



HueVen C3 User Manual

※ Without Duct Type Model : HRD3-50PLCN

※ With Duct Type Model : HRD3-100PLC, HRD3-120PLC

- Images and content in this manual may be changed without notice to improve product performance.
- Be sure to read the 'User Manual' before use.
- If you need product installation, please contact the supplier.
(If a problem occurs as the product is not installed by a professional installer, there may be a trouble to have free service even within the warranty period.)
- Product specifications may be changed without prior notice to improve quality.

Key Feature

The Himpel ERV system checks indoor air quality to provide fresh air. Polluted indoor air(CO₂, PM2.5, PM10, harmful substances, etc) is discharged outside and outdoor fresh air is purified and supplied to indoor.



Ventilation

A function that discharges indoor polluted air to the outside and cleans the outdoor air with filters to bring it indoors.



Auto

A function that automatically purifies indoor air in ventilation mode depending on the indoor air quality.



Air Purification(Optional)

On days with heavy yellow dust or fine dust, the air purification mode cleans indoor fine dust and recirculates air indoors.



Bypass

When the outdoor temperature is similar to the indoor temperature, the function purifies the outdoor air through filters without heat exchange to bring clean air indoors.



Saving Energy

By recovering cooling/heating energy wasted during ventilation, cooling/heating costs can be reduced by more than 20% compared to general ventilation.



High-Performance Filter

HEPA filter H13 grade removes ultrafine dust, fine dust, and harmful substances.



BLDC motor

By applying a BLDC motor, the utility cost is low even if the product is used 24 hours a day.

Contents

Instructions Before Use	Warnings and precautions during installation	04
	Precautions and recommendations for use	05
Specifications	Product and Controllers	06
Parts	Product and display window	07
	Wireless controller	08
	Wired controller	09
Indoor air quality management and measurement parameters		10
How To Use	Ventilation mode	11
	Auto mode	11
	Air purification mode	12
	Bypass mode	12
	Timer set	12
Maintenance	Filter cleaning and replacement cycle	13
	Filter notifications	13
	Filter cleaning	13
	Filter/enthalpy exchanger separation	14
	Grill cap and cleaning	14
Specifications	Specification and size	15
Customer Service	ERV connection diagram	16
	Things to check before inquiring about A/S	17
	Warranty	19

※ Before use, be sure to read the following.



Warnings When Installing

* If the instructions are not followed, the user may be injured.

01

Do not install the product near electric heaters, fire, gas, or flammable substances.

There is a risk of explosion and fire.

02

Install using an outlet connected to an earth leakage breaker rated at 220V~240V/15mA or less.

There is a risk of fire and electric shock.

03

Do not extend the power cable or use it in parallel with a power strip or other devices.

There is a risk of fire and electric shock.

04

Be sure to install an earth leakage breaker and a dedicated switch.

There is a risk of fire and electric shock.

05

To move or reinstall the product, please contact the supplier.

There is a risk of fire, electric shock, short circuit, or injury.

06

Do not allow non-experts to disassemble, repair, or modify the product.

There is a risk of fire, electric shock, short circuit, or injury.

07

Install the product safely by a professional installer or a licensed electrician.

There is a risk of explosion, fire, electric shock, or injury. Please contact the supplier.

08

Use only AC 220V~240V/50Hz, 60Hz voltage for this product.

If the voltage conditions are different, there is a risk of product malfunction, electric shock, or fire.

09

Install firmly and accurately in a place that can support the weight of the product.

User may suffer injury from falling.



Precautions When Installing

※ User may be injured if precautions are not followed.

01

If the power cable is damaged, contact the supplier for a replacement.

There is a risk of fire and electric shock.

02

Be sure to use accessories and suggested parts for installation.

This may cause performance problem.

03

Make sure the main body and grill are securely fastened.

User may suffer injury from falling.

04

Install using an external air cap attached to a bird barrier or equivalent material.

If foreign substances such as bird nests block the air intake, it may cause performance to be low.

05

Do not install in places that require year-round cooling, such as machine rooms or computer rooms, or inside mobile vehicles (camping cars) or ships.

Problems with product reliability may arise out of the product warranty environment.

06

Do not damage the power cable, such as bringing it close to a high temperature area, pulling it with force, or placing a heavy object on it.

There is a risk of fire and electric shock.

07

When installing, repairing, or servicing the product, be sure to turn off the power and do not connect the power until the product is assembled.

There is a risk of short circuit and electric shock.

08

Do not install the product in a place where the temperature may be below freezing.

Condensation may form inside the main body or enthalpy exchanger, causing electric shock or abnormal operation.

09

Turn off the power during thunder or lightning or when not in use for a long time.

There is a risk of fire and electric shock.

※ Before use, be sure to read the following.



Precautions For Use

* User may be injured if instructions are not followed.

01

Do not block the air intake and exhaust vents with your fingers or insert foreign objects into them.

There is a risk of malfunction and injury.

04

Do not use the product for ventilation of indoor stove.

When using indoor stove such as gas or oil stoves, ventilation through this product is not recommendable.

07

If water or foreign matter gets into the electrical parts of the product, turn off the power and contact the supplier.

There is a risk of short circuit and electric shock.

10

Be careful not to let children swallow the batteries, and keep them out of reach.

If a child swallows a battery, consult a doctor immediately.

02

Do not disassemble the product or open the grill cover while the product is in operation.

There is a risk of electric shock and injury.

05

Store or dispose of plastic packaging out of reach of children.

Wearing it on head can block your nose or mouth, causing severe injury or death.

08

If the product makes a strange sound, odor, or smoke, immediately turn off the power and contact the supplier.

There is a risk of fire and electric shock.

03

When changing filters or cleaning, be sure to turn off the power and do not use an unsafe stand.

There is a risk of fire, electric shock, or injury.

06

Do not artificially give excessive shock or pull the product with force.

It may cause fire, malfunction, or injury.

09

People with reduced physical or mental capabilities, or lack of experience and knowledge (including children) should not use the product.

This product cannot be used safely without parental supervision or instruction.



Recommendations For Use

* Failure to follow the instructions may result in injury to the user or damage to property.

01

Do not spray water directly on the product or use benzene, thinner, alcohol, acetone, or chemicals to clean.

It may cause fire, deformation, or discoloration.

04

Do not place obstacles around the inlet or outlet.

It may cause malfunction or injury.

02

Turn off the product before cleaning, and clean after the fan has completely stopped rotating.

It may cause malfunction or injury.

05

When replacing the enthalpy exchanger and filter, avoid bending it.

It may cause damage or assembly failure.

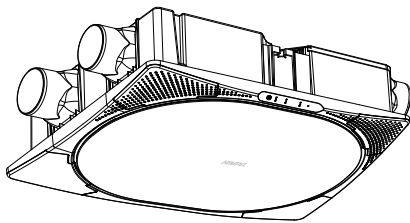
03

Cleaning of enthalpy exchanger and filters with water is prohibited. Exchange it regularly.

Dust may cause fire, performance degradation, or noise.

※ Check all the parts.

1 Parts



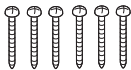
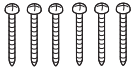
Main Body



User Manual



Grill Screw

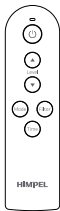


Installation Screw

2 Controllers

* Wireless controller is optional.

Wireless Controller



Bar Type



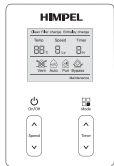
Remote Controller Holder



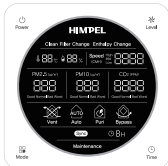
CR 2032

Lithium Battery

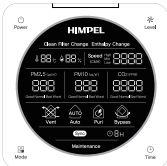
Wired Controller



RJ2



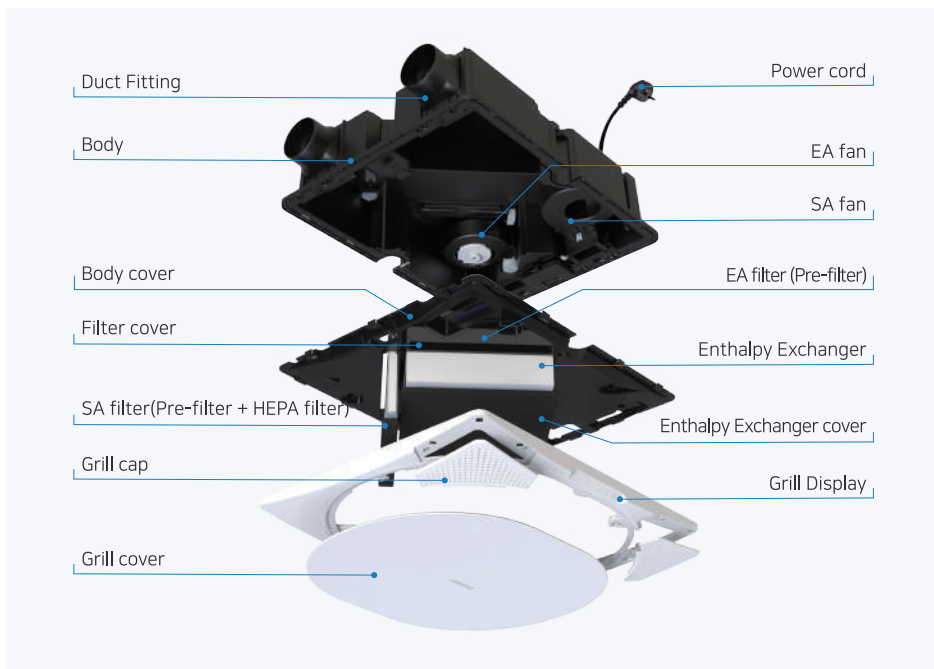
RS2(IoT Option)



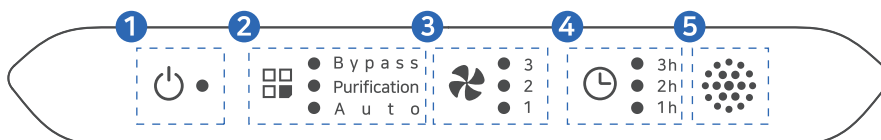
RS2 LED

※ The part names are listed below.

1 Product

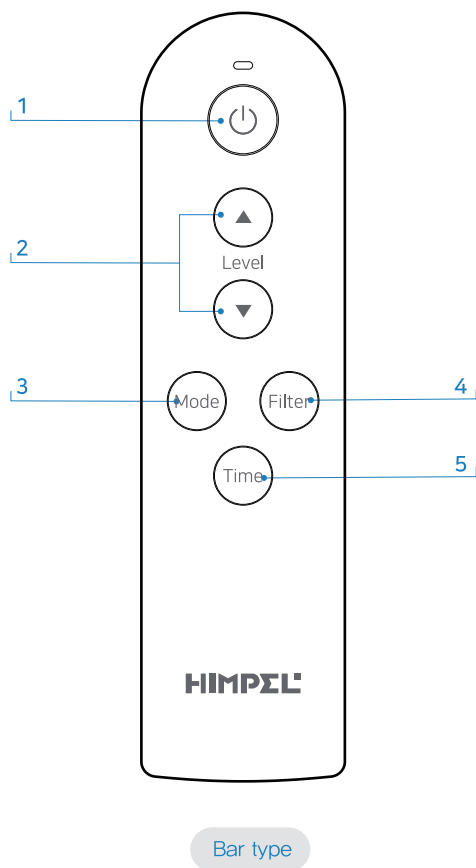


2 Grill Display



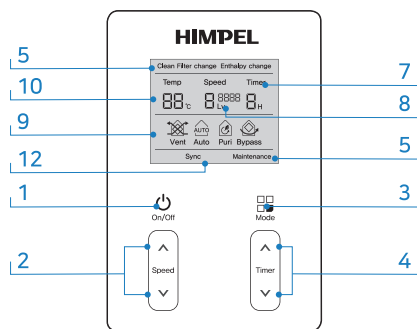
1 Power 2 Mode 3 Air Volume 4 Timer 5 Wireless Controller Receiver

3 Wireless Controller

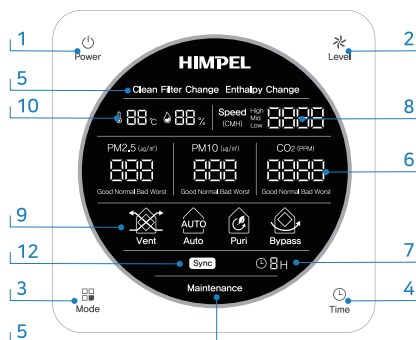


- 1 Power Button 2 Air Volume Button 3 Mode Button 4 Filter Alarm Button 5 Timer Button

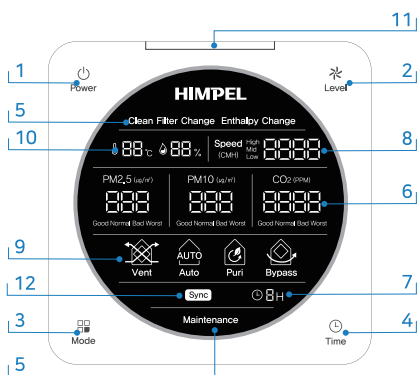
4 Wired Controller



RJ2



RS2(IoT Optional)

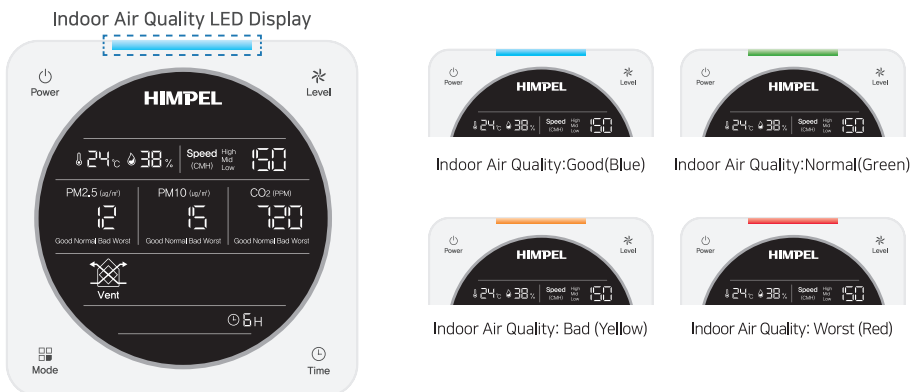


RS2 LED

- 1 Power Button 2 Air Volume Button 3 Mode Button 4 Timer Button 5 Maintenance & Filter Alarm
- 6 Indoor Air Quality Display 7 Reservation Time Display 8 Air Volume Display
- 9 Operation Mode Display 10 Temperature, Humidity Display 11 Indoor Air Quality LED Display
- 12 IoT Link Display

1 Indoor Air Quality LED Display / Criteria

Indoor air quality is monitored in real-time and is displayed through the LED display.



Type	Good	Normal	Bad	Worst
CO ₂ (PPM)	0 ~ 700	701 ~ 1,000	1,000 ~ 1,500	1,501 or higher
PM 10 (μm/m ³)	0 ~ 30	31 ~ 80	81 ~ 150	151 or higher
PM 2,5 (μm/m ³)	0 ~ 15	16 ~ 35	36 ~ 75	76 or higher
Physical Symptoms	Pleasant, normal breathing	Eye irritation. Sneezing	Headache, fatigue	Impaired concentration, vomiting

※ Note: PM10 and PM2,5 Criteria - Integrated Air Quality Index

※ The indoor air quality displayed on the remote controller may vary slightly depending on the installation location and environment.

※ The remote controller sensor varies depending on the remote controller, and only remote controllers with sensors can check indoor air quality.

※ The LED on the top of the RS2 LED remote controller changes color depending on the indoor air quality.

2 Auto Mode according to Indoor Air Quality

In Auto Mode, the operation mode changes according to the indoor air quality.

CO ₂ PM2,5 PM10	Good	Normal	Bad	Worst
Good	Stop	Air Purification / (Lv1)	Air Purification / (Lv2)	Air Purification / (Lv3)
Normal	Ventilation / (Lv1)	Ventilation / (Lv1)	Ventilation / (Lv2)	Ventilation / (Lv3)
Bad	Ventilation / (Lv2)	Ventilation / (Lv2)	Ventilation / (Lv2)	Ventilation / (Lv3)
Worst	Ventilation / (Lv3)	Ventilation / (Lv3)	Ventilation / (Lv3)	Ventilation / (Lv3)

※ If CO₂ and particulate matter values are both "Good," operation stops.

※ Models without Air Purification Mode will operate in Ventilation Mode.

※ The remote controller sensor varies depending on the remote controller, and the Auto Mode operation may vary accordingly.

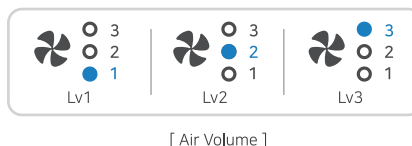
※ Before using the product, be sure to read the following.

1 Ventilation

1. Press the 'Power' button on the controller to operate the product.

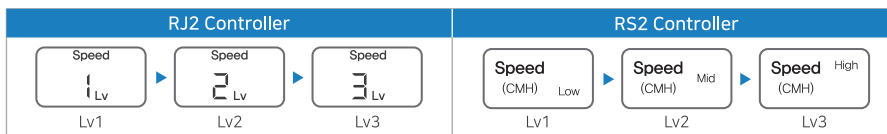
1) The power indicator and air volume indicator light on the product display.

2) When the product is turned on, it operates in **ventilation mode [Lv1]**.



2. User can select the air volume by pressing the 'Level' button on each controller.

The air volume can be set in the following order: **Lv1 ▶ Lv2 ▶ Lv3**



2 Automatic Mode

1. Press the 'Mode' button on the controller to select automatic mode.

The automatic mode indicator and air volume indicator light on the product display.



2. Press the 'Mode' button on the controller to cancel automatic mode.

※ Description of automatic mode

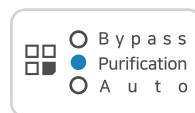
- 1) It operates by setting the air volume automatically according to the indoor air quality.
- 2) Specifications (controller) without carbon dioxide (CO₂) and fine dust sensors operate repeatedly for 20 minutes and stop for 40 minutes with a fixed air volume of 'Lv1'.

※ Before using the product, be sure to read the following.

3 Air Purification Mode(Optional)

1. Press the 'Mode' button on the controller to select the purification mode.

The purification indicator and air volume indicator light on the product display.



[Purification Mode Indicator]

2. Press the 'Mode' button on the controller to cancel the purification mode.

4 Bypass Mode

1. Press the 'Mode' button on the controller to select bypass mode.

1) The bypass indicator and air volume indicator light on the product display.

2) In bypass mode, it only operates in [Lv1].



[Bypass Mode Indicator]

2. Press the 'Mode' button on the controller to cancel bypass mode.

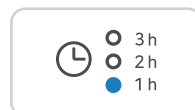
5 Timer Set

1. Press the 'Timer' button on the controller to set the reservation time.

1) The timer indicator and air volume indicator light on the product display.

2) The timer can be set in the following order: 1h ▶ 2h ▶ 3h ▶ OFF.

3) The timer automatically stops working after the set time.



[1 Hour Timer Indicator]

※ Timer is available only on ventilation mode.

※ To prevent the mal-function, please clean the filter and enthalpy exchanger regularly.

! Filter Cleaning And Replacement Cycle

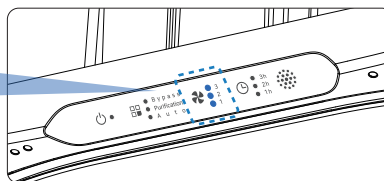
Type	Cleaning Cycle	Replacement Cycle
SA, EA Pre-filter	About 2,000 hours(about 3 months)	About 4,000 hours(about 5 months)
Hepa-filter	-	60%~70% filter contamination(about 3 ~ 6 months)
Enthalpy exchanger	-	About 20,000 hours (about 2 years 3 months)

* Calculation based on 24 hours use a day.

! Filter Alarm

After cleaning and replacing the filter, please turn off the filter alarm.

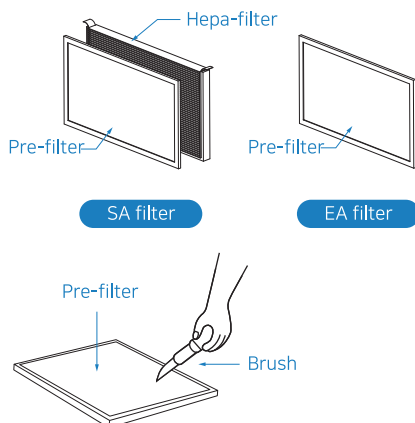
1. The [Air volume] indicator on the product display blinks to notify you of filter cleaning and replacement.
2. If the filter/enthalpy exchanger cleaning and replacement notification indicator lights up on the wired remote control, turn it off as follows.



※ How to disable filter alarm

- Wireless controller : Press the [Filter] button for more than 3 seconds while the power is on.
- Wired controller : Press the [Mode] button for more than 3 seconds to cancel while power is off.

! How To Clean Filters



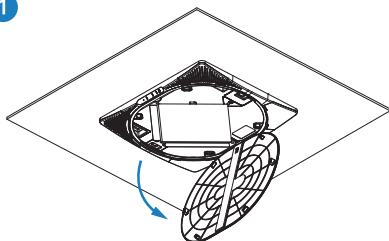
- Lightly shake the pre-filter and clean it using brush. Hepa filter is recommended to be replaced. (To maintain the life of the product, clean the filter once every 3 to 6 months.)
- If the pre-filter is heavily dusted, lightly wash it with warm water mixed with neutral detergent. However, be careful as rubbing and washing may damage the filter. After cleaning with water, dry completely in the shade.
- To prevent product performance, clean and replace the filter and enthalpy exchanger regularly.

※ If the filter is damaged or heavily contaminated, contact the supplier.

! Filter And Enthalpy Exchanger Replacement Method

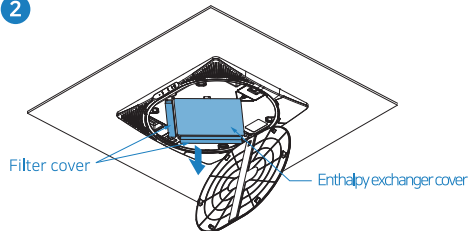
* Before changing the filter and enthalpy exchanger, be sure to turn off the product.

1



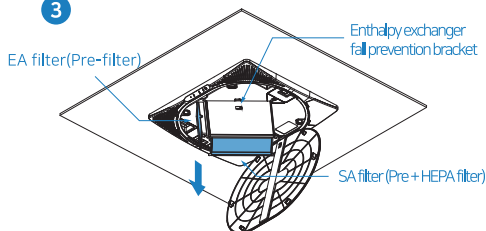
1) Open the inspection port of the grill.

2



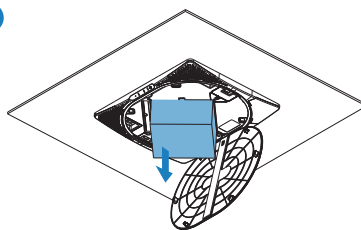
1) Pull out filter and Enthalpy exchanger cover.

3



1) Pull down SA, EA filters.
2) Unscrew enthalpy exchanger fall prevention bracket and pull down enthalpy exchanger.
※ HEPA filter must be in the SA filter.

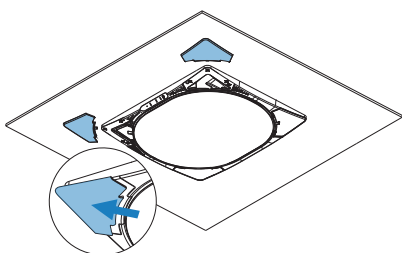
4



1) Separate the enthalpy exchanger by holding the handle and pulling down.
※ User may suffer from enthalpy exchanger falling.

! How To Disassemble The Grill Cap

* Before disassemble the grill cap, be sure to turn off the product.



- Separate the two grill caps by pushing and pulling in the direction of the arrow as shown in the picture.
- Clean the grill cap with a vacuum cleaner or cleaning brush.

Product Specifications

15

※ Product specifications and performance may change depending on quality improvement or installation environment without notice.

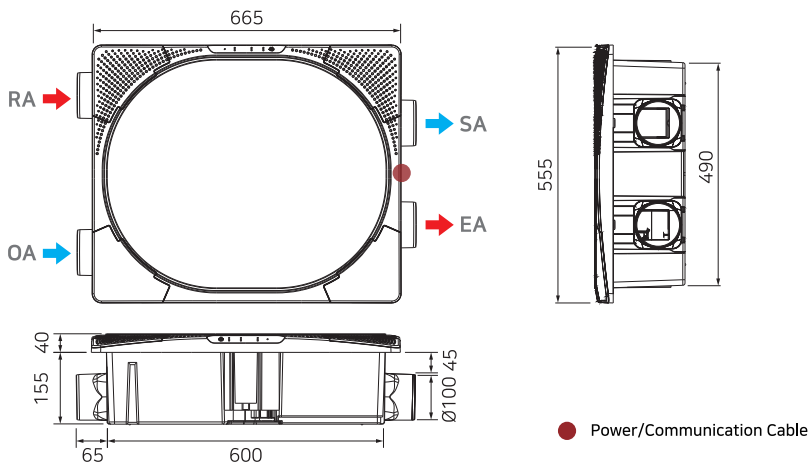
1 Specifications

Model	HRD3-50PLCN	HRD3-100PLC	HRD3-120PLC
Voltage Spec.	220V~240V / 50Hz, 60Hz		
Type	Without Duct	With Duct	With Duct
Air Volume(CMH) (Lv1/Lv2/Lv3)	40 / 50 / 60	70 / 100 / 120	100 / 120 / 150
Power Consume(W) (Lv3)	18 / 20 / 24	26 / 38 / 48	38 / 52 / 66
Noise Level(dB)	40 or less	40 or less	40 or less
Energy saving rate(%)	Heating 82%, Cooling 76%	Heating 71%, Cooling 58%	Heating 73%, Cooling 64%
Filter	Pre+Hepa filter(265 X 154 X 20T)	Pre+Hepa filter(265 X 154 X 20T)	Pre+Hepa filter(265 X 154 X 20T)
Product size	600(W) X 490(D) X 155(H)	600(W) X 490(D) X 155(H)	600(W) X 490(D) X 155(H)
Duct size	EA, OA : Ø100	EA, OA, RA, SA : Ø100	EA, OA, RA, SA : Ø100
Weight(kg)	10	10	10
Option	Wired controller, RS 485 communication, home network communication, air purification mode		

※ Product specifications and performance may change depending on quality improvement or installation environment.

2 Product Size

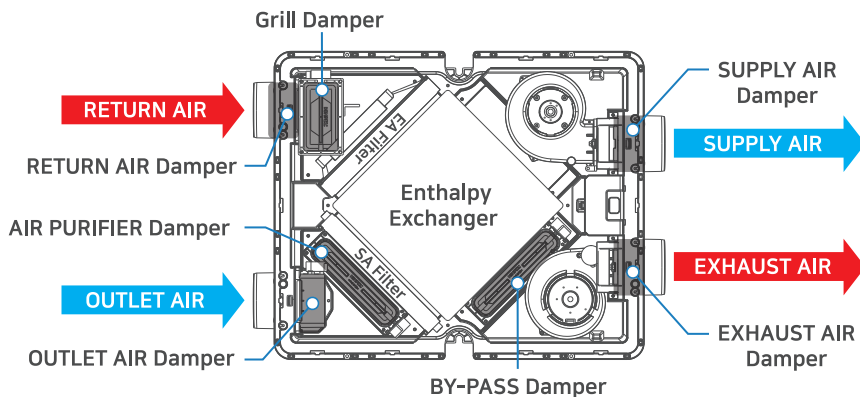
* Dimension Unit : mm



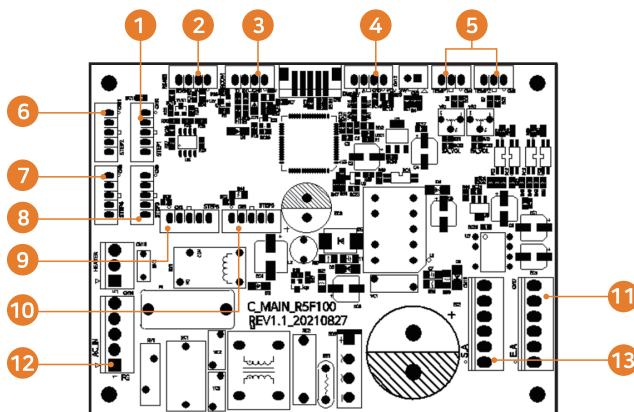
ERV Connection diagram

16

1 Air Pass



2 ERV Main Board



- | | | | |
|---|----------------------|-----------------------|-----------------------|
| 1 OUTLET AIR Damper | 2 INTERFACE RS-485 | 3 ROOM Controller | 4 DISPLAY |
| 5 TEMPERATURE Sensor | 6 EXHAUST AIR Damper | 7 AIR PURIFIER Damper | |
| 8 BY-PASS Damper | 9 RETURN AIR Damper | 10 Grill Damper | 11 EXHAUST Fan Damper |
| 12 AC 220~240V/50Hz, 60Hz Live, Neutral, F, G (Green) | 13 SUPPLY Fan Damper | | |

! Things To Check Before Inquiring A/S

Q. The product doesn't operate.

A. If the power cord is disconnected, the product may not operate properly.

Make sure the power cord is properly plugged into the outlet.

Q. Ventilation performance is not good.

A. 1) If the filter/enthalpy exchanger is not properly connected, product performance may be low.

Connect the filter/enthalpy exchanger properly.

2) If the filter has not been cleaned for a long time and the filter becomes contaminated, product performance may be low.

Operate the product after cleaning and replacing the filter/enthalpy exchanger.

Q. The noise of a product is loud.

A. 1) If the product is not installed properly, it may make a sound.

Check whether the flexible duct and electric damper are properly installed.

2) If the filter is not properly installed, the product may make a sound.

Please check whether the filter is properly installed.

Q. It is impossible to change the air volume.

A. 1) In automatic mode, it is impossible to change the air volume because it operates automatically according to the sensor.

You can change the air volume in the ventilation mode.

2) In bypass mode, it is impossible to change the air volume because ventilation is fixed to 'Lv1'.

You can change the air volume in a different mode.

3) In automatic mode, for specifications without sensors, the ventilation is set to 'Lv1' and operates repeatedly for 20 minutes and then stops for 40 minutes.

Specifications without sensors operate repeatedly in automatic mode and this is not a product malfunction.

! Things To Check Before Inquiring A/S

Q. The power turns off while the product is in operation.

- A.**
- 1) To protect the product, it temporarily stops in equipment protection mode below -15°C. This is not a product malfunction.
The product may operate normally when the outdoor temperature rises.
 - 2) In automatic mode, to protect the product, operate intervally for 20 minutes at -7°C ~ -14°C ► Stop for 10 minutes.
The product may operate normally when the outdoor temperature rises.
 - 3) In automatic mode, the product may not operate if indoor air quality is good.
The product operates when indoor CO₂ or fine dust level is above normal.
 - 4) In automatic mode, products without an indoor air quality sensor will operate with 'Lv1' ventilation for 20 minutes and then stop for 40 minutes.
This is not a product malfunction because it turns on and off repeatedly based on time.
 - 5) If you set a timer, it operates and stops after set time.
Please operate the product again.

! Error Code

If a problem occurs with the product, error codes are displayed on the wired controller.

E02 : Temperature and humidity sensor **E05** : Enthalpy exchanger replacement
E06 : CO₂ sensor **E07** : Internal communication **E08** : Fine dust sensor
E09 : SA (fan) motor **E10** : EA (fan) motor **COLD** : Equipment protection mode

Product Warranty

About Product Services

HIMPEL provides product warranty as grounds mentioned below under Consumer Compensation for Damage Regulation. HIMPEL Co. Service or dedicated cooperative companies will provide customer service when requested. Compensation acceptance notification is provided within 7 days and actual compensation for the damage is provided within 14 days.



**Warranty period
of total heat exchanger
is 1 year and part
retention period is
5 years.**

Product Name		Model Name	
Purchase Date		Purchasing Price	
Store where Purchased			

Customer Service

You have a right to be entitled for free of charge 1 year guaranteed service if damage occurs when using the product. However, if the damage was caused by customer fault or natural disaster, the service will be provided of charge even during the free of charge guarantee period.

A/S fee consists of technical fee, price of the parts, and visitation fee.

1. Technical fee refers to an expense occurring for diagnosis, repair or change of broken parts, adjustment, and inspection after completion of repair.
2. Price of parts refers to parts or additional material used for repair.
3. Visitation fee refers to an expense occurring for A/S technician to visit the site as per the request from the customer.

Free of Charge Services

During guaranteed service period, repair or change of device/product caused by its defect is provided for free of charge, excluding customer fault caused by negligence.

Below grounds show applicable cases for free of charge services.

1. Excessive noise caused by unbalanced fan or any other odd conditions
2. Remote control display not matching with actual operation of the product
3. Fan not operating properly even when the power on

Services of Charge

1. Abnormality occurred caused by removing and reassembling of parts on the customer's own
2. Product damaged by missing wiring
3. Change of filters or grill cover of enthalpy exchanger
4. Routine inspection and repair



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* Product specifications and performance may be changed
depending on quality improvement or
installation environment without notice.