



STEEL PANEL RADIATOR FOR HEATING

USER AND SERVICE MANUAL

Part 2 of 2

GENERAL DESCRIPTION

Steel panel heating radiator is intended for use in closed, independent one-pipe and two-pipe water heating systems of residential, administrative and public buildings.

1. TECHNICAL SPECIFICATIONS

Parameter	Value
Structure	The radiator consists of heating panels, convection panels and fittings connected by welding
Normative	EN 442-1 :2014
Maximum working pressure	1.0 MPa
Test pressure	1.5 MPa
Maximum temperature of heat carrier	120° C
Manufacturing material	Cold-rolled sheet steel made of low-carbon quality steel for cold stamping
Material thickness	Heating panel - 1.2 mm. Convective panel - 0.4 mm
Radiator height	Horizontal radiator - 200, 300, 400, 500, 600 mm Vertical radiator - 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000 mm
Radiator length	Horizontal radiator - 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000 mm Vertical radiator - 300, 500 mm
Radiator type	10, 11, 20, 21, 22, 30, 33
Number of heating panels	Type 10 and type 11 - 1 heating panel Type 20, type 21 and type 22 - 2 heating panels Type 30 and type 33 - 3 heating panels
Number of convective panels	Type 10, type 20 and type 30 - no convection panels Type 11 and type 21 - 1 convective panel Type 22 - 2 convective panels Type 33 - 3 convective panels
Radiator version	Compact (C) - radiator with side connection without thermostatic valve insert Valve Compact (VC) - radiator with bottom connection with thermostatic valve insert Compact Hygiene (C H) - hygienic radiator with side connection without thermostatic valve insert Valve Compact Hygiene (VC H) - hygienic radiator with bottom connection with thermostatic valve insert Compact Modern (C M) - decorative radiator with side connection without thermostatic valve insert Valve Compact Modern (VC M) - decorative radiator with bottom connection with thermostatic valve insert Compact Modern Vertical (C MV) - vertical decorative radiator with bottom connection without thermostatic valve insert
Connection	G ½" (internal)
Number of branch pipes for connection to the heating system	Radiator with side connection without thermostatic valve - 4 side branch pipes Radiator with bottom connection with thermostatic valve - 4 side and 2 lower branch pipes Radiator with bottom connection without thermostatic valve - 2 top connections and 2 lower branch pipes

ATTENTION!

Operation of radiators at pressures and temperatures higher than those indicated in the passport is not allowed.
The use of radiators as current-carrying and grounding devices is strictly prohibited.

2. EQUIPMENT

Radiator type	C 11; C 20; C 21; C 22; C 30; C 33; C H 10; C H 20; C H 30; C M 20; C M 21; C M 22; C M 30; C M 33	VC 11; VC 20; VC 21; VC 22; VC 30; VC 33; VC H 10; VC H 20; VC H 30; VC M 20; VC M 21; VC M 22; VC M 30; VC M 33	C 21; C 22; C 33; VC 21; VC 22; VC 33	C MV 20
Mounting type	Hook/Standard*	Hook/Standard*	Click/Universal*	Click/Universal*
Radiator	1	1	1	1
Passport	1	1	1	1
Packaging	1	1	1	1
Mounting bracket	2 (3)**	2 (3)**	-	-
Mounting kit	1	1	1	1
Thermostatic valve insert M30x1.5 or Danfoss	-	1	1	-

* – Radiators with a height of 200 mm are only available with click / universal fasteners.

** – Radiators up to 1600 mm long (or height for Modern Vertical radiators) are completed with two mounting brackets. Radiators with lengths (or heights for Modern Vertical radiators) from 1700 mm to 3000 mm are equipped with three mounting brackets.

3. INSTALLATION AND USE REQUIREMENTS

Design, installation and operation of the heating system must be performed in accordance with Local Construction norms specifications. The installation of the radiator must be performed according to the technology, ensuring its safety and tightness of joints in accordance with the current building codes and regulations and operating documents. The installation of the radiator must be performed by a special installer with permission from the operating organization.

The radiator can be installed in both single-pipe and double-pipe heating systems with steel, copper and metal-polymer pipes.

When used as a heating medium for hot water its parameters must meet the requirements given in the Rules of Technical Operation of Power Plants and Networks of the Russian Federation:

- Free carbonic acid content – 0;
- Value pH – 8.3-9.5;
- Content of iron compounds – no more than 0.5 mg/dm³;
- Dissolved oxygen content – no more than 20 mg/dm³;
- The amount of suspended solids – no more than 5 mg/dm³;
- Content of petroleum products – no more than 1 mg/dm³;
- The total hardness of the water must not exceed 7 mg-eq/l.

It is not allowed to use the radiator in steam heating systems., systems, where water serves as a heat carrier incorporating aggressive components and in rooms with aggressive air environment.

The radiator is packed so that the packaging is retained on the radiator during installation. To ensure that the radiator is protected from contamination and damage during installation, construction and finishing work, it is forbidden to remove the packaging from the radiator before the specified work is completed. If the packaging was removed before installing the radiator, after the finishing work its surfaces must be cleaned of construction debris and other contaminants.

The radiator must be cleaned of dust before the start of the heating season and every 3-4 months during operation.

When installing the radiator, it is recommended to adhere to the following parameters:

- distance from floor to bottom of radiator – not less 75% of the depth of the device during installation;
- distance from the windowsill (niches) to the top of the radiator is 100 ... 150 mm.

Sealing gaskets used for the installation of radiators should be made of materials ensuring the tightness of the joints at a coolant temperature higher than the maximum operating temperature 10 °C. The vent valve should only be installed on the upper connection port. When installing the radiator, it is recommended to install-control valves for regulating heat transfer from the radiator, as well as to disconnect the radiator from the heating main. In single-pipe heating systems, it is forbidden to install temperature-regulating valves (valves) without installing a jumper (bypass). The radiator must be constantly filled with water both during the heating and inter-heating periods. Draining the heating system is allowed only in emergency cases for a minimum period necessary to eliminate the accident and not more than 15 days during the year.

The vent valve must be open when blocking the connections to the radiator filled with water.

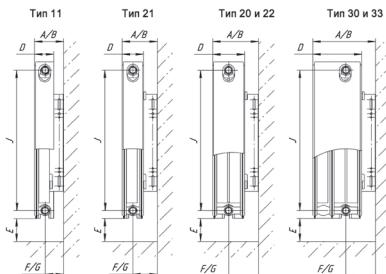
After the installation is completed tests of the mounted radiator must be performed with taking formal note of putting the radiator into operation.

It is not allowed to suddenly open the shut-off valves and valves on the connections to the radiator in order to avoid hydraulic surge.

Operation of the radiator without a test is not allowed!

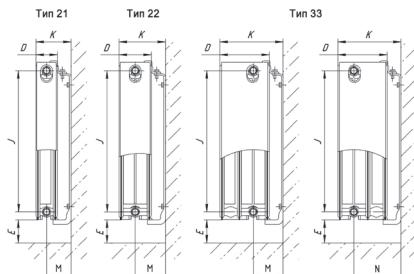
For radiators with bottom connection (VC) equipped with a Danfoss valve insert, the following thermostatic heads are recommended: Danfoss RTR-C 013G7070, Danfoss OEM / RTR-C 013G7097, Danfoss Eco 014G1003. For radiators with bottom connection (VC) equipped with a valve insert M30x1.5, a thermostatic head with a connection size M30x1.5 is recommended.

Compact (C), Compact Modern (C M), Valve Compact (VC), Valve Compact Modern (VC M) radiators with Hook/Standard fastening:



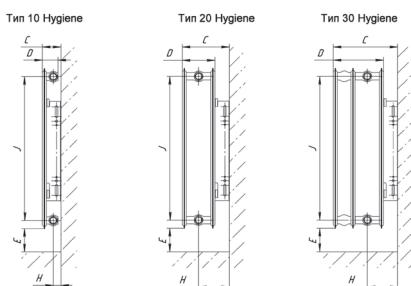
Type of radiator	Type 11	Type 21	Type 20 & 22	Type 30 & 33
A, mm	77	97	132	186
B, mm	92	112	147	201
D, mm	65	68	102	157
E not less, mm	75	85	105	130
F, mm	44	63	80	80
G, mm	59	78	95	95

Compact (C), Compact Modern (C M), Valve Compact (VC), Valve Compact Modern (VC M) radiators with Click/Universal fastening:



Type of radiator	Type 21	Type 22	Type 33
D, mm	68	102	157
E not less, mm	85	105	130
K not less, mm	98	132	187
M not less, mm	63	80	80
N not less, mm	-	-	135

Compact Hygiene (C H), Valve Compact Hygiene (VC H) radiators with Hook/Standard fastening:



Type of radiator	Type 10 Hygiene	Type 20 Hygiene	Type 30 Hygiene
C, mm	113	202	257
D, mm	48,5	102	157
E not less, mm	85	105	130
H, mm	120	145	145

Notes:

1. Dimensions A and F – for installing fasteners with a large shelf to the wall.
2. Dimensions B and G – for mounting fasteners with a small shelf to the wall.
3. Dimensions C and H – for radiators of execution Hygiene.
4. Dimension J – center distance between side pipes:
 - for radiators with a height of 200mm - 149mm;
 - for radiators with a height of 300mm - 249mm;
 - for radiators with a height of 400mm - 349mm;
 - for radiators with a height of 500mm - 449mm;
 - for radiators with a height of 600mm - 549mm;
5. Center-to-center distance between bottom pipes for radiators with bottom connection is 50 mm.
6. Distance from the axis of the lowermost pipe to the end of the side pipe for radiators with a lower connection is 32 mm.

Compact Modern Vertical (C MV) radiators with Click/Universal fastening:



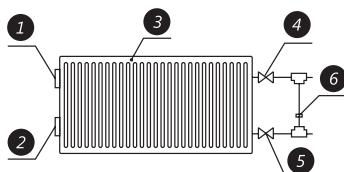
Type of radiator	Type 20
A, mm	97
B, mm	69
C, not less, mm	85
D, mm	63

Notes:

Center-to-center distance between the lower branch pipes:
 – for 300 mm – 249 mm radiators;
 – for 400 mm – 349 mm radiators;
 – for 500 mm – 449 mm radiators.

Installation type of a Compact (C), Compact Hygiene (C H), Compact Modern (C M) radiators

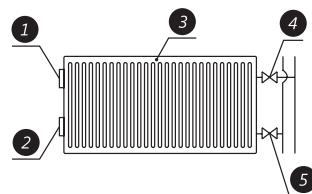
a) for one-pipe systems



1. Air vent valve.
2. Plug.

3. Radiator.
4. Valve.

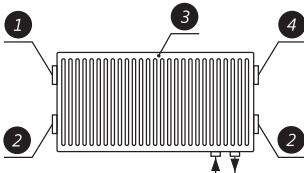
b) for two-pipe systems



5. Gate valve.
6. Jumper.

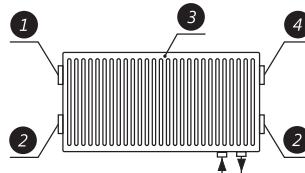
Installation type of a Valve Compact (VC); Valve Compact Hygiene (VC H), Valve Compact Modern (VC M) radiators

a) for one-pipe systems



1. Air vent valve.
2. Plug.

b) for two-pipe systems



3. Radiator.
4. Thermostatic valve insert.

Heat output in watts according to DIN EN 442

Height, mm		200		
Length, mm	Temperature conditions, °C	Radiator version		
		Compact (C); Valve Compact (VC)		
		Radiator type		
400	21	22	33	
	90/70/20	257	316	450
	70/55/20	164	202	287
500	55/45/20	104	128	183
	90/70/20	322	396	563
	70/55/20	206	253	360
600	55/45/20	131	161	229
	90/70/20	385	475	676
	70/55/20	246	303	432
700	55/45/20	156	193	275
	90/70/20	450	554	788
	70/55/20	287	354	503
800	55/45/20	183	225	320
	90/70/20	514	632	900
	70/55/20	328	404	575
900	55/45/20	209	257	366
	90/70/20	578	712	1012
	70/55/20	369	455	646
1000	55/45/20	235	289	411
	90/70/20	643	791	1126
	70/55/20	411	505	719
1100	55/45/20	261	321	457
	90/70/20	707	870	1238
	70/55/20	452	556	791
1200	55/45/20	287	353	503
	90/70/20	771	950	1350
	70/55/20	492	607	862
1300	55/45/20	313	386	548
	90/70/20	835	1028	1464
	70/55/20	533	657	935
1400	55/45/20	339	417	595
	90/70/20	899	1107	1576
	70/55/20	574	707	1007
1500	55/45/20	365	450	640
	90/70/20	964	1187	1688
	70/55/20	616	758	1078
1600	55/45/20	392	482	686
	90/70/20	1028	1266	1800
	70/55/20	657	809	1150
1700	55/45/20	417	514	731
	90/70/20	1093	1345	1914
	70/55/20	698	859	1223
	55/45/20	444	546	777

Height, mm		200		
Length, mm	Temperature conditions, °C	Radiator version		
		Compact (C); Valve Compact (VC)		
		Radiator type		
1800	21	22	33	
	90/70/20	1157	1423	2026
	70/55/20	739	909	1294
1900	55/45/20	470	578	823
	90/70/20	1221	1503	2138
	70/55/20	780	960	1366
2000	55/45/20	496	610	868
	90/70/20	1285	1582	2252
	70/55/20	821	1010	1438
2100	55/45/20	522	642	915
	90/70/20	1349	1661	2364
	70/55/20	862	1061	1510
2200	55/45/20	548	675	960
	90/70/20	1413	1741	2476
	70/55/20	903	1112	1581
2300	55/45/20	574	707	1006
	90/70/20	1478	1819	2588
	70/55/20	944	1162	1653
2400	55/45/20	600	739	1051
	90/70/20	1542	1898	2702
	70/55/20	985	1212	1726
2500	55/45/20	626	771	1097
	90/70/20	1607	1978	2814
	70/55/20	1026	1263	1797
2600	55/45/20	653	803	1143
	90/70/20	1671	2057	2926
	70/55/20	1067	1314	1869
2700	55/45/20	679	835	1188
	90/70/20	1736	2136	3040
	70/55/20	1109	1364	1942
2800	55/45/20	705	867	1235
	90/70/20	1799	2215	3152
	70/55/20	1149	1415	2013
2900	55/45/20	731	900	1280
	90/70/20	1865	2294	3265
	70/55/20	1191	1465	2086
3000	55/45/20	757	932	1326
	90/70/20	1928	2373	3376
	70/55/20	1231	1516	2156
	55/45/20	783	964	1371

Decoding the radiator model:

10, 11, 20, 21, 22, 30, 33 – the number of heat panels (1st digit in the designation) and additional heat-releasing surfaces (2nd digit in the designation);

To calculate the heat flow under conditions other than normal, it is recommended to use special instructions on the manufacturer's website or special software.

Height, mm		300										
Length, mm	Temperature conditions, °C	Radiator version										
		Compact (C); Valve Compact (VC)							Compact Hygiene (C H); Valve Compact Hygiene (VC H)			
		Radiator type							Radiator type			
		10	11	20	21	22	30	33	10	20	30	
400	90/70/20	173	256	306	362	461	421	660	173	306	421	
	70/55/20	110	164	195	231	294	269	422	110	195	269	
	55/45/20	70	104	124	147	187	171	268	70	124	171	
500	90/70/20	215	320	382	451	577	526	826	215	382	526	
	70/55/20	137	204	244	288	369	336	528	137	244	336	
	55/45/20	87	130	155	183	234	214	335	87	155	214	
600	90/70/20	259	384	458	542	693	631	991	259	458	631	
	70/55/20	165	245	293	346	443	403	633	165	293	403	
	55/45/20	105	156	186	220	281	256	402	105	186	256	
700	90/70/20	302	448	536	632	809	736	1156	302	536	736	
	70/55/20	193	286	342	404	517	470	738	193	342	470	
	55/45/20	123	182	218	257	329	299	469	123	218	299	
800	90/70/20	345	512	612	722	924	842	1321	345	612	842	
	70/55/20	220	327	391	461	590	538	844	220	391	538	
	55/45/20	140	208	249	293	375	342	536	140	249	342	
900	90/70/20	388	576	688	813	1039	948	1486	388	688	948	
	70/55/20	248	368	439	519	664	606	949	248	439	606	
	55/45/20	158	234	279	330	422	385	604	158	279	385	
1000	90/70/20	432	640	764	902	1155	1053	1651	432	764	1053	
	70/55/20	276	409	488	576	738	673	1055	276	488	673	
	55/45/20	175	260	310	366	469	428	671	175	310	428	
1100	90/70/20	475	705	840	993	1270	1158	1817	475	840	1158	
	70/55/20	303	450	537	634	811	740	1161	303	537	740	
	55/45/20	193	286	341	403	516	470	738	193	341	470	
1200	90/70/20	518	768	918	1084	1385	1263	1982	518	918	1263	
	70/55/20	331	491	586	692	885	807	1266	331	586	807	
	55/45/20	210	312	373	440	562	513	805	210	373	513	
1300	90/70/20	560	832	994	1173	1501	1368	2147	560	994	1368	
	70/55/20	358	531	635	749	959	874	1371	358	635	874	
	55/45/20	227	338	404	476	610	556	872	227	404	556	
1400	90/70/20	604	896	1070	1264	1616	1474	2312	604	1070	1474	
	70/55/20	386	572	683	807	1032	941	1477	386	683	941	
	55/45/20	245	364	435	513	656	599	939	245	435	599	
1500	90/70/20	647	960	1146	1354	1731	1579	2477	647	1146	1579	
	70/55/20	413	613	732	865	1106	1009	1582	413	732	1009	
	55/45/20	263	390	465	550	703	641	1006	263	465	641	
1600	90/70/20	690	1024	1224	1444	1847	1684	2642	690	1224	1684	
	70/55/20	441	654	782	922	1180	1076	1687	441	782	1076	
	55/45/20	280	416	497	566	750	684	1073	280	497	684	
1700	90/70/20	733	1088	1300	1535	1963	1789	2808	733	1300	1789	
	70/55/20	468	695	830	980	1254	1143	1794	468	830	1143	
	55/45/20	298	442	528	623	797	727	1140	298	528	727	
1800	90/70/20	777	1153	1376	1625	2079	1894	2973	777	1376	1894	
	70/55/20	496	736	879	1038	1328	1210	1899	496	879	1210	
	55/45/20	316	468	559	660	844	769	1207	316	559	769	
1900	90/70/20	820	1216	1452	1715	2194	1999	3137	820	1452	1999	
	70/55/20	524	777	927	1095	1401	1277	2004	524	927	1277	
	55/45/20	333	494	590	697	891	812	1274	333	590	812	
2000	90/70/20	863	1280	1530	1806	2309	2105	3303	863	1530	2105	
	70/55/20	551	818	977	1154	1475	1345	2110	551	977	1345	
	55/45/20	350	520	621	733	938	855	1341	350	621	855	
2100	90/70/20	906	1344	1606	1896	2425	2210	3468	906	1606	2210	
	70/55/20	579	858	1026	1211	1549	1412	2215	579	1026	1412	
	55/45/20	368	546	652	770	985	898	1408	368	652	898	
2200	90/70/20	949	1408	1682	1986	2540	2315	3633	949	1682	2315	
	70/55/20	606	899	1074	1268	1622	1479	2320	606	1074	1479	
	55/45/20	385	572	683	807	1032	940	1475	385	683	940	

Height, mm		300									
Length, mm	Temperature conditions, °C	Radiator version							Compact Hygiene (C H); Valve Compact Hygiene (VC H)		
		Compact (C); Valve Compact (VC)									
		Radiator type							Radiator type		
		10	11	20	21	22	30	33	10	20	30
2300	90/70/20	992	1472	1758	2076	2655	2421	3799	992	1758	2421
	70/55/20	634	940	1123	1326	1696	1546	2426	634	1123	1546
	55/45/20	403	598	714	843	1078	983	1543	403	714	983
2400	90/70/20	1035	1536	1834	2167	2771	2526	3963	1035	1834	2526
	70/55/20	661	981	1171	1384	1770	1613	2531	661	1171	1613
	55/45/20	420	624	745	880	1125	1026	1609	420	745	1026
2500	90/70/20	1078	1601	1912	2257	2886	2631	4128	1078	1912	2631
	70/55/20	689	1023	1221	1442	1843	1680	2637	689	1221	1680
	55/45/20	438	650	777	917	1172	1069	1676	438	777	1069
2600	90/70/20	1122	1664	1988	2347	3001	2737	4293	1122	1988	2737
	70/55/20	717	1063	1270	1499	1917	1748	2742	717	1270	1748
	55/45/20	456	676	807	953	1219	1112	1743	456	807	1112
2700	90/70/20	1166	1728	2063	2435	3119	2843	4458	1166	2063	2843
	70/55/20	745	1104	1318	1556	1992	1816	2847	745	1318	1816
	55/45/20	474	702	838	989	1267	1155	1810	474	838	1155
2800	90/70/20	1208	1792	2140	2528	3233	2947	4624	1208	2140	2947
	70/55/20	772	1145	1367	1615	2065	1882	2953	772	1367	1882
	55/45/20	491	728	869	1027	1313	1197	1878	491	869	1197
2900	90/70/20	1253	1856	2216	2616	3350	3054	4788	1253	2216	3054
	70/55/20	800	1185	1415	1671	2139	1950	3058	800	1415	1950
	55/45/20	509	754	900	1062	1360	1240	1944	509	900	1240
3000	90/70/20	1294	1920	2294	2708	3464	3157	4954	1294	2294	3157
	70/55/20	827	1226	1465	1730	2213	2016	3164	827	1465	2016
	55/45/20	526	780	932	1100	1407	1282	2012	526	932	1282

Height, mm		400									
Length, mm	Temperature conditions, °C	Radiator version							Compact Hygiene (C H); Valve Compact Hygiene (VC H)		
		Compact (C); Valve Compact (VC)									
		Radiator type							Radiator type		
		10	11	20	21	22	30	33	10	20	30
400	90/70/20	221	333	385	459	599	531	859	221	385	859
	70/55/20	141	213	246	293	383	339	549	141	246	549
	55/45/20	90	135	156	186	243	216	349	90	156	349
500	90/70/20	276	416	481	575	749	664	1073	276	481	1073
	70/55/20	176	266	307	367	478	424	685	176	307	685
	55/45/20	112	169	195	234	304	270	436	112	195	436
600	90/70/20	332	500	578	690	898	797	1289	332	578	1289
	70/55/20	212	319	369	441	574	509	823	212	369	823
	55/45/20	135	203	235	280	365	324	523	135	235	523
700	90/70/20	387	583	674	804	1049	930	1503	387	674	1503
	70/55/20	247	372	430	514	670	594	960	247	430	960
	55/45/20	157	237	274	327	426	378	610	157	274	610
800	90/70/20	442	665	770	920	1198	1063	1718	442	770	1718
	70/55/20	282	425	492	588	765	679	1097	282	492	1097
	55/45/20	180	270	313	374	487	432	698	180	313	698
900	90/70/20	497	749	866	1035	1347	1196	1932	497	866	1932
	70/55/20	317	478	553	661	860	764	1234	317	553	1234
	55/45/20	202	304	352	420	547	486	785	202	352	785
1000	90/70/20	553	832	963	1149	1498	1329	2147	553	963	2147
	70/55/20	353	531	615	734	957	849	1371	353	615	1371
	55/45/20	225	338	391	467	608	540	872	225	391	872
1100	90/70/20	608	916	1059	1265	1647	1462	2362	608	1059	2362
	70/55/20	388	585	676	808	1052	934	1509	388	676	1509
	55/45/20	247	372	430	514	669	594	959	247	430	959

Height, mm		400											
Length, mm	Temperature conditions, °C	Radiator version											
		Compact (C); Valve Compact (VC)						Compact Hygiene (C H); Valve Compact Hygiene (VC H)					
		Radiator type						Radiator type					
1200	10	11	20	21	22	30	33	10	20	30			
	90/70/20	663	999	1156	1379	1797	1595	2576	663	1156	2576		
	70/55/20	423	638	738	881	1148	1019	1645	423	738	1645		
1300	55/45/20	269	406	469	560	730	648	1046	269	469	1046		
	90/70/20	719	1082	1251	1495	1947	1728	2791	719	1251	2791		
	70/55/20	459	691	799	955	1244	1104	1783	459	799	1783		
1400	55/45/20	292	439	508	607	791	702	1133	292	508	1133		
	90/70/20	774	1165	1348	1610	2096	1861	3006	774	1348	3006		
	70/55/20	494	744	861	1028	1339	1189	1920	494	861	1920		
1500	55/45/20	314	473	547	654	851	756	1221	314	547	1221		
	90/70/20	829	1248	1444	1724	2246	1994	3221	829	1444	3221		
	70/55/20	529	797	922	1101	1435	1274	2057	529	922	2057		
1600	55/45/20	337	507	586	700	912	810	1308	337	586	1308		
	90/70/20	885	1332	1541	1840	2396	2127	3435	885	1541	3435		
	70/55/20	565	851	984	1175	1530	1359	2194	565	984	2194		
1700	55/45/20	359	541	626	747	973	864	1395	359	626	1395		
	90/70/20	939	1414	1637	1954	2545	2260	3650	939	1637	3650		
	70/55/20	600	903	1046	1248	1626	1444	2331	600	1046	2331		
1800	55/45/20	381	574	665	794	1034	918	1482	381	665	1482		
	90/70/20	995	1498	1733	2069	2696	2393	3865	995	1733	3865		
	70/55/20	636	957	1107	1322	1722	1528	2469	636	1107	2469		
1900	55/45/20	404	608	704	840	1095	972	1570	404	704	1570		
	90/70/20	1051	1581	1829	2185	2845	2526	4079	1051	1829	4079		
	70/55/20	671	1010	1168	1396	1817	1613	2605	671	1168	2605		
2000	55/45/20	427	642	743	887	1155	1026	1657	427	743	1657		
	90/70/20	1105	1664	1926	2299	2995	2658	4294	1105	1926	4294		
	70/55/20	706	1063	1230	1468	1913	1698	2743	706	1230	2743		
2100	55/45/20	449	676	782	934	1216	1079	1744	449	782	1744		
	90/70/20	1161	1748	2022	2414	3145	2791	4508	1161	2022	4508		
	70/55/20	742	1116	1291	1542	2009	1783	2879	742	1291	2879		
2200	55/45/20	472	710	821	980	1277	1133	1831	472	821	1831		
	90/70/20	1216	1830	2119	2529	3294	2924	4724	1216	2119	4724		
	70/55/20	777	1169	1353	1615	2104	1868	3017	777	1353	3017		
2300	55/45/20	494	743	861	1027	1338	1188	1919	494	861	1919		
	90/70/20	1271	1914	2215	2644	3444	3057	4938	1271	2215	4938		
	70/55/20	812	1223	1415	1689	2200	1953	3154	812	1415	3154		
2400	55/45/20	516	777	900	1074	1399	1242	2005	516	900	2005		
	90/70/20	1327	1997	2311	2759	3594	3190	5153	1327	2311	5153		
	70/55/20	848	1276	1476	1762	2296	2038	3291	848	1476	3291		
2500	55/45/20	539	811	939	1121	1460	1296	2093	539	939	2093		
	90/70/20	1382	2081	2407	2874	3743	3323	5367	1382	2407	5367		
	70/55/20	883	1329	1537	1836	2391	2122	3428	883	1537	3428		
2600	55/45/20	561	845	978	1167	1520	1350	2180	561	978	2180		
	90/70/20	1437	2164	2504	2989	3893	3456	5583	1437	2164	5583		
	70/55/20	918	1382	1599	1909	2487	2207	3566	918	1599	3566		
2700	55/45/20	584	879	1017	1214	1581	1404	2267	584	1017	2267		
	90/70/20	1493	2246	2600	3102	4045	3588	5797	1493	2600	5797		
	70/55/20	954	1435	1661	1981	2583	2292	3703	954	1661	3703		
2800	55/45/20	606	912	1056	1260	1643	1457	2354	606	1056	2354		
	90/70/20	1548	2330	2697	3219	4193	3721	6011	1548	2697	6011		
	70/55/20	989	1488	1723	2056	2678	2377	3839	989	1723	3839		
2900	55/45/20	629	946	1095	1307	1703	1511	2441	629	1095	2441		
	90/70/20	1604	2413	2793	3332	4344	3854	6226	1604	2793	6226		
	70/55/20	1024	1541	1784	2128	2775	2462	3977	1024	1784	3977		
3000	55/45/20	651	980	1134	1353	1764	1565	2529	651	1134	2529		
	90/70/20	1658	2497	2889	3448	4492	3987	6441	1658	2889	6441		
	70/55/20	1059	1595	1845	2202	2869	2547	4114	1059	1845	4114		
	55/45/20	673	1014	1173	1400	1824	1619	2616	673	1173	2616		

Height, mm		500										
Length, mm	Temperature conditions, °C	Radiator version										
		Compact (C); Valve Compact (VC)						Compact Hygiene (C H); Valve Compact Hygiene (VC H)				
		Radiator type				Radiator type				Radiator type		
		10	11	20	21	22	30	33		10	20	30
400	90/70/20	269	402	461	555	728	639	1045	269	461	639	
	70/55/20	172	257	294	354	465	408	667	172	294	408	
	55/45/20	109	163	187	225	296	260	424	109	187	260	
500	90/70/20	336	502	577	693	911	798	1306	336	577	798	
	70/55/20	215	321	369	443	582	510	834	215	369	510	
	55/45/20	136	204	234	281	370	324	530	136	234	324	
600	90/70/20	403	603	691	832	1092	958	1568	403	691	958	
	70/55/20	257	385	441	531	697	612	1002	257	441	612	
	55/45/20	164	245	281	338	443	389	637	164	281	389	
700	90/70/20	470	702	806	971	1274	1119	1828	470	806	1119	
	70/55/20	300	448	515	620	814	715	1168	300	515	715	
	55/45/20	191	285	327	394	517	454	742	191	327	454	
800	90/70/20	537	802	922	1109	1456	1278	2090	537	922	1278	
	70/55/20	343	512	589	708	930	816	1335	343	589	816	
	55/45/20	218	326	374	450	591	519	849	218	374	519	
900	90/70/20	605	903	1037	1248	1639	1438	2351	605	1037	1438	
	70/55/20	386	577	662	797	1047	918	1502	386	662	918	
	55/45/20	246	367	421	507	666	584	955	246	421	584	
1000	90/70/20	672	1003	1153	1387	1820	1598	2612	672	1153	1598	
	70/55/20	429	641	736	886	1162	1021	1668	429	736	1021	
	55/45/20	273	407	468	563	739	649	1061	273	468	649	
1100	90/70/20	739	1104	1268	1525	2002	1757	2874	739	1268	1757	
	70/55/20	472	705	810	974	1279	1122	1836	472	810	1122	
	55/45/20	300	448	515	619	813	714	1167	300	515	714	
1200	90/70/20	805	1204	1383	1664	2185	1917	3135	805	1383	1917	
	70/55/20	514	769	883	1063	1396	1224	2002	514	883	1224	
	55/45/20	327	489	562	676	887	779	1273	327	562	779	
1300	90/70/20	872	1305	1499	1804	2367	2076	3396	872	1499	2076	
	70/55/20	557	834	957	1152	1512	1326	2169	557	957	1326	
	55/45/20	354	530	609	733	961	843	1379	354	609	843	
1400	90/70/20	939	1405	1614	1943	2548	2236	3658	939	1614	2236	
	70/55/20	600	897	1031	1241	1627	1428	2336	600	1031	1428	
	55/45/20	381	571	655	789	1035	908	1486	381	655	908	
1500	90/70/20	1007	1506	1729	2081	2731	2396	3919	1007	1729	2396	
	70/55/20	643	962	1104	1329	1744	1530	2503	643	1104	1530	
	55/45/20	409	612	702	845	1109	973	1592	409	702	973	
1600	90/70/20	1074	1606	1845	2220	2913	2555	4180	1074	1845	2555	
	70/55/20	686	1026	1178	1418	1861	1632	2670	686	1178	1632	
	55/45/20	436	652	749	902	1183	1038	1698	436	749	1038	
1700	90/70/20	1141	1706	1960	2359	3094	2715	4441	1141	1960	2715	
	70/55/20	729	1090	1252	1507	1976	1734	2837	729	1252	1734	
	55/45/20	463	693	796	958	1257	1103	1804	463	796	1103	
1800	90/70/20	1208	1807	2074	2497	3276	2875	4702	1208	2074	2875	
	70/55/20	772	1154	1325	1595	2092	1836	3003	772	1325	1836	
	55/45/20	491	734	842	1014	1330	1168	1910	491	842	1168	
1900	90/70/20	1275	1907	2190	2636	3459	3034	4964	1275	2190	3034	
	70/55/20	814	1218	1399	1684	2209	1938	3171	814	1399	1938	
	55/45/20	518	774	889	1071	1405	1232	2016	518	889	1232	
2000	90/70/20	1343	2007	2305	2775	3641	3195	5225	1343	2305	3195	
	70/55/20	858	1282	1472	1772	2326	2041	3337	858	1472	2041	
	55/45/20	545	815	936	1127	1479	1298	2122	545	936	1298	
2100	90/70/20	1410	2107	2421	2913	3822	3355	5486	1410	2421	3355	
	70/55/20	901	1346	1546	1861	2441	2143	3504	901	1546	2143	
	55/45/20	573	856	983	1183	1552	1363	2228	573	983	1363	
2200	90/70/20	1477	2208	2536	3052	4005	3514	5747	1477	2536	3514	
	70/55/20	943	1410	1620	1949	2558	2244	3671	943	1620	2244	
	55/45/20	600	897	1030	1239	1627	1427	2334	600	1030	1427	

Height, mm		500										
Length, mm	Temperature conditions, °C	Radiator version								Compact Hygiene (C H); Valve Compact Hygiene (VC H)		
		Compact (C); Valve Compact (VC)										
		Radiator type							Radiator type			
2300	10	11	20	21	22	30	33					
	90/70/20	1544	2308	2651	3191	4187	3674	6009	1544	2651	3674	
	70/55/20	986	1474	1693	2038	2674	2347	3838	986	1693	2347	
2400	55/45/20	627	937	1077	1296	1700	1492	2440	627	1077	1492	
	90/70/20	1611	2408	2767	3329	4369	3834	6270	1611	2767	3834	
	70/55/20	1029	1538	1767	2126	2791	2449	4005	1029	1767	2449	
2500	55/45/20	654	978	1124	1352	1774	1557	2546	654	1124	1557	
	90/70/20	1678	2509	2882	3468	4551	3993	6531	1678	2882	3993	
	70/55/20	1072	1603	1841	2215	2907	2550	4171	1072	1841	2550	
2600	55/45/20	681	1019	1170	1408	1848	1622	2652	681	1170	1622	
	90/70/20	1746	2609	2997	3607	4733	4153	6793	1746	2997	4153	
	70/55/20	1115	1666	1914	2304	3023	2653	4339	1115	1914	2653	
2700	55/45/20	709	1060	1217	1465	1922	1687	2759	709	1217	1687	
	90/70/20	1814	2708	3113	3745	4914	4315	7052	1814	3113	4315	
	70/55/20	1159	1730	1988	2392	3139	2756	4504	1159	1988	2756	
2800	55/45/20	737	1100	1264	1521	1996	1752	2864	737	1264	1752	
	90/70/20	1880	2810	3228	3884	5097	4472	7315	1880	3228	4472	
	70/55/20	1201	1795	2062	2481	3256	2856	4672	1201	2062	2856	
2900	55/45/20	764	1141	1311	1577	2070	1816	2971	764	1311	1816	
	90/70/20	1949	2909	3344	4022	5278	4634	7575	1949	3344	4634	
	70/55/20	1245	1858	2136	2569	3371	2960	4838	1245	2136	2960	
3000	55/45/20	791	1181	1358	1634	2144	1882	3076	791	1358	1882	
	90/70/20	2014	3011	3458	4161	5461	4792	7837	2014	3458	4792	
	70/55/20	1286	1923	2209	2658	3488	3061	5006	1286	2209	3061	
	55/45/20	818	1223	1404	1690	2218	1946	3183	818	1404	1946	

Height, mm		600										
Length, mm	Temperature conditions, °C	Radiator version								Compact Hygiene (C H); Valve Compact Hygiene (VC H)		
		Compact (C); Valve Compact (VC)										
		Radiator type							Radiator type			
400	10	11	20	21	22	30	33					
	90/70/20	315	461	535	647	850	744	1220	315	535	744	
	70/55/20	201	294	342	413	543	475	779	201	342	475	
500	55/45/20	128	187	217	263	345	302	495	128	217	302	
	90/70/20	394	577	668	809	1062	930	1524	394	668	930	
	70/55/20	252	369	427	517	678	594	973	252	427	594	
600	55/45/20	160	234	271	329	431	378	619	160	271	378	
	90/70/20	473	692	801	970	1274	1117	1829	473	801	1117	
	70/55/20	302	442	512	620	814	713	1168	302	512	713	
700	55/45/20	192	281	325	394	517	454	743	192	325	454	
	90/70/20	552	808	935	1133	1487	1302	2134	552	935	1302	
	70/55/20	353	516	597	724	950	832	1363	353	597	832	
800	55/45/20	224	328	380	460	604	529	867	224	380	529	
	90/70/20	630	923	1069	1295	1700	1488	2439	630	1069	1488	
	70/55/20	402	590	683	827	1086	950	1558	402	683	950	
900	55/45/20	256	375	434	526	690	604	991	256	434	604	
	90/70/20	710	1038	1203	1456	1912	1674	2744	710	1203	1674	
	70/55/20	453	663	768	930	1221	1069	1753	453	768	1069	
1000	55/45/20	288	422	489	591	777	680	1114	288	489	680	
	90/70/20	788	1154	1336	1618	2124	1860	3049	788	1336	1860	
	70/55/20	503	737	853	1033	1357	1188	1947	503	853	1188	
1100	55/45/20	320	469	543	657	863	755	1238	320	543	755	
	90/70/20	867	1270	1470	1780	2337	2047	3354	867	1470	2047	
	70/55/20	554	811	939	1137	1493	1307	2142	554	939	1307	
	55/45/20	352	516	597	723	949	831	1362	352	597	831	

Height, mm		600										
Length, mm	Temperature conditions, °C	Radiator version										
		Compact (C); Valve Compact (VC)						Compact Hygiene (C H); Valve Compact Hygiene (VC H)				
		Radiator type						Radiator type				
		10	11	20	21	22	30	33	10	20	30	
1200	90/70/20	946	1385	1604	1942	2549	2232	3659	946	1604	2232	
	70/55/20	604	885	1025	1240	1628	1426	2337	604	1025	1426	
	55/45/20	384	562	651	789	1035	906	1486	384	651	906	
1300	90/70/20	1025	1501	1738	2103	2761	2418	3962	1025	1738	2418	
	70/55/20	655	959	1110	1343	1763	1544	2531	655	1110	1544	
	55/45/20	416	610	706	854	1121	982	1609	416	706	982	
1400	90/70/20	1103	1616	1870	2265	2974	2604	4267	1103	1870	2604	
	70/55/20	705	1032	1194	1447	1900	1663	2725	705	1194	1663	
	55/45/20	448	656	759	920	1208	1058	1733	448	759	1058	
1500	90/70/20	1182	1731	2004	2427	3187	2790	4572	1182	2004	2790	
	70/55/20	755	1106	1280	1550	2036	1782	2920	755	1280	1782	
	55/45/20	480	703	814	986	1294	1133	1857	480	814	1133	
1600	90/70/20	1261	1847	2138	2588	3399	2977	4877	1261	2138	2977	
	70/55/20	805	1180	1366	1653	2171	1901	3115	805	1366	1901	
	55/45/20	512	750	868	1051	1380	1209	1981	512	868	1209	
1700	90/70/20	1340	1962	2272	2750	3611	3162	5182	1340	2272	3162	
	70/55/20	856	1253	1451	1756	2306	2020	3310	856	1451	2020	
	55/45/20	544	797	923	1117	1467	1284	2105	544	923	1284	
1800	90/70/20	1418	2078	2405	2912	3823	3349	5487	1418	2405	3349	
	70/55/20	906	1327	1536	1860	2442	2139	3505	906	1536	2139	
	55/45/20	576	844	977	1183	1553	1360	2228	576	977	1360	
1900	90/70/20	1498	2193	2539	3074	4037	3534	5792	1498	2539	3534	
	70/55/20	957	1401	1622	1963	2579	2257	3699	957	1622	2257	
	55/45/20	608	891	1031	1248	1640	1435	2352	608	1031	1435	
2000	90/70/20	1576	2308	2673	3235	4249	3720	6097	1576	2673	3720	
	70/55/20	1007	1474	1707	2066	2714	2376	3894	1007	1707	2376	
	55/45/20	640	937	1086	1314	1726	1511	2476	640	1086	1511	
2100	90/70/20	1655	2424	2807	3398	4461	3907	6401	1655	2807	3907	
	70/55/20	1057	1548	1793	2170	2849	2495	4088	1057	1793	2495	
	55/45/20	672	984	1140	1380	1812	1587	2600	672	1140	1587	
2200	90/70/20	1733	2539	2940	3560	4673	4092	6706	1733	2940	4092	
	70/55/20	1107	1622	1878	2274	2985	2614	4283	1107	1878	2614	
	55/45/20	704	1031	1194	1446	1898	1662	2723	704	1194	1662	
2300	90/70/20	1813	2654	3074	3721	4886	4279	7011	1813	3074	4279	
	70/55/20	1158	1695	1963	2377	3121	2733	4478	1158	1963	2733	
	55/45/20	736	1078	1248	1511	1984	1738	2847	736	1248	1738	
2400	90/70/20	1891	2770	3207	3883	5099	4464	7316	1891	3207	4464	
	70/55/20	1208	1769	2048	2480	3257	2851	4673	1208	2048	2851	
	55/45/20	768	1125	1302	1577	2071	1813	2971	768	1302	1813	
2500	90/70/20	1970	2885	3341	4045	5311	4650	7621	1970	3341	4650	
	70/55/20	1258	1843	2134	2584	3392	2970	4868	1258	2134	2970	
	55/45/20	800	1172	1357	1643	2157	1888	3095	800	1357	1888	
2600	90/70/20	2049	3000	3474	4207	5523	4837	7926	2049	3474	4837	
	70/55/20	1309	1916	2219	2687	3528	3089	5062	1309	2219	3089	
	55/45/20	832	1218	1411	1709	2243	1964	3219	832	1411	1964	
2700	90/70/20	2128	3116	3607	4369	5735	5022	8232	2128	3607	5022	
	70/55/20	1359	1990	2304	2790	3663	3208	5258	1359	2304	3208	
	55/45/20	864	1265	1465	1774	2329	2040	3343	864	1465	2040	
2800	90/70/20	2206	3231	3742	4530	5948	5209	8536	2206	3742	5209	
	70/55/20	1409	2064	2390	2893	3799	3327	5452	1409	2390	3327	
	55/45/20	896	1312	1520	1840	2416	2116	3467	896	1520	2116	
2900	90/70/20	2285	3347	3874	4692	6160	5394	8842	2285	3874	5394	
	70/55/20	1460	2138	2475	2997	3934	3445	5648	1460	2475	3445	
	55/45/20	928	1359	1573	1906	2502	2191	3591	928	1573	2191	
3000	90/70/20	2364	3462	4009	4853	6373	5581	9145	2364	4009	5581	
	70/55/20	1510	2211	2561	3100	4071	3565	5841	1510	2561	3565	
	55/45/20	960	1406	1628	1971	2588	2267	3714	960	1628	2267	

Height, mm		200			300				
Length, mm	Temperature conditions, °C	Radiator version			Radiator version				
		Compact Modern (C M); Valve Compact Modern (VC M)			Compact Modern (C M); Valve Compact Modern (VC M)				
		Radiator type		Radiator type					
		21	22	33	20	21	22	30	33
400	90/70/20	246	314	445	306	358	455	421	660
	70/55/20	157	201	284	195	228	291	269	422
	55/45/20	100	128	181	124	145	185	171	268
500	90/70/20	308	393	557	382	445	569	526	826
	70/55/20	197	251	356	244	285	364	336	528
	55/45/20	125	160	226	155	181	231	214	336
600	90/70/20	369	472	669	458	535	684	631	991
	70/55/20	236	301	427	293	342	437	403	633
	55/45/20	150	192	272	186	217	278	256	403
700	90/70/20	431	551	780	536	624	798	736	1157
	70/55/20	275	352	498	342	399	510	470	739
	55/45/20	175	224	317	218	254	324	299	470
800	90/70/20	492	628	890	612	713	912	842	1322
	70/55/20	314	401	569	391	456	582	538	844
	55/45/20	200	255	362	249	290	370	342	537
900	90/70/20	554	708	1001	688	803	1025	948	1487
	70/55/20	354	452	639	439	513	655	606	950
	55/45/20	225	287	407	279	326	416	385	604
1000	90/70/20	616	786	1114	764	891	1140	1053	1652
	70/55/20	393	502	711	488	569	728	673	1055
	55/45/20	250	319	452	310	362	463	428	671
1100	90/70/20	677	865	1225	840	981	1253	1158	1818
	70/55/20	432	552	782	537	626	801	740	1161
	55/45/20	275	351	497	341	398	509	470	738
1200	90/70/20	738	944	1336	918	1071	1367	1263	1983
	70/55/20	472	603	853	586	684	873	807	1267
	55/45/20	300	383	542	373	435	555	513	805
1300	90/70/20	800	1022	1448	994	1159	1481	1368	2148
	70/55/20	511	652	925	635	740	946	874	1372
	55/45/20	325	415	588	404	471	602	556	872
1400	90/70/20	861	1100	1559	1070	1249	1595	1474	2313
	70/55/20	550	703	996	683	797	1019	941	1477
	55/45/20	350	447	633	435	507	648	599	939
1500	90/70/20	923	1180	1670	1146	1337	1708	1579	2478
	70/55/20	590	753	1067	732	854	1091	1009	1583
	55/45/20	375	479	678	465	543	694	641	1006
1600	90/70/20	985	1258	1781	1224	1426	1823	1684	2643
	70/55/20	629	804	1137	782	911	1164	1076	1688
	55/45/20	400	511	723	497	579	740	684	1073
1700	90/70/20	1047	1337	1893	1300	1516	1937	1789	2809
	70/55/20	669	854	1209	830	968	1237	1143	1794
	55/45/20	425	543	769	528	616	787	727	1141
1800	90/70/20	1108	1414	2004	1376	1605	2052	1894	2974
	70/55/20	708	903	1280	879	1025	1311	1210	1900
	55/45/20	450	574	814	559	652	833	769	1208
1900	90/70/20	1169	1494	2115	1452	1694	2165	1999	3138
	70/55/20	747	954	1351	927	1082	1383	1277	2005
	55/45/20	475	607	859	590	688	879	812	1275
2000	90/70/20	1231	1572	2228	1530	1784	2279	2105	3305
	70/55/20	786	1004	1423	977	1139	1456	1345	2111
	55/45/20	500	638	905	621	724	926	855	1342
2100	90/70/20	1292	1651	2339	1606	1873	2393	2210	3470
	70/55/20	825	1054	1494	1026	1196	1529	1412	2216
	55/45/20	525	670	950	652	761	972	898	1409
2200	90/70/20	1353	1730	2449	1682	1962	2507	2315	3635
	70/55/20	864	1105	1564	1074	1253	1601	1479	2322
	55/45/20	550	703	995	683	797	1018	940	1476

Height, mm		200			300				
Length, mm	Temperature conditions, °C	Radiator version			Radiator version				
		Compact Modern (C M); Valve Compact Modern (VC M)			Compact Modern (C M); Valve Compact Modern (VC M)				
		Radiator type			Radiator type				
2300	90/70/20	1416	1808	2560	1758	2051	2620	2421	3801
	70/55/20	904	1155	1635	1123	1310	1674	1546	2428
	55/45/20	575	734	1040	714	833	1064	983	1544
2400	90/70/20	1477	1886	2673	1834	2140	2735	2526	3965
	70/55/20	943	1205	1707	1171	1367	1747	1613	2532
	55/45/20	600	766	1086	745	869	1111	1026	1610
2500	90/70/20	1539	1966	2784	1912	2229	2848	2631	4130
	70/55/20	983	1255	1778	1221	1424	1819	1680	2638
	55/45/20	625	798	1131	777	905	1157	1069	1677
2600	90/70/20	1600	2044	2895	1988	2318	2962	2737	4295
	70/55/20	1022	1306	1849	1270	1481	1892	1748	2743
	55/45/20	650	830	1176	807	941	1203	1112	1744
2700	90/70/20	1663	2122	3008	2063	2406	3078	2843	4460
	70/55/20	1062	1356	1921	1318	1536	1966	1816	2849
	55/45/20	675	862	1221	838	977	1250	1155	1811
2800	90/70/20	1723	2201	3118	2140	2497	3191	2947	4626
	70/55/20	1101	1406	1992	1367	1595	2038	1882	2955
	55/45/20	700	894	1266	869	1014	1296	1197	1879
2900	90/70/20	1786	2279	3230	2216	2584	3306	3054	4790
	70/55/20	1141	1456	2063	1415	1650	2112	1950	3060
	55/45/20	725	926	1312	900	1049	1343	1240	1945
3000	90/70/20	1847	1942	3340	2294	2675	3419	3157	4956
	70/55/20	1179	1240	2133	1465	1708	2184	2016	3166
	55/45/20	750	789	1356	932	1086	1389	1282	2013

Height, mm		400					500				
Length, mm	Temperature conditions, °C	Radiator version					Radiator version				
		Compact Modern (C M); Valve Compact Modern (VC M)					Compact Modern (C M); Valve Compact Modern (VC M)				
		Radiator type			Radiator type					Radiator type	
400	90/70/20	385	455	596	531	855	461	547	728	639	1035
	70/55/20	246	290	381	339	546	294	350	465	408	661
	55/45/20	156	185	242	216	347	187	222	296	260	420
500	90/70/20	481	570	746	664	1068	577	683	911	798	1294
	70/55/20	307	364	476	424	682	369	437	582	510	826
	55/45/20	195	231	303	270	434	234	278	370	324	526
600	90/70/20	578	684	894	797	1283	691	821	1092	958	1554
	70/55/20	369	437	571	509	820	441	524	697	612	992
	55/45/20	235	278	363	324	521	281	333	443	389	631
700	90/70/20	674	797	1044	930	1497	806	958	1274	1119	1811
	70/55/20	430	509	667	594	956	515	612	814	715	1157
	55/45/20	274	324	424	378	608	327	389	517	454	736
800	90/70/20	770	912	1192	1063	1711	922	1094	1456	1278	2071
	70/55/20	492	582	762	679	1093	589	699	930	816	1323
	55/45/20	313	370	484	432	695	374	444	591	519	841
900	90/70/20	866	1025	1341	1196	1924	1037	1231	1639	1438	2329
	70/55/20	553	655	856	764	1229	662	786	1047	918	1488
	55/45/20	352	416	545	486	781	421	500	666	584	946
1000	90/70/20	963	1138	1491	1329	2138	1153	1368	1820	1598	2588
	70/55/20	615	727	952	849	1365	736	874	1162	1021	1653
	55/45/20	391	462	606	540	868	468	556	739	649	1051
1100	90/70/20	1059	1253	1639	1462	2352	1268	1504	2002	1757	2848
	70/55/20	676	801	1047	934	1502	810	961	1279	1122	1819
	55/45/20	430	509	666	594	955	515	611	813	714	1156

Height, mm		400					500				
Length, mm	Temperature conditions, °C	Radiator version					Radiator version				
		Compact Modern (C M); Valve Compact Modern (VC M)					Compact Modern (C M); Valve Compact Modern (VC M)				
		Radiator type					Radiator type				
20	21	22	30	33	20	21	22	30	33		
1200	90/70/20	1156	1366	1789	1595	2565	1383	1641	2185	1917	3106
	70/55/20	738	873	1142	1019	1638	883	1048	1396	1224	1984
	55/45/20	469	555	726	648	1042	562	666	887	779	1261
1300	90/70/20	1251	1481	1938	1728	2779	1499	1779	2367	2076	3365
	70/55/20	799	946	1238	1104	1775	957	1136	1512	1326	2149
	55/45/20	508	602	787	702	1129	609	723	961	843	1367
1400	90/70/20	1348	1595	2086	1861	2993	1614	1916	2548	2236	3624
	70/55/20	861	1019	1333	1189	1912	1031	1224	1627	1428	2315
	55/45/20	547	648	847	756	1216	655	778	1035	908	1472
1500	90/70/20	1444	1708	2236	1994	3207	1729	2052	2731	2396	3883
	70/55/20	922	1091	1428	1274	2048	1104	1311	1744	1530	2480
	55/45/20	586	694	908	810	1302	702	834	1109	973	1577
1600	90/70/20	1541	1823	2385	2127	3420	1845	2189	2913	2555	4142
	70/55/20	984	1164	1523	1359	2185	1178	1398	1861	1632	2645
	55/45/20	626	740	969	864	1389	749	889	1183	1038	1682
1700	90/70/20	1637	1936	2533	2260	3634	1960	2326	3094	2715	4400
	70/55/20	1046	1237	1618	1444	2321	1252	1486	1976	1734	2810
	55/45/20	665	786	1029	918	1476	796	945	1257	1103	1787
1800	90/70/20	1733	2050	2684	2393	3848	2074	2463	3276	2875	4659
	70/55/20	1107	1309	1714	1528	2458	1325	1573	2092	1836	2976
	55/45/20	704	833	1090	972	1563	842	1000	1330	1168	1892
1900	90/70/20	1829	2165	2832	2526	4061	2190	2600	3459	3034	4918
	70/55/20	1168	1383	1809	1613	2594	1399	1660	2209	1938	3141
	55/45/20	743	879	1150	1026	1649	889	1056	1405	1232	1997
2000	90/70/20	1926	2278	2981	2658	4276	2305	2737	3641	3195	5177
	70/55/20	1230	1455	1904	1698	2731	1472	1748	2326	2041	3307
	55/45/20	782	925	1211	1079	1736	936	1111	1479	1298	2102
2100	90/70/20	2022	2392	3130	2791	4489	2421	2873	3822	3355	5435
	70/55/20	1291	1528	1999	1783	2867	1546	1835	2441	2143	3472
	55/45/20	821	971	1271	1133	1823	983	1167	1552	1363	2207
2200	90/70/20	2119	2506	3279	2924	4704	2536	3010	4005	3514	5694
	70/55/20	1353	1600	2094	1868	3004	1620	1923	2558	2244	3637
	55/45/20	861	1018	1332	1188	1910	1030	1222	1627	1427	2313
2300	90/70/20	2215	2620	3428	3057	4917	2651	3147	4187	3674	5954
	70/55/20	1415	1673	2190	1953	3140	1693	2010	2674	2347	3803
	55/45/20	900	1064	1392	1242	1997	1077	1278	1700	1492	2418
2400	90/70/20	2311	2734	3577	3190	5131	2767	3283	4369	3834	6212
	70/55/20	1476	1746	2285	2038	3277	1767	2097	2791	2449	3968
	55/45/20	939	1110	1453	1296	2084	1124	1333	1774	1557	2523
2500	90/70/20	2407	2848	3726	3323	5344	2882	3420	4551	3993	6471
	70/55/20	1537	1819	2380	2122	3413	1841	2185	2907	2550	4133
	55/45/20	978	1156	1513	1350	2170	1170	1389	1848	1622	2628
2600	90/70/20	2504	2961	3875	3456	5559	2997	3557	4733	4153	6730
	70/55/20	1599	1892	2475	2207	3551	1914	2272	3023	2653	4299
	55/45/20	1017	1203	1574	1404	2258	1217	1445	1922	1687	2733
2700	90/70/20	2600	3074	4026	3588	5772	3113	3693	4914	4315	6987
	70/55/20	1661	1963	2571	2292	3687	1988	2359	3139	2756	4463
	55/45/20	1056	1248	1635	1457	2344	1264	1500	1996	1752	2838
2800	90/70/20	2697	3189	4174	3721	5985	3228	3830	5097	4472	7248
	70/55/20	1723	2037	2666	2377	3823	2062	2447	3256	2856	4629
	55/45/20	1095	1295	1695	1511	2431	1311	1556	2070	1816	2943
2900	90/70/20	2793	3301	4324	3854	6199	3344	3967	5278	4634	7505
	70/55/20	1784	2109	2762	2462	3960	2136	2534	3371	2960	4794
	55/45/20	1134	1341	1756	1565	2518	1358	1611	2144	1882	3048
3000	90/70/20	2889	3416	4471	3987	6413	3458	4104	5461	4792	7765
	70/55/20	1845	2182	2856	2547	4096	2209	2621	3488	3061	4960
	55/45/20	1173	1387	1816	1619	2605	1404	1667	2218	1946	3154

Height, mm		600				
Length, mm	Temperature conditions, °C	Radiator version				
		Compact Modern (C M); Valve Compact Modern (VC M)				
		Radiator type				
		20	21	22	30	33
400	90/70/20	535	638	840	744	1209
	70/55/20	342	408	537	475	772
	55/45/20	217	259	341	302	491
500	90/70/20	668	798	1050	930	1510
	70/55/20	427	510	671	594	965
	55/45/20	271	324	426	378	613
600	90/70/20	801	957	1259	1117	1813
	70/55/20	512	611	804	713	1158
	55/45/20	325	389	511	454	736
700	90/70/20	935	1117	1470	1302	2115
	70/55/20	597	714	939	832	1351
	55/45/20	380	454	597	529	859
800	90/70/20	1069	1277	1680	1488	2417
	70/55/20	683	816	1073	950	1544
	55/45/20	434	519	682	604	982
900	90/70/20	1203	1436	1890	1674	2720
	70/55/20	768	917	1207	1069	1737
	55/45/20	489	583	768	680	1104
1000	90/70/20	1336	1596	2100	1860	3022
	70/55/20	853	1019	1341	1188	1930
	55/45/20	543	648	853	755	1227
1100	90/70/20	1470	1755	2310	2047	3324
	70/55/20	939	1121	1476	1307	2123
	55/45/20	597	713	938	831	1350
1200	90/70/20	1604	1915	2520	2232	3626
	70/55/20	1025	1223	1609	1426	2316
	55/45/20	651	778	1023	906	1473
1300	90/70/20	1738	2074	2729	2418	3927
	70/55/20	1110	1325	1743	1544	2508
	55/45/20	706	842	1108	982	1595
1400	90/70/20	1870	2234	2940	2604	4229
	70/55/20	1194	1427	1878	1663	2701
	55/45/20	759	907	1194	1058	1718
1500	90/70/20	2004	2394	3150	2790	4531
	70/55/20	1280	1529	2012	1782	2894
	55/45/20	814	972	1279	1133	1840
1600	90/70/20	2138	2552	3360	2977	4834
	70/55/20	1366	1630	2146	1901	3087
	55/45/20	868	1037	1365	1209	1963
1700	90/70/20	2272	2712	3569	3162	5136
	70/55/20	1451	1732	2280	2020	3280
	55/45/20	923	1101	1450	1284	2086

Height, mm		600				
Length, mm	Temperature conditions, °C	Radiator version				
		Compact Modern (C M); Valve Compact Modern (VC M)				
		Radiator type				
		20	21	22	30	33
1800	90/70/20	2405	2872	3779	3349	5438
	70/55/20	1536	1834	2414	2139	3473
	55/45/20	977	1166	1535	1360	2209
1900	90/70/20	2539	3032	3991	3534	5740
	70/55/20	1622	1936	2549	2257	3667
	55/45/20	1031	1231	1621	1435	2331
2000	90/70/20	2673	3190	4200	3720	6043
	70/55/20	1707	2038	2683	2376	3860
	55/45/20	1086	1296	1706	1511	2454
2100	90/70/20	2807	3351	4410	3907	6344
	70/55/20	1793	2140	2817	2495	4052
	55/45/20	1140	1361	1791	1587	2576
2200	90/70/20	2940	3511	4619	4092	6646
	70/55/20	1878	2243	2950	2614	4245
	55/45/20	1194	1426	1876	1662	2699
2300	90/70/20	3074	3670	4830	4279	6949
	70/55/20	1963	2344	3085	2733	4438
	55/45/20	1248	1490	1962	1738	2822
2400	90/70/20	3207	3830	5040	4464	7251
	70/55/20	2048	2446	3219	2851	4631
	55/45/20	1302	1555	2047	1813	2945
2500	90/70/20	3341	3989	5250	4650	7553
	70/55/20	2134	2548	3353	2970	4824
	55/45/20	1357	1620	2132	1888	3068
2600	90/70/20	3474	4149	5460	4837	7855
	70/55/20	2219	2650	3487	3089	5017
	55/45/20	1411	1685	2217	1964	3190
2700	90/70/20	3607	4308	5669	5022	8159
	70/55/20	2304	2752	3621	3208	5211
	55/45/20	1465	1750	2302	2040	3314
2800	90/70/20	3742	4468	5880	5209	8460
	70/55/20	2390	2854	3755	3327	5404
	55/45/20	1520	1814	2388	2116	3436
2900	90/70/20	3874	4628	6089	5394	8763
	70/55/20	2475	2956	3889	3445	5597
	55/45/20	1573	1879	2473	2191	3559
3000	90/70/20	4009	4786	6300	5581	9064
	70/55/20	2561	3057	4024	3565	5789
	55/45/20	1628	1944	2558	2267	3681

Length, mm		300	400	500
Height, mm	Temperature conditions, °C	Radiator version		
		Compact	Modern	Vertical (C MV)
		20	20	20
400	90/70/20	306	385	461
	70/55/20	195	246	294
	55/45/20	124	156	187
500	90/70/20	382	481	577
	70/55/20	244	307	369
	55/45/20	155	195	234
600	90/70/20	458	578	691
	70/55/20	293	369	441
	55/45/20	186	235	281
700	90/70/20	536	674	806
	70/55/20	342	430	515
	55/45/20	218	274	327
800	90/70/20	612	770	922
	70/55/20	391	492	589
	55/45/20	249	313	374
900	90/70/20	688	866	1037
	70/55/20	439	553	662
	55/45/20	279	352	421
1000	90/70/20	764	963	1153
	70/55/20	488	615	736
	55/45/20	310	391	468
1100	90/70/20	840	1 059	1 268
	70/55/20	537	676	810
	55/45/20	341	430	515
1200	90/70/20	918	1 156	1 383
	70/55/20	586	738	883
	55/45/20	373	469	562
1300	90/70/20	994	1251	1499
	70/55/20	635	799	957
	55/45/20	404	508	609
1400	90/70/20	1070	1348	1614
	70/55/20	683	861	1031
	55/45/20	435	547	655
1500	90/70/20	1146	1444	1729
	70/55/20	732	922	1104
	55/45/20	465	586	702
1600	90/70/20	1224	1541	1845
	70/55/20	782	984	1178
	55/45/20	497	626	749
1700	90/70/20	1300	1637	1960
	70/55/20	830	1046	1252
	55/45/20	528	665	796

Length, mm		300	400	500
Height, mm	Temperature conditions, °C	Radiator version		
		Compact	Modern	Vertical (C MV)
		20	20	20
1800	90/70/20	1376	1733	2074
	70/55/20	879	1107	1325
	55/45/20	559	704	842
1900	90/70/20	1452	1829	2190
	70/55/20	927	1168	1399
	55/45/20	590	743	889
2000	90/70/20	1530	1926	2305
	70/55/20	977	1230	1472
	55/45/20	621	782	936
2100	90/70/20	1606	2022	2421
	70/55/20	1026	1291	1546
	55/45/20	652	821	983
2200	90/70/20	1682	2119	2536
	70/55/20	1074	1353	1620
	55/45/20	683	861	1030
2300	90/70/20	1758	2215	2651
	70/55/20	1123	1415	1693
	55/45/20	714	900	1077
2400	90/70/20	1834	2311	2767
	70/55/20	1171	1476	1767
	55/45/20	745	939	1124
2500	90/70/20	1912	2407	2882
	70/55/20	1221	1537	1841
	55/45/20	777	978	1170
2600	90/70/20	1988	2504	2997
	70/55/20	1270	1599	1914
	55/45/20	807	1017	1217
2700	90/70/20	2063	2600	3113
	70/55/20	1318	1661	1988
	55/45/20	838	1056	1264
2800	90/70/20	2140	2697	3228
	70/55/20	1367	1723	2062
	55/45/20	869	1095	1311
2900	90/70/20	2216	2793	3344
	70/55/20	1415	1784	2136
	55/45/20	900	1134	1358
3000	90/70/20	2294	2889	3458
	70/55/20	1465	1845	2209
	55/45/20	932	1173	1404

Decoding the radiator model:

10, 11, 20, 21, 22, 30, 33 – the number of heat panels (1st digit in the designation) and additional heat-releasing surfaces (2nd digit in the designation);

To calculate the heat flow under conditions other than normal, it is recommended to use special instructions on the manufacturer's website or special software.

4. RADIATOR DISPOSAL DETAILS

There are no requirements for the disposal of radiators.

5. WARRANTY

The warranty period of storage and operation in compliance with the requirements for storage, transportation, installation and operation is 10 years from the date of manufacture.

The service life of the radiator is 25 years.

Radiators are transported by all types of transport in accordance with the rules of cargo transportation applicable to this type of transport. Transportation of radiators in terms of the impact of climatic factors - according to group G2 GOST 15150, in terms of mechanical factors - according to group C GOST 23170. Radiators should be stored in a packed form in a closed room or under a canopy, and they should be protected from moisture and chemicals that cause corrosion.

You must have a passport, a correctly filled out warranty card and a certificate of commissioning of the radiator to fulfill the warranty obligations.

The warranty applies only to defects caused by the manufacturer.

The warranty does not apply to radiators installed in violation of the rules of transportation, installation, operation and quality of the coolant.

The manufacturer guarantees that the radiators meet the requirements of DIN EN 442, subject to the conditions of transportation, storage, installation and operation.

Quality control passed

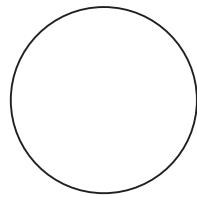


WARRANTY CARD

Dealer

Date of
Purchase

Customer
Name and
Address



Trade organization stamp

Manufacturer's address: OOO «Lemax», Nikolaevskoe shosse, 10-V,
Taganrog, Rostov oblast, Russia, 347913.