



CIAC
Air conditioning

FREEDOM
INVERTER | B SERIES



INVERTER
TECHNOLOGY

R-410A
REFRIGERANT



AHRI CERTIFIED



FLOOR CEILING

- » Wired Controller
- » Build-in Pump
- » Central Controller
- » Digital Display
- » Long Distance Alarm
- » Anti-Cold Wind Switch
- » ON/OFF Controller
- » Emergency Using
- » Blue anti-corrosion treatment

R-410A
REFRIGERANT



Indoor/Outdoor		CP4100018-M/NTH	CP4100024-M/NTH	CP4100036-M/NTH	CP4100048-M/NTH	CP4100064-M/NTH
Power supply (Indoor)	V, Ph, Hz	220-230V, 1Ph, 60Hz	220-230V, 1Ph, 60Hz	208-230V, 1Ph, 60Hz	220-230V, 1Ph, 60Hz	220-230V, 1Ph, 60Hz
Power supply (Outdoor)	V, Ph, Hz	220-230V, 1Ph, 60Hz	220-230V, 1Ph, 60Hz	208-230V, 1Ph, 60Hz	220-230V, 1Ph, 60Hz	220-230V, 1Ph, 60Hz
Cooling	Capacity (range)	Btu/h	10000(-)	14000(-)	18000(-)	24000(-)
	Input	W	1440	1920	2500	3100
	Rated current	A	6.6	8.7	11.2	14.2
	SEER	Btu/h	12.5	12.5	9	9.5
Heating	Capacity (range)	Btu/h	10000(-)	14000(-)	18000(-)	24000(-)
	Input	W	1830	1840	1870	1870
	Rated current	A	7.48	8.44	8.2	8.2
	COP	WW	3.22	3.21	2.60	3.16
Heating at 17F (-8.3C)	Rated capacity	Btu/h	-	-	-	35000
	Rated capacity	Btu/h	10633	11700	12200	14000
	COP	WW	-	-	-	2.0
	Rated capacity	Btu/h	-	-	-	28000
Heating at 13F (-25C)	Rated capacity	Btu/h	-	-	-	21000
	Rated capacity	Btu/h	-	-	-	-
	Rated capacity	Btu/h	-	-	-	17000
	Rated capacity	Btu/h	-	-	-	-
MINIMUM CIRCUIT AMPERITY (Indoor)	A	1.0	3.5	3.9	2.3	3.0
	A	1.8	18.2	18.0	18.0	18
Indoor fan motor	Model		ZFN-05-B-1	ZFN-05-B-1	ZFN-115-B-1	ZFN-05-B-1
	Capacity	W	100.8	180.0	130.0	88.0
	Winding Resistance	A	1.5	-	-	-
	Speed (RPM/Lo)	r/min	900/850	1300/1250	1300/1250	1300/1250
Indoor air flow (H/M/L)	m ³ /h	332/325/7.15	1200/1204/6117	1762/1528/1894	2500/1900/1700	2353/1746/1352
	CFM	648/2448/2942/648	2580/2708/3498/34	1038/4781/1060/3788	1332/6411/766/1000/658	1384/1232/827/629
Indoor noise level (H/M/L)	dB(A)	44.5/41.5/38.5	50/47/38.5	51.0/40.5	55.5/40.5	55.0/39
	Dimension (W/D/H)	mm	1066/752/235	1066/752/235	1280/752/235	1624/752/235
	Weight	kg	42.0/42.8/37.4/26	42.0/42.8/37.4/26	50.9/42.8/37.4/26	54.9/42.8/37.4/26
	Net Gross weight	kg	38.0/31	38.0/31	31.3/27	38.0/31
Drainage water pipe Ø	mm	Ø20/Ø25	Ø20/Ø25	Ø20/Ø25	Ø20/Ø25	Ø20/Ø25
	Ø	102/220/252	102/220/252	82/190/212	72/147/167	72/147/167
MINIMUM CIRCUIT AMPERITY (Outdoor)	A	15.3	18	35	35	0
	A	22	28	80	80	0
Compressor	Model	40M13503LPE	47P23802JUMF	47P11004JUMF	47P42801JUMF	47P42801JUMF
	Type	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
	Capacity	W	4555	7135	9490	15100
	Rated current (FLA)	A	1836	1874	2600	3420
Outdoor fan motor	Model	ZFN-05-B-2	ZFN-120-B-2	ZFN-120-B-2	ZFN-05-B-2-5	ZFN-05-B-2-5
	Capacity	W	111.5	193.0	193.0	138.0
	Winding Resistance	A	0.6	0.6	0.6	0
	Speed	r/min	900/750/750	900/750/750	900/750	900/650
Outdoor air flow	m ³ /h	2900	3800	3300	7800	7800
	CFM	1470.88	2230.28	1487.68	4888.80	4811.28
	dB(A)	67.5	68.2	62.5	65	65
	Dimension (W/D/H)	mm	840/840/202	840/1040/18	840/1040/18	840/1040/18
Outdoor noise level	Dimension (W/D/H)	mm	33.27/14.28/27.84	37.24/16.14/31.09	37.24/16.14/31.09	37.48/16.34/31.42
	Weight	kg	865/350/715	1290/550/885	1290/550/885	1890/550/1160
	Net Gross weight	kg	37.89/15.84/30.12	42.91/18.94/24.45	42.91/18.94/24.45	43.11/18.49/24.27
	Net Gross weight	kg	47.7/51	84.8/9	87.4/75	102.1/115.4
Refrigerant type	oz	R410A/88.8	R410A/82.8	R410A/138	R410A/148	R410A/163
	oz	20	20	30	30	30
Additional charge for each F	oz	0.21	0.21	0.30	0.32	0.32
	PSIG	550/340	550/340	550/340	550/340	550/340
Design pressure	Liquid side (Gas side)	mm (inch)	6.35mm (1/4")/12.7mm (1/2")	6.35mm (1/4")/12.7mm (1/2")	6.35mm (1/4")/12.7mm (1/2")	6.35mm (1/4")/12.7mm (1/2")
	Max. refrigerant pipe length	m	80	80	80	80
	Max. refrigerant pipe length	ft	263.28	263.28	263.28	263.28
	Max. difference in level	m	30	30	30	30
Room temperature	Indoor (cooling/heating)	°F	17~32/1~30	17~32/1~30	17~32/1~30	17~32/1~30
	Outdoor (cooling/heating)	°F	-28~-50/23~38	-28~-50/23~38	-28~-50/23~38	-28~-50/23~38
Application area (Cooling Standard)	m ²	24~38	32~47	48~70	66~94	72~106
	sq ft	258.23~407.74	344.43~506.89	516.87~753.47	708.88~1011.81	771.02~1140.87
Application area (Heating Standard)	Outdoor unit	102/215/215	44/95/131	44/95/130	22/48/60	22/48/60



CASSETTE

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Indoor		CA438099-C2NH	CA438012-C2NH	CA438018-C2NH	CA438024-C2NH	CA438030-C2NH	CA438045-C2NH	
Outdoor		CA438099-40NH	CA438012-40NH	CA438018-40NH	CA438024-40NH	CA438030-40NH	CA438045-40NH	
Power supply (Indoor)	V, Ph, Hz	208-230V/1Ph, 60Hz	208-230V/1Ph, 60Hz	208-230V/1Ph, 60Hz	208-230V/1Ph, 60Hz	208-230V/1Ph, 60Hz	208-230V/1Ph, 60Hz	
Power supply (Outdoor)	V, Ph, Hz	208-230V/1Ph, 60Hz	208-230V/1Ph, 60Hz	208-230V/1Ph, 60Hz	208-230V/1Ph, 60Hz	208-230V/1Ph, 60Hz	208-230V/1Ph, 60Hz	
Cooling	Capacity (range)	8000(-)	12000(-)	18000(-)	24000(-)	30000(-)	48000(-)	
	Input	882	1348	1440	1820	2080	3393	
	Rated current	A	3.17	3.9	6.68	9.78	23.1	
	ODR	Btu/h	13	14	12.5	12.5	9.0	9.5
Heating	Capacity (range)	10000(+)	12000(+)	18000(+)	24400(+)	30000(+)	58000(+)	
	Input	810	951	1638	2218	3700	4727	
	Rated current	A	4	4.3	7.49	10.18	16.93	21.8
	COP	WW	3.22	3.3	3.22	3.22	3.01	3.18
Heating at 6F (-15C)	Rated capacity	Btu/h	9818	9468	9410	10411	20000	39410
	MINIMUM CIRCUIT AMPACITY (Indoor)	A	1.2	/	/	2.5	1.9	2
Indoor fan motor	Model	ZKPP-48-0-1	ZKPP-48-0-1	ZKPP-48-0-1	ZKPP-48-0-1	ZKPP-124-0-2	ZKPP-170-0-1	
	Input	W	45.0	45.0	58.2	141.0	232.0	
	RLA	A	/	/	0.532	0.92	/	
	Speed(Hz/Min)	rpm	800/520/490	/	/	600/520/490	1200/520/490	950/800/800/100
Indoor air flow (HMLL)	m ³ /h	800/520/490	/	/	1162/1042/918	188/1162/1447	2922/1759/1450	
Indoor air flow (HMLL)	CFM	352/94/305/88/270/39	/	/	503/338/12/34/54/30	1004/71/657/65/651/10	1176/47/1022/41/652/94	
Indoor unit	Indoor noise level (HMLL)	dB(A)	36.5/34.5/30.5	41/38.5/33.5	41/38.5/33.5	40.5/40.5/40.5	52.5/48.5	54.5/51.5/48.5
	Dimensions(W*D*H)	mm	570x570x260	570x570x260	570x570x260	840x840x235	840x840x235	940x940x287
	Dimensions(W*D*H)	inch	22.44x22.44x10.24	22.44x22.44x10.24	22.44x22.44x10.24	33.07x33.07x9.25	33.07x33.07x9.25	37.01x37.01x11.30
	Packing (W*D*H)	mm	663x663x17	663x663x17	663x663x17	900x900x225	900x900x225	900x900x307
	Packing (W*D*H)	inch	26.08x26.08x0.67	26.08x26.08x0.67	26.08x26.08x0.67	35.43x35.43x8.86	35.43x35.43x8.86	35.43x35.43x12.10
	Net/Gross weight	Kg	14.5/17.3	14.5/18.8	14.5/18.8	21.2/4.8	26.4/30	28.1/32.8
	Net/Gross weight	lbs	31.97/38.14	31.97/41.61	31.97/41.61	46.3/10.6	58.2/66.14	61.7/72.53
	Drainage water pipe dia	mm	OD:25mm	OD:25mm	OD:25mm	OD:25mm	OD:25mm	OD:25mm
Compressor	Model	ZKRV-34-0-1-3	ZKRV-34-0-1-3	ZKRV-34-0-1-3	ZKRV-120-0-2	ZKRV-120-0-2	ZKRV-120-0-2	
	Input	W	/	/	150.0	150.0	126.0	
	RLA	A	0.4	0.4	0.6	0.6	0.6	
	Speed	rpm	800/750/650	800/750/650	800/750/650	800/750/650	800/750/650	800/750/650
Outdoor fan motor	Outdoor air flow	m ³ /h	2000	2000	3800	3500	7450	
	Outdoor air flow	CFM	1176/47	1176/47	2238/28	1487/65	4900/100	
	Outdoor noise level	dB(A)	52	56	57.5	58.5	63.5	67.5
	Outdoor unit	Dimension(W*D*H)	mm	770x500x595	800x535x594	800x535x594	940x840x610	940x840x610
Dimension(W*D*H)		inch	30.31x19.68x23.81	31.50x21.06x23.35	31.50x21.06x23.35	37.24x33.07x24.01	37.24x33.07x24.01	38.66x45.28x21.06
Packing (W*D*H)		mm	800x845x695	800x845x695	800x845x695	1090x990x895	1090x990x895	1090x990x1140
Packing (W*D*H)		inch	31.50x33.27x27.36	31.50x33.27x27.36	31.50x33.27x27.36	42.91x39.01x35.24	42.91x39.01x35.24	42.91x39.01x44.88
Net/Gross weight		Kg	30.5/32.5	36.5/38.1	36.5/38.1	64/60	67.4/73	101/115
Net/Gross weight		lbs	67.24/71.85	80.47/84.20	80.47/84.20	141.08/132.12	148.58/160.94	222.86/253.83
Refrigerant type		oz	R410A/38.8	R410A/40.8	R410A/40.8	R410A/83.9	R410A/103	R410A/149
Refrigerant precharge		lb	1.0	1.0	1.0	2.0	2.0	3.0
Refrigerant piping	Additional charge for each lb	oz	0.18	0.18	0.21	0.32	0.32	
	Design pressure	Psi	550/940	550/940	550/940	550/940	550/940	550/940
	Liquid side Gas side	mm(inch)	3/8(1.315) 1/2(1.27)	3/8(1.315) 1/2(1.27)	3/8(1.315) 1/2(1.27)	3/8(1.315) 1/2(1.27)	3/8(1.315) 1/2(1.27)	3/8(1.315) 1/2(1.27)
	Max. refrigerant pipe length	m	25	25	30	65	65	65
Room temperature	Max. refrigerant pipe length	ft	82.02	82.02	98.43	213.28	213.28	213.28
	Max. difference in level	m	10	10	10	38	38	38
	Max. difference in level	ft	32.81	32.81	32.81	124.34	124.34	124.34
	Indoor(cooling/heating)	°F	17~32.0~30	17~32.0~30	17~32.0~30	17~32.0~30	17~32.0~30	17~32.0~30
Application area (Cooling Standard)	Outdoor(cooling/heating)	°F	-25~-50/-25~-30	-25~-50/-25~-30	-25~-50/-25~-30	-25~-50/-25~-30	-25~-50/-25~-30	-25~-50/-25~-30
	Application area (cooling standard)	sq.ft	126.17~183.75	172.22~247.57	259.33~370.74	394.44~520.60	518.47~752.47	888.50~1311.81
CFM per 10' JAT (40Hz)	Outdoor unit	188/344/344	104/218/292	/	449/6158	449/6138	2248/48	



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Indoor Outdoor		0418R014-4BPH 0418R014-4BPH	0418R012-4BPH 0418R012-4BPH	0418R011-4BPH 0418R011-4BPH	0418R004-4BPH 0418R004-4BPH	0418R016-4BPH 0418R016-4BPH	0418R041-4BPH 0418R041-4BPH	0418R018-4BPH 0418R018-4BPH	
Power supply (Indoor)	1-Ph-115	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	
Power supply (Outdoor)	3-Ph-380	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	
Cooling	Capacity (range)	18000-30000 (18000)	12000-21000 (12000)	18000-30000 (18000)	24000-32000 (24000)	30000-42000 (30000)	48000-60000 (48000)	60000-72000 (60000)	
	Inlet	W	597	440	440	440	440	440	
	Rated current	A	3.08	4.4	6.0	5.8	16.3	22.4	26.0
	EEA	Watt	13.5	12.5	12.5	12.5	9	9.2	18
	SEER	Watt	20.5	21.8	19	21.8	16.3	17.4	18
Heating	Capacity (range)	18000-30000 (18000)	12000-21000 (12000)	18000-30000 (18000)	24000-32000 (24000)	30000-42000 (30000)	48000-60000 (48000)	60000-72000 (60000)	
	Inlet	W	597	1672	1680	2028	3476	4128	5008
	Rated current	A	3.8	9.26	11.1	9.3	16.8	18.3	23.1
	CCP	Watt	2.62	3.28	3.14	3.30	3.37	3.82	3.48
	HSPFL	Watt	11.8	11.8	10.8	11	10.3	10.3	8.0
Cooling at 5F (-15.0C)	Rated capacity	Watt	12000	12000	12000	24000	30000	48000	60000
	Heating at 17F (-8.33C)	Watt	6786	8800	10800	17100	21300	36000	44800
	Heating at 5F (-15.0C)	Watt	6544	8600	10600	17200	21200	36000	44800
	Heating at 4F (-20.0C)	Watt	6177	8300	10300	14800	18000	30000	37000
	Heating at -12F (-10C)	Watt	6031	8000	10000	12000	15000	24000	30000
MINIMUM CIRCUIT AMPACITY (Indoor)	A	1.3	1.3	2	2.0	3.0	3.8	4.5	
MAXIMUM CIRCUIT AMPACITY (Outdoor)	A	18	19	19	19.0	19.0	19.0	19.0	
Indoor fan motor	Model	207N-10-0-01	207N-08-0-02	207N-10-0-1-0	207N-10-0-1-0	207N-04-0-1	207N-04-0-1-1	207N-10-0-1	
	Inlet	W	100.0	100.0	90.0	90.0	90.0	90.0	
	WLA	A	1.1	1.1	1.3	1.3	1.8	1.8	
	Speed (RPM)	min	1170/1000/900	1170/1000/900	900/750/600	1170/1000/900	1170/1000/900	1170/1000/900	1170/1000/900
Indoor unit	Dimension (WxDxH)	mm	760x260x260	760x260x260	760x260x260	1020x260x260	1020x260x260	1020x260x260	
	Weight (kg)	kg	27.5/27.5/27.5	27.5/27.5/27.5	34.5/34.5/34.5	48.5/48.5/48.5	58.5/58.5/58.5	88.5/88.5/88.5	
	Capacity (W)	W	18000-30000	12000-21000	18000-30000	24000-32000	30000-42000	48000-60000	
	Rated current (A)	A	3.08	4.4	6.0	5.8	16.3	22.4	
	SEER	Watt	20.5	21.8	19	21.8	16.3	17.4	
	EEA	Watt	13.5	12.5	12.5	12.5	9	9.2	
	Net weight (kg)	kg	17.0/17.0	17.0/17.0	21.8/21.8	29.8/29.8	34.8/34.8	51.8/51.8	
	Net weight (kg)	kg	20.0/20.0	20.0/20.0	25.0/25.0	30.0/30.0	35.0/35.0	51.8/51.8	
	Drainage water pipe dia (mm)	mm	16	16	16	16	16	16	
	Drainage water pipe dia (in)	in	5/8	5/8	5/8	5/8	5/8	5/8	
MINIMUM CIRCUIT AMPACITY (Indoor)	A	1.3	1.3	2	2.0	3.0	3.8	4.5	
	MAXIMUM CIRCUIT AMPACITY (Outdoor)	A	18	19	19	19.0	19.0	19.0	
	Model	408R0102L0P2	408R0102L0P2	408R0102L0P2	408R0102L0P2	408R0102L0P2	408R0102L0P2	408R0102L0P2	
	Type	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	
Compressor	Brand	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	
	Capacity	W	2000	2000	2000	1138	6180	13100	
	Inlet	W	100	100	100	100	100	100	
	Rated current (A)	A	3.8	6.8	19	12	23.8	26	
	Thermal protector position	NA	NA	NA	NA	NA	NA	NA	
Outdoor fan motor	Capacity	W	100	100	100	100	100	100	
	Inlet	W	100	100	100	100	100	100	
	WLA	A	0.4	0.4	0.4	0.4	0.4	0.4	
	Speed	min	600/700/600	600/700/600	600/700/600	600/700/600	600/700/600	600/700/600	
	Dimension (WxDxH)	mm	760x260x260	760x260x260	760x260x260	760x260x260	760x260x260	760x260x260	
Outdoor unit	Dimension (WxDxH)	mm	760x260x260	760x260x260	760x260x260	1020x260x260	1020x260x260	1020x260x260	
	Weight (kg)	kg	27.5/27.5/27.5	27.5/27.5/27.5	34.5/34.5/34.5	48.5/48.5/48.5	58.5/58.5/58.5	88.5/88.5/88.5	
	Capacity (W)	W	18000-30000	12000-21000	18000-30000	24000-32000	30000-42000	48000-60000	
	Rated current (A)	A	3.08	4.4	6.0	5.8	16.3	22.4	
	SEER	Watt	20.5	21.8	19	21.8	16.3	17.4	
Refrigerants	Refrigerant charge	kg	6.1/3.1/3.1	6.1/3.1/3.1	6.1/3.1/3.1	6.1/3.1/3.1	6.1/3.1/3.1	6.1/3.1/3.1	
	Additional charge for each ft	kg	0.18	0.18	0.18	0.18	0.18	0.18	
	Design pressure	PSI	400/240	400/240	400/240	400/240	400/240	400/240	
	Logged side Gas size	mm(inch)	6.35mm (1/4")/6.35mm (1/4")	6.35mm (1/4")/6.35mm (1/4")	6.35mm (1/4")/6.35mm (1/4")	6.35mm (1/4")/6.35mm (1/4")	6.35mm (1/4")/6.35mm (1/4")	6.35mm (1/4")/6.35mm (1/4")	
	Max refrigerant pipe length	m	25	25	25	25	25	25	
Refrigerant piping	Max refrigerant pipe length	m	32.02	32.02	32.02	32.02	32.02	32.02	
	Max difference in level	m	10	10	10	10	10	10	
	Min difference in level	m	0.31	0.31	0.31	0.31	0.31	0.31	
	Indoor (cooling/heating)	W	17-320-30	17-320-30	17-320-30	17-320-30	17-320-30	17-320-30	
	Outdoor (cooling/heating)	W	25-800-28	25-800-28	25-800-28	25-800-28	25-800-28	25-800-28	
Application area (Cooling Standard)	sq'	12-35	16-23	24-35	32-47	44-70	64-70	78-111	
	sq.m	1.1-3.2	1.5-2.7	2.2-4.1	3.4-4.4	4.1-6.4	6.0-6.4	7.3-10.1	
	sq.ft	12-35	16-23	24-35	32-47	44-70	64-70	78-111	
Application area (Cooling Standard)	sq.m	1.1-3.2	1.5-2.7	2.2-4.1	3.4-4.4	4.1-6.4	6.0-6.4	7.3-10.1	
Application area (Cooling Standard)	sq.ft	12-35	16-23	24-35	32-47	44-70	64-70	78-111	



CONSOLE

- › Wired Controller
- › Central Controller
- › Long Distance Alarm
- › ON/OFF Controller
- › Blue anti-corrosion treatment
- › Build-in Pump
- › Digital Display
- › Anti-Cold Wind Switch
- › Emergency Using

R-410A
REFRIGERANT



Indoor		Outdoor	
Power supply (Indoor)		V, Ph, Hz	CP43BX012-M3N1H CM43BX012-H3N1H
Power supply (Outdoor)		V, Ph, Hz	200-230V, 1 Ph, 60Hz 200-230V, 1 Ph, 60Hz
Cooling	Capacity (range)	Btu/h	12000(-)
	input	W	923
	Rated current	A	4.23
	EER	Btu/w	13
Heating	SEER	Btu/w	20.5
	Capacity (range)	Btu/h	12000(-)
	input	W	960
	Rated current	A	4.36
Heating at 5F (-15°C)	COP	WW	3.66
	HSPF4	Btu/w	10
	HSPF5	Btu/w	8
	Rated capacity	Btu/h	8550
MINIMUM CIRCUIT AMPACITY(Indoor)		A	1.3
Indoor fan motor	Model		ZKFP-20-B-3-1
	Speed(Hi/Mi/Lo)	r/min	810/780/650/530
Indoor air flow (Hi/Mi/Lo)		m ³ /h	620/541/421
Indoor air flow (Hi/Mi/Lo)		CFM	364.7/318.24/247.65
Indoor noise level (Hi/Mi/Lo)		dB(A)	45/34.5
Indoor unit	Dimension(W*D*H)	mm	730x500x210
	Dimension(W*D*H)	inch	27.96x23.62x8.27
	Packing (W*D*H)	mm	740x685x300
	Packing (W*D*H)	inch	30.71x26.97x11.81
	Net/Gross weight	Kg	14.8/19.8
	Net/Gross weight	lb.	32.63/41.81
Drainage water pipe dia		mm	ODΦ16mm
		in	0.63
MINIMUM CIRCUIT AMPACITY(Outdoor)		A	12
MAX FUSE(Outdoor)		A	15
Compressor	Model		ASM98C32LPZ
	Type		ROTARY
	Brand		GMCC
	Capacity	W	2958
	input	W	730
	Rated current(RLA)	A	6.8
	Thermal protector position		NA
	Capacitor	μF	0.0
Refrigerant oil/oi charge	ml		VG74/340
Outdoor fan motor	Model		ZKFN-34-B-1-3
	RLA	A	0.4
	Speed	r/min	800/700/650
Outdoor air flow		m ³ /h	2000
Outdoor air flow		CFM	1176.47
Outdoor noise level		dB(A)	55.5
Outdoor unit	Dimension(W*D*H)	mm	850x333x554
	Dimension(W*D*H)	inch	31.50x13.11x21.81
	Packing (W*D*H)	mm	920x390x625
	Packing (W*D*H)	inch	36.22x15.35x24.61
	Net/Gross weight	Kg	36.5/39.1
	Net/Gross weight	lb.	80.47/86.20
Refrigerant type		oz	8410A/40.6
Refrigerant precharge		lb	16
Additional charge for each ft		oz	0.16
Design pressure		Psi/G	550/340
Refrigerant piping	Liquid side/ Gas side	mm(inch)	6.35mm(1/4in)/12.7mm(1/2in)
	Max. refrigerant pipe length	m	25
	Max. refrigerant pipe length	ft	82.02
	Max. difference in level	m	10
Room temperature	Max. difference in level	ft	32.81
	Indoor(cooling/heating)	°C	17~32.0~30
	Outdoor(cooling/heating)	°C	20~30/25~30
Application area (Cooling Standard)		m ²	16~23
Application area (cooling standard)		sq.ft	172.22~247.57
		Outdoor unit	108②190③④



R-410A
REFRIGERANT



AHRI CERTIFIED

OUTDOOR UNITS

- » Wired Controller
- » Build-in Pump
- » Central Controller
- » Digital Display
- » Long Distance Alarm
- » Anti-Cold Wind Switch
- » ON/OFF Controller
- » Emergency Using
- » Blue anti-corrosion treatment

Outdoor Unit Model Number		CM43BX086-H3N1H	CM43BX012-H3N1H	CM43BX018-H3N1H	CM43BX024-H3N1H	CM43BX036-H3N1H	CM43BX048-H3N1H	CM43BX066-H3N1H	
System type		Heat pump							
Power supply	V, Ph, Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208-230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	
MINIMUM CIRCUIT AMPACITY (Outdoor)	A	15.0	18	25	35	0	0	0	
MINIMUM CIRCUIT AMPACITY (Outdoor)	A	20	25	50	50	1	1	1	
Compressor	Model	ASB690221UFZ	ASB68032UFZ	ASB135023UFZ	ATP235022UMT	ATP310043UMT	ATG420010UMJ	ATG420010UMJ	
	Type	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	
	Brand	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	
	Capacity	W	2935	2958	4055	7155	9490	13100	13100
	Input	W	748	730	1035	1970	2650	3420	3420
	Rated current (RLA)	A	5.5	6.8	10	12	1	23.5	0
	Thermal protector position	NA	NA	NA	NA	NA	NA	NA	NA
	Capacitor	µF	/	0.0	/	/	/	/	/
Refrigerant oil/oil charge	ml	V074/910	V074/940	V074/450	V074/670	V074/1600	V074/1400	V074/1400	
Outdoor fan motor	Model	ZKFN-34-B-1-3	ZKFN-34-B-1-3	ZKFN-50-B-2	ZKFN-120-B-2	ZKFN-120-B-2	ZKFN-85-B-32-B	ZKFN-85-B-32-B	
	Input	W	/	115.0	150.0	155.0	125.0	125.0	
	RLA	A	0.4	0.4	0.6	0.6	1.2	0	
Speed	rpm	800/750/690	800/700/650	830/750/700	850/750/700	950/750	800/700/600	900/900	
Outdoor air flow	m ³ /h	2000	2000	2500	3800	2520	2650	2650	
Outdoor air flow	CFM	1176.47	1176.47	1478.59	2235.29	1487.63	4500.00	4411.78	
Outdoor noise level	dB(A)	54.5	55	55	55	63.5	62.5	64	
Outdoor unit	Dimension (W*D*H)	mm	770x300x555	800x330x594	845x360x703	946x410x810	996x410x810	952x415x1333	952x415x1333
	Dimension (W*D*H)	inch	30.31x11.81x21.85	31.50x13.11x21.81	33.27x14.29x27.64	37.24x16.14x31.89	37.24x16.14x31.89	37.48x16.34x52.48	37.48x16.34x52.48
	Packing (W*D*H)	mm	900x430x695	920x490x825	965x595x775	1090x600x885	1090x600x890	1095x690x1480	1095x690x1480
	Packing (W*D*H)	inch	35.43x17.32x27.43	36.22x19.30x32.46	37.99x23.43x30.12	42.91x23.62x34.84	42.91x23.62x34.84	43.11x27.16x58.27	43.11x27.16x58.27
	Net/Gross weight	kg	30.5/32.5	36.5/39.1	47.1/51.1	64.8/69	67.4/73	101/115	102.1/115.4
Net/Gross weight	lb.	67.24/71.65	80.47/86.20	105.16/112.42	141.26/152.12	148.59/160.54	223.66/253.55	225.58/254.41	
Refrigerant type	oz	R410A/38.8	R410A/40.8	R410A/68.8	R410A/82.9	R410A/108	R410A/148	R410A/163	
Refrigerant precharge	fl	15	15	20	20	30	30	30	
Additional charge for each fl	oz	0.50	0.16	0.21	0.21	0.32	0.32	0.32	
Design pressure	PSIG	550/340	550/340	550/340	550/340	550/340	550/340	550/340	
Refrigerant piping	Liquid side / Gas side	mm (inch)	6.35mm(1/4in) / 9.52mm(3/8in)	6.35mm(1/4in) / 12.7mm(1/2in)	6.35mm(1/4in) / 12.7mm(1/2in)	6.50mm(3/8in) / 15.88mm(5/8in)	6.50mm(3/8in) / 15.88mm(5/8in)	6.50mm(3/8in) / 15.88mm(5/8in)	6.50mm(3/8in) / 19.05mm(3/4in)
	Max. refrigerant pipe length	m	25	25	30	50	65	65	
	Max. refrigerant pipe length	ft	82.02	82.02	98.42	164.04	213.25	213.25	
	Max. difference in level	m	10	10	20	25	30	30	
Max. difference in level	ft	32.81	32.81	65.62	82.02	98.42	98.42		
Room temperature	Indoor (cooling/heating)	°C	17~32/0~30	17~32/0~30	17~32/0~30	17~32/0~30	17~32/0~30	17~32/0~30	
	Outdoor (cooling/heating)	°C	-25~50/35~30	-25~50/35~30	-25~50/35~30	-25~50/35~30	-25~50/35~30	-25~50/35~30	
Application area (Cooling Standard)	m ²	12~18	16~23	24~35	32~47	46~70	84~94	76~111	
Application area (cooling standard)	sq.ft	129.17~193.75	172.22~247.57	258.33~376.74	344.44~505.90	516.67~753.47	898.89~1011.81	818.00~1194.78	
Qty per 20' / 40' / 40' HD	Outdoor unit	16/3/4/5/4	10/2/15/2/2	10/2/15/2/1	4/4/6/1/3	4/4/6/1/3	2/2/4/4/8	2/2/4/4/8	



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