM	K20HVKM	K21HVKM	K22HVKM		K11HVKM	K20HVKM	K21HVKM	K22HVKM
Height **H** [mm]	588					662				
Number of profiles **i** [pcs]	8					9				
Nominal heat output Q_N [W/m]	595	853	1121	1278	1532	666	946	1245	1409	1672
Temperature exponent **n** [-]	1,2363	1,2223	1,2205	1,2183	1,2010	1,2450	1,2261	1,2210	1,2187	1,2042

For weight and water volume see page 22 and 23.

Characteristic equation: $\Phi_L = K_T \bullet H^b \bullet \Delta T^{(c_0+c_1 \bullet H)}$

KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

20 °C			Type									
			K10H	K11H	K20H	K21H	K22H	K10H	K11H	K20H	K21H	K22H
				K11HM	K20HM	K21HM	K22HM					
				K11HVKM	K20HVKM	K21HVKM	K22HVKM					
Height **H** [mm]			884					958				
Number of profiles **i** [pcs]			12					13				
Length **L** [mm]	Connecting pitch **h** [mm]	t_1/t_2 [°C]	Heat output Q [W]									
500	450	90/70	560	754	1002	1101	1284	613	808	1078	1172	1363
	50	75/65	449	607	807	888	1030	491	650	868	945	1090
		70/55	363	492	655	721	833	396	526	704	768	879
		55/45	234	320	428	472	540	256	343	459	503	566
600	550	90/70	673	905	1203	1321	1541	736	969	1294	1406	1635
	50	75/65	539	728	968	1065	1236	589	779	1042	1134	1308
		70/55	435	590	786	866	1000	476	632	845	922	1055
		55/45	281	384	513	567	647	307	411	551	603	680
700	650	90/70	785	1056	1403	1541	1798	859	1131	1510	1641	1908
	50	75/65	629	849	1130	1243	1442	687	909	1215	1323	1526
		70/55	508	689	917	1010	1166	555	737	986	1075	1231
		55/45	328	449	599	661	755	358	480	643	704	793
800	750	90/70	897	1206	1603	1761	2055	981	1293	1725	1875	2180
	50	75/65	718	970	1291	1420	1648	786	1039	1389	1512	1744
		70/55	580	787	1048	1154	1333	634	842	1127	1229	1407
		55/45	375	513	684	756	863	409	548	735	804	906
900	850	90/70	1009	1357	1804	1981	2311	1104	1454	1941	2110	2453
	50	75/65	808	1092	1453	1598	1854	884	1169	1562	1701	1962
		70/55	653	885	1179	1299	1499	713	948	1268	1383	1583
		55/45	422	577	770	850	971	460	617	827	905	1020
1000	950	90/70	1121	1508	2004	2201	2568	1227	1616	2157	2344	2725
	50	75/65	898	1213	1614	1775	2060	982	1299	1736	1890	2180
		70/55	725	984	1310	1443	1666	793	1053	1409	1536	1758
		55/45	469	641	855	944	1079	511	685	919	1005	1133
1100	1050	90/70	1233	1659	2205	2421	2825	1349	1777	2372	2579	2998
	50	75/65	988	1334	1775	1953	2266	1080	1429	1910	2079	2398
		70/55	798	1082	1441	1587	1833	872	1158	1550	1690	1934
		55/45	516	705	941	1039	1187	563	754	1011	1106	1246
1200	1150	90/70	1345	1810	2405	2641	3082	1472	1939	2588	2813	3271
	50	75/65	1078	1456	1937	2130	2472	1178	1559	2083	2268	2616
		70/55	870	1180	1572	1731	1999	951	1263	1690	1843	2110
		55/45	562	769	1026	1133	1295	614	822	1103	1206	1359
1400	1350	90/70	1569	2111	2806	3082	3596	1717	2262	3020	3282	3816
	50	75/65	1257	1698	2260	2485	2884	1375	1819	2430	2646	3052
		70/55	1016	1377	1834	2020	2332	1110	1474	1972	2151	2462
		55/45	656	897	1198	1322	1511	716	959	1286	1407	1586
1600	1550	90/70	1794	2413	3207	3522		1963	2585	3451	3751	
	50	75/65	1437	1941	2582	2840		1571	2078	2778	3024	
		70/55	1161	1574	2096	2309		1268	1685	2254	2458	
		55/45	750	1025	1369	1511		818	1096	1470	1608	
1800	1750	90/70	2018	2714	3608	3962		2208	2908	3882		
	50	75/65	1616	2183	2905	3195		1768	2338	3125		
		70/55	1306	1771	2359	2597		1427	1895	2536		
		55/45	844	1153	1540	1700		920	1233	1654		
2000	1950	90/70	2242	3016	4009			2454	3232			
	50	75/65	1796	2426	3228			1964	2598			
		70/55	1451	1967	2621			1585	2106			
		55/45	937	1281	1711			1023	1370			
2300	2250	90/70	2578	3468				2822	3716			
	50	75/65	2065	2790				2259	2988			
		70/55	1668	2262				1823	2422			
		55/45	1078	1474				1176	1576			
2600	2550	90/70	2915	3921				3190	4201			
	50	75/65	2335	3154				2553	3377			
		70/55	1886	2558				2061	2737			
		55/45	1219	1666				1330	1781			
3000	2950	90/70	3363	4524				3680				
	50	75/65	2694	3639				2946				
		70/55	2176	2951				2378				
		55/45	1406	1922				1534				

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

BASIC TECHNICAL PARAMETERS

Type	K10H	K11H	K20H	K21H	K22H	K10H	K11H	K20H	K21H	K22H
		K11HM	K20HM	K21HM	K22HM					
		K11HVKM	K20HVKM	K21HVKM	K22HVKM					
Height **H** [mm]	884					958				
Number of profiles **i** [pcs]	12					13				
Nominal heat output $\mathbf{Q_N}$ [W/m]	898	1213	1614	1775	2060	982	1299	1736	1890	2180
Temperature exponent **n** [-]	1,2580	1,2349	1,2285	1,2208	1,2510	1,2624	1,2379	1,2311	1,2215	1,2666

For weight and water volume see page 22 and 23.

Characteristic equation: $\Phi_L = K_T \bullet H^b \bullet \Delta T^{(c_0+c_1 \bullet H)}$

KORATHERM REFLEX

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442											BASIC TECHNICAL PARAMETERS			
Type	H [mm]	L [mm]	h [mm]	i [prof]	t_1/t_2 [°C]	Q [W] pro t_i [°C]					Nominal heat output Q_N [W]	Temperature exponent n [-]	Radiator weight M_T [kg]	Water volume V_T [l]
						15	18	20	22	24				
K10R	1800	514	1750	4	90/70	1098	1033	990	947	905	791	1,2724	23,00	5,1
					75/65	894	832	791	751	711				
					70/55	736	677	637	599	560				
					55/45	500	446	410	375	340				
		662		6	90/70	1510	1420	1361	1302	1244	1086	1,2791	30,20	7,4
					75/65	1228	1142	1086	1030	975				
					70/55	1010	928	874	821	768				
					55/45	685	610	561	512	465				
		810		8	90/70	1924	1808	1732	1657	1582	1381	1,2859	37,50	9,7
					75/65	1562	1453	1381	1310	1240				
					70/55	1284	1179	1110	1042	975				
					55/45	869	773	710	649	589				
		958		10	90/70	2339	2198	2105	2013	1922	1676	1,2926	44,70	12,0
					75/65	1897	1764	1676	1589	1504				
					70/55	1558	1430	1346	1263	1181				
					55/45	1052	935	859	785	711				
K20R	1800	514	1750	4	90/70	1981	1861	1781	1703	1625	1415	1,3063	46,50	12,0
					75/65	1604	1490	1415	1341	1268				
					70/55	1315	1205	1134	1063	993				
					55/45	884	785	720	657	595				
		662		6	90/70	2630	2470	2364	2259	2156	1877	1,3084	60,30	16,3
					75/65	2128	1976	1877	1779	1682				
					70/55	1744	1598	1503	1409	1317				
					55/45	1172	1040	954	871	788				
		810		8	90/70	3279	3079	2947	2816	2687	2339	1,3104	74,20	20,6
					75/65	2652	2463	2339	2216	2095				
					70/55	2173	1991	1873	1756	1640				
					55/45	1459	1295	1188	1083	981				
		958		10	90/70	3929	3688	3530	3374	3219	2801	1,3125	88,00	24,9
					75/65	3177	2950	2801	2654	2509				
					70/55	2601	2384	2242	2101	1963				
					55/45	1746	1549	1421	1296	1173				

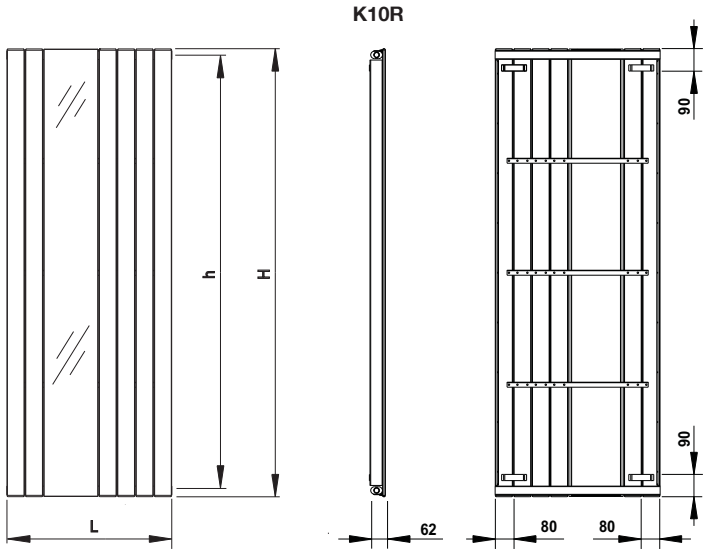
Characteristic equation: $\Phi_L = K_T \bullet H^b \bullet \Delta T^{(c_0+c_1 \bullet H)}$

Notice:

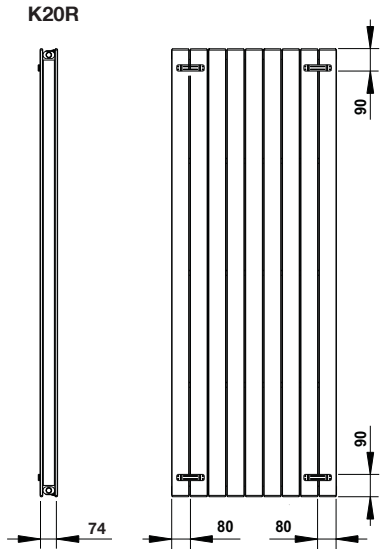
The mirror glued on the zinc-coated metal bed can be also ordered as a spare part. Order code of this item is Z-ND-014.

The radiators KORATHERM REFLEX with the length 662 mm and longer can be mounted with the mirror on the left as well as right side.

K10R



K20R



KORATHERM VERTIKAL, VERTIKAL - M

RADIATOR WEIGHT M_T [kg]

Type	K10V, K10VM											
Height **H** [mm]	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000
Length **L** [mm]	Radiator weight M_T [kg]											
144	3,0	3,4	3,9	4,4	4,9	5,4	5,8	6,3	7,2	8,2	9,2	10,1
218	4,1	4,7	5,4	6,0	6,7	7,4	8,1	8,7	10,0	11,4	12,7	14,0
366	6,3	7,3	8,3	9,4	10,4	11,5	12,5	13,5	15,6	17,7	19,8	21,8
514	8,5	9,9	11,3	12,7	14,1	15,6	17,0	18,4	21,2	24,1	26,8	29,6
588	9,6	11,2	12,8	14,4	15,9	17,7	19,2	20,8	23,9	27,3	30,4	33,5
662	10,8	12,5	14,3	16,0	17,8	19,7	21,5	23,2	26,7	30,4	33,9	37,4
884	14,1	16,4	18,7	21,0	23,3	25,9	28,2	30,5	35,1	40,0	44,6	49,2
958	15,2	17,7	20,2	22,7	25,1	27,9	30,4	32,9	37,9	43,1	48,1	53,1

Type	K11V, K11VM											
Height **H** [mm]	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000
Length **L** [mm]	Radiator weight M_T [kg]											
144	3,3	3,7	4,3	4,8	5,5	6,0	6,5	7,0	8,1	9,1	10,3	11,4
218	4,6	5,3	6,1	6,8	7,9	8,5	9,2	9,8	11,5	12,8	14,6	16,2
366	7,4	8,4	9,8	10,8	12,6	13,6	14,6	15,7	18,4	20,4	23,2	25,9
514	10,1	11,5	13,4	14,8	17,3	18,7	20,1	21,5	25,2	28,0	31,9	35,6
588	11,5	13,0	15,2	16,8	19,7	21,2	22,8	24,4	28,6	31,7	36,2	40,4
662	12,8	14,6	17,1	18,8	22,0	23,8	25,5	27,3	32,0	35,5	40,5	45,2
884	16,9	19,2	22,5	24,8	29,1	31,4	33,7	36,0	42,3	46,9	53,5	59,7
958	18,3	20,8	24,3	26,8	31,5							

Type	K20V, K20VM											
Height **H** [mm]	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000
Length **L** [mm]	Radiator weight M_T [kg]											
144	4,9	5,8	6,6	7,5	8,3	9,2	10,0	10,9	12,6	14,3	16,0	17,6
218	6,9	8,2	9,4	10,6	11,8	13,1	14,3	15,5	17,9	20,4	22,8	25,2
366	11,1	13,2	15,2	17,1	19,1	21,1	23,0	24,9	28,8	32,7	36,6	40,5
514	15,3	18,3	21,0	23,6	26,3	29,0	31,7	34,4	39,7	45,1	50,4	55,8
588	17,4	20,8	23,9	26,9	29,9	33,0	36,1	39,1	45,2	51,3	57,4	63,4
662	19,5	23,3	26,7	30,2	33,6	37,0	40,4	43,8	50,6	57,5	64,3	71,1
884	25,9	30,9	35,4	39,9	44,4	49,0	53,5	58,0	67,0	76,0	85,0	94,0
958	28,0	33,4	38,3	43,2	48,0	53,0	57,8	62,7	72,4	82,2	91,9	

WATER VOLUME V_T [l]

Type	K10V, K10VM, K11V, K11VM											
Height **H** [mm]	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000
Length **L** [mm]	Water volume V_T [l]											
144	0,8	0,9	1,1	1,2	1,3	1,4	1,5	1,6	1,8	2,0	2,2	2,4
218	1,3	1,4	1,6	1,7	1,9	2,1	2,2	2,4	2,7	3,0	3,3	3,6
366	2,1	2,4	2,6	2,9	3,2	3,4	3,7	4,0	4,5	5,0	5,6	6,1
514	3,0	3,3	3,7	4,1	4,4	4,8	5,2	5,6	6,3	7,0	7,8	8,5
588	3,4	3,8	4,2	4,7	5,1	5,5	5,9	6,3	7,2	8,0	8,9	9,7
662	3,8	4,3	4,8	5,2	5,7	6,2	6,7	7,1	8,1	9,1	10,0	11,0
884	5,1	5,7	6,3	7,0	7,6	8,3	8,9	9,5	10,8	12,1	13,3	14,6
958	5,5	6,2	6,9	7,6	8,3	8,9	9,6	10,3	11,7	13,1	14,5	15,8

Type	K20V, K20VM											
Height **H** [mm]	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000
Length **L** [mm]	Water volume V_T [l]											
144	1,4	1,6	1,8	2,0	2,2	2,4	2,6	2,8	3,3	3,7	4,1	4,5
218	2,0	2,4	2,7	3,0	3,3	3,6	3,9	4,3	4,9	5,5	6,2	6,8
366	3,4	3,9	4,5	5,0	5,5	6,1	6,6	7,1	8,2	9,2	10,3	11,4
514	4,8	5,5	6,3	7,0	7,7	8,5	9,2	10,0	11,4	12,9	14,4	15,9
588	5,5	6,3	7,2	8,0	8,8	9,7	10,5	11,4	13,1	14,8	16,5	18,2
662	6,1	7,1	8,0	9,0	10,0	10,9	11,9	12,8	14,7	16,6	18,5	20,4
884	8,2	9,5	10,7	12,0	13,3	14,5	15,8	17,1	19,6	22,2	24,7	27,3
958	8,9	10,2	11,6	13,0	14,4	15,8	17,1	18,5	21,3	24,0	26,8	

KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM

RADIATOR WEIGHT M_T [kg]

Type	K10H								K11H, K11HM, K11HVKM							
Height **H** [mm]	144	218	366	514	588	662	884	958	144	218	366	514	588	662	884	958
Length **L** [mm]	Radiator weight M_T [kg]															
500	2,7	3,8	6,1	8,3	9,4	10,5	13,9	15,0	2,9	4,3	7,0	9,8	11,0	12,4	16,6	17,8
600	3,1	4,4	7,0	9,6	10,9	12,2	16,1	17,4	3,4	5,1	8,3	11,6	13,0	14,7	19,7	21,1
700	3,6	5,0	8,0	11,0	12,4	13,9	18,3	19,8	3,9	5,9	9,5	13,4	15,0	17,1	22,8	24,3
800	4,0	5,6	9,0	12,3	14,0	15,6	20,6	22,3	4,4	6,7	10,8	15,2	17,0	19,4	25,8	27,6
900	4,4	6,2	9,9	13,6	15,5	17,3	22,8	24,7	5,0	7,4	12,1	17,0	19,0	21,7	28,9	30,9
1000	4,9	6,9	11,0	15,1	17,2	19,2	25,4	27,4	5,5	8,2	13,3	18,8	21,0	24,0	32,0	34,2
1100	5,3	7,5	12,0	16,4	18,7	20,9	27,6	29,9	6,0	9,0	14,6	20,6	23,1	26,3	35,1	37,5
1200	5,7	8,1	12,9	17,8	20,2	22,6	29,9	32,3	6,5	9,8	15,9	22,4	25,1	28,6	38,2	40,8
1400	6,5	9,3	14,9	20,4	23,2	26,0	34,4	37,2	7,5	11,3	18,4	26,1	29,1	33,2	44,4	47,4
1600	7,4	10,5	16,9	23,3	26,4	29,6	39,1	42,3	8,5	12,9	21,0	29,7	33,1	37,8	50,6	54,0
1800	8,4	11,9	19,0	26,1	29,6	33,1	43,8	47,3	9,6	14,5	23,6	33,4	37,2	42,5	56,8	60,7
2000	9,2	13,1	20,9	28,7	32,6	36,5	48,3	52,2	10,6	16,0	26,1	37,0	41,3	47,1	63,0	67,3
2300	10,5	14,9	23,9	32,9	37,3	41,8	55,3	59,8	12,1	18,4	29,9	42,4	47,3	54,0	72,3	77,2
2600	11,8	16,7	26,8	36,9	41,9	46,9	62,0	67,1	13,6	20,7	33,7	47,9	53,3	60,9	81,6	87,0
3000	13,4	19,1	30,7	42,2	48,0	53,7	71,0	76,8	15,7	23,8	38,8	55,1	61,4	70,1	93,9	

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

Type	K20H, K20HM, K20HVKM								K21H, K21HM, K21HVKM							
Height **H** [mm]	144	218	366	514	588	662	884	958	144	218	366	514	588	662	884	958
Length **L** [mm]	Radiator weight M_T [kg]															
500	4,6	6,6	10,8	15,1	17,2	19,3	25,6	27,7	4,7	7,0	11,5	16,1	18,1	20,5	27,3	29,4
600	5,4	7,8	12,7	17,7	20,1	22,6	30,0	32,5	5,6	8,4	13,7	19,1	21,6	24,4	32,6	35,0
700	6,1	8,9	14,6	20,3	23,1	25,9	34,5	37,3	6,5	9,7	15,8	22,2	25,1	28,4	37,9	40,7
800	6,9	10,1	16,5	22,9	26,1	29,3	38,9	42,1	7,4	11,0	18,0	25,3	28,6	32,3	43,2	46,4
900	7,7	11,2	18,4	25,5	29,1	32,6	43,4	46,9	8,2	12,3	20,2	28,4	32,0	36,3	48,4	52,1
1000	8,6	12,5	20,5	28,4	32,4	36,4	48,4	52,3	9,1	13,7	22,5	31,6	35,6	40,4	53,9	57,9
1100	9,4	13,6	22,3	31,0	35,4	39,7	52,8	57,2	10,0	15,0	24,6	34,7	39,1	44,3	59,2	63,6
1200	10,1	14,8	24,2	33,6	38,4	43,1	57,2	62,0	10,9	16,3	26,8	37,8	42,6	48,3	64,4	69,2
1400	11,7	17,1	28,0	38,9	44,3	49,8	66,1	71,6	12,6	19,0	31,2	43,9	49,5	56,2	75,0	80,6
1600	13,4	19,5	31,9	44,4	50,6	56,9	75,6	81,8	14,4	21,6	35,6	50,2	56,6	64,2	85,8	92,1
1800	15,0	21,9	35,8	49,7	56,7	63,7	84,6	91,5	16,2	24,4	40,1	56,5	63,6	72,2	96,4	
2000	16,6	24,2	39,6	55,0	62,7	70,4	93,5		18,0	27,0	44,5	62,7	70,6	80,1		
2300	19,0	27,7	45,4	63,1	71,9	80,8			20,6	31,0	51,0	72,0	81,1	92,0		
2600	21,3	31,1	51,0	70,9	80,9	90,8			23,2	35,0	57,6	81,3	91,5			
3000	24,5	35,7	58,6	81,4	92,8				26,7	40,3	66,3	93,6				

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

Type	K22H, K22HM, K22HVKM							
Height **H** [mm]	144	218	366	514	588	662	884	958
Length **L** [mm]	Radiator weight M_T [kg]							
500	5,8	8,6	13,9	19,4	21,8	24,7	32,9	35,2
600	6,8	10,1	16,4	23,0	25,8	29,3	39,1	41,8
700	7,8	11,7	18,9	26,6	29,8	33,9	45,2	48,4
800	8,8	13,2	21,5	30,3	33,8	38,5	51,4	55,0
900	9,8	14,8	24,0	33,9	37,9	43,1	57,6	61,6
1000	10,9	16,3	26,6	37,5	41,9	47,7	63,8	68,2
1100	11,9	17,9	29,1	41,1	45,9	52,3	70,0	74,8
1200	12,9	19,4	31,6	44,7	49,9	56,9	76,1	81,3
1400	14,9	22,5	36,7	52,0	58,0	66,1	88,5	94,5
1600	16,9	25,6	41,8	59,2	66,0	75,4		
1800	19,0	28,8	47,0	66,5	74,2	84,7		
2000	21,1	31,9	52,1	73,8	82,3	93,9		
2300	24,1	36,5	59,6	84,6	94,3			
2600	27,1	41,2	67,2	95,4				
3000	31,1	47,3	77,4					

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM

WATER VOLUME V_T [l]

Type	K10H								K11H, K11HM, K11HVKM							
Height **H** [mm]	144	218	366	514	588	662	884	958	144	218	366	514	588	662	884	958
Length **L** [mm]	Water volume V_T [l]															
500	0,8	1,3	2,1	3,0	3,4	3,8	5,1	5,5	0,8	1,3	2,1	3,0	3,4	3,8	5,1	5,5
600	0,9	1,4	2,4	3,3	3,8	4,3	5,7	6,2	0,9	1,4	2,4	3,3	3,8	4,3	5,7	6,2
700	1,1	1,6	2,6	3,7	4,2	4,8	6,3	6,9	1,1	1,6	2,6	3,7	4,2	4,8	6,3	6,9
800	1,2	1,7	2,9	4,1	4,7	5,2	7,0	7,6	1,2	1,7	2,9	4,1	4,7	5,2	7,0	7,6
900	1,3	1,9	3,2	4,4	5,1	5,7	7,6	8,3	1,3	1,9	3,2	4,4	5,1	5,7	7,6	8,3
1000	1,4	2,1	3,4	4,8	5,5	6,2	8,3	8,9	1,4	2,1	3,4	4,8	5,5	6,2	8,3	8,9
1100	1,5	2,2	3,7	5,2	5,9	6,7	8,9	9,6	1,5	2,2	3,7	5,2	5,9	6,7	8,9	9,6
1200	1,6	2,4	4,0	5,6	6,3	7,1	9,5	10,3	1,6	2,4	4,0	5,6	6,3	7,1	9,5	10,3
1400	1,8	2,7	4,5	6,3	7,2	8,1	10,8	11,7	1,8	2,7	4,5	6,3	7,2	8,1	10,8	11,7
1600	2,0	3,0	5,0	7,0	8,0	9,1	12,1	13,1	2,0	3,0	5,0	7,0	8,0	9,1	12,1	13,1
1800	2,2	3,3	5,6	7,8	8,9	10,0	13,3	14,5	2,2	3,3	5,6	7,8	8,9	10,0	13,3	14,5
2000	2,4	3,6	6,1	8,5	9,7	11,0	14,6	15,8	2,4	3,6	6,1	8,5	9,7	11,0	14,6	15,8
2300	2,7	4,1	6,9	9,6	11,0	12,4	16,5	17,9	2,7	4,1	6,9	9,6	11,0	12,4	16,5	17,9
2600	3,1	4,6	7,7	10,7	12,3	13,8	18,4	20,0	3,1	4,6	7,7	10,7	12,3	13,8	18,4	20,0
3000	3,5	5,2	8,7	12,2	14,0	15,7	21,0	22,7	3,5	5,2	8,7	12,2	14,0	15,7	21,0	

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

Type	K20H, K20HM, K20HVKM								K21H, K21HM, K21HVKM							
Height **H** [mm]	144	218	366	514	588	662	884	958	144	218	366	514	588	662	884	958
Length **L** [mm]	Water volume V_T [l]															
500	1,4	2,0	3,4	4,8	5,5	6,1	8,2	8,9	1,4	2,0	3,4	4,8	5,5	6,1	8,2	8,9
600	1,6	2,4	3,9	5,5	6,3	7,1	9,5	10,2	1,6	2,4	3,9	5,5	6,3	7,1	9,5	10,2
700	1,8	2,7	4,5	6,3	7,2	8,0	10,7	11,6	1,8	2,7	4,5	6,3	7,2	8,0	10,7	11,6
800	2,0	3,0	5,0	7,0	8,0	9,0	12,0	13,0	2,0	3,0	5,0	7,0	8,0	9,0	12,0	13,0
900	2,2	3,3	5,5	7,7	8,8	10,0	13,3	14,4	2,2	3,3	5,5	7,7	8,8	10,0	13,3	14,4
1000	2,4	3,6	6,1	8,5	9,7	10,9	14,5	15,8	2,4	3,6	6,1	8,5	9,7	10,9	14,5	15,8
1100	2,6	3,9	6,6	9,2	10,5	11,9	15,8	17,1	2,6	3,9	6,6	9,2	10,5	11,9	15,8	17,1
1200	2,8	4,3	7,1	10,0	11,4	12,8	17,1	18,5	2,8	4,3	7,1	10,0	11,4	12,8	17,1	18,5
1400	3,3	4,9	8,2	11,4	13,1	14,7	19,6	21,3	3,3	4,9	8,2	11,4	13,1	14,7	19,6	21,3
1600	3,7	5,5	9,2	12,9	14,8	16,6	22,2	24,0	3,7	5,5	9,2	12,9	14,8	16,6	22,2	24,0
1800	4,1	6,2	10,3	14,4	16,5	18,5	24,7	26,8	4,1	6,2	10,3	14,4	16,5	18,5	24,7	
2000	4,5	6,8	11,4	15,9	18,2	20,4	27,3		4,5	6,8	11,4	15,9	18,2	20,4		
2300	5,2	7,8	12,9	18,1	20,7	23,3			5,2	7,8	12,9	18,1	20,7	23,3		
2600	5,8	8,7	14,5	20,4	23,3	26,2			5,8	8,7	14,5	20,4	23,3			
3000	6,7	10,0	16,7	23,3	26,7				6,7	10,0	16,7	23,3				

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

Type	K22H, K22HM, K22HVKM							
Height **H** [mm]	144	218	366	514	588	662	884	958
Length **L** [mm]	Water volume V_T [l]							
500	1,6	2,4	3,9	5,5	6,3	7,1	9,5	10,3
600	1,8	2,7	4,5	6,3	7,2	8,1	10,7	11,6
700	2,0	3,0	5,0	7,0	8,0	9,0	12,0	13,0
800	2,2	3,3	5,5	7,7	8,9	10,0	13,3	14,4
900	2,4	3,6	6,1	8,5	9,7	10,9	14,6	15,8
1000	2,6	3,9	6,6	9,2	10,6	11,9	15,8	17,2
1100	2,8	4,3	7,1	10,0	11,4	12,8	17,1	18,5
1200	3,1	4,6	7,7	10,7	12,2	13,8	18,4	19,9
1400	3,5	5,2	8,7	12,2	13,9	15,7	20,9	22,7
1600	3,9	5,9	9,8	13,7	15,6	17,6		
1800	4,3	6,5	10,8	15,2	17,3	19,5		
2000	4,7	7,1	11,9	16,7	19,0	21,4		
2300	5,4	8,1	13,5	18,9	21,6			
2600	6,0	9,0	15,1	21,1				
3000	6,9	10,3	17,2					

The models **KORATHERM HORIZONTAL - M** and **KORATHERM HORIZONTAL VKM** are available in lengths up to L = 2000 mm.

DATA FOR WALL MOUNTING

Mounting on the wall

KORATHERM decorative radiators have two upper and two lower hangers welded to the back of the radiator, with the exception of models 10, 11, and 20 with a length of L= 144 mm. For these models, there is only one upper and one lower hanger.
The HORIZONTAL model with a length of L=1800 mm or longer has six welded hangers.
The minimum number of the brackets shown in this catalog under individual bracket types has been stipulated by calculating the weight of the radiator, the heat-transfer agent, plus an added „random load weight“ of 80 kg. When choosing another type of bracket than the one mentioned in the catalogue, it is necessary to check the maximum vertical load allowed for the bracket. The necessary information about the maximum vertical load for individual brackets is listed in the KORAMONT catalogue.

18/120 Drill-in bracket

For mounting the radiators KORATHERM HORIZONTAL on the wall, we recommend using the 18/120 drill-in bracket (order no. Z-U144.)

- The set includes two brackets and two supports
- Metal parts are galvanized
- Preferably for use on walls made from solid or perforated bricks or cellular concrete
- For drilling into walls, it is necessary to use a ø 18 mm drill bit
- Maximum vertical load is **1000 N** at **D = 50 mm**

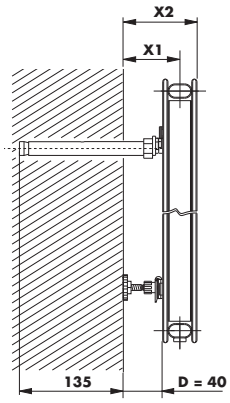
Number of brackets

For mounting the radiators, it is always necessary to use a minimum of two 18/120 drill-in brackets; for radiators 1800 mm in length or longer, use a minimum of three brackets.

Ordering brackets

Type	Order number
18/120 Drill-in bracket	Z - U144

Positioning



Type	K10V K10VM K10H K10R	K11V K11VM K11H K11HM K11HVKM	K20V K20VM K20H K20HM K20R K20HVKM	K21H K21HM K21HVKM	K22H K22HM K22HVKM
X1 [mm]	63	63	77	77	77
X2 [mm]	99	99	114	114	158

Values **X1** and **X2** are dependent on the type of fixing bracket actually used.

Split bracket VERTIKAL

For mounting the radiators KORATHERM VERTIKAL and REFLEX with height H = 500 mm and higher it is recommended to use preferentially the split bracket VERTIKAL (order number Z-U558).

- Set contains: 2 x brackets, screws 7 x 60 mm, dowel plugs Ø 10 mm, 4 x safety catch against lifting and move
- Suitable for all types with welded fixing hangers with height of radiators **H = 500 mm** and higher
- Zinc-coated metal parts
- Equipped with a safety catch to prevent the radiator from lifting and move
- Enables mounting on the wall at a distance of **D = 40 mm** from the wall
- Used for concrete structures and masonry from porous concrete and solid bricks
- Maximum vertical load is **1500 N**
- Maximum permitted horizontal load on the bracket in longitudinal and transverse direction is **250 N**

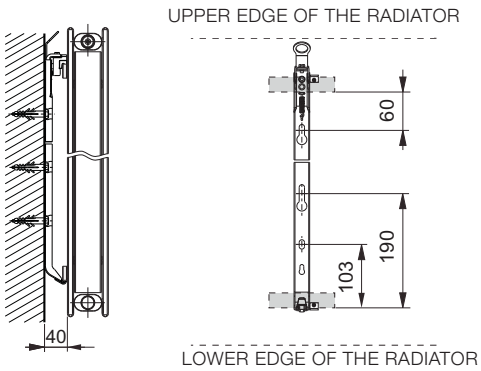
Number of brackets

For mounting KORATHERM radiators it is always necessary to use the number of brackets corresponding to the number of upper welded hangers (see Mounting to the wall). For mounting the radiators KORATHERM HORIZONTAL, type 10 and 11, it is necessary to use three split brackets from the lenght L=2300 mm and longer.

Ordering brackets

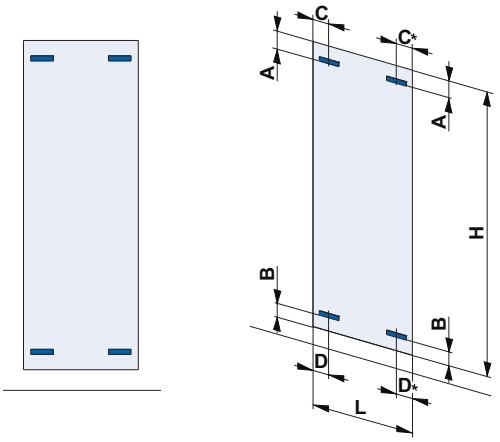
Type	Order number
Split bracket VERTIKAL	Z - U558

Positioning



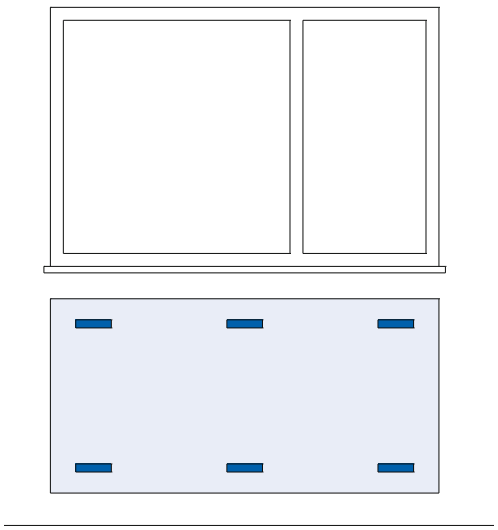
DATA FOR WALL MOUNTING

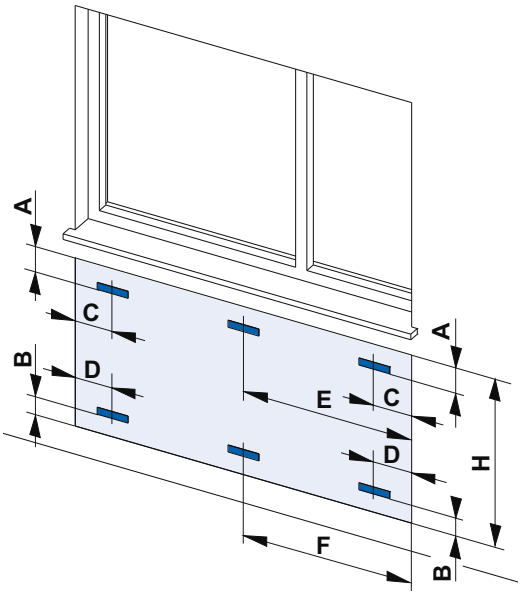
Location of hangers VERTIKAL and REFLEX



KORATHERM VERTIKAL, KORATHERM VERTIKAL - M, KORATHERM REFLEX				
	L [mm]	144	218	366 ÷ 958
K10V K10VM K10R K11V K11VM K20V K20VM K20R	A	90	90	90
	B	65	65	65
	C	72	60	80
	C*	-	60	80
	D	72	60	80
	D*	-	60	80

Location of hangers HORIZONTAL



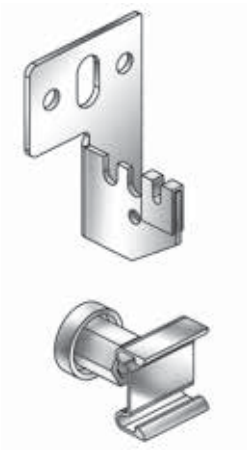


KORATHERM HORIZONTAL, KORATHERM HORIZONTAL - M, KORATHERM HORIZONTAL VKM							
H [mm]	L [mm]	500 ÷ 1600	1800	2000	2300	2600	3000
144	A	50	50	50	50	50	50
	B	5	5	5	5	5	5
	C	160	160	160	160	160	160
	D	160	160	160	160	160	160
	E	-	900	1000	1150	1300	1500
	F	-	-	-	-	-	-
218	A	50	50	50	50	50	50
	B	25	25	25	25	25	25
	C	160	160	160	160	160	160
	D	160	160	160	160	160	160
	E	-	900	1000	1150	1300	1500
	F	-	-	-	-	-	-
366 ÷ 958	A	125	125	125	125	125	125
	B	25	25	25	25	25	25
	C	160	160	160	160	160	160
	D	160	160	160	160	160	160
	E	-	900	1000	1150	1300	1500
	F	-	900 *	1000 *	1150	1300	1500

* valid for types 20, 21 and 22

DATA FOR WALL MOUNTING

Single wall bracket



- The set includes two brackets, two supports, 8 x 60 mm screws, and ø 10 mm expansion plugs
- Metal parts are galvanized
- For use in concrete construction and cellular concrete or solid brick construction
- For wall mounting at a distance of **D = 40 mm** from the wall
- Maximum vertical load for the bracket is **500 N**

Ordering brackets

Type	Order number
Single wall bracket	Z-U320

K11HM = K11HVKM
K20HM = K20HVKM
K21HM = K21HVKM
K22HM = K22HVKM

Number of brackets for KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM

KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM																
Type	L [mm] / H [mm]	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000	2300	2600	3000
K10H	144	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	218	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	366	2	2	2	2	2	2	2	2	2	4	3	3	3	3	3
	514	2	2	2	2	2	2	4	4	4	4	3	3	3	3	3
	588	2	2	2	2	4	4	4	4	4	4	3	3	3	3	3
	662	2	2	2	4	4	4	4	4	4	4	3	3	3	3	3
	884	2	4	4	4	4	4	4	4	4	4	3	3	6	6	6
	958	4	4	4	4	4	4	4	4	4	4	3	3	6	6	6
K11H K11HM	144	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	218	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	366	2	2	2	2	2	2	2	2	4	4	3	3	3	3	3
	514	2	2	2	2	4	4	4	4	4	4	3	3	3	3	3
	588	2	2	2	4	4	4	4	4	4	4	3	3	3	3	6
	662	2	2	4	4	4	4	4	4	4	4	3	3	3	6	6
	884	4	4	4	4	4	4	4	4	4	4	5	5	6	6	6
	958	4	4	4	4	4	4	4	4	4	4	5	5	6	6	
K20H K20HM	144	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	218	2	2	2	2	2	2	2	2	4	4	3	3	3	3	3
	366	2	2	2	4	4	4	4	4	4	4	3	3	3	3	6
	514	2	4	4	4	4	4	4	4	4	4	3	6	6	6	6
	588	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6
	662	4	4	4	4	4	4	4	4	4	4	6	6	6	6	
	884	4	4	4	4	4	4	4	4	4	4	6	6			
	958	4	4	4	4	4	4	4	4	4	4	6				
K21H K21HM	144	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	218	2	2	2	2	2	2	2	4	4	4	3	3	3	3	3
	366	2	2	4	4	4	4	4	4	4	4	3	3	3	6	6
	514	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6
	588	4	4	4	4	4	4	4	4	4	4	6	6	6	6	
	662	4	4	4	4	4	4	4	4	4	4	6	6	6		
	884	4	4	4	4	4	4	4	4	4	4	6				
	958	4	4	4	4	4	4	4	4	4	4					
K22H K22HM	144	2	2	2	2	2	2	2	2	2	4	3	3	3	3	3
	218	2	2	2	2	2	4	4	4	4	4	3	3	3	3	3
	366	2	4	4	4	4	4	4	4	4	4	3	3	6	6	6
	514	4	4	4	4	4	4	4	4	4	4	6	6	6	6	
	588	4	4	4	4	4	4	4	4	4	4	6	6	6		
	662	4	4	4	4	4	4	4	4	4	4	6	6			
	884	4	4	4	4	4	4	4	4	4						
	958	4	4	4	4	4	4	4	4	4						

Single wall bracket - angular

- The set includes two brackets, two supports, 8 x 60 mm screws, and ø 10 mm expansion plugs
- Metal parts are galvanized
- For use in concrete construction and cellular concrete or solid brick construction
- For wall mounting at a distance of **D = 54 mm or 36 mm** from the wall
- Maximum vertical load for the bracket is **700 N**

Ordering brackets

Type	Order number
Single wall bracket - angular	Z-U300

K11HM = K11HVKM
K20HM = K20HVKM
K21HM = K21HVKM
K22HM = K22HVKM

Number of brackets for KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM

KORATHERM HORIZONTAL, HORIZONTAL - M, HORIZONTAL VKM																
Type	L [mm] / H [mm]	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000	2300	2600	3000
K10H	144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	218	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	366	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	514	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	588	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	662	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	884	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	958	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
K11H K11HM	144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	218	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	366	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	514	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	588	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	662	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	884	2	2	2	2	2	2	2	2	2	4	3	3	3	3	3
	958	2	2	2	2	2	2	2	2	2	4	3	3	3	3	
K20H K20HM	144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	218	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	366	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	514	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	588	2	2	2	2	2	2	2	2	2	4	3	3	3	3	3
	662	2	2	2	2	2	2	2	2	4	4	3	3	3	3	
	884	2	2	2	2	2	4	4	4	4	4	3	3			
	958	2	2	2	2	4	4	4	4	4	4	3				
K21H K21HM	144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	218	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	366	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	514	2	2	2	2	2	2	2	2	2	4	3	3	3	3	3
	588	2	2	2	2	2	2	2	2	4	4	3	3	3	3	
	662	2	2	2	2	2	2	2	4	4	4	3	3	3		
	884	2	2	2	2	4	4	4	4	4	4	3				
	958	2	2	2	2	4	4	4	4	4	4					
K22H K22HM	144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	218	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	366	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	514	2	2	2	2	2	2	2	2	4	4	3	3	3	3	
	588	2	2	2	2	2	2	2	4	4	4	3	3	3		
	662	2	2	2	2	2	2	4	4	4	4	3	3			
	884	2	2	2	4	4	4	4	4	4						
	958	2	2	4	4	4	4	4	4	4						

DATA FOR MOUNTING ON THE FLOOR

Mounting on the floor

KORATHERM decorative radiators HORIZONTAL model, specifically models 20, 21 and 22 up to a maximum height of H_{max} = 588 mm can be mounted on the floor with the help of special bracket stands. These radiators can also be ordered without welded hangers for mounting on the wall (see position 16 in the ordering codes on page 33).

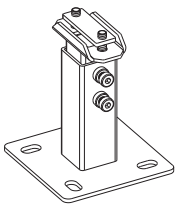
For covering the base plate of the bracket stands, it is possible to order a two-part cover to hide the fixing screws.

Number of brackets

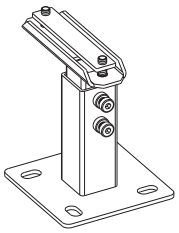
For mounting the KORATHERM HORIZONTAL models up to a length of L = 2000 mm, it is necessary to use two bracket stands; three brackets stands are needed for lengths of L = 2300, 2600, and 3000 mm.
The model **KORATHERM HORIZONTAL – M** and **KORATHERM HORIZONTAL VKM** can be mounted to the floor using two stand brackets.

KORATHERM stand bracket

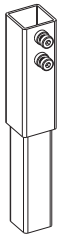
- The set contains one bracket, complete material for mounting and mounting instructions
- Use up to a height of H_{max} = 588 mm
- Individual parts coated with white paint
- The maximum vertical load on the bracket is **1000 N**



for Type 20, 21



for Type 22



Extension piece for stand brackets RADIK and KORATHERM

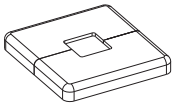
Ordering brackets and accessories

Type	Order number
KORATHERM stand bracket for types 20 and 21	Z-U580-XY
KORATHERM stand bracket for type 22	Z-U581-XY
Cover for KORATHERM stand brackets - white	Z-U582
Extension piece for stand brackets RADIK and KORATHERM	Z-U402

We offer stand brackets in the colours to be found in our colour card – see please the colour card on page 34.

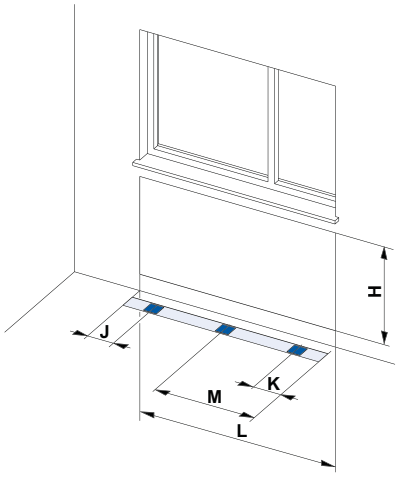
Order codes of stand brackets are Z - U580 - XY and Z - U581 - XY. Positions XY stand for the colour code (see please the colour card on page 34).

The basic colour is white RAL 9016, other colour shades are subject to an additional charge, see please the colour card on page 34.



Cover for KORATHERM stand brackets

Location of stand brackets

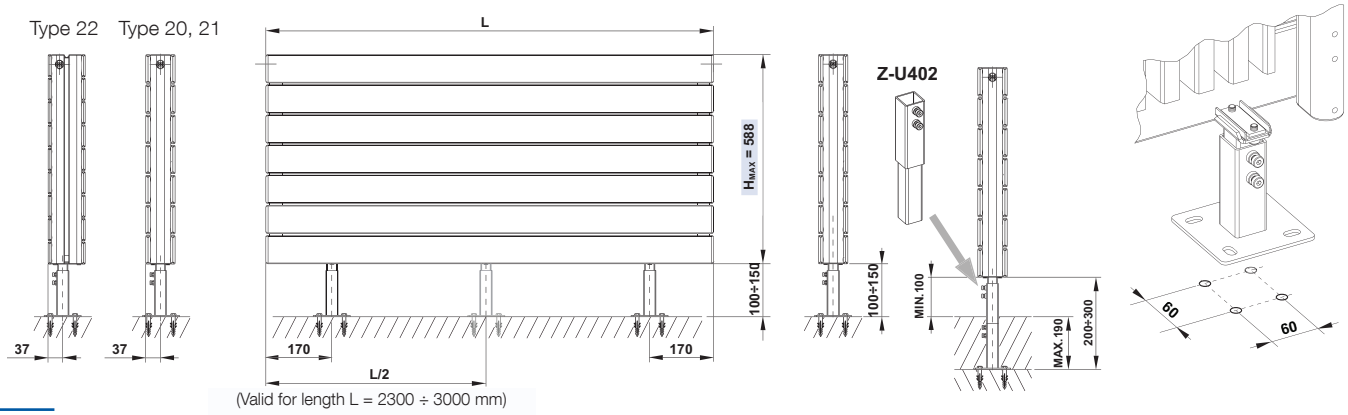


KORATHERM table of sizes

HORIZONTAL						H [mm]	HORIZONTAL - M HORIZONTAL VKM		
Type	L [mm]	500 ÷ 2000	2300	2600	3000		500 ÷ 2000	L [mm]	Type
K20H K21H K22H	J	170	170	170	170	144	170	J	K20HM K21HM K22HM
	K	170	170	170	170		170	K	
	M	-	1150	1300	1500		-	M	
	J	170	170	170	170	218	170	J	
	K	170	170	170	170		170	K	
	M	-	1150	1300	1500		-	M	
	J	170	170	170	170	366 ÷ 588	170	J	
	K	170	170	170	170		170	K	
	M	-	1150	1300	1500		-	M	

K20HM = K20HVKM, K21HM = K21HVKM, K22HM = K22HVKM

Positioning

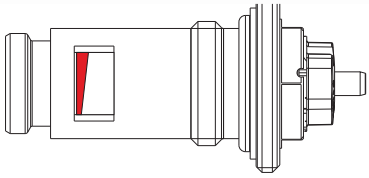


(Valid for length L = 2300 ÷ 3000 mm)

Twin-pipe heating system

When installing KORATHERM HORIZONTAL VKM design radiators, it is necessary to preset the valve to such a position that the radiator will perform as calculated. It is the responsibility of the installer to make sure this has been done.

At the factory the valve is preset at level 8 and after rinsing and before the start of the heating test it must be set by a special key to the desired position.



Level 4 presetting

Example of calculation

Solution to: level of presetting

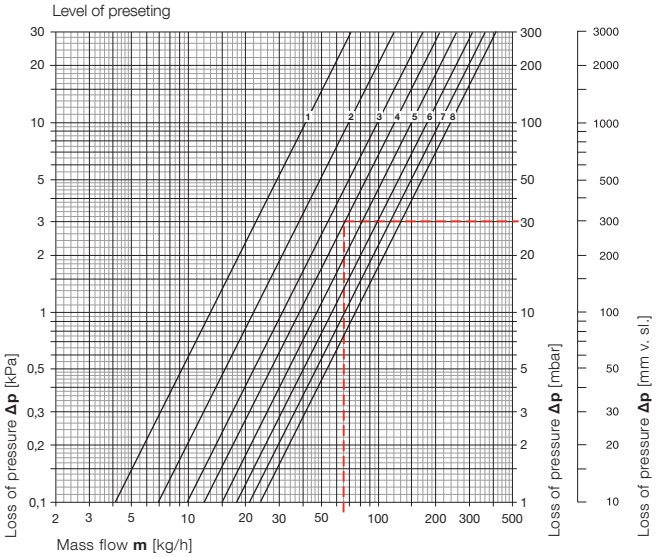
Given:	heat output	Q	=	1135 W
	cooling of water	t_1 - t_2	=	15 K (65/50 °C)
	pressure loss of radiator with valve	Δp	=	30 mbar
	heat capacity of water	c	=	1,163 Wh/kg.K

Solution: weight flow

$$m = \frac{Q}{c \cdot (t_1 - t_2)} = \frac{1135}{1{,}163 \cdot 15} = 65 \text{ kg/h}$$

level of presetting (see diagram): 4

Twin-pipe heating system



HORIZONTAL VKM Radiators without connecting fittings		Level of valve presetting							
		1	2	3	4	5	6	7	8
Valve with presetting at six levels and with thermostatic head	k_V [m³/h]	0,13	0,22	0,31	0,38	0,47	0,57	0,66	0,75
	k_{VS} [m³/h]	0,16	0,27	0,38	0,43	0,65	0,98	1,23	1,43

The indicated values of k_v comply with proportionality interval of 2 K.

Conversion table for valve setting

Setting of 8-level valve following a calculation made for a 6-level valve.

	Level of valve setting					
6-level valve	1	2	3	4	5	6
8-level valve	1	1	2,5	4,5	6,5	8

SVÚOM PRAHA – INFORMATION

(I.E. STATE RESEARCH INSTITUTE FOR PROTECTION OF MATERIALS)

The below given information defines conditions for appropriate using steel radiators which are protected with final surface finish in accordance with DIN 55 900 standard. It also specifies critical locations, spaces and environment limiting their applications. KORADO, a.s. (joint-stock co.) recommends the below given advice to be strictly respected at all practical applications because this will be taken into consideration in case of judgement and evaluation of any future
claims and/or complaints.

POSSIBILITIES AND LIMITATIONS FOR USING STEEL RADIATORS WITH SURFACE FINISH ACCORDING TO DIN 55 900 STANDARD:

(Explicit comment from the Prague State Research Institute
for Protection of Materials)

1. REQUIREMENTS FOR SURFACE FINISH OF RADIATORS

1.1 General

The requirements concerning the surface finish of radiators are defined in German standard DIN 55 900 which bears the following title: "Surface finish of radiators. Terminology, requirements, tests. Surface finish made industrially." The said standard relates to materials which are used for surface finish of radiators and it is binding for industrially made surface finish of radiators for hot water heating and low pressure steam heating (temperature of the heat-carrying medium up to 120 °C). The object of the said standard in not surface finish of radiators
operating with temperatures exceeding 120 °C or which are to be used in spaces with aggressive and/or humid environment air. Kitchens, bathrooms etc. and places outside the reach of water shower spraying and toilets are not considered to be spaces with aggressive and/or humid environment air.
The DIN 55 900 standard is divided into 2 parts: DIN 55 900-1 defines the base paint layer for radiators, DIN 55 900-2 defines the final surface finish of radiators. The said standard specifies reguirements on paint coating materials applicable for surface finish, i.e. both their physical-mechanical properties (adhesion, impact resistance)and corrosion resistance (resistance against condensating water).
In general terms, the said standard also requires that radiators with final paint coating must be protected appropriately for and during: transportation, storage, and mounting, and it must be possible to clean the radiators surface with common detergents (non abbrasive).
The said standard is the basis for definition and assessment of the surface finish quality and for compliance with all principles therein stipulated, all of which is binding both for manufacturers and users of radiators. B reach of the scope of the standard DIN 55 900 by the user may be the cause of extinction of the producer´s quarantees.

2. QUALITATIVE DESCRIPTION OF TYPICAL ENVIRONMENTS

The qualitative description of typical environments with relevant grades of corrosivity is given in the table under the following title:
Qualitative description of typical environments for judgement of corrosivity grades:

Corrosivity grade	Corrosivity	Examples of typical interior environments
C-1	Very low	Heated spaces with relative low humidity (30 – 65 %) and with negligible uncleanliness, e.g. office premises, schools, museums, flats, hotels, shops, etc.
C-2	Low	Unsufficiently heated spaces with changeable temperature and with relative humidity exceeding 70 %. Rare occurrence of condensation and minor uncleanliness, e.g. warehouses, corridors, gym halls, etc.
C-3	Average	Spaces with average occurrence of condensation and with average uncleanliness caused by technological or other processes, e.g. food production premises, laundry plants, breweries, dairy houses, meat packing factories, etc.
C-4	High	Spaces with high occurrence of condensation and with average uncleanliness caused by technological or other processes, e.g. industrial manufacturing premises, swimming pools, bath houses, car-washing facilities, public WCs, stables, etc..
C-5	Very High	Spaces with nearly constant occurrence of condensation and/or with high uncleanliness caused by technological processes, e.g. mining premises, underground technological spaces/ rooms/halls, unaired shelters in tropical humid areas.

The radiators with surface finish complying with the DIN 55 900 standard are applicable in spaces/premises with C 1 interior air environment without limitation for a long period of service.
However, pursuant to the DIN 55 900-2 standard, the radiators must not be placed in spaces with aggressive or humid environment air (C2 – C5). Any placement of such radiators in the lower defined spaces must be considered as critical.

3. POSSIBILITIES AND LIMITATIONS FOR USING STEEL RADIATORS WITH SURFACE FINISH COMPLYING WITH DIN 55 900 STANDARD:

3.1 Spaces with possible water spray or water solutions spray

In spaces/premises with the C1 interior environment air, e.g.
in flats, offices, schools and other public buildings, there are also some rooms (kitchens, bathrooms, toilets) wherein some places with corrosion activity of C2 – C5 can be found.
These are places within a direct reach of water spray or water solutions spray (e.g. places under kitchen sinks, under wash-basins, under showers, and some other places which are regularly sprayed with water). Such places are considered as spaces with humid or aggressive environment air and they are not suitable for placing radiators there even though the whole rooms in question (i.e. kitchens, bathrooms, toilets) are not considered to have aggressive or humid environment air.

(I.E. STATE RESEARCH INSTITUTE FOR PROTECTION OF MATERIALS)

That is why the guaranty claims resulting from the title of corrosion or from a change of the surface appearance cannot be applied on those radiators which are placed within reach of water spray or within reach of aggressive solutions (C2 – C5 spaces). In case it is necessary to place radiators within such a reach or in the middle of such an area, special protective measures must be applied (e.g. using zinc-coated or corrosion more resistant sheets, appropriate encasing etc.) which prevent corrosion damage of the surface finish of the radiators in question.
Radiators with surface finish complying with the DIN 55 900 standard can thus be installed in kitchens, bathrooms and toilets, provided they are located in the suitable place of the room.

3.2 Spaces which are unsufficiently air-ventilated

These are rooms (spaces with C2 interior environment air and higher) with windows which are never opened or rooms without windows where no sufficient air exchange can be achieved and maintained. In such spaces, humidity from air can often condensate on turned-off and therefore cold radiators. This condensated humidity can damage the protective coating due to corrosion or blistering.

Regular air-ventilation of the heated rooms/premises is the necessary protection of the surface finish of radiators against humidity and condensated water. It is not recommended, as a kind of protection against condensated humidity, to turn off radiators which are placed in unsufficiently air-ventilated rooms.

Using radiators complying with the surface finish according to DIN 55 900 inside bathrooms, toilets and launderettes (without windows) is possible only if air-ventilation is maintained in accordance with DIN 18 017 standard, Part 1 and Part 3, wherein hour exchanges of air volumes are defined. Analogically, requirements re. temperature-humidity microclimate are given in ČSN EN ISO 7730 standard.

If no regular air-ventilation is possible, or if no permanent air exchange can be achieved, radiators must be in continuous operation so that cooling down of such surfaces is prevented where air humidity would condensate.

Users of such unaired and humid rooms (e.g bathrooms, launderettes) must respect this fact. C losed rooms with installed radiators must be heated or air-ventilated regularly. Requirements defining air-ventilation of flats or houses are given in the following table:

Room	Air exchange rate
Kitchen	50 l/s – during operation 12 l/s – with permanent air-ventilation or with opened windows
Bathroom, toilet	25 l/s – when being used 10 l/s – with permanent air-ventilation or with opened windows
Garage a) separate b) shared	50 l/s – separate 7,5 l/s car – shared

3.3 Spaces with permanent increased humidity or aggressivity of environment air

This relates to critical rooms and premises (C2 – C5), i.e. swimming pools, saunas, public toilets, car-washing facilities, laundry plants, battery recharging workshops, various premises in chemical and food processing industries, and rooms and spaces where wet cleaning is carried out by means of low or high pressure equipment etc. The radiators complying with DIN 55 900 are not suitable for application in such premises.
If the said radiators are still to be installed into such difficult conditions, it is necessary to consult the manufacturer for the best possible placement of the radiators and to set limitations for usage of these radiators with standard surface finish. Inside the above mentioned critical premises there are usually also places with the corrossion impact of grade C1, such as offices, changing rooms, workshops, dining halls etc. wherein the radiators complying with DIN 55 900 can be applied without limitations.

4. STORING OF RADIATORS AND MOUNTING OF RADIATORS

The DIN 55 900 standard requires that radiators provided with the final surface coating must be appropriately protected for and during transportation and for storage and mounting and that it must be possible to clean the radiators surface with common detergents.
The following advice is to be respected.

4.1 Transportation

During transportation but also during storage and final mounting of radiators, it is necessary to prevent any damage of the radiator coating and/or of all covering elements. No damage caused by rain or by any aggressive impurities may occur.

4.2 Storage

Radiators provided with final surface finish must be stored at the user's in dry and well air-ventilated spaces so that no corrosion damage of the radiators surface finish occurs.

4.3 Protection of the surface finish during mounting

Mounting of the radiators is to be carried out in such a manner that the protective wrapping is removed only after all building construction jobs (e.g. floor tiling, concrete works, wall painting/ decorating and cleaning) has been finished in order to prevent any damage of radiators, especially any damage of their surface finish. The radiators can be mounted and put into operation without removing the protective wrapping.

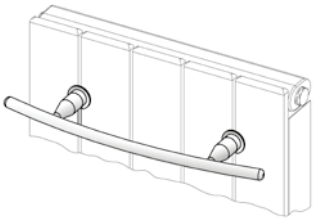
4.4 Cleaning

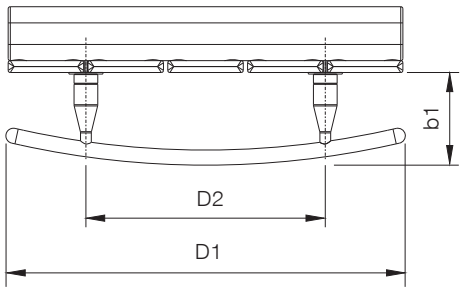
Radiators with final surface finish can be cleaned with such suitable water-borne detergents which are commonly used in households without any adverse impact on the painted surface. Such detergents must neither be abrasive (they would abrade the surface) nor strongly alkaline or acidic (i.e. chemically aggressive).

ACCESSORIES

Towel hanger for KORATHERM

- designed for use with all types of design radiators KORATHERM in the VERTIKAL and HORIZONTAL version
- simple fitting and removal
- manufactured from stainless steel
- the choice of length of the hanger **D1** depends on the length of the radiator **L**
- maximum vertical load on the hanger is **50 N** (up to 5 kg)
- the set contains 1 pc of the Towel hanger for KORATHERM

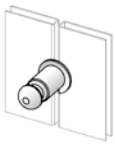


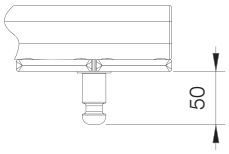


Type	D1 [mm]	D2 [mm]	b1 [mm]	min radiator length L [mm]	Order number
Towel hanger for KORATHERM 370	370	222	86	366	Z-D035
Towel hanger for KORATHERM 518	518	370	102	514	Z-D036

Towel peg for KORATHERM

- designed for use with all types of design radiators KORATHERM in the VERTIKAL and HORIZONTAL version
- simple fitting and removal
- manufactured from stainless steel
- maximum vertical load on peg is **50 N** (up to 5 kg)
- the set contains 1 pc of the Towel peg for KORATHERM





Type	Order number
Towel peg for KORATHERM	Z-D038

DATA FOR YOUR ORDER

Structure of order code

Position	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.			14.	15.	16.	
Items KORATHERM	**K**	**T**	**T**	**P**	**H**	**H**	**H**	**H**	**L**	**L**	**L**	**L**	**-**	**M**	**V**	**X**	**Y**		**N**

Order code - meaning of the items

Position	ITEMS - Description		Code
1.	KORATHERM flat panel radiators		**K**
2. ÷ 3.	Type **T**		**10, 11, 20, 21, 22**
4.	Version **P**	VERTIKAL	**V**
		HORIZONTAL	**H**
		REFLEX	**R**
5. ÷ 8.	Height **H** v mm		**HHHH**
9. ÷ 12.	Length **L** v mm		**LLLL**
13.	Type of connection	Central bottom connection	**M**
		HORIZONTAL VKM	**V**
		Bottom connection	**-**
		Side	**-**
14. ÷ 15.	Colour code		**XY**
16.	Welded hangers for mounting on the wall	YES	**not marked**
		NO	**N**

How to order

Model	Type	Code
KORATHERM VERTIKAL	K10V	K 10 V HHHH LLLL - XY
	K11V	K 11 V HHHH LLLL - XY
	K20V	K 20 V HHHH LLLL - XY
KORATHERM VERTIKAL - M	K10VM	K 10 V HHHH LLLL M XY
	K11VM	K 11 V HHHH LLLL M XY
	K20VM	K 20 V HHHH LLLL M XY
KORATHERM HORIZONTAL	K10H	K 10 H HHHH LLLL - XY
	K11H	K 11 H HHHH LLLL - XY
	K20H	K 20 H HHHH LLLL - XY (N)
	K21H	K 21 H HHHH LLLL - XY (N)
	K22H	K 22 H HHHH LLLL - XY (N)
KORATHERM HORIZONTAL - M	K11HM	K 11 H HHHH LLLL M XY
	K20HM	K 20 H HHHH LLLL M XY (N)
	K21HM	K 21 H HHHH LLLL M XY (N)
	K22HM	K 22 H HHHH LLLL M XY (N)
KORATHERM HORIZONTAL VKM	K11HVKM	K 11 H HHHH LLLL V XY
	K20HVKM	K 20 H HHHH LLLL V XY (N)
	K21HVKM	K 21 H HHHH LLLL V XY (N)
	K22HVKM	K 22 H HHHH LLLL V XY (N)
KORATHERM REFLEX	K10R	K 10 R HHHH LLLL - XY
	K20R	K 20 R HHHH LLLL - XY

Practical examples of stock codes

KORATHERM VERTIKAL with side connection for mounting on the wall, type 11, height H = 2000 mm, length L = 366 mm, colour white RAL 9016

KORATHERM HORIZONTAL - M with bottom middle connection for mounting on the floor, type 22, height H = 218 mm, length L = 2000 mm, colour Silber

KORATHERM HORIZONTAL with bottom connection, type 11, height H = 662 mm, length L = 1200 mm, colour Alloy Black

KORATHERM REFLEX with side connection for mounting on the wall, type 10, height H = 1800 mm, length L = 958, colour Anthrazit Metallic

Correct code

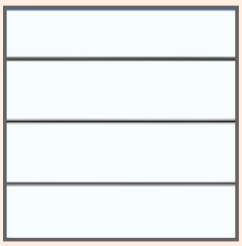
K T T P HHHH LLLL - XY
K 11 V 2000 0366 - 10

K T T P HHHH LLLL M XY N
K 22 H 0218 2000 M 35 N

K T T P HHHH LLLL - XY
K 1 1 H 0662 1 2 0 0 - 3 0

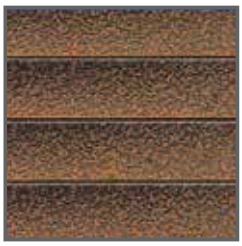
K T T P HHHH LLLL - XY
K 1 0 R 1 8 0 0 0958 - 3 2

COLOUR CARD



code 10
White RAL 9016

code 40
Alloy Black

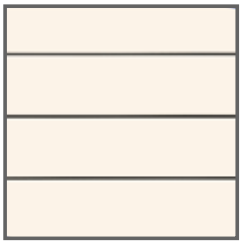


code 45
Pearl Brown

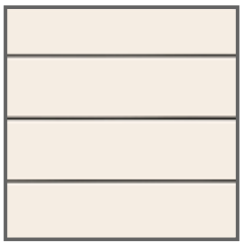
code 35
Silber RAL 9006

code 42
Gold

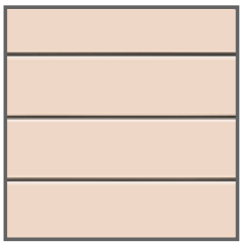
code 32
Anthrazit Metallic



code 14
Jasmine



code 26
Pergamon



code 16
Bahama

code 22
Manhattan

code 37
Red RAL 3001

code 39
Black RAL 9005

Notice:
The colour of the radiator may vary in comparison with the colour shown in the colour card.
The standard paint finish is RAL 9016, other colours from KORADO colour range with an extra charge 20 %.
Radiators can be ordered also in other colours from RAL colour range (with order code 99) with an extra charge 30 %.

A quick access to most recent information

Read us in your mobile phone

You can view our offer also in your mobile phone. You just need to scan the QR code with the QR reader on your mobile phone. You will then be able to view the complete range of our KORATHERM products on your mobile phone, including the overview of models, technical parameters and photo gallery.

The new plant KORADO is the most modern factory for the production of radiators in Europe thanks to its up-to date production facility, technology and organization. Its modern and sophisticated organization in the area of 30 000 m^2 enables further increases of production capacity whenever needed.

The choice of all technology was driven by the maximum effort to ensure environment protection inside the factory as well as in its surroundings.

KORADO, a.s. obtained the ISO 9001 quality certificate in 1997 and currently already holds the ISO 9001:2008.

The KORATHERM 03/2016 catalogue replaces all previous issues.

EN 442 EURONORM

55 45 new HEAT

5 YEARS GUARANTEE KORADO

DEKRA certified

Quality Management

ISO 9001

www.dekra-seal.com

CE