Steel, that heats

KORAD | Steel panel radiators

New colors

KORAD 10 YEARS GUARANTEE

TÜV NORD ISO 9001
Certificate Reg. No. 04 100 930041

TÜV NORD ISO 14001
Certificate Reg. No. 44 104 060736

CE

EURONORM EN 442

DIN Geprüft

PCT AR80

094

0002646

MARK OF QUALITY SLOVAK GOLD CERTIFICATE N°12/2006

Description of the product.

The radiator panel is welded of two stampings, seam welded along its perimeter and spot welded at vertical flutings. The separation of the axes of vertical channels is 33.33 mm.

Types 11, 21, 22 and 33 have an extended surface of transmission - convector, welded at vertical channels of the bodies. This additional surface raises the heat output up to 30%. Radiator type Kompakt (K) might be connected on one or both sides.

Types 10, 20 and 30 are also suitable for environments with high sanitary standards.

Radiator Ventil Kompakt (VK) is supplied with special set for bottom attachment and with valve insertion Heimeier with adjustable value k_v. The radiators type VK are delivered with a connection on the right, left or with a central connection (VKS).

All radiators can be produced with flat front panels - version PLAN (-P).

Heat output - measuring of the KORAD radiators output according to EN 442 had been performed in the test laboratory of the Technical University in Stuttgart. The radiators acquired the CE mark in 2005 issued by the Engineering Test Institute (Strojárenský skúšobní ústav - SZÚ) in Brno (CE 1015).

Material - panel radiators KORAD and convectors are made of cold rolled steel sheets in accordance with STN EN 10130+A1.

The New Height Dimension

KORAD - H 550

U. S. Steel Košice, s.r.o - the important producer of steel panel radiators KORAD has enriched its product assortment by a new height - 550 mm.

The new height dimension is especially suitable as an adequate replacement of old sectional radiators for new panel models. Dimensions of a radiator as well as height spacing between connections are identical with a majority of usually used sectional radiators, which significantly contributes to minimization of necessary construction works and costs saving.

The radiators H 550 are designed for side connection - Korad Kompakt. They are also manufactured with flat front panels - Korad Kompakt Plan.

Basic technical parameters:

- *construction height: - 554 mm*
- *connecting pitch: - 500 mm*

Connection to heating system

1) type Kompakt - K:
- 4 x inner thread G 1/2",
- join pitch = construction height H – 54 mm ± 1,0 mm.

2) type Ventil Kompakt - VK:
- 2 x inner thread for bottom connection G 1/2",
- 2 x inner thread for side connection G 1/2",
- thermostatic valve with thread M30 x 1,5 mm,
- join pitch = 50 mm ± 0,5 mm.

Surface finish

a) degreasing
b) basic phosphate coat
c) primer coat - cataphoretic applied paint
d) final coat - electrostatically applied powder paint; color RAL 9010

Pressure

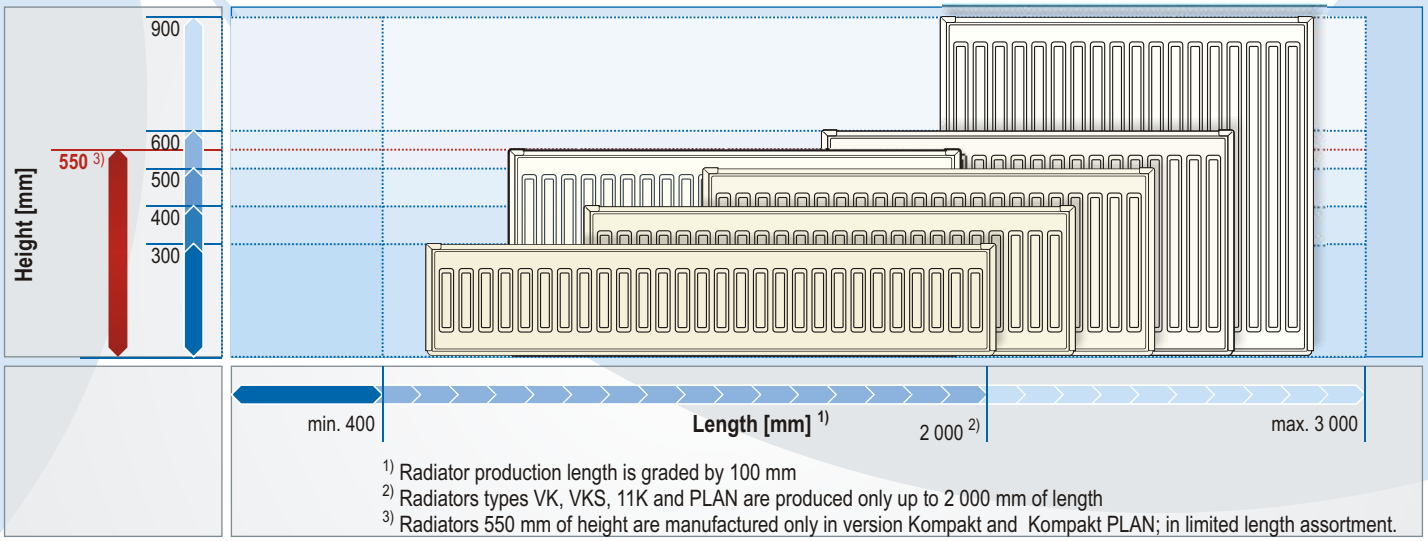
Each panel radiator must successfully pass an airproof test.
Testing pressure - minimum: 1,3 MPa
Operating pressure - maximum: 1,0 MPa
Max. temperature of heating medium is: 110 °C

Accessories - venting plug, blinding plug, holders for clamping the radiators. The accessories have to be ordered additionally.

Guaranty - 10 years when utilized for its proper purpose and at compliance with guarantee conditions.

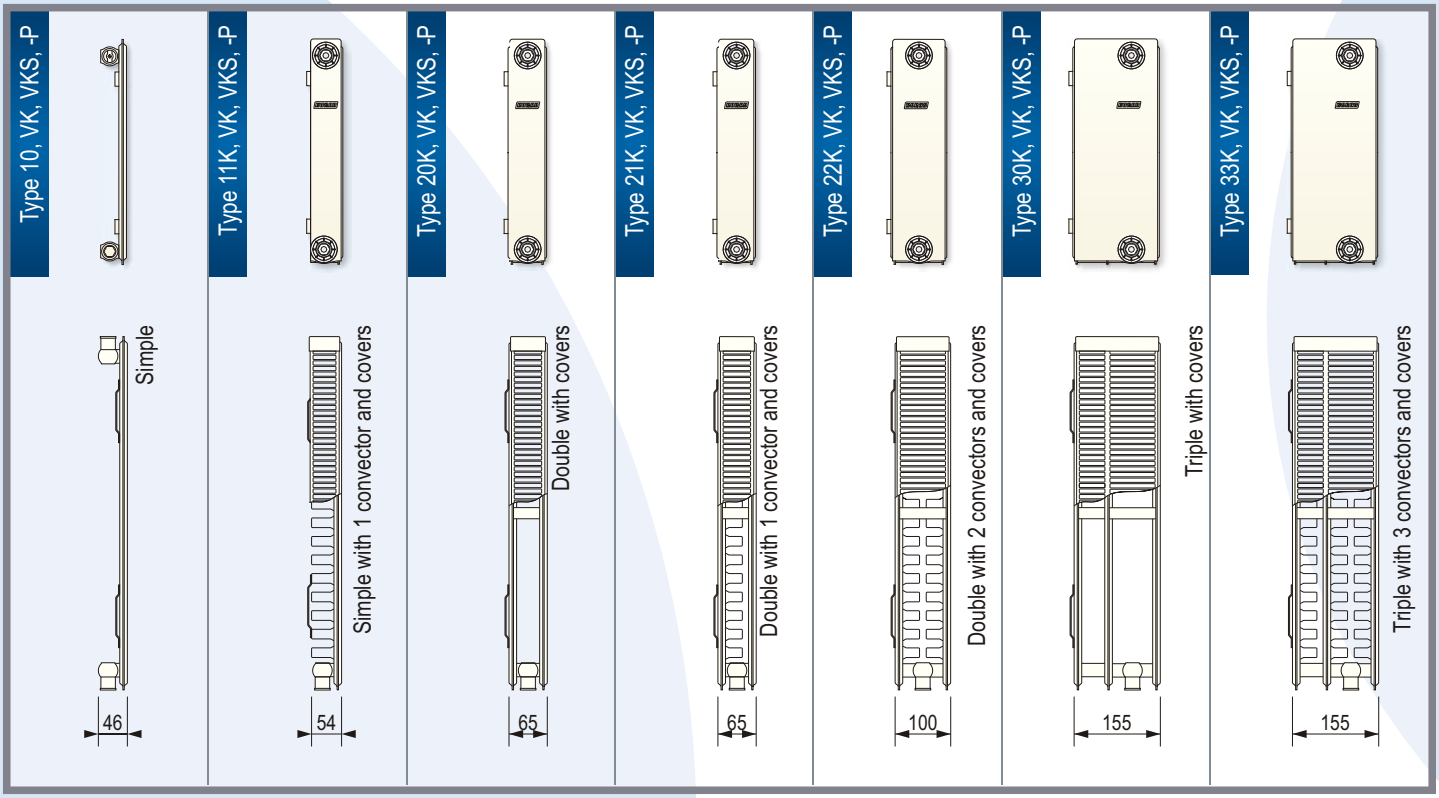
Package - U-shaped edge protecting cardboard, plastic angles, protective foil. The panel radiators are stored on disposable palettes.

RADIATOR HEIGHT AND LENGTH ASSORTMENT [mm]



1) Radiator production length is graded by 100 mm
2) Radiators types VK, VKS, 11K and PLAN are produced only up to 2 000 mm of length
3) Radiators 550 mm of height are manufactured only in version Kompakt and Kompakt PLAN; in limited length assortment.

TYPE ASSORTMENT



HEAT OUTPUTS Q [W] (for most frequently used types and dimensions)

Length [mm]		Type assortment and heights [mm]															
		type 10		type 11			type 20	type 21				type 22					type 33
		500	600	500	600	900	600	500	550	600	900	300	500	550	600	900	300
500	75/65/20 °C	268	311	413	480	673	510	558	604	644	894	492	735	797	849	1 174	694
	90/70/20 °C	339	392	523	609	856	647	712	771	824	1 144	624	936	1 015	1 083	1 497	880
600	75/65/20 °C	322	373	496	576	807	612	669	725	772	1 073	590	882	956	1 019	1 409	833
	90/70/20 °C	407	471	628	731	1 027	777	855	926	988	1 372	749	1 123	1 218	1 299	1 797	1 056
700	75/65/20 °C	375	435	578	672	942	714	781	846	901	1 252	688	1 029	1 116	1 189	1 644	972
	90/70/20 °C	475	549	733	852	1 198	906	997	1 080	1 153	1 601	874	1 310	1 421	1 516	2 096	1 232
800	75/65/20 °C	429	497	661	768	1 076	816	892	966	1 030	1 430	786	1 176	1 275	1 358	1 878	1 110
	90/70/20 °C	543	628	837	974	1 370	1 036	1 140	1 234	1 318	1 830	998	1 497	1 624	1 732	2 396	1 408
900	75/65/20 °C	482	559	743	864	1 211	918	1 004	1 087	1 158	1 609	885	1 323	1 435	1 528	2 113	1 249
	90/70/20 °C	611	706	942	1 096	1 541	1 165	1 282	1 388	1 483	2 059	1 123	1 685	1 827	1 949	2 695	1 583
1000	75/65/20 °C	536	621	826	960	1 345	1 020	1 115	1 208	1 287	1 788	983	1 470	1 594	1 698	2 348	1 388
	90/70/20 °C	679	785	1 047	1 218	1 712	1 295	1 425	1 543	1 647	2 287	1 248	1 872	2 030	2 165	2 995	1 759
1200	75/65/20 °C	643	745	991	1 152	1 614	1 224	1 338	1 450	1 544	2 146	1 180	1 764	1 913	2 038	2 818	1 666
	90/70/20 °C	815	942	1 256	1 461	2 055	1 554	1 709	1 851	1 977	2 745	1 497	2 246	2 435	2 598	3 594	2 111
1400	75/65/20 °C	750	869	1 156	1 344	1 883	1 428	1 561	1 691	1 802	2 503	1 376	2 058	2 232	2 377	3 287	1 943
	90/70/20 °C	950	1 099	1 466	1 705	2 397	1 813	1 994	2 160	2 306	3 202	1 747	2 620	2 841	3 031	4 193	2 463
1600	75/65/20 °C	858	994	1 322	1 536	2 152	1 632	1 784	1 933	2 059	2 861	1 573	2 352	2 550	2 717	3 757	2 221
	90/70/20 °C	1 086	1 256	1 675	1 948	2 739	2 072	2 279	2 468	2 636	3 660	1 997	2 995	3 247	3 464	4 792	2 815
1800	75/65/20 °C	965	1 118	1 487	1 728	2 421	1 836	2 007	2 174	2 317	3 218	1 769	2 646	2 869	3 056	4 226	2 498
	90/70/20 °C	1 222	1 413	1 884	2 192	3 082	2 331	2 564	2 777	2 965	4 117	2 246	3 369	3 653	3 897	5 391	3 167
2000	75/65/20 °C	1 072	1 242	1 652	1 920	2 690	2 040	2 230	2 416	2 574	3 576	1 966	2 940	3 188	3 396	4 696	2 776
	90/70/20 °C	1 358	1 570	2 094	2 435	3 424	2 590	2 849	3 085	3 294	4 575	2 496	3 743	4 059	4 330	5 990	3 519
		type 10		type 11			type 20	type 21				type 22					type 33

75/65/20 °C	t_1 - inlet water temperature = 75 °C	t_2 - outlet water temperature = 65 °C	t_r - reference air temperature = 20 °C
90/70/20 °C	t_1 - inlet water temperature = 90 °C	t_2 - outlet water temperature = 70 °C	t_r - reference air temperature = 20 °C

BASIC TECHNICAL DATA

TYPE	Height [mm]	M_T [kg.m^{-1}]	V_i [dm^3.m^{-1}]	Q_n [W.m^{-1}]	n
10 VK VKS	300	6,75	1,81	342	1,3187
	400	8,60	2,24	443	1,3072
	500	10,60	2,67	536	1,2958
	550	11,70	2,80	583	1,3145
	600	12,53	3,10	621	1,2843
	900	18,32	4,30	829	1,3216
11K VK VKS	300	10,60	1,83	545	1,2912
	400	13,70	2,25	689	1,2953
	500	17,05	2,67	826	1,2994
	550	-	-	-	-
	600	19,95	3,08	960	1,3035
	900	29,47	4,42	1345	1,3237
20K VK VKS	300	14,06	3,50	585	1,3128
	400	17,70	4,37	732	1,3032
	500	21,30	5,23	878	1,3094
	550	23,55	5,30	945	1,3252
	600	25,45	6,10	1020	1,3186
	900	37,54	8,70	1463	1,3152
21K VK VKS	300	14,97	3,40	752	1,3239
	400	19,46	4,27	937	1,3338
	500	23,98	5,13	1115	1,3437
	550	27,00	5,30	1 208	1,3030
	600	28,50	6,00	1287	1,3536
	900	42,59	8,80	1788	1,3507
22K VK VKS	300	17,13	3,40	983	1,3087
	400	22,99	4,30	1233	1,3168
	500	27,60	5,20	1470	1,3250
	550	31,20	5,35	1 594	1,3413
	600	32,75	6,10	1698	1,3331
	900	48,30	8,90	2348	1,3348
30K VK VKS	300	21,60	5,20	828	1,2831
	400	17,44	6,47	1044	1,2939
	500	33,17	7,73	1253	1,3048
	550	35,95	8,15	1 363	1,3053
	600	38,96	9,00	1455	1,3156
	900	56,34	12,60	2040	1,3192
33K VK VKS	300	25,31	5,20	1388	1,3005
	400	33,97	6,53	1751	1,3151
	500	40,70	7,87	2091	1,3298
	550	46,05	8,15	2 265	1,3357
	600	48,72	9,20	2410	1,3444
	900	73,37	13,00	3267	1,3580

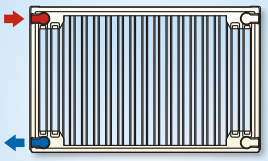
M_T - weight of elements
V_i - water volume
Q_n - standard heating output for thermal drop 75/65 °C at room temperature 20 °C
n - characteristic exponent of panel radiators

Heating body termal outputs according to EN 442:

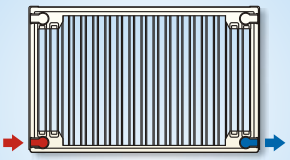
- inlet water temperature t_1 = 75 °C
- outlet water temperature t_2 = 65 °C
- reference air temperature t_r = 20 °C
- temperature difference ÄT = 50 K

For different operational conditions further conversion is to be performed - please see the KORAD Production Programcatalog.

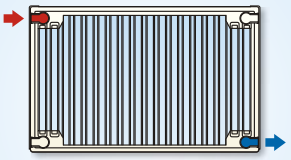
CONNECTION OF RADIATORS KORAD KOMPAKT



Single-sided connection, ö = 1



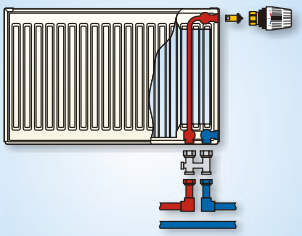
Double-sided bottom connection, ö = 0,9



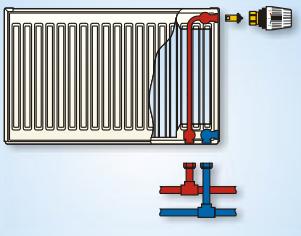
Double-sided diagonal connection
ö = 1 recommended for: L ≥ 3 x H

CONNECTION OF RADIATORS KORAD VENTIL KOMPAKT

with a connection on the right or on the left

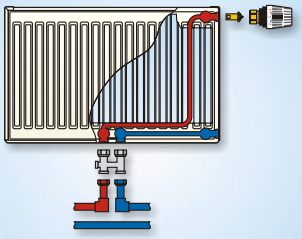


Single-pipe system

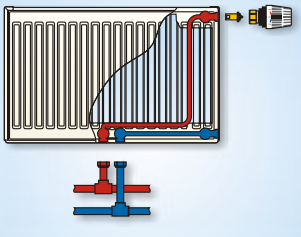


Double-pipe system

with a middle connection



Single-pipe system



Double-pipe system

ADDITIONAL SURFACE COLORS

New

RAL 1000	RAL 1001	RAL 1002	RAL 1013	RAL 1014	RAL 1015	RAL 1016	RAL 1017	RAL 1018
RAL 1019	RAL 1021	RAL 1027	RAL 1028	RAL 1034	RAL 2004	RAL 3000	RAL 3002	RAL 3012
RAL 3014	RAL 3015	RAL 3020	RAL 4004	RAL 4005	RAL 5002	RAL 5005	RAL 5007	RAL 5008
RAL 5010	RAL 5011	RAL 5012	RAL 5014	RAL 5015	RAL 5023	RAL 5024	RAL 6011	RAL 6017
RAL 6018	RAL 6019	RAL 6021	RAL 6024	RAL 6027	RAL 7000	RAL 7001	RAL 7009	RAL 7012
RAL 7030	RAL 7032	RAL 7033	RAL 7035	RAL 7036	RAL 7038	RAL 7047	RAL 8001	RAL 8002
RAL 8017	RAL 8022	RAL 9001	RAL 9002	RAL 9003	RAL 9005	RAL 9006	RAL 9010	

The depicted colours are for guidance only

Sales Promotion

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