

ComfortStar®

Air Conditioning & Heating Products

eco
smart series™

CH32 Series Performance Data



CH32 SERIES | PERFORMANCE DATA

Cooling and heating capacity by outdoor and indoor coil-air conditions.

12K | 115V

PERFORMANCE DATA

12K-115V

Outdoor		70F DB (21C)		75F DB (24C)		80F DB (27C)		90F DB (32C)	
Coil air		59F WB (15C)		63F WB (17C)		67F WB (19C)		73F WB (23C)	
DB F	DB C	TC*	SHC**	TC	SHC	TC	SHC	TC	SHC
5	-15	6135	5171	6591	5501	7347	6230	8332	5513
14	-10	6033	5084	6480	5409	7225	6126	8193	5421
23	-5	5828	4912	6260	5225	6979	5918	7914	5237
33.8	1	6076	5121	6527	5448	7277	6170	8252	5460
53.6	12	7979	6725	8572	7155	9556	8103	10837	7171
68	20	8335	7025	8954	7474	9982	8464	11320	7491
77	25	8714	7345	9362	7814	10437	8849	11835	7831
86	30	9247	7794	9934	8292	11075	9390	12559	8310
95	35	9524	8027	10231	8540	11406	9671	12935	8559
109.4	43	9854	8305	10586	8836	11802	10007	13383	8856
118.4	48	9483	7992	10187	8503	11357	9629	12879	8522
131	55	4511	3802	4846	4045	5402	4581	6126	4054

*Total Capacity (BtuH) **Sensible Heat Capacity (BtuH)

12K-115V

Outdoor		70F DB (21C)	75F DB (24C)	80F DB (27C)
Coil air		59F WB (15C)	63F WB (17C)	67F WB (19C)
DB F	DB C	TC*	TC	TC
-13	-25	4429	4362	4277
-4	-20	5468	5385	5279
0	-18	5839	5751	5638
5	-15	6380	6284	6160
17	-8	7382	7271	7128
24.8	-4	7886	7767	7615
32	0	8343	8217	8055
35	1.7	8531	8402	8237
39.2	4	9755	9608	9419
47	8	11509	11335	11112
53.6	12	11866	11687	11458
57	14	11997	11816	11584
*Total Capacity (Btu/h)				

*Total Capacity (BtuH)

12K | 230V

PERFORMANCE DATA

12K-230V

Outdoor		70F DB (21C)		75F DB (24C)		80F DB (27C)		90F DB (32C)	
Coil air		59F WB (15C)		63F WB (17C)		67F WB (19C)		73F WB (23C)	
DB F	DB C	TC*	SHC**	TC	SHC	TC	SHC	TC	SHC
5	-15	6155	5188	6612	5519	7372	6250	8359	5531
14	-10	6052	5101	6502	5427	7248	6146	8220	5439
23	-5	5847	4928	6281	5242	7002	5937	7940	5254
33.8	1	6096	5138	6549	5466	7301	6190	8279	5478
53.6	12	8006	6747	8600	7178	9588	8129	10872	7194
68	20	8363	7048	8984	7498	10015	8492	11357	7515
77	25	8743	7369	9392	7839	10471	8878	11874	7857
86	30	9278	7819	9967	8319	11111	9421	12600	8338
95	35	9556	8054	10265	8568	11444	9703	12977	8587
109.4	43	9887	8333	10621	8865	11841	10039	13427	8885
118.4	48	9514	8019	10221	8531	11394	9661	12921	8550
131	55	4526	3814	4862	4058	5420	4596	6146	4067

*Total Capacity (BtuH) **Sensible Heat Capacity (BtuH)

12K-230V

Outdoor		70F DB (21C)	75F DB (24C)	80F DB (27C)
Coil air		59F WB (15C)	63F WB (17C)	67F WB (19C)
DB F	DB C	TC*	TC	TC
-13	-25	4054	3993	3914
-4	-20	5004	4929	4832
0	-18	5344	5264	5160
5	-15	5839	5751	5638
17	-8	6756	6654	6524
24.8	-4	7218	7109	6969
32	0	7635	7520	7373
35	1.7	7808	7690	7539
39.2	4	8928	8793	8621
47	8	10533	10374	10170
53.6	12	10860	10697	10486
57	14	10980	10814	10602

*Total Capacity (BtuH)

*Total Capacity (BtuH)

18K | 230V

PERFORMANCE DATA

18K 230V

Outdoor		70F DB (21C)		75F DB (24C)		80F DB (27C)		90F DB (32C)	
Coil air		59F WB (15C)		63F WB (17C)		67F WB (19C)		73F WB (23C)	
DB F	DB C	TC*	SHC**	TC	SHC	TC	SHC	TC	SHC
5	-15	11759	9290	12638	9888	14184	11274	16000	9910
14	-10	12044	9516	12945	10128	14529	11549	16389	10151
23	-5	12190	9631	13102	10251	14705	11688	16587	10274
33.8	1	13706	10829	14731	11525	16533	13142	18650	11552
53.6	12	12297	9715	13216	10340	14833	11790	16732	10364
68	20	12769	10089	13724	10738	15403	12244	17375	10762
77	25	13254	10471	14245	11145	15988	12708	18034	11170
86	30	13963	11031	15007	11741	16843	13388	18998	11768
95	35	14321	11315	15392	12042	17275	13731	19486	12070
109.4	43	14780	11677	15885	12428	17828	14171	20110	12456
118.4	48	14222	11236	15285	11959	17155	13636	19351	11986
131	55	5790	4574	6223	4868	6984	5551	7878	4880

*Total Capacity (BtuH) **Sensible Heat Capacity (BtuH)

18K

Outdoor		70F DB (21C)	75F DB (24C)	80F DB (27C)
Coil air		59F WB (15C)	63F WB (17C)	67F WB (19C)
DB F	DB C	TC*	TC	TC
-13	-25	6868	6766	6562
-4	-20	8420	8294	8045
0	-18	8481	8354	8103
5	-15	10124	9973	9673
17	-8	11993	11813	11458
24.8	-4	12170	11988	11627
32	0	13691	13487	13081
35	1.7	14292	14079	13655
39.2	4	15720	15485	15019
47	8	17241	16983	16472
53.6	12	18001	17733	17199
57	14	18564	18287	17737
*Total Capacity (Btu/H)				

*Total Capacity (BtuH)

CH32 SERIES

PERFORMANCE DATA

24K and 36K capacity tables

24K | 230V

PERFORMANCE DATA

24K230V

Outdoor		70F DB (21C)		75F DB (24C)		80F DB (27C)		90F DB (32C)	
Coil air		59F WB (15C)		63F WB (17C)		67F WB (19C)		73F WB (23C)	
DB F	DB C	TC*	SHC**	TC	SHC	TC	SHC	TC	SHC
5	-15	13158	9307	14144	9907	15910	11322	17915	9929
14	-10	15820	11190	17006	11911	19130	13613	21540	11938
23	-5	18295	12940	19667	13775	22122	15742	24910	13806
33.8	1	19185	13570	20623	14445	23198	16508	26121	14478
53.6	12	15968	11294	17165	12022	19308	13740	21741	12050
68	20	16763	11857	18020	12621	20270	14424	22824	12650
77	25	17495	12374	18806	13172	21154	15054	23820	13202
86	30	18577	13140	19970	13987	22464	15985	25294	14019
95	35	19162	13554	20599	14428	23171	16489	26090	14461
109.4	43	19958	14116	21454	15026	24133	17173	27173	15061
118.4	48	19255	13619	20699	14498	23283	16569	26217	14531
131	55	10166	7191	10928	7654	12293	8748	13842	7672
*Total Capacity (BtuH) **Sensible Heat Capacity (BtuH)									

24K

Outdoor		70F DB (21C)		75F DB (24C)		80F DB (27C)	
Coil air		59F WB (15C)		63F WB (17C)		67F WB (19C)	
DB F	DB C	TC*	TC	TC	TC	TC	TC
-13	-25	8758	8627				8367
-4	-20	10736	10576				10258
0	-18	10814	10653				10332
5	-15	12909	12716				12333
17	-8	15291	15063				14610
24.8	-4	15518	15286				14826
32	0	17457	17197				16679
35	1.7	18224	17952				17411
39.2	4	20044	19745				19150
47	8	21984	21655				21003
53.6	12	22953	22611				21930
57	14	23671	23318				22616
*Total Capacity (BtuH)							

36K | 230V

PERFORMANCE DATA

36K230V

Outdoor		70F DB (21C)		75F DB (24C)		80F DB (27C)		90F DB (32C)	
Coil air		59F WB (15C)		63F WB (17C)		67F WB (19C)		73F WB (23C)	
DB F	DB C	TC*	SHC**	TC	SHC	TC	SHC	TC	SHC
5	-15	19990	14139	21488	15050	24171	17200	27217	15085
14	-10	24034	17000	25836	18096	29062	20681	32724	18137
23	-5	27794	19659	29878	20927	33609	23916	37843	20974
33.8	1	29146	20615	31331	21944	35243	25079	39684	21995
53.6	12	24259	17158	26077	18265	29334	20874	33030	18307
68	20	25467	18013	27377	19175	30795	21914	34675	19218
77	25	26578	18799	28571	20011	32138	22870	36188	20057
86	30	28223	19962	30339	21249	34127	24285	38427	21298
95	35	29112	20591	31294	21919	35202	25050	39637	21969
109.4	43	30320	21446	32593	22828	36663	26090	41282	22881
118.4	48	29253	20691	31446	22025	35372	25171	39829	22075
131	55	15445	10924	16603	11629	18676	13290	21029	11655

*Total Capacity (BtuH) **Sensible Heat Capacity (BtuH)

36K

Outdoor		70F DB (21C)		75F DB (24C)		80F DB (27C)	
Coil air		59F WB (15C)		63F WB (17C)		67F WB (19C)	
DB F	DB C	TC*	TC	TC	TC	TC	TC
-13	-25	14291	14078				13654
-4	-20	17520	17259				16739
0	-18	17647	17383				16860
5	-15	21065	20751				20126
17	-8	24953	24581				23841
24.8	-4	25323	24945				24194
32	0	28488	28063				27218
35	1.7	29738	29294				28412
39.2	4	32708	32220				31250
47	8	35874	35338				34274
53.6	12	37456	36897				35786
57	14	38628	38051				36905

*Total Capacity (BtuH)

READING THE TABLES

DB = dry-bulb temperature | WB = wet-bulb temperature

TC = total capacity (Btu/h) | SHC = sensible heat capacity (Btu/h)

Values and test conditions are reproduced from the supplied CH32 performance sheet.