

HORIZONTAL, HEATPUMP, PACKAGE UNITS, WITH **INVERTER TECHNOLOGY**



ROOFTOP PACKAGED PRODUCT DATA

Models

CP400A-X120DH5H1H

CP400A-X180AH5H1H

CP400A-X240AH5H1H

1 PRODUCT LINE

Nominal Capacity (Ton)	Model			Power Supply (V, Ph, Hz)	Appearance
	Refrigerant	Model Name	System Type		
10	R410A	CP400A-X120DH5H1H	Heat Pump	208-230V, 3Ph, 60Hz	
15	R410A	CP400A-X180AH5H1H	Heat Pump	208-230V, 3Ph, 60Hz	
20	R410A	CP400A-X240AH5H1H	Heat Pump	208-230V, 3Ph, 60Hz	



NOTES:

- ① Above pictures may be different from actual model.
- ② 1Ton = 12000Btu/h = 3.517kW.

2 NOMENCLATURE

Type 1

	C	P	4	0	0	A	—	X	1	2	0	D	H	5	H	1	H	
C= CIAC																		C = Cool only, H= Heat Pump
P = Package unit																		Edition 1= first
4 = R410A refrigerant																		Manufacturing plant
Reserved																		Voltage
A- = First Series																		5= 208/230-3-60 ,6= 460-3-60
X = Inverter Compressor																		H = Horizontal duct connection
Nominal Capacity																		Indoor fan type
120 = 120,000 BTUH																		A= AC Volt., D= DC Volt.
180 = 180,000 BTUH																		
240 = 240,000 BTUH																		
360 = 360,000 BTUH																		

3 FEATURES

Function	Description
ENHANCED COIL DESIGN	Grooved copper tubes and enhanced aluminum fin construction improves heat transfer for maximum efficiency and durability.
INVERTER CONTROLLED COMPRESSORS	The compressor speed is adjusted to match the heat demand of the space being conditioned. Resulting in a more efficient and quieter operation.
TOP DISCHARGE COND.	The top discharge condenser fan does not disrupt neighboring areas and affect vegetation surrounding the unit. The warm air from the top mounted fan is blown up away from the structure and any landscaping.
LOW OPERATING SOUND LEVEL	The upward air flow carries the normal operating sound up and away. The unique shock absorption structure greatly reduces the vibration and effectively isolates motor sound.
SPACE SAVING	Compact design simplifies installation at the job site, reducing transport and installation, as well as physical space at the job site.
SELF DIAGNOSTICS	The unit control system monitors temperatures, pressures, and other inputs to protect the system. If a malfunction of the sensors is detected the appropriate code will be displayed.
SIMPLIFIED ELECTRICAL CONNECTIONS	Central electrical control box location allows for easy access for main power, and control wiring. This reduces job time and labor.

4 PRODUCT DATA AT RATED CONDITIONS

Model				CP400A-X120DH5H1H	CP400A-X180AH5H1H	CP400A-X240AH5H1H
Total Capacity	Cooling		Btu/h	116000	174000	211600
			kW	34	51	62
	Heating		Btu/h	119400	182500	249100
			kW	35	53.5	73
Electrical Data	Power Supply		V-Hz-Ph	208-230V-60Hz-3Ph		
			Power Input	Cooling	kW	13.7
	Heating	kW		11.5	16	25
	Current Input	Cooling	A	36	63	79
Heating			A	30	46	70
Sound Pressure Level			dB(A)	72	74	74
Refrigerant	Type/Weight		—	R410A/10.0kg	R410A/12.0kg	R410A/16.0kg
Air Flow Volume			CFM	3413	5591	8416
			m³/h	5800	9500	14300
External Static Pressure		Rated/Range	Pa	90(0-210)	120(0-320)	140(0-350)
			InWg	0.36(0-0.84)	0.48(0-1.28)	0.56(0-1.4)
Dehumidifying Volume			l/h	11.08	14.31	16.2
Evaporator Side	Fan Motor	Drive Type	-	Direct Drive	Belt	Belt
		Power Output	HP	2	4	5.5
	Fan	Type	-	Centrifugal		
		Quantity	-	2	1	2
		Motor Speed	rpm	1400	916	1020
	Evaporator coil	Material	-	Copper Tube- Aluminum Fin		
		Face Area	sq.ft	7	10.12	12.32
			m2	0.65	0.94	1.145
		Fins Per Inch (FPI)	-	16	18	16
	Drain Connection Size		Inch	3/4"(NPT)		
Condenser Side	Compressor	Type	-	Inverter Rotary		
		Quantity	-	1	2	2
	Fan Motor	Drive Type	-	Direct Drive		
		Power Output	HP	2		
	Fan	Type	-	Axial-Flow		
		Quantity	-	1	1	2
	Condenser coil	Material	-	Copper Tube -Aluminum Fin		
		Face Area	sq.ft	25.19	26.16	34.22
			m2	2.34	2.43	3.18
Fins Per Inch (FPI)	-	16				

Model			CP400A-X120DH5H1H	CP400A-X180AH5H1H	CP400A-X240AH5H1H
Maximum Operating Pressure, High Side		Mpa	4.4		
Maximum Operating Pressure, Low Side		Mpa	2.5		
Operating Temp. Range	Cooling	°C	18~48		
	Heating	°C	-10~24		
Filter		-	PP		
Dimensions	Unit Dimension (W×D×H)	mm	1450×1120×1215	2260×1140×1245	2240×1880×1250
	Package Dimension (W×D×H)	mm	1463×1133×1260	2283×1163×1290	2258×1898×1300
Weight	Net Weight	kg	339	572	820
	Gross Weight	kg	360	600	870
Load Quantity	20'GP		7	4	3
	40'GP		16	10	6
	40'HQ		32	20	12

**NOTES:**

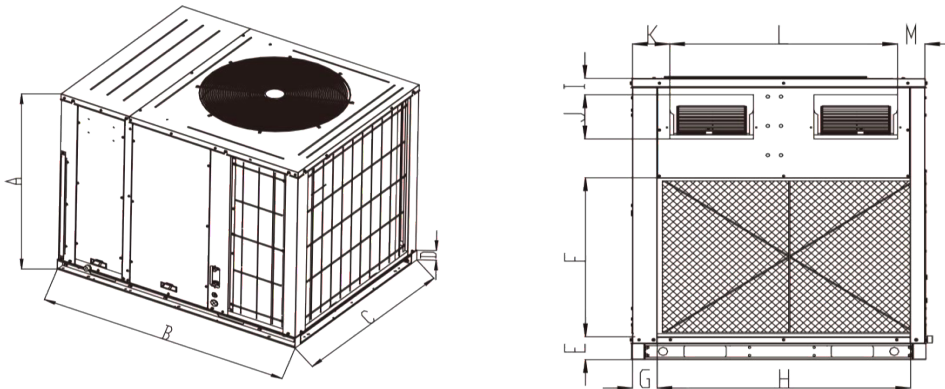
- ① The cooling capacity stated above is measured under following conditions:
 - Indoor Conditions: 27°CDB/19°CWB (81°FDB/67°FWB);
 - Outdoor Conditions: 35°CDB/24°CWB (95°FDB/76°FWB).
- ② The air volume is measured at the relevant standard external static pressure.
- ③ The technical parameters are changed along with the products improvement; please refer to the nameplate of the unit for actual data.
- ④ Above data is subject to change without notice.

5 ELECTRICAL DATA

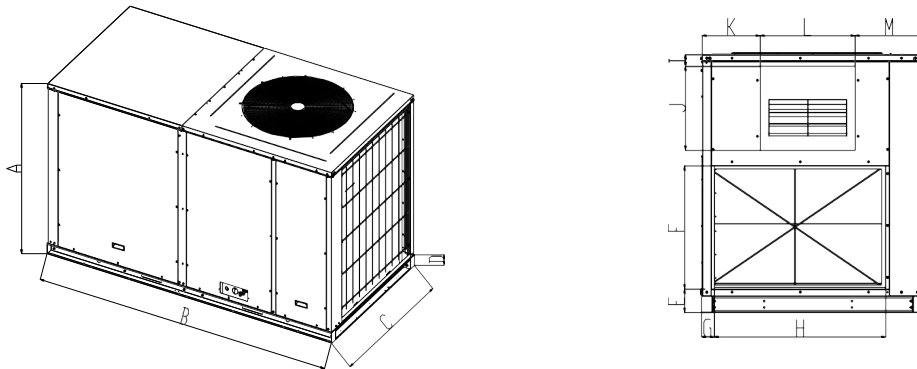
Model	Compressor			Condenser Fan Motors	Supply Blower Motor	Breaker Capacity	Min. Power Supply Cord
	Power Supply	Qty.	RLA	FLA	FLA		
	V/Ph/Hz	—	A	A	A		
CP400A-X120DH5H1H	208-230V, 3Ph,60Hz	1	36	3.5	7.5	50	10
CP400A-X180AH5H1H	208-230V, 3Ph,60Hz	2	29	4.2	11	80	25
CP400A-X240AH5H1H	208-230V, 3Ph,60Hz	2	36	3.5	12	100	25

6 UNIT DIMENSIONS

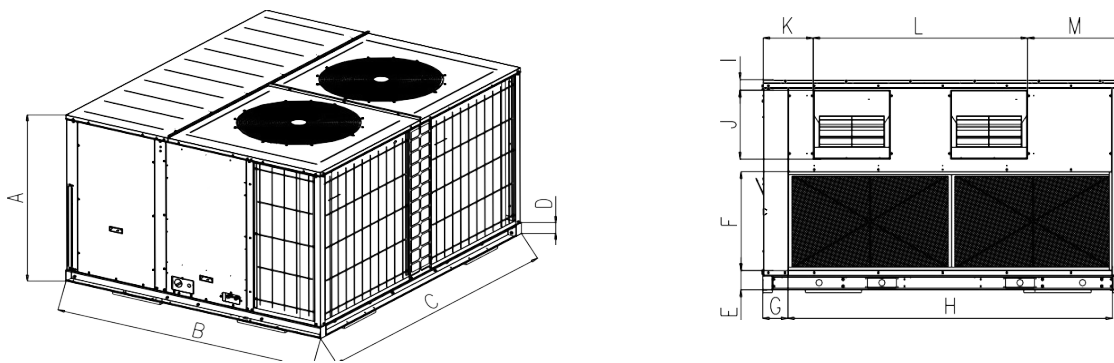
CP400A-X120DH5H1H



CP400A-X180AH5H1H



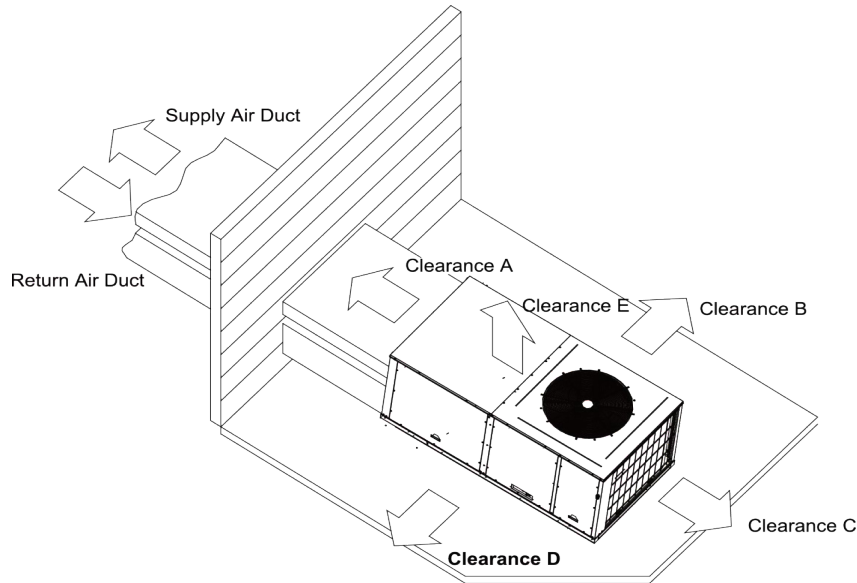
CP400A-X240AH5H1H



Model	Dimensions in mm												
	A	B	C	D	E	F	G	H	I	J	K	L	M
CP400A-X120DH5H1H	1215	1450	1120	70	98	686	94	916	70	190	144	866	105
CP400A-X180AH5H1H	1245	2260	1140	80	111	595	50	914	58	406	298	487	349
CP400A-X240AH5H1H	1250	1880	2240	85	115	590	158	2021	45	412	311	1336	588

NOTE: Above diagrams may be different from actual model.

7 MINIMUM CLEARANCES

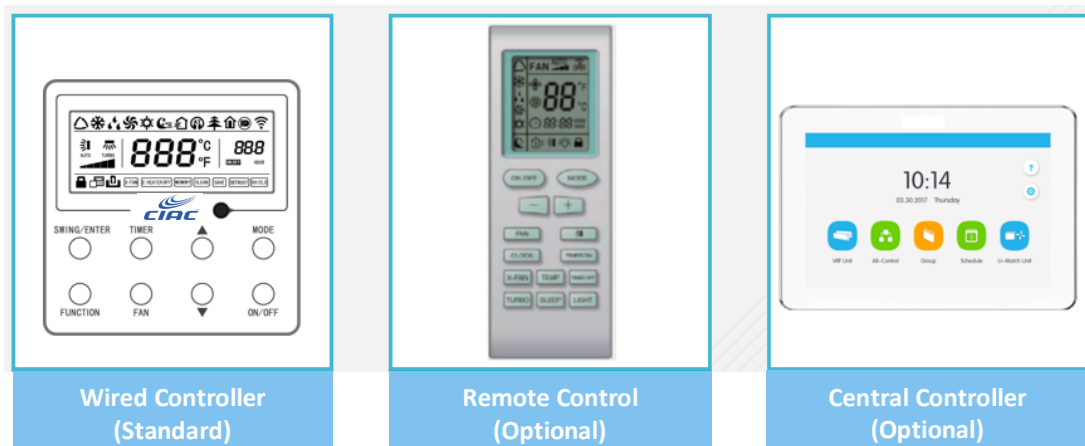


NOTE: Above diagrams may be different from actual mode.

CP400A-X120DH5H1H, CP400A-X180AH5H1H, CP400A-X240AH5H1H

Installation Clearances		
DIMENSION (Minimum)	mm	inch
A	1000	39
B	1500	59
C	1100	43
D	1100	43
E	3000	118

8 CONTROL OPTIONS





HORIZONTAL, HEATPUMP PACKAGED UNITS.
COOLING AND HEATING