

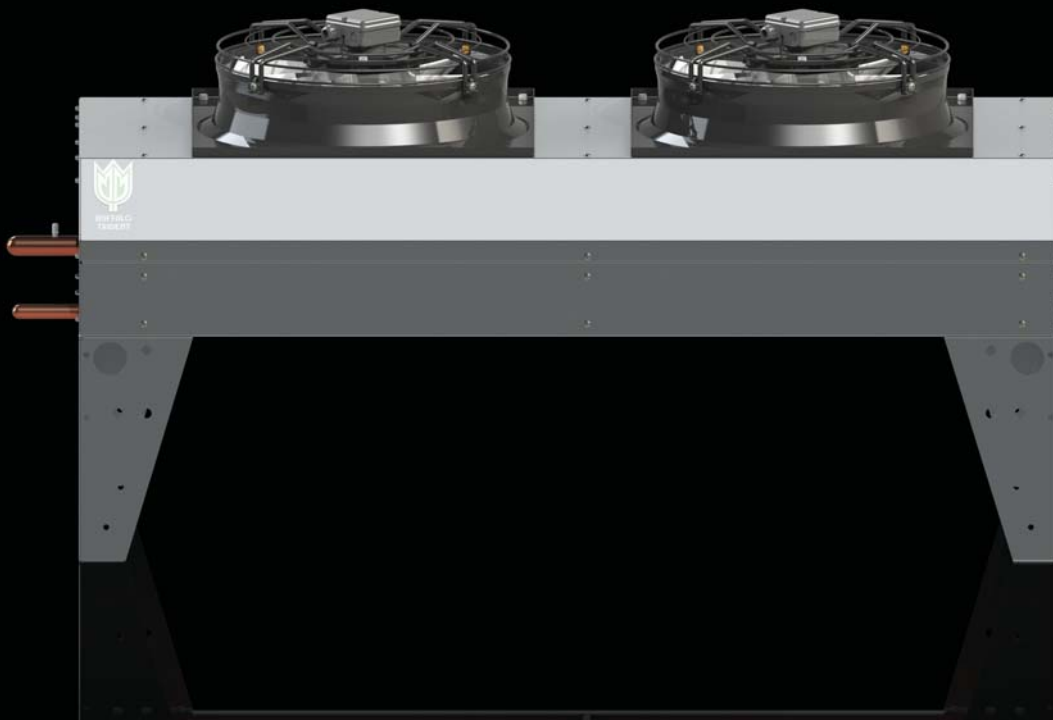
RC-C SERIES

AIR COOLED CONDENSER

RC-C CONDENSERS WITH AC & EC HIGH EFFICIENCY FANS

ORIGINAL MANUFACTURED EQUIPMENT

RC-C
Series





Products Specifications

The Buffalo Trident RC Condenser range has stood the test of time for over 30 years. The large RC product range has now been extended to include market leading efficiency through the use of 'EC' fan technology. With innovative design and technology, the RC Condenser has over 20 different models with three different fan configurations, ensuring there will be a model to suit your specific requirements.

The RC Condenser continues to demonstrate market leading performance, reliability and durability within the Refrigeration and HVAC industries.

Specific features include:

- Two speed AC fan motors
- Solid Marine grade stucco aluminium housing for harsh Australian climates
- Gold epoxy coated fin corrosion resistant alloy fin material, proven to be more durable than standard
- Common condenser design for vertical and horizontal discharge air flows
- Internal ripple finned copper tube for optimised heat transfer and improved oil return

Standard Features

- Epoxy coated aluminium fins
- Sickle blade fan technology
- Statically and dynamically balanced fan motors
- Stainless steel fixings
- Buffalo Trident engineered staggered copper tube
- Rippled epoxy coated fin for maximum heat transfer

Optional Extras

- Single phase fan motors
- Copper fins for harsh environments
- Multiple circuits
- Stainless steel case
- Fan speed controllers
- Liquid Receivers mounted underneath
- Energy efficient EC fan technology with variable fan capacity control from 0-100% speed
- Blygold coil protection
- Hazardous location motors (e.g. flameproof)
- Circuiting for dry-cooler operation
- Circuiting for oil-cooler operation

Explanation Of Type Designation

RC - 54 - C - 4P

RC Series Condenser

RC - 54 - C - 4P

Model number

RC - 54 - C - 4P

Series

RC - 54 - C - 4P

Fan Motor Series " " = 4 Pole Motor, "Q" = 6 Pole Motor, EC = Electronic Commutated Motor

Engineering Tools

Heat Rejection Factors

Condenser Load = Compressor Capacity x Factor

Open Compressors Tables No.1							Evap. Temp	Suction Cooled Hermetic Compressors Table No.2						
Condensing Temperature °C								Condensing Temperature °C						
30	35	40	45	50	55	60	°C	30	35	40	45	50	55	60
1.41	1.45	1.50	1.56	*	*	*	-40	1.63	1.67	1.74	1.80	*	*	*
1.37	1.40	1.45	1.50	1.56	*	*	-35	1.56	1.59	1.65	1.71	1.77	*	*
1.33	1.36	1.40	1.45	1.50	1.50	*	-30	1.50	1.53	1.58	1.63	1.69	1.75	*
1.28	1.31	1.35	1.39	1.44	1.49	1.55	-25	1.43	1.46	1.50	1.55	1.61	1.66	1.73
1.25	1.28	1.31	1.35	1.40	1.44	1.49	-20	1.38	1.41	1.45	1.49	1.55	1.59	1.65
1.21	1.24	1.28	1.31	1.35	1.39	1.44	-15	1.32	1.35	1.40	1.43	1.47	1.52	1.57
1.18	1.21	1.24	1.27	1.31	1.35	1.39	-10	1.28	1.31	1.35	1.38	1.42	1.46	1.51
1.15	1.18	1.21	1.24	1.27	1.31	1.35	-5	1.24	1.27	1.30	1.34	1.37	1.41	1.45
1.12	1.15	1.18	1.20	1.24	1.27	1.31	0	1.20	1.23	1.26	1.29	1.33	1.36	1.40
1.10	1.12	1.15	1.17	1.20	1.24	1.27	5	1.16	1.18	1.21	1.23	1.26	1.31	1.34
1.07	1.10	1.13	1.15	1.17	1.21	1.24	10	1.12	1.15	1.18	1.20	1.22	1.27	1.30

*Outside limits of normal single stage compression application

Selection Example

Compressor Capacity	40.83kW
(Hermetic Compressor)	
Refrigerant	R404A
Suction Temperature	+5°C
Air Temp. on entering condenser	+35°C
Required condensing temp.	+50°C
	(high speed fan)
Temp. difference (TDK)	= 15 KTD
Heat rejection factor (Table 1)	= 1.26
Total heat rejection required	= 40.83 x 1.26
	= 51.446 kW
Selected model RC54C	
which has a capacity of 57.121 kW	
at 15K TD	
Actual TD	= 51.446
	÷ 3.808
	= 13.51K TD

The heat load on a compressor always exceeds that of the evaporator by an amount equal to the heat of compression. Since the work (heat) of compression per unit of refrigeration capacity changes depending upon the compression ratio, the heat load on the condenser varies with the operating conditions of the system and compressor design or type - that is, open or suction cooled hermetics.

For this reason, whenever possible the selection of an air cooled condenser should be based on the compressor manufacturers published heat rejection ratings and operating limitations applicable to that particular machine. In the absence of manufacturers data, the condenser heat rejection factor tables listed may be used to obtain an approximate heat of rejection.



Performance Data

RC Series Condensers - 4 pole Condenser Capacity - Total Heat Rejection (Watts)

R22 High Speed (Connection in Delta Δ - RC19C to RC115C)																					
TD/K	RC09C	RC12C	RC13C	RC18C	RC23C	RC25C	RC19C	RC24C	RC28C	RC30C	RC34C	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	606	777	881	1163	1481	1684	1221	1579	1809	2006	2287	2503	3158	3627	4158	4912	5428	6237	6691	7237	7652
5	3030	3885	4405	5817	7403	8421	6106	7896	9046	10028	11435	12514	15792	18134	20790	24560	27138	31185	33453	36183	38262
10	6059	7770	8810	11634	14805	16482	12212	15792	18092	20055	20055	22869	25027	36267	41580	49119	54275	62370	66906	72366	76524
15	9089	11655	13215	17451	22208	25263	18318	23688	27138	30083	34304	37541	47376	54401	62370	73679	81413	93555	100359	108549	114786
20	12118	15540	17620	23268	29610	33684	24424	31584	36184	40110	45738	50054	63168	72534	83160	98238	108550	124740	133812	144732	153048

Low Speed (Connection in Star ▲)																
1	N/A	975	1207	1324	1520	1624	1808	2414	2784	3086	3548	3971	4628	4759	5294	5441
5		4874	6035	6618	7602	8121	9039	12069	13920	15428	17738	19854	23142	23797	26472	27203
10		9747	12069	13235	15204	16241	18077	24138	27839	30856	35476	39708	46284	47593	52944	54406
15		14621	18104	19853	22806	24362	27116	36207	41759	46284	53214	59562	69426	71390	79416	81609
20		19494	24138	26470	30408	32482	36154	48276	55678	61712	70952	79416	92568	95186	105888	108812

R404A /R507A High Speed (Connection in Delta Δ - RC19C to RC115C)																					
TD/K	RC09C	RC12C	RC13C	RC18C	RC23C	RC25C	RC19C	RC24C	RC28C	RC30C	RC34C	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	636	816	925	1222	1555	1768	1282	1658	1900	2106	2401	2628	3316	3808	4366	5157	5699	6549	7025	7598	8035
5	3181	4079	4625	6108	7773	8842	6411	8291	9498	10529	12006	13139	16582	19040	21830	25787	28494	32744	35126	37992	40175
10	6362	8159	9251	12216	15545	17684	12823	16582	18997	21058	24012	26278	33163	38080	43659	51575	56989	65489	70251	75984	80350
15	9543	12238	13876	18324	23318	26526	19234	24872	28495	31587	36019	31587	49745	57121	65489	77362	85483	98233	105377	113976	120525
20	12724	16317	18501	24431	24431	31091	25645	33163	37993	42116	48025	42116	66236	76161	87318	103150	113978	130977	140503	151969	160700

Low Speed (Connection in Star Δ)																
1	N/A	1023	1267	1390	1596	1705	1898	2534	2923	3240	3725	4169	4860	4997	5559	5713
5		5117	6336	6948	7982	8527	9490	12672	14615	16199	18625	20847	24299	24986	27796	28563
10		10234	12672	13897	15964	15964	18981	25345	29231	32399	37250	41693	48598	49973	55591	57126
15		15352	19009	20845	23946	23946	28471	38017	43846	48598	55875	62540	72897	74959	83387	85689
20		20469	25345	27794	31928	31928	37962	50690	58462	64798	74500	83387	97196	99945	111182	114253

R407C High Speed (Connection in Delta Δ - RC19C to RC115C)																					
TD/K	RC09C	RC12C	RC13C	RC18C	RC23C	RC25C	RC19C	RC24C	RC28C	RC30C	RC34C	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	588	754	855	1128	1436	1634	1185	1532	1755	1945	2218	2428	3064	3518	4033	4765	5265	6050	6490	7020	7423
5	2939	3768	4273	5642	7180	8168	5923	7659	8775	9727	11091	12138	15318	17589	20166	23823	26323	30249	32449	35098	37114
10	5877	7537	8546	11285	14361	16337	11846	15318	17549	19453	22183	24276	30636	35179	40333	47645	52647	60499	64899	70195	74228
15	8816	11305	12819	16927	21541	24505	17768	22977	26324	29180	33274	36414	45955	52768	60499	71468	78970	90748	97348	105293	111342
20	11754	15074	17091	22570	28722	32673	23691	30636	35098	44366	44366	38907	61273	70358	80665	95291	105294	120998	129798	140390	148457

Low Speed (Connection in Star Δ)																
1	N/A	945	1171	1284	1475	1575	1753	2341	2700	2993	3441	3852	4490	4617	5136	5277
5		4727	5853	6419	7374	7877	8767	11707	13502	14965	17206	19258	22448	23083	25678	26387
10		9455	11707	12838	14748	15754	17535	23414	27004	29930	34412	38517	44895	46165	51356	52774
15		14182	17560	19257	22122	23631	26302	35121	40506	44895	51618	57775	67343	69248	77034	79161
20		18909	23414	25676	24496	31508	35069	46828	54008	59861	68823	77034	89791	92330	102711	105548

R134a High Speed (Connection in Delta Δ - RC19C to RC115C)																					
TD/K	RC09C	RC12C	RC13C	RC18C	RC23C	RC25C	RC19C	RC24C	RC28C	RC30C	RC34C	RC37C	RC47C	RC54C	RC62C	RC74C	RC82C	RC93C	RC100C	RC109C	RC115C
1	582	746	846	1117	1421	1617	1172	1516	1737	1925	2195	2403	3032	3482	3992	4715	5210	5988	6423	6947	7346
5	2908	3730	4229	5584	7106	8084	5862	7580	8684	9626	10977	12013	15160	17408	19958	23577	26052	29938	32115	34736	36732
10	5817	7459	8458	11169	14213	16168	11724	15160	17368	19253	21954	24026	30321	34816	39917	47154	52104	59875	64230	69741	73463
15	8725	11189	12686	16753	21319	24252	17585	22740	26052	28879	32931	36039	45481	52224	59875	70731	78156	89813	96345	104307	110195
20	11633	14918	16915	22337	28426	32337	23447	30321	34737	38506	43908	48052	60641	69633	79834	94308	104208	119750	128460	138943	146926

Low Speed (Connection in Star Δ)																	
1	N/A	936	1159	1271	1460	1559	1735	2317	2673	2962	3406	3812	4443	4569	5083	5223	
5		4679	5973	6353	7298	7796	8677	11586	13363	14811	17028	19060	22216	22845	25413	26115	
10		9357	11586	12706	14596	15591	17354	23172	26725	29622	35057	38120	44433	45689	50826	52230	
15		14036	1739	19508	21894	23387	26031	24759	40088	44433	51085	57180	66649	68534	76239	78345	
20		18714	23172	25411	29192	31183	34708	46345	53451	59244	68114	76239	88865	91379	101652	104460	

Capacity Correction Factors

REFRIG.	R22	R507A	R407B
CAP. MULTI	1.0	1.045	0.975

Performance Data

RC-Q Series Condensers - 6 pole

Condenser Capacity - Total Heat Rejection (Watts)

R22		High Speed (Connect in Delta Δ - RC19C to RC115C)													
TD/K	RC19C-Q	RC24C-Q	RC28C-Q	RC30C-Q	RC34C-Q	RC37C-Q	RC47C-Q	RC54C-Q	RC62C-Q	RC74C-Q	RC82C-Q	RC93C-Q	RC100C-Q	RC109C-Q	RC115C-Q
1	953	1184	1303	1504	1647	1752	2369	2720	2994	3438	3908	4491	4683	5210	5357
5	4763	5922	6513	7521	8233	8759	11844	13600	14969	17192	19539	22453	23417	26052	26783
10	9525	11844	13026	15041	16486	17519	23688	27200	29938	34383	39078	44906	46834	52104	53267
15	14288	17766	19539	22562	24699	26278	35532	40800	44906	51575	58617	67360	70251	78155	80350
20	19051	23688	26052	30083	32931	35038	47376	54401	59875	68767	78156	89813	93668	104207	107134

		Low Speed (Connect in Star Δ)													
1	780	917	966	1156	1186	1265	1834	2116	2252	2483	2899	3379	3332	3865	3808
5	3899	4586	4831	5778	5928	6327	9172	10579	11262	12417	14493	16894	16658	19325	19042
10	7798	9172	9662	11555	11856	12654	18345	21158	22525	24833	28987	33787	33315	38649	38084
15	11696	13759	14492	17333	17784	18981	27517	31756	33787	37250	43480	50681	49973	57974	57126
20	15595	18345	19323	23110	23712	25308	36690	42315	45050	49666	57974	67575	66630	77298	76168

R404A/R507A		High Speed (Connect in Delta Δ - RC19C to RC115C)													
TD/K	RC19C-Q	RC24C-Q	RC28C-Q	RC30C-Q	RC34C-Q	RC37C-Q	RC47C-Q	RC54C-Q	RC62C-Q	RC74C-Q	RC82C-Q	RC93C-Q	RC100C-Q	RC109C-Q	RC115C-Q
1	1000	1244	1368	1579	1729	1839	2487	2856	3143	3610	4103	4715	4918	5471	5625
5	5001	6218	6839	7897	8644	9197	12436	14280	15717	18051	20516	23576	24588	27354	28123
10	10002	12436	13678	15793	17289	18395	24872	28560	31434	36102	41032	47152	49176	54709	56245
15	15002	18654	20516	23690	25933	27592	37309	42840	47152	54154	61548	70728	73764	82063	84368
20	20003	24872	27355	31587	34578	36790	49745	57121	62869	72205	82064	94303	98352	109417	112490

		Low Speed (Connect in Star Δ)													
1	819	963	1014	1213	1245	1329	1926	2222	2365	2607	3044	3548	3498	4058	3999
5	4094	4816	5072	6066	6224	6643	9631	11108	11826	13037	15218	17738	17490	20291	19994
10	8187	9631	10145	12133	12449	13287	19262	22216	23651	26075	30436	35477	34981	40582	39988
15	12281	14447	15217	18199	18673	19930	28893	33323	35477	39112	45654	53215	52471	60872	59983
20	16375	19262	20289	24266	24897	26573	38524	44431	47302	52150	60872	70953	69962	81163	79977

R407C		High Speed (Connect in Delta Δ - RC19C to RC115C)													
TD/K	RC19C-Q	RC24C-Q	RC28C-Q	RC30C-Q	RC34C-Q	RC37C-Q	RC47C-Q	RC54C-Q	RC62C-Q	RC74C-Q	RC82C-Q	RC93C-Q	RC100C-Q	RC109C-Q	RC115C-Q
1	924	1149	1264	1459	1597	1699	2298	2638	2904	3335	3791	4356	4543	5054	5196
5	4620	5744	6318	7295	7986	8497	11489	13192	14520	16676	18953	21780	22715	25270	25980
10	9240	11489	12635	14590	15972	16993	22977	26384	29039	33352	37906	43559	45429	50540	51960
15	13859	17233	18953	21885	23958	25490	34466	39576	43559	50028	56858	65339	68144	75811	77940
20	18479	22977	25271	29180	31943	33987	45955	52768	58079	66704	75811	87118	90858	101081	103920

		Low Speed (Connect in Star Δ)													
1	756	890	937	1121	1150	1227	1779	2052	2185	2409	2812	3277	3232	3749	3694
5	3782	4449	4686	5604	5750	6137	8897	10261	10925	12044	14059	16387	16158	18745	18471
10	7564	8897	9372	11208	11500	12274	17795	20523	21849	24088	28117	32774	32316	37490	36942
15	11346	13346	14058	16813	17250	18411	26692	30784	32774	36132	42176	49161	48473	56234	55413
20	15127	17795	18743	22417	23001	24549	35589	41046	43698	48176	56234	65547	64631	74979	73883

R134a		High Speed (Connect in Delta Δ - RC19C to RC115C)													
TD/K	RC19C-Q	RC24C-Q	RC28C-Q	RC30C-Q	RC34C-Q	RC37C-Q	RC47C-Q	RC54C-Q	RC62C-Q	RC74C-Q	RC82C-Q	RC93C-Q	RC100C-Q	RC109C-Q	RC115C-Q
1	914	1137	1251	1444	1581	1682	2274	2611	2874	3301	3751	4311	4496	5002	5142
5	4572	5685	6253	7220	7904	8409	11370	13056	14370	16504	18757	21555	22480	25010	25712
10	9144	11370	12505	14440	15807	16818	22740	26112	28740	33008	37515	43110	44961	50019	51424
15	13717	17055	18758	21659	23711	25227	34111	39168	43110	49512	56272	64665	67441	75029	77136
20	18289	22740	25010	28879	31614	33636	45481	52224	57480	66016	75030	86220	89922	100039	102848

		Low Speed (Connect in Star Δ)													
1	749	881	928	1109	1138	1215	1761	2031	2162	2384	2783	3244	3198	3710	3656
5	3743	4403	4638	5546	5691	6074	8806	10156	10812	11920	13914	16218	15991	18552	18280
10	7486	8806	9275	11093	11382	12148	17611	20311	21624	23840	27827	32436	31982	37103	36561
15	11229	13208	13913	16639	17073	18222	26417	30467	32436	35760	41741	48654	47974	55655	54841
20	14971	17611	18550	22186	22763	24295	35222	40623	43248	47680	55655	64872	63965	74206	73122

Capacity Correction Factors

REFRIG.	R22	R507A	R407B
CAP. MULTI	1.0	1.045	0.975



Performance Data

RC-EC Series Condensers - "EC" Fans Condenser Capacity - Total Heat Rejection (Watts)

R22		RC-EC			Full Speed										
TD/K	RC19C-EC	RC24C-EC	RC28C-EC	RC30C-EC	RC34C-EC	RC37C-EC	RC47C-EC	RC54C-EC	RC62C-EC	RC74C-EC	RC82C-EC	RC93C-EC	RC100C-EC	RC109C-EC	RC115C-EC
1	1270	1642	1882	2086	2378	2603	3285	3772	4324	5108	5645	6487	6958	7526	7959
5	6350	8212	9408	10429	11892	13014	16424	18859	21622	25542	28223	32433	34791	37631	39793
10	12700	16424	18816	20857	23784	26028	32847	37718	43243	51084	56446	64865	69582	75261	79585
15	19050	24636	28224	31286	35676	39042	49271	56577	64865	76626	84669	97298	104373	112892	119378
20	25400	32848	37632	41714	47568	52056	65694	75436	86486	102168	112892	129730	139164	150522	159170

R404A/R507F		RC-EC		Full Speed											
TD/K	RC19C-EC	RC24C-EC	RC28C-EC	RC30C-EC	RC34C-EC	RC37C-EC	RC47C-EC	RC54C-EC	RC62C-EC	RC74C-EC	RC82C-EC	RC93C-EC	RC100C-EC	RC109C-EC	RC115C-EC
1	1334	1725	1976	2190	2497	2733	3449	3960	4505	5364	5927	6811	7306	7902	8356
5	6668	8623	9879	10950	12486	13665	17245	19802	22523	26819	29635	34055	36531	39512	41782
10	13336	17245	19757	21900	24972	27329	34490	39603	45045	53638	59269	68109	73061	79023	83564
15	20004	25868	29636	32850	37458	40994	51735	59405	67568	80457	88904	102164	109592	118535	125346
20	26672	34490	39514	43800	49944	54658	68980	79206	90090	107276	118538	136218	146122	158046	167128

R407C		RC-EC			Full Speed										
TD/K	RC19C-EC	RC24C-EC	RC28C-EC	RC30C-EC	RC34C-EC	RC37C-EC	RC47C-EC	RC54C-EC	RC62C-EC	RC74C-EC	RC82C-EC	RC93C-EC	RC100C-EC	RC109C-EC	RC115C-EC
1	1232	1593	1825	2023	2307	2525	3186	3659	4195	4955	5475	6292	6750	7300	7720
5	6160	7966	9126	10116	11535	12624	15931	18293	20973	24776	27377	31460	33748	36502	38599
10	12320	15931	18251	20231	23070	25247	31861	36586	41946	49551	54753	62919	67495	73003	77197
15	18480	23897	27377	30347	34605	37871	47792	54879	62919	74327	82130	94379	101243	109505	115796
20	24640	31862	36502	40462	46140	50494	63722	73172	83892	99102	109506	125838	134990	146006	154394

R134a		RC-EC			Full Speed										
TD/K	RC19C-EC	RC24C-EC	RC28C-EC	RC30C-EC	RC34C-EC	RC37C-EC	RC47C-EC	RC54C-EC	RC62C-EC	RC74C-EC	RC82C-EC	RC93C-EC	RC100C-EC	RC109C-EC	RC115C-EC
1	1219	1577	1806	2002	2283	2499	3153	3621	4151	4904	5419	6227	6680	7225	7604
5	6097	7883	9032	10012	11416	12494	15767	18105	20757	24520	27094	31135	33400	36125	38021
10	12193	15766	18063	20023	22832	24987	31534	36209	41514	49040	54188	62270	66799	72250	76042
15	18290	23649	27095	30035	34248	37481	47301	54314	62271	73560	81282	93405	100199	108375	114063
20	24386	31532	36126	40046	45664	49974	63068	72418	83028	98080	108376	124540	133598	144500	152084

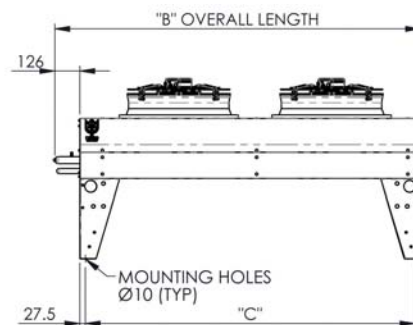
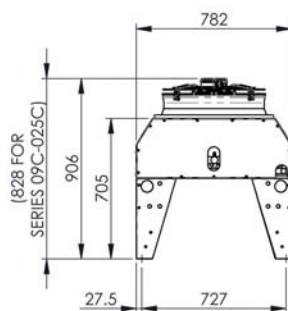
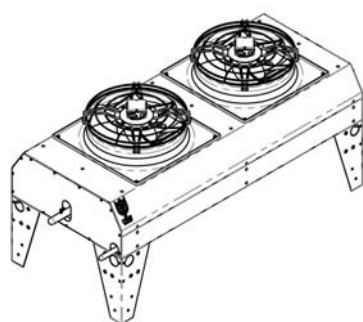
Capacity Correction Factors

REFRIG.	R22	R507A	R407B
CAP. MULTI	1.0	1.045	0.975

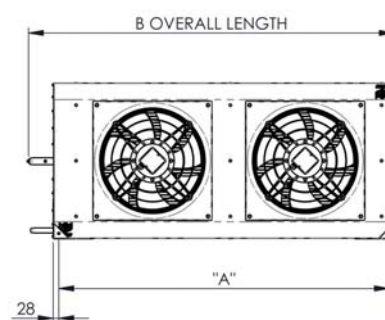
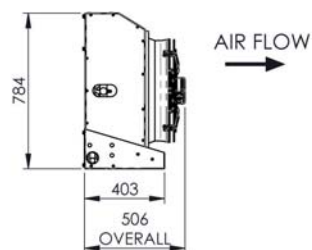
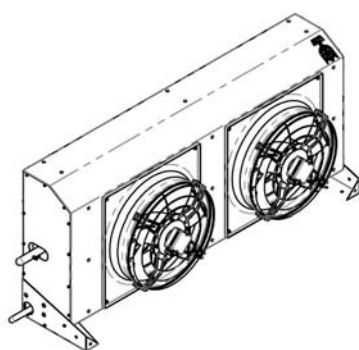


Dimensional Drawings

Vertical Airflow



Horizontal Airflow



Physical Data

Model: RC	09C	12C	13C	18C	23C	25C
No. Of Rows	2	2	4	2	3	4
Tubes Wide	30	30	30	30	30	30
Inlet Connections mm	19.05	22.20	22.20	25.40	25.40	25.40
Outlet Connections mm	15.80	15.80	15.80	22.20	22.20	22.20
* Operating Charge R22 (kg)	0.41	0.60	0.78	0.74	1.07	1.39
* * Pump Down Capacity (kg)	2.15	3.22	4.29	3.86	5.79	7.72
Weight Unpacked (kg)	32	37	42	46	55	64
Dimensions (mm): A	664	664	664	1152	1152	1152
B	930	930	930	1418	1418	1418
C	742	742	742	1230	1230	1230

Model: RC	19C	24C	28C	30C	34C	37C	47C	54C	62C	74C	82C	93C	100C	109C	115C
No. Of Rows	2	3	4	3	4	5	3	3	4	5	4	4	5	4	5
Tubes Wide	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Inlet Connections mm	25.40	28.50	28.50	28.50	28.50	28.50	34.90	34.90	41.30	41.30	41.30	41.30	41.30	41.30	41.30
Outlet Connections mm	22.20	25.40	25.40	25.40	25.40	25.40	25.40	25.40	28.50	28.50	28.50	28.50	28.50	28.50	28.50
* Operating Charge R22 (kg)	0.73	1.07	1.38	1.58	2.06	2.54	2.13	2.66	3.45	5.08	4.14	5.18	6.35	5.52	6.77
* * Pump Down Capacity (kg)	3.83	5.75	7.67	8.54	11.50	14.38	11.50	14.38	19.17	28.75	23.01	28.75	35.94	30.67	38.34
Weight Unpacked (kg)	50	55	60	64	72	80	93	108	121	149	157	175	195	207	228
Dimensions (mm): A	816	816	816	1197	1197	1197	1578	1959	1959	2340	2340	2911	2911	3102	3102
B	1082	1082	1082	1463	1463	1463	1844	2225	2225	2606	2606	3177	3177	3368	3368
C	894	894	894	1275	1275	1275	1656	2037	2037	2418	2418	2989	2989	3180	3180

* Based on -4°C SST, +25°C Suction gas temperature, 40°C Condensing and 2°C Sub cooling

* * Pump down capacity based on 80% of total volume - Refrigerant R22



Technical Data

Model:		RC09C	RC12C	RC13C	RC18C	RC23C	RC25C
Air Flow High l/sec		768	764	741	1550	1494	1441
No. Of Motors (350mm)		1	1	1	2	2	2
Motor Power:							
Total Watts - 1 Phase		165	165	165	330	330	330
Total Amps - 1 Phase *		0.73	0.73	0.73	1.4	1.4	1.4

Model: RC	19C	24C	28C	30C	34C	37C	47C	54C	62C	74C	82C	93C	100C	109C	115C
Air Flow High l/sec	2163	2007	1870	2306	2215	2130	4014	4374	4150	4260	5610	6225	5919	7480	6996
Air Flow Low l/sec	1418	1305	1204	1519	1454	1394	2610	2870	2710	2788	3612	4065	3840	4816	4460
No. Of Motors (500mm)	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4
Motor Power: High Speed															
Total Watts - 3 Phase	830	830	830	830	830	830	1660	1660	1660	1660	2490	2490	2490	3320	3320
Total Amps - 3 Phase, 400V*	1.45	1.45	1.45	1.45	1.45	1.45	2.9	2.9	2.9	2.9	4.35	4.35	4.35	5.8	5.8
Total Amps - 3 Phase, 440V	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0	4.5	4.5	4.5	6.0	6.0
Motor Power: Low Speed															
Total Watts - 3 Phase	550	550	550	550	550	550	1100	1100	1100	1100	1650	1650	1650	2200	2200
Total Amps - 3 Phase, 400V*	0.97	0.97	0.97	0.97	0.97	0.97	1.94	1.94	1.94	1.94	2.91	2.91	2.91	3.88	3.88
Total Amps - 3 Phase, 440V	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8	2.7	2.7	2.7	3.6	3.6
Motor Power:															
Total Watts - 1 Phase	750	750	750	750	750	750	1500	1500	1500	1500	2250	2250	2250	3000	3000
Total Amps - 1 Phase*	3.35	3.35	3.35	3.35	3.35	3.35	6.7	6.7	6.7	6.7	10.05	10.05	10.05	13.4	13.4

Model: RC	19C-Q	24C-Q	28C-Q	30C-Q	34C-Q	37C-Q	47C-Q	54C-Q	62C-Q	74C-Q	82C-Q	93C-Q	100C-Q	109C-Q	115C-Q
Air Flow High l/sec	1430	1315	1219	1539	1469	1405	2630	2896	2730	2810	3657	4095	3873	4876	4552
Air Flow Low l/sec	997	903	825	1091	1030	1143	1806	2024	1886	1952	2475	2829	2652	3300	3000
No. Of Motors (500mm)	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4
Motor Power: High Speed															
Total Watts - 3 Phase	280	280	280	280	280	280	560	560	560	560	840	840	840	1120	1120
Total Amps - 3 Phase, 400V*	0.71	0.71	0.71	0.71	0.71	0.71	1.42	1.42	1.42	1.42	2.13	2.13	2.13	2.84	2.84
Total Amps - 3 Phase, 440V	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6	2.4	2.4	2.4	3.2	3.2
Motor Power: Low Speed															
Total Watts - 3 Phase	140	140	140	140	140	140	280	280	280	280	420	420	420	560	560
Total Amps - 3 Phase, 400V*	0.35	0.35	0.35	0.35	0.35	0.35	0.7	0.7	0.7	0.7	1.05	1.05	1.05	1.4	1.4
Total Amps - 3 Phase, 440V	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	1.4	1.4	1.4	1.8	1.8
Motor Power:															
Total Watts - 1 Phase	290	290	290	290	290	290	580	580	580	580	870	870	870	1160	1160
Total Amps - 1 Phase*	1.25	1.25	1.25	1.25	1.25	1.25	2.5	2.5	2.5	2.5	3.75	3.75	3.75	5.0	5.0

Model: RC	19C-EC	24C-EC	28C-EC	30C-EC	34C-EC	37C-EC	47C-EC	54C-EC	62C-EC	74C-EC	82C-EC	93C-EC	100C-EC	109C-EC	115C-EC
Air Flow High l/sec	2247	2109	1984	2375	2295	2219	4216	4540	4341	4439	5952	6511	6234	7936	7488
No. Of Motors (500mm)	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4
Motor Power: Full Speed															
Total Watts - 3 Phase	1000	1000	1000	1000	1000	1000	2000	2000	2000	2000	3000	3000	3000	4000	4000
Total Amps - 3 Phase, 400V*	1.7	1.7	1.7	1.7	1.7	1.7	3.4	3.4	3.4	3.4	5.1	5.1	5.1	6.8	6.8
Motor Power: Full Speed															
Total Watts - Single Phase	840	840	840	840	840	840	1680	1680	1680	1680	2520	2520	2520	3360	3360
Total Amps - Single Phase, 240 Volt	4.4	4.4	4.4	4.4	4.4	4.4	8.8	8.8	8.8	8.8	13.2	13.2	13.2	17.6	17.6

*Based on Manufacturer's Nominal Data. (3Ph, 400V ± 10%, 50Hz), (1Ph, 230V ± 10%, 50Hz)

Note: Actual amps may vary in application.

Sound Data

Fan Diameter	No. of fans	Speed	Sound Power Level, dB (re 1pW)								Noise Rating NR	Sound Pressure dB(A)
			Octave Band Centre Frequency (Hz)									
			dB(A)	125	250	500	1000	2000	4000	8000		
350 mm Dia	1	High	67	56	58	61	64	59	54	44	47	50
	2	High	70	59	61	64	67	62	57	47	50	53
500mm Dia 4 Pole	1	High	82	74	73	75	77	72	65	54	60	64
		Low	73	67	62	66	69	64	57	45	52	56
	2	High	85	77	76	78	80	75	68	57	63	67
		Low	76	70	65	69	72	67	60	48	55	59
	3	High	86	79	78	80	82	76	69	59	64	69
		Low	78	71	67	70	74	69	62	50	57	61
	4	High	88	80	79	81	83	78	71	60	66	70
		Low	79	73	68	72	75	70	63	51	58	62
500mm Dia 6 Pole (Q Series)	1	High	69	57	61	62	65	60	53	42	48	51
		Low	62	52	58	54	56	52	45	34	40	45
	2	High	72	60	64	65	68	63	56	45	51	54
		Low	65	55	61	57	59	55	48	37	43	48
	3	High	74	62	66	67	69	64	57	47	53	56
		Low	67	56	63	59	61	56	50	39	45	49
	4	High	75	63	67	68	71	66	59	48	54	57
		Low	68	58	64	60	62	58	51	40	46	51

Sound Pressure Levels dB(A) re 20mPa and Noise Rating calculated with typical 17.5 dB deducts for 3m distance.

Sound Power Levels Testing in accordance with Australian Standards AS 1217.5-1985.

Model	No. of fans	Speed	Sound Power Level, dB (re 1pW)							Sound Pressure dB(A) (1)	Sound Pressure dB(A) (2)
			Octave Band Centre Frequency (Hz)								
			125	250	500	1000	2000	4000	8000		
RC-EC	1	Full	60	63	69	74	74	69	60	58	48
	2	Full	60	63	69	74	74	69	60	61	51
	3	Full	60	63	69	74	73	69	60	62	52
	4	Full	60	63	69	74	74	69	60	64	54

(1) Sound Pressure Levels dB(A) re 20mPa and Noise Rating calculated @ 3m distance, free field.

(2) Sound Pressure Levels dB(A) re 20mPa and Noise Rating calculated @ 10m distance, free field.

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