



ROOFTOP PACKAGED UNITS


TECHNICAL REFERENCE





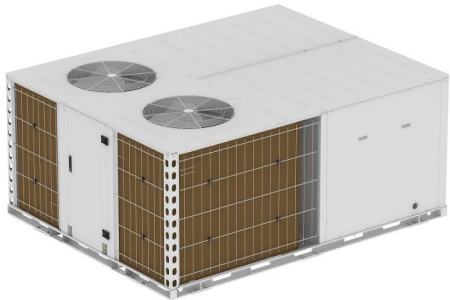
PRODUCT

PRODUCT INTRODUCTION

MODELS LIST

Nominal Capacity (Ton)	Model			Power Supply (V, Ph, Hz)	Appearance
	Refrigerant	Model Name	Product Code		
5.5	R410A	GART-G22HW	/	380-415V 3N ~ , 50 /60Hz	
6.2	R410A	GART-G23HW	/	380-415V 3N ~ , 50 /60Hz	
7.5	R410A	GART-G28HW	/	380-415V 3N ~ , 50 /60Hz	
10	R410A	GART-G34HW	/	380-415V 3N ~ , 50 /60Hz	
15	R410A	GART-G49HW	/	380-415V 3N ~ , 50Hz	

ROOFTOP PACKAGED

Nominal Capacity (Ton)	Model			Power Supply (V, Ph, Hz)	Appearance
	Refrigerant	Model Name	Product Code		
20	R410A	GART-G60HW	/	380-415V 3N ~ , 50Hz	
25	R410A	GART-G84HW	/	380-415V 3N ~ , 50Hz	
30	R410A	GART-G100HW	/	380-415V 3N ~ , 50Hz	



Notes:

- ① Above pictures may be different from actual model.

FEATURE

Feature	Description
DC Inverter technology	The General Climate Rooftop unit equipped efficient DC compressor and fan motor fusing advanced fuzzy control, can stepless adjust the output capacity according to the space load and significantly reduce power consumption.
Excellent grid adaptability	The General Climate Rooftop unit are strong anti-grid fluctuations design, performance stably in ultra wide voltage range from 342V to 456V.
Non-polarity communication design	The General Climate Rooftop unit are strong anti-interference design, host directly connected to wired controller with two-core unshielded cable, which length can up to 100 meters.
Anti-corrosive and dustproof design	The General Climate Rooftop unit equipped with high anti-corrosive coating of outdoor and indoor heat exchanger, triple layer moisture proof painting PCB, hermetically sealed indoor fan motor, which greatly improve the durability of product in the extreme environment.
Multi-protection design	The General Climate Rooftop unit build in comprehensive protection such as high/low pressure protection, over current protection, high discharge temperature protection, phase failure&sequence protection, which greatly improve the reliability of product in the extreme environment.
Multi parameter throttling control design	The General Climate Rooftop unit EXV control by the MCU fusing high/low pressure, compressor discharge temperature, etc. Maximum optimize the unit operation process.
Emergency operation design	The General Climate Rooftop unit above 15Ton adopt double compressors. when one compressor fails, the other compressor without. failure can be started in an emergency. during the maintenance period, the unit does not stop and continues to refrigerate, which is more flexible and convenient.
Dead wind start-up design	The General Climate Rooftop unit intergrated exclusive outdoor fan dead wind start-up fuction, which greatly improve the success rates of fan start-up in the windy circumstances and ensure the unit performance steadily.
Centralized Control	The General Climate Rooftop unit support centralized control fuction. One centralized controller can control up to 36 host.
Remote control function	The General Climate Rooftop unit support remote control function, host can be access and control through LAN and WAN(Gateway accessory are required).

PRODUCT DATA

PRODUCT DATA AT RATED CONDITION

Model		GART-G22HW	GART-G23HW
Ton		5.5	6.2
Capacity			
Cooling Capacity	Btu/h	75100	76800
Cooling Capacity	kW	22.0	22.5
Cooling Capacity (T3)	Btu/h	63100	64800
Cooling Capacity (T3)	kW	18.5	19.0
Heating Capacity	Btu/h	88700	90400
Heating Capacity	kW	26.0	26.5
Electrical Data			
Power Supply	-	380-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz
Cooling Power Input	kW	8.5	8.5
Cooling Power Input (T3)	kW	9.5	9.5
Heating Power Input	kW	7.5	7.5
Max. Power Input	kW	10.0	10.0
Max. Current	A	18.0	18.0
Sound			
Sound Pressure Level	dB(A)	66	66
Refrigerant			
Refrigerant Type	-	R410A	R410A
Refrigerant Weight	kg	5	5
Air Flow			
Air Flow Volume	CFM	1766	1766
Air Flow Volume	m³/h	3000	3000
Pressure			
External Static Pressure	Pa	60	60
External Static Pressure	InWg	0.24	0.24
External Static Pressure Range	Pa	0-180	0-180
External Static Pressure Range	InWg	0-0.72	0-0.72
Dimension			
Outline Dimension(W×D×H)	mm	1450×1120×815	1450×1120×815
Package Dimension(W×D×H)	mm	1463×1133×860	1463×1133×860
Weight			
Net Weight	kg	268	268
Gross Weight	kg	289	289
Loading			
Loading Quantity	20'GP	16	16
Loading Quantity	40'HQ	48	48

Model		GART-G28HW	GART-G34HW
Ton		7.5	10
Capacity			
Cooling Capacity	Btu/h	95500	116000
Cooling Capacity	kW	28.0	34.0
Cooling Capacity (T3)	Btu/h	75100	98900
Cooling Capacity (T3)	kW	22.0	29.0
Heating Capacity	Btu/h	105800	133100
Heating Capacity	kW	31.0	39.0
Electrical Data			
Power Supply		380-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz
Cooling Power Input	kW	9.0	13.5
Cooling Power Input (T3)	kW	9.5	13.3
Heating Power Input	kW	8.0	11.5
Max. Power Input	kW	10.0	15.0
Max. Current	A	18.0	23.0
Sound			
Sound Pressure Level	dB(A)	68	72
Refrigerant			
Refrigerant Type	-	R410A	R410A
Refrigerant Weight	kg	8.0	10.0
Air Flow			
Air Flow Volume	CFM	2590	3414
Air Flow Volume	m³/h	4400	5800
Pressure			
External Static Pressure	Pa	80	90
External Static Pressure	InWg	0.32	0.36
External Static Pressure Range	Pa	0-210	0-210
External Static Pressure Range	InWg	0-0.84	0-0.84
Dimension			
Outline Dimension(W×D×H)	mm	1450×1120×1215	1450×1120×1215
Package Dimension(W×D×H)	mm	1463×1133×1260	1463×1133×1260
Weight			
Net Weight	kg	348	350
Gross Weight	kg	368	370
Loading			
Loading Quantity	20'GP	7	7
Loading Quantity	40'HQ	32	32

Model		GART-G49HW	GART-G60HW
Ton		15	20
Capacity			
Cooling Capacity	Btu/h	165500	204700
Cooling Capacity	kW	48.5	60
Cooling Capacity (T3)	Btu/h	122800	167200
Cooling Capacity (T3)	kW	36.0	49.0
Heating Capacity	Btu/h	189400	242300
Heating Capacity	kW	55.5	71.0
Electrical Data			
Power Supply	-	380-415V 3N~ 50Hz	380-415V 3N~ 50Hz
Cooling Power Input	kW	23.0	28.5
Cooling Power Input (T3)	kW	21.0	28.6
Heating Power Input	kW	16.5	25.0
Max. Power Input	kW	26.0	30.0
Max. Current	A	44.0	51.0
Sound			
Sound Pressure Level	dB(A)	74	75
Refrigerant			
Refrigerant Type	-	R410A	R410A
Refrigerant Weight	kg	12.0	16.0
Air Flow			
Air Flow Volume	CFM	5592	8829
Air Flow Volume	m³/h	9500	15000
Pressure			
External Static Pressure	Pa	130	150
External Static Pressure	InWg	0.52	0.60
External Static Pressure Range	Pa	50-200	75-220
External Static Pressure Range	InWg	0.2-0.8	0.3-0.88
Dimension			
Outline Dimension(W×D×H)	mm	2260×1140×1245	2240×1880×1250
Package Dimension(W×D×H)	mm	2283×1163×1290	2258×1898×1300
Weight			
Net Weight	kg	590	820
Gross Weight	kg	618	870
Loading			
Loading Quantity	20'GP	4	3
Loading Quantity	40'HQ	20	12

Model		GART-G84HW	GART-G100HW
Ton		25	30
Capacity			
Cooling Capacity	Btu/h	286600	348000
Cooling Capacity	kW	84	102.0
Cooling Capacity (T3)	Btu/h	228600	259300
Cooling Capacity (T3)	kW	67.0	76.0
Heating Capacity	Btu/h	324100	412900
Heating Capacity	kW	95.0	121
Electrical Data			
Power Supply	-	380-415V 3N~ 50Hz	380-415V 3N~ 50Hz
Cooling Power Input	kW	38.0	43.0
Cooling Power Input (T3)	kW	38.0	46.0
Heating Power Input	kW	30.5	38.0
Max. Power Input	kW	43.0	47.0
Max. Current	A	73.0	80.0
Sound			
Sound Pressure Level	dB(A)	76	77
Refrigerant			
Refrigerant Type	-	R410A	R410A
Refrigerant Weight	kg	25.0	14.0+14.0
Air Flow			
Air Flow Volume	CFM	9712	9712
Air Flow Volume	m³/h	16500	16500
Pressure			
External Static Pressure	Pa	200	125
External Static Pressure	InWg	0.8	0.5
External Static Pressure Range	Pa	100-250	125-350
External Static Pressure Range	InWg	0.40-1.00	0.50-1.40
Dimension			
Outline Dimension(WxDxH)	mm	2880×2240×1270	2850×2240×1240
Package Dimension(WxDxH)	mm	2893×2253×1290	2863×2253×1285
Weight			
Net Weight	kg	1180	1009
Gross Weight	kg	1224	1070
Loading			
Loading Quantity	20'GP	1	2
Loading Quantity	40'HQ	8	8

**Notes:**

- (1) The cooling capacity stated above is measured under following conditions.
 - a) Indoor Conditions: 27°C (80.6 °F) DB/19°C (66.2 °F)WB;
 - b) Outdoor Conditions: 35°C (95°F) DB/24°C (75.2°F)WB;
- (2) The T3 cooling capacity stated above is measured under following conditions.
 - a) Indoor Conditions: 29°C (84.2 °F) DB/19°C (66.2 °F)WB;
 - b) Outdoor Conditions: 46°C (114.8°F) DB/24°C (75.2°F)WB;
- (3) The Heating capacity stated above is measured under following conditions.
 - c) Indoor Conditions: 20°C (68 °F) DB/15°C (59 °F)WB;
 - d) Outdoor Conditions: 7°C (44.6°F) DB/6°C (42.8°F)WB;
- (4) The air volume is measured at the relevant standard external static pressure.
- (5) The technical parameters are changed along with the products improvement; please refer to the name plate of the unit for actual data.

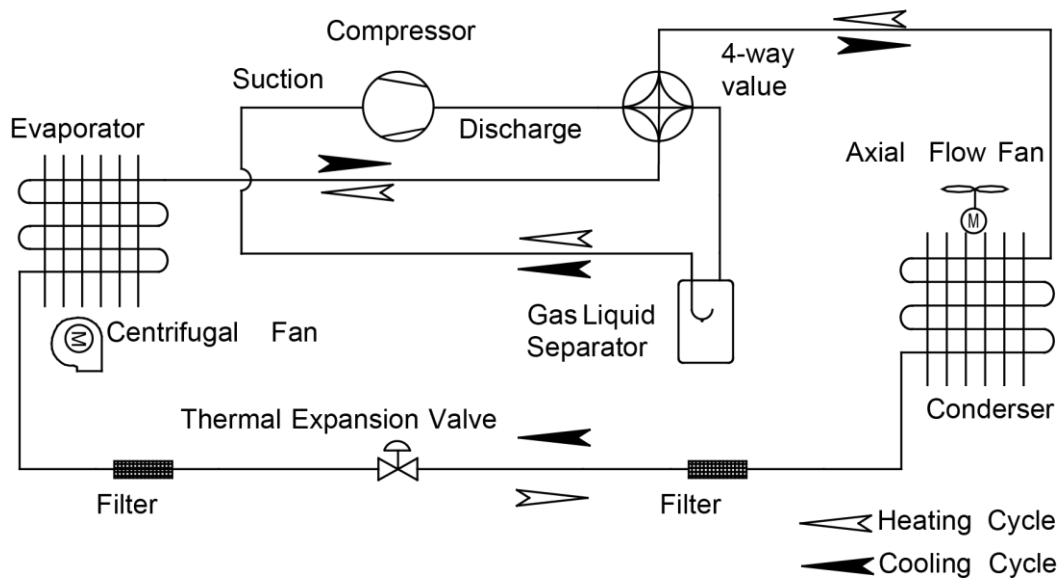
OPERATION RANGE

Item	Outdoor Condition (DB °C)* (°F)
Cooling	18(64.4)~52(125.6)
Heating	-5(23)~24(75.2)

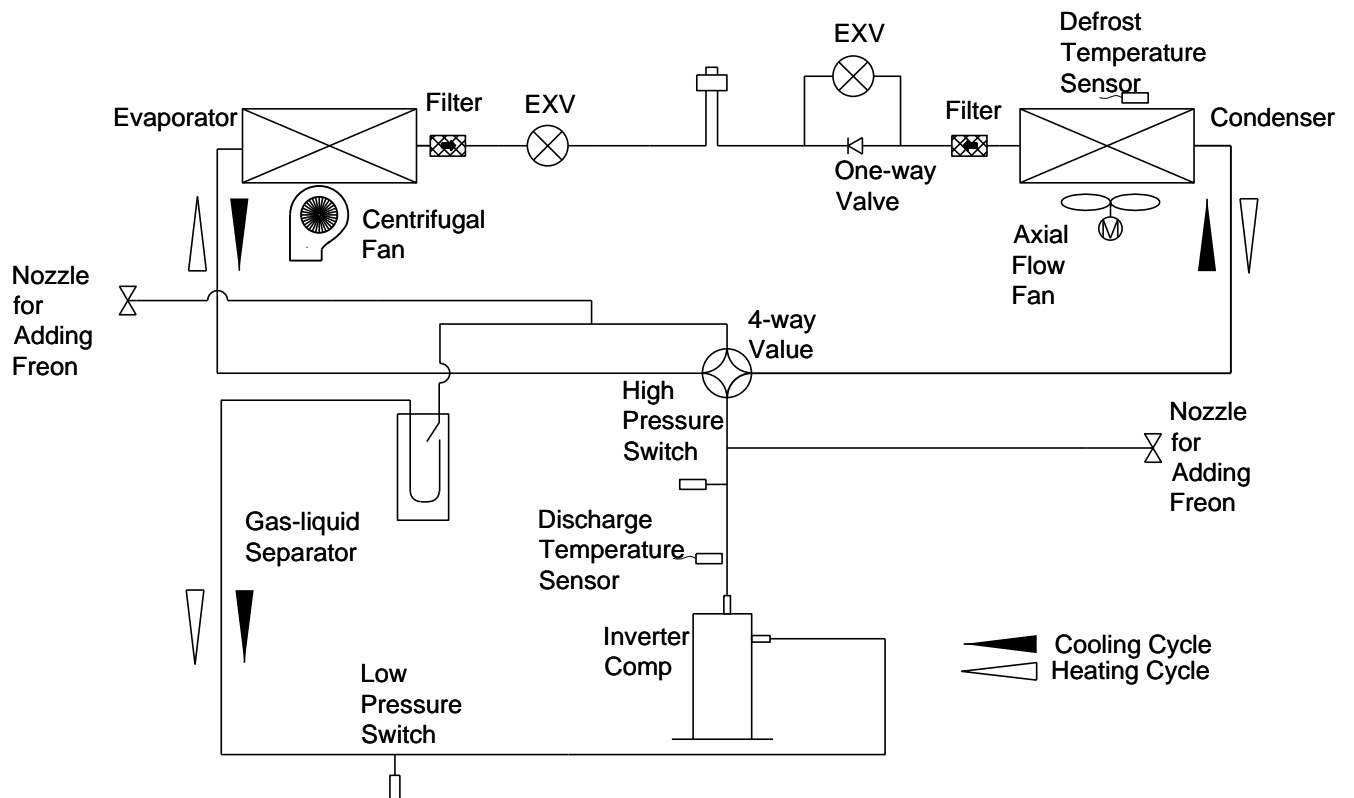
ELECTRICAL DATA

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		
GART-G22HW	380-415V 3N ~ ,50 /60Hz	1	15.4	2.0	2.8	25	2.5
GART-G23HW	380-415V 3N ~ ,50 /60Hz	1	15.4	2.0	2.8	25	2.5
GART-G28HW	380-415V 3N ~ ,50 /60Hz	1	17.7	3.5	7.5	32	4
GART-G34HW	380-415V 3N ~ ,50 /60Hz	1	17.7	3.5	7.5	32	4
GART-G49HW	380-415V 3N ~ ,50 Hz	2	17.7	4.0	11.0	63	10
GART-G60HW	380-415V 3N ~ ,50 Hz	2	17.7	4.0	12.0	63	10
GART-G84HW	380-415V 3N ~ ,50 Hz	2	30.01	4.5	11.0	80	25
GART-G100HW	380-415V 3N ~ ,50 Hz	2	32.0	3.1	12.5	100	25

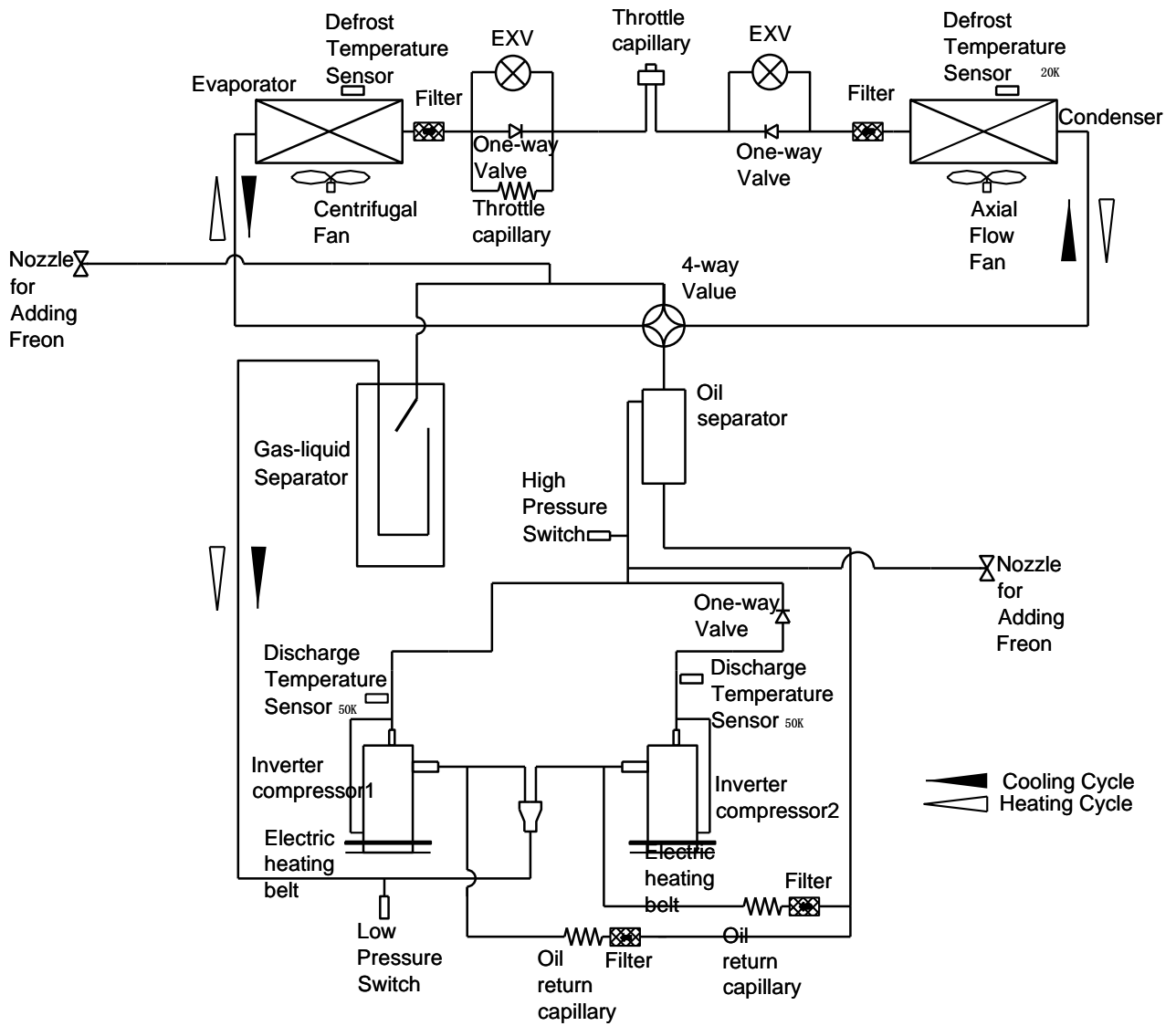
PIPING DIAGRAM



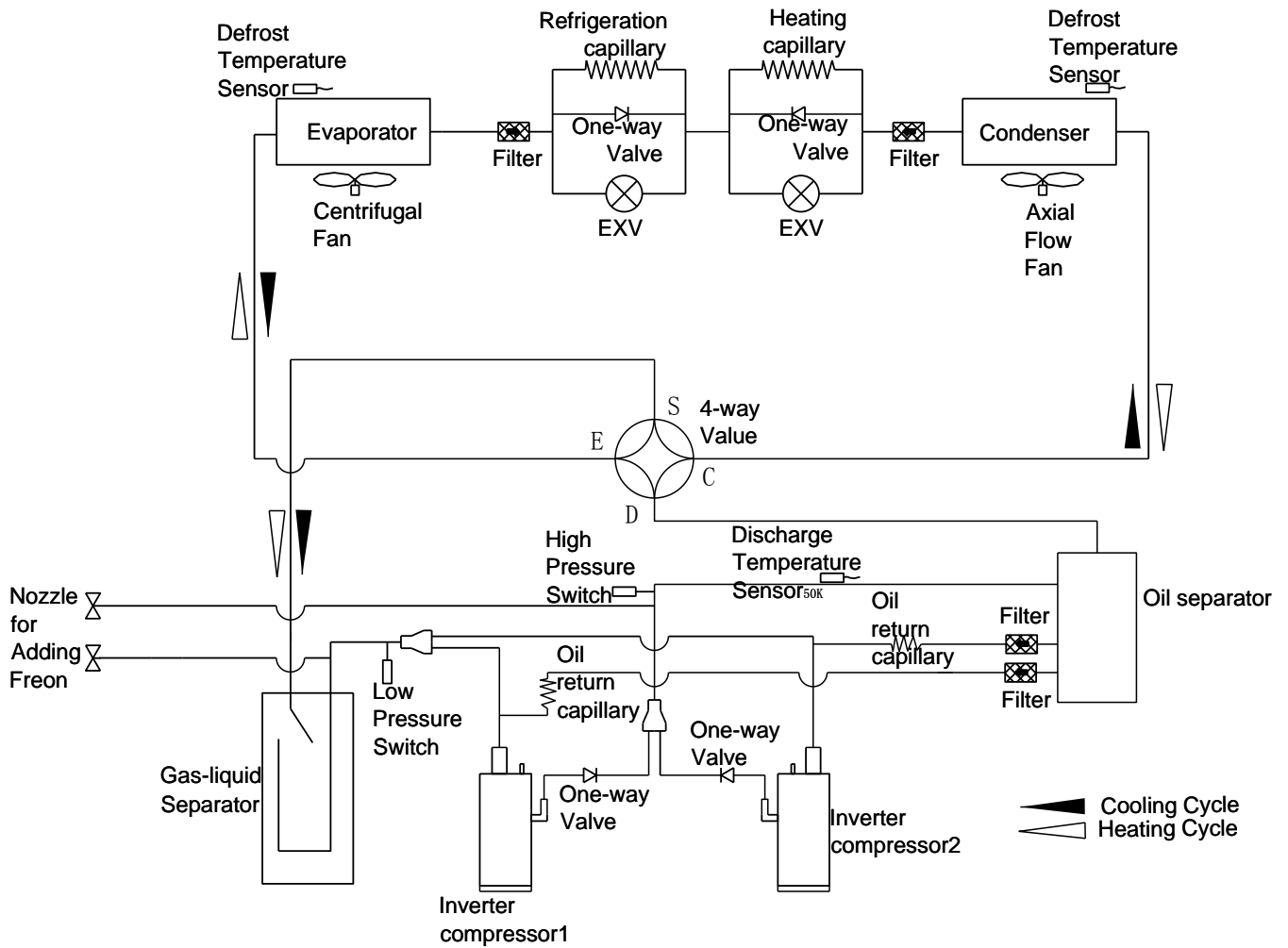
GART-G22HW, GART-G23HW



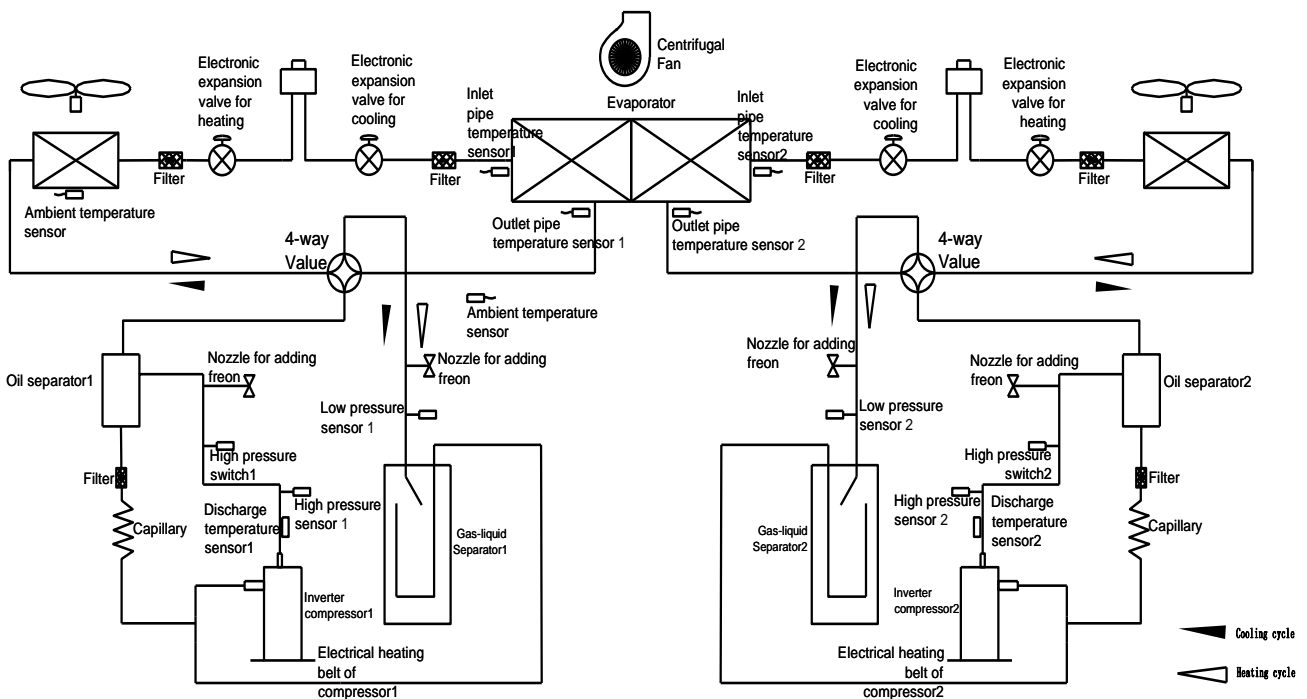
GART-G28HW, GART-G34HW



GART-G49HW, GART-G60HW



GART-G84HW



GART-G100HW

(Refrigerant flowing direction is shown as the arrow)

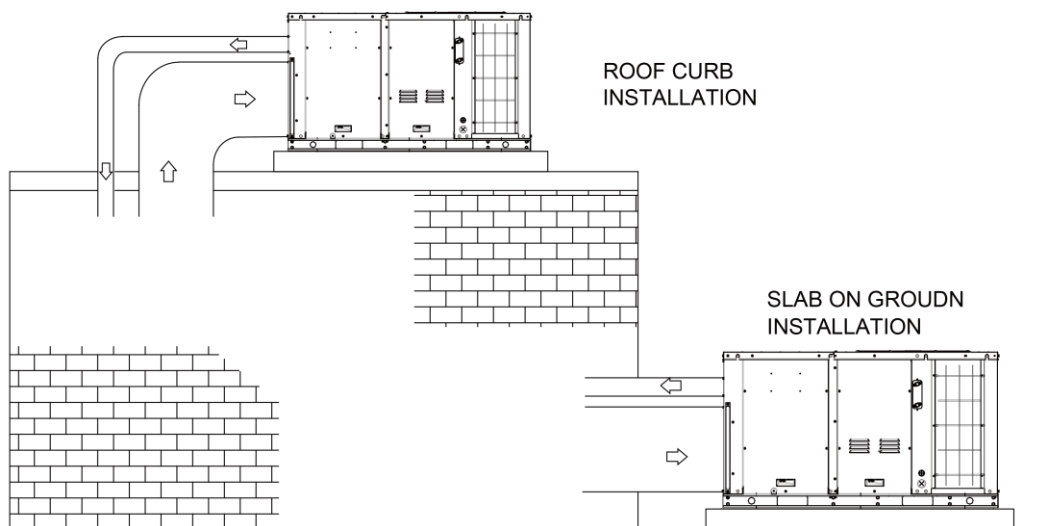
INSTALLATION

UNITS INSTALL

INSTALLATION POSITIONS

To ensure the unit in proper function, selection of installation location must be in accordance with following principles.

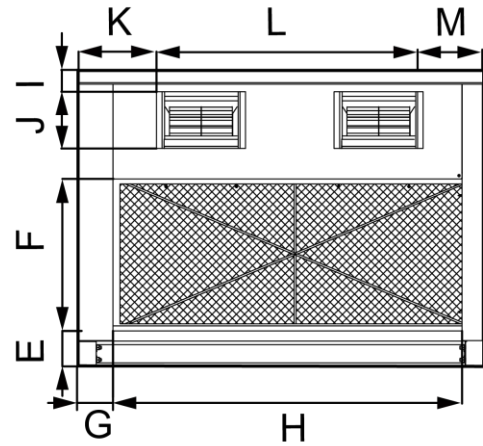
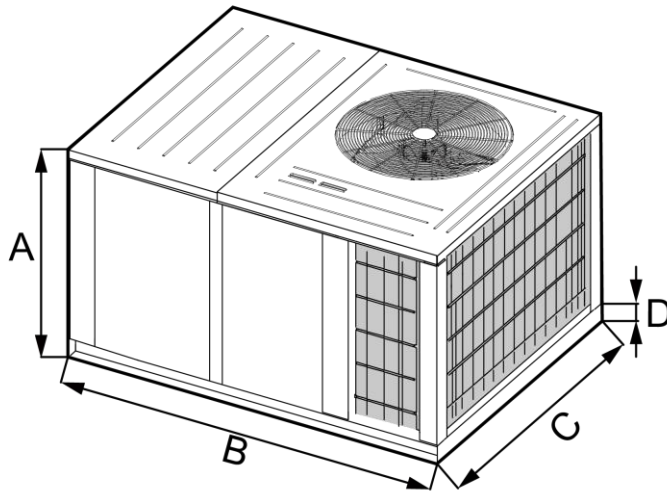
- (1) Unit shall be installed so that the air discharged by outdoor fan will not return and that sufficient space for repair shall be provided around the unit.
- (2) The installation site must have good ventilation, so that the unit can take in and exhaust enough air.
- (3) Place of installation shall be strong enough to support the weight of unit, and it shall be able to insulate noise and prevent vibration. Ensure that the wind and noise from the unit will not affect your neighbors.
- (4) Avoid direct sunshine over the unit. It is better to set up a sun shield as the protection.
- (5) Place of installation must be able to drain the rainwater and defrosting water.
- (6) Place of installation must ensure the unit will not subject to the influence of rubbish or oil fog.
- (7) The installation site must be at a place where the air exhaust outlet does not face strong wind.
- (8) Unit must be fixed on stable and solid surface of floor.



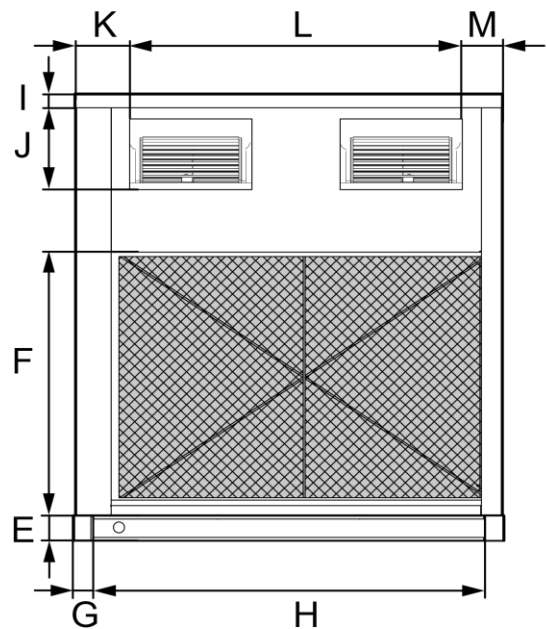
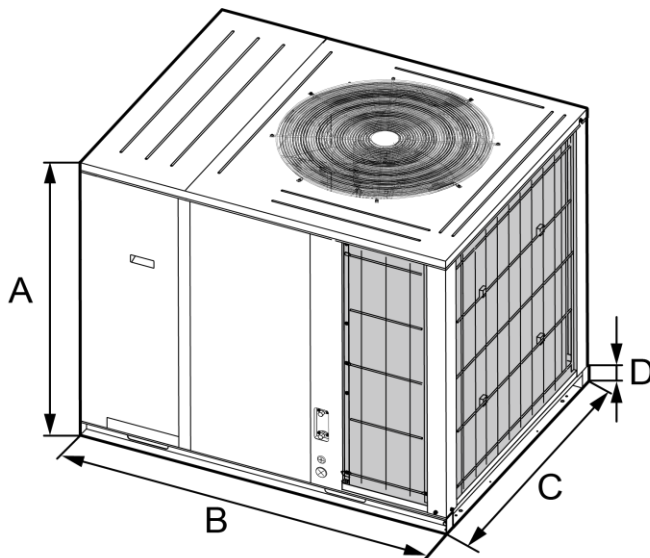
DIMENSION

DIMENSION OF UNITS

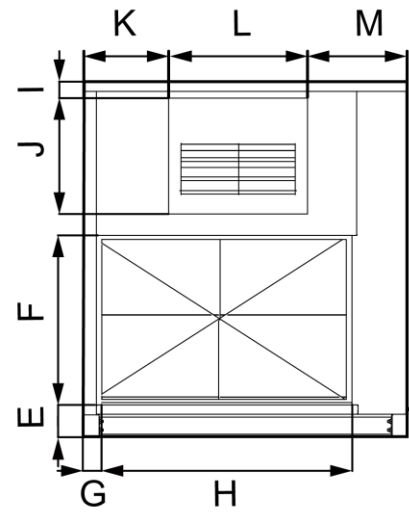
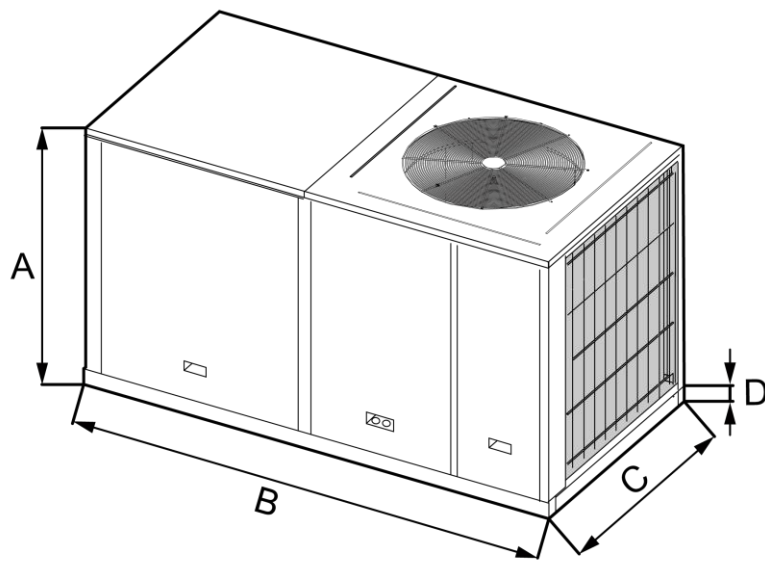
GART-G22HW, GART-G23HW



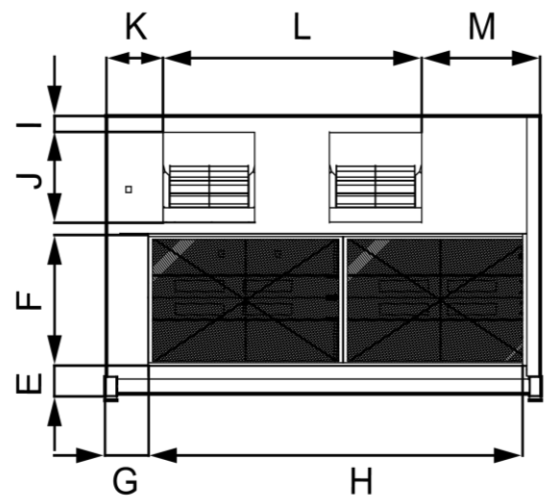
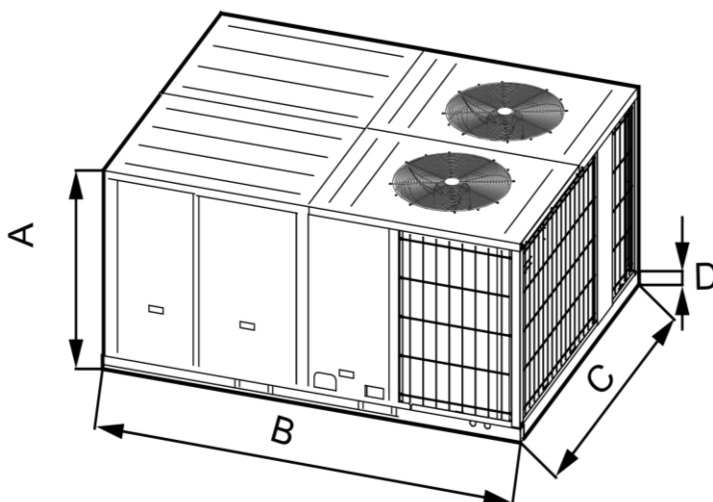
GART-G28HW, GART-G34HW



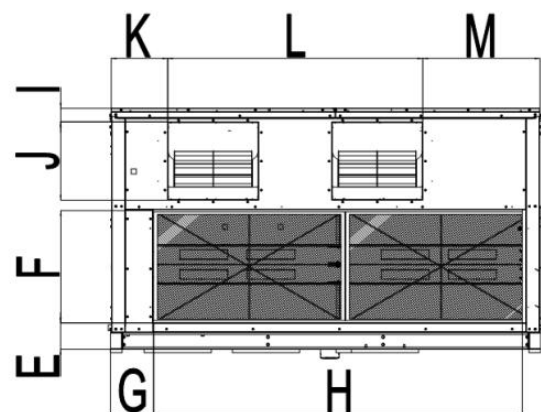
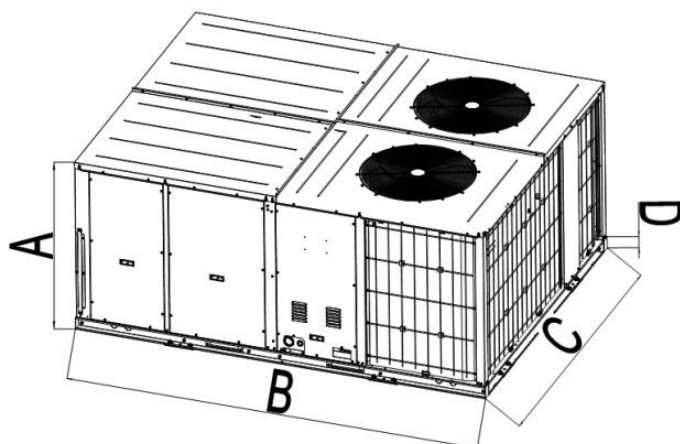
GART-G49HW



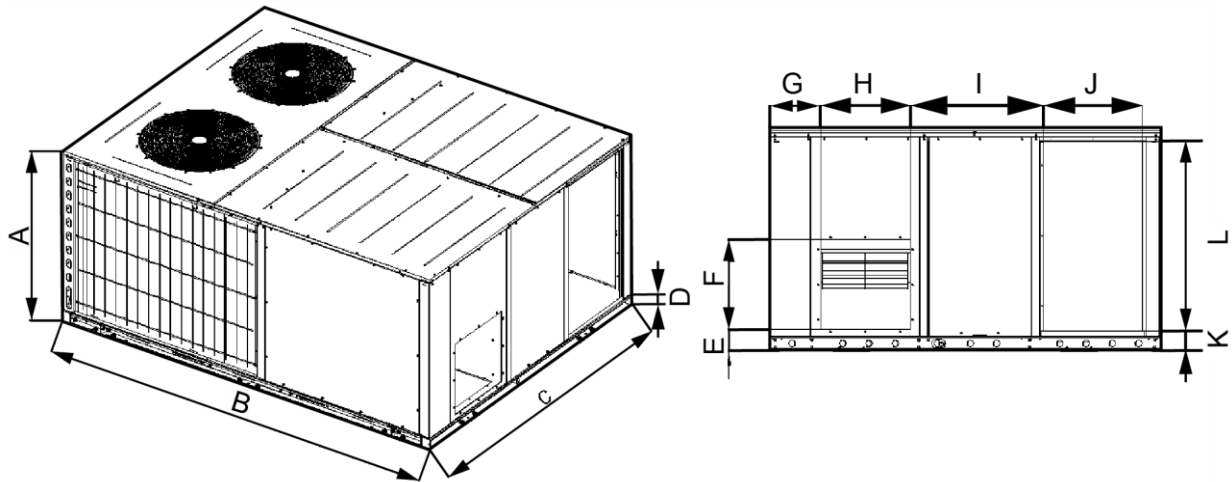
GART-G60HW



GART-G84HW



GART-G100HW

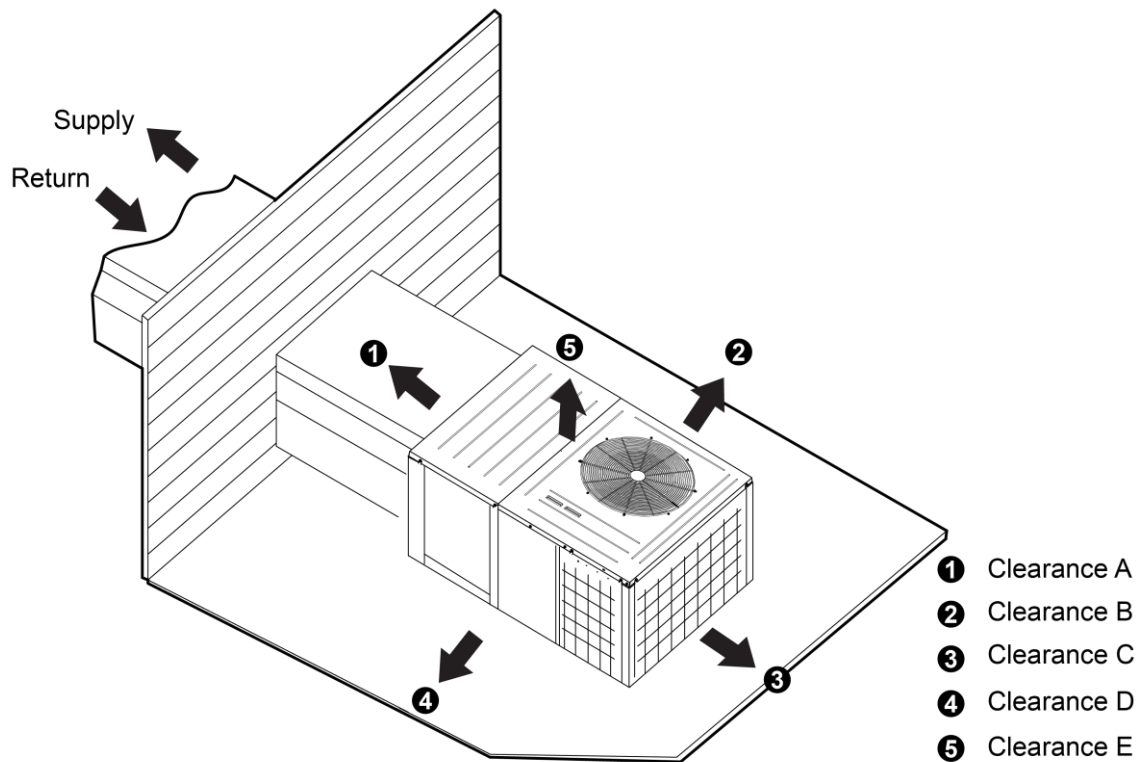


Dimension(mm)	A	B	C	D	E	F	G	H	I	J	K	L	M
GART-G22HW	815	1450	1120	70	98	417	94	916	65	190	144	866	105
GART-G23HW	815	1450	1120	70	98	417	94	916	65	190	144	866	105
GART-G28HW	1215	1450	1120	70	98	686	94	916	70	190	144	866	105
GART-G34HW	1215	1450	1120	70	98	686	94	916	70	190	144	866	105
GART-G49HW	1245	2260	1140	80	111	595	50	914	58	406	298	487	349
GART-G60HW	1250	1880	2240	85	115	590	158	2021	45	412	311	1336	588
GART-G84HW	1270	2880	2240	90	138	585	224	1920	71	407	294	1329	610
GART-G100HW	1240	2850	2240	80	129	553	286	513	763	563	111	1081	/

Note: Above diagrams may be different from actual mode.

INSTALLATION CLEARANCE DATA

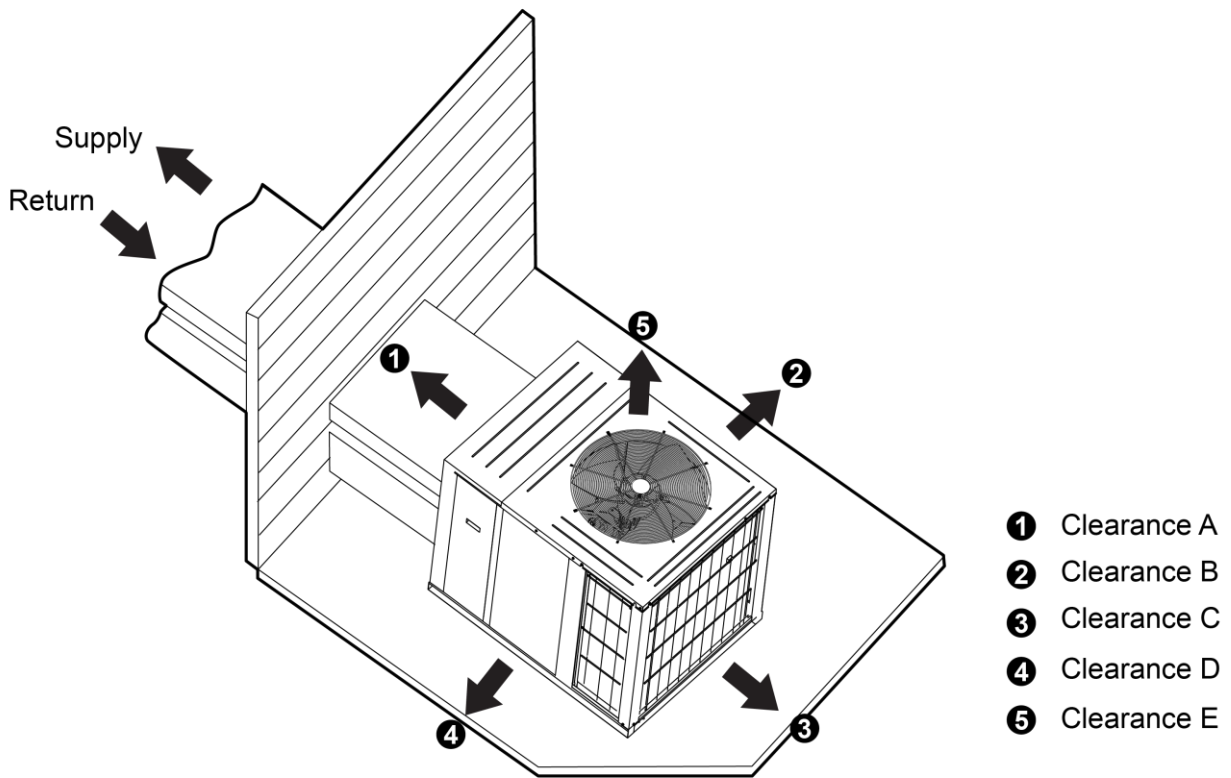
GART-G22HW, GART-G23HW



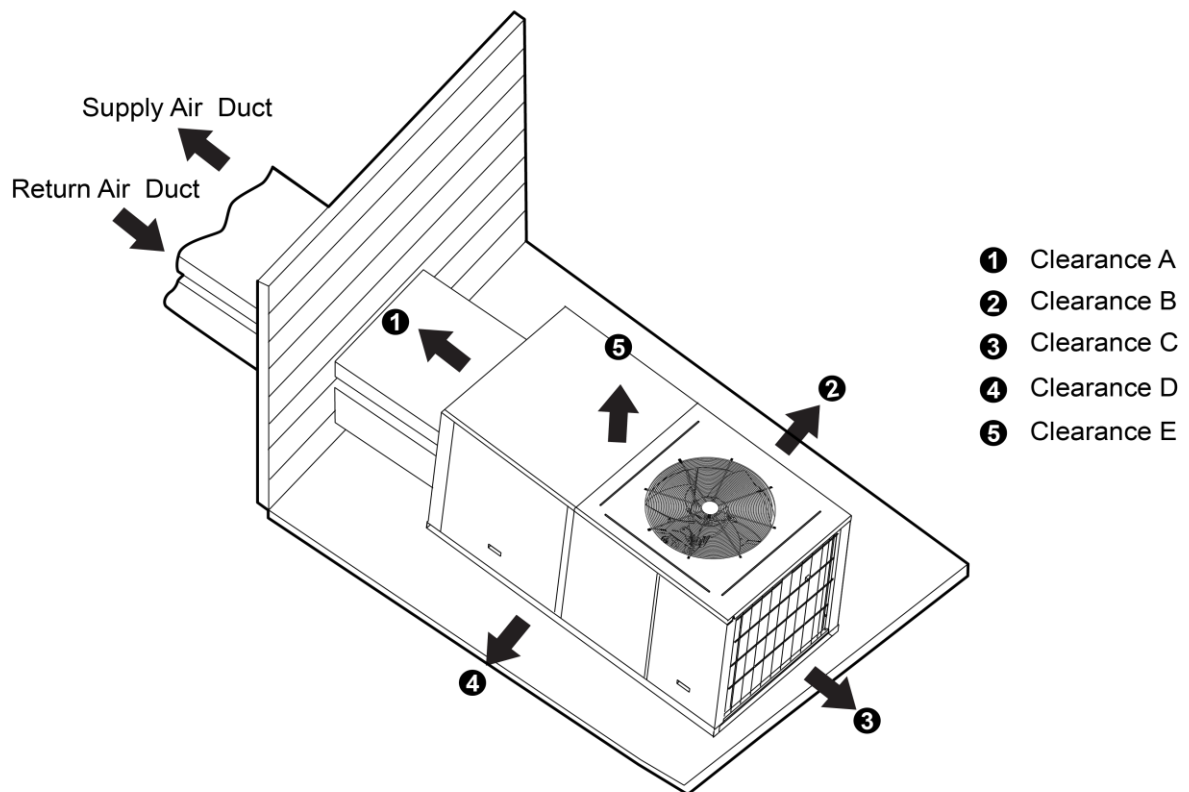
Note: Above diagrams may be different from actual model.

Installation clearances		
Dimension (minimum)	mm	inch
A	600	24
B	1100	43
C	860	34
D	1100	43
E	3000	118

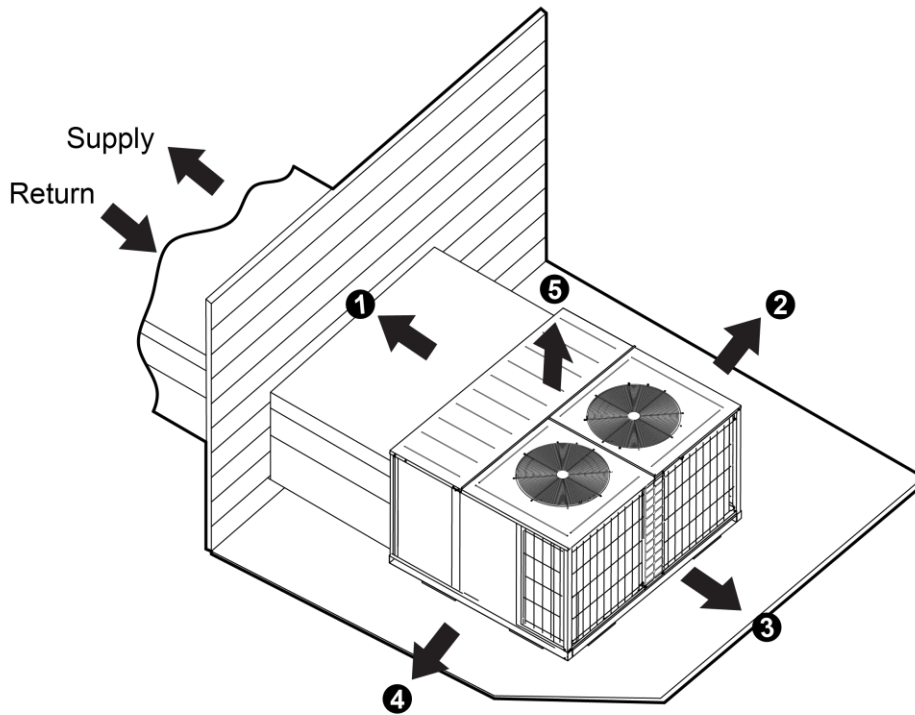
GART-G28HW, GART-G34HW



GART-G49HW

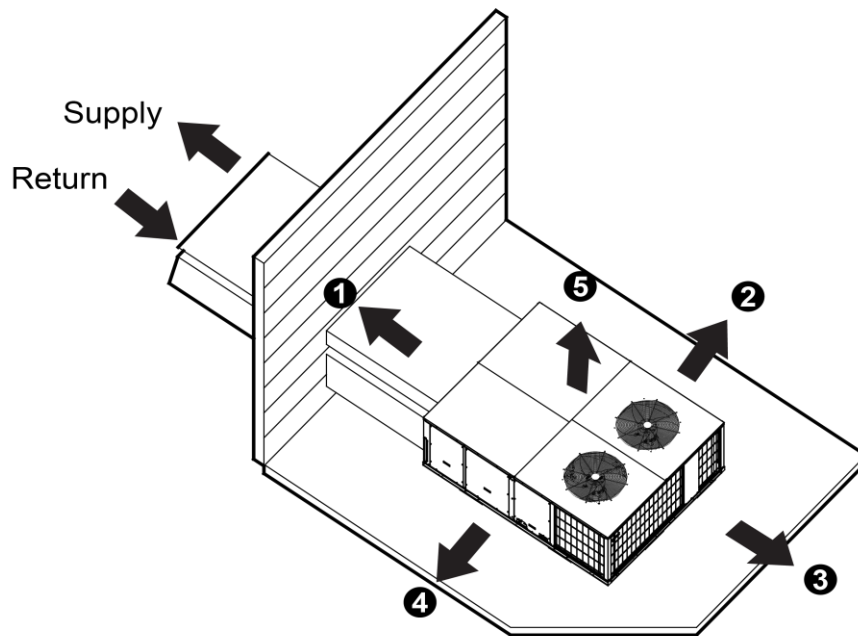


GART-G60HW



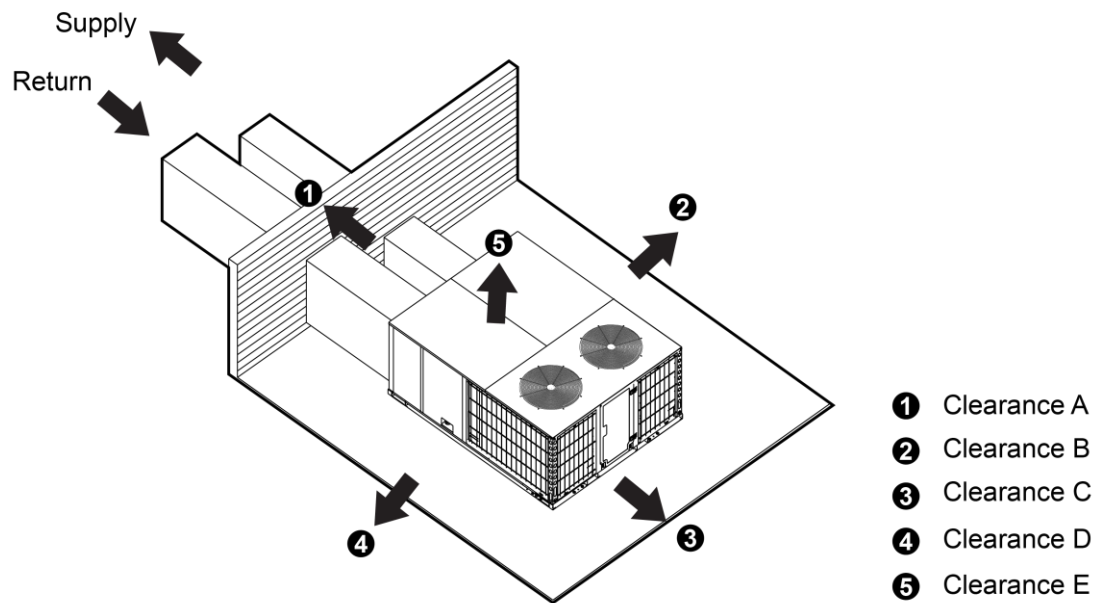
- ❶ Clearance A
- ❷ Clearance B
- ❸ Clearance C
- ❹ Clearance D
- ❺ Clearance E

GART-G84HW



- ❶ Clearance A
- ❷ Clearance B
- ❸ Clearance C
- ❹ Clearance D
- ❺ Clearance E

GART-G100HW



Note: Above diagrams may be different from actual model.

Installation clearances		
Dimension (minimum)	mm	inch
A	1000	39
B	1500	59
C	1100	43
D	1100	43
E	3000	118

