

ALARKO

Panel Radiator



EN **EURO****NORM**
442

10
YEAR
GUARANTEE

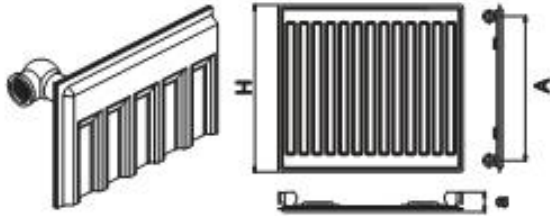
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The line which reaches to
21'st Century in panel radiator...



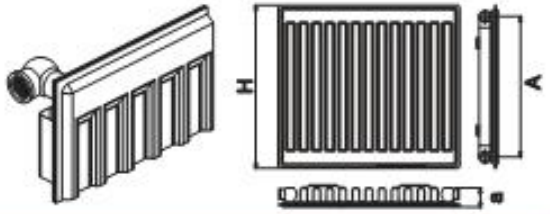
TYPE 10 P

Standard width: a= 48 mm.



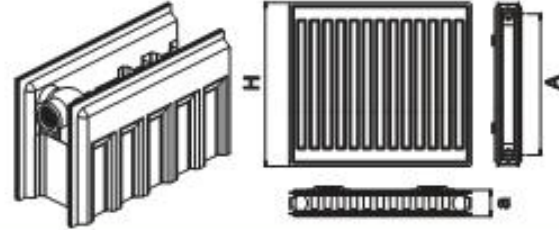
TYPE 11 PK

Standard width: a= 48 mm.



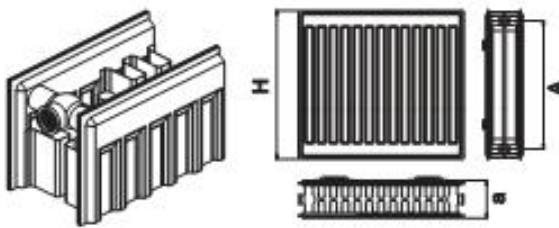
TYPE 21 PKP

Standard width: a= 67 mm.



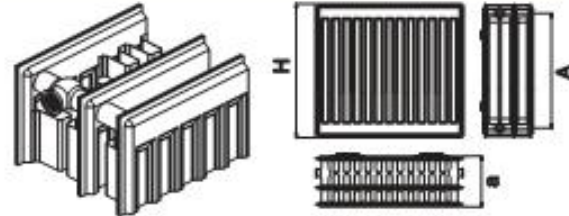
TYPE 22 PKKP

Standard width: a= 105 mm.



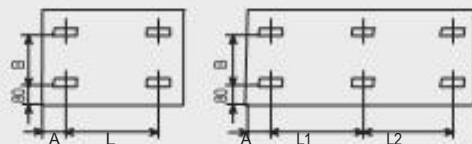
TYPE 33 PKKPKP

Standard width: a= 160.5 mm.



TYPE	DIMENSIONS (mm)		WEIGHT (kg/m)	WATER CONTENT (Lt/m)	
	HEIGHT (H)	A			
TYPE 10 P	300	245	6.7	1.8	
	400	345	8.8	2.1	
	500	445	10.9	2.5	
	600	545	12.8	2.8	
	750	695	15.5	3.4	
TYPE 11 PK	300	245	9.2	1.8	
	400	345	12.3	2.1	
	500	445	15.4	2.5	
	600	545	18.5	2.8	
	750	695	22.9	3.4	
TYPE 21 PKP	300	245	15.7	3.6	
	400	345	20.9	4.2	
	500	445	26.1	5.0	
	600	545	31.3	5.6	
	750	695	38.0	6.8	
TYPE 22 PKKP	300	245	47.1	8.0	
	300	245	18.7	3.6	
	400	345	25.0	4.2	
	500	445	31.3	5.0	
	600	545	37.5	5.6	
TYPE 22 PKKP	750	695	45.6	6.8	
	900	845	56.9	8.0	
	TYPE 33 PKKPKP	300	245	28.1	5.4
		400	345	37.5	6.3
		500	445	46.9	7.5
600		545	56.3	8.4	
750		695	68.5	10.2	
900	845	85.4	12.0		

SUSPENSION BRACKET DIMENSIONS



For lengths between 400-1700 mm.

TYPE	A
10-21-22-33	100
11	116.5

For lengths between 1800-3000 mm.

L=Radiator Length-2xA

RADIATOR HEIGHT	B
300	115
400	215
500	315
600	415
750	565
900	715

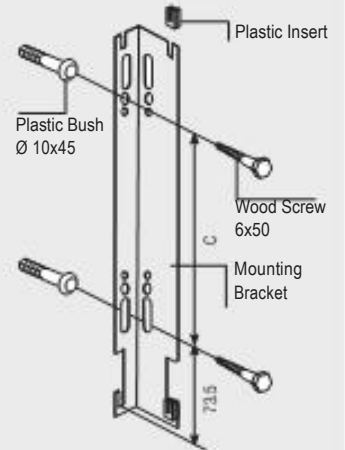
RADIATOR LENGTH	TYPE: 10-21-22-33		TYPE: 11	
	L1	L2	L1	L2
1800	800	800	766.5	800
2000	900	900	866.5	900
2200	1000	1000	966.5	1000
2400	1100	1100	1066.5	1100
2600	1200	1200	1166.5	1200
2800	1300	1300	1266.5	1300
3000	1400	1400	1366.5	1400

MOUNTING BRACKET DIMENSIONS

300 mm HEIGHT



400-500-600-750-900 mm HEIGHT



The mounting bracket can be installed either on the wide or the narrow side, depending on the installation requirements.

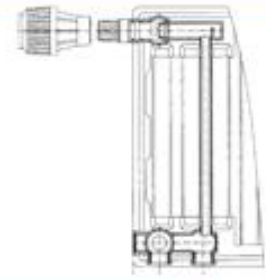
RADIATOR HEIGHT	C
400	92.5
500	192.5
600	292.5
750	442.5
900	592.5

All the dimensions are given in mm.

RADIATORS SUPPLIED WITH COMPACT VALVE



Alarko steel panel radiators can also be supplied with compact valve ensuring piping connection from the bottom side. This type of radiator provides savings in heating costs, when equipped with a thermostatic regulator.



HIGH HEATING EFFICIENCY

Heating surfaces are increased by their special profile, water circulation channels with 33,3 mm pitch and high convectors directly welded onto these channels. They heat environment rapidly since their water content is little and heat outputs are high. More output is achieved from a smaller radiator.



CONVERSION INFORMATION: The outputs quoted in this publication are based on mean water temperatures of 70°C and 80°C (DIN EN 442). For other operating conditions different from tables, coefficients stated below should be used.

CONVERSION TABLE: F: Factors for differences between mean water temperature and room temperature in °C other than 60°C.
T: Mean water temperature - Room temperature.

ΔT	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C
	0.050	0.123	0.209	0.304	0.406	0.515	0.629	0.748	0.872	1.000	1.132	1.267	1.406	1.549	1.694
	0.040	0.097	0.165	0.240	0.320	0.406	0.496	0.590	0.688	0.798	0.893	1.000	1.110	1.222	1.337

PANEL RADIATORS HEAT OUTPUT (kcal/h) - DIN EN 442

TYPE	Height (mm)	75/65 °C (Mean Water Temperature 70 °C)										90/70 °C (Mean Water Temperature 80 °C)					
		ROOM TEMPERATURE										ROOM TEMPERATURE					
		10	12	15	18	20	22	24	26	10	12	15	18	20	22	24	26
10-P	300	349	334	312	290	276	263	249	235	424	409	386	363	349	334	320	305
	400	443	424	397	369	351	333	315	298	541	521	491	462	443	424	404	387
	500	539	516	481	448	426	404	382	361	658	633	597	562	539	516	494	470
	600	636	609	568	528	502	476	450	425	776	748	706	664	636	609	584	554
	750	787	752	701	652	619	587	555	523	963	927	874	821	787	752	722	685
11-PK	300	945	904	842	782	742	703	664	627	1159	1115	1051	987	945	904	864	822
	400	562	537	501	465	442	418	396	374	689	663	624	587	562	537	513	489
	500	726	694	647	601	571	541	511	482	888	855	806	757	726	694	664	632
	600	881	843	787	731	694	658	622	587	1079	1039	979	920	881	843	804	768
	750	1031	986	920	855	813	770	728	687	1262	1214	1145	1077	1031	986	941	896
21-PKP	300	1245	1191	1111	1033	981	930	881	831	1522	1465	1381	1299	1245	1191	1141	1091
	400	1446	1384	1292	1201	1141	1083	1024	967	1766	1702	1604	1509	1446	1384	1324	1261
	500	811	775	722	670	635	602	568	535	997	959	903	848	811	775	741	704
	600	1034	988	921	855	811	768	726	683	1270	1221	1150	1080	1034	988	941	894
	750	1240	1186	1105	1026	974	923	872	822	1523	1465	1380	1296	1240	1186	1134	1078
22-PKPK	300	1433	1370	1277	1186	1127	1067	1009	952	1757	1690	1592	1497	1433	1370	1310	1250
	400	1696	1623	1514	1406	1336	1267	1198	1130	2077	1999	1884	1771	1696	1623	1563	1500
	500	1934	1851	1727	1605	1525	1447	1369	1292	2364	2276	2146	2018	1934	1851	1771	1685
	600	2182	2084	1943	1803	1711	1621	1531	1441	2652	2547	2403	2261	2182	2094	2007	1917
	750	2430	2311	2151	2001	1907	1817	1727	1637	2940	2811	2641	2491	2430	2331	2241	2141
33-PKPKPK	300	1587	1517	1413	1312	1245	1178	1114	1049	1950	1876	1766	1659	1587	1517	1447	1372
	400	2011	1922	1791	1662	1578	1494	1412	1331	2469	2376	2237	2101	2011	1922	1832	1741
	500	2408	2302	2146	1992	1890	1790	1692	1595	2956	2845	2679	2516	2408	2302	2202	2101
	600	2784	2662	2481	2303	2187	2072	1958	1846	3415	3287	3096	2908	2784	2662	2541	2420
	750	3313	3168	2954	2743	2605	2468	2333	2200	4062	3908	3683	3460	3313	3168	3013	2858
900	3805	3639	3394	3152	2994	2837	2683	2530	4661	4486	4228	3973	3805	3639	3474	3309	

PANEL RADIATORS HEAT OUTPUT (WATT) - DIN EN 442

TYPE	Height (mm)	75/65 °C (Mean Water Temperature 70 °C)										90/70 °C (Mean Water Temperature 80 °C)					
		ROOM TEMPERATURE										ROOM TEMPERATURE					
		10	12	15	18	20	22	24	26	10	12	15	18	20	22	24	26
10-P	300	405	388	362	337	321	305	289	273	493	475	448	422	405	388	372	354
	400	515	493	461	429	408	387	366	346	628	605	571	537	515	493	472	450
	500	626	599	559	520	495	469	444	419	764	736	694	653	626	599	572	546
	600	739	707	660	613	583	553	523	494	902	869	820	771	739	707	677	644
	750	914	874	815	757	719	682	645	608	1119	1077	1015	954	914	874	834	796
11-PK	300	1098	1050	978	908	862	817	772	728	1347	1296	1221	1147	1098	1050	1000	955
	400	653	624	582	540	513	486	460	434	800	770	725	682	653	624	594	568
	500	843	806	752	698	663	628	594	560	1032	993	936	880	843	806	772	734
	600	1024	980	914	849	806	764	723	682	1254	1207	1138	1069	1024	980	940	892
	750	1198	1146	1069	993	944	895	846	798	1466	1411	1330	1251	1198	1146	1094	1044
21-PKP	300	1446	1384	1291	1200	1140	1081	1023	965	1768	1702	1605	1509	1446	1384	1324	1261
	400	1680	1608	1501	1395	1326	1258	1190	1123	2052	1977	1864	1753	1680	1608	1528	1465
	500	942	900	839	778	738	699	660	622	1158	1114	1049	985	942	900	860	818
	600	1201	1148	1070	993	942	892	843	794	1475	1419	1336	1255	1201	1148	1094	1044
	750	1441	1378	1284	1192	1132	1072	1013	955	1769	1702	1603	1506	1441	1378	1318	1253
22-PKPK	300	1665	1592	1484	1378	1309	1240	1172	1106	2041	1964	1850	1739	1665	1592	1522	1449
	400	1971	1886	1759	1634	1552	1472	1392	1313	2413	2323	2189	2058	1971	1886	1806	1717
	500	2247	2150	2006	1865	1772	1681	1590	1501	2746	2644	2493	2345	2247	2150	2050	1959
	600	2533	2421	2251	2109	2006	1905	1804	1703	3080	2967	2807	2653	2533	2421	2311	2200
	750	2866	2699	2496	2326	2214	2104	1995	1886	3420	3297	3096	2937	2806	2699	2589	2478
33-PKPKPK	300	3087	2954	2756	2561	2433	2307	2183	2059	3775	3635	3427	3222	3087	2954	2821	2691
	400	1844	1763	1642	1524	1446	1369	1294	1219	2266	2180	2052	1927	1844	1763	1683	1602
	500	2336	2233	2081	1931	1833	1736	1640	1546	2869	2760	2599	2441	2336	2233	2133	2031
	600	2798	2675	2493	2314	2196	2080	1966	1853	3434	3305	3112	2923	2798	2675	2553	2433
	750	3245	3093	2883	2676	2541	2407	2275	2145	3968	3819	3597	3379	3235	3093	2953	2814
900	3849	3681	3432	3187	3026	2867	2710	2556	4719	4541	4279	4020	3849	3681	3511	3350	
900	4421	4228	3943	3662	3478	3296	3117	2940	5415	5212	4912	4616	4421	4228	4028	3849	

*Capacities are based on tests conducted on radiators without top grilles and side panels.

Heat output values are given for 1 m radiator length. Full range ΔT 50°C and ΔT 60°C outputs are available on request. DIN Geprüft logo use for type 10, 21, and 33. BSI Kitemark logo use for type 10, 11, 21, 22, and 33.



A salon, bedroom, living room, child's room, kitchen, bath or office... All details have been considered in the careful search for an attractive decor that suits your personal taste and provides full comfort as well. From the picture on the wall to the carpet on the floor and the style of the arm chairs-every selection is important. In such a setting there is yet another, equally important selection to be made; **The Radiator.**



Chic and Decorative: Alarko steel panel radiators lend a chic and decorative aspect to the environment in which they are placed.



Elegant: Alarko steel panel radiators offer an elegance that is indispensable among those who know how to appreciate it.



Different: Alarko steel panel radiators are selected by discriminating people. This line is indeed extraordinary, a point not so easily reached-even by those who desire it!

Quality: Alarko steel panel radiators are produced and coated according to the latest technology on computer-controlled assembly lines. These highly efficient radiators are resistant to corrosion, chemicals, impact, scratches and ambient air conditions. The smooth surfaces don't collect dust, and the special covering system allows for easy cleaning.



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NEW PATENTED PACKAGING TECHNOLOGY



SAFE PACKAGING

Alarko steel panel radiators are protected from exterior effects and impurities during transportation and installation by the merit of safe packaging.



- 1- Shrinking foil
- 2- Bubble wrap foil
- 3- Corner protective plastic
- 4- Side panel protective cardboard
- 5- Label



Alarko steel panel radiators are produced in series and complying with DIN EN 442 through the high-tech computer controlled modern production lines established by Alarko Steel Panel Radiator Production Plant. The dies which are used in the production were prepared in Germany. Welding lines and test pool were designed in Switzerland. Surface preparation, coating and painting facilities have the most recent technology. The main casing of radiators is produced from cold rolled steel in conformity with EN standards.

PERFECT PAINT, LONG LIFE

Alarko steel panel radiators are resistant to corrosion, exterior effects and impacts. Their outer appearances are perfect. They have long life. Because the inner and outer surfaces of radiators are completely cleaned by applying the operations of immersion and spray oil taking, iron phosphate coating and passivation respectively in conformity with DIN 55900 and completely purified from chemical substances which effect the quality of paint. Radiators which are primer coated by the immersion method and baked are rebaked by being painted with the method of electrostatic powder-coating through robot spray in a climatized cabin. In addition to standard panel radiator tests, Alarko panel radiators are exposed to moisture and 350 hour salty water test conditions. Thus, both the lifetime and

quality of surface and painting operations, and resistance against moist conditions are tested.

DURABLE, IMPERMEABLE

In standard production radiators leaving the production line are individually controlled in the special test tank under the pressure of 13 bars, allowing a maximum operating pressure of 10 bars. Allowed maximum operating temperature is 120°C.

EASY INSTALLATION

Alarko steel panel radiators are preferred and recommended by assembly workers due to their sensitive sizes, slightness and mountability without unpacking.



The right to amend specifications under technologic developments is reserved

