



Internal Use Only

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***MULTI V* Hydro Kit** **(For Medium Temperature)** **SVC MANUAL(Exploded View)**

MODEL : ARNH10GK2A2 / ARNH04GK2A2

CAUTION

Before Servicing the unit, read the safety precautions in General SVC manual.
Only for authorized service personnel.

1. Specification

Type			Hydro Kit (Medium Temp)		
Model		Unit	ARNH10GK2A2	ARNH04GK2A2	
Power Supply			220~240 / 1 / 50		
			220 / 1 / 60		
Capacity (Rated)	Cooling	kW	28	12.3	
		kcal/h	24100	10580	
		Btu/h	95900	42000	
	Heating	kW	31.5	13.8	
		kcal/h	27100	11870	
Btu/h		107500	47000		
Input (Rated)	Cooling	kW	0.01		
	Heating	kW	0.01		
Casing			Painted Steel Plate		
Dimensions	Body	W x H x D	mm	520 X 631 X 330	
			inch	20-15/32 X 24-27/32 X 13	
Net Weight	Body	kg (lbs)	35.0 (77.2)	30.4 (67)	
Heat Exchanger	Refrigerant to Water	Type	Brazen Plate HEX		
		Quantity	EA	1	
		Number of Plate	EA	48	26
		Rated Water Flow	l/min	92	39.6
		Head Loss	kPa	69	41
Temperature Control			Microprocessor, Thermostat for cooling and heating		
Sound Absorbing Thermal Insulation Material			Foamed polystyrene		
Safety Device			Fuse		
Piping Connections	Water Side	Inlet	inch	Male PT 1	
		Outlet	inch	Male PT 1	
	Refrigerant Side	Liquid	mm(inch)	9.52(3/8)	9.52(3/8)
		Gas	mm(inch)	22.2(7/8)	15.88(5/8)
Drain Piping Connection			inch	Male PT 1	
Sound Press Level	Cooling		dB(A)	26	
	Heating		dB(A)	26	
Power Supply Cable			No. x mm ²	3C X CV2.5	
Communication cable			No. x mm ²	2C X CVV-SB 1.0~1.5	
Refrigerant	Refrigerant to Water	Refrigerant name		R410A	
		Precharged Amount	kg (lbs)	-	
		Control		Electronic Expansion Valve	

Notes:

1. Capacities are based on the following conditions:

- Cooling Temperature Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB
Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
Water Inlet 23°C(73.4°F) / Outlet 18°C(64.4°F)
- Heating Temperature Indoor 20°C(68°F) DB / 15°C(59°F) WB
Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
Water Inlet 30°C(86°F) / Outlet 35°C(95°F)
- Piping Length : Interconnected Pipe Length = 7.5m
- Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.

2. Wiring cable size must comply with the applicable local and national code.

3. Due to our policy of innovation, some specifications may be changed without notification.

4. Sound Level Values are measured at Anechoic chamber.

Therefore, these values can be increased (maximum 3dB(A)) owing to ambient conditions during operation.

Conversion Formula

kcal/h= kW x 860
Btu/h = kW x 3412

2. List of Function

Category	Function	ARNH10GK2A2
Installation	Drain pump	X
	E.S.P. control	X
	Electric heater	X
	High ceiling operation	X
	Auto Elevation Grille	X
Reliability	Hot start	X
	Self diagnosis	O
	Soft dry operation	X
Convenience	Auto changeover	X
	Auto cleaning	X
	Auto operation(artificial intelligence)	X
	Auto Restart	O
	Child lock	O
	Forced operation	X
	Group control	O
	Sleep mode	X
	Timer(on/off)	O
	Timer(weekly)	O
	Two thermistor control	X
Individual control	Standard Wired remote controller	O
	Deluxe wired remote controller	X
	Simple wired remote controller	X
	Simple Wired remote controller(for hotel use)	X
	Wireless remote controller	X
CAC network function	General central controller (Non LGAP)	X
	Network Solution(LGAP)	O
	Dry contact	PQDSA(1) / PQDSB(1)
	PDI(power distribution indicator)	O
	PI 485(for Indoor Unit)	X
Special function kit	Zone controller	X
	CTI(Communication transfer interface)	X
	Electronic thermostat	X
Others	Remote temperature sensor	PQRSTA0
	Telecom shelter controller	X
Air to Water Heat Pump Functions	Anti-condensation on floor(cooling)	O
	Water pump on / off Control	O
	Flow switch control	O
	Thermostat interface (230V AC)	O
	Thermostat interface (24V AC)	O
	Sanitary tank heating	X
	Solar-thermal interface with sanitary tank	O
	PHEX anti-freezing control	O
	Water pump forced operation	O
	Autosetting according to ambient temperature	O
	Silent operation	X
	Anti-overheating of water pipe	O
	Emergency operation	O

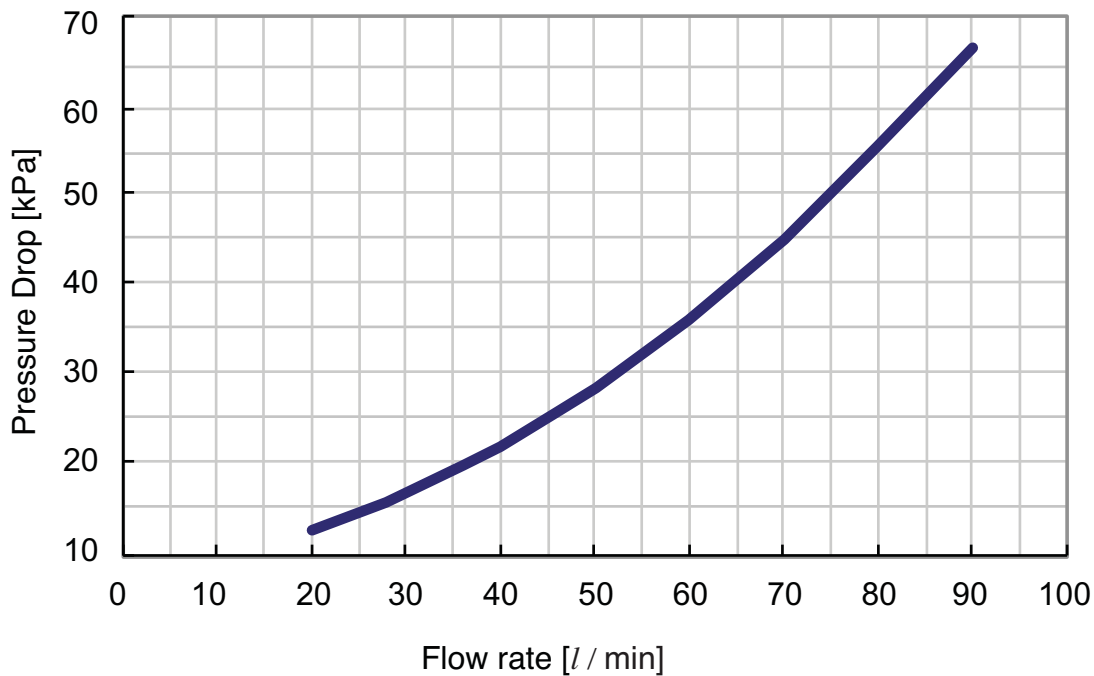
Notes

O : Applied, X : Not applied

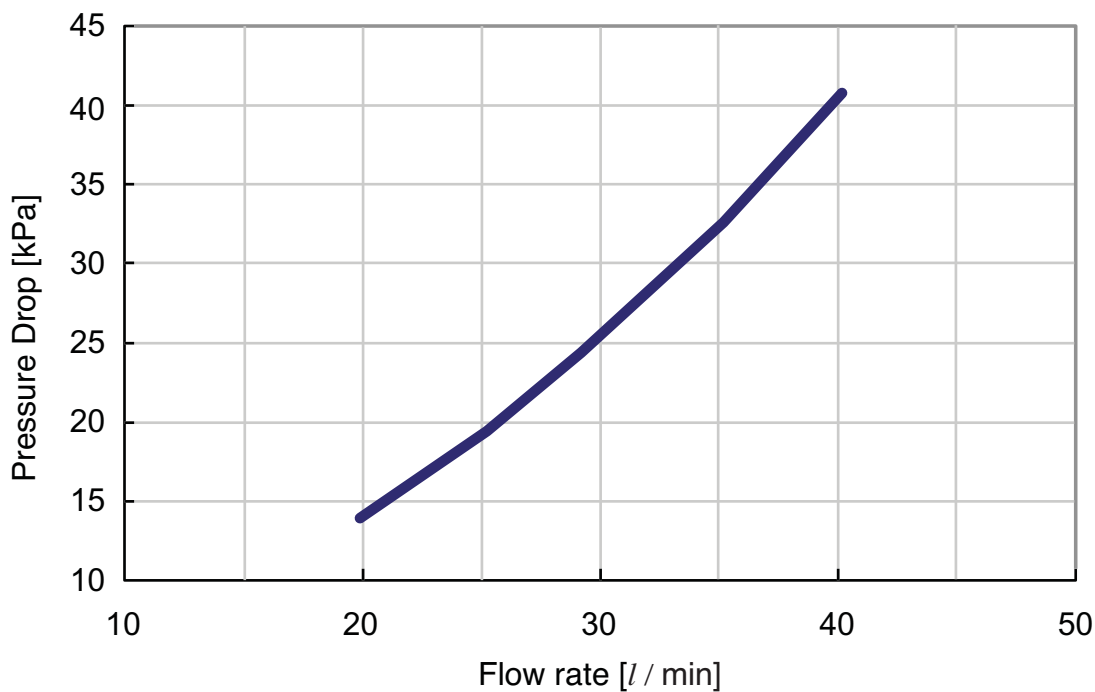
Accessory model name : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

3. Water Pressure Drop

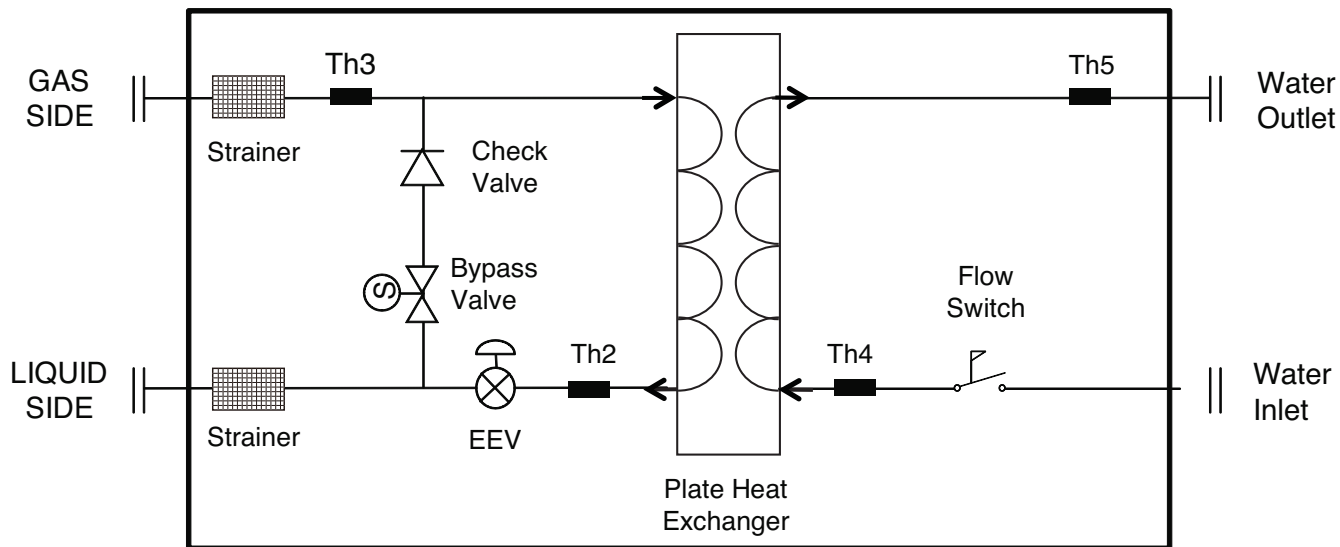
3.1 ARNH10GK2A2



3.2 ARNH04GK2A2

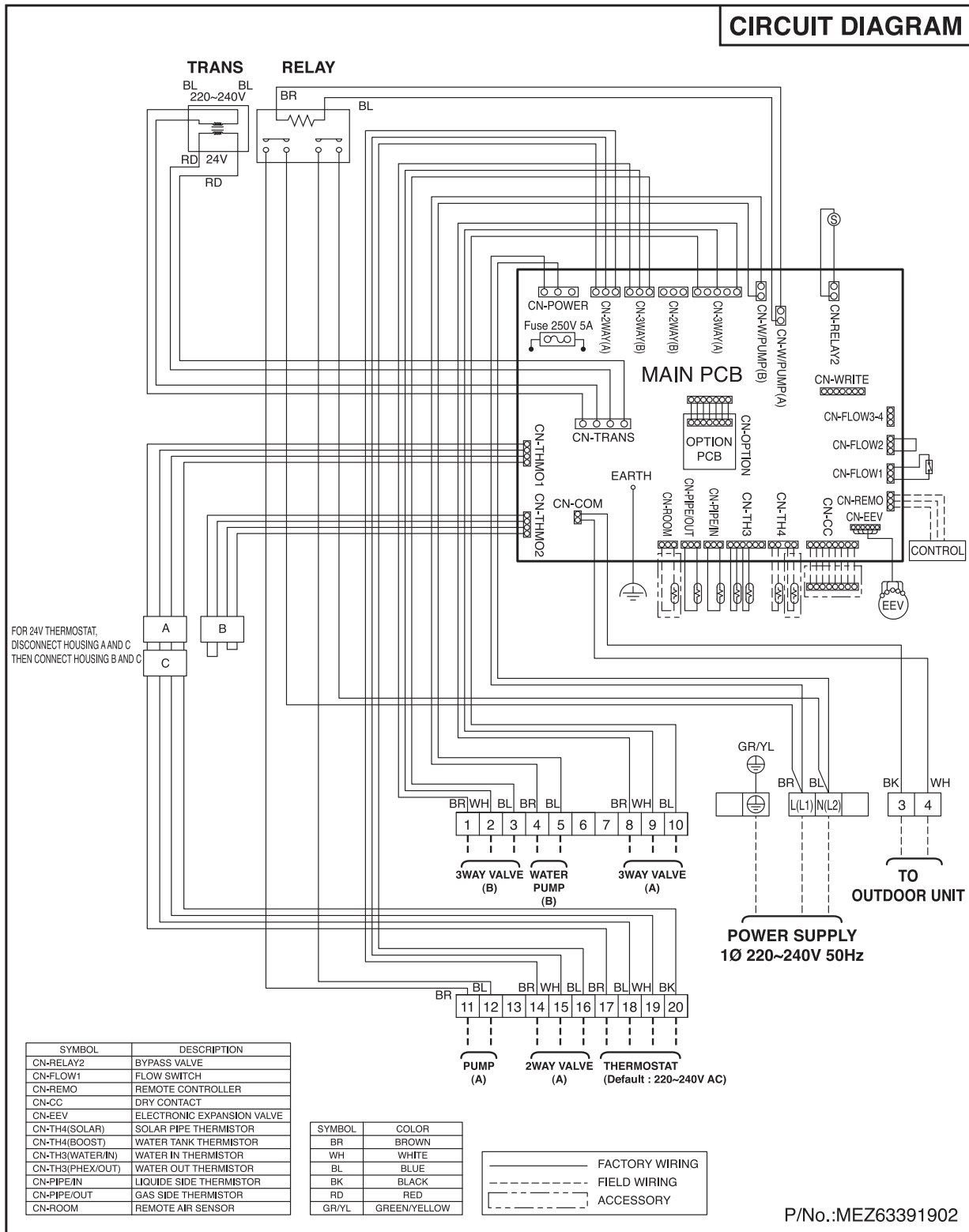


4. Cycle Diagram

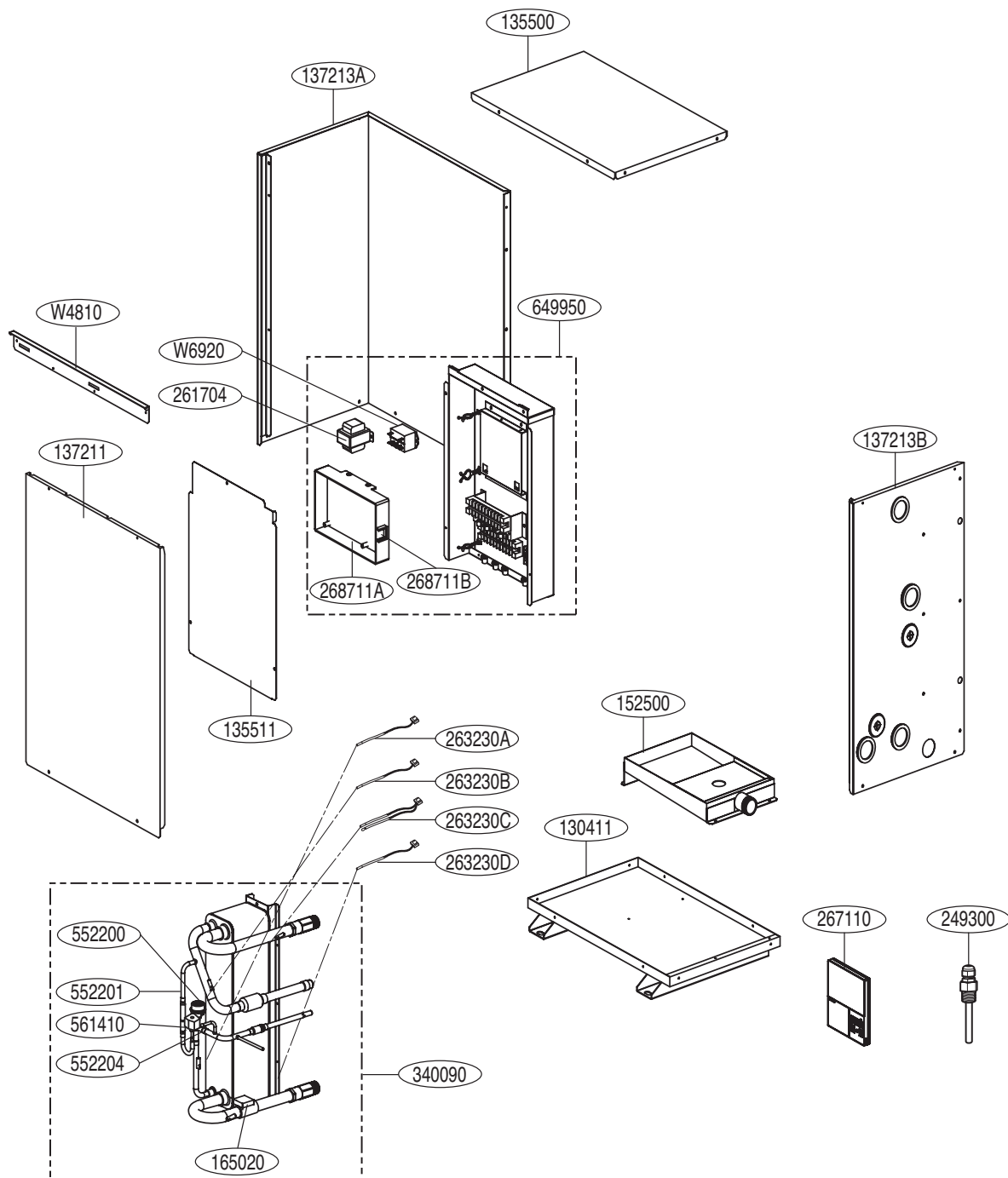


Symbol	Description	PCB Connector	Remarks
Th1	Air Temperature Sensor	CN-ROOM	*Optional accessory (being sold separately) *Not shown in diagram
Th2	Liquid Side Temperature Sensor	CN-PIPE/IN	
Th3	Gas Side Temperature Sensor	CN-PIPE/OUT	
Th4	Water Inlet Temperature Sensor	CN-TH3	*Th4 and Th5 are connected to 4 pin type connector CN-TH3
Th5	Water Outlet Temperature Sensor		

5. Wiring Diagram



6. Exploded View



Location No.	Description	Housing Color
263230A	Liquid Side Temperature Sensor	White
263230B	Gas Side Temperature Sensor	Red
263230C	Water Inlet/Outlet Temperature Sensor	Black
263230D	Water Tank Temperature Sensor	Red



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