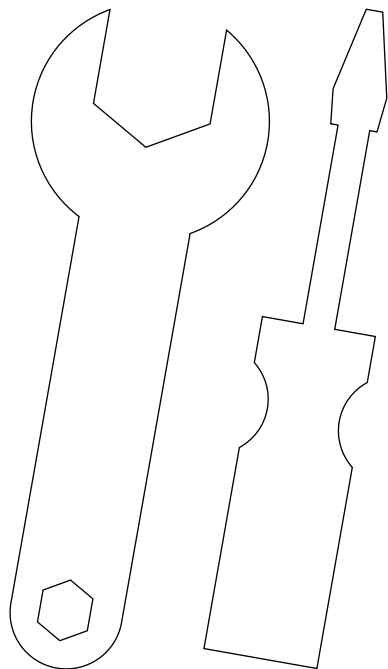


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- This product must not be disassembled under any circumstances. Only authorized repair technicians are qualified to conduct disassembly and repairs.
- Failure to heed this warning may result in fire, electrical shock or injury.



- Do not install this product in a refrigerated warehouse, heated swimming pool or other location where temperature and humidity are significantly different. (Failure to heed this warning may result in electrical shock or malfunctioning.)
- Do not install this product where it will be directly exposed to rain. (Failure to heed this warning may result in electrical shock or malfunctioning.)
- Do not install this product in a location where acid, alkali or organic solvent vapors, paints or other toxic gases, gases containing corrosive components or high concentrations of oily smoke are present. (Failure to heed this warning may result not only in malfunctioning but also fire, power leakage and electrical shock.)
- Do not use this product outside the range of its rated voltage and control capacity. RHR 800 ~ 5000 Single phase, 230V, 50 Hz. RHR 6000 Three phase, 380V, 50 Hz. If used with electrical heaters, RHR 800 ~ 6000 Three phase, 380V, 50 Hz. (Failure to heed this warning may result in fire or electrical shock.)



- Install this product in an environment where the temperature ranges from -10 °C to +40 °C and the relative humidity is less than 80%. If condensation is expected to form, heat up the fresh outside air by a duct heater etc.
- Select a position for introducing the outside air where no exhaust or combustion gases will be sucked into the fresh air duct and where it will not be covered by snow (Failure to ensure a supply of air can result in producing a state of Oxygen deficiency inside the room.)
- Select an adequately sturdy position for installing the product and install it properly and securely. (Injury may result if the product should fall.)
- Use the designated electrical wires for the terminal board connections and connect the wires securely so that they will not be disconnected. (Failure to ensure proper connections may result in fire.)
- When passing metal ducts through wooden buildings clad with metal laths, wire laths or metal, these ducts must be installed in such a way that they will not make electrical contact with metal laths, wire laths or metal sheets. (Power leakage can cause ignition.)
- The outside ducts must be tilted at a gradient(1/30 or more) downwards toward the outdoor area from the main unit, and properly insulated. (The entry of rain water may cause power leaks, fire or damage to household property.)
- Gloves should be worn during installation. (Failure to heed this warning may result in injury.)
- A dedicated circuit breaker must be installed at the origin of mains power supply. This circuit breaker must be provided with a means for locking (lock and key).



- Connect the product properly to the ground. (Malfunctioning or power leaks can cause electrical shock.)



- An isolator switch having a minimum contact gap of 3 mm in all poles must be provided as a means of disconnecting the power supply.

Control List



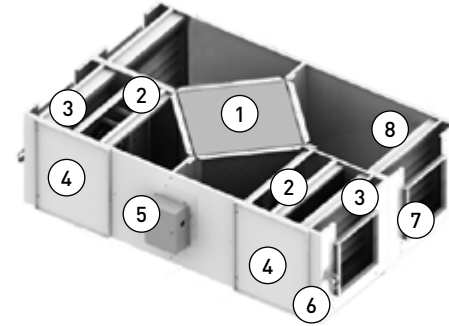
► Control procedures required after commissioning and in case of a malfunction are listed below. In the event of further malfunction after initial controls, consult to our company.

CONTROL LIST



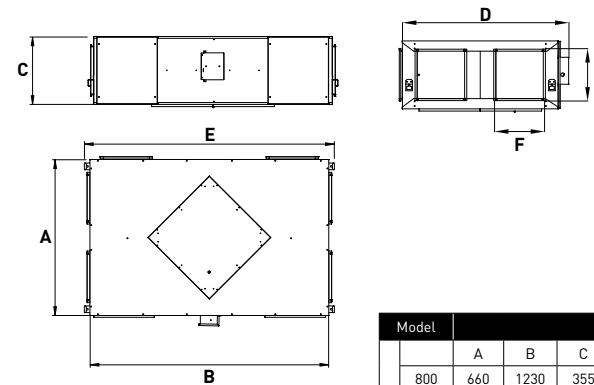
01	Make sure the unit receives power and grounding is done!	<input type="checkbox"/>
02	Make sure the length of electric cables is correct! (Check for overheating on cables!)	<input type="checkbox"/>
03	Check if the cables heading to the electrical box are shielded (protected against magnetic field) and shield is grounded. If not, replace!	<input type="checkbox"/>
04	Check if the exhaust and supply filters are clean and make sure they do not prevent air flow!	<input type="checkbox"/>
05	Make sure the drain hose is connected and check for any blockages through the drain line! If needed, clean it!	<input type="checkbox"/>
06	Please check that the duct dimensions used in the duct system are correct and of the same dimension of the units duct connection. If wrong correct it with appropriate one.	<input type="checkbox"/>
07	Make sure electrical connections are done as it is described in this manual. Make necessary corrections if there is any faulty connection.	<input type="checkbox"/>
08	Make sure there is enough service space for installation. If not, repeat installation.	<input type="checkbox"/>
09	In extremely cold climates in which freezing may occur on the heat recovery unit, use electric pre-heater at the fresh air suction to raise the air temperature to -8 °C or above.	<input type="checkbox"/>
10	Check for unusual noise or vibration after the installation. If there is, control if anti-vibration pads are used.	<input type="checkbox"/>

Components

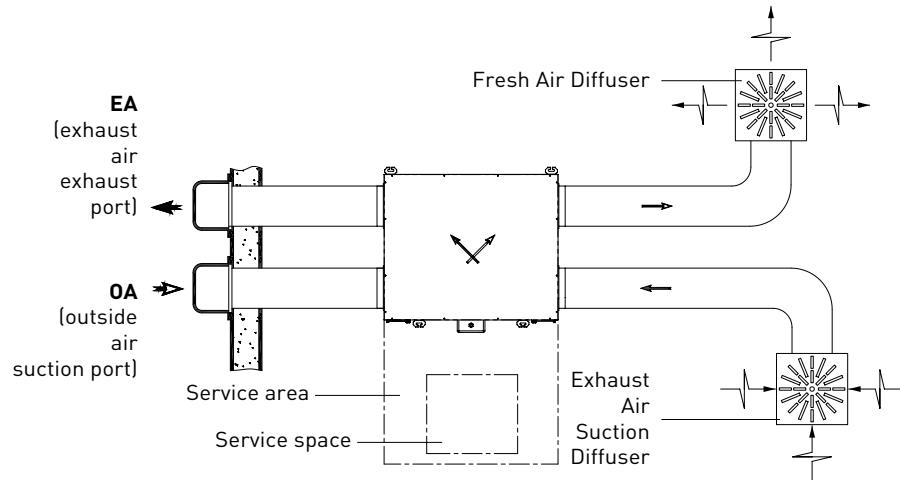


- 1 Heat Recovery Exchanger
- 2 Fresh Air and Exhaust Air Fans
- 3 Fresh Air and Exhaust Air Filters
- 4 Filter and Fan Service Cover
- 5 Electrical Box
- 6 Sub Hangers
- 7 Duct Connectors
- 8 Alternative Duct Connections

Dimensions

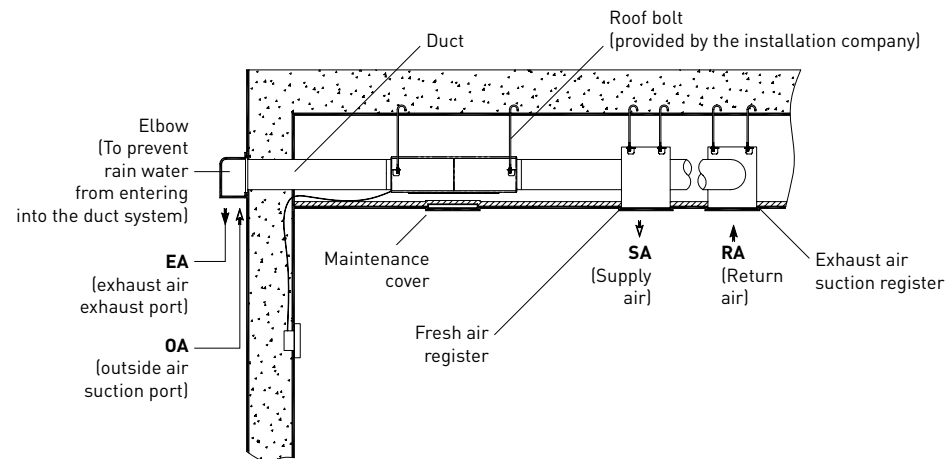
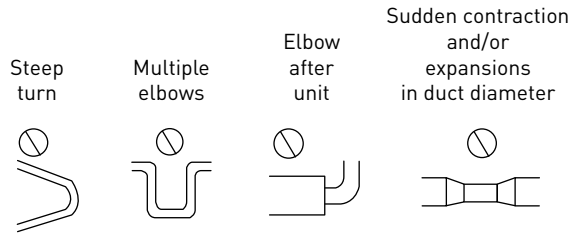


Model	Dimensions							
	A	B	C	D	E	F	G	Weight (kg)
800	660	1230	355	795	1312	200	200	51
1000	660	1230	355	795	1312	200	200	52
1500	910	1430	360	1045	1510	170	270	72
2000	910	1430	430	1045	1510	250	300	84
2500	1170	1790	425	1300	1870	300	300	103
3000	1170	1790	515	1300	1870	370	370	116
4000	1170	1890	515	1300	1970	370	370	125
5000	1380	1990	645	1455	2070	432	432	186
6000	1380	1990	645	1455	2070	432	432	199



CAUTION

- ▶ Make sure service doors open easily and fan/ filter can be pulled out.
- ▶ Pay attention to the warnings before connecting the units to ducts.

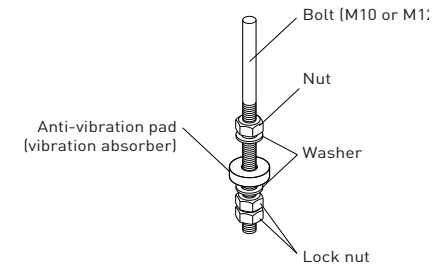


Preparation of roof bolts

Hang the rubber anti-vibration pad to the bolt and balance the unit so that it remains horizontally. Make sure the unit is attached securely with a lock nut.

CAUTION

▶ Control the strength of the bolts before installation.



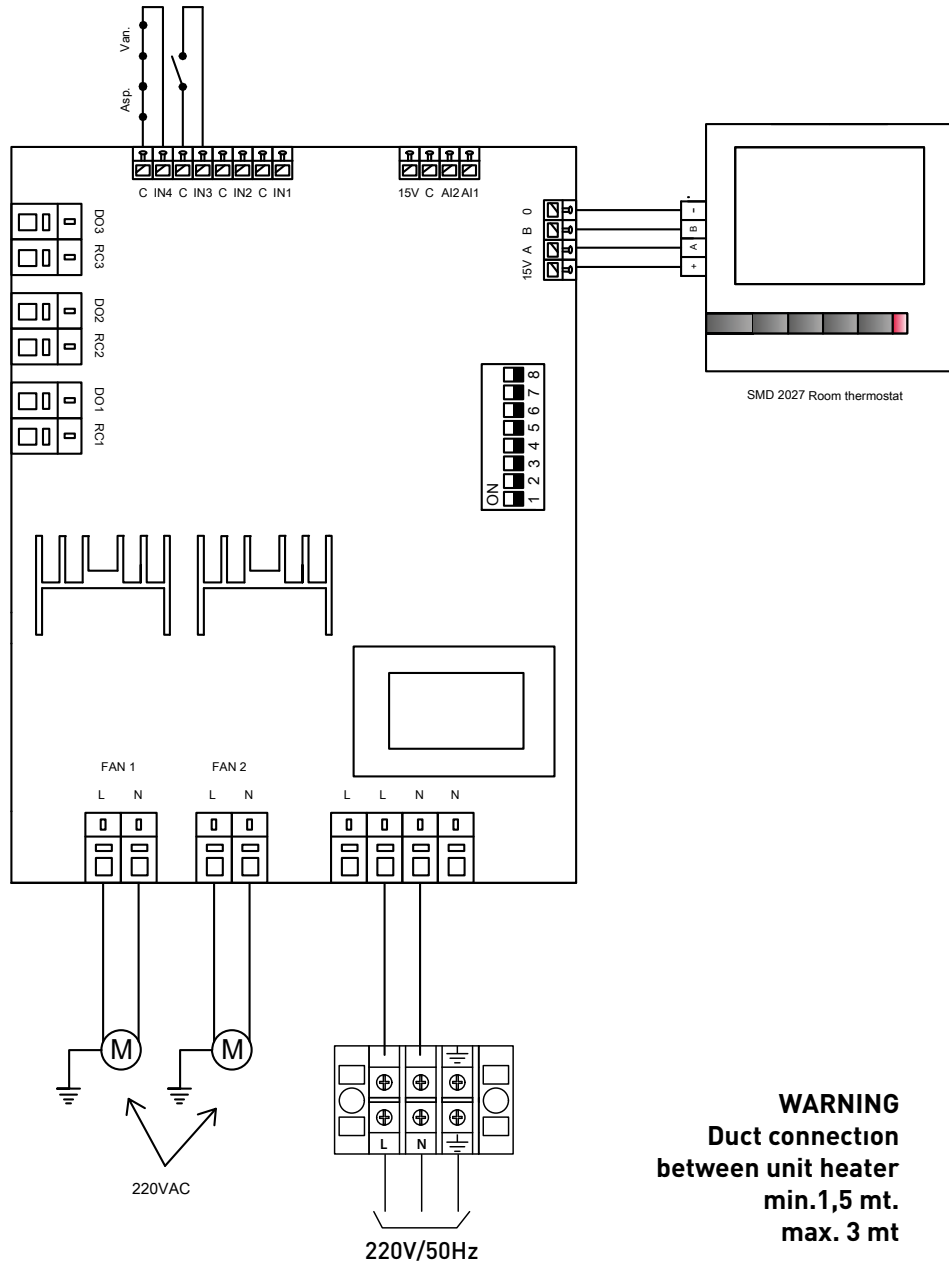
Drain pan outlet connection must be made as from picture.

Technical Specification

	Model	RHR								
		Birim	800	1000	1500	2000	2500	3000	4000	5000
Mains Connection		1~230 V 50 Hz								
Performance data		- 12°C ~ 46°C								
Air Flow Rate [1]	m ³ /h	800	1000	1450	1900	2400	2970	3730	4700	5700
Sound Level [2]	dB (A)	44	45	46	48	49	50	52	53	59
Electrical Data										
Fan Motor Power	W	390	624	790	1050	1050	1080	1300	1780	2540
Maximum Current	[A]	1,6	2,6	3,4	4,8	4,8	4,6	5,4	7,6	10,6

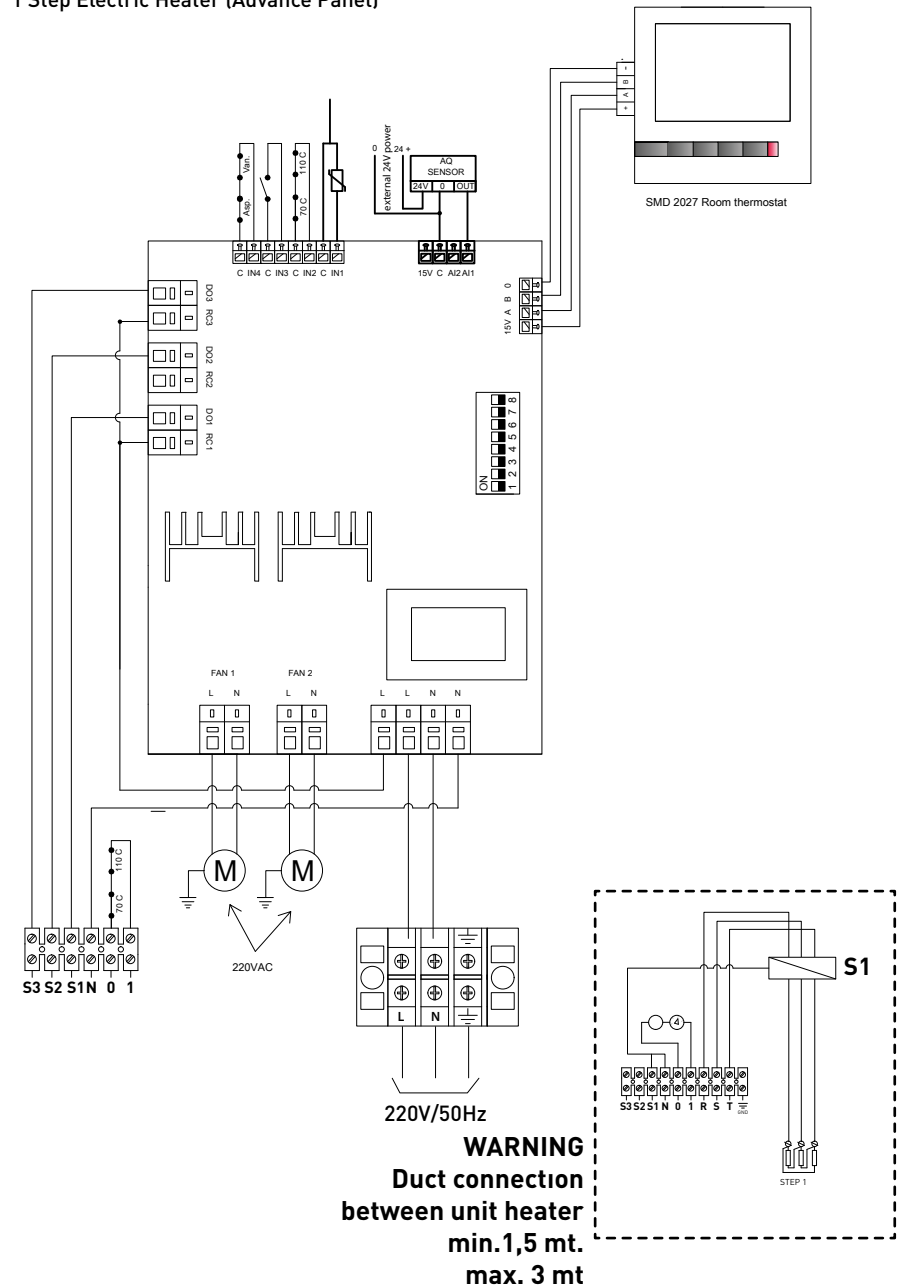
¹It is measured when external static pressure is 0 Pa.
²Sound level data are measured at 250 Hz and 1.5 m away from the unit's bottom.

Electrical Connection



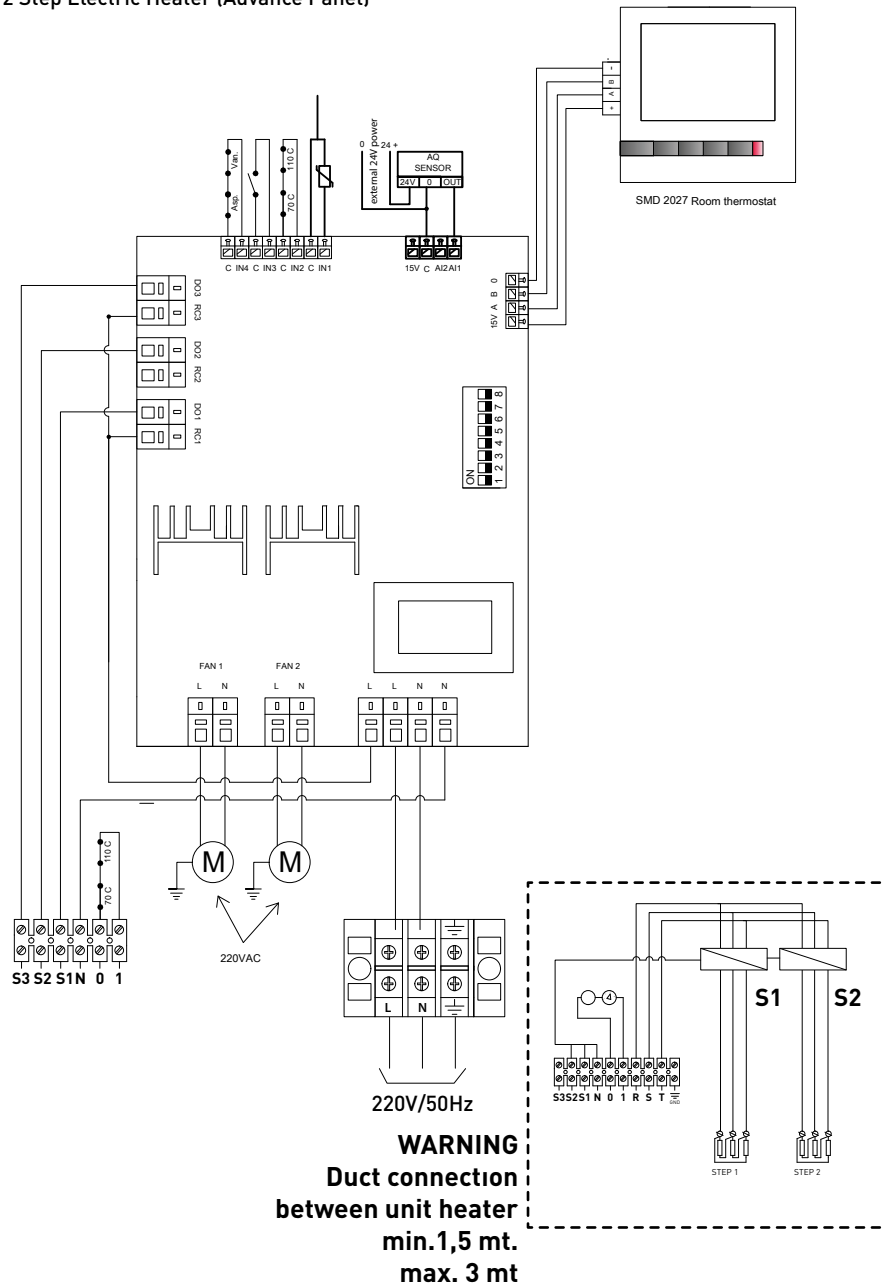
Electrical Scheme

1 Step Electric Heater (Advance Panel)



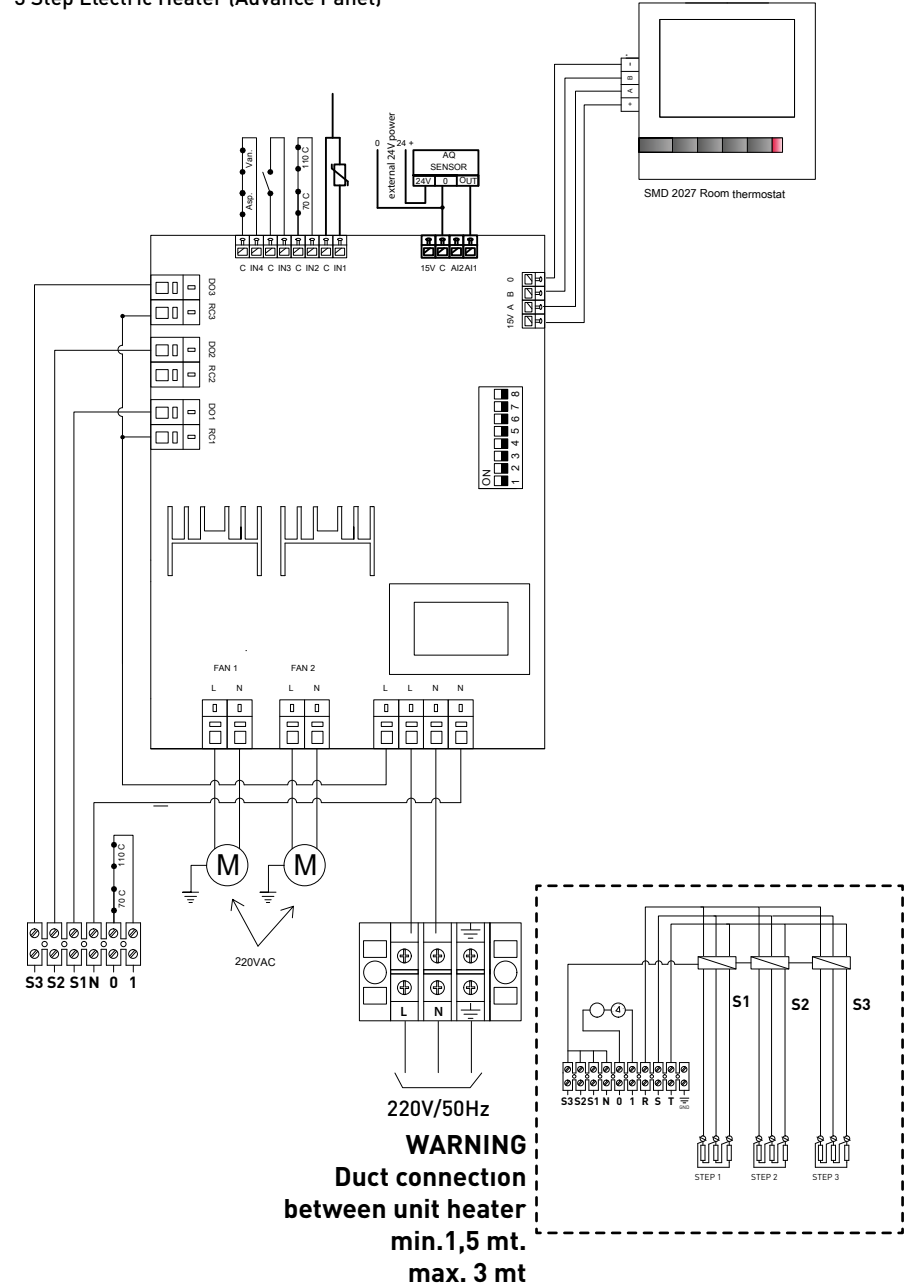
Electrical Scheme

2 Step Electric Heater (Advance Panel)

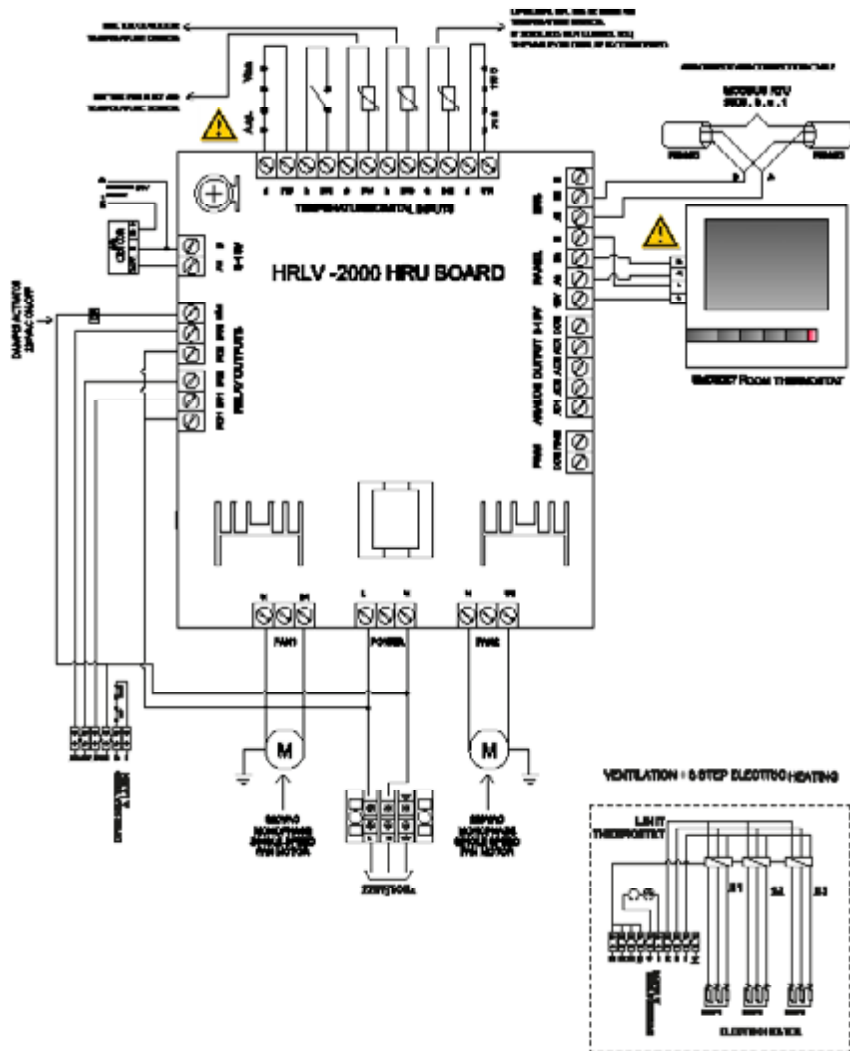


Electrical Scheme

3 Step Electric Heater (Advance Panel)



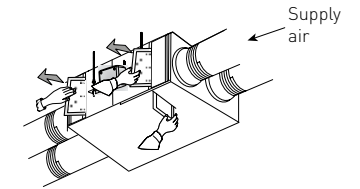
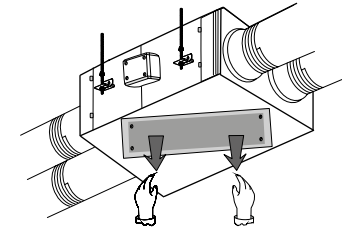
PRO SCHEME



- Turn off all power switches before maintenance.
- Do not turn on the unit without the air filter mounted otherwise blockages may occur.
- Clean the air filters at least once a year.
- Clean the heat recovery exchanger at least once in every two years.

Cleaning of The Heat Recovery Exchanger

Cleaning of The Air Filter

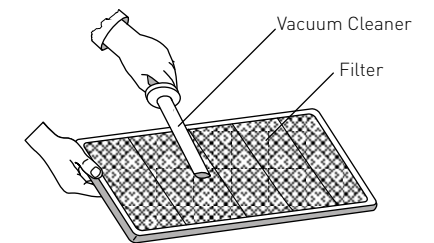
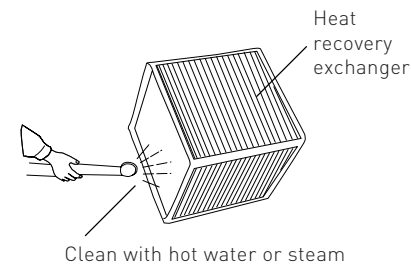


1. STEP
Remove the screws that secure the heat recovery exchanger service cover to the unit's bottom cover. While performing this operation make sure heat recovery exchanger does not fall down.

1. STEP
Open filter cover. Filters can be removed from sides and bottom.



► Maximum mass of the exchanger is 22 kg.



2. STEP
Clean the heat recovery exchanger with hot water or steam. Use natural detergent or soap powder if need be. Leave it to dry after cleaning and mount it to the unit after it is completely dry. Tighten the service cover screws thoroughly and make sure the heat recovery exchanger does not fall down.

2. STEP
Clean the filter with a vacuum cleaner. To remove dense dust build-ups, prepare a solution with cold water and natural detergent or soap powder and submerge the filter in the solution. Later pull out the filter from the solution and leave it to dry. In any case, do not scrub or apply force on the filter material. After it is completely dry, mount the filter to the unit, close the service door and tighten the screws thoroughly.



Renair