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SERRAFF®
Thermal Exchange Solutions

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SERRAFF®
Thermal Exchange Solutions

QUALITY MANAGEMENT ISO 9001

Visa LINE

PRODUCT CATALOG
COMMERCIAL REFRIGERATION
FORCED AIR EVAPORATORS

SERRAFF®
Thermal Exchange Solutions

QUALITY MANAGEMENT ISO 9001

Serraff Management is guided by the search for continuous improvement and relies on an ISO 9001 Quality Management System that systematically standardizes, monitors, inspects and reviews its practices.

Heat Exchange Solutions

Serraff is not limited to supplying heat exchangers: we are committed to combining technology and human potential to meet special market needs. In this way, we are always ready to meet specific and personalized demands. Serraff goes far beyond producing and supplying finned heat exchangers and forced air evaporators to the refrigeration and air conditioning sector: Serraff is a provider of heat exchange solutions.

Mission

Meet the needs of the various heat exchange markets while selling, developing and producing competitive and innovative products and services.

Vision

To be recognized as a benchmark for business performance in the thermal exchange market.

2019B

Forced air evaporators

VISA is the line of forced air evaporators resulting from meticulous work from its design to manufacture, which covers aspects related to quality, safety, functionality and thermomechanical efficiency. Developed with differentials and features that aim to meet and adapt to the needs of customers.

Advantages

- Certified components that provide product quality.
- Produced with lightweight materials that facilitate handling.
- Modern and simple architecture that maintains harmony in its various applications.
- Functional testing of components and models.
- Easy installation in the cooling system where it will be used.
- High efficiency with low noise.

Features

- Designed using an internationally approved computer program;
- Laboratory tested;
- Serraff standard and quality.

visa *Bottom*

visa *Classic*

visa *Duo*

visa *Fit*

visa *Wall*

visa *Bottom*

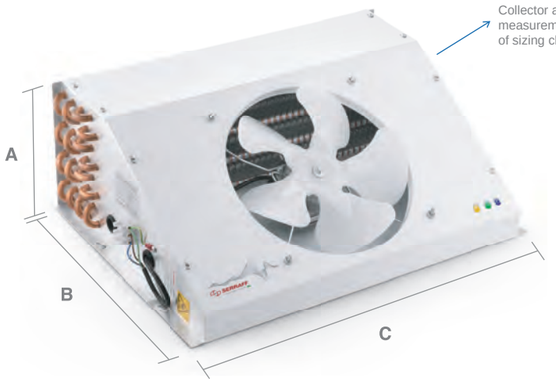
Description

Technical Data

Applications

- Horizontal refrigerators and freezers;
- Horizontal refrigerated displays (showcase counters);
- Special equipment.

Consult our sales team and see other possible application conditions



Collector and distributor measurements: see table of sizing characteristics.

General Features

Model	Defrost	Fan					Resistor kit			
		Modules	Air Flow (m³/h)	Voltage (V)	Current (A)	Power (W)	Quantity	Voltage (V)	Current (A)	Power (W)
VB 15140	A/E	1	214	220	0.16	35	1	220	1,59	350
VB 15240		2	428	220	0.32	70		220	2,27	500
VB 20140		1	550	220	0.20	44		220	2,27	500
VB 20240		2	1100	220	0.40	88		220	4,55	1000
VB 20340		3	1650	220	0.60	132		220	6,82	1500
VB 20440		4	2200	220	0.80	176		220	9,09	2000
VB 25140		1	903	220	0.51	112		220	2,27	500
VB 25240		2	1806	220	1.02	224		220	4,55	1000
VB 25340		3	2709	220	1.53	336		220	6,82	1500
VB 25440		4	3612	220	2.04	448		220	9,09	2000
A - Defrost process by air or hot gas							E - Electric defrost process (resistor)			

General Characteristics

Fans
Ø 6" | 152,4 mm
Ø 8" | 203,2 mm
Ø 10" | 254 mm

Design concept in modules
1 to 4 modules

Housing
White*
*Galvalume

Voltage / Phase / Frequency
110 V / 1F / 50 Hz or
220 V / 1F / 50 and 60 Hz

Different models (for) } **Freezing and Cooling**

Defrosting process

A – air (natural) or **E** – electric (electric resistor in freezing models).

Options

Dimensional Characteristics

Model	Defrost		A (mm)	B (mm)	C (mm)
VB 15140	A/E		6"	122	363	300
VB 15240			6"	122	363	570
VB 20140			8"	153	363	430
VB 20240			8"	153	363	831
VB 20340			8"	153	363	1232
VB 20440			8"	153	363	1635
VB 25140			10"	170	395	430
VB 25240			10"	170	395	831
VB 25340			10"	170	395	1232
VB 25440			10"	170	395	1635

Measures for application:
Collector and Distributor: Measure C + 60 mm

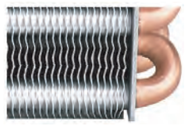
Thermal Characteristics

Capacity (kcal/h) Temperature (° C)								Modules	Defrost	Model	Defrost	Modules	Capacity (W) Temperature (° C)							
10	5	0	-5	-10	-15	-20	-25						10	5	0	-5	-10	-15	-20	-25
Refrigerant R-134a													Refrigerant R-134a							
222	219	217	213	210	206	204	202	1	A/E	VB 15140	A/E	1	258	255	252	248	244	240	237	235
603	590	569	542	512	482	464	452	2		VB 15240		2	701	686	662	630	595	561	539	526
766	746	725	685	629	581	541	510	1		VB 20140		1	891	868	843	797	731	675	629	593
1544	1521	1473	1398	1287	1204	1134	1041	2		VB 20240		2	1795	1769	1713	1626	1497	1400	1319	1210
2326	2283	2221	2112	1949	1829	1730	1639	3		VB 20340		3	2705	2655	2582	2456	2266	2127	2012	1906
3265	3136	2969	2801	2628	2455	2326	2229	4		VB 20440		4	3796	3647	3452	3257	3056	2855	2705	2592
1096	1054	1004	925	825	734	659	570	1		VB 25140		1	1274	1226	1167	1075	959	854	766	663
2194	2138	2056	1909	1700	1551	1407	1325	2		VB 25240		2	2551	2486	2391	2220	1977	1803	1636	1541
3350	3255	3120	2891	2627	2387	2182	2048	3		VB 25340		3	3895	3785	3628	3362	3055	2775	2537	2381
4469	4333	4165	3884	3492	3191	2920	2765	4		VB 25440		4	5197	5038	4843	4516	4061	3711	3395	3215
Refrigerant R-404A													Refrigerant R-404A							
259	255	251	245	240	236	232	230	1	A/E	VB 15140	A/E	1	301	297	292	285	279	274	270	268
646	635	618	593	557	535	520	508	2		VB 15240		2	751	738	719	689	648	622	605	591
808	796	771	734	684	647	627	611	1		VB 20140		1	939	925	896	853	795	752	729	711
1614	1591	1552	1482	1395	1330	1284	1257	2		VB 20240		2	1877	1850	1805	1723	1622	1546	1493	1462
2436	2395	2335	2231	2110	2019	1942	1868	3		VB 20340		3	2832	2785	2715	2594	2454	2348	2258	2172
3262	3197	3117	2979	2792	2666	2600	2565	4		VB 20440		4	3793	3717	3624	3464	3246	3100	3023	2982
1161	1120	1065	983	888	831	796	778	1		VB 25140		1	1350	1302	1238	1143	1033	966	926	905
2255	2230	2163	2041	1883	1753	1662	1613	2		VB 25240		2	2622	2593	2515	2373	2190	2038	1932	1876
3465	3389	3268	3090	2854	2672	2543	2464	3		VB 25340		3	4029	3941	3800	3593	3319	3107	2957	2865
4573	4487	4360	4125	3807	3568	3399	3265	4		VB 25440		4	5318	5217	5070	4796	4427	4149	3952	3797
Refrigerant R-410A													Refrigerant R-410A							
240	237	230	223	217	212	210	207	1	A/E	VB 15140	A/E	1	279	275	268	259	252	247	244	241
626	613	597	575	557	539	525	521	2		VB 15240		2	728	713	694	669	648	627	611	606
809	796	778	747	705	679	666	654	1		VB 20140		1	941	925	905	869	820	789	774	761
1605	1588	1562	1508	1440	1378	1345	1324	2		VB 20240		2	1866	1846	1816	1754	1674	1602	1564	1539
2445	2405	2345	2253	2146	2071	2024	1994	3		VB 20340		3	2843	2796	2727	2620	2495	2408	2354	2319
3560	3473	3349	3200	3005	2878	2822	2785	4		VB 20440		4	4139	4038	3894	3721	3494	3347	3281	3238
1183	1150	1106	1049	984	940	915	898	1		VB 25140		1	1376	1337	1286	1220	1144	1093	1064	1044
2350	2310	2227	2125	1997	1907	1864	1832	2		VB 25240		2	2732	2686	2589	2471	2322	2217	2168	2130
2665	2704	2756	2852	3007	3129	3196	3247	3		VB 25340		3	3099	3144	3205	3316	3496	3638	3716	3776
4698	4605	4467	4269	3979	3841	3765	3712	4		VB 25440		4	5463	5355	5194	4964	4627	4466	4378	4316

Consult us and see other possible application conditions (refrigerant, temperature range, etc.)

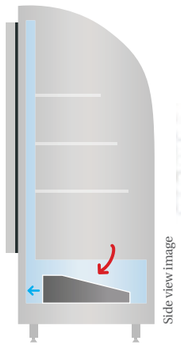
Calculation basis ΔT = 8 K, where ΔT = (T chamber - T boiling)

Evaporator



- Tube: Grooved 3/8 "copper
- Fin: Aluminum
- Self-spaced: 5.1 mm (5 fins per inch)
- Header: Aluminum.

Air movement



Horizontal refrigerator / display application illustration

See more

visa Classic

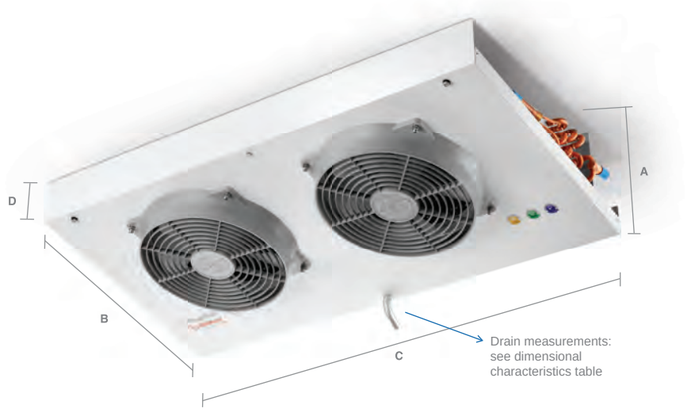
Description

Technical Data

Applications

- Commercial displays - vertical or horizontal (counters);
- Commercial refrigerators and freezers;
- Professional and industrial kitchen counters;
- Cellars;
- Mini-chambers;
- Walk-in;
- Special equipment.

Consult our sales team and see other possible application conditions



General Features

Fans
Ø 6" | 152,4 mm*
Ø 8" | 203,2 mm
Ø 10" | 254 mm
* available in 1 module only

Design concept in modules
1 to 4 modules

Different models (for) } Freezing and Cooling

Options

Housing
White*, Black*, Stainless**
*Galvalume
**430 Stainless Steel

Voltage / Phase / Frequency
110 V / 1F / 50 Hz or
220 V / 1F / 50 and 60 Hz

Defrosting process

A – air (natural) ou **E** – electric (electric resistor in freezing models).


VC 710 / 630

SLIM
(compact version
of 1 module / fan)


VC 200 / 190
VC 270 / 250


VC 25140

Models of 1 module with different capacity and size

General Features

Model	Defrost	Fan					Resistor			
		Modules	Air Flow (m³/h)	Voltage (V)	Current (A)	Power (W)	Quantity	Voltage (V)	Current (A)	Power (W)
VC 200	A	1	246	220	0.16	35	0	220	1.59	350
VC 190	E						1			
VC 270	A	1	225	220	0.16	35	0			
VC 250	E						1			
VC 710	A	1	555	220	0.2	44	0	220	2.27	500
VC 630	E		533				1			
VC 1360	A	2	1110	220	0.4	88	0	220	4.55	1000
VC 1240	E		1066				1			
VC 2340	A	3	1665	220	0.6	132	0	220	6.82	1500
VC 1800	E		1599				1			
VC 3100	A	4	2220	220	0.8	176	0	220	9.09	2000
VC 2530	E		2132				1			
VC 25140	A/E	1	903	220	0.51	112	0	220	2.27	500
							1			
VC 25240	A/E	2	1806	220	1.02	224	0	220	4.55	1000
							1			
VC 25340	A/E	3	2709	220	1.53	336	0	220	6.82	1500
							1			
VC 25440	A/E	4	3612	220	2.04	448	0	220	9.09	2000
							1			

A - Defrost process by air
E - Electric defrost process (resistor)

Dimensional Characteristics

Model	Defrost		A (mm)	B (mm)	C (mm)	D (mm)
VC 200	A		6"	140	320	380	75
VC 190	E						
VC 270	A		6"	140	320	380	75
VC 250	E						
VC 710	A		8"	151	380	540	75
VC 630	E						
VC 1360	A		8"	151	380	940	75
VC 1240	E						
VC 2340	A		8"	151	380	1340	75
VC 1800	E						
VC 3100	A		8"	151	380	1740	75
VC 2530	E						
VC 25140	A/E		10"	213	440	542	81
VC 25240	A/E		10"	213	440	945	81
VC 25340	A/E		10"	213	440	1348	81
VC 25440	A/E		10"	213	440	1750	81

Measures for application:
Drain pipe: Measure A + 53 mm

Thermal Characteristics

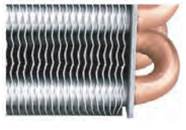
Modules	Defrost	Model	Defrost	Modules	Capacity (kcal/h) Temperature (° C)							
					10	5	0	-5	-10	-15	-20	-25
					Refrigerant R-134a							
1	A	VC 200	A	1	176	173	170	169	167	165	163	163
1	E	VC 190	E		176	173	170	169	167	165	163	163
1	A	VC 270	A	1	243	241	237	232	228	224	222	220
1	E	VC 250	E		243	241	237	232	228	224	222	220
1	A	VC 710	A	1	519	501	487	474	461	447	432	418
1	E	VC 630	E		698	675	650	617	578	544	516	496
2	A	VC 1360	A	2	968	950	930	909	886	866	847	835
2	E	VC 1240	E		1244	1229	1201	1153	1098	1047	1011	986
3	A	VC 2340	A	3	1764	1727	1675	1583	1463	1373	1298	1250
3	E	VC 1800	E		1555	1545	1533	1512	1484	1467	1452	1440
4	A	VC 3100	A	4	2367	2320	2239	2080	1885	1692	1536	1441
4	E	VC 2530	E		2504	2468	2413	2325	2210	2124	2064	2022
1	A/E	VC 25140	A/E	1	1096	1054	1004	925	825	734	659	570
2	A/E	VC 25240	A/E	2	2194	2138	2056	1909	1700	1551	1407	1325
3	A/E	VC 25340	A/E	3	3350	3255	3120	2891	2627	2387	2182	2048
4	A/E	VC 25440	A/E	4	4469	4333	4165	3884	3492	3191	2920	2765
					Refrigerant R-404A							
1	A	VC 200	A	1	214	212	208	205	200	197	194	193
1	E	VC 190	E		214	212	208	205	200	197	194	193
1	A	VC 270	A	1	288	285	280	273	267	261	257	255
1	E	VC 250	E		288	285	280	273	267	261	257	255
1	A	VC 710	A	1	586	577	562	542	518	501	489	481
1	E	VC 630	E		747	731	707	676	640	613	590	572
2	A	VC 1360	A	2	1133	1118	1092	1053	1010	981	959	947
2	E	VC 1240	E		1414	1375	1336	1284	1225	1179	1142	1115
3	A	VC 2340	A	3	1809	1786	1743	1667	1551	1484	1442	1412
3	E	VC 1800	E		1914	1900	1873	1828	1750	1709	1697	1684
4	A	VC 3100	A	4	2502	2442	2357	2221	2043	1904	1802	1742
4	E	VC 2530	E		2763	2738	2679	2577	2426	2339	2306	2284
1	A/E	VC 25140	A/E	1	1161	1120	1065	983	888	831	796	778
2	A/E	VC 25240	A/E	2	2255	2230	2163	2041	1883	1753	1662	1613
3	A/E	VC 25340	A/E	3	3465	3389	3268	3090	2854	2672	2543	2464
4	A/E	VC 25440	A/E	4	4573	4487	4360	4125	3807	3568	3399	3265
					Refrigerant R-410A							
1	A	VC 200	A	1	195	193	188	183	178	175	171	169
1	E	VC 190	E		195	193	188	183	178	175	171	169
1	A	VC 270	A	1	261	259	255	249	242	237	232	230
1	E	VC 250	E		261	259	255	249	242	237	232	230
1	A	VC 710	A	1	547	534	519	501	488	478	470	465
1	E	VC 630	E		735	720	700	674	653	638	628	622
2	A	VC 1360	A	2	1040	1019	992	959	926	898	879	866
2	E	VC 1240	E		1351	1324	1290	1246	1203	1174	1158	1154
3	A	VC 2340	A	3	1848	1811	1760	1690	1614	1552	1520	1497
3	E	VC 1800	E		1679	1671	1653	1613	1569	1546	1537	1520
4	A	VC 3100	A	4	2560	2505	2431	2319	2173	2087	2034	2004
4	E	VC 2530	E		2739	2669	2583	2502	2423	2373	2326	2304
1	A/E	VC 25140	A/E	1	1183	1150	1106	1049	984	940	915	898
2	A/E	VC 25240	A/E	2	2530	2310	2227	2125	1997	1907	1864	1832
3	A/E	VC 25340	A/E	3	3560	3473	3349	3200	3005	2878	2822	2785
4	A/E	VC 25440	A/E	4	4698	4605	4467	4269	3979	3841	3765	3712

Modules	Defrost	Model	Defrost	Modules	Capacity (W) Temperature (° C)							
					10	5	0	-5	-10	-15	-20	-25
					Refrigerant R-134a							
1	A	VC 200	A	1	205	201	198	196	194	192	190	189
1	E	VC 190	E		205	201	198	196	194	192	190	189
1	A	VC 270	A	1	283	280	275	270	265	261	258	256
1	E	VC 250	E		283	280	275	270	265	261	258	256
1	A	VC 710	A	1	603	583	566	551	536	520	502	486
1	E	VC 630	E		812	785	756	717	672	632	600	577
2	A	VC 1360	A	2	1125	1105	1081	1057	1030	1007	985	971
2	E	VC 1240	E		1447	1429	1396	1341	1277	1217	1176	1147
3	A	VC 2340	A	3	2051	2008	1948	1841	1701	1596	1509	1453
3	E	VC 1800	E		1808	1797	1782	1758	1725	1706	1688	1674
4	A	VC 3100	A	4	2752	2698	2604	2419	2192	1967	1786	1675
4	E	VC 2530	E		2912	2870	2806	2703	2570	2470	2400	2351
1	A/E	VC 25140	A/E	1	1274	1226	1167	1075	959	854	766	663
2	A/E	VC 25240	A/E	2	2551	2486	2391	2220	1977	1803	1636	1541
3	A/E	VC 25340	A/E	3	3895	3785	3628	3362	3055	2775	2537	2381
4	A/E	VC 25440	A/E	4	5197	5038	4843	4516	4061	3711	3395	3215
					Refrigerant R-404A							
1	A	VC 200	A	1	249	246	242	238	233	229	226	224
1	E	VC 190	E		249	246	242	238	233	229	226	224
1	A	VC 270	A	1	335	331	325	317	310	304	299	296
1	E	VC 250	E		335	331	325	317	310	304	299	296
1	A	VC 710	A	1	681	671	654	630	602	582	569	559
1	E	VC 630	E		869	850	822	786	744	713	686	665
2	A	VC 1360	A	2	1317	1300	1270	1224	1174	1141	1115	1101
2	E	VC 1240	E		1644	1599	1553	1493	1424	1371	1328	1296
3	A	VC 2340	A	3	2104	2077	2027	1938	1804	1725	1677	1642
3	E	VC 1800	E		2226	2209	2178	2126	2035	1987	1973	1958
4	A	VC 3100	A	4	2909	2840	2741	2583	2375	2214	2095	2026
4	E	VC 2530	E		3213	3184	3115	2996	2821	2720	2681	2656
1	A/E	VC 25140	A/E	1	1350	1302	1238	1143	1033	966	926	905
2	A/E	VC 25240	A/E	2	2622	2593	2515	2373	2190	2038	1932	1876
3	A/E	VC 25340	A/E	3	4029	3941	3800	3593	3319	3107	2597	2865
4	A/E	VC 25440	A/E	4	5318	5217	5070	4796	4427	4149	3952	3797
					Refrigerant R-410A							
1	A	VC 200	A	1	227	224	219	213	207	203	199	197
1	E	VC 190	E		227	224	219	213	207	203	199	197
1	A	VC 270	A	1	304	301	297	290	281	275	270	268
1	E	VC 250	E		304	301	297	290	281	275	270	268
1	A	VC 710	A	1	636	621	603	583	568	556	547	541
1	E	VC 630	E		855	837	814	784	759	742	730	723
2	A	VC 1360	A	2	1209	1185	1154	1115	1077	1044	1022	1007
2	E	VC 1240	E		1571	1539	1500	1449	1399	1365	1347	1342
3	A	VC 2340	A	3	2149	2106	2047	1965	1877	1805	1768	1741
3	E	VC 1800	E		1952	1943	1922	1876	1824	1798	1787	1768
4	A	VC 3100	A	4	2977	2913	2827	2697	2527	2427	2365	2330
4	E	VC 2530	E		3185	3104	3004	2909	2817	2759	2705	2679
1	A/E	VC 25140	A/E	1	1376	1337	1286	1220	1144	1093	1064	1044
2	A/E	VC 25240	A/E	2	2732	2686	2589	2471	2322	2217	2168	2130
3	A/E	VC 25340	A/E	3	4139	4038	3894	3721	3494	3347	3281	3238
4	A/E	VC 25440	A/E	4	5463	5355	5194	4964	4627	4466	4378	4316

Consult us and see other possible application conditions (refrigerant, temperature range, etc.)

Calculation basis ΔT = 8 K, where ΔT = (T chamber - T boiling)

Evaporator



- Tube: Grooved 3/8 "copper
- Fin: Aluminum
- Self-spaced: 5.1 mm (5 fins per inch)
- Header: Aluminum.

Air movement

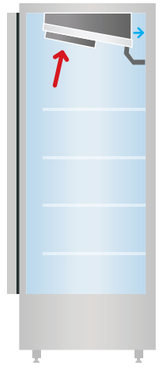

Side view image

Illustration of superior application in vertical refrigerator / display

See more

visa Duo

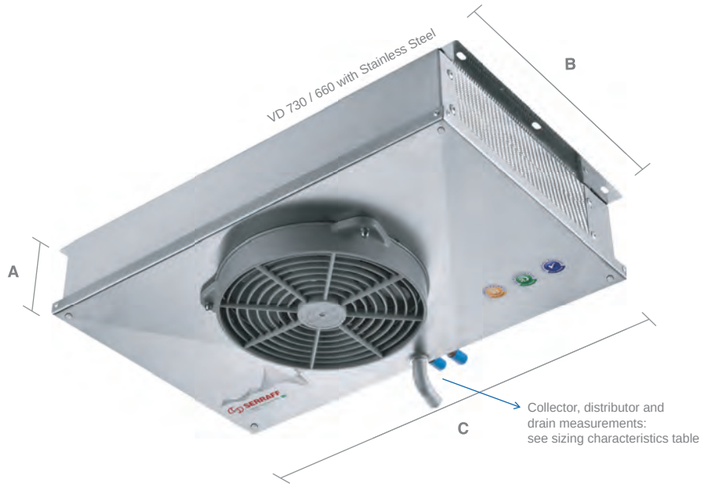
Description

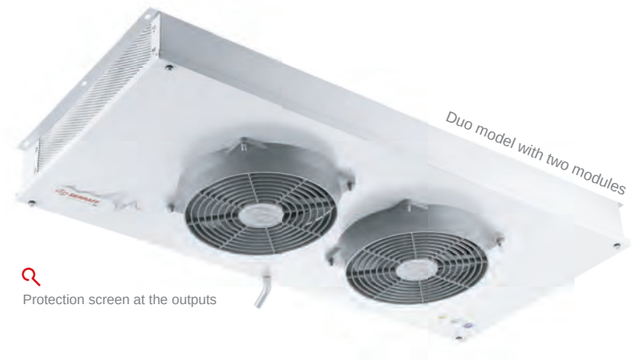
Technical Data

Applications

- Commercial displays - vertical or horizontal (counters);
- Commercial refrigerators and freezers;
- Professional and industrial kitchen counters;
- Cellars;
- Mini-chambers;
- Special equipment.

Consult our sales team and see other possible application conditions





General Features

Fans

Ø 6" | 152,4 mm
Ø 8" | 203,2 mm
Ø 10" | 254 mm

Design concept in parallel cores

1 to 2 modules

Options

Housing

White*, Black*, Stainless**

*Galvalume
**430 Stainless Steel

Voltage / Phase / Frequency

110 V / 1F / 50 Hz or
220 V / 1F / 50 and 60 Hz

Different models (for) } Freezing and Cooling

Defrosting process

A – air (natural) ou **E** – electric (electric resistor in freezing models).

General Features

Model	Defrost	Fan					Resistor			
		Modules	Air Flow (m³/h)	Voltage (V)	Current (A)	Power (W)	Quantity	Voltage (V)	Current (A)	Power (W)
VD 310	A	1	296	220	0.16	35	0	220	1.82	400
VD 290	E						2			
VD 730	A	1	492	220	0.20	44	0	220	2.28	500
VD 660	E						2			
VD 1330	A	2	850	220	0.40	88	0	220	4.55	1000
VD 1000	E						2			
VD 1320	A	1	782	220	0.51	112	0	220	2.28	500
VD 1080	E						2			
VD 1970	A	2	1400	220	1.02	124	0	220	4.55	1000
VD 1400	E						2			

A - Defrost process by air
E - Electric defrost process (resistor)

Dimensional Characteristics

Model	Defrost		A (mm)	B (mm)	C (mm)
VD 310	A	6"	100	305	420
VD 290	E				
VD 730	A	8"	100	335	522
VD 660	E				
VD 1330	A	8"	100	480	875
VD 1000	E				
VD 1320	A	10"	100	365	598
VD 1080	E				
VD 1970	A	10"	100	480	1060
VD 1400	E				

Measures for application:
Drain pipe: Measure A + 53 mm
Collector and Distributor: Measurement B + 50 mm

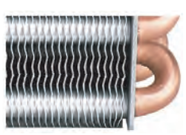
Thermal Characteristics

Capacity (kcal/h)								Modules	Defrost	Model	Defrost	Modules	Capacity (W)							
Temperature (° C)													Temperature (° C)							
10	5	0	-5	-10	-15	-20	-25						10	5	0	-5	-10	-15	-20	-25
Refrigerant R-134a													Refrigerant R-134a							
250	247	244	241	237	234	230	228	1	A	VD 310	A	1	290	287	284	281	276	272	268	265
250	247	244	241	237	234	230	228		E	VD 290	E		290	287	284	281	276	272	268	265
605	597	588	576	564	553	545	540	1	A	VD 730	A	1	703	694	684	670	656	643	634	628
605	597	588	576	564	553	545	540		E	VD 660	E		703	694	684	670	656	643	634	628
1359	1300	1202	1103	1013	954	917	877	2	A	VD 1330	A	2	1580	1512	1398	1282	1178	1109	1066	1020
1359	1300	1202	1103	1013	954	917	877		E	VD 1000	E		1580	1512	1398	1282	1178	1109	1066	1020
1158	1120	1084	1035	982	936	903	880	1	A	VD 1320	A	1	1346	1302	1260	1203	1142	1088	1050	1023
1158	1120	1084	1035	982	936	903	880		E	VD 1080	E		1346	1302	1260	1203	1142	1088	1050	1023
2040	1919	1768	1622	1471	1357	1262	1173	2	A	VD 1970	A	2	2372	2231	2056	1886	1710	1578	1468	1364
2040	1919	1768	1622	1471	1357	1262	1173		E	VD 1400	E		2372	2231	2056	1886	1710	1578	1468	1364
Refrigerant R-404A													Refrigerant R-404A							
309	306	303	297	292	286	280	277	1	A	VD 310	A	1	359	356	352	346	339	333	326	322
309	306	303	297	292	286	280	277		E	VD 290	E		359	356	352	346	339	333	326	322
719	708	695	677	660	646	633	624	1	A	VD 730	A	1	836	823	808	787	767	751	736	726
719	708	695	677	660	646	633	624		E	VD 660	E		836	823	808	787	767	751	736	726
1428	1358	1273	1199	1123	1068	1027	1015	2	A	VD 1330	A	2	1661	1579	1480	1394	1306	1242	1194	1180
1428	1358	1273	1199	1123	1068	1027	1015		E	VD 1000	E		1661	1579	1480	1394	1306	1242	1194	1180
1305	1267	1221	1158	1103	1066	1037	1017	1	A	VD 1320	A	1	1517	1474	1420	1346	1283	1240	1206	1182
1305	1267	1221	1158	1103	1066	1037	1017		E	VD 1080	E		1517	1474	1420	1346	1283	1240	1206	1182
2165	2038	1907	1780	1646	1547	1476	1407	2	A	VD 1970	A	2	2518	2370	2218	2070	1914	1799	1716	1636
2165	2038	1907	1780	1646	1547	1476	1407		E	VD 1400	E		2518	2370	2218	2070	1914	1799	1716	1636
Refrigerant R-410A													Refrigerant R-410A							
286	280	275	268	260	252	246	243	1	A	VD 310	A	1	332	326	320	312	302	293	286	282
286	280	275	268	260	252	246	243		E	VD 290	E		332	326	320	312	302	293	286	282
652	644	633	617	600	586	576	570	1	A	VD 730	A	1	758	749	736	718	698	681	670	663
652	644	633	617	600	586	576	570		E	VD 660	E		758	749	736	718	698	681	670	663
1387	1345	1290	1229	1153	1088	1044	1017	2	A	VD 1330	A	2	1613	1564	1500	1429	1341	1265	1214	1183
1387	1345	1290	1229	1153	1088	1044	1017		E	VD 1000	E		1613	1564	1500	1429	1341	1265	1214	1183
1208	1189	1164	1129	1090	1061	1041	1027	1	A	VD 1320	A	1	1405	1383	1354	1313	1268	1234	1210	1194
1208	1189	1164	1129	1090	1061	1041	1027		E	VD 1080	E		1405	1383	1354	1313	1268	1234	1210	1194
2227	2133	2006	1887	1763	1686	1643	1629	2	A	VD 1970	A	2	2590	2480	2332	2194	2050	1960	1910	1894
2227	2133	2006	1887	1763	1686	1643	1629		E	VD 1400	E		2590	2480	2332	2194	2050	1960	1910	1894

Consult us and see other possible application conditions (refrigerant, temperature range, etc.)

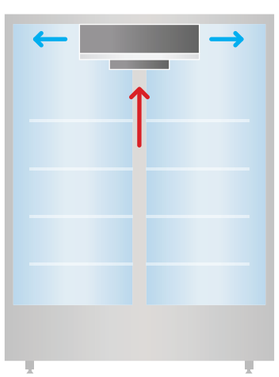
Calculation basis ΔT = 8 K, where ΔT = (T chamber - T boiling)

Evaporator



- Tube: Grooved 3/8 "copper
- Fin: Aluminum
- Self-spaced: 5.1 mm (5 fins per inch)
- Header: Aluminum.

Air movement



Front view image

Illustration of superior application in vertical refrigerator / display

See more

Applications

- Commercial refrigerators and freezers;
- Professional and industrial kitchen counters;
- Special equipment.

Consult our sales team and see other possible application conditions

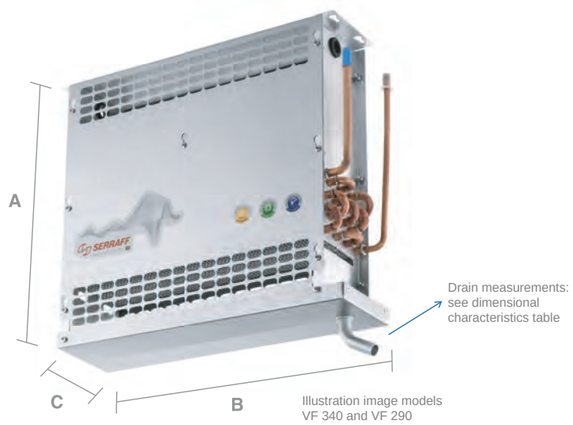


Illustration image models VF 340 and VF 290

General Features

Fan
Ø 120 mm

Design concept by equivalent area

Housing
Stainless*
*430 Stainless Steel

Voltage / Phase / Frequency
110 V / 1F / 50 Hz or
220 V / 1F / 50 and 60 Hz

Different models (for) } Freezing and Cooling

Options

Defrosting process

A – air (natural) ou **E** – electric (electric resistor in freezing models).

VF 12230A / VF 12230E
SLIM (compact version without defrost tray and drain pipe)

General Features

Model	Defrost	Fan					Resistor			
		Modules	Air Flow (m³/h)	Voltage (V)	Current (A)	Power (W)	Quantity	Voltage (V)	Current (A)	Power (W)
VF 340	A	1	230	220	0.20	42	0	220	2.3	500
VF 290	E						1			
VF 12230	A	1	245	220	0.20	42	0	220	2.3	500
VF 12230	E						1			

A - Defrost process by air
E - Electric defrost process (resistor)

Dimensional Characteristics

Model	Defrost	A (mm)	B (mm)	C (mm)
VF 340	A	368	420	108
VF 290	E			
VF 12230	A	255	420	108
VF 12230	E			

Measures for application:
Drain pipe: Measure A + 53 mm
Model VF 12230 does not have a defrost tray and drain pipe

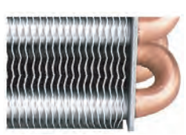
Thermal Characteristics

Capacity (kcal/h) Temperature (° C)								Modules	Defrost	Model	Defrost	Modules	Capacity (W) Temperature (° C)							
10	5	0	-5	-10	-15	-20	-25						10	5	0	-5	-10	-15	-20	-25
Refrigerant R-134a													Refrigerant R-134a							
304	291	276	262	251	242	234	228	1	A	VF 340	A	1	354	338	321	305	292	281	272	265
304	291	276	262	251	242	234	228		E	VF 290	E		354	338	321	305	292	281	272	265
187	184	180	175	172	169	168	166	1	A	VF 12230	A	1	217	214	209	204	200	197	195	193
187	184	180	175	172	169	168	166		E	VF 12230	E		217	214	209	204	200	197	195	193
Refrigerant R-404A													Refrigerant R-404A							
392	366	338	313	293	275	266	259	1	A	VF 340	A	1	456	425	393	364	341	320	309	301
392	366	338	313	293	275	266	259		E	VF 290	E		456	425	393	364	341	320	309	301
243	233	221	205	195	192	189	171	1	A	VF 12230	A	1	282	271	257	238	227	223	220	199
243	233	221	205	195	192	189	171		E	VF 12230	E		282	271	257	238	227	223	220	199
Refrigerant R-410A													Refrigerant R-410A							
329	316	299	284	267	254	243	237	1	A	VF 340	A	1	382	368	348	330	311	295	283	275
329	316	299	284	267	254	243	237		E	VF 290	E		382	368	348	330	311	295	283	275
207	200	191	181	175	172	169	166	1	A	VF 12230	A	1	241	233	222	211	204	200	196	193
207	200	191	181	175	172	169	166		E	VF 12230	E		241	233	222	211	204	200	196	193

Consult us and see other possible application conditions (refrigerant, temperature range, etc.)

Calculation basis ΔT = 8 K, where ΔT = (T chamber - T boiling)

Evaporator



- Tube: Grooved 3/8 "copper
- Fin: Aluminum
- Self-spaced: 5.1 mm (5 fins per inch)
- Header: Aluminum.

Air movement

Side application

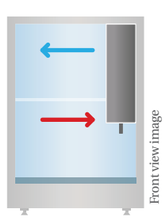
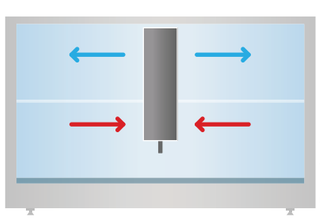


Illustration of horizontal refrigerator / display application

See more

Center application



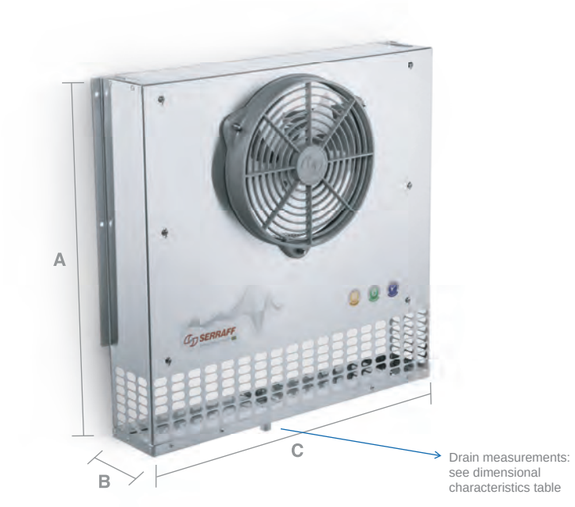
visa *Wall*

Description Technical Data

Applications

- Commercial displays - vertical or horizontal (counters);
- Commercial refrigerators and freezers;
- Professional and industrial kitchen counters;
- Cellars;
- Special equipment.

Consult our sales team and see other possible application conditions



General Features

Fan
Ø 6" | 152,4 mm
Ø 8" | 203,2 mm
Ø 10" | 254 mm

Design concept
Power in modules
1 module

Housing
Stainless*
*430 Stainless Steel

Voltage / Phase / Frequency
110 V / 1F / 50 Hz or
220 V / 1F / 50 and 60 Hz

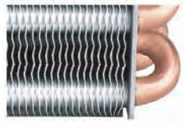
Different models (for) } Freezing and Cooling

Options

Defrosting process

A – air (natural) ou **E** – electric (electric resistor in freezing models).

Evaporator



- Tube: Grooved 3/8 "copper
- Fin: Aluminum
- Self-spaced: 5.1 mm (5 fins per inch)
- Header: Aluminum.

Air movement

Side application

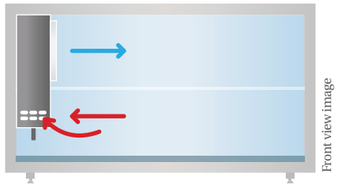


Illustration of horizontal refrigerator / display application

General Features

Model	Defrost	Fan					Resistor			
		Modules	Air Flow (m³/h)	Voltage (V)	Current (A)	Power (W)	Quantity	Voltage (V)	Current (A)	Power (W)
VW 15160	A/E	1	195	220	0.16	35	1	220	1.59	350
VW 20160	A/E	1	480	220	0.20	44	1	220	2.28	500
VW 25160	A/E	1	750	220	0.51	112	1	220	2.28	500

A - Defrost process by air or hot gas
E - Electric defrost process (resistor)

Dimensional Characteristics

Model	Defrost		A (mm)	B (mm)	C (mm)
VW 15160	A/E	6"	420	90	382
VW 20160	A/E	8"	479	90	512
VW 25160	A/E	10"	556	100	512

Measures for application:
Drain pipe: Measure A + 53 mm

Thermal Characteristics

Capacity (kcal/h) Temperature (° C)								Modules	Defrost	Model	Defrost	Modules	Capacity (W) Temperature (° C)							
10	5	0	-5	-10	-15	-20	-25						10	5	0	-5	-10	-15	-20	-25
Refrigerant R-134a													Refrigerant R-134a							
398	382	356	332	311	298	295	294	1	A/E	VW 15160	A/E	1	415	398	371	346	324	310	307	306
814	773	719	667	609	557	530	516	1	A/E	VW 20160	A/E	1	848	805	749	695	634	580	552	537
802	792	779	769	762	756	751	747	1	A/E	VW 25160	A/E	1	835	825	811	801	794	788	782	778
Refrigerant R-404A													Refrigerant R-404A							
479	454	422	391	364	346	339	335	1	A/E	VW 15160	A/E	1	499	473	440	407	379	360	353	349
852	808	757	711	667	629	610	602	1	A/E	VW 20160	A/E	1	888	842	789	741	695	655	635	627
1029	1013	975	924	884	865	853	844	1	A/E	VW 25160	A/E	1	1072	1055	1016	963	921	901	889	879
Refrigerant R-410A													Refrigerant R-410A							
437	410	378	350	331	322	318	316	1	A/E	VW 15160	A/E	1	455	427	394	365	345	335	331	329
866	829	772	725	682	655	645	637	1	A/E	VW 20160	A/E	1	902	864	804	755	710	682	672	664
888	865	830	782	759	750	741	734	1	A/E	VW 25160	A/E	1	925	901	865	815	791	781	772	765

Consult us and see other possible application conditions (refrigerant, temperature range, etc.)

Calculation basis ΔT = 8 K, where ΔT = (T chamber - T boiling)