

CKC Outdoor Units

CKC OUTDOOR UNITS ARE DESIGNED TO COMPLIMENT THE MARSTAIR RANGE OF SPLIT SYSTEM AIR HANDLING UNITS, BUT ARE EQUALLY SUITED FOR USE IN A WIDE VARIETY OF VENTILATION AND AIR CONDITIONING APPLICATIONS



Suitable for wall mounting or free standing, these stylish and efficient outdoor units incorporate the latest technology to deliver low sound levels.

Specification

- Easy access for installation and service
- Suction and liquid service valves
- Fan speed head pressure control
- Low ambient start timer
- 3-minute delay timer / random start timer
- Crankcase Heater (reciprocating only)
- Contactor
- LP switch (auto)
- HP switch (auto)
- Up to 80m pipe runs
(equivalent length including 20m lift available)
(Models 15-20 up to 50m)
- CKC 15-40 (Reciprocation compressors)
- CKC 50-240 (Scroll compressors)
- Supplied with a Nitrogen holding charge

Options

- CSR 1 Phase
- Overload on 1 Phase (Standard on 3ph)
- Wall mounting kit
- Volt free relay / HP switch (with alarm output)
- Isolator
- Compressor jacket
- Noise attenuation kit



For further information please contact our Technical Department on 01484 405600

R407C Technical Information - CKC 15-200 Cooling Capacities

MODEL	AIR ON TO CONDENSER °C	SATURATED SUCTION TEMPERATURE °C											
		-2.5		0		2.5		5		7.5		10	
		COOLING CAPACITY AND POWER INPUT kW											
		CAP	POWER	CAP	POWER	CAP	POWER	CAP	POWER	CAP	POWER	CAP	POWER
CKC 15	25	1.93	0.69	2.14	0.70	2.35	0.70	2.55	0.71	2.76	0.72	2.96	0.72
	30	1.81	0.74	2.01	0.75	2.21	0.76	2.41	0.77	2.61	0.78	2.81	0.79
	35	1.69	0.79	1.89	0.80	2.08	0.81	2.27	0.83	2.46	0.84	2.65	0.86
	40	1.58	0.84	1.76	0.86	1.95	0.88	2.13	0.90	2.32	0.91	2.50	0.93
	45	1.46	0.90	1.64	0.92	1.82	0.94	2.00	0.97	2.18	0.99	2.36	1.01
CKC 20	25	2.25	0.08	2.49	0.81	2.71	0.81	2.96	0.82	3.22	0.84	3.49	0.85
	30	2.08	0.84	2.31	0.86	2.54	0.87	2.78	0.89	3.01	0.90	3.26	0.92
	35	1.94	0.90	2.16	0.92	2.38	0.93	2.61	0.95	2.84	0.97	3.05	0.98
	40	1.83	0.98	2.04	0.99	2.25	1.01	2.46	1.03	2.66	1.05	2.86	1.06
	45	1.73	1.07	1.92	1.08	2.11	1.09	2.30	1.11	2.49	1.13	2.68	1.15
CKC 30	25	2.87	1.02	3.22	1.05	3.53	1.06	3.74	1.04	4.12	1.07	4.49	1.10
	30	2.71	1.10	3.06	1.13	3.27	1.12	3.51	1.12	3.84	1.15	4.19	1.18
	35	2.59	1.20	2.82	1.20	3.03	1.19	3.36	1.23	3.68	1.26	3.79	1.22
	40	2.38	1.27	2.17	1.32	2.80	1.26	3.12	1.31	3.32	1.31	3.62	1.35
	45	2.11	1.30	2.43	1.36	2.53	1.31	2.84	1.37	-	-	-	-
CKC 40	25	3.38	1.13	3.70	1.15	4.02	1.16	4.35	1.18	4.67	1.19	5.00	1.21
	30	3.19	1.22	3.50	1.24	3.81	1.26	4.11	1.28	4.42	1.30	4.73	1.32
	35	3.01	1.31	3.30	1.33	3.59	1.36	3.88	1.38	4.17	1.41	4.46	1.43
	40	2.84	1.40	3.11	1.43	3.37	1.47	3.63	1.50	3.89	1.53	4.15	1.56
	45	2.68	1.51	2.91	1.55	3.15	1.58	3.38	1.62	3.61	1.66	3.85	1.70
CKC 50	25	4.57	1.87	5.09	2.03	5.51	2.14	5.97	2.25	6.41	2.38	6.79	2.51
	30	4.34	1.95	4.75	2.09	5.25	2.19	5.63	2.32	6.04	2.45	6.49	2.58
	35	3.94	2.00	4.42	2.13	4.91	2.24	5.29	2.36	5.75	2.49	6.09	2.65
	40	3.76	2.05	4.22	2.18	4.58	2.29	5.04	2.41	5.39	2.58	5.69	2.74
	45	3.50	2.12	3.93	2.22	4.37	2.35	4.69	2.48	-	-	-	-
CKC 60	25	5.43	2.22	6.02	2.27	6.61	2.31	7.21	2.37	7.80	2.42	8.39	2.47
	30	5.06	2.46	5.64	2.51	6.22	2.56	6.80	2.62	7.39	2.67	7.97	2.73
	35	4.77	2.72	5.33	2.78	5.89	2.83	6.45	2.89	7.01	2.95	7.57	3.01
	40	4.39	3.01	4.91	3.07	5.43	3.13	5.95	3.19	6.47	3.26	6.99	3.32
	45	4.02	3.32	4.49	3.40	4.97	3.46	5.45	3.53	5.93	3.60	-	-
CKC 80	25	6.07	2.26	6.64	2.31	7.21	2.37	7.79	2.42	8.36	2.47	8.93	2.53
	30	5.68	2.49	6.23	2.54	6.77	2.60	7.32	2.66	7.87	2.71	8.42	2.77
	35	5.28	2.72	5.81	2.78	6.33	2.83	6.86	2.89	7.38	2.95	7.91	3.01
	40	4.90	3.03	5.39	3.10	5.88	3.16	6.37	3.23	6.86	3.29	7.35	3.36
	45	4.52	3.35	4.97	3.42	5.43	3.49	5.88	3.56	6.33	3.63	-	-
CKC 90	25	7.16	2.89	7.71	2.95	8.26	3.01	8.81	3.06	9.36	3.12	9.91	3.18
	30	6.69	3.17	7.21	3.24	7.74	3.30	8.27	3.36	8.79	3.42	9.32	3.48
	35	6.22	3.46	6.72	3.52	7.22	3.59	7.72	3.65	8.23	3.72	8.73	3.78
	40	5.80	3.79	6.27	3.86	6.74	3.93	7.22	4.00	7.69	4.07	8.17	4.14
	45	5.38	4.12	5.82	4.20	6.27	4.27	6.71	4.34	7.16	4.42	7.60	4.49
CKC 100	25	7.87	3.18	9.10	3.42	10.40	3.66	11.52	3.87	12.61	3.87	13.83	3.86
	30	7.60	3.23	8.73	3.88	9.68	3.81	10.71	4.05	11.66	4.18	12.71	4.29

	35	7.00	3.24	8.06	3.56	9.03	3.87	9.92	4.13	10.91	4.31	11.89	4.52
	40	6.17	3.16	7.12	3.54	8.14	3.86	8.91	4.17	9.86	4.47	10.80	4.75
	45	5.12	2.95	6.18	3.47	7.07	3.89	7.89	4.25	-	-	-	-
CKC 130	**25**	9.69	3.14	10.71	3.46	11.72	3.73	12.76	4.01	13.71	4.28	14.56	4.54
	30	9.09	3.16	10.07	3.46	11.11	3.74	12.12	4.08	13.05	4.36	13.93	4.68
	35	8.27	3.27	9.32	3.61	10.27	3.91	11.34	4.25	12.41	4.56	13.29	4.91
	40	7.61	3.29	8.58	3.65	9.54	4.01	10.44	4.31	11.46	4.68	-	-
	45	6.89	3.34	7.63	3.68	8.68	4.09	-	-	-	-	-	-
CKC 150	**25**	11.06	3.73	12.26	4.13	13.26	4.46	14.30	4.82	15.24	5.15	16.19	5.47
	30	10.42	3.75	11.52	4.14	12.56	4.48	13.57	4.88	14.56	5.24	15.48	5.63
	35	9.46	3.89	10.59	4.32	11.61	4.68	12.69	5.08	13.77	5.47	14.77	5.90
	40	8.70	3.90	9.79	4.35	10.76	4.78	11.67	5.15	-	-	-	-
	45	7.90	3.98	8.89	4.40	-	-	-	-	-	-		-
CKC 165	**25**	11.97	4.13	13.30	4.57	14.29	4.95	15.32	5.36	16.26	5.73	17.28	6.09
	30	11.31	4.15	12.49	4.59	13.52	4.98	14.54	5.42	15.57	5.82	16.51	6.26
	35	10.26	4.30	11.44	4.79	12.51	5.19	13.59	5.64	14.67	6.08	15.75	6.56
	40	9.43	4.31	10.60	4.81	11.58	5.29	12.49	5.17	-	-	-	-
	45	8.57	4.41	-	-	-	-	-	-	-	-	-	-
CKC 180	**25**	13.42	4.71	14.97	5.12	16.28	5.45	17.63	5.79	18.86	6.13	20.27	6.47
	30	12.74	4.75	14.13	5.16	15.39	5.51	16.76	5.90	18.08	6.26	19.34	6.64
	35	11.52	4.94	12.94	5.38	14.34	5.76	15.67	6.16	17.12	6.56	18.51	6.98
	40	10.63	4.96	11.97	5.44	13.28	5.89	14.43	6.26	15.95	6.74	17.31	7.18
	45	9.72	5.10	10.95	5.61	12.17	6.09	13.31	6.49	14.63	6.98	-	-
CKC 200	**25**	15.28	5.37	16.96	5.90	18.96	6.47	21.12	6.87	22.34	7.28	23.48	7.65
	30	14.42	5.41	16.01	5.92	17.73	6.41	19.75	6.96	21.18	7.40	22.52	7.88
	35	13.13	5.51	14.68	6.17	16.49	6.68	18.30	7.23	19.88	7.74	21.48	8.27
	40	12.03	5.62	13.59	6.24	15.13	6.82	16.58	7.31	18.33	7.92	-	-
	45	10.99	5.78	12.36	6.42	13.80	7.03	-	-	-	-	-	-

***Please note CKC 220 & CKC 240 are R513A only**

R513A Technical Information - CKC 15-240 Cooling Capacities

Model	Air on °C	Evaporating Temperature										
		-15	-12.5	-10	-7.5	-5	-2.5	0	2.5	5	7.5	10
		TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
CKC45 R134A / R513A ZR18	30	1.14	1.31	1.50	1.70	1.93	2.20	2.44	2.72	3.02	3.34	3.67
	34	1.08	1.24	1.42	1.62	1.83	2.07	2.32	2.59	2.88	3.18	3.51
	38	1.01	1.17	1.34	1.53	1.73	1.96	2.20	2.46	2.74	3.03	3.34
	41		1.12	1.28	1.46	1.66	1.88	2.11	2.36	2.63	2.91	3.22
	45			1.19	1.37	1.56	1.77	1.99	2.23	2.49	2.76	3.05
	50				1.25	1.43	1.62	1.84	2.06	2.30	2.56	2.84
	55					1.29	1.47	1.67	1.89	2.11	2.36	2.62
CKC50 R134A / R513AZR24	30	1.53	1.75	2.00	2.28	2.58	2.94	3.27	3.65	4.04	4.47	4.92
	34	1.44	1.66	1.90	2.17	2.45	2.77	3.10	3.47	3.85	4.27	4.70
	38	1.36	1.57	1.80	2.05	2.32	2.62	2.95	3.29	3.67	4.06	4.48
	41		1.50	1.71	1.96	2.23	2.52	2.83	3.16	3.53	3.90	4.31
	45			1.60	1.83	2.09	2.37	2.67	2.99	3.34	3.70	4.09
	50				1.67	1.92	2.18	2.46	2.76	3.09	3.43	3.80
	55					1.73	1.97	2.24	2.53	2.83	3.16	3.51
CKC60 R134A / R513A ZR28	30	1.78	2.04	2.33	2.65	3.00	3.42	3.80	4.24	4.70	5.20	5.72
	34	1.68	1.93	2.21	2.52	2.85	3.22	3.61	4.04	4.48	4.96	5.46
	38	1.58	1.82	2.09	2.38	2.70	3.05	3.43	3.83	4.27	4.72	5.21
	41		1.74	1.99	2.28	2.59	2.93	3.29	3.68	4.10	4.54	5.01
	45			1.86	2.13	2.43	2.75	3.10	3.48	3.88	4.30	4.75
	50				1.94	2.23	2.53	2.86	3.21	3.59	3.99	4.42
	55					2.01	2.29	2.60	2.94	3.29	3.67	4.08
CKC80 R134A / R513A ZR34	30	2.22	2.52	2.85	3.21	3.60	4.02	4.48	4.97	5.51	6.08	6.70
	34	2.09	2.38	2.70	3.04	3.42	3.83	4.24	4.74	5.26	5.81	6.40
	38	1.96	2.24	2.55	2.88	3.24	3.63	4.05	4.51	5.00	5.53	6.10
	41		2.14	2.43	2.75	3.10	3.48	3.88	4.33	4.81	5.32	5.88
	45			2.27	2.58	2.91	3.24	3.66	4.08	4.54	5.03	5.57
	50				2.36	2.67	3.01	3.37	3.77	4.20	4.67	5.17
	55					2.42	2.74	3.08	3.45	3.85	4.29	4.76
CKC90 R134A / R513A ZR40	30	2.46	2.83	2.24	3.67	4.14	4.65	5.19	5.77	6.39	7.04	7.73
	34	2.30	2.66	3.04	3.47	3.92	4.41	4.94	5.50	6.10	6.74	7.42
	38	2.15	2.48	2.86	3.26	3.70	4.18	3.70	5.23	5.82	6.44	7.10
	41		2.36	2.72	3.11	2.53	4.00	4.49	5.03	5.60	6.21	6.85
	45			2.53	2.90	3.31	3.75	4.23	4.74	5.29	5.88	6.51
	50				2.63	3.02	3.43	3.88	4.37	4.90	5.46	6.06
	55					2.71	3.09	3.52	3.97	4.47	5.00	5.57
CKC100	30	3.09	3.53	4.01	4.52	5.07	5.67	6.31	7.00	7.76	8.57	9.44

R134A / R513A ZR48	34	2.88	3.31	3.78	4.27	4.81	5.38	6.00	6.67	7.39	8.17	9.01
	38	2.65	3.08	3.53	4.01	4.53	5.08	5.68	6.32	7.01	7.76	8.56
	41		2.89	3.34	3.81	4.31	4.85	5.43	6.05	6.72	7.44	8.22
	45			3.07	3.53	4.01	4.53	5.09	2.56	6.33	7.02	7.76
	50				3.16	3.62	4.12	4.65	5.21	5.82	6.47	7.17
	55					3.22	3.69	4.19	4.72	5.29	5.91	6.57

Model	Air on °C	Evaporating Temperature										
		-15	-12.5	-10	-7.5	-5	-2.5	0	2.5	5	7.5	10
		TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
CKC130 R134A / R513A ZR57	30	3.43	3.92	4.45	5.02	5.63	6.29	7.00	7.77	8.61	9.51	10.48
	34	3.20	3.67	4.20	4.74	5.34	5.97	6.66	7.40	8.20	9.07	10.00
	38	2.94	3.42	3.92	4.45	5.03	5.64	6.30	7.02	7.78	8.61	9.50
	41		3.21	3.71	4.23	4.78	5.38	6.03	6.72	7.46	8.26	9.12
	45			3.41	3.92	4.45	5.03	5.65	2.84	7.03	7.79	8.61
	50				3.51	4.02	4.57	5.16	5.78	6.46	7.18	7.96
	55					3.57	4.10	4.65	5.24	5.87	6.56	7.29
CKC150 R134A / R513A ZR72	30	4.02	4.59	5.22	5.88	6.60	7.38	8.21	9.11	10.10	11.15	12.28
	34	5.02	4.31	4.92	5.56	6.26	7.00	7.81	8.68	9.61	10.63	11.72
	38	6.02	4.01	4.59	5.22	5.89	6.61	7.39	8.22	9.12	10.10	11.14
	41		3.76	4.35	4.96	5.61	6.31	7.06	7.87	8.74	9.68	10.69
	45			3.99	4.59	5.22	5.89	6.62	3.33	8.24	9.13	10.10
	50				4.11	4.71	5.36	6.05	6.78	7.57	8.42	9.33
	55					4.19	4.80	5.45	6.14	6.88	7.69	8.55
CKC165 R134A / R513A ZR72	30	4.80	5.44	6.14	6.91	7.75	8.66	9.65	10.70	11.85	13.10	14.40
	34	4.52	5.13	5.80	6.53	7.34	8.21	9.16	10.20	11.30	12.50	13.75
	38	4.25	4.82	5.45	6.15	6.92	7.75	9.66	9.65	10.70	11.85	13.10
	41		4.59	5.19	5.86	6.60	7.41	8.29	9.24	10.25	11.40	12.55
	45			4.85	5.48	6.17	6.94	7.77	8.68	9.66	10.70	11.85
	50				5.00	5.64	6.34	7.12	7.97	8.89	9.89	10.95
	55					5.10	5.75	6.46	7.24	8.10	9.03	10.05
CKC180 R134A / R513A ZR81	30	5.51	6.21	6.98	7.82	8.73	9.71	10.80	11.95	13.15	14.50	15.95
	34	5.22	5.90	6.64	7.44	8.31	9.26	10.30	11.40	12.60	13.85	15.25
	38	4.92	5.57	6.28	7.05	7.89	8.80	9.78	10.85	12.00	13.20	14.55

	41		5.33	6.01	6.76	7.57	8.45	9.40	10.40	11.55	12.75	14.00
	45			5.64	6.36	7.13	7.97	8.87	9.85	10.90	12.05	13.30
	50				5.84	6.57	7.35	8.21	9.13	10.10	11.20	12.35
	55					5.99	6.72	7.52	8.38	9.31	10.30	11.40
CKC200 R134A / R513A ZR90	**30**	6.07	6.89	7.80	8.80	9.90	11.06	12.24	13.92	15.75	17.18	18.48
	34	5.69	6.48	7.35	8.30	9.35	10.48	11.67	13.13	14.85	16.22	17.76
	38	5.46	6.21	7.04	7.94	8.93	10.03	11.10	12.48	14.01	15.33	16.88
	41		5.93	6.71	7.58	8.53	9.56	10.67	11.85	13.27	14.65	16.28
	45			6.34	7.16	8.04	9.01	10.01	11.17	12.36	13.71	15.48
	50				6.57	7.40	8.30	9.29	10.28	11.29	12.61	14.39
	55					6.74	7.58	8.50	9.37	10.26	11.48	13.30
CKC220 R134A / R513A ZR108	**30**	7.59	8.56	9.62	10.78	12.03	13.38	14.88	16.47	18.12	19.98	21.98
	34	7.19	8.13	9.15	10.25	11.45	12.76	14.19	15.71	17.36	19.09	21.01
	38	6.78	7.68	8.65	9.71	10.87	12.13	13.48	14.95	16.54	18.19	20.05
	41		7.34	8.28	9.32	10.43	11.64	12.95	14.33	15.92	17.57	19.29
	45			7.77	8.76	9.83	10.98	12.22	13.57	15.02	16.60	18.33
	50				8.05	9.05	10.13	11.31	12.58	13.92	15.43	17.02
	55					8.25	9.26	10.36	11.55	12.83	14.19	15.71
CKC240 R134A / R513A ZR125	**30**			10.47	11.73	13.10	14.57	16.20	17.93	19.73	21.75	23.93
	34	7.83	8.85	9.96	11.16	12.47	13.89	15.45	17.10	18.90	20.78	22.88
	38	7.36	8.36	9.42	10.58	11.84	13.20	14.67	16.28	18.00	19.80	21.83
	41		8.00	9.02	10.14	11.36	12.68	14.10	15.60	17.33	19.13	21.00
	45			8.46	9.54	10.70	11.96	13.31	14.78	16.35	18.08	19.95
	50				8.76	9.86	11.03	12.32	13.70	15.15	16.80	18.53
	55					8.99	10.08	11.28	12.57	13.97	15.45	17.10

Sound Pressure Levels

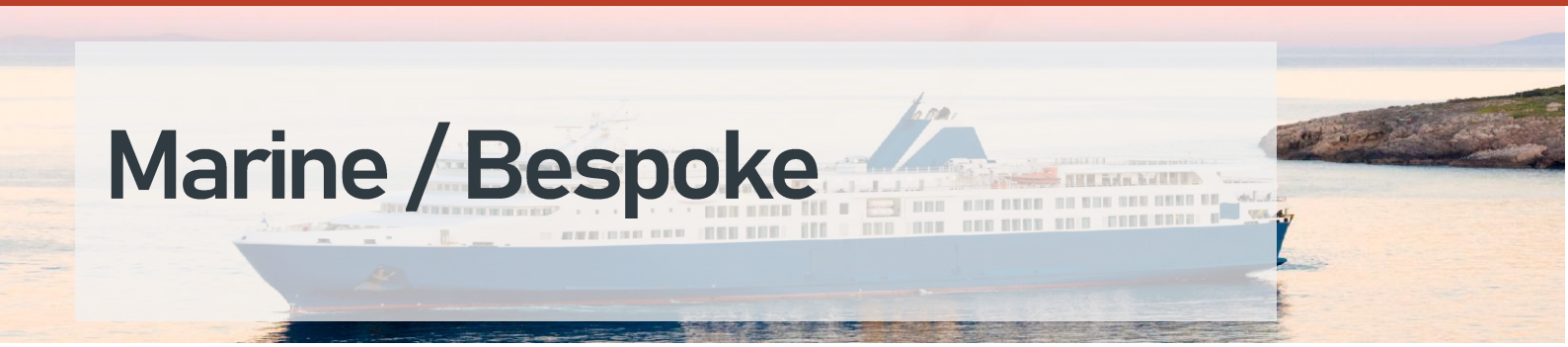
SOUND PRESSURE LEVELS								
MODEL	HIGH dBA	LOW dBA	MODEL	HIGH dBA	LOW dBA	MODEL	HIGH dBA	LOW dBA
CKC 15	49	44	CKC 80	49	47	CKC 220	62	56
CKC 20	49	44	CKC 90	52	47	CKC 240	62	56
CKC 20	50	44	CKC 100	53	50			
CKC 40	49	44	CKC130	52	50			
CKC 50	49	47	CKC165	57	53			
CKC 60	50	49	CKC200	62	56			

Sound pressure levels measured at 3m distance from unit in anechoic condition

Dimensions & Weights

DIMENSIONS AND WEIGHTS											
MODEL	WIDTH (mm)	DEPTH (mm)	HEIGHT (mm)	WEIGHT KG		MODEL	WIDTH (mm)*	DEPTH (mm)	HEIGHT (mm)**	WEIGHT KG	
				1Ph	3Ph					1Ph	3Ph
CKC 15	900	300	560	45	-	CKC 90	1000	350	760	76	73
CKC 20	900	300	560	46	-	CKC 100	1000	350	760	-	81
CKC 30	900	300	560	48	48	CKC 130	1000	425	1020	-	101
CKC 40	900	300	560	53	53	CKC 150	1000	425	1020	-	103
CKC 50	1000	300	660	64	62	CKC 165	1000	425	1020	-	103
CKC 60	1000	300	660	65	63	CKC 180	1100	425	1215	-	118
CKC 80	1000	300	660	66	64	CKC 200	1100	425	1215	-	173
						CKC 220	1100	425	1275	-	140
						CKC 240	1100	425	1275	-	140

* Does not include service valves,
** Add 60mm for feet



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