

Service Manual

AIR CONDITIONER



CS-A24BD2P CU-A24BBP5
 CS-A28BD2P CU-A28BBP5
 CS-A28BD2P CU-A28BBP8
 CS-A34BD2P CU-A34BBP5
 CS-A34BD2P CU-A34BBP8
 CS-A43BD2P CU-A43BBP8
 CS-A50BD2P CU-A50BBP8
 CS-A24BD2P CU-C24BBP5
 CS-A28BD2P CU-C28BBP5
 CS-A28BD2P CU-C28BBP8
 CS-A34BD2P CU-C34BBP5
 CS-A34BD2P CU-C34BBP8
 CS-A43BD2P CU-C43BBP8
 CS-A50BD2P CU-C50BBP8

Subject : Revision

Please file and use this supplement manual together with the service manual for Model No. CS-A24BD2P/CU-A24BBP5, CS-A28BD2P/CU-A28BBP5, CS-A28BD2P/CU-A28BBP8, CS-A34BD2P/CU-A34BBP5, CS-A34BD2P/CU-A34BBP8, CS-A43BD2P/CU-A43BBP8, CS-A50BD2P/CU-A50BBP8, CS-A24BD2P/CU-C24BBP5, CS-A28BD2P/CU-C28BBP5, CS-A28BD2P/CU-C28BBP8, CS-A34BD2P/CU-C34BBP5, CS-A34BD2P/CU-C34BBP8, CS-A43BD2P/CU-C43BBP8, CS-A50BD2P/CU-C50BBP8, Order No. MAC0112089C0.

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Panasonic

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1 CAPACITY AND POWER CONSUMPTION (Pages: 58 - 64)

1.1. PERFORMANCE DATA

1.1.1. COOLING PERFORMANCE

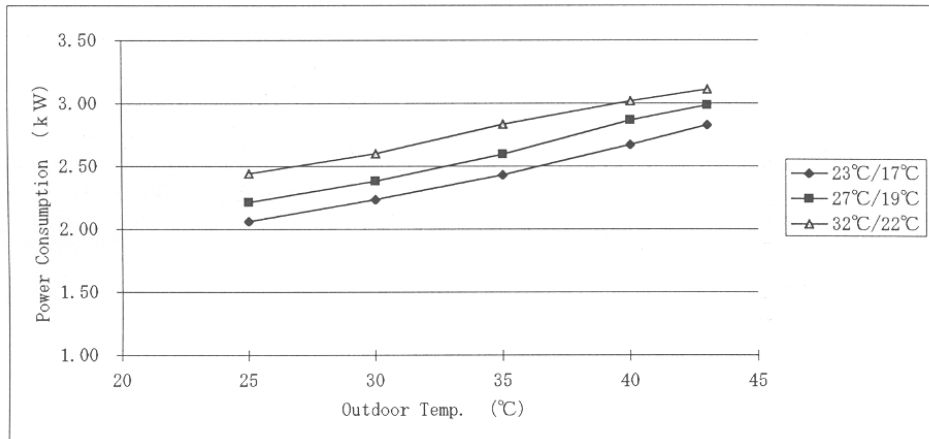
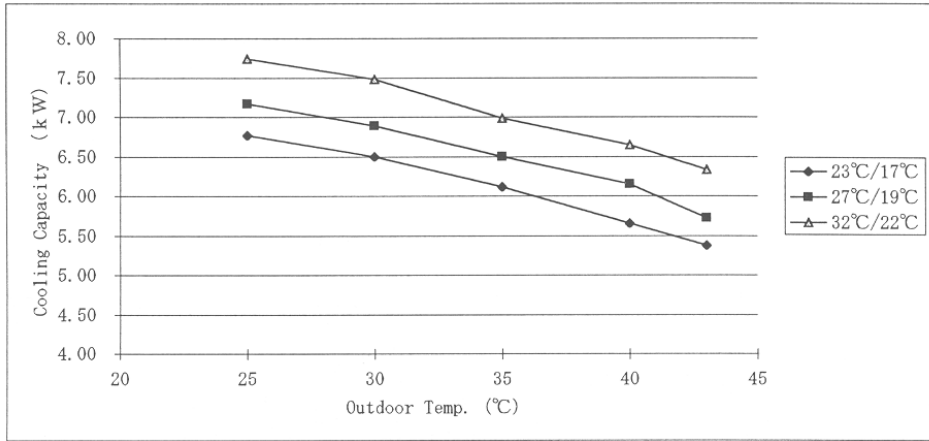
Model	Cooling Capacity	Cooling capacities are based conditions
CS-A24BD2P CU-A24BBP5 CU-C24BBP5	6.5kW	<ul style="list-style-type: none"> Indoor temp. 27°C D.B. 19°C W.B. Outdoor temp. 35°C D.B. Standard air volume 18 m³/min

Ambient Return Air		Temperature Air Entering Condenser (°C D.B.)														
		25°C			30°C			35°C			40°C			43°C		
		TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
D.B.	W.B.	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	
23	17	6.77	4.53	2.06	6.50	4.49	2.23	6.12	4.34	2.43	5.66	4.13	2.67	5.37	4.03	2.83
	19	7.15	3.79	2.19	6.92	3.81	2.37	6.57	3.74	2.58	6.12	3.61	2.83	5.81	3.55	3.00
	22	7.80	3.20	2.36	7.59	3.27	2.56	7.25	3.26	2.78	6.78	3.19	3.05	6.46	3.16	3.24
25	17	6.69	5.28	2.06	6.43	5.21	2.23	6.05	5.03	2.43	5.61	4.77	2.65	5.30	4.61	2.81
	19	7.15	4.65	2.20	6.91	4.63	2.37	6.53	4.51	2.58	6.08	4.32	2.82	5.77	4.21	2.99
	22	7.80	3.82	2.37	7.56	3.86	2.56	7.19	3.81	2.79	6.70	3.68	3.05	6.40	3.65	3.23
27	17	6.60	6.27	2.07	6.35	6.16	2.23	5.99	5.99	2.42	5.57	5.57	2.63	5.27	5.27	2.79
	19	7.16	5.44	2.21	6.89	5.37	2.38	6.50	5.20	2.59	6.15	5.04	2.87	5.72	4.80	2.98
	22	7.79	4.44	2.39	7.53	4.44	2.57	7.14	4.35	2.80	6.63	4.18	3.04	6.34	4.12	3.22
29	17	6.59	6.26	2.05	6.35	6.16	2.22	5.98	5.98	2.39	5.62	5.62	2.57	5.34	5.34	2.68
	19	7.15	6.58	2.20	6.89	6.48	2.38	6.50	6.24	2.56	6.09	5.97	2.75	5.79	5.79	2.86
	22	7.76	5.20	2.42	7.50	5.17	2.62	7.09	5.03	2.82	6.64	4.85	3.03	6.33	4.75	3.15
32	17	6.58	6.25	2.05	6.35	6.16	2.22	5.56	5.56	2.38	5.65	5.65	2.53	5.38	5.38	2.61
	19	7.14	6.78	2.19	6.89	6.69	2.37	6.50	6.50	2.54	6.12	6.12	2.70	5.84	5.84	2.78
	22	7.74	6.43	2.44	7.48	6.35	2.60	6.98	6.07	2.83	6.64	5.91	3.02	6.33	5.76	3.11

TC: Cooling Capacity

SHC: Sensible Heat Capacity

IPT: Cooling Power Consumption



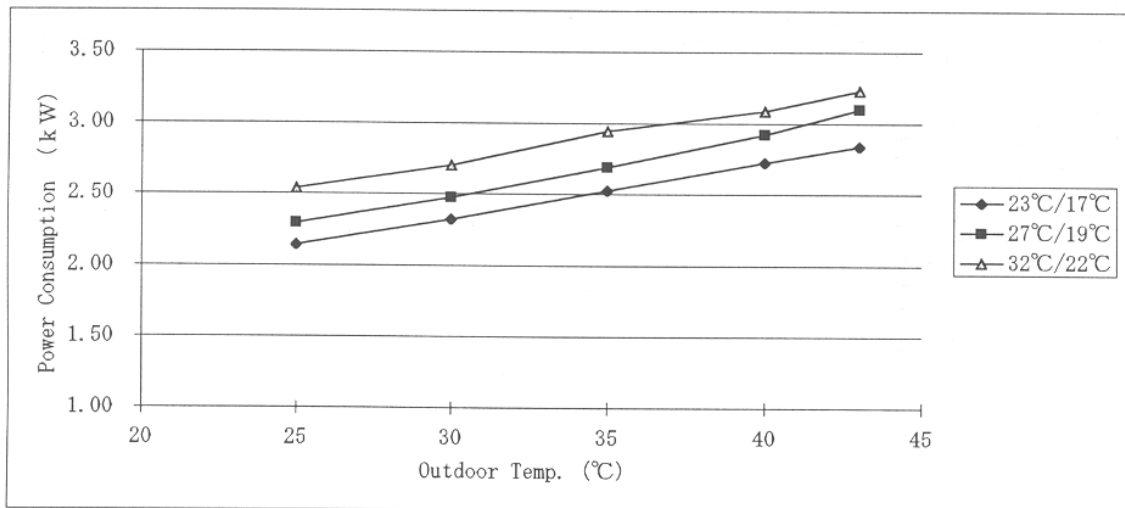
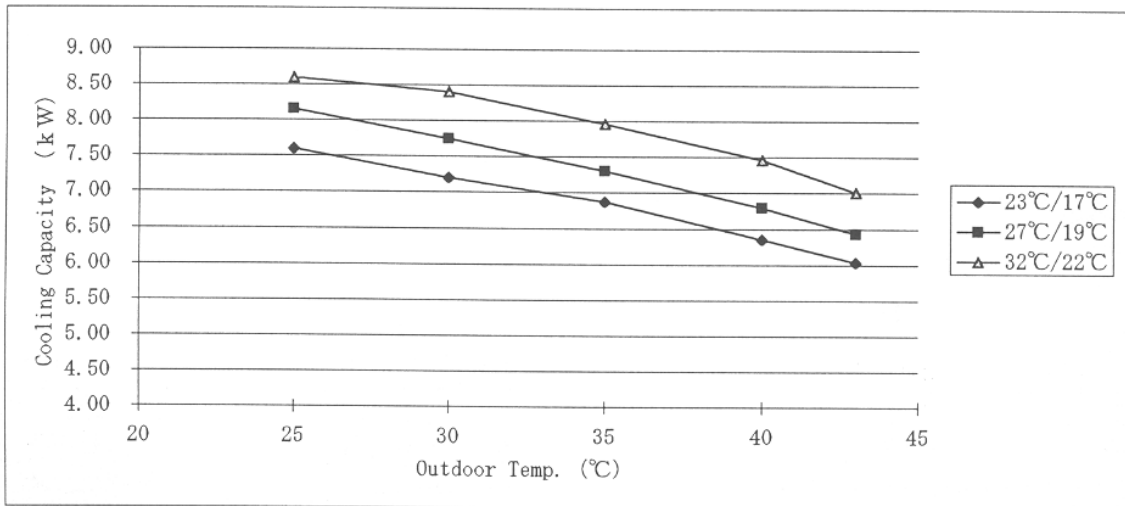
Model	Cooling Capacity	Cooling capacities are based conditions
CS-A28BD2P CU-A28BBP5 CU-C28BBP5 CU-A28BBP8	7.3kW	<ul style="list-style-type: none"> Indoor temp. 27°C D.B. 19°C W.B. Outdoor temp. 35°C D.B. Standard air volume 20 m³/min

Ambient Return Air		Temperature Air Entering Condenser (°C D.B.)														
		25°C			30°C			35°C			40°C			43°C		
		TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
D.B.	W.B.	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	
23	17	7.60	5.09	2.14	7.20	4.97	2.32	6.87	4.88	2.53	6.35	4.64	2.72	6.03	4.52	2.84
	19	8.02	4.25	2.27	7.77	4.28	2.46	7.38	4.21	2.68	6.88	4.06	2.94	6.53	3.98	3.11
	22	8.76	3.59	2.45	8.53	3.67	2.65	8.14	3.66	2.89	7.61	3.58	3.17	7.25	3.55	3.36
25	17	7.51	5.93	2.14	7.22	5.85	2.32	6.80	5.64	2.52	6.31	5.36	2.75	5.95	5.18	2.92
	19	8.03	5.22	2.28	7.76	5.20	2.47	7.34	5.06	2.68	6.83	4.85	2.93	6.48	4.73	3.11
	22	8.76	4.29	2.46	8.49	4.33	2.66	8.08	4.28	2.90	7.52	4.14	3.16	7.19	4.10	3.35
27	17	7.42	7.05	2.15	7.13	6.92	2.31	6.73	6.73	2.52	6.26	6.26	2.74	5.92	5.92	2.90
	19	8.14	6.19	2.29	7.74	6.04	2.47	7.30	5.84	2.69	6.79	5.57	2.92	6.42	5.40	3.10
	22	8.75	4.99	2.48	8.46	4.99	2.67	8.02	4.89	2.91	7.45	4.69	3.16	7.12	4.63	3.35
29	17	7.40	7.03	2.13	7.14	6.92	2.31	6.72	6.72	2.49	6.31	6.31	2.67	6.00	6.00	2.78
	19	8.03	7.39	2.28	7.74	7.27	2.47	7.30	7.01	2.66	6.84	6.71	2.85	6.50	6.50	2.97
	22	8.72	5.84	2.51	8.42	5.81	2.72	7.96	5.65	2.93	7.46	5.44	3.14	7.11	5.33	3.28
32	17	7.39	7.02	2.12	7.14	6.92	2.30	6.24	6.24	2.47	6.34	6.34	2.63	6.04	6.04	2.71
	19	8.02	7.62	2.27	7.74	7.51	2.46	7.30	7.30	2.64	6.88	6.88	2.81	6.56	6.56	2.89
	22	8.59	7.13	2.53	8.40	7.14	2.70	7.95	6.92	2.94	7.46	6.64	3.08	7.01	6.38	3.23

TC: Cooling Capacity

SHC: Sensible Heat Capacity

IPT: Cooling Power Consumption



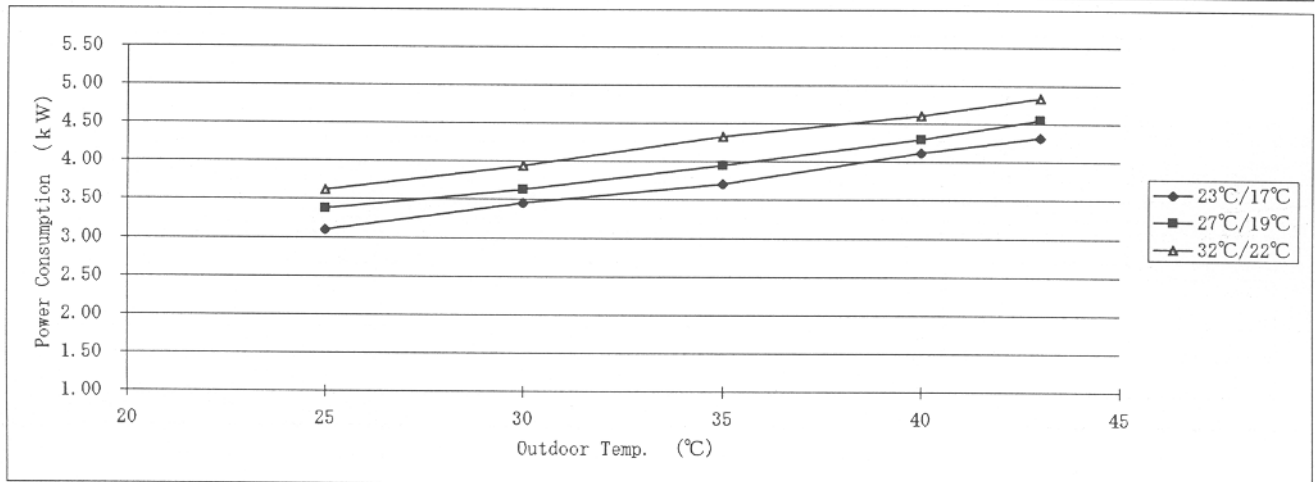
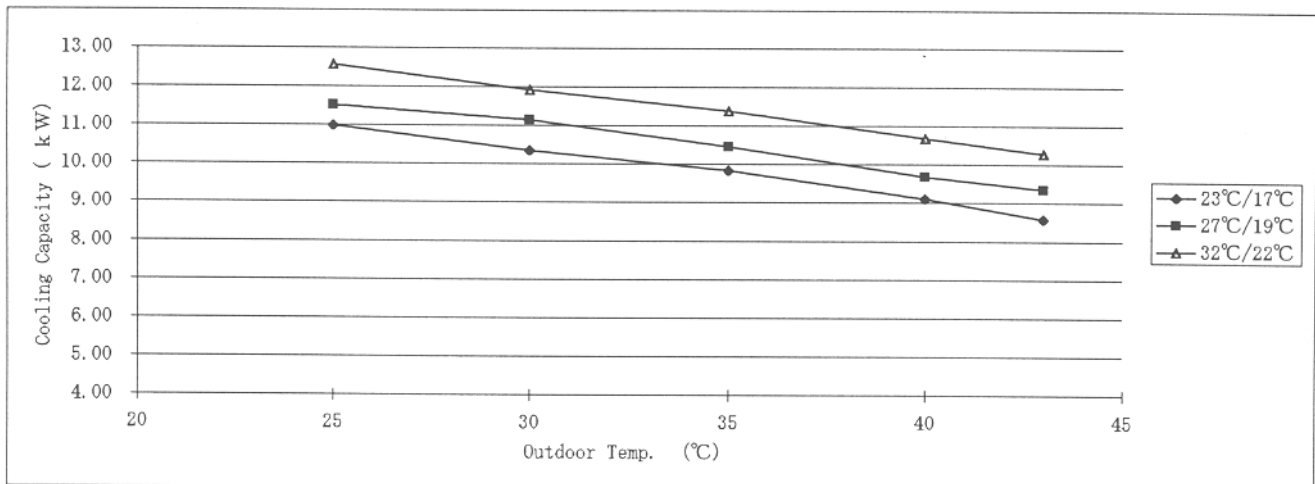
Model	Cooling Capacity	Cooling capacities are based conditions
CS-A34BD2P CU-A34BBP5 CU-C34BBP5	10.45kW	<ul style="list-style-type: none"> Indoor temp. 27°C D.B. 19°C W.B. Outdoor temp. 35°C D.B. Standard air volume 35 m³/min

Ambient Return Air		Temperature Air Entering Condenser (°C D.B.)														
		25°C			30°C			35°C			40°C			43°C		
		TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
D.B.	W.B.	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
23	17	10.98	7.36	3.09	10.35	7.14	3.45	9.83	6.98	3.71	9.09	6.64	4.12	8.56	6.42	4.31
	19	11.49	6.09	3.33	11.13	6.12	3.61	10.56	6.02	3.93	9.85	5.81	4.31	9.35	5.70	4.57
	22	12.54	5.14	3.60	12.21	5.25	3.90	11.65	5.24	4.25	10.90	5.12	4.66	10.38	5.09	4.94
25	17	10.75	8.49	3.15	10.33	8.37	3.40	9.73	8.08	3.70	9.03	7.67	4.04	8.52	7.41	4.29
	19	11.50	7.48	3.35	11.10	7.44	3.62	10.51	7.25	3.94	9.78	6.95	4.30	9.27	6.77	4.56
	22	12.54	6.14	3.62	12.16	6.20	3.91	11.56	6.13	4.26	10.77	5.92	4.65	10.29	5.86	4.93
27	17	10.62	10.09	3.15	10.21	9.91	3.40	9.63	9.63	3.70	8.96	8.96	4.02	8.48	8.48	4.26
	19	11.52	8.75	3.37	11.13	8.68	3.63	10.45	8.36	3.95	9.67	7.93	4.29	9.35	7.85	4.55
	22	12.53	7.14	3.64	12.11	7.14	3.92	11.47	7.00	4.27	10.66	6.72	4.64	10.19	6.62	4.91
29	17	10.60	10.07	3.13	10.21	9.91	3.39	9.61	9.61	3.65	9.03	9.03	3.92	8.58	8.58	4.09
	19	11.49	10.57	3.35	11.08	10.41	3.62	10.45	10.04	3.90	9.80	9.60	4.19	9.31	9.31	4.37
	22	12.48	8.36	3.69	12.05	8.32	3.99	11.40	8.09	4.30	10.67	7.79	4.62	10.18	7.64	4.81
32	17	10.58	10.05	3.12	10.22	9.91	3.38	8.94	8.94	3.62	9.08	9.08	3.86	8.65	8.65	3.97
	19	11.48	10.90	3.33	11.08	10.75	3.62	10.46	10.46	3.87	9.85	9.85	4.12	9.38	9.38	4.25
	22	12.55	10.41	3.62	11.92	10.13	3.94	11.39	9.91	4.32	10.68	9.51	4.60	10.28	9.35	4.84

TC: Cooling Capacity

SHC: Sensible Heat Capacity

IPT: Cooling Power Consumption



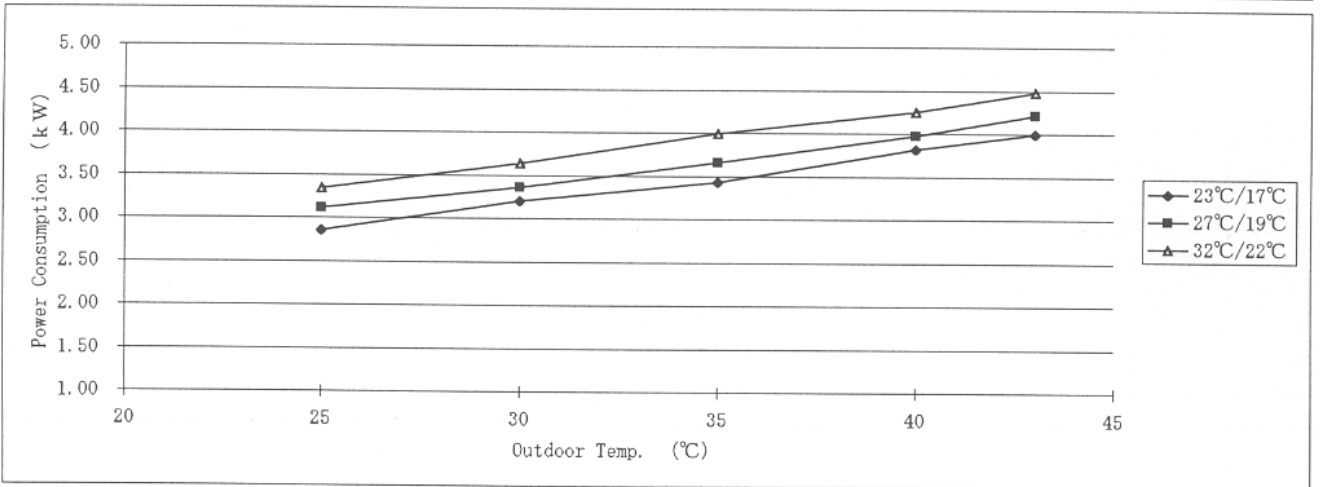
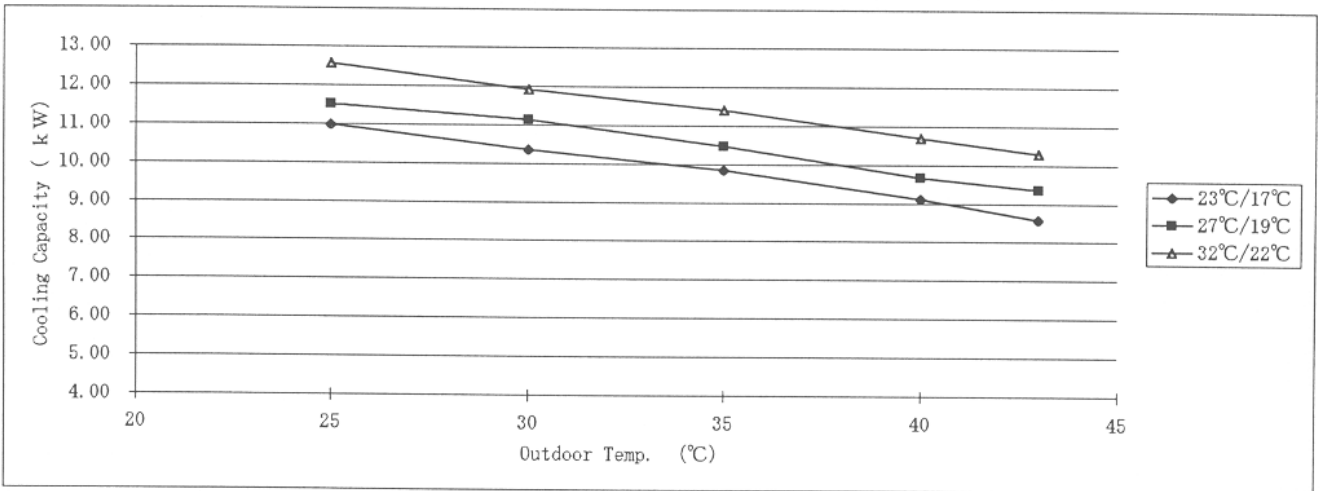
Model	Cooling Capacity	Cooling capacities are based conditions
CS-A34BD2P CU-A34BBP8 CU-C34BBP8	10.45kW	<ul style="list-style-type: none"> Indoor temp. 27°C D.B. 19°C W.B. Outdoor temp. 35°C D.B. Standard air volume 35 m³/min

Ambient Return Air		Temperature Air Entering Condenser (°C D.B.)														
		25°C			30°C			35°C			40°C			43°C		
		TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
D.B.	W.B.	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	
23	17	10.98	7.36	2.86	10.35	7.14	3.20	9.83	6.98	3.43	9.09	6.64	3.81	8.56	6.42	3.99
	19	11.49	6.09	3.08	11.13	6.12	3.34	10.56	6.02	3.63	9.85	5.81	3.99	9.35	5.70	4.22
	22	12.54	5.14	3.33	12.21	5.25	3.60	11.65	5.24	3.92	10.90	5.12	4.30	10.38	5.09	4.56
25	17	10.75	8.49	2.91	10.33	8.37	3.14	9.73	8.08	3.42	9.03	7.67	3.74	8.52	7.41	3.96
	19	11.50	7.48	3.10	11.10	7.44	3.34	10.51	7.25	3.64	9.78	6.95	3.98	9.27	6.77	4.21
	22	12.54	6.14	3.34	12.16	6.20	3.61	11.56	6.13	3.93	10.77	5.92	4.29	10.29	5.86	4.55
27	17	10.62	10.09	2.91	10.21	9.91	3.14	9.63	9.63	3.42	8.96	8.96	3.71	8.48	8.48	3.93
	19	11.52	8.75	3.11	11.13	8.68	3.35	10.45	8.36	3.65	9.67	7.93	3.97	9.35	7.85	4.20
	22	12.53	7.14	3.36	12.11	7.14	3.62	11.47	7.00	3.94	10.66	6.72	4.28	10.19	6.62	4.54
29	17	10.60	10.07	2.89	10.21	9.91	3.13	9.61	9.61	3.37	9.03	9.03	3.62	8.58	8.58	3.78
	19	11.49	10.57	3.09	11.08	10.41	3.35	10.45	10.04	3.61	9.80	9.60	3.87	9.31	9.31	4.04
	22	12.48	8.36	3.41	12.05	8.32	3.69	11.40	8.09	3.97	10.67	7.79	4.27	10.18	7.64	4.44
32	17	10.58	10.05	2.88	10.22	9.91	3.13	8.94	8.94	3.35	9.08	9.08	3.57	8.65	8.65	3.67
	19	11.48	10.90	3.08	11.08	10.75	3.34	10.46	10.46	3.58	9.85	9.85	3.81	9.38	9.38	3.92
	22	12.55	10.41	3.34	11.92	10.13	3.63	11.39	9.91	3.99	10.68	9.51	4.25	10.28	9.35	4.48

TC: Cooling Capacity

SHC: Sensible Heat Capacity

IPT: Cooling Power Consumption



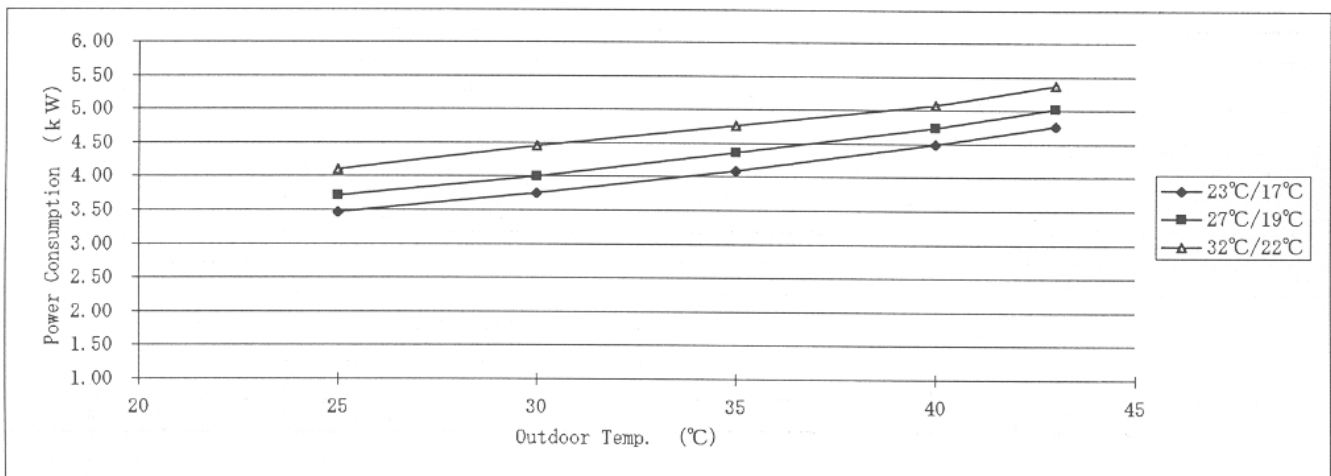
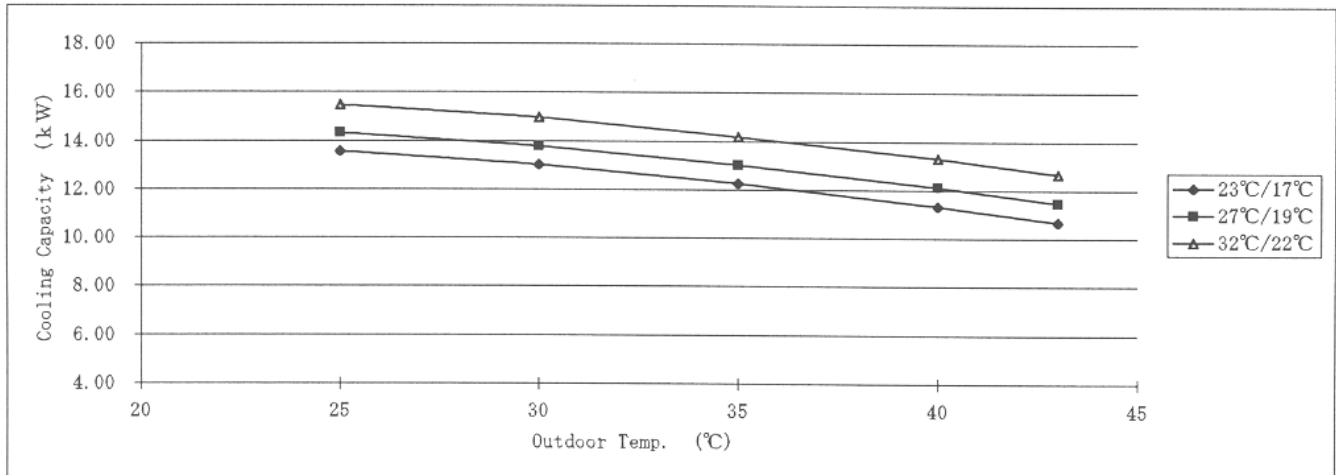
Model	Cooling Capacity	Cooling capacities are based conditions
CS-A43BD2P CU-A43BBP8 CU-C43BBP8	13.00kW	<ul style="list-style-type: none"> Indoor temp. 27°C D.B. 19°C W.B. Outdoor temp. 35°C D.B. Standard air volume 40 m³/min

Ambient Return Air		Temperature Air Entering Condenser (°C D.B.)														
		25°C			30°C			35°C			40°C			43°C		
		TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
D.B.	W.B.	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
23	17	13.53	9.07	3.46	13.00	8.97	3.75	12.23	8.69	4.08	11.31	8.26	4.48	10.65	7.99	4.75
	19	14.29	7.57	3.67	13.85	7.61	3.97	13.14	7.49	4.33	12.25	7.23	4.75	11.63	7.09	5.04
	22	15.61	6.40	3.96	15.19	6.53	4.29	14.49	6.52	4.68	13.56	6.37	5.13	12.92	6.33	5.44
25	17	13.37	10.56	3.47	12.85	10.41	3.75	12.11	10.05	4.08	11.23	9.54	4.45	10.60	9.22	4.72
	19	14.31	9.30	3.69	13.81	9.25	3.99	13.07	9.02	4.34	12.17	8.64	4.74	11.53	8.42	5.02
	22	15.60	7.64	3.99	15.12	7.71	4.31	14.38	7.62	4.69	13.40	7.37	5.12	12.80	7.29	5.43
27	17	13.21	12.55	3.47	12.71	12.32	3.74	11.99	11.99	4.07	11.15	11.15	4.42	10.55	10.55	4.69
	19	14.33	10.89	3.71	13.78	10.75	4.00	13.00	10.40	4.35	12.09	9.91	4.73	11.44	9.61	5.01
	22	15.59	8.88	4.01	15.06	8.89	4.32	14.27	8.71	4.70	13.26	8.36	5.11	12.68	8.24	5.41
29	17	13.18	12.52	3.45	12.71	12.33	3.73	11.96	11.96	4.02	11.24	11.24	4.32	10.68	10.68	4.50
	19	14.30	13.15	3.69	13.78	12.96	3.99	13.00	12.48	4.30	12.19	11.94	4.62	11.58	11.58	4.81
	22	15.52	10.40	4.06	14.99	10.35	4.39	14.18	10.07	4.73	13.28	9.69	5.08	12.67	9.50	5.30
32	17	13.16	12.50	3.44	12.71	12.33	3.73	11.12	11.12	3.99	11.29	11.29	4.25	10.76	10.76	4.38
	19	14.28	13.56	3.67	13.78	13.37	3.98	13.01	13.01	4.26	12.25	12.25	4.54	11.67	11.67	4.68
	22	15.48	12.85	4.10	14.95	12.71	4.45	14.17	12.32	4.76	13.29	11.82	5.07	12.66	11.52	5.37

TC: Cooling Capacity

SHC: Sensible Heat Capacity

IPT: Cooling Power Consumption



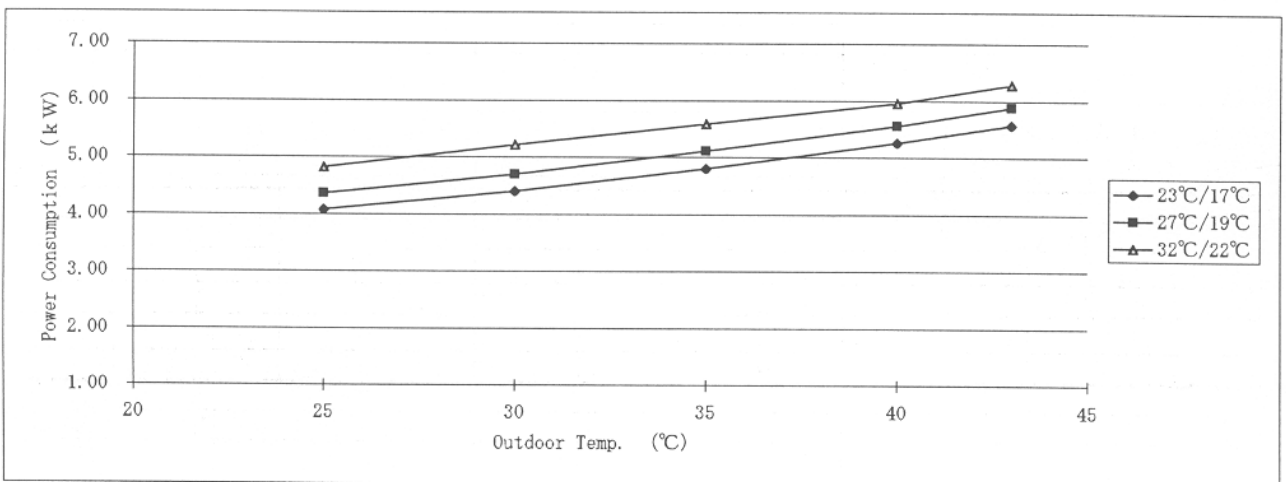
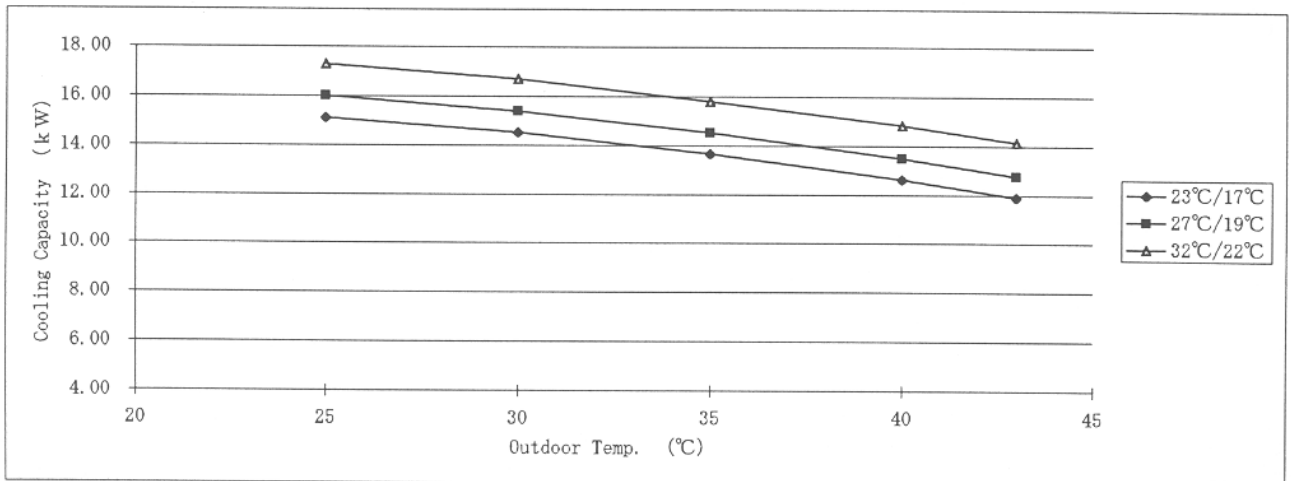
Model	Cooling Capacity	Cooling capacities are based conditions
CS-A50BD2P CU-A50BBP8 CU-C50BBP8	14.50kW	<ul style="list-style-type: none"> Indoor temp. 27°C D.B. 19°C W.B. Outdoor temp. 35°C D.B. Standard air volume 45 m³/min

Ambient Return Air		Temperature Air Entering Condenser (°C D.B.)														
		25°C			30°C			35°C			40°C			43°C		
		TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
D.B.	W.B.	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	
23	17	15.09	10.11	4.06	14.50	10.01	4.40	13.64	9.69	4.79	12.62	9.21	5.25	11.88	8.91	5.57
	19	15.94	8.45	4.30	15.44	8.49	4.66	14.65	8.35	5.08	13.66	8.06	5.57	12.97	7.91	5.90
	22	17.41	7.14	4.65	16.94	7.28	5.03	16.16	7.27	5.48	15.12	7.11	6.01	14.41	7.06	6.38
25	17	14.91	11.78	4.07	14.34	11.61	4.39	13.51	11.21	4.78	12.52	10.65	5.22	11.82	10.28	5.53
	19	15.96	10.37	4.33	15.41	10.32	4.67	14.58	10.06	5.09	13.57	9.64	5.56	12.86	9.39	5.89
	22	17.40	8.52	4.67	16.87	8.60	5.05	16.04	8.50	5.50	14.94	8.22	6.00	14.27	8.14	6.36
27	17	14.73	14.00	4.07	14.17	13.75	4.39	13.37	13.37	4.77	12.43	12.43	5.19	11.76	11.76	5.50
	19	15.98	12.14	4.35	15.37	11.99	4.69	14.50	11.60	5.10	13.49	11.06	5.54	12.76	10.72	5.88
	22	17.39	9.91	4.70	16.80	9.91	5.06	15.92	9.71	5.51	14.79	9.32	5.99	14.14	9.19	6.35
29	17	14.70	13.97	4.04	14.17	13.75	4.38	13.34	13.34	4.72	12.53	12.53	5.06	11.91	11.91	5.28
	19	15.95	14.67	4.32	15.37	14.45	4.68	14.51	13.93	5.04	13.59	13.32	5.41	12.92	12.92	5.64
	22	17.32	11.60	4.76	16.72	11.54	5.15	15.82	11.23	5.55	14.81	10.81	5.96	14.13	10.60	6.21
32	17	14.68	13.95	4.03	14.18	13.75	4.37	12.40	12.40	4.68	12.60	12.60	4.98	12.01	12.01	5.13
	19	15.92	15.13	4.30	15.37	14.91	4.67	14.51	14.51	5.00	13.66	13.66	5.32	13.02	13.02	5.48
	22	17.27	14.33	4.80	16.68	14.17	5.21	15.80	13.75	5.58	14.82	13.19	5.94	14.12	12.85	6.27

TC: Cooling Capacity

SHC: Sensible Heat Capacity

IPT: Cooling Power Consumption



1.1.2. HEATING PERFORMANCE

Model	Heating Capacity	Heating capacities are based conditions	
CS-A24BD2P CU-A24BBP5	7.1kW	<ul style="list-style-type: none"> • Single Phase, 50Hz, 230V • Indoor temp. 20°C D.B.T. • Outdoor temp. 7°C D.B. 6°C W.B.T. • Standard air volume 18 m³/min 	

Inlet Air		Outdoor Temperature (°C W. B. T.)							
Air Volume (m ³ /min)	Entering Air D. B. T. (°C)	-6°C		0°C		6°C		12°C	
		H.C.	IPT	H.C.	IPT	H.C.	IPT	H.C.	IPT
18 m ³ /min	15	5.18	1.75	6.21	2.00	7.46	2.38	8.66	2.80
	20	4.90	1.85	5.86	2.13	7.10	2.50	8.52	2.90
	25	4.62	1.95	5.54	2.25	6.75	2.63	8.17	2.96

Model	Heating Capacity	Heating capacities are based conditions	
CS-A28BD2P CU-A28BBP5	7.75kW	<ul style="list-style-type: none"> • Single Phase, 50Hz, 230V • Indoor temp. 20°C D.B.T. • Outdoor temp. 7°C D.B. 6°C W.B.T. • Standard air volume 20 m³/min 	

Inlet Air		Outdoor Temperature (°C W. B. T.)							
Air Volume (m ³ /min)	Entering Air D. B. T. (°C)	-6°C		0°C		6°C		12°C	
		H.C.	IPT	H.C.	IPT	H.C.	IPT	H.C.	IPT
20 m ³ /min	15	5.66	1.83	6.78	2.09	8.14	2.48	9.46	2.92
	20	5.35	1.93	6.39	2.22	7.75	2.61	9.30	3.03
	25	5.04	2.04	6.05	2.35	7.36	2.74	8.91	3.06

Model	Heating Capacity	Heating capacities are based conditions	
CS-A28BD2P CU-A28BBP8	7.75kW	<ul style="list-style-type: none"> • 3N Phase, 50Hz, 400V • Indoor temp. 20°C D.B.T. • Outdoor temp. 7°C D.B. 6°C W.B.T. • Standard air volume 20 m³/min 	

Inlet Air		Outdoor Temperature (°C W. B. T.)							
Air Volume (m ³ /min)	Entering Air D. B. T. (°C)	-6°C		0°C		6°C		12°C	
		H.C.	IPT	H.C.	IPT	H.C.	IPT	H.C.	IPT
20 m ³ /min	15	5.66	1.83	6.78	2.09	8.14	2.48	9.46	2.92
	20	5.35	1.93	6.39	2.22	7.75	2.61	9.30	3.03
	25	5.04	2.04	6.05	2.35	7.36	2.74	8.91	3.06

Model	Heating Capacity	Heating capacities are based conditions	
CS-A34BD2P CU-A34BBP5	11.2kW	<ul style="list-style-type: none"> • Single Phase, 50Hz, 230V • Indoor temp. 20°C D.B.T. • Outdoor temp. 7°C D.B. 6°C W.B.T. • Standard air volume 35 m³/min 	

Inlet Air		Outdoor Temperature (°C W. B. T.)							
Air Volume (m ³ /min)	Entering Air D. B. T. (°C)	-6°C		0°C		6°C		12°C	
		H.C.	IPT	H.C.	IPT	H.C.	IPT	H.C.	IPT
35 m ³ /min	15	8.18	2.49	9.80	2.84	11.8	3.37	13.7	3.98
	20	7.73	2.63	9.24	3.02	11.2	3.55	13.4	4.12
	25	7.28	2.77	8.74	3.20	10.6	3.73	12.9	4.30

Model	Heating Capacity	Heating capacities are based conditions
CS-A34BD2P CU-A34BBP8	11.2kW	<ul style="list-style-type: none"> • 3N Phase, 50Hz, 400V • Indoor temp. 20°C D.B.T. • Outdoor temp. 7°C D.B. 6°C W.B.T. • Standard air volume 35 m³/min

Inlet Air		Outdoor Temperature (°C W. B. T.)							
Air Volume (m ³ /min)	Entering Air D. B. T. (°C)	-6°C		0°C		6°C		12°C	
		H.C.	IPT	H.C.	IPT	H.C.	IPT	H.C.	IPT
35 m ³ /min	15	8.18	2.38	9.80	2.72	11.8	3.23	13.7	3.81
	20	7.73	2.52	9.24	2.89	11.2	3.40	13.4	3.94
	25	7.28	2.65	8.74	3.06	10.6	3.57	12.9	4.11

Model	Heating Capacity	Heating capacities are based conditions
CS-A43BD2P CU-A43BBP8	14.2kW	<ul style="list-style-type: none"> • 3N Phase, 50Hz, 400V • Indoor temp. 20°C D.B.T. • Outdoor temp. 7°C D.B. 6°C W.B.T. • Standard air volume 40 m³/min

Inlet Air		Outdoor Temperature (°C W. B. T.)							
Air Volume (m ³ /min)	Entering Air D. B. T. (°C)	-6°C		0°C		6°C		12°C	
		H.C.	IPT	H.C.	IPT	H.C.	IPT	H.C.	IPT
40 m ³ /min	15	10.37	2.73	12.43	3.12	14.9	3.71	17.3	4.37
	20	9.80	2.89	11.72	3.32	14.2	3.90	17.0	4.52
	25	9.23	3.04	11.08	3.51	13.5	4.10	16.3	4.67

Model	Heating Capacity	Heating capacities are based conditions
CS-A50BD2P CU-A50BBP8	15.7kW	<ul style="list-style-type: none"> • 3N Phase, 50Hz, 400V • Indoor temp. 20°C D.B.T. • Outdoor temp. 7°C D.B. 6°C W.B.T. • Standard air volume 45 m³/min

Inlet Air		Outdoor Temperature (°C W. B. T.)							
Air Volume (m ³ /min)	Entering Air D. B. T. (°C)	-6°C		0°C		6°C		12°C	
		H.C.	IPT	H.C.	IPT	H.C.	IPT	H.C.	IPT
45 m ³ /min	15	11.46	3.29	13.74	3.76	16.5	4.47	19.2	5.26
	20	10.83	3.48	12.95	4.00	15.7	4.70	18.8	5.45
	25	10.21	3.67	12.25	4.23	14.9	4.94	18.1	5.63

1.2. COOLING CAPACITY CURVE, COOLING POWER CONSUMPTION CURVE

IRATED COOLING CAPACITY, RATED COOLING POWER CONSUMPTION

MODEL NAME	RATED COOLING STANDARD	
	CAPACITY (kW)	POWER CONSUMPTION (kW)
CS-A24BD2P/CU-A24BBP5	6.50	2.59
CS-A28BD2P/CU-A28BBP5	7.30	2.69
CS-A28BD2P/CU-A28BBP8	7.30	2.69
CS-A34BD2P/CU-A34BBP5	10.45	3.95
CS-A34BD2P/CU-A34BBP8	10.45	3.65
CS-A43BD2P/CU-A43BBP8	13.00	4.35
CS-A50BD2P/CU-A50BBP8	14.50	5.10
CS-A24BD2P/CU-C24BBP5	6.50	2.59
CS-A28BD2P/CU-C28BBP5	7.30	2.69
CS-A28BD2P/CU-C28BBP8	7.30	2.69
CS-A34BD2P/CU-C34BBP5	10.45	3.95
CS-A34BD2P/CU-C34BBP8	10.45	3.65
CS-A43BD2P/CU-C43BBP8	13.00	4.35
CS-A50BD2P/CU-C50BBP8	14.50	5.10

1.3. HEATING CAPACITY CURVE, HEATING POWER CONSUMPTION CURVE (HEAT PUMP MODEL ONLY)

IRATED HEATING CAPACITY, RATED HEATING POWER CONSUMPTION

MODEL NAME	RATED HEATING STANDARD	
	CAPACITY(kW)	POWER CONSUMPTION(kW)
CS-A24BD2P/CU-A24BBP5	7.10	2.50
CS-A28BD2P/CU-A28BBP5	7.75	2.61
CS-A28BD2P/CU-A28BBP8	7.75	2.61
CS-A34BD2P/CU-A34BBP5	11.20	3.55
CS-A34BD2P/CU-A34BBP8	11.20	3.40
CS-A43BD2P/CU-A43BBP8	14.20	3.90
CS-A50BD2P/CU-A50BBP8	15.70	4.70