

Multi-Zone Inverter Heat Pump Outdoor Unit

C&H SOPHIA Multi-Zone systems, with inverter technology, are some of today's most advanced ductless split heat pumps. Up to 5 indoor units can be connected to a single outdoor unit, reducing the number of outdoor units required. All indoor units can be individually controlled and do not need to be installed at the same time.



Model			CH18MSPH230VO *	CH28MSPH230VO *	CH36MSPH230VO	CH48MSPH230VO	
Power supply		Ph-V-Hz	208-230V ~ 60Hz, 1Ph	208-230V ~ 60Hz, 1Ph	208-230V ~ 60Hz, 1Ph	208-230V ~ 60Hz, 1Ph	
Cooling	Capacity	Btu/h	17000	27000	36000	48000	
	Capacity Range	Btu/h	4197~19900	6630~30600	8190~38500	9560~53500	
	Total Input	W	409~2003	670~3210	920~4325	855~4795	
	EER	Btu	12.5	12.0	10.9	11.6	
	SEER		21.3	22.0	22.5	21.5	
Heating at 47F	Capacity	Btu/h	18000	28000	36000	48000	
	Capacity Range	Btu/h	2225~23475	3690~32860	4940~38000	6850~53980	
	Total Input	W	347~2142	1400~3530	1070~2965	995~5160	
	COP		3.7	3.7	3.1	3.4	
	HSPF4		10	9.8	10.3	10.4	
	HSPF5		8.6	8.0	9.0	8.6	
heating at 17F	Rated capacity	Btu/h	11800	16800	25400	30800	
heating at 5F-15°C)	maximum capacity	Btu/h	14200	20900	28800	35800	
MINIMUM CIRCUIT AMPACITY		A	18.0	25.0	30.0	35.0	
MAX.FUSE		A	25.0	35.0	45.0	50.0	
Compressor	Model		ATM150D23UFZ	ATF235D22UMT	ATF310D43UMT	ATQ360D1UMU	
	Type		ROTARY	ROTARY	ROTARY	Twin-ROTARY	
	Brand		GMCC	GMCC	GMCC	GMCC	
	Capacity	Btu/h	15388	24345	32380	38214	
	Input	W	1170	1970	2600	3040	
	Rated current(RLA)	A	10	20.00	22.00	21.00	
Refrigerant oil/oil charge		ml	VG74/500	POE(VG74)/670	POE(VG74)/1000	Ester Oil VG74/1400	
Outdoor fan Motor	Brand		Shibaura	Welling	Welling	Welling	
	Input	W	50(Output)	120(Output)	120(Output)	85(Output)	
	RLA	A	0.74	0.9	1.3	0.39	
	Speed	r/min	150 - 850	150 - 10000	150 - 10000	150 - 870	
Outdoor air flow		m3/h	2362	3619	3619	7646	
Outdoor air flow		CFM	1390	2130	2130	4500	
Outdoor noise level		dB(A)	62,4	63,4	62,3	64	
Outdoor unit	Dimension(W*D*H)	mm	845x363x702	946x410x810	946x410x810	952x415x1333	
	Dimension(W*D*H)	inch	33.27x14.29x27.64	37.24x16.14x31.89	37.24x16.14x31.89	37.48x16.34x52.48	
	Packing (W*D*H)	mm	965x395x755	1090x500x875	1090x500x875	1095x495x1480	
	Packing (W*D*H)	inch	37.99x15.55x29.72	42.91x19.69x34.45	42.91x19.69x34.45	43.11x19.49x58.27	
	Net/Gross weight	Kg	48/52	68/73	71/76	101.5/115.7	
	Net/Gross weight	lbs.	105.82/114.64	149.91/160.94	156.53/167.55	223.77/255.07	
Refrigerant type		oz	R410A/70.5	R410A/98.8	R410A/105.8	R410A/162.3	
Refrigerant precharge(Total pipe length)		ft	25	25	25	25	
Additional charge for each ft		oz	0.161	0.161	0.161	0.32	
Design pressure		PSIG	550/340	550/340	550/340	550/340	
Refrigerant piping	Liquid side - Gas side		inch	2x1/4" - 2x3/8"	3x1/4" - 3x3/8"	4x1/4" - 3x3/8" + 1x1/2"	5x1/4" - 3x3/8" + 2x1/2"
	Max. length for all rooms		m	30	45	60	75
	Max. length for all rooms		ft	98	148	197	246
	Max. length for one indoor unit		m	20	25	30	30
	Max. length for one indoor unit		ft	66	82	98	98
	Max. height difference between indoor and outdoor unit	OU higher than IU	m	10	10	10	10
		OU higher than IU	ft	33	33	33	33
		OU lower than IU	m	15	15	15	15
		OU lower than IU	ft	49	49	49	49
Max. height difference between indoor units		m	10	10	10	10	
Max. height difference between indoor units		ft	33	33	33	33	
Connection wiring			NO	NO	NO	NO	
Ambient temperature	cooling	°C	-25~-50	-25~-50	-25~-50	-25~-50	
	cooling	°F	-13~-122	-13~-122	-13~-122	-13~-122	
	heating	°C	-25~-30	-25~-30	-25~-30	-25~-30	
	heating	°F	-13~-86	-13~-86	-13~-86	-13~-86	
Qty/per 20' /40' /40'HQ		outdoor unit	102/216/216	44/96/144	44/96/144	22/46/46	

* Energy Star certified